

Timnath Development Authority Agenda
Meeting Agenda
September 13, 2016, at 6:00 p.m.
Meeting will be held at Timnath Administration Building
4800 Goodman Street, Timnath, Colorado

1. CALL TO ORDER AND ROLL CALL

Chairperson	Jill Grossman-Belisle
Commissioner	Bill Neal
Commissioner	Aaron Pearson
Commissioner	Paul Steinway
Commissioner	Bryan Voronin

2. CONSENT

a. Approval of the March 8, 2016, Timnath Development Authority Meeting Minutes

3. BUSINESS

a. **RESOLUTION NO. TDA-3, SERIES 2016**, A RESOLUTION APPROVING THE PURCHASE AUTHORIZATION FOR 2016 EXPENSES RELATED TO THE BOXELDER BASIN REGIONAL STORMWATER AUTHORITY (BBRSA) AND THE TIMNATH DEVELOPMENT AUTHORITY IGA

b. **RESOLUTION NO. TDA-4, SERIES 2016**, A RESOLUTION APPROVING AN AGREEMENT BETWEEN THE TDA AND AYRES ASSOCIATES FOR THE BOXELDER LOMR (TIMNATH PORTION)

4. ADJOURNMENT

Timnath Development Authority Agenda
Regular Meeting Minutes
March 8, 2016, 6:00 p.m.
4800 Goodman Street, Timnath, Colorado

1. CALL TO ORDER AND ROLL CALL

Chairperson Grossman-Belisle called to order the regular meeting of the Timnath Development Authority on March 8, 2016, at 6:01 p.m.

Present:

- a. Chairperson Jill Grossman-Belisle
- b. Co-Chairperson Bryan Voronin
- c. Commissioner Paul Steinway

Absent:

- d. Commissioner Bill Neal
- e. Commissioner Aaron Pearson

Also Present:

- a. April Getchius, Town Manager
- b. Milissa Peters, Town Clerk
- c. Robert Rogers, Contracted Town Attorney
- d. Don Taranto, Contracted Town Engineer
- e. Matt Blakely, Contracted Town Planner
- f. Brian Williamson, Contracted Town Planner

2. CONSENT

- a. Approval of the January 26, 2016, Timnath Development Authority Meeting Minutes

Commissioner Voronin moved to approve THE CONSENT AGENDA. Commissioner Steinway seconded the motion. The motion passed unanimously by voice vote.

3. BUSINESS

- A. RESOLUTION NO. TDA-2, SERIES 2016, A RESOLUTION APPROVING THE PURCHASE AUTHORIZATION FOR 2016 EXPENSES RELATED TO ADDITIONAL FUNDING FOR THE LARIMER COUNTY ROAD 52 PROJECT PER THE APPROVED IGA**

Staff Comments:

- Ms. Getchius spoke to the Commissioners about the proposed resolution.

Commissioner Steinway moved to approve RESOLUTION NO. TDA-2, SERIES 2016, A RESOLUTION APPROVING THE PURCHASE AUTHORIZATION FOR 2016 EXPENSES RELATED TO ADDITIONAL FUNDING FOR THE LARIMER COUNTY ROAD 52 PROJECT PER THE APPROVED IGA. Commissioner Voronin seconded the motion. The motion passed unanimously by voice vote.

4. ADJOURNMENT

Chairperson Grossman-Belisle adjourned the meeting at 6:04 p.m.

The Timnath Development Authority approved the March 8, 2016, TDA Meeting Minutes on September 13, 2016.

TIMNATH DEVELOPMENT AUTHORITY

Jill Grossman-Belisle, Chairperson

ATTEST:

Milissa Peters, CMC
Secretary



TDA COMMUNICATION

Meeting Date: September 13, 2016	Item: A Resolution approving the Purchase Authorization for 2016 expenses related to the Boxelder Basin Regional Stormwater Authority (BBRSA) and the Tinnath Development Authority IGA.	Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Discussion <input type="checkbox"/>
Presented by: Don Taranto Town Engineer		
EXECUTIVE SUMMARY: Request for payment under the Intergovernmental Agreement regarding cost sharing for Boxelder Basin improvements. These are 2016 expenses related to the construction of the east side detention facility. Additional budget is being requested due to Tinnath's share of cost overruns on the CR 52 and ESDF projects not anticipated in 2015 when the budget was set.		
STAFF RECOMMENDATION: Staff recommends approval of this resolution as the expenses are justified per the approved IGA.		
KEY POINTS/SUPPORTING INFORMATION: <ul style="list-style-type: none"> • IGA with the TDA was negotiated in 2012 and approved Nov 13, 2012 (Resolution No. TDA-6, Series 2012) • Article 2.3 of the IGA specifies that the TDA shall provide funds in the amount not to exceed 25% of the Costs actually incurred by the Authority. • The reimbursement submitted is 25% of the costs over the specified time period. • In March 2016, \$353,415 was approved related to CR52 additional costs. These had original been anticipated to be completed in 2015 and had not been included in the 2016 budget. • 2016 projects are currently ~\$135,000 (Tinnath's portion) over budget. • An additional \$500,000 for this CIP item has been included in CIP & budget discussions this year. 		
ADVANTAGES: Required expense per the approved IGA.		
DISADVANTAGES: Expenses higher than originally anticipated.		
FINANCIAL IMPACT: The additional funds will come from the other TDA projects not being built this year, primarily the Parkway Improvements that will be rebudgeted for future year.		
RECOMMENDED MOTION: I move to approve Resolution No. __, Series 2016 approving the purchase authorization for 2016 expenses related to the Boxelder Basin Stormwater Authority and the Tinnath Development Authority IGA.		
ATTACHMENTS: 1. Resolution, 2. TDA Purchase Authorization, 3. Invoices		



Town of Timnath
 4800 Goodman Street
 Timnath, CO 80547
 (970) 224-3211

TDA Purchase Authorization

Date: 9/7/16

Vendor: Boxelder Basin Reginal Stormwater Authority (BBRSA)

Department: Engineering

Project: Boxelder - BBRSGA IGA

Description: Timnath's portion of Authority expenses for Jan-July 2016 per the approved IGA.

Is this purchase more than \$25,000 Yes No

Is this the purchase of Real Estate or Land Yes No

Is this the purchase of Public Art Yes No

Is this a budget request for a purchase that will exceed the approved budget Yes No


Advantages: Required expense per the previously approved IGA.


Disadvantages: Expenses are higher than originally anticipated.

Description	Approved Budget	Current Balance	Additional Budget Requested	Requested	Budget Remaining
2016 Boxelder Stormwater Auth	\$500,000	\$146,585.00	\$500,000	\$634,444.26	\$12,140.74

Financial Impact:
 Additional will be allocated from the Parkway Improvements project that was not built this year.

Recommendation/Justification:
 Recommend approval as the expenses are justified BBRSA expenses per the approved IGA.

 9/7/16
 Requesting Department Signature Date

 9/8/16
 Town Manager Signature Date

**TIMNATH DEVELOPMENT AUTHORITY
RESOLUTION NO. TDA-3, SERIES 2016**

**A RESOLUTION APPROVING THE PURCHASE AUTHORIZATION FOR 2016
EXPENSES RELATED TO THE BOXELDER BASIN STORMWATER AUTHORITY
AND THE TIMNATH DEVELOPMENT AUTHORITY IGA.**

WHEREAS, the Town of Timnath ("Town") has established the Timnath Development Authority ("TDA") pursuant to a resolution dated November 10, 2004; and

WHEREAS, Town and the TDA are governed by an identical governing body; and

WHEREAS, the TDA has the power to pass resolutions; and

WHEREAS, the TDA approved the Intergovernmental Agreement between the Boxelder Basin Stormwater Authority and the TDA as Resolution No. TDA-6, Series 2012; and

**NOW, THEREFORE, BE IT RESOLVED BY THE TIMNATH DEVELOPMENT
AUTHORITY OF THE TOWN TIMNATH, COLORADO AS FOLLOWS:**

Section 1. Approval

The TDA hereby approves the Purchase Authorization for 2016 expenses related to the Boxelder Basin Stormwater Authority and the Timnath Development Authority IGA.

**INTRODUCED, MOVED, AND ADOPTED BY THE TIMNATH DEVELOPMENT
AUTHORITY, ON SEPTEMBER 13, 2016.**

TIMNATH DEVELOPMENT AUTHORITY

Jill Grossman-Belisle, Chair

ATTEST:

Milissa Peters, Secretary



TDA COMMUNICATION

Meeting Date: September 13, 2016	Item: A Resolution Approving an agreement between the TDA and Ayres Associates for the Boxelder LOMR (Timnath Portion).	Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Discussion <input type="checkbox"/>
Presented by: Don Taranto Town Engineer		
EXECUTIVE SUMMARY: Now that the Boxelder improvements have been completed, a LOMR needs to be prepared and submitted to remove the floodplain in the Timnath area. This agreement is for the Timnath portion of the LOMR. Funding to be split between 2016 & 2017. 2016 dependent on an increase in the budget per prior requests.		
STAFF RECOMMENDATION: Staff recommends approval of this resolution.		
KEY POINTS/SUPPORTING INFORMATION: <ul style="list-style-type: none"> • Costs were allocated based on amount of floodplain in each jurisdiction. • Boxelder IGA included language that increases to the Project Costs shall be subject to mutual approval by the parties. As this is additional work, it is hereby being approved as a separate agreement. 		
ADVANTAGES: Required expenses per the previously approved IGA and expenses that are necessary to remove the floodplain thru Timnath.		
DISADVANTAGES: None.		
FINANCIAL IMPACT: For 2016, funds will be dependent on approval of an increased budget for the CIP Boxelder Stormwater Authority. For 2017, will be included in the 2017 CIP - Boxelder Stormwater Authority Budget.		
RECOMMENDED MOTION: I move to approve Resolution No. __, Series 2016 approving an agreement between the TDA and Ayres Associates for the Boxelder LOMR in the amount of \$43,815.80.		
ATTACHMENTS: 1. Resolution, 2. Town Council Purchase Authorization, 3. Proposal		



Town of Timnath
 4800 Goodman Street
 Timnath, CO 80547
 (970) 224-3211

TDA Purchase Authorization

Date: 9/7/16

Vendor: Ayres Associates

Department: Engineering

Project: Boxelder Stormwater Authority - Boxelder LOMR

Description: Timnath's portion of the Boxelder LOMR to remove floodplain from Timnath GMA.

Is this purchase more than \$25,000 Yes No

Is this the purchase of Real Estate or Land Yes No

Is this the purchase of Public Art Yes No

Is this a budget request for a purchase that will exceed the approved budget Yes No

Advantages: Required expense per the previously approved IGA.

Disadvantages: None.

Description	Approved Budget	Current Balance	Additional Budget Requested	Requested	Budget Remaining
2016 Boxelder Stormwater Auth	\$1,000,000	\$12,140.74	\$0	\$12,000.00	\$140.74
2017 Boxelder Stormwater Auth	\$250,000	\$250,000	\$0	\$31,815.80	\$206,184.20

Financial Impact:
 Project split between 2016 & 2017. 2017 portion will need to be included in the 2017 Boxelder Stormwater Authority CIP line item.

Recommendation/Justification:
 Recommend approval as the expenses are justified expense per the approved BBRSA IGA.


 Requesting Department Signature

9/8/16
 Date


 Town Manager Signature

9/8/16
 Date

**TIMNATH DEVELOPMENT AUTHORITY
RESOLUTION NO. TDA-4, SERIES 2016**

**A RESOLUTION APPROVING AGREEMENT BETWEEN THE TIMNATH
DEVELOPMENT AUTHORITY AND AYRES ASSOCIATIES FOR THE BOXELDER
LOMR (TIMNATH PORTION)**

WHEREAS, the Town of Timnath ("Town") has established the Timnath Development Authority ("TDA") pursuant to a resolution dated November 10, 2004; and

WHEREAS, Town and the TDA are governed by an identical governing body; and

WHEREAS, the TDA has the power to pass resolutions; and

WHEREAS, the TDA approved the Intergovernmental Agreement between the Boxelder Basin Stormwater Authority and the TDA as Resolution No. TDA-6, Series 2012; and

**NOW, THEREFORE, BE IT RESOLVED BY THE TIMNATH DEVELOPMENT
AUTHORITY OF THE TOWN TIMNATH, COLORADO AS FOLLOWS:**

Section 1. Approval

The TDA hereby approves an agreement between the TDA and Ayres Associates for the Boxelder LOMR in the amount of \$43,815.80.

**INTRODUCED, MOVED, AND ADOPTED BY THE TIMNATH DEVELOPMENT
AUTHORITY, ON SEPTEMBER 13, 2016.**

TIMNATH DEVELOPMENT AUTHORITY

Jill Grossman-Belisle, Chair

ATTEST:

Milissa Peters, Secretary

Ayres Associates - Professional Services Fee Proposal

Boxelder CLOMR Design Fee

Based on Scope of Services dated 6/21/16



LABOR DETAIL AND SUMMARY OF DIRECT AND SUBCONSULTING COSTS BY TASK

Task	Description	QA/QC John Hunt	Sr. Project Manager (Chris Pletcher)	Project Engineer III (Jaclyn Michaelson)	Project Engineer I (Pat Schoenecker)	CAD / GIS	Word Processor / Editor / ContractAdmin	Clerical	Total Labor Cost	Direct Costs	Total by Task
		\$185	\$170	\$140	\$95	\$120	\$75	\$55			
Task 1	Meetings, Coordination, and Data Collection										
1.1	Meetings		36					4	\$ 6,340	\$ 150	\$ 6,490
1.2	As-built Project Survey		2	8		16			\$ 3,380		\$ 3,380
1.3	Management, invoicing		8					8	\$ 1,800	\$ -	\$ 1,800
1.4	Provide support, drafting etc..		8	12		20			\$ 5,440	\$ -	\$ 5,440
	Subtotal		54	20		36		12	\$ 16,960	\$ 150	\$ 17,110
Task 2	Hydrologic Analysis for LOMR Submittal										
2.1	Develop As-built Project Hydrologic Model for LOMR Study Area		2	8					\$ 1,460	\$ 100	\$ 1,560
2.2	As-built Modeling of the L&W Canal Spill		4	16		4			\$ 3,400	\$ -	\$ 3,400
	Subtotal		6	24		4			\$ 4,860	\$ 100	\$ 4,960
Task 3	Hydraulic Analysis for LOMR Submittal (CR 54 South to Poudre River)										
3.1	Existing Conditions (EC) Model south of County Road 54	2	4	8					\$ 2,170		\$ 2,170
3.2	As-built (AB) Model south of County Road 54	2	4	40					\$ 6,650		\$ 6,650
3.3	Coordination with Anderson Consulting Engineers (ACE).		8	8					\$ 2,480		\$ 2,480
3.4	Update Existing Conditions (EC) Floodplain Mapping.	2		16		4			\$ 3,090		\$ 3,090
3.5	Update As-built Conditions (AB) Floodplain Mapping.	2		32		8			\$ 5,810		\$ 5,810
	Subtotal	8	16	104		12			\$ 20,200	\$ -	\$ 20,200

Ayres Associates - Professional Services Fee Proposal

Boxelder CLOMR Design Fee

Based on Scope of Services dated 6/21/16



LABOR DETAIL AND SUMMARY OF DIRECT AND SUBCONSULTING COSTS BY TASK

Task	Description	QA/QC John Hunt	Sr. Project Manager (Chris Pletcher)	Project Engineer III (Jaclyn Michaelson)	Project Engineer I (Pat Schoenecker)	CAD / GIS	Word Processor / Editor / ContractAdmin	Clerical	Total Labor Cost	Direct Costs	Total by Task
Task 4	Update ½ Foot Floodway Model and Mapping (South of CR 54)										
4.1	Update Existing Conditions (EC) Floodway Models	2		8					\$ 1,490		\$ 1,490
4.2	Update As-built Conditions (AB) Floodway Models	2		24					\$ 3,730		\$ 3,730
4.3	Update Existing Conditions (EC) Floodway Mapping	2		16		4			\$ 3,090		\$ 3,090
4.4	Update As-built Conditions (AB) Floodway Mapping	2		32		8			\$ 5,810		\$ 5,810
	Subtotal	8		80		12			\$ 14,120	\$ -	\$ 14,120
Task 5	Prepare LOMR Package										
5.1	Prepare Narrative and MT-2 Forms		2	8				4	\$ 1,680	\$ 35,500	\$ 37,180
5.2	Prepare Work Maps			8		40			\$ 5,920		\$ 5,920
5.3	Annotated Firm	4		8		8			\$ 2,820		\$ 2,820
5.4	Data Tables		2	16					\$ 2,580		\$ 2,580
5.5	Flood Profiles		2	8					\$ 1,460		\$ 1,460
5.6	Submit Package to City of Fort Collins and Address Comments			40		32			\$ 9,440		\$ 9,440
5.7	Submit Package to Larimer County Flood Review Board			8		2			\$ 1,360		\$ 1,360
5.8	Submit Package to FEMA and Respond to FEMA Review Comments.	8	16	40		16			\$ 11,720		\$ 11,720
	Subtotal	12	22	136		98		4	\$ 36,980	\$ 35,500	\$ 72,480
	Total	28	98	364		162		16	\$ 93,120	\$ 35,750	\$ 128,870

Ayres Associates - Professional Services Fee Proposal

Boxelder CLOMR Design Fee

Based on Scope of Services dated 6/21/16



LABOR DETAIL AND SUMMARY OF DIRECT AND SUBCONSULTING COSTS BY TASK

Task	Description	QA/QC John Hunt	Sr. Project Manager (Chris Fletcher)	Project Engineer III (Jaclyn Michaelson)	Project Engineer I (Pat Schoenecker)	CAD / GIS	Word Processor / Editor / ContractAdmin	Clerical	Total Labor Cost	Direct Costs	Total by Task
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Budget Breakdown:

Total Miles of Mapped Floodplain = 16.6

COFC Mapped Floodplain (west side of Prospect) = 2.8 miles (17%) = \$21,907.90

Timnath Mapped Floodplain (I-25 boxes to Poudre River) = 5.8 miles (34%) = \$43,815.80

Remainder of mapped floodplain update = 8.0 miles (49%) = \$63,146.30

Total \$128,870.00

BOXELDER BASIN REGIONAL STORMWATER AUTHORITY IN COMBINATION WITH CITY OF FORT COLLINS AND TOWN OF TIMNATH

Scope of Work for Letter of Map Revision (LOMR) preparation for ESDF, LWCCS, CR 52, opening of I-25 boxes and siphoning of Lake Canal for the Boxelder and Cooper Slough Basins

PROJECT OBJECTIVE: This scope of work covers those tasks necessary to complete the Letter of Map Revision (LOMR) for the three (3) projects being constructed by the Boxelder Stormwater Authority and the three (3) projects being constructed by the City of Fort Collins and Town of Timnath. The three Boxelder Authority projects include:

1. East Side Detention Facility (ESDF) – This is a large scale (1700 acre-foot) regional detention facility proposed between CR 50 and CR 52. The construction of this project is what allows the other projects to be built.
2. CR 52 – This project is being constructed in coordination with the ESDF project to reduce the overtopping depth of CR 52 to what it would have been had the originally proposed Edson project been constructed.
3. Larimer and Weld Canal Crossing Structure – The Boxelder Creek flood flows currently overtop the Larimer and Weld Canal just north of Vine Drive. The construction of the side spill weir in the canal bank will insure that the canal bank does not fail during a flood event.

The three City of Fort Collins/Town of Timnath projects include:

1. Opening of I-25 Boxes – With the construction of ESDF it will be possible to open the 2 blocked box culverts under I-25 and be at or below the existing 100-year flow rates on the west side of I-25 at Prospect Road
2. Siphoning of Lake Canal – Immediately downstream of the I-25 boxes there is an existing irrigation crossing of Boxelder Creek. The crossing is a suspended box culvert with an invert barely above the invert of Boxelder Creek. Siphoning the Lake Canal crossing will greatly reduce the backwater created by the current crossing structure
3. Prospect Road Overflow – This project is channel improvements that convey the storm flows into a new bridge structure/box culverts under Prospect Road. The flows discharge on the south side of Prospect Road, onto the effective floodplain.

The construction of these six projects have dramatic impacts on the existing Boxelder Creek floodplain and a portion of the Cooper Slough floodplain. There is a portion of the Cooper Slough floodplain which is also being affected by the proposed projects. The spills from the Larimer and Weld canal are reduced with the construction of the ESDF, reducing the Cooper Slough floodplain downstream of the Larimer and Weld Canal to the Poudre River.

Ayres Associates' Staff will include:

Project Manager - Chris Pletcher, PE; c (970) 218-5546, w (970) 223-5556

Project Engineer - Jaclyn Michaelsen, PE; c (970) 310-1547, w (970) 223-5556

Task 1 – Meetings, Coordination, and Data Collection

1.1 Meetings. This task provides time for Ayres staff to meet with the City of Fort Collins staff twice during the modeling of the LOMR. In addition Ayres will attend Board meetings and work sessions as required until the LOMR is submitted to FEMA. This scope assumes 9 months of board meetings.

1.2 As-built Project Survey. This task assumes that detailed as-built survey of the six projects will be provided to Ayres. The survey will be provided to Ayres in the following coordinates:

Horizontal: NAD 83 State Plane

Vertical: NAVD 88 coordinates

Any topography required to do the modeling, outside the extents of the projects, will use the Boxelder LiDAR data that was obtained for the projects. Ayres will obtain and review the as-built survey information in this task.

1.3 Management and invoicing. This task provides time for the Ayres project manager to handle invoicing to the Boxelder stormwater authority, City of Fort Collins and Town of Timnath who will all share in the cost of this work. This task also allows time for the project manager to track the project budgets for each entity, and progress schedule.

1.4 Provide support, drafting etc. Frequently during the course of design, Project Manager Myers requests assistance from Ayres with drawings, or figures which he uses to speak with effected property owners or municipal entities. This task provides time for Ayres to provide that assistance for concerns related to the project that do not fall within the overall scope of work, but are necessary to keep the project moving forward. This task assumes 40hrs of additional assistance.

Task 2 – Hydrologic Analysis for LOMR Submittal

The hydrologic models used for the CLOMR submittal to FEMA for this project will be used as the baseline for the LOMR submittal. This task assumes that the existing conditions hydrologic model will not be adjusted for the LOMR submittal.

2.1 Develop As-built Project Hydrologic Model for LOMR Study Area. This task allows time to update the proposed project EPA SWMM model to include the as-built hydrologic changes created with ESDF, LWCCS and Opening of I-25 Box Culverts. The other two projects (siphoning of Lake Canal and CR 52 improvements) will have hydraulic benefits which will be reflected in the HEC-RAS modeling.

2.2 As-built Modeling of the L&W Canal Spill. The modeling of the side spill weir was performed in an un-steady HEC-RAS model. This model will be adjusted based on the as-built survey data of the weir. The spill will be input into the as-built hydrologic EPA SWMM Model.

Task 3 – Hydraulic Analysis for LOMR Submittal (CR 54 South to Poudre River)

Ayres will use the hydraulic models provided in the CLOMR as the baseline for the LOMR submittal. All modeling will comply with Appendix C of the FEMA Guidelines and Specifications (G&S). The approach to each model in the series is described below. This task assumes that the effective model is the same one that was used in the CLOMR submittal. The Duplicate Effective modeling was performed in the CLOMR submittal.

- 3.1 Existing Conditions (EC) Model south of County Road 54.** This task assumes that minor modifications will be required of the existing conditions model that was created with the CLOMR submittal. Adjustment to the model may be required based on the final construction of the projects. For example, in the event that cross sections are added into the as-built conditions model to more accurately represent the projects constructed, the cross sections will also be added in to the exiting conditions model.
- 3.2 As-built (AB) Model south of County Road 54.** The survey data obtained for the projects will be input into the proposed project model that was created for the CLOMR. The as-built model will analysis what was constructed on the site for the six projects.
- 3.3 Coordination with Anderson Consulting Engineers (ACE).** The City of Fort Collins and Town of Timnath projects were designed by ACE. ACE is also providing construction management for these projects. Coordination will be required between Ayres and ACE for these projects.
- 3.4 Update Existing Conditions (EC) Floodplain Mapping.** The existing conditions floodplain mapping for the limits of the study will be updated. The floodplain mapped for the CLOMR will be used as the baseline for this task.
- 3.5 Update As-built Conditions (AB) Floodplain Mapping.** The as-built floodplain mapping for the limits of the study will be updated. The floodplain mapped for the CLOMR will be used as the baseline for this task.

Task 4 – Update ½ Foot Floodway Model and Mapping (South of CR 54)

- 4.1 Update Existing Conditions (EC) Floodway Models.** The existing conditions floodway model will be modified with this task. The existing conditions floodway model created in the CLOMR will be used as the baseline for this task. This task provides time to adjust the floodway and to minimize the rise to 0.5ft as well as eliminating all negative surcharges in the model. Frequently when preparing a floodway model it is necessary to iterate on the solutions many times in order to eliminate all of the negative surcharge values and also to get the floodway close to the defined parameter of ½ foot.
- 4.2 Update As-built Conditions (AB) Floodway Models.** The as-built conditions floodway model will be modified with this task. The proposed project floodway model created in

the CLOMR will be used as the baseline for this task. This task provides time to adjust the floodway and to minimize the rise to 0.5ft as well as eliminating all negative surcharges in the model. Frequently when preparing a floodway model it is necessary to iterate on the solutions many times in order to eliminate all of the negative surcharge values and also to get the floodway close to the defined parameter of ½ foot

- 4.3 **Update Existing Conditions (EC) Floodway Mapping.** The existing conditions floodway mapping for the limits of the study will be updated. The floodway mapped for the CLOMR will be used as the baseline for this task.
- 4.4 **Update As-built Conditions (AB) Floodway Mapping.** The as-built floodway mapping for the limits of the study will be updated. The floodway mapped for the CLOMR will be used as the baseline for this task.

Task 5 – Prepare LOMR Package

Ayres Associates will compile the hydrologic and hydraulic analysis prepared under Tasks 3 and 4, along with other pertinent data, into a LOMR submittal package by performing the following work:

- 5.1 **Prepare Narrative and MT-2 Forms.**
- 5.2 **Prepare Work Maps.** The CLOMR work maps will be updated to include the existing conditions floodplain and the as-built floodplain. The as-built information will be shown on the work maps.
- 5.3 **Annotated Firm.**
- 5.4 **Data Tables.** The following tables will be provided for the LOMR:
- Annotated Floodway Data Table
 - New Floodway Data Tables
 - City's BFE Comparison Table for the flowpaths
 - City's Map-Model Agreement Table for the flowpaths
- 5.5 **Flood Profiles.** The effective flood profiles will be annotated and the as-built profiles will be created.
- 5.6 **Submit Package to City of Fort Collins and Address Comments.** The LOMR package will be submitted to the City of Fort Collins for review. This task assumes two rounds of comments from the City of Fort Collins. This task includes time to attend and support a pre-submittal meeting, one or more meetings with COFC staff to answer questions and time to address comments and make corrections.
- 5.7 **Submit Package to Larimer County Flood Review Board.** Ayres Associates will submit the LOMR package to the Larimer County Flood Review Board. This task assumes that the submittal package will be submitted to the County for informational purposes only.

June 21, 2016

- 5.8 Submit Package to FEMA and Respond to FEMA Review Comments.** Ayres Associates will submit the LOMR package to FEMA for review and comment. Ayres Associates will respond to FEMA review comments and provide additional requested data as necessary. This task assumes one round of comments from FEMA. Because of the extents of the mapping changes this will actually be submitted as a PMR to FEMA which will require FEMA to change the maps which is a lengthier process for them.

Exclusions:

- This Scope of Work does not include a 500-year floodplain model or mapping