

FCP MN Diversion Phase 4

Fargo-Moorhead Metro Flood Risk Management Project, Feasibility Study, Phase 3, Report for the US Army Corps of Engineers and the cities of Fargo, ND & Moorhead, MN

State Sales Tax Source: MN Department of Revenue Website 2010 sales tax rate 6.875%. City/County sales tax not included. Not assuming all materials are purchased in Clay County.

Sources: U.S. Department of Labor January 2009, MN Department of Revenue June 2010, 2010 RS Means Heavy Construction Cost Data

Contractor assumptions for the MII estimates are coordinated with the USACE. Contractor assumptions are developed in the estimate to reflect one possible scenario by which the work could be constructed. Other scenarios are certainly possible. These contractor assumptions apply to items in estimate groups 09 Channels & Canals and 11 Levees & Floodwalls. These assumptions do not apply to cost estimate group 08 Roads, Railroads and Bridges, as discussed in Section G3.1 and Section G3.2.

The cost estimate assumes the work is performed by a prime general contractor performing management duties, and discipline-specific subcontractors performing work tasks. This arrangement exists once, estimate-wide. However, this arrangement and the estimated contractor costs are assumed to be applicable to each 1-year to 2-year phase of the \$200M/year funding scenario utilized, as discussed during the July 1st, 2010 meeting with USACE. A summary of contractor assumptions is included in Consultant Exhibit G-K.

PRIME CONTRACTOR:

Job Office Overhead (JOOH) costs are those that occur specifically as a result of a particular project and include contractor supervision, field engineering, surveying, quality control, testing, shop drawings, safety and security, temporary offices, permits and fees, travel, vehicles, supplies and other miscellaneous items to run a field office. JOOH rates are individualized by contractor. A JOOH of 5% is assumed for the earthwork prime contractor. This is assumed to cover all estimated costs associated with mobilization/demobilization for the prime contractor. This percentage assumes the prime contractor functions as a management company in this estimate and does not incur significant costs to manage the fleet of equipment (rather, this cost is incurred by the subcontractors). Page 5-8 of EPA/COE guidance document EPA 540-R-00-002 indicates 5% for JOOH is appropriate for large projects over \$500,000. A summary of contractor assumptions is included in Consultant Exhibit G-K1.1.

Home Office Overhead (HOOH) is commonly referred to as general and administrative (G & A) cost. Typical estimated costs associated with HOOH are the contractor's main office, furniture and equipment, equipment yard, management and staff, office utilities, corporate vehicles, business insurance and taxes. A HOOH of 5% was used for the prime contractor. Page 5-8 of EPA/COE guidance document EPA 540-R-00-002 indicates 5% for HOOH is appropriate. A summary of contractor assumptions is included in Consultant Exhibit G-K1.1.

Mobilization/demobilization includes all costs required to furnish construction equipment and supplies at the beginning, during and at the end of the Project. The prime contractor is assumed to have no mobilization/demobilization (0%), as the entity is assumed to be performing a managerial role only. The prime contractor is assumed to not be performing the role of a subcontractor for facilities/components of the Project, and it does not have significant field equipment mobilization needs beyond that covered under JOOH. A summary of contractor assumptions is included in Consultant Exhibit G-K1.1.

Contractor profit is determined using USACE weighted guidelines method (ETL 1110-2-573, Section 5.3.3) to calculate the percentage for prime contractor profit at 9%. Section 5.3 of COE ETL 1110-2-573 identifies a profit range of 3% (for basic work) to 12% (for the most risky work) as appropriate. Exhibit G-K2.1 in Consultant's Appendix G shows weighted guidelines profit calculations performed to help develop the assumed rate.

All government construction contracts require the contractor to provide a Performance and Payment Bond. The assumed percentage rate for Performance and Payment Bond Premium is 1% (running percent) for the prime contractor. All government construction contracts require the contractor to provide a performance and payment bond. Consultant Exhibit G-K2.3 shows a calculation to help develop the assumed percentage rate for Performance and Payment Bond Premium.

Estimated by MRM, RKN, ATS
SUBCONTRACTOR MARKUPS

Designed by

Prepared by Barr Engineering Company Job # 34/09-1004 400 100

Preparation Date 8/18/2010

Effective Date of Pricing 8/18/2010

Estimated Construction Time Days

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Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
FCP MN Diversion Phase 4 Labor	41,652,719.70	4,165,271.97	19,581,146.13	8,647,841.47	91,220,862.97	1,493,528.9726
09 Channels and Canals	40,349,597.19	4,034,959.72	19,065,202.19	8,451,108.51	88,634,127.79	1,447,719.6090
901 Diversion Channel	36,707,255.59	3,670,725.56	17,305,350.30	7,723,614.84	80,478,485.28	1,318,799.8095
90102 Reach 2013	741,341.71	74,134.17	341,033.67	149,440.92	1,606,600.76	26,577.0898
9010202 Clearing and Grubbing	9,728.33	972.83	3,959.17	1,250.00	19,548.77	416.6667
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	4,725.00	472.50	1,417.50	0.00	8,304.28	250.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	5,003.33	500.33	2,541.67	1,250.00	11,244.49	166.6667
9010203 Temporary Erosion and Sedimentation Control	49,176.36	4,917.64	12,771.88	0.00	85,928.77	1,817.6251
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	40,860.36	4,086.04	10,277.08	0.00	71,313.23	1,377.6251
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	8,316.00	831.60	2,494.80	0.00	14,615.54	440.0000
9010204 Dewatering and Control of Water	21,638.40	2,163.84	7,472.64	3,360.00	43,194.23	672.0000
(Note: The total cost of Dewatering and Control of Water is estimated to be approximately 2% of the total cost of construction of the reach)						
MIL B-EQOPRMEQ Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	14,994.56	1,499.46	5,801.60	3,360.00	31,665.30	448.0000
MIL B-LABORER Laborers, (Semi-Skilled)	6,643.84	664.38	1,671.04	0.00	11,528.93	224.0000
9010205 Strip and Stockpile Topsoil - Channel	37,414.94	3,741.49	17,743.71	7,830.59	81,419.82	1,365.3328
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes scraper crews will strip material over the channel excavation areas and dozer crews will stockpile at the edges. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	6,071.72	607.17	1,821.51	0.00	10,700.40	321.2548
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	31,343.22	3,134.32	15,922.19	7,830.59	70,719.42	1,044.0781
9010206 Strip and Stockpile Topsoil - Spoil Berm	28,442.37	2,844.24	14,016.97	6,587.44	62,904.86	988.1160
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes dozer crews will strip and stockpile material over the spoil berm excavation areas. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	2,075.04	207.50	622.51	0.00	3,646.93	109.7907

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	26,367.33	2,636.73	13,394.46	6,587.44	59,257.93	878.3253
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010207 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	277,286.55	27,728.66	133,940.15	60,963.55	616,031.90	9,888.7794
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon	33,269.79	3,326.98	9,980.94	0.00	59,437.38	1,760.3063
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	244,016.76	24,401.68	123,959.22	60,963.55	556,594.52	8,128.4731
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010208 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	139,761.37	13,976.14	67,646.04	30,890.81	311,050.32	4,971.4600
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon	16,115.75	1,611.58	4,834.73	0.00	28,816.01	852.6853
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	123,645.62	12,364.56	62,811.31	30,890.81	282,234.31	4,118.7747
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010212 Temporary Haul Roads	16,372.40	1,637.24	6,916.04	3,657.32	35,130.28	522.4026
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and reach length. This calculation is assuming 1-way traffic and that the haul road would be constructed only on one side of the diversion (protected side). See Consultant Appendix F-Drawings for specific dimensions.)						
MIL B-EQOPRMED Equip. Operators, Medium	10,442.64	1,044.26	4,040.40	2,340.00	22,052.62	312.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
USR Laborer - MN Clay County Davis Bacon	656.96	65.70	197.09	0.00	1,161.55	34.7598
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	5,272.80	527.28	2,678.55	1,317.32	11,916.11	175.6428
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010213 Excavation and Embankment - Channel - Lower Bank Protection Riprap Excavation	8,985.91	898.59	4,348.42	1,985.08	19,856.91	319.7196
901021301 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	887.14	88.71	428.52	195.04	1,957.24	31.6378

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	106.44	10.64	31.93	0.00	188.52	5.6319
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	780.70	78.07	396.59	195.04	1,768.72	26.0059
901021302 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	8,098.77	809.88	3,919.89	1,790.03	17,899.67	288.0818
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	933.86	93.39	280.16	0.00	1,655.41	49.4107
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	7,164.91	716.49	3,639.74	1,790.03	16,244.26	238.6712
9010214a Lower Bank Protection	12,779.94	1,277.99	6,492.14	3,192.86	28,721.64	425.7143
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	12,779.94	1,277.99	6,492.14	3,192.86	28,721.64	425.7143
9010214b Low Flow Channel Protection	599.45	59.94	304.52	149.76	1,347.20	19.9683
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	599.45	59.94	304.52	149.76	1,347.20	19.9683
9010215 Topsoil Placement - Channel	10,603.37	1,060.34	5,139.81	2,352.82	23,249.10	376.4509
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,185.82	118.58	355.75	0.00	2,084.10	62.7418
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	9,417.55	941.75	4,784.06	2,352.82	21,165.00	313.7091
9010216 Topsoil Placement - Spoil Berm	57,196.20	5,719.62	27,595.24	12,535.70	125,103.79	2,042.8540
USR Laborer - MN Clay County Davis Bacon	7,019.99	702.00	2,106.00	0.00	12,337.77	371.4280

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	50,176.21	5,017.62	25,489.25	12,535.70	112,766.02	1,671.4260
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010219 Site Restoration	60,128.64	6,012.86	26,983.44	11,880.00	127,880.54	2,376.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon	14,968.80	1,496.88	4,490.64	0.00	26,307.97	792.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	23,775.84	2,377.58	12,078.00	5,940.00	53,433.83	792.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Truck Driver - Articulated Truck	21,384.00	2,138.40	10,414.80	5,940.00	48,138.75	792.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010220 Snow Removal	11,227.48	1,122.75	5,703.50	2,805.00	25,232.64	374.0000
USR Operator - Medium	11,227.48	1,122.75	5,703.50	2,805.00	25,232.64	374.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
90103 Reach 2014	2,791,851.75	279,185.18	1,300,278.05	576,246.18	6,086,796.74	100,086.7958
9010302 Clearing and Grubbing	26,071.93	2,607.19	10,610.57	3,350.00	52,390.71	1,116.6667
USR Laborer - MN Clay County Davis Bacon	12,663.00	1,266.30	3,798.90	0.00	22,255.48	670.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	13,408.93	1,340.89	6,811.67	3,350.00	30,135.24	446.6667
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010303 Temporary Erosion and Sedimentation Control	132,372.39	13,237.24	34,656.20	0.00	231,371.98	5,002.3238
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	104,274.39	10,427.44	26,226.80	0.00	181,989.18	3,515.6571
USR Laborer - MN Clay County Davis Bacon	28,098.00	2,809.80	8,429.40	0.00	49,382.80	1,486.6667
(Note: Clay County MN - Davis Bacon Wage Rate)						
9010304 Dewatering and Control of Water	73,029.60	7,302.96	25,220.16	11,340.00	145,780.53	2,268.0000
(Note: The total cost of Dewatering and Control of Water is estimated to be approximately 2% of the total cost of construction of the reach)						
MIL B-EQOPRMED Equip. Operators, Medium	50,606.64	5,060.66	19,580.40	11,340.00	106,870.38	1,512.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	22,422.96	2,242.30	5,639.76	0.00	38,910.15	756.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
9010305 Strip and Stockpile Topsoil - Channel	115,244.16	11,524.42	54,653.53	24,119.49	250,786.43	4,205.4497
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes scraper crews will strip material over the channel excavation areas and dozer crews will stockpile at the edges. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	18,701.88	1,870.19	5,610.56	0.00	32,958.99	989.5176
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	96,542.28	9,654.23	49,042.96	24,119.49	217,827.43	3,215.9321
9010306 Strip and Stockpile Topsoil - Spoil Berm	102,943.88	10,294.39	50,732.82	23,842.48	227,676.90	3,576.3720
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes dozer crews will strip and stockpile material over the spoil berm excavation areas. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	7,510.38	751.04	2,253.11	0.00	13,199.65	397.3747
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	95,433.50	9,543.35	48,479.71	23,842.48	214,477.26	3,178.9973
9010307 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	771,988.99	77,198.90	372,900.60	169,727.63	1,715,084.40	27,531.1902
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	92,625.88	9,262.59	27,787.76	0.00	165,478.64	4,900.8401
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	679,363.11	67,936.31	345,112.84	169,727.63	1,549,605.77	22,630.3501
9010308 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	1,012,216.88	101,221.69	489,924.10	223,725.62	2,252,771.17	36,005.6271
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	116,717.78	11,671.78	35,015.33	0.00	208,698.96	6,175.5440
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	895,499.09	89,549.91	454,908.77	223,725.62	2,044,072.21	29,830.0831

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
9010312 Temporary Haul Roads	41,640.60	4,164.06	17,594.85	9,301.72	89,353.08	1,328.9341
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and reach length. This calculation is assuming 1-way traffic and that the haul road would be constructed only on one side of the diversion (protected side). See Consultant Appendix F-Drawings for specific dimensions.)						
MIL B-EQOPRMED Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	26,508.24	2,650.82	10,256.40	5,940.00	55,979.73	792.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,676.52	167.65	502.96	0.00	2,964.20	88.7049
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	13,455.84	1,345.58	6,835.50	3,361.72	30,409.16	448.2293
9010313 Excavation and Embankment - Channel - Lower Bank Protection Riprap Excavation	23,302.81	2,330.28	11,278.82	5,150.51	51,503.21	828.9058
901031302 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	23,302.81	2,330.28	11,278.82	5,150.51	51,503.21	828.9058
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	2,687.03	268.70	806.11	0.00	4,763.17	142.1707
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	20,615.79	2,061.58	10,472.71	5,150.51	46,740.04	686.7351
9010314a Lower Bank Protection	32,614.11	3,261.41	16,567.79	8,148.10	73,296.95	1,086.4127
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	32,614.11	3,261.41	16,567.79	8,148.10	73,296.95	1,086.4127
9010314b Low Flow Channel Protection	1,529.59	152.96	777.02	382.14	3,437.60	50.9524
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,529.59	152.96	777.02	382.14	3,437.60	50.9524
9010315 Topsoil Placement - Channel	33,033.66	3,303.37	16,012.53	7,329.95	72,430.09	1,172.7927
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	3,694.30	369.43	1,108.29	0.00	6,492.80	195.4655

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	29,339.36	2,933.94	14,904.24	7,329.95	65,937.29	977.3273
9010316 Topsoil Placement - Spoil Berm	194,032.12	19,403.21	93,613.98	42,526.04	424,401.52	6,930.1687
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	23,814.58	2,381.46	7,144.37	0.00	41,854.60	1,260.0307
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	170,217.54	17,021.75	86,469.60	42,526.04	382,546.92	5,670.1380
9010319 Site Restoration	203,161.92	20,316.19	91,171.32	40,140.00	432,081.21	8,028.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	50,576.40	5,057.64	15,172.92	0.00	88,889.03	2,676.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	80,333.52	8,033.35	40,809.00	20,070.00	180,541.56	2,676.0000
USR Truck Driver - Articulated Truck (Note: Hennepin County MN - Davis Bacon Wage Rate)	72,252.00	7,225.20	35,189.40	20,070.00	162,650.61	2,676.0000
9010320 Snow Removal	28,669.10	2,866.91	14,563.75	7,162.50	64,430.94	955.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	28,669.10	2,866.91	14,563.75	7,162.50	64,430.94	955.0000
90104 Reach 2015	9,472,376.00	947,237.60	4,477,756.72	2,006,455.59	20,805,232.85	339,541.8846
9010402 Clearing and Grubbing	59,926.53	5,992.65	24,388.47	7,700.00	120,420.45	2,566.6667
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	29,106.00	2,910.60	8,731.80	0.00	51,154.38	1,540.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	30,820.53	3,082.05	15,656.67	7,700.00	69,266.07	1,026.6667
9010403 Temporary Erosion and Sedimentation Control	239,504.52	23,950.45	63,377.41	0.00	418,796.61	9,317.3163
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	174,782.41	17,478.24	43,960.78	0.00	305,046.21	5,892.8663
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	64,722.11	6,472.21	19,416.63	0.00	113,750.39	3,424.4500
9010404 Dewatering and Control of Water	168,084.00	16,808.40	58,046.40	26,100.00	335,526.62	5,220.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: The total cost of Dewatering and Control of Water is estimated to be approximately 2% of the total cost of construction of the reach)						
MIL B-EQOPRMED Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	116,475.60	11,647.56	45,066.00	26,100.00	245,971.52	3,480.0000
MIL B-LABORER Laborers, (Semi-Skilled)	51,608.40	5,160.84	12,980.40	0.00	89,555.10	1,740.0000
9010405 Strip and Stockpile Topsoil - Channel	227,943.43	22,794.34	108,100.17	47,706.36	496,034.83	8,318.0320
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes scraper crews will strip material over the channel excavation areas and dozer crews will stockpile at the edges. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	36,990.78	3,699.08	11,097.23	0.00	65,190.17	1,957.1840
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	190,952.66	19,095.27	97,002.93	47,706.36	430,844.66	6,360.8480
9010406 Strip and Stockpile Topsoil - Spoil Berm	262,782.69	26,278.27	129,504.62	60,862.20	581,186.07	9,129.3300
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes dozer crews will strip and stockpile material over the spoil berm excavation areas. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	19,171.59	1,917.16	5,751.48	0.00	33,694.46	1,014.3700
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	243,611.10	24,361.11	123,753.14	60,862.20	547,491.61	8,114.9600
9010407 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	1,436,811.53	143,681.15	694,035.66	315,893.90	3,192,083.16	51,240.5386
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	172,393.56	17,239.36	51,718.07	0.00	307,985.76	9,121.3524
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,264,417.97	126,441.80	642,317.59	315,893.90	2,884,097.40	42,119.1862
9010408 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	4,836,417.70	483,641.77	2,340,879.37	1,068,971.08	10,763,841.84	172,036.5037
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	557,682.80	55,768.28	167,304.84	0.00	997,173.00	29,507.0267
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	4,278,734.90	427,873.49	2,173,574.52	1,068,971.08	9,766,668.84	142,529.4770
9010410 Excavation and Embankment - Channel - Type 4 Brenna	1,028,974.24	102,897.42	491,929.55	220,096.03	2,270,037.10	37,176.9943
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	148,003.20	14,800.32	44,400.96	0.00	264,394.95	7,830.8571
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	880,971.04	88,097.10	447,528.59	220,096.03	2,005,642.15	29,346.1371
9010412 Temporary Haul Roads	70,080.86	7,008.09	29,601.95	15,654.93	150,371.03	2,236.0116
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and reach length. This calculation is assuming 1-way traffic and that the haul road would be constructed only on one side of the diversion (protected side). See Consultant Appendix F-Drawings for specific dimensions.)						
MIL B-EQOPRMEQ Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	44,715.92	4,471.59	17,301.20	10,020.00	94,430.45	1,336.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	2,810.20	281.02	843.06	0.00	4,968.61	148.6877
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	22,554.75	2,255.47	11,457.69	5,634.93	50,971.97	751.3240
9010413 Excavation and Embankment - Channel - Lower Bank Protection Riprap Excavation	49,157.77	4,915.78	23,641.77	10,683.58	108,543.81	1,762.8351
901041302 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	23,685.70	2,368.57	11,464.14	5,235.14	52,349.46	842.5255
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	2,731.18	273.12	819.35	0.00	4,841.43	144.5067
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	20,954.52	2,095.45	10,644.79	5,235.14	47,508.03	698.0188
901041304 Excavation and Embankment - Channel - Type 4 Brenna	25,472.07	2,547.21	12,177.63	5,448.44	56,194.35	920.3097

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	3,663.79	366.38	1,099.14	0.00	6,545.05	193.8514
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	21,808.28	2,180.83	11,078.49	5,448.44	49,649.30	726.4582
9010414a Lower Bank Protection	54,667.85	5,466.78	27,770.98	13,657.86	122,860.53	1,821.0476
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	54,667.85	5,466.78	27,770.98	13,657.86	122,860.53	1,821.0476
9010414b Low Flow Channel Protection	2,564.57	256.46	1,302.79	640.71	5,763.61	85.4286
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,564.57	256.46	1,302.79	640.71	5,763.61	85.4286
9010415 Topsoil Placement - Channel	65,882.55	6,588.26	31,935.49	14,618.91	144,455.05	2,339.0255
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	7,367.93	736.79	2,210.38	0.00	12,949.28	389.8376
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	58,514.62	5,851.46	29,725.12	14,618.91	131,505.76	1,949.1879
9010416 Topsoil Placement - Spoil Berm	453,574.88	45,357.49	218,834.63	99,410.04	992,092.78	16,200.1547
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	55,669.62	5,566.96	16,700.89	0.00	97,840.47	2,945.4827
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	397,905.25	39,790.53	202,133.75	99,410.04	894,252.30	13,254.6720
9010419 Site Restoration	467,970.88	46,797.09	210,007.48	92,460.00	995,272.26	18,492.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	116,499.60	11,649.96	34,949.88	0.00	204,750.38	6,164.0000
USR Operator - Medium	185,043.28	18,504.33	94,001.00	46,230.00	415,866.28	6,164.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Truck Driver - Articulated Truck	166,428.00	16,642.80	81,056.60	46,230.00	374,655.59	6,164.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010420 Snow Removal	48,032.00	4,803.20	24,400.00	12,000.00	107,947.12	1,600.0000
USR Operator - Medium	48,032.00	4,803.20	24,400.00	12,000.00	107,947.12	1,600.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
90105 Reach 2016	7,045,496.23	704,549.62	3,336,914.67	1,492,363.73	15,480,603.34	253,526.3114
9010502 Clearing and Grubbing						
USR Laborer - MN Clay County Davis Bacon	17,199.00	1,719.90	5,159.70	0.00	30,227.59	910.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	18,212.13	1,821.21	9,251.67	4,550.00	40,929.95	606.6667
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010503 Temporary Erosion and Sedimentation Control	125,683.31	12,568.33	33,470.63	0.00	219,822.90	4,973.5028
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	87,337.41	8,733.74	21,966.86	0.00	152,429.22	2,944.6194
USR Laborer - MN Clay County Davis Bacon	38,345.90	3,834.59	11,503.77	0.00	67,393.68	2,028.8833
(Note: Clay County MN - Davis Bacon Wage Rate)						
9010504 Dewatering and Control of Water	99,691.20	9,969.12	34,427.52	15,480.00	199,001.99	3,096.0000
(Note: The total cost of Dewatering and Control of Water is estimated to be approximately 2% of the total cost of construction of the reach)						
MIL B-EQOPRMEQ Equip. Operators, Medium	69,082.08	6,908.21	26,728.80	15,480.00	145,886.56	2,064.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	30,609.12	3,060.91	7,698.72	0.00	53,115.44	1,032.0000
9010505 Strip and Stockpile Topsoil - Channel	145,718.30	14,571.83	69,105.62	30,497.43	317,102.14	5,317.5011
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes scraper crews will strip material over the channel excavation areas and dozer crews will stockpile at the edges. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	23,647.24	2,364.72	7,094.17	0.00	41,674.37	1,251.1767
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	122,071.06	12,207.11	62,011.45	30,497.43	275,427.76	4,066.3244
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010506 Strip and Stockpile Topsoil - Spoil Berm	146,936.07	14,693.61	72,413.06	34,031.36	324,972.68	5,104.7040

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes dozer crews will strip and stockpile material over the spoil berm excavation areas. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	10,719.88	1,071.99	3,215.96	0.00	18,840.40	567.1893
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	136,216.19	13,621.62	69,197.10	34,031.36	306,132.28	4,537.5147
9010507 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	994,948.83	99,494.88	480,598.85	218,747.03	2,210,421.71	35,482.5339
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	119,377.36	11,937.74	35,813.21	0.00	213,270.89	6,316.2626
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	875,571.46	87,557.15	444,785.64	218,747.03	1,997,150.82	29,166.2713
9010508 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	2,845,746.68	284,574.67	1,377,372.69	628,982.25	6,333,441.20	101,226.2254
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	328,140.39	32,814.04	98,442.12	0.00	586,736.29	17,361.9253
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,517,606.29	251,760.63	1,278,930.58	628,982.25	5,746,704.91	83,864.3000
9010509 Excavation and Embankment - Channel - Type 3 Oxidized Brenna	477,046.05	47,704.61	227,920.27	101,865.54	1,050,778.48	17,249.3872
(Note: The volume of Type 3 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	69,312.27	6,931.23	20,793.68	0.00	123,660.99	3,667.3157
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	407,733.79	40,773.38	207,126.59	101,865.54	927,117.50	13,582.0715
9010510 Excavation and Embankment - Channel - Type 4 Brenna	1,364,965.41	136,496.54	652,559.41	291,964.03	3,011,272.80	49,316.4060

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	196,330.72	19,633.07	58,899.21	0.00	350,727.89	10,387.8686
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,168,634.69	116,863.47	593,660.20	291,964.03	2,660,544.91	38,928.5375
9010511 Excavation and Embankment - Channel	104,075.04	10,407.50	44,506.33	15,955.90	214,200.72	4,254.9075
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	40,208.88	4,020.89	12,062.66	0.00	70,667.90	2,127.4538
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	63,866.16	6,386.62	32,443.67	15,955.90	143,532.82	2,127.4538
9010512 Temporary Haul Roads	34,898.36	3,489.84	14,745.20	7,795.65	74,884.73	1,113.7153
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and reach length. This calculation is assuming 1-way traffic and that the haul road would be constructed only on one side of the diversion (protected side). See Consultant Appendix F-Drawings for specific dimensions.)						
MIL B-EQOPRMEQ Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	22,224.08	2,222.41	8,598.80	4,980.00	46,932.50	664.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,404.19	140.42	421.26	0.00	2,482.70	74.2959
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	11,270.09	1,127.01	5,725.15	2,815.65	25,469.53	375.4194
9010513 Excavation and Embankment - Channel - Lower Bank Protection Riprap Excavation	33,455.97	3,345.60	15,996.57	7,158.61	73,809.15	1,208.5785
901051302 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	340.93	34.09	165.01	75.35	753.51	12.1271
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	39.31	3.93	11.79	0.00	69.69	2.0800
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	301.62	30.16	153.22	75.35	683.82	10.0471
901051304 Excavation and Embankment - Channel - Type 4 Brenna	33,115.04	3,311.50	15,831.56	7,083.26	73,055.64	1,196.4514

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	4,763.12	476.31	1,428.94	0.00	8,508.91	252.0171
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	28,351.92	2,835.19	14,402.62	7,083.26	64,546.73	944.4342
9010514a Lower Bank Protection	27,317.25	2,731.72	13,877.02	6,824.76	61,392.78	909.9683
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	27,317.25	2,731.72	13,877.02	6,824.76	61,392.78	909.9683
9010514b Low Flow Channel Protection	1,281.81	128.18	651.15	320.24	2,880.73	42.6984
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,281.81	128.18	651.15	320.24	2,880.73	42.6984
9010515 Topsoil Placement - Channel	42,539.45	4,253.95	20,620.31	9,439.23	93,272.62	1,510.2764
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	4,757.37	475.74	1,427.21	0.00	8,361.17	251.7127
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	37,782.08	3,778.21	19,193.10	9,439.23	84,911.45	1,258.5636
9010516 Topsoil Placement - Spoil Berm	264,505.54	26,450.55	127,615.04	57,971.70	578,546.24	9,447.2400
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	32,464.15	3,246.42	9,739.25	0.00	57,056.40	1,717.6800
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	232,041.39	23,204.14	117,875.79	57,971.70	521,489.84	7,729.5600
9010519 Site Restoration	277,259.84	27,725.98	124,423.64	54,780.00	589,671.36	10,956.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	69,022.80	6,902.28	20,706.84	0.00	121,308.95	3,652.0000
USR Operator - Medium	109,633.04	10,963.30	55,693.00	27,390.00	246,389.30	3,652.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Truck Driver - Articulated Truck	98,604.00	9,860.40	48,023.80	27,390.00	221,973.11	3,652.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010520 Snow Removal	24,016.00	2,401.60	12,200.00	6,000.00	53,973.56	800.0000
USR Operator - Medium	24,016.00	2,401.60	12,200.00	6,000.00	53,973.56	800.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
90106 Reach 2017	3,793,150.26	379,315.03	1,794,004.16	803,838.16	8,331,871.25	136,091.7089
9010602 Clearing and Grubbing						
USR Laborer - MN Clay County Davis Bacon	11,529.00	1,152.90	3,458.70	0.00	20,262.45	610.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	12,208.13	1,220.81	6,201.67	3,050.00	27,436.56	406.6667
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010603 Temporary Erosion and Sedimentation Control	88,226.74	8,822.67	23,434.71	0.00	154,295.17	3,467.1776
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	62,564.63	6,256.46	15,736.08	0.00	109,193.51	2,109.3943
USR Laborer - MN Clay County Davis Bacon	25,662.11	2,566.21	7,698.63	0.00	45,101.66	1,357.7833
(Note: Clay County MN - Davis Bacon Wage Rate)						
9010604 Dewatering and Control of Water	66,847.20	6,684.72	23,085.12	10,380.00	133,439.32	2,076.0000
(Note: The total cost of Dewatering and Control of Water is estimated to be approximately 2% of the total cost of construction of the reach)						
MIL B-EQOPRMED Equip. Operators, Medium	46,322.48	4,632.25	17,922.80	10,380.00	97,823.16	1,384.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	20,524.72	2,052.47	5,162.32	0.00	35,616.17	692.0000
9010605 Strip and Stockpile Topsoil - Channel	91,296.81	9,129.68	43,296.71	19,107.54	198,673.85	3,331.5714
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes scraper crews will strip material over the channel excavation areas and dozer crews will stockpile at the edges. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	14,815.69	1,481.57	4,444.71	0.00	26,110.23	783.8992
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	76,481.12	7,648.11	38,852.00	19,107.54	172,563.62	2,547.6722
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010606 Strip and Stockpile Topsoil - Spoil Berm	103,072.72	10,307.27	50,796.32	23,872.32	227,961.85	3,580.8480

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes dozer crews will strip and stockpile material over the spoil berm excavation areas. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	7,519.78	751.98	2,255.93	0.00	13,216.17	397.8720
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	95,552.94	9,555.29	48,540.38	23,872.32	214,745.69	3,182.9760
9010607 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	820,338.70	82,033.87	396,255.39	180,357.68	1,822,500.22	29,255.4700
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	98,427.04	9,842.70	29,528.11	0.00	175,842.57	5,207.7800
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	721,911.65	72,191.17	366,727.27	180,357.68	1,646,657.65	24,047.6900
9010608 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	1,589,198.62	158,919.86	769,189.61	351,253.23	3,536,891.07	56,529.4793
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	183,249.01	18,324.90	54,974.70	0.00	327,661.10	9,695.7147
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,405,949.61	140,594.96	714,214.91	351,253.23	3,209,229.97	46,833.7646
9010609 Excavation and Embankment - Channel - Type 3 Oxidized Brenna	88,638.48	8,863.85	42,349.17	18,927.33	195,241.97	3,205.0564
(Note: The volume of Type 3 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	12,878.70	1,287.87	3,863.61	0.00	22,977.07	681.4128
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	75,759.78	7,575.98	38,485.56	18,927.33	172,264.89	2,523.6435
9010610 Excavation and Embankment - Channel - Type 4 Brenna	444,267.74	44,426.77	212,394.46	95,028.19	980,106.41	16,051.4603

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	63,901.55	6,390.15	19,170.46	0.00	114,154.60	3,381.0343
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	380,366.19	38,036.62	193,224.00	95,028.19	865,951.81	12,670.4260
9010612 Temporary Haul Roads	25,144.82	2,514.48	10,618.98	5,616.99	53,950.69	802.1537
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and reach length. This calculation is assuming 1-way traffic and that the haul road would be constructed only on one side of the diversion (protected side). See Consultant Appendix F-Drawings for specific dimensions.)						
MIL B-EQOPRMEQ Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	16,065.60	1,606.56	6,216.00	3,600.00	33,927.11	480.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,005.89	100.59	301.77	0.00	1,778.49	53.2220
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	8,073.33	807.33	4,101.21	2,016.99	18,245.10	268.9317
9010613 Excavation and Embankment - Channel - Lower Bank Protection Riprap Excavation	23,679.81	2,367.98	11,320.87	5,065.17	52,240.47	855.5474
901061302 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	13.55	1.35	6.56	2.99	29.95	0.4820
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1.56	0.16	0.47	0.00	2.77	0.0827
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	11.99	1.20	6.09	2.99	27.18	0.3993
901061304 Excavation and Embankment - Channel - Type 4 Brenna	23,666.26	2,366.63	11,314.31	5,062.18	52,210.52	855.0654
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	3,404.05	340.41	1,021.22	0.00	6,081.05	180.1086
USR Operator - Medium	20,262.21	2,026.22	10,293.09	5,062.18	46,129.48	674.9569

<u>Description</u>	<u>BaseWage</u>	<u>Overtime</u>	<u>TaxableFringe</u>	<u>Subsistence</u>	<u>Total</u>	<u>ManHours</u>
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010614a Lower Bank Protection	19,568.27	1,956.83	9,940.58	4,888.81	43,977.74	651.8413
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium	19,568.27	1,956.83	9,940.58	4,888.81	43,977.74	651.8413
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010614b Low Flow Channel Protection	917.75	91.78	466.21	229.29	2,062.56	30.5714
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium	917.75	91.78	466.21	229.29	2,062.56	30.5714
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010615 Topsoil Placement - Channel	26,516.41	2,651.64	12,853.40	5,883.82	58,140.26	941.4109
USR Laborer - MN Clay County Davis Bacon	2,965.44	296.54	889.63	0.00	5,211.83	156.9018
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	23,550.96	2,355.10	11,963.76	5,883.82	52,928.44	784.5091
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010616 Topsoil Placement - Spoil Berm	178,949.11	17,894.91	86,336.93	39,220.29	391,410.83	6,391.4547
USR Laborer - MN Clay County Davis Bacon	21,963.36	2,196.34	6,589.01	0.00	38,601.05	1,162.0827
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	156,985.75	15,698.57	79,747.92	39,220.29	352,809.78	5,229.3720
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010619 Site Restoration	185,548.48	18,554.85	83,267.08	36,660.00	394,621.25	7,332.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon	46,191.60	4,619.16	13,857.48	0.00	81,182.66	2,444.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	73,368.88	7,336.89	37,271.00	18,330.00	164,889.23	2,444.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Truck Driver - Articulated Truck	65,988.00	6,598.80	32,138.60	18,330.00	148,549.36	2,444.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010620 Snow Removal	17,201.46	1,720.15	8,738.25	4,297.50	38,658.56	573.0000
USR Operator - Medium	17,201.46	1,720.15	8,738.25	4,297.50	38,658.56	573.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
90107 Reach 2018	12,863,039.64	1,286,303.96	6,055,363.02	2,695,270.26	28,167,380.35	462,976.0189
9010702 Clearing and Grubbing	78,994.07	7,899.41	32,148.43	10,150.00	158,736.04	3,383.3333
USR Laborer - MN Clay County Davis Bacon	38,367.00	3,836.70	11,510.10	0.00	67,430.77	2,030.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	40,627.07	4,062.71	20,638.33	10,150.00	91,305.27	1,353.3333
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010703 Temporary Erosion and Sedimentation Control	343,945.17	34,394.52	90,647.88	0.00	601,328.66	13,235.2165
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	258,559.07	25,855.91	65,032.05	0.00	451,260.87	8,717.4331
USR Laborer - MN Clay County Davis Bacon	85,386.11	8,538.61	25,615.83	0.00	150,067.79	4,517.7833
(Note: Clay County MN - Davis Bacon Wage Rate)						
9010704 Dewatering and Control of Water	221,793.60	22,179.36	76,594.56	34,440.00	442,740.87	6,888.0000
(Note: Dewatering and Control of Water: The total cost of Dewatering and Control of Water is estimated to be approximately 2% of the total cost of construction of the reach)						
MIL B-EQOPRMEQ Equip. Operators, Medium	153,694.24	15,369.42	59,466.40	34,440.00	324,569.32	4,592.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	68,099.36	6,809.94	17,128.16	0.00	118,171.56	2,296.0000
9010705 Strip and Stockpile Topsoil - Channel	306,318.14	30,631.81	145,268.68	64,109.43	666,588.47	11,178.0543
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes scraper crews will strip material over the channel excavation areas and dozer crews will stockpile at the edges. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	49,709.47	4,970.95	14,912.84	0.00	87,604.76	2,630.1304
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	256,608.67	25,660.87	130,355.84	64,109.43	578,983.71	8,547.9239
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010706 Strip and Stockpile Topsoil - Spoil Berm	342,289.93	34,228.99	168,687.39	79,276.60	757,029.08	11,891.4900
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes dozer crews will strip and stockpile material over the spoil berm excavation areas. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	24,972.13	2,497.21	7,491.64	0.00	43,889.02	1,321.2767
(Note: Clay County MN - Davis Bacon Wage Rate)						

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	317,317.80	31,731.78	161,195.75	79,276.60	713,140.06	10,570.2133
9010707 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	2,671,192.92	267,119.29	1,290,289.71	587,281.99	5,934,438.70	95,261.8776
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	320,498.86	32,049.89	96,149.66	0.00	572,579.89	16,957.6117
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,350,694.06	235,069.41	1,194,140.05	587,281.99	5,361,858.81	78,304.2659
9010708 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	2,447,565.53	244,756.55	1,184,648.64	540,974.11	5,447,256.59	87,062.4999
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	282,226.49	28,222.65	84,667.95	0.00	504,639.26	14,932.6187
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,165,339.03	216,533.90	1,099,980.69	540,974.11	4,942,617.33	72,129.8812
9010709 Excavation and Embankment - Channel - Type 3 Oxidized Brenna	3,181,231.68	318,123.17	1,519,910.25	679,301.02	7,007,226.61	115,029.3491
(Note: The volume of Type 3 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	462,216.12	46,221.61	138,664.84	0.00	824,646.26	24,455.8796
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,719,015.56	271,901.56	1,381,245.41	679,301.02	6,182,580.34	90,573.4696
9010710 Excavation and Embankment - Channel - Type 4 Brenna	1,627,578.35	162,757.83	778,108.78	348,136.54	3,590,627.55	58,804.6510
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	234,103.82	23,410.38	70,231.15	0.00	418,206.29	12,386.4457

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,393,474.52	139,347.45	707,877.63	348,136.54	3,172,421.26	46,418.2053
9010712 Temporary Haul Roads	103,659.18	10,365.92	43,785.75	23,155.77	222,419.70	3,307.3907
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and reach length. This calculation is assuming 1-way traffic and that the haul road would be constructed only on one side of the diversion (protected side). See Consultant Appendix F-Drawings for specific dimensions.)						
MIL B-EQOPRMED Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	66,136.72	6,613.67	25,589.20	14,820.00	139,666.59	1,976.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	4,157.14	415.71	1,247.14	0.00	7,350.09	219.9544
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	33,365.32	3,336.53	16,949.40	8,335.77	75,403.02	1,111.4363
9010713 Excavation and Embankment - Channel - Lower Bank Protection Riprap Excavation	80,197.63	8,019.76	38,337.44	17,150.24	176,854.52	2,897.8594
901071301 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	604.05	60.41	291.78	132.81	1,332.68	21.5421
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	72.48	7.25	21.74	0.00	128.36	3.8347
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	531.57	53.16	270.04	132.81	1,204.31	17.7074
901071303 Excavation and Embankment - Channel - Type 3 Oxidized Brenna	20,607.77	2,060.78	9,845.86	4,400.46	45,392.26	745.1510
(Note: The volume of Type 3 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	2,994.20	299.42	898.26	0.00	5,341.99	158.4233
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	17,613.57	1,761.36	8,947.60	4,400.46	40,050.27	586.7278
901071304 Excavation and Embankment - Channel - Type 4 Brenna	58,985.81	5,898.58	28,199.80	12,616.98	130,129.58	2,131.1663
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						

<u>Description</u>	<u>BaseWage</u>	<u>Overtime</u>	<u>TaxableFringe</u>	<u>Subsistence</u>	<u>Total</u>	<u>ManHours</u>
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	8,484.26	848.43	2,545.28	0.00	15,156.41	448.9029
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	50,501.55	5,050.15	25,654.52	12,616.98	114,973.17	1,682.2635
9010714a Lower Bank Protection	80,871.02	8,087.10	41,082.05	20,204.29	181,749.54	2,693.9048
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	80,871.02	8,087.10	41,082.05	20,204.29	181,749.54	2,693.9048
9010714b Low Flow Channel Protection	3,793.96	379.40	1,927.31	947.86	8,526.54	126.3810
(Note: The area of geotextile and volume of rip rap was calculated from the typical cross sections on the drawings and the reach length. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	3,793.96	379.40	1,927.31	947.86	8,526.54	126.3810
9010715 Topsoil Placement - Channel	88,574.03	8,857.40	42,934.82	19,654.00	194,208.71	3,144.6400
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	9,905.62	990.56	2,971.68	0.00	17,409.32	524.1067
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	78,668.41	7,866.84	39,963.13	19,654.00	176,799.39	2,620.5333
9010716 Topsoil Placement - Spoil Berm	596,595.65	59,659.57	287,837.35	130,755.92	1,304,918.49	21,308.3713
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	73,223.31	7,322.33	21,966.99	0.00	128,691.44	3,874.2493
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	523,372.34	52,337.23	265,870.36	130,755.92	1,176,227.05	17,434.1220
9010719 Site Restoration	617,381.44	61,738.14	277,057.24	121,980.00	1,313,036.01	24,396.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	153,694.80	15,369.48	46,108.44	0.00	270,121.68	8,132.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	244,122.64	24,412.26	124,013.00	60,990.00	548,641.24	8,132.0000
USR Truck Driver - Articulated Truck	219,564.00	21,956.40	106,935.80	60,990.00	494,273.08	8,132.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9010720 Snow Removal	71,057.34	7,105.73	36,096.75	17,752.50	159,694.27	2,367.0000
USR Operator - Medium	71,057.34	7,105.73	36,096.75	17,752.50	159,694.27	2,367.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
902 Hydraulic Structure - Red River Control Structure	3,205,328.04	320,532.80	1,533,604.60	627,023.86	7,143,953.34	114,434.3396
90201 Hydraulic Structure - Red River Control Structure - Site work	1,251,335.05	125,133.51	570,108.26	248,029.17	2,700,840.52	44,653.1523
9020102 Temporary Erosion and Sedimentation Control	69,234.30	6,923.43	17,749.60	0.00	120,671.21	2,467.2838
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	62,304.30	6,230.43	15,670.60	0.00	108,491.60	2,100.6171
USR Laborer - MN Clay County Davis Bacon	6,930.00	693.00	2,079.00	0.00	12,179.61	366.6667
(Note: Clay County MN - Davis Bacon Wage Rate)						
9020103 Clearing and Grubbing	10,117.47	1,011.75	4,117.53	1,300.00	20,330.72	433.3333
USR Laborer - MN Clay County Davis Bacon	4,914.00	491.40	1,474.20	0.00	8,636.45	260.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	5,203.47	520.35	2,643.33	1,300.00	11,694.27	173.3333
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9020104 Strip and Stockpile Topsoil	60,127.00	6,012.70	28,514.70	12,584.00	130,844.24	2,194.1333
(Note: It is assumed that the contractor will strip and salvage 12 inches of topsoil from work areas. Topsoil quantities for suitable topsoil stripping are based on channel and spoil pile plan areas multiplied by the depth of 12 inches. The estimate assumes scraper crews will strip material over the structural excavation areas and dozer crews will stockpile at the edges. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	9,757.44	975.74	2,927.23	0.00	17,195.88	516.2667
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	50,369.56	5,036.96	25,587.47	12,584.00	113,648.35	1,677.8667
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9020105 Temporary Haul Roads	36,895.29	3,689.53	16,339.09	8,253.49	79,937.17	1,217.0433
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and road length (derived from drawing to nearest accessible roadway). Added to this was the volume of base material required to convert the temp haul road to a permanent haul road. (extra thickness). See Consultant Appendix F-Drawings for specific dimensions.)						
MIL B-EQOPRMEQ Equip. Operators, Medium	16,065.60	1,606.56	6,216.00	3,600.00	33,927.11	480.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
USR Laborer - MN Clay County Davis Bacon	2,203.32	220.33	661.00	0.00	3,898.67	116.5779
(Note: Clay County MN - Davis Bacon Wage Rate)						

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	18,626.37	1,862.64	9,462.10	4,653.49	42,111.40	620.4654
9020106 Coffering - Steel Sheetpile	16,623.00	1,662.30	8,568.07	4,070.00	39,738.48	542.6667
(Note: Sheet Pile quantities were obtained from the structural design and drawings. The number of sheets were determined by dividing the total wall length by the width of one sheet (1.5'). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	8,386.25	838.62	4,304.07	2,005.00	20,021.72	267.3333
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,558.37	255.84	1,234.33	575.00	5,953.87	76.6667
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,952.70	195.27	1,169.17	575.00	4,942.52	76.6667
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	3,515.55	351.56	1,753.75	862.50	8,320.30	115.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	210.14	21.01	106.75	52.50	500.08	7.0000
9020108 Embankment - Temporary Levee	18,532.84	1,853.28	9,006.01	4,139.37	40,958.15	655.8486
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,964.33	196.43	589.30	0.00	3,480.78	103.9329
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	16,568.51	1,656.85	8,416.71	4,139.37	37,477.37	551.9157
9020109 Excavation and Embankment - Channel Realignment	830,385.06	83,038.51	397,941.11	178,762.32	1,829,727.05	29,912.1766
902010901 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	250,816.37	25,081.64	122,250.35	56,460.72	555,668.19	8,841.4783
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	24,822.91	2,482.29	7,446.87	0.00	44,029.99	1,313.3816
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	225,993.46	22,599.35	114,803.47	56,460.72	511,638.20	7,528.0967
902010902 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	133,587.53	13,358.75	64,657.83	29,526.23	297,309.93	4,751.8499

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	15,403.85	1,540.39	4,621.16	0.00	27,543.09	815.0187
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	118,183.67	11,818.37	60,036.68	29,526.23	269,766.84	3,936.8312
902010903 Excavation and Embankment - Channel - Type 3 Oxidized Brenna	290,292.66	29,029.27	138,694.33	61,987.34	639,421.04	10,496.6187
(Note: The volume of Type 3 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	42,177.99	4,217.80	12,653.40	0.00	75,250.34	2,231.6395
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	248,114.67	24,811.47	126,040.93	61,987.34	564,170.70	8,264.9792
902010904 Excavation and Embankment - Channel - Type 4 Brenna	114,202.32	11,420.23	54,597.58	24,427.70	251,943.64	4,126.1472
(Note: The volume of Type 4 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	16,426.37	1,642.64	4,927.91	0.00	29,344.29	869.1200
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	97,775.96	9,777.60	49,669.66	24,427.70	222,599.35	3,257.0272
902010905 Excavation and Embankment - Channel	41,486.18	4,148.62	17,741.02	6,360.31	85,384.25	1,696.0825
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	16,027.98	1,602.80	4,808.39	0.00	28,169.49	848.0413
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	25,458.20	2,545.82	12,932.63	6,360.31	57,214.76	848.0413
9020110 Dewatering and Control of Water	78,052.80	7,805.28	26,954.88	12,120.00	155,807.76	2,424.0000
(Note: The total cost of Dewatering and Control of Water is estimated to be approximately 2% of the total cost of construction of the structure.)						
MIL B-EQOPRMEQ Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	54,087.52	5,408.75	20,927.20	12,120.00	114,221.26	1,616.0000
MIL B-LABORER Laborers, (Semi-Skilled)	23,965.28	2,396.53	6,027.68	0.00	41,586.51	808.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
9020115 Topsoil Placement	54,530.67	5,453.07	26,432.85	12,100.00	119,564.74	1,936.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	6,098.40	609.84	1,829.52	0.00	10,718.06	322.6667
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	48,432.27	4,843.23	24,603.33	12,100.00	108,846.68	1,613.3333
9020116 Site Restoration	50,107.20	5,010.72	22,486.20	9,900.00	106,567.11	1,980.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	12,474.00	1,247.40	3,742.20	0.00	21,923.30	660.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	19,813.20	1,981.32	10,065.00	4,950.00	44,528.19	660.0000
USR Truck Driver - Articulated Truck (Note: Hennepin County MN - Davis Bacon Wage Rate)	17,820.00	1,782.00	8,679.00	4,950.00	40,115.62	660.0000
9020117 Miscellaneous Features	7,516.61	751.66	2,238.21	0.00	13,515.04	250.6667
MIL B-EQOPRLT Equip. Operators, Light	88.13	8.81	34.53	0.00	166.90	2.6667
MIL B-LABORER Laborers, (Semi-Skilled)	4,982.88	498.29	1,253.28	0.00	8,719.83	168.0000
MIL B-TRKDVRLT Truck Drivers, Light	2,445.60	244.56	950.40	0.00	4,628.31	80.0000
9020118 Snow Removal	19,212.80	1,921.28	9,760.00	4,800.00	43,178.85	640.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	19,212.80	1,921.28	9,760.00	4,800.00	43,178.85	640.0000
90202 Hydraulic Structure Red River Control Structure - Structure	1,744,469.62	174,446.96	857,789.42	329,033.95	3,959,649.80	62,732.5841
9020201 Earthwork - Structural	36,575.71	3,657.57	17,667.83	8,041.86	80,426.34	1,304.3549
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	4,386.82	438.68	1,316.05	0.00	7,772.13	232.1068
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	32,188.89	3,218.89	16,351.78	8,041.86	72,654.21	1,072.2481
9020202 Gated Structure	883,336.32	88,333.63	400,237.18	135,870.91	1,920,161.46	34,424.1980
902020201 HP 14X73 Piling	45,760.94	4,576.09	23,656.09	11,268.49	109,667.19	1,502.4649
(Note: Pile quantities were obtained from the structural design and drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter	7,234.62	723.46	3,490.48	1,626.00	16,827.11	216.8000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	20,638.36	2,063.84	10,592.21	4,934.26	49,416.37	657.9013
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	6,476.54	647.65	3,877.79	1,907.11	16,402.45	254.2813
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	11,087.17	1,108.72	5,530.89	2,720.11	26,249.64	362.6813
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	324.25	32.42	164.72	81.01	771.63	10.8011
902020202 Concrete - Footing	13,664.63	1,366.46	5,786.38	1,907.50	28,604.37	555.2667
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,643.94	264.39	1,356.95	632.12	6,071.56	84.2824
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,406.25	140.63	678.47	316.06	3,159.26	42.1412
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,290.85	229.09	1,241.35	564.25	5,353.02	75.2333
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,572.38	157.24	426.57	0.00	2,795.86	75.2333
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	4,265.73	426.57	1,279.72	0.00	7,726.26	225.7000
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	536.67	53.67	321.33	158.03	1,315.10	21.0706
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	948.81	94.88	481.99	237.04	2,183.32	31.6059
902020203 Concrete - Piers	623,596.92	62,359.69	255,620.17	77,298.74	1,285,979.96	26,121.1649
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	95,341.37	9,534.14	48,931.98	22,794.40	219,033.73	3,039.2531

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	49,163.82	4,916.38	23,720.04	11,049.71	110,451.86	1,473.2941
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	120,368.85	12,036.89	65,224.50	29,647.50	281,264.66	3,953.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	224,185.50	22,418.55	67,255.65	0.00	406,054.52	11,861.6667
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	82,617.70	8,261.77	22,413.51	0.00	146,903.19	3,953.0000
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	18,728.44	1,872.84	11,213.53	5,514.85	45,893.75	735.3137
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	33,191.23	3,319.12	16,860.97	8,292.28	76,378.24	1,105.6373
902020204 Concrete - Elevated Deck	7,243.64	724.36	2,983.26	920.92	15,020.86	301.9323
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,499.38	249.94	1,282.75	597.56	5,739.59	79.6741
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	664.68	66.47	320.69	149.39	1,493.26	19.9185
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	133.99	13.40	68.13	30.97	305.89	4.1290
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	125.73	12.57	68.13	30.97	293.79	4.1290
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	3,307.76	330.78	992.33	0.00	6,036.10	175.0137
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	86.30	8.63	23.41	0.00	153.44	4.1290
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	126.83	12.68	75.94	37.35	310.80	4.9796
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	298.98	29.90	151.88	74.69	687.98	9.9593

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
902020205 Steel Reinforcement Bars	126,698.41	12,669.84	74,659.62	28,902.73	316,954.35	3,853.6979
(Note: Rebar quantities were obtained from the structural design and drawings. The amount of rebar was determined by the bar type and spacing in a particular concrete section. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	86,240.64	8,624.06	52,152.62	19,136.24	216,745.30	2,551.4982
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	18,268.73	1,826.87	10,430.52	3,827.25	44,975.33	510.2996
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	10,084.85	1,008.48	6,038.24	2,969.63	26,008.00	395.9500
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	12,104.19	1,210.42	6,038.24	2,969.63	29,225.72	395.9500
902020206 Hydraulic Gates - Steel	54,243.70	5,424.37	31,342.71	12,657.52	135,264.49	1,687.6688
(Note: The surface area of the hydraulic gates was calculated assuming gate dimensions as shown on the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	9,666.97	966.70	5,519.35	2,025.20	23,798.87	270.0270
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	27,380.74	2,738.07	16,558.06	6,075.61	68,814.96	810.0810
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	6,877.59	687.76	4,117.91	2,025.20	17,736.74	270.0270
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	10,318.41	1,031.84	5,147.39	2,531.50	24,913.92	337.5338
902020209 Steel Sheetpile	10,675.22	1,067.52	5,503.32	2,615.00	25,528.51	348.6667
(Note: Sheet Pile quantities were obtained from the structural design and drawings. The number of sheets were determined by dividing the total wall length by the width of one sheet (1.5'). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	5,280.62	528.06	2,710.17	1,262.50	12,609.00	168.3333
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,690.75	169.07	815.73	380.00	3,936.48	50.6667
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,290.48	129.05	772.67	380.00	3,267.69	50.6667

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,323.32	232.33	1,159.00	570.00	5,501.03	76.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	90.06	9.01	45.75	22.50	214.32	3.0000
90202010 Structural Aggregate Backfill	1,452.87	145.29	685.63	300.02	3,141.73	53.3360
(Note: The volume of aggregate was calculated as the base material needed for the gated structure work area and the pile caps. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	252.01	25.20	75.60	0.00	442.92	13.3340
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,200.86	120.09	610.03	300.02	2,698.81	40.0020
9020203 Walls	749,941.91	74,994.19	398,268.26	167,464.64	1,778,164.49	24,630.6423
902020301 HP 14X73 Piling	127,584.19	12,758.42	65,941.67	31,405.58	305,732.01	4,187.4105
(Note: Pile quantities were obtained from the structural design and drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	19,682.14	1,968.21	9,496.03	4,423.62	45,770.16	589.8154
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	58,396.97	5,839.70	29,971.03	13,961.66	139,858.10	1,861.5546
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	17,657.43	1,765.74	10,572.27	5,199.48	44,706.01	693.2637
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	30,208.40	3,020.84	15,069.61	7,411.29	71,496.73	988.1714
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,639.26	163.93	832.73	409.54	3,901.01	54.6055
902020302 Concrete - Footing	33,482.32	3,348.23	15,864.66	6,619.00	73,980.34	1,204.2667
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	11,840.88	1,184.09	6,077.09	2,830.94	27,191.52	377.4588
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	6,297.90	629.79	3,038.54	1,415.47	14,148.74	188.7294

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,449.19	244.92	1,327.15	603.25	5,723.01	80.4333
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,681.06	168.11	456.06	0.00	2,989.10	80.4333
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	4,560.57	456.06	1,368.17	0.00	8,260.29	241.3000
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,403.47	240.35	1,439.06	707.74	5,889.66	94.3647
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	4,249.24	424.92	2,158.59	1,061.60	9,778.02	141.5471
902020303 Concrete - Elevated Deck	34,329.63	3,432.96	14,115.15	4,336.59	71,129.20	1,433.0097
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	11,621.31	1,162.13	5,964.39	2,778.44	26,687.28	370.4593
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	3,090.56	309.06	1,491.10	694.61	6,943.18	92.6148
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	741.12	74.11	376.84	171.29	1,691.94	22.8387
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	695.44	69.54	376.84	171.29	1,625.02	22.8387
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	15,724.01	1,572.40	4,717.20	0.00	28,689.01	831.9584
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	477.33	47.73	129.50	0.00	848.74	22.8387
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	589.72	58.97	353.09	173.65	1,445.11	23.1537
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,390.15	139.01	706.19	347.31	3,198.90	46.3074
902020304 Concrete - Wall	223,119.64	22,311.96	109,885.33	48,903.42	502,688.84	7,637.1232

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	93,694.75	9,369.48	48,086.88	22,400.72	215,252.42	2,986.7629
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	48,288.03	4,828.80	23,297.49	10,852.87	108,484.31	1,447.0490
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	8,480.33	848.03	4,595.25	2,088.75	19,815.89	278.5000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	15,841.35	1,584.14	4,752.40	0.00	28,693.26	838.1667
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	5,820.65	582.06	1,579.10	0.00	10,349.74	278.5000
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	18,394.21	1,839.42	11,013.42	5,416.43	45,074.72	722.1912
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	32,600.32	3,260.03	16,560.79	8,144.65	75,018.49	1,085.9534
902020305 Steel Reinforcement	293,544.10	29,354.41	172,976.86	66,963.96	734,342.94	8,928.5283
(Note: Rebar quantities were obtained from the structural design and drawings. The amount of rebar was determined by the bar type and spacing in a particular concrete section. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	199,808.60	19,980.86	120,831.00	44,336.23	502,171.31	5,911.4972
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	42,326.32	4,232.63	24,166.20	8,867.25	104,202.12	1,182.2994
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	23,365.31	2,336.53	13,989.83	6,880.24	60,257.24	917.3658
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	28,043.87	2,804.39	13,989.83	6,880.24	67,712.28	917.3658
902020307 Steel Sheetpile	36,920.35	3,692.04	19,030.75	9,037.50	88,211.60	1,205.0000
(Note: Sheet Pile quantities were obtained from the structural design and drawings. The number of sheets were determined by dividing the total wall length by the width of one sheet (1.5'). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter	18,822.00	1,882.20	9,660.00	4,500.00	44,905.94	600.0000

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Carpenter	5,672.90	567.29	2,737.00	1,275.00	13,195.80	170.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Oiler	4,329.90	432.99	2,592.50	1,275.00	10,954.71	170.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Heavy	7,795.35	779.53	3,888.75	1,912.50	18,440.75	255.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	300.20	30.02	152.50	75.00	714.40	10.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
902020308 Structural Aggregate Backfill	961.68	96.17	453.83	198.59	2,079.56	35.3040
(Note: The volume of aggregate was calculated as the base material needed for the gated structure work area and the pile caps. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	166.81	16.68	50.04	0.00	293.17	8.8260
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	794.87	79.49	403.79	198.59	1,786.39	26.4780
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9020204 Riprap	20,371.99	2,037.20	10,273.45	4,999.02	45,633.02	685.7201
(Note: The volume of rip rap and Select granular aggregate was determined by the area shown on the drawings and a specified thickness. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	362.58	36.26	108.77	0.00	637.24	19.1840
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	20,009.41	2,000.94	10,164.68	4,999.02	44,995.78	666.5361
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9020205 Fish Passage System	54,243.70	5,424.37	31,342.71	12,657.52	135,264.49	1,687.6688
(Note: The surface area of the hydraulic gates was calculated assuming gate dimensions as shown on the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Ironworker	9,666.97	966.70	5,519.35	2,025.20	23,798.87	270.0270
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Ironworker	27,380.74	2,738.07	16,558.06	6,075.61	68,814.96	810.0810
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Oiler	6,877.59	687.76	4,117.91	2,025.20	17,736.74	270.0270

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Heavy	10,318.41	1,031.84	5,147.39	2,531.50	24,913.92	337.5338
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
90203 Hydraulic Structure - Red River Control Structure - Inlet Weir to Diversion	149,194.30	14,919.43	75,286.78	35,584.13	344,353.20	5,017.1455
9020301 Earthwork - Structural	38,053.25	3,805.32	18,381.55	8,366.73	83,675.31	1,357.0467
USR Laborer - MN Clay County Davis Bacon	4,564.03	456.40	1,369.21	0.00	8,086.10	241.4832
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	33,489.22	3,348.92	17,012.34	8,366.73	75,589.21	1,115.5635
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9020302 Steel Sheetpile	78,101.81	7,810.18	40,243.78	19,110.00	186,670.38	2,548.0000
(Note: Sheet Pile quantities were obtained from the structural design and drawings. The number of sheets were determined by dividing the total wall length by the width of one sheet (1.5'). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter	40,420.25	4,042.02	20,744.85	9,663.75	96,521.57	1,288.5000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Carpenter	11,445.91	1,144.59	5,522.30	2,572.50	26,624.38	343.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Oiler	8,736.21	873.62	5,230.75	2,572.50	22,102.68	343.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Heavy	15,728.27	1,572.83	7,846.13	3,858.75	37,206.80	514.5000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	1,771.18	177.12	899.75	442.50	4,214.96	59.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
9020303 Riprap	33,039.24	3,303.92	16,661.45	8,107.40	74,007.51	1,112.0988
(Note: The volume of rip rap and Select granular aggregate was determined by the area shown on the drawings and a specified thickness. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon	588.02	58.80	176.41	0.00	1,033.45	31.1120
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	32,451.22	3,245.12	16,485.05	8,107.40	72,974.06	1,080.9868
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
90204 Hydraulic Structure - Red River Control Structure - Inlet Weir to Extension Channel	60,329.06	6,032.91	30,420.13	14,376.61	139,109.82	2,031.4577

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
9020401 Earthwork - Structural	15,855.04	1,585.50	7,658.75	3,486.03	34,863.67	565.4192
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,901.62	190.16	570.49	0.00	3,369.11	100.6150
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	13,953.42	1,395.34	7,088.26	3,486.03	31,494.56	464.8042
9020402 Temporary Haul Roads	108.96	10.90	51.42	22.50	235.62	4.0000
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and road length (derived from drawing to nearest accessible roadway). Added to this was the volume of base material required to convert the temp haul road to a permanent haul road. (extra thickness). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	18.90	1.89	5.67	0.00	33.22	1.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	90.06	9.01	45.75	22.50	202.40	3.0000
9020403 Steel Sheetpile	30,598.77	3,059.88	15,767.72	7,490.00	73,174.21	998.6667
(Note: Sheet Pile quantities were obtained from the structural design and drawings. The number of sheets were determined by dividing the total wall length by the width of one sheet (1.5'). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	15,569.98	1,557.00	7,990.97	3,722.50	37,200.32	496.3333
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	4,560.57	456.06	2,200.33	1,025.00	10,614.54	136.6667
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	3,480.90	348.09	2,084.17	1,025.00	8,811.43	136.6667
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	6,266.85	626.68	3,126.25	1,537.50	14,833.37	205.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	720.48	72.05	366.00	180.00	1,714.56	24.0000
9020404 Riprap	13,766.28	1,376.63	6,942.24	3,378.07	30,836.33	463.3718
(Note: The volume of rip rap and Select granular aggregate was determined by the area shown on the drawings and a specified thickness. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	244.98	24.50	73.49	0.00	430.56	12.9620
USR Operator - Medium	13,521.30	1,352.13	6,868.75	3,378.07	30,405.77	450.4098

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
908 Hydraulic Structure - Small Drain Structure (3 Structures)	86,111.20	8,611.12	45,247.45	19,820.19	201,029.74	2,812.1212
90801 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	13,771.90	1,377.19	6,652.36	3,027.86	30,384.04	491.1429
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,652.40	165.24	495.72	0.00	2,926.59	87.4286
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	12,119.50	1,211.95	6,156.64	3,027.86	27,457.44	403.7143
90802 Concrete - Wall	47,211.03	4,721.10	23,879.53	11,035.50	108,070.85	1,553.4001
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	26,721.34	2,672.13	13,714.17	6,388.59	61,671.94	851.8118
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	8,899.98	890.00	4,293.96	2,000.29	19,995.54	266.7059
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	609.00	60.90	330.00	150.00	1,423.04	20.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,171.80	117.18	351.54	0.00	2,122.99	62.0000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	418.00	41.80	113.40	0.00	743.25	20.0000
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	3,371.03	337.10	2,018.38	992.65	8,260.65	132.3529
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	6,019.89	601.99	3,058.07	1,503.97	13,853.42	200.5294
90803 Steel Reinforcement Bars	23,998.94	2,399.89	14,141.87	5,474.69	60,036.81	729.9592
(Note: Rebar quantities were obtained from the structural design and drawings. The amount of rebar was determined by the bar type and spacing in a particular concrete section. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Ironworker	16,335.52	1,633.55	9,878.64	3,624.74	41,055.43	483.2993

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Ironworker	3,460.42	346.04	1,975.73	724.95	8,519.13	96.6599
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Oiler	1,910.25	191.03	1,143.75	562.50	4,926.38	75.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Heavy	2,292.75	229.28	1,143.75	562.50	5,535.87	75.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
90804 Erosion Protection	1,129.32	112.93	573.69	282.14	2,538.04	37.6190
USR Operator - Medium	1,129.32	112.93	573.69	282.14	2,538.04	37.6190
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
910 Hydraulic Structure - Side Channel Inlet 1X72" (7 Inlets)	99,451.24	9,945.12	51,430.71	22,669.51	229,718.08	3,305.9353
91001 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	32,134.44	3,213.44	15,522.18	7,065.00	70,896.08	1,146.0000
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon	3,855.60	385.56	1,156.68	0.00	6,828.72	204.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	28,278.84	2,827.88	14,365.50	7,065.00	64,067.36	942.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
91003 Concrete - Wall	44,557.55	4,455.76	22,526.46	10,404.80	101,978.04	1,466.6401
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter	25,203.42	2,520.34	12,935.13	6,025.68	58,169.66	803.4244
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Carpenter	8,400.08	840.01	4,052.78	1,887.94	18,873.86	251.7255
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Cement Mason / Concrete Finisher	568.40	56.84	308.00	140.00	1,328.17	18.6667
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Laborer - MN Clay County Davis Bacon	1,146.60	114.66	343.98	0.00	2,078.13	60.6667
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Laborer - MN Clay County Davis Bacon	390.13	39.01	105.84	0.00	693.70	18.6667

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Oiler	3,146.29	314.63	1,883.82	926.47	7,709.94	123.5294
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	5,702.62	570.26	2,896.90	1,424.71	13,124.58	189.9608
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
91004 Steel Reinforcement Bars	22,399.01	2,239.90	13,199.07	5,109.71	56,034.36	681.2952
(Note: Rebar quantities were obtained from the structural design and drawings. The amount of rebar was determined by the bar type and spacing in a particular concrete section. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Ironworker	15,246.48	1,524.65	9,220.06	3,383.10	38,318.40	451.0794
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Ironworker	3,229.73	322.97	1,844.01	676.62	7,951.19	90.2159
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Oiler	1,782.90	178.29	1,067.50	525.00	4,597.95	70.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
USR Operator - Heavy	2,139.90	213.99	1,067.50	525.00	5,166.81	70.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
91005 Erosion Protection	360.24	36.02	183.00	90.00	809.60	12.0000
USR Operator - Medium	360.24	36.02	183.00	90.00	809.60	12.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
911 Hydraulic Structure - Side Channel Inlet 2X72" (11 Inlets)	188,798.66	18,879.87	98,189.26	43,166.80	437,765.12	6,237.4777
91101 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	50,496.98	5,049.70	24,392.00	11,102.14	111,408.13	1,800.8571
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon	6,058.80	605.88	1,817.64	0.00	10,730.84	320.5714
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Medium	44,438.18	4,443.82	22,574.36	11,102.14	100,677.28	1,480.2857
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
91103 Concrete - Wall	91,495.70	9,149.57	46,265.30	21,373.96	209,419.66	3,011.1951
(Note: Quantities for form, strip cure and concrete were derived from the structural design and the drawings. See Consultant Appendix F-Drawings for specific dimensions.)						

<u>Description</u>	<u>BaseWage</u>	<u>Overtime</u>	<u>TaxableFringe</u>	<u>Subsistence</u>	<u>Total</u>	<u>ManHours</u>
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	51,766.39	5,176.64	26,568.02	12,376.41	119,476.34	1,650.1878
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	17,248.69	1,724.87	8,321.96	3,876.69	38,754.35	516.8922
USR Cement Mason / Concrete Finisher (Note: Hennepin County MN - Davis Bacon Wage Rate)	1,172.33	117.23	635.25	288.75	2,739.36	38.5000
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	2,321.55	232.16	696.46	0.00	4,207.02	122.8333
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	804.65	80.46	218.30	0.00	1,430.75	38.5000
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	6,489.23	648.92	3,885.39	1,910.85	15,901.76	254.7794
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	11,692.86	1,169.29	5,939.91	2,921.27	26,910.08	389.5025
91104 Steel Reinforcement Bars	46,197.96	4,619.80	27,223.09	10,538.79	115,570.86	1,405.1714
(Note: Rebar quantities were obtained from the structural design and drawings. The amount of rebar was determined by the bar type and spacing in a particular concrete section. See Consultant Appendix F-Drawings for specific dimensions.)						
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	31,445.87	3,144.59	19,016.38	6,977.63	79,031.70	930.3512
USR Ironworker (Note: Hennepin County MN - Davis Bacon Wage Rate)	6,661.31	666.13	3,803.28	1,395.53	16,399.33	186.0702
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	3,677.23	367.72	2,201.72	1,082.81	9,483.28	144.3750
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	4,413.54	441.35	2,201.72	1,082.81	10,656.56	144.3750
91105 Erosion Protection	608.02	60.80	308.87	151.90	1,366.47	20.2540
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	608.02	60.80	308.87	151.90	1,366.47	20.2540
913 Hydraulic Structure - Outlet to Red River of the North	29,163.08	2,916.31	14,262.70	6,622.88	64,942.56	1,023.4686
91301 Excavation and Embankment - Channel Realignment	18,790.18	1,879.02	9,033.28	4,079.39	41,581.83	674.1697

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
9130101 Excavation and Embankment - Channel - Type 1 Non-Saturated Non-Brenna	6,344.65	634.47	3,066.58	1,397.16	14,092.90	226.0911
(Note: The volume of Type 1 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	752.27	75.23	225.68	0.00	1,343.41	39.8025
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	5,592.38	559.24	2,840.90	1,397.16	12,749.49	186.2886
9130102 Excavation and Embankment - Channel - Type 2 Saturated Non-Brenna	3,294.32	329.43	1,594.49	728.13	7,331.77	117.1824
(Note: The volume of Type 2 excavation based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	379.86	37.99	113.96	0.00	679.22	20.0987
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,914.45	291.45	1,480.53	728.13	6,652.55	97.0837
9130103 Excavation and Embankment - Channel - Type 3 Oxidized Brenna	9,151.21	915.12	4,372.21	1,954.09	20,157.16	330.8962
(Note: The volume of Type 3 excavation is based on the stratigraphic profiles developed in coordination with USACE, based on a number of soil borings performed by the Corps of Engineers. Digital 3-D grading models are developed to calculate volumes of excavations in bank cubic yards (HEI). Earthwork quantities are calculated using the average end area method using cross sections at 100 foot intervals as well as at specific stations.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	1,329.62	132.96	398.89	0.00	2,372.20	70.3504
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	7,821.59	782.16	3,973.32	1,954.09	17,784.96	260.5458
91303 Temporary Haul Roads	48.38	4.84	22.83	9.99	104.61	1.7760
(Note: The volume of class V aggregate base was calculated using a typical temporary haul road cross section and road length (derived from drawing to nearest accessible roadway). Added to this was the volume of base material required to convert the temp haul road to a permanent haul road. (extra thickness). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	8.39	0.84	2.52	0.00	14.75	0.4440
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	39.99	4.00	20.31	9.99	89.87	1.3320

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
91304 Erosion Protection	10,324.53	1,032.45	5,206.59	2,533.51	23,256.11	347.5229
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	183.75	18.37	55.12	0.00	322.94	9.7220
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	10,140.78	1,014.08	5,151.46	2,533.51	22,933.18	337.8009
914 Diversion Channel Drop Structure	33,489.37	3,348.94	17,117.17	8,190.43	78,233.66	1,106.4571
91401 Steel Sheetpile	21,627.77	2,162.78	11,148.15	5,295.00	51,689.25	706.0000
(Note: Sheet Pile quantities were obtained from the structural design and drawings. The number of sheets were determined by dividing the total wall length by the width of one sheet (1.5'). See Consultant Appendix F-Drawings for specific dimensions.)						
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	10,948.13	1,094.81	5,618.90	2,617.50	26,128.84	349.0000
USR Carpenter (Note: Hennepin County MN - Davis Bacon Wage Rate)	3,337.00	333.70	1,610.00	750.00	7,764.35	100.0000
USR Oiler (Note: Hennepin County MN - Davis Bacon Wage Rate)	2,547.00	254.70	1,525.00	750.00	6,445.57	100.0000
USR Operator - Heavy (Note: Hennepin County MN - Davis Bacon Wage Rate)	4,585.50	458.55	2,287.50	1,125.00	10,850.41	150.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	210.14	21.01	106.75	52.50	500.08	7.0000
91402 Riprap	11,861.60	1,186.16	5,969.02	2,895.43	26,544.41	400.4571
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	272.16	27.22	81.65	0.00	478.33	14.4000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	11,589.44	1,158.94	5,887.37	2,895.43	26,066.08	386.0571
11 Levees, Floodwalls and Floodproofing	778,391.92	77,839.19	346,753.88	140,542.60	1,574,892.37	29,096.9753
1101 Tie-Back Levee	778,391.92	77,839.19	346,753.88	140,542.60	1,574,892.37	29,096.9753
110101 Temporary Erosion and Sedimentation Control	68,155.91	6,815.59	17,488.60	0.00	111,495.87	2,434.9762
(Note: Historical projects referenced; 3% of construction cost)						
MIL B-LABORER Laborers, (Semi-Skilled)	61,014.86	6,101.49	15,346.29	0.00	99,673.02	2,057.1429
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	7,141.05	714.11	2,142.32	0.00	11,822.86	377.8333

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
110102 Strip and Stockpile Topsoil - Channel	37,268.80	3,726.88	17,674.40	7,800.00	77,268.10	1,360.0000
(Note:)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	6,048.00	604.80	1,814.40	0.00	10,041.51	320.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	31,220.80	3,122.08	15,860.00	7,800.00	67,226.59	1,040.0000
110103 Excavation and Embankment - Tie-Back Levee	576,767.64	57,676.76	267,030.68	112,908.86	1,188,463.96	21,659.3351
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	124,831.10	12,483.11	37,449.33	0.00	211,018.59	6,604.8200
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	451,936.54	45,193.65	229,581.36	112,908.86	977,445.37	15,054.5151
110104 Topsoil Placement	44,573.97	4,457.40	21,392.60	9,633.74	93,161.28	1,602.6640
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	6,013.34	601.33	1,804.00	0.00	10,018.11	318.1660
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	38,560.63	3,856.06	19,588.59	9,633.74	83,143.17	1,284.4980
110105 Site Restoration	51,625.60	5,162.56	23,167.60	10,200.00	104,503.16	2,040.0000
(Note: The area of site restoration was determined calculating the disturbed area from the drawings. See Consultant Appendix F-Drawings for specific areas.)						
USR Laborer - MN Clay County Davis Bacon (Note: Clay County MN - Davis Bacon Wage Rate)	12,852.00	1,285.20	3,855.60	0.00	21,278.02	680.0000
USR Operator - Medium (Note: Hennepin County MN - Davis Bacon Wage Rate)	20,413.60	2,041.36	10,370.00	5,100.00	43,779.36	680.0000
USR Truck Driver - Articulated Truck (Note: Hennepin County MN - Davis Bacon Wage Rate)	18,360.00	1,836.00	8,942.00	5,100.00	39,445.78	680.0000
14 Recreation Facilities	524,730.60	52,473.06	169,190.06	56,190.36	1,011,842.81	16,712.3883
Multi-Purpose Trails	303,254.50	30,325.45	94,861.18	31,493.53	581,131.17	9,676.4259
Compacted 12-inch Subgrade	54,145.34	5,414.53	18,698.64	8,407.66	108,810.93	1,681.5323
(Note: 10-foot wide trail + 3-foot shoulders each side = 16-feet. 16 ft x 5280 ft/mile x 1 ft = 84480 CF = 3,130 CY/mile)						
MIL B-EQOPRMEQ Equip. Operators, Medium (Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)	37,520.59	3,752.06	14,517.23	8,407.66	79,739.13	1,121.0215

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
MIL B-LABORER Laborers, (Semi-Skilled)	16,624.75	1,662.47	4,181.41	0.00	29,071.79	560.5108
Class 5 Aggregate	45,745.70	4,574.57	16,387.24	8,448.48	93,329.52	1,408.0800
(Note: 6 inch depth. 10-foot wide trail x 5280 ft/mile = 52800 SF/mile = 5867 SY/mile)						
MIL B-EQOPRMED Equip. Operators, Medium	28,277.06	2,827.71	10,940.78	6,336.36	59,715.10	844.8480
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	8,634.35	863.43	2,100.86	0.00	14,891.78	281.6160
MIL B-TRKDVRHV Truck Drivers, Heavy	8,834.29	883.43	3,345.60	2,112.12	18,722.64	281.6160
10-foot Wide Bituminous Trail	197,772.24	19,777.22	58,247.91	14,309.38	368,826.27	6,403.9470
(Note: 6-inch depth pavement)						
MIL B-EQOPRMED Equip. Operators, Medium	63,858.01	6,385.80	24,707.54	14,309.38	135,380.68	1,907.9179
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	116,683.19	11,668.32	29,347.83	0.00	203,566.29	3,934.0254
MIL B-LABORER Laborers, (Semi-Skilled)	17,231.03	1,723.10	4,192.55	0.00	29,879.29	562.0036
Turf Shoulders	0.00	0.00	0.00	0.00	0.00	0.0000
(Note: 3+3 = 6 feet total width.)						
Topsoil for Turf Shoulders	0.00	0.00	0.00	0.00	0.00	0.0000
MIL B-EQOPRMED Equip. Operators, Medium	0.00	0.00	0.00	0.00	0.00	0.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	0.00	0.00	0.00	0.00	0.00	0.0000
Seeding for Turf Shoulders	0.00	0.00	0.00	0.00	0.00	0.0000
(Note: Add 15% to Qty to account for areas disturbed outside Trail footprint)						
MIL B-EQOPRLT Equip. Operators, Light	0.00	0.00	0.00	0.00	0.00	0.0000
MIL B-LABORER Laborers, (Semi-Skilled)	0.00	0.00	0.00	0.00	0.00	0.0000
MIL B-TRKDVRLT Truck Drivers, Light	0.00	0.00	0.00	0.00	0.00	0.0000
Park Benches	1,585.96	158.60	493.42	256.00	3,112.77	49.0667
Concrete Pad for Bench	1,585.96	158.60	493.42	256.00	3,112.77	49.0667
MIL B-CARPNTER Carpenters	415.87	41.59	131.33	96.00	847.28	12.8000
MIL B-CEMFINR Cement Finishers	443.90	44.39	142.46	96.00	899.69	12.8000
MIL B-EQOPRMED Equip. Operators, Medium	214.21	21.42	82.88	48.00	452.36	6.4000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
MIL B-LABORER Laborers, (Semi-Skilled)	65.41	6.54	15.91	0.00	112.81	2.1333
MIL B-LABORER Laborers, (Semi-Skilled)	379.65	37.96	95.49	0.00	658.80	12.8000
MIL B-TRKDVRHV Truck Drivers, Heavy	66.92	6.69	25.34	16.00	141.83	2.1333
Trash Receptacles	446.05	44.61	138.77	72.00	875.47	13.8000
Concrete Pad for Trash Cans	446.05	44.61	138.77	72.00	875.47	13.8000
MIL B-CARPENTER Carpenters	116.96	11.70	36.94	27.00	238.30	3.6000
MIL B-CEMFINR Cement Finishers	124.85	12.48	40.07	27.00	253.04	3.6000
MIL B-EQOPRMED Equip. Operators, Medium	60.25	6.02	23.31	13.50	127.23	1.8000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	18.40	1.84	4.48	0.00	31.73	0.6000
MIL B-LABORER Laborers, (Semi-Skilled)	106.78	10.68	26.86	0.00	185.29	3.6000
MIL B-TRKDVRHV Truck Drivers, Heavy	18.82	1.88	7.13	4.50	39.89	0.6000
Trail Signage	3,559.20	355.92	895.20	0.00	6,176.21	120.0000
(Note: Assume about 4 info signs per mile)						
MIL B-LABORER Laborers, (Semi-Skilled)	3,559.20	355.92	895.20	0.00	6,176.21	120.0000
Soft Trails	115,532.69	11,553.27	40,437.24	18,529.41	232,264.48	3,580.1980
Compacted 12-inch Subgrade	32,487.20	3,248.72	11,219.18	5,044.60	65,286.56	1,008.9194
(Note: 10-foot wide trail + 3-foot shoulders each side = 16-feet. 16 ft x 5280 ft/mile x 1 ft = 84480 CF = 3,130 CY/mile)						
MIL B-EQOPRMED Equip. Operators, Medium	22,512.35	2,251.24	8,710.34	5,044.60	47,843.48	672.6129
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	9,974.85	997.48	2,508.85	0.00	17,443.08	336.3065
Class 5 Aggregate	27,447.42	2,744.74	9,832.34	5,069.09	55,997.71	844.8480
(Note: 6 inch depth. 10-foot wide trail x 5280 ft/mile = 52800 SF/mile = 5867 SY/mile)						
MIL B-EQOPRMED Equip. Operators, Medium	16,966.24	1,696.62	6,564.47	3,801.82	35,829.06	506.9088
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	5,180.61	518.06	1,260.51	0.00	8,935.07	168.9696
MIL B-TRKDVRHV Truck Drivers, Heavy	5,300.58	530.06	2,007.36	1,267.27	11,233.58	168.9696
10-foot Wide Aggregate Trail	26,909.24	2,690.92	9,639.55	4,969.69	54,899.72	828.2824
(Note: 4 inch depth. 10-foot wide trail x 5280 ft/mile = 52800 SF/mile = 5867 SY/mile)						
MIL B-EQOPRMED Equip. Operators, Medium	16,633.57	1,663.36	6,435.75	3,727.27	35,126.53	496.9694

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	5,079.03	507.90	1,235.80	0.00	8,759.87	165.6565
MIL B-TRKDVRHV Truck Drivers, Heavy	5,196.64	519.66	1,968.00	1,242.42	11,013.32	165.6565
Turf Shoulders	25,334.10	2,533.41	8,829.73	3,249.23	49,981.82	788.4283
(Note: 3+3 = 6 feet total width.)						
Topsoil for Turf Shoulders	20,925.05	2,092.50	7,226.29	3,249.23	41,770.25	649.8462
MIL B-EQOPRMED Equip. Operators, Medium	14,500.23	1,450.02	5,610.34	3,249.23	30,621.39	433.2308
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	6,424.81	642.48	1,615.95	0.00	11,148.86	216.6154
Seeding for Turf Shoulders	4,409.05	440.91	1,603.44	0.00	8,211.57	138.5821
(Note: Add 15% to Qty to account for areas disturbed outside Trail footprint)						
MIL B-EQOPRLT Equip. Operators, Light	2,653.61	265.36	1,039.77	0.00	5,025.31	80.2909
MIL B-LABORER Laborers, (Semi-Skilled)	864.46	86.45	217.43	0.00	1,500.08	29.1456
MIL B-TRKDVRLT Truck Drivers, Light	890.98	89.10	346.25	0.00	1,686.18	29.1456
Park Benches	951.58	95.16	296.05	153.60	1,867.66	29.4400
Concrete Pad for Bench	951.58	95.16	296.05	153.60	1,867.66	29.4400
MIL B-CARPNTER Carpenters	249.52	24.95	78.80	57.60	508.37	7.6800
MIL B-CEMFINR Cement Finishers	266.34	26.63	85.48	57.60	539.82	7.6800
MIL B-EQOPRMED Equip. Operators, Medium	128.52	12.85	49.73	28.80	271.42	3.8400
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	39.24	3.92	9.55	0.00	67.69	1.2800
MIL B-LABORER Laborers, (Semi-Skilled)	227.79	22.78	57.29	0.00	395.28	7.6800
MIL B-TRKDVRHV Truck Drivers, Heavy	40.15	4.02	15.21	9.60	85.10	1.2800
Trash Receptacles	267.63	26.76	83.26	43.20	525.28	8.2800
Concrete Pad for Trash Cans	267.63	26.76	83.26	43.20	525.28	8.2800
MIL B-CARPNTER Carpenters	70.18	7.02	22.16	16.20	142.98	2.1600
MIL B-CEMFINR Cement Finishers	74.91	7.49	24.04	16.20	151.82	2.1600
MIL B-EQOPRMED Equip. Operators, Medium	36.15	3.61	13.99	8.10	76.34	1.0800
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	11.04	1.10	2.69	0.00	19.04	0.3600

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
MIL B-LABORER Laborers, (Semi-Skilled)	64.07	6.41	16.11	0.00	111.17	2.1600
MIL B-TRKDVRHV Truck Drivers, Heavy	11.29	1.13	4.28	2.70	23.93	0.3600
Trail Signage	2,135.52	213.55	537.12	0.00	3,705.73	72.0000
(Note: Assume about 4 info signs per mile)						
MIL B-LABORER Laborers, (Semi-Skilled)	2,135.52	213.55	537.12	0.00	3,705.73	72.0000
Traihead Facilities	21,044.85	2,104.48	7,076.30	1,403.74	40,074.63	693.2986
Picnic Tables	1,291.78	129.18	398.11	153.60	2,465.57	47.4400
Tables	340.20	34.02	102.06	0.00	597.91	18.0000
USR Laborer - MN Clay County Davis Bacon	340.20	34.02	102.06	0.00	597.91	18.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
Concrete Pad for Tables	951.58	95.16	296.05	153.60	1,867.66	29.4400
MIL B-CARPENTER Carpenters	249.52	24.95	78.80	57.60	508.37	7.6800
MIL B-CEMFINR Cement Finishers	266.34	26.63	85.48	57.60	539.82	7.6800
MIL B-EQOPRMED Equip. Operators, Medium	128.52	12.85	49.73	28.80	271.42	3.8400
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	39.24	3.92	9.55	0.00	67.69	1.2800
MIL B-LABORER Laborers, (Semi-Skilled)	227.79	22.78	57.29	0.00	395.28	7.6800
MIL B-TRKDVRHV Truck Drivers, Heavy	40.15	4.02	15.21	9.60	85.10	1.2800
Park Benches	317.19	31.72	98.68	51.20	622.55	9.8133
Concrete Pad for Bench	317.19	31.72	98.68	51.20	622.55	9.8133
MIL B-CARPENTER Carpenters	83.17	8.32	26.27	19.20	169.46	2.5600
MIL B-CEMFINR Cement Finishers	88.78	8.88	28.49	19.20	179.94	2.5600
MIL B-EQOPRMED Equip. Operators, Medium	42.84	4.28	16.58	9.60	90.47	1.2800
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	13.08	1.31	3.18	0.00	22.56	0.4267
MIL B-LABORER Laborers, (Semi-Skilled)	75.93	7.59	19.10	0.00	131.76	2.5600
MIL B-TRKDVRHV Truck Drivers, Heavy	13.38	1.34	5.07	3.20	28.37	0.4267
Restroom Facility	12,894.65	1,289.46	4,639.25	487.94	24,622.57	417.9386
MIL B-CARPENTER Carpenters	1,696.03	169.60	535.59	391.51	3,574.69	52.2017
MIL B-ELECTRN Electricians	40.29	4.03	14.62	0.00	74.82	1.0909

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
MIL B-EQOPRCRN Equip. Operators, Heavy	2,841.00	284.10	1,083.36	0.00	5,347.02	83.6571
MIL B-EQOPROIL Equip. Operators, Oilers / Grade Checker	210.45	21.04	88.80	51.43	457.77	6.8571
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	210.24	21.02	51.15	0.00	362.60	6.8571
MIL B-LABORER Laborers, (Semi-Skilled)	3,091.42	309.14	777.55	0.00	5,377.02	104.2286
MIL B-PLUMBER Plumbers	1,724.15	172.41	665.40	0.00	3,288.44	40.3027
MIL B-PLUMBER Plumbers	764.68	76.47	483.79	0.00	1,678.96	29.3027
MIL B-SHTMTLWK Sheet Metal Workers	47.06	4.71	38.47	0.00	113.00	2.1818
MIL B-SHTMTLWK Sheet Metal Workers	74.71	7.47	38.47	0.00	152.01	2.1818
MIL B-TERRAZZO Tile Mozaic/Terrazzo Workers	941.39	94.14	317.24	0.00	1,724.24	29.5385
MIL B-TERRAZZO Tile Mozaic/Terrazzo Workers	621.32	62.13	317.24	0.00	1,272.53	29.5385
USR Laborer - MN Clay County Davis Bacon	453.60	45.36	136.08	0.00	797.21	24.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
USR Operator - Light	178.32	17.83	91.50	45.00	402.26	6.0000
(Note: Hennepin County MN - Davis Bacon Wage Rate)						
Drinking Fountains	256.68	25.67	99.06	0.00	482.58	6.0000
MIL B-PLUMBER Plumbers	256.68	25.67	99.06	0.00	482.58	6.0000
Picnic Grills	680.40	68.04	204.12	0.00	1,195.82	36.0000
USR Laborer - MN Clay County Davis Bacon	680.40	68.04	204.12	0.00	1,195.82	36.0000
(Note: Clay County MN - Davis Bacon Wage Rate)						
Bike Racks	1,079.76	107.98	268.56	0.00	1,869.80	36.0000
MIL B-LABORER Laborers, (Semi-Skilled)	711.84	71.18	179.04	0.00	1,235.24	24.0000
MIL B-LABORER Laborers, (Semi-Skilled)	367.92	36.79	89.52	0.00	634.56	12.0000
Trash Receptacles	267.63	26.76	83.26	43.20	525.28	8.2800
Concrete Pad for Trash Cans	267.63	26.76	83.26	43.20	525.28	8.2800
MIL B-CARPENTER Carpenters	70.18	7.02	22.16	16.20	142.98	2.1600
MIL B-CEMFINR Cement Finishers	74.91	7.49	24.04	16.20	151.82	2.1600
MIL B-EQOPRMED Equip. Operators, Medium	36.15	3.61	13.99	8.10	76.34	1.0800
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	11.04	1.10	2.69	0.00	19.04	0.3600

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
MIL B-LABORER Laborers, (Semi-Skilled)	64.07	6.41	16.11	0.00	111.17	2.1600
MIL B-TRKDVRHV Truck Drivers, Heavy	11.29	1.13	4.28	2.70	23.93	0.3600
Recycling Trash Receptacles	89.21	8.92	27.75	14.40	175.09	2.7600
Concrete Pad for Trash Cans	89.21	8.92	27.75	14.40	175.09	2.7600
MIL B-CARPENTER Carpenters	23.39	2.34	7.39	5.40	47.66	0.7200
MIL B-CEMFINR Cement Finishers	24.97	2.50	8.01	5.40	50.61	0.7200
MIL B-EQOPRMED Equip. Operators, Medium	12.05	1.20	4.66	2.70	25.45	0.3600
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	3.68	0.37	0.90	0.00	6.35	0.1200
MIL B-LABORER Laborers, (Semi-Skilled)	21.36	2.14	5.37	0.00	37.06	0.7200
MIL B-TRKDVRHV Truck Drivers, Heavy	3.76	0.38	1.43	0.90	7.98	0.1200
Information Kiosks	4,167.55	416.75	1,257.50	653.40	8,115.36	129.0667
MIL B-CARPENTER Carpenters	1,310.43	131.04	413.82	302.50	2,669.82	40.3333
MIL B-CEMFINR Cement Finishers	1,398.76	139.88	448.91	302.50	2,834.98	40.3333
MIL B-EQOPRMED Equip. Operators, Medium	161.99	16.20	62.68	36.30	342.10	4.8400
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	1,196.29	119.63	300.89	0.00	2,075.89	40.3333
MIL B-LABORER Laborers, (Semi-Skilled)	49.46	4.95	12.04	0.00	85.31	1.6133
MIL B-TRKDVRHV Truck Drivers, Heavy	50.61	5.06	19.17	12.10	107.26	1.6133
Parking Lots	83,198.82	8,319.88	26,270.19	4,763.68	155,289.69	2,707.6086
Car Parking Areas	36,205.16	3,620.52	11,231.61	1,454.30	66,727.92	1,187.2049
(Note: Aggregate surface Car Parking Areas at 1600 SY each)						
Compacted 12-inch Subgrade	922.60	92.26	318.61	143.26	1,854.07	28.6523
(Note: 1600 SY at 12 inches = compacted 533.33 CY per parking lot)						
MIL B-EQOPRMED Equip. Operators, Medium	639.33	63.93	247.36	143.26	1,358.71	19.1015
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	283.28	28.33	71.25	0.00	495.37	9.5508
Aggregate Sub-Base	1,455.88	145.59	521.53	268.88	2,970.26	44.8128
(Note: 1600 SY at 7 inches for each parking lot)						
MIL B-EQOPRMED Equip. Operators, Medium	899.93	89.99	348.20	201.66	1,900.46	26.8877

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	274.79	27.48	66.86	0.00	473.94	8.9626
MIL B-TRKDVRHV Truck Drivers, Heavy	281.16	28.12	106.48	67.22	595.86	8.9626
Aggregate Base	1,223.08	122.31	438.14	225.88	2,495.30	37.6471
(Note: 1600 SY at 4 inch depth for each parking lot.)						
MIL B-EQOPRMED Equip. Operators, Medium	756.03	75.60	292.52	169.41	1,596.57	22.5882
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	230.85	23.09	56.17	0.00	398.15	7.5294
MIL B-TRKDVRHV Truck Drivers, Heavy	236.20	23.62	89.45	56.47	500.58	7.5294
Aggregate Surface Course	1,223.08	122.31	438.14	225.88	2,495.30	37.6471
MIL B-EQOPRMED Equip. Operators, Medium	756.03	75.60	292.52	169.41	1,596.57	22.5882
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	230.85	23.09	56.17	0.00	398.15	7.5294
MIL B-TRKDVRHV Truck Drivers, Heavy	236.20	23.62	89.45	56.47	500.58	7.5294
Barrier Posts	26,967.00	2,696.70	8,040.00	0.00	48,237.22	900.0000
(Note: for 1600 SY parking lot assume about 100 posts for each lot)						
MIL B-LABORER Laborers, (Semi-Skilled)	17,796.00	1,779.60	4,476.00	0.00	30,881.07	600.0000
MIL B-TRKDVRLT Truck Drivers, Light	9,171.00	917.10	3,564.00	0.00	17,356.15	300.0000
Signs	614.87	61.49	166.41	0.00	1,086.42	20.4857
MIL B-EQOPRLT Equip. Operators, Light	45.33	4.53	17.76	0.00	85.84	1.3714
MIL B-LABORER Laborers, (Semi-Skilled)	485.58	48.56	122.13	0.00	848.72	16.3714
MIL B-LABORER Laborers, (Semi-Skilled)	42.05	4.20	10.23	0.00	72.52	1.3714
MIL B-TRKDVRLT Truck Drivers, Light	41.92	4.19	16.29	0.00	79.34	1.3714
Site Work	3,709.44	370.94	1,281.02	576.00	7,414.25	115.2000
MIL B-EQOPRMED Equip. Operators, Medium	2,570.50	257.05	994.56	576.00	5,434.94	76.8000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	1,138.94	113.89	286.46	0.00	1,979.31	38.4000
Trash Receptacles	89.21	8.92	27.75	14.40	175.09	2.7600
Concrete Pad for Trash Cans	89.21	8.92	27.75	14.40	175.09	2.7600
MIL B-CARPENTER Carpenters	23.39	2.34	7.39	5.40	47.66	0.7200

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
MIL B-CEMFINR Cement Finishers	24.97	2.50	8.01	5.40	50.61	0.7200
MIL B-EQOPRMED Equip. Operators, Medium	12.05	1.20	4.66	2.70	25.45	0.3600
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	3.68	0.37	0.90	0.00	6.35	0.1200
MIL B-LABORER Laborers, (Semi-Skilled)	21.36	2.14	5.37	0.00	37.06	0.7200
MIL B-TRKDVRHV Truck Drivers, Heavy	3.76	0.38	1.43	0.90	7.98	0.1200
Car/Trailer Parking Areas	46,993.65	4,699.37	15,038.58	3,309.38	88,561.77	1,520.4037
(Note: Aggregate surface Car Parking Areas at 5500 SY each)						
Compacted 12-inch Subgrade	2,114.30	211.43	730.16	328.31	4,248.92	65.6615
(Note: 5500 SY at 12 inches = compacted 1833.33 CY per parking lot)						
MIL B-EQOPRMED Equip. Operators, Medium	1,465.13	146.51	566.88	328.31	3,113.70	43.7744
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	649.17	64.92	163.28	0.00	1,135.21	21.8872
Aggregate Sub-Base	3,336.39	333.64	1,195.18	616.18	6,806.84	102.6960
(Note: 5500 SY at 7 inches for each parking lot)						
MIL B-EQOPRMED Equip. Operators, Medium	2,062.34	206.23	797.95	462.13	4,355.22	61.6176
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	629.73	62.97	153.22	0.00	1,086.11	20.5392
MIL B-TRKDVRHV Truck Drivers, Heavy	644.31	64.43	244.01	154.04	1,365.51	20.5392
Aggregate Base	2,802.89	280.29	1,004.06	517.65	5,718.40	86.2745
(Note: 5500 SY at 4 inch depth for each parking lot.)						
MIL B-EQOPRMED Equip. Operators, Medium	1,732.56	173.26	670.35	388.24	3,658.81	51.7647
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	529.04	52.90	128.72	0.00	912.43	17.2549
MIL B-TRKDVRHV Truck Drivers, Heavy	541.29	54.13	204.99	129.41	1,147.16	17.2549
Aggregate Surface Course	2,802.89	280.29	1,004.06	517.65	5,718.40	86.2745
MIL B-EQOPRMED Equip. Operators, Medium	1,732.56	173.26	670.35	388.24	3,658.81	51.7647
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	529.04	52.90	128.72	0.00	912.43	17.2549
MIL B-TRKDVRHV Truck Drivers, Heavy	541.29	54.13	204.99	129.41	1,147.16	17.2549

Description	BaseWage	Overtime	TaxableFringe	Subsistence	Total	ManHours
Barrier Posts	26,967.00	2,696.70	8,040.00	0.00	48,237.22	900.0000
(Note: for 5500 SY parking lot assume about 150 posts for each lot)						
MIL B-LABORER Laborers, (Semi-Skilled)	17,796.00	1,779.60	4,476.00	0.00	30,881.07	600.0000
MIL B-TRKDVRLT Truck Drivers, Light	9,171.00	917.10	3,564.00	0.00	17,356.15	300.0000
Signs	409.92	40.99	110.94	0.00	724.28	13.6571
MIL B-EQOPRLT Equip. Operators, Light	30.22	3.02	11.84	0.00	57.22	0.9143
MIL B-LABORER Laborers, (Semi-Skilled)	323.72	32.37	81.42	0.00	565.82	10.9143
MIL B-LABORER Laborers, (Semi-Skilled)	28.03	2.80	6.82	0.00	48.35	0.9143
MIL B-TRKDVRLT Truck Drivers, Light	27.95	2.79	10.86	0.00	52.89	0.9143
Site Work	8,500.80	850.08	2,935.68	1,320.00	16,991.00	264.0000
(Note: Assume about same yardage as Compacted Subgrade)						
MIL B-EQOPRMD Equip. Operators, Medium	5,890.72	589.07	2,279.20	1,320.00	12,455.07	176.0000
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	2,610.08	261.01	656.48	0.00	4,535.93	88.0000
Trash Receptacles	59.47	5.95	18.50	9.60	116.73	1.8400
Concrete Pad for Trash Cans						
MIL B-CARPNTER Carpenters	15.60	1.56	4.92	3.60	31.77	0.4800
MIL B-CEMTFINR Cement Finishers	16.65	1.66	5.34	3.60	33.74	0.4800
MIL B-EQOPRMD Equip. Operators, Medium	8.03	0.80	3.11	1.80	16.96	0.2400
(Note: BARR - Added \$7.50/hr for each laborer to include per diem rate)						
MIL B-LABORER Laborers, (Semi-Skilled)	2.45	0.25	0.60	0.00	4.23	0.0800
MIL B-LABORER Laborers, (Semi-Skilled)	14.24	1.42	3.58	0.00	24.70	0.4800
MIL B-TRKDVRLT Truck Drivers, Heavy	2.51	0.25	0.95	0.60	5.32	0.0800
Interpretive Signage	1,699.75	169.97	545.14	0.00	3,082.84	54.8571
MIL B-EQOPRLT Equip. Operators, Light	453.26	45.33	177.60	0.00	858.36	13.7143
MIL B-LABORER Laborers, (Semi-Skilled)	406.77	40.68	102.31	0.00	705.85	13.7143
MIL B-LABORER Laborers, (Semi-Skilled)	420.48	42.05	102.31	0.00	725.21	13.7143
MIL B-TRKDVRLT Truck Drivers, Light	419.25	41.92	162.93	0.00	793.42	13.7143

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