



Pinellas County

Staff Report

Approved by Board of County Commissioners 9/9/2021

File #: 21-1435A, **Version:** 1

Agenda Date: 9/9/2021

Subject:

First Amendment to the Agreement with PCL Construction, Inc. for design-build services for the Dunn Water Reclamation Facility Filtration and Disinfection Improvements Project.

Recommended Action:

Approval of the First Amendment to the project scope and lump sum price (LSP) Agreement with PCL Construction, Inc. for Phase 2, construction, of the professional design build services pertaining to the Dunn Water Reclamation Facility filtration and disinfection improvements project.

- This Amendment will initiate Phase 2 of the project for a LSP of \$11,921,504.00 to finalize design and construct the project.
- The Board of County Commissioners approved the original award, Phase 1 - Design on August 6, 2019 for \$1,270,796.00.
- Phase 1 and 2 total contract value is \$13,192,300.00.
- This project consists of two phases: Phase 1 included the design development, inclusive of design and 70% construction documents, pre-construction elements and LSP. Phase 2 will initiate the construction phase providing the filtration and disinfection improvement.
- Process improvements are needed as the existing treatment filters have reached the end of their service life. Replacing the existing shallow bed sand filters with traveling bridge Aqua-Diamond cloth media filters will provide a higher capacity filtration system with less maintenance requirements.
- The existing disinfection system utilizes chlorine gas, a hazardous substance. Phase 1 includes converting from gas to a liquid bleach disinfection system which is a safer and more stable option.

Contact No. 178-0407-NC (SS), Phase II in the amount of \$11,921,504.00 for 405 consecutive calendar days from the construction notice to proceed date to substantial completion. Phase I and II total contract value is \$13,192,300.00. Authorize the Chairman to sign and the Clerk of the Circuit Court to attest.

Strategic Plan:

Foster Continual Economic Growth and Vitality

4.4 Invest in infrastructure to meet current and future needs

Deliver First Class Services to the Public and Our Customers

5.2 Be responsible stewards of the public's resources

Summary:

This project will improve the filtration and disinfection processes at the DWRF by incorporating higher capacity filters, constructing a new disinfection facility, and incorporating other ancillary components

needed for project completion.

Board approval of this Amendment will initiate Phase 2 of the project for a LSP of \$11,921,504.00. PCL completed Phase I of the project on July 1, 2021, submitting 70% construction documents and the LSP.

Background Information:

The project consists of two (2) phases: Phase 1 included the design development, inclusive of design and 70% construction documents, and pre-construction elements. The design and construction documents have been completed to a point where a lump sum construction price has been received and is presented to the Board for consideration and approval, which will initiate Phase 2 construction.

Construction of the filtration and bleach disinfection systems along with incorporating the identified improvements will allow the treatment facility to meet regulatory compliance requirements.

Fiscal Impact:

Phase 1 (Design) Total:	\$ 1,270,796.00
Phase 2 Construction:	\$11,721,504.00
Phase 2 Owner Contingency:	\$ 200,000.00
Phase 2 Total:	<u>\$11,921,504.00</u>
Total for Phase 1 and Phase 2:	\$13,192,300.00

During the 405 days of the project construction schedule, it is reasonable to anticipate unforeseen conditions requiring the use of contingency funds for resolution. Owner controlled contingency is intended to be utilized for any necessary items as directed by the Owner on a case-by-case basis.

Funding for this project is derived from the Sewer Renewal and Replacement Fund.

Staff Member Responsible:

Megan Ross, Director, Utilities
Merry Celeste, Director, Purchasing and Risk Management
Joe Lauro, Director, Administrative Services

Partners:

N/A

Attachments:

Exhibit N - First Amendment

EXHIBIT N

LUMP SUM AMENDMENT AGREEMENT FORM

Pursuant to Sections 3B and 5A of the Design Build Agreement, dated September 9, 2021, between Pinellas County, Florida ("Owner") and ("Design Builder"), for the design and construction of the ("Project"), Owner and Design Builder establish the Lump Sum Price and Contract Time for all the Work as set forth below:

ARTICLE 1

SCOPE OF WORK

The scope of the Work consists of the design and construction of the Project in accordance with the Agreement, this Amendment and other Contract Documents listed as Attachments 1 through 7 below, which are hereby incorporated into and made a part of the Amendment by this reference:

Attachment Number	Description	Pages	Dated
1.	List of Drawings and Specifications	<u>1</u> through <u>7</u>	May 2020
2.	Schedule of Values	<u>1</u> through <u>2</u>	July 2021
3.	Clarifications, & Exclusions	<u>1</u> through <u>3</u>	May 2020
4.	Completion Schedule	<u>1</u> through <u>3</u>	July 2021
5.	List of Subcontractors and Major Suppliers	<u>1</u> through <u>1</u>	May 2020
6.	Allowances	<u>1</u> through <u>4</u>	July 2021

DIRECT PURCHASES

The Owner, at its sole discretion, may elect to directly purchase materials and/or equipment included in the Guaranteed Maximum Price in order to take advantage of tax savings. Should the Owner elect to purchase materials and/or equipment directly, the general procedure shall be as follows:

1. All subcontracts shall be competitively bid by the Design Builder as outlined in other sections of this Agreement.
2. Each selected subcontractor shall submit a documented list of materials and/or equipment in the scope of its work in excess of \$15,000 along with the amount of sales tax applicable to such material and/or equipment.
3. The Design Builder shall forward these lists to the Owner, and the Owner shall obtain a purchase order for each item.
4. Once purchase orders have been obtained by the Owner for direct payment of these items, the Design Builder shall remove their direct cost from the schedule of Values accompanying its monthly pay applications. Tax savings realized from the Owner's direct purchase of each item, shall be transferred in the Schedule of Values to the line item for the Owner's Contingency. No retainage will be held on Direct Purchase material.
5. The Design Builder will order the materials as approved by the Owner (County Project Manager).
6. Invoices will be delivered directly to the Design Builder.
7. The Design Builder will develop and prepare a detailed summary of all direct purchase items along with their associated asset assignments to the appropriate corresponding County departments and stakeholders and locations in the buildings.
8. The Design Builder and the Owner will sign off on the packing slips to ensure materials ordered were received.
9. Design Builder will match the invoices to the packing slips and submit to the Owner (Pinellas County's Finance Department) via email to ClerkFinanceDivisionFixedAssets@co.pinellas.fl.us to ensure the vendor/subcontractor is paid timely. The invoices must be received in a timely manner in order to comply with Section 218.735, *Florida Statutes* "Local Government Prompt Payment Act". Design Builder should date and time stamp all direct purchases invoices.

ARTICLE 2

LUMP SUM PRICE

2.1 The Lump Sum Price for the Work, as defined in Section 3B of the Agreement, is eleven million, nine hundred and twenty-one thousand, five hundred and four Dollars and 00/100 (**\$11,921,504.00**).

2.2 Monthly installment payment of the Lump Sum Price shall be based upon the percent completion of the designated portion of the Work for each particular month.

2.3 In order to efficiently and timely address certain Change Order situations that may arise during Phase 2, the parties have agreed to establish an Owner controlled contingency within the Lump Sum Price in the amount of two hundred thousand dollars and 00/100 (**\$200,000.00**) ("Owner's Contingency"). The Design Builder acknowledges and agrees that any change work which is to be charged against the Owner's Contingency must be approved in advance in a Change Order or Construction Change Directive signed by the County Project Manager with supporting documentation. The Owner reserves the right, at its sole discretion, to withhold its consent on Owner's Contingency expenditures. Unused Owner's Contingency remaining at Substantial Completion will be deducted from the Lump Sum Price. Design Builder has no entitlement to any portion of any unused Owner's Contingency.

2.4 If the parties agree to establish Allowances within the Lump Sum Price, said Allowances items and amounts will be identified in Attachment 6. Design Builder shall not proceed with any portion of the Work associated with the aforesaid Allowances ("Allowance Work") without first obtaining Owner's express written authorization to proceed with said Allowance Work.

2.5 Design Builder recognizes that this Contract includes work for trench excavation in excess of five feet deep. Design Builder acknowledges the requirements set forth in Section 553.63 of the Florida Statutes titled Trench Safety Act. Design Builder certifies that the required trench safety standards will be in effect during the period of construction of the Project and Design Builder agrees to comply with all such required trench safety standards.

2.5.1 The amount of ten thousand dollars and 00/100 (**\$10,000.00**) has been separately identified in Attachment 2, Schedule of Values, for the cost of compliance with the required trench safety standards; said amount is included within the Lump Sum Price.

ARTICLE 3

CONTRACT TIME

3.1 The Phase 2 Commencement Date for the Work is September 29, 2021. The total period of time beginning with the Phase 2 Commencement Date through the date required for Substantial Completion of the Work is 405 days ("Contract Time"). THE SUBSTANTIAL COMPLETION DATE IS THEREFORE ESTABLISHED AS May 11, 2023.

3.2 Pursuant to this Agreement, the parties have established a liquidated damage rate for reasons stated therein, which the parties acknowledge and agree apply to this Amendment and Design Builder's responsibility to complete the Work within the Contract Time as stated herein. Accordingly, the liquidated damage rate established in this Agreement shall be assessed from Design Builder for each calendar day Design Builder fails to achieve Substantial Completion for the Designated Work within the Contract Time.

ARTICLE 4

MISCELLANEOUS

4.1 Except as expressly modified herein, the terms and conditions of the Agreement remain unchanged. In the event of a conflict between the terms of this Amendment and those of the Agreement, Owner and Design Builder agree that the terms of this Amendment shall prevail and control.

Owner: **PINELLAS COUNTY, by and through its Board of County Commissioners**

Design Builder: **PCL Construction, Inc.**

By: *Dave Eggers*

By: *Mike McKinney* *Shawn W. Britton*

Print Name: Dave Eggers

Print Name: Mike McKinney Shawn W. Britton
President Secretary / Treasurer

Its: Chair, Board of County Commissioners

Its: _____

Date: September 9, 2021

Date: 8-9-2021

APPROVED AS TO FORM

By: *Jacina Parson*

Office of the County Attorney



ATTEST: KEN BURKE, CLERK

By: *Jacina Parson*
Deputy Clerk



CONSTRUCTION



W.E. DUNN WRF
Filtration and
Disinfection
Improvements
Project

Contract # 178-0407-
NC (SS)

Attachment #1 - List of Drawings and Specifications

SPECIFICATIONS		
DIVISION 00 - GENERAL REQUIREMENTS		
00_75_00	SPECIAL PROVISIONS AND SUPPLEMENTAL TECHNICAL SPECIFICATIONS	MAY, 2020
DIVISION 01 - GENERAL REQUIREMENTS		
01_11_00	SUMMARY OF WORK	MAY, 2020
01_14_00	WORK RESTRICTIONS	MAY, 2020
01_33_00	SUBMITTAL PROCEDURES	MAY, 2020
01_35_21	SELECTIVE ALTERATIONS AND DEMOLITION	MAY, 2020
01_35_22	SAFETY PLAN	MAY, 2020
01_35_45	PREVENTION, CONTROL, & ABATEMENT OF EROSION & WATER POLLUTION	MAY, 2020
01_41_00	REGULATORY REQUIREMENTS	MAY, 2020
01_42_13	ABBREVIATIONS AND ACRONYMS	MAY, 2020
01_45_00	QUALITY CONTROL	MAY, 2020
01_45_24	SPECIAL TESTS AND INSPECTIONS	MAY, 2020
01_50_00	TEMPORARY FACILITIES AND CONTROLS	MAY, 2020
01_60_00	PRODUCT REQUIREMENTS	MAY, 2020
01_71_23	FIELD ENGINEERING	MAY, 2020
01_75_17	COMMISSIONING	MAY, 2020
01_75_18	DISINFECTION	MAY, 2020
01_77_00	CLOSEOUT PROCEDURES	MAY, 2020
01_78_23	OPERATION AND MAINTENANCE DATA	MAY, 2020
DIVISION 03 - CONCRETE		
03_01_04	STRUCTURAL CONCRETE REPAIR	MAY, 2020
03_11_07	CONCRETE FORMWORK	MAY, 2020
03_15_00	CONCRETE ACCESSORIES	MAY, 2020
03_15_14	HYDROPHILIC RUBBER WATERSTOP	MAY, 2020
03_20_00	CONCRETE REINFORCING	MAY, 2020
03_21_17	ADHESIVE-BONDED REINFORCING BARS AND ALL THREAD RODS IN CONCRETE	MAY, 2020
03_30_00	CAST-IN-PLACE CONCRETE	MAY, 2020
03_35_29	TOOLED CONCRETE FINISHING	MAY, 2020
03_60_00	GROUTING	MAY, 2020
03_63_01	EPOXIES	MAY, 2020
03_64_24	EPOXY INJECTION SYSTEM	MAY, 2020
DIVISION 05 - METALS		
05_05_24	MECHANICAL ANCHORING AND FASTENING TO CONCRETE AND MASONRY	MAY, 2020
05_12_00	STRUCTURAL STEEL	MAY, 2020
05_14_05	STRUCTURAL ALUMINUM	MAY, 2020
05_50_00	METAL FABRICATIONS	MAY, 2020
DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES		
06_80_15	FIBERGLASS REINFORCED PLASTIC	MAY, 2020



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DIVISION 07 - THERMAL AND MOISTURE PROTECTION		
07_90_00	JOINT SEALANTS	MAY, 2020
DIVISION 09 - FINISHES		
09_96_01	HIGH-PERFORMANCE COATINGS	MAY, 2020
DIVISION 10 - SPECIALTIES		
10_14_00	SIGNAGE	MAY, 2020
DIVISION 13 - SPECIAL CONSTRUCTION		
13_34_19	METAL BUILDING SYSTEMS	MAY, 2020
DIVISION 22 - PLUMBING		
22_45_17	EMERGENCY EYE/FACE WASH AND SHOWER EQUIPMENT	MAY, 2020
DIVISION 26 - ELECTRICAL		
26_05_00	COMMON WORK RESULTS FOR ELECTRICAL	MAY, 2020
26_05_02	HAZARDOUS CLASSIFIED AREA CONSTRUCTION	MAY, 2020
26_05_09	LOW VOLTAGE MOTORS UP TO 500 HORSEPOWER	MAY, 2020
26_05_18	600-VOLT OR LESS WIRES AND CABLES	MAY, 2020
26_05_20	FIBER OPTIC CABLE AND APPURTENANCES	MAY, 2020
26_05_21	LOW VOLTAGE WIRE CONNECTIONS	MAY, 2020
26_05_26	GROUNDING AND BONDING	MAY, 2020
26_05_29	HANGERS AND SUPPORTS	MAY, 2020
26_05_33	CONDUITS	MAY, 2020
26_05_34	BOXES	MAY, 2020
26_05_44	DUCT BANKS	MAY, 2020
26_05_53	IDENTIFICATION FOR ELECTRICAL SYSTEMS	MAY, 2020
26_06_01	CONDUIT SCHEDULE	MAY, 2020
26_08_50	FIELD ELECTRICAL ACCEPTANCE TESTS	MAY, 2020
26_22_14	DRY-TYPE TRANSFORMERS	MAY, 2020
26_24_16	PANELBOARDS	MAY, 2020
26_27_26	WIRING DEVICES	MAY, 2020
26_28_01	LOW VOLTAGE MOLDED CASE CIRCUIT BREAKERS	MAY, 2020
26_28_17	DISCONNECT SWITCHES	MAY, 2020
26_29_24	VARIABLE FREQUENCY DRIVES 0.50 - 50 HORSEPOWER	MAY, 2020
26_41_01	LIGHTNING PROTECTION	MAY, 2020
26_43_14	SURGE PROTECTIVE DEVICES	MAY, 2020
26_50_10	LIGHTING: LED LUMINAIRES	MAY, 2020
DIVISION 31 - EARTHWORK		
31_00_00	EARTHWORK (TO BE INCLUDED AT 100%)	MAY, 2020
31_05_15	SOILS AND AGGREGATES FOR EARTHWORK (TO BE INCLUDED AT 100%)	MAY, 2020
31_23_24	CONTROLLED LOW STRENGTH MATERIAL (CLSM) (TO BE INCLUDED AT 100%)	MAY, 2020



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31_23_35	TRENCHING (TO BE INCLUDED AT 100%)	MAY, 2020
31_34_07	LOW DENSITY CELLULAR CONCRETE FILL	MAY, 2020
31_50_00	EXCAVATION SUPPORT AND PROTECTION (TO BE INCLUDED AT 100%)	MAY, 2020
31_63_30	DRILLED CONCRETE PIERS	MAY, 2020
DIVISION 32 - EXTERIOR IMPROVEMENTS		
32_01_15	PAVEMENT RESTORATION AND REHABILITATION	MAY, 2020
DIVISION 40 - PROCESS INTEGRATION		
40_05_00	01 COMMON WORK RESULTS FOR GENERAL PIPING - PLANT	MAY, 2020
40_05_00	03 PIPE IDENTIFICATION - PLANT	MAY, 2020
40_05_00	09 PIPING SYSTEMS TESTING - PLANT	MAY, 2020
40_05_06	01 PIPING SPECIALTIES	MAY, 2020
40_05_06	10 STRAINERS	MAY, 2020
40_05_06	55 PIPING INSULATION	MAY, 2020
40_05_07	01 PIPE SUPPORTS	MAY, 2020
40_05_07	03 PREFORMED CHANNEL PIPE SUPPORT SYSTEM	MAY, 2020
40_05_19	01 DUCTILE IRON PIPE: AWWA C151 - PLANT	MAY, 2020
40_05_31	01 PLASTIC PIPING AND TUBING	MAY, 2020
40_05_51	01 COMMON WORK RESULTS FOR VALVES	MAY, 2020
40_05_52	SPECIALTY VALVES	MAY, 2020
40_05_57	13 MANUAL ACTUATORS	MAY, 2020
40_05_57	24 ELECTRIC ACTUATORS	MAY, 2020
40_05_59	34 HEAVY-DUTY FABRICATED STAINLESS STEEL SLIDE GATES	MAY, 2020
40_05_62	PLUG VALVES	MAY, 2020
40_05_63	BALL VALVES	MAY, 2020
40_05_64	BUTTERFLY VALVES	MAY, 2020
40_05_65	01 GATE, GLOBE, AND ANGLE VALVES	MAY, 2020
40_05_65	24 CHECK VALVES	MAY, 2020
40_05_67	37 PRESSURE REDUCING AND PRESSURE RELIEF VALVES	MAY, 2020
40_05_67	40 AUTOMATIC AIR AND VACUUM VALVES	MAY, 2020
40_61_00	COMMON WORK RESULTS FOR PROCESS CONTROL AND INSTRUMENTATION SYSTEMS	MAY, 2020
40_61_15	CONTROL STRATEGIES	MAY, 2020
40_61_16	SPECIFIC CONTROL STRATEGIES	MAY, 2020
40_64_01	CONTROL SYSTEMS: PROGRAMMABLE LOGIC CONTROLLERS	MAY, 2020
40_67_01	CONTROL SYSTEMS: PANELS, ENCLOSURES, AND PANEL COMPONENTS	MAY, 2020
40_71_15	FLOW MEASUREMENT: MAGNETIC FLOW	MAY, 2020
40_71_43	FLOW MEASUREMENT: ROTAMETERS (VARIABLE AREA FLOWMETERS)	MAY, 2020
40_71_79	FLOW MEASUREMENT: SWITCHES	MAY, 2020
40_72_76	LEVEL MEASUREMENT: SWITCHES	MAY, 2020

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40_73_13	PRESSURE/VACUUM MEASUREMENT: GAUGES	MAY, 2020
40_73_36	PRESSURE/VACUUM MEASUREMENT: SWITCHES	MAY, 2020
40_73_63	PRESSURE/VACUUM MEASUREMENT: DIAPHRAGM AND ANNULAR SEALS	MAY, 2020
40_73_64	PRESSURE/VACUUM MEASUREMENT: INSTRUMENT VALVES	MAY, 2020
40_75_23	ANALYZERS: RESIDUAL CHLORINE	MAY, 2020
40_75_53	ANALYZERS: TURBIDITY	MAY, 2020
40_80_01	COMMISSIONING FOR INSTRUMENTATION AND CONTROLS	MAY, 2020
DIVISION 41 - MATERIAL PROCESSING AND HANDLING EQUIPMENT		
41_22_17	DAVIT CRANES	MAY, 2020
DIVISION 43 - PROCESS GAS AND LIQUID HANDLING, PURIFICATION, AND STORAGE EQUIPMENT		
43_23_40	20 HORIZONTAL MAGNETIC DRIVE CENTRIFUGAL PUMPS	MAY, 2020
43_25_00	15 SUBMERSIBLE CHEMICAL LIQUID SUMP PUMPS	MAY, 2020
43_33_20	01 CHEMICAL FEED PUMPS	MAY, 2020
43_41_46	FIBERGLASS REINFORCED PLASTIC ABOVEGROUND STORAGE TANKS	MAY, 2020
DIVISION 46 - WATER AND WASTEWATER EQUIPMENT		
46_05_10	COMMON WORK RESULTS FOR MECHANICAL EQUIPMENT	MAY, 2020
46_05_11	EQUIPMENT IDENTIFICATION	MAY, 2020
46_05_94	MECHANICAL EQUIPMENT TESTING	MAY, 2020
46_41_25	SUBMERSIBLE MIXERS: HIGH-SPEED	MAY, 2020
46_61_42	CLOTH MEDIA TRAVELING BRIDGE FILTERS	MAY, 2020

GENERAL DRAWINGS - (G)		
1 01G01	COVER SHEET, LOCATION, AND VICINITY MAP	MAY, 2020
2 01G02	SHEET INDEX, CODE AND CLASSIFICATION	MAY, 2020
3 01G03	LEGEND, ABBREVIATIONS, AND SYMBOLS	MAY, 2020
4 01G04	DESIGN CRITERIA	MAY, 2020
5 01G05	PROCESS FLOW SCHEMATIC	MAY, 2020
6 01G06	FILTER HYDRAULIC PROFILE	MAY, 2020
7 01G07	SITE SURVEY, CONSTRUCTION STAGING AND SITE ACCESS PLAN	MAY, 2020
DEMOLITION - (D)		
9 08D01	TERTIARY FILTERS - DEMOLITION PLAN	MAY, 2020
10 08D02	TERTIARY FILTERS - DEMOLITION SECTIONS AND DETAILS	MAY, 2020
12 09D01	EXISTING GAS CHLORINE BLDG- DEMOLITION PLAN	MAY, 2020

Attachment #1 - List of Drawings and Specifications



PCL
CONSTRUCTION



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CIVIL/SITE DRAWINGS - (C)		
15 03C01	CIVIL - LEGEND, ABBREVIATIONS, SYMBOLS AND GENERAL NOTES	MAY, 2020
16 03C02	PAVING AND GRADING PLAN - NEW DISINFECTION FACILITIES AREA	MAY, 2020
17 03C03	YARD PIPING PLAN 1 - FILTER AND DISINFECTION AREA	MAY, 2020
18 03C04	YARD PIPING PLAN 2 - REJECT POND AREA	MAY, 2020
19 99C01	TYPICAL CIVIL DETAILS	MAY, 2020
STRUCTURAL DRAWINGS - (S)		
20 01S01	STRUCTURAL - GENERAL NOTES	MAY, 2020
21 01S02	STRUCTURAL - PILE SCHEDULE	MAY, 2020
22 08S01	TERTIARY FILTERS BOTTOM PLAN	MAY, 2020
23 08S02	TERTIARY FILTERS TOP PLAN	MAY, 2020
24 08S03	TERTIARY FILTERS ROOF FRAMING PLAN	MAY, 2020
25 08S04	TERTIARY FILTERS SECTIONS AND DETAILS I	MAY, 2020
26 08S05	TERTIARY FILTERS SECTIONS AND DETAILS II	MAY, 2020
27 08S06	TERTIARY FILTERS SECTIONS AND DETAILS III	MAY, 2020
28 08S07	TERTIARY FILTERS SECTIONS AND DETAILS IV	MAY, 2020
29 09S01	DISINFECTION FACILITIES- FOUNDATION PLAN	MAY, 2020
30 09S02	DISINFECTION FACILITIES- FLOOR PLAN	MAY, 2020
31 09S03	DISINFECTION FACILITIES- ROOF FRAMING PLAN	MAY, 2020
32 09S04	DISINFECTION FACILITIES- SECTION AND DETAILS I	MAY, 2020
33 09S05	DISINFECTION FACILITIES- SECTION AND DETAILS II	MAY, 2020
36 99A01	TYPICAL ARCHITECTURAL DETAILS I	MAY, 2020
37 99A02	TYPICAL ARCHITECTURAL DETAILS II	MAY, 2020
38 99S01	TYPICAL STRUCTURAL DETAILS I	MAY, 2020
39 99S02	TYPICAL STRUCTURAL DETAILS II	MAY, 2020
40 99S03	TYPICAL STRUCTURAL DETAILS III	MAY, 2020
PROCESS MECHANICAL DRAWINGS - (M)		
42 01M01	MECHANICAL - LEGEND, ABBREVIATIONS AND SYMBOLS	MAY, 2020
43 08M01	TERTIARY FILTERS - PLAN	MAY, 2020
44 08M02	TERTIARY FILTERS - SECTION AND DETAILS I	MAY, 2020
45 08M03	TERTIARY FILTERS - SECTION AND DETAILS II	MAY, 2020
46 08M04	TERTIARY FILTERS - SECTION AND DETAILS III	MAY, 2020
48 09M01	DISINFECTION FACILITIES- PLAN	MAY, 2020
49 09M02	DISINFECTION FACILITIES- SECTION AND DETAILS I	MAY, 2020
50 09M03	DISINFECTION FACILITIES- SECTION AND DETAILS II	MAY, 2020
51 09M04	DISINFECTION FACILITIES- SECTION AND DETAILS III	MAY, 2020

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52 09M05	DISINFECTION FACILITIES- TANK SCHEDULE	MAY, 2020
53 09M06	CHLORINE CONTACT CHAMBER - PLAN AND SECTION	MAY, 2020
56 99M01	TYPICAL MECHANICAL DETAILS I	MAY, 2020
57 99M02	TYPICAL MECHANICAL DETAILS II	MAY, 2020
58 99M03	TYPICAL MECHANICAL DETAILS III	MAY, 2020
59 99M04	TYPICAL MECHANICAL DETAILS IV	MAY, 2020
ELECTRICAL DRAWINGS - (E)		
60 01E01	ELECTRICAL LEGEND AND SYMBOLS	MAY, 2020
61 01E02	ELECTRICAL LEGEND AND ABBREVIATIONS	MAY, 2020
62 01E03	PARTIAL WRF ELECTRICAL SITE PLAN	MAY, 2020
63 01E04	ELECTRICAL DUCTBANK SECTIONS, LIGHTING AND PULL BOX SCHEDULE	MAY, 2020
64 02E01	PANEL SCHEDULES	MAY, 2020
65 02E02	ONE LINE DIAGRAM	MAY, 2020
66 02E03	EXISTING MCC WEST POWER PLAN	MAY, 2020
68 08E01	TERTIARY FILTERS CONTROL PANELS DETAILS	MAY, 2020
69 08E02	TERTIARY FILTERS - AREA POWER PLAN	MAY, 2020
70 08E03	TERTIARY FILTERS - LIGHTING PLAN	MAY, 2020
71 08E04	TERTIARY FILTERS - LIGHTING AND GROUNDING PLAN	MAY, 2020
73 09E01	DISINFECTION FACILITIES-CONTROL AND POWER PLAN	MAY, 2020
74 09E02	DISINFECTION FACILITIES-LIGHTING PLAN	MAY, 2020
75 09E03	DISINFECTION FACILITIES-LIGHTING AND GROUNDING PLAN	MAY, 2020
76 09E04	DISINFECTION FACILITIES-SECTIONS	MAY, 2020
79 99E01	TYPICAL ELECTRICAL DETAILS I	MAY, 2020
80 99E02	TYPICAL ELECTRICAL DETAILS II	MAY, 2020
81 99E03	TYPICAL ELECTRICAL DETAILS III	MAY, 2020
82 99E04	TYPICAL ELECTRICAL DETAILS IV	MAY, 2020
83 99E05	TYPICAL ELECTRICAL DETAILS V	MAY, 2020
84 99E06	TYPICAL ELECTRICAL DETAILS VI	MAY, 2020
85 99E07	TYPICAL ELECTRICAL DETAILS VII	MAY, 2020
86 99E08	TYPICAL ELECTRICAL DETAILS VIII	MAY, 2020
87 99E09	TYPICAL ELECTRICAL DETAILS IX	MAY, 2020
88 100E0	1 CONDUIT SCHEDULE I	MAY, 2020
89 100E0	2 CONDUIT SCHEDULE II	MAY, 2020
INSTRUMENTATION AND CONTROLS DRAWINGS - (N)		
90 01N01	INSTRUMENTATION - LEGEND, ABBREVIATIONS I	MAY, 2020
91 01N02	INSTRUMENTATION - LEGEND, ABBREVIATIONS II	MAY, 2020
92 01N03	NETWORK DIAGRAM	MAY, 2020
94 08N01	TERTIARY FILTER NO. 1 - P&ID	MAY, 2020
95 08N02	TERTIARY FILTER NO. 2 - P&ID	MAY, 2020
96 08N03	TERTIARY FILTER NO. 3 - P&ID	MAY, 2020



CONSTRUCTION



Attachment #1 - List of Drawings and Specifications

97 09N01	DISINFECTION STORAGE TANKS - P&ID	MAY, 2020
98 09N02	DISINFECTION LOOP SYSTEM - P&ID	MAY, 2020
99 09N03	DISINFECTION METERING PUMPS - P&ID I	MAY, 2020
100 09N0	4 DISINFECTION METERING PUMPS - P&ID II	MAY, 2020
101 09N0	5 CHLORINE CONTACT CHAMBERS - P&ID	MAY, 2020

The design services required hereunder were performed in accordance with the prevailing engineering standard of care by exercising the skill and ability ordinarily required of engineers performing the same or similar services and circumstances in the State of Florida.



**W.E. DUNN WRF
Filtration and
Disinfection
Improvements
Project**

**Contract # 178-0407-
NC (SS)**

SCHEDULE OF VALUES

Job: **Design Build Services - Dunn WRF Filtration & Disinfection Improvements - Phase 2**
 Contract No: **178-0407-NC(SS)**

APPLICATION NUMBER:
 APPLICATION DATE:
 PERIOD TO:

A ITEM NO.	B DESCRIPTION OF WORK	QTY	UNIT OF MEASURE	UNIT PRICE	C SCHEDULED VALUE	D WORK COMPLETED				E COMPLETED THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G/C)	H BALANCE TO FINISH (C - G)	I RETAINAGE 5%
						TOTAL QUANTITY COMPLETED	TOTAL QUANTITY COMPLETED PREVIOUS APP	TOTAL COMPLETED (D + E FROM PREVIOUS APP)	QUANTITY COMPLETED THIS PERIOD						
1000	PHASE 1A - MOBILIZATION														
1010	Mobilization & Demobilization	1.00	LS	\$ 150,000.00	\$ 150,000.00			0.00		0.00	0.00	0.00%	150,000.00	0.00	
1020	Temporary Field Offices & Support Equipment	1.00	LS	\$ 211,000.00	\$ 211,000.00			0.00		0.00	0.00	0.00%	211,000.00	0.00	
1030	Errosion Control & Trench Safety	1.00	LS	\$ 10,000.00	\$ 10,000.00			0.00		0.00	0.00	0.00%	10,000.00	0.00	
1040	Maintenance of Plant Operations	1.00	LS	\$ 126,470.00	\$ 126,470.00			0.00		0.00	0.00	0.00%	126,470.00	0.00	
1050	General Administration & Construction Management	1.00	LS	\$ 1,172,710.00	\$ 1,172,710.00			0.00		0.00	0.00	0.00%	1,172,710.00	0.00	
1060	Design Builder Performance & Payment Bonds	1.00	LS	\$ 66,864.00	\$ 66,864.00			0.00		0.00	0.00	0.00%	66,864.00	0.00	
1070	Design Builder Insurance	1.00	LS	\$ 115,007.00	\$ 115,007.00			0.00		0.00	0.00	0.00%	115,007.00	0.00	
1080	Design Builder Fee	1.00	LS	\$ 567,690.67	\$ 567,690.67			0.00		0.00	0.00	0.00%	567,690.67	0.00	
1100	PHASE 1B - DESIGN AND PERMITTING														
1110	100% Construction Documents	1.00	LS	\$ 111,365.00	\$ 111,365.00			0.00		0.00	0.00	0.00%	111,365.00	0.00	
1120	Engineering, Permitting, and Inspection Services During Construction	1.00	LS	\$ 177,254.00	\$ 177,254.00			0.00		0.00	0.00	0.00%	177,254.00	0.00	
2000	PHASE 2 - FILTRATION STURCTURE IMPROVEMENTS														
	SITE CIVIL														
2010	Potholing	1.00	LS	\$ 5,000.00	\$ 5,000.00			0.00		0.00	0.00	0.00%	5,000.00	0.00	
2020	Clear Trees @ Filter Beds	1.00	LS	\$ 4,000.00	\$ 4,000.00			0.00		0.00	0.00	0.00%	4,000.00	0.00	
2030	Demo Filters	1.00	LS	\$ 460,962.33	\$ 460,962.33			0.00		0.00	0.00	0.00%	460,962.33	0.00	
2040	Demo Old Instrument Shed	1.00	LS	\$ 11,145.00	\$ 11,145.00			0.00		0.00	0.00	0.00%	11,145.00	0.00	
2050	Pressure Washing	1.00	LS	\$ 14,536.00	\$ 14,536.00			0.00		0.00	0.00	0.00%	14,536.00	0.00	
2060	Site Grade	1.00	LS	\$ 19,341.00	\$ 19,341.00			0.00		0.00	0.00	0.00%	19,341.00	0.00	
2070	Catch Basin Rebuild	1.00	LS	\$ 9,299.00	\$ 9,299.00			0.00		0.00	0.00	0.00%	9,299.00	0.00	
2080	Topsoil Placement	1.00	LS	\$ 7,502.00	\$ 7,502.00			0.00		0.00	0.00	0.00%	7,502.00	0.00	
2090	Excavation on West Side	1.00	LS	\$ 18,577.00	\$ 18,577.00			0.00		0.00	0.00	0.00%	18,577.00	0.00	
2100	Local Dewatering on Filter Basin	1.00	LS	\$ 21,761.00	\$ 21,761.00			0.00		0.00	0.00	0.00%	21,761.00	0.00	
	STRUCTURAL														
2110	Concrete @ Filter Basin	1.00	LS	\$ 310,000.00	\$ 310,000.00			0.00		0.00	0.00	0.00%	310,000.00	0.00	
2120	Pipe Encasements	1.00	LS	\$ 61,405.00	\$ 61,405.00			0.00		0.00	0.00	0.00%	61,405.00	0.00	
	METALS														
2130	Aluminum Grating, Stairs, Handrail	1.00	LS	\$ 131,298.00	\$ 131,298.00			0.00		0.00	0.00	0.00%	131,298.00	0.00	
	FINISHES														
2140	Interior Filter Coatings	1.00	LS	\$ 254,316.00	\$ 254,316.00			0.00		0.00	0.00	0.00%	254,316.00	0.00	
2150	External Surface Rehab @ Cutoff	1.00	LS	\$ 5,084.00	\$ 5,084.00			0.00		0.00	0.00	0.00%	5,084.00	0.00	
	EQUIPMENT														
2160	Influent Gates	1.00	LS	\$ 111,120.00	\$ 111,120.00			0.00		0.00	0.00	0.00%	111,120.00	0.00	
2170	Aquadiamond Filters	1.00	LS	\$ 3,014,925.00	\$ 3,014,925.00			0.00		0.00	0.00	0.00%	3,014,925.00	0.00	
	SPECIAL CONSTRUCTION														
2180	Canopy	1.00	LS	\$ 215,071.00	\$ 215,071.00			0.00		0.00	0.00	0.00%	215,071.00	0.00	
2190	FRP Shed for Instrument Analyzer	1.00	LS	\$ 40,633.00	\$ 40,633.00			0.00		0.00	0.00	0.00%	40,633.00	0.00	
	MECHANICAL														
2200	Install Backwash Pipe Under Filters	1.00	LS	\$ 19,261.00	\$ 19,261.00			0.00		0.00	0.00	0.00%	19,261.00	0.00	
2210	Install Backwash Pipe Run	1.00	LS	\$ 11,202.00	\$ 11,202.00			0.00		0.00	0.00	0.00%	11,202.00	0.00	
2220	Backwash Line Tie Into Existing Drain	1.00	LS	\$ 3,368.00	\$ 3,368.00			0.00		0.00	0.00	0.00%	3,368.00	0.00	
2230	Install Drain Pipe 3ea	1.00	LS	\$ 41,794.00	\$ 41,794.00			0.00		0.00	0.00	0.00%	41,794.00	0.00	
2240	Testing Backwash & Drain Lines	1.00	LS	\$ 9,516.00	\$ 9,516.00			0.00		0.00	0.00	0.00%	9,516.00	0.00	
2250	Install Resuse Line & Hose Bibs	1.00	LS	\$ 42,910.00	\$ 42,910.00			0.00		0.00	0.00	0.00%	42,910.00	0.00	
2260	Relocate Existing Turbidity Analyzer	1.00	LS	\$ 3,039.00	\$ 3,039.00			0.00		0.00	0.00	0.00%	3,039.00	0.00	
2270	Relocate Filter Chemsan Sample Pump	1.00	LS	\$ 3,039.00	\$ 3,039.00			0.00		0.00	0.00	0.00%	3,039.00	0.00	
2280	Re Install RW Line to Sample Pump	1.00	LS	\$ 3,568.00	\$ 3,568.00			0.00		0.00	0.00	0.00%	3,568.00	0.00	
2290	Relocate Davit Crane & Base	1.00	LS	\$ 2,774.00	\$ 2,774.00			0.00		0.00	0.00	0.00%	2,774.00	0.00	
2300	Mechanical Expendables	1.00	LS	\$ 6,548.00	\$ 6,548.00			0.00		0.00	0.00	0.00%	6,548.00	0.00	
3000	PHASE 3 - DISINFECTION IMPROVEMENTS														
	SITE CIVIL														
3010	Clear Trees @ Disinfection Bldg	1.00	LS	\$ 5,296.00	\$ 5,296.00			0.00		0.00	0.00	0.00%	5,296.00	0.00	
3020	Sedimentation Control	1.00	LS	\$ 21,450.00	\$ 21,450.00			0.00		0.00	0.00	0.00%	21,450.00	0.00	
3030	Onsite Disinfection Line	1.00	LS	\$ 78,000.00	\$ 78,000.00			0.00		0.00	0.00	0.00%	78,000.00	0.00	
3040	Offsite Disinfection Line	1.00	LS	\$ 70,285.00	\$ 70,285.00			0.00		0.00	0.00	0.00%	70,285.00	0.00	

Attachment #2 - Phase II Schedule of Values																			
3050	Chlorine Connections to Existing	1.00	LS	\$	12,563.00	\$	12,563.00	0.00	0.00	0.00	0.00	0.00%	12,563.00	0.00					
3060	Testing of Disinfection Lines	1.00	LS	\$	5,113.00	\$	5,113.00	0.00	0.00	0.00	0.00	0.00%	5,113.00	0.00					
3070	Potable Waterline	1.00	LS	\$	17,380.00	\$	17,380.00	0.00	0.00	0.00	0.00	0.00%	17,380.00	0.00					
3080	4" Drain from FRP Shed	1.00	LS	\$	21,244.00	\$	21,244.00	0.00	0.00	0.00	0.00	0.00%	21,244.00	0.00					
3090	Piping to new FRP Shed	1.00	LS	\$	24,239.00	\$	24,239.00	0.00	0.00	0.00	0.00	0.00%	24,239.00	0.00					
3100	Temporary Pipe Base	1.00	LS	\$	12,977.00	\$	12,977.00	0.00	0.00	0.00	0.00	0.00%	12,977.00	0.00					
3110	Soil Excavation	1.00	LS	\$	20,470.00	\$	20,470.00	0.00	0.00	0.00	0.00	0.00%	20,470.00	0.00					
3120	Backfill	1.00	LS	\$	1,117.00	\$	1,117.00	0.00	0.00	0.00	0.00	0.00%	1,117.00	0.00					
3130	Asphalt Paving	1.00	LS	\$	118,082.00	\$	118,082.00	0.00	0.00	0.00	0.00	0.00%	118,082.00	0.00					
STRUCTURAL																			
3140	New Disinfection SOG, Walls, and Pads	1.00	LS	\$	322,613.00	\$	322,613.00	0.00	0.00	0.00	0.00	0.00%	322,613.00	0.00					
3150	Precast Structures	1.00	LS	\$	27,059.00	\$	27,059.00	0.00	0.00	0.00	0.00	0.00%	27,059.00	0.00					
METALS																			
3160	FRP Platform & Stairs	1.00	LS	\$	55,488.00	\$	55,488.00	0.00	0.00	0.00	0.00	0.00%	55,488.00	0.00					
3170	Bollards	1.00	LS	\$	12,421.00	\$	12,421.00	0.00	0.00	0.00	0.00	0.00%	12,421.00	0.00					
FINISHES																			
3180	Disinfection Bldg Coatings	1.00	LS	\$	70,000.00	\$	70,000.00	0.00	0.00	0.00	0.00	0.00%	70,000.00	0.00					
EQUIPMENT																			
3190	Bulk Storage Tanks	1.00	LS	\$	212,401.00	\$	212,401.00	0.00	0.00	0.00	0.00	0.00%	212,401.00	0.00					
3200	Recirculation Pumps	1.00	LS	\$	34,065.00	\$	34,065.00	0.00	0.00	0.00	0.00	0.00%	34,065.00	0.00					
3210	Chemical Dosing Skids	1.00	LS	\$	126,700.00	\$	126,700.00	0.00	0.00	0.00	0.00	0.00%	126,700.00	0.00					
3220	Sump Pump	1.00	LS	\$	2,613.00	\$	2,613.00	0.00	0.00	0.00	0.00	0.00%	2,613.00	0.00					
SPECIAL CONSTRUCTION																			
3230	Pre-Engineered Metal Canopy	1.00	LS	\$	52,562.00	\$	52,562.00	0.00	0.00	0.00	0.00	0.00%	52,562.00	0.00					
MECHANICAL																			
3240	Piping Materials	1.00	LS	\$	166,303.00	\$	166,303.00	0.00	0.00	0.00	0.00	0.00%	166,303.00	0.00					
3250	Washdown Stations & Bird System	1.00	LS	\$	13,236.00	\$	13,236.00	0.00	0.00	0.00	0.00	0.00%	13,236.00	0.00					
3260	Install Disinfection Building Piping	1.00	LS	\$	41,732.00	\$	41,732.00	0.00	0.00	0.00	0.00	0.00%	41,732.00	0.00					
3270	Offsite Pump Skid Piping	1.00	LS	\$	7,810.00	\$	7,810.00	0.00	0.00	0.00	0.00	0.00%	7,810.00	0.00					
4000 PHASE 4 - ELECTRICAL																			
4010	Install Ductbanks and Manholes	1.00	LS	\$	264,819.00	\$	264,819.00	0.00	0.00	0.00	0.00	0.00%	264,819.00	0.00					
4020	Filtration Electrical Distribution Panels	1.00	LS	\$	116,520.00	\$	116,520.00	0.00	0.00	0.00	0.00	0.00%	116,520.00	0.00					
4030	Filtration Electrical Rough In	1.00	LS	\$	79,445.00	\$	79,445.00	0.00	0.00	0.00	0.00	0.00%	79,445.00	0.00					
4040	Filtration Grounding Grid	1.00	LS	\$	47,667.00	\$	47,667.00	0.00	0.00	0.00	0.00	0.00%	47,667.00	0.00					
4050	Filtration Wiring & Terminations	1.00	LS	\$	105,927.00	\$	105,927.00	0.00	0.00	0.00	0.00	0.00%	105,927.00	0.00					
4060	Filtration Lighting	1.00	LS	\$	52,963.00	\$	52,963.00	0.00	0.00	0.00	0.00	0.00%	52,963.00	0.00					
4070	Disinfection Electrical Distribution Panels	1.00	LS	\$	79,445.00	\$	79,445.00	0.00	0.00	0.00	0.00	0.00%	79,445.00	0.00					
4080	Disinfection Electrical Rough In	1.00	LS	\$	68,852.00	\$	68,852.00	0.00	0.00	0.00	0.00	0.00%	68,852.00	0.00					
4090	Disinfection Grounding Grid	1.00	LS	\$	37,074.00	\$	37,074.00	0.00	0.00	0.00	0.00	0.00%	37,074.00	0.00					
4100	Disinfection Wiring & Terminations	1.00	LS	\$	84,742.00	\$	84,742.00	0.00	0.00	0.00	0.00	0.00%	84,742.00	0.00					
4110	Disinfection Lighting	1.00	LS	\$	47,667.00	\$	47,667.00	0.00	0.00	0.00	0.00	0.00%	47,667.00	0.00					
4120	Electrical Startup & Testing	1.00	LS	\$	28,329.00	\$	28,329.00	0.00	0.00	0.00	0.00	0.00%	28,329.00	0.00					
5000 PHASE 5 - INSTRUMENTATION & CONTROLS																			
5010	Furnish New PLCs	1.00	LS	\$	105,927.00	\$	105,927.00	-	0.00	0.00	0.00	0.00%	105,927.00	0.00					
5020	New Turbidity Panel	1.00	LS	\$	47,667.00	\$	47,667.00	-	0.00	0.00	0.00	0.00%	47,667.00	0.00					
5030	New Field Instruments & Analyzers	1.00	LS	\$	86,025.00	\$	86,025.00	-	0.00	0.00	0.00	0.00%	86,025.00	0.00					
5040	Fiber Optic Supply & Testing	1.00	LS	\$	13,240.00	\$	13,240.00	-	0.00	0.00	0.00	0.00%	13,240.00	0.00					
5050	Startup & Testing	1.00	LS	\$	42,371.00	\$	42,371.00	-	0.00	0.00	0.00	0.00%	42,371.00	0.00					
CONTINGENCIES / ALLOWANCES																			
A1	Project Permits and Fees Allowance	1.00	CA	\$	25,000.00	\$	25,000.00	0.00	0.00	0.00	0.00	0.00%	25,000.00	0.00					
A2	Landscaping and Irrigation Allowance	1.00	CA	\$	15,000.00	\$	15,000.00	0.00	0.00	0.00	0.00	0.00%	15,000.00	0.00					
A3	Structural Repairs Allowance	1.00	CA	\$	153,000.00	\$	153,000.00	0.00	0.00	0.00	0.00	0.00%	153,000.00	0.00					
A4	Unforeseen Conditions Allowance	1.00	CA	\$	200,000.00	\$	200,000.00	0.00	0.00	0.00	0.00	0.00%	200,000.00	0.00					
A5	General Conditions Extension Allowance	1.00	MO	\$	80,000.00	\$	80,000.00	0.00	0.00	0.00	0.00	0.00%	80,000.00	0.00					
A6	Mixers at CCC Allowance	1.00	CA	\$	145,250.00	\$	145,250.00	0.00	0.00	0.00	0.00	0.00%	145,250.00	0.00					
A7	Deep Foundation Support System Allowance	1.00	CA	\$	220,000.00	\$	220,000.00	0.00	0.00	0.00	0.00	0.00%	220,000.00	0.00					
A8	Owner Contingency	1.00	CA	\$	200,000.00	\$	200,000.00	0.00	0.00	0.00	0.00	0.00%	200,000.00	0.00					
A9	Design Builder Contingency	1.00	LS	\$	450,000.00	\$	450,000.00	0.00	0.00	0.00	0.00	0.00%	450,000.00	0.00					
TOTALS																			
					\$	11,921,504.00			\$	-			\$	-	0.00%	\$	11,921,504.00	\$	-

Attachment #3 – Clarifications & Exclusions



CONSTRUCTION



W.E. DUNN WRF Filtration and Disinfection Improvements Project

Contract # 178-0407-
NC (SS)

GENERAL NOTES

1. The pricing for the Lump Sum Proposal is based on 90 percent Specification and 70 percent drawings dated May 2020. Any additional scope and/or work added to the design subsequent to this design phase and/or required from Permit Review or other Authorities have Jurisdiction (AHJ) shall be funded by the Owner Contingency.
2. Removal of hazardous materials encountered during the work and not identified by the Contract Documents shall be reimbursed through the Owner Contingency. In the event suspected Asbestos Containing Materials (ACM's) or other hazardous materials are encountered, work in the area(s) will be halted until the Owner's testing agency samples and confirms the presence/absence of ACM's/hazardous materials. If ACM's/hazardous materials are present, it shall be the Owner's responsibility to remove any ACM's and/or hazardous materials and retest.
3. Application, review, and impact fees for permitting will be paid through the "Permit Allowance" which has been included as part of this Lump Sum proposal. These are assumed to be FDEP Construction Dewatering Permit, Pinellas County Building Permit and FDEP form 62-620.910(2) Notification of Construction Completion.
4. Based on our construction sequencing the Owner is responsible for operation of the existing/new process equipment as it is placed into service.
5. PCL's phased construction sequence requires multiple warranties start dates to apply as equipment is placed into service and the County has beneficial use. It is assumed that beneficial use occurs after the manufacturers testing is completed, functional checkout has been signed off by the owner, and the equipment is used to process and treat plant flow.
6. It is assumed that the existing filter basin is structurally sound and free of leakage.
7. All work associated with the Plant Drain Pump Station, the associated piping, and the Screening channel is excluded from this model per Owner's direction during design workshop dated 1/28/2020.
8. Billable rates for labor and equipment shown in tab 5 will be applicable for allowance, contingency and change order work.
9. PCL assumes the LD's specified also apply to final completion.
10. If construction is suspended by Owner, the Design Builder assumes we will be compensated for all work in progress.

Attachment #3 – Clarifications & Exclusions



CONSTRUCTION



W.E. DUNN WRF Filtration and Disinfection Improvements Project

Contract # 178-0407-
NC (SS)

GENERAL REQUIREMENTS

11. The work is phased to commence with the rehabilitation of existing Filter 4, followed by existing Filters 2 and 3 concurrently. It is assumed that existing Filter 2 and existing Filter 3 can be taken out of service concurrently, relying on new Filter 1 (previously named existing Filter 4) and existing Filter 1 to handle plant flow and maintain compliance with all treatment permits.
12. Assumes utilities (Power, Water, Sewer) use and fees for temporary facilities, equipment testing, startup and commissioning are to be supplied by Owner.
13. Existing flow isolation gates and valves are assumed to be in normal operation condition and can be used to isolate flows.
14. Assume one tank fill for each of the Sodium Hypochlorite bulk tanks prior start-up and testing. Any additional chemical fills are by Owner.

SITWORK

15. Assumes abandoning and capping in place all underground utilities that are no longer used.
16. Includes the asphalt restoration and in-kind replacement of the road to the offsite HS distribution station to the width of our trench. Ductbank runs will be restored to trench widths. County standard details apply for asphalt restoration.
17. Assumes that the Design Builder will coordinate with the Owner's existing chlorine gas supplier for the purging and abandoning of existing chlorine gas lines and equipment. All expenses from Chlorine Gas Supplier to be covered by Owner.
18. Assumes that groundwater produced from dewatering operations can be discharged into the existing storm drain system in accordance with approved permits, state and local regulations, and erosion control & sedimentation contract drawings & specifications.

CONCRETE

19. Assumes the existing concrete is of adequate structural integrity to allow for structural modifications.

MISCELLANEOUS METALS

20. Existing supports will be reused where possible in the filtration structure.

PAINT & COATINGS



CONSTRUCTION



**W.E. DUNN WRF
Filtration and
Disinfection
Improvements
Project**

**Contract # 178-0407-
NC (SS)**

Attachment #3 – Clarifications & Exclusions

21. Assumes necessary coatings of concrete surfaces in the New Filter Basins excluding existing channels. Any channels that are continually used to process flow will not be coated.

PROCESS EQUIPMENT

22. Assumes the existing filter media is considered non-hazardous and classified as construction debris.

MECHANICAL

23. Assumes the relocation of the turbidity analyzers from their current location. Sample points to remain at existing location.
24. Assumes that at all the piping tie-in points, the existing conditions of the piping is sound and of condition for operational use. Chlorine feed at the clarifiers is not to be rehabilitated as part of this project.

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	2022												2023											
						Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Task 7 - Phase 1 Construction Contingencies		60	60	14-Jul-21	05-Oct-21																								
P 1030	Submit & Approve Filters	60	60	14-Jul-21	05-Oct-21	Submit & Approve Filters																							
Owner GMP Review		216	55	24-Aug-20 A	29-Sep-21																								
3000	DB Ph 2 Review & County Board - GMP Approval	40	42	24-Aug-20 A	09-Sep-21	DB Ph 2 Review & County Board - GMP Approval																							
3010	DB Ph 2 NTP	0	0	29-Sep-21		◆ DB Ph 2 NTP																							
Phase 2 - Construction Schedule (Projected)		462	462	29-Sep-21	07-Jul-23																								
P 1020	Design Completion 100%	60	60	29-Sep-21	21-Dec-21	Design Completion 100%																							
P 1010	Obtain Building Permits	60	60	22-Dec-21	15-Mar-22	Obtain Building Permits																							
3120	Phase 2 Substantial Completion	0	0		11-May-23	◆ Phase 2 Substantial Completion																							
3140	Phase 2 Schedule Contingency	20	20	09-Jun-23	06-Jul-23																								
3130	Phase 2 Final Completion	0	0	07-Jul-23		◆ Phase 2 Final Completion																							
Submittals & Procurement		180	180	29-Sep-21	07-Jun-22																								
P 1120	Submit & Approve Demo Plan	10	10	29-Sep-21	12-Oct-21	Submit & Approve Demo Plan																							
P 1150	Procure Filters	100	100	06-Oct-21	22-Feb-22	Procure Filters																							
P 1040	Submit & Approve Chemical Skids	40	40	22-Dec-21	15-Feb-22	Submit & Approve Chemical Skids																							
P 1050	Submit & Approve Chemical Tanks	40	40	22-Dec-21	15-Feb-22	Submit & Approve Chemical Tanks																							
P 1060	Submit & Approve I&C	60	60	22-Dec-21	15-Mar-22	Submit & Approve I&C																							
P 1070	Submit & Approve Piles	40	40	22-Dec-21	15-Feb-22	Submit & Approve Piles																							
P 1080	Submit & Approve Concrete Mix & Rebar	15	15	22-Dec-21	11-Jan-22	Submit & Approve Concrete Mix & Rebar																							
P 1090	Submit & Approve Piping Materials	15	15	22-Dec-21	11-Jan-22	Submit & Approve Piping Materials																							
P 1100	Submit & Approve Electrical Materials	20	20	22-Dec-21	18-Jan-22	Submit & Approve Electrical Materials																							
P 1110	Submit & Approve Electrical Panels	40	40	22-Dec-21	15-Feb-22	Submit & Approve Electrical Panels																							
P 1130	Submit & Approve Coatings	15	15	22-Dec-21	11-Jan-22	Submit & Approve Coatings																							
P 1140	Submit & Approve Canopys	40	40	22-Dec-21	15-Feb-22	Submit & Approve Canopys																							
P 1160	Procure Chemical Skids	80	80	16-Feb-22	07-Jun-22	Procure Chemical Skids																							
P 1170	Procure Chemical Tanks	80	80	16-Feb-22	07-Jun-22	Procure Chemical Tanks																							
P 1190	Procure Electrical Panels	40	40	16-Feb-22	12-Apr-22	Procure Electrical Panels																							
P 1180	Procure I&C	40	40	16-Mar-22	10-May-22	Procure I&C																							
Site		312	312	16-Mar-22	08-Jun-23																								
A1000	Mobilize	10	10	16-Mar-22	29-Mar-22	Mobilize																							
A1010	Paving, Punchlist & Cleanup	19	19	12-May-23	08-Jun-23	Paving, Punchlist & Cleanup																							
Filtration		283	283	30-Mar-22	11-May-23																								
F 1000	Relocate Existing Turbidity Sampler	10	10	30-Mar-22	12-Apr-22	Relocate Existing Turbidity Sampler																							
F 1010	DLB Ductbanks to Filters & Install Panels	40	40	30-Mar-22	24-May-22	DLB Ductbanks to Filters & Install Panels																							
F 1020	F4 Flow Isolation Filter 4	10	10	13-Apr-22	26-Apr-22	F4 Flow Isolation Filter 4																							
F 1300	Install Electrical Distribution Panels @ Filters	15	15	13-Apr-22	03-May-22	Install Electrical Distribution Panels @ Filters																							
F 1030	F4 Demo Filter 4	25	25	27-Apr-22	01-Jun-22	F4 Demo Filter 4																							
F 1040	F4 New Concrete Filter 4	40	40	02-Jun-22	28-Jul-22	F4 New Concrete Filter 4																							
F 1060	F4 Underslab Piping Filter 4	8	8	02-Jun-22	13-Jun-22	F4 Underslab Piping Filter 4																							
F 1050	F4 Coatings Filter 4	20	20	29-Jul-22	25-Aug-22	F4 Coatings Filter 4																							
F 1070	F4 Mechanical Installation	20	20	26-Aug-22	23-Sep-22	F4 Mechanical Installation																							
F 1080	F4 Electrical Terminations	10	10	26-Sep-22	07-Oct-22	F4 Electrical Terminations																							
F 1090	F4 Startup & Testing	15	15	10-Oct-22	28-Oct-22	F4 Startup & Testing																							
F 1100	F3 Flow Isolation	5	5	31-Oct-22	04-Nov-22	F3 Flow Isolation																							
F 1180	F2 Flow Isolation	5	5	31-Oct-22	04-Nov-22	F2 Flow Isolation																							
F 1110	F3 Demo	15	15	07-Nov-22	29-Nov-22	F3 Demo																							
F 1190	F2 Demo	15	15	07-Nov-22	29-Nov-22	F2 Demo																							
F 1120	F3 New Concrete	30	30	30-Nov-22	13-Jan-23	F3 New Concrete																							
F 1140	F3 Underslab Piping	5	5	30-Nov-22	06-Dec-22	F3 Underslab Piping																							





CONSTRUCTION



W.E. DUNN WRF
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Contract # 178-0407-
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Attachment #5 - List of Potential Subcontractors and Major Suppliers

Description	Subcontractor/Supplier
DIV 01 - General Requirements	
Demolition	PAW Demolition
Demolition	ICI Demolition
Demolition	Speedy Concrete Cutting
Demolition	Maxter Enterprises LLC
Demolition	Thunder Demolition
DIV 03 - Concrete	
Concrete Installation	B&M Contracting Services, Inc.
Concrete Installation	Matcon Construction Services, Inc.
Concrete Installation	Integ-Crete Construction, Inc.
DIV 05 - Metals	
Micellaneous Metals	Bar-Fab of Florida, Inc.
Micellaneous Metals	Bearing Point Construction, Inc.
Micellaneous Metals	T3 Fabricators
DIV 06 - Wood, Plastics, and Composites	
FRP Platform	Mona Composite
FRP Platform	Fibergrate Composite
DIV 09 - Finishes	
Painting and Coatings	Exceletech Coatings Applications, LLC
Painting and Coatings	Cypress Coatings
Painting and Coatings	Universal Coatings
DIV 13 - Special Construction	
Metal Canopy	Florida Metal Buildings
Metal Canopy	Steel Worx Solutions
Metal Canopy	Formella Construction
Metal Canopy	Caladesi Construction
Metal Canopy	Trident Building Systems, LLC
DIV 26 - Electrical	
Electrical	Cogburn Bros, Inc.
DIV 31 - Earthwork	
Drilled Concrete Piers	Keller
Deep Foundation Support	Earthtech
DIV 32 - Exterior Improvements	
Asphalt Paving	ACPLM, Inc.
Asphalt Paving	John W. Lord and Sons
DIV 40 - Process Integration	
Pipe and Valve Supply	Ferguson Waterworks
Pipe and Valve Supply	Core and Main
Pipe and Valve Supply	McDade Waterworks
Slide Gates	Hydro-Gate
Instrumentation	Rocha Controls
DIV 43 - Process Gas and Liquid Handling, Purification, and Storage Equipment	
Chemical Feed Pumps	Jesco
Chemical Feed Pumps	TKM
Chemical Feed Pumps	Prominent
FRP Tanks	Augusta Fiberglass
FRP Tanks	Harrington Industrial Products
FRP Tanks	Plastanks
DIV 46	
Submersible Mixers	TBD
Cloth Media Filters	Aqua Aerobics



CONSTRUCTION



W.E. DUNN WRF
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Attachment #6 – Contingencies and Allowances

1. **Project Permits and Fees: \$25,000**
Allowance for phase II permits and fees.
2. **Landscaping and Irrigation: \$15,000**
Allowance for repair and restore landscaping and irrigation system.
3. **Structural Repairs: \$153,000**
Allowance for structural inspections and repairs for the existing filter basin as per the following:
 - a. Concrete Walls & Floor crack repairs: \$68,000
 - b. Concrete inspections: \$25,000
 - c. Concrete spalling as described in DCP Appendix A: \$60,000
4. **Unforeseen/Unknown Conditions and Undefined Work: \$200,000**
5. **General Conditions Extension: \$80,000/30 days**
Allowance for delay damages and schedule extension for additional 30 days of general conditions for unforeseen/unknown conditions and / or Owner delay.
6. **Deep Foundation Support System: \$220,000**
Allowance for the Deep Foundation Support System under Disinfection Building structure.
7. **Chlorine Contact Chamber Mixers: \$145,250**
Allowance to furnish and install (2) new mixers at CCC.
8. **Owner’s contingency per Article 2.3: \$200,000**
9. **Design Builder Contingency: \$450,000**
Contingency controlled by and for the Design-Builder to cover design and construction progression beyond the 70% design documents.

Contingencies and Allowances		\$ 1,488,250
1	PERMITS AND FEES	\$ 25,000
2	LANDSCAPING AND IRRIGATION SYSTEM	\$ 15,000
3	STRUCTURAL REPAIRS	3.a, 3.b, 3.c
3.a	BASIN CONCRETE CRACK REPAIRS	\$ 68,000
3.b	BASIN CONCRETE INSPECTION	\$ 25,000
3.c	BASIN CONCRETE SPALLING REPAIRS	\$ 60,000
4	UNFORESEEN/UNKNOWN CONDITIONS AND UNDEFINED WORK	\$ 200,000
5	GENERAL CONDITIONS EXTENSION	\$ 80,000
6	DEEP FOUNDATION SUPPORT SYSTEM	\$ 220,000
7	CHLORINE CONTACT CHAMBER MIXERS	\$ 145,250



CONSTRUCTION



**W.E. DUNN WRF
Filtration and
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Project**

**Contract # 178-0407-
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Attachment #6 – Contingencies and Allowances

8	OWNER'S CONTINGENCY – Article 2.3	\$	200,000
9	DESIGN BUILDER CONTINGENCY	\$	450,000

Allowance Items:

Design-Builder and Owner will work together to review the Allowance Items and Allowance Values based on design information then available to determine that the Allowance Values constitute reasonable estimates. Design-Builder and Owner will continue working closely together during the preparation of the design to develop Construction Documents consistent with the Allowance Values. Nothing herein is intended in any way to constitute a guarantee by Design-Builder that the Allowance Item in question can be performed for the Allowance Value.

No work shall be performed on any Allowance Item without Design-Builder first obtaining in writing advanced authorization to proceed from Owner.

Whenever the actual price for an Allowance Item is more than or less than the stated Allowance Value, the Contract Price shall be adjusted accordingly by Change Order.

PCL Construction, Inc.

Pinellas County - Professional Design Build Services

Dunn Water Reclamation Facility & Disinfection Improvements Project - Contract No. 178-0407-NC(SS)

All equipment to be billed at the blue book rates per the current version of equipment watch (www.equipmentwatch.com)

*Travel expenses outside the Tampa Bay Metropolitan Statistical Area to be reimbursed in accordance with Florida Statutes.

Description of Management and Staff

Billable Rate

<i>Description of Management and Staff</i>	<i>Billable Rate</i>
<i>PCL Construction:</i>	
Principal In Charge	\$ 238.00 /hr
DB Manager	\$ 192.00 /hr
Construction Manager	\$ 185.00 /hr
Project Manager	\$ 162.00 /hr
Chief Estimator	\$ 182.00 /hr
Superintendent	\$ 175.00 /hr
Commissioning Manager	\$ 162.00 /hr
Estimator	\$ 148.00 /hr
Project Engineer	\$ 128.00 /hr
HSE Supervisor	\$ 98.00 /hr
Foreman	\$ 88.00 /hr
Project Administration	\$ 65.00 /hr
<i>Carollo Engineers:</i>	
Principal Engineer	\$ 265.00 /hr
Senior Engineer	\$ 240.00 /hr
Project Professional	\$ 205.00 /hr
Engineer	\$ 135.00 /hr
Senior CADD Designer	\$ 135.00 /hr
CADD Designer	\$ 120.00 /hr
Sr. Administrative Assistant	\$ 110.00 /hr
Clerk/Administrative	\$ 80.00 /hr
<i>Cogburn:</i>	
Project Manager	\$ 150.00 /hr
Electrician	\$ 135.00 /hr
Estimator	\$ 125.00 /hr

<i>Rocha Controls:</i>	
HMI/PLC Programmer	\$ 145.00 /hr
Consulting/Design Engineer	\$ 130.00 /hr
Design Engineer	\$ 110.00 /hr
Field Service Technician	\$ 110.00 /hr
Panel Builder	\$ 65.00 /hr
<i>Hyatt Survey:</i>	
Senior Professional Surveyor and Mapper or Project Manager	\$ 165.00 /hr
Professional Surveyor and Mapper	\$ 135.00 /hr
Senior CADD Technician	\$ 115.00 /hr
CADD Technician	\$ 95.00 /hr
<i>Dialogue:</i>	
Principal/ Senior Public Relations Counselor	\$ 215.00 /hr
Public Relations Specialist	\$ 160.00 /hr
Graphic Design Subconsultant	\$ 120.00 /hr
Web Programming Subconsultant	\$ 120.00 /hr
PR Coordinator/Administrative Support	\$ 60.00 /hr
<i>MC² Engineers:</i>	
Project Manager	\$ 171.00 /hr
Chief Engineer	\$ 195.00 /hr
Senior Engineer	\$ 158.00 /hr
Project Engineer	\$ 125.60 /hr
Engineer	\$ 113.60 /hr
Geologist	\$ 85.00 /hr
Sr. Technician	\$ 73.80 /hr
Technician	\$ 61.20 /hr
CADD Technician	\$ 77.90 /hr
Clerical	\$ 59.50 /hr