SALT BRANCH OF PRYOR CREEK

REGIONAL STORMWATER DETENTION CONCEPT PLAN and UPDATED SALT BRANCH CREEK BACKWATER MODELING

SUMMARY REPORT

PREPARED BY

REV. W. B. SMITH, P.E. CFM CITY OF PRYOR CREEK FLOODPLAIN ADMINISTRATOR

(MAY 2021)





May 14, 2021

City of Pryor Creek 12 North Rowe Street P.O. Box 1167 Pryor Creek, Oklahoma 74361

Attention:

Mr. Larry Lees, Mayor

Reference:

Salt Branch - Regional Stormwater Detention and Backwater Modeling Report

Gentlemen:

Enclosed herewith is a final report for the proposed concept of the Regional Stormwater Detention facilities on Salt Branch to Pryor Creek for the reduction of flows upstream of the State Highway 69 Bridge for development purposes.

Also included in the report are the results of the updated backwater modeling for Salt Branch as a result of the additional surveys and LIDAR data from Highway 69/Railroad Bridges to N. Maple Street Bridge.

If you have any questions relating to the modeling or concept, please contact our office.

SIGNED:

Rev. W.B. SMITH, P.E. CFM, FLOODPLAIN ADMINISTRATOR

Office Telephone: (918) 865-6977 Cell Phone: (918)- 625-2449

Cc: Mr. Steve Powell, City Engineer



12 North Rowe Street P.O. Box 1167 Pryor Creek, Oklahoma 74361



Salt Branch of Pryor Creek Regional Stormwater Detention Concept Plan and Updated Salt Branch Creek Backwater Modeling (May 2021)

General:

The City of Pryor Creek's Floodplain Administrator and City Engineer have been studying and evaluating options for development upstream of the State Highway 69 Bridge on the Salt Branch of Pryor Creek for over a year's period of time. Various concepts have been considered and this report summarizes the current proposed concept. In addition, the current FEMA mapping and the backwater modeling that supports the current mapping on Salt Branch is outdated. The City authorized the securing of updated LIDAR 2-foot topography and field surveys of the Salt Branch Creek both upstream and downstream of the State Highway 69/Railroad bridges. This updated information has been used to revised the FEMA Current Effective HEC RAS Backwater model.

Hydrologic Modeling:

The City now has a new HEC HMS model for Salt Branch Creek to the confluence with Pryor Creek. The Drainage Area Map for the contributing drainage area is shown on Exhibit 1 in the Appendix. The flows from this new hydrology model were used, in conjunction with

A summary of flows is as follows, comparing the existing FEMA model flows (Regression Formulas) with the HEC HMS flows (Atlas 14) including the two Regional SWDs that are proposed to be constructed and identifying the HEC RAS (backwater model) river stations where these flows are used:

Confluence with Pryor Creek (HEC RAS River Sta. 450)

Storm Frequency	FEMA Model	HEC HMS Model	Difference
0.2% (500-Yr)	8625.3	8579.3	(46)
1% (100-Yr)	6164.1	5827.7	(336.4)
50-Yr	5300.9	4772.2	(528.7)
10-Yr	3457.1	2631.3	(825.8)
5-Yr	2428.0	1761.2	(666.8)
2-Yr	1013.3	616,4	(396.9)



US Hwy 69 (near middle of Hospital at Tributary Confluence) JCT 1 (Reduction by SWD N & SWD S and Increase by DA 2 and DA 4) (HEC RAS River Sta. 9775.2)

Storm Frequency	FEMA Model	HEC HMS Model	Difference
0.2% (500-Yr)	7403.7	7366.9	(36.8)
1% (100-Yr)	5281.3	4986.3	(295)
50-Yr	4527.3	4092.2	(435.1)
10-Yr	2951.4	2343.5	(607.9)
5-Yr	2069.9	1512.3	(557.6)
2-Yr	860.5	549.1	(311.4)

At Confluence with Tributary (at discharge of SWD N) JCT 2 (HEC RAS River Sta. 13260)

Storm Frequency	FEMA Model	HEC HMS Model	Difference
0.2% (500-Yr)	6273.7	31823	(3091.4)
1% (100-Yr)	4449.7	2230.2	(2219.5)
50-Yr	3794.2	1856.9	(1937.3)
10-Yr	2456.2	1077.9	(1378.3)
5-Yr			
2-Yr			

At Upstream End of Detailed FEMA Study JCT 4 (HEC RAS River Sta. 17870)

Storm Frequency	FEMA Model	HEC HMS Model	Difference
0.2% (500-Yr)	5082.9	5082.9	0
1% (100-Yr)	3601	3601	0
50-Yr	3088	3088	0
10-Yr	2308	2308	0
5-Yr			
2-Yr			

The first item to note is that there is a reduction in flows downstream of the proposed Regional SWDs. The reason there is not much of a change at the confluence is due to approximately 1152 acres of contributing drainage area that is not affected by the Regional SWDs. These acreages are downstream and contribute to the Salt Branch flows after the reduction at the SWDs.

Regional SWDs:

The two Regional Stormwater Detention facilities are proposed for construction. These two facilities are shown on Exhibits 3 and 4 in the Appendix.



On each SWD a concept has been laid out for regulation-size soccer fields for multi-use facilities of the stormwater detention facility area.

SWD N has a storage volume of approximately 90.7 acre-feet with the top of dike at Elev. 630 which about matches the natural ground on the north side, thus allowing the tributary flows from the north to divert flow into this SWD. The flowline of the stormwater detention facility is at Elev. 622.0 and uses a pair of 48-inch pipe and a stepped weir for overflows beginning at Elev. 626.0 to discharge reduced stormwater back into Salt Branch Creek. There is also a diversion weir in the main channel with a low flow 24-inch pipe to allow environmental discharge to continually flow in the creek between the regional stormwater detention facilities.

<u>SWD S</u> has a storage volume of approximately 151.086 acre-feet with the top of dike at Elev. 628.5 which also about matches the natural ground on the south side; thus, allowing the tributary from the south to flow into this SWD. The flowline of the stormwater detention facility is at Elev. 620.0 and uses a pair of 48-inch pipes and a stepped weir for overflows beginning at Elev. 625.0 to discharge reduced stormwater back into Salt Branch Creek.

As stated above, there will have to be some type of "restriction" placed between the two Regional SWDs to cause the flow of water in the Main Stem of the Channel to divert into each of the Regional SWDs. This diversion structure still remains to be hydraulically designed for construction. The flows for diversion in the model have been established.

Alternative Regional SWD Locations Evaluated:

The study considered other locations for additional regional stormwater detention facilities to mitigate the uncontrolled 1152 acres of contributing drainage areas downstream of the proposed Regional Stormwater Detention Facilities and upstream of State Highway 69.

Drainage Area 4: The study considered a location in Drainage Area 4 (Exhibit 5) to place a Regional SWD, as there may be a benefit similar to the reduction in flood height immediately downstream of the two proposed Regional SWDs. It was also considered to relocate SWD N, if there were to be City land on the north side of Clayton Road before the tributary flows into Salt Branch.

Drainage Area 2: The study also considered a location in Drainage Area 2 (Exhibit 6) to place a Regional SWD, that would be immediately upstream of the State Highway 69 Bridge to again reduced the flood height immediately upstream of the bridge by reducing the flows into the bridge.



Floodplain (Backwater) Modeling:

The Current Effective FEMA HEC-2 model was obtained from the FEMA Library and converted to a HEC RAS backwater model. Then this model was updated by adding cross sections between State Hwy 69 Bridge and the upstream side of the Regional SWDs. The printouts that are included in the Appendix show the reduction in the Base Flood Elevation (1% or 100-Yr) as well at the other flows included in the FEMA Flood Insurance Study (10-Yr, 50-Yr, and 0.2% or 500-Yr).

At the Confluence with Pryor Creek, the BFE is reduced less than 0.2 feet with the inclusion of the Regional Stormwater Detention Facilities. At the upstream side of State Hwy 69 Bridge the BFE is reduced by 0.3 feet. At the downstream side of the Hospital Site (RS 9190) the BFE is reduced by 0.3 feet. At the upstream side of the Hospital Site (RS 10421.7) the BFE is reduced by 0.3 feet. At the outlet to SWD S (RS 13260), the BFE is reduced 1.2 feet.

As discussed during periodic meetings, the issue of the location of the Regional SWDs is critical in relationship to the non-contributing Drainage Areas that interject flows downstream of the Regional SWDs that affect the Base Flood Elevation.

Summary of Floodplain Modeling:

The various alternative regional stormwater detention facilities were evaluated and modeled in the HEC RAS model, without much change in the BFE. After further detailed review of the model downstream of the State Highway 69 bridge, the existing flowline from approximately Maple Street to the railroad bridge adjacent to the State Highway 69 bridge had a strange slope. It was recommended to the City to perform some field surveys of the creek bottom and bank toes to verify the FEMA model.

In March 2021, Smith accompanied the surveyor as survey points were obtained between Maple Street and State Highway 69 Bridge along with some shots of the flowlines under Highway 69 Bridge and Railroad Bridge. Task 3C approval was received on May 4th for updating the base working drawing with all of the survey points and taking off new cross section data. The HEC RAS model was updated with the addition of thirty (30) new cross sections to replace three (3) cross sections in the Current Effective Model. The updated modeling also included the recently obtained LIDAR data and the survey creek data.

The following table provides a brief comparison summary of water surface elevations and floodplain widths for the Current Effective FEMA Floodplain as shown on FEMA Panel 40097C0235E with an effective date of September 16, 2011, with the proposed water surface elevations and floodplain widths for the proposed concept presented herewith at selected River Stas. from the HEC RAS Hydraulic Backwater model and the HEC HMS Hydrology Model:



River Sta. 450 is located at the confluence of Pryor Creek with Salt Branch Creek.

River Sta. 8120 is located on the downstream side of the Union Pacific Railroad Bridge

River Sta. 8343 is located on the upstream side of State Highway 69

River Sta. 9775.2 is at Jct. 1 in the hydrology model approximately one-half way

between Hwy 69 and the discharge of SWD S

River Sta 13260 is at the discharge point of SWD N

River Sta 17870 is the upstream end of the Detailed Study at HEC HMS Jct. 4

River Sta.	Current E	ffective BFE	Propo	sed BFE	Differences		
	Elevation	Top Width	Elevation	Top Width	Elevation	Top Width	
450	606.72	506.02	606.17	463.90	(0.61)	(42.1)	
8120	621.0	1064.98	619.46	785.38	(1.54)	(279.6)	
8343	624.53	102	623.06	102	(1.47)	(0) ¹	
9775.2	N/A	N/A	623.77	1289.05	N/A	N/A ²	
13260	627.64	782.47	624.82	288.04	(2.82)	(494.4)	
17870	632.92	596.68	631.23	429.34	(1.69)	(167.34)	

¹ Within confines of bridge embankment ² No Cross Section at this River Sta. in Current Effective Model

As was expected, and as can be seen on the comparison profile plots, the profile of the natural stream is significantly different between the Current Effective FEMA model (probably the original 1978 model using USGS topo) and the updated model using the LIDAR and survey data. Included in Appendix are printouts of resulting flood elevations from the HEC RAS Models for the Current Effective FEMA model output data and the revised modeling for each of the 4 storm frequencies.

In the Appendix is also a HEC RAS Output Summary of the Current Effective FEMA floodplain and a comparison of the Current Effective Model and the Updated HEC RAS model with the new LIDAR topography, the downstream survey data and added cross sections, and the reduction of flows by the Regional SWD N and SWD S. At the upstream side of the State Highway 69 bridge, there is a reduction in the BFE of 1.47 feet and a narrowing of the 1% floodplain width by approximately 220 feet.

When comparing the pre- and post- construction of the Regional SWD N and SWD S and the inclusion of the downstream LIDAR and field survey, there is a slight drop upstream of Hwy 69 Bridge for the 1% (100-Yr) of 0.2 feet, but the reduction in flood elevation downstream of the railroad bridge of 0.67 feet really is the telling factor that the railroad/Hwy 69 bridges are the controlling factor for the upstream floodplain elevations and floodplain limits that the studies to date have been addressing through reduction of the flows with the on-site regional stormwater detention facilities.

All of the floodplain modeling data is based on the two regional stormwater detention facilities(SWD N and SWD S) being in place. Each component that has been included in this study to date has contributed to the reduction of the Base Flood Elevation and the narrowing of the Floodplain limits upstream of the State Highway 69 Bridges.



The ultimate resolution of the floodplain on the upstream side of the State Highway 59 bridges and the railroad bridge is a "widening" of the bridge openings. This would be a long-term issue of discussion and resolution with both the Oklahoma Department of Transportation and the Union Pacific Railroad.

Design and Estimates of Construction Costs:

Infrastructure Solutions Group, LLC, (ISG) acting as the City Engineer for the City of Pryor Creek, has been working with and coordinating the hydrologic and hydraulic modeling being performed by HISINC, LLC (Smith). As study results have been completed, those results have been forwarded to the City (Mayor Lees) and ISG (Steve Powell) for development of "design drawings" and estimates of probable construction costs.

Included in Appendix B, are the preliminary design drawings for both SWD N and SWD S based on the modeling provided to ISG. Final coordination of design will be pending the City's decision to proceed with final design and construction. Also included in Appendix B are the estimates of probable construction costs for each stormwater detention facility (earthwork cut and fill, inlet and outlet structures, and the diversion weirs located within the main channels.

Prior to construction of these facilities, there will be the following steps:

1. Finalize Design

2. Finalize hydraulic modeling based on final design

3. Prepare and Submit a Conditional Letter of Map Revision (CLOMR) to FEMA for a revision of the floodway. Since the reach between the State Highway 69 bridges and N 433 Road is designated as a Zone AE with Floodway, and the proposed changes will affect the floodway elevations and limits, a CLOMR is required to be submitted and approved by FEMA. Once the CLOMR has been approved by the City of Pryor Creek FPA, construction could proceed "at risk" of required changes by FEMA.

During and after construction the following steps are required:

- Perform Construction of the two regional stormwater detention facilities and any necessary channel work (re-grading or widening) of the existing Salt Branch Creek channel
- 5. Upon completion of construction, a detailed survey (signed and sealed) of all changes to the existing floodplain area to be documented.
- 6. Update the CLOMR Modeling and Exhibits and prepare and file a Letter of Map Revision (LOMR) that will officially revise the FEMA Panel 40097C0235E with an effective date of September 16, 2011.



Conclusion and Recommendation:

To develop the lands on the upstream side of State Highway 69 the current floodplain is needed to be revised and reduced in elevation and width. The use of Regional Stormwater Detention Facilities to reduce flows and the updated modeling are the most current and effective methods of accomplishing these goals.

Long-term the ultimate solution is the "opening" of the restrictive bridge openings on the State Highway 69 and Union Pacific Railroad bridges, but this may take years to accomplish.

It is our recommendation for the City Council to proceed with these projects, if they are ultimately determined to be economically viable to the City of Pryor Creek.

Respectfully submitted, City of Pryor Creek Floodplain Administrator

Rev. W. B. Smith, P.E. CFM



Preliminary Opinion of Probable Construction Cost

City of Pryor -

May 12, 2021

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Salt Branch Improvements - Phase I

ltem	Description	Unit	Qty	Unit Price			Total Price
	CHANNEL CLEAN UP ABOVE HWY 69						
1	Mobilization	LS	1	\$	10,000.00	\$	10,000.00
2	Clearing and Grubbing	ACRE	1.8	\$	10,000.00	\$	18,000.00
3	Erosion Control	ACRE	1.8	\$	900.00	\$	1,620.00
4	Disposal of Removed Debris(Burn pit & landfill)	LS	1	\$	5,000.00	\$	5,000.00
5	Final Clean up Grading	ACRE	1.8	\$	1,000.00	\$	1,800.00
6	Mulch Seeding	ACRE	3	\$	750.00	\$	2,250.00
7	Contingency	\$38,670.00 10%				\$	3,867.00
				1	0% Contingency	\$	4,300.00
				Cor	struction Total	\$	46,837.00
				E	Engineering Fee	\$	5,000.00
		Resident	Project Rep	resentati	ve (2 MONTHS)	\$	6,000.00
					Survey	\$	2,500.00
	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Tot	tal Project Cost	s	60,337.00



Preliminary Opinion of Probable Construction Cost City of Pryor May 12, 2021 Page 1 of 1

Salt Branch Improvements - Phase II

item	Description		Total Price				
	CHANNEL WORK DWNSTRM HWY 6	9					7 -
1	Mobilization	LS	1	\$	10,000.00	\$	10,000.00
2	ReChannelization	ACRE	1.5	\$	10,000.00	\$	15,000.00
3	Erosion Control	ACRE	1.5	\$	900.00	\$	1,350.00
4	Diposal of Removed Debris	LS	1	\$	10,000.00	\$	10,000.00
5	Final Clean up Grading	ACRE	2	\$	1,000.00	\$	2,000.00
6	Mulch Seeding	ACRE	2	\$	750.00	\$	1,500.00
7	Contingency	\$39,850.00		\$	0.10	\$	3,985.00
	L			Con	struction Total	\$	43,835.00
				E	ngineering Fee	\$	4,200.00
		\$	4,500.00				
	- M. Loui			Tot	al Project Cost	s	52,535.00



Preliminary Opinion of Probable Construction Cost City of Pryor

May 12, 2021

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Salt Branch Improvements - Phase III

Item	Description	Unit	Qty	l u	Init Price	Total Price
	REGIONAL DETENTION FACILITIES (Sait Bran	ich N & S SV	/D)	•		
1	CLEARING AND GRUBBING	AC	48	\$	3,000.00	\$ 144,000.00
2	EROSION CONTROL, IN PLACE	AC	2	\$	5,000.00	\$ 10,000.00
3	EXCAVATION, STOCKPILE AND WASTE	CY	46,000	\$	20.00	\$ 920,000.00
4	CONSTR. BERMS	CY	5,000	\$	18.00	\$ 90,000.00
5	REINFORCED CONCRETE, IN PLACE	CY	250	\$	125.00	\$ 31,250.00
6	OUTLET STRUCTURE, IN PLACE	CY	55	\$	125.00	\$ 6,875.00
7	48 INCH HDPE DISHARGE LINES, W HDWL.	LF	200	\$	145.00	\$ 29,000.00
8	PILOT CHANNEL, CONC., IN PLACE	LF	540	\$	105.00	\$ 56,700.00
9	MULCH SEED VEGETATIVE COVER	AC	48	\$	750.00	\$ 36,000.00
10	RIP RAP ARMOR INLETS & PIPE OUTLET	TONS	200	\$	35.00	\$ 7,000.00
11	ASPHALT ACCESS ROADWAY & RAMPS	SY	1500	\$	18.00	\$ 27,000.00
12	CONTINGENCY	\$1,35	7,825		10%	\$ 135,782.50
				Cons	struction Total	\$ 1,493,607.50
				Ēr	ngineering Fee	\$ 118,000.00
		Resident F	roject Repre	sentative	(15 MONTHS)	\$ 36,000.00
				Tota	ıl Project Cost	\$ 1,647,607.50



Preliminary Opinion of Probable Construction Cost

City of Pryor

May 12, 2021

Page 1 of 1

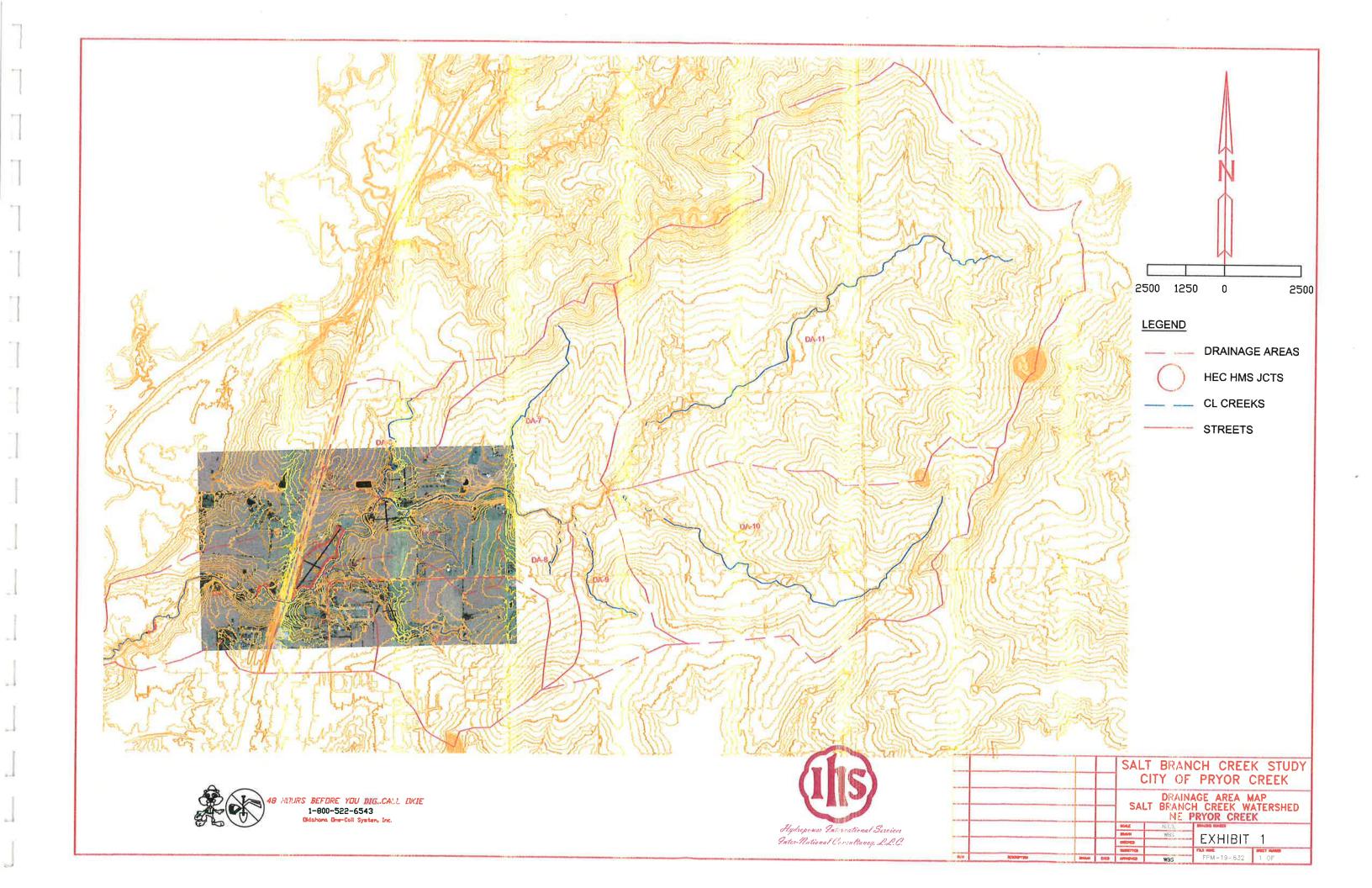
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	Salt Branch Improvements - Phase I	V (N. ELLIO	TT ST. STORMWA	TER & S. Trib SWD &)	
Item	Description Unit Qty Unit Price					Total Price
	N. Elliott St. Storm Sewer System		***			
1	36 inch HDPE, IN PLACE	LF	1000	\$ 125.00	\$	125,000.00
2	24 INCH HDPE, INPLACE	LF	400	\$ 115.00	\$	46,000.00
3	18 INCH HDPE, IN PLACE	LF	110	\$ 85.00	\$	9,350.00
4	15 INCH HDPE, IN PLACE	LF	75	\$ 80.00	\$	6,000.00
5	4' DIA. MH, IN PLACE	EA	6	\$ 3,000.00	\$	18,000.00
6	DGDI W/ 2 HOODS, IN PLACE	EA	10	\$ 7,500.00	\$	75,000.00
7	R&R PAVEMENT	SF	11,000	\$ 30.00	\$	330,000.00
8	AGGREGATE BACKFILL	CY	1815	\$ 20.00	\$	36,300.00
9	TRAFFIC CONTROL	LS	1	\$ 10,000.00	\$	10,000.00
10	MOBILIZATION AND SURVEY	LS	1	\$ 15,000.00	\$	15,000.00
11	MISC. COST ASSIGNED TO CITY (CITY SHARE)	LS	1	\$ 10,000.00	\$	10,000.00
12	CONTINGENCY		\$ 680,650.00	10%	\$	68,065.00
				Construction Total	\$	748,715.00
			Engineering Fee (C	ITY SHARE ONLY 1/3)	\$	85,000.00
			Resident	Project Representative	\$	18,000.00
		тот	AL S. ELLIOTT ST	REET STORM SEWER	\$	851,715.00
	S. TRIBUTARY DETENTION FACILITY (CITY SHARE	ONLY)				
13	EXCAVATION, EMBANKMENT	CY	36,000	\$ 20.00	\$	720,000.00
14	EXIT DITCH IMPROVEMENTS	AC	1.3	\$ 10,000.00	\$	13,000.00
15	MISC. COSTS ASSIGNED TO CITY	LS	1	\$ 10,000.00	\$	10,000.00
16	CONTINGENCY		\$ 743,000.00	10%	\$	74,300.00
	S.	TRIBUTARY	DETENTION FACI	LITY PROJECT COST	\$	817,300.00
	CIT	TY SHARE C	F S. TRIBUTARY I	DETENTION FACILITY	\$	272,433.33
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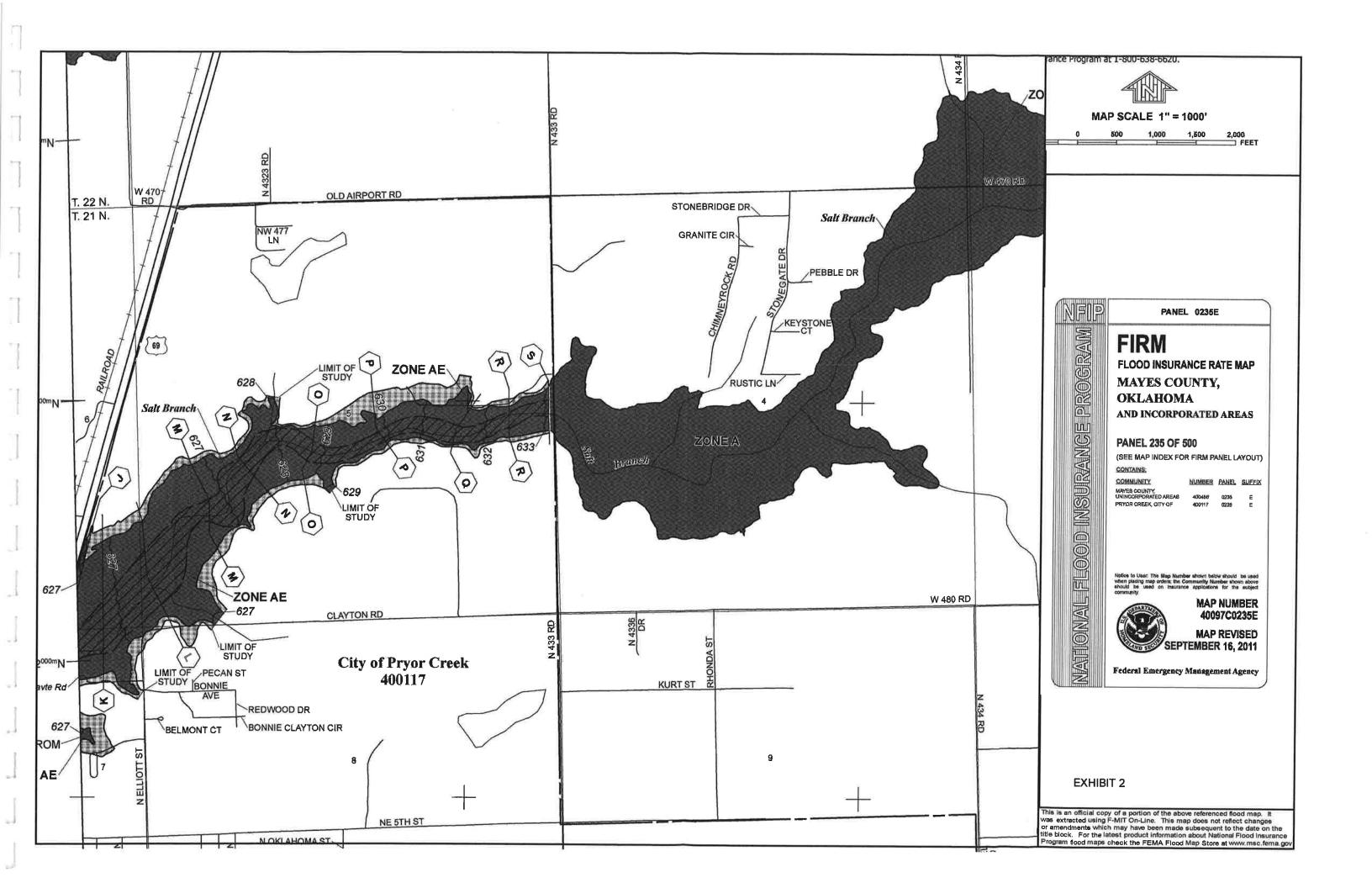
APPENDIX A

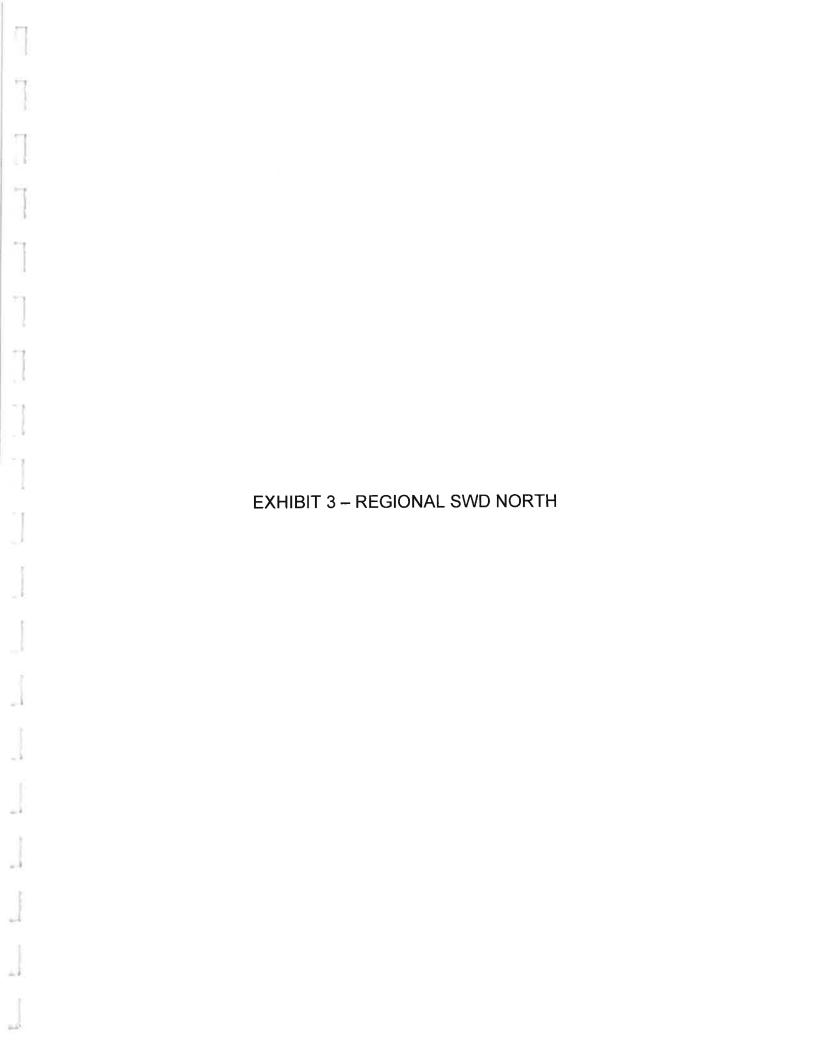
EXHIBITS

EXHIBIT 1 – DRAINAGE AREA MAP

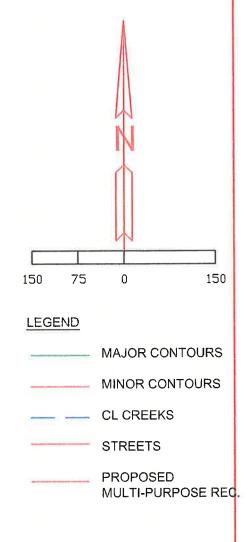












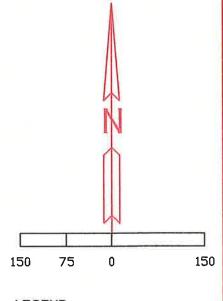
NOTES:

- 1. PRELIMINARY LAYOUT ONLY
- 2. STORAGE VOLUME = 90 AC-FT
- 3. ESTIMATED CUT = 225,000 CY
- 4. ESTIMATED FILL = 40,000 CY
- 5. OUTLET = 2 48-IN PIPES & OVERFLOW SPILLWAY



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LEGEND

MAJOR CONTOURS

MINOR CONTOURS

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STREETS

PROPOSED

MULTI-PURPOSE REG.

CURRENT 1% FLOODPLAIN

NOTES:

- 1. PRELIMINARY LAYOUT ONLY
- 2. STORAGE VOLUME ≈ 151 AC-FT
- 3. ESTIMATED CUT = 164,000 CY
- 4. ESTIMATED FILL = 40,000 CY
- 5. OUTLET = 2 48-IN PIPES & OVERFLOW SPILLWAY

48 M.M.RS BEFORE YOU DIG., CALL MIE 1-800-522-6543 Didahona One-Call System, Inc.



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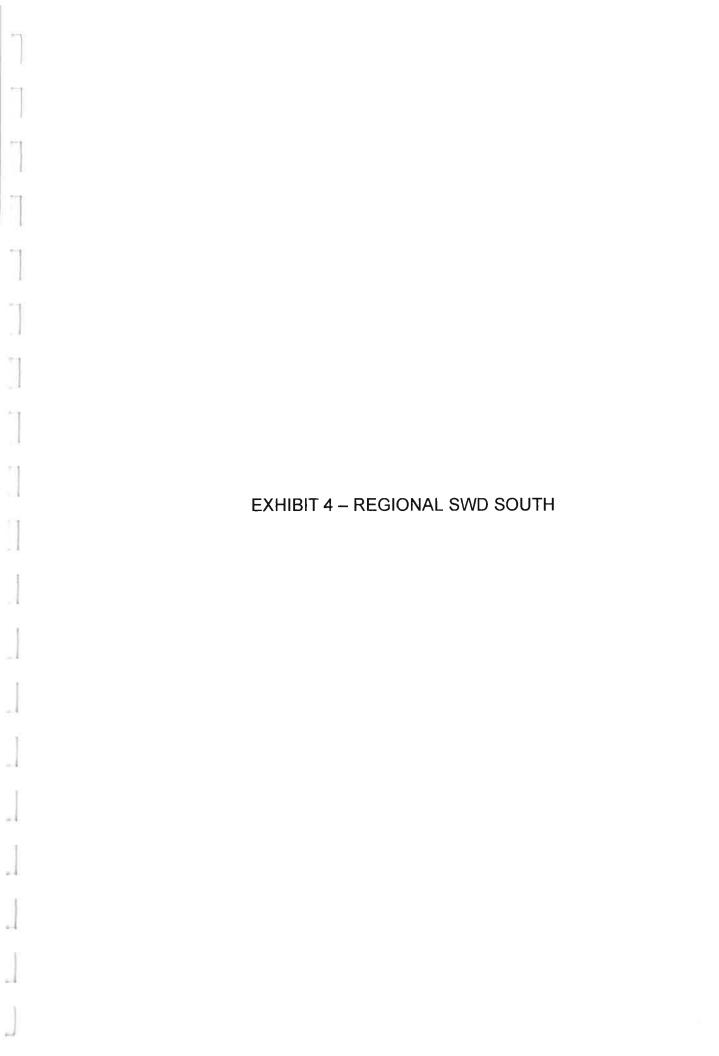
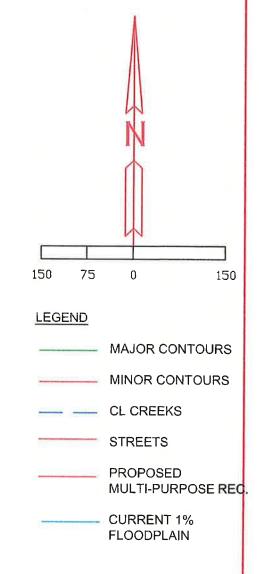


EXHIBIT 5 – REGIONAL SWD DA 4





NOTES:

- 1. PRELIMINARY LAYOUT ONLY
- 2. STORAGE VOLUME = 44.5 AC-FT
- 3. ESTIMATED CUT = 90,000 CY
- 4. ESTIMATED FILL = 10,000 CY
- 5. OUTLET = 2 48-IN PIPES & OVERFLOW SPILLWAY

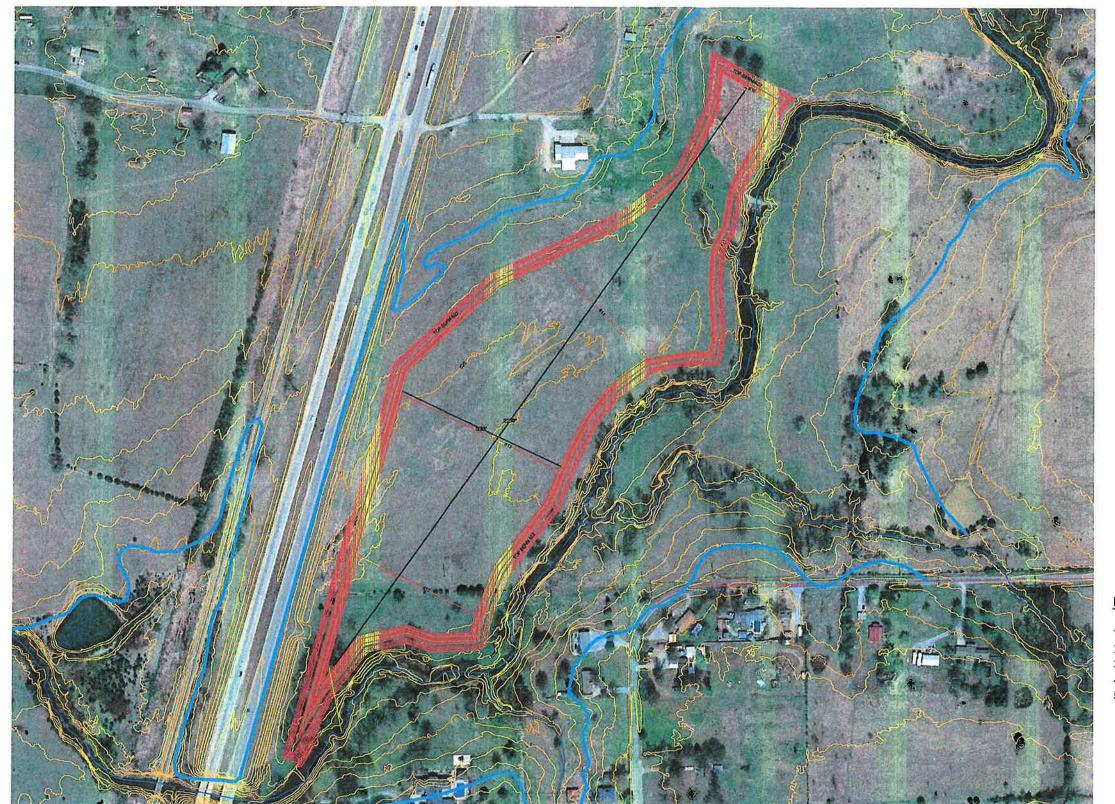


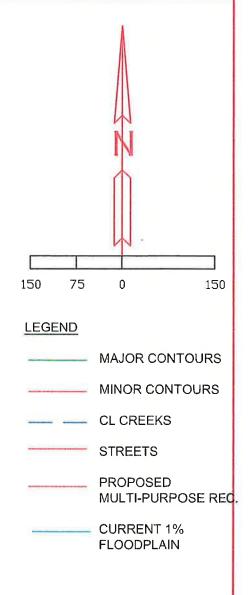
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EXHIBIT 6 – REGIONAL SWD DA 5





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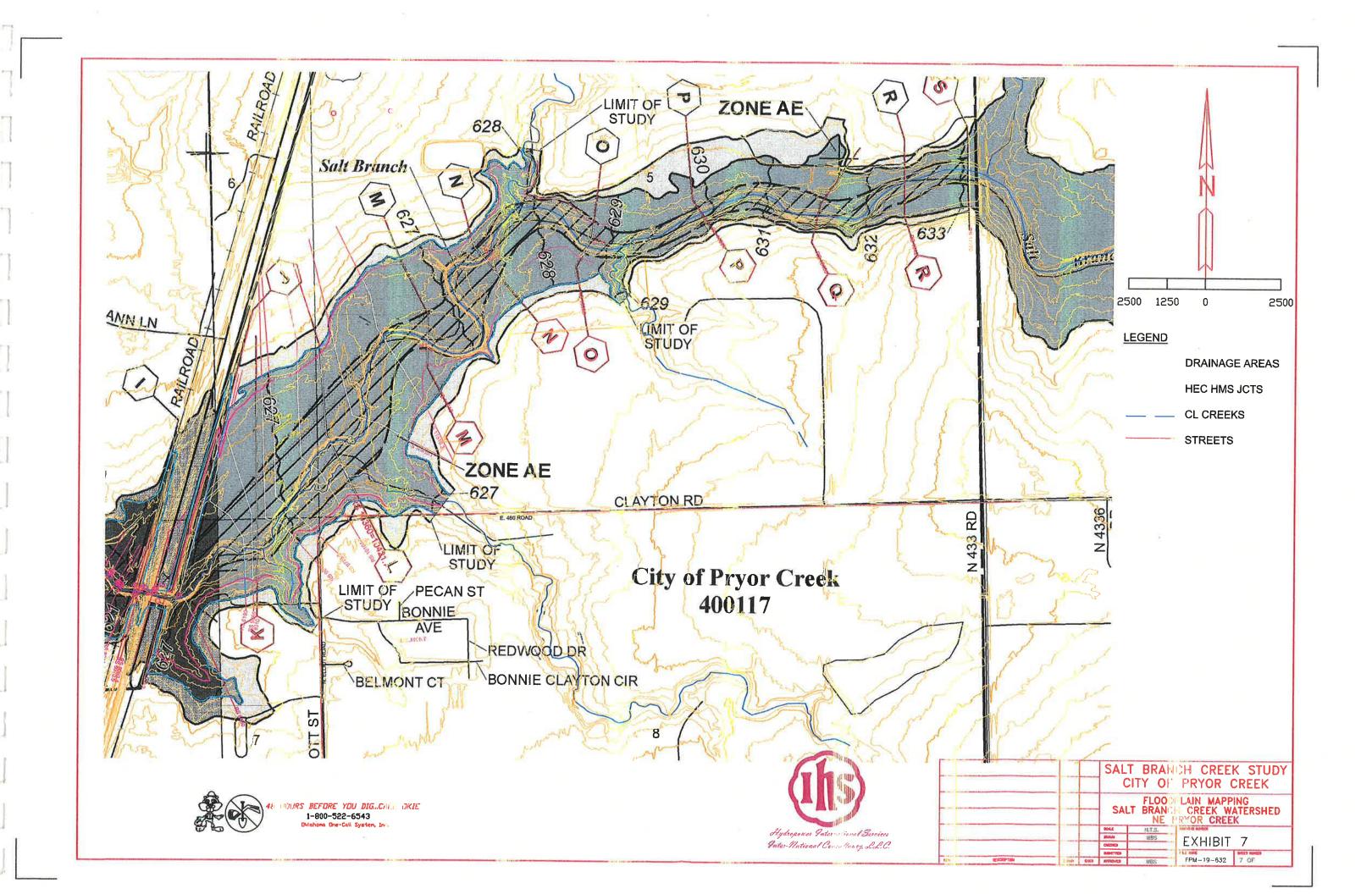
- 1. PRELIMINARY LAYOUT ONLY
- 2. STORAGE VOLUME = 160 AC-FT
- 3. ESTIMATED CUT = 258,000 CY
- 4. ESTIMATED FILL = 30,000 CY
 5. OUTLET = 2 36-IN PIPES & OVERFLOW SPILLWAY

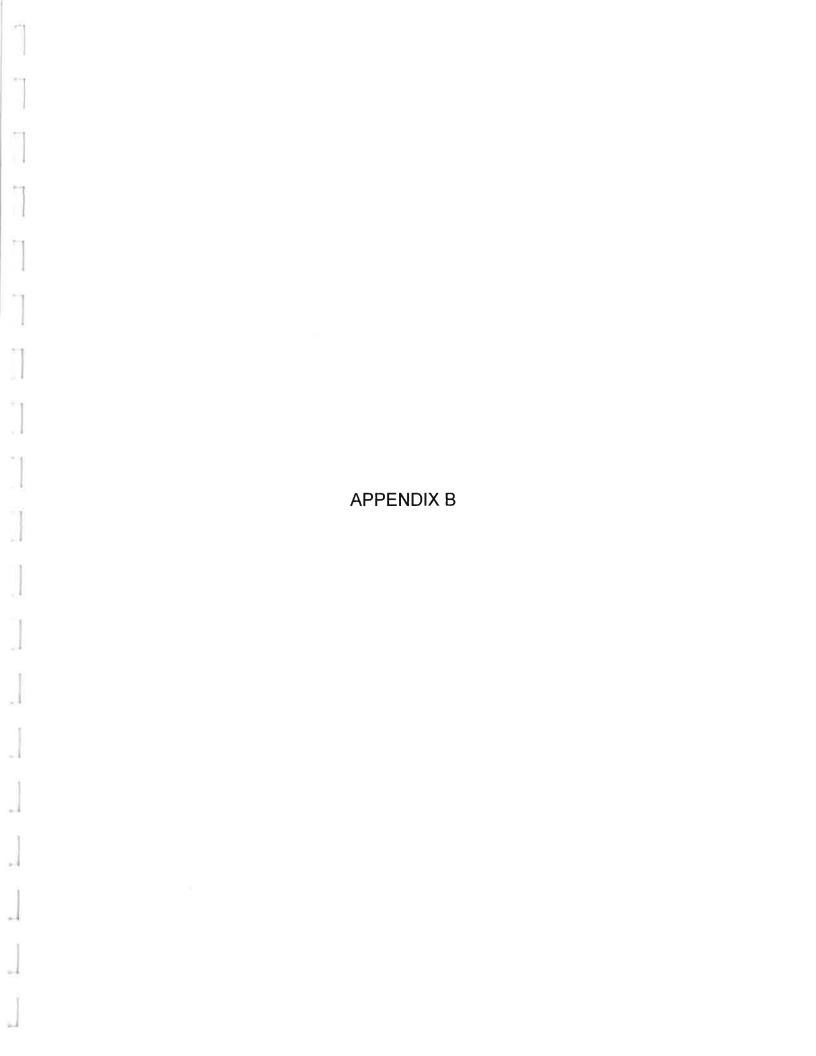




					NCH CREE F PRYOR		
			SAL	T BRAN	ONAL SWD DA CH CREEK W PRYOR CREE	REEK WATERSHED	
			ECAX N.T.S. DWGG HARD				
			WAS EXHIBIT 6				
			Occup		CVUIDII	O	
			SUMMERS OF		FULL SHIPE	DICCY MARCIE	
MAGNIFICA	MANAG	013	MANIBALD	WBS	FPM-19-632	5 OF	

EXHIBIT 7
FLOODPLAIN MAPPING



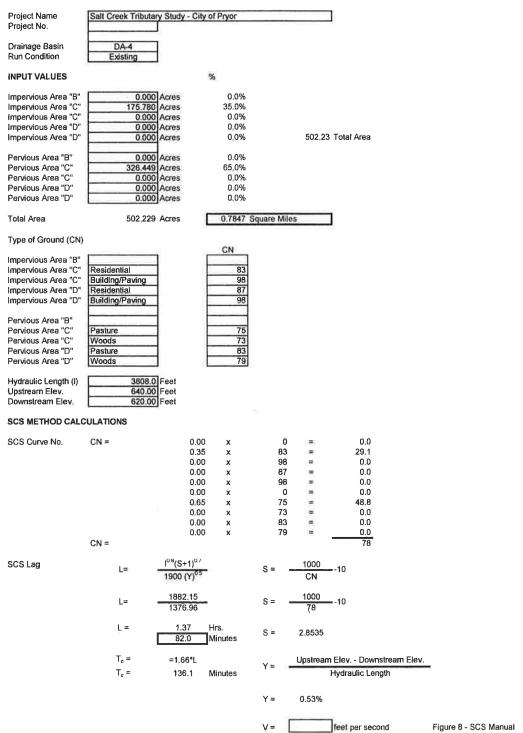


EXISTING CONDITIONS
HEC HMS MODELING INPUT DATA

Drainat Nama	Salt Crack Tributery	Study - City of Pryor		
Project Name Project No.	Sait Creek Indutary	Study - City of Pryor		
•				
Drainage Basin Run Condition	DA-1 Existing			
Train Continuon	Datamig			
INPUT VALUES		%		
Impervious Area "B"	0.000 A	cres 0,0%		
Impervious Area "C"	60.647 A			
Impervious Area "C"		cres 0,0%		
Impervious Area "D" Impervious Area "D"			404.31 Total Area	
impervious Area D	0.000	GGES 0,076	404 31 Total Area	
Pervious Area "B"	0.000 A			
Pervious Area "C"	343.667 A			
Pervious Area "C"	0.000			
Pervious Area "D" Pervious Area "D"	0.000 A			
reivious Alea D	0.000]/	0,070		
Total Area	404,315 A	o.6317 Sc	uare Miles	
Type of Ground (CN)	1			
1,700 01 0100110 (011		CN		
Impervious Area "B"				
Impervious Area "C"		83		
Impervious Area "C" Impervious Area "D"		98 87		
Impervious Area "D"		98		
Pervious Area "B"				
Pervious Area "C"	Pasture	75		
Pervious Area "C" Pervious Area "D"	Woods Pasture	73		
Pervious Area "D"	Woods	79		
Hydraulic Length (I)	1994.0 F 595.00 F			
Upstream Elev. Downstream Elev.	580.00 F			
	. See See See See See See See See See Se	17.021		
SCS METHOD CAL	CULATIONS			
SCS Curve No.	CN =	0.00 x	0.0	
		0.15 x	83 = 12.5	
		0.00	98 = 0,0	
		0.00 x 0.00 x	87 = 0.0 98 = 0.0	
		0.00 x	0 = 0,0	
		0.85 ×	75 = 63.8	
		0.00 ×	73 = 0.0	
		0.00 ×	83 = 0.0 79 = 0.0	
	CN =	0.00 x	79 = 0.0 76	
	CN -		70	
SCS Lag	L= :=	I ^{UB} (S+1) ^{U7}	S = 1000 -10	
	ē ·	1900 (Y) ⁰⁵	CN	
		1176 12	1000	
	L= -	1176.13 1647.92	S = \frac{1000}{76} -10	
		1017102	(450)	
	L≃	0.71 Hrs.	S = 3,1234	
	L	42.8 Minutes	-	
	T _c =	=1.66*L	Upstream Elev, - Downstream Elev.	
	T _c ≔	71.1 Minutes	Y = Hydraulic Length	
		20		
			Y = 0.75%	
			V = feet per second	Figure 8 - SCS Manual

			3C3 Methodology	
Project Name	Salt Creek Tributary Stud	v - City of Pryor		
Project No.	Can Great History Class	, on ,		
_				
Drainage Basin	DA-2			
Run Condition	Existing			
INPUT VALUES		%		
I MOU	0.000	0.00/		
Impervious Area "B"	0.000 Acres			
Impervious Area "C"	4.885 Acres			
Impervious Area "C" Impervious Area "D"	0.000 Acres 0.000 Acres			
Impervious Area "D"	0.000 Acres		97.70 Total Area	
Impervious Area D	0.000 Acres	0.070	31.70 Total Alea	
Pervious Area "B"	0.000 Acres	0.0%		
Pervious Area "C"	92.816 Acres	95.0%		
Pervious Area "C"	0.000 Acres			
Pervious Area "D"	0.000 Acres			
Pervious Area "D"	0.000 Acres			
	I			
Total Area	97,701 Acres	0.1527 Sc	uare Miles	
Type of Ground (CN)				
Immonday - A		CN		
Impervious Area "B" Impervious Area "C"	Residential	83		
Impervious Area "C"	Building/Paving	98		
Impervious Area "D"	Residential	87		
Impervious Area "D"	Building/Paving	98		
impervious Area D	Dulluling/r avilig	- 50		
Pervious Area "B"				
Pervious Area "C"	Pasture	75		
Pervious Area "C"	Woods	73		
Pervious Area "D"	Pasture	83		
Pervious Area "D"	Woods	79		
		A STATE OF THE STA		
Hydraulic Length (I)	2328.0 Feet			
Upstream Elev.	630.00 Feet			
Downstream Elev.	610.00 Feet			
SCS METHOD CALC	CULATIONS			
SCS Curve No.	CN =	0.00 x	0.0	
		0.05 x	83 = 4.2	
		0.00 x	98 = 0.0	
		0.00 x	87 = 0.0	
		0.00 x	98 = 0.0	
		0.00 x	0 = 0.0	
		0.95 x	75 = 71.3 73 = 0.0	
		0.00 x 0.00 x	73 = 0.0 83 = 0.0	
		0.00 x	79 = 0.0	
	CN =	0,00	75	
	- Company	NULS Codes in		
SCS Lag	L= 10°(S	S+1)07	S = 1000 -10	
	1900	(Y)05	CN	
	. 136	32.57	5 - 1000 10	
		31.07	S = \frac{1000}{75} -10	
		.77 Hrs. 6.4 Minutes	S = 3.2626	
		T. T		
	T _c = =1.	66 * L	Upstream Elev Downstream Elev.	
	T _c = 7	7.1 Minutes	Y = Hydraulic Length	Tr.
	,		,	
			Y = 0.86%	
			. 0.0070	
			V = feet per second	Figure 8 - SCS Manual
			vneat per second	i iguie o - 303 iviaridal

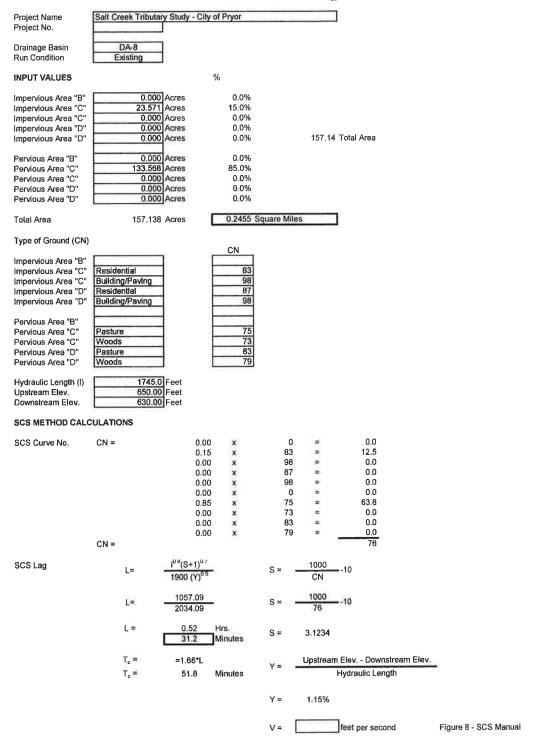
		ood wellisadiogy
Project Name	Salt Creek Tributary Study - City of Pryor	
Project No.		
Drainage Basin	DA-3	
Run Condition	Existing	
INPUT VALUES	%	
Impervious Area "B"	0.000 Acres 0.0%	
Impervious Area "C"	69.730 Acres 45.0%	
Impervious Area "C"	0.000 Acres 0.0%	
Impervious Area "D"	0.000 Acres 0.0%	
Impervious Area "D"	0.000 Acres 0.0%	154.96 Total Area
D	0.000	
Pervious Area "B"	0.000 Acres 0.0%	
Pervious Area "C"	85.226 Acres 55,0%	
Pervious Area "C" Pervious Area "D"	0.000 Acres 0.0% 0.000 Acres 0.0%	
Pervious Area "D"	0.000 Acres 0.0%	
reivious Alea D	0.000 Acres 0.0%	
Total Area	154,956 Acres 0.2421 S	quare Miles
10tal Alca	134,330 AGES	Addition miles
Type of Ground (CN)		
Type of Glodila (GI4)	CN	
Impervious Area "B"		
Impervious Area "C"	Residential 83	
Impervious Area "C"	Building/Paving 98	
Impervious Area "D"	Residential 87	
Impervious Area "D"	Building/Paving 98	
Importious / tou D	Summings army	
Pervious Area "B"		
Pervious Area "C"	Pasture 75	
Pervious Area "C"	Woods 73	
Pervious Area "D"	Pasture 83	
Pervious Area "D"	Woods 79	
	1.	
Hydraulic Length (I)	1278.0 Feet	
Upstream Elev.	630.00 Feet	
Downstream Elev.	610.00 Feet	
SCS METHOD CALC	CULATIONS	
SCS Curve No.	CN = 0.00 x	0.0
	0.45 ×	83 = 37.4
	0.00 ×	98 = 0.0
	0.00 x	87 = 0.0
	0.00 x	98 = 0.0
	0.00 x	0 = 0.0
	0.55 x	75 = 41.3
	0.00 ×	73 = 0.0 83 = 0.0
	0.00 × 0.00 ×	83 = 0.0 79 = 0.0
		79 79
	CN =	19
0001	, I ^{0 8} (S+1) ^{0.7}	1000
SCS Lag	=	S = 1000 -10
	1900 (Y) ⁶	CN
	L= 767.05	S = 1000 -10
	2376.86	79
	L = 0,32 Hrs.	S = 2.7226
	19.4 Minutes	
	T _c = =1.66*L	Y = Upstream Elev Downstream Elev.
	$T_c = 32.1$ Minutes	Hydraulic Length
		Y = 1.56%
		1 = 1,0070
		V = feet per second Figure 8 - SCS Manual



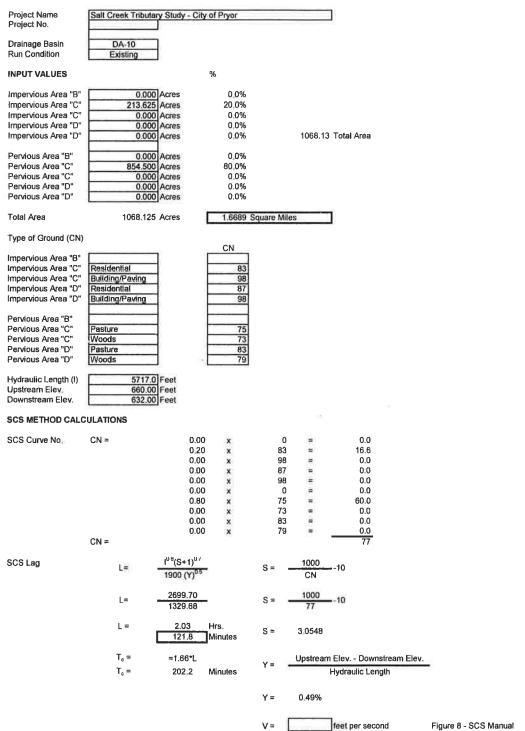
Project Name	Salt Creek Tributa	or Chudu Cib	of Daves				
	Sait Clear Lubria	y Study - City	y of Piyor				
Project No.							
Drainage Basin	DA-5	1					
		1					
Run Condition	Existing	J.					
INPUT VALUES			%				
		1493099	0.00/				
Impervious Area "B"		Acres	0.0%				
Impervious Area "C"	31.858	Acres	15,0%				
Impervious Area "C"		Acres	0.0%				
Impervious Area "D"		Acres	0.0%				
Impervious Area "D"	0.000	Acres	0.0%		212.15 Tol	al Area	
•		I AMI SOS					
Pervious Area "B"	0.000	A	0.0%				
		Acres					
Pervious Area "C"	180.297	Acres	85.0%				
Pervious Area "C"	0.000	Acres	0.0%				
Pervious Area "D"		Acres	0.0%				
Pervious Area "D"	0.000	Acres	0.0%				
Total Area	212,154	Acres	0.3315 \$	quare Miles			
I Olai Alea	212,104	ACCO	0.0010 0	date wiles			
Type of Ground (CN)							
			CN				
		1	CIV				
Impervious Area "B"							
Impervious Area "C"	Residential	1	83				
Impervious Area "C"	Bullding/Paving	1	98				
		1					
Impervious Area "D"	Residential	1	87				
Impervious Area "D"	Building/Paving	1	98				
		1					
D i A IIDI		-	$\overline{}$				
Pervious Area "B"							
Pervious Area "C"	Pasture		75				
Pervious Area "C"	Woods	1	73				
		1					
Pervious Area "D"	Pasture	1	83				
Pervious Area "D"	Woods		79				
		-					
Hydraulic Length (I)	1743.0	Trant					
Upstream Elev.	640.00	Feet					
Downstream Elev.	626.00	Feet					
		10000					
OCC METHOD ON	NUL ATIONO						
SCS METHOD CALC	OLA HUNS						
SCS Curve No.	CN =	0.00) x	0	=	0.0	
000 Our ve 140.	011 -						
		0.15		83	=	12.5	
		0.00) x	98	=	0.0	
		0.00) x	87	=	0.0	
				98	=	0.0	
		0.00					
		0.00) x	0	=	0.0	
		0.85	5 x	75	=	63.7	
		0.00		73	=	0.0	
		0,00) x			0.0	
		0.00	x 0	83	=	0.0	
						0.0 0.0	
	CN -	0.00		83	=	0.0	
	CN =			83	=		
	CN =	0.00		83	=	0.0	
SCS Lag				83 79	1000	76	
SCS Lag	CN =	0.00		83	1000 -10	76	
SCS Lag		0.00		83 79	1000	76	
SCS Lag		0.00		83 79	1000 -10	76	
SCS Lag	L=	0.00 1 ⁰⁸ (S+1) ⁰⁷ 1900 (Y) ^{0.5}		83 79 S = —	1000 CN -10	0.0 76	
SCS Lag		0.00 1 ⁰⁸ (S+1) ⁰⁷ 1900 (Y) ^{0.5} 1056.08		83 79 S = —	= = 1000 CN -10	0.0 76	
SCS Lag	L=	0.00 1 ⁰⁸ (S+1) ⁰⁷ 1900 (Y) ^{0.5}		83 79	= = 1000 CN -10	0.0 76	
SCS Lag	L=	0.00 1 ⁰⁸ (S+1) ⁰⁷ 1900 (Y) ^{0.5} 1056.08		83 79 S = —	= = 1000 CN -10	0.0 76	
SCS Lag	L= L=	0.00 1 ⁰⁸ (S+1) ⁰⁷ 1900 (Y) ^{0.5} 1056.08 1702.82	- -	83 79 S = S =	= = 1000 CN -10 1000 76 -10	0.0 76	
SCS Lag	L=	0.00 108(S+1) ⁰⁷ 1900 (Y) ⁰⁵ 1056.08 1702.82 0.62		83 79 S = S =	= = 1000 CN -10	0.0 76	
SCS Lag	L= L=	0.00 1 ⁰⁸ (S+1) ⁰⁷ 1900 (Y) ^{0.5} 1056.08 1702.82	- -	83 79 S = S =	= = 1000 CN -10 1000 76 -10	0.0 76	
SCS Lag	L= L=	0.00 108(S+1) ⁰⁷ 1900 (Y) ⁰⁵ 1056.08 1702.82 0.62		83 79 S = S =	= = 1000 CN -10 1000 76 -10	0.0 76	
SCS Lag	L= L=	0.00 108(S+1) 07 1900 (Y) 05 1056.08 1702.82 0.62 37.2		83 79 S = S = :	1000 -10 CN -10 1000 -10	0.0 76	
SCS Lag	L= L= L=	0.00 108(S+1)07 1900 (Y)05 1056.08 1702.82 0.62 37.2 =1.66*L	Hrs.	83 79 S = S =	= = 1000 -10 CN -1000 -100 -10	0.0 76	_
SCS Lag	L= L=	0.00 108(S+1) 07 1900 (Y) 05 1056.08 1702.82 0.62 37.2		83 79 S = S = :	= = 1000 -10 CN -1000 -100 -10	0.0 76	-
SCS Lag	L= L= L=	0.00 108(S+1)07 1900 (Y)05 1056.08 1702.82 0.62 37.2 =1.66*L	Hrs.	83 79 S = S = :	= = 1000 -10 CN -1000 -100 -10	0.0 76	-
SCS Lag	L= L= L=	0.00 108(S+1)07 1900 (Y)05 1056.08 1702.82 0.62 37.2 =1.66*L	Hrs.	83 79 S = S = :	= = 1000 -10 CN -1000 -100 -10	0.0 76	-
SCS Lag	L= L= L=	0.00 108(S+1)07 1900 (Y)05 1056.08 1702.82 0.62 37.2 =1.66*L	Hrs.	83 79 S = S = Y =	1000 -10 CN -10 1000 -10 76 -10 3.1231 Upstream Ele Hyd	0.0 76	-
SCS Lag	L= L= L=	0.00 108(S+1)07 1900 (Y)05 1056.08 1702.82 0.62 37.2 =1.66*L	Hrs.	83 79 S = S = Y =	= = 1000 -10 CN -1000 -100 -10	0.0 76	-
SCS Lag	L= L= L=	0.00 108(S+1)07 1900 (Y)05 1056.08 1702.82 0.62 37.2 =1.66*L	Hrs.	83 79 S = S = Y =	1000 -10 CN -10 1000 -10 76 -10 3.1231 Upstream Ele Hyd	0.0 76	-
SCS Lag	L= L= L=	0.00 108(S+1)07 1900 (Y)05 1056.08 1702.82 0.62 37.2 =1.66*L	Hrs.	83 79 S = S = Y =	1000 -10 CN -10 1000 -10 76 -10 3.1231 Upstream Ele Hyd	0.0 76	Figure 8 - SCS Manual

Project Name Project No.	Salt Creek Tribute	ry Study - City of Pryor		
Project No.		ı		
Drainage Basin	DA-6	1		
Run Condition	Existing	1		
Kull Collution	Existing	1		
INPUT VALUES		%		
Impopious Area 709	0.000	Acres 0.0%		
Impervious Area "B"		Acres 0,0% Acres 8,0%		
Impervious Area "C"				
Impervious Area "C" Impervious Area "D"		Acres 0.0% Acres 0.0%		
Impervious Area "D"		Acres 0,0%	237.80 Total Area	
impervious Area D	0.000	Aues 0,0 %	257.00 Total Alea	
Pervious Area "B"	0.000	Acres 0.0%		
Pervious Area "C"	218.772			
Pervious Area "C"		Acres 0.0%		
Pervious Area "D"		Acres 0.0%		
Pervious Area "D"		Acres 0.0%		
=				
Total Area	237.796	Acres 0.3716 Sc	quare Miles	
Type of Ground (CN)				
lane and a confidence when	r	CN		
Impervious Area "B"	Danislantial	92		
Impervious Area "C"	Residential	83 98		
Impervious Area "C" Impervious Area "D"	Building/Paving Residential	87		
Impervious Area "D"	Building/Paving	98		
Impervious Alea D	Bulluling/Favilig	30		
Pervious Area "B"		1 1		
Pervious Area "C"	Pasture	75		
Pervious Area "C"	Woods	73		
Pervious Area "D"	Pasture	83		
Pervious Area "D"	Woods	79		
Hydraulic Length (I)	2042.0	Feet		
Upstream Elev.	640.00			
Downstream Elev.	624.00			
SCS METHOD CALC	UII ATIONS	71		
SCS METHOD CALC	ULATIONS			
SCS Curve No.	CN =	0.00	0.0	
		0.08 ×	83 = 6.6	
		0.00 ×	98 = 0.0	
		0.00 x	87 = 0.0	
		0.00 x	98 = 0.0	
		0.00 x	0 = 0.0	
		0.92 x	75 = 69.0 73 = 0.0	
		0.00 x 0.00 x	73 = 0.0 83 = 0.0	
		0.00 x 0.00 x	79 = 0.0	
	CN =	0.00	76	
SCS Lag	L=	I ^{UB} (S+1) ^U	S = 1000 -10	
	-	1900 (Y) ⁰⁵	CN	
		1218.43	0 - 1000 10	
	L=	1681.84	S = \frac{1000}{76} -10	
	L =	0.72 Hrs. 43.5 Minutes	S = 3.2205	
		40.5 Williates		
	T _c =	=1.66*L	Y = Upstream Elev Downstream Elev.	
	T _c =	72.2 Minutes	Hydraulic Length	,
			Y = 0.78%	
			V = feet per second	Figure 8 - SCS Manual

			OCO Metrodology	
Project Name	Salt Creek Tributery St	udy - City of Pryor		
Project No.				
Drainage Basin	DA-7			
Run Condition	Existing			
INPUT VALUES		%		
Impervious Area "B"	0.000 Acr	es 0.0%		
Impervious Area "C"	167.969 Acre	es 28.0%		
Impervious Area "C"	0.000 Acr	es 0.0%		
Impervious Area "D"	0.000 Acr	es 0.0%		
Impervious Area "D"	0.000 Acr		599.89 Total Area	
Pervious Area "B"	0.000 Acr	es 0.0%		
Pervious Area "C"	431.921 Acr			
Pervious Area "C"	0.000 Acr	7.7		
Pervious Area "D"	0.000 Acr			
Pervious Area "D"				
reivious Alea D	0.000 Acr	es 0.0%		
Total Area	599,891 Acr	es 0.9373 S	quare Miles	
T			All the second s	
Type of Ground (CN)		CN		
Impervious Area "B"		CIN		
	Residential	02		
Impervious Area "C"		83		
Impervious Area "C"	Building/Paving	98		
Impervious Area "D"	Residential	87		
Impervious Area "D"	Building/Paving	98		
Pervious Area "B"				
Pervious Area "C"	Pasture	75		
Pervious Area "C"	Woods	73		
Pervious Area "D"	Pasture	83		
Pervious Area "D"	Woods	79		
		- 14415.		
Hydraulic Length (I)	2817.0 Fee			
Upstream Elev.	650.00 Fee	t		
Downstream Elev.	630.00 Fee	t		
SCS METHOD CALC	ULATIONS			
SCS Curve No:	CN =	0.00 x	0.0	
000 00.101101	0.1	0.28 x	83 = 23.2	
		0.00 x	98 = 0.0	
			87 = 0.0	
		0.00 x	98 = 0.0	
		0.00 x	0 = 0.0	
		0.72 x	75 = 54.0	
		0.00 x	73 = 0.0	
		0.00 x	83 = 0,0	
		0.00 x	79 =0.0	
	CN =		77	
2001	,O 8	(O. 4)U/	radio b	
SCS Lag	L=	(5+1)	S = 1000 -10	
	19	00 (Y)°5	CN	
	1	503.80	S = 1000 10	
		600.94	S = -1000 -10	
	100	*CHOWN		
	L=	0.94 Hrs. 56.4 Minutes	S = 2.9467	
		Out Immaica		
	T _c = =	1.66*L	Upstream Elev Downstream Ele	ev.
	T _e :e		Y = Hydraulic Length	
	• 6	93.6 Minutes	nyuraulic Lerigin	
			Y = 0.71%	
			V = feet per second	Figure 8 - SCS Manual

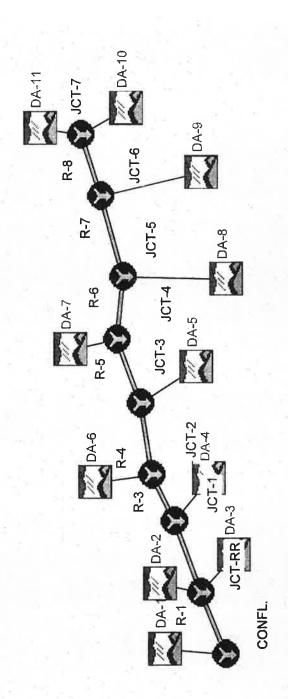


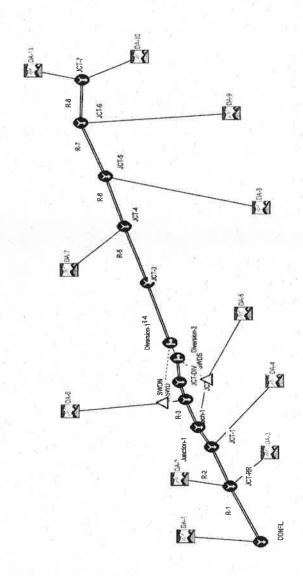
			SCS Methodology	
Project Name	Salt Creek Tributary Study	- City of Pryor		
Project No.	Can Green Imparary Grady	oly or rigor		
Drainage Basin	DA-9			
Run Condition	Existing			
INPUT VALUES		%		
Impervious Area "B"	0.000 Acres	0.0%		
Impervious Area "C"	32.833 Acres	15.0%		
Impervious Area "C"	0.000 Acres	0.0%		
Impervious Area "D"	0.000 Acres	0.0%	040 00 T-4-1 A	
Impervious Area "D"	0.000 Acres	0.0%	218,88 Total Area	
Pervious Area "B"	0.000 Acres	0.0%		
Pervious Area "C"	186.051 Acres	85.0%		
Pervious Area "C"	0.000 Acres	0.0%		
Pervious Area "D"	0.000 Acres	0.0%		
Pervious Area "D"	0.000 Acres	0.0%		
	The state of the s			
Total Area	218,884 Acres	0.3420 Sc	guare Miles	
Type of Ground (CN)				
. , p = 0. Si Salia (511)		CN		
Impervious Area "B"	Harrier Transfer			
Impervious Area "C"	Residential	83		
Impervious Area "C"	Building/Paving	98		
Impervious Area "D"	Residential	87		
Impervious Area "D"	Building/Paving	98		
Pervious Area "B"				
Pervious Area "C"	Pasture	75		
Pervious Area "C"	Woods	73		
Pervious Area "D"	Pasture	83		
Pervious Area "D"	Woods	79		
Hydraulic Length (I)	1812.0 Feet			
Upstream Elev.	650.00 Feet			
Downstream Elev.	632.00 Feet			
SCS METHOD CALC	CULATIONS			
SCS Curve No.	CN =	0.00 x	0.0	
SCS Culve No.	CN =		83 = 12.5	
			98 = 0.0	
		0.00 x 0.00 x	87 = 0.0	
		0.00 x	98 = 0.0	
		0.00 ×	0 = 0.0	
		0.85 x	75 = 63.8	
		0.00 x	73 = 0.0	
		0.00 x	83 = 0.0	
		0.00 x	79 = 0.0	
	CN =		76	
	ul H.o.	41117		
SCS Lag	L= 1 ¹¹⁸ (S-	11)	S = 1000 -10	
	1900	(Y)03	CN	
	1090	2.44	1000	
	L= 1089		$S = \frac{1000}{76} -10$	
	1000		7.0	
	L = 0.5	8 Hrs.	S = 3,1234	
	34	.5 Minutes	3 - 3,1234	
	T = 10	041		
	T _c = =1.6		Y = Upstream Elev Downstream Elev.	-
	T _c = 57	3 Minutes	Hydraulic Length	
			Y = 0.99%	
			V = feet per second	Figure 8 - SCS Manual

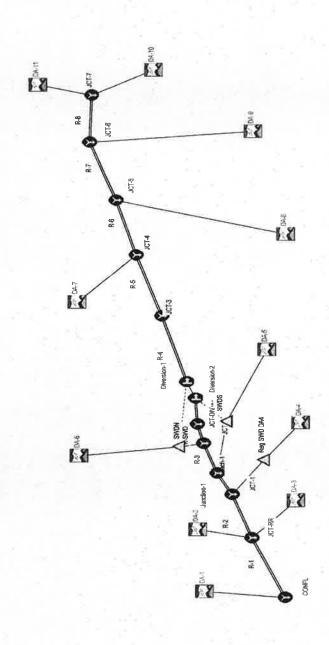


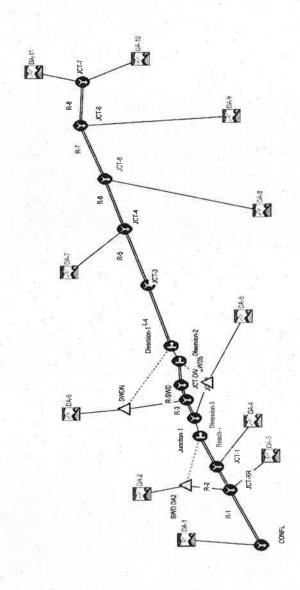
			SCS Methodology	
Project Name	Salt Creek Tributary Stud	v - City of Pryor		
Project No.	CON CICCII THIOLINY CLUB	y sig siriya		
Drainage Basin	DA-11			
Run Condition	Existing			
INPUT VALUES		%		
INFO! VALUES		70		
Impervious Area "B"	0.000 Acres	0.0%		
Impervious Area "C"	405.983 Acres			
Impervious Area "C"	0.000 Acres			
Impervious Area "D"	0.000 Acres	0.0%		
Impervious Area "D"	0.000 Acres	0.0%	2706,56 Total Area	
Dominus Anna IIDII	0.000	0.00/		
Pervious Area "B" Pervious Area "C"	0.000 Acres 2300.573 Acres			
Pervious Area "C"	0.000 Acres			
Pervious Area "D"	0.000 Acres			
Pervious Area "D"	0.000 Acres			
	1			
Total Area	2706,557 Acres	4.2290 Sc	uare Miles	
Tune of Course (Chi)				
Type of Ground (CN)		CN		
Impervious Area "B"		ON		
Impervious Area "C"	Residential	83		
Impervious Area "C"	Building/Paving	98		
Impervious Area "D"	Residential	87		
Impervious Area "D"	Building/Paving	98		
Pervious Area "B"	Deathur			
Pervious Area "C" Pervious Area "C"	Pasture Woods	75 73		
Pervious Area "D"	Pasture	83		
Pervious Area "D"	Woods	79		
Hydraulic Length (I)	9145.0 Feet			
Upstream Elev.	660.00 Feet			
Downstream Elev.	632.00 Feet			
SCS METHOD CALC	LU ATIONS			
OOG METHOD GALO	OLATIONO			
SCS Curve No.	CN =	0.00 x	0.0	
		0.15 x	83 = 12.5	
		0.00	98 = 0.0	
		0.00 ×	87 = 0.0	
		0.00 ×	98 = 0.0 0 = 0.0	
		0.00 × 0.85 ×	0 = 0.0 75 = 63.8	
		0.00 ×	73 = 0.0	
		0.00 ×	83 = 0.0	
		0.00 x	79 = 0.0	
	CN =		76	
	0.4	0.7		
SCS Lag	L= 100(S	(+1) ⁰	S = 1000 -10	
	1900	(Y)05	CN	
	207	7.00	4000	
		7.62	S = 1000 -10	
	105	1.33	76	
	L = 3.	78 Hrs.		
		7.0 Minutes	S = 3.1234	
	T _c = =1.6	66*L	Upstream Elev Downstream Elev.	
		6.8 Minutes	Y = Hydraulic Length	•
		Millaton	, ardano congui	
			V = 0.319/	
			Y = 0.31%	(90)
			V = feet per second	Figure 8 - SCS Manual

HEC HMS SCHEMATICS

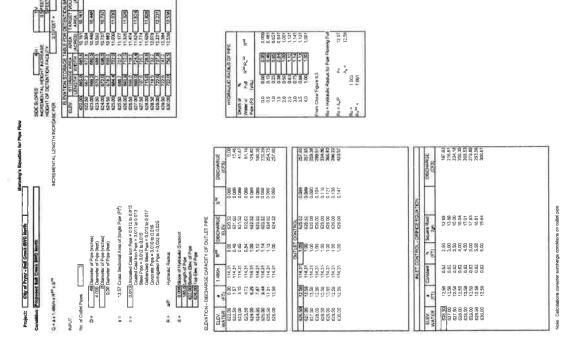








STORMWATER DETENTION INPUT DATA SHEETS (PROPOSED PROJECT)

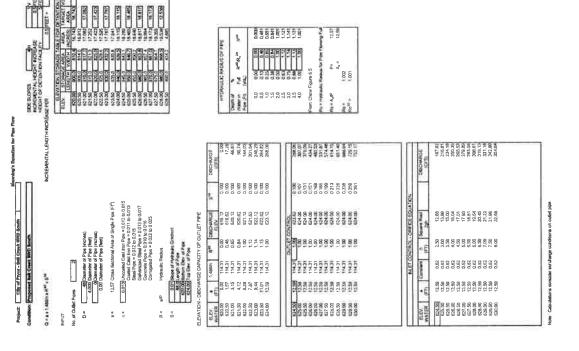


North Regions

Set franc

name of																					
Beath	Proposed	Self Croek SWO North	-th		12425																
Transmitter.	LOW PLOW DISCHARGE PIPE	1000	WEIN FLOW	WEIR FLOW CALCULATION - SECTION	NON-SECTI	1 200			WEST	WEST FLOW CALCUCATION - SECTION 2	ATION - SEC	1043			O.M.	WER ROW CALCULATION - SECTION 3	CAARON - S	SECTION 3		-	Γ
ELEVATION OF WATER	R GEE DETENTION BAZINE 1)	HEIGHT OF WATER SECTION 1	o	- E 2	≠E	H	FLOW (CPS)	MEIGHT OF WATER SECTION 1	o	-E	≖Ę	ī	FLOW (CFS)	DF WATER	U	→ £ 3	±Ę.	Ī	55	FLOW FLO	FLOW (CFS)
822.00	_																			_	0.00
622.59 E22.59	15.46																			_	15.4
623 50																				_	81.16
624.00																				-	28.81
624.50																				=	100 P
625.00																				=	85,00
05550																				=	89.00
90'929			2.86	75.0	90	0.0														¥	93.00
05929			2.88	75.0	5.0	4,0														- 53	99.40
627.00			2,66	75,0	1,0	1,6		00'0	2.86	-	0.0	9	00.0							4	16,31
627.50			2.86	75.0	1.5	1.8		050	2.66	-	50	0.4	47.00							4	M7.78
628.00			2.68	75,0	2.0	2.8		1,00	2.86		1.0	1.0	133.00							d	47.62
628.50			2.66	75.0	52	4.6		150	2.66		15	18	244.34	000	2.6			0'0	0.0	0000	98.4
00.629		300	2,66	75.0	3.0	5,2	1036.63	2,00	2.86	20.0	2,0	2.8	375.18	0.50	2,666	0,250		0.5	0.4	306.65 188	1698.34
529.50			2.86	75.0	3.5	6.5		2.50	2 66		2,5	đ	525,73	1.00	2.6			1.0			90.09
830.00			2.68	75.0	40	3.8		3.00	2 66		3.0	5.2	90 L09	150	2.6			1,5		•	(181.8)
																				1	٦

	nchem)		an of Pipe (Ft ²)	200013 20013 00017		D Stope - Hydraulic CD Length of Pos- on 0.00 Below Elev, of Pt
3	Commercial Page (Inches)	11	25,13 Cross Sectional Area of Pipe (FI ³)	OATS Uncomed Card Hain Piger + 0.011 of County Coun	Hydemalic Radius	C Stope - Hydrauk Gir 0.0 (amplit of Pipe 822.00 (bullouin Elen, of Pipe
1000	Н	П		11		111



Charles of the con-

Branch Creek Study

STORMWATER DETENTION BASIN OUTLET STRUCTURE WITH LOW FLOW PIPE AND STEPPED WERR OUTLET FLOW CONTROL WERR

City of Pryor - Sak Creek SWD South Proposed Sak Creek SWD South

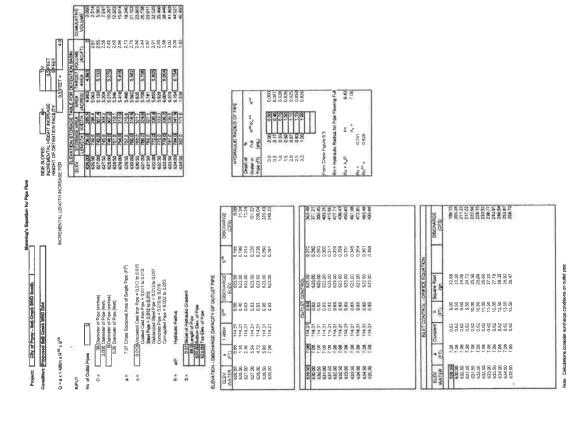
Project:

SECTION 1 SECT	Company Comp	L	adia adaya Jak Dischassor		WEIDER	WEIB ELOW CALCULATION	ATION SECTION	TOW 1			WEIR	LOWCALCUL	WEIR FLOW CALCULATION - SECTION 2	SN2			WER	WEIR FLOW CALCULATION - SECTION 3	A'DON-SECT	DON 3		
17.28 17.28 17.28 17.28 17.29 17.20	17.28 17.24 17.25 17.2	ELEVATION OF WATER	DISCHARGE (CFS) (CFS)	OF WATER	o	-E8			FLOW (CFS)	OF WATER	υ	¬€	±Ε.	£	FLOW (CFS)	NEIGHT OF WATER SECTION 1	υ	(F) 6008	H (FT)	¥.	FLOW (CFS)	FLOW (CFS)
17.28 17.28 17.29 17.29 17.20	17.26 17.27 17.2	1																				
4.6 ft 12.26 12.27	1/2 20 2 2 2 2 2 2 2 2	90	0.00																			00.0
9.45 H	90.74 14.03 11.00	250	17.28	_																		46.8
1,500 1,50	144 CM 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 8	45,84																			90.7
	12.00 12.00 12.00 12.00 12.00 10.0 10	2 2	144 DS																			144
	17-202 1	250	53.00																			153
157,002 157,002 158,002 158,003 158,		3.00	152.00																			77
197-22 1	197-22 1	3,50	173.00																			2 6
15 25 25 25 25 25 25 25	16 17 18 18 18 18 18 18 18	4,00	182,00	-																		9 6
23418 0.00 2.565 50.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	23418 0.00 2.56 50.00 0.0	150	197.92																			216.6
250.35 10 0.50 2.86 50.0 0.5 10 133.00 0.5 1	250.35 1.00 2.86 50.0 0.5 1.4 70.0 250.35 1.00 2.86 50.0 1.5 1.6 1.3.0 2.66 30.0 0.5 0.4 702.1 0.00 2.86 280.0 0.0 <td>00'5</td> <td>216.81</td> <td></td> <td>2,6</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2017</td>	00'5	216.81		2,6											-						2017
2555 150 2166 500 10 10 128 13.00 00 256 300.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	2555.53 150 2.66 550.0 16 10 125 150 2.66 50.0 16 10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	20	234.18		52																	202
Table Tabl	150 2.66 50.0 15 18 2.69 50.0 15 18 2.64 50.0 2.66 50.0 15 18 2.64 50.0 2.66 50.0 15 18 2.65 50.0 2.66 50.	00	250.35		2.5								3									205
250.5 2.5 2.6 50.0 2.6 50.0 2.0 2.8 50.0 2.0 2.6 50.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	2501.56 2.00 2.66 550.0 2.6 2.6 577.1 1.00 2.66 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.00 2.6 500.0 0.5 1.4 577.2 1.0 577.2 1	20	265 53		2,6						2 66	300.0	00	0.0								950
255 25 25 25 25 25 25 25 25 25 25 25 25	2551 2.50 2.66 50.0 2.5 60.0 2.5 60.0 2.5 60.0 0.0 1.5 1.0 10.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	00	279 89		28						5.86	300.0	0	* 0		100.00	100	2000				
366 1 350 2.66 50.0 10 5.2 670.0 10 5.2 670.0 10 15 1.8 144,000 10 10 10 10 10 26 50.0 10 10 10 10 10 10 10 10 10 10 10 10 10	30.6 ii 3.00 2.66 5.00 3.0 5.2 6.00 3.0 1.5 1.8 144,000 1.0 1.0 1.4 144,000 1.0 1.6 1.8 1.8 144,000 1.0 1.0 1.9 1.8 1.8 1.8 1.8 1.2 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	20	293.56		2.6						286	300 0		9		800	8 1	2000				
18,14, 1857 286 50.0 15 61 61 61 61 61 61 61 61 61 61 61 61 61	101 2 266 50.0 15 615 615 615 615 615 615 615 615 615	8	306.61		2.6						2,66	3000	9.	0		25	8 1	200				
33116 400 256 50,0 40 5,0 106400 226 258 50,0 10 3,0 106407 126 258 250 13 12 12 1000 20 13 13 12 10 10 10 10 10 10 10 10 10 10 10 10 10	3311/8 4.00 2.86 50.0 4.0 6.0 1094/00 2.87 2.89 50.0 1.0 1154/37 1.50 2.89 2.00 2.0 12 13. 127.00 2.0 13. 127.00 2.0 13. 127.00 2.0 13. 127.00 2.0 13. 127.00 2.0 13. 127.00 2.0 13. 127.00 2.0 13. 130.00 2.0 130.00 2	8	319.13		2.8						2.95	3000	20	2.0		8	28					
34200 450 156 500 45 53 (2586) 3.00 2.96 300.0 3.0 6.2 44453 2.00 2.04 250.0 2.0 2.0 100.000	340,04 5.00 2.66 5.00 4.5 8.3 (2386) 3.00 2.66 30.00 3.5 6.5 5255.22 2.50 2.66 250.0 2.5 4.0 3520.04	800	231 165		2.6				7		2.85	300.0	2.5	9		1.80	288	2800				
34,404 5.00 2.66 93.0 8.0 11.2 1466.99 3.50 2.06 300.0 3.5 4.5 8226.22 2.50 2.96 250.0 2.5 4.0 3520.04	35,404 5.00 2.66 90.0 6.0 11.2 1466.90 3.50 2.66 300.0 3.5 4.5 9256.22 2.59 2.66 259.0 2.5 4.0 35,20,64	5	OR COT		36				Ť		2.56	3000	30	52		200	997	250.0				
		8	254.04		2.6				1		2,05	300.0	3.5	6.5		97	288	2800				

All Duranties of Pipe (reches) 4.00 Duranties of Pipe (reches) 5.00 Duranties of Duranties of Duranties 5.00 Duranties of Duranties 5.00 Duranties Pipe = 0.013 to 0.013 5.00 Duranties Pipe = 0.013 to 0.015 Findenalize Resize
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de Deanch County Dr.

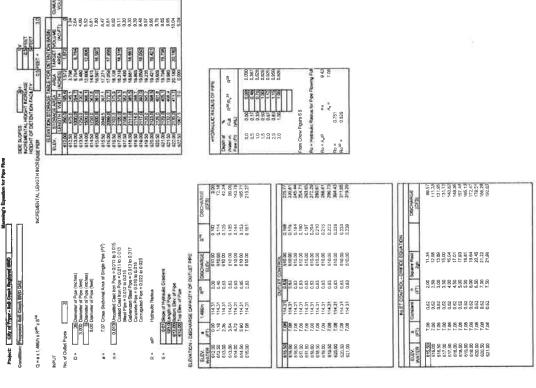
STORMMATER DETENTION BASIN OUTLET STRUCTURE WITH LOW FLOW PIPE AND STEPPED WEIR OUTLET FLOW CONTROL WEIR

City of Pryor - Sait Creek SWD South Proposed Sait Creek SWD DAA

Project: Basin:

	FLOW (CFS)	21.34 77.24 180.00 173.22 180.00 173.20 183.00 183.00 183.00 183.00 183.00 183.00 183.00 183.00 183.00 183.00 183.00 184.13 184.13 184.13 184.13 184.13 184.13 184.13 186.10 186.10
	FLOW (CFS)	0.00 70 55 62 70 54 16 70 54 16 70 54 16 70 54 16
3	ни	00 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0
N-SECTION	±Ē.	0.0 5.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6
CALCULATIO	- (F)	275.0 275.0 275.0 275.0 275.0 275.0
WER FLOW CALCULATION - SECTION 3		2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.
100	ER C	2.00 2.00 2.00 2.00 2.00 2.00
	OF WATER	
	FLOW (CFS)	6 1787; 6 1786; 6 1786
5	ŧ.	0.0 0 4 2 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
WEIR FLOW CALCULATION - SECTION 2	±Ē.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CALCULATE	- E &	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
WEIR FLOW	ט	2000000000000000000000000000000000000
		0.00 0.50 1.10 0.22 2.20 3.50 3.50
	OF WATER	
	FLOW (CFS)	0.00 0.00 0.00 0.00 1.10 66.50 1.10 66.50 1.20 196.08 2.2 196.08 5.2 34.54 6.5 34.54 6.5 34.54 11.3 74.54
I NO	T.	D C + + + C 4 4 0 10 50 50 50
CTION - SECT	±Ē,	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
WER FLOW CALCULATION - SECTION	-E	
WERFL	υ	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	HEIGHT OF WATER	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
LOW FLOW DISCHARGE PIPE	DISCHARGE OF (CFS) OF	8448888488848444
9	ELEVATION OF WATER	600 50 50 50 50 50 50 50 50 50 50 50 50 5

No. of Outlet Pipess	R		
	36 Dumeter of Pipe (inches)		
	D Dameter of Pipe (inches)		
	14,14 Cross Sectional Area of Pipe (Ft²)	***	0.00
	0.013 Uncusted Cast fron Pige = 0.015 to 0.015 Cauted Cast Ven Pige = 0.011 to 0.013 Steff Per = 0.012 to 0.015 Galvanzed Steff Pige = 0.013 to 0.017 Contracts Pige = 0.010 to 0.015		
G/B	Hydraulic Radius		
	OStope - Hydraulic Gradient	O Stope - Hydraulic Gradient	Gradien
	626 00 Retton Flav of Dire	0.00 Length of Pipe 0.00 Retion: Elev. of Pine	
	629.00 Top Elev. of Pipe	0.00 Top Elev. of Pipe	Į.



AMMAN AMMAN

Calculations consider surcharge conditions on outlet pipe

STORMWATER DETENTION BASIN OUTLET STRUCTURE WITH LOW FLOW PIPE AND STEPPED WERN OUTLET FLOW CONTROL WEIR

			FLOW FLOW (CF6)	000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		SECTION 3	T .	8.45.2
		WER FLOW CALCULATION - SECTION 3	(F)	0.0259 0.0259 0.0259
		WER FLO	υ	2.2 2.2 2.8 2.8
			HEIGHT OF WATER SECTION 1	8883
			FLow (CFS)	0.00 TO 10.00 TO 10.0
		1082	ž,	G 2 5 5 5 4 8 8
		AATION - SECT	H (j.)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DUILEI PLOW CONIRUL WEIN		WEIR FLOW CALCULATION - SECTION 2	1000	2
OUTE FLOW		W	HT C	000 0.50 0.50 1.50 2.50 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3
			W HEIGHT S) OF WATER SECTION 1	0.000 2.2.5.5 2.2.5.5 2.2.5.5 2.2.5.5 2.2.5.5 3.2.5.5 3.3.5 3.5
			H FLOW (CFS)	0 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		DM-SECTION 1	ıĘ.	88528888844
		WER FLOW CALCULATION	¬€%	
donal SWD	D DA2	WEIR FL	o	\$2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
City of Pryor - Salt Creek Regional SWD	Proposed Sall Creek SWD DA2		HEIGHT OF WATER SECTION 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
City of Pryor	Proposes	TOW BY OWN DISCHARGE PIPE	DISCHARGE (GFS) (SEE DETENTION BASIN 1)	000 000 000 000 000 000 000 000 000 00
Project:	Basin:	E	ELEVATION OF WATER	612.00 612.00 613.00 613.00 614.00 615.50 615.50 615.50 617.00 617.00 618.50 617.00 618.50 61

Danmeter of Per- Cross Socialization Cross Socialization Cross Steel Per- Steel Per- Control Per- Hydraufic Radius Steece - Hydraufic Radius	9	Dameter of Pipe (inches)	OC Demeter of Pipe (feet)	O Dameter of Pipe (riches)	14,14 Cross Sectional Area of Pipe [Ft ²]	0.013 Lincolled Cast Iron Pipe = 0.012 to 0.015	State Pipe = 0.012 to 0.015 Galvenizad State Pipe = 0.013 to 0.017	Concrete Pipe = 0.010 to 0.016	Hydraulic Radius	Stage - Hydraulic Gradient Gradient	Langth of Pipe	612.00 Bottom Elev. of Pipe 0.00 Bottom Elev. of Pipe
--	---	--------------------------	---------------------------	----------------------------	---	---	---	--------------------------------	------------------	-------------------------------------	----------------	---



FEMA CURRENT EFFECTIVE MODEL

Reach	River Sta	Profile	○ Total	Min Ch El	W.S. Elev	Crit W.5.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Top Width	Froude # Chl
	WELL CO.	15 OF 15 ST	(cfs)	(11)	(17)	(R)	(III)	(f\/π)	(ft/s)	(6q ff)	(m)	
Reach-1	17870	PF 1 - 10-Yr	2600.00	625,80	630,37		630,60	0.003101	4,56	776.96	318.58	0,38
Resch-1	17870	PF 2 - 50-Yr	5410,00	625,80	632.39		632,61	0.002211	4,91	1680.42	558.43	0,34
Reach-1	17870	PF 3 - 100-Yr	6410.00	625,80	632,92		633.13	0.001994	4,91	1985,13	596,68	0,32
React-1	17870	PF 4 - 500-Yr	9730,00	625,80	634,38		634,60	0,001600	4,98	2935,98	697,12	0,30
Kearari	17670	FT 4-300-11	8730,00	025,00	034,00		004,00	0,001000	4,50	2505,50	551,12	
D	47770	DF 4 40 Ve	2600,00	623,20	629,33		629,47	0,001277	3,56	982,95	303,66	0.25
Reach-1	17270	PF 1 - 10-Yr										
Reach-1	17270	PF 2 - 50-Yr	5410.00	623,20	631,48		631,66	0,001243	4,29	1765_40	396_95	0.26
Reach-1	17270	PF 3 - 100-Yr	6410.00	623,20	632,03		632,22	0.001261	4,51	1986,92	410,80	0.27
Reach-1	17270	PF 4 - 500-Yr	9730,00	623,20	633,48		633,73	0,001378	5,22	2617,87	454.55	0.29
		FERRES.										
Reach-1	18420	PF 1 = 10-Yr	2600,00	621,00	628,47		628,59	0,000962	3_18	1101_37	358,14	0,22
Reach-1	16420	PF 2 - 50-Yr	5410.00	621.00	630,68		630,83	0.000907	3.76	2036.93	477.34	0.22
Reach-1	16420	PF 3 - 100-Yr	6410.00	621_00	631.22		631.38	0.000924	3,95	2299,94	498,89	0,23
Reach-1	16420	PF 4 - 500-Yr	9730,00	621,00	632,63		632,83	0.000987	4,49	3037.41	539,46	0.24
Keaci-1	10420	FF 4 - 300-11	3190,00	021,00	002,00		502,00	0,00001	1,10	5551,41	000,10	0.21
	45400	DE - 40 V-	2000.00	C40.40	627,16		627,36	0.001473	3,72	787,27	244.74	0.27
Reach-1	15400	PF 1 - 10-Yr	2600,00	619.40				0,001473	5.08	1430,60	471,39	0.32
Reach-1	15400	PF 2 - 50-Yr	5410.00	619.40	629,15		629,49					
Reach-1	15400	PF 3 - 100-Yr	6410,00	619.40	629_63		630_00	0.001954	5,39	1676,68	555,28	0,33
Reach-1	15400	PF 4 - 500-Yr	9730,00	619.40	631,12	7.	631_46	0.001713	5,62	2648.12	725,55	0_31
	VIDE NO.											
Reach-1	14360	PF 1 - 10-Yr	2500,00	617_80	625.78		625,96	0,001304	3,75	960.16	365_63	0.25
Reach-1	14360	PF 2 - 50-Yr	5410,00	617,80	627.87		628,04	0,001124	4.15	2023.94	693.67	0.25
Reach-1	14360	PF 3 - 100-Yr	6410,00	617.80	628.38		628,55	0,001081	4,23	2394,21	744.61	0.24
Reach-1	14360	PF 4 - 500-Yr	9730,00	617,80	630,21		630,34	0,000759	3,99	3864.06	868,54	0,21
A359A359	2000											
Reach-1	13664	PF 1 - 10-Yr	2800,00	616,70	625.16		625.26	0.000768	2,50	1179,06	339,22	0,19
		-		615,70	627,19		627,33	0,000766	3.25	2205.68	695,26	0,22
Reach-1	13664	PF 2 - 50-Yr	5830,00									
Reach-1	13654	PF 3 - 100-Yr	6910,00	516,70	627,72		627,87	0,000955	3,40	2601_74	798,03	0,22
Reach-1	13664	PF 4 - 500-Yr	10490,00	616,70	629,81		629,92	0,000589	3,16	4484_40	972,35	0.18
15000	Passes of											
Reach-1	13662	PF 1 - 10-Yr	2800.00	620_30	624,98		625,24	0,003977	4,15	713,47	311_27	0.40
Reach-1	13662	PF 2 - 50-Yr	5830,00	620,30	627,09		627_32	0,002415	4,17	1734.95	676,69	0.33
Reach-1	13662	PF 3 - 100-Yr	6910.00	620.30	627.64		627.86	0.002089	4.17	2137.00	783.39	0,32
Reach-1	13862	PF 4 - 500-Yr	10490.00	620,30	629,79		629.92	0,000909	3,44	4081,53	993,51	0.22
		1000	10.000									
Reach-1	13681	PF 1 - 10-Yr	2800.00	620.30	624,97		625,23	0,003994	4,16	711.95	310.54	0.40
				-	627,09		627,32	0,003934	4,18	1733.05	676,15	0,33
Reach-1	13661	PF 2 - 50-Yr	5830,00	620,30								
Reach-1	13661	PF 3 - 100-Yr	6910,00	620,30	627,64		627,86	0,002094	4,17	2135_09	782,92	0.32
Reach-1	13661	PF 4 - 500-Yr	10490,00	620,30	629,79		629_92	0.000909	3,44	4080_56	993.44	0.22
	1,12	45 24 37 37										
Reach-1	13680	PF 1 - 10-Yr	2800,00	620,30	624,97		625,23	0.004009	4,17	710,59	309.88	0.40
Reach-1	13660	PF 2 - 50-Yr	5830.00	620,30	627,09		627,32	0.002427	4.18	1731.24	675_63	0.34
Reach-1	13660	PF 3 - 100-Yr	6910.00	620.30	627.64		627.86	0.002098	4.18	2133.27	782.47	0.32
Reach-1	13660	PF 4 - 500-Yr	10490.00	620,30	629,79		629,92	0.000910	3.44	4079_59	993,36	0.22
	A 10	100										
Reach-1	13260	PF 1 - 10-Yr	2800.00	615,70	624,36		624,50	0.000997	3.53	1153.33	403,10	0.23
		-					626,77	0.000869	3.94	2300.73	595.75	
Reach-1	13260	PF 2 - 50-Yr	5830,00	615,70	626,63							0.22
Reach-1	13260	PF 3 - 100-Yr	6910,00	615,70	627,20		627,35	0,000855	4.06	2655,28	633,25	
Reach-1	13260	PF 4 - 500-Yr	10490,00	615,70	629,51		629,63	0.000644	4_04	4363,79	884.83	0.20
CALTEST			7									
Reach-1	11810	PF 1 - 10-Yr	2800,00	613_80	623.02		623,20	0,001051	3,60	965,54	287.01	0.23
Reach-1	11810	PF 2 - 50-Yr	5830,00	613_80	625,36		625,60	0,001182	4.58	1953.68	628.38	0.28
Reach-1	11810	PF 3 - 100-Yr	6910.00	613.80	626.01		626.24	0.001135	4.69	2418,29	811.34	0.26
Reach-1	11810	PF 4 - 500-Yr	10490.00	613,80	628,99		629.08	0,000431	3,42	5608,64	1330,89	0,17
	100		1									
Reach-1	10360	PF 1 - 10-Yr	2800.00	612,60	621.90		622,00	0.000762	3.23	1467.41	632.46	0.20
Reach-1	10360	PF 2 - 50-Yr	5830.00	612,60	624.83		624,88	0,000314	2.54	4015.29	1084.02	
	10360	PF 3 - 100-Yr	6910.00	612,60	625.55		625.59	0,000374	2,50	4821.78	1173,34	0,13
Reach-1												
Reach-1	10360	PF 4 - 500-Yr	10490.00	612.60	628.81		628,84	0,000116	1,90	9061.48	1425.43	0,09
100000	5705											
Reach-1	9310	PF 1 - 10-Yr	2800.00	611.80	621,49		621,52		2,14	2711.82	1262.84	
Reach-1	9310	PF 2 - 50-Yr	5830,00	611,80	624.71		624.72		1.42	7325.02	1571_11	
Reach-1	9310	PF 3 - 100-Yr	6910.00	611_80	625.43		625.44	0,000077	1,41	8488.25	1632,24	
Reach-1	9310	PF 4 - 600-Yr	10490.00	511,80	628.76		628,77	0.000039	1.17	14332.12	1873,23	0.05
X 20 000	1	TO STATE OF STREET	1									
Reach-1	8490	PF 1 - 10-Yr	2800.00	611,30	621,35		621,37	0,000125	1.20	4102.24	1143.02	0.07
Reach-1	8490	PF 2 - 50-Yr	5830.00	611.30			624.65		1,21	8623.22	1601.05	
Reach-1	8490	PF 3 - 100-Yr	6910,00	611.30			625,38		1,26	9823.74	1693.36	
Reach-1	8490	PF 4 - 500-Yr	10490.00	611,30	628,73		628,73	0,000052	1,15	16220.91	2118.51	
ncoun-1	3480	FF 4 - 300-TI	10490.00	011,30	020,73		020,/3	0,000032	1,13	13220.91	2110,01	3,00
2003577			+					0.001711		700.10	00.15	1
Reach-1	8343	PF 1 - 10-Yr	2800,00	611.20	621,03	615,48	621,26		3,82	733.10		
Reach-1	8343	PF 2 - 50-Yr	5830.00	611.20	623.97	617,88	624.47		5,65	1032.49		
Reach-1	6343	PF 3 - 100-Yr	6910.00	611.20	524.53	618.58	625.16		5.34	1089,64	102.00	
Reach-1	8343	PF 4 - 500-Yr	10490.00	611.20	627.58	620.60	628.45	0.003387	7,49	1400.14	102.00	0.31
AST 8A.00	S2895.0		1									
Reach-1	8291	100000000000000000000000000000000000000	Bridge									
	State of the	1227	Direge		V							
Reach-1	8239	PF 1 - 10-Yr	2800.00	611.20	620,83	615.48	621.07	0.001882	3,93	712.92	98,13	0.26
									5.84	998.35		
Reach-1	8239	PF 2 - 50-Yr	5830.00		623,64	617.88	624,17					
Reach-1	8239	PF 3 - 100-Yr	6910.00				624.79		6.60	1047.19		
Readh-1	8239	PF 4 - 500-Yr	10490.00	611.20	627.13	620.60	628.06	0.003745	7.74	1354.47	102,00	/I 0.

HEC-RAS Plan: Salt Creek FP River RIVER-1 Reach: Reach-1 (Continued)

43	Profile PF 1 - 10-Yr PF 2 - 50-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 3 - 100-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr	Q Total (offs) 2800,00 5830,00 5830,00 10490,00 10490,00 2800,00 5830,00 10490,00 2800,00 5830,00 10490,00 2800,00 5830,00 10490,00	Min Ch El (n) 611,10 611,10 611,10 611,10 611,10 611,10 611,10 611,10 610,70 610,70 610,70	W.S. Elev (R) 619,93 622,31 621,45 627,55 619,11 620,54 621,00 622,28 618,37 620,03	Crit W.S. (ft) 517,84 520,36 620,93 622,62 614,86 616,74 617,32 619,01	E.G. Elev (ft) 620,59 623,50 622,05 627,56 619,35 620,63 621,09	E.G. Slope (ftm) 0,009995 0,010098 0,022438 0,000155	Vel Chril (ft/s) 6,51 8,72 11,86 1,59	Flow Area (eq 1) 430,01 668,46 582,56 11409,25	7op Width (ft) 98.95 1371,77 1299,92 1896,04	0,55 0,59 0,87 0,08
43	PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 3 - 100-Yr PF 3 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 3 - 100-Yr	2800,00 5830,00 6910,00 10490,00 Bridge 2800,00 5830,00 6810,00 10490,00 5830,00 6910,00	611,10 611,10 611,10 611,10 611,10 611,10 611,10 611,10 611,70 610,70 610,70	619,93 622,31 621,45 627,55 619,11 620,54 621,00 622,28 618,37	517,84 520,36 620,93 522,52 614,86 616,74 617,32	620,59 623,50 622,05 627,56 619,35 620,63	0.009995 0.010098 0.022438 0.000155	6.51 8,72 11.86 1,59	430.01 668.46 582.56 11409.25	98.95 1371.77 1299.92	0,59 0,87
43	PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 3 - 100-Yr PF 3	5830,00 6910,00 10490,00 Bridge 2800.00 5830.00 6910,00 10490,00 5830.00 6910,00 10490,00	611,10 611,10 611,10 611,10 611,10 611,10 611,10 611,10 610,70 610,70 610,70	622,31 621,45 627,55 627,55 619,11 620,54 621,00 622,28	620,36 620,93 622.62 614.86 616,74 617,32	623,50 622,05 627,56 619,35 620,63	0,010098 0,022438 0,000155	8,72 11,86 1,59	668,46 582,56 11409,25	1371,77 1299,92	0,59 0,87
43	PF 3 - 100-Yr PF 4 - 500-Yr PF 5 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 3 - 100-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 5 - 500-Yr PF 7 - 500-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 2 - 50-Yr PF 3 - 100-Yr	6910,00 10490,00 Bridge 2800,00 6810,00 10490,00 2800,00 5830,00 6810,00 10490,00	611,10 611,10 611,10 611,10 611,10 611,10 610,70 610,70 610,70	621,45 627,55 619,11 620,54 621,00 622,28	620,93 622.62 614,86 616,74 617,32	622,05 627,56 619,35 620,63	0,022438 0,000155 0,001890	11,86 1,59	582,56 11409,25	1299,92	0_87
43 43 43 43 43 43 43 44 43 44 44 44 44 4	PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 500-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 5 - 500-Yr PF 5 - 500-Yr PF 5 - 500-Yr PF 6 - 500-Yr PF 7 - 500-Yr PF 7 - 500-Yr PF 7 - 500-Yr PF 8 - 500-Yr	10490,00 Bridge 2800,00 5830,00 6810,00 10490,00 2800,00 5830,00 6910,00 10490,00	611,10 611,10 611,10 611,10 610,70 610,70 610,70	619.11 620,54 621,00 622.28 618,37	614.86 616,74 617,32	627,56 619,35 620,63	0,000155	1,59 3,95	11409.25		
31.5 20 1 20 20 20 20 20 20 2	PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 5 - 100-Yr PF 5 - 100-Yr PF 5 - 100-Yr PF 5 - 100-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr	Bridge 2500.00 5830.00 6810.00 10490.00 2800.00 5830.00 6910.00 10490.00	611,10 611,10 611,10 611,10 610,70 610,70 610,70	619.11 620.54 621.00 622.28 618.37	614,86 616,74 617,32	619,35 620,63	0,001890	3,95		1896,04	0.08
220 1 220 1 220 1 220 1 20 1 20 1 200 1	PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 5 - 50-Yr PF 7 - 100-Yr PF 7 - 100-Yr PF 9 - 500-Yr	2800.00 5830.00 6810.00 10490.00 2800.00 5830.00 6910.00	611,10 611,10 611,10 610,70 610,70 610,70	620,54 621,00 622,28 618,37	616, 74 617,32	620,63					
220 1 220 1 220 1 220 1 20 1 20 1 200 1	PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 5 - 50-Yr PF 7 - 100-Yr PF 7 - 100-Yr PF 9 - 500-Yr	2800.00 5830.00 6810.00 10490.00 2800.00 5830.00 6910.00	611,10 611,10 611,10 610,70 610,70 610,70	620,54 621,00 622,28 618,37	616, 74 617,32	620,63					
20 1 20 1 20 1 20 1 20 1 20 1 20 20	PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 5 - 500-Yr PF 7 - 100-Yr PF 7 - 100-Yr PF 9 2 - 50-Yr PF 9 3 - 100-Yr	5830,00 6810,00 10490,00 2800,00 5830.00 6910,00 10490,00	611,10 611,10 611,10 610,70 610,70 610,70	620,54 621,00 622,28 618,37	616, 74 617,32	620,63			700.00		
20 1 20 1 20 1 20 20 20	PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 3 - 100-Yr	5810,00 10490,00 2800,00 5830.00 6910,00 10490,00	611,10 611,10 610,70 610,70 610,70	621,00 622.28 618,37	617_32		0.000060		708.99	720.34	0,26
20 1 000	PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 60-Yr PF 3 - 100-Yr	2800,00 5830.00 6910,00	610,70 610,70 610,70	622.28 618.37		621.09		3,20	3218,86	982,51	0,19
600 100 100 100 100 100 100 100 100 100	PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr	2800,00 5830.00 6910.00 10490.00	610,70 610,70 610,70	618,37	619,01		0,000997	3,36	3687.74	1064,96	0,20
600 1 600 1 600 1 600 1 600 1 600 1 600 1 625 1	PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 60-Yr PF 3 - 100-Yr	5830,00 6910,00 10490,00	610,70 610,70			622,38	0,001025	3,72	5194,17	1281.83	0,20
600 1 600 1 600 1 600 1 600 1 600 1 600 1 625 1	PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 60-Yr PF 3 - 100-Yr	5830,00 6910,00 10490,00	610,70 610,70			618,46	0,001100	3_02	1460,63	680,42	0,20
600 1 600 1 600 1 600 1 600 1 600 1 725 1	PF 3 - 100-Yr PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 60-Yr PF 3 - 100-Yr	6910,00 10490,00	610,70			620,13	0,000953	3,23	2673,38	778.66	0.19
600 1000 1000 1000 1000 1000 1025 125	PF 4 - 500-Yr PF 1 - 10-Yr PF 2 - 60-Yr PF 3 - 100-Yr	10490,00		620,49		620,59	0,000944	3.33	3038,76	814.55	0,19
100 100	PF 2 - 60-Yr PF 3 - 100-Yr	2800.00	010,10	621.77		621,89	0,000922	3,58	4145,90	914,74	0.19
100 100	PF 2 - 60-Yr PF 3 - 100-Yr	2800.00									
100 100 125	PF 3 - 100-Yr		610,00	617.01		617.14	0.001349	2,97	1130,62	428,50	0,21
125 126		5830,00	610_00	618,84		619,00	0,001389	3,60	2129.00	627_01	0_23
125		6910,00	610,00	619,34		619,50	0,001367	3,72	2448,77	660,54	0.23
125	11-006-11	10490.00	610,00	620,70		620,88	0,001323	4,06	3409,11	750,18	0.23
125	PF 1 - 10-Yr	2800,00	610,00	616,81		616,99	0.002957	4,48	912,49	386,65	0,32
	PF 2 - 50-Yr	5830.00	610,00	618.68		618.87	0,002937	4,58	1836.39	580.83	0.28
	PF 3 - 100-Yr	6910.00	610,00	619,18		619,37	0,002025	4,61	2138,55	618,61	0,28
25	PF 4 - 500-Yr	10490.00	610,00	620,55		620.76	0.001804	4,80	3058.23	729.28	0.27
77 - I											
	PF 1 - 10-Yr	2800.00	608.00	616.77		616.85	0,000819	2,67	1444.79	519.81	0,17
	PF 2 - 50-Yr	5830.00	608,00	618.64		618,74	0,000857	3,17	2533.98	634,33	0,18
	PF 3 - 100-Yr	6910,00	608,00	619,14		619,25	0,000867	3,30	2859.04	657,39	0,19
50	PF 4 - 500-Yr	10490.00	608.00	620,51		620,64	0,000919	3,71	3802,10	730,16	0,20
500	PF 1 - 10-Yr	2800.00	607,50	615,93	_	616,13	0,001918	4,12	910,60	314,16	0,26
	PF 2 - 50-Yr	5830,00	607,50	617,56		617,87	0,002536	5,40	1486,18	388.86	0.31
	PF 3 - 100-Yr	6910.00	607,50	618,01		618,35	0,002672	5.72	1664.99	409,31	0.32
	PF 4 - 500-Yr	10490.00	607.50	619.21		619,64	0,003058	6,61	2186,04	463,77	0,35
50	PF 1 - 10-Yr	2800.00	606.60	614.17	611.08	614.28	0.001574	3.27	1272.01	621.93	0,23
	PF 2 - 50-Yr	5830.00	606.60	615,17	613,62	615,35	0,002314	4,37	1925,11	691,65	0,29
	PF 3 - 100-Yr	6910,00	605,60	615,41		615,62	0,002589	4,73	2094,46	708,48	0.30
150	PF 4 - 500-Yr	10490.00	606,60	616,16		616,45	0,003128	5.54	2648,30	761.24	0.34
550	PF 1 - 10-Yr	2800,00	605,40	609,98	609,98	610,89	0.021339	8.56	412,14	238,17	0.78
	PF 2 - 50-Yr	5830.00	605,40	611,92	611,58	612,30	0,007288	6,62	1406,12	776.48	0.49
	PF 3 - 100-Yr	6910.00	605,40	612.32	611.75	612,64	0.005934	6,25	1722.14	818.09	0.45
	PF 4 - 500-Yr	10490,00	605.40	613.32		513.61	0,004372	5.95	2594.84	917.60	0.39
		2800.00	598.30	608.41							0,13
											0,18
											0,23
uu	PF 4 - 300-11	10490,00	380,30	011,38		011,31	0,001248	4,02	4020,00	7710113	0,20
204	PF 1 - 10-Yr	2800.00	598,30	608,36	602.61	608.42	0.000485	2,18	1726,56	469,01	0,14
		5830,00	598,30	610,23	604,51	610,35	0.000815	3.24	2820,95	960,15	0,18
		6910,00	598.30	610.41	605.01	610.56	0.001017	3,67	2992,99	983.17	0.20
204	PF 4 - 500-Yr	10490.00	598.30	611,24	506.52	611.44	0,001367	4.48	3858.48	1091.63	0,24
									110.00	47.50	0.07
						4					
									3563,07	1494.04	0,25
		.5100,00	200,03	211,547	2.0,.1						
187		Bridge									
	4										
		2800.00	598.00	606,80	602,94	607.56	0.011875	6,97	401.49		
		5830.00	598.00	610.02	609.25	610.28	0.004592	5.30	1953.31		
		6910.00									
172	PF 4 - 500-Yr	10490.00	598.00	611.18	610.11	611,39	0.003970	5,25	34/1.64	14//_bb	0,26
170	DF 1 - 10-V-	2800.00	508 00	606.77	602.04	6A7.53	0.012001	7.00	400.10	47.88	0,43
							0.004688	5,35	1934.03		
					609.52	610.48	0.005287	5.74	2144,23		
		10490.00	598.00	611.17	610.11	611.38	0.004012	5.28	3462.41		
	STEETERS.										
Male -		2800.00	598.D0	605.84	602.94	606.82	0.009833	7.94	352.69		
110		5830.00	598.00	608.99	506.06	609.67					
110 110											
110 110 110	Pr 4 - 500-Yr	10490,00	598,00	610,85	609,71	611.11	0,004529	4,98	2034,27	1430,03	0.36
110 110 110											
200 200 200 200 200 200 200 200 200 200	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PF 1 - 10-Yr PF 2 - 50-Yr PF 3 - 100-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 4 - 500-Yr PF 5 - 100-Yr PF 7 - 100-Yr PF 7 - 100-Yr PF 8 - 100-Yr PF 9 - 500-Yr	PF 1 - 10-Yr	PF 1 - 10-Yr	PF 1 - 10-Yr	PF 1 - 10-Yr	PF 1 - 10-Yr	PF 1-10-Yr 2800.00 598.30 608.41 608.47 0.000471 PF 2-50-Yr 5830.00 598.30 610.32 610.43 0.000770 PF 3-100-Yr 6910.00 598.30 610.32 610.85 0.000947 PF 4-500-Yr 10490.00 598.30 611.39 611.57 0.001248 PF 1-10-Yr 2800.00 598.30 608.36 602.61 608.42 0.000485 PF 2-50-Yr 5830.00 598.30 610.23 604.51 610.35 0.000815 PF 3-100-Yr 6910.00 598.30 610.23 604.51 610.35 0.000815 PF 3-100-Yr 6910.00 598.30 611.44 606.52 611.44 0.001367 PF 4-500-Yr 10490.00 598.30 611.24 606.52 611.44 0.001367 PF 3-100-Yr 6910.00 598.00 607.62 602.94 608.25 0.004882 PF 3-100-Yr 6910.00 598.00 610.07 609.25 610.31 0.004352 PF 3-100-Yr 6910.00 598.00 610.25 609.52 610.52 0.004888 PF 3-100-Yr 6910.00 598.00 610.07 609.55 610.26 0.00578 PF 4-500-Yr 10490.00 598.00 610.20 609.55 610.26 0.00578 PF 3-100-Yr 6910.00 598.00 610.02 609.55 610.26 0.00578 PF 3-100-Yr 6910.00 598.00 610.01 606.14 610.27 0.004688 PF 3-100-Yr 6910.00 598.00 609.99 606.06 609.967 0.00833 PF 3-100-Yr 6910.00 598.00 609.99 606.06 609.967 0.00833	PF 1-10-Yr 2800.00 598.30 608.41 608.47 0.000471 2.15 PF 2-50-Yr 5830.00 598.30 610.32 610.43 0.000770 3.17 PF 3-100-Yr 6910.00 598.30 610.52 610.65 0.000947 3.56 PF 4-500-Yr 10490.00 598.30 611.39 611.57 0.001248 4.32 PF 1-10-Yr 2800.00 598.30 608.36 602.61 608.42 0.000485 2.18 PF 2-50-Yr 5830.00 598.30 610.23 604.51 610.35 0.000815 3.24 PF 3-100-Yr 6910.00 598.30 610.23 604.51 610.35 0.000815 3.24 PF 4-500-Yr 10490.00 598.30 610.41 605.01 610.56 0.001017 3.57 PF 4-500-Yr 10490.00 598.30 611.24 606.52 611.44 0.001367 4.48 PF 3-100-Yr 6910.00 598.00 607.62 602.94 608.25 610.31 0.004352 5.17 PF 3-100-Yr 6910.00 598.00 610.07 699.25 610.31 0.004352 5.17 PF 3-100-Yr 6910.00 598.00 610.27 609.25 610.31 0.004352 5.17 PF 3-100-Yr 6910.00 598.00 610.07 699.25 610.52 0.008892 6.35 PF 4-500-Yr 10490.00 598.00 610.07 699.25 610.52 0.004888 5.54 PF 4-500-Yr 10490.00 598.00 610.07 699.25 610.52 0.004888 5.54 PF 4-500-Yr 10490.00 598.00 610.02 609.52 610.52 0.004888 5.54 PF 4-500-Yr 10490.00 598.00 610.02 609.55 610.28 0.004592 5.30 PF 2-50-Yr 5830.00 598.00 610.02 609.55 610.28 0.004592 5.30 PF 3-100-Yr 6910.00 598.00 610.02 609.55 610.49 0.005178 5.69 PF 3-100-Yr 6910.00 598.00 610.01 606.14 610.27 0.004688 5.35 PF 3-100-Yr 6910.00 598.00 606.77 602.94 607.53 0.012003 7.00 PF 3-100-Yr 6910.00 598.00 610.01 606.14 610.27 0.004688 5.35 PF 3-100-Yr 6910.00 598.00 610.01 606.14 610.27 0.004688 5.35 PF 3-100-Yr 6910.00 598.00 610.01 606.14 610.27 0.004688 5.35 PF 3-100-Yr 6910.00 598.00 610.01 606.14 610.27 0.004688 5.35 PF 3-100-Yr 6910.00 598.00 611.17 610.11 611.38 0.004012 5.28 PF 3-100-Yr 6910.00 598.00 608.99 606.06 609.67 0.018356 7.33 PF 3-100-Yr 6910.00 598.00 608.99 606.06 609.67 0.018356 7.33 PF 3-100-Yr 6910.00 598.00 608.99 606.06 609.67 0.018356 7.33 PF 3-100-Yr 6910.00 598.00 608.99 606.06 609.67 0.018356 7.33	PF 1-10-Yr	PF1-10-Yr Z800.00 598.30 608.41 608.47 0.000471 2.15 1749.06 472.83 0 PF 2-50-Yr 5830.00 598.30 610.32 610.43 0.000770 3.17 2902.28 971.10 PF3-100-Yr 6910.00 598.30 610.52 610.65 0.000947 3.56 3098.99 997.09 PF4-500-Yr 10490.00 598.30 611.39 611.57 0.001248 4.32 4020.80 1110.79 PF4-500-Yr 5830.00 598.30 611.39 611.57 0.001248 4.32 4020.80 1110.79 PF3-100-Yr 5830.00 598.30 610.23 604.51 610.55 0.000945 2.18 1726.56 469.01 PF3-100-Yr 5830.00 598.30 610.23 604.51 610.55 0.000157 3.24 2820.95 980.15 PF3-100-Yr 5830.00 598.00 610.07 609.25 610.31 0.004352 5.17 2003.62 1159.00 PF4-500-Yr 10490.00 598.00 610.25 609.52 610.52 0.004888 5.54 2222.68 1211.57 2 PF4-500-Yr 10490.00 598.00 610.25 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.25 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.25 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.25 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.25 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.07 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.07 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.07 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.02 609.52 610.52 0.004888 5.54 2222.68 1211.67 2 PF4-500-Yr 10490.00 598.00 610.02 609.52 610.52 0.004592 5.30 1953.31 1146.56 2 PF3-100-Yr 2800.00 598.00 610.00 606.40 610.40 0.005748 5.69 2164.81 1197.98 1197.98 1197.98 1100-Yr 2800.00 598.00 610.00 606.40 610.40 0.005878 5.55 3477.64 1477.66 0 PF3-100-Yr 5810.00 598.00 610.10 606.40 610.27 0.004688 5.35 1934.03 1141.76 0 PF3-100-Yr 5810.00 598.00 610.10 606.40 609.57 610.40 0.005878 5.35 1934.03 1141.76 0 PF3-100-Yr 5810.00 598.00 610.10 606.40 600.60 600.67 0.005838 7.94 352.69 3462.41 1474.72 0 PF3-100-Yr 5810.00 598.00 610.10 606.40 600.60 600.67 0.005838 7.94 352.69 3462.41 1474.72 0 PF3-100-Yr 5810.00 598.00 600.60 600.60 600.67 0.005838 7.94 352.69

HEC-RAS Plan: Salt Creek FP. River: RIVER-1. Reach: Reach-1 (Continued)

HEC-RAS P	ian: Salt Creek	FP RIVER: RIVER-1	Reach: Reacl	1-1 (Continued)								
Reach	River Stn	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Top Width	Froude # Chi
			(ch)	(m)	(R)	(ft)	(n)	(n/n)	(Ns)	(sq ft)	(n)	
Reach-1	1650	PF 2 - 50-Yr	5830,00	595.80	607.75		607,98	0.001361	3.88	1523.28	195,78	0.23
Reach-1	1650	PF 3 - 100-Yr	6910.00	595.80	608.35		608.63	0.001513	4.26	1748.90	652.02	0.24
Reach-1	1650	PF 4 - 500-Yr	10490.00	595.80	609,79		610.08	0.001539	4.72	3199,53	1264.47	0.25
Reach-1	450	PF 1 - 10-Yr	2800.00	593.40	604,11	601.12	604.23	0.001802	3.11	1030.91	305,41	0.24
Reach-1	450	PF 2 - 50-Yr	5830.00	593.40	606.17	602.76	605,34	0.001800	3.76	1825.42	463.99	0.25
Reach-1	450	PF 3 - 100-Yr	6910.00	593,40	606.72	603.14	606,90	0.001798	3,92	2099.86	506.02	0.25
Reach-1	460	PF 4 - 500-Yr	10490.00	593,40	608.23	604.10	508,44	0.001802	4.35	2907.65	586.25	0,26

¥:

HEC HMS FLOWS AND LIDAR TOPOGRAPHY MODEL

HEC-RAS Plan: LIDAR HMS River: RIVER-1 Reach: Reach-1

		River: RIVER-1									- 141 ml	F + 4011
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Too Width	Froude # Chi
	A CONTRACTOR	70 19 19 11 11	(cfs)	(ft)	(n)	(ft)	(10)	(ft/ft)	(ft/s)	(fl pa)	(ft)	0.00
Reach-1	17870	PF 1 - 10-Yr	2038,00	625,80	629_75		629.97	0,003457	4,37	600,97	255,21	0,39
Reach-1	17870	PF 2 - 50-Yr	3088,00	625,80	630,83		631,05	0,002905	4.70	934.57	377.45	0,37
Reach-1	17870	PF 3 - 100-Yr	3601.00	625,80	631,23		631,46	0,002739	4,81	1098.53	430.23	0,36
Reach-1	17870	PF 4 - 500-Yr	5082.90	625.80	632,21		632,43	0,002294	4,91	1580,84	545,35	0,34
PERMIT	CUNCHED.											
Reach-1	17270	PF 1 - 10-Yr	2038,00	623,20	628,68		628,80	0.001247	3,26	803,44	249.22	0.25
Reach-1	17270	PF 2 - 50-Yr	3088,00	623.20	629,80		629,95	0,001295	3.76	1134.00	342,83	0,26
Reach-1	17270	PF 3 - 100-Yr	3601.00	623,20	630.23		630,39	0.001283	3,91	1289.39	365,75	0.26
Reach-1	17270	PF 4 - 500-Yr	5082,90	623,20	631.29		631,47	0.001232	4.21	1692,29	392.32	0,26
Meaner	11210	77 4 - 300-11	0002,00	020,20								
	16420	DE 4 40 1/2	2038.00	621,00	627,78		627,90	0.001024	3,04	870.11	312.60	0,22
Reach-1		PF 1 - 10-Yr			628.95		629.07	0.000946	3,31	1279.64	386,85	0,22
Reach-1	16420	PF 2 - 50-Yr	3088.00	621,00			629.53	0.000934	3.43	1460.18	413,91	0,22
Reach-1	16420	PF 3 - 100-Yr	3601,00	621,00	629.40			THE RESERVE TO BE ADDRESS OF THE PERSON NAMED IN		1952.93	470.25	0,22
Reach-1	16420	PF 4 - 500-Yr	5082.90	621.00	630.51		630,65	0.000894	3.68	1932.93	470.23	U,ZZ
DESCRIPTION AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS	0.900											
Reach-1	15400	PF 1 - 10-Yr	2038,00	619,40	626.45		626,64	0.001464	3,45	624,03	211,68	0,26
Reach-1	15400	PF 2 - 50-Yr	3088,00	619.40	627,60		627,83	0.001530	3_98	899,59	258,14	0.28
Reach-1	15400	PF 3 - 100-Yr	3601.00	619,40	628.02		628_27	0.001586	4,22	1010,34	274,08	0,28
Reach-1	15400	PF 4 - 500-Yr	5082.90	519.40	629.03		629,35	0.001776	4.90	1375.90	450,63	0.31
	and the same	Participation										
Reach-1	14360	PF 1 - 10-Yr	2038,00	617.80	624.91		625.10	0,001530	3,78	583.48	267.27	0,27
Reach-1	14360	PF 2 - 50-Yr	3088.00	617.80	626.25		626.43	0.001270	3.85	1143.59	422.51	0.25
Reach-1	14360	PF 3 - 100-Yr	3601.00	617.80	626,75		626.92	0.001153	3.84	1371,45	487,60	0.24
Reach-1	14380	PF 4 - 500-Yr	5082.90	617.80	627.88		628,03	0,000983	3.89	2032,85	696,23	0,23
NOBULL	17500	11-000-11	3005'30	utr bu	027,00		920,00		5.50			
Section 12	12001	DE 4 45 V	2020.22	610.70	094 30		624.46	0,000565	2.14	961.19	222,95	0.16
Reach-1	13664	PF 1 = 10-Yr	2038,00	616,70	624,39				2.14	1363.02	412,62	0.19
Reach-1	13864	PF 2 - 50-Yr	3088,00	616.70	625,65		625,74	0.000736				0.19
Reach-1	13664	PF 3 - 100-Yr	3601,00	616,70	626,17		626,27	0,000739	2,54	1599.00	498.29	
Reach-1	13664	PF 4 - 500-Yr	5082,90	616,70	627.39		627.49	0,000642	2.70	2349.78	734,32	0,18
THE KIND		10000										
Reach-1	13862	PF 1 - 10-Yr	2038,00	616,30	624.39		524,45	0.000485	2,04	1006,96	223.47	0.15
Reach-1	13662	PF 2 - 50-Yr	3088.00	616.30	625.65		625.74	0.000655	2.38	1409.21	413,05	0,18
Reach-1	13662	PF 3 - 100-Yr	3601.00	615,30	626.17		626.26	0.000666	2.47	1645.19	498.75	0.18
Reach-1	13662	PF 4 - 500-Yr	5082.90	616.30	627.39		627,49	0.000594	2,64	2395.82	734.59	0.18
17110 153		This Election										
Reach-1	13661	PF 1 - 10-Yr	2038.00	616,30	624.39		624.45	0.000485	2.04	1006.84	223.38	0.15
Reach-1	13661	PF 2 - 50-Yr	3088.00	616,30			625,74	0.000655	2,38	1408.93	412,95	0.18
			3601,00	616.30			526.26	0.000666	2,47	1644.86		0.18
Reach-1	13661	PF 3 - 100-Yr					627.49	0.000594	2.64	2395.37		0.18
Reach-1	13661	PF 4 - 500-Yr	5082.90	616.30	627,39		021.43	0,000354	2.04	2555,51	704,41	0,10
	-			545.55	624.26		624.45	0.000495	2.04	1006,73	223.31	0.15
Reach-1	13660	PF 1 - 10-Yr	2038,00	616,30			624.45	0,000485				0.18
Reach-1	13660	PF 2 - 50-Yr	3088.00	516,30			625.74	0.000655	2,38	1408.63		
Reach-1	13660	PF 3 - 100-Yr	3601.00	616.30			626.26	0.000667	2,47	1644.49	+	0,18
Reach-1	13660	PF 4 - 500-Yr	5082.90	616.30	627,39		627.49	0.000594	2.64	2394,87	734,34	0.18
13000000												
Reach-1	13260	PF 1 - 10-Yr	2436.20	615.70	624.05		624.18	0.000967	3.38	1031,74		
Reach-1	13260	PF 2 - 50-Yr	3794.20	615.70	625.29		625.43	0.000911	3.65	1570.27		0.22
Reach-1	13260	PF 3 - 100-Yr	4449,70	615.70	625,83		625,96	0.000863	3.71	1844,79		
Reach-1	13260	PF 4 - 500-Yr	6273,70	615.70	627.09		627.22	0.000753	3.78	2585.99	626.10	0.21
- THE O'- 100												
Reach-1	11810	PF 1 - 10-Yr	2436.20	613.80	622.84		622.99	0.000888	3.25	915.49	269.93	0.21
Reach-1	11610	PF 2 - 50-Yr	3794.20				524.25	0.001038	3.90	1313.02	387.94	0.24
Resch-1	11810	PF 3 - 100-Yr	4449.70				624.84	0.001031	4.06	1564.27		0.24
	11810	PF 4 - 500-Yr	6273.70				626.32	0.000859	4,11	2527.21	834.17	0.22
Reach-1	11610	4 - 300-11	02/3./0	013.60	020:14		020,02	2,000,000		302.12	1	
		004 (0)	=1=0-1	740.00	639.43		500.00	0.003489	3.55	728.89	557.72	0.37
Reach-1	11518.3	PF 1 - 10-Yr	2436.20				622,36		2.63	1970.28		0.22
Reach-1	11518.3	PF 2 - 50-Yr	3794.20				623.82			2745.84		
Reach-1	11518.3	PF 3 - 100-Yr	4449.70				624,50		2.27			
Reach-1	11518.3	PF 4 - 500-Yr	6273.70	616.00	626.07		626.11	0.000298	1.83	4717.77	1273.00	U,12
	100000									44	1000	
Reach-1	10835.7	PF 1 - 10-Yr	2436.20				622 14		1.06	3582.75		
Reach-1	10635.7	PF 2 - 50-Yr	3794.20				623.69		1,06			
Reach-1	10835.7	PF 3 - 100-Yr	4449.70	614-00	624.39		624.40		1.05			
Reach-1	10835.7	PF 4 - 500-Yr	6273.70	614.00	626,03		626.04	0.000053	1.06	8468.98	1416.38	0.06
4007,587	CONTRACTOR	THE PARTY										
Reach-1	10421.7	PF 1 - 10-Yr	2436.20	612.60	622,05		622.07	0.000248	1.66	2420.35		
Reach-1	10421.7	PF 2 - 50-Yr	3794.20				623.65	0,000140	1,44	4237.78	1196.06	
Reach-1	10421.7	PF 3 - 100-Yr	4449.70				624,36	0.000114	1,37	5107-02	1236.96	0.08
Reach-1	10421.7	PF 4 - 500-Yr	6273.70				526.01		1.30			0.07
	12,20,0	1	Q2.12110	0.2.00	525,00							
Reach-1	10164	PF 1 - 10-Yr	2436.20	614.00	621.78	618.32	621.80	0.000279	1.52	2318.93	999.3	0,12
							623.50			4182.05		
Reach-1	10164	PF 2 - 50-Yr	3794.20				624.24			5062.17		
Reach-1	10164	PF 3 - 100-Yr	4449.70						1.25			
Reach-1	10164	PF 4 - 500-Yr	6273.70	614.00	625.91	620.01	625.93	0.000081	1.20	/ 130.95	12/1-7	3,0
5	W 2111-10	72.13.13.1	1			 				2070 -	1404 0	0.10
Reach-1	9775.2	PF 1 - 10-Yr	2436.20				621,72					
Reach-1	9775.2	PF 2 - 50-Yr	3794.20			+	623.45					
Reach-1	9775.2	PF 3 - 100-Yr	4449.70	612.00			624.20					
Reach-1	9775.2	PF 4 - 500-Yr	6273.70	612.00	625.89		625.90	0.000064	1.24	8064.92	2 1446.6	0.06
5.0		10000										0.09
Reach-1	9618	PF 1 - 10-Yr	2436.20	612.00	621.67		621-69	0.000151	1:42	2963.04	4 1158	.33

HEC-RAS Plan: LIDAR HMS River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.5. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Tops Whatth	Froude # Chi
331740		MARKATAN PARTIES	(cfs)	(ft)	(h)	(m)	(III)	(IIVII)	(R/L)	(eq ff)	(n)	
Reach-1	9618	PF 2 - 50-Yr	3794,20	612,00	623,43		623,44	0,000083	1,21	5119,20	1279,50	0.0
Reach-1	9618	PF 3 - 100-Yr	4449.70	612.00	624.18		624,19	0,000069	1,16	6099.05	1322.88	0.0
Reach-1	9618	PF 4 - 500-Yr	6273,70	612,00	625,88		625,89	0,000054	1,13	8423,30	1415_15	0.00
Reach-1	9310	PF 1 - 10-Yr	2436.20	611.80	621.63		621,64	0,000187	1.18	2892,52	1285.06	0.09
Reach-1	9310	PF 2 - 50-Yr	3794.20	611,80	623,41		623,42	0.000085	0.98	5358,70	1461.99	0.03
	9310	PF 3 - 100-Yr	4449.70	611.80	624,17		624,18	0.000068	0,93	6489,29	1525.69	0.08
Reach-1	9310	PF 4 - 500-Yr	6273.70	611,80	625,87		625.88	0.000049	0.91	9207.86	1668.94	0,0
TERROR	15.55											
Reach-1	9256.7	PF 1 - 10-Yr	2436.20	612,00	621_63		621,63	0,000095	0,97	3555,DS	1133,01	0,0
Reach-1	9256.7	PF 2 - 50-Yr	3794,20	612,00	623,41		623,42	0,000060	0.92	5705,93	1278_10	0,08
Reach-1	9256.7	PF 3 - 100-Yr	4449.70	612.00	624,16		624,17	0,000055	0.93	6706.48	1398.52	0.06
Reach-1	9256.7	PF 4 - 500-Yr	6273.70	612.00	625.87		525,87	0_000042	0,92	9115,78	1431.97	0,05
D - 1 4	9190	PF 1 - 10-Yr	2436.20	611.80	621,62		621,63	0.000083	0,91	3515.21	959.34	0.00
Reach-1 Reach-1	9190	PF 2 - 50-Yr	3794.20	611.80	623.40		623,41	0,000060	0.91	5314,70	1060_11	0,0
Reach-1	9190	PF 3 - 100-Yr	4449.70	611,80	624,16		624.17	0,000054	0.92	6133,10	1099,08	0,0
	9190	PF 4 - 500-Yr	6273.70	611,80	625,86		625,87	0.000034	0,98	8049,25	1152.69	0,0
Reach-1	9190	PF 4 - 300+TI	0213,10	011,80	025,00		023,67	0,000048	U ₄ 50	0043,23	1132,03	0,0
Reach-1	8490	PF 1 - 10-Yr	2951,40	611,30	621.56		621,57	0,000122	1.20	4335,28	1171,71	0,0
Reach-1	8490	PF 2 - 50-Yr	4527.30	611.30	623,36		623,37	0,000098	1,22	6674.23	1428,11	0.00
Reach-1	8490	PF 3 - 100-Yr	5281.00	611.30	624.12		624.13	0.000090	1,22	7803,65	1534_84	0,0
Reach-1	8490	PF 4 - 500-Yr	7403.00	611.30	625,83		625.84	0.000079	1,25	10610,35	1751 22	0.0
-27	A DOTLY	1000										
Reach-1	8343	PF 1 = 10-Yr	2951.40	611.20	621.22	615,61	621.45	0.001803	3,93	751,53	100,08	0.2
Reach-1	8343	PF 2 - 50-Yr	4527.30	611,20	622,84	616,94	623,22	0.002317	4,94	916.56	102.00	0,29
Reach-1	8343	PF 3 - 100-Yr	5281.00	611,20	623,51	617,49	623,96	0.002516	5,36	985,58	102.00	0.30
Resch-1	8343	PF 4 - 500-Yr	7403,00	611,20	524 94	618,89	625,60	0,003234	6,55	1130,94	102,00	0,3
Reach-1	8291		Bridge					-				
resul-1	0241		Bridge									
Resch-1	8239	PF 1 - 10-Yr	2951.40	611.20	621.00	615,61	621,26	0.001954	4.04	730,32	99.01	0.20
Reach-1	8239	PF 2 - 50-Yr	4527.30	611,20	622.55	616.94	622.96	0.002562	5.10	887.42	102.00	0,3
Reach-1	8239	PF 3 - 100-Yr	5281.00	611,20	623,20	617,49	623,68	0,002788	5.54	953,52	102.00	0.3
Reach-1	8239	PF 4 - 500-Yr	7403.00	611,20	624.51	618.89	625.23	0.003650	6.81	1087.30	102,00	0,3
		DOUBLE OF										
Reach-1	8143	PF 1 - 10-Yr	2951,40	611,10	620.09	618.00	620,77	0.010007	6,62	445,52	231,22	0.5
Reach-1	8143	PF 2 - 50-Yr	4527.30	611,10	621,40	619,49	622,36	0.009934	7.84	577,18	1295.42	0,5
Reach-1	5143	PF 3 - 100-Yr	5281.00	611,10	621.95	620.05	623,04	0.009983	8.35	632,12	1341,38	0.5
Reach-1	8143	PF 4 - 500-Yr	7403.00	611,10	621,50	621,18	622,13	0.025177	12,62	586,53	1303.24	0,9
Reach-1	8131.6		Bridge		-							
Realai-1	0131.6		Diluge									
Reach-1	8120	PF 1 - 10-Yr	2951.40	611,10	619,22	614,98	619.48	0.001998	4.10	719,60	739.95	0.2
Reach-1	8120	PF 2 - 50-Yr	4527.30	611.10	619.92	616.00	620.43	0.003445	5.73	789,97	870,14	0,3
Reach-1	8120	PF 3 - 100-Yr	5281.00	611.10	620.29	616,45	620.38	0.000947	3.10	2980.35	937.80	0,1
Resch-1	8120	PF 4 - 600-Yr	7403.00	611.10	621.19	617,57	621.29	0.001007	3,42	3898.91	1100.07	0,2
	01000 m	17 - 17 17										
Reach-1	7500	PF 1 - 10-Yt	2951.40	610,70	618,48		518,57	0.001081	3.03	1534.06	686.73	0,2
Reach-1	7500	PF 2 - 50-Yr	4527.30	610,70	619,42		619,50	0.000976	3,12	2205.51	741.87	0,1
Reach-1	7500	PF 3 - 100-Yr	5281,00	610,70	619,78		619,87	0.000961	3,18	2481,40	763,38	0.1
Reach-1	7500	PF 4 - 500-Yr	7403.00	610,70	620,69		620,79	0,000940	3,37	3199,30	829,83	0,1
Reach-1	6300	PF 1 - 10-Yr	2951.40	610,00	617.13		617.25	0.001367	3.02	1180,79	444.96	0,2
Reach-1	6300	PF 2 - 50-Yr	4527.30	610.00	618.16		618.30	0.001428	3,43	1713,00	580,50	0.2
Reach-1	6300	PF 3 - 100-Yr	5281.00	610.00	618,57		618.72	0.001423	3.53	1958.37	608,36	0.2
Reach-1	6300	PF 4 - 500-Yr	7403.00	610,00	619,55		619.71	0.001359	3,78	2588,61	674.68	0,2
VI Sp	0.000000	(C-200 a fem)										
Reach-1	8225	PF 1 - 10-Yr	2951.40	610,00	616,92		617.10	0.002909	4,50	958.56	400.69	0.3
Reach-1	8225	PF 2 - 50-Yr	4527.30	610.00	617.97		618.16	0.002469	4.59	1445.20	526.64	0,3
Reach-1	6225	PF 3 - 100-Yr	5281,00	610.00	618.40		618,58	0,002270	4.57	1675,72	559.70	0.2
Reach-1	6225	PF 4 - 500-Yr	7403.00	610,00	619,39		619,59	0.001978	4,63	2271.18	634,49	0,2
2.082				*****	242.00		040.07	5 000004	2.70	4 500 05	527.02	0.1
Readt-1	6150	PF 1 - 10-Yr	2951.40	608.00	616.89		616.97	0.000824	2.70 3.00	1506.25 2098.80	527.92 600.56	0.1
Reach-1	6150	PF 2 - 50-Yr	4527.30	608.00	617.94		618.03	0.000854	3,10	2357.65	621,45	0.1
Reach-1	6150 6150	PF 4 - 500-Yr	5281.00 7403.00	608.00	618.36 619.35		618.46 619.47	0.000854	3,10	2999.01	667.08	0.1
, court	3100	1.7-300-11	7 403.00	000,00	01900		01047	5,000012	5,30	2030,01	Va. 30	3.1
Reach-1	5600	PF 1 - 10-Yr	2951.40	607.50	616,02		616.24	0.001974	4.22	941,30	318,58	0.2
Reach-1	56D0	PF 2 - 50-Yr	4527.30	607.50	616,93		617.20	0.002360	4.97	1248,47	359.89	0.3
Reach-1	5600	PF 3 - 100-Yr	5281.00	607.50	617.31		617,61	0.002462	5.22	1389.81	377.39	0.3
Reach-1	5600	PF 4 - 500-Yr	7403.00	607,50	618.20		618,55	0.002733	5,86	1742.00		0.3
1000	関係の	Charles II										
Reach-1	4450	PF 1 - 10-Yr	2951.40	606,60	614.28	611.24	614.39	0.001543	3.27	1337.57	629.27	0,2
Reach-1	4450	PF 2 - 50-Yr	4527.30	606.60	614,91	613,22	615.05	0.001805	3.77	1750.08	673,60	0.2
Reach-1	4460	PF 3 - 100-Yr	5281.00	606.60	615.04	613,46	615.21	0.002143	4,16	1841.58		0.2
Reach-1	4450	PF 4 - 500-Yr	7403.00	606.60	615.52		615,74	0.002679	4,86	2175.65	716.46	0,3
Reach-1	3550	PF 1 - 10-Yr	2951.40	605,40	610.01	610,01	610,99	0,022822	8.90	419.14	241.43	0.8
Reach-1	3550	PF 2 - 50-Yr	4527.30	605.40	611.30	610.84	611.91	0.011979	7.86	946.19		0.6
	3560	PF 3 - 100-Yr	5281.00	605.40	611.69	611.48	612,12	0.008506	6.96	1228.99		0.5

Reach	River 5ta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.5.	E.G. Elev	E.G. Slope	Vel Chris	Flow Area	Top Width	Froude # Chl
12.00	TAC SERVICE	1 2/ 1/ W 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/	(cfs)	(ff)	(ft)	(ft)	(ft)	(10/10)	(ft/s)	(sq ft)	(11)	MULTIPE L
Reach-1	3560	PF 4 - 500-Yr	7403.00	605,40	612.47	610.78	612,79	0.005573	6.16	1853.23	834,75	0,44
Reach-1	2300	PF 1 - 10-Yr	2951.40	598,30	608.69		608,74	0.000443	2,14	1882,83	494.95	0.13
Reach-1	2300	PF 2 - 50-Yr	4527_30	598,30	610,15		610.23	0.000518	2.57	2744_82	949.79	0.14
Reach-1	2300	PF 3 - 100-Yr	5281.00	598.30	610.20		610,30	0.000682	2,96	2792.46	956,29	0.17
Reach-1	2300	PF 4 - 500-Yr	7403.00	598.30	610,67		610,82	0.000980	3_66	3257.74	1017,57	0,20
Reach-1	2204	PF 1 = 10-Yr	2951,40	598,30	608,64	602.73	608,70	0.000455	2.16	1860,76	491,37	0.13
Reach-1	2204	PF 2 - 50-Yr	4527,30	598,30	610.10	603,82	610.18	0.000537	2,61	2693,54	942.74	0.15
Reach-1	2204	PF 3 - 100-Yr	5281,00	598.30	610,13	604,25	610,23	0,000716	3,02	2722,60	946,74	0_17
Reach-1	2204	PF 4 - 500-Yr	7403,00	598,30	610,56	605,22	610,71	0.001055	3.77	3145,26	1003,10	0.21
Reach-1	2202	PF 1 - 10-Yr	2951,40	598,00	607,85	603,11	608.51	0.009155	6,53	451.88	47,99	0.38
Ready1	2202	PF 2 - 50-Yr	4527,30	598.00	609,98	604,79	610.15	0.002905	4.21	1908_48	1133.38	0,22
Readh-1	2202	PF 3 - 100-Yr	5281,00	598.00	609.96	605.52	610_19	0.004057	4,97	1683,66	1124.54	0,26
Reach-1	2202	PF 4 - 500-Yr	7403.00	598.00	610,45	609,62	610,69	0,004434	5.34	2469.57	1268,41	0,27
Reach-1	2187		Bridge									
Reach-1	2172	PF 1 - 10-Yr	2951.40	598,00	607,19	603,11	607.95	0.011474	7.03	420,01	47,92	0.42
Reach-1	2172	PF 2 - 50-Yr	4527,30	598,00	609,95	604.79	610,12	0.003009	4.27	1875,24	1121,42	0,22
Reach-1	2172	PF 3 - 100-Yr	5281.00	598.00	609,93	605.52	610,17	0.004237	5.06	1843.24	1109.77	0.26
Reach-1	2172	PF 4 - 500-Yr	7403,00	598,00	610,40	609,62	610.65	0_004706	5,48	2405.37	1253.90	0.28
Reach-1	2170	PF 1 - 10-Yr	2951,40	598.00	607.16	603_11	607.93	0,011587	7.05	418,68	47,92	0.42
Reach-1	2170	PF 2 - 50-Yr	4527.30	598.00	609,94	604.79	610.12	0.003043	4,30	1864.55	1117,57	0,22
Reach-1	2170	PF 3 - 100-Yr	5281,00	598.00	609,91	605.52	610,16	0.004315	5,11	1826.35	1103,57	0,27
Reach-1	2170	PF 4 - 500-Yr	7403.00	598.00	610,39	609,62	610,64	0,004785	5,52	2387.72	1249,88	0.28
Reach-1	2110	PF 1 - 10-Yr	2951.40	598,00	606.27	603,10	607.25	0,009306	7,93	372.17	45,00	0.49
Reach-1	2110	PF 2 - 50-Yr	4527.30	598,00	607,62	604.79	609.32	0,013999	10.46	433.02	45.00	0.59
Reach-1	2110	PF 3 - 100-Yr	5281.00	598,00	608,79	605,51	609.53	0.018529	7,54	888,85	662.93	0.68
Reach-1	2110	PF 4 - 500-Yr	7403.00	598,00	610.00	609.27	610,30	0.006215	5.25	1885,71	988.83	0.41
Reach-1	1650	PF 1 - 10-Yr	2951.40	595,80	605.89		605,98	0.000734	2,48	1191.44	162,52	0.16
Reach-1	1650	PF 2 - 50-Yr	4527.30	595.80	607.26		607.42	0.000986	3.19	1430.20	186,75	0.19
Reach-1	1650	PF 3 - 100-Yr	5281,00	595,80	607.78		607,97	0,001101	3,50	1530,67	196,48	0,20
Reach-1	1650	PF 4 - 500-Yr	7403,00	595,80	609,00		609.24	0.001252	4.05	2281,21	977,69	0.22
Reach-1	450	PF 1 - 10-Yr	3457.00	593,40	604,65	601.61	604.79	0,001801	3.29	1209,29	347.38	0.24
Reach-1	450	PF 2 - 50-Yr	5300,90	593,40	605.88	602,53	606,04	0.001800	3,67	1692,35	441.42	0.25
Reach-1	450	PF 3 - 100-Yr	6164,00	593,40	606,35	602.87	606.52	0.001802	3.81	1907.47	477.38	0.25
Reach-1	450	PF 4 - 500-Yr	8625.30	593.40	607.52	603.68	607.72	0.001803	4,15	2513.80	541.11	0.25

HEC HMS FLOWS WITH REGIONAL SWDs AND LIDAR TOPOGRAPHY MODEL HEC-RAS Plan: LI SWD River: RIVER-1 Reach: Reach-1

Reach	River Sta	Profile	□ Total	Min Ch El	W.S. Elev	Crit W.5	E.G. Elev	E.G. Slope	Vei Chra	Flow Area	Top Width	Frouds # Chi
30000	1900		(cfs)	(11)	(fl)	(R)	(4)	(fVft)	(50/e)	(6q ff)	(n)	
Reach-1	17870	PF 1 - 10-Yr	2038,00	625,80	629,74		529,96	0.003487	4_38	598.97	254,75	0,39
Reads-1	17870	PF 2 - 50-Yr	3088.00	625,80	630,82		631,05	0,002922	4.71	932,16	376.62	0,37
Reach-1	17870	PF 3 - 100-Yr	3601,00	625,80	631,23		631,46	0,002755	4_82	1095,70	429,37	0,36
Reach-1	17870	PF 4 - 500-Yr	5082,90	625,80	632,20		632,42	0,002320	4,93	1574,09	544,45	0,34
		PF 1 - 10-Yr	2038.00	623.20	628,66		628.78	0.001268	3.28	797.61	247.25	0,25
Reach-1	17270	PF 2 - 50-Yr	3088,00	623,20	629.78		629,93	0.001200	3,78	1128 19	341,40	0,26
Reach-1	17270	PF 3 - 100-Yr	3601,00	623.20	630.21		630.37	0.001301	3.93	1282,80	365.29	0,26
Reach-1 Reach-1	17270	PF 4 - 500-Yr	5082.90	623,20	631,27		631,44	0.001253	4.23	1681,89	391,66	0,26
Kesci-i	17270	FF 4 - 300-11	3002.30	OLOLLO	GUILI							
Reach-1	16420	PF 1 - 10-Yr	2038,00	621,00	627.73		627,85	0,001070	3,09	853,41	308,30	0,23
Reach-1	16420	PF 2 - 50-Yr	3088,00	621.00	628,91		629.04	0,000971	3.34	1266,21	384,77	0.22
Reach-1	16420	PF 3 - 100-Yr	3601,00	621,00	629.36		629,50	0.000957	3,46	1445,41	411,76	0,22
Reach-1	16420	PF 4 - 500-Yr	5082,90	621,00	630,46		630,60	0,000921	3,72	1930,79	468,36	0,23
15.57		S Barrilors										
Reach-1	15400	PF 1 - 10-Yr	2038_00	619,40	626.31		626_51	0_001603	3,56	594.36	200.33	0,27
Reach-1	15400	PF 2 - 50-Yr	3088,00	619,40	627,50		627.74	0.001644	4_08	872,23	254_94	0,29
Reach-1	15400	PF 3 - 100-Yr	3601_00	619,40	627,92		628,18	0.001688	4,31	982,88	267,64	0,29
Reach-1	15400	PF 4 - 500-Yr	5082.90	619.40	628,90		629 24	0,001929	5.04	1315,90	426,69	0,32
	0.00						201.12	0.000000	5.04	452.20	154,99	0,39
Reach-1	14360	PF 1 - 10-Yr	2038,00	617,80	623,79		624,16	0,003383	5,04	453.28	320.02	0,35
Reach-1	14360	PF 2 - 50-Yr	3088,00	617,80	625,38		625,71	0,002487	5.01 4.85	821_18 1048.13	392,04	0,33
Reach-1	14360	PF 3 - 100-Yr	3601.00	617,80	626,02		626,30 627,55	0,002102	4,85	1677,89	585,45	0,32
Reach-1	14360	PF 4 - 500-Yr	5082,90	617,80	627_33		027,00	0,001478	*_35	1011.09	363,43	0,26
Reach-1	13664	PF 1 - 10-Yr	2038,00	616,70	622.60		622.74	0.001261	3,02	674.49	136,95	0,24
Reach-1	13664	PF 2 - 50-Yr	3088.00	616.70	624.22		624,39	0.001381	3,35	925,58	197,55	0,25
Reach-1	13664	PF 3 - 100-Yr	3501.00	616,70	624.89		625_07	0.001439	3,41	1091,40	297,94	0.26
Reach-1	13664	PF 4 - 500-Yr	5082.90	616,70	626,45		626,62	0,001212	3,36	1746.13	552,54	0.24
	1/10/2017											
Reach-1	13662	PF 1 - 10-Yr	2038.00	616,30	622,61		622,73	0,001016	2.83	720,88	137,15	0,22
Reach-1	13662	PF 2 - 50-Yr	3088.00	616,30	624.23		624.38	0.001178	3,18	972,35	198,88	0.24
Reach-1	13662	PF 3 - 100-Yr	3601,00	616,30	624,89		625.06	0.001250	3,27	1138,74	299.12	0.24
Reach-1	13862	PF 4 - 500-Yr	5082,90	616,30	626,46		626,61	0_001098	3,27	1793,30	553,30	0,23
-21-2		The rest										
Reach-1	13661	PF 1 - 10-Yr	2038.00	616,30	622.61		622,73	0,001016	2,83	720.73	137.13	0.22
Reach-1	13661	PF 2 - 50-Yr	3088,00	616.30	624,22		624.38	0.001179	3.19	972_11	198,70	0,24
Reach-1	13661	PF 3 - 100-Yr	3601.00	616,30	624,89		625.06	0.001251	3,27	1138_33	298,91	0.24
Reach-1	13661	PF 4 - 500-Yr	5082.90	616.30	626.45		626,61	0.001099	3.27	1792,66	553,08	0,23
129 1803		225 11077					200 70	0.004047	7.02	720,58	137,11	0,22
Reach-1	13680	PF 1 - 10-Yr	2038,00	616,30	622,61		622,73	0,001017	2,83	971.87	198.52	0,24
Reach-1	13660	PF 2 - 50-Yr	3088,00	616,30	624,22		624,38	0,001179	3.19	1137.93	298.71	0.24
Reach-1	13660	PF 3 - 100-Yr	3601,00	616,30	624,89 626,45		625,06 626,61	0.001232	3,27	1792,01	552,85	0.23
Reach-1	13860	PF 4 - 500-Yr	5082,90	616,30	620,43		020,07	0,001100	3,21	1752,01	002,00	
Reach-1	13260	PF 1 - 10-Yr	1077.90	615,70	622.26		622,35	0.000809	2.55	514.19	204.32	0.19
Reach-1	13260	PF 2 - 50-Yr	1856.90	615.70	623.92		624.00	0.000621	2.68	985.01	362.22	0.18
Reach-1	13260	PF 3 - 100-Yr	2230,30	615.70	624,62		624.70	0,000517	2,60	1262,46	427.41	0,17
Reach-1	13260	PF 4 - 500-Yr	3182.30	615.70	626,28		626.33	0,000324	2,35	2098.80	573,30	0.14
	STALLED A											
Reach-1	11810	PF 1 - 10-Yr	1077.90	613,80	621.55		621.60	0.000375	1,88	640.95	170,91	0,13
Reach-1	11810	PF 2 - 50-Yr	1856,90	613,80	623,31		623.38	0.000388	2,24	1052,63	314,51	0,14
Reach-1	11810	PF 3 - 100-Yr	2230.30	613,80	624,11		624.17	0.000348	2.27	1334_21	395.78	0.14
Reach-1	11810	PF 4 - 500-Yr	3182.30	613,80	625,96		626,01	0,000248	2,18	2379.94	798,64	0,12
N. Carlot	C KIND									,	20015	
Reach-1	11518.3	PF 1 - 10-Yr	1077,90	616,00	621.23		621,32	0.001877	2.28	473.50	200.45	0.26
Reach-1	11518.3	PF 2 - 60-Yr	1856.90	616.00	623,16		623.20	0.000526	1.68	1430.51 2282.88	854.56 1107.65	0,1
Reach-1	11518.3	PF 3 - 100-Yr	2230,30	616.00	624.03		624.05 625.95	0.000265	1.36	4552.40	1263.47	0.0
Reach-1	11518.3	PF 4 - 500-Yt	3182.30	616.00	625.94		020,85	0,000003	0,31	7002140	1200,47	3.0
Reach-1	10835.7	PF 1 - 10-Yr	1077,90	614.00	621,21		621.22	0.000042	0.64	2659,94	953,08	0.0:
Reach-1	10835.7	PF 2 - 50-Yr	1856,90	614.00	623.15		623.15	0,000025	0.59	4711,45	1167.22	0.0
Reach-1	10835.7	PF 3 - 100-Yr	2230.30	614.00	624,01		624.01	0,000020	0.57	5763.78	1261.12	0.0
Reach-1	10835.7	PF 4 - 500-Yr	3182.30	614,00	625,93		625.93	0.000014	0,55	8324.25		0.0
		ar later and a second	1									
Reach-1	10421.7	PF 1 - 10-Yr	1077.90	612.60	521.17		621.18	0,000120	1.05	1629.90	800.79	0.0
Reach-1	10421.7	PF 2 - 50-Yr	1856,90	612.60	623,13		623.13	0.000051	0,83	3641.56	1165.16	0.0
Reach-1	10421,7	PF 3 - 100-Yr	2230.30	612.60	624.00		624.00	0,000037	0,76	4679.74	1218,47	0.0
Reach-1	10421.7	PF 4 - 500-Yr	3182.30	612.60	625.92		625.92	0,000022	0,67	7121.44	1320.61	0.0
OF SE	V STORY	SO DESCRIPTION	p .									
Reach-1	10164	PF 1 - 10-Yr	1077.90	614.00	621.05	617,28	621,06	0,000122	0,91	1645.15	860.07	0.0
Reach-1	10164	PF 2 - 50-Yr	1856.90	614.00	623,08	617.99	623.0B		0.72	3715,23		0.0
Reach-1	10184	PF 3 - 100-Yr	2230.30	614.00	623,96	618,21	623.97	0.000035	0,67	4742.14	1194.97	0.0
Reach-1	10164	PF 4 - 500-Yr	3182.30	614,00	625.90	618,74	625.90	0,000021	0.51	7132.99	1271-20	0.0
1000				-14.51			220.00	0.000400	224	1053.00	1019.89	0.1
Reach-1	9775.2	PF 1 - 10-Yr	2343.50	612,00	620.92		620.96		2.24	1853.66		
Reach-1	9775.2	PF 2 - 50-Yr	4092.20	612-00	623.02		623.04		1.67	4223,75 5355,78		
Reach-1	9775.2	PF 3 - 100-Yr	4986.30	612,00	623,92		623,93	0.000130	1,56	8034,56		
Reach-1	9775,2	PF 4 - 500-Yr	7366.90	612,00	625,87		625,88	0,000080	1,40	3034,36	1445110	3.0
ST. ST. A. ST.												

HEC-RAS Plan: LI SWD River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River 6t	a Profile	Q Total	Mtn Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Top Width	Froude # Chl
	CIV C		(cfs)	(ft)	(TI)	(ft)	(11)	(ft/fi)	(IVs)	(sq ft)	(n)	0.00
Reach-1	9618	PF 2 - 50-Yr	4092,20	612,00	623,00		623_02	0,000133	1,48	4575,60	1254,33	0.09
Reach-1	9618	PF 3 - 100-Yr	4986,30	612.00	623,90		623,91	0.000104	1,40	5729.80	1307_19	80,0
Reach-1	9618	PF 4 - 500-Yr	7366,90	612,00	625,85		625_87	0.000075	1,34	8388,42	1413,81	0,07
Reach-1	9310	PF 1 - 10-Yr	2343.50	611,80	620.75		620,79	0.000503	1,69	1829,33	1148.15	0,15
	_		4092.20	611.80	622.97		622.98	0,000142	1.20	4722,18	1424.87	0.08
Reach-1	9310	PF 2 - 50-Yr						0,000142	1,13	6053,07	1501.43	0,08
Reach-1 Reach-1	9310 9310	PF 4 - 500-Yr	4986.30 7366.90	611.80 611.80	623,88 625,84		623,89 625,85	0,000069	1.08	9160.73	1566.56	0.06
resor-1	8310	PF 4 - 500-11	7300,30	011.00	023,04		023,63	0,000003	1,00	3100,73	1000.00	0,00
Reach-1	9256.7	PF 1 - 10-Yr	2343.50	612.00	620.75		620,77	0.000205	1,30	2599,21	1053,44	0.10
Reach-1	9256.7	PF 2 - 50-Yr	4092.20	612.00	622,96		622,98	0.000094	1,11	5148.39	1243,21	0.07
Reach-1	9256.7	PF 3 - 100-Yr	4986.30	612.00	623,87		623,89	0.000078	1.09	6312.10	1314,99	0.07
Reach-1	9256.7	PF 4 - 500-Yr	7366.90	612.00	625.84		625,85	0.000059	1.09	9073.92	1431.39	0.06
Keenel	8250.7	PF 4 - 300-11	7300,90	012,00	023,04		020,03	0.000003	1.00	3070.32	1401.00	0.00
Reach-1	0190	PF 1 - 10-Yr	2343.50	611,80	620,74		620,75	0.000168	1,16	2692.68	910.29	0.09
Reach-1	9190	PF 2 - 50-Yr	4092.20	611.80	622.96		622,97	0.000091	1,08	4848,68	1034.87	0.07
Read-1	9190	PF 3 - 100-Yr	4986,30	611,80	623,87		623,88	0,000080	1,09	5814.01	1086,51	0,07
Reach-1	9190	PF 4 - 500-Yr	7366,90	611,80	625,83		625,84	0.000067	1,15	8012.82	1151,69	0,06
rceaca-1	9190	FF 4 - 300-11	7300,50	011,00	025,03		025,04	0,000001	1,10	3012,02	1151,05	0,00
Reach-1	8490	PF 1 - 10-Yr	2343,50	611.30	620,65		620,66	0.000145	1.23	3328,82	1042,14	0.07
Reach-1	8490	PF 2 - 50-Yr	4092.20	611.30	622,90		622,91	0.000103	1,21	6041,91	1363,56	0.07
Reach-1	8490	PF 3 - 100-Yr	4986.30	611,30	623.82		623,83	0.000093	1.22	7352,56	1494.26	0.06
Reach-1	8490	PF 4 - 500-Yr	7366,90	611.30	625.79		625,80	0.000080	1.25	10549.61	1746.82	0.06
,	4.55	71.4:000*11	, 300, 30	311,30	01,0,75		020,00	2,000030	.,,20		1,7000	
Reach-1	8343	PF 1 = 10-Yr	2343.50	611.20	620.37	615.02	620,56	0.001582	3,51	668,37	95,83	0.23
Reach-1	8343	PF 2 - 50-Yr	4092.20	611.20	622.43	616,60	622.77	0.002183	4.67	875,53	102,00	0.28
Reach-1	8343	PF 3 - 100-Yr	4986.30	611,20	623,25	617.28	623,67	0,002445	5,20	958,53	102,00	0.30
Reach-1	8343	PF 4 - 500-Yr	7366.90	611,20	624,91	618,86	625,57	0,003231	6,53	1127.75	102.00	0.35
, restar-1		7- 200-11	, 550,00	5,1,20	52401	570,00	220,01	5,550251	O,DU		.02,00	5,00
Reach-1	5291		Bridge									
3753	Mark Co.											
Reach-1	8239	PF 1 - 10-Yr	2343,50	611.20	620.18	615.02	620,38	0.001706	3.60	650,81	94.91	0.24
Reach-1	8239	PF 2 - 50-Yr	4092.20	611,20	622.17	616.60	622,53	0.002410	4.82	848.31	102.00	0.29
Reach-1	8239	PF 3 - 100-Yr	4986.30	611.20	622.94	617.28	623.39	0.002709	5.38	927,51	102.00	0.31
Reach-1	8239	PF 4 - 500-Yr	7366.90	611.20	624.48	618_86	625,20	0.003647	6,79	1084,18	102.00	0,37
HEALT.		-III MENICONITO										
Readh-1	8143	PF 1 - 10-Yr	2343.50	611,10	619.32	617.31	619,93	0.009972	6,30	372.03	89,73	0,55
Reach-1	8143	PF 2 - 50-Yr	4092,20	611.10	621.09	619,13	621,96	0.009761	7.49	546,10	1269,42	0,57
Reach-1	0143	PF 3 - 100-Yr	4986,30	611.10	621.73	619.86	622.77	0.010038	8,18	609,69	1322,62	0.58
Reach-1	B143	PF 4 - 500-Yr	7366.90	511,10	621.50	521.16	622,13	0.024892	12.55	586,81	1303.48	0.91
	100-3											
Reach-1	8131.5		Bridge									
	du base											
Reach-1	Ø120	PF 1 - 10-Yr	2343.50	611.10	618,76	614,54	618.95	0.001568	3.48	673.91	655,43	0,24
Reach-1	8120	PF 2 - 50-Yr	4092.20	611.10	619.90	615.74	620,32	0,002834	5,19	788,36	867.17	0.33
Reach-1	8120	PF 3 - 100-Yr	4986.30	611.10	620.15	616.25	620.24	0.000932	3.04	2851.86	912,81	0.19
Reach-1	8120	PF 4 - 500-Yr	7366,90	611.10	621.18	617.55	621.28	0.001006	3,42	3883.48	1097.54	0.20
1.00	á Minte									43-	1 2 2	
Reach-1	7500	PF 1 + 10-Yr	2343.50	610.70			618-11	0.001181	3,03	1222.11	659.54	0.20
Reach-1	7500	PF 2 - 50-Yr	4092.20	610.70	619.19		619.27	0.000991	3.08	2035,78	728.33	0.19
Reach-1	7500	PF 3 - 100-Yr	4986.30	610.70	619,65		619.73	0.000966	3,16	2375,55	755,20	0,19
Reach-1	7500	PF 4 - 50D-Yr	7366.90	610,70	620.67		620.77	0.000940	3.36	3167.65	828,73	0.19
	36.18											
Resch-1	6300	PF 1 - 10-Yr	2343.50	610,00			616.74	0.001285	2.77	976,66	373,46	0,21
Reach-1	6300	PF 2 - 50-Yr	4092.20	610.D0	617.90		618.04	0.001435	3,36	1565,13	555.13	0.23
Reach-1	6300	PF 3 - 100-Yr	4986.30	610.00	618,41		618.56	0.001412	3,49	1864.32	597,84	0,23
Reach-1	6300	PF 4 - 500-Yr	7366.90	610,00	619,54		619.70	0,001360	3,77	2578.49	673.66	0,23
A DEPOS	0.000											
Resch-1	6225	PF 1 - 10-Yr	2343.50	610.00			616.59		4,41	770.10		0.32
Reach-1	6225	PF 2 - 50-Yr	4092.20	610,00			617.89	0.002575	4,58	1310.27	494.94	0.30
Reach-1	6225	PF 3 - 100-Yr	4986.30	610,00			618,42		4,58	1587.28		0.25
Reach-1	6225	PF 4 - 500-Yr	7366,90	610,00	619,38		619,57	0.001981	4,63	2261.54	633.35	U.26
D	0450	be a said	00/000	665.5	0.44-			0.00000	n 70	1715.71	400.55	0.15
Reach-1	6150	PF 1 - 10-Yr	2343.50	608.00			616.45	0.000808	2.56	1245.34	492,55	0.17
Reach-1	6150	PF 2 - 50-Yr	4092.20	608.00			617.76	0.000848	2.93	1942.71	582.30 614.14	0.18
Reach-1	6150	PF 3 - 100-Yr	4986.30	608.00			618,30		3.06	2259.09		
Reach-1	6150	PF 4 - 500-Yr	7366.90	608,00	619.34		619,45	0.000872	3.36	2988.88	000,38	0,18
Danels 4	5600	DE 1 - 10 V-	2242 50	507.50	£1E E0		615,78	0.001764	3,84	807,34	298.78	0,25
Reach-1	5600	PF 1 - 10-Yr	2343.50	607.50			616,96		4.79	1166.10		0.29
Reach-1	5600	PF 2 - 50-Yr	4092.20	607.50							370,82	0.30
Reach-1	5600	PF 3 - 100-Yr	4986.30	607.50			617,46 618,54	0.002421	5.12 5.85	1335,97 1736,40	417.19	0.33
Neau+1	10000	PF 4 - 500-Yr	7356.90	607,50	616-19		010,54	0.002729	5.85	1730.40	717.19	4,3,
Reach-1	4450	PF 1 - 10-Yr	2747 50	606.60	613.87		613.98	0.001576	3.17	1090,91	585.82	0,23
Reach-1	4450	PF 2 - 50-Yr	2343.50 4092.20	606.60		613,05	614,92		3.57	1677.60		0.24
Reach-1	4450	PF 3 - 100-Yr	4986.30	606,60		613.05	615,14	0.002030	4.03	1800.56		0,27
Reach-1	4450	PF 4 - 500-Yr	7366.90	606,60		013 37	615,74	0.002671	4.85	2170,10		0,31
TOBUP	7730	FF 4 - 300-11	1300.90	300,00	013:31		015,74	0.002071	7,03	2170,10	, 10,31	0.51
Reach-1	3550	PF 1 - 10-Yr	2343.50	605,40	609.75	609.75	610.59	0.020303	8.06	360,56	217,81	0.76
Reach-1	3550	PF 2 - 50-Yr	4092.20	605,40		610.71			8.92			
	14444	PF 3 - 100-Yr	4986.30	605.40			612.03		7.20			

HEC-RAS Plan: LLSMD River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.5.	E.G. Elev	E.G. Slope	Vel Chri	Flow Area	Top Width	Froude # Chi
El Hillian	STORY FOR		(cfs)	(ft)	(ft)	(n)	(m)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	3550	PF 4 - 500-Yr	7366,90	605,40	612,46	610,78	612,78	0,005598	6,17	1843,66	833,55	0.44
Reach-1	2300	PF 1 - 10-Yr	2343,50	598,30	607,48		607,54	0,000598	2.24	1342,52	398,15	0,15
Reach-1	2300	PF 2 - 50-Yr	4092,20	598,30	609,71		609,77	0.000471	2,38	2431.23	576.82	0.14
Reach-1	2300	PF 3 - 100-Yr	4986.30	598,30	610.25		610,33	0,000590	2.76	2835,20	962.08	0_15
Reach-1	2300	PF 4 - 500-Yr	7366,90	598,30	610,66		610,80	0.000978	3,66	3245,64	1016,03	0.20
Reach-1	2204	PF 1 - 10-Yr	2343.50	598.30	607.33	602.23	607.45	0.000952	2.78	841.90	386.76	0.19
Reach-1	2204	PF 2 - 50-Yr	4092.20	598,30	609,66	603.55	609,73	0,000484	2,40	2403,79	573,00	0.14
Reach-1	2204	PF 3 = 100-Yr	4986,30	598.30	610,18	604.09	610.27	0.000615	2,81	2775.33	953.95	0,16
Reach-1	2204	PF 4 - 500-Yr	7366,90	598.30	610.55	605,20	610,70	0,001052	3,76	3133,57	1001,59	0,21
Resch-1	2202	PF 1 - 10-Yr	2343.50	598.00	606,80	602.38	607.33	0,008324	5.84	401,40	47,88	0.36
Reach-1	2202	PF 2 - 50-Yr	4092.20	598.00	609,30	604,35	609,64	0,005331	5,47	1230,76	856.89	0.29
Reach-1	2202	PF 3 - 100-Yr	4986.30	598.00	610.07	605.24	610,24	0.003182	4.42	2004.04	1159.10	0.23
Reach-1	2202	PF 4 - 500-Yr	7366,90	598,00	610.44	609.62	610,67	0.004468	5.35	2450,79	1264,18	0.27
Reauh-1	2187		Bridge									
Reach-1	2172	PF 1 - 10-Yr	2343,50	598,00	606,22	602,38	606,83	0.010375	6.27	373.94	47.82	0,39
Reach-1	2172	PF 2 - 50-Yr	4092.20	598,00	609.26	604,35	609,62	0.005627	5,61	1191.09	837.88	0.30
Reach-1	2172	PF 3 - 100-Yr	4986.30	598.00	610,03	605.24	610.22	0.003311	4.50	1966.90	1149.93	0.23
Reach-1	2172	PF 4 - 500-Yr	7366.90	598,00	610.39	609.62	610.64	0.004725	5.49	2390.62	1250,55	0.28
Reach-1	2170	PF 1 - 10-Yr	2343.50	598.00	606.20	602.38	606.81	0.010477	6.29	372,76	47.82	0.40
Reach-1	2170	PF 2 - 50-Yr	4092.20	598.00	609.23	604.35	609.61	0.005771	5,67	1172.68	828.91	0.30
Reach-1	2170	PF 3 - 100-Yr	4986.30	598.00	610.02	605.24	610,21	0.00335B	4,53	1953,59	1146.63	0.23
Reach-1	2170	PF 4 - 500-Yr	7366.90	598.00	610.37	609.62	610.63	0.004805	5.53	2372,87	1246.49	0.28
Reach-1	2110	PF 1 - 10-Yr	2343.50	598.00	605.47	602.39	606.23	0.007945	6.97	336,26	45.00	0.45
Reach-1	2110	PF 2 - 50-Yr	4092,20	598.00	607.29	604,37	608.78	0.012675	9.79	418_14	45.00	0.57
Reach-1	2110	PF 3 - 100-Yr	4986.30	598,00	608.50	605,25	609,52	0.026360	8,52	707.25	584.31	08-0
Readt-1	2110	PF 4 - 500-Yr	7366,90	598.00	609.98	609.26	610.29	0,006278	5,26	1870.78	984.74	0.42
Reach-1	1650	PF 1 - 10-Yr	2343.50	595.80	605.10		605.17	0.000637	2.20	1065.63	156.62	0.15
Reach-1	1650	PF 2 - 50-Yr	4092.20	595.80	606.91		607.05	0.000922	3.01	1366.55	180.31	0,18
Reach-1	1650	PF 3 - 100-Yr	4986.30	595.80	607.59		607.76	0.001056	3.38	1492.28	192.82	0,20
Reach-1	1650	PF 4 - 500-Yr	7366.90	595.80	608.98		609.22	0.001252	4.05	2263,92	968.84	0.22
Reach-1	450	PF 1 - 10-Yr	2631.30	593.40	603.95	600.94	504-07	0.001801	3.06	983.68	294.67	0.24
Reach-1	450	PF 2 - 50-Yr	4772.20	593,40	605.56	602.34	605.71	0.001802	3.58	1556.37	417.10	0,24
Reach-1	450	PF 3 - 100-Yr	5827.70	593,40	606-17	602.76	606.34	0.001800	3.76	1824.85	463.90	0.25
Reach-1	450	PF 4 - 500-Yr	8579.30	593.40	607-51	603.67	607.70	0.001803	4.14	2503.70	540.08	0.25

HEC RAS COMPARISON

CURRENT EFFECTIVE FEMA MODEL vs. POST- PROJECT MODEL

HEC-RAS River RIVER-1 Reach Reach-1

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.5.	E.G. Elev	E.G. Slope	Vet Chril	Flow Area	Top Width	Froude # Chl
	10-00	7 7 7 4 4 7 1 4		(cfs)	(ft)	(ft)	(n)	(11)	(ft/ft)	(fl/s)	(\$0 ft)	(R)	0.32
Reach-1	17870	PF 3 - 100-Yr	Salt Creek FP	6410.00	625.80	632.92		633,13	0.001994	4,91 4,82	1985.13	596.68 429.34	0.32
Reach-1	17870	PF 3 - 100-Yr	RevDSTope	3601.00	625,80	631,23		631,46					
Reach-1	17870	PF 4 - 500-Yr	Salt Creek FP	9730.00	625,80	634_38		634,60	0.001600	4,98	2935 98	697_12	0.30
Reart-1	17870	PF 4 - 500-Yt	RevDSTopo	5082,90	625,80	632.20		632,42	0,002321	4,93	1573 59	544,39	0.34
D	17270	PF 3 - 100-Yr	Salt Creek FP	6410.00	623,20	632,03		632,22	0.001261	4.51	1986.92	410.80	0.27
Reach-1			RevDSTopo	3601,00	623,20	630.21		630.37	0.001302	3,93	1282.54	365.28	0.26
Reach-1	17270	PF 4 - 500-Yr	Balt Creek FP	9730.00	623.20	633.48		633,73	0.001378	5.22	2617.87	454.55	0.29
Reach-1	17270	PF 4 - 500-Yr	RevOSTopo	5082.90	623.20	631.26		631,44	0.001255	4,23	1681,12	391,61	0_26
Kegori	17270	FF 4. 500-11	Revisitopo	51102.001	020.20	057,20		001,11	0.001286	,,,,,			
Reach-1	16420	PF 3 - 100-Yr	Salt Creak FP	6410,00	621,00	631,22		631,38	0.000924	3.95	2299.94	498.89	0.23
Reach-1	16420	PF 3 - 100-Yr	RevDSTopo	3601,00	621,00	629.38		629,50	0.000958	3.46	1444.81	411,68	0.22
Reach-1	18420	PF 4 - 500-Yr	Salt Creek FP	9730.00	621.00	632.63		632,83	0.000987	4.49	3037.41	539.46	0.24
Reach-1	18420	PF 4 - 500-Yr	RevDSTopo	5082.90	621.00	630,46		630,60	0.000923	3.72	1929.16	468.22	0.23
10000-1	10-20	11.1.556.11	Tanber upo		OZ III OZ								
Reach-1	15480	PF 3 - 100-Yr	Saft Creek FP	6410.00	619.40	629.63		630.00	0.001954	5,39	1676.68	555,28	0.33
Reach-1	15400	PF 3 - 100-Yr	RevDSTopo	3601.00	619.40	627.92		62B.18	0.001693	4.32	981.77	267,52	0,29
Reach-1	15400	PF 4 - 500-Yr	Salt Creek FP	9730.00	619,40	631.12		631,46	0.001713	5.62	2648 12	725.55	0,31
Reach-1	15400	PF 4 - 500-Yr	RevOSTopo	5082.90	619.40	628.69		629.23	0.001940	5.05	1311.93	425.08	0,32
	A Charles	Month Res			1227/4/2	12.5							
Reach-1	14360	PF 3 - 100-Yr	Salt Creek FP	6410.00	617_80	628.38		628,55	0.001081	4.23	2394 21	744,61	0.24
Reach-1	14360	PF 3 - 100-Yr	RevDSTopo	3601.00	617.80	625.98		626.27	0.002161	4.90	1034.43	387,81	0,33
Reach-1	14360	PF 4 - 500-Yr	Salt Creek FP	9730.00	617.60	630.21		630,34	0.000759	3,99	3864.06	868.54	0.21
Reach-1	14380	PF 4 - 500-Yr	RevDSTopo	5082,90	617,80	627.26		627.49	0.001552	4.65	1640.12	572.40	0.29
0.151415.34	e lateralia		10.000	302,00									
Reach-1	13654	PF 3 - 100-Yr	Salt Creek FP	6910,00	616.70	627.72		627.87	0.000955	3,40	2601,74	798.03	0.22
Reach-1	13864	PF 3 - 100-Yr	RevDSTopo	3601,00	616,70	624,81		625.00	0.001484	3,47	1070,45	287,20	0,26
Reach-1	13684	PF 4 - 500-Yr	Salt Creek FP	10490,00	618,70	629,81		629.92	0.000589	3,16	4484.40	972,35	0.18
Reach-1	13564	PF 4 - 500-Yr	RevDSTopo	5082.90	616.70	626.31		626.49	0.001334	3,47	1671,38	525.68	0.25
0.05	PACASTIC	PARTIES P	The second second		4.4.4								
Reach-1	13662	PF 3 - 100-Yr	Salt Creek FP	6910.00	620,30	627.64		627.86	0.002089	4.17	2137.00	783.39	0.32
Reach-1	13662	PF 3 - 100-Yr	RevDSTopo	3601.00	616.30	624.82		624,99	0.001287	3,32	1117,83	288.44	0,25
Reach-1	13662	PF 4 - 500-Yr	Salt Creek FP	10490.00	620,30	629,79		629.92	0.000909	3.44	4081,53	993.51	0.22
Reach-1	13662	PF 4 - 500-Yr	RevOSTopo	5082.90	616,30	626.32		626.48	0.001205	3.37	1718.72	526.54	0.24
(canot:	1000	17 4 550 11	Trevers repe										
Reach-1	13661	PF 3 - 100-Yr	Salt Creak FP	6910.00	620,30	627.64		627.86	0.002094	4,17	2135.09	782.92	0,32
Reach-1	13661	PF 3 - 100-Yr	RevDSTopo	3601.00	616,30	624.82		624.99	0.001288	3,32	1117.44	288.24	0.25
Reach-1	13861	PF 4 - 500-Yr	Salt Creek FP	10490.00	620.30	629.79		629,92	0.000909	3,44	4080,56	993,44	0,22
Reach-1	13681	PF 4 - 500-Yr	RevDSTopo	5082.90	616.30	626.32		626,48	0.001206	3,37	1718.05	526.29	0.24
110100	III DESK.			1.00//200									
Reach-1	13660	PF 3 - 100-Yr	Salt Creek FP	6910,00	620,30	627.64		627,86	0.002098	4,18	2133.27	782.47	0.32
Reach-1	13660	PF 3 - 100-Yr	RevDSTopo	3601.00	616,30	624.82		624,99		3,32	1117,05	288.04	0.25
Reach-1	13860	PF 4 - 500-Yr	Saft Creek FP	10490.00	620.30	529.79		629,92	0,000910	3,44	4079.58	993.36	0.22
Reach-1	13660	PF 4 - 500-Yr	RevDSTopo	5082,90	616,30	626.32		626,48	0.001207	3.37	1717.37	526.04	0,24
		Contract of the last								- Inabia			
Reach-1	13260	PF 3 - 100-Yr	Selt Creek FP	6910.00	615.70	627.20		627.35	0:000855	4.06	2655.28	633.25	0,22
Reach-1	13260	PF 3 - 100-Yr	RevDSTopo	2230 30	615.70	624.53		624.61	0.000552	2,67	1225,49	419,33	0,17
Reach-1	13260	PF 4 - 500-Yr	Salt Creek FP	16490.00	615.70	629.51		629.63	0.000644	4.04	4363.79	884.83	0,20
Reach-1	13260	PF 4 - 500-Yr	RayDSTopo	3182.30	615,70	626.12		626.18		2.45	2007.65	562.87	0.14
	7 17 5 2 1		- CONTRACTOR OF THE PARTY OF TH										
Reach-1	11810	PF 3 - 100-Yr	Bult Creek FP	6910.00	613.80	626.01		626 24	0,001135	4.69	2415.29	811.34	0,26
Reach-1	11810	PF 3 - 100-Yr	RevOSTopo	2230.30	613.80	623,98		624.05	0.000373	2.32	1285,54	378.38	0.14
Reach-1	11810	PF 4 - 500-Yr	Salt Creek FP	10490.00	613.80	628.99		629.08	0.000431	3.42	5608.64	1330.89	0.17
Reach-1	11810	PF 4 - 500-Yr	RevDSTopo	3182.30	613.80	625,76		625,81	0.000280	2.29	2223.24	740.61	0.13
3.49(3.53)	of Children												
Reach-1	11518.3	PF 3 - 100-Yr	RevDSTopo	2230.30	616.00	623.89		623.91	0.000312	1,45	2130,06	1071.57	0.12
Reach-1	11518.3	PF 4 - 500-Yr	RevDSTopo	3182 30	616,00	625.73		625.74	0.000100	1.03	4291,04	1246.52	0.07
	1082	III PERMIT	M DOMESTICAL CO.										
React-1	10835.7	PF 3 - 100-Yr	RevOSTopo	2230.30	614.00	623.87		623.87	0.000022	0.59	5587.00	1246,16	0,04
Reach-1	10635.7	PF 4 - 500-Yr	RevDSTapo	3182.30	614.00	625,72		625,72	0.000016	0,57	8030,64	1392.27	0.03
316620	I CHARLE												
Reach-1	10421,7	PF 3 - 100-Yr	RevOSTopo	2230,30	612.60	623.66		623.86	0.000041	0.79	4505.79	1209.75	0.05
Reach-1	10421.7	PF 4-500-Yr	RevDSTope	3182.30	612.60	625.71		625.71	0,000025	0.70	6844,53	1309,43	0.04
21E-1550	Maria .	OL LOS											
Reach-1	10380	PF 3 - 100-Yr	Salt Creek FP	6910.00	612,60	625.55		625.59	0.000278	2.50	4821,78	1173.34	
Reach-1	19360	PF 4 - 500-Yr	Salt Creek FF	10490.00	612.60	628.81		628,84		1.90	9061,48	1425.43	0.09
35,50	No. of the												
Reach-1	10164	PF 3 - 100-Yr	RevOsTopo	2230.30	614.00	623.81	618.21	623.82	0.000039	0,70			
Reach-1	10164	PF 4 - 500-Yr	RevOSTopo	3182.30	614.00	625 69	618.74	625,69	0.000024	0.64	6862.54	1262.97	0,04
Walter S													
Reach-1	9775.2	PF 3 - 100-Yr	RevDSTopo	4986.30	612.00	623.77		623.78		1.63	5158.97	1289.05	
Reach-1	9775.2	PF 4 - 500-Yr	RevDSTopo	7366.90	612,00	525 65		625.67	0.000101	1,53	7722.70	1429.39	0.08
SON	1 St. 1		E MINISTER			10.000							
Reach-1	9618	PF 3 - 100-Yr	RevOSTopo	4985.30	612.00	623.75		623.76		1.46		1298.21	0.08
Reach-1	9618	PF 4 - 500-Yr	RevOSTopo	7366.90	612.00	625 63		625.69	0.000084	1,39	8080.98	1401.94	0.07
	A CADINE	7											
Reach-1	8310	PF 3+100-Yr	Saft Creak FP	6910.00	611.80	625.43		625.44		1.41	8488,25	1632.24	
Reach-1	9310	PF 3 - 100-Yr	RevDSTopo	4986.30	611,80	623.72		623.74		1,17		1488.33	
Reach-1	9310	PF 4 - 500-Yr	Balt Creek FP	10490.00	611.80	628.76		628,77		1.17	14332,12		
Reach-1	9310	PF 4 - 500-Yr	RevDSTopo	7366.90	611.80	625.62		625.63	0.000077	1.12	8795.87	1648.03	0.07
	1200	W 12 10 10 10 10 10 10 10 10 10 10 10 10 10	STATE OF THE										
Reach-1	9258.7	PF 3 - 100-Yr	RevDSTapo	4986.30	612.00	623.72		623.73		1.13			
Reach-1	9258.7	PF 4 - 500-Yr	RevDSTopo	7366.90	612.00	625.62		625.63	0,000066	1.13	8758.75	1427.06	0.06
		181											
Reach-1	9190	PF 3 - 106-Yr	RevDSTopo	4986.30	611,80	623.71		623.72		1,12			
Reach-1	9190	PF 4 - 500-Yr	RevDSTopo	7366.90	611.B0	625.61		625.62	0.000074	1.19	7758.92	1144.73	0.07
	3 11 17	Marie Marie						202		1720	(41124-1-	744474	
Reach-1	8490	PF 3 - 100-Yr	Salt Creek FP	6910.00	611.30	625.37		625.38		1.26			
Reach-1	8490	PF 3 - 100-Yr	RevDSTopo	4986.30	611.30	623.66	i i	623.67	0.000102	1.26	7113.90	1471,33	0.0

HEC-RAS River. RIVER-1 Reach: Reach-1 (Continued)

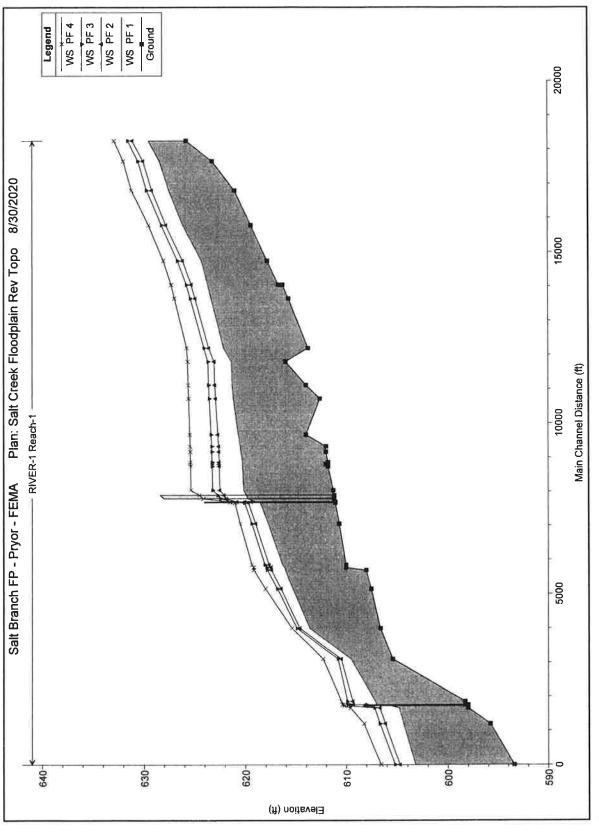
Reach	River Sta	Profile	Plan	Q Total	Min Ch E	W.S. Elev	Crit.W.S.	E.G. Elev	E.G. Slope	Vel Chri	Flow Area	Top Width	Frouds # Chi
- Call 112	A 197	APRILL NO	ALTERNATION OF	(ufe)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(fUe)	(eq ft)	(10)	0.00
Reach-1	8490 8490	PF 4 - 500-Yr	RayDSTopo	10490,00 7366.90	611.30 611.30	628.73 625.57		628.73 625.58	0.000052	1,15		2118.51 1718.29	0,05
TCGGGCT-1	D4-00	FF 4-300-11	Navochogo.	7,000.00	01.500	OLD DI		020,00	0,000000	,,,,,	10105,11	1170,20	-
Reach-1	8343	PF 3 - 100-Yr	Salt Creek FP	6910,00	611.20	624,53	618,58	625.16	0,003159	6,34	1089,64	102.00	0.34
Reach-1	8343	PF 3 - 100-Yr	RevD6Topo	4986,30	611,20	623,06	617_28	623_50	0.002601	5,31	939,64	102,00	
Reach-1	6343	PF 4 - 500-Yr	Salt Creek FP	10490,00	611,20	627_58	620,60	628.45	0.003387	7,49		102.00	
Reach-1	8343	PF 4 - 500-Yr	RevD6Topo	7366,90	611,20	624,64	618,86	625,33	0.003487	6.70	1100.06	102.00	0.36
Reach-1	B291			Bridge									
9 7 7 9	Harry Co.	HOTELS.											
Reach-1	8239	PF 3 - 100-Yr	Sult Creek FP	5910.00	611,20		618,58	624,79		6,60			
Reach-1	8239	PF 3 - 100-Yr	RevDSTopo	4986.30	611.20	622.79	617.28	623.26		5_47			
Reach-1	8239	PF 4 - 500-Yr	Salt Creek FP	10490,00 7366,90	611,20 611,20	627 13 624 25	620 60 618 86	628.06 625.00		7,74 6.95		102 00	
Reach-1	0238	PF 4-300-11	RevDSTopo	7300,50	01.620	024,23	010,00	023.00	0.002711	0.00	1000,02	102,00	
Reach-1	8143	PF 3 - 100-Yr	Saft Creek FP	6910.00	611,10	621,46	620,93	622.05	0.022438	11,86	582.56	1299.92	0.87
Reach-1	8143	PF 3 - 100-Yr	RevDSTopo	4986.30	611,10	621,72	619.86	622.76		8.19			
Reach-1	8143	PF 4 - 500-Yr	Selt Cresk FP	10490.00	611.10		622.62	627.58	0.000155	1,59			
Reach-1	8143	PF 4 - 500-Yr	RevDSTopo	7366.90	611,10	622.25	621.16	622.52	0.011566	11.13	661.98	1366.35	0.76
Reach-1	8131,5	-		Bridge									
(toptar)	0101,0			Unidge									
Reach-1	8120	PF 3 - 100-Yr	Salt Crack FP	6910.00	611.10	621.00	617.32	621,09	0.000997	3,36	3687.74	1064_98	
Reach-1	8120	PF 3 - 100-Yr	RevOSTopo	4986.30	611,10		616 25	620,16		6,70			
Reach-1	5120	PF 4 - 500-Yr	Salt Creak FP	10490.00	611,10		619,01	622.38		3,72			
Reach-1	8120	PF 4 - 500-Yr	RevDSTopo	7366_90	611,10	622,32	617,55	622,38	0,000429	2,89	5247.88	1287.37	0.16
Querb 4	8070,5	PF 3 - 100-Yr	RevDSTopo	4986.30	607.76	618.31		619,70	0.008320	9.45	527.80	74,27	0,62
Reach-1	8070.5	PF 4 - 500-Yr	RavDSTopo	7366.90	607.76		517.87	621.68		12.10			
	30,00	700 11	1.2.2.5.000	, 500,50	551.76	0.000		37,100					
Reach-1	8046	PF 3 - 100-Yr	RevDSTopo	4988.30	607.76			619,55	0.009242	9,76			
Reach-1	8046	PF 4 - 500-Yr	RevDSTopo	7366.90	607.76	617.88	617,89	621,30	0.021904	14,85	496,04	73,46	1.01
	200			tone an	CON 77	C40.04		540.70	0.001040	4,11	2442.02	1032.54	0.26
Reach-1	7927.5	PF 4 - 500-Yr	RevDSTepo RevDSTepo	4986.30 7366.90	608.77 608.77			618,79 619,75	0.001840	4,11			
Reach-1	7027.5	PT-4 - 300-11	Hevus lope	1,100,90	000,77	019.03		019,73	0.001394	4.15	3472.00	1120.00	0.2.
Reach-1	7888	PF 3 - 100-Yr	RevOSTopo	4986.30	608.26	618.51		618,72	0.001187	3.31	2637.28	1033.45	0.21
Reach-1	7886	PF 4 - 500-Yr	RevD8Topo	7366,90	608.26	619.58		619.70		3,54	3692,16	1127.70	0,21
SACTE LA	Email Sol	masor.	Validation:										
Reach-1	7799.B	PF 3 - 100-Yr	RevD6Topo	4986.30	606.70			618,62	0,001145	3,43			
Reach-1	7799.9	PF 4 - 500-Yr	RevOSTopo	7365.90	605,70	619.50		619.60	0.001146	3,66	3892,43	1167.7	u 21
Reach-1	7726.5	PF 3 - 100-Yr	RevDSTopo	4986.30	608,21	618.37		618,52	0.001524	3,86	2430.16	1026.0	0.24
Reach-1	7726.5	PF 4 - 500-Yr	RevDSTopo	7366.90		619.37		619,50					
	(A) (S)		PERMIT										
Reach-1	7500	PF 3 - 100-Yr	Salt Creek FP	6910,00				620.59		3.33			
Reach-1	7500	PF 4 - 500-Yr	Saft Creek FP	10490.00	610,70	621,77		621.89	0,000922	3,58	4145,90	914.7	0.19
Resch-1	7451.3	PF 3 - 100-Yr	RevDSTopo	4986,30	908.30	618.18		618.26	0.001312	2,78	2284.56	808.2	0.21
Reach-1	7451.3	PF 4 - 500-Yr	RevDSTopo	7366.90				619.30		2,82			
Transit I			The state of the s										
Reach-1	7370	PF 3 - 100-Yr	RevDSTopo	4986.30	604.63	618.15		618.23		2,95			
Reach-1	7370	PF 4 - 500-Yr	RevDSTopo	7366.90	604,63	619.18		619 27	0.000811	3.11	3359.96	824.5	0,17
113	The Control of	Prin Jan V	D. DOT	4000 20	007.00	540.44		C10.10	0.001007	7.00	2343.65	756.7	4 0.19
Reach-1	7277.5	PF 4 - 500-Yr	RevDSTopo RevDSTopo	4986.30 7366.90				618 19 619 24		2.88			
repair 1	1411,0	17 47 000-11	- National	1.0070.00		0,100,00		0.000				- CHSCII	
Reach-1	7244,4	PF 3 - 100-Yr	RevOSTopo	4986.30	608.29	618,10		618.17		2,69			
Reach-1	7244.4	PF 4 - 500-Yr	RevDSTopo	7366.90	608.29	519.14		619.23	0.000964	2.85	3231.43	867.8	0,19
13 14			-			210.00		010.00	0.000000	0.77	201011	#20 G	0.11
Reach-1	7201.4	PF 4 - 500-Yr	RevDSTopo RevDSTopo	4986.30 7366.90				619.21		2.75			
NOBUTE1	7.201,4	17-4-300-11	- KBAMA LODO	7,300,90	507,90	0 (9,13		019,21	0.000793	2.00	5401,3.	250,0	1
Reach-1	7085.8	PF 3 - 100-Yr	RevDSTopo	4986.30	607,32	618.05		618.12	0.000719	2,8	2788.26	908.5	
Resch-1	7085.8	PF 4 - 500-Yr	RevDSTopo	7366.90				619,18		2.93	3795.51	999.1	0.10
	ELECTION .												
Reach-1	6977,4	PF 3 - 100-Yr	RevDSTopo	4986;30				618.07		2,56			
Reach-1	8977.A	PF 4 - 500-Yr	RevDSTopo	7366.90	605.78	619,06		619,14	0.000701	2,7	30/0.94	344.0	0,10
Reach-1	8764.6	PF 3 - 100-Yr	RevOSTopo	4985.30	606.08	617,77		617,88	0.001329	3.41	2088.10	703.4	1 0,2
Reach-1	6764.6	PF 4 - 500-Yr	RevDSTope	7366.90				618.98					
	SEPTIME OF		SCIENT PAGE										
Reach-1	6532.1	PF 3 - 100-Yr	RevDSTopo	4986.30				617.76					
Reach-1	6632.1	PF 4 - 500-Yr	RevDSTopo	7366,90	606.70	618,76		618,85	0,000751	3,3	3353,4	784.2	0.1
Reach-1	6495.3	PF 3 - 100-Yr	RevDSTopo	4986.30	605,94	617,62		617.69	0.000620	2.5	2676.95	735.6	4 0.1
Reach-1	8495.3	PF 4 - 500-Yr	RevDSTopo	7366.90				618,77					
//ds/17010	Will Soll	(Sept.)											
Reach-1	6398,7	PF 3 - 100-Yr	RevDSTopo	4986 30				617,61					
Reach-1	0396,7	PF 4 - 500-Yr	RevDSTepo	7366,90	604,94	618.59		618.69	0.001001	3.4	3105.5	815.3	9 0,1
David C	leann.	lors or	0.10		2			040.55	0.004507	, , ,	2 2448,7	660.5	4 0.2
Reach-1	6300	PF 3 - 100-Yr	Salt Creek FP RevOSTopo	6910.00 4986.30				619,50					
Reach-1	6300	PF 4 - 500-Yr	Salt Creek FP	10490.00				620.88					
Reach-1	8300	PF 4+500-Yr	RevDSTopo	7366.90									
0.50	Share of	Mark Selection	E CANDELD .				- 5			100			
Reach-1	6225	PF 3 - 100-Yr	5 uit Creak FP	6910.00				619.37					
Reach-1	6225	PF 3 - 100-Yr	RevOSTopo	4986.30				617,31					
Reach-1	6225	PF 4 - 500-Yr	Salt Creek FP	10490.00	610.00	620.55		620.76	0.001804	4,8	0 3058.2	729.2	0,2

Reach	River Sta	Reach Reach-1 (C	Continued) Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Veil Chris	Flow Area	Top Width	Frouds # Chi
Keach	Nover Sta	Projet	Pun	(cfa)	(ft)	(R)	(ft)	(ft)	(f/ft)	(fl/e)	(sq fi)	(ft)	Fribuda a Cra
Reach-1	6225	PF 4 - 500-Yr	RevDSTopo	7366,90	610,00	617,86		618 40	0.007259	7,79	1385,69	512,90	0,51
71-230-5	0-1-1	Commence	HSDP Facilities										
Reach-1	6212.6	PF 3-100-Yr	RevDSTopo	4985.30	602 13	616.61		616.78	0.001519	4.33	1860.28	629,68	0.24
Reach-1	6212.6	PF 4 - 500-Yr	RevOsTopo	7366,90	602.13	517.80		617,95	0.001356	4.40	2679,31	745,85	0.23
Reach-1	6150	PF 3 - 100-Yr	Salt Creek FP	6910,00	608,00	619,14		619.25	0.000867	3,30	2859,04	657,39	0.19
Reach-1	6150	PF 3 - 100-Yr	RevDSTopo	4986.30	602.00	616,47		616.69	0.001242	4.03	1640,20	499,51	0,22
Reach-1	B150	PF 4 - 500-Yr	Buit Creek FP	10490,00	608,00	620,51		620,64	0.000919	3,71	3802,10	730 16	0.20
Reach-1	6150	PF 4 - 500-Yr	RevDSTopa	7366,90	602,00	617,62		617,87	0.001395	4,57	2258,09	578.78	0,23
Reach-1	5676,3	PF 3 - 100-Yr	RevDSTope	4986.30	601.86	616.08	_	615,20	0.000878	3.50	2098.09	529.65	0.18
Reach-1	5678.3	PF 4 - 500-Yr	RevDSTopo	7366,90	601,86	617.19		617.33	0.000985	3.96	2715.92	589.49	0.20
	100		CEO ESSET										
Read>1	5800	PF 3 - 100-Yr	Salt Creek FP	6910.00	607.50	618.01		618.35	0.002672	5.72	1664.99	409.31	0.32
Reach-1	5800	PF 4 - 500-Yr	Selt Creek FP	10490.00	607,50	619.21		619.64	0.003058	6,61	2186.04	463.77	0,35
React+1	5084	PF 3 - 100-Yr	RevOSTopo	4986,30	601.56	615,31		615.50	0.001590	4,33	1600,00	414.66	0.25
Reach-1	5084	PF 4 - 500-Yr	RevOSTopo	7366,90	601,56	616,27		616.53	0.001898	5,04	2019,77	455.83	0.27
P-12H-36	Carrier No.	opreégoire.	ASSESSED A							1.00			
Reach-1	4450	PF 3 - 100-Yr	Salt Creek FP	6910.00 10490.00	606.60 606.60	615.41 616.16		615,62 616.45	0.002589 0.003128	4.73 5.54	2094,46 2648,30	708.48 761.24	0.30
(COBCZ)-1	4400	FF 4 - 300-11	SEE CHOOK FF	10480,00	000,00	010.101		018.45	0,003126	3,34	2040,30	101,24	0.34
Reach-1	4405	PF3-100-Yr	RevDsTopo	4985.30	601.22	614.18		614.37	0.002010	4.38	1657.53	547,45	0.27
Ready-1	4405	PF 4 - 500-YI	RevOSTopo	7366.90	601.22	615,00		615,23	0.002205	4,90	2116,36	568,05	0.29
0042000	2006.2	DE 2 400 Ve	D-Any	4000 20	504.70	613,44		613.57	0.000374	4.40	1773,88	660,35	0.25
Reach-1	3995,2	PF 4 - 500-Yr	RevDSTopo RevDSTopo	4986.30 7365.90	601,20 601,20	614,23		614.39	0.002374	4.13	2327.86	745.26	0.28
	100												
Reach-1	3659.3	PF 3 - 100-Yr	RevDSTopo	4986.30	600.85	612,55		612,78	0,002274	4.81	1641,46	695,65	0.29
Reach-1	3659.3	PF 4 - 500-Yr	RevDSTopo	7366,90	600 B5	613,23		613,51	0.002671	5,49	2147,02	780,97	0,32
Reach-1	3550	PF 3 - 100-Yr	Salt Creek FP	6910.00	605,40	612.32	611.75	612.64	0.005934	6.25	1722,14	818.09	0.45
Reach-1	3550	PF 4 - 500-Yr	Salt Creek FP	10490.00	605.40	613.32	011270	613.61	0.004372	5.95	2594.84	917,60	0.39
	V-1010		(3		
Reach-1	3416.5	PF 3 - 100-Yr	RevDSTopo	4986.30	600.60	611.45		611.62	0.003247	4.60	1694,62	805.44	0.32
Reach-1	3416.5	PF 4 - 500-Yr	RevDSTopo	7366 90	600.60	612.12		612.31	0.003228	4.91	2261.70	890.22	0.33
Reach-1	3079	PF 3 - 100-Yr	RevDSTopo	4986,30	600.39	610,88		610.97	0.001871	3.74	2122.52	883,10	0.22
Reach-1	3079	PF 4 - 500-Yr	RevDSTopo	7366,90	600.39	611.52		611.64	0,002128	4,18	2718,09	992,49	0.24
Syde 6		Harris A.	PHT ALL										
Reach-1	2757.5	PF 3 - 100-Yr	RevDSTopo	4986,30	600.20	610.47		610.57	0.001250	3,42	2319,16	979,71	0.21
Reach-1	2757.5	PF 4 - 500-Yr	RevDSTopo	7366.90	600.20	611,01		511.15	0.001613	4.06	2872.40	1070,57	0.25
Reach-1	2574.8	PF 3 - 100-Yr	RevDSTopo	4986,30	598,55	610:35		610,45	0,000913	3,42	2581,82	1016,70	0,19
Reach-1	2574,8	PF 4 - 500-Yr	RevOSTopo	7366,90	598,55	610,85		610.99	0,001296	4,22	3119,67	1132,58	0.23
	100 miles	A TOP	PER CHARLE										
Reach-1	2476.8 2476.8	PF 4 - 500-Yr	RevDSTopo RevDSTopo	4986.30 7366.90	596.60 596.60	610.28 610.73		610.37 610.89	0,001146	3.62 4.42	2430.17 2942.69	1035,29 1146,09	0,21
NOBILEP 1	2470.0	FF 4 - 300-11	Marcalopo	7300.90	330,00	010.73		010,00	0,001000	4,42	2542,03	1140,03	0.23
Reach-1	2300	PF 3 - 100-Yr	Salt Creek FP	6910.00	598.30	610.52		610.65	0.000947	3.56	3098.99	997.09	0.20
Reach-1	2300	PF 4 - 500-Yr	Salt Creek FP	10490.00	598.30	611.39		611.57	0.001248	4.32	4020.60	1110.79	0.23
Reach-1	2285	PF 3 - 100-Yr	RevOSTopo	4986.30	596.60	610,16		610.25	0.000474	3.38	3392.68	1162.42	0.17
Reach-1	2285	PF 4 - 500-Yr	RevOSTopo	7366.90	596.80	610.58		610.70	0.000778	4.42	3878,34	1253,91	0.17
Tipyth	100,000m	Juliu Scott	0.00000000	1237122									
Reach-1	2204	PF 3 - 100-Yr	Salt Creek FP	6910,00	598,30	610,41	605.01	610,56	0,001017	3.67	2992,99	983,17	0.20
Reach-1	2204	PF 4 - 500-Yr	RevD&Topo Salt Creek FP	4986,30 10490,00	596.30 598.30	610.14 611.24	602,51 606,52	610.23 611.44	0,000478 0,001367	2.67	2892.64 3858.48	948.80	0.14
Reach-1	2204	PF 4 - 500-Yr	RevOSTopo	7366,90	596.30	610.53	603.91	610.67	0.000829	3,60	3267.39	998.83	0.19
				. 555,56		217/24		2.5000					20.76
Reach-1	2202	PF 3 - 100-Yr	Suit Creek FP	6910.00	598.00	610.25	609.52	610.52	0,004888	5.54	2222 68	1211.67	0.28
Reach-1	2202	PF 3 - 100-Yr	RevDSTopo	4985.30	596.00	610,03	603.24	610.20	0,002774	4.23	2049 49	1147,85	0.20
Reach-1 Reach-1	2202	PF 4 - 500-Yr	Solt Creek FP RevDSTopo	10490.00 7366.90	598.00 596.00	611.24	610.11	611.44 610.65	0.003741	5.12 5.14	3563.07 2514.08	1494,04 1257,92	0.25
	OKAL E	LEST ME			300,00	3.0.31	50,50	510,00	5,5000 17			723.,02	
Reach-1	2187	Service of	CION-T-T	Bridge									
Description of	aven	DE 2 450 14	0-10-10-	0717.0	900.00	F16.91	#00 F	P48.75	A carte		510121	9409.00	0.00
Reach-1	2172	PF 3 - 100-Yr	Salf Creek FP RevDSTope	6910,00 4986.30	598.00	610.20 610.00	609.52 603.24	610.49 610.18	0.005178	5.69 4.29	2164.81 2013.78	1197.98	0.29
Reach-1	2172	PF 4 - 500-Yr	Salt Creek FP	10490.00	598.00	611.18	610.11	611.39	0.003970	5.25	3477.64	1477.66	0.26
Reach-1	2172	PF 4 - 500-Yr	RevOSTopo	7366.90	596.00	610.37	605.38	610.62	0.004124	5.24	2463.79	1246,48	0.25
200	10/1	100									0.11.	,	
Reach-1	2170	PF 3 - 100-Yr	Salt Creek FP RevDSTopo	6910,00 4985,30	598,00 596,00	610,19	609,52 603.24	610,48 610,17	0,005287	5.74	2144,23 2002,87	1193,07 1134.60	0.30
Reach-1	2170	PF 4 - 500-Yr	Saft Creek FP	10490.00	598.00	611,17	610,11	611,38	0,004012	5.28	3462.41	1474,72	0.26
Reach-1	2170	PF 4 - 500-Yr	RevDSTopo	7366,90	596.00	610.36	605,38	610,61	0,004179	5.27	2448.50	1243.00	0.25
	400	167					100000	717397					
Reach-1	2110	PF 3 - 100-Yr	Salt Crack FP RevDSTopo	6910.00 4956.30	598.00 598.00	509.62 508.50	609.18 605.25	610.03 609.52	0.009049	6.01 8.52	1530.85 707.25	886,66 584,31	0.49
Reach-1	2110	PF 4 - 500-Yr	Salt Creek FP	10490.00	598.00	610.85	609.71	611.11	0.026360	4.98	2834.27	1236,03	0.36
Reach-1	2110	PF 4 - 500-Yr	RevDSTopo	7366.90	598.00	609.98	609 26	610.29	0.006278	5.26	1870.78	984.74	0.42
THE PARTY													
Reach-1	1650	PF 3 - 100-Yr	Smit Creek FP	6910.00	595.80	608.35		608,63	0.001513	4.26	1748 90	652.02	0.24
Reach-1	1650	PF 4 - 500-Yr	RevDSTopo Salt Creak FP	4986.30 10490.00	595.80 595.80	607.59 609.79		610.06	0.001056	3,38 4,72	1492.28 3199.53	192.82 1264.47	0.20
Reach-1	1650	PF 4 - 500-Yr	RevDSTopo	7366.90	595.80	608.98		609.22	0.001252	4.05	2263.92	968.84	0.23
	12.00	No.	100000										
Reach-1	450	PF 3 - 100-Yr	Suit Creek FP	6910.00	593.40	606.72	603,14	606,90	0.001798	3.92	2090.86	506.02	0.25
Reach-1	450	PF 3 - 100-Yr	RevDSTopo	5827.70	593.40	606,17	602.78	606.34	0,001800	3,76	1824.85	463.90	0.25

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Bev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Top Width	Froude # Chi
in contract of	STREET, ST.	William Blanch	A CARRIED A	(ofe)	(ff)	(rto	(10)	(ft)	(DATO	(fl/a)	(eq fl)	(ff)	- District
Reach-1	450	PF 4 - 500-Yr	Balt Crask FP	10490.00	593.40	608 23	604 1D	60B,44	0.001802	4.35	2907.65	586 25	0.26
Reach-1	450	PF 4 - 500-Yr	RevDSTopo	8579.30	593.40	607.51	603.67	607.70	0.001803	4.14	2503.70	540.08	0.2

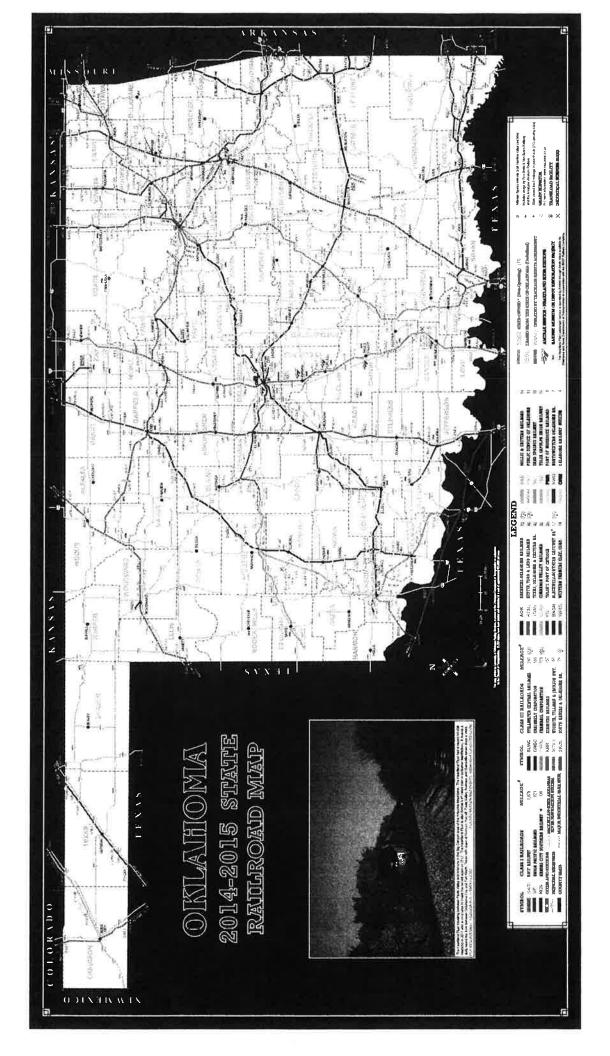
HEC RAS WATER SURFACE PROFILES

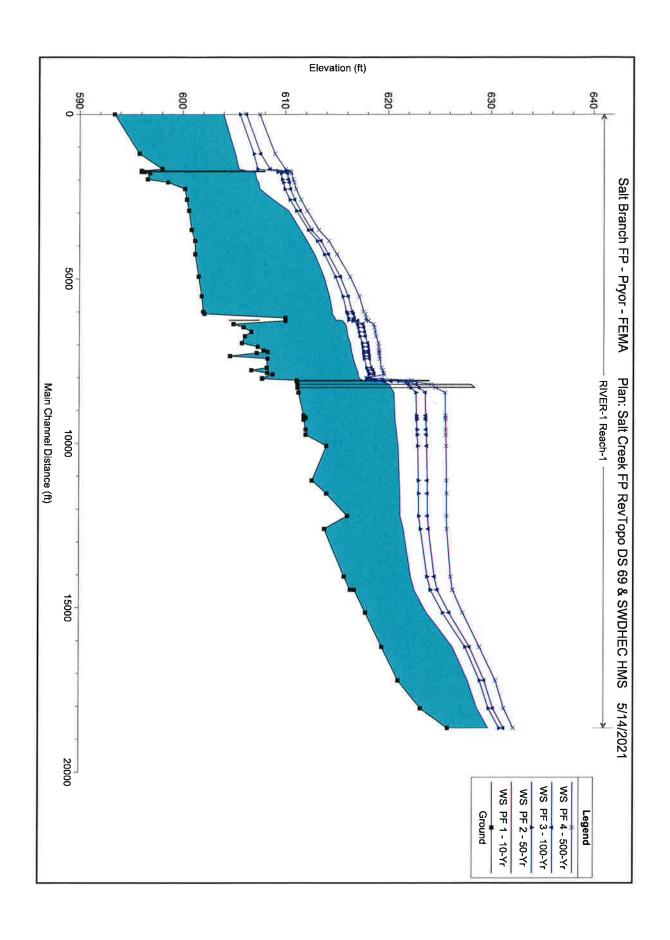
CURRENT EFFECTIVE FEMA PROFILES

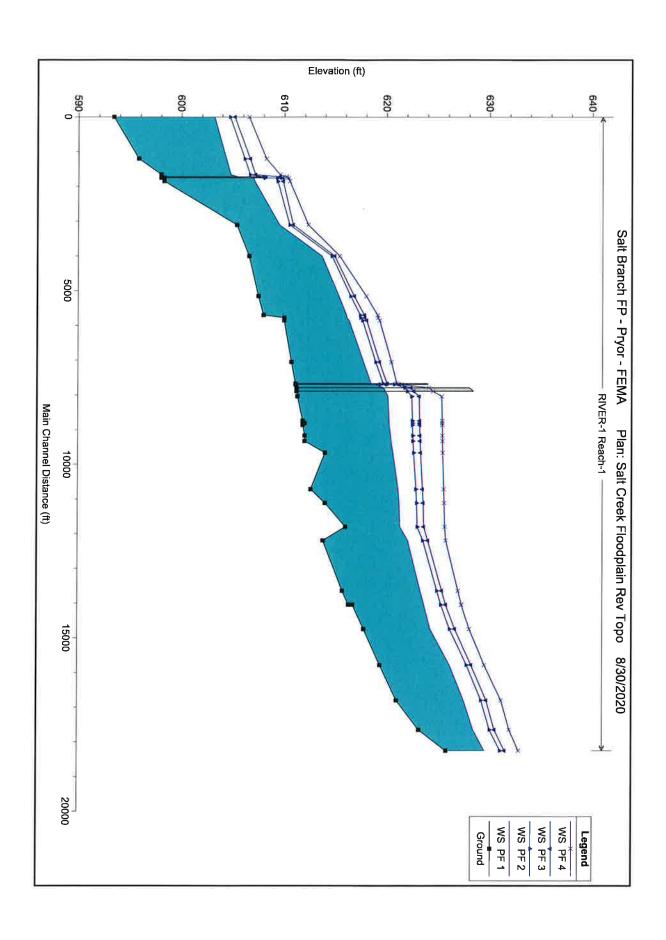


REVISED HEC RAS BACKWATER MODEL









HEC-RAS River: RIVER-1 Reach: Reach-1

		TO 10 10 1 10 10 10 10 10 10 10 10 10 10 1											
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Top Width	Froude # Chl
Reach-1	17870	PF 3 - 100-Yr	RevDSTopo	3601.00	625.80	631.23	(11)	631.46	0.002756	(IUS) 4.82	(sq II)	(T) 429 34	0.36
Reach-1	17870	PF 3 - 100-Yr	LISWD	3601,00	625.80	631.23		631.46	0.002755	4.82	1095.70	429.37	0.36
Reach-1	17870	PF 4 - 500-Yr	RevDSTopo	5082.90	625.80	632.20		632.42	0.002321	4.93	1573.59	544.39	0.34
Reach-1	17870	PF 4 - 500-Yr	LISWD	5082.90	625.80	632,20		632.42	0.002320	4.93	1574.09	544.45	0.34
Reach-1	17270	PF 3 - 100-Yr	RevDSTopo	3601.00	623.20	630.21		630.37	0.001302	3.93	1282.54	365.28	0.26
Reach-1	17270	PF 3 - 100-Yr	LISWD	3601.00	623.20	630.21		630.37	0.001301	3.93	1282.80	365.29	0.26
Reach-1	17270	PF 4 - 500-Yr	RevDSTopo	5082.90	623.20	631.26		631.44	0.001255	4.23	1681_12	391.61	0.26
Reach-1	17270	PF 4 - 500-Yr	LISWD	5082.90	623,20	631.27		631.44	0.001253	4.23	1681.89	391.66	0.26
Reach-1	16420	PF 3 - 100-Yr	RevDSTopo	3601.00	621.00	629.36		629 50	0 000958	3 46	1444 81	411 68	0.33
Reach-1	16420	PF 3 - 100-Yr	LISWD	3601.00	621.00	629.36		629.50	0.000957	3.46	1445.41	411.76	0.22
Reach-1	16420	PF 4 - 500-Yr	RevDSTopo	5082.90	621.00	630.46		630.60	0.000923	3.72	1929.16	468.22	0.23
Reach-1	16420	PF 4 - 500-Yr	LISWD	5082.90	621.00	630.46		630.60	0.000921	3.72	1930.79	468.36	0.23
Reach-1	15400	PF 3 - 100-Yr	RevDSTopo	3601.00	619.40	627.92		628.18	0.001693	4.32	981.77	267.52	0.29
Reach-1	15400	PF 3 - 100-Yr	LISWD	3601.00	619,40	627.92		628.18	0.001688	4.31	982.88	267.64	0.29
Reach-1	15400	PF 4 - 500-Yr	RevDSTopo	5082.90	619.40	628.89		629.23	0.001940	5.05	1311.93	425.06	0.32
Reach-1	15400	PF 4 - 500-Yr	LISWD	5082.90	619.40	628.90		629.24	0.001929	5.04	1315.90	426.69	0.32
Reach-1	14360	PF 3 - 100-Yr	RevDSTopo	3601.00	617.80	625.98		626.27	0.002161	4.90	1034.43	387.81	0.33
Reach-1	14360	PF 3 - 100-Yr	LISWD	3601.00	617.80	626.02		626.30	0.002102	4.85	1048,13	392.04	0.32
Reach-1	14360	PF 4 - 500-Yr	RevDSTopo	5082.90	617.80	627.26		627.49	0.001552	4.65	1640,12	572.40	0.29
Reach-1	14360	PF 4 - 500-Yr	LI SWD	5082.90	617.80	627.33		627.55	0.001478	4.56	1677.89	585.45	0.28
Reach-1	13664	PF 3 - 100-Yr	RevDSTopo	3601.00	616.70	624.81		625.00	0.001484	3.47	1070.45	287.20	0.26
Reach-1	13664	PF 3 - 100-Yr	LISWD	3601.00	616,70	624.89		625.07	0.001439	3.41	1091.40	297.94	0.26
Reach-1	13664	PF 4 - 500-Yr	RevDSTopo	5082.90	616.70	626.31		626,49	0.001334	3.47	1671,38	525.68	0.25
Reach-1	13664	PF 4 - 500-Yr	LISWD	5082.90	616.70	626.45		626.62	0.001212	3.36	1746.13	552.54	0.24
Reach-1	13662	PF 3 - 100-Yr	RevDSTopo	3601.00	616.30	624.82		624.99	0.001287	3.32	1117.83	288.44	0.25
Reach-1	13662	PF 3 - 100-Yr	LISWD	3601.00	616.30	624.89		625.06	0.001250	3.27	1138.74	299.12	0.24
Reach-1	13662	PF 4 - 500-Yr	RevDSTopo	5082.90	616.30	626.32		626,48	0.001205	3.37	1718.72	526.54	0.24
Reach-1	13662	PF 4 - 500-Yr	LISWD	5082.90	616.30	626.46		626.61	0.001098	3.27	1793.30	553.30	0.23
Reach-1	13661	PF 3 - 100-Yr	RevDSTopo	3601.00	616.30	624.82		624.99	0.001288	3.32	1117.44	288.24	0.25
Reach-1	13661	PF 3 - 100-Yr	LISWD	3601.00	616.30	624.89		625.06	0.001251	3.27	1138.33	298.91	0.24
Reach-1	13661	PF 4 - 500-Yr	RevDSTopo	5082.90	616.30	626.32		626.48	0.001206	3.37	1718.05	526.29	0.24
Reach-1	13661	PF 4 - 500-Yr	LISWD	5082.90	616.30	626.45		626.61	0.001099	3.27	1792.66	553.08	0.23
Reach-1	13660	PF 3 - 100-Yr	RevDSTopo	3601.00	616.30	624.82		624.99	0.001288	3.32	1117.05	288.04	0.25
Reach-1	13660	PF 3 - 100-Yr	LI SWD	3601.00	616.30	624.89		625.06	0.001252	3.27	1137.93	298.71	0.24
Reach-1	13660	PF 4 - 500-Yr	RevDSTopo	5082.90	616.30	626.32		626.48	0.001207	3.37	1717.37	526.04	0.24
Reach-1	13660	PF 4 - 500-Yr	LISWD	5082.90	616.30	626.45		626.61	0.001100	3.27	1792.01	552.85	0.23
												L	

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	73.48	496.04	14.85	0.021904	621.30	617.88	617.88	607.76	7366.90	RevDSTopo	PF 4 - 500-Yr	8046	Reach-1
0.66	73.82	509.74	9.78	0.009242	619.55		618.07	607.76	4986.30	RevDSTopo	PF 3 - 100-Yr	8046	Reach-1
0.75	/6.2/	66.809	12.10	0.011823	00.120	017.07	015.55	007.76	7 300-30	reappoint of	1-000-11	00,0.0	- tomor -
0.62	/4.2/	527.80	9,45	0.008320	674.60	647 07	640.30	67.70	7366.00	RevosTopo	DE 4 - 500-Vr	8070.5	Reach_1
					20.70			607 76	1000 20	Despera	DE 3 400 V.	8070 F	Reach_1
0.20	1097.54	3883.48	3,42	0.001006	621.28	617.55	621.18	611.10	7366.90	LI SWD	PF 4 - 500-Yr	8120	Reach-1
0.16	1287.37	5247.88	2.89	0.000429	622.38	617.55	622.32	611.10	7366.90	RevDSTopo	PF 4 - 500-Yr	8120	Reach-1
0.19	912.81	2851.86	3.04	0.000932	620.24	616.25	620.15	611.10	4986.30	LISWD	PF 3 - 100-Yr	8120	Reach-1
0.43	785.38	744.15	6.70	0.003541	620.16	616.25	619.46	611.10	4986.30	RevDSTopo	PF 3 - 100-Yr	8120	Reach-1
									ri age				
							RAILROAD BRIDGE	RAILRO	Bridge			8131.5	Reach-1
0.91	1303.48	586.81	12.55	0.024892	622.13	621.16	621.50	611.10	7366.90	LI SWD	PF 4 - 500-Yr	8143	Reach-1
0.76	1366.35	661.98	11.13	0.011566	622.52	621.16	622.25	611.10	7366.90	RevDSTopo	PF 4 - 500-Yr	8143	Reach-1
0.58	1322.62	609.69	8.18	0.010038	622.77	619.86	621.73	611.10	4986.30	LISWD	PF 3 - 100-Yr	8143	Reach-1
0.59	1321.83	608,75	8.19	0.007007	622.76	619.86	621.72	611.10	4986.30	RevDSTopo	PF 3 - 100-Yr	8143	Reach-1
													Control of
0.37	102.00	1084.18	6.79	0.003647	625.20	618.86	624.48	611.20	7366.90	LISWD	PF 4 - 500-Yr	8239	Reach-1
0.38	102.00	1060.52	6.95	0.002711	625.00	618.86	624.25	611.20	7366.90	RevDSTopo	PF 4 - 500-Yr	8239	Reach-1
0.31	102.00	927.51	5.38	0.002709	623.39	617.28	622.94	611.20	4986.30	LISWD	PF 3 - 100-Yr	8239	Reach-1
0.32	102.00	912.06	5.47	0.001982	623.26	617.28	622.79	611.20	4986.30	RevDSTopo	PF 3 - 100-Yr	8239	Reach-1
									cinga			Olivo I	1000
							BIDGES	HWV 80 BBIDGES				8304	Beach 1
0,35	102.00	1127.75	6.53	0.003231	625.57	618.86	624.91	611.20	7366.90	LISWD	PF 4 - 500-Yr	8343	Reach-1
0.36	102.00	1100.06	6.70	0.003487	625.33	618.86	624.64	611.20	7366.90	RevDSTopo	PF 4 - 500-Yr	8343	Reach-1
0.30	102.00	958.53	5.20	0.002445	623.67	617.28	623.25	611.20	4986.30	LISWD	PF 3 - 100-Yr	8343	Reach-1
0.31	102.00	939.64	5.31	0.002601	623.50	617.28	623.06	611.20	4986.30	RevDSTopo	PF 3 - 100-Yr	8343	Reach-1
1300													
0.06	1746.82	10549.61	1.25	0.000080	625.80		625.79	611.30	7366.90	LISWD	PF 4 - 500-Yr	8490	Reach-1
0.06	1718.29	10159.41	1.30	0.000088	625.58		625.57	611.30	7366.90	RevDSTopo	PF 4 - 500-Yr	8490	Reach-1
0.06	1494.26	7352.56	1.22	0.000093	623.83		623.82	611.30	4986.30	LISWD	PF 3 - 100-Yr	8490	Reach-1
0.07	1471_33	7113.90	1.26	0.000102	623.67		623.66	611.30	4986.30	RevDSTopo	PF 3 - 100-Yr	8490	Reach-1
0,06	1151.69	8012.82	1.15	0.000067	625.84		625.83	611.80	7366.90	LI SWD	PF 4 - 500-Yr	9190	Reach-1
0.07	1144,73	7758.92	1,19	0.000074	625.62		625.61	611.80	7366.90	RevDSTopo	PF 4 - 500-Yr	9190	Reach-1
0.07	1086.51	5814.01	1.09	0.000080	623.88		623.87	611.80	4986.30	LISWD	PF 3 - 100-Yr	9190	Reach-1
0.07	1077.63	5644.54	1.12	0,000087	623.72		623.71	611.80	4986.30	RevDSTopo	PF 3 - 100-Yr	9190	Reach-1
0.06	1431.39	9073.92	1.09	0.000059	625,85		625.84	612.00	7366.90	LISWD	PF 4 - 500-Yr	9256.7	Reach-1
0.06	1427,06	8758.75	1.13	0.000066	625.63		625.62	612.00	7366.90	RevDSTopo	PF 4 - 500-Yr	9256.7	Reach-1
0,07	1314.99	6312.10	1.09	0.000078	623.89		623.87	612.00	4986,30	LISWD	PF 3 - 100-Yr	9256.7	Reach-1
0.07	1302.69	6108.00	1.13	0.000086	623.73		623.72	612.00	4986.30	RevDSTopo	PF 3 - 100-Yr	9256.7	Reach-1
		(sq ft)	(fl/s)	(ft/ft)	(f)	(1)	(f)	(#)	(cfs)				
Froude # Chi	Top Width	Flow Area	Vel Chnl	E.G. Slope	E.G. Elev	Crit W.S.	W.S. Elev	Min Ch El	Q Total	Plan	Profile	Reach River Sta	Reach

0.55	737.92	1128.04	7.20	0.009437	612.03	610.97	611.55	605.40	4986.30	LISWD	PF 3 - 100-Yr	3550	Reach-1
0.32	/6.08/	2147.02	5.49	0.002671	013.51		013.23	00.00	7300.50	Now Colopo	4-000-1	0000.0	TO CONTRACT OF THE PARTY OF THE
0.29	695.65	1641.46	4.81	0.002274	612,78		612.55	600.85	7366 00	Revusiopo	PF 3 - 100-YF	3650 3	Dosch 1
											100	200	
0.26	745.26	2327.86	4.48	0.002482	614.39		614.23	601.20	7366.90	RevDSTopo	PF 4 - 500-Yr	3996.2	Reach-1
0.25	660.35	1773.88	4.13	0.002374	613.57		613.44	601.20	4986.30	RevDSTopo	PF 3 - 100-Yr	3996.2	Reach-1
c i	000												
0.29	568.05	2116.36	4.90	0.002205	615.23		615.00	601.22	7366.90	RevDSTopo	PF 4 - 500-Yr	4405	Reach-1
0.27	547.45	1657.53	4.38	0.002010	614.37		614.18	601,22	4986.30	RevDSTopo	PF 3 - 100-Yr	4405	Reach-1
0.31	/15.91	21.0.10	4.85	0.002671	015.74		10.010	000,00	7300.90	0440	4 - 000-11	1100	- Volume
0.4.5	0,0.04	24.70.00	1.00	0.00200	645.74	0.000	DATE 100	606 60	7366 00	UWSTI	DE 4 500 V	4450	Reach_1
0 27	678.82	1800.56	4.03	0.002030	615.14	613.37	614.98	606.60	4986.30	LI SWD	PF 3 - 100-Yr	4450	Reach-1
0.27	455.83	2019.77	5.04	0.001898	616.53		616.27	601.56	7366.90	RevDSTopo	PF 4 - 500-Yr	5084	Keach-1
0.25	414.66	1600.00	4.33	0.001590	615.50		615.31	601.56	4986.30	RevDSTopo	PF 3 - 100-Yr	5084	Reach-1
0.33	417.19	1736.40	5.85	0.002729	618.54		618.19	607.50	7366.90	LISWD	PF 4 - 500-Yr	5600	Reach-1
0.30	370.82	1335.97	5.12	0.002421	617.46		617.17	607.50	4986.30	LISWD	PF 3 - 100-Yr	5600	Reach-1
													ST 1250 - 135
0.20	589.49	2715.92	3.96	0.000985	617.33		617.19	601.86	7366.90	RevDSTopo	PF 4 - 500-Yr	5676.3	Reach-1
0.19	529.65	2098.09	3.50	0.000878	616.20		616.08	601.86	4986.30	RevDSTopo	PF 3 - 100-Yr	5676.3	Reach-1
0.19	666.38	2988.88	3.36	0.000872	619.45		619.34	608.00	7366.90	LISWD	PF 4 - 500-Yr	6150	Reach-1
0.23	578.78	2258.09	4.57	0.001395	617.87		617.62	602.00	7366.90	RevDSTopo	PF 4 - 500-Yr	6150	Reach-1
0.18	614.14	2259.09	3.06	0.000854	618.30		618.20	608.00	4986.30	LISWD	PF 3 - 100-Yr	6150	Reach-1
0.22	499.51	1640.20	4.03	0.001242	616,69		616.47	602.00	4986.30	RevDSTopo	PF 3 - 100-Yr	6150	Reach-1
0 11.0												#	
0.23	745.85	2679.31	4.40	0.001356	617.96		617.80	602.13	7366.90	RevDSTopo	PF 4 - 500-Yr	6212.6	Reach-1
0.24	629,68	1860.28	4.33	0.001519	616.78		616.61	602.13	4986.30	RevDSTopo	PF 3 - 100-Yr	6212.6	Reach-1
o i	0000												
0.28	633.35	2261.54	4.63	0.001981	619.57		619.38	610.00	7366.90	LISWD	PF 4 - 500-Yr	6225	Reach-1
0.51	512.90	1385.69	7.79	0.007259	618.40		617.86	610.00	7366,90	RevDSTopo	PF 4 - 500-Yr	6225	Reach-1
0.29	547.72	1587.28	4.58	0.002338	618.42		618.24	610.00	4986.30	LISWD	PF 3 - 100-Yr	6225	Reach-1
0.60	371.62	865.01	8.40	0.010699	617.31		616.68	610.00	4986,30	RevDSTopo	PF 3 - 100-Yr	6225	Reach-1
									Inl Struct		1000	6262.5	Reach-1
0.2.0	01.000	20,000	0.1.1	0.00	0.00		6	0.000					
0 0	673 66	2579 /0	3 77	0.001360	619 70		619 54	610.00	7366 90	UWSII	PF 4 - 500-Yr	6300	Reach-1
0.38	575.44	1676.14	5.69	0.003951	618.49	615.80	618.08	610.00	7366.90	RevDSTopo	PF 4 - 500-Yr	6300	Reach-1
0.23	597.84	1864.32	3.49	0.001412	618.56		618.41	610,00	4986.30	LISWD	PF 3 - 100-Yr	6300	Reach-1
0.38	429.97	1141.55	5.23	0.004146	617.40	614.38	617.02	610.00	4986.30	RevDSTopo	PF 3 - 100-Yr	6300	Reach-1
													16
0.19	815.39	3105.57	3.48	0.001001	618.69		618.59	604.94	7366.90	RevDSTopo	PF 4 - 500-Yr	6396.7	Reach-1
0.18	710.62	2284.06	3.28	0.001019	617.61		617.52	604.94	4986.30	RevDSTopo	PF 3 - 100-Yr	6396.7	Reach-1
		(sq ft)	(ft/s)	(ft/ft)	(#)	(3)	(E)	€	(cfs)				
Froude # Chi	Top Width	Flow Area	Vel Chnl	E.G. Slope	E.G. Elev	Crit W.S.	W.S. Elev	Min Ch El	Q Total	Plan	Profile	River Sta	Reach
										Continuous		1401.101.1.	

110 10 10	STATE OF THE PARTY	The second secon	Common)										
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chril	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	<u>a</u>	(fl/ft)	(ft/s)	(sq ft)	∄	
Reach-1	2110	PF 3 - 100-Yr	RevDSTopo	4986.30	598.00	608.50	605.25	609.52	0.026360	8.52	707.25	584.31	0.80
Reach-1	2110	PF 3 - 100-Yr	LISWD	4986.30	598.00	608.50	605.25	609.52	0.026360	8.52	707.25	584.31	0.80
Reach-1	2110	PF 4 - 500-Yr	RevDSTopo	7366.90	598.00	609.98	609.26	610.29	0.006278	5.26	1870.78	984.74	0.42
Reach-1	2110	PF 4 - 500-Yr	LISWD	7366.90	598.00	609.98	609.26	610.29	0.006278	5.26	1870.78	984.74	0.42
Reach-1	1650	PF 3 - 100-Yr	RevDSTopo	4986.30	595.80	607.59		607.76	0.001056	3.38	1492.28	192.82	0.20
Reach-1	1650	PF 3 - 100-Yr	LI SWD	4986.30	595.80	607.59		607.76	0.001056	3.38	1492.28	192.82	0.20
Reach-1	1650	PF 4 - 500-Yr	RevDSTopo	7366.90	595.80	608.98		609.22	0.001252	4.05	2263.92	968.84	0.22
Reach-1	1650	PF 4 - 500-Yr	LISWD	7366.90	595.80	608.98		609.22	0.001252	4.05	2263.92	968.84	0.22
Reach-1	450	PF 3 - 100-Yr	RevDSTopo	5827.70	593.40	606.17	602.76	606.34	0.001800	3 76	1824 85	463 00	٥ پر
Reach-1	450	PF 3 - 100-Yr	LI SWD	5827.70	593.40	606.17	602.76	606,34	0.001800	3.76	1824.85	463.90	0.25
Reach-1	450	PF 4 - 500-Yr	RevDSTopo	8579.30	593.40	607.51	603.67	607.70	0.001803	4.14	2503.70	540.08	0.25
Reach-1	450	PF 4 - 500-Yr	LISWD	8579.30	593.40	607.51	603.67	607.70	0.001803	4.14	2503.70	540.08	0.25

Reach	River RIVER-1	Reach: Reac	h-1 Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E C Elou	E C Clone	Vel Chril	Flaur Area	Ton Mildle	Frauda # Obl
neach	KIVEF-SIE	FIGIRE	Figit	(cfs)	(ft)	(ft)	(fi)	E.G. Elev	E.G. Slope (ft/ft)	(ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach-1	17870	PF 1	Selt Crk Rev FP	1870.00	625.80	629.53	174	629.75	0.003719	4.36	546.87	242.43	0.40
Reach-1	17870	PF 1	Salt Creek FP	2600.00	625.80	630,37		630,60	0.003101	4.56	776.98	318.58	0,38
Reach-1	17870	PF 2	Salt Crk Rev FP	3410.00	625.80	631,09		631.31	0.002804	4.77	1036.58	411.08	0.37
Reach-1	17870	PF 2	Sall Creek FP	5410.00	625,80	632.39		632.61	0.002211	4.91	1680.42	558.43	0.34
Reach-1	17870	PF 3	Salt Crk Rev FP	4010,00	625,80	631.52		631.75	0.002631	4.88	1227.50	467.58	0,36
Reach-1	17870	PF 3	Salt Creek FP	6410,00	625.80	632.92		633.13	0.001994	4,91	1985_13	596,68	0,32
Reach-1	17870	PF 4	Salt Crk Rev FP	6340.00	625.80	632.88		633,09	0,002017	4,92	1960_39	593,67	0,33
Reach-1	17870	PF 4	Salt Creek FP	9730.00	625,80	634_38		634,60	0,001600	4.98	2935.98	697,12	0.30
	17.23		Manager Park										
Reach-1	17270	PF 1	Salt Crk Rev FP	1870,00	623 20	628 44		628,55	0,001245	3.16	745.61	228.95	0.24
Reach-1	17270	PF 1	Salt Creek FP	2600,00	623.20	629,33		629,47	0,001277	3.56	982.95	303.66	0.25
Reach-1	17270	PF 2	Salt Crk Rev FP	3410.00	623.20	630.06		630.22	0.001308	3.88	1227_73	361,51	0.26
Reach-1	17270	PF 2	Salt Creek FP	5410.00	623.20	631,48		631,66	0,001243	4,29	1765_40	396,95	0.26
Reach-1	17270	PF 3	Sall Crk Rev FP	4010.00	623.20	630,54		630,70	0,001273	4.00	1402,96	373.43	0.26
Reach-1	17270	PF 3	Sall Creek FP Sall Crk Rev FP	6410,00	623,20	632 03		632,22	0,001261	4.51	1986.92	410.80	0.27
Reach-1	17270	PF 4	Salt Creek FP	6340,00 9730,00	623.20 623.20	631.98 633.48		632,17	0.001267	4.50	1967.32	409.47	0,27
IXBACIF I	17210	114	Sat Clear FF	9730.00	023.20	033.46		633,73	0.001378	5.22	2617,87	454,55	0.29
Reach-1	16420	PF 1	Salt Crk Rev FP	1870.00	621.00	627.51		627.62	0,001082	3.03	786.61	290.44	0.23
Reach-1	16420	PF 1	Salt Creek FP	2600.00	621.00	628.47		628.59	0.000962	3.18	1101.37	358.14	0.23
Reach-1	16420	PF 2	Salt Crk Rev FP	3410.00	621.00	629.21		629,34	0.000956	3.41	1382.77	402.53	0.22
Reach-1	16420	PF 2	Salt Creek FP	5410.00	621.00	630,68		630 83	0.000907	3.76	2036.93	477.34	0,22
Reach-1	16420	PF 3	Salt Crk Rev FP	4010.00	621.00	629.71		629.85	0.000938	3.53	1591.32	432.50	0,22
Reach-1	16420	PF 3	Salt Creek FP	6410.00	621.00	631.22		631,38	0.000924	3,95	2299,94	498.89	0.23
Reach-1	16420	PF 4	Salt Crk Rev FP	6340.00	621.00	631,17		631,33	0.000933	3,95	2272.63	496.70	0,23
Reach-1	16420	PF 4	Sall Creek FP	9730.00	621.00	632,63		632.83	0.000987	4,49	3037,41	539.46	0.24
	10.00												
Reach-1	15400	PF 1	Salt Crk Rev FP	1870_00	619,40	626,13		626.31	0.001506	3.39	560,05	186,36	0,26
Reach-1	15400	PF 1	Salt Creek FP	2600.00	619.40	627.16		627.36	0.001473	3.72	787,27	244.74	0.27
Reach-1	15400	PF 2	Salt Crk Rev FP	3410.00	619,40	627,80		628,05	0.001641	4,20	950,05	263,94	0,29
Reach-1	15400	PF 2	Salt Creek FP	5410,00	619.40	629.15		629,49	0.001872	5.08	1430.60	471.39	0.32
Reach-1	15400	PF 3	Salt Crk Rev FP	4010.00	619.40	628.24		628.52	0.001755	4.53	1073.07	311.57	0.30
Reach-1	15400	PF 3	Salt Creek FP	6410.00	619.40	629.63		630.00	0.001954	5.39	1676.68	555,28	0,33
Reach-1	15400	PF 4	Salt Crk Rev FP	6340.00	619,40	629.54		629.91	0.002028	5,45	1624,87	538,71	0,33
Reach-1	15400	PF 4	Salt Creek FP	9730.00	619.40	631,12		631,46	0.001713	5,62	2648 12	725 55	0,31
Death 4	14200	DE 4	0-11-0-1-7-1-50	4070 05	047.00	004.03						100.00	
Reach-1	14360	PF 1	Salt Crk Rev FP Salt Creek FP	1870.00 2600.00	617.80 617.80	624,27 625,78		624,52	0.002025	4,10	536 49	195.86	0.31
Reach-1	14360	PF 2	Salt Crk Rev FP	3410.00	617.80	626.15		625.96 626.38	0.001304	3.75 4.39	960.16 1103.62	365.63 410.03	0.25
Reach-1	14360	PF 2	Salt Creek FP	5410.00	617.80	627.87		62B.04	0.001124	4.15	2023.94	693.67	0,29
Reach-1	14360	PF 3	Salt Crk Rev FP	4010.00	617.80	626.65		626.87	0,001548	4.41	1323.38	474.61	0,28
Reach-1	14360	PF 3	Salt Creek FP	6410.00	617.80	628,38		628,55	0,001081	4.23	2394.21	744.61	0.24
Reach-1	14360	PF 4	Salt Crk Rev FP	6340 00	617,80	628,06		628.27	0.001342	4.60	2159.87	723.86	0.27
Reach-1	14360	PF 4	Salt Creek FP	9730.00	617,80	630,21		630.34	0.000759	3.99	3864.08	868.54	0.21
Reach-1	13664	PF 1	Salt Crk Rev FP	1870.00	616.70	623.66	- 1	623,73	0.000641	2.25	830,68	158_12	0,17
Reach-1	13664	PF 1	Salt Creek FP	2800.00	616,70	625,16		625.26	0.000768	2,50	1179.06	339.22	0.19
Reach-1	13664	PF 2	Sall Crk Rev FP	3410,00	616,70	625,30		625.44	0.001066	2.95	1228.90	360.58	0.22
Reach-1	13664	PF 2	Sall Creek FP	5830,00	616,70	627,19		627.33	0.000966	3.25	2205.68	695.26	0.22
Reach-1	13664	PF 3	Salt Crk Rev FP	4010,00	616,70	625,78		625.92	0.001161	3.11	1417.80	432.08	0,23
Reach-1		PF 3	Salt Creek FP	6910,00	616,70	627,72		627,87	0.000955	3,40	2601,74	798.03	0,22
Reach-1	13664	PF 4	Sall Crk Rev FP	6340.00	616.70	627,29		627.45	0.001068	3,45	2277,03	714.86	0.23
Reach-1	13004	PF 4	Salt Creek FP	10490,00	616,70	629,81		629,92	0.000589	3.16	4484.40	972.35	0.18
Reach-1	13662	PF 1	Salt Crk Rev FP	1870,00	616,30	623,66		623,73	0,000538	2.13	876.38	450.04	0.46
Reach-1	13662	PF 1	Salt Creek FP	2800,00	620.30	624.98		625.24	0.003338	4.15	713.47	158.21 311.27	0.16
Reach-1		PF 2	Salt Crk Rev FP	3410.00	616.30	625.31		625,43	0.000938	2.84	1275.69	361.33	0.21
Reach-1	13662	PF 2	Sall Creek FP	5830.00	620.30	627.09		627.32	0.002415	4.17	1734.95	676.69	0.33
Reach-1	13662	PF 3	Salt Crk Rev FP	4010.00	616,30	625,78		625,92	0.001035	3.00	1464,71	432.74	0.22
Reach-1	13662	PF 3	Salt Creek FP	6910,00	620.30	627,64		627.86	0.002089	4.17	2137.00	783.39	0.32
Reach-1		PF 4	Salt Crk Rev FP	6340.00	616,30	627.29		627,45	0.000985	3.37	2323.87	715.36	0.23
Reach-1	13662	PF 4	Salt Creek FP	10490.00	620.30	629.79		629.92	0.000909	3.44	4081.53	993.51	0.22
The second	THE COLON							11.11					
Reach-1		PF 1	Salt Crk Rev FP	1870,00	616,30	623,66		623,73	0.000538	2.13	876,28	158,20	0.16
Reach-1	13661	PF 1	Salt Creek FP	2800,00	620,30	624,97		625 23	0.003994	4,16	711,95	310.54	0.40
teach-1		PF 2	Salt Crk Rev FP	3410,00	616,30	625,31		625,43	0.000938	2.84	1275.34	361,18	0.21
Reach-1		PF 2	Salt Creek FP	5830.00	620.30	627,09		627.32	0.002421	4.18	1733,05	676,15	0.33
Reach-1		PF 3 PF 3	Salt Crk Rev FP	4010.00	616.30	625.78		625,92	0.001036	3.00	1464,23	432,57	0.22
Reach-1 Reach-1		PF 4	Sall Creek FP Salt Crk Rev FP	6910.00	620.30	627.64		627.86	0.002094	4.17	2135,09	782.92	0.32
Reach-1		PF 4	Sail Creek FP	10490.00	616.30 620.30	627,29 629,79		627.45 629.92	0.000986	3.37	2323.13 4080.56	715.16	0.23
Seport 1	.0001	-	GUIL GIBBR FF	10450,00	020.30	029.19		629.92	0.000909	3.44	4080.56	993.44	0.22
Reach-1	13660	PF 1	Salt Crk Rev FP	1870.00	616.30	623.66		623.73	0.000539	2.13	876,20	158 19	0.16
Reach-1		PF 1	Selt Creek FP	2800.00	620.30	624.97		625.23	0.004009	4.17	710,59	309.88	0.40
Reach-1		PF 2	Salt Crk Rev FP	3410.00	616.30	625.31		625.43	0.000939	2.84	1275.01	381.04	0.40
Reach-1		PF 2	Salt Creek FP	5830.00	620.30	627.09		627.32	0.002427	4.18	1731.24	675.63	0.34
leach-1	13660	PF 3	Salt Crk Rev FP	4010.00	616.30	625.78		625.92	0.001036	3.00	1463.76	432.41	0.22
Reach-1		PF 3	Salt Greek FP	6910.00	620.30	627.64		627.86	0.002098	4.18	2133.27	782.47	0.32
leach-1	13660	PF 4	Sall Crk Rev FP	6340.00	616.30	627.29		627.45	0.000986	3,37	2322,38	714,96	0.23
teach-1	13660	PF 4	Self Creek FP	10490.00	620.30	629.79		629.92	0.000910	3.44	4079.59	993,36	0.22
115			V										
leach-1		PF 1	Salt Crk Rev FP	1870.00	615.70	623.31		623.44	0.001021	3.23	781 59	304.22	0.23
teach-1		PF 1	Salt Creek FP	2800.00	615.70	624.36		624.50	0.000997	3,53	1153.33	403,10	0.23
teach-1		PF 2	Salt Crk Rev FP	3410.00	615.70	624,91		625.06	0.000969	3,65	1391,54	454,49	0,23
leach-1		PF 2	Salt Creek FP	5830.00	615.70	626.63		626.77	0.000869	3.94	2300.73	595,75	0.22
leach-1		PF 3	Salt Crk Rev FP	4010.00	615.70	625,39		625.53	0.000951	3.76	1616.72	498.22	0.23
each-1	13260	PF 3	Salt Creek FP	6910.00	615.70	627.20		627.35	0.000855	4.06	2655.28	633.25	0.22

			ch-1 (Continued)										
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	8239	PF 1	Salt Creek FP	2800.00	611.20	620.83	615.48	621.07	0.001882	3.93	712.92	98,13	0.26
Reach-1	8239	PF 2	Salt Crk Rev FP	3710.00	611.20	621.81	616.29	622_13	0,002276	4_57	811,50	102,00	0.29
Reach-1	8239	PF 2	Salt Creek FP	5830 00	611,20	623,64	617,88	624_17	0,002946	5.84	998.35	102.00	0,33
Reach-1	8239	PF 3	Sall Crk Rev FP	4360.00	611.20	622,40	616,81	622,79	0,002509	5.00	872.12	102.00	0.30
Reach-1	8239	PF 3	Salt Creek FP	6910.00	611.20	624.12	618.58	624.79	0,002503	6,60	1047.19		0.36
Reach-1	8239	PF 4	Salt Crk Rev FP		611.20							102.00	
Reach-1	8239	PF 4		6900.00		624.11	618.58	624.79	0.003568	6.59	1046.47	102.00	0.36
Meach 1	0239	FF 4	Salt Creek FP	10490,00	611.20	627.13	620.60	628.06	0.003745	7,74	1354,47	102,00	0.37
Reach-1	8143	PF 1	Salt Crk Rev FP	2040.00	611,10	618.91	616,93	619,48	0,009577	6,05	337,05	83.68	0.53
Reach-1	8143	PF 1	Salt Creek FP	2800_00	611_10	619.93	617,84	620,59	0,009995	6.51	430.01	98.95	0.55
Reach-1	8143	PF 2	Sait Crk Rev FP	3710_00	611_10	620.79	618.80	621.59	0.009708	7.19	515.74	1095.23	0.56
Reach-1	8143	PF 2	Salt Creek FP	5830.00	611.10	622.31	620.36	623,50	0.010098	8.72	668.46	1371,77	0.59
Reach-1	8143	PF 3	Salt Crk Rev FP	4360.00	611.10	621.27	619,37	622.20	0.009922	7.72	564.48	1284.61	0.57
Reach-1	8143	PF 3	Salt Creek FP	6910.00	611_10	621.46	620.93	622,05	0,022438	11,86	582,56	1299.92	0.87
Reach-1	6143	PF 4	Salt Crk Rev FP	6900.00	611_10	621.45	620.92	622.05	0.022473	11.86	581,78	1299.27	0,87
Reach-1	8143	PF 4	Salt Creek FP	10490.00	611_10	627.55	622.62	627.56	0.000155	1.59	11409.25	1896.04	0.08
200									31000.700			170.000	-
Reach-1	8131.5			Bridge									
		1000		Bridge									
Reach-1	8120	PF 1	Selt Crk Rev FP	2040,00	611_10	618_49	614.30	618.65	0.001359	3.15	647.21	606.03	0,22
Reach-1	8120	PF 1	Salt Creek FP	2800,00	611_10								
						619.11	614.86	619.35	0.001890	3,95	708.99	720.34	0.26
Reach-1	8120	PF 2	Sall Crk Rev FP	3710,00	611,10	619,69	615,49	620.06	0.002550	4.84	767.20	828.01	0,31
Reach-1	8120	PF 2	Salt Creek FP	5830,00	611,10	620.54	616,74	620.63	0.000869	3.20	3218.86	982.51	0,19
Reach-1	8120	PF 3	Salt Crk Rev FP	4360_00	611.10	620.05	615.91	620.11	0.000771	2,74	2753,87	893,27	0,17
Reach-1	8120	PF 3	Salt Creek FP	6910.00	611,10	621_00	617.32	621.09	0,000997	3,36	3687_74	1064,96	0,20
Reach-1	8120	PF 4	Sall Crk Rev FP	6900.00	611.10	621_00	617.31	621,09	0.000997	3.36	3683.39	1064.22	0.20
Reach-1	8120	PF 4	Salt Creek FP	10490.00	611,10	622,28	619,01	622,38	0.001025	3,72	5194.17	1281,83	0.20
	1 3 3 3 1												
Reach-1	7500	PF 1	Salt Crk Rev FP	2040.00	610.70	617.74		617.85	0.001265	3.05	1044,94	643,58	0,21
Reach-1	7500	PF 1	Salt Creek FP	2800.00	610.70	618.37		618,46	0.001100	3.02	1460.63	680.42	0.20
Reach-1	7500	PF 2	Salt Crk Rev FP	3710.00	610.70	618.97		619,05	0.001013	3.06	1876.68	715.40	0.19
Reach-1	7500	PF 2	Salt Creek FP	5830.00	610,70	620.03		620,13	0.000953	3.23	2673.38	778.66	0,19
Reach-1	7500	PF 3	Salt Crk Rev FP	4360.00	610,70	619,33		619,42	0.000981	3.10	2141.74	736.81	0.19
Reach-1	7500	PF 3	Salt Creek FP	6910.00	610,70	620,49		620.59	0.000944		3038.76	814.55	0,19
	7500	PF 4								3.33			
Reach-1			Salt Crk Rev FP	6900.00	610.70	620.49		620,58	0,000944	3,33	3035,43	814,23	0,19
Reach-1	7500	PF 4	Salt Creek FP	10490.00	610.70	621,77		621,89	0,000922	3,58	4145,90	914.74	0,19
Reach-1	6300	PF 1	Salt Crk Rev FP	2040.00	610.00	616,33		616,44	0,001233	2.61	872,89	331,25	0.20
Reach-1	6300	PF 1	Salt Creek FP	2800.00	610.00	617.01		617.14	0.001349	2.97	1130.62	428.50	0.21
Reach-1	6300	PF 2	Sall Crk Rev FP	3710.00	610.00	617.66		617.80	0.001421	3.26	1436.61	520.89	0.22
Reach-1	6300	PF 2	Sall Creek FP	5830.00	610.00	618.84		619.00	0,001389	3,60	2129.00	627.01	0.23
Reach-1	6300	PF 3	Salt Crk Rev FP	4360.00	610.00	618.06		618.20	0,001436	3.41	1655,51	573,78	0.23
Reach-1	6300	PF 3	Salt Creek FP	6910.00	610.00	619.34		619,50	0.001367	3.72	2448,77	660.54	0.23
Reach-1	0300	PF 4	Salt Crk Rev FP	6900.00	610.00	619.34		619.49	0.001367	3.72	2445.95	680.25	0.23
Reach-1	6300	PF 4	Salt Creek FP	10490.00	610.00	620.70		620.88	0.001323	4.06	3409.11	750.18	0.23
	THE RESERVE	Charles - T						320.00					
Reach-1	6225	PF 1	Salt Crk Rev FP	2040.00	610.00	616.11		616.29	0.003284	4,35	673,47	303.54	0,33
Reach-1	6225	PF 1	Salt Creek FP	2800.00	610,00	616.81		616.99	0.002957	4.48	912.49	386.65	0.32
Reach-1	6225	PF 2	Salt Crk Rev FP	3710.00	610,00	617,46							
	6225	PF 2						617.65	0.002671	4,55	1193,15	465.68	0,31
Reach-1			Salt Creek FP	5830.00	610.00	618.68		618.87	0.002167	4.58	1836.39	580.83	0.28
Reach-1	6225	PF 3	Salt Crk Rev FP	4360.00	610.00	617.87		618.06	0.002513	4,59	1392.33	514.45	0.30
Reach-1	6225	PF 3	Salt Creek FP	6910.00	610.00	619.18		619,37	0.002025	4.61	2138.55	618,61	0.28
Reach-1	6225	PF 4	Sail Crk Rev FP	6900.00	610,00	619,18		619.37	0.002026	4,61	2135.87	618.29	0,28
Reach-1	6225	PF 4	Salt Creek FP	10490.00	610,00	620,55		620,76	0.001804	4.80	3058.23	729.28	0,27
		020											
Reach-1	6150	PF 1	Salt Crk Rev FP	2040,00	608,00	616,07		616,15	0.000806	2.48	1099.31	471_60	0.17
Reach-1	6150	PF 1	Salt Creek FP	2800.00	609.00	616.77		616,85	0.000819	2.67	1444.79	519.81	0.17
Reach-1	8150	PF 2	Salt Crk Rev FP	3710.00	608.00	617.43		617.52	0.000840	2.86	1802.81	565.44	0.18
Reach-1	6150	PF 2	Salt Creek FP	5830.00	608.00	618.64		618,74	0.000857	3.17	2533.98	634.33	0.18
Reach-1	6150	PF 3	Salt Crk Rev FP	4360.00	608.00	617.83		617.93	0.000853	2.98	2038.20	593.54	0.18
Reach-1	6150	PF 3	Salt Creek FP	6910,00	608.00	619,14		619.25	0.000867	3.30	2859.04	657.39	0.19
Reach-1	6150	PF 4	Salt Crk Rev FP	6900,00	608.00	619.14		619.25	0.000867	3.30	2856.15	657.19	0.19
Reach-1	6150	PF 4	Salt Creek FP	10490.00	608.00	620.51		620.64	0.000919	3.71	3802.10	730.16	0.20
		1 6 11		10,00,00	500.00	320.01		220.04	5,500513	5,7 1	330E, 10	730,10	0.20
Reach-1	5600	PF 1	Salt Crk Rev FP	2040,00	607,50	615.32		615.50	0.001667	3.64	729.42	286.64	0.24
Reach-1	5600	PF 1	Salt Creek FP	2800,00	607,50	615.93			0.001918		910,60	314.16	
Reach-1	5600	PF 2	Salt Crk Rev FP	3710,00				616,13	0.001918	4.12	1094.20		0.26
					607,50	616,49		616.73		4,61		339.78	0.28
Reach-1	5600	PF 2	Salt Creek FP	5830,00	607,50	617,56		617.87	0.002536	5,40	1486,18	388.86	0.31
Reach-1	5600	PF 3	Sall Crk Rev FP	4360.00	607.50	616.84		617_11	0.002337	4,91	1215,49	355,69	0.30
Reach-1	5600	PF 3	Selt Creek FP	6910.00	607.50	618,01		618,35	0.002672	5.72	1664.99	409.31	0.32
Reach-1	5600	PF 4	Salt Crk Rev FP	6900.00	607,50	618.01		618,35	0.002671	5.72	1663.44	409.13	0.32
teach-1	5600	PF 4	Salt Creek FP	10490.00	607,50	619.21		619.64	0.003058	6.61	2186.04	463.77	0.35
171 445	12-0	TOP TO	E NAU										
leach-1	4450	PF 1	Salt Crk Rev FP	2040.00	606.60	613,65		613.76	0.001545	3.06	966.31	543.91	0.22
leach-1	4450	PF 1	Salt Creek FP	2800.00	606.60	614,17	811.08	614.28	0.001574	3.27	1272.01	621.93	0.23
teach-1		PF 2	Salt Crk Rev FP	3710.00	606.60	614,63	612.86	614.75	0.001623	3.48	1566.95	654.29	0.24
leach-1		PF 2	Salt Creek FP	5830.00	606.60	615.17	613.62	615.35	0.002314	4.37	1926.15	691.65	0.29
teach-1		PF 3	Salt Crk Rev FP	4360.00	606.60	614.90	613.16	615.03	0.002314	3.64	1746.55	673.23	0.24
each-1		PF 3	Salt Creek FP	6910.00	606.60	-	013,10						0.24
		PF 4				615.41		615.62	0.002589	4.73	2094.46	708.48	
each-1			Salf Crk Rev FP	6900.00	606,60	615,40		615,62	0.002588	4.73	2092.77	708.31	0.30
each-1	4450	PF4	Salt Creek FP	10490,00	606.60	616.16		616,45	0.003128	5.54	2648,30	761.24	0,34
each-1		PF 1	Salt Crk Rev FP	2040.00	605.40	609.52	609.52	610.36	0.021361	7.95	311.69	196.58	0.77
each-1		PF 1	Salt Creek FP	2800.00	605.40	609.98	609.98	610.89	0.021339	8.56	412,14	238.17	0.78
	3550	PF 2	Salt Crk Rev FP	3710.00	605.40	610.52	610.52	611.42	0.018919	8.83	563,93	323.45	0.75
each-1													
each-1 each-1	3550	PF 2	Salt Creek FP	5830.00	605.40	611.92	611.58	612.30	0.007288	6.62	1406,17	776,48	0.49

Reach	lan: RevDSTop	Profile	Reach: Reach-	Min Ch El	W.S. Elev	Crit W.S.	E.C. Elau	E.G. Slope	Val Chal	Flow Area	Top Mildth	Escudo # Chl
Reacii	River Sta	FIDING	(cfs)				E,G, Elev		Vel Chnl	Flow Area	Top Width	Froude # Chl
Reach-1	17870	PF 1 - 10-Yr		(ft) 625.80	(ft)	(fl)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	0.00
Reach-1	17870	PF 2 - 50-Yr	2038.00	625.80	629,74 630,82		629.96 631.05	0.003487	4,38	598,97	254.75	0.39
Reach-1	17870	PF 3 - 100-Yr	3601.00	625.80	631.23		631,46		4.71	932,11	376.60	0,37
Reach-1	17870	PF 4 - 500-Yr	5082,90	625.80	632.20		632.42	0.002756	4.82	1095.60 1573.59	429.34 544.39	0.34
Troacir I	11010	11 4-300 11	3002,80	023,80	032,20		032,42	0,002321	4.55	1073.08	544,35	0.34
Reach-1	17270	PF 1 - 10-Yr	2038.00	623.20	628.66		628,78	0.001268	3,28	797,61	247,25	0,25
Reach-1	17270	PF 2 - 50-Yr	3088.00	623.20	629.78		629.93	0.001200	3.78	1128.13	341.39	0.26
Reach-1	17270	PF 3 - 100-Yr	3601.00	623,20	630,21		630.37	0.001311	3.93	1282.54	365.28	0.26
Reach-1	17270	PF 4 - 500-Yr	5082.90	623,20	631,26		631.44	0.001352	4,23	1681,12	391.61	0,26
TOUGHT !	17270	11 4-000-17	3002.30	023.20	031,20		051,44	0,001233	4,23	1001,12	351,01	0,20
Reach-1	16420	PF 1 - 10-Yr	2038.00	621,00	627.73		627,85	0,001070	3,09	853,41	308,30	0,23
Reach-1	16420	PF 2 - 50-Yr	3088.00	621.00	628,91		629.04	0,000971	3.34	1266,10	384,75	0,22
Reach-1	16420	PF 3 - 100-Yr	3601.00	621.00	629.36		629.50	0.000958	3,46	1444.81	411,68	0.22
Reach-1	16420	PF 4 - 500-Yr	5082.90	621.00	630.46		630.60	0.000923	3.72	1929.16	468,22	0.23
TOUGHT !	10420	11 4 000 11	3002.30	021.00	030,40		030.00	0,000323	5.72	1323.10	400,22	0.20
Reach-1	15400	PF 1 - 10-Yr	2038.00	619.40	626,31		626.51	0.001603	3,56	594.33	200.32	0,27
Reach-1	15400	PF 2 - 50-Yr	3088.00	619.40	627.50		627,74	0.001645	4.08	871.97	254.91	0.29
Reach-1	15400	PF 3 - 100-Yr	3601.00	619.40	627.92		628.18	0.001693	4.32	981.77	267,52	0.29
Reach-1	15400	PF 4 - 500-Yr	5082.90	619.40	628,89		629,23	0.001940	5.05	1311.93	425.06	0.32
(COOCIF1	13400	FF 4-300-11	3002,30	015,40	020,03		029,23	0,001940	5.05	1311.93	425,06	0,32
Reach-1	14360	PF 1 - 10-Yr	2028.00	617.80	622.70		624.46	0.002202	5.05	457.00	154.00	0.39
Reach-1	14360	PF 2 - 50-Yr	2038.00 3088.00	617,80	623.79 625.35		624.16 625.68	0.003393	5.05 5.06	452.66	154,80 316.67	0.39
Reach-1	14360	PF 3 - 100-Yr	3601.00	617,80			626.27		4,90	811.70		0.35
Reach-1	14360	PF 4 - 500-Yr	5082,90	617,80	625,98 627,26		627.49	0.002161	4,90	1034.43	387,81	
HOOGIFT	ITOUT	7 4-000-11	3002,30	017.00	021,20		027,49	0,001552	4,05	1640,12	572,40	0,29
Reach-1	13664	PF 1 - 10-Yr	2038.00	616,70	622,59		622,73	0.001267	3,03	679.00	420 77	0.04
Reach-1	13684	PF 1 - 10-11	3088.00	616,70	624.17		624,73	0.001267	3,38	673,26 915,80	136.77 189.98	0.24
Reach-1	13664	PF 3 - 100-Yr PF 4 - 500-Yr	3601.00	616,70	624.81		625,00	0.001484	3,47	1070,45	287,20	0,26
Reach-1	13004	1 7 4 - 300-TI	5082,90	616,70	626,31		626.49	0.001334	3,47	1671.38	525,68	0,25
Reach-1	13662	PF 1 - 10-Yr	2028.00	646.30	622.60		800.70	0.004000	2.02	740.00	420.07	0.00
Reach-1	13662	PF 2 - 50-Yr	2038.00 3088.00	616.30 616.30	622,60 624,18		622,72	0.001020	2,83 3,21	719.66	136,97	0.22
	13662						624.34	0,001198		962.57	191.37	0.24
Reach-1		PF 3 - 100-Yr	3601.00	616.30	624.82		624.99	0.001287	3.32	1117,83	288.44	0.25
Reach-1	13662	PF 4 - 500-Yr	5082,90	616.30	626.32		626,48	0,001205	3.37	1718.72	526,54	0.24
Deceb 4	13661	DE 4 40 Va	2020.00	646.20	000.00		000.70	0.004000	0.00	740.54	400.05	0.00
Reach-1		PF 1 - 10-Yr	2038.00	616,30	622.60	_	622.72	0.001020	2.83	719.51	136.95	0.22
Reach-1	13661 13661	PF 2 - 50-Yr	3088.00	616,30	624.17		624,33	0,001198	3.21	962,33	191,17	0,24
Reach-1		PF 3 - 100-Yr	3601.00	616,30	624.82		624.99	0.001288	3.32	1117.44	288,24	0.25
Reach-1	13661	PF 4 - 500-Yr	5082,90	616,30	626,32		626,48	0,001206	3.37	1718,05	526,29	0,24
Desch 4	10000	DE 4 40 V	2000.00	040.00	200.00		200.70	0.004004	0.00	740.05	100.00	2.00
Reach-1	13660	PF 1 - 10-Yr	2038,00	616.30	622.60		622,72	0,001021	2.83	719,35	136,93	0.22
Reach-1	13660	PF 2 - 50-Yr	3088.00	616.30	624,17		624,33	0.001199	3,22	962,08	190,98	0,24
Reach-1	13660	PF 3 - 100-Yr	3601,00	616.30	624.82		624.99	0.001288	3.32	1117,05	288.04	0.25
Reach-1	13660	PF 4 - 500-Yr	5082,90	616,30	626.32		626.48	0.001207	3.37	1717,37	526,04	0.24
D	10000	DE 4 48 V										
Reach-1	13260	PF 1 - 10-Yr	1077,90	615,70	622,24		622.34	0.000817	2.56	511,88	203,24	0.20
Reach-1	13260	PF 2 - 50-Yr	1856,90	615,70	623,86		623.94	0.000651	2,73	962,67	356,31	0.18
Reach-1	13260	PF 3 - 100-Yr	2230,30	615,70	624.53		624,61	0.000552	2,67	1225,49	419.33	0,17
Reach-1	13260	PF 4 - 500-Yr	3182.30	615.70	626.12		626.18	0.000361	2.45	2007,65	562.87	0.14
Reach-1	11810	PF 1 - 10-Yr	1077.90	613,80	621.53		621,58	0.000379	1.89	637,67	170,09	0.14
Reach-1	11810	PF 2 - 50-Yr	1856.90	613,80	623,21		623.28	0,000412	2,29	1021,88	305,09	0.15
Reach-1	11810	PF 3 - 100-Yr	2230,30	613,80	623.98		624.05	0.000373	2.32	1285,54	378,38	0.14
Reach-1	11810	PF 4 - 500-Yr	3182.30	613,80	625,76		625,81	0.000280	2.29	2223.24	740.61	0.13
D. colo f	44540.5	DE 4 46 11	10									
Reach-1	11518,3	PF 1 - 10-Yr	1077.90	616.00	621,21		621,29	0,001930	2.30	468,42	199.29	0.26
Reach-1	11518.3	PF 2 - 50-Yr	1856,90	616.00	623,04		623.08	0,000615	1,78	1329,97	818.66	0.16
Reach-1	11518.3	PF 3 - 100-Yr	2230.30	616.00	623.69		623.91	0,000312	1,45	2130.06	1071,57	0,12
Reach-1	11518.3	PF 4 - 500-Yr	3182,30	616.00	625,73		625.74	0,000100	1,03	4291,04	1246.52	0.07
Death 1	40005 7	DE 4 46 16	4077.05	011.05	021.15		661.45	0.00000		00010		
Reach-1		PF 1 - 10-Yr	1077.90	614,00	621.19		621.19	0.000043	0,65	2634,97	950,10	0,05
Reach-1		PF 2 - 50-Yr	1856,90	614.00	623,02		623.03	0.000027	0,61	4571,25	1154,08	0,04
Reach-1		PF 3 - 100-Yr	2230.30	614.00	623.87		623.87	0,000022	0,59	5587.00	1246,16	0.04
Reach-1	10835.7	PF 4 - 500-Yr	3182.30	614.00	625.72		625.72	0.000016	0.57	8030.84	1392.27	0.03
Zanah 4	40404.7	DE 4 46 V	4077.05	010.00	001.15		601.1	0.00000		40 4:		
Reach-1	-	PF 1 - 10-Yr	1077,90	612,60	621.15		621.16	0,000124	1,07	1608,04	794.60	0,08
Reach-1	-	PF 2 - 50-Yr	1856.90	612.60	623.00		623,01	0.000057	0,87	3499.01	1157.64	0.05
Reach-1		PF 3 - 100-Yr	2230,30	612.60	623.86		623.86	0.000041	0.79	4506.79	1209.75	0.05
Reach-1	10421.7	PF 4 - 500-Yr	3182,30	612.60	625.71		625,71	0.000025	0.70	6844.53	1309.43	0.04
Zonat 4	4040	DC 4 40 V	102-11	****								
Reach-1		PF 1 - 10-Yr	1077.90	614.00	621.02	617.28	621.03	0.000126	0,92	1617.84	853,95	0.08
Reach-1		PF 2 - 50-Yr	1856,90	614.00	622,95	617.99	622.95	0.000053	0.75	3571,25	1116,19	0,05
Reach-1		PF 3 - 100-Yr	2230,30	614,00	623,81	618,21	623,82	0.000039	0,70	4567,85	1183.57	0.05
Reach-1	10164	PF 4 - 500-Yr	3182,30	614.00	625.69	618.74	625,69	0_000024	0,64	6862.54	1262.97	0.04
		Tile of										
Reach-1		PF 1 - 10-Yr	2343.50	612.00	620,88		620.93	0.000448	2,28	1815,27	1015,91	0,15
Reach-1		PF 2 - 50-Yr	4092,20	612.00	622,89		622,91	0.000188	1,75	4060.01	1211,90	0.10
Reach-1		PF 3 = 100-Yr	4986.30	612,00	623.77		623.78	0.000144	1,63	5159.97	1289.05	0.09
Reach-1	9775.2	PF 4 ~ 500-Yr	7366.90	612,00	625.65		625.67	0.000101	1.53	7722.70	1429.39	0.08
		SHAP										
Reach-1	9618	PF 1 + 10-Yr	2343.50	612.00	620.82		620.86	0.000340	1.97	2024.92	1062,79	0.13

HEC-RAS Plan: RevOSTopo River: RIVER-1 Reach: Reach-1 (Continued)

	River Sta	a Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	2 12 12 12 12 12
Reach-1	7451.3	PF 4 - 500-Yr	7366.90	608.30	619 21		619.30	0.001127	2,82	3144,40	864.28	0.2
3,7 - 2,11												
Reach-1	7370	PF 1 - 10-Yr	2343.50	604,63	616,55		616.63	0.000963	2.77	1362.88	679.39	0.1
Reach-1	7370	PF 2 - 50-Yr	4092,20	604,63	617,67		617,74	0.000881	2,90	2161.98	751.24	0.1
Reach-1	7370	PF 3 - 100-Yr	4986.30	604.63	618,15		618.23	0.000844	2,95	2531,27	779,31	0,1
Reach-1	7370	PF 4 - 500-Yr	7366,90	604,63	619 18		619.27	0_000811	3.11	3359.98	824_55	0.1
Reach-1	7277.5	PF 1 - 10-Yr	2343.50	607_22	616.47		616.56	0.001547	2.96	1188.64	653.26	0,22
Reach-1	7277.5	PF 2 - 50-Yr	4092,20	607.22	617.62		617,70	0.001191	2,88	1982.07	725.13	0,20
Reach-1	7277.5	PF 3 - 100-Yr	4986.30	607.22	618,11		618,19	0.001097	2,88	2343.65	756.74	0,19
Reach-1	7277.5	PF 4 - 500-Yr	7366.90	607.22	619,15		619.24	0.000989	3,01	3169.49	832.11	0,19
Reach-1	7244.4	PF 1 - 10-Yr	2343.50	608,29	616.45		616.53	0.001472	2.60	1227,71	645,74	0,21
Reach-1	7244.4	PF 2 - 50-Yr	4092.20	608.29	617.61		617,68	0.001136	2.64	2021.71	723.18	0.19
Reach-1	7244.4	PF 3 - 100-Yr	4986.30	608.29	618.10		618,17	0.001138	2.69	2383.86	758.74	0.19
Reach-1	7244.4	PF 4 - 500-Yr	7366,90	608.29	619.14		619,23	0.000964	2,85	3231.43	867.80	0,19
, todoii i	121111	11 4 000 11	7000,50	000,23	010.14		010,20	0.000304	2,00	0201.40	001.00	0,10
Reach-1	7201.4	PF 1 - 10-Yr	2343,50	607,90	616,43		616,49	0.001083	2.62	1250.20	648,74	0.19
			-							1350.28		
Reach-1	7201.4	PF 2 - 50-Yr	4092.20	607.90	617.59		617,66	0,000900	2,69	2161,77	741,49	0,18
Reach-1	7201.4	PF 3 - 100-Yr	4986,30	607.90	618.09		618,16	0.000856	2,75	2540,15	828,81	0,18
Reach-1	7201.4	PF 4 - 500-Yr	7366.90	607.90	619,13		619.21	0.000793	2,88	3461.95	933.08	0,17
	-											
Reach-1	7085,8	PF 1 - 10-Yr	2343.50	607.32	616,36		616.43	0.000842	2,63	1429.78	695.31	0.17
Reach-1	7085.8	PF 2 - 50-Yr	4092,20	607,32	617,55		617,62	0.000755	2,77	2349,61	847_14	0.17
Reach-1	7085.8	PF 3 - 100-Yr	4986.30	607.32	618.05		618.12	0.000719	2,81	2788.26	908,50	0.17
Reach-1	7085.8	PF 4 - 500-Yr	7366,90	607,32	619.11		619,18	0.000668	2.92	3795.51	999,11	0.16
Reach-1	6977.4	PF 1 - 10-Yr	2343.50	605.78	616,31		616.36	0.000789	2.23	1453,06	635,12	0,16
Reach-1	6977.4	PF 2 - 50-Yr	4092.20	605.78	617.50		617.57	0.000758	2.48	2308.86	793.23	0.16
Reach-1	6977.4	PF 3 - 100-Yr	4986.30	605.78	618.01		618,07	0.000738	2.56	2723.39	859.14	0.16
Reach-1	6977,4	PF 4 - 500-Yr	7366,90	605.78	619.06		619,14	0.000701	2.72	3678.92	944,80	0,16
	10000		100000	000,10	010.00		0.10,14	0.000101	2.72	0070.02	044,00	0,10
Reach-1	6764.6	PF 1 - 10-Yr	2343.50	606.08	616,05		616,15	0.001374	2,90	1085,47	465.57	0,21
Reach-1	6764.6	PF 2 - 50-Yr	4092.20	606.08	617.25			0.001374	3,30		632.51	0,21
Reach-1	6764.6						617.37			1746,54		0,22
		PF 3 - 100-Yr	4986.30	606.08	617.77		617,88	0,001329	3,40	2088,10	703,41	
Reach-1	6764.6	PF 4 - 500-Yr	7366.90	606.08	618.84		618.96	0.001235	3.59	2913.19	822.17	0.22
I DELIVE												
Reach-1	6632.1	PF 1 - 10-Yr	2343.50	606.70	615,99		616,03	0.000579	2.39	1518.41	521.37	0.15
Reach-1	6632.1	PF 2 - 50-Yr	4092.20	606.70	617,18		617,25	0,000688	2.85	2215.44	644.02	0.16
Reach-1	6632.1	PF 3 = 100-Yr	4986.30	606,70	617,69		617.76	0.000710	3,00	2556.64	695,94	0,17
Reach-1	6632.1	PF 4 - 500-Yr	7366.90	606.70	618.76		618.85	0,000751	3.31	3353.41	784.20	0,18
	120											
Reach-1	6495.3	PF 1 - 10-Yr	2343.50	605.94	615.93		615.97	0.000485	1.90	1579.19	558.03	0.13
Reach-1	6495.3	PF 2 - 50-Yr	4092.20	605.94	617,11		617,17	0.000596	2,36	2316.73	683.60	0.15
Reach-1	6495.3	PF 3 - 100-Yr	4986.30	605.94	617.62		617.69	0.000620	2.51	2676.95	735,64	0,15
Reach-1	6495.3	PF 4 - 500-Yr	7366,90	605.94	618,69		618,77	0.000666	2,82	3515,19	825, 17	0,16
	THE STATE OF	THE RESERVE										
Reach-1	6396.7	PF 1 - 10-Yr	2343.50	604.94	615.84		615.91	0.000900	2.72	1261,10	503,90	0,17
Reach-1	6396.7	PF 2 - 50-Yr	4092.20	604.94	617.02		617,10	0.001020	3,16	1939.03	649.27	0,18
Reach-1	6396.7	PF 3 - 100-Yr	4986.30	604.94	617.52		617.61	0.001019	3.28	2284.06	710.62	0.18
Reach-1	6396.7	PF 4 - 500-Yr	7366,90	604,94	618.59		618.69	0.001001	3.48	3105.57	815.39	0.19
TOUGHT I	0000.7	11 4-500-11	7000,50	001,01	010,55		010.03	0.001001	5.40	3103.37	010.00	0.15
Reach-1	6300	PF 1 - 10-Yr	2242 50	610.00	615.54	612.76	615.75	0.000070	2.67	501.45	202.64	0.30
Reach-1	6300		2343.50	610.00	615,54	612.76	615,75	0.002972	3.67	661.45	222,61	0.30
		PF 2 - 50-Yr	4092.20	610.00	616.55	613,88	616,90	0.004076	4,91	953,07	361.73	0.37
Reach-1	6300	PF 3 - 100-Yr	4986.30	610.00	617,02	614,38	617.40	0,004146	5,23	1141,55	429.97	0.38
Reach-1	6300	PF 4 - 500-Yr	7366,90	610,00	618.08	615,80	618,49	0.003951	5,69	1676,14	575.44	0,38
1b 1	2000 5		4-18:						_			
Reach-1	6262.5		Ini Struct									
	1											
Reach-1	6225	PF 1 - 10-Yr	2343.50	610.00	614,83	614.83	615,70	0,021175	9,25	352.44	202.40	0.80
Reach-1	6225	PF 2 - 50-Yr	4092.20	610,00	616,13		616.81	0.013034	8,69	677,43	305.10	0.66
Reach-1	6225	PF 3 - 100-Yr	4986.30	610,00	616,68		617.31	0.010699	8,40	865,01	371,62	0,60
Reach-1	6225	PF 4 - 500-Yr	7366.90	610.00	617,86		618,40	0.007259	7.79	1385.69	512.90	0.51
	Marian											
Reach-1	6212.6	PF 1 - 10-Yr	2343.50	602,13	614.54		614.79	0.002158	4.44	760.37	437.83	0.27
Reach-1	6212.6	PF 2 - 50-Yr	4092,20	602,13	616,04		616.22	0.001644	4.34	1516.75	574.00	0,25
Reach-1	6212.6	PF 3 - 100-Yr	4986.30	602.13	616,61		616,78	0.001519	4.33	1860.28	629,68	0,24
Reach-1	6212.6	PF 4 - 500-Yr	7366,90	602.13	617.80		617.96	0.001356	4.40	2679.31	745.85	0.23
-	7.00											
Reach-1	6150	PF 1 - 10-Yr	2343.50	602.00	614,56		614.68	0.000748	2.74	893.12	174.95	0.16
leach-1	6150	PF 2 - 50-Yr	4092.20	602.00	615,94		616.13	0.001146	3.74	1382.20	462.40	0.21
leach-1	6150	PF 3 - 100-Yr	4986.30	602.00	616.47		616.69	0.001140	4.03	1640.20	499.51	0.22
leach-1	6150							0.001242				
odur!	0100	PF 4 - 500-Yr	7366,90	602,00	617,62		617,87	0,001395	4.57	2258,09	578,78	0,23
	E070 C	DE 4 AT 11	9910.55	05: 53	041.00			0.0555		10		
teach-1	5676.3	PF 1 - 10-Yr	2343.50	601,86	614,27		614.35	0.000644	2.65	1259,72	395,14	0.16
leach-1	5676.3	PF 2 - 50-Yr	4092.20	601.86	615.57		615,68	0,000817	3.27	1835.87	492,85	0,18
leach-1	5676.3	PF 3 - 100-Yr	4986,30	601,86	616,08		616.20	0.000878	3.50	2098.09	529,65	0.19
leach-1	5676.3	PF 4 - 500-Yr	7366.90	601.86	617.19		617.33	0,000985	3.96	2715,92	589.49	0.20
0.37	11 18 11 5											
each-1	5084	PF 1 - 10-Yr	2343,50	601,56	613.74		613.86	0.001078	3.16	1007.69	335.17	0.20
	5084	PF 2 - 50-Yr	4092.20	601.56	614.86		615.04	0.001445	4.00	1420.57	394.32	0,23

HEC-RAS Plan: RevDSTopo River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W,S, Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chi
			(cfs)	(n)	(ft)	(ft)	(ft)	(n/n)	(ft/s)	(sq ft)	(ft)	
Reach-1	450	PF 2 - 50-Yr	4772.20	593.40	605.56	602.34	605.71	0.001802	3.58	1556.37	417.10	0.24
Reach-1	450	PF 3 - 100-Yr	5827.70	593.40	606.17	602.76	606.34	0.001800	3.76	1824.85	463.90	0.25
Reach-1	450	PF 4 - 500-Yr	8579.30	593.40	607.51	603,67	607.70	0.001803	4.14	2503.70	540.08	0.25

MINUTES CITY COUNCIL MEETING FOLLOWED BY PRYOR PUBLIC WORKS AUTHORITY MEETING CITY OF PRYOR CREEK, OKLAHOMA TUESDAY, MAY 18TH, 2021 AT 6:00 P.M.

The City Council of the City of Pryor Creek, Oklahoma met in regular session on the above date and time in the Council Chamber upstairs at City Hall, 12 North Rowe Street in Pryor Creek, Oklahoma. This meeting was followed immediately by a meeting of the Pryor Public Works Authority. Notice of these meetings was posted on the East bulletin board located outside to the South of the entrance doors and the City website at www.pryorcreek.org. Notice was also e-mailed to The Paper newspaper and e-mailed to the Council members.

1. CALL TO ORDER, PRAYER, PLEDGE OF ALLEGIANCE, ROLL CALL.

Mayor Lees called the meeting to order at 6:00 p.m. The Prayer and Pledge of Allegiance were led by Rev. Dan Hazelton. Roll Call was conducted by Deputy Clerk Darla Coats. Council members present included: Jon Ketcher, Choya Shropshire, Dennis Nance, Steve Smith, Randy Chitwood, Briana Brakefield, Jimmy Tramel and Yolanda Thompson. Members absent: none.

Department Heads and other City Officials present: City Attorney Kim Ritchie, Police Chief Dennis Nichols, Assistant Police Chief James Willyard, Fire Chief BK Young, Park Superintendent Frank Powell, Golf Director Dennis Bowman, Library Director Cari Rerat, Building Inspector Kenneth Young, Recreation Center Director Jessica Long, Assistant Recreation Center Director Jerome Hopkins.

Others present: Police Captain Kevin Tramel, Police Officer Dustin VanHorn, City Engineer Steve Powell, Dalton Powell, Library Board Chairman Jeanette Anderson, Dan Hazelton, John Mozingo, Rickey Hayes, Jim Bloom, Kemmie Shropshire and Terry Aylward.

2. PETITIONS FROM THE AUDIENCE. (LIMITED TO 5 MINUTES, MUST REQUEST IN ADVANCE.) John Mozingo spoke regarding his damaged fence and whistle.

3. DEPARTMENT HEAD REPORTS IF NEEDED: a. Building Inspector

Young had no report.

b. Emergency Management

No report.

c. Fire

Young had no report.

d. Golf

Bowman reported that the new equipment has arrived. He provided an updated membership report to the Council members. He reported that the membership promotion went well. He also reported that all the tournaments that were recently held went well and there are more coming soon. The plans for the Halloween Festival are also going well. There has been some minimal Bermuda grass loss, but it is manageable and the course is in good shape.

e. Library

Rerat handed out a statistics report for April. She reported that they sold a low number of library cards, and they had 193 physical visitors and 2,250 digital visitors. They have in-person, online and grab-and-go programs, and the Summer Reading Program begins next week.

f. Parks / Cemetery

Powell reported that they are getting the parks ready for summer and the cemeteries ready for Memorial Day. He reported that the Splash Pad is now open for the season. The State inspector did a walk-through of the Whitaker Park pool today and his findings will go to the Park Board next week. He reported that the Whitaker Park restrooms should be finished within the next three weeks and the plans to install the equipment at Bobby Buck are still on for the week after Memorial Day.

g. Police

Nichols included his statistics report in the Council packet. Councilman Tramel asked him about the juveniles who have been harassing people in the park. Nichols stated those issues are being addressed.

h. Recreation Center

Long reported that their new sign is up and she is still learning how to work it. She reported that plans for summer programs are finalized and will start on June 7th. They plan to increase the water aerobics classes due to large groups. They have added new senior classes and new senior challenges. She reported that they will increase family swim hours to seven days a week after Memorial Day. When asked about the Fitness Court, she stated that she has been in contact with possible donors and is awaiting their responses. She also reported that the new awning is still in the design phase. There has been some fishing taking place, as well.

i. Street

No report.

4. MAYOR'S REPORT:

a. Possible Executive Session pursuant to the Oklahoma Open Meeting Act for the purpose of conferring on matters pertaining to economic development, including the transfer of property, financing, or the creation of a proposal to entice a business to remain or to locate within the jurisdiction of the City of Pryor Creek where the public disclosure of the matter discussed would interfere with the development of products or services or would violate the confidentiality of the business. (25 O.S. § 307 (C) (11).

Motion was made by Thompson, second by Chitwood to enter Executive Session at 6:35 p.m. Voting yes: Ketcher, Shropshire, Nance, Smith, Chitwood, Brakefield, Thompson. Voting no: Tramel.

b. Discussion and possible action regarding resuming regular session. No action taken during Executive Session.

Motion was made by Chitwood, second by Nance to resume regular session at 8:08 p.m. No action taken during Executive Session. Voting yes: Shropshire, Nance, Smith, Chitwood, Brakefield, Tramel, Thompson, Ketcher. Voting no: none.

c. Discussion and possible action regarding renewal with or without change in contract language (automatic renewal) or termination of the agreement between City of Pryor Creek, Oklahoma and Retail Attractions, LLC (consultant) as provided in Part II, Term of Agreement and Part VII, Miscellaneous Provision Paragraph 1, Termination, Modification, and Suspension.

Motion was made by Chitwood, second by Smith to approve renewal without change in contract language (automatic renewal) of the agreement between City of Pryor Creek, Oklahoma and Retail Attractions, LLC (consultant) as provided in Part II, Term of Agreement and Part VII, Miscellaneous Provision Paragraph 1, Termination, Modification, and Suspension. Voting yes: Nance, Smith, Chitwood, Brakefield, Thompson, Ketcher, Shropshire. Voting no: Tramel.

d. Discussion and possible action regarding removing from the table Item d. from Mayor's Report on May 4th, 2021.

Motion was made by Ketcher, second by Nance to approve removing from the table Item d. from Mayor's Report on May 4th, 2021. Voting yes: Smith, Chitwood, Brakefield, Tramel, Thompson, Ketcher, Shropshire, Nance. Voting no: none.

e. Discussion and possible action regarding spending the remainder of the CARES Act Relief funds towards remedy of the Salt Branch Creek seasonal flooding.

Motion was made by Shropshire, second by Smith to approve spending the remainder of the CARES Act Relief funds towards remedy of the Salt Branch Creek seasonal flooding.

After some discussion, Shropshire and Smith amended their motion and second to table spending the remainder of the CARES Act Relief funds towards remedy of the Salt Branch Creek seasonal flooding. Voting yes: Chitwood, Brakefield, Tramel, Thompson, Shropshire, Smith. Voting no: Ketcher and Nance.

f. A few updates.

- 1. Whitaker Park Pool
- 2. Castle Theater (PYO)
- 3. Local cleanup of rights-of-way and drainage improvements
- 4. Budget progress 2021-2022 FY

No action. Mayor briefly spoke to each item.

Mayor moved to the Addendum.

ADDENDUM CITY COUNCIL MEETING TUESDAY, MAY 18TH, 2021 AT 6:00 P.M.

1. Discussion and possible action regarding removing the Cares Act Funding, which has been awarded to City of Pryor Creek by the State of Oklahoma, from the General Revenue and Expenditure Accounts, 02-000-4401, 02-000-4405, and 02-201-5401 respectively, and creating a separate fund for receiving, expending, and accounting of the Cares Act Funding.

Motion was made by Chitwood, second by Thompson to approve removing the Cares Act Funding, which has been awarded to City of Pryor Creek by the State of Oklahoma, from the General Revenue and Expenditure Accounts, 02-000-4401, 02-000-4405, and 02-201-5401 respectively, and creating a separate fund for receiving, expending, and accounting of the Cares Act Funding. Voting yes: Brakefield, Tramel, Thompson, Ketcher, Shropshire, Nance, Smith, Chitwood. Voting no: none.

Mayor moved back to regular Agenda.

5. CITY ATTORNEY'S REPORT:

No report.

6. DISCUSSION AND POSSIBLE ACTION ON CONSENT AGENDA.

(Items deemed non-controversial and routine in nature to be approved by one motion without discussion. Any Council member wishing to discuss an item may request it be removed and placed on the regular agenda.)

- a. Approve minutes of the May 4th, 2021 Council meeting.
- b. Approve payroll purchase orders through May 28th, 2021.
- c. Approve claims for purchase orders through May 18th, 2021.

<u>FUNDS</u>	PURCHASE ORDER NUMBER	TOTALS
GENERAL	2020202753 - 2020202851	192,212.33
STREET & DRAINAGE	2020202751 - 911226B	5,277.96
GOLF COURSE	2020202871 - 2020201989	44,685.16
CAPITAL OUTLAY	2020202812 - 2020202305	8,804.15
RECREATION CENTER	2020202825 - 2020202836	48,144.29
DONATIONS AND EARMARKED	2020202794 - 2020202757	881.99
	<u>TOTAL</u>	300,005.88
	NO BLANKETS	

- d. Acknowledge receipt of deficient purchase orders.
 - There were no deficient purchase orders.
- e. Approve March 2021 Appropriation Requests.
- f. Discussion and possible action regarding expenditure in the amount of \$3,000.00 to OverDrive for the Thomas J Harrison Pryor Public Library from Library Non-Book Materials Account #02-221-5032.
- g. Discussion and possible action regarding accepting bid for hot water pressure washer from Northern Tool and Equipment in the amount of \$3,799.99 as lowest and best bid for the Pryor Creek Park Department from Covid Reimbursement Account #02-201-5401. Other bids received: Best Buy Automotive Equipment: \$3,860.00; Pressure Washers Direct: \$3,899.99; C&A Sales: \$5,069.50.
- h. Discussion and possible action regarding accepting bid for ice machine from Air Heat Systems, LLC in the amount of \$3,700.00 as lowest and best bid for the Pryor Creek Fire Department from Fire Repair and Maintenance Account #02-217-5091. Other bids received: Masters Heating Cooling & Appliances: \$4,200.00; Melton's A/C & Appliance: \$4,027.98.
- Discussion and possible action regarding an expenditure in the amount of \$10,080.00 to UpCurve Cloud for the GSuite Basic Annual License subscription from May 12th, 2021 – May 11th, 2022, from General Software Account #02-201-5260.
- j. Discussion and possible action regarding accepting bid from Carman Concrete, LLC in the amount of \$27,646.52 for extended parking on North end of existing fire building to accommodate firefighters and assist in Medivac transport, from Covid Reimbursement Account #02-201-5401. Other bids received: Matlock Construction: \$28,700.00.
- k. Discussion and possible action regarding removing from the table Item 6.i. on May 4th, 2021.
- 1. Discussion and possible action regarding Change Order No. 1, for Drainage Project at 3rd and Eastmanor.
- m. Discussion and possible action regarding acceptance of donation from the Cherokee Nation in the amount of \$3,500.00 to the Pryor Creek Police Department Miscellaneous Account #96-000-4502.
- n. Discussion and possible action regarding acceptance of donation from the Cherokee Nation in the amount of \$3,500.00 to the Pryor Creek Fire Department Cherokee Nation Contribution Account #96-000-4535.

- o. Discussion and possible action regarding the City of Pryor Creek bidding on property owned by Wilma Ruth Wells, 604 Belmont, Pryor Creek, Oklahoma (Property ID: 1010-00-004-031-0-001-00) Base ID: 16714, Legal Description: BELMONT ADDITION, BLK 4 LOT 31 in an amount not to exceed \$3,700.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office.
- p. Discussion and possible action regarding the City of Pryor Creek bidding on property owned by Antolino Villegas, 203 N. Adair, Pryor Creek, Oklahoma (Property ID: 1001-00-004-011-0-001-00) Base ID: 15975, Legal Description: PRYOR ORIG BLK 4 N 50' LOT 11 in an amount not to exceed \$8,500.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office.
- q. Discussion and possible action regarding the City of Pryor Creek bidding on property owned by Mitchell S. Smith, 302 S. Whitaker, Pryor Creek, Oklahoma (Property ID: 1300-00-006-001-0-001-00) Base ID: 18100, Legal Description: LANDRUM ADDITION BLK 6 N 65' LOT 1, in an amount not to exceed \$1,200.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office.

Motion was made by Ketcher, second by Smith to approve items a-q, less items j, k, l, m n, o, p and q. Voting yes: Tramel, Thompson, Ketcher, Shropshire, Nance, Smith, Chitwood, Brakefield. Voting no: none.

j. Discussion and possible action regarding accepting bid from Carman Concrete, LLC in the amount of \$27,646.52 for extended parking on North end of existing fire building to accommodate firefighters and assist in Medivac transport, from Covid Reimbursement Account #02-201-5401. Other bids received: Matlock Construction: \$28,700.00.

Motion was made by Thompson, second by Chitwood to approve accepting bid from Carman Concrete, LLC in the amount of \$27,646.52, and amend item by the addition of a third bid from Rick Ogden Construction, for extended parking on North end of existing fire building to accommodate firefighters and assist in Medivac transport, from Covid Reimbursement Account #02-201-5401. Other bids received: Matlock Construction: \$28,700.00; Rick Ogden Construction: \$29,642.00. Voting yes: Thompson, Ketcher, Shropshire, Nance, Smith, Chitwood, Brakefield, Tramel. Voting no: none.

k. Discussion and possible action regarding removing from the table Item 6.i. on May 4th, 2021. Motion was made by Chitwood, second by Smith to approve removing from the table Item 6.i. on May 4th, 2021. Voting yes: Ketcher, Shropshire, Nance, Smith, Chitwood, Brakefield, Tramel, Thompson. Voting no: none.

l. Discussion and possible action regarding Change Order No. 1, for Drainage Project at 3rd and Eastmanor.

Motion was made by Tramel, second by Chitwood to approve Change Order No. 1, for Drainage Project at 3rd and Eastmanor and include amount of \$308,401.75. Mayor commended the City Engineer for his diligence and hard work on all the projects he oversees for the City. Voting yes: Shropshire, Nance, Smith, Chitwood, Brakefield, Tramel, Thompson, Ketcher. Voting no: none.

m. Discussion and possible action regarding acceptance of donation from the Cherokee Nation in the amount of \$3,500.00 to the Pryor Creek Police Department Miscellaneous Account #96-000-4502.

Motion was made by Chitwood, second by Smith to approve acceptance of donation from the Cherokee Nation in the amount of \$3,500.00 to the Pryor Creek Police Department Miscellaneous Account #96-000-4502. Chitwood thanked the Cherokee Nation for their partnership with the City of Pryor Creek. Voting yes: Nance, Smith, Chitwood, Brakefield, Tramel, Thompson, Shropshire. Abstaining, counting as a no vote: Ketcher. Voting no: none.

n. Discussion and possible action regarding acceptance of donation from the Cherokee Nation in the amount of \$3,500.00 to the Pryor Creek Fire Department Cherokee Nation Contribution Account #96-000-4535.

Motion was made by Shropshire, second by Chitwood to approve acceptance of donation from the Cherokee Nation in the amount of \$3,500.00 to the Pryor Creek Fire Department Cherokee Nation Contribution Account #96-000-4535. Chitwood thanked the Cherokee Nation for their partnership with the City of Pryor Creek. Voting yes: Smith, Chitwood, Brakefield, Tramel, Thompson, Shropshire, Nance. Abstaining, counting as a no vote: Ketcher. Voting no: none.

o. Discussion and possible action regarding the City of Pryor Creek bidding on property owned by Wilma Ruth Wells, 604 Belmont, Pryor Creek, Oklahoma (Property ID: 1010-00-004-031-0-001-00) Base ID: 16714, Legal Description: BELMONT ADDITION, BLK 4 LOT 31 in an amount not to exceed \$3,700.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office.

Motion was made by Shropshire, second by Smith to approve the City of Pryor Creek bidding on property owned by Wilma Ruth Wells, 604 Belmont, Pryor Creek, Oklahoma (Property ID: 1010-00-004-031-0-001-00) Base ID: 16714, Legal Description: BELMONT ADDITION, BLK 4 LOT 31 in an amount not to exceed \$3,700.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office. Ketcher stated that Ms. Wells is his late grandmother, so he will be abstaining. Voting yes: Chitwood, Brakefield, Tramel, Thompson, Shropshire, Nance, Smith. Abstaining, counting as a no vote: Ketcher. Voting no: none.

p. Discussion and possible action regarding the City of Pryor Creek bidding on property owned by Antolino Villegas, 203 N. Adair, Pryor Creek, Oklahoma (Property ID: 1001-00-004-011-0-001-00) Base ID: 15975, Legal Description: PRYOR ORIG BLK 4 N 50' LOT 11 in an amount not to exceed \$8,500.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office.

Motion was made by Chitwood, second by Smith to approve the City of Pryor Creek bidding on property owned by Antolino Villegas, 203 N. Adair, Pryor Creek, Oklahoma (Property ID: 1001-00-004-011-0-001-00) Base ID: 15975, Legal Description: PRYOR ORIG BLK 4 N 50' LOT 11 in an amount not to exceed \$8,500.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office.

Thompson informed the Council that Mr. Villegas paid his delinquent taxes, so this property has been removed from the sale.

Chitwood and Smith modified their motion and second to take no action. No vote was taken.

q. Discussion and possible action regarding the City of Pryor Creek bidding on property owned by Mitchell S. Smith, 302 S. Whitaker, Pryor Creek, Oklahoma (Property ID: 1300-00-006-001-0-001-00) Base ID: 18100, Legal Description: LANDRUM ADDITION BLK 6 N 65' LOT 1, in an amount not to exceed \$1,200.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office.

Motion was made by Chitwood, second by Smith to approve the City of Pryor Creek bidding on property owned by Mitchell S. Smith, 302 S. Whitaker, Pryor Creek, Oklahoma (Property ID: 1300-00-006-001-0-001-00) Base ID: 18100, Legal Description: LANDRUM ADDITION BLK 6 N 65' LOT 1, in an amount not to exceed \$1,200.00 at the Sale of Real Estate for Delinquent Tax to be held on June 14th, 2021 at 9:00 a.m. at the Mayes County Courthouse, Treasurer's Office. Voting yes: Tramel, Thompson, Ketcher, Shropshire, Nance, Smith, Chitwood, Brakefield. Voting no: none.

7. COMMITTEE REPORTS:

a. Budget and Personnel (Brakefield)

Brakefield reported that the next Budget and Personnel Committee meeting will be on June 8th, at 5:30 pm.

b. Ordinance and Insurance (Shropshire)

Shropshire reported that they have a meeting in the works, but it has not been scheduled.

c. Street (Smith)

Smith had nothing to report at this time.

8. UNFORESEEABLE BUSINESS.

(ANY MATTER NOT REASONABLY FORESEEN PRIOR TO POSTING OF AGENDA.)

There was no unforeseeable business.

9. ADJOURN.

Motion was made by Ketcher, second by Smith to adjourn. Voting yes: Thompson, Ketcher, Shropshire, Nance, Smith, Chitwood, Brakefield, Tramel. Voting no: none.

PRYOR PUBLIC WORKS AUTHORITY 1. CALL TO ORDER.

Meeting was called to order at 8:53 p.m.

2. APPROVE MINUTES OF MAY 4TH, 2021 MEETING.

Motion was made by Smith, second by Chitwood to approve minutes of May 4th, 2021 meeting. Voting yes: Ketcher, Shropshire, Nance, Smith, Chitwood, Brakefield, Tramel, Thompson. Voting no: none.

3. UNFORESEEABLE BUSINESS.

(ANY MATTER NOT REASONABLY FORESEEN PRIOR TO POSTING OF AGENDA.)

There was no unforeseeable business.

4. ADJOURN.Motion was made by Ketcher, second by Chitwood to adjourn. Voting yes: Shropshire, Nance, Smith, Chitwood, Brakefield, Tramel, Thompson, Ketcher. Voting no: none.

INUTES APPROVED BY MAYOR / P.P.W.A. CHAIRMAN LARRY LEES
INUTES WRITTEN BY DEPUTY CLERK DARLA COATS

CITY OF PRYOR

PRYOR, OKLAHOMA

05-22-2021

BID FOR MOWING OF THE RIGHTS-OF-WAY WITHIN THE CITY LIMITS OF PRYOR (JULY 2021, AUGUST 2021, SEPTEMBER 2021, APRIL 2022, MAY 2022, JUNE 2022)

\$28,000.00

THANK YOU

DUANE FOUGHT

2151 N. 432

PRYOR, OKLAHOMA 74361