

**MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF  
TRINITY RIVER VISION AUTHORITY (“TRVA”)  
HELD ON THE 8th DAY OF JANUARY, 2020 AT 2:00 PM**

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The call of the roll disclosed the presence of the Directors as follows:

Present  
G.K. Maenius  
David Cooke  
Jim Oliver  
Bob Riley  
Carlos Flores  
James Hill

Also in attendance were: Sandy Newby, Victoria Bailey, Debra Witherspoon and Marty Leonard of the Tarrant Regional Water District (“TRWD”); Mark Mazzanti of TRVA; Doug Rademaker of the City of Fort Worth (“COFW”); Lee Christie and Ethel Steele of Pope, Hardwicke, Christie, Schell, Kelly & Taplett, L.L.P.; Meagan South of Tarrant County; Carl DeZee of Kimley-Horn; Luke Ranker of the Fort Worth Star-Telegram; Marice Richter of the Fort Worth Business Press; John Schults of Trinity River Communications-Joint Venture; and Robert Montoya of Empower Texans.

**I. Call to Order**

President Maenius convened the meeting at 2:03 P.M. with the assurance that a quorum was present and all requirements of the Texas Open Meetings Act had been met.

**II. Public Comment**

No public comment.

**III. Action Items**

A1.

On a motion made by Director Riley and seconded by Director Oliver, the Directors voted to approve the minutes of the meeting held on December 4, 2019.

A2.

With the recommendation of Sandy Newby (TRWD, Chief Financial Officer), Director Oliver made a motion to receive and file the TRV Central City Finance Report of September 30, 2019. The motion was seconded by Director Cooke and the vote in favor was unanimous. The TRV Central City Finance Report is attached hereto as Exhibit “A”.

A3.

With the recommendation of Ms. Newby, Director Oliver made a motion to receive and file the TRV Central City Finance Report of November 30, 2019. The motion was seconded by Director Cooke and the vote in favor was unanimous. The TRV Central City Finance Report is attached hereto as Exhibit “B”. Ms. Newby also advised the Board that \$1 million in commercial paper will be sold to fund the Trinity River Vision Project for the next 90 days.

A4.

With the recommendation of Mark Mazzanti, (TRVA, Flood Control Project Program Coordinator), Director Cooke made a motion to receive and file the TRV Risk Management Report. The motion was seconded by Director Flores and the vote in favor was unanimous. The TRV Risk Management report is attached hereto as Exhibit “C”.

#### **IV. Discussion Items**

D1.

##### *Bridge Construction Update*

On behalf of the City of Fort Worth (COFW), Doug Rademaker, P.E. (COFW, TRV Bridges Project Manager) reported that piers are complete and construction is being done on the portions of the spans that will support the road decks for all three bridges, with the White Settlement Road bridge the furthest along. Mr. Rademaker showed the Board photographs of the

White Settlement Road bridge V-pier bents and construction progress. He also explained to the Board the process of installing the I-beams on the White Settlement Road bridge. Next, he showed the Board photographs of the Henderson Street bridge superstructure false work, with the work for this bridge progressing from each end to meet in the middle. Finally, Mr. Rademaker informed the Board that both lower areas have been poured across the length of the North Main Street bridge and the contractor is installing the box girder web forms. Last, he advised the Board that the contractor has moved to a seven-day work week schedule.

The Texas Department of Transportation bridge update will be rescheduled for a later date.

D2.

The next TRVA Board of Directors meeting was tentatively scheduled for February 5, 2020 pending confirmation of a quorum.

#### **V. Adjourn**

There being no further business before the Board of Directors, the meeting was adjourned at 2:47 P.M.

\_\_\_\_\_  
President

\_\_\_\_\_  
Secretary

**EXHIBIT "A"**

**USACE - CENTRAL CITY FLOOD CONTROL PROJECT**

		2017 Estimate	Actuals Thru 9/30/2019	Variance
<b>LOCAL</b>				
TRWD	Preliminary Design	\$18,225,972	\$18,225,972	\$0
	Land Acquisition	\$72,552,625	\$73,889,122	(\$1,336,497)
	Flood Control Cash Match	\$50,900,362	\$31,647,074	\$19,253,288
TRVA	Relo, Demo, Enviro	\$113,692,580	\$93,781,415	\$19,911,165
	TRVA Program Coordination	\$27,197,476	\$18,953,087	\$8,244,389
CITY OF FW	Sewer & Water Relocation	\$71,680,516	\$18,052,754	\$53,627,762
	Storm Water Relocation	\$23,549,203	\$4,655,767	\$18,893,436
	Franchise Utilities	\$20,169,474	\$10,232,880	\$9,936,594
	Local Street Mods	\$5,521,441	\$3,348,791	\$2,172,650
	CFW Program Management	\$6,635,424	\$1,413,184	\$5,222,240
<b>Local Subtotal</b>		<b>\$410,125,073</b>	<b>\$274,200,046</b>	<b>\$135,925,027</b>
<b>FEDERAL / STATE MATCH</b>				
EDI HUD	Land (Offsets Local Above)	\$4,487,035	\$4,485,535	\$1,500
USACE	Preliminary Design	\$7,372,888	\$7,372,888	\$0
	Valley Storage	\$124,231,564	\$54,342,347	\$69,889,217
	Ecosystem Restoration	\$38,551,750	\$0	\$38,551,750
	North Bypass Channel	\$74,290,882	\$10,435,499	\$63,855,383
	South Bypass Channel	\$104,401,759	\$9,367,370	\$95,034,389
	Flood Gates & Pump System	\$99,385,763	\$662,870	\$98,722,893
	Dams & Channel Expansion	\$85,528,943	\$0	\$85,528,943
	USACE Prog Mgmt/Contingency	\$48,356,327	\$1,139,538	\$47,216,789
LOCAL	Less Local Flood Cash Match	(\$45,900,363)	(\$31,647,074)	(\$14,253,289)
<b>Federal/State Subtotal</b>		<b>\$540,706,548</b>	<b>\$56,158,973</b>	<b>\$484,547,575</b>
<b>Total USACE Flood Control Project</b>		<b>\$950,831,621</b>	<b>\$330,359,019</b>	<b>\$620,472,602</b>

## TXDOT - BRIDGES PROJECT

		2017 Estimate	Actuals Thru 9/30/2019	Variance
<b>LOCAL</b>				
TRWD	Land Acquisition	\$26,481,892	\$11,973,077	\$14,508,815
CITY OF FW	Bridge Costs Local Share	\$33,973,387	\$33,733,372	\$240,015 \$0
	CFW Project Management	\$0	\$350,337	(\$350,337)
<b>Local Subtotal</b>		<b>\$60,455,279</b>	<b>\$46,056,786</b>	<b>\$14,398,493</b>
<b>FEDERAL / STATE MATCH</b>				
TXDOT/STATE	Henderson Street	\$17,598,353	\$7,429,157	\$10,169,196
	White Settlement	\$17,792,487	\$6,651,266	\$11,141,221
	Main	\$11,414,779	\$4,356,497	\$7,058,282
	Contingency - Federal	\$2,801,685	\$0	\$2,801,685
<b>Federal/State Subtotal</b>		<b>\$49,607,304</b>	<b>\$18,436,920</b>	<b>\$31,170,384</b>
<b>Total TXDOT Bridges Project</b>		<b>\$110,062,583</b>	<b>\$64,493,706</b>	<b>\$45,568,877</b>

**LOCAL PROJECTS (with or without flood project)**

		2017 Estimate	Actuals Thru 9/30/2019	Variance
<b>LOCAL</b>				
TRWD	Marine Creek/Stockyards Connection	\$10,245,376	\$0	\$10,245,376
	Bypass Local Share (hardscape & softscape)	\$21,834,669	\$3,507,109	\$18,327,560
TRVA	TRVA Program Coordination	\$3,100,000	\$0	\$3,100,000
CITY OF FW	Panther Island Sewer and Water	\$15,827,650	\$0	\$15,827,650
	Panther Island Storm Drainage	\$13,631,000	\$0	\$13,631,000
	Gateway Park	\$6,668,614	\$0	\$6,668,614
<b>TOTAL LOCAL PROJECTS</b>		<b>\$71,307,309</b>	<b>\$3,507,109</b>	<b>\$67,800,200</b>

## LOCAL CONTINGENCY

	2017 Estimate	Actuals Thru 9/30/2019	Variance
<b>LOCAL</b>			
TRVA Programmatic Review		\$466,222	(\$466,222)
Bond Issuance Costs		\$550,971	(\$550,971)
<b>Total Contingency</b>	<b>\$36,408,910</b>	<b>\$1,017,193</b>	<b>\$35,391,717</b>

**USACE - CENTRAL CITY FLOOD CONTROL PROJECT**

		2017 Estimate	Actuals Thru 11/30/2019	Variance
<b>LOCAL</b>				
TRWD	Preliminary Design	\$18,225,972	\$18,225,972	\$0
	Land Acquisition	\$72,552,625	\$80,010,122	(\$7,457,497)
	Flood Control Cash Match	\$50,900,362	\$31,647,074	\$19,253,288
TRVA	Relo, Demo, Enviro	\$113,692,580	\$93,783,120	\$19,909,460
	TRVA Program Coordination	\$27,197,476	\$18,968,749	\$8,228,727
CITY OF FW	Sewer & Water Relocation	\$71,680,516	\$18,142,515	\$53,538,001
	Storm Water Relocation	\$23,549,203	\$4,680,032	\$18,869,171
	Franchise Utilities	\$20,169,474	\$10,232,880	\$9,936,594
	Local Street Mods	\$5,521,441	\$3,354,791	\$2,166,650
	CFW Program Management	\$6,635,424	\$1,418,513	\$5,216,911
<b>Local Subtotal</b>		<b>\$410,125,073</b>	<b>\$280,463,768</b>	<b>\$129,661,305</b>
<b>FEDERAL / STATE MATCH</b>				
EDI HUD	Land (Offsets Local Above)	\$4,487,035	\$4,485,535	\$1,500
USACE	Preliminary Design	\$7,372,888	\$7,372,888	\$0
	Valley Storage	\$124,231,564	\$55,682,504	\$68,549,060
	Ecosystem Restoration	\$38,551,750	\$0	\$38,551,750
	North Bypass Channel	\$74,290,882	\$10,465,708	\$63,825,174
	South Bypass Channel	\$104,401,759	\$9,367,370	\$95,034,389
	Flood Gates & Pump System	\$99,385,763	\$662,870	\$98,722,893
	Dams & Channel Expansion	\$85,528,943	\$0	\$85,528,943
	USACE Prog Mgmt/Contingency	\$48,356,327	\$1,139,538	\$47,216,789
LOCAL	Less Local Flood Cash Match	(\$45,900,363)	(\$31,647,074)	(\$14,253,289)
<b>Federal/State Subtotal</b>		<b>\$540,706,548</b>	<b>\$57,529,339</b>	<b>\$483,177,209</b>
<b>Total USACE Flood Control Project</b>		<b>\$950,831,621</b>	<b>\$337,993,107</b>	<b>\$612,838,514</b>



## TXDOT - BRIDGES PROJECT

		2017 Estimate	Actuals Thru 11/30/2019	Variance
<b>LOCAL</b>				
TRWD	Land Acquisition	\$26,481,892	\$11,973,077	\$14,508,815
CITY OF FW	Bridge Costs Local Share	\$33,973,387	\$33,733,372	\$240,015 \$0
CITY OF FW	CFW Project Management	\$0	\$351,970	(\$351,970)
<b>Local Subtotal</b>		<b>\$60,455,279</b>	<b>\$46,058,419</b>	<b>\$14,396,860</b>
<b>FEDERAL / STATE MATCH</b>				
TXDOT/STATE	Henderson Street	\$17,598,353	\$7,992,434	\$9,605,919
TXDOT/STATE	White Settlement	\$17,792,487	\$7,239,876	\$10,552,611
TXDOT/STATE	Main	\$11,414,779	\$4,694,760	\$6,720,019
TXDOT/STATE	Contingency - Federal	\$2,801,685	\$0	\$2,801,685
<b>Federal/State Subtotal</b>		<b>\$49,607,304</b>	<b>\$19,927,070</b>	<b>\$29,680,234</b>
<b>Total TXDOT Bridges Project</b>		<b>\$110,062,583</b>	<b>\$65,985,489</b>	<b>\$44,077,094</b>

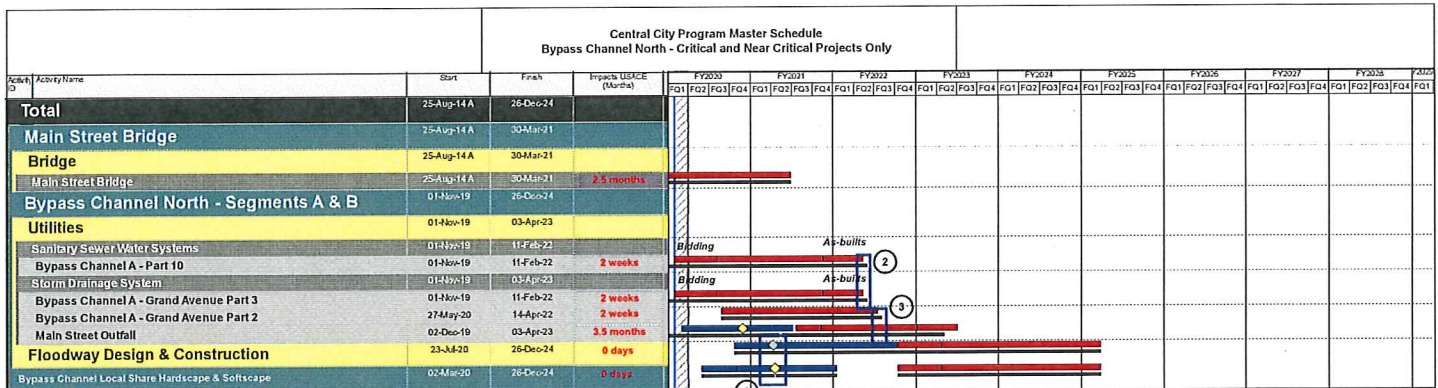
**LOCAL PROJECTS (with or without flood project)**

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TRWD	Marine Creek/Stockyards Connection	\$10,245,376	\$0	\$10,245,376
	Bypass Local Share (hardscape & softscape)	\$21,834,669	\$3,507,109	\$18,327,560
TRVA	TRVA Program Coordination	\$3,100,000	\$46,851	\$3,053,149
CITY OF FW	Panther Island Sewer and Water	\$15,827,650	\$0	\$15,827,650
	Panther Island Storm Drainage	\$13,631,000	\$0	\$13,631,000
	Gateway Park	\$6,668,614	\$0	\$6,668,614
<b>TOTAL LOCAL PROJECTS</b>		<b>\$71,307,309</b>	<b>\$3,553,960</b>	<b>\$67,753,349</b>

**LOCAL CONTINGENCY**

	2017 Estimate	Actuals Thru 11/30/2019	Variance
<b>LOCAL</b>			
TRVA Programmatic Review		\$466,222	(\$466,222)
Bond Issuance Costs		\$667,626	(\$667,626)
<b>Total Contingency</b>	<b>\$36,408,910</b>	<b>\$1,133,848</b>	<b>\$35,275,062</b>

# EXHIBIT "C"



**SUMMARY (JANUARY 2020):**

- 1) **CRITICAL:** Pedestrian Bridge design needs to begin in March of 2020 or the 60% submittal will be delayed and will impact the start of Bypass Channel North design.  
**RECOMMENDED ACTION:** TRWD staff plans to submit the design contract to the TRWD Board for approval in February for a March design start, in order to stay on schedule.
  
- 2) **NEAR CRITICAL:** Based on status updates received from CoFW, Sanitary Sewer Part 10 and Storm Drainage Part 3 and Part 2 have become near critical.  
**RECOMMENDED ACTION:** City staff plans to advertise these projects in January for award in May, in order to stay on schedule.
  
- 3) **NEAR CRITICAL:** Any delays in CoFW, Sanitary Sewer Part 10 and Storm Drainage Part 3 and Part 2 may impact the incorporation of as-builts into the final design of USACE Bypass Channel North design.  
**RECOMMENDED ACTION:** City staff plans to advertise these projects in January for award in May, in order to stay on schedule.

Schedule reflects only critical and near critical components of Bypass Channel North. This schedule contains the best information from Project Partners through the end of December 2019 and is subject to change.



<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Construction-Critical</li> <li><span style="color: blue;">■</span> Design-Critical</li> <li><span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span> October Board Dates</li> <li><span style="color: green;">◆</span> 60% Design</li> <li><span style="color: blue;">◆</span> USACE Resume 60% Design</li> <li><span style="border: 1px solid black; border-radius: 50%; padding: 2px;">1</span> Summary Note</li> </ul>	TRVA: Summary Level Schedule - by WBS Page 1 of 1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> <tr> <td>03-Jan-20</td> <td>January Board Meeting</td> <td></td> <td></td> </tr> </table>	Date	Revision	Checked	Approved	03-Jan-20	January Board Meeting		
Date	Revision	Checked	Approved							
03-Jan-20	January Board Meeting									










### Central City Risk Register as of 1/8/2020 for North Bypass Channel

Financial Impacts of Occurrence						Legend	Schedule Impacts of Occurrence						
Likelihood of Occurrence	Negligible		Marginal	Significant	Critical	Crisis	Likelihood of Occurrence	Negligible		Marginal	Significant	Critical	Crisis
	Less Than \$2,500,000		\$2,500,000 to \$9,500,000	\$9,500,000 to \$14,000,000	\$14,000,000 to \$23,500,000	More Than \$23,500,000		Less Than 4 months		4 months to 6 months	6 months to 12 months	12 months to 24 months	More Than 24 months
	Certain	Moderate	Moderate	High	High	High		Certain	Moderate	Moderate	High	High	High
Very Likely	Low	Moderate	High	High	High	High	Very Likely	Low	Moderate	High	High	High	
Likely	Low	Moderate	High	High	High	High	Likely	Low	Moderate	High	High	High	
Unlikely	Low	Low	Moderate	Moderate	High	High	Unlikely	Low	Low	Moderate	Moderate	High	
Very Unlikely	Low	Low	Low	Low	Moderate	Moderate	Very Unlikely	Low	Low	Low	Low	Moderate	

Central City Risk Register modeled after USACE's Cost Engineering Center of Expertise Cost and Schedule Risk Analysis template.

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Identify		Assess				Strategize & Manage		
Project Managers					Project Managers & Board			
Project	Risk Description	Inherent Risk Likelihood of Occurrence	Inherent Risk Impacts		Jurisdictional Agency	Response Timing (If..., Then...)	Risk Management Strategies	Status
			Financial	Schedule				
Utilities in North Bypass Channel	Due to local funding limitations, contracting for Utility construction in the North Bypass Channel has been delayed 3 years which impacts the ability to move forward on design and construction of the North Bypass Channel	Certain	●	●		As of December 2019, utilities in the North Channel are currently on the critical path for the North Bypass Channel Design. If the COFW and Franchise do not complete construction and as-built documents by April of 2022, then it will delay design and construction of North Bypass Channel. Additional congestion is anticipated in the work zones as a result. This could impact cost and schedule.	Mitigation: We may need USACE to allow for ongoing utility construction during Channel construction if we cannot overcome schedule impacts. USACE has not agreed to this at this time.	Active
Local Funding	Funding mechanisms for local funds are not put in place for FY20.	Board Input Requested	Board Input Requested	Board Input Requested		If local funding mechanisms are not put in place for FY20 then the predecessor projects fall further behind putting the receipt of Federal funds further at risk.	Avoidance: Funding mechanisms have been identified but not fully implemented by local partners in order to fund the FY20 projects so the USACE remains eligible for Federal funding.	Active

Project	Risk Description	Inherent Risk Likelihood of Occurrence	Inherent Risk Impacts		Jurisdictional Agency COFW; USACE; TXDOT; TRWD	Response Timing (If..., Then...)	Risk Management Strategies <i>Acceptance; Avoidance; Mitigation; Transference</i>	Status <i>Active; On Hold; Closed</i>
			Financial	Schedule				
Bypass Channel North Design	The USACE does not receive requested capability for Bypass Channel Design in FY20. (\$5M-\$10M)	Unlikely	Negligible 	Significant 	USACE 	If USACE does not receive approximately \$5 to \$10 Million by July of 2020, then the 6 month procurement of the Bypass Channel design will be delayed. Design of Bypass Channel North is currently on the critical path and must begin by January of 2021.	Mitigation: Continue to stay ahead of USACE with Bypass Channel relocations so USACE is shovel ready. Making the project more competitive and likely to receive Federal funds.	Active
Bypass Channel Local Share Hardscape & Softscape Design	Failure to execute contract by March of 2020 will delay start of Bypass Channel Design.	Unlikely	Negligible 	Significant 	TRWD 	HNTB completed Value Engineering. Design is on hold awaiting resolution of local funding. Design of the local components must be at 60% for USACE to start Bypass Channel design. If HNTB contract is not awarded by March of 2020 then USACE will be delayed in starting design of Bypass Channel. As of January 2020, we have 3 months to execute this contract to prevent delay to the Bypass Channel Design.	Avoidance: Go to Board for contract approval by March of 2020	Active
Federal Funding	The USACE does not receive the entire (\$38M) Federal funding request for FY20 which was for design of: Bypass North & South; Rockwood & University; 3 Gates; Storm Water Pump Station; Ecosystem & Adaptive Mitigation	Likely	Negligible 	Negligible 	USACE 	Over the past three years the USACE has made similar size requests for funds to have designs completed and construction shovel ready. All USACE design activities in the request currently have 7 months or more of float due to other local requirement predecessor activities which must be completed ahead of USACE. Due to float available in the schedule, if USACE does not receive the full funding request for FY20, then the majority of the USACE designs will not be impacted.	Mitigation: If USACE does not receive all funds requested they can petition HQ for additional funds when available due to lack of other Districts not obligating funds.	Active

**Central City Program Master Schedule  
Bypass Channel South - Critical and Near Critical Projects Only**

Activity Name	Start	Finish	Float Bypass Channel South	FY2020		FY2021		FY2022		FY2023		FY2024		FY2025		FY2026		FY2027		FY2028	
				F01	F02	F03	F04	F01	F02	F03	F04	F01	F02	F03	F04	F01	F02	F03	F04	F01	F02
<b>Total</b>	25-Aug-14A	24-Jul-23																			
<b>Henderson Street Bridge</b>	25-Aug-14A	30-Jul-21																			
<b>Bridge</b>	25-Aug-14A	30-Jul-21																			
Henderson Street Bridge	25-Aug-14A	30-Jul-21	0 days																		
<b>Bypass Channel South - Segments C &amp; D</b>	02-Dec-19	24-Jul-28																			
<b>Land, Relocation, Demolition and Environmental Remediation</b>	02-Jan-20	10-Feb-21																			
Bypass Channel C	03-Jan-20	10-Feb-21																			
Demolition and Environmental Remediation - Police and Fire	02-Dec-19	10-Feb-21	2 weeks behind																		
<b>Utilities</b>	03-Dec-19	18-Oct-23																			
Sanitary Sewer Water Systems	13-Feb-20	15-Oct-23																			
Bypass Channel C - Part 14	10-Feb-20	18-Oct-23	2 weeks behind																		
Bypass Channel D - Part 13	01-Apr-20	28-Sep-23	0 days																		
Storm Drainage System	01-Apr-20	31-Mar-23																			
Bypass Channel D - Greenleaf	01-Apr-20	31-Mar-23	6 months																		
AT&T	03-Dec-19	14-Apr-22																			
Bypass Channel D	02-Dec-19	14-Apr-23	5.5 months																		
Oncor	02-Dec-19	28-Apr-23																			
Oncor - Bypass Channel C	02-Dec-19	28-Apr-23	5 months																		
<b>Floodway Design &amp; Construction</b>	10-Feb-22	24-Jul-28	2 weeks behind																		

**SUMMARY (JANUARY 2020):**

1) **CRITICAL:** If TXDOT Henderson Street Bridge is not re-routed off detour by July of 2021, then construction of CoFW Sanitary Sewer Part 14, Oncor Segment C, and USACE South Bypass Channel will be delayed.

**RECOMMENDED ACTION:** TxDOT is working with Texas Sterling to remove traffic from detour by summer of 2021.

2) **CRITICAL:** Due to delay in funding and revised duration for TRWD Demolition and Environmental of Police and Fire, completion of this project has become critical and will impact the start of CoFW Sanitary Sewer Part 14 project.

**RECOMMENDED ACTION:** TRWD staff plans to submit the environmental contract to the TRWD Board for approval in January, in order to stay on schedule.

3) **NEAR CRITICAL:** As built for the following projects are near critical and are needed to complete USACE design: Sanitary Sewer Part 13, Storm Drainage Greenleaf, and Franchise AT&T Segment D and Oncor Segment C.

**RECOMMENDED ACTION:** City staff plans to progress these projects in accordance with the required schedule.

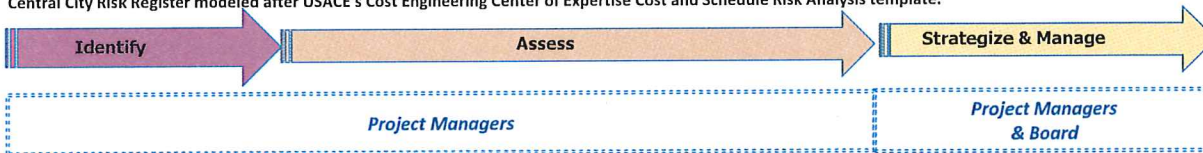
Schedule reflects only critical and near critical components of Bypass Channel South. This schedule contains the best information from Project Partners through the end of December 2019 and is subject to change.

Construction-Critical Design-Critical October Board Dates	① Summary Note	TRVA: Summary Level Schedule - by WBS Page 1 of 1	Date 08-Jan-20	Revision January Board Meeting	Checked	Approved
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### Central City Risk Register as of 1/8/2020 for South Bypass Channel













Financial Impacts of Occurrence						Legend		Schedule Impacts of Occurrence					
Likelihood of Occurrence	Negligible	Marginal	Significant	Critical	Crisis	Likelihood of Occurrence	<div style="background-color: #d9ead3; width: 15px; height: 15px; margin-bottom: 5px;"></div> Low <div style="background-color: #fcf8e3; width: 15px; height: 15px; margin-bottom: 5px;"></div> Moderate <div style="background-color: #f2dede; width: 15px; height: 15px;"></div> High	Negligible	Marginal	Significant	Critical	Crisis	
	Less Than \$2,500,000	\$2,500,000 to \$9,500,000	\$9,500,000 to \$14,000,000	\$14,000,000 to \$25,500,000	More Than \$25,500,000			Less Than 4 months	4 months to 6 months	6 months to 12 months	12 months to 24 months	More Than 24 months	
	Certain	Moderate	Moderate	High	High			High	Certain	Moderate	Moderate	High	High
Very Likely	Low	Moderate	High	High	High	Very Likely	Low	Moderate	High	High	High		
Likely	Low	Moderate	High	High	High	Likely	Low	Moderate	High	High	High		
Unlikely	Low	Low	Moderate	Moderate	High	Unlikely	Low	Low	Moderate	Moderate	High		
Very Unlikely	Low	Low	Low	Low	Moderate	Very Unlikely	Low	Low	Low	Low	Moderate		




Central City Risk Register modeled after USACE's Cost Engineering Center of Expertise Cost and Schedule Risk Analysis template.



Project	Risk Description	Inherent Risk Likelihood of Occurrence	Inherent Risk Impacts		Jurisdictional Agency	Response Timing (If..., Then...)	Risk Management Strategies	Status
			Financial	Schedule				
TXDOT Henderson	Potential TXDOT bridge delays and change orders, thereby delaying follow on projects and impacting our ability to move forward on construction of utilities and design of South Bypass Channel based on the current finish date in Q4 of FY21.	Very Likely	Marginal	Crisis	TXDOT 	As of January 2020, if the traffic shift off of Henderson St Detour does not complete by July of 2021, then construction of Part 14, Oncor Segment C, and South Bypass Channel design will be delayed by the same duration. This will impact cost and schedule.	1. Acceptance and Transference (seeing very little mitigation outside of quality related issues). Need to keep pressure politically on TXDOT. 2. Mitigation: Discuss schedule with TXDOT to shift traffic off of Henderson St. detour sooner to not delay Part 14, Oncor Segment C, and South Bypass Channel design.	Active



Project	Risk Description	Inherent Risk Likelihood of Occurrence	Inherent Risk Impacts		Jurisdictional Agency COFW; USACE; TXDOT; TRWD	Response Timing (If..., Then...)	Risk Management Strategies  Acceptance; Avoidance; Mitigation; Transference	Status  Active; On Hold; Closed
			Financial	Schedule				
Water/ Sewer Part 14	Easement acquisition may require condemnation which may impact the schedule and may be costly. Work will be installed between USACE hardwall piers with narrow room for error. This project is also in the Henderson St Detour footprint and can only start 2 months prior to the detour removal.	Very Likely	Marginal 	Critical 	COFW 	Design of Part 14 is scheduled to start in February of 2020 to maintain the critical path. Removal of Henderson St. Detour is required before Part 14 work construction can begin. If easement is not acquired by November of 2020, then it delays the start of Part 14 construction. If Part 14 does not complete construction and as-built documents by September of 2023, then it will delay design and construction of the South Bypass Channel.	1. Mitigation: Discuss schedule with TXDOT to shift traffic off of Henderson St. detour sooner to not delay Part 14. 2. Avoidance & Transference: Part 14 potentially can be done by USACE and money fronted by locals.	Active
Utilities in South Bypass Channel	Due to local funding limitations, contracting for Utility construction in the South Bypass Channel has been delayed 3 years which impacts the ability to move forward on design and construction of the South Bypass Channel	Likely	Negligible 	Significant 	COFW 	If Part 13 and AT&T Segment D design does not begin by April of 2020, then they will become critical and will delay the design of the South Channel.	Mitigation: We may need USACE to allow for ongoing utility construction during Channel construction if we cannot overcome schedule impacts. USACE has not agreed to this at this time.	Active
Oncor Segment C Crossing	Crossing design has not begun and work impacts completion of South Bypass Channel Design. This project is also in the Henderson St Detour footprint.	Unlikely	Negligible 	Significant 	COFW 	If the project does not start before Q3 of FY20, then the project will become critical because it will prevent USACE from completing design of the South Bypass Channel.	Avoidance: The COFW to get a commitment from Oncor to stay on current schedule.	Active
Remaining Demolition and Environmental Work	Remaining Demolition and Environmental work is on hold waiting for local funding. All properties must be demolished and environmentally clean for USACE to start.	Very Unlikely	Negligible 	Negligible 	TRWD 	Demolition and environmental work is needed before utility work can begin in the South Channel. If demolition and environmental work is not started by January of 2020 and completion is delayed beyond November of 2020, then it becomes critical and will delay the bidding of Part 14.	Mitigation: Continue to stay ahead of USACE with Bypass Channel relocations so USACE is shovel ready. Making the project more competitive and likely to receive federal funds.	Active

Project	Risk Description	Inherent Risk Likelihood of Occurrence	Inherent Risk Impacts		Jurisdictional Agency	Response Timing (If..., Then...)	Risk Management Strategies	Status
			Financial	Schedule	COFW; USACE; TXDOT; TRWD		Acceptance; Avoidance; Mitigation; Transference	Active; On Hold; Closed
Bypass Channel South Design	As-builts of Part 14 and Part 13 impact the USACE design completion of the South Bypass Channel.	Unlikely	Negligible 	Negligible 	USACE 	If USACE does not receive the Part 14 and Part 13 as-builts by September of 2023, then their review and incorporation of the as-builts into the South Bypass Channel Design cannot be completed, which will delay the start of channel construction.	Mitigation: Continue to stay ahead of USACE with Bypass Channel relocations so USACE is shovel ready. Making the project more competitive and likely to receive federal funds.	Active