

AMERICAN FORK RIVER DEBRIS BASIN
ADMINISTRATIVE BOARD MEETING AGENDA
THURSDAY, APRIL 9, 2020

NOTICE is hereby given that the American Fork River Debris Basin Administrative Board will meet in a regular session on Thursday, April 9, 2020 in the Highland City Conference Room, 5400 Civic Center Drive, Suite 100, Highland, Utah commencing at 11:30 a.m. The agenda shall be as follows:

ACTION ITEMS

- 1) ACTION TO APPROVE THE MINUTES OF THE JANUARY 23, 2020 MEETING
- 2) REVIEW AND ACTION TO APPROVE A PROPOSAL BY HORROCKS ENGINEERING FOR WORK ASSOCIATED WITH THE DEBRIS BASIN OUTLET STRUCTURE.

DISCUSSION ITEMS:

- 3) REVIEW OF THE MOST RECENT UTAH STATE DAM INSPECTION AND RECOMMENDATIONS.

OTHER ITEMS:

ADJOURMENT:

NEXT MEETING: JULY 9, 2020

CERTIFICATE OF POSTING

I, Jo Ann Scott, certify that the foregoing agenda was posted at the principal office of the public body, at the Lone Peak Fire Station and Lone Peak Police Station, on the Utah State website (<http://pmn.utah.gov>) and on Highland City's website (www.highlandcity.org).

In accordance with Americans with Disabilities Act, Highland City will make reasonable accommodations to participate in the meeting. Requests for assistance can be made by contacting the City Recorder at (801) 772-4505 at least three days in advance of the meeting.

ELECTRONIC PARTICIPATION

Members of the Administrative Board may participate electronically via telephone, Skype, or other electronic means during this meeting.

Please note the order of agenda items are subject to change in order to accommodate the needs of the Debris Basin Administrative Board, staff and the public.

Posted and dated this 6th day of April, 2020

Jo Ann Scott, Highland City

THE PUBLIC IS INVITED TO PARTICIPATE IN ALL PUBLIC CITY MEETINGS.

PLEASE BE AWARE THE GOVERNOR HAS RECOMMENDED THAT MASS GATHERINGS BE LIMITED TO 100 OR LESS, AND 20 OR LESS FOR INDIVIDUALS OVER 60. AUDIO OF THIS MEETING WILL BE AVAILABLE FROM THE HIGHLAND CITY WEBSITE OR BY CONTACTING US AT publicworks@highlandcity.org.

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**AMERICAN FORK RIVER DEBRIS BASIN
ADMINISTRATIVE BOARD MEETING MINUTES
THURSDAY, JANUARY 23, 2020**

The American Fork River Debris Basin Administrative Board met in a regular session on Thursday, January 23, 2020 in the Highland City Conference Room, 5400 Civic Center Drive, Suite 100, Highland, Utah commencing at 11:30 am.

Present: Scott Sensenbaugher, American Fork City
Todd Trane, Highland City
Jeff Maag, City of Cedar Hills
Kevin Anderson, City of Cedar Hills
JoAnn Scott, Highland City
Charl Louw, City of Cedar Hills

Excused: Ernie John, Basin Operator -

Todd Trane welcomed all present and called the meeting to order at 11:51 p.m.

ACTION ITEMS

1. Approval of minutes from January 2, 2020.

Jeff noted that Ernie John is not a voting member of the board and asked that his reporting record be removed.

MOTION: Jeff Maag moved to approve the January 2, 2020 minutes with the removal of Ernie John as a voting member of the Board. Seconded by Scott Sensenbaugher. Voting was as follows:

Yes -

Jeff Maag
Scott Sensenbaugher
Todd Trane

Motion passes

2. Approval of invoices for payment.

a. JoAnn Scott – 1.23.2020 Costa Vida lunch receipt totaling \$69.40.

MOTION: Todd Trane moved to approve the bills as presented. Seconded by Scott Sensenbaugher. Voting was as follows:

Yes -

Scott Sensenbaugher
Todd Trane
Jeff Maag

Motion passes

3. Review and action to approve the Final Budget for fiscal year 2020-2021.

Todd stated that the budget for the 2020-2021 fiscal year would reflect monies anticipated in the reconstruction of dam outlet at the debris basin. The cost of design would come from the funds

48 allocated under Professional and Technical Services (\$3,500) and Professional – Legal Services
49 (\$5,000) from the current budget.

50

51 Construction would occur and be paid out during the next 2 budget years.

52

53 Charl stated that there is currently funding of \$70,000 available with another \$12,000 anticipated
54 as revenue between the 3 cities for the coming fiscal year. The line item for Repair and
55 Maintenance – Debris Removal was established to more directly fund those unforeseen
56 expenditures associated with high run-off and is the line item that is funded the most. Other line
57 items are for repair and maintenance within the basin.

58

59 Todd asked how fluid the budget is as there appears that not very much is spent.

60

61 Charl stated that there are not a lot of expenditures that come from maintain the basin and that
62 these funds are rolled into the next year.

63

64 Jeff expressed concern about reaching the \$75,000 budget ceiling with the \$12,000 revenue
65 collected from each city this next year. Todd stated that with Horrocks Engineers being paid out
66 of this budget year for design services, that there more than likely would not be funds in excess
67 of \$75,000 carried. Scott asked if there was an estimate from John Schiess for the design of the
68 outlet structure. Todd stated that he did not get one as of yet.

69

70 Scott stated that with the design being funded from the FY20 year, materials related to the
71 reconstruction would be purchased in FY21 and actual construction in FY22. This would allow
72 the Board time in January of 2021 to determine more closely what additional funding needs there
73 would be from the communities to complete construction.

74

75 Charl stated that the funds can be moved within the line items without doing a budget adjustment
76 as long as they are all within the same fund.

77

78 Jeff stated that assessing each city \$4,000 in the coming fiscal year would more than likely pay
79 for the design work. A heavier assessment would more likely come in the FY22 based on the
80 estimate for construction.

81

82 **MOTION: Todd Trane moved to approve the Final Budget for Fiscal year 2020-2021 as**
83 **presented to this Board.** Seconded by Jeff Maag. Voting was as follows:

84

Yes - Jeff Maag

85

Scott Sensanbaugher

86

Todd Trane

87

88

Motion passes

89

90 DISCUSSION ITEMS:

91 Jeff stated that there had been concrete trucks doing work for American Fork City driving over the outlet
92 bridge. He is concerned that they exceed the allowable weight limit. There is a sign on the structure with
93 the allowed tonnage on it. Scott will speak with their contractor about this.

94

95 There are signs around the basin warning of the ice. Ernie is now retaining water in the basin and will
96 continue through the winter season.

97

98 OTHER ITEMS:

99 Todd stated that John should have the estimate for the outlet structure design at the next meeting in April.

100

101 Jeff asked if there were reports on the dam structure itself. The structure itself is rusted. Jeff asked to
102 review it at the April 9th meeting. Do we need to have an inspection on the structure itself which is
103 separate than the dam?

104

105 Ernie is going to keep the water level at 6 feet. It is not quite there, but almost

106

107 Jeff will have his crews begin hauling off wood from the basin once the salt spreaders come off the
108 trucks.

109

110 American Fork will grade road the road over the dam when it gets warmer/drier. Follow up in April.

111

112 ADJOURNMENT

113

114 This meeting was adjourned at 12:12 pm on a motion by Scott and seconded by Jeff. Voting was
115 unanimously.

116

117 **NEXT MEETING:** April 9, 2020

118

119

120

121 
JoAnn Scott, Highland

122 Community Development/Public Works

To: American Fork Debris Basin Committee
From: John E. Schiess, P.E.
Date: February 6, 2020 **Memorandum**
Subject: American Fork Debris Basin Outlet Structure Modifications Proposal

Horrocks Engineers is pleased to provide this proposal for engineering assistance for the Outlet structure modifications requested. The following scope and fees are described in Phase I and Phase II.

Phase I: Trash Rack Modifications (\$14,650)


The purpose of Phase I is to design a replacement trash rack system on the upstream side of the outlet structure that is more accessible to cleaning equipment, easier to clean, and better able to handle likely debris without damage. It will include a flatter sloped and stronger trash rack with extended wing walls and approach slab. It will also include grading of landing areas near the trash rack for cleaning access. See below for scope of items covered in this phase.

- Project management, coordination, review, meetings, etc.
- Survey
- Structural design and drawings
- Site design and drawings
- Dam safety review and approvals
- Preparation of contract documents for bidding and construction
- Assisting the committee in obtaining and evaluating bids
- Construction management and inspection services not included in this scope and estimate but can be provided separately.

Phase II: Vehicle Access Evaluation (\$6,900)

The purpose of Phase II is to evaluate vehicle access across the structure and or river below the structure and recommend solutions to the access issues. The existing structure is not able to handle larger construction vehicles or equipment and therefore these have needed to cross the river below the structure and sometimes high flows limited access. It is assumed that three options will be analyzed including: modifying the existing structure to allow full access across the top of the embankment, building a new box culvert below the structure, building a stabilized channel crossing with potential low flow bypass. See below for scope of items covered in this phase.

- Data gathering and review
- Analyze options for access including limitations and concerns with each

- 
- Prepare summary report of various options including cost estimates
 - Review and present report
 - Finalize report

Please let me know if you have questions or comments.

Thanks

John Schiess

American Fork Debris Basin Committee - Outlet Structure Modifications

Engineering Design Costs

Task & Description	Total Cost	Total Hours	Principal Engineer - John Schiess	Associate Engineer - Brett Brady	Engineer, P.E. - Jens Hurst	CAD Technician	Sr. Licensed Surveyor	Surveyor/RO W Technician	Administrative Assistant
BILLING RATE			\$182	\$167	\$159	\$75	\$145	\$78	\$58
PHASE I: Trash Rack Modifications									
General Project Management	\$545	3	3						
City Coordination/Review Meetings	\$863	5	3		2				
Topographic survey	\$604	6					2	4	
Structural Design and Drawings	\$7,862	65		5	30	30			
Site Design and Drawings	\$815	8	2			6			
Dam Safety Review and Approvals	\$704	4	3		1				
QA QC	\$516	3	1	2					
Specifications and Contract Documents	\$1,709	13	2		7				4
Bidding Assistance	\$681	4	2		2				
PHASE II: Vehicle Access Evaluation									
Data Gathering and Review	\$681	4	2		2				
Options Analysis	\$3,015	18	5	5	8				
Draft Report and Cost Estimates	\$2,115	14	4		8				2
Report Presentation	\$341	2	1		1				
Finalize Report	\$739	5	2		2				1
Total Labor	\$21,190	154	30	12	63	36	2	4	7

Design Direct Costs:

other consultant:	None
Mileage (200 Miles @ \$0.68/Mile)	\$150
Printing	\$200
TOTAL DIRECT COSTS	\$350

Phase I	\$14,648.61
Phase II	\$6,891.51
DESIGN TOTAL	\$21,540



GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

Division of Water Rights

MICHAEL R. STYLER KENT L. JONES
Executive Director State Engineer/Division Director

July 17, 2018

JUSTIN PARDUHN
HIGHLAND CITY/AMERICAN FORK CITY
5400 W CIVIC CENTER DR STE 1
HIGHLAND CITY, UT 84003

UT DIVISION OF WATER RIGHTS – DAM SAFETY SECTION

DAM INSPECTION REPORT – 2018

Dam Name / Number	American Fork Debris Basin / UT00469		
Inspection Date	July 10, 2018	Hazard rating	Moderate
Weather	85°	Rating is appropriate?	Yes
Reservoir Level	0	EAP is current?*	No
Spillway Flow	0	EAP is distributed?*	No
Outlet Insp. last 5 yrs.?	N/A	SOP is current?*	Yes
Outlet Material Type	N/A	*Based on conversation with the Owner's representative.	

Representatives at the Inspection:

Name	Representing
S. Ross Hansen	Regional Office
Ty Christensen	Highland City
Jeff Maag, Chad Scott	Cedar Hills

Checklist Item	Necessary Action, Maintenance and/or Repair:
2, 3, 4, 7, 8, 10	Please remove woody vegetation and trees from within 25' of embankment.
	Please update and distribute EAP.
12, 17	Please continue efforts to remove debris from basin so it does not plug the outlet in a flooding event.

Embankment	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
1. Crest	---	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Upstream Slope	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Downstream Slope	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Groins	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Abutment/Foundation	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
5. Left Abutment	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Right Abutment	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Upstream Toe	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Downstream Toe	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Reservoir Basin	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
9. Shore Stability	---	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Reservoir Bottom	---	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Spillway	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
11. Freeboard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Concrete Structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Stilling Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Outfall Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Outlet	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
16. Conduit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. Stilling Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Discharge Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Instrumentation	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
22. Monuments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Staff Gage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Piezometers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Drains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This report presents the results of an engineering evaluation of the dam and appurtenant structures based on visual observations and discussions with the Owner's representative at the time of the inspection. The status and performance of the dam may vary with time and changing conditions.

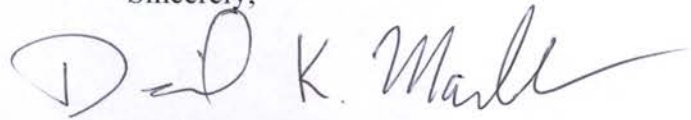
This inspection does not relieve the Owner/Operator of the legal duties, obligations, or liabilities incident to ownership and operation of the dam and reservoir.

This inspection does not include an assessment of site safety related to facility personnel and public access.

UT00469
Page 3

Your cooperation is appreciated. If you have any questions, please feel free to contact Ross Hansen at (801) 538-7405.

Sincerely,

A handwritten signature in black ink that reads "David K. Marble". The signature is fluid and cursive, with a large initial "D" and a long horizontal flourish at the end.

David K. Marble, P.E.
Assistant State Engineer

DKM/tg

pc: Ross Hansen - Water Rights Regional Engineer
Brenda Shuman Cedar Hills, publicworks@cedarhills.org
Peter Quittner Utah County Emergency Services, peterq@utahcounty.gov