EXHIBIT A

Oxbow Construction
A dba of Iron Horse Excavation, LLC
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DBE/WBE #7618

CMGC Downtown Old Town Main Taylor
Project #E10999 / Oxbow Project 363
Dec 8th, 2021

GMP Submittal

100% COMPLETE REV #3

SUMMARY STATEMENT

Please find below and attached our Guaranteed Maximum Price (GPM) Proposal submitted for the Downtown Old Town Main Taylor Sewer Rehabilitation Project for your review and consideration. The below discussion summarizes the assumptions and criteria used to evaluate and determine the price proposed for the work.

Note, this estimate is based on updated BOLI wages from the January 2021 handbook as updated by the State of Oregon for Multnomah County.

The following are the identified major changes implemented in the final design plans. The current plans are 100% complete and going through signing process as of this submittal.

MODIFIED COSTS/ COST CHANGES:

- The addition of 10 feet of 15-inch PVC sewer pipe and a connection to a new structure on sheet C17.
- Pavement restoration was modified to reflect anticipated pavement restoration costs per PBOT requirements, the information developed from the on-site Oxbow, PBOT, and BES inspection of existing conditions and based on actual subcontractor pricing for work.
- Following review of traffic control plans and requirements, the flagger quantities were reduced to reflect the estimated/expected flagger costs.

- The PCMS board budget was reduced to reflect a purchase method for supplying two (2) each PCMS boards rather than a rental method for supplying message boards.

- Existing Rails to be removed were added to the design layers and resulting in cost additions of approximately $77,000.

- Added lateral diversion work and monitoring based on information received from other BES projects in the downtown area. The amount included in the final estimate should considerably reduce any contingency amount for diversion issues. An exception to this would be a catastrophic break/breach in diversion within a building.

- All maintenance holes were amended based on revised depths and known utility conflicts and renamed per the 100% design drawings. NOTE, following review of costs and historical information, the maintenance hole cost presented were adjusted manually and therefore the cost presented in the proposal is less than that shown in the detailed cost report.

- NIGHT WORK HOUR SCHEDULE - According to the recently received specification from the Portland Bureau of Transportation, the project will largely be completed during nighttime hours. This restriction presents numerous challenges in completing the work including the following:

    1. Loss of efficiency due to worker fatigue
    2. Gain in efficiency from reduced pedestrian and traffic congestion
    3. Added light plant and nighttime work equipment costs
    4. Pit opening costs (aggregate supply)
    5. Disposal site opening cost
    6. Rental staging area for rock and spoils handling in lieu of direct pit disposal.
    7. Concrete Batch Plant opening costs.
    8. AC batch plant opening costs.
    9. Noise ordinance/mitigation costs.
    10. Security services, if required, will be provided by BES so this is not considered in the impact cost.

  Following a review of the traffic control requirements, Oxbow determined the estimated cost of these items as noted in the estimate line items numbered 167130 and noted below:

167130	Night Work Impacts	3.0	Month	$ 39,799.46 / MO	$119,398.38

It shall be noted the nightwork estimate is conservative due to two (2) factors. First, the cost impact to night work is extremely costly and second, the specifications are clear in indicating work may be required at night. Our anticipation and goal will be to minimize this amount to a great extent.

- RESTRICTED WORK HOURS (9-3, 9-6, 7-3)
  As noted above, the current PBOT specification indicates most work will take place during night hours. In light of this requirement, the project team met with PBOT to determine what locations would be limited by restricted hours and or night work.

  In the review meeting, work areas were defined as being restricted to the either 9-3, 7-3, or 9-7 work shifts. Based on the actual work required for each area identified and the approximate schedules, Oxbow developed an average daily cost impact for each work shift based on typical crew and arrived at the following estimated cost impact related to restricted work schedules.

167140	Restricted Work Hrs - 9AM to 3PM	19	Days	$ 1,232.25	$ 23,412.73
167150	Restricted Work Hrs - 11PM to 5AM	7	Days	$ 5,105.02	$ 35,735.14
167160	Restricted Work Hrs – 9AM to 6PM	26	Days	$ 616.12	$ 16,019.12

  The costs associated with the work hour restrictions are currently included in the overall cost estimate for the work based on the completed design.

  The overall schedule night work impacts/constraints are incorporated into the project and result in an addition of $195,000, approximately.

Conceptual Estimate Development

As the initial step in the GMP development process, a conceptual estimate was developed using the 100% complete design. Based on the original quantity surveys, Oxbow reviewed and increased and or decreased task quantities to provide a true evaluation of the amount of work required by the Contract. The criteria used for determining quantities and amounts of work is the actual work required to complete the work as opposed to City of Portland specified payment quantities. In addition to measured quantities, Oxbow utilized historical perspective to determine some quantities that could not be determined from simple plan evaluation.

Following the determination of the revised work scopes and or quantities, an estimated cost for all aspects of the work was produced using the normal information, data, current material costs, subcontractor costs, current BOLI wages with current tax rates, and equipment rates. The estimate structure is based on the City of Portland standard bid items and the bid schedule provided in the BES-developed Engineer's Estimate.

Pursuant to the Contract documents, the following items comprise the entire GMP amount.

A. CMGC Fee as defined in 120.18(c)
B. CMGC's Direct Reimbursable Costs and Indirect Reimbursable Costs as defined in 00120.18(d)
C. Contingency amounts if allowed per 00120.18(f)

The sum of all items above shall constitute the Guaranteed Maximum Price proposal amount. The development and amount of the items listed above are detailed below for review. All detailed information used to develop these amounts presented in this proposal are included as attachments.

CMGC'S REIMBURSABLE COSTS

a. DIRECT REIMBURSABLE COSTS

In general, the Reimbursable Costs include all direct costs required to physically construct the work including all materials, labor, equipment, subcontractors, services, permits, fees, and other direct costs. Please note for this proposal, no costs identified under item d and e in Section 00120.18(d) have been included in the reimbursable amounts shown. Note further, per the 90% GMP review notes received, the Owner indicated the costs identified as fringe benefits and burden are not to be included in the direct reimbursable costs. Per the Contract documents and specifically section 00120(18)d(1)b, burden, taxes, insurance, and other benefits paid to labor personnel on the project are to be included in the direct reimbursable costs and therefore those costs remain in the direct cost report.

Please also note on the cost report provided in the appendix, a column identified as "tax/ot%" is used solely for the calculation of overtime. If the work estimated is based on anything greater than an 8-hour day or over 40-hours per week, this column will indicate a factor that is applied to provide a weighted hourly cost for both the standard time and overtime rates used to calculate the actual labor costs.

b. GENERAL CONDITIONS / INDIRECT REIMBURSIBLE COSTS

The general conditions portion of the GMP is limited to construction supervisory staff including project manager, project superintendent and project engineer. Oxbow will be subcontracting out some supervisory tasks to consultants. These will include a project safety officer and a consulting engineer. The consulting engineer will assist in diversion design, lining evaluation, and overall quality control for the project.

The budget amount for temporary facilities is also included and is made up primarily of field office costs. To help reduce the overall budget, Oxbow will utilize one of its current rental spaces in the downtown area for the temporary office. This will help reduce office rent and parking costs for the project. The below items summarize the costs presented in in appendix B of this submittal.

Per Appendix A and B – Cost Estimate of this summary document, the reimbursable amount submitted for consideration is as follows:

1. Labor wages and Fringe Benefits	$ 2,407,304
2. Equipment Costs	$ 1,214,134
3. Materials Costs	$ 828,334
4. Subcontractor Costs	$ 1,577,799
5. Haul/Fees/Consumable	$ 627,615
TOTAL Reimbursable Costs:	$ 6,655,186

*Note – cost includes manual adjustments to maintenance hole unit costs which are not reflected in the printed cost detail report. This results in a lower cost than for the GMP than that represents in the GMP cost estimate. Oxbow acknowledges this difference.

CMGC Fee

Per the original GMP Proposal submission, Oxbow has set its CMGC GMP Fee at eleven and one half percent (11 ½%). In accordance with the Contract and specifically the conditions established in Section 00120.18, the CMGC fee is applied to all costs identified as reimbursable costs and general conditions. The CMGC Fee is calculated as shown below:

Reimbursable Costs identified in 00120.18 (c)	$ 6,655,186
SUBTOTAL ALL REIMBURSABLE COSTS:	$ 6,655,186
CMGC FEE at 11.5%	$ 765,346
TOTAL GMP AMOUNT EXCLUDING CONTINGENCIES:	**$ 7,420,532**

Contingency Amounts

Based on our estimating process and experience, an actual competitively estimated "cost", exclusive of overhead and profit, of the work is established at $ 6,655,186. This is based on direct costs only and does not include any contingencies and or markup and overhead. It also does not include any contractor paid overhead items such as taxes, licenses, fees, general liability insurances, etc.

Per the Contract, the General Contractor may propose contingencies, either contractor-owned, owner-owned, or jointly owned contingencies. These amounts are to be used when approved to cover the costs incurred by un-anticipated events that may arise during the life of the contract.

The ultimate purpose of the contingencies is to provide a budgetary safety net. This bucket of funds is not included in the construction budget and therefore does not get paid out as part of the contract if no contingent events occur. The contingency process prevents the Owner from being at risk if events do occur that are excluded in the GMP proposal but it also prevent the Owner from paying for possible events that never occur. These safety nets are to be used for events that are not caused by the negligent actions of the CMGC Contractor.

To determine appropriate contingency amounts, some form of analysis must be performed to assess actual risks and or risk probability. For this contract, the project team has elected to use two different means of assessing risk. These are (1) a statistical analysis utilizing estimated costs and quantities, and (2) a risk analysis using a risk identification and valuation process.

STATISTICAL ANALYSIS

Using the complete 100% design, the cost estimate was evaluated using a statistical analysis to arrive at a final cost estimate that most likely would occur. Per our written CMGC proposal, Oxbow selected a Monte Carlo statistical analysis procedure to evaluate the project costs.

In the normal CGMC process, a statistical factor is applied to the estimated base cost to arrive at the final GMP cost amount. The additional amount added to the base cost is intended to provide compensation for any variations in costs that normally occur in the construction industry and to provide budget for any design clarifications or changes and actual conditions encountered in the field. The statistical analysis is performed to provide the project with a means for incorporating those variations into the project prior to finalization of the work. The mitigates upward budgetary adjustments that could detrimentally impact the project.

To effectively analyze the project's costs, each cost (bid) item is evaluated separately based on the two criteria available, the (1) quantity and (2) the unit cost. With these two primary variables available, both must be evaluated.

1. Quantity Criteria

The quantity of work for most bid items should be definable and as such should not vary by a substantial amount. Several of the more variable work scopes have been further defined during the early investigation work including a significant amount of the surface restoration work, lateral rehabilitation, and traffic control. The project remains to have a significant amount of definable work scopes that will not vary during the construction process.

In the Monte Carlo analysis, each bid item received a lower and upper quantity based on experience and current design completeness. Based on those ranges of quantities, the work scopes were statistically analyzed to determine the most probable quantity of work that will be required during the project. These quantities combined with the cost analysis are used to develop the most probable final cost of the project.

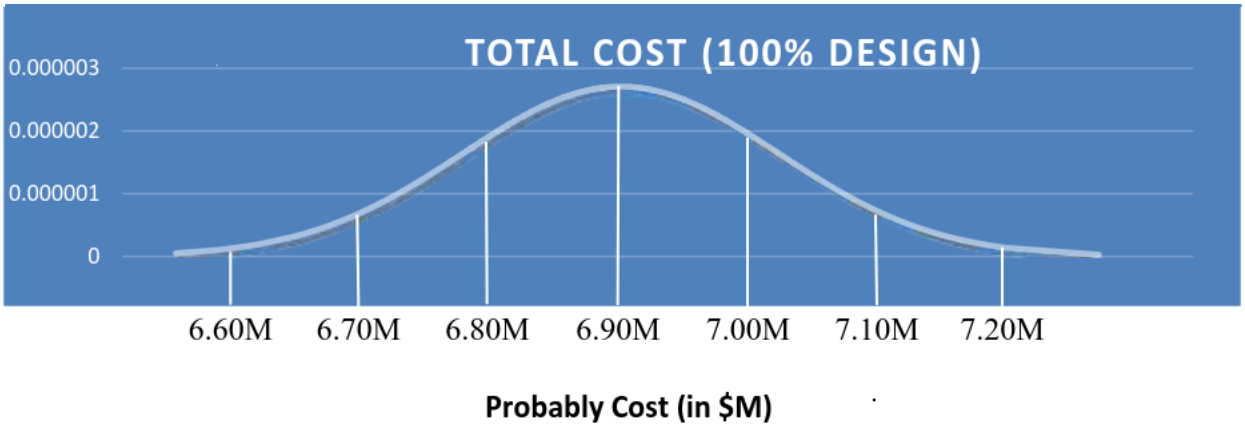
2. Cost Estimate Criteria

While the quantity of the work may not change significantly, the cost of the work may still change, although much less based on the design being complete, from final estimated cost. Note, for this final quantitative analysis, the general conditions were removed from the evaluation.

Using historical cost information and recently garnered cost information from ongoing COP BES projects taking place in the downtown area, Oxbow has adjusted some of the unit costs provided in its estimate. This has resulted in more increases than decreases as over time, materials costs, wage costs, and subcontractor costs have escalated. The probable unit cost for each bid item was, for this submission, was evaluated based on an upper and lower estimated cost which was developed for work item based on historical knowledge and difficulty or complexity of work, and the possibility for any variations or unknowns to impact the work.

3. Monte Carlo Simulation

Using the two factors identified above and the variable band widths established, each bid or cost item was evaluated using a random value generator to arrive at the most probable cost. The use of a random generator prevents the evaluator from "guessing" at values and thereby injecting personal bias into the process. Each bid item was evaluated three hundred and sixty-four times and averaged to define the most probable cost. Adding up the most probable costs provides the final submitted GMP amount. Based on the simulation run and using the direct cost of $6,655,186, the most probable cost for the project work was determined to be $6,916,069 exclusive of markups and profits. This result would provide a contingency value of $ 260,883 or approximately 3.92%. This reduced probable cost value from previous iterations of the statistical analysis is related to the more defined design stage. The below standard distribution curve depicts the data developed through the Monte Carlo simulation process.



4. Risk Register Analysis

As an additional evaluation step, Oxbow reviewed the contingency amounts established in the Risk Register(see attachment). The risk registered was modified based on the revised design and current field knowledge gained through the Early Work Package (EWP) work efforts. The revised/Updated risk register is included in this package for review.

A comparison of the approximate upper and lower costs provided by the Risk Register with the most probable cost determined using the statistical analysis above was performed to ensure the most probable cost fell within a reasonable amount. The current Risk Register depicts a lowest risk value of $278,500 based on all risks occurring and a least cost impact. The Risk Register also indicates an upper risk valve of $373,750 based on all risks occurring and a maximum estimated cost impact. The project team understands that not all risks will come to fruition and the value of the risks will fall between the upper and lower cost but not necessarily the pure average.

The challenge in identifying a realistic contingency is identifying those risks that cannot be engineered out of the project such as costs related to existing utilities, accidents, protests, etc., and ensuring those risk items are accounted for in the final contract amount.

A third means of evaluating risk is that of assessing the true risk components of the project. Given the ability to analyze the quantity of work, the fixed components of the work, materials, and subcontractors, do not present a great deal of risk. Additionally, as most equipment is contractor-owned, the equipment resource risk can be mitigated by the contractor not charging itself rent in the event the project is extended by some risk component occurring. The remaining cost component of the project, labor, is therefore the most significant resource at risk should the project incur a delay or impact related to one of the risk components impacting the project.

The labor risk component is normally evaluated on a percentage basis. If the project incurred a significant impact, the labor required to complete the work would exceed the budget. It is a standard practice in the construction industry to consider the contractor at risk for a percentage of the project. Should work no go as plan, production be lower than anticipated, etc., the largest, unavoidable cost incurred by the CGMC will be the cost of direct labor. A prudent contractor will recognize their costs may overrun by 30% to 50% of the total labor cost originally estimated for the work. A simple project can be estimated more accurately than a complex project and therefore the labor risk amount would adjust in relation to the type of work involved. The percentage factor applied is determined based on subjective review of the project challenges or risks identified. Based on Oxbow's understanding of this project and the contractors experience factor, a labor risk contingency of 25% is a reasonable value for mitigation of occurring risk issues. The total direct, non-supervisory job labor estimated for this project of $1,767,304 would result in a labor contingency value of $ 441,826.

5. Final Contingency Amount

The CMGC documents afford both the CMGC contractor and the Owner the ability to include a contingency amount for certain events that may be experienced by the project during the project life-cycle. Following a detailed review meeting with the project team, the following risk contingency amounts were determined for the project.

Bypassing Overflow in Mains:	10,000.00
Bypassing – No access Available:	6,480.00
Bypassing – Upstream backups:	10,000.00
Bypassing – Pipe System Failure:	25,000.00
CIPP Liner Failure:	25,000.00
CIPP Reinstatement Issues:	5,000.00
CIPP Liner Deficiencies:	5,000.00
CIPP Liner Escalation:	15,000.00
Pedestrian Incidents / Deductible:	10,000.00
Vehicle/Bike Incidents / Deductible:	10,000.00
Fuel Escalation Costs:	11,520.00
Aggregates Escalation:	10,000.00
HDD Contaminated Mtrls Encountered:	10,000.00
HDD Drilling Equipment Availability:	20,000.00
Failure of MH Structures / HDD	10,000.00
HDD Frac Out During Drilling:	5,000.00
Building Access Issues:	11,500.00
Contaminated Materials at MH's	5,000.00
Manhole Escalation Costs:	4,000.00
Open Cut Contaminated Materials:	5,000.00
Reaming – Contaminated Materials:	5,000.00
AC Paving added requirements:	64,000.00
100% Contingency Amount:	**$ 282,500.00**

The above contingencies are further detailed in the revised risk register.

While the contingency amount determined above is less than the labor risk contingency calculated on page 9 above, Oxbow Construction believes the contingency amount of $282,500 is acceptable for this project. The individual contingencies provided above will afford the project insurance against an average issue that may occur during the life of the contract for each of the categories identified. Projects of this nature normally will encounter a share of smaller issues and normally one to two larger more significant issues.

SUMMARY GMP:

Summarizing the above information, Oxbow Construction presents the below GMP proposal at the completed 100% design stage:

Direct Reimbursable Expenses:	$ 6,655,186.00
Subtotal Amount:	$ 6,655,186.00
CMGC Fee at 11.5%:	$ 765,346.39
SUBTOTAL AMOUNT:	**$ 7,420,532.39**
Project Contingency:	$ 282,500.00
TOTAL GMP AMOUNT:	$ **7,704.032.39**

Oxbow Construction submits the above proposal based for your consideration. If you have any comments and or questions, please feel free to contact us at your earliest convenience.

Respectfully;

Jim Hall, Project Estimator
Oxbow Construction
Attachments: Appendix A - Schedule of Values
Appendix B – Cost Summary Reports
Appendix C - Direct Cost Report
Appendix D - Risk Register (electronic)

Cc: JK/Oxbow
ABK/Oxbow
DB File 363/budget/design/100%GMP

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CMGC DOWNTOWN/OLD TOWN MAIN/TAYLOR SEWER REHABILITATION, PROJECT #E10999

FINAL SUBMISSION - DEC 4th, 2021

GMP Submittal
100% Design Phase

Appendix A - Schedule of Values - Itemized Unit Pricing

E10999 - Downtown Old Town Main Taylor Sewer Rehab
100% GMP FINAL

Oxbow Construction

31005 East Historic Columbia River Hwy

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Contact: **Jim Hall, Project Estimator**

Phone: **503-766-8635**

Email: **jimh@oxbow-construction.com**

Quote To:	Susan Hjorten, Project Manager, BES Riley Walsh, Construction Manager, BES	Job Name: Date of Plans: Plan Version:	DTOTMT Sewer Rehab 2021-09-30 100% Design - FINAL
Phone:	503-865-6664	Revision Date:	Rev #5
Email:	Susan.hjorten@portlandoregon.gov riley.walsh@portlandoregon.gov		

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	MOBE				
101010	Project Supervision - Direct (12mo)	12.00	MO	48,530.38	582,364.56
101020	General Conditions/Temp Facilities (14mo)	14.00	MO	4,371.43	61,200.02
101030	Project Health and Safety (12mo)	12.00	MO	3,400.00	40,800.00
101040	Project Consulting Engineering	12.00	MO	7,623.75	91,485.00
101050	Equipment Mobilizations	20.00	EA	2,475.67	49,513.40
101090	GR - Subcontractor Mobes	1.00	LS	100,000.00	100,000.00
	MOBE - TOTAL				**$925,362.98**
	TRAFFIC CONTROL				
102010	C00 - TPDT - Construction Flagging	3,000.00	HRS	60.80	182,400.00
102015	C00 - TPDT - Traffic Control Setup/Takedown	301.00	DAYS	180.00	54,180.00
102020	C00 - TPDT - Traffic Devices	1.00	LS	39,480.00	39,480.00
103000	C00 - PCMS BOARDS	2.00	EA	43,923.12	87,846.24
104000	C00 - FLAGGERS - DIRECTED BY OWNER	300.00	HRS	60.80	18,240.00
	TRAFFIC CONTROL - TOTAL				**$382,146.24**
	EROSION CONTROL				
105005	C00 - Erosion Maintenance - All	52.00	WKS	109.36	5,686.72
105010	C00 - Erosion Control Plan	1.00	LS	2,500.00	2,500.00
105015	C00 - Erosion Materials	1.00	LS	1,080.00	1,080.00
105905	C00 - Wood Framed Tree Prot Fencing	32.00	EA	766.12	24,515.84
106000	C00 - INLET PROTECTION	122.00	EA	106.18	12,953.96
	EROSION CONTROL - TOTAL				**$46,736.52**
	STD UTILITY CONST ITEMS				
107000	C00 - POLLUTION CONTROL PLAN	1.00	LS	3,500.00	3,500.00
108000	C00 - CONTAM MEDIA DISPOSAL	100.00	TNS	240.00	24,000.00

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
109000	C00 - HASP/CMDP WORK PLAN	1.00	LS	4,000.00	4,000.00
109500	C00 - ENGINEERED SHORING	1.00	LS	99,500.00	99,500.00
110000	C00 - CLEAR AND GRUB	1.00	LS	5,000.00	5,000.00
111005	C00 - Video Mainline (w Support) REV 9-17	17,000.00	LF	4.52	76,840.00
112000	C00 - VIDEO INSPECTION OF SEWERS - LATS (5ea)	5.00	EA	402.74	2,013.70
113000	C00 - TRENCH EXC, COMMON	325.00	BCY	77.77	25,275.25
113700	C00 - TRENCH BACKFILL, CLASS B	215.00	CCY	84.39	18,143.85
113800	C00 - SUBGRADE STABE(INCL EXC)	50.00	CCY	123.11	6,155.50
113900	C00 - SUBGRADE FABRIC	30.00	SY	1.47	44.10
114000	C00 - EXPLORATORY EXC	50.00	BCY	182.71	9,135.50
115000	C00 - POTHOLE EXC	70.00	EA	1,638.83	114,718.10
115500	C01 - Curtain Grout 30" Tunnel Base	1.00	LS	5,089.38	5,089.38
	STD UTILTY CONSTR ITEMS - TOTAL				**$393,415.38**
	HAND TUNNELING 36" CASING				
116005	C01 - 36" Casing for 8" Line, Hand Tunnel	35.00	LF	2,327.63	81,467.05
116010	C26 - 36" Casing, Hand Tunneled	25.00	LF	2,665.47	66,636.75
116020	C26 - 36" Casing, Hand Tunneled SW 10th	47.00	LF	1,931.53	90,781.91
116030	C27 - 36" Casing, Hand Tunneled SW 11th	51.00	LF	1,907.49	97,281.99
	HAND TUNNEL 36" CASING - TOTAL				**$336,167.70**
	HDD WORK				
117000	HDD, 6" SEWER LATERALS - Lengthen on C01 15ft each	489.00	LF	306.20	149,731.80
118000	HDD, 8" SEWER MAIN - Deleted C01 Open Cut 35ft	516.00	LF	213.37	110,098.92
119000	HDD, 12" SEWER MAIN	146.00	LF	309.49	45,185.54
	HDD - TOTAL				**$305,016.26**
	LATERAL LINING				
119700	CIPP Lats - Lat Lining from Cleanout 0-12ft	12.00	EA	3,100.00	37,200.00
119705	CIPP Lats - Extra Footage over 12ft	150.00	LF	65.00	9,750.00
119710	CIPP Lats - Top Hats	12.00	EA	3,000.00	36,000.00
120010	CIPP Lats - Main/Lateral Tee Liners. 0-12 Ft	50.00	EA	7,000.00	350,000.00
121010	C00 - All Tee Liners, Footage over 12ft	303.00	LF	65.00	19,695.00
	LATERAL LINING - TOTAL				**$452,645.00**
	6" CIPP LINING				
122010	C02 - CIPP - 6" Main Lining	73.00	LF	86.74	6,332.02
122015	C06 - CIPP - 6" Main Lining - Added 79 LF C03	104.00	LF	76.78	7,985.12
	6" CIPP LINING - TOTAL				**$14,317.14**
	8" CIPP LINING				
123015	C03 - CIPP - 8" Liner	90.00	LF	141.64	12,747.60

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
123020	C30 - CIPP - 8" Liner	202.00	LF	72.52	14,649.04
123030	C31 - CIPP - 8" Liner	40.00	LF	206.36	8,254.40
	8" CIPP LINING - TOTAL				**$35,651.04**
	12" CIPP LINING				
124010	C08 - CIPP - 12" Liner	13.00	LF	170.69	2,218.97
124012	C11 - CIPP - 12" Liner	244.00	LF	111.44	27,191.36
124020	C11 - CIPP - 12" Liner	237.00	LF	111.48	26,420.76
124030	C12 - CIPP - 12" Liner	427.00	LF	115.27	49,220.29
124040	C13 - CIPP - 12" Liner (Add length to MH984)	579.00	LF	98.67	57,129.93
124050	C14 - CIPP - 12" Liner	42.00	LF	215.48	9,050.16
124063	C18 - CIPP - 12" Liner	475.00	LF	85.53	40,626.75
124065	C19 - CIPP - 12" Liner	419.00	LF	83.33	34,915.27
124067	C20 - CIPP - 12" Liner	281.00	LF	90.33	25,382.73
124068	C24 - CIPP - 12" Liner	278.00	LF	98.00	27,244.00
124080	C28 - CIPP - 12" Liner	222.00	LF	122.57	27,210.54
124082	C31 - CIPP - 12" Liner	40.00	LF	222.72	8,908.80
	12" CIPP LINING - TOTAL				**$335,519.56**
	15" CIPP LINING				
125010	C04 - CIPP - 15" Liner	273.00	LF	133.49	36,442.77
125020	C17 - CIPP - 15" Line	378.00	LF	113.56	42,925.68
	15" CIPP LINING - TOTAL				**$79,368.45**
	18" CIPP LINING				
126010	C10 - CIPP - 18" Liner	281.00	LF	173.19	48,666.39
126020	C11 - CIPP - 18" Line	279.00	LF	175.51	48,967.29
	18" CIPP LINING - TOTAL				**$97,633.68**
	21" CIPP LINING				
127020	C09 - CIPP - 21" Line	432.00	LF	212.42	91,765.44
	21" CIPP LINING - TOTAL				**$91,765.44**
	24" CIPP LINING				
128010	C07 - CIPP - 24" Liner	224.00	LF	232.00	51,968.00
	24" CIPP LINING - TOTAL				**$51,968.00**
	30" CIPP LINING				
129015	C22 - CIPP - 30" Install	234.00	LF	256.38	59,992.92
129020	C23 - CIPP - 30" Install	276.00	LF	247.62	68,343.12
129025	C23 - CIPP - 30' Install - 2nd-1st	266.00	LF	277.05	73,695.30
	30" CIPP LINING - TOTAL				**$202,031.34**
	CIPP SECTIONAL REHAB				

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
130010	C25 - CIPP - Sectional Liner, 24" 0-4ft,	4.00	LF	4,385.94	17,543.76
131100	C25 - CIPP - Sectional Liner, 24" over 4ft	11.00	LF	142.97	1,572.67
	CIPP SECTIONAL REHAB - TOTAL				**$19,116.43**
	PIPE BURSTING				
131510	C32 - Bursting - 8" HDPE	170.00	LF	90.00	15,300.00
	PIPE BURSTING - TOTAL				**$15,300.00**
	20" PIPE REAMING				
132005	C026 - 20" HDPE Pipe Reaming	348.00	LF	457.58	159,237.84
132010	C027 - 20" HDPE Pipe Reaming	479.00	LF	509.04	243,830.16
	20" PIPE REAMING - TOTAL				**$403,068.00**
	STD UTILITY WORK				
133000	C00 - SERVICE CONNECTIONS - PVC LATS	45.00	EA	431.37	19,411.65
134000	C00 - CLEANOUT OVER EXISTING LATS - ALL	75.00	EA	4,011.09	300,831.75
135000	C00 - SEWER LATERALS, 6" HDPE DR 17, CL D BEDDING	29.00	LF	280.77	8,142.33
136000	C00 - SEWER LATERALS, 6" PVC 3034, CL D BEDDING	75.00	LF	247.64	18,573.00
136050	SEWER MAIN, CONNECT TO EXISTING C17	1.00	LS	3,788.88	3,788.88
136100	SEWER MAIN, 15" PVC 3034, CL D BEDDING C17	10.00	LF	529.33	5,293.30
137000	SEWER MAIN, 10" PVC 3034, CL D BEDDING	44.00	LF	350.30	15,413.20
138500	STORM INLET LEADS 10" DR 17 C21, C16	87.00	LF	305.28	26,559.36
139000	SEWER MAIN, 12" HDPE DR 17, CL D BEDDING	48.00	LF	662.03	31,777.44
140000	SEWER MAIN, 18" HDPE DR 17, CL D BEDDING	56.00	LF	407.40	22,814.40
	STD UTILITY WORK - TOTAL				**$452,605.31**
	CONCRETE MAINTENANCE HOLE				
141005	MH #02 - Sht C01- (8ft Deep)	1.00	EA	14,000.00	14,000.00
141010	MH #01 - Sht C01 (8ft Deep)	1.00	EA	14,000.00	14,000.00
141030	MH #03 - Sht C03 (8ft Deep) 30" Dia	1.00	EA	14,000.00	14,000.00
141040	MH #04 - Sht C04 (14ft Deep)	1.00	EA	18,000.00	18,000.00
141050	MH #05 - Sht C05 (10ft Deep)	1.00	EA	15,000.00	15,000.00
141070	MH #07 - Sht C11 (14ft Deep)	1.00	EA	18,000.00	18,000.00
141090	MH #09 - Sht C15 (10ft Deep)	1.00	EA	15,000.00	15,000.00
141095	MH #08 - Sht C15 (10ft Deep)	1.00	EA	15,000.00	15,000.00
141100	MH #10 - Sht C16 (12ft Deep)- Storm No Depth	1.00	EA	16,000.00	16,000.00
141110	MH #11 - Sht C17 (12ft Deep)	1.00	EA	16,000.00	16,000.00
141120	MH #13 - Sht C26 (10ft Deep)	1.00	EA	15,000.00	15,000.00
141130	MH #14 - Sht C26 (12ft Deep)	1.00	EA	16,000.00	16,000.00
141140	MH #15 - Sht C26 (12ft Deep)	1.00	EA	16,000.00	16,000.00
141150	MH #16 - Sht C27 (12ft Deep)	1.00	EA	16,000.00	16,000.00
141200	MH #17 - Sht C27 (10ft Deep)	1.00	EA	15,000.00	15,000.00

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
141210	MH #18 - Sht C28 (12ft Deep)	1.00	EA	16,000.00	16,000.00
141220	MH #19 - Sht C29 (14ft Deep)	1.00	EA	18,000.00	18,000.00
141300	MH #20 - Sht C30 (12ft Deep)	1.00	EA	16,000.00	16,000.00
141400	MH #21 - Sht C30 (12ft Deep)	1.00	EA	16,000.00	16,000.00
141500	MH #22 - Sht C32 (14ft Deep) 30" Dia	1.00	EA	18,000.00	18,000.00
142020	MH #ALL - Extra Depths	75.00	VF	423.05	31,728.75
	CONCRETE MAINTENANCE HOLE - TOTAL				**$348,728.75**
	CLEANOUTS AND DROPS				
142905	C00 - Inside Drop Assy 10" Bowls	6.00	EA	2,189.19	13,135.14
143010	C00 - Inside Drop Assy 12" Bowls	2.00	EA	2,456.33	4,912.66
143020	C21 - Deep Conn Riser	1.00	EA	13,094.78	13,094.78
144005	C00 - Terminal cleanouts - All	5.00	EA	1,195.26	5,976.30
	CLEANOUTS AND DROPS - TOTAL				**$37,118.88**
	SPOT REPAIR WORK				
146005	Spot Repair #1 - N/A - No 5th	1.00	LS		
146010	Spot Repair #2 - RLM1 -Taylor West Park 2ft x 10D	1.00	LS	12,258.22	12,258.22
146015	Spot Repair #3 - RM1 - SW Salmon - 2ft x 13D	1.00	LS	15,897.55	15,897.55
146020	Spot Repair #4 - RLM1 - SW Main 2ft x 14D	1.00	LS	14,570.10	14,570.10
146030	Spot Repair #5 - RLM - SW Main 2ft x 15D	1.00	LS	14,835.98	14,835.98
	SPOT REPAIR - TOTAL				**$57,561.85**
	MISC MH AND ABANDONMENTS				
147001	COO - Replace MH Steps	267.00	EA	120.50	32,173.50
148010	C00 - Rehab MH Base (Rechannel)	10.00	EA	2,903.63	29,036.30
149005	C00 - Abandon Outside Drops	4.00	EA	1,051.40	4,205.60
149010	C03 - Abandon Sewer Pipe - Mech Plugs	14.00	EA	759.54	10,633.56
	MISC MH AND ABANDONMENT - TOTAL				**$76,048.96**
	SEWER DIVERSION/BYPASS				
150001	C00 - Diversion Designs	1.00	LS	10,500.00	10,500.00
150002	C00 - Miscellaneous Diversion Equipment	1.00	LS	50,000.00	50,000.00
150003	Lateral Diversion Watch	15.00	EA	6,919.40	103,791.00
150004	Building Lateral Diversion Installations	15.00	EA	6,110.69	91,660.35
150005	C01A - Sewer Bypass Sht- 30" Taylor-Naito	1.00	LS	2,823.02	2,823.02
150015	C02 - Sewer Bypass Sht - Minor CIPP Dead End	1.00	LS	2,288.04	2,288.04
150020	C03 - Sewer Bypass - Minor CIPP Dead End	1.00	LS	2,587.51	2,587.51
150025	C04 - Sewer Bypass Sht - 15" CIPP 2nd-3rd	1.00	LS	5,450.78	5,450.78
150027	C06 - Sewer Bypass - 8" Terminal End	1.00	LS	2,587.51	2,587.51
150030	C07 - Sewer Bypass Sht - 24" CIPP 5th-4th	1.00	LS	5,174.98	5,174.98
150035	C08A - Sewer Bypass - 12" CIPP Park E-Brdwy	1.00	LS	7,466.84	7,466.84
150040	C08B - Sewer Bypass - 21" CIPP Brdwy-6th	1.00	LS	1,607.16	1,607.16
150045	C09A - Sewer Bypass - 21" CIPP 10th-ParkW	1.00	LS	4,372.30	4,372.30
150047	C09B - Sewer Bypass - 21" CIPP PrkW-PrkE	1.00	LS	3,513.75	3,513.75

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
150050	C10 - Sewer Bypass - 18" CIPP 11th-10th	1.00	LS	3,623.62	3,623.62
150055	C11A - Sewer Bypass - 18" CIPP 13th-12th	1.00	LS	3,773.35	3,773.35
150060	C11B - Seer Bypass - 12" CIPP 12th-11th	1.00	LS	3,623.62	3,623.62
150065	C12A - Sewer Bypass 12" CIPP 10th-ParkW	1.00	LS	3,623.62	3,623.62
150070	C12B - Sewer Bypass 12" CIPP ParkW-ParkE	1.00	LS	4,207.49	4,207.49
150075	C13A - Sewer Bypass 12" CIPP - 12th-11th	1.00	LS	4,222.54	4,222.54
150080	C13B - Sewer Bypass 12" CIPP - 11th-10th	1.00	LS	4,821.45	4,821.45
150085	C14A - Sewer Bypass 12" CIPP Taylor/10th	1.00	LS	1,623.57	1,623.57
150090	C14B - Sewer Bypass 12" CIPP Taylor/11th	1.00	LS	1,773.31	1,773.31
150100	C17 - Sewer Bypass - 15" CIPP 4th-3rd	1.00	LS	6,272.23	6,272.23
150105	C17B - Sewer Bypass - 15" CIPP 3rd-2nd	1.00	LS	9,034.05	9,034.05
150110	C18A - Sewer Bypass - 12" CIPP - East Park-SW Brdw	1.00	LS	3,473.93	3,473.93
150115	C18B - Sewer Bypass - 12" CIPP - Brdwy-SW 6th	1.00	LS	5,270.64	5,270.64
150120	C19A - Sewer Bypass - 12" CIPP Park W-Park E	1.00	LS	4,522.00	4,522.00
150125	C19B - Sewer Bypass - 12" CIPP 10th-Park W	1.00	LS	4,222.54	4,222.54
150130	C20 - Sewer Bypass - 12" CIPP - SW12th-11th	1.00	LS	4,467.10	4,467.10
150140	C22 - Sewer Bypass - 30" CIPP 1st - Naito	1.00	LS	5,452.59	5,452.59
150145	C23A - Sewer Bypass - 30" CIPP 3rd-2nd	1.00	LS	4,235.82	4,235.82
150150	C23B - Sewer Bypass - 30" CIPP 2nd-1st	1.00	LS	4,597.90	4,597.90
150155	C24 - Sewer Bypass- 12" CIPP 4th-3rd	1.00	LS	3,786.63	3,786.63
150160	C25 - Sewer Bypass - 24" Sectional	1.00	LS	2,206.10	2,206.10
150165	C25B - Sewer Bypass - 12" CIPP Brdy-6th	1.00	LS	5,583.39	5,583.39
150170	C26 - Sewer Bypass - 20" Jacked Casing	1.00	LS	93,040.63	93,040.63
150175	C26 - Sewer Bypass - 20" HDPE Reamed- 10th-Prk W	1.00	LS	14,907.33	14,907.33
150180	C26 - Sewer Bypass - 20" HDPE ParkW-ParkE	1.00	LS	39,663.99	39,663.99
150185	C27 - Sewer Bypass - Jacked Casing SW 11th	1.00	LS	27,194.26	27,194.26
150190	C27 - Sewer Bypass - 20" HDPE Reamed 12th-11th	1.00	LS	19,099.75	19,099.75
150200	C27 - Sewer Bypass - 20" HDPE Reamed 11th-10th	1.00	LS	14,907.33	14,907.33
150205	C28 - Sewer Bypass - 12" CIP 13th -12th	1.00	LS	2,342.51	2,342.51
150210	C30A - Sewer Bypass - 8" CIPP 13th South	1.00	LS	1,171.25	1,171.25
150215	C31 - Sewer Bypass - 8" CIPP lateral	1.00	LS	1,239.47	1,239.47
	SEWER BYPASS - TOTAL				**$601,807.25**
	MH GROUTING				
152005	Rehabilitate MH - Grouting	22.00	EA	4,147.27	91,239.94
	MH GROUTING - TOTAL				**$91,239.94**
	SURFACE AND HARDSCAPE				
153005	Temp AC Patching, All Sheets	1,700.00	SY	33.35	56,695.00
156005	Perm AC Patch 8", All Sheets	1,700.00	SY	212.72	361,624.00
157005	Perm Trench Patch, 10", All Sheets	100.00	SY	274.02	27,402.00
158005	Conc Paving, 8" Plain, 4000 PSI, all Sheets	100.00	SY	154.30	15,430.00
159005	Conc Walks, All Sheets	1,600.00	SF	13.02	20,832.00
160005	Conc C Curb, All Sheets	534.00	LF	43.43	23,191.62

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
161005	Conc Curb and Gutter, All Sheets	200.00	LF	46.43	9,286.00
162005	Conc Mono Curb and Gutter, All Sheets	100.00	LF	33.60	3,360.00
163005	CONC Dway/Mono Dway and Gutter, All Sheets	33.00	SY	236.50	7,804.50
164005	Conc Dway, Miscellaneous - All Sheets	10.00	SY	215.91	2,159.10
165005	Lawn Seeding, All Sheets	20.00	SY	50.00	1,000.00
166005	Topsoil - All Sheets	10.00	CY	90.00	900.00
167005	Bollard Glue Down Delineators - C27	7.00	EA	250.00	1,750.00
	SURFACING AND HARDSCAPE - TOTAL				**$531,434.22**
	EXISTING TRACK REMOVAL				
167012	Track Removal - C01 (LF of Single Track)	200.00	LF	183.99	36,798.00
167014	Track Removal - C04 (LF of Single Track)	40.00	LF	260.63	10,425.20
167016	Track Removal - CO5 (LF of Single Track	30.00	LF	222.56	6,676.80
167018	Track Removal - C16 (LF of Single Track)	40.00	LF	215.63	8,625.20
167020	Track Removal - C31 (LF of Single Track)	80.00	LF	197.73	15,818.40
	EXISTING TRACK REMOVAL - TOTAL				**$78,343.60**
	NIGHT WORK IMPACTS				
167130	Night Work Impacts	3.00	MO	39,799.46	119,398.38
167140	Restricted Work Hours Impacts 9-3	19.00	DAY	1,232.25	23,412.75
167150	Restricted Work Hours Impacts 11-5	7.00	DAY	5,105.02	35,735.14
167160	Restricted Work Hours Impacts 9-7	26.00	DAY	616.12	16,019.12
	NIGHT WORK IMPACTS - TOTAL				**$194,565.39**
GRAND TOTAL					**$6,656,683.31**

NOTES:

SEE CLARIFICATIONS AND EXCLUSIONS

EXCLUSIONS:

- Design Engineering, Construction Surveying, As-built Surveying

- Parking Permit fees, Street Use Permit fees.

CLARIFICATIONS:

- The pavement restoration item is intended to be paid for ALL AC paving and Concrete restoration. No restoration is incidental to other pay/bid items.

- Estimated based on 100% design drawings and specifications as indicated.

- Estimate includes submitting for and managing parking permits and street use permits. Estimate does NOT include parking fees.

- Project costs assume all lining materials are per the design plan sheets.

- No contingency is included for dewatering (groundwater) on any portion of this work.

- Estimate does not assume any below grade diversion piping will be installed.

- Estimate provides only for the contingencies listed
and detailed within the GMP submittal letter.

- Estimate based on approximately 365 calendar day contract.

- Manhole restoration is based on hand or spray applied mortar application.

- Employee wages are established using the BOLI 2021 January wage determinations.