



**Attachment D**  
**Section 404 Wetland Permit Application –**  
**Supplements 1 and 2**



## MEMORANDUM

TO: Melissa Jenny  
USACE Project Manager

FROM: Jeffrey Olson, Senior Scientist (SEH, Inc)

DATE: July 18, 2016

RE: Proposed BLRT Extension Project  
WCA/ Corps Joint Permit Application (Supplement #1)  
SEH No. HDRMN 131203

The purpose of this Memorandum is to provide the USACE supplemental information associated with the WCA/ Corps Joint Permit Application in anticipation of the Public Notice of the application. The points covered in this Memorandum address issues described in correspondence with the USACE since the submittal of the permit application. Data in this Supplement #1 supersedes information in the original permit application. Subsequent Supplements, if required, will supersede data herein.

The current WCA and Corps jurisdictional wetland impacts and required mitigation summarized in this Supplement #1 are as follows:

- WCA jurisdictional wetland impacts = 6.2815 ac, WCA mitigation requirements = 12.563 ac
- Corps jurisdictional wetland impacts = 6.7815 ac, Corps mitigation requirements = 13.563 ac

Appendix A contains updated tabular data concerning impacts to wetlands and other waterbodies within the proposed BLRT Extension project area. Appendix B contains an updated list and figures of landowners adjacent to impacted portions of Corps jurisdictional waterbodies.

Issues discussed in this Supplement #1 are as follows:

### **USACE Jurisdiction of W38, 39, 44 and 45**

Per communication with the USACE we agree that it would be most expedient to include W38, W39, W44 and W45 as part of the request for a Preliminary Jurisdictional Determination (PJD). Tabular data in Appendix A has been updated to reflect these additions to Corps jurisdiction.

### **List of Permits and Approvals (Required and Applied For)**

The following table summarizes permits and approvals that have been applied for and those that will be applied for and an estimated timeline of application dates:

Permit / Decision/ Approval	Jurisdiction	Estimated Date
<b>Federal Approvals</b>		
Record of Decision	Federal Transit Administration	Sept 2016
Section 4(f) Determination	Federal Transit Administration	Sept 2016

<b>Permit / Decision/ Approval</b>	<b>Jurisdiction</b>	<b>Estimated Date</b>
Section 6(f) Conversion Approval	National Park Service	To be submitted post-ROD
Section 106 Memorandum of Agreement	Federal Transit Administration, Advisory Council on Historic Preservation	Sept 2016
Section 404 Wetland Permit	US Army Corps of Engineers	May 2016 submittal of application. Supplemental information to be submitted as needed.
Section 7 Concurrence	US Fish and Wildlife Service	May 2016
Letter of No Objection for Use within Runway Protection Zone	Federal Aviation Administration	Dec 2015
Letter of Map Revision Approval	Federal Emergency Management Agency	In Process
<b>State Approvals</b>		
Section 106 Memorandum of Agreement	State Historic Preservation Office	Sept 2016
Right-of-Way Permit	Minnesota Department of Transportation	During Final Design
Application for Drainage Permit	Minnesota Department of Transportation	During Final Design
Application for Utility Accommodation on Trunk Highway Right-of-Way	Minnesota Department of Transportation	During Final Design
Application for Miscellaneous Work on Trunk Highway Right-of-Way	Minnesota Department of Transportation	During Final Design
National Pollutant Discharge Elimination System Permit	Minnesota Pollution Control Agency	During Final Design
Section 401 Water Quality Certification	Minnesota Pollution Control Agency	May 2016 submittal of application. Supplemental information to be submitted as needed.
Public Waters Wetland Permit	Minnesota Department of Natural Resources	June 2016 submittal of application
Water Appropriation Permit	Minnesota Department of Natural Resources	During Final Design
Grant-funded Park Conversion Approval	Minnesota Department of Natural Resources	May 2016
Response Action Plan	Minnesota Pollution Control Agency	During Final Design
Noxious Weed Management Plan	Minnesota Department of Agriculture	During Final Design
<b>Local Approvals</b>		
EIS Adequacy Determination	Metropolitan Council	Sept 2016
Road Crossing/Right-of-Way Permits	Hennepin County and cities of Brooklyn Park, Crystal, Golden Valley, Maple Grove, Minneapolis, and Robbinsdale	During Final Design

Permit / Decision/ Approval	Jurisdiction	Estimated Date
Utility permits	Cities of Brooklyn Park, Crystal, Golden Valley, Maple Grove, Minneapolis, and Robbinsdale	During Final Design
Building permits	Cities of Brooklyn Park, Crystal, Golden Valley, Maple Grove, Minneapolis, and Robbinsdale	During Final Design
Sediment- and erosion-control permits	Cities of Brooklyn Park, Crystal, Golden Valley, Maple Grove, Minneapolis, and Robbinsdale; Mississippi Watershed Management Organization; Bassett Creek Watershed Management Commission; and Shingle Creek and West Mississippi Watershed Management Organization	During Final Design
Wetland Conservation Act Approval	Cities of Crystal, Golden Valley, and Minneapolis; Bassett Creek Watershed Management Commission; Shingle Creek Watershed Management Commission; and West Mississippi Watershed Management Commission	Replacement Plan approval expected in Fall of 2016

**Impacts (square feet and linear feet) to Streams below the OHWM**

The following table summarizes impacts (square feet and linear feet) to streams and Corps jurisdictional conveyances below the OHWM.

Stream ID	Square Feet Impacts (below OHWM)	Linear Feet Impacts (below OHWM)
Bassett Creek	21,735 SF <sup>1</sup>	450 feet
Culverted conveyance (associated with Wetland 28)	175 SF <sup>1</sup>	~35 feet
Culverted conveyance (associated with Wetland 29)	0 SF	0 feet
Culverted conveyance (associated with Pond East of W30)	0 SF	0 feet

<sup>1</sup> Square Feet of impacts are based on an approximation of the footprint below the Ordinary High Water Mark (OHWM).

### **Temporary Impacts**

Temporary impacts to water bodies are described and depicted in the WCA/ Corps Joint Permit Application. Appendix A summarizes temporary wetland impacts including wetlands updated to be Corps jurisdictional. Total temporary impacts to wetlands are 3.2284 acres.

### **Total Impacts to Corps Jurisdictional Wetlands, Streams and Ditches**

Tabular data in Appendix A summarizes updated impacts to Corp jurisdictional wetland, streams and ditches.

### **Updates to List and Figures of Landowners Adjacent to Impacts to Corps Jurisdictional Waterbodies**

As a result of the determination that W38, W39, W44 and W45 are Corps jurisdictional several additional entries have been added to the list and figures of landowners adjacent to impacts to Corps jurisdictional impacts. See Appendix B.

## Appendix A: Tabular Update to Impacts to Wetlands and Other Waterbodies

## Appendix B: Update to List of Adjacent Landowners



## MEMORANDUM

TO: Melissa Jenny  
USACE Project Manager

FROM: Jeffrey Olson, Senior Scientist (SEH, Inc)

DATE: August 16, 2016

RE: Proposed BLRT Extension Project  
WCA/ Corps Joint Permit Application (Supplement #2)  
SEH No. HDRMN 131203

The purpose of this Memorandum is to provide the USACE supplemental information associated with the WCA/ Corps Joint Permit Application. Per correspondence with the USACE, Supplement #2 treats the "Pond east of Wetland 30" as non-jurisdictional (non-WOUS) per the USACE. Data in this Supplement #2 supersedes information in the original permit application and in Supplement #1. Subsequent Supplements, if required, will supersede data herein.

The total USACE-jurisdictional wetland impacts per Supplement #2 are now 5.8715 acres. Total USACE mitigation requirements (assuming a 2:1 mitigation ratio) are 11.743 acres.

The total impacts to wetlands that are only WCA jurisdictional (W4, W7, W8, W9, W12, W13, W52) are 1.0519 acres. Total WCA mitigation requirements (assuming a 2:1 mitigation ratio) are 2.1038 acres.

Appendix A contains updated tabular data concerning impacts to wetlands and other waterbodies within the proposed BLRT Extension project area.



## Appendix A: Tabular Update to Impacts to Wetlands and Other Waterbodies

Basin ID	Updated NWI <sup>1</sup>	Hydric Soil Map?	Field-Verified Cowardin	Eggers & Reed	Circ. 39 Class. <sup>2</sup>	Total Basin Size (ac)		USACE Jurisdiction			WCA Juris.	MnDNR Juris.	Impact Type					Mitigation Ratio (2:1 or 1:1)	WCA Mitigation Requirements (ac)	Corps Mitigation requirements (ac)	Municip. (WCA LGU)			
						natural basin	storm pond	Likely Juris. Waters and Streams	Non-WOUS (no mitigation required)	Potentially Isolated Basins (no mitigation required)			Fill impact (ac)	Cut impact (ac)	Temp. Impact (ac)	Total Impact (ac)	Total WCA Mitigatable Impacts (ac)					Total Corps Mitigatable Impacts (ac)		
W1	PEM1A	Yes	PEM1A	Seas. flooded basin	Type 1	1.59				yes	yes	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W2	PEM1C	Yes	PEM1A	Seas. flooded basin	Type 1	1.37				yes	yes	yes	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W3	PEM1A	Yes	PEM1A	Seas. flooded basin	Type 1	1.23				yes	yes	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W4	Not mapped	Yes	PEM1A	Seas. flooded basin	Type 1	0.14				yes	yes	no	0.1357	0	0	0	0.1357	0.1357	2 to 1	0.2714	0	0	0	Brooklyn Park (Shingle Creek WMC)
W5	PFO1A	Yes	PFO1A	Floodplain forest	Type 1	0.07				yes	yes	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W6	PFO1A	Yes	PFO1A	Floodplain forest	Type 1	0.14				yes	yes	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W7	PEM1A	Yes	PEM1A	Seas. flooded basin	Type 1	0.55				yes	yes	no	0.2869	0	0	0	0.2869	0.2869	2 to 1	0.5738	0	0	0	Brooklyn Park (Shingle Creek WMC)
W8	PFO1A	Yes	PFO1A	Floodplain forest	Type 1	0.14				yes	yes	no	0.0254	0	0	0	0.0254	0.0254	2 to 1	0.0508	0	0	0	Brooklyn Park (Shingle Creek WMC)
W9	Not mapped	Yes	PEM1A	Seas. flooded basin	Type 1	0.18				yes	yes	no	0.0012	0	0	0	0.0012	0.0012	2 to 1	0.0024	0	0	0	Brooklyn Park (Shingle Creek WMC)
W10	Not mapped	Yes	PEM1A	Seas. flooded basin	Type 1		0.06		yes		yes	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W11	PEM1A	Partially	PEM1A	Seas. flooded basin	Type 1	1.06				yes	yes	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W12	Not mapped	Yes	PEM1A	Seas. flooded basin	Type 1	0.06				yes	yes	no	0.0233	0.0332	0	0	0.0565	0.0233	2 to 1	0.0466	0	0	0	Brooklyn Park (Shingle Creek WMC)
W13	PEM1A	Partially	PEM1A	Seas. flooded basin	Type 1	2.41				yes	yes	no	0.5333	0	0	0	0.5333	0.5333	2 to 1	1.0666	0	0	0	Brooklyn Park (Shingle Creek WMC)
W14	PEM1A	Yes	PUBGx	Deep Marsh	Type 4		0.61		yes		no	no	0.6058	0	0	0	0.6058	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W15	Not mapped	Yes	PSS1A	Shrub Carr	Type 6		0.79		yes		no	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W16	PUBGx/PEM1C	No	PUBGx	Deep Marsh	Type 4		0.82		yes		no	no	0.8194	0	0	0	0.8194	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W17	Not mapped	No	PSS1A	Shrub Carr	Type 6		0.05		yes		no	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W26	Not mapped	No	PEM1A	Seas. flooded basin	Type 1		0.01		yes		no	no	0.01	0	0	0	0.01	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W27	PEM1C	No	PEM1A	Seas. flooded basin	Type 1		0.62		yes		no	no	0	0	0	0	0	0	2 to 1	0	0	0	Brooklyn Park (Shingle Creek WMC)	
W28	PABGx/PEM1C	Yes	PFO1A	Floodplain forest	Type 1	2.57		yes			yes	yes	0.2821	0.1482	0	0	0.4303	0.4303	2 to 1	0	0	0.8606	0	Brooklyn Park (Shingle Creek WMC)
W29	PEM1C	Yes	PEM1C	Shallow Marsh	Type 3		1.02	yes			yes	no	0	0	0	0	0	0	2 to 1	0	0	0	Crystal (Crystal)	

Basin ID	Updated NWI <sup>1</sup>	Hydric Soil Map?	Field-Verified Cowardin	Eggers & Reed	Circ. 39 Class. <sup>2</sup>	Total Basin Size (ac)		USACE Jurisdiction		WCA Juris.	MnDNR Juris.	Impact Type					Mitigation Ratio (2:1 or 1:1)	WCA Mitigation Requirements (ac)	Corps Mitigation requirements (ac)	Municip. (WCA LGU)		
W30	PUBG/ PEM1A	No	PUBGx	Open Water	Type 5		1.2		yes		no	no	0	0	0	0	0	0	2 to 1	0	0	Robbinsdale (Shingle Creek WMC)
W31	PSS1A	No	PSS1A	Shrub Carr	Type 6	0			yes		yes	yes	0	0	0	0	0	0	2 to 1	0	0	Robbinsdale (Bassett Creek WMC)
W32	PFO1A	No	PFO1A/ PEMC/ PSS1C	Floodplain forest/ Shallow Marsh/ Shrub Carr	Type 1/ Type 3/ Type 6	7.71			yes		yes	yes	0	0	1.2544	1.2544	0	0	2 to 1	0	0	Robbinsdale (Bassett Creek WMC)
W33	PABG	No	PUBGx	Open Water	Type 5	7.41			yes		yes	yes	0.3464	0.0731	1.2725	1.692	0.4195	0.4195	2 to 1	0.839	0.839	Robbinsdale (Bassett Creek WMC)
W34	PEM1F/ PABG	Yes	PEM1F	Deep Marsh	Type 4	17.01			yes		yes	yes	0	0	0	0	0	0	2 to 1	0	0	Golden Valley (Golden Valley) and Robbinsdale (Bassett Creek WMC)
W35	PEM1F	No	PFO1A	Floodplain forest	Type 1	0.85			yes		no	no	0.3639	0.0394	0	0.4033	0.4033	0.4033	2 to 1	0.8066	0.8066	Robbinsdale (Bassett Creek WMC)
W36	PSS1A	No	PSS1A	Shrub Carr	Type 6	1.39			yes		no	no	0.2124	0	0	0.2124	0.2124	0.2124	2 to 1	0.4248	0.4248	Robbinsdale (Bassett Creek WMC)
W37	Not mapped	No	PEM1A	Seas. flooded basin	Type 1		0.08		yes		no	no	0.0755	0	0	0.0755	0	0	2 to 1	0	0	Golden Valley (Golden Valley)
W38	PFO1A/ PABG	No	PUBGx/ PEMA	Open Water/ wet (fresh) meadow	Type 5/ Type 2	3.08			yes		no	no	0	0	0	0	0	0	2 to 1	0	0	Golden Valley (Golden Valley)
W39	PFO1A	No	PUBGx	Open Water	Type 5	2			yes		no	no	0.398	0.0025	0.6505	1.051	0.4005	0.4005	2 to 1	0.801	0.801	Golden Valley (Golden Valley)
W40	PFO1A	No	PEM1A	Seas. flooded basin	Type 1	0.31			yes		no	no	0.3006	0.0121	0	0.3127	0.3127	0.3127	2 to 1	0.6254	0.6254	Golden Valley (Golden Valley)
W41	Not mapped	No	PEM1A	Seas. flooded basin	Type 1		0.19		yes		no	no	0.1917	0	0	0.1917	0	0	2 to 1	0	0	Golden Valley (Golden Valley)
W42	Not mapped	No	PSS1A	Shrub Carr	Type 6		0.29		yes		no	no	0.2886	0	0	0.2886	0	0	2 to 1	0	0	Golden Valley (Golden Valley) and Minneapolis
W44	PABG	No	PUBGx	Open Water	Type 5	0.87			yes		no	no	0.8722	0	0	0.8722	0.8722	0.8722	2 to 1	1.7444	1.7444	Robbinsdale (Bassett Creek WMC)
W45	Not mapped	No	PFO1A	Floodplain forest	Type 1	2.05			yes		no	no	1.1982	0.1483	0	1.3465	1.1982	1.3465	2 to 1	2.3964	2.693	Robbinsdale (Bassett Creek WMC)
W46	riverine	Yes	riverine	riverine	riverine	0			yes		yes	yes	0	0	0	0	0	0	2 to 1	0	0	
W46	PFO1A	No	PFO1A	Floodplain forest	Type 1	11.14			yes		no	no	0.9799	0.0633	0.0008	1.044	0.9799	1.0432	2 to 1	1.9598	2.0864	Golden Valley (Golden Valley)
W47	PEM1C	No	PFO1A	Floodplain forest	Type 1	0			yes		yes	yes	0	0	0	0	0	0	2 to 1	0	0	Golden Valley (Golden Valley)
W48	R2UBG	No	R2UBGx	Riverine	Type 4	0.5			yes		no	no	0.1038	0	0.0502	0.154	0.1038	0.1038	2 to 1	0.2076	0.2076	Minneapolis (Minneapolis)
W49	PFO1A	No	PFO1A	Floodplain forest	Type 1		0.08		yes		no	no	0.1018	0	0	0.1018	0	0	2 to 1	0	0	Golden Valley (Golden Valley) /Minneapolis (Minneapolis)
W50	PFO1A	No	PEM1A	Seas. flooded basin	Type 1	0.12			yes		no	no	0.1176	0	0	0.1176	0.1176	0.1176	2 to 1	0.2352	0.2352	Golden Valley (Golden Valley)

Basin ID	Updated NWI <sup>1</sup>	Hydric Soil Map?	Field-Verified Cowardin	Eggers & Reed	Circ. 39 Class. <sup>2</sup>	Total Basin Size (ac)		USACE Jurisdiction			WCA Juris.	MnDNR Juris.	Impact Type					Mitigation Ratio (2:1 or 1:1)	WCA Mitigation Requirements (ac)	Corps Mitigation requirements (ac)	Municip. (WCA LGU)	
W51	PEMA	Yes	PEMA	Seas. flooded basin	Type 1	4.59		yes			yes	no	0.2095	0	0	0.2095	0.2095	0.2095	2 to 1	0.419	0.419	Brooklyn Park (Shingle Creek WMC)
W52	not mapped	Yes	PEMA	Seas. flooded basin	Type 1	0.01				yes	yes	no	0	0.0461	0	0.0461	0.0461		2 to 1	0.0922	0	Brooklyn Park (Shingle Creek WMC)
pond east of W30	PUBG	No	PUBG	Open Water	Type 4		0.91		yes		no	no	0	0.91	0	0.91	0		2 to 1	0	0	Robbinsdale (Shingle Creek WMC)
<b>Total</b>						<b>70.55</b>	<b>6.73</b>						<b>8.4832</b>	<b>1.4762</b>	<b>3.2284</b>	<b>13.1878</b>			<b>2 to 1</b>	<b>12.563</b>	<b>11.743</b>	

1: NWI data used in this report was updated in 2013.

2: Note: Wetland Types per Circular 39 indicate the majority of wetland types within a delineated basin. Several other minor wetland types may also be present within the basin.