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INDIANA UTILITY
REGULATORY COMMISSION

Petitioner's Exhibit No. 3

THE CITY OF EVANSVILLE, INDIANA

INDIANA UTILITY REGULATORY COMMISSION

CAUSE NO. 45545 S1

SUB-DOCKET DIRECT TESTIMONY

OF

ANDREA W. BRETL, P.E.

SPONSORING ATTACHMENTS AWB-1 THROUGH AWB-4__

City of Evansville

Cause No. 45545 S1

Direct Testimony of Andrea W. Bretl, P.E.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Andrea W. Bretl. I am Area Manager of Central Illinois Operations for Clark Deitz, Inc. My business address is 125 W. Church Street, Champaign, Illinois 61820.

Q. Please describe your formal education and summarize your experience and current duties for the City of Evansville ("Petitioner").

A. I hold a Bachelor of Science degree in Environmental Engineering from Swarthmore College and a Master of Engineering degree in Civil and Environmental Engineering from Massachusetts Institute of Technology. I have worked for Clark Dietz for 17 years, where I am currently an Area Manager. I am also a team leader and project manager for our civil environmental group that is responsible for water and wastewater treatment facility planning and design. I have extensive experience with process design calculations, hydraulic and operational evaluations of existing plants, and facility master plans. With Clark Dietz I have over 10 years of experience working with the Evansville Water and Sewer Utility

("EWSU"). From 2018-2023, I was the project manager for their East Wastewater Treatment Plant Capacity Expansion project and prior to that managed several other projects at their facilities. Most recently, I also worked on water treatment plant value engineering for Petitioner and we are starting a contract to provide engineering assistance for the water treatment plant design redesign.

Q. Have you previously testified before the Indiana Utility Regulatory Commission (the "Commission")?

A. No I have not.

Q. Are you sponsoring any attachments?

A. Yes I am sponsoring the following attachments to my testimony:

- <u>Attachment AWB-1</u>: July 2023 Water Plant Value Engineering Report
- <u>Attachment AWB-2</u>: August 29, 2023 EWSU Water Plant VE Review
- <u>Attachment AWB-3</u>: November 14, 2023 Technical Memorandum
- <u>Attachment AWB-4</u>: Original and Hybrid Site Layouts

Q. Were these attachments prepared by you or under you supervision?

A. Yes they were.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is two parts: (1) to describe the role Clark Dietz played in offering guidance and technical input to Petitioner in the development of alternative solutions to the original AECOM WTP design; and (2) to discuss the hybrid solution that has ultimately been identified by Petitioner as the most advantageous solution for the WTP Plant moving forward.

Q. Why was Clark Dietz engaged by Petitioner to advise on the WTP Project?

A. As explained in greater detail in the testimony of Shawn Wright, on March 31, 2023, AECOM communicated to Petitioner that it was anticipating a cost for the WTP of around $350 million dollars. This cost estimate was much higher than what had previously been communicated to Petitioner and much higher than they were anticipating. This and other issues caused the City to seek advice from other engineering firms to determine a path forward. Petitioner reached out to Clark Dietz in May 2023 and engaged us for the purpose of offering an expert opinion regarding the condition of the AECOM original plant design, as well as to offer guidance and technical input to Petitioner in the development of alternative solutions.

Q. What specifically has Petitioner engaged Clark Dietz to do with respect to the WTP Project?

A. Petitioner originally retained Clark Dietz in June 2023 to engage in "value engineering" of the original plant design in an effort to identify opportunities for cost savings while maintaining functionality, treatment objectives, and performance. In August 2023 our scope of work was expanded by Petitioner to identify alternative solutions for the WTP Project, including developing a new conceptual water plant design and estimating project costs with less uncertainty.

Q. Please explain Clark Dietz's role in value-engineering AECOM's original WTP design.

A. When AECOM's cost estimate was provided to Petitioner in May 2023, it was much higher than what Petitioner originally anticipated for the WTP Project. Petitioner asked Clark Dietz to review the plans and determine if cost savings with the original WTP design could be identified. The need for the value engineering review was confirmed when the Guaranteed Maximum ("GMAX") price was issued in June 2023. The goals of Clark Dietz's work included evaluating alternative design, construction, or operational options; ensuring that the project aligned with stakeholder expectations and requirements; and developing recommendations for implementation to improve project outcomes. Petitioner directed Clark Dietz to evaluate potential changes and deletions from the 90% design documents while retaining the new plant concept and meeting capacity, regulatory requirements, and water quality goals. The documents we reviewed included AECOM's meeting minutes, April 2021 Advanced Facility Plan, basis of design documents, and 90% drawings and specifications. At the conclusion of this review, we recommended potential cost savings including: deferring construction of the ozone treatment system until a later time, changing the type of pile system used to conform with other pile types used at EWSU facilities in this area, raising the hydraulic profile, considering reuse of some elements of the existing system such as the existing 6.5 million gallon clearwell and high service pump station, improving site layout and piping layout for more efficiency, and simplifying the new administration building. Our recommended alternatives for potential cost savings were submitted to Petitioner in our July 2023 Water Plant Value Engineering Report. The July 2023 Water Plant Value Engineering Report is provided as Attachment AWB-1 to my testimony. As shown in Attachment AWB-1, the preliminary analyses that we presented in July 2023 estimated that cost savings between $78.5M and $131M were possible, however the range in potential savings corresponded to the uncertainty in needing to design these modifications.

Q. In your July 2023 analysis, did Clark Dietz evaluate potential rehabilitation of the existing water treatment plant?

A. No, Clark Dietz's scope was not to evaluate rehabilitation of the existing water treatment plant. We were aware that Petitioner had two other engineering firms, Black & Veatch and Arcadis, evaluating rehabilitation options for the existing plant. Our focus was on value engineering and cost reduction of a new water plant. However, as part of our cost reduction ideas we suggested reusing some parts of the existing water plant, such as the existing large clearwell, for added cost savings. The results of the Black & Veatch and Arcadis's evaluations were made available to Clark Dietz by Petitioner in late July 2023.

Q. Did the GMAX pricing, VE review of the GMAX pricing, or rehabilitation estimates reflect Petitioner's total project cost for the new water plant?

A. No, the GMAX pricing reflected the cost for the improvements shown in AECOM's 90% drawings; however, there were some items that those drawings did not cover.

In August 2023, Clark Dietz evaluated other cost elements not included in the 90% drawing or the GMAX pricing. We determined that there were a number of additional costs including: 1) design engineering costs, which would be necessary if modifications were made to the AECOM drawings through either VE or rehabilitation, 2) construction engineering costs, 3) electrical utility costs, 4) demolition costs for the existing plant, 5) potential change orders, and 6) the cost of delay due to inflation if the construction did not start in a timely manner due to needing to redesign the project. Our analysis of the total project costs, as well as our evaluation of the rehabilitation option as prepared by Petitioner's other engineers, was presented to the Petitioner in an August 29, 2023 presentation which is provided as Attachment AWB-2 to my testimony.

Q. Upon review of the July 2023 Water Plant Value Engineering Report and discussions of the total project costs with Petitioner, what was Clark Dietz's role in Petitioner's subsequent value engineering work?

A. After reviewing and discussing our July 2023 Water Plant Value Engineering Report, rehabilitation options evaluated by the City's other engineering consultants, and the uncertainty with all of the engineering costs with Petitioner, we determined that the cost information presented had more uncertainty than Petitioner was comfortable with as the basis for decision making. In August 2023, Petitioner extended our scope of services and requested that we participate with a team of engineers to develop two conceptual water plant designs to obtain project cost estimates with less uncertainty. The other consulting engineering firms on the team, Black & Veatch and Arcadis, were retained independently by Petitioner.

The first conceptual design option was the Hybrid Option and was based on the independent recommendations of both Black & Veatch and Arcadis that some portions of the existing plant, particularly the South Plant, be rehabilitated and other portions, particularly the North Plant, be demolished and replaced because the North Plant is well past its useful life. Black & Veatch and Arcadis concluded in their July analysis that a total rehabilitation of the plant was not a feasible option because at least half of the existing plant (North Plant) was not salvageable; however, they determined that a hybrid new-rehabilitated option was feasible.

The second conceptual design option was the VE of the new plant, which eliminated the use of the majority of the existing plant except for the existing intake structure. The VE option used most elements of the 90% AECOM design. However, using the same treatment components, except ozone treatment, it also revised the site layout, changed the hydraulic profile, and eliminated the new administration and maintenance building.

The combined team of engineers and Petitioner and their operations staff kicked off the conceptual design efforts on August 31, 2023. We included the GMAX contractor, Kokosing, and Kokosing's major subcontractor, Sterling, on the team to provide more accurate pricing estimates. A week after the kickoff meeting, we had a Workshop on September 7, 2023 where we discussed each team's independent work from the preceding months, the objectives for the conceptual design and cost estimating efforts, site constraints, the schedule, and preliminary criteria. As a team, we also met Petitioner's operations staff at the water plant facilities for a full walk through exploring the issues and opportunities at the existing plant, its operations, and water-quality specific requirements. After the September 7 Workshop, the combined team met for two hours each week for the purpose of refining the components of the Hybrid and VE Options and providing the contractors with information to be used for cost estimation. In the initial weeks, we defined the planning objectives, confirmed treatment goals, discussed future regulatory requirements, and treatment regulatory requirements. The planning goals we developed were:

1. Work collaboratively as a single team with all the best ideas on the table.
2. Develop 2023 planning costs that have a higher level of confidence than the current costs.
3. Develop life cycle costs for the hybrid option and new plant option.
4. Meet current water quality requirements, and plan for future requirements.
5. Maximize the reuse of the existing plant. Maximize the best and highest reuse of all real estate.
6. Develop costs for demolition of the un-reused portions of the existing plant.

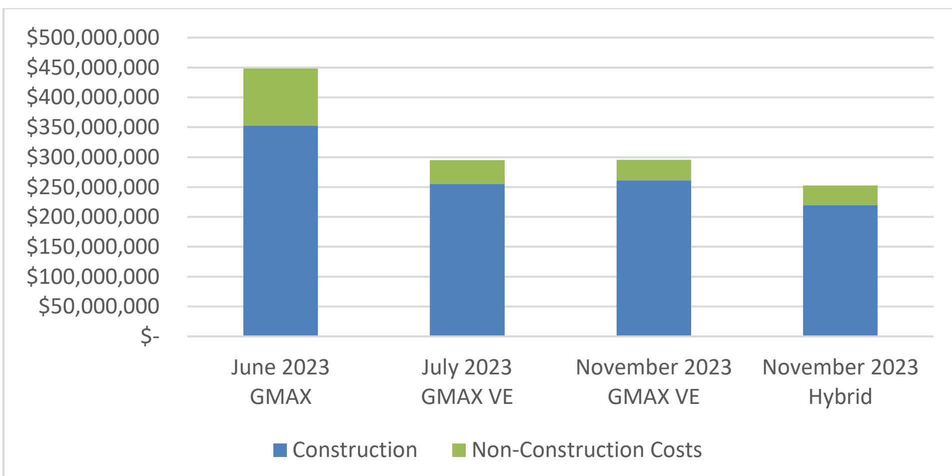
7. Develop a phasing plan and associated costs per phase.

During September and October 2023 weekly meetings, there were multiple conceptual designs developed, discussed, and modified to determine the optimum plant layout and reuse possibilities. At each meeting, plant layout and process flow diagrams were discussed and refined. Several site visits were performed to review existing systems, consider reuse potential, assess space availability, and review operational concerns. The contractors developed conceptual construction costs used their experience with similar construction, their work on the GMAX pricing, and quotes obtained from subcontractors and suppliers.

After meeting weekly for eight weeks, our work culminated in an October 26, 2023 workshop and full-team site visit. In the workshop, we reviewed and discussed the complete contractor-provided price estimates for both the Hybrid and VE Options. With the cost estimating numbers, the team identified additional savings items and iterated through several different Hybrid option ideas and the associated costs, advantages, and disadvantages with the options. Following the workshop and the final estimated pricing, we summarized the Hybrid Option conceptual design engineering work in a November 14, 2023 Technical Memorandum to Petitioner, which is included as Attachment AWB-3 to my testimony.

Q. How do the conceptual construction costs for the different options compare?

A. Cost estimates for the final VE and Hybrid Options were developed by Kokosing based on the design criteria, site layouts, process flow diagrams, and hydraulic profiles provided by the engineering team. The costs for both the VE and Hybrid Option were compared to the GMAX price developed for the 90% AECOM drawings and the July 2023 VE estimate as shown in the chart below. The non-construction costs include engineering fees, electrical utility relocation or new service, cost inflation estimates, and permitting. For the June 2023 GMAX costs we also added additional costs for adjusting the structure elevations needed to meet IDEM flood elevation requirements, and additional concrete and rebar costs to account for the increase in structure size between AECOM's 90% and 100% drawings.



Both the VE Option and the Hybrid Option offer significant savings over the original GMAX price. Based on the conceptual design work and contractor estimates, the Hybrid Option appears to provide $43M more savings than the VE Option. Since it was the lower cost option, the Hybrid Option was selected by Petitioner as the preferred alternative.

The estimated total project cost of AECOM's original new plant design based on the GMAX proposal prepared using AECOM's 90% design documents is $448M. The estimated total project cost of the Hybrid Option using the November 2023 conceptual design is $258M. Therefore, the conceptual Hybrid Option developed by the engineering team is estimated to provide EWSU with $190M in savings compared with the GMAX pricing developed from the AECOM 90% design documents. Thus, Petitioner has determined to move forward with the Hybrid Option, as it will produce the most savings for the City and its customers.

Q. Please describe the Hybrid Option and how it compares to the original WTP design.

A. The majority of the proposed Hybrid Option treatment includes the same treatment processes as the original WTP design. However, the Hybrid Option is able to produce significant savings over the original AECOM design for the following reasons:

1. The Settling process reuses existing settling basins in the south plant. This will produce saving over the new water plant because of avoided excavation, pile, and concrete costs. The internal components of the Hybrid Settlers will be new and additional capacity will be gained using tube settlers.

2. Site piping costs are reduced by a more efficient plant layout and by eliminating the pipe stands originally designed for the raw water piping.

3. Ozone has been eliminated because it is not required to meet current water quality goals. The hybrid design will reserve space in the treatment footprint and hydraulic profile so that ozone or other methods of additional treatment can be added in the future, if required. Eliminating ozone generation requirements saves costs for both tankage, treatment equipment, and the cost of upgrading the site electrical for the higher load associated with the ozone treatment equipment.

4. Filtration will be new equipment in a new structure, which is similar to the AECOM design. However, the Hybrid option raises the structure elevation which will save in excavation costs. The pile type was assumed to conform to Petitioner's other recent pile designs with large structures in this vicinity, which is another significant cost savings. Also, the high service pump station and backwash pump stations have been consolidated located on top of the clearwell to save space and consolidate electrical requirements.

5. The existing site electrical service will be reused. A new electrical feed is no longer required because the electrical load for a new ozone treatment system has not been included.

6. Several of the existing chemical buildings will be reused. New chemical feed equipment will be installed in areas where the building is being reused.

7. The hybrid design eliminates the original design's new administration building. The existing building will continue to be used for administrative and maintenance staff spaces.

The following chart summarizes the components of the original AECOM design in comparison with the selected Hybrid design. The site layouts of the Original Design and the conceptual site layout of the Revised Hybrid Design are included in Attachment AWB-4.

	Original Design	**Revised Hybrid Design**	**Savings Source**
Intake building rehabilitation	◑	◑	Piping made more efficient
Site piping	✔	✔	Shortened length, pipe won't be elevated
Rapid Mix/Splitter Structure	✔	✔	No savings
Settling Basins	✔	◑	No new structures, piles, or excavation requirements; internal components new

Filters	✔	✔	All new filters
Ozone	✔	⊗	Process eliminated
Clearwell	✔	✔	No savings
High Service Pump Station	✔	✔	Piping efficiency
Site Electrical Distribution	✔	◑	No new site electrcial feed or backup power.
Residual Pump Station	✔	✔	Structure will not be as deep saving excavation.
PAC Chemical	✔	✔	No savings
Hypochlorite	✔	✔	No new structure
Coagulant	✔	✔	No new strucutre
Post Filtration Chemicals	✔	✔	No savings
Demolition East of Waterworks Road (Levee Building and Maintenance Garage)	✔	✔	No savings
Demolition West of Waterworks Road (Abandoned Water Plant Structures)	✔	✔	No savings
Administration and Maintenance Spaces	✔	⊗	Eliminated new spaces

Q. If part of the existing WTP is being reused in the Hybrid Option, why does Petitioner need to use additional space on the east side of Waterworks Road where the City Maintenance Garage and Levee Authority Buildings are located?

A. The Hybrid Option includes a new filter building with clearwell, high service pump station, and backwash supply pump station. During construction, the water treatment capacity of the north plant is needed, therefore the north plant cannot be taken out of service until new facilities are available to meet the design water demand. This eliminates the area of the north plant from consideration for new treatment components. The only other significant open space west of Waterworks Road is the wedge-shaped parcel south of the south plant. Much of this wedge shape is in the toe of the levee, which would be difficult or impossible to get permitted and could jeopardize the integrity of the levee. Also, this area has been reported to have boiling sands during high river stages, which would complicate the construction and foundation designs. The limited buildable area and the complexities of building the required footprint south of the south plant, make this an infeasible location for the new components of the Hybrid Option.

With construction of new components to the north and south of the existing plant infeasible, the only remaining location is east since the Ohio River is on the west side. The conceptual layout of the Hybrid Option has the filter building with clearwell, high service pump station, and backwash supply pump station east of Waterworks Road, but not on the footprint of the City maintenance garage or the levee building. However, the excavation, construction laydown, piping, and other access requirements during and after construction with this new infrastructure will make the continued access to and operation of these buildings difficult or impossible.

Q. Do you believe the Hybrid Option is reasonably necessary for the City of Evansville to continue providing reasonable and adequate water utility service?

A. Yes. The existing water treatment plant is well over 100 years old and most of the structures and treatment components are well past their design life. Petitioner must make significant improvements to structures, equipment, conveyance piping and valves in order for the plant to continue providing reasonable and adequate service to Evansville's customers. I believe the Hybrid Option is a reasonable alternative to building an entirely new plant, as it will rehabilitate existing components of the plant that have at least 30 years of design life remaining and rebuild new components of the plant and allow the plant to remain on and directly adjacent to the existing site. Further, this option is more cost-effective than building an entirely new WTP and will be most advantageous for the City and Evansville's customers moving forward.

Q. Does this conclude your testimony?

A. Yes.

I, Andrea W. Bretl, P.E. affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

Andrea W. Bretl, P.E.

Date: 1/24/2024

REPORT

Water Plant Value Engineering

Prepared for: Evansville Water and Sewer Utility

CDI Project Number: E0080470

Prepared by: Clark Dietz, Inc.
&
Benton and Associates

Date: July 7, 2023

Professional Consulting and Design Services

BENTON & ASSOCIATES INC

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Executive Summary

After review of the existing documentation, summarized in Chapter 6, available on the planning and design of the New Water Plant we concluded that there are several main reasons that constructing a New Water Plant instead of rehabilitation of the existing plant was recommended. The reasons are discussed and Chapter 2 and summarized as:

1. Previous evaluations of the existing water plant (HNTB, 2016) (AECOM, 2021) found equipment, structures, and systems in both the North and South water plants that are past their useful life.
2. An extensive comparative analysis showed that with similar treatment schemes, rehabilitation of the existing plant had similar capital costs but achieved fewer of EWSU's non-monetary goals (AECOM, 2021).
3. Operating two plants (the North plant and the South plant) is a challenge because of the flow split and the different hydraulic and operating characteristics of the two plants. This situation could be improved through rehabilitation and retrofit by metering flow to each plant and installing automated valving to improve the flow split. However, whether both plants are rehabilitated, or one half is rehabilitated, and a half-capacity East treatment plant is built, there would still be the complexity of operating two systems with different process flows and hydraulic profiles.
4. Rehabilitating the existing plant would not bring the existing systems to complete seismic compliance with existing standards.

Given these reasons, and the strong likelihood that rehabilitation would be as costly as a new plant, our team recommends proceeding with the construction of the New Water Plant. However, our value engineering (VE) review and the review of the selected contractor has found significant potential savings. Details on VE items that the Clark Dietz team recommends are in Chapter 3. The most significant savings are based on the following recommendations:

1. Defer Ozone – This option defers installation of the ozone system and corresponding biological filtration. Conventional filtration should be installed with filter bed depth sufficient to either convert to biological in the future or convert to granular activated carbon (GAC) filter beds for PFAS sorption.
2. Change Pile Type – This option changes from 30" diameter drilled shaft founds to auger cast piles. Auger cast piles have been used successfully by Evansville for recently constructed similar structures.
3. Reduce Treatment Capacity – The existing 50 MGD capacity is based on a misunderstanding of population growth projections and overly optimistic projects for industrial and commercial water demand growth. Based on the data available for review, a 40 MGD New Water Plant capacity should be sufficient for the planning period with hydraulic and site space reserved for future expansion. If a new industrial user with a high water demand is expected, then a future expansion may be warranted earlier than the planning period.
4. Raise Hydraulic Profile – The plant is not built to balance cut and fill, rather significant excavation, construction dewatering, and material handling, and disposal will be required. Raising the profile will reduce construction cost and time. It will also bring all treatment structures above the river high water level.
5. Rehab and Reuse the 6.5 MG Clearwell and High Service Pump Station. If the hydraulic profile is raised, there may be an opportunity to reuse the existing 6.5 MG clearwell and high service pump station, which would eliminate, or partially eliminate, the need for the deepest designed new tank. This option will need further evaluation prior to implementation.

There are many other smaller value engineering opportunities that combined also add to significant savings.

If EWSU makes some difficult choices and accepts the VE options presented here, we think it is likely that at least $105M in savings can be found, which could bring the construction cost down to $248M. A breakout of the savings are discussed in Chapter 4. Part of the savings will likely depend on not deferring the start of construction. Delays to construction start will lead to increases in construction cost as material and labor prices continue to rise.

We believe that, acting promptly, even with the modifications described herein, construction could possibly start in 90 days. For this early of a construction start even with this magnitude of design modifications will require:

1. The design engineer keeping as much of the process, structural, electrical, and mechanical design as possible while being flexible on resizing some elements and significantly modifying the site design.
2. All parties being comfortable with design work continuing as construction starts and understanding and prioritizing decision making to keep construction work moving.
3. The Contractor will being able to be firm and responsive with pricing modifications on short turn-around times.
4. All parties being comfortable with prompt decision making and follow through.

The savings are only possible if the City, Engineering team, and Contractor's team can agree on the VE changes, come to a prompt agreement on VE dollar values, and finalize design during construction.

CHAPTER 1 - INTRODUCTION

1.1 NEED FOR WATER PLANT IMPROVEMENTS

The Evansville Water and Sewer Utility (EWSU) owns and operates the Evansville Water Treatment Plant. The Water Utility has a service area of approximately 100 square miles and provides water to 93% of residents within Vanderburgh County (Area Plan Commission, 2016). The population served in 2015 was approximately 163,000 with over 60,000 residential and commercial customers. They also serve four wholesale customers: German Township Water District and three others in Gibson and Warrick Counties.

1.1.1 WATER SUPPLY

The source of water for the Water Utility is the Ohio River. The existing plant is rated at a 60 million gallon per day (MGD) flow. The average reported distributed in 2015 was 29 MGD (Area Plan Commission, 2016). In addition to the treatment plant, watermains, booster stations, and fire hydrants, there are also eight storage facilities with capacities ranging from 0.5 to 20 MG. The total system storage is 37 MG. Some parts of the existing treatment plant were constructed in the early 1900s with major improvements or expansion occurring every 20 to 30 years.

In the Evansville-Vanderburgh County Comprehensive Plan (2015-2035). The stated goal for the Water Utility was to provide high quality, safe, dependable water service to the planning area at rates that encourage developments. The Comprehensive Plan also noted that water plant facility improvements were needed to meet future growth needs and meet future regulations.

1.1.2 POPULATION

The Comprehensive Plan reviewed population trends in the City and County from 1950 through 2015. The plan notes that while the City's population has generally declined since 1960, the county population has generally grown. The population table from the Comprehensive Plan is shown in Figure 1.

Table 4-2: Change in Population: Vanderburgh County and City of Evansville: 1950-2010

YEAR	COUNTY			CITY		
	POPULATION	AMOUNT OF CHANGE	PERCENT OF CHANGE	POPULATION	AMOUNT OF CHANGE	PERCENT OF CHANGE
2010	179,703	7,781	4.53	117,429	- 4,153	- 3.42
2000	171,922	6,864	4.16	121,582	- 4,690	- 3.71
1990	165,058	-2,457	- 1.47	126,272	- 4,224	- 3.24
1980	167,515	-1,257	- .74	130,496	- 8,268	- 5.96
1970	168,772	2,978	1.80	138,764	- 2,779	- 1.95
1960	165,794	5,372	3.35	141,543	12,907	10.03
1950	160,422			128,636		

Source: STATS Indiana, Population

Figure 1. Population Change

The Comprehensive Plan also includes 2035 population projections. They used two Vanderburgh County population projections for comparison: 1) Indiana Business Research Center (IBRC) and 2) Sustainable Evansville Area Coalition (SEAC) Regional Plan for Sustainable Development. IBRC estimated a 2035 County population growth rate of 7.0% and SEAC calculated a 12.5% growth. This is the estimated 25-year population increase. We took the 2035 population project numbers and used the IBRC and SEAC growth percentages and plotted them for the 2050 planning period. This results in an estimated 2050 population projection of between 201,000 and 219,000 people as shown in Figure 2, below.

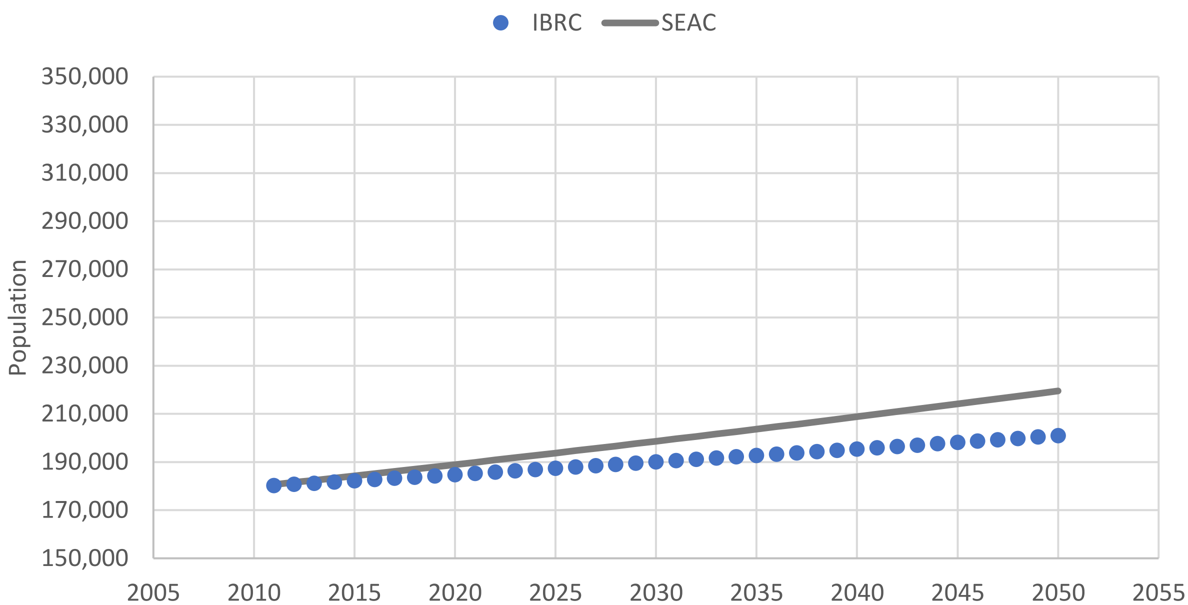

Figure 2. Population Projection

1.2 GOALS FOR VE REVIEW

Since the existing 90% costs for the New Water Plant are significantly higher than the original cost estimates, EWSU requested that Clark Dietz perform a Value Engineering review of the current project, alternative selection, and basis of design. Clark Dietz, and our partner subconsultant Benton and Associates, had the following goals:

- Identify opportunities to optimize project costs while maintaining functionality, treatment objectives, and performance.
- Enhance the value proposition of the project by evaluating alternative design, construction, or operational options.
- Identify potential construction risks and propose mitigation measures.
- Ensure that project goals align with stakeholder expectations and requirements.
- Develop recommendations for implementation to improve project outcomes.

1.

CHAPTER 2 - 90% WATER PLANT PLANS DEVELOPMENT

The May 2023 90% design documents for the New Water Plant are based on several planning studies. This Chapter will give a high-level overflow of the plant development process.

2.1 WATER MASTER PLAN

The first study was a Water Master Plan prepared by HNTB (HNTB, 2016), which proposed improvements to maintain the existing level of service for the next 30 years until 2046. In the executive summary of the Water Master Plan, it notes that the projected maximum day demand in 2035 will be 47 MGD, which led them to recommend that the previous full capacity of 60 MGD in the plant be restored. There is no data or analysis in the report to back up the reason for the 47 MGD projection.

The Water Master Plan notes that much of the existing equipment is past its intended life and the existing conditions are documented. The report outlined the cost of fully rehabilitating the existing plant in the 30-year planning horizon. Those costs are summarized below in Table 1. An alternative groundwater treatment plant was also discussed.

Table 1. Water Treatment Plant Needs

	2017-2021	2022-2026	2027-2036	2037-2046	Total
2016 Dollars[1]	$110.7M	$29.4M	$21.8M	$14.0M	$175.9M
2023 Dollars[2]	$141.9M	$37.7M	$28.0M	$18.0M	$225.6M

Note:

1. The Water Master Plan included capital costs in 2016 dollars.
2. 2023 estimate based on the Engineering News Record (ENR) Construction Cost Index.

2.2 ALTERNATIVE DEVELOPMENT

In 2019 EWSU retained AECOM to develop a long-term solution to address infrastructure past its useful life and develop design documents for the preferred alternative.

2.2.1 KICKOFF MEETING

AECOM started with a Kickoff Meeting in September 2019 (AECOM, 2019). In that meeting it was noted that raw water pumping was generally in the 15 to 35 MGD range. A range of treatment alternatives was introduced.

2.2.2 ALTERNATIVE WORKSHOP

In November 2019, an alternative workshop was held (AECOM, 2019). It presented a thorough list of options for various treatment types and discussed groundwater use alternatives.

2.2.3 REVIEW OF PRELIMINARY ALTERNATIVES

In March 2020, a review workshop was held (AECOM, 2020). This workshop both defined the plant water demand and presented a number of treatment alternatives for both construction of a new facility as well as upgrades to the existing water plant was discussed. The 2017 data they presented for flow is as follows:

Table 2. AECOM Flow Projections

	2020				2050		
Category	# of units	Average Use (gpd/unit)	Average use, gpd	Growth Factor	# of units	Average Use (gpd/unit)	Average use, gpd
Residential-per capita	117,500	70	8,230,000	1.5%	184,277	70	12,900,000
Wholesale	1	2,054,795	2,050,000	1%	1.35	2,054,795	2,770,000
Industrial	128	21,404	2,740,000	3%	315	21,404	6,740,000
Commercial	3,570	1,397	4,990,000	2%	6,505	1,397	9,090,000
Public Authority	236	3,831	900,000	0.5%	274	3,831	1,050,000
Total Sold			18,910,000				32,550,000
Leaks and Losses (5%)			950,000				1,630,000
Total Average Demand			**19,860,000**				**34,180,000**
Peak Day (1.4)			**27,800,000**				**47,850,000**

Note: Average Use recalculated by Clark Dietz using number of units, average use, and growth factors in the March 2020 Alternatives Workshop slides. Some differences in the third significant digit are noted from AECOM's original numbers but are found to be insignificant.

The 30-year flow projections anticipate a 57% increase in population and residential demand, a 146% increase in industrial demand, and an 82% increase in commercial demand with an overall daily water use increase of 72%. What is most notable about this is that the 57% increase in population is significantly higher than the 7.0% increase calculated by the IBRC and the 12.5% increase calculated by the SEAC. This population projection is shown in Figure 1Figure 3.

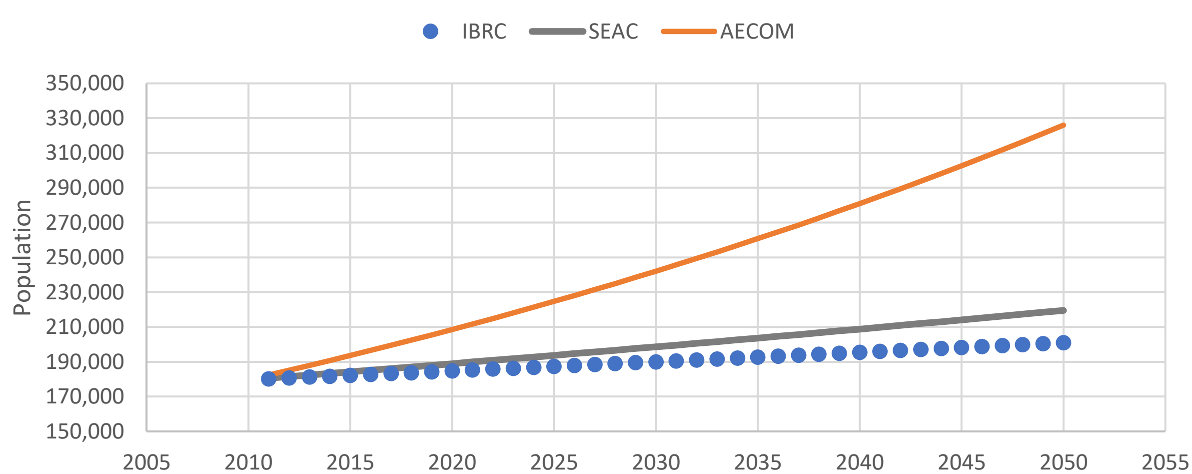

Figure 3. AECOM Population Projections

> Value Engineering Question: Is the Planned Design Flow of 50 MGD based on a misunderstanding of population projections and an overly optimistic assessment of industrial and commercial growth?

The March 2020 Workshop also presented five treatment alternatives for rehabilitating the water treatment plant, summarized as shown in Table 3. All the alternatives reused the parts of the north sedimentation basins and the south filters. Since many of the treatment alternatives are not currently used by EWSU, possible site visits were proposed. Only three of the site visits recommended were in the Midwest and of those only one uses the same source water (Ohio River). No pilot testing was proposed, which is not usual unless similar treatment is known to be performed using the same source water.

Table 3. March 2020 Rehab Alternatives

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Pre-oxidation	x		x		
PAC contact	x	x	x		
ActiFlo (ballasted flocculation)	x	x			
Conventional gravity filtration	x		x		
Ozonation		x		x	
Biologically active filtration		x		x	
Coagulation/flocculation			x	x	
Plate settlers			x	x	x
Membrane filtration					x

2.2.4 REATMENT ALTERNATIVES SCORING

In June 2020, there was a series of meetings with EWSU where various parts of the treatment system were reviewed, and alternatives were scored on non-monetary factors. In these meetings, instead of the five alternatives from March 2020 which all rehabilitated the existing plant, some of the alternatives reviewed included construction of a new plant or components of the treatment process.

2.3 ADVANCED FACILITY PLAN

The Advanced Facility Plan was completed in April 2021 (AECOM, 2021). It was noted that the existing facilities age, poor condition, failures of equipment, imminent failure of additional infrastructure expected in the near-term, limited treatment expansion or modification capabilities, and taste and odor complaints all required prompt action. Further, it stated that doing nothing is not a viable alternative because of the risk of equipment failure, health and safety hazards, and insufficient levels of treatment.

The Advanced Facility Plan primarily reviewed three alternatives:
1) rehab the existing WTP with addition of ozone,
2) utilizing conventional pretreatment, ozone, and BAF by either
    A) partially reusing the existing plant or
    B) construct a new plant
3) using a 50/50 blend of groundwater and surface water.

2.3.1 OZONE AND BAF

For both alternatives 1 and 2 Biologically Active Filtration (BAF) with ozone was the recommended treatment alternative. The reason for this was stated “BAF coupled with ozone is gaining popularity throughout the Unites States at surface water plants due to its ability to remove organic constituents. Theis subsequently reduces DBP formation and other benefits may include improving taste and odors, limiting the amount of chlorine needed, and removal/destruction of trace organic contaminants (pg. 61).”

> Value Engineering Question: Are there currently any DBP or taste and odor issues which cannot be addressed with the current treatment profile? Are known future regulations are driving the need for the conversion? Is this type of treatment is used currently on Ohio River water? If yes, what success there has been? If not, why was pilot testing not performed?

2.3.2 CAPITAL COST ESTIMATES

The capital costs of both preliminary and final alternatives were presented in extensive summary tables (the backup tables were not included in the report). In Chapter 9, the four plant-wide selected alternatives were summarized and compared. In Chapter 11, the non-monetary scoring was summarized for the four alternatives. The total construction costs, non-monetary benefit score, and 30-year lifecycle cost used to develop the recommendations is summarized in Table 4. Alternative 2B was selected as its costs are similar to alternatives 1 and 2A and it has a higher non-monetary benefit score.

Table 4. Final Alternatives Benefit-to-Cost Ratio and Rank

	Total Construction Cost	Non-Monetary Benefit	30-Yr Life Cycle Cost
Alternative 1	$121,822,000	67.1	$253,332,000
Alternative 2A	$141,605,000	76.9	$237,569,000
Alternative 2B	$140,049,000	84.6	$230,923,000
Alternative 3	$175,599,000	68.2	$297,561,000

Note: For Alternative 2B, the April 2021 Total Construction Costs adjusted using ENR's construction cost index to June 2023 prices is $158M.

Value Engineering Thoughts: The retrofit option was the least costly, though not by much. It got a significantly lower non-monetary benefit score. The methodology of scoring, the score weighting, and the decision factors used in scoring are subjective. It is likely that if these projects scored again using different individuals and knowing some of the additional information available during design, the scoring and outcome might have been different. It is also possible that some of the lower-footprint alternatives, such as ballasted floc, might have scored higher if the time and costs of installing new large concrete tanks had been better understood.

2.4 CURRENT COSTS AND ANALYSIS

2.4.1 TREATMENT TIME ANALYSIS

The treatment process selected as part of the alternatives evaluation and Advanced Facility Planning process is a good one and has been used successfully in many places. Ozonation and biological filtration may not necessarily be needed at this time to meet current water quality standards. However, in designing a new facility it is good practice to leave space both in the hydraulic profile and on the site to accommodate future treatment needs.

2.4.2 CURRENT PROJECT COST

In 2022, EWSU used a Guaranteed Maximum Price (GMP) procurement method to select a contractor-team for construction of the Water Plant Upgrades. Kokosing is the lead contractor of the team and as of this report date the price for the proposed project – Alternative 2B – is $353M. This includes a new administration building and construction contingencies totaling $54M. Without the admin building and contingencies, the project cost is $299M.

CHAPTER 3 - VE IDEAS CONSIDERED

Clark Dietz explored value engineering (VE) ideas to reduce project costs and shorten the construction schedule. Each idea is described briefly in this chapter and then anticipated cost ranges are shown in Chapter 4.

3.1 TREATMENT MODIFICATIONS

3.1.1 REDUCE TREATMENT CAPACITY

As discussed in Section 2.2.3, it appears that both the population estimates, and the commercial and industrial flow estimates are too high. We recommend using the following modified flow projections shown in Table 5 and construct a plant with a 40 MGD peak flow. Doing this will allow the reduction in treatment capacity, especially in the sedimentation basins and filtration basins. Space should be preserved both in the hydraulic profile and on the site for future flows up to 50 MGD. The piping should also be sized for future flows.

Table 5. Clark Dietz Flow Projections

	2020				2050		
Category	# of units	Average Use (gpd/unit)	Average use, gpd	Growth Factor	# of units	Average Use (gpd/unit)	Average use, gpd
Residential-per capita	117,500	70	8,230,000	0.28%	127,796	70	8,950,000
Wholesale	1	2,054,795	2,050,000	1%	1.35	2,054,795	2,770,000
Industrial	128	21,404	2,740,000	1%	173	21,404	3,700,000
Commercial	3,570	1,397	4,990,000	1%	4,819	1,397	6,730,000
Public Authority	236	3,831	900,000	0.5%	274	3,831	1,050,000
Total Sold			18,910,000				23,200,000
Leaks and Losses (5%)			950,000				1,160,000
Total Average Demand			**19,860,000**				**24,360,000**
Peak Day (1.5)			**29,790,000**				**36,540,000**

Note: The residential per-capita growth factor used here is from IBRC. The industrial and commercial growth numbers are more reasonable at 35% during the 30-year planning period.

3.1.2 DEFER OZONE

As discussed in Section 2.3.1, there are no regulatory drivers for converting the treatment process to ozonation with biological filtration. It is possible that this process could be needed in the future if regulations change and therefore it would be reasonable to leave space both in the hydraulic profile and in the site design to add it in the future. Similarly, to would also be good planning to design a new filtration system that could be easily retrofit to accommodate potential future biological filters or convert to granular activated carbon (GAC) filter beds for PFAS sorption.

3.1.3 REDUCE BACKWASH BLOWER CAPACITY

The 90% plans provided for redundant air scour blowers for filter backwash. While the backwash blowers are recommended for long term filter health and optimum backwash sequences, it is typically still possible to perform a backwash utilizing *only water* and variable flow rates if the blower is out of service. One backwash blower could be installed in lieu of two blowers to save capital expense of the blower, electrical connections, controls, and building footprint. An evaluation of blower type, local service providers, and potential time out of service should be conducted to ensure the blowers can be repaired in a reasonable amount of time.

3.1.4 REMOVE SEDIMENTATION BASIN COVER

The 90% drawings include algae covers for the sedimentation basin. Unless the existing facility has been challenged with algae growth in the basins, or it is anticipated to be a problem in the new facility due to chemical changes, residence time, or other factors, EWSU should consider removing the sedimentation roof structure. The structural design of the walls and foundations could be sufficient to allow for a future structure. Therefore, if a basin cover was found necessary in the future it can be added at that time.

3.2 STRUCTURAL MODIFICATIONS

3.2.1 CHANGE PILE TYPE

The plans call for 30” diameter drilled shaft foundations with the bottom 10’-0” to 12’-0” socketed into the bedrock underlying the softer soils. The shafts are called to be reinforced for their full height. The East wastewater treatment plant and Sunrise Pump Station, located adjacent to the proposed water treatment plant, use auger cast piles founded approximately at the top of the underlying bedrock. The auger cast piles installed at other installations have only been reinforced at the top portion of the pile with a single large bar placed at the center for the full length of the pile. We understand that much of the existing water treatment plant is also founded on auger cast piles. Auger cast piles have been extensively used in this area of Evansville for both old structures and for recently built structures and have acceptable performance. Several load tests were performed for the recently built structures.

Auger cast piles are less costly to install than drilled shaft piles because:

1. Drilled shafts require more care to install since the hole needs to be open before reinforcement and concrete is placed.
2. The installation time of drilled shafts is significantly slower, which can affect the scheduling of other work at the site.

Given the success of auger cast piles at other similar locations, load testing to show adequate performance, and the fact that they are more economical, auger cast piles should be considered instead of drilled shafts.

3.2.2 REDUCE THE SEISMIC RATING ON SOME BUILDINGS/STRUCTURES

According to the plans, all structures at the New Water Plant are considered essential facilities with an International Building Code (IBC) Table 1604.5 risk category designation of IV. For the site soil characteristics and seismicity of the area, the resulting seismic performance category is D. Risk Category IV is appropriate for water storage facilities and pump structures that are required to maintain water pressure for fire suppression.

Some areas of the New Water Plant, such as the high service pumps and some of the storage tanks, are appropriately classified. We believe that several other structures that are not related to maintaining water pressure for the city-wide water service can be classified as Risk Category III. The lower Risk Category III includes “water treatment facilities for potable water … not included in Risk Category IV.” The Risk Category often affects the seismic performance category. At this location Risk Category III results in structures being in seismic performance category C, which is less stringent than D.

Compared to seismic category D, category C is less stringent and may require less reinforcement in certain areas with fewer inspections required of key components of the later force resisting systems of buildings. It should be noted that the reinforcement details for the structures were not fully developed for review in the 90% drawings.

3.3 SITE MODIFICATIONS

3.3.1 RAISE HYDRAULIC PROFILE

Raw water must be pumped into the treatment process. The existing grade at the proposed New Water Plant site is approximately 369-ft. The 90% drawings have the top of the wall of the sedimentation basin at 377-ft and the bottom at 356-ft. For the filters, the top of the wall is at 370.25-ft and the bottom of the clearwell is at 329-ft, which is 40-ft below grade, see Appendix A-1. This hydraulic profile has several concerns:

1. From a cost perspective the low hydraulic profile and associated deep tanks lead to more costs than a higher hydraulic profile given excavation, shoring, and material handling and disposal requirements.
2. The hydraulic profile also puts the top of all the tanks below the major flood stage elevation of 381-ft. Given that the structures at the plant are designed for rigorous seismic code, a similar rigor in planning for a potential levee issue may also be warranted.

We recommend raising the hydraulic profile of the treatment process so that the sedimentation tank is at grade. This will raise the remaining tanks as shown in the revised hydraulic profile in Appendix A-2. Cost savings associated with this move will be based on a reduction in excavation, a reduction in construction dewatering, and a significant reduction in soils hauled off-site for disposal. There are potentially also time savings that would result from not needing to excavate and haul as much material.

The electrical requirements and cost of pumping raw water will increase if the hydraulic profile is raised, however this will balance with lowering the electrical requirements and pumping costs of raising the hydraulic profile of the finished water.

3.3.2 MODIFY RAW WATER PIPE ALIGNMENT

In the 90% design documents, the raw water lines are routed around the river wall and levee and supported on above grade structures for 450-ft past the intake building. At the entrance road to the South plant the raw water line goes underground and circles south, east, then north into the proposed new plant. The total length of this line is approximately 1,650 ft. We suggest considering an alternative routing for the raw water piping straight east of the influent structure and buried the entire way to the new plant location. This routing will save considerable length and pipe support structures.

3.3.3 ALTERNATE PIPE MATERIALS

The current design calls for ductile iron pipe and fittings with additional flexible fittings at structure locations for small diameter and large diameter piping (up to 42”). The Flex-Tend double ball expansion/contraction joints (Sheet 11-C049), and the other specified expansions couplings (Sheet 11-C051) provide superior differential settlement protection but at an extremely high price. Unless there is planned differential settlement as part of the design, and construction, these types of joints typically are not needed to this extent. These fittings would also be beneficial during a large seismic event but have not typically been included in other similar projects for EWSU.

Recently, pipeline availability has become a critical path issue for project delivery. Other materials such as PVC and HDPE could be considered in locations where installation and operating service conditions meet with pipe performance specifications. In the past year, suppliers have reported that it requires a considerable time for the delivery of ductile iron pipe while PVC and HDPE have been much easier to obtain in the last six months.

While ductile iron pipe may be a preferred pipe material for this project, a pipeline materials analysis should be conducted to ensure the most cost-effective piping system is being utilized and the availability matches the intended project schedule.

3.3.4 IMPROVE LAYOUT EFFICIENCY

We suggest three means of improving the layout efficiency of the new plant:

1. Switching the flow through the plant from east to west, instead of west to east, would flip the location of the Pretreatment Basins and New Filter building. This will allow for the tallest structures to be near the existing plant. This adds value if the existing clearwell is reused as described in Section 3.4.1 as it would because it would shorten the piping runs.
2. Consolidating some of the buildings would also improve site efficiency. This suggestion was recommended in previous value engineering studies (AECOM, 2022). There are several ways how consolidating the layout would reduce costs: during construction it would reduce the amount of shoring/excavation required, and it would also reduce costs for the piping, conduit, and conductors between the structures.
3. Utility coordination could be made more efficient by coordinating pipe routing and electrical ductbank routing throughout the site to have an efficient installation of underground utilities.

3.3.5 RELOCATE BACKWASH PUMP STATION

Currently the filter backwash pump station is a separate structure from the filter building and clearwell. It is located on the opposite side of the filters from the high service pump station and has its own separate clearwell. The backwash pump station could be relocated near the High Service pump station for efficiency of large electrical supply runs, large variable frequency drives (and associated conditioned space) and maintenance for similar pump types.

It is likely that the current layout was made to allow the backwash to be performed with unchlorinated finish water. If ozone is removed from the project, or deferred until later, biological filtration will not be used and chlorinated backwash water can be obtained from the same clear well as the finished water. Should ozone and biological filtration be added, either now or in the future, either unchlorinated water supply piping can be routed to the backwash pump wells or a dechlorination system can be added and fed into the backwash water. Either option should be bench tested and possibly piloted to ensure the biological community of the filtration system can be maintained and challenge tested for intermittent chlorine/chloramine contact in the event of dechlorination system failure.

3.3.6 SIMPLIFY INTAKE BUILDING PIPING

The existing discharge piping in the intake building has a double header configuration for maximum flexibility. The layout is not used and is not needed. Building a single header with three valves located to allow isolation of each discharge pipe would reduce the amount of pipe and time if bypass pumping is utilized.

3.3.7 SIMPLIFY ADMINISTRATION BUILDING

The administration building is a significant structure with a lot of functionality including offices, laboratory space, conference rooms, and a training room. EWSU has two similar buildings that have been constructed in the last three years and within a quarter mile of the water plant: the Sunrise Pump Station and the East

Wastewater Treatment Plant. The size of the new administration building could be reduced by reducing some of the larger conference and training room spaces and by eliminating the upper observation deck. Reducing the building to one story and utilizing the neighboring EWSU facilities for larger meetings and training events.

Alternately, it is possible that the existing administration space in the water plant could have significant remodeling and upgrades and still have savings compared to the proposed new building. There are also areas within the existing building that could be utilized for maintenance areas, which would decrease the size of the building.

3.4 REUSE OPTIONS

3.4.1 REHAB AND REUSE 6.5 MG CLEARWELL

Operations staff and the analysis in the Water Master Plan and the Advanced Facility Plan noted issues with the existing 6.5 MG clearwell. However, the proposed new clearwell will be the costliest structure to build given its size and depth. Raising the hydraulic profile of the treatment system, discussed above, will give an opportunity to reuse the clearwell. We believe that leak issues in the existing clearwell could be addressed. A second, smaller clearwell could also be constructed at the new filters to give EWSU the opportunity to isolate, inspect, and repair either clearwell in the future.

A potential hydraulic profile of this option is shown as the lower profile in Appendix A-2. It was prepared using the hydraulic drops shown in the existing hydraulic profile and using those differential elevations will limit the available volume in the clearwell. Preliminary calculations suggest that only 3.3 MG could be usable. If this is the case, then there may not be sufficient clearwell capacity to obtain chlorine contact time credit. If this option is pursued, then additional analysis will be required.

3.4.2 REHAB AND REUSE HIGH SERVICE PUMPS

If the existing 6.5 MG clearwell is reused, the existing high service pump station at that clear well could be reused as well. The existing piping and pumps could be rehabilitated either as part of this project or in the future. Reusing this infrastructure also has the benefit of continuing service the new electrical gear that was recently installed in that building.

3.5 ELECTRICAL

3.5.1 REDUCE GENERATOR CAPACITY

The existing design provides 100% backup power to connected loads. Efficiency and cost savings could be found by limiting backup power demand. Some equipment is not critical to the continued operation of the plant during power outages.

3.6 EXISTING PLANT REHABILITATION AND REUSE

An alternative to looking for value engineering savings by modifying the design of the New Water Plant is to either rehabilitate the existing water plant or rehabilitate part of the existing water plant (such as the south plant) and build a New Water Plant with ½ of the capacity as what is currently in the 90% design.

This could be accomplished by:

1. Bypass pumping to existing North and South plants during rehabilitation of influent structure.

2. During bypass pumping, build a three-way splitter box near the influent structure. This will allow new metering and valving systems to be installed to more accurately split the flow between the existing North and South plants during construction and then to the new East plant after construction.
3. Construct a new East plant, estimated 20 MGD capacity. At the East plant, design deep filters and locate them near the existing South plant and lay them out in a manner that allows for future expansion.
4. After startup of East plant, continue operation of North plant to maintain capacity and perform rehab work at the South plant. Then bring the South plant back online and operate it in parallel with East plant.
5. Decommission / demolish the North plant.
6. If river conditions or regulation change, expand East plant deep bed filters to except South plant flow and eliminate the shallower South plant filters.

Given the need for both a new 20 MGD East plant and complete rehabilitation of the existing South plant, it is unclear if this option would provide significant savings.

CHAPTER 4 - VE PRELIMINARY SAVINGS ESTIMATES

4.1 CLARK DIETZ SAVINGS ESTIMATE

All the VE options presented in Sections 3.1 through 3.4 above were categorized as either treatment, structural, site, reuse, or electrical savings. Given the magnitude and uncertainty associated with determining an exact dollar value of savings we used our experience with recent projects and estimated a potential savings range. These ranges are shown below in Table 6.

Table 6. Clark Dietz VE Savings Opportunity Cost Ranges

Area	VE Item	Savings Range, $M	
		Low	**High**
Treatment	Reduce Treatment Capacity	15	20
	Defer Ozone	30	40
	Reduce Backwash Blower Capacity	0.5	0.5
	Remove Sedimentation Basin Cover	0.5	1
Structural	Change Pile Type	5	10
	Reduce Seismic Rating on Some Structures	1	2
Site	Raise Hydraulic Profile	5	10
	Modify Raw Water Pipe Alignment	1	3
	Alternate Pipe Materials	2	4
	Improve Layout Efficiency	2	5
	Relocate Backwash Pump Station	1	3
	Simplify Intake Building Piping	0.5	0.5
	Simplify Administration Building	5	10
Reuse Options	Rehab and Reuse 6.5 MG Clearwell	6	12
	Rehab and reuse High Service Pumps	2	4
Electrical	Reduce Generator Capacity	1	2
	Savings Bracket	**78.5**	**131**
	Current Construction Cost	353	
	Estimated Construction Cost Bracket with VE	**274.5**	**222**

4.2 CLARK DIETZ SAVINGS ESTIMATE WITH CONTRACTOR VE OPTIONS

After preparing the value engineering options discussed in Chapter 3 and shown in the table above, EWSU provided the contractor's construction value and their value engineering recommendations. In reviewing both our savings estimates and theirs we found that we have some similarities, and some items are unique to one or the other entity. The table below shows

Table 7. Clark Dietz and Contractor VE Savings Opportunity Cost Ranges

Area	Est[1]	VE Item	Savings Range, $M		Notes on Overlap
			Low[2]	**High[2]**	
Treatment	CD	Defer Ozone			CD - 30 to 40, delete as covered by KI
	KI	Defer Ozone	27	27	
	KI	Eliminate bridge crane, use skylights	0.035	0.035	
	CD	Reduce Backwash Blower Capacity	0.5	0.5	
	CD	Reduce Treatment Capacity - Filtration			CD-7 to 10, delete as covered by KI

Area	Est[1]	VE Item	Savings Range, $M Low[2]	High[2]	Notes on Overlap
	CD	Reduce Treatment Capacity - Sedimentation	8	10	
	KI	Reduce Treatment Capacity-Construct 10/14 Filters (Binh)	3	3	
	KI	Reduce Treatment Capacity-Construct 10/14 Filters (Todd/Justin)	5	5	
	CD	Remove Sedimentation Basin Cover			CD-.5 to 1, delete as covered by KI
	KI	Remove Sedimentation Basin Cover	0.8	0.8	
	KI	Use FRP Baffles, not stainless	0.1	0.1	
Structural	CD	Change Pile Type			CD - 5 to 10, delete as covered by KI
	KI	Change Pile Type	9	9	
	KI	Eliminate flexible joints	4.5	4.5	
	CD	Reduce Seismic Rating Some Structures	1	2	
Site	CD	Alternate Pipe Materials	2	4	
	KI	Delete painting of the raw water building	0.25	0.25	
	KI	Eliminate 400-ft of 8" potable water line	0.088	0.088	
	KI	Eliminate landscaping	0.04	0.04	
	KI	Eliminate new 36" distribution main to south	1.75	1.75	
	KI	Eliminate thrust blocks, rely on restrained	0.025	0.025	
	CD	Improve Layout Efficiency	1	3	CD-2-5, reduce to 1-3 for some by KI
	CD	Modify Raw Water Pipe Alignment	1	3	
	CD	Raise Hydraulic Profile	5	10	
	KI	Reduce pressure class to 1.5x max operating	0.75	0.75	
	CD	Relocate Backwash Pump Station	1	3	
	KI	Reroute 250-ft of 16" rps	0.095	0.095	
	KI	Reroute 650-ft of 8" water line	0.13	0.13	
	KI	Road/sidewalk reduction	0.32	0.32	
	KI	Simplify Administration Building			KI-1.6, CD - additional savings possible
	CD	Simplify Administration Building	5	10	
	CD	Simplify Intake Building Piping			CD-.5, delete as covered by KI
	KI	Simplify Intake Building Piping	1.5	1.5	
Reuse Options	CD	Rehab and Reuse 6.5 MG Clearwell	6	12	
	CD	Rehab and Reuse High Service Pumps	2	4	
Mgmt	KI	Reduce schedule	1	1	
Electrical	KI	Eliminate 1 power feed	5.7	5.7	
	CD	Reduce Generator Capacity			CD-eliminated generator (1-2), not both
		Savings Bracket without Contingencies	**93.6**	**122.6**	
		Reduction in Contractor Fee (7.5%)[3]	7.0	9.2	
		Reduction in Owner Contingency (5%)[3]	4.7	6.1	
		Savings Bracket with Contingencies	**105.3**	**137.9**	
		Current Construction Cost	353	353	
		Estimated Construction Cost Bracket with VE	**247.7**	**215.1**	

Notes:

1. Estimate from the Clark Dietz team (CD) or the Contractor team (KI).
2. Clark Dietz's team used a savings bracket. The Contract used absolute values, so the same dollar value was put into the both the high and low brackets.
3. Fee and contingency percentage values are from the Contractor's pricing.

CHAPTER 5 - RECOMMENDATION

There are several main reasons that constructing a New Water Plant instead of rehabilitation of the existing plant was recommended:

1. Previous evaluations of the existing water plant (HNTB, 2016) (AECOM, 2021) found equipment, structures, and systems in both the North and South water plants that are past their useful life.
2. An extensive comparative analysis showed that with similar treatment schemes, rehabilitation of the existing plant had similar capital costs but achieved fewer of EWSU's non-monetary goals (AECOM, 2021).
3. Operating two plants (the North plant and the South plant) is a challenge because of the flow split and the different hydraulic and operating characteristics of the two plants. This situation could be improved through rehabilitation and retrofit by metering flow to each plant and installing automated valving to improve the flow split. However, whether both plants are rehabilitated, or one half is rehabilitated, and a half-capacity East treatment plant is built, there would still be the complexity of operating two systems with different process flows and hydraulic profiles.
4. Rehabilitating the existing plant would not bring the existing systems to complete seismic compliance with existing standards.

Given these reasons, and the strong likelihood that rehabilitation would be as costly as a new plant, our team recommends proceeding with the construction of the New Water Plant. However, our value engineering review and the review of the selected contractor has found significant savings. The most significant savings come from:

6. Defer Ozone – This option defers installation of the ozone system and corresponding biological filtration. Conventional filtration should be installed with filter bed depth sufficient to either convert to biological in the future or convert to granular activated carbon (GAC) filter beds for PFAS sorption.
7. Change Pile Type – This option changes from 30" diameter drilled shaft founds to auger cast piles. Auger cast piles have been used successfully by Evansville for recently constructed similar structures.
8. Reduce Treatment Capacity – The existing 50 MGD capacity is based on a misunderstanding of population growth projections and overly optimistic projects for industrial and commercial water demand growth. Based on the data available for review, a 40 MGD New Water Plant capacity should be sufficient for the planning period with hydraulic and site space reserved for future expansion. If a new industrial user with a high water demand is expected, then a future expansion may be warranted earlier than the planning period.
9. Raise Hydraulic Profile – The plant is not built to balance cut and fill, rather significant excavation, construction dewatering, and material handling, and disposal will be required. Raising the profile will reduce construction cost and time. It will also bring all treatment structures above the river high water level.
10. Rehab and Reuse the 6.5 MG Clearwell and High Service Pump Station. If the hydraulic profile is raised, there may be an opportunity to reuse the existing 6.5 MG clearwell and high service pump station, which would eliminate, or partially eliminate, the need for the deepest designed new tank. This option will need further evaluation prior to implementation.

There are many other smaller value engineering opportunities that combined also add to significant savings.

If EWSU makes some difficult choices and accepts the VE options presented here, we think it is likely that at least $105M in savings can be found, which could bring the construction cost down to $248M. Part of the savings will likely depend on not deferring the start of construction. Delays to construction start will lead to increases in construction cost as material and labor prices continue to rise.

We believe that, acting promptly, even with the modifications described herein, construction could possibly start in 90 days. For this early of a construction start even with this magnitude of design modifications will require:

5. The design engineer keeping as much of the process, structural, electrical, and mechanical design as possible while being flexible on resizing some elements and significantly modifying the site design.
6. All parties being comfortable with design work continuing as construction starts and understanding and prioritizing decision making to keep construction work moving.
7. The Contractor will being able to be firm and responsive with pricing modifications on short turn-around times.
8. All parties being comfortable with prompt decision making and follow through.

The savings are only possible if the City, Engineering team, and Contractor's team can agree on the VE changes, come to a prompt agreement on VE dollar values, and finalize design during construction.

CHAPTER 6 - REFERENCES

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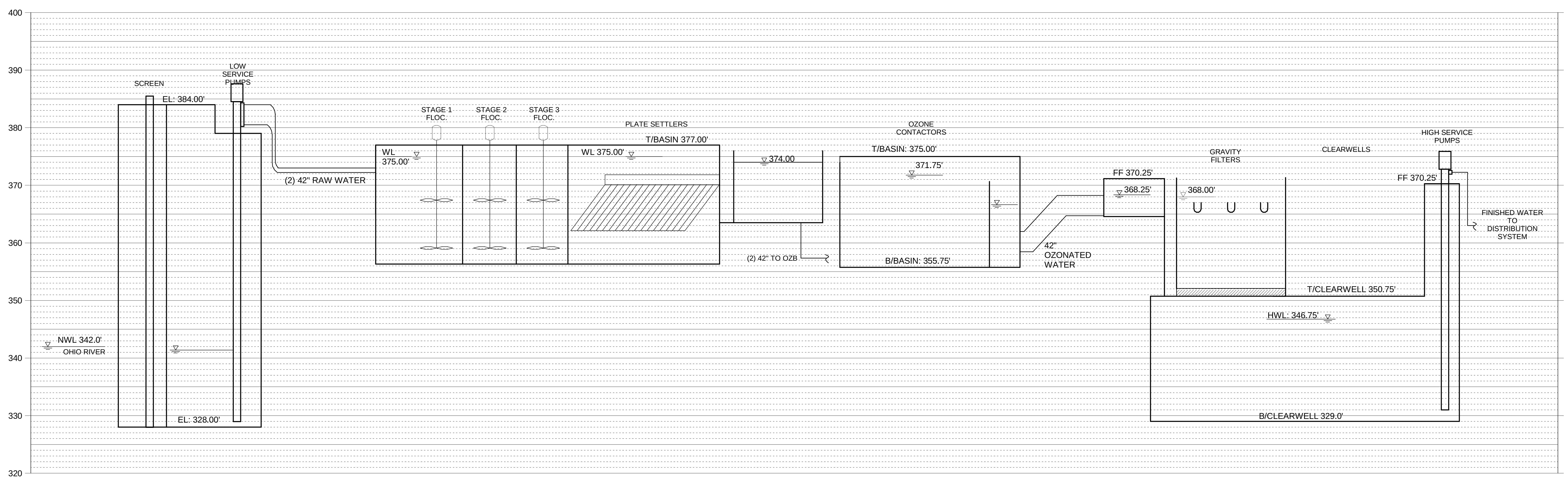


NOTES:

1) PLANT CAPACITY, Q=50 MGD

1 HYDRAULIC PROFILE
0-G008 NTS

NOT FOR CONSTRUCTION

DRAWN: Author
DESIGNED: Designer
CHECKED: Checker
DATE: 02/08/23
SCALE: 3/32" = 1'-0"
APPROVED: DATE:
TITLE:

EVANSVILLE WATER AND SEWER UTILITY
1 SE 9th Street Suite 200 - Evansville, IN 47708 (812) 421-2120

HYDRAULIC PROFILE - LIQUID

AECOM

Evansville WATER AND SEWER UTILITY

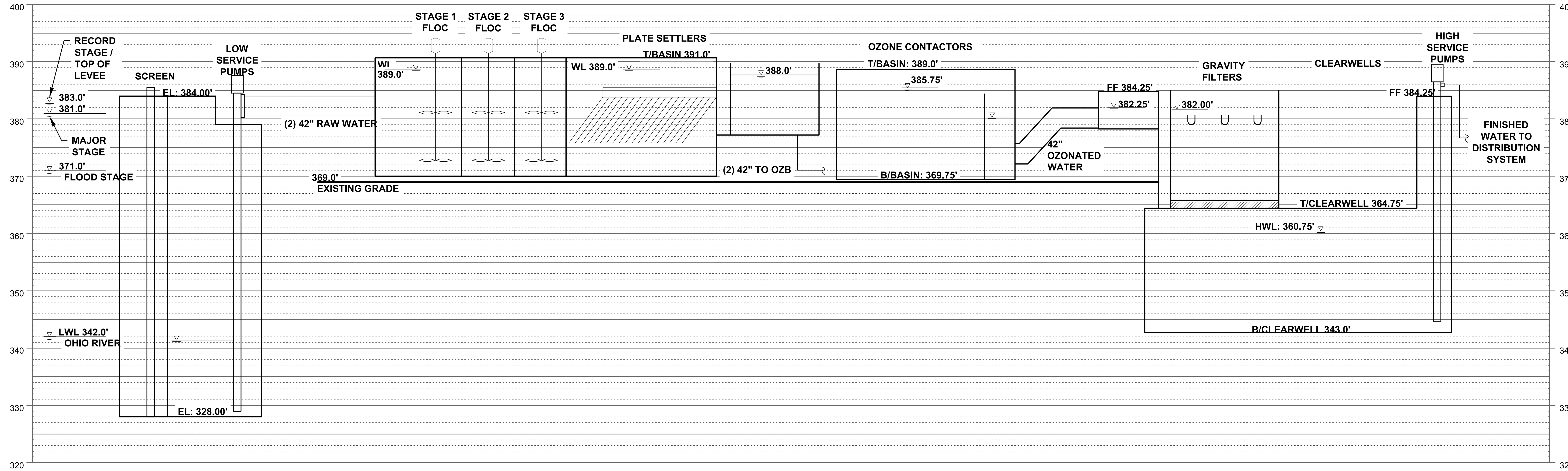
REVISIONS	
DATE	DESCRIPTION
MAY 2023	90% OWNER REVIEW SET

EWSU PROJECT NO: U1032

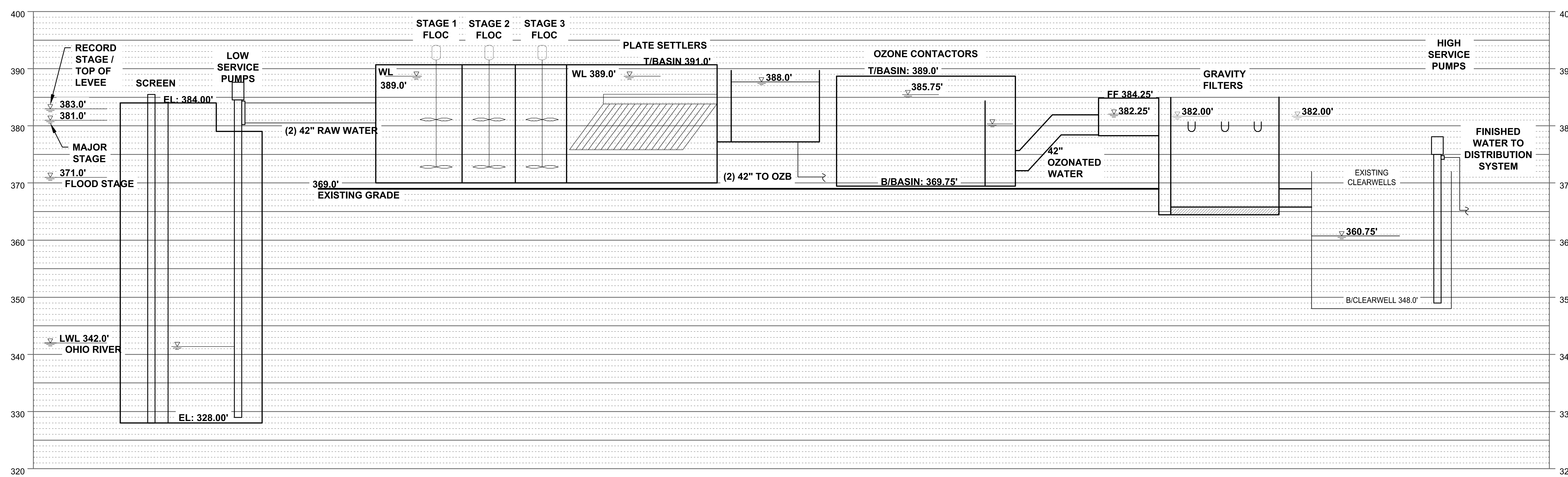
DRAWING NO:

0-G008

Appendix A-2



HYDRAULIC PROFILE OPTION 1 - B/CLEAR WELL AT 343.0'



HYDRAULIC PROFILE OPTION 2 - REUSE EXISTING CLEARWELL

ClarkDietz
21 SE 3rd Street, Suite 705
Evansville IN 47708
PHONE : 812.471.4802
www.clarkdietz.com

PROJECT TITLE
EVANSVILLE WATER & SEWER UTILITY - WATER PLANT DESIGN REVIEW

DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE CHECKED:

DATE REVISION

DRAWING TITLE
HYDRAULIC PROFILE OPTIONS

PROJECT No.
E0080370

DRAWING No.
-

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

Clark Dietz, Inc.
125 W Church St
Champaign, IL 61820

p 217.373.8900

clarkdietz.com

Engineering Quality of Life®

EWSU Water Plant VE Review

August 29, 2023

Cost Analysis Basis

$190M in B&V slides, $220M in B&V report. This estimate is based on Kokosing GMAX and % reductions.

Likely low. Power use will go up if an additional pump station is added for above grade clearwells; power supply upgrades may still be needed.

Likely high. More realistic ~$15M (7%).

$30M in savings for bidding seems unrealistic.

	New Plant no VE GMAX	New Plant with VE GMAX	New Plant Bid Out W/VE	Rehab Option (B&V Opt.2) GMAX	Rehab Option (ARCADIS Opt. 3) GMAX
Construction Cost	[illegible]	[illegible]	223,048,000	$ 210,000,000	$ 223,000,000
Construction Contingency	[illegible]	[illegible]	$14,232,479	$0	$0
Contractor Fee/Profit	[illegible]	[illegible]	$17,795,913	$0	$0
Construction Cost (w/conting. and fee)	$ 336,040,000	$255,076,392	$255,076,392	$210,000,000	$223,000,000
Owner Contingency (5%)	$ 16,802,000	$12,753,820	$12,753,820	$0	$11,150,000
Total Construction Sell Price	$352,842,000	$267,830,212	$267,830,212	$210,000,000	$234,150,000
Bidding Reduction			$ (30,000,000)		
Design	$ 1,000,000	$ 2,000,000	$ 3,000,000	$ 20,000,000	$ 20,000,000
CES/RPR	$ 13,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000
Centerpoint Costs	$ 8,500,000	$ 7,000,000	$ 7,000,000	$ 1,000,000	$ 1,000,000
Builders Ris	[illegible]	[illegible]	[illegible]	$ 1,000,000	$ 1,000,000
IDEM Eleva	[illegible]	[illegible]	[illegible]	N/A	N/A
Market Volatility (3% per month)			$ 1,000,000	$ 6,000,000	Included in Construction Cost (15%)
Demolition/Reuse of Old Plant	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 2,000,000	Included in Constuction Cost ($1M)
De	[illegible]	[illegible]	[illegible]	$ 2,000,000	$ 2,000,000
Ch	[illegible]	[illegible]	-		
To	[illegible]	[illegible]	0,212	$252,000,000	$268,150,000
Sa	[illegible]	[illegible]	1,788	$129,342,000	$113,192,000
Sa	[illegible]	[illegible]	0,000	$40,830,212	$24,680,211

Likely low. Construction complexity with reuse, keeping old and new plants in operation, construction schedule at least 4 yrs.

$6,000,000 is ~3% of $210M. If you have cost escalation of 3%/month for 24 months, the total costs is $400M+. More likely ~0.6%/month (7%/yr). For $210M, this would escalate to $226M in yr 1, $242M in yr 2, and $260M in yr 3.

Too low if beneficial reuse. Maybe ok if just taking out above grade structures. Doesn't include environmental abatement.

Cost Analysis – Revised Basis

	New Plant no VE GMAX	New Plant with VE GMAX	New Plant Bid Out W/VE	Rehab Option (B&V Opt.2) GMAX	Rehab Option (ARCADIS Opt. 3) GMAX
Construction Cost	$ 293,845,500	$ 223,048,000	$ 223,048,000	$ 210,000,000	$ 223,000,000
Construction Contingency	$ 18,750,000	$14,232,479	$14,232,479	$0	$0
Contractor Fee/Profit	$ 23,444,500	$17,795,913	$17,795,913	$0	$0
Construction Cost (w/conting. and fee)	$ 336,040,000	$255,076,392	$255,076,392	$210,000,000	$223,000,000
Owner Contingency (5%)	$ 16,802,000	$12,753,820	$12,753,820	$0	$11,150,000
Total Construction Sell Price	$352,842,000	$267,830,212	$267,830,212	$210,000,000	$234,150,000
Bidding Reduction			$ (15,000,000)		
Design	$ 1,000,000	$ 2,000,000	$ 3,000,000	$ 15,000,000	$ 15,000,000
CES/RPR (7% of construction+inflation)	$ 23,000,000	$ 17,000,000	$ 17,000,000	$ 17,000,000	$ 17,000,000
Centerpoint Costs	$ 8,500,000	$ 7,000,000	$ 7,000,000	$ 5,000,000	$ 1,000,000
Builders Risk Insurance	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
IDEM Elevation Issue (Raise dirt 15')	$ -	$ -	$ -	N/A	N/A
Market Volatility (0.6% per month for 24 months)				$ 33,000,000	Included in Construction Cost (15%)
Demolition/Reuse of Old Plant	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
Demolition of Levee and SMD	Included in Price	Included in Price	Included in Price	Included in Price	$ 2,000,000
Change Order Risk (2.5% New, 5% Rehab)	$10,000,000	$8,000,000	$8,000,000	$14,000,000	$14,000,000
Total	$401,342,000	$307,830,212	$293,830,212	$300,000,000	$289,150,000
Savings From Baseline GMAX		$93,511,788	$107,511,788	$101,342,000	$112,192,000
Savings From GMAX VE			$14,000,000	$7,830,212	$18,680,211

Cost Analysis – Range for Rehab

	Kokosing Original	AECOM		B&V (Option 2) GMAX		
	New Plant no VE GMAX	New Plant w VE GMAX	New Plant Bid Out W/VE	Low	Estimated	High
				80%		150%
Construction Cost Estimate	$ 293,845,500	$ 223,048,000	$ 223,048,000	$ 168,000,000	$ 210,000,000	$ 315,000,000
Construction Contingency	$ 18,750,000	$14,232,479	$14,232,479	Included in Price	Included in Price	Included in Price
Contractor Fee/Profit	$ 23,444,500	$17,795,913	$17,795,913	Included in Price	Included in Price	Included in Price
Construction Cost (w/conting. and fee)	$ 336,040,000	$255,076,392	$255,076,392	$168,000,000	$210,000,000	$315,000,000
Owner Contingency (5%)	$ 16,802,000	$12,753,820	$12,753,820	Included in Price	Included in Price	Included in Price
Total Construction Sell Price	$352,842,000	$267,830,212	$267,830,212	$168,000,000	$210,000,000	$315,000,000
Bidding Reduction			$ (15,000,000)			
Design	$ 1,000,000	$ 2,000,000	$ 3,000,000	$ 15,000,000	$ 15,000,000	$ 15,000,000
CES/RPR (7% of construction+inflation)	$ 23,000,000	$ 17,000,000	$ 17,000,000	$ 14,000,000	$ 17,000,000	$ 25,000,000
Centerpoint Costs	$ 8,500,000	$ 7,000,000	$ 7,000,000	$ 1,000,000	$ 5,000,000	$ 7,000,000
Builders Risk Insurance	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
IDEM Elevation Issue (Raise dirt 15')	$ -	$ -	$ -	N/A	N/A	N/A
Market Volatility (0.60% per month for 24 months)			$ 1,000,000	$ 26,000,000	$ 33,000,000	$ 49,000,000
Demolition/Reuse of Old Plant	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
Demolition of Levee and SMD	Included in Price	Included in Price	Included in Price	Included in Price	Included in Price	Included in Price
Change Order Risk (2.5% New, 5% Rehab)	$10,000,000	$8,000,000	$8,000,000	$12,000,000	$14,000,000	$21,000,000
Total	$401,342,000	$307,830,212	$294,830,212	$242,000,000	$300,000,000	$438,000,000
Savings From Baseline GMAX		$93,511,788	$106,511,788	$159,342,000	$101,342,000	-$36,658,000
Savings From GMAX VE			$13,000,000	**$65,830,212**	**$7,830,212**	**-$130,169,788**

Cost Analysis Summary

	New Plant With VE	Rehab	Percent Savings
Total Project Cost Estimate	$308,000,000		
Low-End Estimate		$242,000,000	21%
Estimate		$300,000,000	3%
High-End Estimate		$438,000,000	-54%

If bidding is not for 36 months, instead of the estimated 24 months, then market volatility pushes the construction cost estimate to $320M with a range of $258M to $468M.

Planning Goals – New vs Rehab Option

Goal	New w/ VE	Rehab
Provide high quality, safe, dependable water service	3	3
Maintain rates that encourage development	1	1
Maintain level of service for 30-year planning period	3	2
Meet Treatment Objectives – now and future	3	2
Ease of operations	3	2
Minimize impacts and length of construction	3	1
Provide Reliability and Redundancy	3	2
Flexibility for Future Expansion	3	2
Reduce susceptibility to earthquakes, tornados, and flooding	3	1
Low 30-yr operating costs	3	2

3=Easy to meet goal, 2=may not fully meet goal, 1=unlikely to meet goal

Suggestions for the Rehab Option

Rehab Options. The Black and Veatch information we had includes a robust analysis of water quality. The conceptual design included process flow diagrams and hydraulic profile. The more fully thought-through conceptual design reduces risk for the final design needing to deviate from the concept, which is why it was evaluated primarily in the cost estimate and below.

Tube Settlers. We feel like the recommendation to install tube settlers in the existing basins needs to be more thoroughly vetted. At minimum, other Ohio River WTPs should be visited to discuss tube settler performance and maintenance with operators. Bench scale or pilot testing would be preferable, if time allows.

Suggestions for the Rehab Option

Clarification Layout. The B&V plan shows flow split four ways between the two existing primaries and the two secondaries converted to primaries. This will require re-piping the existing primaries and complexity splitting to multiple size/hydraulic profile clarifiers. We suggest that instead of this, a third primary clarifier of equal size be installed to the south of the existing primaries. This was planned for in the design of the existing clarifiers and will operations and maintenance easier. Also, with only 3 or 4 clarifiers, when one clarifier is out of service there isn't a lot of redundancy.

Secondary Clarification. The rehab option does not have secondary clarification, which will be a significant change in treatment. Has this been discussed with operators? Pilot testing or visiting similar plants will be helpful.

Suggestions for the Rehab Option

Dedicated Flocculation. The existing North plant has dedicated flocculation. That might be a reason they are getting such good treatment. The proposed plans don't have dedicated flocculation. Has this been discussed with operators?

Filters. The modification and reuse of 21-28 is proposed. These are not deep enough for future biological filtration if that is needed.

Clearwells. The cost of pumping to above-grade clearwells is not captured in the analysis. In addition to cost, there is a disadvantage in another major pump station, its power requirements, and the associated risks of power outages. We recommend considering reuse of the existing 6.5 mg clearwell. It is not clear whether the transfer pump station is included in the construction costs. It's not clear whether sufficient volume is available for chlorination before chloramination.

Conclusions

1. There is a significant risk that rehab will be more costly than the new plant costs with VE.
2. Even if the 2023 estimates are good, with 2 years of inflation the cost of the rehab project will be approximately the same as the new plant project today.
3. Rehab design will take 2 to 3 years, which will likely add 14 to 21% to the summer 2023 construction cost estimates.
4. Rehab does not meet as many of the WTP project original goals as a new plant.
5. If rehab is pursued, it can be optimized for operability and reuse potential of the clearwell. Proposed new technology should be vetted for Ohio River applicability prior to design work.
6. Trying to get 50 mgd in the space that is just slightly bigger than the existing 24 mgd South Plant will potentially push the envelop for treatment and ease of operation.

Clark Dietz
Engineering Quality of Life™

Technical Memorandum

Project: Water Plant Value Engineering: Hybrid Option Conceptual Design and Budgeting
Subject: **VE Process Summary**
Date: November 14, 2023
To: EWSU: Lane Young, Shawn Wright, Matt Montgomery
From: Clark Dietz: Andrea Bretl and Jim Edenburn
Cc: Black and Veatch: Adam Westermann, Ben Freese, Donnie Ginn
Arcadis: Amy Smitley, Tony Smurlo
Kokosing: Tim Cooper, Todd Lemen, Alan Holding, Steve Ehret
Sterling: Brian Luigs, Matt Perkins
EWSU: Harry Lawson, Steve Capin, Rick Glover
Clark Dietz: David Wichman, Jamie Headen (Benton and Associates)

Black and Veatch, Arcadis, and Clark Dietz have been retained by the Evansville Water and Sewer Utility (EWSU) to evaluate water treatment plant upgrade and rehabilitation options. The need for this evaluation came after the design plans developed by their previous design engineer, AECOM, generated construction costs beyond EWSU's current funding capabilities. This technical memorandum briefly summarizes the background of new water treatment plant (WTP) needs and the original construction costs, the Value Engineering (VE) process that EWSU has engaged with from May to November 2023, and the recommended option for constructing a hybrid new and rehabilitated WTP that meets treatment, water production, operational improvements, and funding availability requirements.

1.0 Background

EWSU owns and operates the Evansville Water Treatment Plant. The WTP serves an area of approximately 100 square miles and provides water to 93% of residents within Vanderburgh County (Area Plan Commission, 2016). The population served in 2015 was approximately 163,000 with over 60,000 residential and commercial customers. They also serve four wholesale customers: German Township Water District and three others in Gibson and Warrick Counties.

The source of water for the EWSU is the Ohio River. The existing WTP is rated at a 60 million gallon per day (mgd) flow. The average reported distribution in 2015 was 29 mgd. In addition to the treatment plant, watermains, booster stations, and fire hydrants, there are also eight storage facilities with capacities ranging from 0.5 to 20 mg. The total system storage is 37 mg. Some parts of the existing treatment plant were constructed in the early 1900s with major improvements or expansion occurring every 20 to 30 years.

Much of the existing WTP is beyond its useful life. The goal for EWSU is to provide high quality, safe, dependable water service to the planning area at rates that encourage developments. Water plant facility improvements are needed to address the aging infrastructure, operational complexity, and to meet future growth needs and anticipate future regulatory requirements.

To address the existing water plant challenges, EWSU has been planning improvements for several years. The first study was a Water Master Plan prepared by HNTB (HNTB, 2016), which proposed improvements to maintain the existing level of service for the next 30 years until 2046. In 2019, EWSU retained AECOM to develop a long-term solution to address infrastructure past its useful life and develop design documents for the preferred alternative. AECOM completed their Advanced Facility Plan in April 2021 (AECOM, 2021). It was noted that the existing facilities age, poor condition, failures of equipment, imminent failure of additional infrastructure expected in the near-term, limited treatment expansion or modification capabilities, and taste and odor complaints all required prompt action. Further, it stated that doing nothing is not a viable alternative because of the risk of equipment failure, health and safety hazards, and insufficient levels of treatment.

The AECOM Advanced Facility Plan reviewed four main alternatives as shown in the following table. Alternative 2B was chosen because even though it did not have the lowest total construction costs, it had scored the best for non-monetary benefits and had the lowest 30-year life cycle costs.

Table 1. AECOM Advanced Facility Plan Analysis

	Description	Total Construction Cost	Non-Monetary Benefit	30-Yr Life Cycle Cost
Alternative 1	Rehab the existing WTP with addition of ozone	$121,822,000	67.1	$253,332,000
Alternative 2A	Partial rehab: utilize conventional pretreatment, ozone, and biological filtration	$141,605,000	76.9	$237,569,000
Alternative 2B	New Plant: utilize conventional pretreatment, ozone, and biological filtration	$140,049,000	84.6	$230,923,000
Alternative 3	Treatment with a 50/50 blend of ground water	$175,599,000	68.2	$297,561,000

An SRF low-interest loan is the funding source for the project. To be able to meet the requirements for loan pay-back, user rates needed to be raised, so EWSU also made a rate case to the Indiana Utility Regulatory Commission (IURC) and the Indiana Office of Utility Consumer Counselor (OUCC). The SRF funding and supporting new utility rates was for a total loan value of approximately $176M, which covered the Advanced Facility Plan estimated cost.

In 2022, EWSU used a Guaranteed Maximum Price (GMP) procurement method to select a contractor-team for construction of the Water Plant Upgrades. Kokosing is the lead contractor selected. On June 28, 2023, Kokosing submitted their GMAX price for Alternate 2B of $353M. This price included a new WTP rated for 50 mgd and included a new administration building and construction contingencies. It did not include other costs including electrical utility relocation and substation costs or construction engineering.

The proposed new WTP costs were significantly higher than either EWSU's SRF loan or their planned rate increases to cover the costs of new facilities. Therefore, an alternative needed to be found.

2.0 Value Engineering Process

On March 31, 2023, EWSU received verbal information from AECOM that the high-level cost estimate would be around $325M. In May 2023 EWSU received the 90% plans and was alerted via AECOM estimates and verbal statements from the contractor that the price would be in excess of $300M. In response, EWSU engaged several independent design engineering firms to evaluate both Value Engineering (VE) analysis and existing plant rehabilitation (Rehab) to options to determine whether significant cost savings were possible by either modifying the AECOM design or performing significant upgrade work on the existing plant. For this effort both Black and Veatch and Arcadis were tasked with determining the cost savings associated with extensive rehabilitation of the existing plant with all new treatment equipment, the "Rehab Option." Clark Dietz was tasked with determining the cost savings associated with significant modifications to the AECOM design, the "VE Option." The analyses were performed by each firm independent of the other and were completed in July 2023. The estimated cost savings for each in comparison to the original are shown in Table 2.

Table 2. July 2023 Engineering Summary

	Original AECOM (price from Kokosing)	Original VE Option[4]	Rehab Option Black & Veatch	Rehab Option Arcadis
Construction Cost	$294M	$223M	$210M	$223M
Construction Contingency and Overhead	$42M	$32M	Incl above	Incl above
Owner Allowance	$17M	$4M	Incl above	$11M
Total Construction[1]	**$353M**	**$259M**	**$210M[2]**	**$234M[3]**
Elevation Adjustment[8]	$20M	$5M	$10M	$10
Engineering	$18M	$15M	$21M	$21M
Electric Utility[5]	$9M	$2M	$0M	$0M
Permitting[6]	$1M	$1M	$1M	$1M
Inflation[7]	$0M	$6M	$6M	$5M
Total Project Cost	**$401M**	**$288M**	**$248M**	**$271M**

Note:

1. The total construction costs do not include electrical utility relocation costs (necessary for building to the east), electrical substation costs (necessary for the original AECOM design), additional design costs (necessary for VE or Rehab Options), construction engineering costs, or the construction cost inflation of deferring construction to re-design the project (necessary for VE or Hybrid Options). These construction costs also do not reflect the additional concrete and rebar costs that Kokosing found Rehab receiving AECOM's 100% drawings. The GMAX estimate was based on AECOM's 90% drawings.
2. Due to the conceptual nature of the Hybrid Option, Black and Veatch estimated that the actual construction cost would be -80% to +150% of their estimate. This put actual construction costs, in 2023 dollars, between $168M and $315M.
3. Due to the conceptual nature of the Rehab Option, Arcadis estimated that the actual construction cost would be -70% to +150% of their estimate. This put actual construction costs, in 2023 dollars, between $164M and $351M.
4. The original VE does not fully address flood elevation concerns, additional money would be needed to raise the site to the 384-ft flood elevation. It also does not reflect the 100% structural design and the increased rebar and concrete costs associated with that. It does include an administration building.
5. Electric Utility costs assume 1) relocation of the overhead electric lines required for working on the east side of Waterworks Road and 2) the Original plan required a new electrical substation for the increased electrical load associated with ozone treatment.
6. Includes the potential need for wetland offsets.
7. Assumes a time delay of 8 months and an assumed 0.3% per month inflation for either the VE or Rehab options. It assumed no time delay in construction of the original GMAX estimate for the original AECOM design and therefore no inflation for this option.
8. The original price, the original VE option, and the original Rehab options do not fully address flood issues. The cost for elevation adjustments for the original AECOM design is from AECOM's March 24, 2023 Memorandum. The original VE Option raised most of the plant elevations except for the chemical buildings and electrical equipment; it is assumed that raising this additional equipment will be $5M. The original Black & Veatch and Arcadis rehabilitation options did not have provisions for flood elevation adjustments. It is assumed that they would be about half the cost of the AECOM option as less infrastructure is proposed at lower elevations.

The preliminary analyses presented in July 2023 showed that significant cost savings were possible. However, given that the costs are still high, the uncertainty with those costs, and fact that neither the VE nor Rehab options were costs developed by a contractor, EWSU chose to bring all the engineers and the contractor together to further develop the conceptual design cost savings options and prepare full cost estimate. Since the engineering teams looking at Rehab options found that much of the existing North plant is not salvageable, but portions of the South plant are, a purely Rehab option was not pursued and a Hybrid option combining the logical portions of new components and rehab components was pursued instead.

Starting in August 2023 the combined team of EWSU, Clark Dietz, Black & Veatch, Arcadis, Kokosing, and Sterling (Kokosing's major subcontractor) met weekly to discuss Hybrid and VE options. In the initial weeks we defined the planning objectives, confirmed treatment goals, discussed future regulatory requirements, and treatment regulatory requirements. The planning goals were summarized as:

1. Work collaboratively as a single team with all the best ideas on the table.
2. Develop 2023 planning costs that have a higher level of confidence than the current costs.

3. Develop life cycle costs for the hybrid option and new plant option.
4. Meet current water quality requirements, plan for future requirements.
5. Maximize the reuse of the existing plant. Maximize the best and highest reuse of all real estate.
6. Develop costs for demolition of the un-reused portions of the existing plant.
7. Develop a phasing plan and associated costs per phase.

At each meeting plant layout and process flow diagrams were discussed and refined. Several site visits were performed to look at existing systems, reuse potential, space availability, and potential concerns. The contractors used a combination of experience and obtaining quotes from subcontractors and suppliers to develop and refine costs.

3.0 Recommended Option

Cost for the final options were developed by Kokosing based on the design criteria, layouts, process flow diagrams, and hydraulic profiles provided by the engineering team. During September and October 2023 weekly meetings, there were multiple conceptual designs developed, discussed, and modified to determine the optimum plant layout and reuse possibilities.

The costs for both the Hybrid option and the VE option in comparison to the original GMAX and the initial VE option are shown in Table 3. Both the VE Option and the Hybrid Option offer significant savings over the original costs. The Hybrid Option offers $42M more savings than the VE Option, therefore it is the selected alternative. Attachment 1 shows the final version of the site plan for the Hybrid Option.

Table 3. Final Cost Analysis

	Original AECOM (price from Kokosing)	Original VE Option	Final VE Option	Hybrid Option
Construction Cost[1,8]	$353M	$255M	$261M	$219M
Owner Allowance	Incl. in Construction	$4M	$4M	$4M
Design Engineering[2]	$0	$2M	$8M	$8M
Construction Engineering[3]	$18M	$13M	$13M	$13M
Elevation Adjustment[9]	$20M	$5M	$0	$0
Electric Utility[4]	$9M	$2M	$2M	$2M
Permitting[5]	$1M	$1M	$1M	$1M
Inflation[6]	$26M	$6M	$6M	$5M
Additional Concrete[7]	$15M	$5M	$0	$0
Demolition of abandoned water plant structures[10]	$7M	$7M	*$7M*	*$7M*
Total Project Cost	**$448M**	**$299M**	**$301M**	**$258M**

Notes:

1. Pricing from Kokosing. These costs do not include EWSU administration or maintenance spaces. Demolition of the parts of the existing plant that are not being reused is included in the VE Option and Hybrid Options.
2. Design Engineering is estimated at 3% to 4% of the construction cost. The actual engineering fee may be different.
3. Construction engineering including resident project representative services is estimated at 5.0 to 6.5% of the project cost, the actual cost may be different.
4. Electric Utility costs assume 1) relocation of the overhead electric lines required for working on the east side of Waterworks Road and 2) the Original plan required a new electrical substation for the increased electrical load associated with ozone treatment.
5. Includes potential wetland offsets.
6. Assumes a time delay of 8 months and an assumed 0.3% per month inflation for either the VE or Rehab options. It also assumes that the Original design would have a delay of 24 months for the City to find additional project funding.
7. The original GMAX price estimate was based around AECOM's 90% design plans. In October, Kokosing received the 100% design plans and significant structural changes had been made including significant additional concrete and rebar. The Original and Original VE prices were updated for these extra structural costs. The final VE and Hybrid Options have these additional costs included.
8. The original design included a new administration building with significant space for maintenance personnel. This cost was also included with the Original VE option, but was removed for the Final VE and Hybrid Options.

9. The cost for elevation adjustments for the original AECOM design is from AECOM's March 24, 2023 Memorandum. The original VE Option raised most of the plant elevations except for the chemical buildings and electrical equipment; it is assumed that raising this additional equipment will be $5M. Flood elevation concerns were included final VE and Hybrid Options.
10. Demolition costs for the complete removal of existing-to-be-abandoned water treatment plant structures were provided by Klenck on 10/9/2023.

The new versus rehabilitated components of each of the options shown in Table 3 are summarized in Table 4.

Table 4. Component Analysis

	Original AECOM	Original VE Option	Final VE Option	Hybrid Option
Intake building rehabilitation	◑	◑	◑	◑
Raw water piping	✔	✔	✔	✔
Rapid Mix/Splitter Structure	✔	✔	✔	✔
Settled water piping	✔	✔	✔	✔
Filtered water piping	✔	✔	✔	✔
Settling Basins	✔	✔	✔	◑
Filters	✔	✔	✔	✔
Ozone	✔	⊗	⊗	⊗
Clearwell	✔	◑	✔	✔
High Service Pump Station	✔	◑	✔	✔
Site Electrical Distribution	✔	◑	◑	◑
Residual Pump Station	✔	✔	◑	✔
PAC Chemical	✔	✔	✔	✔
Hypochlorite	✔	✔	◑	✔
Coagulant	✔	✔	◑	✔
Post Filtration Chemicals	✔	✔	✔	✔
Demolition East of Waterworks Road (Levee Building and Maintenance Garage)	✔	✔	✔	✔
Demolition of Abandoned Water Plant Structures	✔	✔	✔	✔
Administration and Maintenance Spaces	✔	✔	⊗	⊗

Key:

✔ New Equipment and/or Structure

◑ New Equipment, Rehabilitated Structure

⊗ Not Included

Though the value engineering review and the hybrid option developed by the team will provide EWSU with $169M in savings compared with the original design, it is still more than the projected SRF loan value and the corresponding rate case made by the EWSU. If additional savings are needed, the design team recommends reducing the design flow rate of the plant from 50 mgd to 40 mgd. This would be done by building the structures and piping for the anticipated future

50 mgd demand but installing only part of the major equipment at this time. The main equipment that could be delayed for future installation includes filter piping, valves, and equipment. The estimated savings of the reduced capacity are $10M.

A breakout of the costs provided by Kokosing and the cost estimate classification as determined by the contractor for the Hybrid Option is shown in Table 4.

Table 5. Hybrid Option Cost Estimate and Classifications

Cost Category	Budgetary Estimate[2]	Cost Estimate Classification[1]
General Conditions	$18,000,000	2
Mobilization/Demobilization	$5,900,000	2
Sitework/Civil/Demolition	$7,000,000	3
Dewatering	$4,760,000	2
Raw Water Piping	$3,000,000	3
Yard Piping and Structures	$6,400,000	3
Site Electrical Distribution	$13,255,000	3
Existing RW Intake PS	$11,600,000	2
Exist. Final Settling Basins #1 & #2	$5,800,000	4
Exist. Secondary Settling Basins #1&#2	$3,000,000	4
Filter Bldg/CW/HSPS	$98,700,000	2
Residual PS	$9,900,000	2
Chemical Bldgs	$11,400,000	3
PAC -Intake Chem Bldg	$4,250,000	2
Hypochlorite Conversion	$322,000	3
Rehab Coagulant Bldg	$212,000	4
Const Contingency	$10,000,000	3
Site Based Equipment	$3,750,000	2
Maintenance of Plant Operation	$300,000	3
Sludge PS	$311,000	3
Rapid Mix/Splitter Structure	$1,985,000	4
Abandoned Water Plant Structure Demolition	$7,000,000	2
TOTAL	**$226,845,000**	**2.3 (Weighted Average)**

Note:

1. The cost estimate classification is shown here is based on the AACE International Recommended Practice for Cost Estimate Classification. For this an estimate Class 5 is based on deliverables that are 0% to 2% complete, Class 4 for is 1% to 15%, Class 3 is for 10% to 40%, Class 2 is for 30% to 75%, and Class 1 is 65% to 100% complete deliverable information. As the classification number gets lower, the expected accuracy range is higher. For example, a Class 2 accuracy is expected to be -5% to -10% on the low side to +5% to +15% on the high side and a Class 3 accuracy is expected to be -5% to -15% on the low side to +10% to +20% on the high side.
2. The detailed breakdown of these costs is included in Attachment 2. Except for the existing-to-be-abandoned water plant demolition costs, which were provided separated.

Attachments

1. Final Hybrid Layout
2. Detailed Cost Breakdown

BLACK & VEATCH	ClarkDietz Engineering Quality of Life®	WATER TREATMENT PLANT ALTERNATIVES EVALUATION	FIGURE
DATE: 11/3/2023	Evansville WATER AND SEWER UTILITY		
B&V PROJECT 416585	ARCADIS	Hybrid Alternative	

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

PARENT ITEM = 11000 SAE
Description = GENERAL CONDITIONS Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 11000:

BID ITEM = 11010 Land Item SCHEDULE: 1 100
Description = PROJECT SUPERVISION - A Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01103 SENIOR PROJECT MANAGER Quan: 36.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z003 PROJ MANAGER 6,335.99 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$779,011.20 176.0000 MH/MO 6,336.00 MH [16280] 779,011 779,011

01103A PROJECT MANAGER Quan: 48.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z003 PROJ MANAGER 8,447.99 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$1,038,681.60 176.0000 MH/MO 8,448.00 MH [16280] 1,038,682 1,038,682

01104 FIELD/OFFICE ENGINEER Quan: 96.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z005 PROJECT ENGINEER 16,896.00 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$1,686,051.84 176.0000 MH/MO 16,896.00 MH [12936] 1,686,052 1,686,052

01105 PROJECT ENGINEER Quan: 48.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z005 PROJECT ENGINEER 8,447.99 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$843,025.92 176.0000 MH/MO 8,448.00 MH [12936] 843,026 843,026

01105C COST ENGINEER Quan: 18.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z005 PROJECT ENGINEER 3,168.00 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$316,134.72 176.0000 MH/MO 3,168.00 MH [12936] 316,135 316,135

01106 LEAD PROJECT ENGINEER Quan: 48.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z006 LEAD PROJECT ENGINEER 8,447.99 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$933,335.04 176.0000 MH/MO 8,448.00 MH [14432] 933,335 933,335

01107 PROJECT SUPERINTENDENT Quan: 48.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z007 PROJ SUPERINTENDENT 8,447.99 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 1.00
$995,850.24 176.0000 MH/MO 8,448.00 MH [13024] 860,513 135,337 995,850

01109 CONCRETE SUPERINTENDENT - all other conc Quan: 40.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z009 CONCRETE SUPERINTENDENT 7,040.00 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 1.00
$703,436.80 176.0000 MH/MO 7,040.00 MH [10560] 590,656 112,781 703,437

01110 DIRT SUPERINTENDENT - Excavation/UG/Site Quan: 36.00 MO Hrs/Shft: 8.00 Cal: SAL WC: 1

Z010 DIRT SUPERINTENDENT 6,336.00 CH Eff: 100.00 **Prod: 176.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 1.00
$633,093.12 176.0000 MH/MO 6,336.00 MH [10560] 531,590 101,503 633,093

01115 SAFETY ENGINEER Quan: 45.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1

ZPE2 ==> PROJECT ENGINEER 1.00 7,920.00 MH 73.500 790,337 790,337
$790,336.80 176.0000 MH/MO 7,920.00 MH [12936] 790,337 790,337

=====> Item Totals: 11010 - PROJECT SUPERVISION - A

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 11010				Land Item	SCHEDULE: 1	100				
Description =	PROJECT SUPERVISION - A			Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
$8,718,957.28	81,488.0000 MH/LS		81,488.00 MH	[6165720]	8,369,337			349,620		**8,718,957**
8,718,957.280	1 LS				8,369,336.80			349,620.48		8,718,957.28
BID ITEM = 11020				Land Item	SCHEDULE: 1	100				
Description =	LIVING EXPENSES - AS			Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
01151	**PER DIEM - PM/PEX**			**Quan: 84.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z30LEPM	LIVING EXPENSE@107.2	1.00	84.00 MO	3,080.000			277,477			277,477
01152	**PER DIEM - SUPT**			**Quan: 76.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z30LES	LIVING EXPENSE@107.2	1.00	76.00 MO	3,080.000			251,051			251,051
01153	**PER DIEM - PROJ ENGR**			**Quan: 192.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z30LEPE	LIVING EXPENSE@107.2	1.00	192.00 MO	3,080.000			634,234			634,234
01154	**PER DIEM - FOREMAN**			**Quan: 270.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z30LEF	LIVING EXPENSE@107.2	1.00	270.00 MO	2,200.000			637,065			637,065
=====> **Item Totals:**	**11020 - LIVING EXPENSES - AS**									
$1,799,826.60				[ ]			1,799,827			**1,799,827**
1,799,826.600	1 LS						1,799,826.60			1,799,826.60
BID ITEM = 11030				Land Item	SCHEDULE: 1	100				
Description =	FIELD OFFICE - C			Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
01201	**FO-MOBILIZE**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
Z203	FIELD OFFICE MOB CREW		60.00 CH	Eff: 100.00	**Prod: 60.0000 HU**		Lab Pcs: 2.00		Eqp Pcs:	2.00
3Z01OSU	OFFICE SETUP@107.25%	1.00	1.00 LS	2,000.000			2,145			2,145
$12,378.88	120.0000 MH/LS		120.00 MH	[3628.8]	6,471		2,145	3,763		12,379
01202	**ENGINEER'S TRAILER**			**Quan: 48.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z01OTR	OFFICE TRAILER@107.2	1.00	48.00 MO	650.000			33,462			33,462
01204	**FO-FURNITURE**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z01FURN	FIELD OFFICE F@107.25	1.00	1.00 LS	20,000.000			21,450			21,450
01205	**FO-COMPUTER EQUIPMENT**			**Quan: 48.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z01EQ	FIELD OFFICE E@107.25	1.00	48.00 MO	500.000			25,740			25,740
3Z01EQSERV	FO EQUIP SERVI@107.25	1.00	48.00 MO	100.000			5,148			5,148
$30,888.00				[ ]			30,888			30,888
01206	**FO-SUPPLIES**			**Quan: 48.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z01OSP	OFFICE SUPPLIE@107.25	1.00	48.00 MO	200.000			10,296			10,296

Cost Report

BID ITEM = 11030 Land Item SCHEDULE: 1 100
Description = FIELD OFFICE - C Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01208	**FO-JANITOR**				**Quan: 48.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z01JAN	JANITORIAL SER@107.2	1.00	48.00	MO	500.000			25,740			25,740
01211	**FO-ELECTRICAL HOOK-UP**				**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z01EDROP	ELECTRIC DROP@107.25	1.00	1.00	LS	5,000.000			5,363			5,363
01214	**FO-POWER USAGE**				**Quan: 48.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z01PWR	POWER CONSUMPT@10	1.00	48.00	MO	700.000			36,036			36,036
01217	**FO-T1 INTERNET SERVICE**				**Quan: 48.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z01INTT1	T1 INTERNET SE@107.25	1.00	48.00	MO	750.000			38,610			38,610
01219	**FO-HEAT**				**Quan: 48.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z01HEAT	FIELD OFFICE H@107.25	1.00	48.00	MO	250.000			12,870			12,870
01220	**TEMPORARY TOILETS**				**Quan: 48.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z10PT	PORTABLE TOILE@107.2	1.00	48.00	MO	160.000			8,237			8,237
=====> Item Totals: 11030 - FIELD OFFICE - C											
$235,330.18	120.0000 MH/LS		120.00	MH	[3628.8]	6,471		225,096	3,763		**235,330**
235,330.180	1 LS					6,470.68		225,096.30	3,763.20		235,330.18

BID ITEM = 11040 Land Item SCHEDULE: 1 100
Description = SURVEYING & LAYOUT - D Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01172	**SURVEYING SUB(Cripe - WBE)**				**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
401SURVEY	Surveyor Sub	1.00	1.00	LS	60,000.000					60,000	60,000

BID ITEM = 11050 Land Item SCHEDULE: 1 100
Description = DUMPSTERS - E Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01273	**30 CY DUMPSTER**				**Quan: 140.00 PL Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z50DF30	30 CY DUMPSTER@107.	1.00	140.00	PL	600.000			90,090			90,090
01274	**CONCRETE WASHOUT DUMPSTER**				**Quan: 40.00 PL Hrs/Shft: 8.00 Cal: 508 WC: 1**						
3Z50DF10	CONCRETE DUMPS@10	1.00	40.00	PL	400.000			17,160			17,160
=====> Item Totals: 11050 - DUMPSTERS - E											
$107,250.00					[ ]			107,250			**107,250**
107,250.000	1 LS							107,250.00			107,250.00

BID ITEM = 11060 — Land Item — SCHEDULE: 1 100
Description = EQUIPMENT MOVES - F — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01301	**GENERAL TRUCKING**			**Quan: 283.00 TR**	**Hrs/Shft: 10.00**	**Cal: 510**	**WC: 1**			
Z202	GENERAL TRUCKING PER HR		3,200.00 CH	Eff: 100.00	**Prod: 11.3074 HU**		Lab Pcs: 1.00		Eqp Pcs: 2.00	
$412,114.13	11.3074 MH/TR		3,200.00 MH	[456.854]	211,282			200,832		412,114
01303	**FORM MOBILIZATION**			**Quan: 136.00 TR**	**Hrs/Shft: 10.00**	**Cal: 510**	**WC: 1**			
Z202	GENERAL TRUCKING PER HR		2,176.00 CH	Eff: 100.00	**Prod: 16.0000 HU**		Lab Pcs: 1.00		Eqp Pcs: 2.00	
$280,237.61	16.0000 MH/TR		2,176.00 MH	[646.448]	143,672			136,566		280,238
01304	**MOBILIZE 50 TN RT CRANE**			**Quan: 2.00 EA**	**Hrs/Shft: 10.00**	**Cal: 510**	**WC: 1**			
Z201	EQUIPMENT MOVES PER HR		64.00 CH	Eff: 100.00	**Prod: 32.0000 HU**		Lab Pcs: 1.00		Eqp Pcs: 2.00	
$9,206.12	32.0000 MH/EA		64.00 MH	[1292.895]	4,226			4,980		9,206
=====> **Item Totals:**	**11060 - EQUIPMENT MOVES - F**									
$701,557.86	5,440.0000 MH/LS		5,440.00 MH	[219792.32]	359,180			342,378		**701,558**
701,557.860	1 LS				359,179.62			342,378.24		701,557.86

BID ITEM = 11070 — Land Item — SCHEDULE: 1 100
Description = ICE AND WATER - J — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01210	**ICE & WATER**			**Quan: 48.00 MO**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
3Z10I&W	ICE & WATER@107.25%	1.00	48.00 MO	500.000			25,740			25,740
=====> **Item Totals:**	**11070 - ICE AND WATER - J**									
$25,740.00				[ ]			25,740			**25,740**
25,740.000	1 LS						25,740.00			25,740.00

BID ITEM = 11090 — Land Item — SCHEDULE: 1 100
Description = 3RD PARTY TESTING — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01291	**CIVIL TESTING SERVICES**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
401TESTCI	CIVIL MATERIAL TESTI	1.00	1.00 LS	1,500,000.000					1,500,000	1,500,000

BID ITEM = 11100 — Land Item — SCHEDULE: 1 100
Description = CENTRAL ENGINEERING - CEG — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
CEG-A	**Central Engineering - Phase Coding**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
ZCEG2	==> CEG PROJECT ENGI	1.00	40.00 MH	86.400	4,656					4,656
$4,655.84	40.0000 MH/LS		40.00 MH	[3456]	4,656					4,656
CEG-D	**Central Engineering - Design**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
ZCAD	==> CAD OPERATOR	1.00	60.00 MH	49.500	4,286					4,286
ZCEG2	==> CEG PROJECT ENGI	1.00	16.00 MH	86.400	1,862					1,862
ZCEG3	==> CEG LEAD ENGINEE	1.00	100.00 MH	93.400	12,438					12,438

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Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 11100					Land Item SCHEDULE: 1 100						
Description =	CENTRAL ENGINEERING - CEG				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
$18,585.74	176.0000 MH/LS		176.00	MH	[13692.4]	18,586					18,586
CEG-E	**Central Engineering - MEP Coordination**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
ZCEG2	==> CEG PROJECT ENGI	1.00	64.00	MH	86.400	7,449					7,449
$7,449.34	64.0000 MH/LS		64.00	MH	[5529.6]	7,449					7,449
CEG-P	**Central Engineering - Project Controls**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
ZCEG2	==> CEG PROJECT ENGI	1.00	544.00	MH	86.400	63,319					63,319
$63,319.42	544.0000 MH/LS		544.00	MH	[47001.6]	63,319					63,319
CEG-P-S	**Central Engineering - Project Controls S**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
ZCEG2	==> CEG PROJECT ENGI	1.00	40.00	MH	86.400	4,656					4,656
$4,655.84	40.0000 MH/LS		40.00	MH	[3456]	4,656					4,656
CEG-U	**Central Engineering - UG Coordination**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
ZCAD	==> CAD OPERATOR	1.00	1,197.00	MH	49.500	85,502					85,502
ZCEG1	==> CEG OFFICE ENGIN	1.00	418.00	MH	75.000	42,761					42,761
$128,263.11	1,615.0000 MH/LS		1,615.00	MH	[90601.5]	128,263					128,263
=====> Item Totals:	**11100 - CENTRAL ENGINEERING - CEG**										
$226,929.29	2,479.0000 MH/LS		2,479.00	MH	[163737.1]	226,929					**226,929**
226,929.290	1 LS					226,929.29					226,929.29
BID ITEM = 11110					Land Item SCHEDULE: 1 100						
Description =	SAFETY RAILINGS & BARRICADES - ZSR				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
01252	**TEMPORARY RAILINGS**				**Quan: 12,000.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C001	CARPENTER ONLY PER MH		800.00	CH	Eff: 100.00	**Prod: 15.0000 UH**		Lab Pcs: 1.00		Eqp Pcs:	0.00
3Z50TR	TEMP RAILINGS@107.25	1.00	12,000.00	LF	2.500			32,175			32,175
$81,393.61	0.0666 MH/LF		800.00	MH	[1.899]	49,219		32,175			81,394
01252A	**STAIR TOWERS**				**Quan: 6.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C001	CARPENTER ONLY PER MH		192.00	CH	Eff: 100.00	**Prod: 32.0000 HU**		Lab Pcs: 1.00		Eqp Pcs:	0.00
2MCSTRTWR	Stair Tower Rental	1.00	0.75	LS	55,000.000		41,250				41,250
$53,062.47	32.0000 MH/EA		192.00	MH	[911.488]	11,812	41,250				53,062
=====> Item Totals:	**11110 - SAFETY RAILINGS & BARRICADES - ZSR**										
$134,456.08	992.0000 MH/LS		992.00	MH	[28256.13]	61,031	41,250	32,175			**134,456**
134,456.080	1 LS					61,031.08	41,250.00	32,175.00			134,456.08
BID ITEM = 11120					Land Item SCHEDULE: 1 100						
Description =	SAFETY TRAINING AND ORIENTATION - ZST				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
01156	**CRAFT TRAINING & ORIENTATION**				**Quan: 160.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C001	CARPENTER ONLY PER MH		2,400.00	CH	Eff: 100.00	**Prod: 15.0000 HU**		Lab Pcs: 1.00		Eqp Pcs:	0.00
$148,407.40	15.0000 MH/EA		2,400.00	MH	[499.14]	148,407					148,407

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 11120 Land Item SCHEDULE: 1 100
Description = SAFETY TRAINING AND ORIENTATION - ZST Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals: 11120 - SAFETY TRAINING AND ORIENTATION - ZST**

$148,407.40	2,400.0000 MH/LS		2,400.00 MH	[79862.4]	148,407					**148,407**
148,407.400	1 LS				148,407.40					148,407.40

BID ITEM = 11140 Land Item SCHEDULE: 1 100
Description = LAYDOWN/ROADS/PARKING/WAREHOUSE STORAGUnit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01235 MAINTAIN LAYDOWN & PARKING Quan: 48.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1

C236 STONE BASE CREW-MED 192.00 CH Eff: 100.00 **Prod: 4.0000 HU** Lab Pcs: 4.00 Eqp Pcs: 2.00

$78,868.26	16.0000 MH/MO		768.00 MH	[591.44]	47,879			30,989		78,868

14001 OFF-SITE INDOOR STORAGE - LEASE Quan: 36.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1

3LEASESTOR	Indoor Storage@107.25%	1.00	36.00 MO	5,000.000			193,050			193,050

=====> **Item Totals: 11140 - LAYDOWN/ROADS/PARKING/WAREHOUSE STORAGE**

$271,918.26	768.0000 MH/LS		768.00 MH	[28389.12]	47,879		193,050	30,989		**271,918**
271,918.260	1 LS				47,879.46		193,050.00	30,988.80		271,918.26

BID ITEM = 11145 Land Item SCHEDULE: 1 100
Description = MATERIAL HANDLING CREW Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01450 MATERIAL HANDLING CREW Quan: 24.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1

C203 DEMO - 710 HOE W/ 2 LAB 960.00 CH Eff: 100.00 **Prod: 40.0000 HU** Lab Pcs: 4.00 Eqp Pcs: 2.00

2MC25000	Misc. tarps, dunnage, etc.	1.00	1.00 LS	25,000.000		25,000				25,000
$295,060.32	160.0000 MH/MO		3,840.00 MH	[5798.8]	236,192	25,000		33,869		295,060

=====> **Item Totals: 11145 - MATERIAL HANDLING CREW**

$295,060.32	3,840.0000 MH/LS		3,840.00 MH	[139171.2]	236,192	25,000		33,869		**295,060**
295,060.320	1 LS				236,191.52	25,000.00		33,868.80		295,060.32

BID ITEM = 11160 Land Item SCHEDULE: 1 100
Description = SNOW REMOVAL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01256 SNOW REMOVAL Quan: 16.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1

Z123 JD 544G LOADER & OP 384.00 CH Eff: 100.00 **Prod: 24.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 0.00

$20,706.17	24.0000 MH/MO		384.00 MH	[725.76]	20,706					20,706

=====> **Item Totals: 11160 - SNOW REMOVAL**

$20,706.17	384.0000 MH/LS		384.00 MH	[11612.16]	20,706					**20,706**
20,706.170	1 LS				20,706.17					20,706.17

BID ITEM = 11170 Land Item SCHEDULE: 1 100
Description = DUST CONTROL / STREET SWEEPING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 11170 Land Item SCHEDULE: 1 100
Description = DUST CONTROL / STREET SWEEPING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01278 STREET SWEEPING RUBBER TIRE BACKHOE Quan: 400.00 HR Hrs/Shft: 8.00 Cal: 508 WC: 1

Z902 710, OP AND 2 LAB 400.00 CH Eff: 100.00 **Prod: 1.0000 HU** Lab Pcs: 1.00 Eqp Pcs: 2.00

$52,900.55	1.0000 MH/HR		400.00 MH	[43.16]	28,061			24,840		52,901

01279 STREET SWEEPING SUB(Porters) Quan: 700.00 HR Hrs/Shft: 8.00 Cal: 508 WC: 1

402STREETSWP	Street Sweeping Sub	1.00	700.00 HR	145.000					101,500	101,500

=====> **Item Totals: 11170 - DUST CONTROL / STREET SWEEPING**

$154,400.55	400.0000 MH/LS		400.00 MH	[17264]	28,061			24,840	101,500	**154,401**
154,400.550	1 LS				28,060.55			24,840.00	101,500.00	154,400.55

BID ITEM = 11180 Land Item SCHEDULE: 1 100
Description = PHOTOGRAPHIC DOCUMENTATION(MULTITEK) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01384 PROGRESS PHOTOGRAPHS Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

401PHOTO	Construction Photography S	1.00	1.00 LS	49,200.000					49,200	49,200

BID ITEM = 11185 Land Item SCHEDULE: 1 100
Description = ADMIN HELP/SWPPP MONITORING(ENVIROKINETI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01399 ADMIN HELP & SWPPP MONITORING Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

401ADMINSWPP	Admin-SWPPP Monitor Su	1.00	1.00 LS	616,246.000					616,246	616,246

BID ITEM = 11190 Land Item SCHEDULE: 1 100
Description = SECURITY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals: 11190 - SECURITY**

$0.00 [ ]
0.000 1 LS

BID ITEM = 11195 Land Item SCHEDULE: 1 100
Description = PM SOFTWARE SYSTEM Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals: 11195 - PM SOFTWARE SYSTEM**

$0.00 [ ]
0.000 1 LS

BID ITEM = 11200 Land Item SCHEDULE: 1 100
Description = BOND ADDER FOR CONTINGENCY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01368 Bond Add for Contingency (LS) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 11200 Land Item SCHEDULE: 1 100
Description = BOND ADDER FOR CONTINGENCY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

3Z40CB	Bond for Contingency (LS)	1.00	1.00 LS	0.000						

=====> **Item Totals: 11200 - BOND ADDER FOR CONTINGENCY**
$0.00 [ ]
0.000 1 LS

BID ITEM = 11210 Land Item SCHEDULE: 1 100
Description = ESCALATIONS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01411 FUEL SURCHARGE - OFF-ROAD FUEL Quan: 220,000.00 GL Hrs/Shft: 8.00 Cal: 508 WC: 1

3Z60SC	FUEL SURCHARGE ON E	1.00	220,000.00 GL	0.500			110,000			110,000

01420 PERMANENT MATERIAL ESCALATIONS Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

3Z8010	Material Escalation	1.00	1.00 LS	1,090,000.000			1,090,000			1,090,000

=====> **Item Totals: 11210 - ESCALATIONS**

$1,200,000.00				[ ]			1,200,000			**1,200,000**
1,200,000.000		1 LS					1,200,000.00			1,200,000.00

Total of Above Sub-Biditems

=====> **Item Totals: 11000 - GENERAL CONDITIONS**

$16,265,985.99	**98,311.0000 MH/LS**	**98,311.00**	**MH**	**[6857433.23]**	**9,504,193**	**66,250**	**3,583,138**	**785,460**	**2,326,946**	**16,265,986**
16,265,985.990		**1 LS**			**9,504,192.57**	**66,250.00**	**3,583,137.90**	**785,459.52**	**2,326,946.00**	**16,265,985.99**

PARENT ITEM = 12000 CLIENT# = 1 SAE
Description = MOBILIZATION / DEMOBILIZATION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 12000:

BID ITEM = 12010 Land Item SCHEDULE: 1 100
Description = MOBILIZATION Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

01191 BLDRS RISK INSURANCE Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

3Z401030	BUILDERS RISK INSURA	1.00	1.00 LS	2,100,000.000			2,100,000			2,100,000

01192 GENERAL LIABILITY INSURANCE Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

3Z40GL*TC	GENERAL LIABILITY IN	1.00	203,520,000.00 $T	0.003			610,560			610,560

01196 BID BOND (From Bid Summary) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

3Z40BOND	Bid Bond from Bid Summa	1.00	1.00 LS	1,555,000.000			1,555,000			1,555,000

01271 GENERAL CLEAN-UP Quan: 208.00 WK Hrs/Shft: 8.00 Cal: 508 WC: 1

C003 LABORER ONLY PER MH 2,080.00 CH Eff: 100.00 **Prod: 10.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 12010					Land Item SCHEDULE: 1 100						
Description =	MOBILIZATION				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
$226,864.50	20.0000 MH/WK		4,160.00	MH	[615.4]	226,865					226,865
01299	**TEMPORARY UTIITIES(Section 01 0010) & CE**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
3Z01EDROP	ELECTRIC DROP	1.00	1.00	LS	100,000.000			100,000			100,000
3Z01UTILITY	Temporary Util@107.25%	1.00	48.00	MO	3,000.000			154,440			154,440
$254,440.00					[ ]			254,440			254,440
01301	**GENERAL TRUCKING**		**Quan: 153.00 TR**		**Hrs/Shft: 10.00**	**Cal: 510**	**WC: 1**				
Z202	GENERAL TRUCKING PER HR		2,448.00	CH	Eff: 100.00	**Prod: 16.0000 HU**		Lab Pcs: 1.00		Eqp Pcs:	2.00
$315,267.31	16.0000 MH/TR		2,448.00	MH	[646.448]	161,631			153,636		315,267
10401	**PROJECT SIGN MATERIAL**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2S14-LS	Signs - LS	1.00	1.00	LS	4,113.000		4,113				4,113
10409	**INSTALL PROJECT SIGN**		**Quan: 1.00 EA**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C299	Bobcat/Drill - 2 Labr		8.00	CH	Eff: 100.00	**Prod: 8.0000 HU**		Lab Pcs: 3.00		Eqp Pcs:	2.00
$1,701.61	24.0000 MH/EA		24.00	MH	[837.6]	1,434			268		1,702
=====> **Item Totals:**	**12010 - MOBILIZATION**										
$5,067,946.42	6,632.0000 MH/LS		6,632.00	MH	[227747.34]	389,929	4,113	4,520,000	153,904		**5,067,946**
5,067,946.420	1 LS					389,929.10	4,113.00	4,520,000.00	153,904.32		5,067,946.42
BID ITEM = 12020					Land Item SCHEDULE: 1 100						
Description =	DEMOBILIZATION				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
01274	**FINAL CLEAN-UP**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
Z901	CLEAN UP CREW, 3L		240.00	CH	Eff: 100.00	**Prod: 240.0000 HU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
$39,118.03	720.0000 MH/LS		720.00	MH	[22027.2]	39,118					39,118
12100	**ADD'L PIPING, FITTINGS, VALVES & BYPASS**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2ZALLOW-SU	Allowance for start-up extra	1.00	1.00	LS	200,000.000		200,000				200,000
=====> **Item Totals:**	**12020 - DEMOBILIZATION**										
$239,118.03	720.0000 MH/LS		720.00	MH	[22027.2]	39,118	200,000				**239,118**
239,118.030	1 LS					39,118.03	200,000.00				239,118.03

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**12000 - MOBILIZATION / DEMOBILIZATION**										
$5,307,064.45	**7,352.0000 MH/LS**		**7,352.00**	**MH**	**[249774.54]**	**429,047**	**204,113**	**4,520,000**	**153,904**		**5,307,064**
5,307,064.450	**1 LS**					**429,047.13**	**204,113.00**	**4,520,000.00**	**153,904.32**		**5,307,064.45**

Cost Report

BID ITEM = 15000 Land Item SCHEDULE: 1 100 TKC
Description = MAINTAINING PLANT OPERATIONS(BUDGET) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

151 BUDGET TO MAINTAIN PLANT OPERATIONS D Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01PLNTOPPLUG	Maintain Plant Operations	1.00	1.00	LS	300,000.000			300,000			300,000

=====> Item Totals: 15000 - MAINTAINING PLANT OPERATIONS(BUDGET)

$300,000.00			[ ]			300,000			**300,000**
300,000.000	1 LS					300,000.00			300,000.00

PARENT ITEM = 20000 CLIENT# = 12 BCL
Description = SITEWORK / CIVIL Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20000:

PARENT ITEM = 20100 BCL
Description = SITE PREP Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20100:

BID ITEM = 20110 Land Item SCHEDULE: 1 100 BCL
Description = EROSION CONTROL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

110-01 INSTALL/REMOVE SILT FENCE Quan: 2,000.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C292 SILTFENCE 16.00 CH Eff: 100.00 **Prod: 125.0000 UH** Lab Pcs: 4.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2EC04SF	Silt Fence Standard	1.10	2,200.00	LF	0.350		770				770
$5,035.96	0.0320 MH/LF		64.00	MH	[1.08]	3,730	770		536		5,036

110-02 CONCRETE WASHOUT Quan: 63.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
402CONCWASH	Concrete Washout - Pull	1.00	63.00	EA	700.000					44,100	44,100

110-03 TEMPORARY SEEDING Quan: 10,000.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
402SEEDTEMP	Seeding Sub - Temp Seed	1.00	10,000.00	SY	1.500					15,000	15,000

110-04 INLET PROTECTION Quan: 30.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C295 JD710, OPER & 2 LABORERS 16.00 CH Eff: 100.00 **Prod: 1.8750 UH** Lab Pcs: 3.00 Eqp Pcs: 1.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2EC02DB	Dandy Bag	1.00	60.00	EA	55.000		3,300				3,300
$7,100.65	1.6000 MH/EA		48.00	MH	[55.84]	2,868	3,300		933		7,101

110-05 EROSION CONTROL MATTING Quan: 3,200.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

C295 JD710, OPER & 2 LABORERS 10.00 CH Eff: 100.00 **Prod: 320.0000 UH** Lab Pcs: 4.00 Eqp Pcs: 1.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2EC03EB150	Nag SC-150 Blanket	1.25	4,000.00	SY	2.650		10,600				10,600
$13,514.63	0.0125 MH/SY		40.00	MH	[0.422]	2,331	10,600		583		13,515

110-06 PLACE RIP RAP Quan: 210.00 TN Hrs/Shft: 8.00 Cal: 508 WC: 1

C263 EXCAVATE CREW-SMALL 24.00 CH Eff: 100.00 **Prod: 8.7500 UH** Lab Pcs: 4.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2A01RRC	Rock Channel Prot. Type C	1.00	210.00	TN	42.000		8,820				8,820
2EC0160Z	6 Ounce Fabric	1.30	204.10	SY	1.000		204				204
$19,442.80	0.4571 MH/TN		96.00	MH	[16.898]	5,985	9,024		4,434		19,443

Cost Report

BID ITEM = 20110 Land Item SCHEDULE: 1 100 BCL
Description = EROSION CONTROL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
110-07	**CONSTRUCTION ENTRANCES**		**Quan: 816.00 TN**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		16.00	CH	Eff: 100.00	**Prod:**	**51.0000 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
2A0102	#2 Aggregate	1.00	816.00	TN	32.290		26,349				26,349
$32,150.39	0.0588 MH/TN		48.00	MH	[2.306]	3,127	26,349		2,675		32,150
110-08	**MAINTAIN E&S**		**Quan: 156.00 WK**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C201	DEMO - 2 LAB		156.00	CH	Eff: 100.00	**Prod:**	**1.0000 HU**	Lab Pcs:	1.00	Eqp Pcs:	0.00
2A0102	#2 Aggregate	1.00	100.00	TN	32.290		3,229				3,229
2A0108	#8 Aggregate	1.00	100.00	TN	33.660		3,366				3,366
2EC01SF	Silt Fence	1.00	200.00	LF	1.000		200				200
2EC02DB	Dandy Bag	1.00	10.00	EA	55.000		550				550
$15,756.88	1.0000 MH/WK		156.00	MH	[30.24]	8,412	7,345				15,757
=====> Item Totals:	**20110 - EROSION CONTROL**										
$152,101.31	452.0000 MH/LS		452.00	MH	[15331.64]	26,453	57,388		9,160	59,100	**152,101**
152,101.310	1 LS					26,453.25	57,387.74		9,160.32	59,100.00	152,101.31

BID ITEM = 20120 Land Item SCHEDULE: 1 100 BCL
Description = LAYDOWN & PARKING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
120-01	**SUBGRADE PREP**		**Quan: 15,725.00 SY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		104.83	CH	Eff: 100.00	**Prod:**	**150.0000 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
2EC0160Z	6 Ounce Fabric	1.30	20,442.50	SY	1.000		20,443				20,443
$58,454.86	0.0199 MH/SY		314.49	MH	[0.784]	20,489	20,443		17,523		58,455
120-02	**STONE BASE 6"**		**Quan: 6,988.00 TN**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		138.64	CH	Eff: 100.00	**Prod:**	**50.4039 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
2A01053	#53 Aggregate	1.00	6,988.00	TN	35.100		245,279				245,279
$295,551.02	0.0595 MH/TN		415.92	MH	[2.334]	27,097	245,279		23,175		295,551
120-03	**FINE GRADE**		**Quan: 15,725.00 SY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		157.25	CH	Eff: 100.00	**Prod:**	**100.0000 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
$57,020.40	0.0300 MH/SY		471.75	MH	[1.176]	30,735			26,286		57,020
120-04	**REMOVE LAYDOWN**		**Quan: 3,494.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C265A	Exc Crew		106.64	CH	Eff: 100.00	**Prod:**	**32.7625 UH**	Lab Pcs:	4.00	Eqp Pcs:	2.00
5DUMP	Dump Fee	1.00	3,494.00	CY	4.000			13,976			13,976
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	426.59	HR	130.000			55,457			55,457
$119,199.02	0.1220 MH/CY		426.60	MH	[4.513]	26,596		69,433	23,171		119,199
120-05	**TEMPORARY FENCING**		**Quan: 4,000.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402FENTEMP	Fencing Sub - Temporary	1.00	4,000.00	LF	20.000					80,000	80,000
=====> Item Totals:	**20120 - LAYDOWN & PARKING**										
$610,225.30	1,628.7600 MH/LS		1,628.76	MH	[62901.95]	104,916	265,721	69,433	90,155	80,000	**610,225**
610,225.300	1 LS					104,916.22	265,721.30	69,432.70	90,155.08	80,000.00	610,225.30

BID ITEM = 20130 Land Item SCHEDULE: 1 100 BCL
Description = CLEAR & GRUB Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
130-01	**CLEAR & GRUB**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402CLEARING	Clearing Sub	1.00	1.00	LS	60,000.000					60,000	60,000
130-02	**STRIP TOPSOIL --> STOCKPILE SITE**		**Quan: 2,610.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C230A	Subgrade Compact Crew		64.00	CH	Eff: 100.00	**Prod:**	**40.7813 UH**	Lab Pcs:	4.00	Eqp Pcs:	2.00
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	128.00	HR	130.000			16,640			16,640
$46,504.47	0.0980 MH/CY		256.00	MH	[3.626]	15,960		16,640	13,905		46,504
130-03	**STRIP GRAVEL DRIVE --> DUMPSITE**		**Quan: 2,311.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C230A	Subgrade Compact Crew		56.00	CH	Eff: 100.00	**Prod:**	**41.2679 UH**	Lab Pcs:	4.00	Eqp Pcs:	2.00
5DUMP	Dump Fee	1.00	2,311.00	CY	4.000			9,244			9,244
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	280.00	HR	130.000			36,400			36,400
$71,775.41	0.0969 MH/CY		224.00	MH	[3.583]	13,965		45,644	12,167		71,775
=====> **Item Totals:**	**20130 - CLEAR & GRUB**										
$178,279.88	480.0000 MH/LS		480.00	MH	[17743.2]	29,925		62,284	26,071	60,000	**178,280**
178,279.880	1 LS					29,924.68		62,284.00	26,071.20	60,000.00	178,279.88

BID ITEM = 20140 Land Item SCHEDULE: 1 100 BCL
Description = SITE MONITORING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
140-01	**VIBRATION SUB**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402GEOSUBVIB	Geotech Sub - Vibration Mo	1.00	1.00	LS	116,400.000					116,400	116,400
140-02	**SETTLEMENT MONITORING**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402GEOSUBMO	Geotech Sub - Settle Monito	1.00	180.00	DAY	2,500.000					450,000	450,000
=====> **Item Totals:**	**20140 - SITE MONITORING**										
$566,400.00					[ ]					566,400	**566,400**
566,400.000	1 LS									566,400.00	566,400.00

BID ITEM = 20150 Land Item SCHEDULE: 1 100 BCL
Description = CRANE ROAD Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
150-01	**SUBGRADE PREP**		**Quan: 5,590.00 SY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		37.26	CH	Eff: 100.00	**Prod:**	**149.9999 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
2EC0160Z	6 Ounce Fabric	1.30	7,267.00	SY	1.000		7,267				7,267
$20,781.45	0.0200 MH/SY		111.81	MH	[0.784]	7,284	7,267		6,230		20,781
150-02	**STONE BASE 6"**		**Quan: 3,730.00 TN**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		74.00	CH	Eff: 100.00	**Prod:**	**50.4038 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
2A01053	#53 Aggregate	1.00	3,730.00	TN	35.100		130,923				130,923
$157,756.13	0.0595 MH/TN		222.00	MH	[2.333]	14,463	130,923		12,370		157,756
150-03	**FINE GRADE**		**Quan: 5,590.00 SY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20150 Land Item SCHEDULE: 1 100 BCL
Description = CRANE ROAD Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C240A	ROCK EXCAVATION		55.90 CH	Eff: 100.00	Prod: 100.0000 UH		Lab Pcs: 3.00		Eqp Pcs:	2.00
$20,269.86	0.0300 MH/SY		167.70 MH	[1.176]	10,926			9,344		20,270

150-04 REMOVE LAYDOWN Quan: 1,863.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C265A	Exc Crew		56.86 CH	Eff: 100.00	Prod: 32.7625 UH		Lab Pcs: 4.00		Eqp Pcs:	2.00
5DUMP	Dump Fee	1.00	1,863.00 CY	4.000			7,452			7,452
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	227.46 HR	130.000			29,570			29,570
$63,554.48	0.1220 MH/CY		227.44 MH	[4.513]	14,179		37,022	12,353		63,554

=====> **Item Totals: 20150 - CRANE ROAD**

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$262,361.92	728.9500 MH/LS		728.95 MH	[28069.85]	46,853	138,190	37,022	40,297		**262,362**
262,361.920	1 LS				46,852.65	138,190.00	37,021.80	40,297.47		262,361.92

BID ITEM = 20160 Land Item SCHEDULE: 1 100 BCL
Description = BARRIER WALL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

160-01 LOAD JERSEY BARRIER Quan: 20.00 LD Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
Z110	RT FORKLIFT & OPERATOR		30.00 CH	Eff: 100.00	Prod: 1.5000 HU		Lab Pcs: 2.00		Eqp Pcs:	1.00
$4,894.63	3.0000 MH/LD		60.00 MH	[105.765]	3,622			1,273		4,895

160-02 BARRIER WALL TRUCKING Quan: 20.00 LD Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
Z202	GENERAL TRUCKING PER HR		480.00 CH	Eff: 100.00	Prod: 24.0000 HU		Lab Pcs: 1.00		Eqp Pcs:	2.00
$59,779.93	24.0000 MH/LD		480.00 MH	[881.52]	29,655			30,125		59,780

160-03 UNLOAD/LOAD JERSEY BARRIER - SITE Quan: 20.00 LD Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
Z110	RT FORKLIFT & OPERATOR		60.00 CH	Eff: 100.00	Prod: 3.0000 HU		Lab Pcs: 2.00		Eqp Pcs:	1.00
$9,789.26	6.0000 MH/LD		120.00 MH	[211.53]	7,244			2,545		9,789

160-04 MOVE BARRIER WALL ONSITE Quan: 2,200.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
Z110	RT FORKLIFT & OPERATOR		183.33 CH	Eff: 100.00	Prod: 12.0000 UH		Lab Pcs: 2.00		Eqp Pcs:	1.00
$29,911.07	0.1666 MH/LF		366.66 MH	[5.876]	22,134			7,777		29,911

=====> **Item Totals: 20160 - BARRIER WALL**

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$104,374.89	1,026.6600 MH/LS		1,026.66 MH	[36902.9]	62,655			41,719		**104,375**
104,374.890	1 LS				62,655.44			41,719.45		104,374.89

Total of Above Sub-Biditems

=====> Item Totals: 20100 - SITE PREP

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$1,873,743.30	**4,316.3700 MH/LS**		**4,316.37 MH**	**[160949.54]**	**270,802**	**461,299**	**168,739**	**207,404**	**765,500**	**1,873,743**
1,873,743.300	**1 LS**				**270,802.24**	**461,299.04**	**168,738.50**	**207,403.52**	**765,500.00**	**1,873,743.30**

Cost Report

PARENT ITEM = 20260 MSL
Description = DEMOLITION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20260:

BID ITEM = 20261 Land Item SCHEDULE: 1 100 BCL
Description = DEMO EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
261-01	**EXCAVATE LEVEE BLDG --> DUMPSITE**	**Quan:**	**345.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C260D	Demo Exc Crew		16.00	CH	Eff: 100.00	**Prod:**	**21.5625 UH**	Lab Pcs:	3.00	Eqp Pcs:	1.00
5DUMP	Dump Fee	1.00	345.00	CY	4.000			1,380			1,380
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	48.00	HR	130.000			6,240			6,240
$11,729.77	0.1391 MH/CY		48.00	MH	[4.856]	2,868		7,620	1,242		11,730
261-02	**EXCAVATE GARAGE --> DUMPSITE**	**Quan:**	**957.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C260D	Demo Exc Crew		40.00	CH	Eff: 100.00	**Prod:**	**23.9250 UH**	Lab Pcs:	3.00	Eqp Pcs:	1.00
5DUMP	Dump Fee	1.00	957.00	CY	4.000			3,828			3,828
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	120.00	HR	130.000			15,600			15,600
$29,702.44	0.1253 MH/CY		120.00	MH	[4.376]	7,169		19,428	3,106		29,702
261-03	**EXCAVATE CIB TANK PAD --> DUMPSITE**	**Quan:**	**207.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C260D	Demo Exc Crew		8.00	CH	Eff: 100.00	**Prod:**	**25.8750 UH**	Lab Pcs:	3.00	Eqp Pcs:	1.00
5DUMP	Dump Fee	1.00	207.00	CY	4.000			828			828
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	24.00	HR	130.000			3,120			3,120
$6,002.89	0.1159 MH/CY		24.00	MH	[4.046]	1,434		3,948	621		6,003
=====> Item Totals:	**20261 - DEMO EXC & BF**										
$47,435.10	192.0000 MH/LS		192.00	MH	[6700.8]	11,470		30,996	4,969		**47,435**
47,435.100	1 LS					11,470.14		30,996.00	4,968.96		47,435.10

PARENT ITEM = 20275 MSL
Description = GARAGE & LEVEE DEMO Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20275:

BID ITEM = 20276 Land Item SCHEDULE: 1 100 MSL
Description = 11-C022 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
019	**Cap Water Line**	**Quan:**	**1.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C206	DEMO - 325 HOE W/ 3 LAB		16.00	CH	Eff: 100.00	**Prod:**	**64.0000 MU**	Lab Pcs:	4.00	Eqp Pcs:	1.00
2P0106BF	6" BLIND FLANGE	1.00	1.00	EA	95.000		95				95
$5,354.56	64.0000 MH/EA		64.00	MH	[2159.04]	3,730	95		1,529		5,355
020	**Cap Underground Gas Line**	**Quan:**	**2.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C206	DEMO - 325 HOE W/ 3 LAB		12.00	CH	Eff: 100.00	**Prod:**	**24.0000 MU**	Lab Pcs:	4.00	Eqp Pcs:	1.00
2P064F030CA	3" Sch 40 BW CS Caps	1.00	2.00	EA	24.000		48				48
$3,992.69	24.0000 MH/EA		48.00	MH	[809.64]	2,798	48		1,147		3,993
=====> Item Totals:	**20276 - 11-C022**										
$9,347.25	112.0000 MH/LS		112.00	MH	[3778.32]	6,528	143		2,676		**9,347**
9,347.250	1 LS					6,528.01	143.00		2,676.24		9,347.25

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20280 — Land Item — SCHEDULE: 1 100 — MSL
Description = DEMO SUB — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
80200	**DEMO SUB**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
402DEMO	Demolition Sub	1.00	1.00	LS	675,000.000					675,000	675,000

Total of Above Sub-Biditems

=====> Item Totals: 20275 - GARAGE & LEVEE DEMO										
$684,347.25	**112.0000 MH/LS**	**112.00 MH**	**[3778.32]**	**6,528**	**143**		**2,676**	**675,000**	**684,347**	
684,347.250	**1 LS**			**6,528.01**	**143.00**		**2,676.24**	**675,000.00**	**684,347.25**	

Total of Above Sub-Biditems

=====> Item Totals: 20260 - DEMOLITION										
$731,782.35	**304.0000 MH/LS**	**304.00 MH**	**[10479.12]**	**17,998**	**143**	**30,996**	**7,645**	**675,000**	**731,782**	
731,782.350	**1 LS**			**17,998.15**	**143.00**	**30,996.00**	**7,645.20**	**675,000.00**	**731,782.35**	

PARENT ITEM = 20300 — BVN
Description = SITE CONCRETE - SEE DWG 11-C026 — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20300:

BID ITEM = 20301 — Land Item — SCHEDULE: 1 100 — BVN
Description = SIDEWALKS - 4"THK — Unit = SF — Takeoff Quan: 13,470.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 167.00**	**CY**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C02S	Superplasticizer	1.05	175.35	CY	5.000		877				877
03295A	**EMBED DETECTABLE WARNING SURF**		**Quan: 40.00**	**SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C309	2 LAB, 1 LAB FOREMAN		8.00	CH	Eff: 100.00 **Prod: 0.6000**	**MU** Lab Pcs: 3.00			Eqp Pcs:		0.00
2C30WARNSUF	DETECTABLE WARNIN	1.00	40.00	SF	20.000		800				800
$2,103.94	0.6000 MH/SF		24.00	MH	[18.356]	1,304	800				2,104
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 167.00**	**CY**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C01FUEL	READYMIX FUEL SURC	1.05	175.35	CY	2.500		438				438
03999S	**SIDEWALK SUB - OWL CREEK (WBE)**		**Quan: 13,470.00**	**SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
403SITESUB	SITE CONCRETE SUB	1.00	13,470.00	SF	9.800					132,006	132,006
03999Z	**READYMIX ESCALATION**		**Quan: 167.00**	**CY**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C01ESCL5	2028 READYMIX ESCAL	1.05	175.35	CY	84.000		14,729				14,729

=====> Item Totals: 20301 - SIDEWALKS - 4"THK

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20301 Land Item SCHEDULE: 1 100 BVN
Description = SIDEWALKS - 4"THK Unit = SF Takeoff Quan: 13,470.000 Engr Quan: 0.000

$150,154.47	0.0017 MH/SF		24.00 MH		[0.055]	1,304	16,845			132,006	**150,154**
11.147	13470 SF					0.10	1.25			9.80	11.15

BID ITEM = 20303 Land Item SCHEDULE: 1 100 BVN
Description = SITE CURBS - 6-9"WX20"H Unit = LF Takeoff Quan: 5,186.000 Engr Quan: 0.000

03008	**SPRAY CURE - REGULAR**		**Quan: 20,562.49 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		18.50 CH	Eff: 100.00	**Prod:**		**0.0018 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
3C01SCR	SPRAY CURE REG@107.	1.00	20,562.49 SF		0.050			1,103			1,103
$3,098.32	0.0017 MH/SF		37.01 MH		[0.054]	1,996		1,103			3,098
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 200.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	210.00 CY		5.000		1,050				1,050
03212	**REINFORCING MAT SUPTS-BRICKS**		**Quan: 5,186.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C30BMS	Brick Mat Supports	1.00	5,186.00 SF		0.150		778				778
03224	**JOINT SEALANT TO 1/2" WIDE**		**Quan: 173.21 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C305	1 LAB, 1 FINISHER		6.06 CH	Eff: 100.00	**Prod:**		**0.0700 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
2C25N	Joint Sealant to 1/2" W	1.15	199.19 LF		0.700		139				139
$800.39	0.0699 MH/LF		12.12 MH		[2.153]	661	139				800
03235	**1/2" ASPHALT E.J.M.**		**Quan: 173.21 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		11.54 CH	Eff: 100.00	**Prod:**		**0.2000 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
2C24A.5X12	1/2"x12" Asphalt EJM	1.15	199.19 LF		1.150		229				229
$2,261.13	0.1999 MH/SF		34.64 MH		[5.757]	2,032	229				2,261
03262	**EJ SLAB-SLAB 16"-24" W/B.H. & KEY**		**Quan: 173.21 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C312	2 CARP, 1 CARP FOREMAN		28.86 CH	Eff: 100.00	**Prod:**		**0.5000 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15SS1624	S-S 16"-24" CJ@107.25%	1.00	173.21 SF		2.900			539			539
$5,895.55	0.5000 MH/SF		86.61 MH		[14.384]	5,357		539			5,896
03298	**EF SITE CURBS COMPLETE 100-500'**		**Quan: 5,186.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		388.95 CH	Eff: 100.00	**Prod:**		**0.3000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C10EF12/24	EF 12"-24" Ht.@107.25%	1.00	5,186.00 SF		5.463			30,389			30,389
$123,531.64	0.3000 MH/LF		1,555.80 MH		[8.74]	93,143		30,389			123,532
03301	**POUR SITE CURBS 3-12 CY**		**Quan: 200.47 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		100.23 CH	Eff: 100.00	**Prod:**		**2.5000 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00
2C0104	Site Concrete	1.05	210.49 CY		141.500		29,784				29,784
$57,877.13	2.5000 MH/CY		501.18 MH		[77.771]	28,093	29,784				57,877
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 200.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	210.00 CY		2.500		525				525
03999Z	**READYMIX ESCALATION**		**Quan: 200.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL5	2028 READYMIX ESCAL	1.05	210.00 CY		84.000		17,640				17,640

BID ITEM = 20303 Land Item SCHEDULE: 1 100 BVN
Description = SITE CURBS - 6-9"WX20"H Unit = LF Takeoff Quan: 5,186.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**20303 - SITE CURBS - 6-9"WX20"H**										
$213,457.06	0.4294 MH/LF		2,227.36	MH	[12.707]	131,281	50,146	32,030			**213,457**
41.160		5186 LF				25.31	9.67	6.18			41.16

BID ITEM = 20304 Land Item SCHEDULE: 1 100 BVN
Description = PAVEMENT 8"THK Unit = SF Takeoff Quan: 780.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03008	**SPRAY CURE - REGULAR**		**Quan: 779.97**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.70	CH	Eff: 100.00	**Prod: 0.0018**	**MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
3C01SCR	SPRAY CURE REG@107.	1.00	779.97	SF	0.050			42			42
$117.32	0.0017 MH/SF		1.40	MH	[0.054]	75		42			117
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 20.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	21.00	CY	5.000		105				105
03171	**REBAR-FURNISH/INSTALL SEPARATE-PLAIN**		**Quan: 1.20**	**TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C10ESCL5	REBAR ESCALATION 20	1.00	1.20	TN	450.000		540				540
2C10RP	Rebar-Plain	1.00	1.20	TN	1,425.950		1,711				1,711
403REBARL	Rebar Install Sub	1.00	1.20	TN	1,331.700					1,598	1,598
$3,849.18					[ ]		2,251			1,598	3,849
03190	**PLACE TRANS DOWELL BASKETS**		**Quan: 30.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		0.75	CH	Eff: 100.00	**Prod: 0.1000**	**MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C10DBT	DBT 1 1/4" x 18" x 12"oc	1.00	30.00	LF	6.400		192				192
$354.70	0.1000 MH/LF		3.00	MH	[3.051]	163	192				355
03212	**REINFORCING MAT SUPTS-BRICKS**		**Quan: 779.97**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C30BMS	Brick Mat Supports	1.00	779.97	SF	0.150		117				117
03217	**SAW NEW CONC FLOOR >1000 LF**		**Quan: 74.28**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		0.29	CH	Eff: 100.00	**Prod: 0.0200**	**MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
$82.97	0.0199 MH/LF		1.48	MH	[0.62]	83					83
03224	**JOINT SEALANT TO 1/2" WIDE**		**Quan: 148.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C305	1 LAB, 1 FINISHER		3.98	CH	Eff: 100.00	**Prod: 0.0539**	**MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C25N	Joint Sealant to 1/2" W	1.15	170.20	LF	0.700		119				119
$553.24	0.0537 MH/LF		7.96	MH	[1.655]	434	119				553
03235	**1/2" ASPHALT E.J.M.**		**Quan: 118.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		3.54	CH	Eff: 100.00	**Prod: 0.0900**	**MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
2C24A.5X12	1/2"x12" Asphalt EJM	1.15	118.00	LF	1.150		136				136
$758.70	0.0900 MH/SF		10.62	MH	[2.591]	623	136				759
03312	**EF LOADING DOCK PAVMENT 8"THK OZB**		**Quan: 41.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		4.00	CH	Eff: 100.00	**Prod: 0.3902**	**MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C10EF12	EF 7"-12" Ht. @107.25%	1.00	41.00	LF	5.463			240			240
$1,198.14	0.3902 MH/LF		16.00	MH	[11.37]	958		240			1,198

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20304 Land Item SCHEDULE: 1 100 BVN
Description = PAVEMENT 8"THK Unit = SF Takeoff Quan: 780.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03315	**P LOADING DOCK PAVMENT 8"THK OZB**		**Quan: 19.35**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		6.00	CH	Eff: 100.00	**Prod: 1.5504 MU**		Lab Pcs: 5.00		Eqp Pcs:	0.00
2C0104	Site Concrete	1.05	20.32	CY	141.500		2,875				2,875
403RMPUMP1	Pump Slab =< 8"	1.00	19.35	CY	23.241					450	450
$5,006.61	1.5503 MH/CY		30.00	MH	[48.229]	1,682	2,875			450	5,007
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 20.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	21.00	CY	2.500		53				53
03999Z	**READYMIX ESCALATION**		**Quan: 20.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL5	2028 READYMIX ESCAL	1.05	21.00	CY	84.000		1,764				1,764
=====> **Item Totals:**	**20304 - PAVEMENT 8"THK**										
$13,959.36	0.0903 MH/SF		70.46	MH	[2.731]	4,018	7,612	282		2,048	**13,959**
17.897	780 SF					5.15	9.76	0.36		2.63	17.90

BID ITEM = 20310 Land Item SCHEDULE: 1 100 BVN
Description = MISC SITE WORK ITEMS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**		**Quan: 3,048.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		2.28	CH	Eff: 100.00	**Prod: 0.0030 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	3,048.00	SF	0.032			105			105
$600.81	0.0030 MH/SF		9.15	MH	[0.092]	496		105			601
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 47.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	47.00	CY	5.000		235				235
03072	**FINE GRADE TO 3000 SF**		**Quan: 1,524.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C317G2	SMALL FINE GRADE		7.62	CH	Eff: 100.00	**Prod: 0.0200 MU**		Lab Pcs: 4.00		Eqp Pcs:	2.00
$2,021.82	0.0200 MH/SF		30.48	MH	[0.649]	1,731			291		2,022
03172	**REBAR-FURNISH/INSTALL TOGETHER-PLAIN**		**Quan: 3.70**	**TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
403REBARL&M	Rebar Install & Supply Sub	1.00	3.70	TN	2,694.700					9,970	9,970
03212	**REINFORCING MAT SUPTS-BRICKS**		**Quan: 1,524.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C30BMS	Brick Mat Supports	1.00	1,524.00	SF	0.150		229				229
03224	**JOINT SEALANT TO 1/2" WIDE**		**Quan: 195.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C305	1 LAB, 1 FINISHER		3.41	CH	Eff: 100.00	**Prod: 0.0350 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C25N	Joint Sealant to 1/2" W	1.15	224.25	LF	0.700		157				157
$528.90	0.0349 MH/LF		6.82	MH	[1.076]	372	157				529
03235	**1/2" ASPHALT E.J.M.**		**Quan: 195.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		6.50	CH	Eff: 100.00	**Prod: 0.1000 MU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
2C24A.5X12	1/2"x12" Asphalt EJM	1.15	224.25	LF	1.150		258				258
$1,401.82	0.1000 MH/SF		19.50	MH	[2.879]	1,144	258				1,402

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 20310				Land Item	SCHEDULE: 1	100					BVN
Description =	MISC SITE WORK ITEMS			Unit =	CY	Takeoff Quan:		1.000	Engr Quan:		0.000
03317	**EF SITE ENTRY/APRON SLABS 6"THK**			**Quan: 288.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		21.60 CH	Eff: 100.00	**Prod:**	**0.3000 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
3C10EF12	EF 7"-12" Ht. @107.25%	1.00	288.00 LF		5.463			1,688			1,688
$6,860.23		0.3000 MH/LF	86.40 MH		[8.74]	5,173		1,688			6,860
03323	**P SITE ENTRY/APRON SLABS 6"THK**			**Quan: 29.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		17.40 CH	Eff: 100.00	**Prod:**	**3.0000 MU**		Lab Pcs: 5.00		Eqp Pcs:	0.00
2C0104	Site Concrete	1.05	30.45 CY		141.500		4,309				4,309
$9,185.31		3.0000 MH/CY	87.00 MH		[93.324]	4,877	4,309				9,185
03366	**F SITE ENTRY/APRON G BM 8"Tx2.5'Hx305LF**			**Quan: 1,524.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		76.20 CH	Eff: 100.00	**Prod:**	**0.2000 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
3C20GB	Grade Beam For@107.25%	1.00	1,524.00 SF		5.463			8,930			8,930
$27,178.13		0.2000 MH/SF	304.80 MH		[5.827]	18,248		8,930			27,178
03377	**P SITE ENTRY/APRON G BM 8"Tx2.5'Hx305LF**			**Quan: 19.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C326	FOOTING POUR CREW = 2L,1LF,1		4.75 CH	Eff: 100.00	**Prod:**	**1.0000 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0101	Foundation Concrete	1.04	19.76 CY		141.500		2,796				2,796
$3,839.39		1.0000 MH/CY	19.00 MH		[30.691]	1,043	2,796				3,839
03999F	**READYMIX FUEL SURCHARGE**			**Quan: 47.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	47.00 CY		2.500		118				118
03999Z	**READYMIX ESCALATION**			**Quan: 47.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL5	2028 READYMIX ESCAL	1.05	49.35 CY		84.000		4,145				4,145
=====> Item Totals:	**20310 - MISC SITE WORK ITEMS**										
$66,313.30		563.1500 MH/CY	563.15 MH		[16725.91]	33,083	12,246	10,723	291	9,970	**66,313**
66,313.300		1 CY				33,083.00	12,246.09	10,722.60	291.22	9,970.39	66,313.30
BID ITEM = 20315				Land Item	SCHEDULE: 1	100					BVN
Description =	ELEC DUCT BANKS			Unit =	CY	Takeoff Quan:		600.000	Engr Quan:		0.000
03034	**RED DYE SHAKE**			**Quan: 11,922.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		16.69 CH	Eff: 100.00	**Prod:**	**0.0070 MU**		Lab Pcs: 5.00		Eqp Pcs:	0.00
2C21RD	Red Dye Shake	1.10	13,114.20 SF		0.150		1,967				1,967
$6,644.76		0.0069 MH/SF	83.45 MH		[0.218]	4,678	1,967				6,645
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**			**Quan: 615.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	645.94 CY		5.000		3,230				3,230
03172	**REBAR-FURNISH/INSTALL TOGETHER-PLAIN**			**Quan: 20.26 TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
403REBARL&M	Rebar Install & Supply Sub	1.00	20.26 TN		2,694.700					54,595	54,595
03368	**F ELEC DUCT BANKS 5322LF**			**Quan: 2,902.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		130.59 CH	Eff: 100.00	**Prod:**	**0.1800 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20315 Land Item SCHEDULE: 1 100 BVN
Description = ELEC DUCT BANKS Unit = CY Takeoff Quan: 600.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
3C20GB	Grade Beam For@107.25%	1.00	2,902.00	SF	5.463			17,005			17,005
$48,277.84	0.1800 MH/SF		522.36	MH	[5.244]	31,273		17,005			48,278

03378 P ELEC DUCT BANKS 5322LF Quan: 615.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C326 FOOTING POUR CREW = 2L,1LF,1 123.00 CH Eff: 100.00 **Prod: 0.8000 MU** Lab Pcs: 4.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C01ELEC	ELECTRICAL DUCT BAN	1.25	768.75	CY	141.500		108,778				108,778
$135,794.98	0.8000 MH/CY		492.00	MH	[24.552]	27,017	108,778				135,795

03999F READYMIX FUEL SURCHARGE Quan: 615.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C01FUEL	READYMIX FUEL SURC	1.05	645.94	CY	2.500		1,615				1,615

03999Z READYMIX ESCALATION Quan: 615.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C01ESCL5	2028 READYMIX ESCAL	1.05	645.75	CY	84.000		54,243				54,243

=====> Item Totals: 20315 - ELEC DUCT BANKS

$304,399.75	1.8296 MH/CY		1,097.81	MH	[54.857]	62,967	169,833	17,005		54,595	**304,400**
507.333	600 CY					104.95	283.05	28.34		90.99	507.33

Total of Above Sub-Biditems

=====> Item Totals: 20300 - SITE CONCRETE - SEE DWG 11-C026

$748,283.94	**3,982.7800 MH/LS**		**3,982.78**	**MH**	**[118404.21]**	**232,653**	**256,681**	**60,040**	**291**	**198,619**	**748,284**
748,283.940	**1 LS**					**232,652.73**	**256,680.93**	**60,040.28**	**291.22**	**198,618.78**	**748,283.94**

PARENT ITEM = 20400 ALL
Description = ENTRANCE SIGN/FLAGPOLES Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20400:

BID ITEM = 20410 Land Item SCHEDULE: 1 100 BCL
Description = EXCAVATION/BACKFILL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

410-01 EXCAVATE --> DUMPSITE Quan: 300.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260C Excavation -Small 16.00 CH Eff: 100.00 **Prod: 18.7500 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
5DUMP	Dump Fee	1.00	300.00	CY	4.000			1,200			1,200
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	64.00	HR	130.000			8,320			8,320
$13,751.69	0.1600 MH/CY		48.00	MH	[5.584]	2,868		9,520	1,364		13,752

410-02 SUBGRADE PREP Quan: 75.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260C Excavation -Small 4.00 CH Eff: 100.00 **Prod: 18.7500 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$1,057.93	0.1600 MH/SY		12.00	MH	[5.584]	717			341		1,058

410-03 STONE BASE - 6" Quan: 15.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260C Excavation -Small 4.00 CH Eff: 100.00 **Prod: 3.7500 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2A0108	#8 Aggregate	1.00	30.00	TN	33.660		1,010				1,010
$2,067.73	0.8000 MH/CY		12.00	MH	[27.92]	717	1,010		341		2,068

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 20410				Land Item	SCHEDULE: 1 100						BCL
Description =	EXCAVATION/BACKFILL			Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
410-04	**BACKFILL WALL**		**Quan: 300.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C270A	Backfill - Small		30.00 CH	Eff: 100.00	**Prod: 10.0000 UH**		Lab Pcs: 4.00		Eqp Pcs:		4.00
2A01053	#53 Aggregate	1.00	600.00 TN		35.100		21,060				21,060
$33,167.16	0.4000 MH/CY		120.00 MH		[14.786]	7,481	21,060		4,626		33,167
=====> **Item Totals: 20410 - EXCAVATION/BACKFILL**											
$50,044.51	192.0000 MH/LS		192.00 MH		[6948.6]	11,782	22,070	9,520	6,672		**50,045**
50,044.510	1 LS					11,782.47	22,069.80	9,520.00	6,672.24		50,044.51
BID ITEM = 20420				Land Item	SCHEDULE: 1 100						BVN
Description =	CONCRETE			Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
03001	**FILL TIE HOLES: STEEL-PLY**		**Quan: 500.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C302	2 FINISHERS		2.50 CH	Eff: 100.00	**Prod: 0.0100 MU**		Lab Pcs: 2.00		Eqp Pcs:		0.00
2C21F	Fill Tie Holes	1.00	500.00 SF		0.030		15				15
$298.29	0.0100 MH/SF		5.00 MH		[0.31]	283	15				298
03007	**WATER CURE**		**Quan: 550.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		0.44 CH	Eff: 100.00	**Prod: 0.0032 MU**		Lab Pcs: 4.00		Eqp Pcs:		0.00
3C01WC	WATER CURE@107.25%	1.00	550.00 SF		0.032			19			19
$114.32	0.0032 MH/SF		1.76 MH		[0.098]	95		19			114
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 15.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	15.75 CY		5.000		79				79
03072	**FINE GRADE TO 3000 SF**		**Quan: 70.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C317G2	SMALL FINE GRADE		0.35 CH	Eff: 100.00	**Prod: 0.0200 MU**		Lab Pcs: 4.00		Eqp Pcs:		2.00
$92.85	0.0200 MH/SF		1.40 MH		[0.649]	79			13		93
03172	**REBAR-FURNISH/INSTALL TOGETHER-PLAIN**		**Quan: 1.20 TN**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
403REBARL&M	Rebar Install & Supply Sub	1.00	1.20 TN		2,694.700					3,234	3,234
03212	**REINFORCING MAT SUPTS-BRICKS**		**Quan: 70.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C30BMS	Brick Mat Supports	1.00	70.00 SF		0.150		11				11
03350	**EF SIGNAGE FND FTG 1'Tx3'Wx23LF**		**Quan: 52.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		3.90 CH	Eff: 100.00	**Prod: 0.3000 MU**		Lab Pcs: 4.00		Eqp Pcs:		0.00
3C10EF12+	EF > 12" Ht. E@107.25%	1.00	52.00 SF		5.463			305			305
$1,238.65	0.3000 MH/SF		15.60 MH		[8.741]	934		305			1,239
03353	**P SIGNAGE FND FTG 1'Tx3'Wx23LF**		**Quan: 3.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C326	FOOTING POUR CREW = 2L,1LF,1		2.00 CH	Eff: 100.00	**Prod: 2.6667 MU**		Lab Pcs: 4.00		Eqp Pcs:		0.00
2C0101	Foundation Concrete	1.04	3.12 CY		141.500		441				441
$880.77	2.6666 MH/CY		8.00 MH		[81.84]	439	441				881
03483	**F SIGNAGE FND WL 1-1.42'Tx3-7'Hx23LF**		**Quan: 500.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 20420				Land Item	SCHEDULE: 1	100					BVN
Description =	CONCRETE			Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
C320	SMALL FORM =1L, 2C,1CF		25.00 CH	Eff: 100.00	**Prod:**	**0.2000 MU**		Lab Pcs:	4.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	500.00 SF		5.463			2,930			2,930
$8,916.71	0.2000 MH/SF		100.00 MH		[5.827]	5,987		2,930			8,917
03558	**F B.LEDGE WALL FACE 100-500 SF**			**Quan:**	**121.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C303	2 CARPENTERS		12.10 CH	Eff: 100.00	**Prod:**	**0.2000 MU**		Lab Pcs:	2.00	Eqp Pcs:	0.00
3C20BLWF	Brickledge in @107.25%	1.00	121.00 SF		1.950			253			253
$1,730.06	0.2000 MH/SF		24.20 MH		[5.612]	1,477		253			1,730
03594	**P SIGNAGE FND WL 1-1.42'Tx3-7'Hx23LF**			**Quan:**	**10.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C332	POUR VERT UNDER 30 CY = 2L,1		6.00 CH	Eff: 100.00	**Prod:**	**2.4000 MU**		Lab Pcs:	4.00	Eqp Pcs:	0.00
2C0106	Wall Concrete	1.05	10.50 CY		141.500		1,486				1,486
403RMPUMP5	Pump Walls & Cols < 100	1.00	10.00 CY		30.000					300	300
$3,179.92	2.4000 MH/CY		24.00 MH		[71.232]	1,394	1,486			300	3,180
03671	**F FLAGPOLE FND 2.5'DIAx3.5'H 3EA**			**Quan:**	**10.50 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C320	SMALL FORM =1L, 2C,1CF		3.00 CH	Eff: 100.00	**Prod:**	**1.1429 MU**		Lab Pcs:	4.00	Eqp Pcs:	0.00
3C25SONO24	Sonotube 24" F@107.25%	1.00	10.50 LF		14.000			158			158
$876.08	1.1428 MH/LF		12.00 MH		[33.297]	718		158			876
03696	**P FLAGPOLE FND 2.5'DIAx3.5'H 3EA**			**Quan:**	**2.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C332	POUR VERT UNDER 30 CY = 2L,1		1.50 CH	Eff: 100.00	**Prod:**	**3.0000 MU**		Lab Pcs:	4.00	Eqp Pcs:	0.00
2C0107	Column Concrete	1.03	2.06 CY		141.500		291				291
$640.04	3.0000 MH/CY		6.00 MH		[89.04]	349	291				640
03999F	**READYMIX FUEL SURCHARGE**			**Quan:**	**15.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2C01FUEL	READYMIX FUEL SURC	1.05	15.75 CY		2.500		39				39
03999Z	**READYMIX ESCALATION**			**Quan:**	**15.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2C01ESCL5	2028 READYMIX ESCAL	1.05	15.75 CY		84.000		1,323				1,323
=====> **Item Totals:**	**20420 - CONCRETE**										
$22,652.96	197.9600 MH/LS		197.96 MH		[5786.6]	11,756	3,685	3,664	13	3,534	**22,653**
22,652.960	1 LS					11,756.39	3,685.35	3,664.22	13.36	3,533.64	22,652.96
BID ITEM = 20430				Land Item	SCHEDULE: 1	100					SAE
Description =	MASONRY			Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
80402	**MASONRY SUB(SELLERS)**			**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
404MASONRY	Masonry Sub	1.00	1.00 LS		50,287.009					50,287	50,287
BID ITEM = 20440				Land Item	SCHEDULE: 1	100					SAE
Description =	FLAGPLOES			Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
10350	**FLAGPOLES**			**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2S15	FLAG POLES	1.00	1.00 LS		13,289.000		13,289				13,289

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 20440				Land Item SCHEDULE: 1 100						SAE
Description = FLAGPLOES				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
10355	**INSTALL FLAGPOLE**			**Quan: 3.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		24.00 CH	Eff: 100.00	**Prod: 8.0000 HU**	Lab Pcs: 2.00		Eqp Pcs:		0.00
$2,588.27	16.0000 MH/EA		48.00 MH	[483.84]	2,588					2,588
=====> **Item Totals:**	**20440 - FLAGPLOES**									
$15,877.27	48.0000 MH/LS		48.00 MH	[1451.52]	2,588	13,289				**15,877**
15,877.270	1 LS				2,588.27	13,289.00				15,877.27
BID ITEM = 20450				Land Item SCHEDULE: 1 100						SAE
Description = SIGNAGE				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
10401	**SIGN MATERIAL**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2S14-PENT	Plant Entrance Sign Letters	1.00	1.00 LS	6,969.000		6,969				6,969
=====> **Item Totals:**	**20450 - SIGNAGE**									
$6,969.00				[ ]		6,969				**6,969**
6,969.000	1 LS					6,969.00				6,969.00
BID ITEM = 20460				Land Item SCHEDULE: 1 100						REM
Description = ELECTRICAL				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
26000	**Electrical Sub**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
416ELECTRIC	Electrical Sub	1.00	1.00 LS	25,000.000					25,000	25,000

Total of Above Sub-Biditems

Activity / Resource	Desc	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**20400 - ENTRANCE SIGN/FLAGPOLES**								
$170,830.75	**437.9600 MH/LS**	**437.96 MH**	**[14186.72]**	**26,127**	**46,013**	**13,184**	**6,686**	**78,821**	**170,831**
170,830.750	**1 LS**			**26,127.13**	**46,013.15**	**13,184.22**	**6,685.60**	**78,820.65**	**170,830.75**

PARENT ITEM = 20500 BCL
Description = SITE GRADING Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20500:

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 20520				Land Item SCHEDULE: 1 100						BCL
Description = SITE CUT & FILL				Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
520-01	**SUBGRADE CUT --> FILL**			**Quan: 2,661.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C240B	Site CTF		56.00 CH	Eff: 100.00	**Prod: 47.5179 UH**	Lab Pcs:	4.00	Eqp Pcs:		3.00
5HAULEON	Sub Trucking - Onsite	1.00	56.00 HR	130.000			7,280			7,280
$35,929.68	0.0841 MH/CY		224.00 MH	[3.384]	14,874		7,280	13,776		35,930

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20520 Land Item SCHEDULE: 1 100 BCL
Description = SITE CUT & FILL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

520-02 SITE FILL Quan: 19,693.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C240B	Site CTF		246.16	CH	Eff: 100.00	**Prod:**	**80.0000 UH**	Lab Pcs:	4.00	Eqp Pcs:	3.00
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	984.64	HR	130.000			128,003			128,003
$253,938.94	0.0499 MH/CY		984.64	MH	[2.01]	65,380		128,003	60,555		253,939

520-03 ROUGH GRADE SITE Quan: 20,000.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

C240A	ROCK EXCAVATION		133.33	CH	Eff: 100.00	**Prod:**	**150.0000 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
$48,346.76	0.0199 MH/SY		399.99	MH	[0.784]	26,059			22,287		48,347

=====> Item Totals: 20520 - SITE CUT & FILL

$338,215.38	1,608.6300 MH/LS		1,608.63	MH	[64263.57]	106,313		135,283	96,619		**338,215**
338,215.380	1 LS					106,313.42		135,283.20	96,618.76		338,215.38

PARENT ITEM = 20530 BCL
Description = DUMPSITES & STOCKPILES Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20530:

BID ITEM = 20531 Land Item SCHEDULE: 1 100 BCL
Description = STOCKPILE SITE Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

531-01 MOVE EQUIPT - STOCKPILE SITE Quan: 4.00 TR Hrs/Shft: 8.00 Cal: 508 WC: 1

Z201	EQUIPMENT MOVES PER HR		8.00	CH	Eff: 100.00	**Prod:**	**2.0000 HU**	Lab Pcs:	1.00	Eqp Pcs:	2.00
$1,116.81	2.0000 MH/TR		8.00	MH	[73.46]	494			623		1,117

531-02 INSTALL/REMOVE SILT FENCE Quan: 1,000.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C292	SILTFENCE		8.00	CH	Eff: 100.00	**Prod:**	**125.0000 UH**	Lab Pcs:	4.00	Eqp Pcs:	2.00
2EC04SF	Silt Fence Standard	1.10	1,100.00	LF	0.350		385				385
$2,517.99	0.0320 MH/LF		32.00	MH	[1.08]	1,865	385		268		2,518

531-03 ACCESS DRIVE Quan: 100.00 TN Hrs/Shft: 8.00 Cal: 508 WC: 1

C240A	ROCK EXCAVATION		2.00	CH	Eff: 100.00	**Prod:**	**50.0000 UH**	Lab Pcs:	2.00	Eqp Pcs:	1.00
2A01053	#53 Aggregate	1.00	100.00	TN	35.100		3,510				3,510
$3,942.27	0.0400 MH/TN		4.00	MH	[1.489]	251	3,510		182		3,942

531-04 MAINTAIN STOCKPILE Quan: 50,000.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C231	ROUGH GRADE DOZER CREW		500.00	CH	Eff: 100.00	**Prod:**	**100.0000 UH**	Lab Pcs:	1.50	Eqp Pcs:	1.00
$94,282.48	0.0150 MH/CY		750.00	MH	[0.588]	48,862			45,420		94,282

531-05 GENERAL GRADING & CLEANUP Quan: 80.00 CH Hrs/Shft: 8.00 Cal: 508 WC: 1

C231	ROUGH GRADE DOZER CREW		80.00	CH	Eff: 100.00	**Prod:**	**1.0000 HU**	Lab Pcs:	1.50	Eqp Pcs:	1.00
$15,085.20	1.5000 MH/CH		120.00	MH	[58.81]	7,818			7,267		15,085

531-06 TEMPORARY SEEDING Quan: 8,000.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

402SEEDTEMP	Seeding Sub - Temp Seed	1.00	8,000.00	SY	1.500					12,000	12,000

=====> Item Totals: 20531 - STOCKPILE SITE

Cost Report

BID ITEM = 20531 | Land Item | SCHEDULE: 1 | 100 | BCL
Description = STOCKPILE SITE | Unit = LS | Takeoff Quan: 1.000 | Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$128,944.75	914.0000 MH/LS		914.00	MH	[35632.08]	59,290	3,895		53,759	12,000	**128,945**
128,944.750	1 LS					59,290.47	3,895.00		53,759.28	12,000.00	128,944.75

BID ITEM = 20532 | Land Item | SCHEDULE: 1 | 100 | BCL
Description = DUMPSITE | Unit = LS | Takeoff Quan: 1.000 | Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
532-01	**MOVE EQUIPT - DUMPSITE**		**Quan: 4.00**	**TR**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
Z201	EQUIPMENT MOVES PER HR		8.00	CH	Eff: 100.00	**Prod: 2.0000 HU**		Lab Pcs: 1.00		Eqp Pcs:	2.00
$1,116.81	2.0000 MH/TR		8.00	MH	[73.46]	494			623		1,117
532-02	**INSTALL/REMOVE SILT FENCE**		**Quan: 1,500.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C292	SILTFENCE		12.00	CH	Eff: 100.00	**Prod: 125.0000 UH**		Lab Pcs: 4.00		Eqp Pcs:	2.00
2EC04SF	Silt Fence Standard	1.10	1,650.00	LF	0.350		578				578
$3,776.99	0.0320 MH/LF		48.00	MH	[1.08]	2,798	578		402		3,777
532-03	**ACCESS DRIVE**		**Quan: 100.00**	**TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		2.00	CH	Eff: 100.00	**Prod: 50.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:	1.00
2A01053	#53 Aggregate	1.00	100.00	TN	35.100		3,510				3,510
$3,942.27	0.0400 MH/TN		4.00	MH	[1.489]	251	3,510		182		3,942
532-04	**PUSH OFF PILES**		**Quan: 125,000.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C231	ROUGH GRADE DOZER CREW		1,250.00	CH	Eff: 100.00	**Prod: 100.0000 UH**		Lab Pcs: 1.50		Eqp Pcs:	1.00
$235,706.20	0.0150 MH/CY		1,875.00	MH	[0.588]	122,156			113,550		235,706
532-05	**GENERAL GRADING & CLEANUP**		**Quan: 80.00**	**CH**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C231	ROUGH GRADE DOZER CREW		80.00	CH	Eff: 100.00	**Prod: 1.0000 HU**		Lab Pcs: 1.50		Eqp Pcs:	1.00
$15,085.20	1.5000 MH/CH		120.00	MH	[58.81]	7,818			7,267		15,085
532-06	**TEMPORARY SEEDING**		**Quan: 12,000.00**	**SY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402SEEDTEMP	Seeding Sub - Temp Seed	1.00	12,000.00	SY	1.500					18,000	18,000
=====> Item Totals: 20532	**- DUMPSITE**										
$277,627.47	2,055.0000 MH/LS		2,055.00	MH	[80279.34]	133,517	4,088		122,023	18,000	**277,627**
277,627.470	1 LS					133,516.77	4,087.50		122,023.20	18,000.00	277,627.47

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> Item Totals: 20530	**- DUMPSITES & STOCKPILES**										
$406,572.22	**2,969.0000 MH/LS**		**2,969.00**	**MH**	**[115911.42]**	**192,807**	**7,983**		**175,782**	**30,000**	**406,572**
406,572.220	**1 LS**					**192,807.24**	**7,982.50**		**175,782.48**	**30,000.00**	**406,572.22**

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> Item Totals: 20500	**- SITE GRADING**										
$744,787.60	**4,577.6300 MH/LS**		**4,577.63**	**MH**	**[180174.99]**	**299,121**	**7,983**	**135,283**	**272,401**	**30,000**	**744,788**

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20532 Land Item SCHEDULE: 1 100 BCL
Description = DUMPSITE Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

744,787.600 1 LS 299,120.66 7,982.50 135,283.20 272,401.24 30,000.00 744,787.60

PARENT ITEM = 20600 BCL
Description = SITE RESTORATION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20600:

PARENT ITEM = 20610 BCL
Description = PAVING Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 20610:

BID ITEM = 20611 Land Item SCHEDULE: 1 100 BCL
Description = ASPHALT Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

611-01 SUBGRADE PREP Quan: 9,500.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

C240A ROCK EXCAVATION 68.00 CH Eff: 100.00 **Prod: 139.7059 UH** Lab Pcs: 4.00 Eqp Pcs: 2.00
402STABILIZC Stabilization Sub - Cement 1.00 9,500.00 SY 13.000 123,500 123,500
$151,824.19 0.0286 MH/SY 272.00 MH [1.058] 16,957 11,367 123,500 151,824

611-02 STONE BASE 9" Quan: 4,760.00 TN Hrs/Shft: 8.00 Cal: 508 WC: 1

C240A ROCK EXCAVATION 82.00 CH Eff: 100.00 **Prod: 58.0488 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00
2A01053 #53 Aggregate 1.00 4,760.00 TN 35.100 167,076 167,076
$196,810.01 0.0516 MH/TN 246.00 MH [2.026] 16,027 167,076 13,707 196,810

611-03 FINE GRADE Quan: 9,500.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

C240A ROCK EXCAVATION 34.00 CH Eff: 100.00 **Prod: 279.4118 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00
$12,328.74 0.0107 MH/SY 102.00 MH [0.421] 6,645 5,683 12,329

611-04 ASPHALT SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

402PAVEFULL Paving Sub - Full Depth 1.00 1.00 LS 850,000.000 850,000 850,000

=====> **Item Totals: 20611 - ASPHALT**
$1,210,962.94 620.0000 MH/LS 620.00 MH [23698.4] 39,630 167,076 30,757 973,500 **1,210,963**
1,210,962.940 1 LS 39,629.50 167,076.00 30,757.44 973,500.00 1,210,962.94

BID ITEM = 20612 Land Item SCHEDULE: 1 100 BCL
Description = GRAVEL ACCESS RD Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

612-01 SUBGRADE PREP Quan: 460.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

C240A ROCK EXCAVATION 4.00 CH Eff: 100.00 **Prod: 115.0000 UH** Lab Pcs: 4.00 Eqp Pcs: 2.00
402STABILIZC Stabilization Sub - Cement 1.00 460.00 SY 13.000 5,980 5,980
$7,646.14 0.0347 MH/SY 16.00 MH [1.286] 998 669 5,980 7,646

612-02 STONE BASE 12" Quan: 310.00 TN Hrs/Shft: 8.00 Cal: 508 WC: 1

C240A ROCK EXCAVATION 6.00 CH Eff: 100.00 **Prod: 51.6667 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00

Cost Report

Activity / Resource	Desc	Pcs	Quantity / Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 20612			Land Item	SCHEDULE: 1	100						BCL
Description =	GRAVEL ACCESS RD		Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000
2A01053	#53 Aggregate	1.00	310.00 TN		35.100		10,881				10,881
$13,056.66	0.0580 MH/TN		18.00 MH		[2.277]	1,173	10,881		1,003		13,057
612-03	**FINE GRADE**		**Quan: 460.00 SY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C240A	ROCK EXCAVATION		2.00 CH	Eff: 100.00	**Prod: 230.0000 UH**		Lab Pcs: 3.00		Eqp Pcs: 2.00		
$725.21	0.0130 MH/SY		6.00 MH		[0.511]	391			334		725
=====> **Item Totals: 20612 - GRAVEL ACCESS RD**											
$21,428.01	40.0000 MH/LS		40.00 MH		[1532.4]	2,561	10,881		2,006	5,980	**21,428**
21,428.010	1 LS					2,561.09	10,881.00		2,005.92	5,980.00	21,428.01
BID ITEM = 20613			Land Item	SCHEDULE: 1	100						BCL
Description =	CONCRETE APRONS		Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000
613-01	**SUBGRADE PREP**		**Quan: 450.00 SY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C240A	ROCK EXCAVATION		4.00 CH	Eff: 100.00	**Prod: 112.5000 UH**		Lab Pcs: 4.00		Eqp Pcs: 2.00		
402STABILIZC	Stabilization Sub - Cement	1.00	450.00 SY		13.000					5,850	5,850
$7,516.14	0.0355 MH/SY		16.00 MH		[1.314]	998			669	5,850	7,516
613-02	**STONE BASE 12"**		**Quan: 300.00 TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C240A	ROCK EXCAVATION		6.00 CH	Eff: 100.00	**Prod: 50.0000 UH**		Lab Pcs: 3.00		Eqp Pcs: 2.00		
2A01053	#53 Aggregate	1.00	300.00 TN		35.100		10,530				10,530
$12,705.66	0.0600 MH/TN		18.00 MH		[2.352]	1,173	10,530		1,003		12,706
613-03	**FINE GRADE**		**Quan: 450.00 SY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C240A	ROCK EXCAVATION		2.00 CH	Eff: 100.00	**Prod: 225.0000 UH**		Lab Pcs: 3.00		Eqp Pcs: 2.00		
$725.21	0.0133 MH/SY		6.00 MH		[0.523]	391			334		725
=====> **Item Totals: 20613 - CONCRETE APRONS**											
$20,947.01	40.0000 MH/LS		40.00 MH		[1532.4]	2,561	10,530		2,006	5,850	**20,947**
20,947.010	1 LS					2,561.09	10,530.00		2,005.92	5,850.00	20,947.01
BID ITEM = 20615			Land Item	SCHEDULE: 1	100						BCL
Description =	CURBS		Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000
615-01	**SUBGRADE PREP**		**Quan: 5,200.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C240A	ROCK EXCAVATION		104.00 CH	Eff: 100.00	**Prod: 50.0000 UH**		Lab Pcs: 3.00		Eqp Pcs: 2.00		
$25,496.72	0.0600 MH/LF		312.00 MH		[2.094]	18,639			6,858		25,497
615-02	**STONE BASE 9"**		**Quan: 430.00 TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C240A	ROCK EXCAVATION		50.00 CH	Eff: 100.00	**Prod: 8.6000 UH**		Lab Pcs: 2.00		Eqp Pcs: 2.00		
2A01053	#53 Aggregate	1.00	430.00 TN		35.100		15,093				15,093
$24,654.93	0.2325 MH/TN		100.00 MH		[8.658]	6,265	15,093		3,297		24,655
615-03	**FINE GRADE**		**Quan: 5,200.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C240A	ROCK EXCAVATION		104.00 CH	Eff: 100.00	**Prod: 50.0000 UH**		Lab Pcs: 3.00		Eqp Pcs: 2.00		
$25,496.72	0.0600 MH/LF		312.00 MH		[2.094]	18,639			6,858		25,497

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20615 Land Item SCHEDULE: 1 100 BCL
Description = CURBS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals:**	**20615 - CURBS**										
$75,648.37	724.0000 MH/LS		724.00	MH	[25500.6]	43,543	15,093		17,013		**75,648**
75,648.370	1 LS					43,542.85	15,093.00		17,012.52		75,648.37

Total of Above Sub-Biditems

=====> **Item Totals:**	**20610 - PAVING**										
$1,328,986.33	**1,424.0000 MH/LS**		**1,424.00**	**MH**	**[52263.8]**	**88,295**	**203,580**		**51,782**	**985,330**	**1,328,986**
1,328,986.330	**1 LS**					**88,294.53**	**203,580.00**		**51,781.80**	**985,330.00**	**1,328,986.33**

BID ITEM = 20620 Land Item SCHEDULE: 1 100 BCL
Description = TOPSOIL & SEED Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

620-01	**SPREAD TOPSOIL - SMALL AREAS**		**Quan: 1,180.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C200A	Strip Topsoil - Small		118.00	CH	Eff: 100.00	**Prod:**	**10.0000 UH**	Lab Pcs:	4.00	Eqp Pcs:	3.00
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	118.00	HR	130.000			15,340			15,340
$66,228.83	0.4000 MH/CY		472.00	MH	[16.078]	31,341		15,340	19,548		66,229
620-02	**SPREAD TOPSOIL - LARGE AREAS**		**Quan: 1,439.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C200B	Strip Topsoil - Large		40.00	CH	Eff: 100.00	**Prod:**	**35.9750 UH**	Lab Pcs:	4.00	Eqp Pcs:	3.00
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	80.00	HR	130.000			10,400			10,400
$30,096.06	0.1111 MH/CY		160.00	MH	[4.469]	10,624		10,400	9,072		30,096
620-03	**FINE GRADE SUBGRADE FOR SEED**		**Quan: 20,000.00 SY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C234	FINE GRADE-12G		73.10	CH	Eff: 100.00	**Prod:**	**273.5937 UH**	Lab Pcs:	4.00	Eqp Pcs:	3.00
$33,805.90	0.0146 MH/SY		292.40	MH	[0.588]	19,415			14,390		33,806
620-04	**SEEDING SUB**		**Quan: 20,000.00 SY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402SEEDING	Seeding Sub	1.00	20,000.00	SY	2.000					40,000	40,000
=====> **Item Totals:**	**20620 - TOPSOIL & SEED**										
$170,130.79	924.4000 MH/LS		924.40	MH	[37156.26]	61,380		25,740	43,010	40,000	**170,131**
170,130.790	1 LS					61,380.47		25,740.00	43,010.32	40,000.00	170,130.79

BID ITEM = 20630 Land Item SCHEDULE: 1 100 BCL
Description = SIDEWALKS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

630-01	**SUBGRADE PREP**		**Quan: 1,456.00 SY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		80.00	CH	Eff: 100.00	**Prod:**	**18.2000 UH**	Lab Pcs:	3.00	Eqp Pcs:	2.00
$19,612.87	0.1648 MH/SY		240.00	MH	[5.753]	14,338			5,275		19,613
630-02	**STONE BASE 4"**		**Quan: 162.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C240A	ROCK EXCAVATION		80.00	CH	Eff: 100.00	**Prod:**	**2.0250 UH**	Lab Pcs:	2.00	Eqp Pcs:	2.00
2A01053	#53 Aggregate	1.00	330.00	TN	35.100		11,583				11,583

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 20630				Land Item SCHEDULE: 1 100						BCL
Description = SIDEWALKS				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
$26,882.08	0.9876 MH/CY		160.00 MH	[36.77]	10,024	11,583		5,275		26,882
630-03	**FINE GRADE**			**Quan: 1,456.00 SY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C240A	ROCK EXCAVATION		80.00 CH	Eff: 100.00	**Prod: 18.2000 UH**		Lab Pcs: 3.00		Eqp Pcs: 2.00	
$19,612.87	0.1648 MH/SY		240.00 MH	[5.753]	14,338			5,275		19,613
=====> **Item Totals: 20630**	**- SIDEWALKS**									
$66,107.82	640.0000 MH/LS		640.00 MH	[22708.8]	38,699	11,583		15,826		**66,108**
66,107.820	1 LS				38,699.22	11,583.00		15,825.60		66,107.82
BID ITEM = 20640				Land Item SCHEDULE: 1 100						BCL
Description = FENCING				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
640-01	**FENCING SUB - PERMANENT**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
402FENPERM	Fencing Sub - Permanent	1.00	1.00 LS	293,252.000					293,252	293,252
BID ITEM = 20650				Land Item SCHEDULE: 1 100						BCL
Description = LANDSCAPING				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
650-01	**LANDSCAPING SUB**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
402LANDSCAPE	Landscaping Sub	1.00	1.00 LS	100,000.000					100,000	100,000
				Total of Above Sub-Biditems						
=====> **Item Totals: 20600**	**- SITE RESTORATION**									
$1,958,476.94	**2,988.4000 MH/LS**		**2,988.40 MH**	**[112128.86]**	**188,374**	**215,163**	**25,740**	**110,618**	**1,418,582**	**1,958,477**
1,958,476.940	**1 LS**				**188,374.22**	**215,163.00**	**25,740.00**	**110,617.72**	**1,418,582.00**	**1,958,476.94**
BID ITEM = 20700				Land Item SCHEDULE: 1 100						SAE
Description = CAULKING				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
80728	**CAULKING AND SEALANTS SUB**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
407CAULK	Caulking Sub	1.00	1.00 LS	17,000.000					17,000	17,000
BID ITEM = 20900				Land Item SCHEDULE: 1 100						SAE
Description = PAINTING				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
80916	**PAINTING SUB**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
409PAINTING	Painting Sub	1.00	1.00 LS	42,739.356					42,739	42,739

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 20900 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Total of Above Sub-Biditems

=====> Item Totals: 20000	**- SITEWORK / CIVIL**									
$6,287,644.24	**16,607.1400 MH/LS**	**16,607.14 MH**	**[596323.44]**	**1,035,075**	**987,282**	**433,982**	**605,045**	**3,226,261**	**6,287,644**
6,287,644.240	**1 LS**			**1,035,075.13**	**987,281.62**	**433,982.20**	**605,044.50**	**3,226,260.79**	**6,287,644.24**

BID ITEM = 21000 Land Item SCHEDULE: 1 100 BCL
Description = DEWATERING Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

210-01 INSTALL SUMPS - SURFACE WATER Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C260B	Excavation Crew		80.00	CH	Eff: 100.00	**Prod: 8.0000 HU**		Lab Pcs: 3.00		Eqp Pcs:	1.00
2A0108	#8 Aggregate	1.00	200.00	TN	33.660		6,732				6,732
2EC0215DB	Dewatering bay 15' x 15'	1.00	10.00	EA	185.000		1,850				1,850
8VPE02	==> Electric Pumps 2"	1.00	5,280.00	HR	0.480				2,534		2,534
$34,269.34	24.0000 MH/EA		240.00	MH	[734.24]	13,039	8,582		12,648		34,269

210-02A DEWATERING SUB - PURCHASE Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
402DEWATERP	Dewatering Sub - Equipt Pu	0.80	0.80	LS	4,100,000.000					3,280,000	3,280,000

210-03 UNLOAD/LOAD DEWATERING EQUIP Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C295	JD710, OPER & 2 LABORERS		80.00	CH	Eff: 100.00	**Prod: 80.0000 HU**		Lab Pcs: 3.00		Eqp Pcs:	1.00
$19,968.07	240.0000 MH/LS		240.00	MH	[8376]	14,338			5,630		19,968

210-04 ASSIST WELL DRILLER - DRILLING Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C295	JD710, OPER & 2 LABORERS		160.00	CH	Eff: 100.00	**Prod: 160.0000 HU**		Lab Pcs: 2.00		Eqp Pcs:	1.00
2A0109	#9 Aggregate	1.00	600.00	TN	27.750		16,650				16,650
$47,958.56	320.0000 MH/LS		320.00	MH	[11913.6]	20,048	16,650		11,261		47,959

210-05 ASSIST WELL DRILLER - DISCHARGE HDR Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C295	JD710, OPER & 2 LABORERS		80.00	CH	Eff: 100.00	**Prod: 80.0000 HU**		Lab Pcs: 2.00		Eqp Pcs:	1.00
2A01RRC	Rock Channel Prot. Type C	1.00	40.00	TN	35.960		1,438				1,438
$17,092.68	160.0000 MH/LS		160.00	MH	[5956.8]	10,024	1,438		5,630		17,093

210-06 INSTALL PUMPS Quan: 32.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C295	JD710, OPER & 2 LABORERS		64.00	CH	Eff: 100.00	**Prod: 2.0000 HU**		Lab Pcs: 3.50		Eqp Pcs:	1.00
$15,974.73	7.0000 MH/EA		224.00	MH	[222.96]	12,519			3,456		15,975

210-09 ELECTRIC PUMP POWER CONSUMPTION Quan: 584,000.00 HPD Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2ZPUMP	COST PER PUMP HP, PE	1.00	584,000.00	HPDA	1.150		671,600				671,600

210-10 DEWATERING SYSTEM MAINTENANCE Quan: 104.00 WK Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C295	JD710, OPER & 2 LABORERS		832.00	CH	Eff: 100.00	**Prod: 8.0000 HU**		Lab Pcs: 1.50		Eqp Pcs:	0.00
$67,804.58	12.0000 MH/WK		1,248.00	MH	[367.12]	67,805					67,805

210-10A DEWATERING SYSTEM MAINTENANCE - EMER Quan: 24.00 MO Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C295	JD710, OPER & 2 LABORERS		384.00	CH	Eff: 100.00	**Prod: 16.0000 HU**		Lab Pcs: 5.00		Eqp Pcs:	0.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 21000 Land Item SCHEDULE: 1 100 BCL
Description = DEWATERING Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

$104,001.19	80.0000 MH/MO		1,920.00	MH	[2436.16]	104,001					104,001
210-11	**ABANDON WELLS**		**Quan: 32.00 EA**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C295	JD710, OPER & 2 LABORERS		128.00	CH	Eff: 100.00	**Prod: 4.0000 HU**		Lab Pcs: 2.00		Eqp Pcs: 1.00	
2C01GROUT	Grout Fill - Dewater Wells	1.10	165.00	CY	129.000		21,285				21,285
$46,331.86	8.0000 MH/EA		256.00	MH	[297.84]	16,038	21,285		9,009		46,332
=====> **Item Totals: 21000 - DEWATERING**											
$4,305,001.01	4,608.0000 MH/LS		4,608.00	MH	[146902.72]	257,811	719,555		47,634	3,280,000	**4,305,001**
4,305,001.010	1 LS					257,811.37	719,555.40		47,634.24	3,280,000.00	4,305,001.01

PARENT ITEM = 23500 JCB
Description = YARD PIPING & STRUCTURES(B&V HYBRID 3) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 23500:

BID ITEM = 23520 Land Item SCHEDULE: 1 100
Description = L2: BASIN EFFLUENT Unit = LF Takeoff Quan: 556.000 Engr Quan: 0.000

3300201	**LAY PIPE**		**Quan: 1,112.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
YP365	Large UG Pipe Crew		226.01	CH	Eff: 100.00	**Prod: 4.9200 UH**		Lab Pcs: 6.00		Eqp Pcs: 11.00	
$171,010.13	1.2194 MH/LF		1,356.08	MH	[45.294]	84,819			86,191		171,010
3300299	**MATERIALS**		**Quan: 1,112.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2A01053	#53 Aggregate	1.00	285.00	TN	35.100		10,004				10,004
2A0108	#8 Aggregate	1.00	2,122.00	TN	33.660		71,427				71,427
2Y01F4245	42" 45 Deg Bend, MJ	1.00	10.00	EA	15,507.000		155,070				155,070
2Y01F4290	42" 90 Deg Bend, MJ	1.00	3.00	EA	20,979.000		62,937				62,937
2Y01F42SS	42" Sleeve, Solid, MJ	1.00	4.00	EA	9,834.110		39,336				39,336
2Y01F42T42	42" Tee, MJ	1.00	2.00	EA	33,508.000		67,016				67,016
2Y01R422	42" Rest. DIP, CL 52	1.00	1,120.00	LF	785.070		879,278				879,278
2Y3242	42" Rest. MJ Acc. Pack-DI	1.00	40.00	EA	2,901.910		116,076				116,076
2Y7042	Polywrap for 42" DIP	1.00	1,112.00	LF	2.290		2,546				2,546
2Y7099	Polywrap tape (100' roll)	1.00	24.00	EA	7.500		180				180
$1,403,870.74					[ ]		1,403,871				1,403,871
=====> **Item Totals: 23520 - L2: BASIN EFFLUENT**											
$1,574,880.87	2.4389 MH/LF		1,356.08	MH	[90.588]	84,819	1,403,871		86,191		**1,574,881**
2,832.520	556 LF					152.55	2,524.95		155.02		2,832.52

BID ITEM = 23530 Land Item SCHEDULE: 1 100
Description = L3: BASIN INFLUENT Unit = LF Takeoff Quan: 726.000 Engr Quan: 0.000

3300301	**LAY PIPE**		**Quan: 519.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
YP365	Large UG Pipe Crew		102.94	CH	Eff: 100.00	**Prod: 5.0417 UH**		Lab Pcs: 6.00		Eqp Pcs: 11.00	
$77,888.75	1.1900 MH/LF		617.64	MH	[44.201]	38,632			39,257		77,889
3300399	**MATERIALS**		**Quan: 519.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				

BID ITEM = 23530 Land Item SCHEDULE: 1 100
Description = L3: BASIN INFLUENT Unit = LF Takeoff Quan: 726.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2A0108	#8 Aggregate	1.00	880.00	TN	33.660		29,621				29,621
2Y01F2445	24" 45 Deg Bend, MJ	1.00	2.00	EA	2,825.019		5,650				5,650
2Y01F2490	24" 90 Deg Bend, MJ	1.00	6.00	EA	3,640.800		21,845				21,845
2Y01F3645	36" 45 Deg Bend, MJ	1.00	4.00	EA	9,630.000		38,520				38,520
2Y01F3690	36" 90 Deg Bend, MJ	1.00	6.00	EA	11,713.000		70,278				70,278
2Y01F36R24	36" X 24" Red, MJ	1.00	1.00	EA	5,200.650		5,201				5,201
2Y01F36SS	36" Sleeve, Solid, MJ	1.00	3.00	EA	6,500.000		19,500				19,500
2Y01F36T24	36" X 24" Tee, MJ	1.00	1.00	EA	8,872.500		8,873				8,873
2Y01P36WALL	36" Connection @ Building	1.00	3.00	EA	49,736.350		149,209				149,209
2Y01R242	24" Rest. DIP, CL 52	1.00	220.00	LF	157.835		34,724				34,724
2Y01R362	36" Rest. DIP, CL 52	1.00	740.00	LF	465.030		344,122				344,122
2Y3224	24" Rest. MJ Acc. Pack-DI	1.00	18.00	EA	457.000		8,226				8,226
2Y3236	36" Rest. MJ Acc. Pack-DI	1.00	32.00	EA	1,818.200		58,182				58,182
2Y7024	Polywrap for 24" DIP	1.00	215.00	LF	0.773		166				166
2Y7036	Polywrap for 36" DIP	1.00	378.00	LF	1.187		449				449
2Y7099	Polywrap tape (100' roll)	1.00	24.00	EA	7.500		180				180
$794,745.24					[ ]		794,745				794,745

=====> Item Totals: 23530 - L3: BASIN INFLUENT

$872,633.99	0.8507 MH/LF	617.64 MH	[31.598]	38,632	794,745		39,257		**872,634**
1,201.975	726 LF			53.21	1,094.69		54.07		1,201.98

BID ITEM = 23590 Land Item SCHEDULE: 1 100
Description = L9: 42" HS DISCHARGE Unit = LF Takeoff Quan: 1,185.000 Engr Quan: 0.000

3300901 LAY PIPE Quan: 1,185.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

YP365 Large UG Pipe Crew 236.00 CH Eff: 100.00 **Prod: 5.0212 UH** Lab Pcs: 6.00 Eqp Pcs: 11.00

$178,567.79	1.1949 MH/LF	1,416.00 MH	[44.382]	88,567			90,001		178,568

3300999 MATERIALS Quan: 1,185.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2A01053	#53 Aggregate	1.00	2,420.00	TN	35.100		84,942				84,942
2A0108	#8 Aggregate	1.00	1,718.00	TN	33.660		57,828				57,828
2Y01F4290	42" 90 Deg Bend, MJ	1.00	2.00	EA	20,979.000		41,958				41,958
2Y01F42SS	42" Sleeve, Solid, MJ	1.00	2.00	EA	9,834.110		19,668				19,668
2Y01P42WALL	42" Pipe Connections @ Bu	1.00	2.00	EA	96,856.070		193,712				193,712
2Y01R422	42" Rest. DIP, CL 52	1.00	1,200.00	LF	785.070		942,084				942,084
2Y3242	42" Rest. MJ Acc. Pack-DI	1.00	8.00	EA	2,901.910		23,215				23,215
2Y7042	Polywrap for 42" DIP	1.00	1,200.00	LF	2.290		2,748				2,748
2Y7099	Polywrap tape (100' roll)	1.00	48.00	EA	7.500		360				360
$1,366,515.52					[ ]		1,366,516				1,366,516

=====> Item Totals: 23590 - L9: 42" HS DISCHARGE

$1,545,083.31	1.1949 MH/LF	1,416.00 MH	[44.382]	88,567	1,366,516		90,001		**1,545,083**
1,303.868	1185 LF			74.74	1,153.18		75.95		1,303.87

BID ITEM = 23610 Land Item SCHEDULE: 1 100
Description = L11: WASTE RESIDUAL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

3301101 LAY PIPE Quan: 820.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

YP228 SMALL UTILITY 24.00 CH Eff: 100.00 **Prod: 34.1667 UH** Lab Pcs: 5.00 Eqp Pcs: 6.00

$11,233.37	0.1463 MH/LF	120.00 MH	[5.29]	7,353			3,881		11,233

Cost Report

BID ITEM = 23610 Land Item SCHEDULE: 1 100
Description = L11: WASTE RESIDUAL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
3301102	**OUTLET IN RIVER**		**Quan: 500.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402MARINEDIV	KI MARINE DIVISION	1.00	1.00	LS	500,000.000					500,000	500,000
3301199	**MATERIALS**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2A01053	#53 Aggregate	1.00	2,013.00	TN	35.100		70,656				70,656
2A0108	#8 Aggregate	1.00	884.00	TN	33.660		29,755				29,755
2Y01BS182	18" DIP BALL AND SOC	1.00	500.00	LF	575.000		287,500				287,500
2Y01F1845	18" 45 Deg Bend, MJ	1.00	6.00	EA	1,600.000		9,600				9,600
2Y01F18SL	18" Sleeve, Long, MJ	1.00	1.00	EA	907.014		907				907
2Y01R182	18" Rest. DIP, CL 52	1.00	920.00	LF	163.800		150,696				150,696
2Y3218	18" Rest. MJ Acc. Pack-DI	1.00	14.00	EA	300.000		4,200				4,200
2Y7018	Polywrap for 18" DIP	1.00	920.00	LF	0.716		659				659
2Y7099	Polywrap tape (100' roll)	1.00	18.00	EA	7.500		135				135
$554,109.11					[ ]		554,109				554,109
=====> Item Totals: 23610	**- L11: WASTE RESIDUAL**										
$1,065,342.48	120.0000 MH/LS		120.00	MH	[4338]	7,353	554,109		3,881	500,000	**1,065,342**
1,065,342.480	1 LS					7,352.57	554,109.11		3,880.80	500,000.00	1,065,342.48

BID ITEM = 23630 Land Item SCHEDULE: 1 100
Description = YARD PIPE DEMOLITION Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
330801	**LUMP SUM DEMO**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
YP365	Large UG Pipe Crew		320.00	CH	Eff: 100.00	**Prod: 320.0000 HU**	Lab Pcs: 6.00		Eqp Pcs: 11.00		
$242,125.81	1,920.0000 MH/LS		1,920.00	MH	[71312]	120,091			122,035		242,126
=====> Item Totals: 23630	**- YARD PIPE DEMOLITION**										
$242,125.81	1,920.0000 MH/LS		1,920.00	MH	[71312]	120,091			122,035		**242,126**
242,125.810	1 LS					120,090.61			122,035.20		242,125.81

BID ITEM = 23640 Land Item SCHEDULE: 1 100
Description = YARD PIPE GENERAL CONDITIONS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
100	**TESTING**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
YTEST	TESTING CREW		100.00	CH	Eff: 100.00	**Prod: 100.0000 HU**	Lab Pcs: 2.00		Eqp Pcs: 7.00		
$14,851.43	200.0000 MH/LS		200.00	MH	[6260]	11,029			3,822		14,851
110	**TESTING MATERIALS**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2Y01F18C	18" Cap, MJ	1.00	2.00	EA	581.935		1,164				1,164
2Y01F24C	24" Cap, MJ	1.00	2.00	EA	918.508		1,837				1,837
2Y01F36C	36" Cap, MJ	1.00	2.00	EA	3,385.200		6,770				6,770
2Y01F42C	42" Cap, MJ	1.00	3.00	EA	9,500.000		28,500				28,500
2Y3218	18" Rest. MJ Acc. Pack-DI	1.00	4.00	EA	300.000		1,200				1,200
2Y3224	24" Rest. MJ Acc. Pack-DI	1.00	2.00	EA	457.000		914				914
2Y3236	36" Rest. MJ Acc. Pack-DI	1.00	5.00	EA	1,818.200		9,091				9,091
2Y3242	42" Rest. MJ Acc. Pack-DI	1.00	10.00	EA	2,901.910		29,019				29,019
$78,495.39					[ ]		78,495				78,495

Cost Report

BID ITEM = 23640 Land Item SCHEDULE: 1 100
Description = YARD PIPE GENERAL CONDITIONS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
200	**TRUCKING**				**Quan: 8,288.00 CY**	**Hrs/Shft: 8.00**		**Cal: 508**	**WC: 1**		
5DUMP	Dump Fee	1.00	8,288.00	CY	4.000			33,152			33,152
5HAULE	Sub Trucking-Dirt Tandem/	1.00	1,035.72	HR	130.000			134,644			134,644
$167,795.60					[ ]			167,796			167,796
300	**POTHOLING**				**Quan: 100.00 EA**	**Hrs/Shft: 8.00**		**Cal: 508**	**WC: 1**		
402HYDROEXC	Hydro-Excavation Sub	1.00	100.00	EA	500.000					50,000	50,000
400	**BUILD/TEAR DOWN TRENCH BOXES**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**		**Cal: 508**	**WC: 1**		
YP365	Large UG Pipe Crew		40.00	CH	Eff: 100.00 **Prod:**	**40.0000 HU**	Lab Pcs:	6.00		Eqp Pcs:	11.00
$30,265.73	240.0000 MH/LS		240.00	MH	[8914]	15,011			15,254		30,266
500	**UNLOAD/STRING PIPE**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**		**Cal: 508**	**WC: 1**		
YP624	LOADER W/2 LABORERS		160.00	CH	Eff: 100.00 **Prod:**	**160.0000 HU**	Lab Pcs:	3.00		Eqp Pcs:	1.00
$40,132.11	480.0000 MH/LS		480.00	MH	[16921.6]	28,871			11,261		40,132
600	**SUPPORT UTILITIES**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**		**Cal: 508**	**WC: 1**		
2Y99	MISC ESTIMATE BURIE	1.00	1.00	LS	100,000.000		100,000				100,000
=====> **Item Totals:**	**23640 - YARD PIPE GENERAL CONDITIONS**										
$481,540.26	920.0000 MH/LS		920.00	MH	[32095.6]	54,912	178,495	167,796	30,337	50,000	**481,540**
481,540.260	1 LS					54,912.07	178,495.39	167,795.60	30,337.20	50,000.00	481,540.26

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**23500 - YARD PIPING & STRUCTURES(B&V HYBRID 3)**										
$5,781,606.72	**6,349.7200 MH/LS**		**6,349.72**	**MH**	**[233645.44]**	**394,373**	**4,297,736**	**167,796**	**371,702**	**550,000**	**5,781,607**
5,781,606.720	**1 LS**					**394,372.72**	**4,297,736.00**	**167,795.60**	**371,702.40**	**550,000.00**	**5,781,606.72**

PARENT ITEM = 25000 CLIENT# = 11 REM
Description = SITE ELECTRICAL DISTRIBUTION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 25000:

BID ITEM = 25260 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
26000	**Electrical Sub(STERLING)**				**Quan: 1.00 LS**	**Hrs/Shft: 8.00**		**Cal: 508**	**WC: 1**		
416ELECTRIC	Electrical Sub	1.00	1.00	LS	11,000,000.000					11,000,000	11,000,000

BID ITEM = 25300 Land Item SCHEDULE: 1 100 BVN
Description = 10 - TYD ELEC CONCRETE Unit = CY Takeoff Quan: 36.000 Engr Quan: 0.000

BID ITEM = 25300 Land Item SCHEDULE: 1 100 BVN
Description = 10 - TYD ELEC CONCRETE Unit = CY Takeoff Quan: 36.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**		**Quan: 1,308.15 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		2.28	CH	Eff: 100.00	**Prod:**	**0.0070 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	1,308.15	SF	0.032			45			45
$541.63	0.0070 MH/SF		9.16	MH	[0.214]	497		45			542
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 36.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	37.60	CY	5.000		188				188
03072	**FINE GRADE TO 3000 SF**		**Quan: 1,308.15 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C317G2	SMALL FINE GRADE		6.54	CH	Eff: 100.00	**Prod:**	**0.0200 MU**	Lab Pcs:	4.00	Eqp Pcs:	2.00
$1,735.26	0.0199 MH/SF		26.16	MH	[0.649]	1,485			250		1,735
03171	**REBAR-FURNISH/INSTALL SEPARATE-PLAIN**		**Quan: 3.51 TN**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C10ESCL3	REBAR ESCALATION 20	1.00	3.51	TN	250.000		878				878
2C10RP	Rebar-Plain	1.00	3.51	TN	1,425.950		5,005				5,005
403REBARL	Rebar Install Sub	1.00	3.51	TN	1,331.700					4,674	4,674
$10,556.85					[ ]		5,883			4,674	10,557
03212	**REINFORCING MAT SUPTS-BRICKS**		**Quan: 1,308.15 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C30BMS	Brick Mat Supports	1.00	1,308.15	SF	0.150		196				196
03321	**EF SITE PADS >12" HT 100-500 SF**		**Quan: 418.22 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		31.36	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C10EF12+	EF > 12" Ht. E@107.25%	1.00	418.22	SF	5.463			2,451			2,451
$9,962.32	0.3000 MH/SF		125.47	MH	[8.741]	7,512		2,451			9,962
03325	**P SITE PADS & APRONS 20-100 CY**		**Quan: 40.20 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C329	MED FLATWORK W/PUMP = 3L,1LF		5.72	CH	Eff: 100.00	**Prod:**	**1.1387 MU**	Lab Pcs:	8.00	Eqp Pcs:	0.00
2C0104	Site Concrete	1.05	42.21	CY	141.500		5,973				5,973
$8,524.92	1.1388 MH/CY		45.78	MH	[35.311]	2,552	5,973				8,525
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 36.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	37.60	CY	2.500		94				94
03999Z	**READYMIX ESCALATION**		**Quan: 36.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL3	2026 READYMIX ESCAL	1.05	37.60	CY	52.000		1,955				1,955
=====> **Item Totals:**	**25300 - 10 - TYD ELEC CONCRETE**										
$33,754.40	5.7380 MH/CY		206.57	MH	[172.303]	12,046	14,289	2,496	250	4,674	**33,754**
937.622	36 CY					334.61	396.91	69.32	6.94	129.84	937.62

BID ITEM = 25350 Land Item SCHEDULE: 1 100 BCL
Description = DUCT BANK EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
126-01	**EXCAVATE D/B**		**Quan: 5,995.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C293	Ductbank Crew 710, OA w/ LF		800.00	CH	Eff: 100.00	**Prod:**	**7.4938 UH**	Lab Pcs:	3.00	Eqp Pcs:	1.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 25350					Land Item SCHEDULE: 1 100						BCL
Description =	DUCT BANK EXC & BF				Unit = LS	Takeoff Quan:	1.000		Engr Quan:		0.000
5DUMP	Dump Fee	1.00	5,995.00	CY	4.000			23,980			23,980
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	799.33	HR	130.000			103,913			103,913
$317,925.58	0.4003 MH/CY		2,400.00	MH	[13.972]	143,377		127,893	46,656		317,926
126-02	**BACKFILL D/B**		**Quan: 5,353.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C293	Ductbank Crew 710, OA w/ LF		1,080.00	CH	Eff: 100.00	**Prod: 4.9565 UH**		Lab Pcs: 3.00		Eqp Pcs:	2.00
2A01053	#53 Aggregate	1.00	10,706.00	TN	35.100		375,781				375,781
$634,592.72	0.6052 MH/CY		3,240.00	MH	[21.124]	193,559	375,781		65,254		634,593
=====> Item Totals: 25350	**- DUCT BANK EXC & BF**										
$952,518.30	5,640.0000 MH/LS		5,640.00	MH	[196836]	336,935	375,781	127,893	111,910		**952,518**
952,518.300	1 LS					336,935.20	375,780.60	127,892.90	111,909.60		952,518.30

Total of Above Sub-Biditems

Activity / Resource	Desc	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> Item Totals: 25000	**- SITE ELECTRICAL DISTRIBUTION**									
$11,986,272.70	**5,846.5700 MH/LS**	**5,846.57**	**MH**	**[203038.9]**	**348,981**	**390,069**	**130,388**	**112,160**	**11,004,674**	**11,986,273**
11,986,272.700	**1 LS**				**348,981.07**	**390,069.32**	**130,388.49**	**112,159.55**	**11,004,674.27**	**11,986,272.70**

PARENT ITEM = 1000000 CLIENT# = 2 ALL
Description = EXISTING RW INTAKE BLDG(WIB) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 1000000:

PARENT ITEM = 1150000 MSL
Description = INTERIOR PIPE(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 1150000:

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 115101					Land Item SCHEDULE: 1 100						ERS
Description =	PROCESS PIPING - STERLING				Unit = LS	Takeoff Quan:	1.000		Engr Quan:		0.000
215101	**PROCESS PIPING SUB**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
415PROCSTER	Sterling Industrial Process	1.00	1.00	LS	3,566,861.000					3,566,861	3,566,861
BID ITEM = 116100					Land Item SCHEDULE: 1 100						ERS
Description =	GATES - KII				Unit = LS	Takeoff Quan:	1.000		Engr Quan:		0.000
408300-09450	**60"x60" 25SF Slide Gate Existing Embed**		**Quan: 3.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
P106	Sluice Gate Crew		45.00	CH	Eff: 100.00	**Prod: 45.0000 MU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
2P601RWINT	Gate Package = 01 RW Inta	1.00	1.00	LS	112,986.560		112,987				112,987
402DIVER	Diving Work Sub	1.00	1.00	LS	81,075.000					81,075	81,075
$203,399.26	45.0000 MH/EA		135.00	MH	[1623.9]	9,338	112,987			81,075	203,399
=====> Item Totals: 116100	**- GATES - KII**										
$203,399.26	135.0000 MH/LS		135.00	MH	[4871.7]	9,338	112,987			81,075	**203,399**

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 116100 Land Item SCHEDULE: 1 100 ERS
Description = GATES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
203,399.260			1	LS		9,337.70	112,986.56			81,075.00	203,399.26

Total of Above Sub-Biditems

=====> Item Totals: 1150000 - INTERIOR PIPE(STERLING)

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$3,770,260.26	**135.0000 MH/LS**		**135.00**	**MH**	**[4871.7]**	**9,338**	**112,987**			**3,647,936**	**3,770,260**
3,770,260.260			**1**	**LS**		**9,337.70**	**112,986.56**			**3,647,936.00**	**3,770,260.26**

PARENT ITEM = 22000 JCB
Description = RAW WATER INTAKE PIPING Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 22000:

BID ITEM = 220100 Land Item SCHEDULE: 1 100
Description = RAW WATER JCB Unit = LF Takeoff Quan: 841.000 Engr Quan: 0.000

3300701 LAY PIPE Quan: 1,100.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
YP365	Large UG Pipe Crew		110.79	CH	Eff: 100.00 **Prod: 9.9286 UH**	Lab Pcs: 6.00				Eqp Pcs:	11.00
$83,828.41	0.6043 MH/LF		664.74	MH	[22.445]	41,578			42,251		83,828

3300720 MATERIALS Quan: 1,100.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2A01053	#53 Aggregate	1.00	890.00	TN	35.100		31,239				31,239
2A0108	#8 Aggregate	1.00	1,134.00	TN	33.660		38,170				38,170
2Y01F4222	42" 22-1/2 Deg Bend, MJ	1.00	2.00	EA	12,046.790		24,094				24,094
2Y01F4245	42" 45 Deg Bend, MJ	1.00	6.00	EA	15,507.000		93,042				93,042
2Y01F4290	42" 90 Deg Bend, MJ	1.00	4.00	EA	20,979.000		83,916				83,916
2Y01F42SS	42" Sleeve, Solid, MJ	1.00	4.00	EA	9,834.110		39,336				39,336
2Y01P42WALL	42" Pipe Connections @ Bu	1.00	2.00	EA	96,856.070		193,712				193,712
2Y01R422	42" Rest. DIP, CL 52	1.00	1,100.00	LF	785.070		863,577				863,577
2Y3242	42" Rest. MJ Acc. Pack-DI	1.00	20.00	EA	2,901.910		58,038				58,038
2Y7042	Polywrap for 42" DIP	1.00	1,100.00	LF	2.290		2,519				2,519
2Y7099	Polywrap tape (100' roll)	1.00	24.00	EA	7.500		180				180
$1,427,823.80					[ ]		1,427,824				1,427,824

3300730 TESTING Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
YTEST	TESTING CREW		8.00	CH	Eff: 100.00 **Prod: 8.0000 HU**	Lab Pcs: 2.00				Eqp Pcs:	7.00
$1,188.12	16.0000 MH/LS		16.00	MH	[500.8]	882			306		1,188

3300731 TESTING MATERIALS Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2Y01F42C	42" Cap, MJ	1.00	2.00	EA	9,500.000		19,000				19,000
2Y3242	42" Rest. MJ Acc. Pack-DI	1.00	4.00	EA	2,901.910		11,608				11,608
$30,607.64					[ ]		30,608				30,608

3300740 TRUCKING Quan: 1,124.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
5DUMP	Dump Fee	1.00	1,124.00	CY	4.000			4,496			4,496
5HAULE	Sub Trucking-Dirt Tandem/	1.00	140.29	HR	130.000			18,238			18,238
$22,733.70					[ ]			22,734			22,734

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 220100 Land Item SCHEDULE: 1 100
Description = RAW WATER JCB Unit = LF Takeoff Quan: 841.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
3300750	**POTHOLING**				**Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**						
402HYDROEXC	Hydro-Excavation Sub	1.00	13.00	LS	500.000					6,500	6,500
3300800	**STERLING**				**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
402STERLING	STERLING	1.00	2.00	EA	500,000.000					1,000,000	1,000,000
=====> **Item Totals: 220100**	**- RAW WATER JCB**										
$2,572,681.67	0.8094 MH/LF		680.74	MH	[29.953]	42,460	1,458,431	22,734	42,557	1,006,500	**2,572,682**
3,059.075	841 LF					50.49	1,734.16	27.03	50.60	1,196.79	3,059.07

BID ITEM = 220200 Land Item SCHEDULE: 1 100 JCB
Description = TEMPORARY RAW WATER Unit = LF Takeoff Quan: 400.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
100	**TEMP RAW WATER**				**Quan: 400.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1**						
YP365	Large UG Pipe Crew		34.40	CH	Eff: 100.00 **Prod: 11.6250 UH**		Lab Pcs: 6.00			Eqp Pcs:	12.00
$30,479.66	0.5161 MH/LF		206.46	MH	[19.171]	12,913			17,566		30,480
200	**MATERIALS**				**Quan: 400.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2Y16IF42TRF	42" IPS X FLG ADPT NO	1.00	4.00	EA	2,259.000		9,036				9,036
2Y16IP4217	42" IPS HDPE PIPE, DR 1	1.00	400.00	LF	134.140		53,656				53,656
2Y99	MISC ESTIMATE BURIE	1.00	1.00	EA	1,000.000		1,000				1,000
$63,692.00					[ ]		63,692				63,692
=====> **Item Totals: 220200**	**- TEMPORARY RAW WATER**										
$94,171.66	0.5161 MH/LF		206.46	MH	[19.171]	12,913	63,692		17,566		**94,172**
235.429	400 LF					32.28	159.23		43.92		235.43

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals: 22000**	**- RAW WATER INTAKE PIPING**										
$2,666,853.33	**887.2000 MH/LS**		**887.20**	**MH**	**[32858.63]**	**55,373**	**1,522,123**	**22,734**	**60,123**	**1,006,500**	**2,666,853**
2,666,853.330	**1 LS**					**55,373.47**	**1,522,123.44**	**22,733.70**	**60,122.72**	**1,006,500.00**	**2,666,853.33**

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals: 1000000**	**- EXISTING RW INTAKE BLDG(WIB)**										
$3,770,260.26	**135.0000 MH/LS**		**135.00**	**MH**	**[4871.7]**	**9,338**	**112,987**			**3,647,936**	**3,770,260**
3,770,260.260	**1 LS**					**9,337.70**	**112,986.56**			**3,647,936.00**	**3,770,260.26**

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

PARENT ITEM = 4000000 CLIENT# = 5 ALL
Description = FILTER BLDG(FTB)/CLEARWELLS/HS PUMP BLDG Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4000000:

PARENT ITEM = 4150000 MSL
Description = INTERIOR PIPE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4150000:

BID ITEM = 415101 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS PIPING - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215101 xx PROCESS PIPING Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

415PROCSTER	Sterling Industrial Process	1.00	1.00	LS	23,998,953.000					23,998,953	23,998,953

BID ITEM = 416100 Land Item SCHEDULE: 1 100 ERS
Description = GATES - KIIQ Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

408300-09025 48x48" 16SF Sluice Gate - Surface Mount Quan: 4.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P106	Sluice Gate Crew		56.00	CH	Eff: 100.00	**Prod:**	**42.0000 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
2C03N	Non-Shrink Grout	1.00	4.00	CF	35.000		140				140
2MM15E046102	HAS-R 304 5/8" x 10" w/HI	1.00	120.00	EA	7.424		891				891
$12,651.20	42.0000 MH/EA		168.00	MH	[1515.64]	11,620	1,031				12,651

408300-09325 48x48" 16SF Slide Gate - Surface Mounte Quan: 3.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P106	Sluice Gate Crew		50.00	CH	Eff: 100.00	**Prod:**	**50.0000 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
2C03N	Non-Shrink Grout	1.00	3.00	CF	35.000		105				105
2MM15E046102	HAS-R 304 5/8" x 10" w/HI	1.00	90.00	EA	7.424		668				668
2P60FTB	Gate Package = 04 Filter Bu	1.00	1.00	LS	168,069.050		168,069				168,069
$179,217.48	50.0000 MH/EA		150.00	MH	[1804.333]	10,375	168,842				179,217

=====> Item Totals: 416100 - GATES - KIIQ

$191,868.68	318.0000 MH/LS		318.00	MH	[11475.56]	21,995	169,873				**191,869**
191,868.680	1 LS					21,995.47	169,873.21				191,868.68

Total of Above Sub-Biditems

=====> Item Totals: 4150000 - INTERIOR PIPE

$24,190,821.68	**318.0000 MH/LS**		**318.00**	**MH**	**[11475.56]**	**21,995**	**169,873**			**23,998,953**	**24,190,822**
24,190,821.680	**1 LS**					**21,995.47**	**169,873.21**			**23,998,953.00**	**24,190,821.68**

PARENT ITEM = 4430000 TAL
Description = PROCESS EQUIPMENT PACKAGES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4430000:

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 466123 Land Item SCHEDULE: 1 100 JWA
Description = GRAVITY FILTRATION SYSTEM - BASE Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466123P	**GRAVITY FILTERS PKG**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
2EQ466123-04	GRAVITY FILTER PKG	1.00	1.00 LS	6,684,910.000		6,684,910				6,684,910

=====> Item Totals: 466123 - GRAVITY FILTRATION SYSTEM - BASE

$6,684,910.00		[ ]		6,684,910				**6,684,910**
6,684,910.000	1 LS			6,684,910.00				6,684,910.00

Total of Above Sub-Biditems

=====> Item Totals: 4430000 - PROCESS EQUIPMENT PACKAGES - KII

$6,684,910.00		**[ ]**		**6,684,910**				**6,684,910**
6,684,910.000	**1 LS**			**6,684,910.00**				**6,684,910.00**

Total of Above Sub-Biditems

=====> Item Totals: 4000000 - FILTER BLDG(FTB)/CLEARWELLS/HS PUMP BLDG

$30,875,731.68	**318.0000 MH/LS**	**318.00 MH**	**[11475.56]**	**21,995**	**6,854,783**			**23,998,953**	**30,875,732**
30,875,731.680	**1 LS**			**21,995.47**	**6,854,783.21**			**23,998,953.00**	**30,875,731.68**

PARENT ITEM = 5000000 CLIENT# = 6 ALL
Description = RESIDUALS PUMP STATION(RPS) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 5000000:

PARENT ITEM = 5150000 MSL
Description = INTERIOR PIPE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 5150000:

BID ITEM = 515101 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS PIPING - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215101	**xx PROCESS PIPING**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
415PROCSTER	Sterling Industrial Process	1.00	1.00 LS	1,615,355.000					1,615,355	1,615,355

BID ITEM = 515200 Land Item SCHEDULE: 1 100 ERS
Description = GATES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

408300-09325	**18x18" 2.25SF Slide Gate - Surface Moun**	**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
P106	Sluice Gate Crew		28.00 CH	Eff: 100.00	**Prod: 42.0000 MU**	Lab Pcs: 3.00		Eqp Pcs: 0.00		
2C03N	Non-Shrink Grout	1.00	2.00 CF	35.000		70				70

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 515200				Land Item SCHEDULE: 1 100						ERS
Description = GATES - KII				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
2MM15E046102	HAS-R 304 5/8" x 10" w/HI	1.00	60.00 EA	7.424		445				445
2P60RPS	Gate Package = 05 Residual	1.00	1.00 LS	18,687.090		18,687				18,687
$25,012.70	42.0000 MH/EA		84.00 MH	[1515.64]	5,810	19,203				25,013
=====> Item Totals: 515200 - GATES - KII										
$25,012.70	84.0000 MH/LS		84.00 MH	[3031.28]	5,810	19,203				**25,013**
25,012.700	1 LS				5,810.13	19,202.57				25,012.70

Total of Above Sub-Biditems

=====> Item Totals: 5150000 - INTERIOR PIPE									
$1,640,367.70	**84.0000 MH/LS**	**84.00 MH**	**[3031.28]**	**5,810**	**19,203**			**1,615,355**	**1,640,368**
1,640,367.700	**1 LS**			**5,810.13**	**19,202.57**			**1,615,355.00**	**1,640,367.70**

Total of Above Sub-Biditems

=====> Item Totals: 5000000 - RESIDUALS PUMP STATION(RPS)									
$1,640,367.70	**84.0000 MH/LS**	**84.00 MH**	**[3031.28]**	**5,810**	**19,203**			**1,615,355**	**1,640,368**
1,640,367.700	**1 LS**			**5,810.13**	**19,202.57**			**1,615,355.00**	**1,640,367.70**

PARENT ITEM = 6000000 CLIENT# = 7 ALL
Description = CHEMICAL BUILDING(CHB) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 6000000:

PARENT ITEM = 6150000 MSL
Description = INTERIOR PIPE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 6150000:

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 615101				Land Item SCHEDULE: 1 100						
Description = PROCESS PIPING - STERLING				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
215101	**xx PROCESS PIPING(70% of AECOM CHB)**	**Quan:**	**1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
415PROCSTER	Sterling Industrial Process	1.00	1.00 LS	2,200,000.000					2,200,000	2,200,000

Total of Above Sub-Biditems

=====> Item Totals: 6150000 - INTERIOR PIPE									
$2,200,000.00			**[ ]**					**2,200,000**	**2,200,000**
2,200,000.000	**1 LS**							**2,200,000.00**	**2,200,000.00**

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 615101 Land Item SCHEDULE: 1 100
Description = PROCESS PIPING - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Total of Above Sub-Biditems

=====> Item Totals: 6000000 - CHEMICAL BUILDING(CHB)

$2,200,000.00		**[ ]**		**2,200,000**	**2,200,000**
2,200,000.000	**1 LS**			**2,200,000.00**	**2,200,000.00**

PARENT ITEM = 8000000 CLIENT# = 9 ALL
Description = PAC - INTAKE CHEMICAL BUILDING((ICB) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 8000000:

PARENT ITEM = 8150000 MSL
Description = INTERIOR PIPE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 8150000:

BID ITEM = 815101 Land Item SCHEDULE: 1 100
Description = PROCESS PIPING - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215101 xx PROCESS PIPING Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415PROCSTER	Sterling Industrial Process	1.00	1.00 LS	343,983.000					343,983	343,983

Total of Above Sub-Biditems

=====> Item Totals: 8150000 - INTERIOR PIPE

$343,983.00		**[ ]**		**343,983**	**343,983**
343,983.000	**1 LS**			**343,983.00**	**343,983.00**

Total of Above Sub-Biditems

=====> Item Totals: 8000000 - PAC - INTAKE CHEMICAL BUILDING((ICB)

$343,983.00		**[ ]**		**343,983**	**343,983**
343,983.000	**1 LS**			**343,983.00**	**343,983.00**

PARENT ITEM = 1000000 CLIENT# = 2 ALL
Description = EXISTING RW INTAKE BLDG(WIB) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 1000000:

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

PARENT ITEM = 1011000 SAE
Description = ACCESS BRIDGE REPAIR ALLOWANCE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 1011000:

BID ITEM = 1011500 Land Item SCHEDULE: 1 100 RLC
Description = METALS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
05995	**Misc Metal Sub**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
405METALSI	Misc. Metals Install Sub	1.00	1.00 LS	20,000.000					20,000	20,000
05601	**Metals Materials**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
S503	3 IRONWORKERS PER HOUR	24.00 CH	Eff: 100.00	**Prod: 24.0000 HU**	Lab Pcs: 3.00		Eqp Pcs: 0.00			
2MM01-06	06CHB Metals	1.00	1.00 LS	50,000.000		50,000				50,000
$54,854.07	72.0000 MH/LS		72.00 MH	[2443.68]	4,854	50,000				54,854

=====> **Item Totals: 1011500 - METALS**

$74,854.07	72.0000 MH/LS	72.00 MH	[2443.68]	4,854	50,000			20,000	**74,854**
74,854.070	1 LS			4,854.07	50,000.00			20,000.00	74,854.07

BID ITEM = 1011990 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
80916	**PAINTING SUB**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
409PAINTING	Painting Sub	1.00	1.00 LS	75,000.000					75,000	75,000

Total of Above Sub-Biditems

=====> **Item Totals: 1011000 - ACCESS BRIDGE REPAIR ALLOWANCE**

$149,854.07	**72.0000 MH/LS**	**72.00 MH**	**[2443.68]**	**4,854**	**50,000**			**95,000**	**149,854**
149,854.070	**1 LS**			**4,854.07**	**50,000.00**			**95,000.00**	**149,854.07**

BID ITEM = 1026020 Land Item SCHEDULE: 1 100 TAL
Description = DREDGING WATER INTAKE ZONE Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
001	**DREDGING BUDGET**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
402DREDGE	Dredging Sub	1.00	1.00 LS	100,000.000					100,000	100,000

PARENT ITEM = 1026100 MSL
Description = DEMOLITION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 1026100:

BID ITEM = 1026210 Land Item SCHEDULE: 1 100
Description = 1-D100 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Cost Report

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 1026210 Land Item SCHEDULE: 1 100
Description = 1-D100 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

001 Remove Mechanical Screens **Quan: 3.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

C202 DEMO - 3 LAB 72.00 CH Eff: 100.00 **Prod: 72.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$11,735.40 72.0000 MH/EA 216.00 MH [2202.72] 11,735 11,735

002 Remove Low Service Pumps & Motors **Quan: 6.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P103 3 WRENCHERS 96.00 CH Eff: 100.00 **Prod: 48.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$16,176.34 48.0000 MH/EA 288.00 MH [1544.8] 16,176 16,176

003 Remove Pump Bases **Quan: 6.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

C201 DEMO - 2 LAB 72.00 CH Eff: 100.00 **Prod: 24.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$7,853.00 24.0000 MH/EA 144.00 MH [738.48] 7,853 7,853

004 Remove 6", 4", & 3" Sevice Water Lines **Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**

P103 3 WRENCHERS 40.00 CH Eff: 100.00 **Prod: 120.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$6,740.15 120.0000 MH/LS 120.00 MH [3862] 6,740 6,740

005 Remove 3/4" Hose Faucet **Quan: 3.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P102 2 WRENCHERS 2.00 CH Eff: 100.00 **Prod: 1.3333 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$223.04 1.3333 MH/EA 4.00 MH [42.44] 223 223

006 Remove Hydraulic Control Valves **Quan: 6.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P103 3 WRENCHERS 18.00 CH Eff: 100.00 **Prod: 9.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$3,033.06 9.0000 MH/EA 54.00 MH [289.65] 3,033 3,033

007 Remove Potassium Permanganate Systems **Quan: 2.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P102 2 WRENCHERS 8.00 CH Eff: 100.00 **Prod: 8.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$892.15 8.0000 MH/EA 16.00 MH [254.64] 892 892

008 Remove Spray Water Pumps **Quan: 2.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P103 3 WRENCHERS 12.00 CH Eff: 100.00 **Prod: 18.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$2,022.04 18.0000 MH/EA 36.00 MH [579.3] 2,022 2,022

009 Remove Compressed Air System **Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P103 3 WRENCHERS 8.00 CH Eff: 100.00 **Prod: 24.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$1,348.03 24.0000 MH/EA 24.00 MH [772.4] 1,348 1,348

010 Remove Magnetic Coupling Control Panel **Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P102 2 WRENCHERS 6.00 CH Eff: 100.00 **Prod: 12.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$669.11 12.0000 MH/EA 12.00 MH [381.96] 669 669

011 Demo Sluice Gates 5'-0" x 5'-0" **Quan: 3.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P103 3 WRENCHERS 48.00 CH Eff: 100.00 **Prod: 48.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$8,088.17 48.0000 MH/EA 144.00 MH [1544.8] 8,088 8,088

012 Demo Discharge Raw Water Pipe **Quan: 6.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

P103 3 WRENCHERS 48.00 CH Eff: 100.00 **Prod: 24.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$8,088.17 24.0000 MH/EA 144.00 MH [772.4] 8,088 8,088

Activity / Resource	Desc	Pcs	Quantity / Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 1026210			Land Item	SCHEDULE: 1	100						
Description = 1-D100			Unit = LS	Takeoff Quan:	1.000			Engr Quan:			0.000
013	**Demo Hatches**		**Quan: 3.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C201	DEMO - 2 LAB	72.00 CH	Eff: 100.00	**Prod: 48.0000 MU**		Lab Pcs: 2.00			Eqp Pcs: 0.00		
$7,853.00	48.0000 MH/EA	144.00 MH			[1476.96]	7,853					7,853
014	**(90%) Remove Fan & duct D17**		**Quan: 1.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C202	DEMO - 3 LAB	12.00 CH	Eff: 100.00	**Prod: 36.0000 MU**		Lab Pcs: 3.00			Eqp Pcs: 0.00		
$1,955.91	36.0000 MH/EA	36.00 MH			[1101.36]	1,956					1,956
=====> **Item Totals:**	**1026210 - 1-D100**										
$76,677.57	1,382.0000 MH/LS	1,382.00 MH			[43658.34]	76,678					**76,678**
76,677.570	1 LS					76,677.57					76,677.57
BID ITEM = 1026220			Land Item	SCHEDULE: 1	100						
Description = 1-D101			Unit = LS	Takeoff Quan:	1.000			Engr Quan:			0.000
001	**Remove Bridge Crane**		**Quan: 1.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
P104	4 WRENCHERS	32.00 CH	Eff: 100.00	**Prod: 128.0000 MU**		Lab Pcs: 4.00			Eqp Pcs: 0.00		
$7,176.42	128.0000 MH/EA	128.00 MH			[4108.16]	7,176					7,176
002	**Remove Handrail**		**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C201	DEMO - 2 LAB	6.00 CH	Eff: 100.00	**Prod: 12.0000 MU**		Lab Pcs: 2.00			Eqp Pcs: 0.00		
$654.41	12.0000 MH/LS	12.00 MH			[369.24]	654					654
=====> **Item Totals:**	**1026220 - 1-D101**										
$7,830.83	140.0000 MH/LS	140.00 MH			[4477.4]	7,831					**7,831**
7,830.830	1 LS					7,830.83					7,830.83
BID ITEM = 1026230			Land Item	SCHEDULE: 1	100						
Description = 1-D102			Unit = LS	Takeoff Quan:	1.000			Engr Quan:			0.000
001	**Remove Compressed Air System**		**Quan: 3.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
P102	2 WRENCHERS	12.00 CH	Eff: 100.00	**Prod: 8.0000 MU**		Lab Pcs: 2.00			Eqp Pcs: 0.00		
$1,338.23	8.0000 MH/EA	24.00 MH			[254.64]	1,338					1,338
002	**Remove Lube Water System**		**Quan: 1.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
P102	2 WRENCHERS	5.00 CH	Eff: 100.00	**Prod: 10.0000 MU**		Lab Pcs: 2.00			Eqp Pcs: 0.00		
$557.60	10.0000 MH/EA	10.00 MH			[318.3]	558					558
003	**Remove 2" Sump Discharge Line**		**Quan: 1.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
P102	2 WRENCHERS	4.00 CH	Eff: 100.00	**Prod: 8.0000 MU**		Lab Pcs: 2.00			Eqp Pcs: 0.00		
$446.08	8.0000 MH/EA	8.00 MH			[254.64]	446					446
004	**Remove 2" Hot Water Lines**		**Quan: 1.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
P102	2 WRENCHERS	8.00 CH	Eff: 100.00	**Prod: 16.0000 MU**		Lab Pcs: 2.00			Eqp Pcs: 0.00		
$892.15	16.0000 MH/EA	16.00 MH			[509.28]	892					892

Cost Report

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 1026230 Land Item SCHEDULE: 1 100
Description = 1-D102 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Qty	Unit	Details	Labor	Total
005	**Remove Sump Pump**			**Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P102	2 WRENCHERS	4.00	CH	Eff: 100.00 **Prod: 8.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00		
$446.08	8.0000 MH/EA	8.00	MH	[254.64]	446	446
006	**Remove Bar Rack & Guides**			**Quan: 2.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P103	3 WRENCHERS	8.00	CH	Eff: 100.00 **Prod: 12.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00		
$1,348.03	12.0000 MH/EA	24.00	MH	[386.2]	1,348	1,348
007	**Remove Butterfly Valves**			**Quan: 7.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P103	3 WRENCHERS	42.00	CH	Eff: 100.00 **Prod: 18.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00		
$7,077.14	18.0000 MH/EA	126.00	MH	[579.3]	7,077	7,077
008	**Remove Raw Water Piping**			**Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P104	4 WRENCHERS	32.00	CH	Eff: 100.00 **Prod: 128.0000 MU** Lab Pcs: 4.00 Eqp Pcs: 0.00		
$7,176.42	128.0000 MH/EA	128.00	MH	[4108.16]	7,176	7,176
009	**Remove Check Valve**			**Quan: 2.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P104	4 WRENCHERS	24.00	CH	Eff: 100.00 **Prod: 48.0000 MU** Lab Pcs: 4.00 Eqp Pcs: 0.00		
$5,382.32	48.0000 MH/EA	96.00	MH	[1540.56]	5,382	5,382
010	**Remove Non-Potable Water**			**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P103	3 WRENCHERS	12.00	CH	Eff: 100.00 **Prod: 36.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00		
$2,022.04	36.0000 MH/LS	36.00	MH	[1158.6]	2,022	2,022
011	**(90%) D102 D15 Remove Hose Reel**			**Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P102	2 WRENCHERS	3.00	CH	Eff: 100.00 **Prod: 6.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00		
$334.56	6.0000 MH/EA	6.00	MH	[190.98]	335	335
012	**(90%) D102 D16 Rem Pump Capacitor Wall B**			**Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P102	2 WRENCHERS	6.00	CH	Eff: 100.00 **Prod: 12.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00		
$669.11	12.0000 MH/EA	12.00	MH	[381.96]	669	669

=====> Item Totals: 1026230 - 1-D102

$27,689.76	494.0000 MH/LS	494.00	MH	[15849.1]	27,690	**27,690**
27,689.760	1 LS				27,689.76	27,689.76

BID ITEM = 1026240 Land Item SCHEDULE: 1 100
Description = 1-D103 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Qty	Unit	Details	Labor	Total
001	**Demo Sump Pumps**			**Quan: 6.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**		
P102	2 WRENCHERS	18.00	CH	Eff: 100.00 **Prod: 6.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00		
$2,007.34	6.0000 MH/EA	36.00	MH	[190.98]	2,007	2,007
002	**Remove Handrail**			**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**		
C201	DEMO - 2 LAB	6.00	CH	Eff: 100.00 **Prod: 12.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00		
$654.41	12.0000 MH/LS	12.00	MH	[369.24]	654	654

Cost Report

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 1026240 Land Item SCHEDULE: 1 100
Description = 1-D103 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

004 Remove Sump Lids (1-D103) Quan: 6.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P102 2 WRENCHERS 6.00 CH Eff: 100.00 **Prod: 2.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$669.11 2.0000 MH/EA 12.00 MH [63.66] 669 669

=====> **Item Totals: 1026240 - 1-D103**
$3,330.86 60.0000 MH/LS 60.00 MH [1897.08] 3,331 **3,331**
3,330.860 1 LS 3,330.86 3,330.86

BID ITEM = 1026250 Land Item SCHEDULE: 1 100
Description = 1-D104 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

003 1-D104 Inspect Flap Gates Quan: 3.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P103 3 WRENCHERS 18.00 CH Eff: 100.00 **Prod: 18.0000 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$3,033.06 18.0000 MH/EA 54.00 MH [579.3] 3,033 3,033

=====> **Item Totals: 1026250 - 1-D104**
$3,033.06 54.0000 MH/LS 54.00 MH [1737.9] 3,033 **3,033**
3,033.060 1 LS 3,033.06 3,033.06

Total of Above Sub-Biditems

=====> **Item Totals: 1026100 - DEMOLITION**
$118,562.08 2,130.0000 MH/LS 2,130.00 MH [67619.82] 118,562 118,562
118,562.080 1 LS 118,562.08 118,562.08

BID ITEM = 1050000 Land Item SCHEDULE: 1 100 RLC
Description = METALS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05995 Misc Metal Sub Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

405MMTL Misc Metal Sub 1.00 1.00 LS 19,510.000 19,510 19,510

BID ITEM = 1059000 Land Item SCHEDULE: 1 100 RLC
Description = METAL METERIAL - WIB Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05601 Metals Materials Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

S503 3 IRONWORKERS PER HOUR 8.00 CH Eff: 100.00 **Prod: 8.0000 HU** Lab Pcs: 3.00 Eqp Pcs: 0.00
2MM01-01 01WIB Metals 1.00 1.00 LS 72,960.000 72,960 72,960
$74,578.02 24.0000 MH/LS 24.00 MH [814.56] 1,618 72,960 74,578

=====> **Item Totals: 1059000 - METAL METERIAL - WIB**
$74,578.02 24.0000 MH/LS 24.00 MH [814.56] 1,618 72,960 **74,578**
74,578.020 1 LS 1,618.02 72,960.00 74,578.02

Activity / Resource	Desc	Pcs	Quantity / Unit		Unit Cost		Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 1061000				Land Item	SCHEDULE: 1	100						RLC
Description =	CARPENTRY			Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000
06023	**Install 2x8 Treated Nailer**			**Quan:**	**139.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C602	(2) CARPENTER		4.00 CH	Eff: 100.00	**Prod:**	**34.7500 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
2W012X08NT	2x8 Treated Nailer	1.15	159.85 LF		2.850			456				456
$953.63	0.0575 MH/LF		8.00 MH		[1.676]		498	456				954
06035	**Install 2x14 Treated Nailer**			**Quan:**	**409.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C603	(3) CARPENTER		12.00 CH	Eff: 100.00	**Prod:**	**34.0833 UH**		Lab Pcs: 3.00		Eqp Pcs:		0.00
2W012X14NT	2x14 Treated Nailer	1.15	470.35 LF		8.250			3,880				3,880
$6,106.99	0.0880 MH/LF		36.00 MH		[2.532]		2,227	3,880				6,107
=====> **Item Totals:**	**1061000 - CARPENTRY**											
$7,060.62	44.0000 MH/LS		44.00 MH		[1268.56]		2,725	4,336				**7,061**
7,060.620	1 LS						2,724.66	4,335.96				7,060.62
BID ITEM = 1075400				Land Item	SCHEDULE: 1	100						SAE
Description =	ROOFING - TPO			Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000
80722	**EPDM ROOFING SUB**			**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
407ROOFEPDM	EPDM Roofing Sub	1.05	1.05 LS		116,600.000						122,430	122,430
BID ITEM = 1099000				Land Item	SCHEDULE: 1	100						SAE
Description =	PAINTING & COATING			Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000
80916	**PAINTING SUB**			**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
409PAINTING	Painting Sub	1.05	1.05 LS		436,763.000						458,601	458,601
BID ITEM = 1101400				Land Item	SCHEDULE: 1	100						SAE
Description =	SIGNS			Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000
10401	**SIGN MATERIAL**			**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
2S14-LS	Signs - LS	1.00	1.00 LS		4,113.000			4,113				4,113
10402	**Install Interior ID Signs**			**Quan:**	**22.00 EA**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C601	(1) CARPENTER		11.00 CH	Eff: 100.00	**Prod:**	**0.5000 MU**		Lab Pcs: 1.00		Eqp Pcs:		0.00
$671.37	0.5000 MH/EA		11.00 MH		[14.03]		671					671
=====> **Item Totals:**	**1101400 - SIGNS**											
$4,784.37	11.0000 MH/LS		11.00 MH		[308.66]		671	4,113				**4,784**
4,784.370	1 LS						671.37	4,113.00				4,784.37

Activity / Resource	Desc	Quantity Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 1145000 Land Item SCHEDULE: 1 100 RLC
Description = HOIST Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

412502 Erect Monorail Beam **Quan: 3.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

S503 3 IRONWORKERS PER HOUR 3.00 CH Eff: 100.00 **Prod: 1.0000 UH** Lab Pcs: 3.00 Eqp Pcs: 0.00
$606.76 3.0000 MH/EA 9.00 MH [101.82] 607 607

412504 Bolt Up per Point **Quan: 9.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

S520 IW BOLT UP PER HOUR 3.60 CH Eff: 100.00 **Prod: 2.5000 UH** Lab Pcs: 1.00 Eqp Pcs: 0.00
$242.70 0.4000 MH/EA 3.60 MH [13.576] 243 243

412506 Install Hoist & Trolley **Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

S503 3 IRONWORKERS PER HOUR 0.50 CH Eff: 100.00 **Prod: 0.5000 HU** Lab Pcs: 3.00 Eqp Pcs: 0.00
$101.13 1.5000 MH/EA 1.50 MH [50.91] 101 101

412508 Install End Stops **Quan: 2.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

S520 IW BOLT UP PER HOUR 1.00 CH Eff: 100.00 **Prod: 2.0000 UH** Lab Pcs: 1.00 Eqp Pcs: 0.00
$67.42 0.5000 MH/EA 1.00 MH [16.97] 67 67

412999 Startup & Load Test each Hoist **Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

S551 MISC. METALS CREW-TP JOB 1.00 CH Eff: 100.00 **Prod: 1.0000 UH** Lab Pcs: 2.00 Eqp Pcs: 0.00
$137.60 2.0000 MH/EA 2.00 MH [70.27] 138 138

412507 Install Festoon/Track **Quan: 36.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1**

S520 IW BOLT UP PER HOUR 2.00 CH Eff: 100.00 **Prod: 18.0000 UH** Lab Pcs: 1.00 Eqp Pcs: 0.00
$134.84 0.0555 MH/LF 2.00 MH [1.886] 135 135

412599 Hoist Material **Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**

2MH10-01 01WIB Monorail Hoist 1.00 1.00 LS 16,000.000 16,000 16,000

=====> **Item Totals: 1145000 - HOIST**
$17,290.45 19.1000 MH/LS 19.10 MH [650.64] 1,290 16,000 **17,290**
17,290.450 1 LS 1,290.45 16,000.00 17,290.45

BID ITEM = 1230000 Land Item SCHEDULE: 1 100 ERS
Description = HVAC(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

23000 HVAC SUB(STERLING) **Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**

415HVAC HVAC Sub 1.00 1.00 LS 369,854.000 369,854 369,854

BID ITEM = 1260000 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

26000 Electrical Sub(STERLING) **Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**

416ELECTRIC Electrical Sub 1.00 1.00 LS 2,290,372.000 2,290,372 2,290,372

Cost Report

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 1270000 Land Item SCHEDULE: 1 100 REM
Description = INSTRUMENTATION & CONTROL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

27000 I & C SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416I&C	Instrumentation-Control Su	1.00	1.00 LS	1,065,295.000					1,065,295	1,065,295

PARENT ITEM = 1430000 TAL
Description = PROCESS EQUIPMENT PACKAGES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 1430000:

BID ITEM = 1431000 Land Item SCHEDULE: 1 100 JWA
Description = RW INTAKE EQ PKGS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

1432113 LS PUMP PKG (43 2113) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2EQ432113-01	LS PUMP PKG	1.00	1.00 LS	919,265.000		919,265				919,265

1444333 TRAVELING WATER SCREENS PKG Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2EQ444333-01	TRAVELING WATER SC	1.00	1.00 LS	874,000.000		874,000				874,000

=====> **Item Totals: 1431000 - RW INTAKE EQ PKGS**
$1,793,265.00 [ ] 1,793,265 **1,793,265**
1,793,265.000 1 LS 1,793,265.00 1,793,265.00

Total of Above Sub-Biditems

=====> **Item Totals: 1430000 - PROCESS EQUIPMENT PACKAGES - KII**
$1,793,265.00 [ ] **1,793,265** **1,793,265**
1,793,265.000 **1 LS** **1,793,265.00** **1,793,265.00**

PARENT ITEM = 1435000 JWA
Description = PROCESS EQUIPMENT INSTALL - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 1435000:

BID ITEM = 1435010 Land Item SCHEDULE: 1 100 JWA
Description = INSTALL TRAVELING WATER SCREENS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

462113.1 UNLOAD & SHAKEOUT SCREEN EQ Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

P102 2 WRENCHERS 8.00 CH Eff: 100.00 **Prod: 8.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$892.15 16.0000 MH/LS 16.00 MH [509.28] 892 892

462113.2 INSTALL INTAKE SCREEN Quan: 3.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P103 3 WRENCHERS 96.00 CH Eff: 100.00 **Prod: 32.0000 HU** Lab Pcs: 4.25 Eqp Pcs: 1.25

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C03N	Non-Shrink Grout	1.00	5.00 CF	35.000		175				175
2MM15E166125	HAS-R 316 5/8" x 12" w/HI	1.00	45.00 EA	14.585		656				656

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 1435010 Land Item SCHEDULE: 1 100 JWA
Description = INSTALL TRAVELING WATER SCREENS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$34,605.86		136.0000 MH/EA	408.00	MH	[4816]	24,595	831		9,180		34,606

=====> **Item Totals: 1435010 - INSTALL TRAVELING WATER SCREENS**

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$35,498.01		424.0000 MH/LS	424.00	MH	[14957.28]	25,487	831		9,180		**35,498**
35,498.010		1 LS				25,486.66	831.35		9,180.00		35,498.01

Total of Above Sub-Biditems

=====> **Item Totals: 1435000 - PROCESS EQUIPMENT INSTALL - KII**

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$35,498.01		**424.0000 MH/LS**	**424.00**	**MH**	**[14957.28]**	**25,487**	**831**		**9,180**		**35,498**
35,498.010		**1 LS**				**25,486.66**	**831.35**		**9,180.00**		**35,498.01**

BID ITEM = 1440000 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS EQUIPMENT INSTALL - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215501 xx PROCESS EQUIPMENT INSTALL Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415EQUISTER	Sterling Industrial Process	1.00	1.00	LS	84,949.000					84,949	84,949

Total of Above Sub-Biditems

=====> **Item Totals: 1000000 - EXISTING RW INTAKE BLDG(WIB)**

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$6,711,903.77		**2,724.1000 MH/LS**	**2,724.10**	**MH**	**[88063.2]**	**155,207**	**1,941,505**		**9,180**	**4,606,011**	**6,711,904**
6,711,903.770		**1 LS**				**155,207.31**	**1,941,505.31**		**9,180.00**	**4,606,011.15**	**6,711,903.77**

PARENT ITEM = 4000000 CLIENT# = 5 ALL
Description = FILTER BLDG(FTB)/CLEARWELLS/HS PUMP BLDG Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4000000:

BID ITEM = 4032000 Land Item SCHEDULE: 1 100 BVN
Description = CONCRETE REINFORCEMENT Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

03171A REBAR-FURNISH/INSTALL MAY 2025 - MAY 202 Quan: 2,152.50 TN Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C10ESCL2	REBAR ESCALATION 20	0.25	538.12	TN	150.000		80,718				80,718
2C10ESCL3	REBAR ESCALATION 20	0.50	1,076.24	TN	250.000		269,060				269,060
2C10ESCL4	REBAR ESCALATION 20	0.25	538.12	TN	350.000		188,342				188,342
2C10RP	Rebar-Plain	1.00	2,152.50	TN	1,425.950		3,069,357				3,069,357
403REBARL	Rebar Install Sub	1.00	2,152.50	TN	1,331.700					2,866,484	2,866,484
$6,473,961.63					[ ]		3,607,477			2,866,484	6,473,962

03171M REBAR- MASONRY Quan: 20.00 TN Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C10ESCL4	REBAR ESCALATION 20	1.00	20.00	TN	350.000		7,000				7,000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 4032000					Land Item SCHEDULE: 1	100					BVN
Description =	CONCRETE REINFORCEMENT				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
2C10RP1	MASONRY REBAR	1.00	20.00	TN	1,425.950		28,519				28,519
$35,519.00					[ ]		35,519				35,519
03171P	**REBAR DILLED PIERS - SEPT 2024 - DEC 202**		**Quan: 344.20**	**TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C10DRILLED	DRILLED PIER REBAR	1.00	344.20	TN	1,425.950		490,812				490,812
2C10ESCL1	REBAR ESCALATION 20	1.00	344.20	TN	50.000		17,210				17,210
403REBARL	Rebar Install Sub	1.00	344.20	TN	1,331.700					458,371	458,371
$966,393.13					[ ]		508,022			458,371	966,393
=====> **Item Totals:**	**4032000 - CONCRETE REINFORCEMENT**										
$7,475,873.76					[ ]		4,151,018			3,324,855	**7,475,874**
7,475,873.760		1 LS					4,151,018.37			3,324,855.39	7,475,873.76

PARENT ITEM = 4033000 BVN
Description = CAST-IN-PLACE CONCRETE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4033000:

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03001	**FILL TIE HOLES: STEEL-PLY**		**Quan: 212,179.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C302	2 FINISHERS		1,060.89	CH	Eff: 100.00	**Prod: 0.0100 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C21F	Fill Tie Holes	1.00	212,179.00	SF	0.030		6,365				6,365
$126,580.45	0.0100 MH/SF		2,121.79	MH	[0.31]	120,215	6,365				126,580
03003	**GROUT CLEAN**		**Quan: 38,216.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C302	2 FINISHERS		573.24	CH	Eff: 100.00	**Prod: 0.0300 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C21R	Rub Surfaces	1.00	38,216.00	SF	0.075		2,866				2,866
$67,822.76	0.0300 MH/SF		1,146.48	MH	[0.929]	64,957	2,866				67,823
03007	**WATER CURE**		**Quan: 421,600.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		316.20	CH	Eff: 100.00	**Prod: 0.0030 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	421,600.00	SF	0.032			14,469			14,469
$83,057.55	0.0030 MH/SF		1,264.80	MH	[0.092]	68,588		14,469			83,058
03046	**RGHN MECH**		**Quan: 510.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		25.50	CH	Eff: 100.00	**Prod: 0.1000 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
$2,750.04	0.1000 MH/SF		51.00	MH	[3.024]	2,750					2,750
03047	**ROUGHEN CJ LIQUID SPRAY**		**Quan: 13,994.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		209.91	CH	Eff: 100.00	**Prod: 0.0300 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
3C01LR	ROUGHNER-LIQUI@107.	1.00	13,994.00	SF	0.130			1,951			1,951
$24,588.78	0.0300 MH/SF		419.82	MH	[0.907]	22,638		1,951			24,589
03050	**APPLY EPOXY BOND**		**Quan: 41,277.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		165.10	CH	Eff: 100.00	**Prod: 0.0080 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C23BE	Bonding-Epoxy	1.00	41,277.00	SF	1.150		47,469				47,469
$65,274.78	0.0080 MH/SF		330.22	MH	[0.242]	17,806	47,469				65,275

Cost Report

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03063	**WATER BLAST CLEAN SURFACE**		**Quan: 34,000.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C309	2 LAB, 1 LAB FOREMAN		113.33	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
$18,472.39	0.0100 MH/SF		340.00	MH	[0.306]	18,472					18,472
03070	**PLACE G FILL IN UNDER GULLET CHN 3-6'HT**		**Quan: 401.85**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C317	SMALL GRANULAR = 2L,1LF		40.18	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
2A0108	#8 Aggregate	1.00	803.70	TN	33.660		27,053				27,053
$33,602.65	0.3000 MH/CY		120.56	MH	[9.178]	6,550	27,053				33,603
03071A	**BACKFILL TOP - TELEBELT**		**Quan: 1,210.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C270T	Backfill - Telebelt		40.29	CH	Eff: 100.00	**Prod:**	**30.0300 UH**	Lab Pcs:	6.00	Eqp Pcs:	4.00
2A0108	#8 Aggregate	1.00	2,420.00	TN	33.660		81,457				81,457
402TELBELTT	Telebelt Sub - Travel Time	1.00	40.00	HR	350.000					14,000	14,000
402TELEBELT	Telebelt Sub - 110'	1.00	5.00	TRIP	300.000					1,500	1,500
402TELEBELTC	Telebelt Sub - CY Charge	1.00	1,210.00	CY	4.000					4,840	4,840
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	36.30	HR	130.000			4,719			4,719
$129,030.89	0.1998 MH/CY		241.76	MH	[7.368]	15,047	81,457	4,719	7,467	20,340	129,031
03072	**FINE GRADE TO 3000 SF**		**Quan: 4,735.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C317G2	SMALL FINE GRADE		23.67	CH	Eff: 100.00	**Prod:**	**0.0200 MU**	Lab Pcs:	4.00	Eqp Pcs:	2.00
$6,282.47	0.0200 MH/SF		94.71	MH	[0.649]	5,377			905		6,282
03162	**PLACE #6 WWM 6x6/W2.9xW2.9 PC HC PER 12-**		**Quan: 34,000.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		41.20	CH	Eff: 100.00	**Prod:**	**0.0048 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C10W06	#6 WWM 6x6/W2.9xW2.9	1.10	37,400.00	SF	0.300		11,220				11,220
$20,159.04	0.0048 MH/SF		164.84	MH	[0.148]	8,939	11,220				20,159
03164	**PLACE #10 WWM 6x6/W1.4xW1.4 - FND MAT WO**		**Quan: 53,181.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		39.88	CH	Eff: 100.00	**Prod:**	**0.0030 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C10W10	#10 WWM 6x6/W1.4xW1.	1.10	58,499.10	SF	0.300		17,550				17,550
$26,201.90	0.0030 MH/SF		159.55	MH	[0.092]	8,652	17,550				26,202
03178	**D+G VERT<8"**		**Quan: 463.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		34.72	CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	463.00	EA	3.150		1,458				1,458
$5,203.36	0.1500 MH/EA		69.45	MH	[4.536]	3,745	1,458				5,203
03191	**CMU WALL D+G VERT**		**Quan: 500.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		37.50	CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	500.00	EA	3.150		1,575				1,575
$5,619.17	0.1500 MH/EA		75.00	MH	[4.536]	4,044	1,575				5,619
03198	**DBR #6**		**Quan: 177.36**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C303	2 CARPENTERS		15.07	CH	Eff: 100.00	**Prod:**	**0.1700 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C1106	#6 D.B.R.'s	1.00	177.36	EA	24.000		4,257				4,257
403DBRSUB1	DBR SUB INSTALLATIO	1.00	177.36	EA	10.000					1,774	1,774
$7,870.39	0.1699 MH/EA		30.15	MH	[4.77]	1,840	4,257			1,774	7,870

Cost Report

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03200	**DBR#8**		**Quan: 3,151.60**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C303	2 CARPENTERS		393.95	CH	Eff: 100.00	**Prod:**	**0.2500 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
2C1108	#8 D.B.R.'s	1.00	3,151.60	EA	32.000		100,851				100,851
403DBRSUB2	DBR SUB INSTALLATIO	1.00	3,151.60	EA	16.000					50,426	50,426
$199,364.96	0.2500 MH/EA		787.90	MH	[7.015]	48,088	100,851			50,426	199,365
03212	**REINFORCING MAT SUPTS-BRICKS**		**Quan: 53,181.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C30BMS	Brick Mat Supports	1.00	53,181.00	SF	0.150		7,977				7,977
03246	**WATERSTOP IN C.J. 9" PVC**		**Quan: 25,154.35**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		670.78	CH	Eff: 100.00	**Prod:**	**0.0800 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
2C279	9" Waterstop	1.10	27,669.79	LF	4.380		121,194				121,194
2C27FACMADE	FACTORY MADE INTER	1.00	630.00	EA	50.000		31,500				31,500
$270,744.17	0.0800 MH/LF		2,012.35	MH	[2.303]	118,050	152,694				270,744
03251	**HYDRO WATERSTOP**		**Quan: 136.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C304	1 LAB, 1 CARP		6.80	CH	Eff: 100.00	**Prod:**	**0.1000 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
2C27H	Hydrophilic Waterstop	1.10	149.60	LF	7.000		1,047				1,047
$1,828.90	0.1000 MH/LF		13.60	MH	[2.915]	782	1,047				1,829
03257	**CJ SLAB-SLAB**		**Quan: 8,305.59**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C312	2 CARP, 1 CARP FOREMAN		968.98	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15SS915	S-S 9"-15" CJ/@107.25%	1.00	8,305.59	LF	2.900			25,832			25,832
$205,627.60	0.3500 MH/SF		2,906.96	MH	[10.068]	179,795		25,832			205,628
03266	**CJ SLAB-WALL BOT (RAISED KEYS)**		**Quan: 11,366.24**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C312	2 CARP, 1 CARP FOREMAN		757.74	CH	Eff: 100.00	**Prod:**	**0.2000 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15SW8	S-W to 8" CJ F@107.25%	1.00	11,366.24	LF	2.000			24,381			24,381
$164,980.84	0.2000 MH/LF		2,273.25	MH	[5.753]	140,600		24,381			164,981
03266A	**CJ SLAB-WALL TOP CONCAVED KEYS**		**Quan: 12,893.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C312	2 CARP, 1 CARP FOREMAN		42.97	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15SW8	S-W to 8" CJ F@107.25%	1.00	12,893.00	LF	1.250			17,285			17,285
$25,259.00	0.0100 MH/LF		128.93	MH	[0.288]	7,974		17,285			25,259
03274	**C/J SLAB EDGE-WALL FACE**		**Quan: 604.86**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C312	2 CARP, 1 CARP FOREMAN		100.81	CH	Eff: 100.00	**Prod:**	**0.5000 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15SEWF8	SE-WF to 8" CJ@107.25%	1.00	604.86	LF	4.950			3,211			3,211
$21,916.39	0.5000 MH/SF		302.43	MH	[14.383]	18,705		3,211			21,916
03282	**CJ WALL-WALL**		**Quan: 5,083.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C312	2 CARP, 1 CARP FOREMAN		677.73	CH	Eff: 100.00	**Prod:**	**0.4000 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15WW915	W-W 9"-15" CJ/@107.25%	1.00	5,083.00	LF	3.600			19,625			19,625
$145,378.64	0.4000 MH/SF		2,033.20	MH	[11.507]	125,753		19,625			145,379
03366	**F HS PS G BM 1.67'Hx2.5'Wx28LF**		**Quan: 93.52**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		7.01	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C20GB	Grade Beam For@107.25%	1.00	93.52	SF	5.463			548			548

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 4033001					Land Item	SCHEDULE: 1	100				BVN
Description =	4 - FTB/HSP - ORIGINAL				Unit = CY	Takeoff Quan:	17,220.000		Engr Quan:		0.000
$2,227.32	0.2999 MH/SF		28.05	MH	[8.738]	1,679		548			2,227
03369A	**F SPILL CONTNMNT SUMP WL 6"Tx3'H 1EA**		**Quan:**	**75.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C321	LARGE FORM =2L,3C,1CF		4.50	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00
3C20GB	Grade Beam For@107.25%	1.00	75.00	SF	5.463			439			439
$1,791.77	0.3000 MH/SF		22.50	MH	[8.676]	1,352		439			1,792
03377	**P HS PS G BM 1.67'Hx2.5'Wx28LF**		**Quan:**	**4.33 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C326	FOOTING POUR CREW = 2L,1LF,1		2.16	CH	Eff: 100.00	**Prod:**	**2.0000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	4.50	CY	173.000		779				779
$1,254.60	2.0023 MH/CY		8.67	MH	[61.453]	476	779				1,255
03379A	**P SPILL CONTNMNT SUMP WL 6"Tx3'H 1EA**		**Quan:**	**1.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C326	FOOTING POUR CREW = 2L,1LF,1		1.00	CH	Eff: 100.00	**Prod:**	**4.0000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0101	Foundation Concrete	1.04	1.04	CY	141.500		147				147
$366.81	4.0000 MH/CY		4.00	MH	[122.76]	220	147				367
03409	**POUR MUDMAT 3"THK**		**Quan:**	**475.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C328	MED FLATWORK = 2L,1LF,3F,1FF		54.28	CH	Eff: 100.00	**Prod:**	**0.8000 MU**	Lab Pcs: 7.00		Eqp Pcs:	0.00
2C0102	Mudmat Concrete	1.10	522.50	CY	129.000		67,403				67,403
403RMPUMP1	Pump Slab =< 8"	1.00	475.00	CY	23.241					11,040	11,040
$99,726.83	0.8000 MH/CY		380.01	MH	[24.894]	21,284	67,403			11,040	99,727
03418A	**EF SPILL CONTNMNT SUMP MAT 10"Tx1EA**		**Quan:**	**15.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C320	SMALL FORM =1L, 2C,1CF		1.50	CH	Eff: 100.00	**Prod:**	**0.4000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C10EF12	EF 7"-12" Ht. @107.25%	1.00	15.00	LF	5.463			88			88
$447.11	0.4000 MH/LF		6.00	MH	[11.654]	359		88			447
03422	**EF CLEARWL FND MAT 3'THK EL329**		**Quan:**	**2,817.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C321	LARGE FORM =2L,3C,1CF		169.02	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00
3C10EF12+	EF > 12" Ht. E@107.25%	1.00	2,817.00	SF	5.463			16,507			16,507
$67,298.51	0.3000 MH/SF		845.10	MH	[8.676]	50,791		16,507			67,299
03432A	**P SPILL CONTNMNT SUMP MAT 10"Tx1EA**		**Quan:**	**1.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C326	FOOTING POUR CREW = 2L,1LF,1		1.25	CH	Eff: 100.00	**Prod:**	**5.0000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0105	SOG Concrete	1.04	1.04	CY	141.500		147				147
$421.74	5.0000 MH/CY		5.00	MH	[153.46]	275	147				422
03438	**P CLEARWL FND MAT 3'T 45,650SF EL329**		**Quan:**	**5,390.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C331	LRG FLATWORK W/PUMP = 5L,1LF		121.27	CH	Eff: 100.00	**Prod:**	**0.2700 MU**	Lab Pcs: 12.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	5,605.60	CY	173.000		969,769				969,769
403RMPUMP4	Pump Slabs > 24"	1.00	5,390.00	CY	23.241					125,274	125,274
$1,175,952.70	0.2700 MH/CY		1,455.32	MH	[8.336]	80,910	969,769			125,274	1,175,953
03455	**EF SUMP PIT BOXOUT**		**Quan:**	**74.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C303	2 CARPENTERS		18.50	CH	Eff: 100.00	**Prod:**	**0.5000 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
3C10HS12+	Hanging Sump E@107.25	1.00	74.00	SF	5.463			434			434
$2,691.86	0.5000 MH/SF		37.00	MH	[14.03]	2,258		434			2,692

Cost Report

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03472	**F HS PS SUMP PIT WL 1'Tx3.67'Hx11LF 2EA**		**Quan: 161.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C320	SMALL FORM =1L, 2C,1CF		10.06	CH	Eff: 100.00	Prod:	0.2500 MU	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	161.00	SF	5.463			943			943
$3,353.13	0.2500 MH/SF		40.25	MH	[7.284]	2,410		943			3,353
03475	**F PIPE GAL/FLTR TK TRANSTN WL 1-1.3'Tx4-**		**Quan: 8,496.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C321	LARGE FORM =2L,3C,1CF		339.84	CH	Eff: 100.00	Prod:	0.2000 MU	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C20BLWF	Brickledge in @107.25%	1.00	600.00	SF	1.950			1,255			1,255
3C20W	Straight Wall @107.25%	1.00	8,496.00	SF	5.463			49,785			49,785
$153,163.57	0.2000 MH/SF		1,699.20	MH	[5.784]	102,124		51,040			153,164
03483	**F CW BAFFL WL 8"Tx5'Hx8.33LF 10EA EL329**		**Quan: 842.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C320	SMALL FORM =1L, 2C,1CF		42.10	CH	Eff: 100.00	Prod:	0.2000 MU	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	842.00	SF	5.463			4,934			4,934
$15,015.73	0.2000 MH/SF		168.40	MH	[5.827]	10,082		4,934			15,016
03486	**F BW WASTE GULLT WL 1-1.33'Tx4-6'Hx1235L**		**Quan: 12,036.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C321	LARGE FORM =2L,3C,1CF		288.86	CH	Eff: 100.00	Prod:	0.1200 MU	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	12,036.00	SF	5.463			70,529			70,529
$157,333.34	0.1199 MH/SF		1,444.31	MH	[3.47]	86,805		70,529			157,333
03494	**F CW SUP WL 1.25'Tx8.33'Hx8-15LF 10EA EL**		**Quan: 2,125.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C320	SMALL FORM =1L, 2C,1CF		159.37	CH	Eff: 100.00	Prod:	0.3000 MU	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	2,125.00	SF	5.463			12,452			12,452
$50,618.55	0.3000 MH/SF		637.51	MH	[8.741]	38,166		12,452			50,619
03496	**F BW GULLET WL 1.33'Tx6.75-9.25'Hx852LF**		**Quan: 11,715.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C321	LARGE FORM =2L,3C,1CF		304.59	CH	Eff: 100.00	Prod:	0.1300 MU	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	11,715.00	SF	5.463			68,648			68,648
$160,178.69	0.1300 MH/SF		1,522.95	MH	[3.76]	91,531		68,648			160,179
03497	**F FLTR TK WL 6"-16"Tx5-13'Hx3203LF EL354**		**Quan: 46,351.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C321	LARGE FORM =2L,3C,1CF		2,224.84	CH	Eff: 100.00	Prod:	0.2400 MU	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C20BLWF	Brickledge in @107.25%	1.00	600.00	SF	1.950			1,255			1,255
3C20W	Straight Wall @107.25%	1.00	46,351.00	SF	5.463			271,608			271,608
$941,441.87	0.2400 MH/SF		11,124.24	MH	[6.941]	668,579		272,863			941,442
03504	**F VENT RISR WL 1'Tx20.8'Hx20LF 2EA EL349**		**Quan: 1,688.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C320	SMALL FORM =1L, 2C,1CF		84.40	CH	Eff: 100.00	Prod:	0.2000 MU	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	1,688.00	SF	5.463			9,891			9,891
$30,102.81	0.2000 MH/SF		337.60	MH	[5.827]	20,211		9,891			30,103
03505	**F PIPE GAL WL 1.25'Tx18.5'Hx323LF EL350.**		**Quan: 12,478.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C321	LARGE FORM =2L,3C,1CF		499.12	CH	Eff: 100.00	Prod:	0.2000 MU	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	12,478.00	SF	5.463			73,119			73,119
$223,107.02	0.2000 MH/SF		2,495.60	MH	[5.784]	149,988		73,119			223,107
03506	**F HS PS WALLS 1.25-1.75'Tx19-20'Hx440LF**		**Quan: 17,758.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 4033001					Land Item	SCHEDULE: 1	100					BVN
Description =	4 - FTB/HSP - ORIGINAL				Unit =	CY	Takeoff Quan:	17,220.000		Engr Quan:		0.000
C321	LARGE FORM =2L,3C,1CF		710.32	CH	Eff: 100.00	**Prod:**	**0.2000 MU**	Lab Pcs:	5.00	Eqp Pcs:		0.00
3C20W	Straight Wall @107.25%	1.00	17,758.00	SF		5.463			104,059			104,059
$317,513.58	0.2000 MH/SF		3,551.60	MH		[5.784]	213,455		104,059			317,514
03507	**F CLEARWL WL 1-1.67'Tx18-26'Hx2681LF EL3**				**Quan: 116,127.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C321	LARGE FORM =2L,3C,1CF		4,645.08	CH	Eff: 100.00	**Prod:**	**0.2000 MU**	Lab Pcs:	5.00	Eqp Pcs:		0.00
3C20BLWF	Brickledge in @107.25%	1.00	3,464.67	SF		1.950			7,246			7,246
3C20W	Straight Wall @107.25%	1.00	116,127.00	SF		5.463			680,483			680,483
$2,083,600.18	0.2000 MH/SF		23,225.40	MH		[5.784]	1,395,871		687,729			2,083,600
03508	**FTO GANG FORM MAKE-UP - WALLS**				**Quan: 22,195.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C303	2 CARPENTERS		1,331.70	CH	Eff: 100.00	**Prod:**	**0.1200 MU**	Lab Pcs:	2.00	Eqp Pcs:		0.00
$162,556.16	0.1200 MH/SF		2,663.40	MH		[3.367]	162,556					162,556
03570	**FORM B-HEAD**				**Quan: 585.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C303	2 CARPENTERS		87.75	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	2.00	Eqp Pcs:		0.00
3C20BH1619	Opening 16"-19@107.25%	1.00	585.00	SF		2.900			1,820			1,820
$12,530.85	0.3000 MH/SF		175.50	MH		[8.418]	10,711		1,820			12,531
03574	**F BEAM POCKETS <4SF**				**Quan: 100.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C303	2 CARPENTERS		200.00	CH	Eff: 100.00	**Prod:**	**4.0000 MU**	Lab Pcs:	2.00	Eqp Pcs:		0.00
3C20BP4	Beam Pocket to@107.25%	1.00	100.00	EA		7.000			751			751
$25,164.08	4.0000 MH/EA		400.00	MH		[112.24]	24,413		751			25,164
03576	**F BEAM POCKETS >4SF**				**Quan: 4.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C303	2 CARPENTERS		12.00	CH	Eff: 100.00	**Prod:**	**6.0000 MU**	Lab Pcs:	2.00	Eqp Pcs:		0.00
3C20BP4+	Beam Pocket > @107.25%	1.00	4.00	EA		14.000			60			60
$1,524.86	6.0000 MH/EA		24.00	MH		[168.36]	1,465		60			1,525
03591	**P HS PS SUMP PIT WL 1'Tx3.67'Hx11LF 2EA**				**Quan: 3.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		2.25	CH	Eff: 100.00	**Prod:**	**3.0000 MU**	Lab Pcs:	4.00	Eqp Pcs:		0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	3.15	CY		173.000		545				545
$1,067.77	3.0000 MH/CY		9.00	MH		[89.043]	523	545				1,068
03592	**P CW BAFFL WL 8"Tx5'Hx8.33LF 10EA EL329**				**Quan: 10.41 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		5.20	CH	Eff: 100.00	**Prod:**	**2.0000 MU**	Lab Pcs:	4.00	Eqp Pcs:		0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	10.93	CY		173.000		1,891				1,891
$3,100.95	2.0009 MH/CY		20.83	MH		[59.388]	1,210	1,891				3,101
03593	**P VENT RISR WL 1'Tx20.8'Hx20LF 2EA EL349**				**Quan: 31.26 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		11.72	CH	Eff: 100.00	**Prod:**	**1.5000 MU**	Lab Pcs:	4.00	Eqp Pcs:		0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	32.82	CY		173.000		5,678				5,678
$8,401.67	1.5000 MH/CY		46.89	MH		[44.52]	2,724	5,678				8,402
03594	**P CW SUP WL 1.25'Tx8.33'Hx8-15LF 10EA EL**				**Quan: 50.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		10.00	CH	Eff: 100.00	**Prod:**	**0.8000 MU**	Lab Pcs:	4.00	Eqp Pcs:		0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	52.50	CY		173.000		9,083				9,083
$11,406.11	0.8000 MH/CY		40.00	MH		[23.744]	2,324	9,083				11,406

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03595	**P PIPE GAL/FLTR TK TRANSTN WL 1-1.3'Tx4-**		**Quan: 242.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C333	POUR VERT OVER 30 CY = 2L,1L		60.50	CH	Eff: 100.00	**Prod:**	**1.5000 MU**	Lab Pcs: 6.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	254.09	CY	173.000		43,958				43,958
$65,044.33	1.5000 MH/CY		363.00	MH	[44.52]	21,087	43,958				65,044
03596	**P BW WASTE GULLT WL 1-1.33'Tx4-6'Hx1235L**		**Quan: 267.26**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		100.22	CH	Eff: 100.00	**Prod:**	**1.5000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	280.62	CY	173.000		48,547				48,547
$71,835.00	1.5000 MH/CY		400.89	MH	[44.52]	23,288	48,547				71,835
03597	**P BW GULLET WL 1.33'Tx6.75-9.25'Hx852LF**		**Quan: 290.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C333	POUR VERT OVER 30 CY = 2L,1L		29.00	CH	Eff: 100.00	**Prod:**	**0.6000 MU**	Lab Pcs: 6.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	304.50	CY	173.000		52,679				52,679
403RMPUMP7	Pump Walls & Cols > 200	1.00	290.00	CY	23.241					6,740	6,740
$69,526.35	0.6000 MH/CY		174.00	MH	[17.808]	10,108	52,679			6,740	69,526
03598	**P PIPE GAL WL 1.25'Tx18.5'Hx323LF EL350.**		**Quan: 303.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C333	POUR VERT OVER 30 CY = 2L,1L		30.30	CH	Eff: 100.00	**Prod:**	**0.6000 MU**	Lab Pcs: 6.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	318.15	CY	173.000		55,040				55,040
403RMPUMP7	Pump Walls & Cols > 200	1.00	303.00	CY	23.241					7,042	7,042
$72,643.05	0.6000 MH/CY		181.80	MH	[17.808]	10,561	55,040			7,042	72,643
03599	**P HS PS WALLS 1.25-1.75'Tx19-20'Hx440LF**		**Quan: 542.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C333	POUR VERT OVER 30 CY = 2L,1L		45.16	CH	Eff: 100.00	**Prod:**	**0.5000 MU**	Lab Pcs: 6.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	569.10	CY	173.000		98,454				98,454
403RMPUMP7	Pump Walls & Cols > 200	1.00	542.00	CY	23.241					12,597	12,597
$126,793.87	0.5000 MH/CY		271.00	MH	[14.84]	15,742	98,454			12,597	126,794
03600	**P FLTR TK WL 6"-16"Tx5-13'Hx3203LF EL354**		**Quan: 979.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C333	POUR VERT OVER 30 CY = 2L,1L		97.90	CH	Eff: 100.00	**Prod:**	**0.6000 MU**	Lab Pcs: 6.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	1,027.95	CY	173.000		177,835				177,835
403RMPUMP7	Pump Walls & Cols > 200	1.00	979.00	CY	23.241					22,754	22,754
$234,711.36	0.6000 MH/CY		587.40	MH	[17.808]	34,122	177,835			22,754	234,711
03601	**P CLEARWL WL 1-1.67'Tx18-26'Hx2681LF EL3**		**Quan: 4,324.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C333	POUR VERT OVER 30 CY = 2L,1L		324.30	CH	Eff: 100.00	**Prod:**	**0.4500 MU**	Lab Pcs: 6.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	4,540.19	CY	173.000		785,453				785,453
403RMPUMP7	Pump Walls & Cols > 200	1.00	4,324.00	CY	23.241					100,498	100,498
$998,982.84	0.4500 MH/CY		1,945.80	MH	[13.356]	113,032	785,453			100,498	998,983
03607	**F CW COL 1.5'SQx3.5-5'H 20EA EL349.5**		**Quan: 474.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		30.00	CH	Eff: 100.00	**Prod:**	**0.2532 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C25SQC	Square Column @107.25%	1.00	474.00	SF	5.463			2,778			2,778
$9,961.71	0.2531 MH/SF		120.00	MH	[7.376]	7,184		2,778			9,962
03616	**F FLTR TK COL 1.5'SQx5.5'H 8EA EL356**		**Quan: 264.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		26.66	CH	Eff: 100.00	**Prod:**	**0.4040 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01FOAM	GEO FOAM@107.25%	1.25	36.67	CF	15.000			590			590
3C25SQC	Square Column @107.25%	1.00	264.00	SF	5.463			1,547			1,547

Cost Report

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$8,523.03	0.4040 MH/SF		106.67	MH	[11.772]	6,386		2,137			8,523
03617	**F BW GULLET COL 18"SQx6-9'H 8EA EL360-36**		**Quan: 354.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		25.93	CH	Eff: 100.00	**Prod:**	**0.2930 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C01FOAM	GEO FOAM@107.25%	1.20	42.01	CF	15.000			676			676
3C25SQC	Square Column @107.25%	1.00	354.00	SF	5.463			2,074			2,074
$8,960.34	0.2930 MH/SF		103.73	MH	[8.537]	6,210		2,750			8,960
03627	**F COL 1.5'-1.67'x3-3.33'x18.83'H 18EA E**		**Quan: 3,680.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		138.00	CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C25SQC	Square Column @107.25%	1.00	3,680.00	SF	5.463			21,564			21,564
$54,611.26	0.1500 MH/SF		552.00	MH	[4.37]	33,047		21,564			54,611
03628	**F FLTR TK COL 14.5'H 40EA EL370.25**		**Quan: 5,413.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C321	LARGE FORM =2L,3C,1CF		162.39	CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C25SQC	Square Column @107.25%	1.00	5,413.00	SF	5.463			31,719			31,719
$80,518.24	0.1500 MH/SF		811.95	MH	[4.338]	48,799		31,719			80,518
03629	**F COL 1.5'SQx18-24'H 48EA EL329**		**Quan: 6,712.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C321	LARGE FORM =2L,3C,1CF		134.24	CH	Eff: 100.00	**Prod:**	**0.1000 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C25SQC	Square Column @107.25%	1.00	6,712.00	SF	5.463			39,331			39,331
$79,670.94	0.1000 MH/SF		671.20	MH	[2.892]	40,340		39,331			79,671
03676	**FTO GANG FORM MAKE-UP - COLUMNS**		**Quan: 1,601.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C336	FORMSHOP LABOR		240.15	CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	1.00	Eqp Pcs:	0.00
$11,132.39	0.1500 MH/SF		240.15	MH	[5.31]	11,132					11,132
03686	**P FLTR TK COL 1.5'SQx5.5'H 8EA EL356**		**Quan: 4.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		4.00	CH	Eff: 100.00	**Prod:**	**4.0000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.03	4.12	CY	173.000		713				713
$1,642.20	4.0000 MH/CY		16.00	MH	[118.72]	929	713				1,642
03687	**P BW GULLET COL 18"SQx6-9'H 8EA EL360-36**		**Quan: 4.93**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		4.00	CH	Eff: 100.00	**Prod:**	**3.2454 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.03	5.08	CY	173.000		879				879
$1,808.28	3.2454 MH/CY		16.00	MH	[96.325]	929	879				1,808
03688	**P CW COL 1.5'SQx3.5-5'H 20EA EL349.5**		**Quan: 7.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		10.00	CH	Eff: 100.00	**Prod:**	**5.7143 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.03	7.21	CY	173.000		1,247				1,247
$3,570.94	5.7142 MH/CY		40.00	MH	[169.6]	2,324	1,247				3,571
03689	**P COL 1.5'-1.67'x3-3.33'x18.83'H 18EA E**		**Quan: 72.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		10.80	CH	Eff: 100.00	**Prod:**	**0.6000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.03	74.17	CY	173.000		12,831				12,831
$15,340.90	0.6000 MH/CY		43.20	MH	[17.808]	2,509	12,831				15,341
03690	**P FLTR TK COL 14.5'H 40EA EL370.25**		**Quan: 107.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		43.84	CH	Eff: 100.00	**Prod:**	**1.6390 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 4033001				Land Item	SCHEDULE: 1	100					BVN
Description =	4 - FTB/HSP - ORIGINAL			Unit =	CY	Takeoff Quan:	17,220.000		Engr Quan:		0.000
2C01HSX	CLASS HSX 5,500 PSI MI	1.03	110.21	CY	173.000		19,066				19,066
$29,253.58	1.6389 MH/CY		175.37	MH	[48.645]	10,187	19,066				29,254
03691	**P COL 1.5'SQx18-24'H 48EA EL329**		**Quan: 93.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C332	POUR VERT UNDER 30 CY = 2L,1		26.68	CH	Eff: 100.00	**Prod:**	**1.1477 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.03	95.79	CY	173.000		16,572				16,572
$22,771.58	1.1476 MH/CY		106.73	MH	[34.062]	6,200	16,572				22,772
03701	**EF BW GULLET SUP SLB 1'Tx4.83'SPANx3'H E**		**Quan: 67.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		5.86	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35EFSS8	EF S.S. <= to @107.25%	1.00	67.00	LF	5.463			393			393
$1,796.52	0.3500 MH/SF		23.45	MH	[10.197]	1,404		393			1,797
03702	**EF/SH HS PS SUMP PIT SLAB 1'T 2EA EL365.**		**Quan: 97.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		8.48	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35EFSS8	EF S.S. <= to @107.25%	1.00	97.00	LF	5.463			568			568
$2,601.52	0.3501 MH/SF		33.96	MH	[10.2]	2,033		568			2,602
03703	**EF HS PS SUP SLB 1-1.33'Tx40'H EL370.25**		**Quan: 381.19**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		33.35	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35EFSS8	EF S.S. <= to @107.25%	1.00	381.19	LF	5.463			2,234			2,234
$10,220.68	0.3499 MH/SF		133.41	MH	[10.197]	7,987		2,234			10,221
03704	**EF BW GULLET SUP SLB 1'Tx4.83'SPNx6'H EL**		**Quan: 831.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		62.32	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35EFSS915	EF S.S. 12"-15@107.25%	1.00	831.00	SF	5.463			4,870			4,870
$19,795.19	0.3000 MH/SF		249.31	MH	[8.741]	14,926		4,870			19,795
03706	**EF BW WASTE GULLT SUP SLB 1'Tx7.25'Wx9'H**		**Quan: 1,230.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C321	LARGE FORM =2L,3C,1CF		73.80	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C35EFSS915	EF S.S. 12"-15@107.25%	1.00	1,230.00	SF	5.463			7,208			7,208
$29,384.85	0.3000 MH/SF		369.00	MH	[8.676]	22,177		7,208			29,385
03707	**EF PIPE GAL SUP SLAB 1.33'Tx20.4'H EL350**		**Quan: 1,324.48**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		99.33	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35EFSS1624	EF S.S. > 15" @107.25%	1.00	1,324.48	SF	5.463			7,761			7,761
$31,549.74	0.3000 MH/SF		397.35	MH	[8.741]	23,789		7,761			31,550
03708	**EF FLTR TK SUP SLB 12-16"THK EL370.25**		**Quan: 1,762.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		132.15	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35EFSS1624	EF S.S. > 15" @107.25%	1.00	1,762.00	SF	5.463			10,325			10,325
$41,971.23	0.3000 MH/SF		528.60	MH	[8.741]	31,646		10,325			41,971
03709	**EF GULLET SUP SLB 1.5'Tx8.83'Wx44LF 14EA**		**Quan: 2,300.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C320	SMALL FORM =1L, 2C,1CF		174.74	CH	Eff: 100.00	**Prod:**	**0.3039 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35EFSS1624	EF S.S. > 15" @107.25%	1.00	2,300.00	SF	5.463			13,478			13,478
$55,323.52	0.3039 MH/SF		698.97	MH	[8.854]	41,846		13,478			55,324
03710	**EF CW SUP SLAB 1.67'Tx19'H EL349.5**		**Quan: 3,353.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				

Activity / Resource	Desc	Pcs	Quantity / Unit			Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4033001 — Land Item — SCHEDULE: 1 — 100 — BVN
Description = 4 - FTB/HSP - ORIGINAL — Unit = CY — Takeoff Quan: 17,220.000 — Engr Quan: 0.000

C321	LARGE FORM =2L,3C,1CF		214.59 CH	Eff: 100.00	**Prod:**	**0.3200 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C35EFSS1624	EF S.S. > 15" @107.25%	1.00	3,353.00 SF	5.463			19,648			19,648
$84,134.02	0.3200 MH/SF		1,072.96 MH	[9.254]	64,486		19,648			84,134
03710A	**EF FILTER TK SUP SLB 1.5'Tx25.5'H EL356**		**Quan: 4,835.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C321	LARGE FORM =2L,3C,1CF		290.10 CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C35EFSS1624	EF S.S. > 15" @107.25%	1.00	4,835.00 SF	5.463			28,332			28,332
$115,508.81	0.3000 MH/SF		1,450.50 MH	[8.676]	87,177		28,332			115,509
03716	**SH FLTR TK SUP WALK 8"Tx4'Wx6'H EL370.25**		**Quan: 616.00 LF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		246.40 CH	Eff: 100.00	**Prod:**	**1.6000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35SHSS	SH S.S. < 16' @107.25%	1.00	616.00 SF	5.463			3,610			3,610
$62,615.54	1.6000 MH/LF		985.60 MH	[46.616]	59,006		3,610			62,616
03731	**SH PIPE GAL SUP SLAB 1.33'Tx20.4'H EL350**		**Quan: 9,689.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C324	LARGE SHORE = 3L,1LF,3C,1CF		322.96 CH	Eff: 100.00	**Prod:**	**0.2000 MU**	Lab Pcs:	6.00	Eqp Pcs:	0.00
3C35SHSS2	SH S.S. 16-22'@107.25%	1.00	9,689.00 SF	5.463			56,776			56,776
$171,244.10	0.2000 MH/SF		1,937.80 MH	[5.828]	114,468		56,776			171,244
03732	**SH FILTER TK SUP SLB 1.5'Tx25.5'H EL356**		**Quan: 19,047.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		1,428.52 CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35SHSS3	SH S.S. 22-28'@107.25%	1.00	19,047.00 SF	5.463			111,612			111,612
$453,704.25	0.3000 MH/SF		5,714.11 MH	[8.741]	342,092		111,612			453,704
03733	**SH GULLET SUP SLB 24'Hx8.83'Wx44LF 14EA**		**Quan: 5,433.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		407.47 CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35SHSS3	SH S.S. 22-28'@107.25%	1.00	5,433.00 SF	5.463			31,836			31,836
$129,415.83	0.3000 MH/SF		1,629.91 MH	[8.741]	97,579		31,836			129,416
03734	**SH FLTR TK SUP SLB 19'H EL370.25**		**Quan: 9,590.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		479.50 CH	Eff: 100.00	**Prod:**	**0.2000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35SHSS3	SH S.S. 22-28'@107.25%	1.00	9,590.00 SF	5.463			56,196			56,196
$171,022.47	0.2000 MH/SF		1,918.00 MH	[5.827]	114,827		56,196			171,022
03734A	**SH FLTR TK SLB ABOVE GULLT CHAN 7'Hx7.5'**		**Quan: 3,128.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		117.30 CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35SPAN	SH S.S. Span-A@107.25%	1.00	3,128.00 SF	5.463			18,330			18,330
$46,419.57	0.1500 MH/SF		469.20 MH	[4.37]	28,090		18,330			46,420
03734B	**SH HS PS SUP SLB 1-1.33'Tx40'H EL370.25**		**Quan: 2,979.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C324	LARGE SHORE = 3L,1LF,3C,1CF		173.77 CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs:	6.00	Eqp Pcs:	0.00
3C35SHSS3	SH S.S. 22-28'@107.25%	1.00	2,979.00 SF	5.463			17,456			17,456
$79,047.68	0.3500 MH/SF		1,042.66 MH	[10.199]	61,591		17,456			79,048
03735	**SH CW SUP SLAB 1.67'Tx19'H EL349.5**		**Quan: 13,690.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C324	LARGE SHORE = 3L,1LF,3C,1CF		570.41 CH	Eff: 100.00	**Prod:**	**0.2500 MU**	Lab Pcs:	6.00	Eqp Pcs:	0.00
3C35SHSS3	SH S.S. 22-28'@107.25%	1.00	13,690.00 SF	5.463			80,221			80,221
$282,392.38	0.2500 MH/SF		3,422.50 MH	[7.285]	202,171		80,221			282,392

Cost Report

BID ITEM = 4033001 | Land Item | SCHEDULE: 1 100 | BVN
Description = 4 - FTB/HSP - ORIGINAL | Unit = CY | Takeoff Quan: 17,220.000 | Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03739	**SH BW WASTE GULLT SUP SLB 7.25'Wx45LFx9'**				**Quan:**	**4,561.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		285.06	CH	Eff: 100.00	**Prod:**		**0.2500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35SPAN	SH S.S. Span-A@107.25%	1.00	4,561.00	SF		5.463			26,727			26,727
$94,991.12	0.2500 MH/SF		1,140.25	MH		[7.284]	68,264		26,727			94,991
03742	**SET SCAFF WALKWAY 3'W**				**Quan:**	**9,072.00 LF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		793.80	CH	Eff: 100.00	**Prod:**		**0.3500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C35SHSS	SH S.S. < 16' @107.25%	1.00	9,072.00	SF		5.463			53,160			53,160
$243,253.12	0.3500 MH/LF		3,175.20	MH		[10.197]	190,093		53,160			243,253
03746	**F BW GULLET SUP SLB BM SIDES EL360**				**Quan:**	**46.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		4.02	CH	Eff: 100.00	**Prod:**		**0.3500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	46.00	SF		5.463			270			270
$1,234.01	0.3502 MH/SF		16.11	MH		[10.204]	964		270			1,234
03747	**F HS PS SUP SLB BM SIDES EL370.25**				**Quan:**	**301.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		22.57	CH	Eff: 100.00	**Prod:**		**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	301.00	SF		5.463			1,764			1,764
$7,170.47	0.3000 MH/SF		90.31	MH		[8.741]	5,407		1,764			7,170
03748	**F PIPE GAL SUP SLAB BEAM SIDES EL350.75**				**Quan:**	**99.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		8.00	CH	Eff: 100.00	**Prod:**		**0.3232 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	99.00	SF		5.463			580			580
$2,495.89	0.3232 MH/SF		32.00	MH		[9.417]	1,916		580			2,496
03749	**F FLTR TK SUP SLB DROP PNL EL370.25**				**Quan:**	**137.50 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		12.03	CH	Eff: 100.00	**Prod:**		**0.3500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	137.50	SF		5.463			806			806
$3,686.59	0.3499 MH/SF		48.12	MH		[10.196]	2,881		806			3,687
03750	**F GULLET SUP SLB BM SIDES 12"H EL354**				**Quan:**	**180.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		13.50	CH	Eff: 100.00	**Prod:**		**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	180.00	SF		5.463			1,055			1,055
$4,287.65	0.3000 MH/SF		54.00	MH		[8.741]	3,233		1,055			4,288
03750A	**F FLTR TK SUP SLB BM SIDES EL370.25**				**Quan:**	**408.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		30.60	CH	Eff: 100.00	**Prod:**		**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	408.00	SF		5.463			2,391			2,391
$9,718.66	0.3000 MH/SF		122.40	MH		[8.74]	7,328		2,391			9,719
03750B	**F CW SUP SLB BM SIDES 12"H EL349.5**				**Quan:**	**2,541.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		190.57	CH	Eff: 100.00	**Prod:**		**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	2,541.00	SF		5.463			14,890			14,890
$60,527.75	0.3000 MH/SF		762.31	MH		[8.741]	45,638		14,890			60,528
03750C	**F FILTER TK SUP SLB BM SIDES 1.5'H EL356**				**Quan:**	**2,109.00 SF**	**Hrs/Shft:**		**8.00**	**Cal: 508**	**WC: 1**	
C323	SMALL SHORE = 2L,1LF,2C,1CF		131.81	CH	Eff: 100.00	**Prod:**		**0.2500 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	2,109.00	SF		5.463			12,358			12,358

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$43,923.75	0.2500 MH/SF		527.25	MH	[7.284]	31,565		12,358			43,924
03759	**SH CW SUP WL 1.25'Tx8.33'Hx8-15LF 10EA E**		**Quan: 160.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C323	SMALL SHORE = 2L,1LF,2C,1CF		70.00	CH	Eff: 100.00	**Prod:**	**1.7500 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C30BBTM	Beam Bottom Fo@107.25%	1.00	160.00	SF	5.463			938			938
$17,700.61	1.7500 MH/SF		280.00	MH	[50.986]	16,763		938			17,701
03760	**F/SH ROOF FREE STNDG BM 2.7-3.3'Hx1.5-2'**		**Quan: 16,403.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C323	SMALL SHORE = 2L,1LF,2C,1CF		1,230.22	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C30BBTM	Beam Bottom Fo@107.25%	1.00	16,403.00	SF	5.463			96,119			96,119
$390,723.61	0.3000 MH/SF		4,920.91	MH	[8.741]	294,605		96,119			390,724
03760A	**ASSEMBLE/DISASSEMBLE BEAM GANGS**		**Quan: 1,592.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C323	SMALL SHORE = 2L,1LF,2C,1CF		199.00	CH	Eff: 100.00	**Prod:**	**0.5000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
$47,654.93	0.5000 MH/SF		796.00	MH	[14.568]	47,655					47,655
03781	**EF FLTR TK SUP WALK 8"Tx4'Wx6'H EL370.25**		**Quan: 1,144.50 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C323	SMALL SHORE = 2L,1LF,2C,1CF		85.83	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C35EFWF12	EF Sup. Walks & Flumes to	1.00	1,144.50	LF	5.463			6,253			6,253
$26,809.47	0.3000 MH/SF		343.36	MH	[8.741]	20,556		6,253			26,809
03789	**P FLTR TK SUP WALK 8"Tx4'Wx6'H EL370.25**		**Quan: 60.81 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		18.24	CH	Eff: 100.00	**Prod:**	**1.5000 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	63.24	CY	173.000		10,941				10,941
$16,053.69	1.5000 MH/CY		91.22	MH	[46.664]	5,113	10,941				16,054
03796	**RE-SHORE SUP SLAB**		**Quan: 12,374.00 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C321	LARGE FORM =2L,3C,1CF		40.00	CH	Eff: 100.00	**Prod:**	**0.0162 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00
3C35RESHSS	Re-Shore Sup. @107.25%	1.00	12,374.00	SF	0.422			5,600			5,600
$17,620.62	0.0161 MH/SF		200.00	MH	[0.467]	12,020		5,600			17,621
03811	**P HS PS SUMP PIT SLAB 1'T 2EA EL365.25**		**Quan: 2.70 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		1.35	CH	Eff: 100.00	**Prod:**	**2.5000 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	2.81	CY	173.000		486				486
$864.51	2.5000 MH/CY		6.75	MH	[77.774]	378	486				865
03812	**P BW GULLET SUP SLB 1'Tx4.83'SPANx3'H EL**		**Quan: 5.93 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		3.00	CH	Eff: 100.00	**Prod:**	**2.5295 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	6.17	CY	173.000		1,067				1,067
$1,908.20	2.5295 MH/CY		15.00	MH	[78.688]	841	1,067				1,908
03813	**P BW GULLET SUP SLB 1'Tx4.83'SPNx6'H 10P**		**Quan: 113.00 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C329	MED FLATWORK W/PUMP = 3L,1LF		11.30	CH	Eff: 100.00	**Prod:**	**0.8000 MU**	Lab Pcs: 8.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	117.52	CY	173.000		20,331				20,331
403RMPUMP2	Pump Slab 9" - 15"	1.00	113.00	CY	23.241					2,626	2,626
$27,997.01	0.8000 MH/CY		90.40	MH	[24.806]	5,040	20,331			2,626	27,997
03814	**P BW WASTE GULLT SUP SLB 1'Tx7.25'Wx9'H**		**Quan: 168.93 CY**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		42.00	CH	Eff: 100.00	**Prod:**	**1.2431 MU**	Lab Pcs: 5.00		Eqp Pcs:	0.00

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	175.69	CY	173.000		30,394				30,394
403RMPUMP2	Pump Slab 9" - 15"	1.00	168.93	CY	23.241					3,926	3,926
$46,091.81		1.2431 MH/CY	210.00	MH	[38.671]	11,771	30,394			3,926	46,092
03815	**P HS PS SUP SLB 1-1.33'Tx40'H 4002SF EL**				**Quan: 220.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C331	LRG FLATWORK W/PUMP = 5L,1LF		11.91	CH	Eff: 100.00	**Prod: 0.6500 MU**		Lab Pcs: 12.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	228.80	CY	173.000		39,582				39,582
403RMPUMP2	Pump Slab 9" - 15"	1.00	220.00	CY	23.241					5,113	5,113
$52,645.87		0.6500 MH/CY	143.00	MH	[20.069]	7,950	39,582			5,113	52,646
03816	**P GULLET SUP SLB 1.5'Tx8.83'Wx44LF 14EA**				**Quan: 308.52 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C327	SMALL FLATWORK =2L,2F,1FF		42.00	CH	Eff: 100.00	**Prod: 0.6807 MU**		Lab Pcs: 5.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	320.86	CY	173.000		55,509				55,509
403RMPUMP3	Pump Slabs 16" - 24"	1.00	308.52	CY	23.241					7,171	7,171
$74,450.56		0.6806 MH/CY	210.00	MH	[21.174]	11,771	55,509			7,171	74,451
03817	**P ROOF FREE STNDG BM 2.7-3.3'Hx1.5-2'Wx2**				**Quan: 429.96 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C327	SMALL FLATWORK =2L,2F,1FF		51.59	CH	Eff: 100.00	**Prod: 0.6000 MU**		Lab Pcs: 5.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	447.16	CY	173.000		77,359				77,359
$91,819.34		0.6000 MH/CY	257.98	MH	[18.665]	14,461	77,359				91,819
03818	**P PIPE GAL SUP SLAB 1.33'Tx20.4'H 9480SF**				**Quan: 480.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C331	LRG FLATWORK W/PUMP = 5L,1LF		24.00	CH	Eff: 100.00	**Prod: 0.6000 MU**		Lab Pcs: 12.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	499.20	CY	173.000		86,362				86,362
403RMPUMP3	Pump Slabs 16" - 24"	1.00	480.00	CY	23.241					11,156	11,156
$113,529.38		0.6000 MH/CY	288.00	MH	[18.525]	16,012	86,362			11,156	113,529
03819	**P FLTR TK SUP SLB 12-16"T 12375SF EL370**				**Quan: 502.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C331	LRG FLATWORK W/PUMP = 5L,1LF		33.46	CH	Eff: 100.00	**Prod: 0.8000 MU**		Lab Pcs: 12.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	522.08	CY	173.000		90,320				90,320
403RMPUMP3	Pump Slabs 16" - 24"	1.00	502.00	CY	23.241					11,667	11,667
$124,314.64		0.8000 MH/CY	401.60	MH	[24.7]	22,327	90,320			11,667	124,315
03820	**P CW SUP SLAB 1.67'Tx19'H 13121SF EL349.**				**Quan: 940.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C331	LRG FLATWORK W/PUMP = 5L,1LF		39.16	CH	Eff: 100.00	**Prod: 0.5000 MU**		Lab Pcs: 12.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	977.60	CY	173.000		169,125				169,125
403RMPUMP4	Pump Slabs > 24"	1.00	940.00	CY	23.241					21,847	21,847
$217,102.36		0.5000 MH/CY	470.00	MH	[15.438]	26,130	169,125			21,847	217,102
03821	**P FILTER TK SUP SLB 1.5'Tx25.5'H 18690SF**				**Quan: 1,192.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C331	LRG FLATWORK W/PUMP = 5L,1LF		49.66	CH	Eff: 100.00	**Prod: 0.5000 MU**		Lab Pcs: 12.00		Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.04	1,239.68	CY	173.000		214,465				214,465
403RMPUMP3	Pump Slabs 16" - 24"	1.00	1,192.00	CY	23.241					27,704	27,704
$275,304.24		0.5000 MH/CY	596.00	MH	[15.438]	33,135	214,465			27,704	275,304
03880	**P PC HC GROUT TOPPING 3"T 33,000SF EL384**				**Quan: 314.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C331	LRG FLATWORK W/PUMP = 5L,1LF		85.04	CH	Eff: 100.00	**Prod: 3.2500 MU**		Lab Pcs: 12.00		Eqp Pcs:	0.00
2C01HCTOP	HC TOPPING MIX	1.05	329.71	CY	141.500		46,654				46,654
403RMPUMP4	Pump Slabs > 24"	1.00	314.00	CY	23.241					7,298	7,298
$110,687.70		3.2500 MH/CY	1,020.50	MH	[100.344]	56,736	46,654			7,298	110,688

Cost Report

BID ITEM = 4033001 Land Item SCHEDULE: 1 100 BVN
Description = 4 - FTB/HSP - ORIGINAL Unit = CY Takeoff Quan: 17,220.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03905	**EF INT CURBS <12"H - MOSTLY STRAIGHT RUN**		**Quan: 4,108.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		410.80	CH	Eff: 100.00	Prod:	0.3000 MU	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C10C12	Curb to 12" Ht@107.25%	1.00	4,108.00	LF	5.463			24,072			24,072
$96,368.40	0.3000 MH/SF		1,232.40	MH	[8.636]	72,296		24,072			96,368
03910	**P INT CURBS <12"H**		**Quan: 17.33**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C314	2 LAB, 2 FINISHERS		17.33	CH	Eff: 100.00	Prod:	4.0000 MU	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	18.20	CY	173.000		3,149				3,149
$6,981.30	4.0000 MH/CY		69.32	MH	[122.44]	3,833	3,149				6,981
03914	**EF HS CONTAINMNT CURBS 1'Tx2.67'Hx113LF**		**Quan: 602.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		60.20	CH	Eff: 100.00	Prod:	0.3000 MU	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C10C12+	Curb > 12" Ht.@107.25%	1.00	602.00	SF	5.463			3,528			3,528
$14,122.14	0.3000 MH/SF		180.60	MH	[8.636]	10,595		3,528			14,122
03919	**P HS CONTAINMNT CURBS 1'Tx2.67'Hx113LF E**		**Quan: 11.15**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C327	SMALL FLATWORK =2L,2F,1FF		6.69	CH	Eff: 100.00	Prod:	3.0000 MU	Lab Pcs:	5.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	11.71	CY	173.000		2,026				2,026
$3,900.81	3.0000 MH/CY		33.45	MH	[93.324]	1,875	2,026				3,901
03927	**EF INT PADS <12"H**		**Quan: 16.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		1.86	CH	Eff: 100.00	Prod:	0.3500 MU	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C10EQ12	Equip. Pad to @107.25%	1.00	16.00	LF	5.463			94			94
$422.25	0.3500 MH/SF		5.60	MH	[10.076]	328		94			422
03932	**P INT PADS <12"H**		**Quan: 1.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C314	2 LAB, 2 FINISHERS		1.50	CH	Eff: 100.00	Prod:	6.0000 MU	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	1.05	CY	173.000		182				182
$513.39	6.0000 MH/CY		6.00	MH	[183.66]	332	182				513
03939	**EF INT PADS >12"H**		**Quan: 584.75**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		58.47	CH	Eff: 100.00	Prod:	0.3000 MU	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C10EQ12+	Equip. Pad > 1@107.25%	1.00	584.75	SF	5.463			3,427			3,427
$13,717.76	0.3000 MH/SF		175.43	MH	[8.636]	10,291		3,427			13,718
03944	**P INT PADS >12"H**		**Quan: 44.93**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C328	MED FLATWORK = 2L,1LF,3F,1FF		16.04	CH	Eff: 100.00	Prod:	2.5000 MU	Lab Pcs:	7.00	Eqp Pcs:	0.00
2C01HSX	CLASS HSX 5,500 PSI MI	1.05	47.18	CY	173.000		8,162				8,162
$14,453.79	2.5001 MH/CY		112.33	MH	[77.797]	6,292	8,162				14,454
03999	**CHIP TOP OF PILES 30"DIAx2'HT**		**Quan: 186.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		744.00	CH	Eff: 100.00	Prod:	8.0000 MU	Lab Pcs:	2.00	Eqp Pcs:	0.00
$80,236.41	8.0000 MH/EA		1,488.00	MH	[241.92]	80,236					80,236

=====> Item Totals: 4033001 - 4 - FTB/HSP - ORIGINAL

$13,489,688.34	6.8596 MH/CY		118,123.06	MH	[200.371]	7,022,168	3,688,666	2,313,488	8,372	456,994	**13,489,688**
783.373			17220	CY		407.79	214.21	134.35	0.49	26.54	783.37

Cost Report

PARENT ITEM = 4033010 BVN
Description = 4 - ELEC CONCRETE Unit = CY Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4033010:

BID ITEM = 4033011 Land Item SCHEDULE: 1 100 BVN
Description = ELEC INT PADS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**		**Quan: 278.46 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		0.20 CH	Eff: 100.00	**Prod:**	**0.0030 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	278.46 SF	0.032			10			10
$55.11	0.0030 MH/SF		0.84 MH	[0.092]	46		10			55
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 4.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	4.20 CY	5.000		21				21
03046	**ROUGHEN EXISTING MECHANICAL**		**Quan: 278.46 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		13.92 CH	Eff: 100.00	**Prod:**	**0.1000 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
$1,501.73	0.1000 MH/SF		27.85 MH	[3.024]	1,502					1,502
03050	**EPOXY BONDING AGENT <500 SF**		**Quan: 278.46 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		1.11 CH	Eff: 100.00	**Prod:**	**0.0080 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
2C23BE	Bonding-Epoxy	1.00	278.46 SF	1.150		320				320
$440.49	0.0080 MH/SF		2.23 MH	[0.242]	120	320				440
03171	**REBAR-FURNISH/INSTALL SEPARATE-PLAIN**		**Quan: 0.29 TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C10ESCL3	REBAR ESCALATION 20	1.00	0.29 TN	250.000		73				73
2C10RP	Rebar-Plain	1.00	0.29 TN	1,425.950		414				414
403REBARL	Rebar Install Sub	1.00	0.29 TN	1,331.700					386	386
$872.22				[ ]		486			386	872
03178	**D & G VERT TO 8" DP >100 EA**		**Quan: 141.70 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		10.62 CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	141.70 EA	3.150		446				446
$1,592.74	0.1500 MH/EA		21.26 MH	[4.537]	1,146	446				1,593
03937	**EF EQ PADS >12" H 20-100 SF**		**Quan: 141.70 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		16.53 CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C10EQ12+	Equip. Pad > 1@107.25%	1.00	141.70 SF	5.463			830			830
$3,739.44	0.3499 MH/SF		49.59 MH	[10.074]	2,909		830			3,739
03942	**P EQUIP PADS >12" H 2-8 CY**		**Quan: 3.40 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C314	2 LAB, 2 FINISHERS		4.25 CH	Eff: 100.00	**Prod:**	**5.0000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0105	SOG Concrete	1.05	3.57 CY	141.500		505				505
$1,445.09	5.0000 MH/CY		17.00 MH	[153.05]	940	505				1,445
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 4.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	4.20 CY	2.500		11				11
03999Z	**READYMIX ESCALATION**		**Quan: 4.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL3	2026 READYMIX ESCAL	1.05	4.20 CY	52.000		218				218

Cost Report

BID ITEM = 4033011 — Land Item — SCHEDULE: 1 100 — BVN
Description = ELEC INT PADS — Unit = CY — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**4033011 - ELEC INT PADS**										
$9,896.72	118.7700 MH/CY		118.77	MH	[3526.04]	6,663	2,008	840		386	**9,897**
9,896.720	1 CY					6,662.95	2,007.68	839.90		386.19	9,896.72

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**4033010 - 4 - ELEC CONCRETE**										
$9,896.72	**118.7700 MH/CY**		**118.77**	**MH**	**[3526.04]**	**6,663**	**2,008**	**840**		**386**	**9,897**
9,896.720	**1 CY**					**6,662.95**	**2,007.68**	**839.90**		**386.19**	**9,896.72**

BID ITEM = 4033015 — Land Item — SCHEDULE: 1 100 — BVN
Description = WINTER CONCRETE — Unit = CY — Takeoff Quan: 1.000 — Engr Quan: 0.000

03023 — Winter Concrete Protection MAY 2025 - MA — Quan: 4,931.00 CY — Hrs/Shft: 8.00 — Cal: 508 — WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C309	2 LAB, 1 LAB FOREMAN		328.73	CH	Eff: 100.00	**Prod: 0.2000 MU**		Lab Pcs: 3.00		Eqp Pcs: 0.00	
2C02A	Accelerator N/C 2%	0.75	3,698.25	CY	11.000		40,681				40,681
2C02H	Hot Water Winter Heat	1.00	4,931.00	CY	5.000		24,655				24,655
3C01WINTER	WINTER CONCRET@107	1.00	4,931.00	CY	4.500			23,798			23,798
8CXPWINTER2	==> Winter Heater for Conc	1.00	4,931.00	CY	6.600				32,545		32,545
$175,259.42	0.2000 MH/CY		986.20	MH	[6.119]	53,581	65,336	23,798	32,545		175,259
=====> **Item Totals:**	**4033015 - WINTER CONCRETE**										
$175,259.42	986.2000 MH/CY		986.20	MH	[30171.14]	53,581	65,336	23,798	32,545		**175,259**
175,259.420	1 CY					53,580.83	65,335.75	23,798.24	32,544.60		175,259.42

BID ITEM = 4033020 — Land Item — SCHEDULE: 1 100 — BVN
Description = READYMIX ADMIX & ESCLATIONS — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03040	**FIBERS 3 #/CY (FIBERMESH)**		**Quan: 306.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01MACRO	MACRO FIBER 3#/CY	1.05	321.30	CY	21.000		6,747				6,747
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan: 17,220.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	18,081.00	CY	5.000		90,405				90,405
03999	**CRYSTALLINE WATERPROOF ADMIX - TK CON**		**Quan: 17,220.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01CRYSTL	CRYSTALLINE WATERP	1.05	18,081.00	CY	40.000		723,240				723,240
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 18,008.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	18,908.40	CY	2.500		47,271				47,271
03999Z	**READYMIX ESCALATION MAY 2025 - MAY 2027**		**Quan: 18,008.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL2	2025 READYMIX ESCLA	0.25	4,502.00	CY	36.000		162,072				162,072
2C01ESCL3	2026 READYMIX ESCAL	0.55	9,904.40	CY	52.000		515,029				515,029
2C01ESCL4	2027 READYMIX ESCAL	0.25	4,502.00	CY	68.000		306,136				306,136

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4033020 Land Item SCHEDULE: 1 100 BVN
Description = READYMIX ADMIX & ESCLATIONS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

$983,236.80				[ ]		983,237				983,237

=====> Item Totals: 4033020 - READYMIX ADMIX & ESCLATIONS

$1,850,900.10				[ ]		1,850,900				**1,850,900**
1,850,900.100		1 LS				1,850,900.10				1,850,900.10

Total of Above Sub-Biditems

=====> Item Totals: 4033000 - CAST-IN-PLACE CONCRETE

$15,525,744.58	**119,228.0300 MH/LS**		**119,228.03 MH**	**[3484083.65]**	**7,082,412**	**5,606,909**	**2,338,126**	**40,917**	**457,380**	**15,525,745**
15,525,744.580		**1 LS**			**7,082,412.14**	**5,606,909.22**	**2,338,126.17**	**40,916.94**	**457,380.11**	**15,525,744.58**

BID ITEM = 4034000 Land Item SCHEDULE: 1 100 BVN
Description = PRECAST HOLLOWCORE PLANKS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

03876 POUR GROUT BETWEEN PLANKS Quan: 43.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C327	SMALL FLATWORK =2L,2F,1FF		86.00 CH	Eff: 100.00 **Prod: 10.0000 MU**		Lab Pcs: 5.00		Eqp Pcs: 0.00		
2C01HCTOP	HC TOPPING MIX	1.05	45.15 CY	141.500		6,389				6,389
$30,491.65	10.0000 MH/CY		430.00 MH	[311.08]	24,103	6,389				30,492

03997 SUB INSTALL HOLLOWCORE PLANK Quan: 33,907.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

2H02ESCL2	PC ESCALATION 2027	1.00	33,907.00 SF	5.770		195,643				195,643
403PC3	4 - FTB/HSP PC PLANKS	1.00	33,907.00 SF	25.840					876,157	876,157
$1,071,800.27				[ ]		195,643			876,157	1,071,800

=====> Item Totals: 4034000 - PRECAST HOLLOWCORE PLANKS

$1,102,291.92	430.0000 MH/LS		430.00 MH	[13376.44]	24,103	202,032			876,157	**1,102,292**
1,102,291.920		1 LS			24,102.92	202,032.12			876,156.88	1,102,291.92

BID ITEM = 4040000 Land Item SCHEDULE: 1 100 SAE
Description = MASONRY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80402 MASONRY SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

404MASONRY	Masonry Sub	1.05	1.05 LS	1,854,531.638					1,947,258	1,947,258

BID ITEM = 4050000 Land Item SCHEDULE: 1 100 RLC
Description = METALS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05995 Misc Metal Sub Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

405MMTL	Misc Metal Sub	1.00	1.00 LS	89,970.000					89,970	89,970

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4059000 Land Item SCHEDULE: 1 100 RLC
Description = METAL MATERIAL - FTB Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05601 Metals Materials Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
S503	3 IRONWORKERS PER HOUR		16.00 CH	Eff: 100.00	**Prod: 16.0000 HU**	Lab Pcs: 3.00		Eqp Pcs: 0.00		
2MM01-04	04FTB Metals	1.00	1.00 LS	464,850.000		464,850				464,850
$468,086.05	48.0000 MH/LS		48.00 MH	[1629.12]	3,236	464,850				468,086

=====> Item Totals: 4059000 - METAL MATERIAL - FTB

$468,086.05	48.0000 MH/LS		48.00 MH	[1629.12]	3,236	464,850				**468,086**
468,086.050	1 LS				3,236.05	464,850.00				468,086.05

BID ITEM = 4061000 Land Item SCHEDULE: 1 100 RLC
Description = ROUGH CARPENTRY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

06023 Install 2x8 Treated Nailer Quan: 1,891.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C602	(2) CARPENTER		40.00 CH	Eff: 100.00	**Prod: 47.2750 UH**	Lab Pcs: 2.00		Eqp Pcs: 0.00		
2W012X08NT	2x8 Treated Nailer	1.15	2,174.65 LF	2.850		6,198				6,198
$11,178.40	0.0423 MH/LF		80.00 MH	[1.232]	4,981	6,198				11,178

06031 Install 2x12 Treated Nailer Quan: 1,966.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C602	(2) CARPENTER		64.00 CH	Eff: 100.00	**Prod: 30.7188 UH**	Lab Pcs: 2.00		Eqp Pcs: 0.00		
2W012X12NT	2x12 Treated Nailer	1.15	2,260.90 LF	3.500		7,913				7,913
$15,882.19	0.0651 MH/LF		128.00 MH	[1.896]	7,969	7,913				15,882

=====> Item Totals: 4061000 - ROUGH CARPENTRY

$27,060.59	208.0000 MH/LS		208.00 MH	[6056.96]	12,950	14,111				**27,061**
27,060.590	1 LS				12,949.69	14,110.90				27,060.59

BID ITEM = 4071300 Land Item SCHEDULE: 1 100 RLC
Description = WATERPROOFING - SELF-ADHERING SHEET Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

07140 Fluid-Applied Waterproofing Sub (LS) Quan: 40,000.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
407WPROOF	Waterproofing Sub-Gen LS	1.00	1.00 LS	665,000.000					665,000	665,000

BID ITEM = 4075400 Land Item SCHEDULE: 1 100 SAE
Description = ROOFING - TPO Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80722 EPDM ROOFING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
407ROOFEPDM	EPDM Roofing Sub	1.05	1.05 LS	903,920.000					949,116	949,116

BID ITEM = 4079200 Land Item SCHEDULE: 1 100 SAE
Description = JOINT SEALANTS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80728 CAULKING AND SEALANTS SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Cost Report

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 4079200	Description = JOINT SEALANTS			Land Item, Unit = LS	SCHEDULE: 1 100	Takeoff Quan: 1.000		Engr Quan:		SAE 0.000
407CAULK	Caulking Sub	1.00	1.00 LS	92,500.000					92,500	92,500
BID ITEM = 4081100	Description = DOORS, FRAMES & HARDWARE			Land Item, Unit = LS	SCHEDULE: 1 100	Takeoff Quan: 1.000		Engr Quan:		RLC 0.000
08129	**Door Sub - HM SS FRP WD**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
408DOOR-4	Door Sub FTB	1.00	1.00 LS	9,096.000					9,096	9,096
08160	**Door Material - LS**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2D01-04	FTB Door Material	1.00	1.00 LS	57,010.000		57,010				57,010
=====> **Item Totals: 4081100**	**- DOORS, FRAMES & HARDWARE**									
$66,106.00				[ ]		57,010			9,096	**66,106**
66,106.000		1 LS				57,010.00			9,096.00	66,106.00
BID ITEM = 4081200	Description = ALUMINUM DOORS			Land Item, Unit = LS	SCHEDULE: 1 100	Takeoff Quan: 1.000		Engr Quan:		RLC 0.000
=====> **Item Totals: 4081200**	**- ALUMINUM DOORS**									
$0.00				[ ]						
0.000		1 LS								
BID ITEM = 4083300	Description = COILING OVERHEAD DOORS			Land Item, Unit = LS	SCHEDULE: 1 100	Takeoff Quan: 1.000		Engr Quan:		RLC 0.000
08310	**OH Door Sub**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
408OHDOOR	Overhead Door Sub	1.00	1.00 LS	35,940.000					35,940	35,940
BID ITEM = 4084100	Description = ALUMINUM ENTRANCES & STOREFRONTS			Land Item, Unit = LS	SCHEDULE: 1 100	Takeoff Quan: 1.000		Engr Quan:		RLC 0.000
08430	**Storefront Sub (LS)**			**Quan: 27,291.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
408STOREFRNT	Storefront Sub	1.00	1.00 LS	937,570.000					937,570	937,570
BID ITEM = 4088000	Description = GLAZING			Land Item, Unit = LS	SCHEDULE: 1 100	Takeoff Quan: 1.000		Engr Quan:		RLC 0.000
08810	**Glass & Glazing Sub**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
408G&G	Glass & Glazing Sub	1.00	1.00 LS	7,000.000					7,000	7,000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4099000 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING & COATING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80916 PAINTING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

409PAINTING	Painting Sub	1.05	1.05 LS	578,619.141					607,550	607,550

BID ITEM = 4099600 Land Item SCHEDULE: 1 100 SAE
Description = COATING FOR CHEMICAL AREAS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80918 CHEMICAL COATING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

409HIGHPROC	High Preformance Coat Sub	1.05	1.05 LS	250,000.000					262,500	262,500

BID ITEM = 4101400 Land Item SCHEDULE: 1 100 SAE
Description = SIGNS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10401 SIGN MATERIAL Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

2S14-LS	Signs - LS	1.00	1.00 LS	4,113.000		4,113				4,113

10402 Install Interior ID Signs Quan: 44.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 22.00 CH Eff: 100.00 **Prod: 0.5000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$1,342.73 0.5000 MH/EA 22.00 MH [14.03] 1,343 1,343

=====> **Item Totals: 4101400 - SIGNS**
$5,455.73 22.0000 MH/LS 22.00 MH [617.32] 1,343 4,113 **5,456**
5,455.730 1 LS 1,342.73 4,113.00 5,455.73

BID ITEM = 4104400 Land Item SCHEDULE: 1 100 SAE
Description = FIRE PROTECTION CABINETS & FIRE EXTINGUI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10600 *FIRE EXTINGUISHERS, CABINETS, AND ACC.* Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

2S11	FIRE EXTINGUISHERS	1.00	1.00 LS	1,924.000		1,924				1,924

10606 INSTALL FIRE EXTINGUISER IN BRACKET Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 10.00 CH Eff: 100.00 **Prod: 1.0000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$610.33 1.0000 MH/EA 10.00 MH [28.06] 610 610

=====> **Item Totals: 4104400 - FIRE PROTECTION CABINETS & FIRE EXTINGUI**
$2,534.33 10.0000 MH/LS 10.00 MH [280.6] 610 1,924 **2,534**
2,534.330 1 LS 610.33 1,924.00 2,534.33

BID ITEM = 4220000 Land Item SCHEDULE: 1 100 ERS
Description = PLUMBING(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

22000 PLUMBING SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4220000 Land Item SCHEDULE: 1 100 ERS
Description = PLUMBING(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415PLUMBING	Plumbing Sub	1.00	1.00	LS	343,356.000					343,356	343,356

BID ITEM = 4230000 Land Item SCHEDULE: 1 100 ERS
Description = HVAC(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

23000 HVAC SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415HVAC	HVAC Sub	1.00	1.00	LS	841,768.000					841,768	841,768

BID ITEM = 4260000 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

26000 Electrical Sub(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416ELECTRIC	Electrical Sub	1.00	1.00	LS	4,588,548.000					4,588,548	4,588,548

BID ITEM = 4270000 Land Item SCHEDULE: 1 100 REM
Description = INSTRUMENTATION & CONTROL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

27000 I & C SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416I&C	Instrumentation-Control Su	1.00	1.00	LS	2,668,140.000					2,668,140	2,668,140

PARENT ITEM = 4320000 BCL
Description = EARTHWORK - REVISED Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4320000:

BID ITEM = 4320100 Land Item SCHEDULE: 1 100 BCL
Description = EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

210-01 EXCAVATE --> STOCKPILE/DUMPSITE Quan: 102,662.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260A Excavation - Mass 1,140.68 CH Eff: 100.00 **Prod: 90.0000 UH** Lab Pcs: 4.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
5DUMP	Dump Fee	1.00	102,662.00	CY	4.000			410,648			410,648
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	6,844.20	HR	130.000			889,746			889,746
$1,820,631.01	0.0444 MH/CY		4,562.76	MH	[1.643]	284,456		1,300,394	235,781		1,820,631

210-02 SUBGRADE PREP Quan: 6,087.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260A Excavation - Mass 243.48 CH Eff: 100.00 **Prod: 25.0000 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$73,701.58	0.1200 MH/SY		730.44	MH	[4.188]	43,637			30,065		73,702

210-03 STONE BASE 12" Quan: 2,029.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260A Excavation - Mass 202.90 CH Eff: 100.00 **Prod: 10.0000 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2A0108	#8 Aggregate	1.00	4,058.00	TN	33.660		136,592				136,592
$198,010.25	0.3000 MH/CY		608.70	MH	[10.47]	36,364	136,592		25,054		198,010

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4320100 Land Item SCHEDULE: 1 100 BCL
Description = EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

210-04 BACKFILL - GRAN **Quan: 22,924.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**

C270T Backfill - Telebelt 1,146.20 CH Eff: 100.00 **Prod: 20.0000 UH** Lab Pcs: 5.00 Eqp Pcs: 3.00
2A0108 #8 Aggregate 1.00 45,848.00 TN 33.660 1,543,244 1,543,244
$2,113,082.20 0.2500 MH/CY 5,731.00 MH [8.905] 347,636 1,543,244 222,202 2,113,082

=====> **Item Totals: 4320100 - EXC & BF**
$4,205,425.04 11,632.9000 MH/LS 11,632.90 MH [419536.64] 712,093 1,679,836 1,300,394 513,102 **4,205,425**
4,205,425.040 1 LS 712,093.22 1,679,835.96 1,300,394.00 513,101.86 4,205,425.04

BID ITEM = 4320150 Land Item SCHEDULE: 1 100 BCL
Description = ACP Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

220-01 AUGERCAST PILE **Quan: 44,814.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1**

402ACP16A Augercast Pile - 16" All Inc 1.00 44,814.00 LF 100.000 4,481,400 4,481,400

BID ITEM = 4320200 Land Item SCHEDULE: 1 100 BCL
Description = TERS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

230-01 TERS **Quan: 45,632.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1**

402TERS Temp Earth Retention Sub 1.00 45,632.00 SF 150.000 6,844,800 6,844,800

Total of Above Sub-Biditems

=====> **Item Totals: 4320000 - EARTHWORK - REVISED**
$15,531,625.04 11,632.9000 MH/LS 11,632.90 MH [419536.64] 712,093 1,679,836 1,300,394 513,102 11,326,200 15,531,625
15,531,625.040 1 LS 712,093.22 1,679,835.96 1,300,394.00 513,101.86 11,326,200.00 15,531,625.04

BID ITEM = 4410000 Land Item SCHEDULE: 1 100 RLC
Description = CRANES & HOISTS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

412102 Erect Crane Rail **Quan: 4.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

S510 4 MAN IW ERECTION CREW 2.00 CH Eff: 100.00 **Prod: 2.0000 UH** Lab Pcs: 4.00 Eqp Pcs: 0.00
$544.87 2.0000 MH/EA 8.00 MH [69.075] 545 545

412104 Detail/Align Crane Rail **Quan: 84.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1**

S520 IW BOLT UP PER HOUR 21.00 CH Eff: 100.00 **Prod: 4.0000 UH** Lab Pcs: 1.00 Eqp Pcs: 0.00
$1,415.77 0.2500 MH/LF 21.00 MH [8.485] 1,416 1,416

412106 Install End Truck **Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1**

S551 MISC. METALS CREW-TP JOB 1.50 CH Eff: 100.00 **Prod: 3.0000 MU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$206.40 3.0000 MH/EA 3.00 MH [105.41] 206 206

Cost Report

Activity / Resource	Desc	Pcs	Quantity / Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4410000 Land Item SCHEDULE: 1 100 RLC
Description = CRANES & HOISTS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

412108 Erect Crane Girders Quan: 4.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

S511	5 MAN IW ERECTION CREW	1.00 CH	Eff: 100.00	**Prod:**	**4.0000 UH**	Lab Pcs: 5.00	Eqp Pcs:	0.00
$341.07	1.2500 MH/EA	5.00 MH	[43.288]	341				341

412110 Install Hoist & Trolley Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

S503	3 IRONWORKERS PER HOUR	8.00 CH	Eff: 100.00	**Prod:**	**8.0000 HU**	Lab Pcs: 3.00	Eqp Pcs:	0.00
$1,618.02	24.0000 MH/EA	24.00 MH	[814.56]	1,618				1,618

412112 Install Festoon/Track Quan: 42.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

S520	IW BOLT UP PER HOUR	2.10 CH	Eff: 100.00	**Prod:**	**20.0000 UH**	Lab Pcs: 1.00	Eqp Pcs:	0.00
$141.57	0.0500 MH/LF	2.10 MH	[1.697]	142				142

412114 Install End Stops Quan: 4.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

S520	IW BOLT UP PER HOUR	2.00 CH	Eff: 100.00	**Prod:**	**2.0000 UH**	Lab Pcs: 1.00	Eqp Pcs:	0.00
$134.84	0.5000 MH/EA	2.00 MH	[16.97]	135				135

412990 Bridge Crane Material Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

S520	IW BOLT UP PER HOUR		4.00 CH	Eff: 100.00	**Prod:**	**4.0000 HU**	Lab Pcs: 1.00	Eqp Pcs:	0.00
2MH10-04	FTB Crane Material	1.05	1.05 LS	68,155.000		71,563			71,563
$71,832.42	4.0000 MH/LS		4.00 MH	[135.76]	270	71,563			71,832

=====> Item Totals: 4410000 - CRANES & HOISTS

$76,234.96	69.1000 MH/LS	69.10 MH	[2357.07]	4,672	71,563	**76,235**
76,234.960	1 LS			4,672.21	71,562.75	76,234.96

PARENT ITEM = 4430000 TAL
Description = PROCESS EQUIPMENT PACKAGES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4430000:

BID ITEM = 4431000 Land Item SCHEDULE: 1 100 JWA
Description = FILTRATION BLDG EQ PKGS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

4431251 AIR COMPRESSOR PKG Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

2EQ431251-04	AIR COMPRESSOR PKG	1.00	1.00 LS	28,771.000	28,771	28,771

4432111 SAMPLE PUMP PKG Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

2EQ432111-04	SAMPLE PUMP PKG	1.00	1.00 LS	5,744.000	5,744	5,744

4432113 HS PUMP PKG Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

2EQ432113-04	HIGH SERVICE PUMP PK	1.00	1.00 LS	894,420.000	894,420	894,420

=====> Item Totals: 4431000 - FILTRATION BLDG EQ PKGS

$928,935.00		[ ]	928,935	**928,935**
928,935.000	1 LS		928,935.00	928,935.00

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4431000 Land Item SCHEDULE: 1 100 JWA
Description = FILTRATION BLDG EQ PKGS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Total of Above Sub-Biditems

=====> Item Totals: 4430000 - PROCESS EQUIPMENT PACKAGES - KII

$928,935.00		**[ ]**	**928,935**		**928,935**
928,935.000	**1 LS**		**928,935.00**		**928,935.00**

PARENT ITEM = 4435000 JWA
Description = PROCESS EQUIPMENT INSTALL - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 4435000:

PARENT ITEM = 4435010 JWA
Description = INSTALL GRAVITY FILTERS - BASE 10 Unit = EA Takeoff Quan: 10.000 Engr Quan: 10.000

Listing of Sub-Biditems of Parent Item 4435010:

BID ITEM = 4435012 Land Item SCHEDULE: 1 100 JWA
Description = INSTALL GRAVITY FILTER MEDIA Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466113.1 PLACE CONTINUOUS LEVEL LINES Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P102	2 WRENCHERS		5.00 CH	Eff: 66.67	**Prod: 0.3334 HU**	Lab Pcs: 2.00		Eqp Pcs:		0.00
$557.60	1.0000 MH/EA		10.00 MH	[31.83]	558					558

466113.2 INSTALL FILTER SAND Quan: 9,680.00 CF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P101	ONE WRENCHER		108.00 CH	Eff: 67.00	**Prod: 0.0150 MU**	Lab Pcs: 2.00		Eqp Pcs:		0.00
2MC1000	$1000 Misc Material Cost	1.00	1.00 EA	1,000.000		1,000				1,000
$13,176.34	0.0223 MH/CF		216.00 MH	[0.722]	12,176	1,000				13,176

466113.3 BACKWASH FILTER SAND Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
LF	==> LABORER FOREMA	1.00	10.00 MH	31.300	551					551
$551.47	1.0000 MH/EA		10.00 MH	[31.3]	551					551

466113.4 SKIM FILTER SAND Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P103	3 WRENCHERS		36.00 CH	Eff: 67.00	**Prod: 133.7756 UM**	Lab Pcs: 3.00		Eqp Pcs:		0.00
$6,066.13	0.0111 MH/SF		108.00 MH	[0.359]	6,066					6,066

466113.5 INSTALL GAC MEDIA Quan: 45,173.00 CF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P101	ONE WRENCHER		285.00 CH	Eff: 67.00	**Prod: 0.0085 MU**	Lab Pcs: 2.00		Eqp Pcs:		0.00
$32,132.03	0.0126 MH/CF		570.00 MH	[0.408]	32,132					32,132

466113.6 FILTER MEDIA TESTING Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P101	ONE WRENCHER		10.00 CH	Eff: 100.00	**Prod: 10.0000 HU**	Lab Pcs: 1.00		Eqp Pcs:		0.00
4FLTMATTEST	FILTER MATERIAL TEST	1.00	10.00 EA	1,785.000					17,850	17,850
$18,407.60	10.0000 MH/LS		10.00 MH	[318.3]	558				17,850	18,408

466113.9 FILTER MEDIA INSTAL MISC COSTS Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
3FILTERMISC	MISC NEEDS FOR@107.2	1.00	1.00 LS	5,000.000			5,363			5,363

Cost Report

BID ITEM = 4435012 Land Item SCHEDULE: 1 100 JWA
Description = INSTALL GRAVITY FILTER MEDIA Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
8VPRENT	==> RENTAL PUMP FOR	1.00	2.00	MO	1,600.000				3,200		3,200
$8,562.50					[ ]			5,363	3,200		8,563

492000.2 DISINFECT GRAVITY FILTERS Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P102	2 WRENCHERS		10.00	CH	Eff: 100.00	**Prod:**	**1.0000 HU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
3MHYPOPUMP	TEMP PUMP TO F@107.2	1.00	1.00	EA	250.000			268			268
3MSODIUMHYP	SODIUM HYPO FO@107.	1.00	60.00	GAL	8.000			515			515
$1,898.12		2.0000 MH/EA	20.00	MH	[63.66]	1,115		783			1,898

492000.3 DECHLORINATE FILTER CELL Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P102	2 WRENCHERS		10.00	CH	Eff: 100.00	**Prod:**	**1.0000 HU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
3MTHIOSULF	SODIUM THIOSUL@107.	1.00	50.00	LB	3.000			161			161
$1,276.07		2.0000 MH/EA	20.00	MH	[63.66]	1,115		161			1,276

=====> Item Totals: 4435012 - INSTALL GRAVITY FILTER MEDIA

						Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$82,627.86		964.0000 MH/LS	964.00	MH	[31133.56]	54,272	1,000	6,306	3,200	17,850	**82,628**
82,627.860		1 LS				54,271.55	1,000.00	6,306.31	3,200.00	17,850.00	82,627.86

BID ITEM = 4435014 Land Item SCHEDULE: 1 100 JWA
Description = INSTALL GRAVITY FILTER UNDERDRAINS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466124.1 UNLOAD & STORE FILTER UNDERDRAINS Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P102	2 WRENCHERS		20.00	CH	Eff: 100.00	**Prod:**	**2.0000 HU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
$2,230.38		4.0000 MH/EA	40.00	MH	[127.32]	2,230					2,230

466124.2 ASSEMBLE FILTER BLOCKS & STAGE IN CELL Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P104	4 WRENCHERS		68.00	CH	Eff: 67.00	**Prod:**	**53.1168 UM**	Lab Pcs:	4.00	Eqp Pcs:	0.00
$15,249.89		0.0280 MH/SF	272.00	MH	[0.902]	15,250					15,250

466124.3 INSTALL ANCHORS AND GROUT SEAL Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P102	2 WRENCHERS		130.00	CH	Eff: 100.00	**Prod:**	**0.0134 HU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
$14,497.49		0.0268 MH/SF	260.00	MH	[0.855]	14,497					14,497

466124.4 INSTALL UNDERDRAIN PROTECTION Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P102	2 WRENCHERS		40.00	CH	Eff: 100.00	**Prod:**	**4.0000 HU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
3MCADHESFIL	ADHESIVE PROTE@107.	1.00	20.00	EA	50.000			1,073			1,073
3MCHDPEEXP	HDPE EXPANSION@107.	1.50	45.00	EA	275.000			13,272			13,272
$18,805.46		8.0000 MH/EA	80.00	MH	[254.64]	4,461		14,345			18,805

466124.5 INSTALL UNDERDRAINS Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P104	4 WRENCHERS		100.00	CH	Eff: 67.00	**Prod:**	**24.0796 UM**	Lab Pcs:	6.00	Eqp Pcs:	0.00
2C03N	Non-Shrink Grout	1.00	13.50	CF	35.000		473				473
3MC2XSPACE	2X2X18" WOODEN@107.	1.00	35.00	EA	1.000			38			38
$35,143.02		0.0619 MH/SF	600.00	MH	[1.906]	34,633	473	38			35,143

466124.6 GROUT UNDERDRAINS Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C326	FOOTING POUR CREW = 2L,1LF,1		140.00	CH	Eff: 67.00	**Prod:**	**25.7996 UM**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C0111	Topping Grout Concrete	1.00	180.00	CY	153.000		27,540				27,540
$58,290.88		0.0578 MH/SF	560.00	MH	[1.775]	30,751	27,540				58,291

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4435014 Land Item SCHEDULE: 1 100 JWA
Description = INSTALL GRAVITY FILTER UNDERDRAINS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466124.7 REMOVE UNDERDRAIN PROTECTION & CLEAN Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P102	2 WRENCHERS	180.00 CH	Eff: 67.00	**Prod: 12.0600 HU**	Lab Pcs: 2.00	Eqp Pcs: 0.00				
$20,073.44	36.0000 MH/EA	360.00 MH		[1145.88]	20,073					20,073

=====> Item Totals: 4435014 - INSTALL GRAVITY FILTER UNDERDRAINS

$164,290.56	2,172.0000 MH/LS	2,172.00 MH		[67920.44]	121,896	28,013	14,382			**164,291**
164,290.560	1 LS				121,895.83	28,012.50	14,382.23			164,290.56

Total of Above Sub-Biditems

=====> Item Totals: 4435010 - INSTALL GRAVITY FILTERS - BASE 10

$246,918.42	**313.6000 MH/EA**	**3,136.00 MH**		**[9905.4]**	**176,167**	**29,013**	**20,689**	**3,200**	**17,850**	**246,918**
24,691.842	**10 EA**				**17,616.74**	**2,901.25**	**2,068.85**	**320.00**	**1,785.00**	**24,691.84**

PARENT ITEM = 4435050
Description = INSTALL GRAVITY FILTERS - ADD 4 Unit = EA Takeoff Quan: 4.000 Engr Quan: 4.000

Listing of Sub-Biditems of Parent Item 4435050:

BID ITEM = 4435060 Land Item SCHEDULE: 1 100
Description = INSTALL GRAVITY FILTER MEDIA Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466113.1 PLACE CONTINUOUS LEVEL LINES Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P102	2 WRENCHERS	3.33 CH	Eff: 100.00	**Prod: 0.3334 HU**	Lab Pcs: 2.00	Eqp Pcs: 0.00				
$371.92	0.6670 MH/EA	6.67 MH		[21.231]	372					372

466113.2 INSTALL FILTER SAND Quan: 9,680.00 CF Hrs/Shft: 8.00 Cal: 508 WC: 1

P101	ONE WRENCHER	145.20 CH	Eff: 100.00	**Prod: 0.0300 MU**	Lab Pcs: 2.00	Eqp Pcs: 0.00				
2MC1000	$1000 Misc Material Cost	1.00	1.00 EA	1,000.000		1,000				1,000
$17,370.44	0.0300 MH/CF	290.40 MH		[0.971]	16,370	1,000				17,370

466113.3 BACKWASH FILTER SAND Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

LF	==> LABORER FOREMA	1.00	10.00 MH	31.300	551					551
$551.47	1.0000 MH/EA	10.00 MH		[31.3]	551					551

466113.4 SKIM FILTER SAND Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

P103	3 WRENCHERS	24.12 CH	Eff: 100.00	**Prod: 133.7756 UM**	Lab Pcs: 3.00	Eqp Pcs: 0.00				
$4,064.32	0.0074 MH/SF	72.36 MH		[0.241]	4,064					4,064

466113.5 INSTALL GAC MEDIA Quan: 45,173.00 CF Hrs/Shft: 8.00 Cal: 508 WC: 1

P101	ONE WRENCHER	383.97 CH	Eff: 100.00	**Prod: 0.0170 MU**	Lab Pcs: 2.00	Eqp Pcs: 0.00				
$43,290.29	0.0169 MH/CF	767.94 MH		[0.55]	43,290					43,290

466113.6 FILTER MEDIA TESTING Quan: 2.50 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4435060 Land Item SCHEDULE: 1 100
Description = INSTALL GRAVITY FILTER MEDIA Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

P101 ONE WRENCHER 25.00 CH Eff: 100.00 **Prod: 10.0000 HU** Lab Pcs: 0.40 Eqp Pcs: 0.00
4FLTMATTEST FILTER MATERIAL TEST 1.00 10.00 EA 1,785.000 17,850 17,850
$18,407.60 4.0000 MH/LS 10.00 MH [127.32] 558 17,850 18,408

492000.2 DISINFECT GRAVITY FILTERS Quan: 4.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P102 2 WRENCHERS 4.00 CH Eff: 100.00 **Prod: 1.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00
3MSODIUMHYP SODIUM HYPO FO@107. 1.00 25.00 GAL 8.000 215 215
$660.58 2.0000 MH/EA 8.00 MH [63.66] 446 215 661

492000.3 DECHLORINATE FILTER CELL Quan: 4.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P102 2 WRENCHERS 4.00 CH Eff: 100.00 **Prod: 1.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00
3MTHIOSULF SODIUM THIOSUL@107. 1.00 20.00 LB 3.000 64 64
$510.43 2.0000 MH/EA 8.00 MH [63.66] 446 64 510

=====> Item Totals: 4435060 - INSTALL GRAVITY FILTER MEDIA
$85,227.05 1,173.3700 MH/LS 1,173.37 MH [37929.57] 66,098 1,000 279 17,850 **85,227**
85,227.050 1 LS 66,098.20 1,000.00 278.85 17,850.00 85,227.05

BID ITEM = 4435070 Land Item SCHEDULE: 1 100
Description = INSTALL GRAVITY FILTER UNDERDRAINS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466124.1 UNLOAD & STORE FILTER UNDERDRAINS Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P102 2 WRENCHERS 20.00 CH Eff: 100.00 **Prod: 2.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$2,230.38 4.0000 MH/EA 40.00 MH [127.32] 2,230 2,230

466124.2 ASSEMBLE FILTER BLOCKS & STAGE IN CELL Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

P104 4 WRENCHERS 45.56 CH Eff: 100.00 **Prod: 53.1168 UM** Lab Pcs: 4.00 Eqp Pcs: 0.00
$10,217.43 0.0188 MH/SF 182.24 MH [0.604] 10,217 10,217

466124.3 INSTALL ANCHORS AND GROUT SEAL Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

P102 2 WRENCHERS 130.00 CH Eff: 100.00 **Prod: 0.0134 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00
$14,497.49 0.0268 MH/SF 260.00 MH [0.855] 14,497 14,497

466124.4 INSTALL UNDERDRAIN PROTECTION Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

P102 2 WRENCHERS 40.00 CH Eff: 100.00 **Prod: 4.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00
3MCADHESFIL ADHESIVE PROTE@107. 1.00 20.00 EA 50.000 1,073 1,073
3MCHDPEEXP HDPE EXPANSION@107. 1.50 45.00 EA 275.000 13,272 13,272
$18,805.46 8.0000 MH/EA 80.00 MH [254.64] 4,461 14,345 18,805

466124.5 INSTALL UNDERDRAINS Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

P104 4 WRENCHERS 100.49 CH Eff: 100.00 **Prod: 16.0531 UM** Lab Pcs: 6.00 Eqp Pcs: 0.00
2C03N Non-Shrink Grout 1.00 13.50 CF 35.000 473 473
3MC2XSPACE 2X2X18" WOODEN@107. 1.00 35.00 EA 1.000 38 38
$35,316.19 0.0622 MH/SF 603.00 MH [1.916] 34,806 473 38 35,316

466124.6 GROUT UNDERDRAINS Quan: 9,680.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

C326 FOOTING POUR CREW = 2L,1LF,1 93.80 CH Eff: 100.00 **Prod: 25.7996 UM** Lab Pcs: 4.00 Eqp Pcs: 0.00
2C0111 Topping Grout Concrete 1.00 180.00 CY 153.000 27,540 27,540
$48,143.09 0.0387 MH/SF 375.20 MH [1.19] 20,603 27,540 48,143

Cost Report

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 4435070 Land Item SCHEDULE: 1 100
Description = INSTALL GRAVITY FILTER UNDERDRAINS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466124.7 REMOVE UNDERDRAIN PROTECTION & CLEAN Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
P102	2 WRENCHERS	120.60 CH	Eff: 100.00	**Prod: 12.0600 HU**	Lab Pcs: 2.00			Eqp Pcs: 0.00		
$13,449.22	24.1200 MH/EA	241.20 MH		[767.74]	13,449					13,449

=====> **Item Totals: 4435070 - INSTALL GRAVITY FILTER UNDERDRAINS**

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$142,659.26	1,781.6400 MH/LS	1,781.64 MH		[55678.93]	100,265	28,013	14,382			**142,659**
142,659.260	1 LS				100,264.53	28,012.50	14,382.23			142,659.26

BID ITEM = 4435080 Land Item SCHEDULE: 1 100
Description = GRAVITY FILTRATION SYSTEM - ADD 4 Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

466123AP GRAVITY FILTERS ALT PKG Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2EQ466123-A	ALTERNATE (ADDITION	1.00	1.00 LS	2,580,500.000		2,580,500				2,580,500

=====> **Item Totals: 4435080 - GRAVITY FILTRATION SYSTEM - ADD 4**

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$2,580,500.00				[ ]		2,580,500				**2,580,500**
2,580,500.000	1 LS					2,580,500.00				2,580,500.00

Total of Above Sub-Biditems

=====> **Item Totals: 4435050 - INSTALL GRAVITY FILTERS - ADD 4**

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$2,808,386.31	**738.7525 MH/EA**	**2,955.01 MH**		**[23402.125]**	**166,363**	**2,609,513**	**14,661**		**17,850**	**2,808,386**
702,096.578	**4 EA**				**41,590.68**	**652,378.13**	**3,665.27**		**4,462.50**	**702,096.58**

Total of Above Sub-Biditems

=====> **Item Totals: 4435000 - PROCESS EQUIPMENT INSTALL - KII**

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$3,055,304.73	**6,091.0100 MH/LS**	**6,091.01 MH**		**[192662.5]**	**342,530**	**2,638,525**	**35,350**	**3,200**	**35,700**	**3,055,305**
3,055,304.730	**1 LS**				**342,530.11**	**2,638,525.00**	**35,349.62**	**3,200.00**	**35,700.00**	**3,055,304.73**

BID ITEM = 4440000 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS EQUIPMENT INSTALL - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215501 xx PROCESS EQUIPMENT INSTALL Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415EQUISTER	Sterling Industrial Process	1.00	1.00 LS	132,607.000					132,607	132,607

Total of Above Sub-Biditems

=====> **Item Totals: 4000000 - FILTER BLDG(FTB)/CLEARWELLS/HS PUMP BLDG**

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$58,434,076.01	**137,739.0400 MH/LS**	**137,739.04 MH**		**[4120600.3]**	**8,183,949**	**15,820,826**	**3,673,870**	**557,219**	**30,198,212**	**58,434,076**

Cost Report

Activity / Resource	Desc	Pcs	Quantity / Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 4440000					Land Item SCHEDULE: 1 100						ERS
Description = PROCESS EQUIPMENT INSTALL - STERLING					Unit = LS Takeoff Quan: 1.000					Engr Quan:	0.000
58,434,076.010	**1 LS**					**8,183,949.40**	**15,820,826.32**	**3,673,869.79**	**557,218.80**	**30,198,211.70**	**58,434,076.01**

PARENT ITEM = 5000000 CLIENT# = 6 ALL
Description = RESIDUALS PUMP STATION(RPS) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 5000000:

BID ITEM = 5032000 Land Item SCHEDULE: 1 100 BVN
Description = CONCRETE REINFORCEMENT Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03171	**REBAR-FURNISH/INSTALL JUNE 2026 - JAN 20**		**Quan: 236.00**	**TN**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C10ESCL3	REBAR ESCALATION 20	0.86	202.96	TN	250.000		50,740				50,740
2C10ESCL4	REBAR ESCALATION 20	0.14	33.04	TN	350.000		11,564				11,564
2C10RP	Rebar-Plain	1.00	236.00	TN	1,425.950		336,524				336,524
403REBARL	Rebar Install Sub	1.00	236.00	TN	1,331.700					314,281	314,281
$713,109.40					[ ]		398,828			314,281	713,109
03171M	**REBAR- MASONRY 2027**		**Quan: 5.00**	**TN**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C10ESCL4	REBAR ESCALATION 20	1.00	5.00	TN	350.000		1,750				1,750
2C10RP1	MASONRY REBAR	1.00	5.00	TN	1,425.950		7,130				7,130
$8,879.75					[ ]		8,880				8,880
03171P	**REBAR DILLED PIERS APRIL 2025- JUNE 202**		**Quan: 75.00**	**TN**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C10DRILLED	DRILLED PIER REBAR	1.00	75.00	TN	1,425.950		106,946				106,946
2C10ESCL2	REBAR ESCALATION 20	1.00	75.00	TN	150.000		11,250				11,250
403REBARL	Rebar Install Sub	1.00	75.00	TN	1,331.700					99,878	99,878
$218,073.75					[ ]		118,196			99,878	218,074
=====> Item Totals:	**5032000 - CONCRETE REINFORCEMENT**										
$940,062.90					[ ]		525,904			414,159	**940,063**
940,062.900	1 LS						525,904.20			414,158.70	940,062.90

PARENT ITEM = 5033000 BVN
Description = CAST-IN-PLACE CONCRETE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 5033000:

BID ITEM = 5033001 Land Item SCHEDULE: 1 100 BVN
Description = 5 - RPS Unit = CY Takeoff Quan: 2,420.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03001	**FILL TIE HOLES: STEEL-PLY**		**Quan: 37,330.00**	**SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C302	2 FINISHERS		373.30	CH	Eff: 100.00 **Prod: 0.0200 MU**			Lab Pcs: 2.00		Eqp Pcs:	0.00
2C21F	Fill Tie Holes	1.00	37,330.00	SF	0.030			1,120			1,120
$43,420.31	0.0200 MH/SF		746.60	MH	[0.62]	42,300		1,120			43,420
03007	**WATER CURE**		**Quan: 47,701.60**	**SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C334	3 LAB, 1 LAB FOREMAN		35.77	CH	Eff: 100.00 **Prod: 0.0030 MU**			Lab Pcs: 4.00		Eqp Pcs:	0.00

BID ITEM = 5033001 Land Item SCHEDULE: 1 100 BVN
Description = 5 - RPS Unit = CY Takeoff Quan: 2,420.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
3C01WC	WATER CURE@107.25%	1.00	47,701.60	SF	0.032			1,637			1,637
$9,397.76	0.0030 MH/SF		143.11	MH	[0.092]	7,761		1,637			9,398
03047	**ROUGHEN CJ LIQUID SPRAY**				**Quan: 1,769.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C301	2 LABORERS		26.53	CH	Eff: 100.00	**Prod:**	**0.0300 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
3C01LR	ROUGHNER-LIQUI@107.	1.00	1,769.00	SF	0.130			247			247
$3,108.30	0.0300 MH/SF		53.07	MH	[0.907]	2,862		247			3,108
03050	**APPLY EPOXY BOND**				**Quan: 5,144.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C301	2 LABORERS		20.57	CH	Eff: 100.00	**Prod:**	**0.0080 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C23BE	Bonding-Epoxy	1.00	5,144.00	SF	1.150		5,916				5,916
$8,134.51	0.0079 MH/SF		41.15	MH	[0.242]	2,219	5,916				8,135
03063	**WATER BLAST CLEAN SURFACE**				**Quan: 1,588.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C309	2 LAB, 1 LAB FOREMAN		5.29	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
$862.77	0.0100 MH/SF		15.88	MH	[0.306]	863					863
03073	**FINE GRADE > 3000 SF**				**Quan: 4,656.60 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C318G2	LARGE FINE GRADE		7.76	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs:	6.00	Eqp Pcs:	3.00
$4,048.63	0.0099 MH/SF		46.56	MH	[0.347]	2,772			1,277		4,049
03078	**INSTL PERIM RIGID INSUL 2"Tx3.5'H**				**Quan: 910.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C301	2 LABORERS		7.28	CH	Eff: 100.00	**Prod:**	**0.0160 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C22P2	2" Perimeter Insulation	1.10	1,001.00	SF	1.400		1,401				1,401
$2,186.51	0.0160 MH/SF		14.56	MH	[0.484]	785	1,401				2,187
03162	**PLACE #6 WWM 6x6/W2.9xW2.9 PC HC PER 12-**				**Quan: 1,600.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C334	3 LAB, 1 LAB FOREMAN		4.00	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C10W06	#6 WWM 6x6/W2.9xW2.9	1.10	1,760.00	SF	0.300		528				528
$1,395.66	0.0100 MH/SF		16.00	MH	[0.305]	868	528				1,396
03191	**CMU WALL D+G VERT**				**Quan: 105.50 EA**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C301	2 LABORERS		7.91	CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	105.50	EA	3.150		332				332
$1,185.92	0.1500 MH/EA		15.83	MH	[4.537]	854	332				1,186
03212	**REINFORCING MAT SUPTS-BRICKS**				**Quan: 4,656.60 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2C30BMS	Brick Mat Supports	1.00	4,656.60	SF	0.150		698				698
03246	**WATERSTOP IN C.J. 9" PVC**				**Quan: 2,118.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C307	1 LAB, 2 CARP		70.60	CH	Eff: 100.00	**Prod:**	**0.1000 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
2C279	9" Waterstop	1.10	2,329.80	LF	4.380		10,205				10,205
2C27FACMADE	FACTORY MADE INTER	1.00	53.00	EA	50.000		2,650				2,650
$25,279.33	0.1000 MH/LF		211.80	MH	[2.879]	12,425	12,855				25,279
03257	**CJ SLAB-SLAB**				**Quan: 524.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C312	2 CARP, 1 CARP FOREMAN		61.13	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C15SS915	S-S 9"-15" CJ/@107.25%	1.00	524.00	LF	2.900			1,630			1,630
$12,973.02	0.3500 MH/SF		183.40	MH	[10.068]	11,343		1,630			12,973

Cost Report

BID ITEM = 5033001 Land Item SCHEDULE: 1 100 BVN
Description = 5 - RPS Unit = CY Takeoff Quan: 2,420.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03266	**CJ SLAB-WALL BOT (RAISED KEYS)**				**Quan: 450.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C312	2 CARP, 1 CARP FOREMAN		30.00	CH	Eff: 100.00	**Prod:**	**0.2000 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C15SW8	S-W to 8" CJ F@107.25%	1.00	450.00	LF	2.000			965			965
$6,531.74	0.2000 MH/LF		90.00	MH	[5.753]	5,566		965			6,532
03266A	**CJ SLAB-WALL TOP CONCAVED KEYS**				**Quan: 450.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C312	2 CARP, 1 CARP FOREMAN		1.50	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C15SW8	S-W to 8" CJ F@107.25%	1.00	450.00	LF	1.250			603			603
$881.61	0.0100 MH/LF		4.50	MH	[0.288]	278		603			882
03267	**C/J WALL-WALL HORZ**				**Quan: 450.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C312	2 CARP, 1 CARP FOREMAN		1.50	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C15SW915	S-W 9"-15" CJ @107.25%	1.00	450.00	LF	1.750			845			845
$1,122.92	0.0100 MH/LF		4.50	MH	[0.288]	278		845			1,123
03282	**CJ WALL-WALL**				**Quan: 1,245.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C312	2 CARP, 1 CARP FOREMAN		166.00	CH	Eff: 100.00	**Prod:**	**0.4000 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C15WW915	W-W 9"-15" CJ/@107.25%	1.00	1,245.00	LF	3.600			4,807			4,807
$35,608.20	0.4000 MH/SF		498.00	MH	[11.507]	30,801		4,807			35,608
03409	**POUR MUDMAT 3"THK**				**Quan: 4.44 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C328	MED FLATWORK = 2L,1LF,3F,1FF		1.90	CH	Eff: 100.00	**Prod:**	**3.0001 MU**	Lab Pcs:	7.00	Eqp Pcs:	0.00
2C0102	Mudmat Concrete	1.10	4.88	CY	129.000		630				630
$1,375.56	3.0000 MH/CY		13.32	MH	[93.349]	746	630				1,376
03421	**EF FND MAT 2.67'THK EL327-329**				**Quan: 769.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C320	SMALL FORM =1L, 2C,1CF		57.67	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C10EF12+	EF > 12" Ht. E@107.25%	1.00	769.00	SF	5.463			4,506			4,506
$18,318.32	0.3000 MH/SF		230.71	MH	[8.741]	13,812		4,506			18,318
03436	**P FND MAT 2.67'T 4,656SF EL327-329**				**Quan: 512.02 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C331	LRG FLATWORK W/PUMP = 5L,1LF		12.80	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs:	12.00	Eqp Pcs:	0.00
2C0105	SOG Concrete	1.04	532.50	CY	141.500		75,349				75,349
403RMPUMP4	Pump Slabs > 24"	1.00	512.02	CY	23.241					11,900	11,900
$95,788.62	0.2999 MH/CY		153.60	MH	[9.262]	8,540	75,349			11,900	95,789
03453	**EF FND MAT RECESS 2'HT EL327-329**				**Quan: 160.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C303	2 CARPENTERS		40.00	CH	Eff: 100.00	**Prod:**	**0.5000 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
3C10TR12+	Recess > 12" D@107.25%	1.00	160.00	LF	5.463			938			938
$5,820.24	0.5000 MH/SF		80.00	MH	[14.03]	4,883		938			5,820
03507	**F WL 2.5'Tx40-43'Hx450LF 2LIFTS EL327-32**				**Quan: 37,330.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C321	LARGE FORM =2L,3C,1CF		1,642.52	CH	Eff: 100.00	**Prod:**	**0.2200 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
3C20W	Straight Wall @107.25%	1.00	37,330.00	SF	5.463			218,747			218,747
3C35SHSS3	SH S.S. 22-28'@107.25%	1.00	900.00	SF	5.463			5,274			5,274
$717,606.81	0.2200 MH/SF		8,212.60	MH	[6.362]	493,586		224,021			717,607
03508	**FTO GANG FORM MAKE-UP 20'HTx40LFx2SIDES**				**Quan: 2,400.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		

Cost Report

BID ITEM = 5033001 Land Item SCHEDULE: 1 100 BVN
Description = 5 - RPS Unit = CY Takeoff Quan: 2,420.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C303	2 CARPENTERS		120.00	CH	Eff: 100.00	Prod:	0.1000 MU	Lab Pcs: 2.00		Eqp Pcs:	0.00
$14,648.00	0.1000 MH/SF		240.00	MH	[2.806]	14,648					14,648
03570	**FORM B-HEAD**				**Quan: 45.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C303	2 CARPENTERS		6.75	CH	Eff: 100.00	Prod:	0.3000 MU	Lab Pcs: 2.00		Eqp Pcs:	0.00
3C20BH1619	Opening 16"-19@107.25%	1.00	45.00	SF	2.900			140			140
$963.91	0.3000 MH/SF		13.50	MH	[8.418]	824		140			964
03574	**F BEAM POCKETS <4SF**				**Quan: 12.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C303	2 CARPENTERS		24.00	CH	Eff: 100.00	Prod:	4.0000 MU	Lab Pcs: 2.00		Eqp Pcs:	0.00
3C20BP4	Beam Pocket to@107.25%	1.00	12.00	EA	7.000			90			90
$3,019.69	4.0000 MH/EA		48.00	MH	[112.24]	2,930		90			3,020
03597	**P WL 2.5'Tx40-43'Hx450LF 2LIFTS EL327-32**				**Quan: 1,728.22 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C333	POUR VERT OVER 30 CY = 2L,1L		100.81	CH	Eff: 100.00	Prod:	0.3500 MU	Lab Pcs: 6.00		Eqp Pcs:	0.00
2C0106	Wall Concrete	1.05	1,814.63	CY	141.500		256,770				256,770
403RMPUMP7	Pump Walls & Cols > 200	1.00	1,728.22	CY	23.241					40,167	40,167
$332,074.88	0.3500 MH/CY		604.88	MH	[10.388]	35,138	256,770			40,167	332,075
03705	**EF SUP SLAB 14"Tx8-16'SPANx40-43'H EL371**				**Quan: 448.13 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C320	SMALL FORM =1L, 2C,1CF		39.21	CH	Eff: 100.00	Prod:	0.3500 MU	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C35EFSS915	EF S.S. 12"-15@107.25%	1.00	448.13	SF	5.463			2,626			2,626
$12,015.67	0.3499 MH/SF		156.84	MH	[10.197]	9,390		2,626			12,016
03734	**SH SUP SLAB 14"Tx8-16'SPANx40-43'H EL371**				**Quan: 4,127.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		361.11	CH	Eff: 100.00	Prod:	0.3500 MU	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C35SHSS3	SH S.S. 22-28'@107.25%	1.00	4,127.00	SF	5.463			24,183			24,183
$110,659.81	0.3500 MH/SF		1,444.45	MH	[10.197]	86,476		24,183			110,660
03742	**SET SCAFF WALKWAY 3'W**				**Quan: 272.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		27.20	CH	Eff: 100.00	Prod:	0.4000 MU	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C35SHSS	SH S.S. < 16' @107.25%	1.00	272.00	SF	5.463			1,594			1,594
$8,107.51	0.4000 MH/LF		108.80	MH	[11.654]	6,514		1,594			8,108
03747	**F SUP SLAB BM SIDES EL371**				**Quan: 192.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C323	SMALL SHORE = 2L,1LF,2C,1CF		14.40	CH	Eff: 100.00	Prod:	0.3000 MU	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C30BS	Beam Side Form@107.25%	1.00	192.00	SF	5.463			1,125			1,125
$4,573.48	0.3000 MH/SF		57.60	MH	[8.741]	3,448		1,125			4,573
03815	**P SUP SLAB 14"T 4127SF EL371**				**Quan: 180.07 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C329	MED FLATWORK W/PUMP = 3L,1LF		15.75	CH	Eff: 100.00	Prod:	0.7000 MU	Lab Pcs: 8.00		Eqp Pcs:	0.00
2C0108	Sup. Slab Concrete	1.04	187.27	CY	141.500		26,499				26,499
403RMPUMP2	Pump Slab 9" - 15"	1.00	180.07	CY	23.241					4,185	4,185
$37,711.62	0.7000 MH/CY		126.06	MH	[21.707]	7,028	26,499			4,185	37,712
03876	**P ROOF HC TOPPING SLAB 3"T 1588SF EL384.**				**Quan: 15.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C327	SMALL FLATWORK =2L,2F,1FF		10.50	CH	Eff: 100.00	Prod:	3.5000 MU	Lab Pcs: 5.00		Eqp Pcs:	0.00
2C01HCTOP	HC TOPPING MIX	1.05	15.75	CY	141.500		2,229				2,229
$5,171.43	3.5000 MH/CY		52.50	MH	[108.878]	2,943	2,229				5,171

BID ITEM = 5033001 — Land Item — SCHEDULE: 1 100 — BVN
Description = 5 - RPS — Unit = CY — Takeoff Quan: 2,420.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03999	**CHIP TOP OF PILES 30"DIAx5'HT**		**Quan:**	**42.00 EA**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		336.00	CH	Eff: 100.00	**Prod:**	**16.0000 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
$36,235.80	16.0000 MH/EA		672.00	MH	[483.84]	36,236					36,236
=====> **Item Totals:**	**5033001 - 5 - RPS**										
$1,560,927.03	5.9090 MH/CY		14,299.82	MH	[172.649]	849,115	384,326	269,957	1,277	56,253	**1,560,927**
645.011	2420 CY					350.87	158.81	111.55	0.53	23.24	645.01

PARENT ITEM = 5033010 — BVN
Description = 5 - ELEC CONCRETE — Unit = CY — Takeoff Quan: 1.000 — Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 5033010:

BID ITEM = 5033011 — Land Item — SCHEDULE: 1 100 — BVN
Description = ELEC INT PADS — Unit = CY — Takeoff Quan: 1.000 — Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**		**Quan:**	**18.98 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C334	3 LAB, 1 LAB FOREMAN		0.01	CH	Eff: 100.00	**Prod:**	**0.0030 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	18.98	SF	0.032			1			1
$3.36	0.0026 MH/SF		0.05	MH	[0.08]	3		1			3
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan:**	**1.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
2C02S	Superplasticizer	1.05	1.05	CY	5.000		5				5
03046	**ROUGHEN EXISTING MECHANICAL**		**Quan:**	**18.98 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		0.94	CH	Eff: 100.00	**Prod:**	**0.1000 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
$102.45	0.1001 MH/SF		1.90	MH	[3.027]	102					102
03050	**EPOXY BONDING AGENT <500 SF**		**Quan:**	**18.98 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		0.07	CH	Eff: 100.00	**Prod:**	**0.0080 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C23BE	Bonding-Epoxy	1.00	18.98	SF	1.150		22				22
$29.93	0.0079 MH/SF		0.15	MH	[0.239]	8	22				30
03171	**REBAR-FURNISH/INSTALL SEPARATE-PLAIN**		**Quan:**	**0.02 TN**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
2C10ESCL3	REBAR ESCALATION 20	1.00	0.02	TN	250.000		5				5
2C10RP	Rebar-Plain	1.00	0.02	TN	1,425.950		29				29
403REBARL	Rebar Install Sub	1.00	0.02	TN	1,331.700					27	27
$60.15					[ ]		34			27	60
03178	**D & G VERT TO 8" DP >100 EA**		**Quan:**	**25.66 EA**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		1.92	CH	Eff: 100.00	**Prod:**	**0.1500 MU**	Lab Pcs:	2.00	Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	25.66	EA	3.150		81				81
$288.42	0.1500 MH/EA		3.85	MH	[4.537]	208	81				288
03937	**EF EQ PADS >12" H 20-100 SF**		**Quan:**	**25.66 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C307	1 LAB, 2 CARP		2.99	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C10EQ12+	Equip. Pad > 1@107.25%	1.00	25.66	SF	5.463			150			150

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 5033011				Land Item SCHEDULE: 1 100						BVN
Description =	ELEC INT PADS			Unit = CY	Takeoff Quan:	1.000		Engr Quan:		0.000
$677.18	0.3499 MH/SF		8.98 MH	[10.074]	527		150			677
03942	**P EQUIP PADS >12" H 2-8 CY**		**Quan: 0.23 CY**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C314	2 LAB, 2 FINISHERS		0.28 CH	Eff: 100.00	**Prod: 5.0000 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0105	SOG Concrete	1.05	0.24 CY	141.500		34				34
$98.10	5.0434 MH/CY		1.16 MH	[154.391]	64	34				98
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 1.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
2C01FUEL	READYMIX FUEL SURC	1.05	1.05 CY	2.500		3				3
03999Z	**READYMIX ESCALATION**		**Quan: 1.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
2C01ESCL3	2026 READYMIX ESCAL	1.05	1.05 CY	52.000		55				55
=====> **Item Totals: 5033011**	**- ELEC INT PADS**									
$1,322.07	16.0900 MH/CY		16.09 MH	[473.95]	912	233	151		27	**1,322**
1,322.070	1 CY				911.81	232.62	151.01		26.63	1,322.07

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals: 5033010**	**- 5 - ELEC CONCRETE**									
$1,322.07	**16.0900 MH/CY**		**16.09 MH**	**[473.95]**	**912**	**233**	**151**		**27**	**1,322**
1,322.070	**1 CY**				**911.81**	**232.62**	**151.01**		**26.63**	**1,322.07**

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 5033015				Land Item SCHEDULE: 1 100						BVN
Description =	WINTER CONCRETE			Unit = CY	Takeoff Quan:	1.000		Engr Quan:		0.000
03023	**Winter Concrete Protection JUNE 2026 - J**		**Quan: 865.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C309	2 LAB, 1 LAB FOREMAN		57.66 CH	Eff: 100.00	**Prod: 0.2000 MU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
2C02A	Accelerator N/C 2%	0.75	648.75 CY	11.000		7,136				7,136
2C02H	Hot Water Winter Heat	1.00	865.00 CY	5.000		4,325				4,325
3C01WINTER	WINTER CONCRET@107	1.00	865.00 CY	4.500			4,175			4,175
8CXPWINTER2	==> Winter Heater for Conc	1.00	865.00 CY	6.600				5,709		5,709
$30,744.16	0.2000 MH/CY		173.00 MH	[6.119]	9,399	11,461	4,175	5,709		30,744
=====> **Item Totals: 5033015**	**- WINTER CONCRETE**									
$30,744.16	173.0000 MH/CY		173.00 MH	[5292.65]	9,399	11,461	4,175	5,709		**30,744**
30,744.160	1 CY				9,399.20	11,461.25	4,174.71	5,709.00		30,744.16

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 5033020				Land Item SCHEDULE: 1 100						BVN
Description =	READYMIX ADMIX & ESCL			Unit = CY	Takeoff Quan:	1.000		Engr Quan:		0.000
03040	**FIBERS 3#/CY (FIBERMESH)**		**Quan: 15.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
2C01MACRO	MACRO FIBER 3#/CY	1.05	15.75 CY	21.000		331				331

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 5033020 Land Item SCHEDULE: 1 100 BVN
Description = READYMIX ADMIX & ESCL Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW . Quan: 2,430.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**										
2C02S	Superplasticizer	1.05	2,551.50	CY	5.000		12,758				12,758
03999	**CRYSTALLINE WATERPROOF ADMIX - TK CON Quan: 2,420.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**										
2C01CRYSTL	CRYSTALLINE WATERP	1.05	2,541.00	CY	40.000		101,640				101,640
03999F	**READYMIX FUEL SURCHARGE Quan: 2,435.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**										
2C01FUEL	READYMIX FUEL SURC	1.05	2,556.75	CY	2.500		6,392				6,392
03999Z	**READYMIX ESCALATION JUNE 2026 - JAN 2027 Quan: 2,435.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**										
2C01ESCL3	2026 READYMIX ESCAL	0.86	2,094.10	CY	52.000		108,893				108,893
2C01ESCL4	2027 READYMIX ESCAL	0.14	340.90	CY	68.000		23,181				23,181
$132,074.40					[ ]		132,074				132,074

=====> **Item Totals: 5033020 - READYMIX ADMIX & ESCL**

$253,194.53		[ ]		253,195			**253,195**
253,194.530	1 CY			253,194.53			253,194.53

Total of Above Sub-Biditems

=====> **Item Totals: 5033000 - CAST-IN-PLACE CONCRETE**

			Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$1,846,187.79	**14,488.9100 MH/LS**	**14,488.91 MH**	**[423576.8]**	**859,426**	**649,214**	**274,282**	**6,986**	**56,279**	**1,846,188**
1,846,187.790	**1 LS**			**859,426.12**	**649,214.40**	**274,282.39**	**6,985.64**	**56,279.24**	**1,846,187.79**

BID ITEM = 5034000 Land Item SCHEDULE: 1 100 BVN
Description = PRECAST HOLLOWCORE PLANKS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03876	**POUR GROUT BETWEEN PLANKS Quan: 2.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**										
C327	SMALL FLATWORK =2L,2F,1FF		8.00	CH	Eff: 100.00 **Prod: 20.0000 MU**	Lab Pcs: 5.00			Eqp Pcs: 0.00		
2C01HCTOP	HC TOPPING MIX	1.05	2.10	CY	141.500		297				297
$2,539.29	20.0000 MH/CY		40.00	MH	[622.16]	2,242	297				2,539
03997	**SUB INSTALL HOLLOWCORE PLANK Quan: 1,641.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1**										
2H02ESCL2	PC ESCALATION 2027	1.00	1,641.00	SF	5.770		9,469				9,469
403PC4	5 - RPS PC PLANKS	1.00	1.00	LS	57,121.721					57,122	57,122
$66,590.29					[ ]		9,469			57,122	66,590

=====> **Item Totals: 5034000 - PRECAST HOLLOWCORE PLANKS**

			Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$69,129.58	40.0000 MH/LS	40.00 MH	[1244.32]	2,242	9,766			57,122	**69,130**
69,129.580	1 LS			2,242.14	9,765.72			57,121.72	69,129.58

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 5040000 Land Item SCHEDULE: 1 100 SAE
Description = MASONRY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80402 MASONRY SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

404MASONRY Masonry Sub 1.05 1.05 LS 312,530.508 328,157 328,157

BID ITEM = 5050000 Land Item SCHEDULE: 1 100 RLC
Description = METALS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05995 Misc Metal Sub Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

405MMTL Misc Metal Sub 1.00 1.00 LS 8,323.000 8,323 8,323

BID ITEM = 5059000 Land Item SCHEDULE: 1 100 RLC
Description = METAL MATERIAL - RPS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05601 Metals Materials Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

S503 3 IRONWORKERS PER HOUR 8.00 CH Eff: 100.00 **Prod: 8.0000 HU** Lab Pcs: 3.00 Eqp Pcs: 0.00
2MM01-05 05RPS Metals 1.00 1.00 LS 25,445.000 25,445 25,445
$27,063.02 24.0000 MH/LS 24.00 MH [814.56] 1,618 25,445 27,063

=====> **Item Totals: 5059000 - METAL MATERIAL - RPS**
$27,063.02 24.0000 MH/LS 24.00 MH [814.56] 1,618 25,445 **27,063**
27,063.020 1 LS 1,618.02 25,445.00 27,063.02

BID ITEM = 5061000 Land Item SCHEDULE: 1 100 RLC
Description = ROUGH CARPENTRY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

06023 Install 2x8 Treated Nailer Quan: 418.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C602 (2) CARPENTER 10.00 CH Eff: 100.00 **Prod: 41.8000 UH** Lab Pcs: 2.00 Eqp Pcs: 0.00
2W012X08NT 2x8 Treated Nailer 1.15 480.70 LF 2.850 1,370 1,370
$2,615.16 0.0478 MH/LF 20.00 MH [1.393] 1,245 1,370 2,615

06027 Install 2x10 Treated Nailer Quan: 428.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C603 (3) CARPENTER 11.00 CH Eff: 100.00 **Prod: 38.9091 UH** Lab Pcs: 3.00 Eqp Pcs: 0.00
2W012X10NT 2x10 Treated Nailer 1.00 428.00 LF 2.800 1,198 1,198
$3,239.44 0.0771 MH/LF 33.00 MH [2.218] 2,041 1,198 3,239

=====> **Item Totals: 5061000 - ROUGH CARPENTRY**
$5,854.60 53.0000 MH/LS 53.00 MH [1531.7] 3,286 2,568 **5,855**
5,854.600 1 LS 3,286.20 2,568.40 5,854.60

BID ITEM = 5071300 Land Item SCHEDULE: 1 100 RLC
Description = WATERPROOFING - SELF-ADHERING SHEET Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals: 5071300 - WATERPROOFING - SELF-ADHERING SHEET**

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 5071300 Land Item SCHEDULE: 1 100 RLC
Description = WATERPROOFING - SELF-ADHERING SHEET Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

$0.00 [ ]
0.000 1 LS

BID ITEM = 5075400 Land Item SCHEDULE: 1 100 SAE
Description = ROOFING - TPO Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80722 EPDM ROOFING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
407ROOFEPDM	EPDM Roofing Sub	1.05	1.05 LS	79,600.000					83,580	83,580

BID ITEM = 5079200 Land Item SCHEDULE: 1 100 SAE
Description = JOINT SEALANTS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80728 CAULKING AND SEALANTS SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
407CAULK	Caulking Sub	1.00	1.00 LS	48,200.000					48,200	48,200

BID ITEM = 5081200 Land Item SCHEDULE: 1 100 RLC
Description = ALUMINUM DOORS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals: 5081200 - ALUMINUM DOORS**
$0.00 [ ]
0.000 1 LS

BID ITEM = 5099000 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING & COATING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80916 PAINTING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
409PAINTING	Painting Sub	1.05	1.05 LS	62,013.670					65,114	65,114

BID ITEM = 5101400 Land Item SCHEDULE: 1 100 SAE
Description = SIGNS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10401 SIGN MATERIAL Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2S14-LS	Signs - LS	1.00	1.00 LS	4,113.000		4,113				4,113

10402 Install Interior ID Signs Quan: 22.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 11.00 CH Eff: 100.00 **Prod: 0.5000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$671.37 0.5000 MH/EA 11.00 MH [14.03] 671 671

=====> **Item Totals: 5101400 - SIGNS**

$4,784.37	11.0000 MH/LS	11.00 MH		[308.66]	671	4,113				**4,784**
4,784.370	1 LS				671.37	4,113.00				4,784.37

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 5104400 Land Item SCHEDULE: 1 100 SAE
Description = FIRE PROTECTION CABINETS & FIRE EXTINGUI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10600 *FIRE EXTINGUISHERS, CABINETS, AND ACC.* Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2S11	FIRE EXTINGUISHERS	1.00	1.00 LS	1,924.000		1,924				1,924

10606 INSTALL FIRE EXTINGUISER IN BRACKET Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 1.00 CH Eff: 100.00 **Prod: 1.0000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$61.03	1.0000 MH/EA		1.00 MH	[28.06]	61					61

=====> Item Totals: 5104400 - FIRE PROTECTION CABINETS & FIRE EXTINGUI

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$1,985.03	1.0000 MH/LS		1.00 MH	[28.06]	61	1,924				**1,985**
1,985.030	1 LS				61.03	1,924.00				1,985.03

BID ITEM = 5230000 Land Item SCHEDULE: 1 100 ERS
Description = HVAC(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

23000 HVAC SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415HVAC	HVAC Sub	1.00	1.00 LS	389,215.000					389,215	389,215

BID ITEM = 5260000 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

26000 Electrical Sub(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416ELECTRIC	Electrical Sub	1.00	1.00 LS	365,729.000					365,729	365,729

BID ITEM = 5270000 Land Item SCHEDULE: 1 100 REM
Description = INSTRUMENTATION & CONTROL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

27000 I & C SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416I&C	Instrumentation-Control Su	1.00	1.00 LS	331,773.000					331,773	331,773

PARENT ITEM = 5320000 BCL
Description = EARTHWORK - REVISED Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 5320000:

BID ITEM = 5320100 Land Item SCHEDULE: 1 100 BCL
Description = EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

210-01 EXCAVATE --> STOCKPILE/DUMPSITE Quan: 8,550.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260A Excavation - Mass 95.00 CH Eff: 100.00 **Prod: 90.0000 UH** Lab Pcs: 4.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
5DUMP	Dump Fee	1.00	8,550.00 CY	4.000			34,200			34,200
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	570.01 HR	130.000			74,101			74,101

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 5320100	Land Item	SCHEDULE: 1	100								BCL
Description = EXC & BF	Unit = LS	Takeoff Quan: 1.000							Engr Quan:		0.000
$151,628.16	0.0444 MH/CY		380.00	MH	[1.643]	23,690		108,301	19,637		151,628
210-02	**SUBGRADE PREP**	**Quan: 648.00 SY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						
C260A	Excavation - Mass		25.92	CH	Eff: 100.00	**Prod: 25.0000 UH**		Lab Pcs: 3.00		Eqp Pcs:	2.00
$7,845.99	0.1200 MH/SY		77.76	MH	[4.188]	4,645			3,201		7,846
210-03	**STONE BASE 12"**	**Quan: 216.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						
C260A	Excavation - Mass		21.60	CH	Eff: 100.00	**Prod: 10.0000 UH**		Lab Pcs: 3.00		Eqp Pcs:	2.00
2A0108	#8 Aggregate	1.00	432.00	TN	33.660		14,541				14,541
$21,079.45	0.3000 MH/CY		64.80	MH	[10.47]	3,871	14,541		2,667		21,079
210-04	**BACKFILL - GRAN**	**Quan: 2,425.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						
C270T	Backfill - Telebelt		121.25	CH	Eff: 100.00	**Prod: 20.0000 UH**		Lab Pcs: 5.00		Eqp Pcs:	3.00
2A0108	#8 Aggregate	1.00	4,850.00	TN	33.660		163,251				163,251
$223,530.97	0.2500 MH/CY		606.25	MH	[8.905]	36,774	163,251		23,506		223,531
=====> **Item Totals:**	**5320100 - EXC & BF**										
$404,084.57	1,128.8100 MH/LS		1,128.81	MH	[40616.68]	68,981	177,792	108,301	49,010		**404,085**
404,084.570	1 LS					68,981.41	177,792.12	108,301.30	49,009.74		404,084.57
BID ITEM = 5320150	Land Item	SCHEDULE: 1	100								BCL
Description = ACP	Unit = LS	Takeoff Quan: 1.000							Engr Quan:		0.000
220-01	**AUGERCAST PILE**	**Quan: 6,932.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						
402ACP16A	Augercast Pile - 16" All Inc	1.00	6,932.00	LF	100.000					693,200	693,200
BID ITEM = 5320200	Land Item	SCHEDULE: 1	100								BCL
Description = TERS	Unit = LS	Takeoff Quan: 1.000							Engr Quan:		0.000
230-01	**TERS**	**Quan: 11,088.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						
402TERS	Temp Earth Retention Sub	1.00	11,088.00	SF	150.000					1,663,200	1,663,200

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**5320000 - EARTHWORK - REVISED**										
$2,760,484.57	**1,128.8100 MH/LS**		**1,128.81**	**MH**	**[40616.68]**	**68,981**	**177,792**	**108,301**	**49,010**	**2,356,400**	**2,760,485**
2,760,484.570	**1 LS**					**68,981.41**	**177,792.12**	**108,301.30**	**49,009.74**	**2,356,400.00**	**2,760,484.57**

PARENT ITEM = 5430000 TAL
Description = PROCESS EQUIPMENT PACKAGES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 5430000:

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 5431000 Land Item SCHEDULE: 1 100 JWA
Description = RPS EQ PKGS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

5432139 SUBMERSIBLE NON-CLOG PUMPS PKG (43 2139) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C03N	Non-Shrink Grout	1.00	12.00	CF	35.000		420				420
2EQ432139-05	SUBMERSIBLE NON-CL	1.00	1.00	LS	157,721.000		157,721				157,721
$158,141.00					[ ]		158,141				158,141

=====> Item Totals: 5431000 - RPS EQ PKGS

$158,141.00					[ ]		158,141				**158,141**
158,141.000		1 LS					158,141.00				158,141.00

Total of Above Sub-Biditems

=====> Item Totals: 5430000 - PROCESS EQUIPMENT PACKAGES - KII

$158,141.00					**[ ]**		**158,141**				**158,141**
158,141.000		**1 LS**					**158,141.00**				**158,141.00**

BID ITEM = 5440000 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS EQUIPMENT INSTALL - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215501 xx PROCESS EQUIPMENT INSTALL Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415EQUISTER	Sterling Industrial Process	1.00	1.00	LS	36,667.000					36,667	36,667

Total of Above Sub-Biditems

=====> Item Totals: 5000000 - RESIDUALS PUMP STATION(RPS)

$7,470,451.24	**15,746.7200 MH/LS**		**15,746.72**	**MH**	**[468120.78]**	**936,286**	**1,554,868**	**382,584**	**55,995**	**4,540,718**	**7,470,451**
7,470,451.240		**1 LS**				**936,286.29**	**1,554,867.84**	**382,583.69**	**55,995.38**	**4,540,718.04**	**7,470,451.24**

PARENT ITEM = 6000000 CLIENT# = 7 ALL
Description = CHEMICAL BUILDING(CHB) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 6000000:

BID ITEM = 6032000 Land Item SCHEDULE: 1 100 BVN
Description = CONCRETE REINFORCEMENT Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

03171 REBAR-FURNISH/INSTALL APRIL 2026 - OCT 2 Quan: 74.00 TN Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C10ESCL3	REBAR ESCALATION 20	1.00	74.00	TN	250.000		18,500				18,500
2C10RP	Rebar-Plain	1.00	74.00	TN	1,425.950		105,520				105,520
403REBARL	Rebar Install Sub	1.00	74.00	TN	1,331.700					98,546	98,546
$222,566.10					[ ]		124,020			98,546	222,566

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6032000			Land Item	SCHEDULE: 1	100					BVN
Description =	CONCRETE REINFORCEMENT		Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
03171M	**REBAR- MASONRY**		**Quan:**	**10.00 TN**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2C10ESCL3	REBAR ESCALATION 20	1.00	10.00 TN	250.000		2,500				2,500
2C10RP1	MASONRY REBAR	1.00	10.00 TN	1,425.950		14,260				14,260
$16,759.50				[ ]		16,760				16,760
03171P	**REBAR-FURNISH/INSTALL- DILLED PIERS MAY**		**Quan:**	**99.70 TN**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2C10DRILLED	DRILLED PIER REBAR	1.00	99.70 TN	1,425.950		142,167				142,167
2C10ESCL2	REBAR ESCALATION 20	1.00	99.70 TN	150.000		14,955				14,955
403REBARL	Rebar Install Sub	1.00	99.70 TN	1,331.700					132,770	132,770
$289,892.71				[ ]		157,122			132,770	289,893
=====> **Item Totals:**	**6032000 - CONCRETE REINFORCEMENT**									
$529,218.31				[ ]		297,902			231,316	**529,218**
529,218.310		1 LS				297,902.02			231,316.29	529,218.31

PARENT ITEM = 6033000 BVN
Description = CAST-IN-PLACE CONCRETE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 6033000:

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6033002			Land Item	SCHEDULE: 1	100					BVN
Description =	6 - CHB(70%)		Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
001	**B & V CHB(70% of AECOM CHB)**		**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
01CONCPLUG	70% of GMP Concrete Est(	1.00	1.00 LS	461,500.000			461,500			461,500
=====> **Item Totals:**	**6033002 - 6 - CHB(70%)**									
$461,500.00				[ ]			461,500			**461,500**
461,500.000		1 LS					461,500.00			461,500.00

PARENT ITEM = 6033010 BVN
Description = 6 - ELEC CONCRETE Unit = CY Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 6033010:

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6033011			Land Item	SCHEDULE: 1	100					BVN
Description =	ELEC INT PADS		Unit =	CY	Takeoff Quan:	1.000		Engr Quan:		0.000
03007	**WATER CURE**		**Quan:**	**5.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C334	3 LAB, 1 LAB FOREMAN		0.00 CH	Eff: 100.00	**Prod: 0.0030 MU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	5.00 SF	0.032						
$1.24	0.0040 MH/SF		0.02 MH	[0.12]	1					1
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**		**Quan:**	**1.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2C02S	Superplasticizer	1.05	1.05 CY	5.000		5				5

Cost Report

BID ITEM = 6033011 Land Item SCHEDULE: 1 100 BVN
Description = ELEC INT PADS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03046	**ROUGHEN EXISTING MECHANICAL**		**Quan: 5.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.25	CH	Eff: 100.00	Prod: 0.1000 MU		Lab Pcs: 2.00		Eqp Pcs:	0.00
$26.96	0.1000 MH/SF		0.50	MH	[3.024]	27					27
03050	**EPOXY BONDING AGENT <500 SF**		**Quan: 5.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.02	CH	Eff: 100.00	Prod: 0.0080 MU		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C23BE	Bonding-Epoxy	1.00	5.00	SF	1.150		6				6
$7.91	0.0080 MH/SF		0.04	MH	[0.242]	2	6				8
03171	**REBAR-FURNISH/INSTALL SEPARATE-PLAIN**		**Quan: 0.02**	**TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C10ESCL3	REBAR ESCALATION 20	1.00	0.02	TN	250.000		5				5
2C10RP	Rebar-Plain	1.00	0.02	TN	1,425.950		29				29
403REBARL	Rebar Install Sub	1.00	0.02	TN	1,331.700					27	27
$60.15					[ ]		34			27	60
03178	**D & G VERT TO 8" DP >100 EA**		**Quan: 9.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.67	CH	Eff: 100.00	Prod: 0.1500 MU		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	9.00	EA	3.150		28				28
$101.14	0.1500 MH/EA		1.35	MH	[4.536]	73	28				101
03937	**EF EQ PADS >12" H 20-100 SF**		**Quan: 9.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C307	1 LAB, 2 CARP		1.05	CH	Eff: 100.00	Prod: 0.3500 MU		Lab Pcs: 3.00		Eqp Pcs:	0.00
3C10EQ12+	Equip. Pad > 1@107.25%	1.00	9.00	SF	5.463			53			53
$237.53	0.3500 MH/SF		3.15	MH	[10.076]	185		53			238
03942	**P EQUIP PADS >12" H 2-8 CY**		**Quan: 0.06**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C314	2 LAB, 2 FINISHERS		0.07	CH	Eff: 100.00	Prod: 5.0000 MU		Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0105	SOG Concrete	1.05	0.06	CY	141.500		8				8
$25.09	5.0000 MH/CY		0.30	MH	[153.167]	17	8				25
03999F	**READYMIX FUEL SURCHARGE**		**Quan: 1.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	1.05	CY	2.500		3				3
03999Z	**READYMIX ESCALATION**		**Quan: 1.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL3	2026 READYMIX ESCAL	1.05	1.05	CY	52.000		55				55
=====> **Item Totals:**	**6033011 - ELEC INT PADS**										
$522.50	5.3600 MH/CY		5.36	MH	[157.62]	304	139	53		27	**523**
522.500	1 CY					304.37	138.59	52.91		26.63	522.50

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**6033010 - 6 - ELEC CONCRETE**										
$522.50	**5.3600 MH/CY**		**5.36**	**MH**	**[157.62]**	**304**	**139**	**53**		**27**	**523**
522.500	**1 CY**					**304.37**	**138.59**	**52.91**		**26.63**	**522.50**

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 6033015 Land Item SCHEDULE: 1 100 BVN
Description = WINTER CONCRETE Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals: 6033015 - WINTER CONCRETE**
$0.00 [ ]
0.000 1 CY

BID ITEM = 6033020 Land Item SCHEDULE: 1 100 BVN
Description = READYMIX ADMIX & ESCL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03040	**MACRO FIBER ADMIX AT CHEM SLAB&TOPPIN Quan: 501.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**									
2C01MACRO	MACRO FIBER 3#/CY	1.05	526.05 CY	21.000		11,047				11,047
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW . Quan: 915.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**									
2C02S	Superplasticizer	1.05	960.75 CY	5.000		4,804				4,804
03999	**CRYSTALLINE WATERPROOF ADMIX - BULK T Quan: 156.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**									
2C01CRYSTL	CRYSTALLINE WATERP	1.05	163.80 CY	40.000		6,552				6,552
03999F	**READYMIX FUEL SURCHARGE Quan: 916.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**									
2C01FUEL	READYMIX FUEL SURC	1.05	961.80 CY	2.500		2,405				2,405
03999Z	**READYMIX ESCALATION APRIL 2026 - OCT 202 Quan: 916.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**									
2C01ESCL3	2026 READYMIX ESCAL	1.05	961.80 CY	52.000		50,014				50,014

=====> **Item Totals: 6033020 - READYMIX ADMIX & ESCL**
$74,820.90 [ ] 74,821 **74,821**
74,820.900 1 LS 74,820.90 74,820.90

Total of Above Sub-Biditems

=====> **Item Totals: 6033000 - CAST-IN-PLACE CONCRETE**

			Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$536,843.40	**5.3600 MH/LS**	**5.36 MH**	**[157.62]**	**304**	**74,959**	**461,553**		**27**	**536,843**
536,843.400	**1 LS**			**304.37**	**74,959.49**	**461,552.91**		**26.63**	**536,843.40**

BID ITEM = 6034000 Land Item SCHEDULE: 1 100 BVN
Description = PRECAST HOLLOWCORE PLANKS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03876	**POUR GROUT BETWEEN PLANKS Quan: 11.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**									
C327	SMALL FLATWORK =2L,2F,1FF		30.80 CH	Eff: 100.00	**Prod: 14.0000 MU**	Lab Pcs: 5.00		Eqp Pcs: 0.00		
2C01HCTOP	HC TOPPING MIX	1.05	11.55 CY	141.500		1,634				1,634
$10,266.54	14.0000 MH/CY		154.00 MH	[435.512]	8,632	1,634				10,267
03997	**SUB INSTALL HOLLOWCORE PLANK Quan: 9,003.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1**									
2H02ESCL2	PC ESCALATION 2027	1.00	9,003.00 SF	5.770		51,947				51,947

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6034000				Land Item SCHEDULE: 1 100						BVN
Description =	PRECAST HOLLOWCORE PLANKS			Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
403PC5	6 - CHB PC PLANKS	1.00	1.00 LS	269,867.201					269,867	269,867
$321,814.51				[ ]		51,947			269,867	321,815
=====> **Item Totals:**	**6034000 - PRECAST HOLLOWCORE PLANKS**									
$332,081.05	154.0000 MH/LS		154.00 MH	[4790.63]	8,632	53,582			269,867	**332,081**
332,081.050	1 LS				8,632.21	53,581.64			269,867.20	332,081.05
BID ITEM = 6040000				Land Item SCHEDULE: 1 100						SAE
Description =	MASONRY			Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
80402	**MASONRY SUB(70% of AECOM CHB)**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**				
404MASONRY	Masonry Sub	1.00	1.00 LS	585,000.000					585,000	585,000
BID ITEM = 6050000				Land Item SCHEDULE: 1 100						RLC
Description =	METALS			Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
05995	**Misc Metal Sub**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**				
405MMTL	Misc Metal Sub	1.00	1.00 LS	53,670.000					53,670	53,670
BID ITEM = 6051000				Land Item SCHEDULE: 1 100						RLC
Description =	STRUCTURAL STEEL			Unit = LS	Takeoff Quan: 1.000			Engr Quan:		0.000
05199	**SUB INSTALL STRUCTURAL STEEL**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**				
405STRSTL	Structural Steel Erection su	1.00	1.00 LS	1,500.000					1,500	1,500
05029	**ERECT ROOF BEAMS**			**Quan: 3.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**				
S510	4 MAN IW ERECTION CREW		3.00 CH	Eff: 100.00 **Prod:**	**1.0000 UH**	Lab Pcs: 4.00		Eqp Pcs:		0.00
$817.30	4.0000 MH/EA		12.00 MH	[138.15]	817					817
05280	**Beam Seat - Bolted**			**Quan: 6.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**				
S520	IW BOLT UP PER HOUR		3.00 CH	Eff: 100.00 **Prod:**	**2.0000 UH**	Lab Pcs: 1.00		Eqp Pcs:		0.00
$202.25	0.5000 MH/EA		3.00 MH	[16.97]	202					202
05213	**BOLTUP PER POINT**			**Quan: 6.00 PT**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**				
S520	IW BOLT UP PER HOUR		2.40 CH	Eff: 100.00 **Prod:**	**2.5000 UH**	Lab Pcs: 1.00		Eqp Pcs:		0.00
$161.81	0.4000 MH/PT		2.40 MH	[13.577]	162					162
=====> **Item Totals:**	**6051000 - STRUCTURAL STEEL**									
$2,681.36	17.4000 MH/LS		17.40 MH	[597.73]	1,181				1,500	**2,681**
2,681.360	1 LS				1,181.36				1,500.00	2,681.36

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 6059000 Land Item SCHEDULE: 1 100 RLC
Description = METAL MATERIAL - CHB Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05601 Metals Materials(70% of AECOM CHB) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

S503	3 IRONWORKERS PER HOUR		24.00 CH	Eff: 100.00	**Prod: 24.0000 HU**	Lab Pcs: 3.00	Eqp Pcs: 0.00
2MM01-06	06CHB Metals	1.00	1.00 LS	182,000.000		182,000	182,000
$186,854.07	72.0000 MH/LS		72.00 MH	[2443.68]	4,854	182,000	186,854

=====> **Item Totals: 6059000 - METAL MATERIAL - CHB**

$186,854.07	72.0000 MH/LS	72.00 MH	[2443.68]	4,854	182,000	**186,854**
186,854.070	1 LS			4,854.07	182,000.00	186,854.07

BID ITEM = 6061000 Land Item SCHEDULE: 1 100 RLC
Description = ROUGH CARPENTRY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

06066 Install 3/4" Treated Plywood Nailer-20" Quan: 1,063.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C602	(2) CARPENTER		26.57 CH	Eff: 100.00	**Prod: 40.0000 UH**	Lab Pcs: 2.00	Eqp Pcs: 0.00
2W03PLY34PTS	3/4" Plywood Treated-SF	1.10	1,559.80 SF	1.200		1,872	1,872
$5,181.39	0.0500 MH/LF		53.16 MH	[1.456]	3,310	1,872	5,181

06019 Install 2x6 Treated Nailer Quan: 1,063.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C602	(2) CARPENTER		21.26 CH	Eff: 100.00	**Prod: 50.0000 UH**	Lab Pcs: 2.00	Eqp Pcs: 0.00
2W012X06NT	2x6 Treated Nailer	1.10	1,169.30 LF	1.800		2,105	2,105
$4,751.96	0.0400 MH/LF		42.52 MH	[1.165]	2,647	2,105	4,752

06019X Install 2x6 Treated Nailer Quan: 376.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C602	(2) CARPENTER		7.52 CH	Eff: 100.00	**Prod: 50.0000 UH**	Lab Pcs: 2.00	Eqp Pcs: 0.00
2W012X06NT	2x6 Treated Nailer	1.10	413.60 LF	1.800		744	744
$1,680.84	0.0400 MH/LF		15.04 MH	[1.165]	936	744	1,681

06019Y Install 2x6 Treated Nailer Quan: 359.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C602	(2) CARPENTER		7.18 CH	Eff: 100.00	**Prod: 50.0000 UH**	Lab Pcs: 2.00	Eqp Pcs: 0.00
2W012X06NT	2x6 Treated Nailer	1.10	394.90 LF	1.800		711	711
$1,604.85	0.0400 MH/LF		14.36 MH	[1.165]	894	711	1,605

=====> **Item Totals: 6061000 - ROUGH CARPENTRY**

$13,219.04	125.0800 MH/LS	125.08 MH	[3642.32]	7,787	5,432	**13,219**
13,219.040	1 LS			7,787.24	5,431.80	13,219.04

BID ITEM = 6068000 Land Item SCHEDULE: 1 100 RLC
Description = FRP FABRICATIONS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

06601 FRP Material Package(70% of AECOM CHB) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

C602	(2) CARPENTER		4.00 CH	Eff: 100.00	**Prod: 4.0000 HU**	Lab Pcs: 2.00	Eqp Pcs: 0.00
2FR01-06	FRP CHB	1.00	1.00 LS	95,000.000		95,000	95,000
$95,498.06	8.0000 MH/LS		8.00 MH	[232.96]	498	95,000	95,498

06680 Install FRP Platform Column Quan: 4.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C602	(2) CARPENTER		2.66 CH	Eff: 100.00	**Prod: 1.5000 UH**	Lab Pcs: 2.00	Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity / Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6068000			Land Item	SCHEDULE: 1 100							RLC
Description =	FRP FABRICATIONS		Unit = LS	Takeoff Quan: 1.000					Engr Quan:		0.000
2FR21	1/2" SS Epoxy Anchor - 6"	1.00	16.00 EA		10.000		160				160
$492.46	1.3350 MH/EA		5.34 MH		[38.875]	332	160				492
06681	**Install FRP Platform Beam**		**Quan: 22.00 EA**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		11.00 CH	Eff: 100.00	**Prod: 2.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$1,369.68	1.0000 MH/EA		22.00 MH		[29.12]	1,370					1,370
06632	**Install FRP Shelf Angle for 1-1/2" grati**		**Quan: 199.00 LF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		30.61 CH	Eff: 100.00	**Prod: 6.5000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
2FR22	5/8" SS Epoxy Anchor - 6"	1.00	132.67 EA		12.000		1,592				1,592
$5,404.74	0.3077 MH/LF		61.24 MH		[8.961]	3,813	1,592				5,405
06621	**Install FRP Embed Angle for 1" grating**		**Quan: 33.00 LF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C303	2 CARPENTERS		3.30 CH	Eff: 100.00	**Prod: 10.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$402.83	0.2000 MH/LF		6.60 MH		[5.612]	403					403
06612	**Install FRP Grating - 1-1/2" Thk**		**Quan: 691.00 SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		27.64 CH	Eff: 100.00	**Prod: 25.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$3,441.63	0.0800 MH/SF		55.28 MH		[2.33]	3,442					3,442
06611	**Install FRP Grating - 1" Thk**		**Quan: 13.00 SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		0.45 CH	Eff: 100.00	**Prod: 28.5000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$57.28	0.0707 MH/SF		0.92 MH		[2.061]	57					57
06622	**Install FRP Embed Angle for 1-1/2" grati**		**Quan: 40.00 LF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C303	2 CARPENTERS		4.10 CH	Eff: 100.00	**Prod: 9.7500 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$501.08	0.2052 MH/LF		8.21 MH		[5.759]	501					501
06612X	**Install FRP Grating - 1-1/2" Thk**		**Quan: 23.00 SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		1.00 CH	Eff: 100.00	**Prod: 23.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$124.51	0.0869 MH/SF		2.00 MH		[2.532]	125					125
06686	**Install FRP Platform Stair Tread**		**Quan: 30.00 EA**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		5.00 CH	Eff: 100.00	**Prod: 6.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$622.58	0.3333 MH/EA		10.00 MH		[9.707]	623					623
06685	**Install FRP Platform Stair Stringer**		**Quan: 10.00 EA**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		5.00 CH	Eff: 100.00	**Prod: 2.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$622.58	1.0000 MH/EA		10.00 MH		[29.12]	623					623
06684	**Install FRP Platform Handrail - (slope)**		**Quan: 69.00 LF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		13.80 CH	Eff: 100.00	**Prod: 5.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$1,718.32	0.4000 MH/LF		27.60 MH		[11.648]	1,718					1,718
06683	**Install FRP Platform Handrail -**		**Quan: 93.00 LF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**							
C602	(2) CARPENTER		18.60 CH	Eff: 100.00	**Prod: 5.0000 UH**		Lab Pcs: 2.00		Eqp Pcs:		0.00
$2,316.02	0.4000 MH/LF		37.20 MH		[11.648]	2,316					2,316

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6068000				Land Item SCHEDULE: 1 100						RLC
Description = FRP FABRICATIONS				Unit = LS Takeoff Quan: 1.000				Engr Quan:		0.000
=====> **Item Totals: 6068000 - FRP FABRICATIONS**										
$112,571.77		254.3900 MH/LS	254.39 MH	[7392.15]	15,820	96,752				**112,572**
112,571.770		1 LS			15,819.73	96,752.04				112,571.77
BID ITEM = 6071300				Land Item SCHEDULE: 1 100						RLC
Description = WATERPROOFING - SELF-ADHERING SHEET				Unit = LS Takeoff Quan: 1.000				Engr Quan:		0.000
07140	**Fluid-Applied Waterproofing Sub (LS) - (**			**Quan: 2,489.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1**						
407WPROOF	Waterproofing Sub-Gen LS	1.00	1.00 LS	109,000.000					109,000	109,000
BID ITEM = 6075400				Land Item SCHEDULE: 1 100						SAE
Description = ROOFING - TPO				Unit = LS Takeoff Quan: 1.000				Engr Quan:		0.000
80722	**EPDM ROOFING SUB(70% of AECOM CHB)**			**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
407ROOFEPDM	EPDM Roofing Sub	1.00	1.00 LS	181,000.000					181,000	181,000
BID ITEM = 6079200				Land Item SCHEDULE: 1 100						SAE
Description = JOINT SEALANTS				Unit = LS Takeoff Quan: 1.000				Engr Quan:		0.000
80728	**CAULKING AND SEALANTS SUB(70% of AECOM**			**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
407CAULK	Caulking Sub	1.00	1.00 LS	70,000.000					70,000	70,000
BID ITEM = 6081100				Land Item SCHEDULE: 1 100						RLC
Description = DOORS, FRAMES & HARDWARE				Unit = LS Takeoff Quan: 1.000				Engr Quan:		0.000
08129	**Door Sub - HM SS FRP WD**			**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
408DOOR-6	Door Sub - RPS	1.00	1.00 LS	11,866.000					11,866	11,866
08160	**Door Material - LS(70% of AECOM CHB)**			**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2D01-06	CHB Door Material	1.00	1.00 LS	47,000.000		47,000				47,000
=====> **Item Totals: 6081100 - DOORS, FRAMES & HARDWARE**										
$58,866.00				[ ]		47,000			11,866	**58,866**
58,866.000		1 LS				47,000.00			11,866.00	58,866.00
BID ITEM = 6081200				Land Item SCHEDULE: 1 100						RLC
Description = ALUMINUM DOORS				Unit = LS Takeoff Quan: 1.000				Engr Quan:		0.000
08169	**Aluminum Door Sub**			**Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1**						
408ALDOOR	Aluminum Door Sub	1.00	1.00 LS	23,000.000					23,000	23,000

Activity / Resource	Desc	Pcs	Quantity / Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 6083300 Land Item SCHEDULE: 1 100 RLC
Description = COILING OVERHEAD DOORS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

08310 OH Door Sub Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

408OHDOOR	Overhead Door Sub	1.00	1.00 LS	35,940.000					35,940	35,940

BID ITEM = 6084500 Land Item SCHEDULE: 1 100 RLC
Description = FIBERGLASS SANDWICH PANELS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

08450 Translucent Wall & Roof Sub (LS) Quan: 1,047.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

408FRPPAN	FRP Translucent Panel Sub	1.00	1.00 LS	42,060.000					42,060	42,060

BID ITEM = 6099000 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING & COATING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80916 PAINTING SUB(70% of AECOM CHB) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

409PAINTING	Painting Sub	1.00	1.00 LS	148,000.000					148,000	148,000

BID ITEM = 6099600 Land Item SCHEDULE: 1 100 SAE
Description = COATING FOR CHEMICAL AREAS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80918 CHEMICAL COATING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

409HIGHPROC	High Preformance Coat Sub	1.05	1.05 LS	250,000.000					262,500	262,500

BID ITEM = 6101400 Land Item SCHEDULE: 1 100 SAE
Description = SIGNS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10401 SIGN MATERIAL Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

2S14-LS	Signs - LS	1.00	1.00 LS	4,113.000		4,113				4,113

10402 Install Interior ID Signs Quan: 44.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 22.00 CH Eff: 100.00 **Prod: 0.5000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$1,342.73 0.5000 MH/EA 22.00 MH [14.03] 1,343 1,343

=====> **Item Totals: 6101400 - SIGNS**
$5,455.73 22.0000 MH/LS 22.00 MH [617.32] 1,343 4,113 **5,456**
5,455.730 1 LS 1,342.73 4,113.00 5,455.73

BID ITEM = 6104400 Land Item SCHEDULE: 1 100 SAE
Description = FIRE PROTECTION CABINETS & FIRE EXTINGUI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 6104400 Land Item SCHEDULE: 1 100 SAE
Description = FIRE PROTECTION CABINETS & FIRE EXTINGUI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10600 *FIRE EXTINGUISHERS, CABINETS, AND ACC.* Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2S11	FIRE EXTINGUISHERS	1.00	1.00 LS	1,924.000		1,924				1,924

10606 INSTALL FIRE EXTINGUISER IN BRACKET Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 10.00 CH Eff: 100.00 **Prod: 1.0000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$610.33 1.0000 MH/EA 10.00 MH [28.06] Labor 610 Total 610

=====> Item Totals: 6104400 - FIRE PROTECTION CABINETS & FIRE EXTINGUI
$2,534.33 10.0000 MH/LS 10.00 MH [280.6] Labor 610 Perm Material 1,924 Total **2,534**
2,534.330 1 LS Labor 610.33 Perm Material 1,924.00 Total 2,534.33

BID ITEM = 6104500 Land Item SCHEDULE: 1 100 SAE
Description = KNOX BOX Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10600 KNOX BOX - SURFACE MOUNTED Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2S11-KNOX	KNOX BOX	1.00	1.00 LS	500.000		500				500

10609 INSTALL KNOX BOX Quan: 1.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 2.00 CH Eff: 100.00 **Prod: 2.0000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$122.07 2.0000 MH/EA 2.00 MH [56.12] Labor 122 Total 122

=====> Item Totals: 6104500 - KNOX BOX
$622.07 2.0000 MH/LS 2.00 MH [56.12] Labor 122 Perm Material 500 Total **622**
622.070 1 LS Labor 122.07 Perm Material 500.00 Total 622.07

BID ITEM = 6119000 Land Item SCHEDULE: 1 100 RLC
Description = PALLET RACK Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10595 Install 4' Rack Quan: 6.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

S551 MISC. METALS CREW-TP JOB 6.00 CH Eff: 100.00 **Prod: 1.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2K-PR4	4' Pallet Rack	1.00	6.00 EA	420.000		2,520				2,520
$3,345.59	2.0000 MH/EA		12.00 MH	[70.27]	826	2,520				3,346

10597 Install 8' Rack Quan: 7.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

S551 MISC. METALS CREW-TP JOB 10.50 CH Eff: 100.00 **Prod: 1.5000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2K-PR8	8' Pallet Rack	1.00	7.00 EA	625.000		4,375				4,375
$5,819.78	3.0000 MH/EA		21.00 MH	[105.406]	1,445	4,375				5,820

10599 Install 12' Rack Quan: 10.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

S551 MISC. METALS CREW-TP JOB 20.00 CH Eff: 100.00 **Prod: 2.0000 HU** Lab Pcs: 2.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2K-PR12	12' Pallet Rack	1.00	10.00 EA	815.000		8,150				8,150
$10,901.94	4.0000 MH/EA		40.00 MH	[140.54]	2,752	8,150				10,902

=====> Item Totals: 6119000 - PALLET RACK

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$20,067.31	73.0000 MH/LS		73.00 MH	[2564.86]	5,022	15,045				**20,067**
20,067.310	1 LS				5,022.31	15,045.00				20,067.31

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 6210000 Land Item SCHEDULE: 1 100 ERS
Description = FIRE SUPPRESSION Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

21000 Fire Protection Sub(70% of AECOM CHB) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415FPR	Fire Protection Sub	1.00	1.00 LS	184,000.000					184,000	184,000

BID ITEM = 6220000 Land Item SCHEDULE: 1 100 ERS
Description = PLUMBING(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

22000 PLUMBING SUB(STERLING) - (70% of AECOM C Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415PLUMBING	Plumbing Sub	1.00	1.00 LS	368,339.000					368,339	368,339

BID ITEM = 6230000 Land Item SCHEDULE: 1 100 ERS
Description = HVAC(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

23000 HVAC SUB(STERLING) - (70% of AECOM CHB) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415HVAC	HVAC Sub	1.00	1.00 LS	679,021.000					679,021	679,021

BID ITEM = 6260000 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

26000 Electrical Sub(STERLING) - (70% of AECOM Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416ELECTRIC	Electrical Sub	1.00	1.00 LS	1,228,064.000					1,228,064	1,228,064

BID ITEM = 6270000 Land Item SCHEDULE: 1 100 REM
Description = INSTRUMENTATION & CONTROL Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

27000 I & C SUB(STERLING) - (70% of AECOM CHB) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416I&C	Instrumentation-Control Su	1.00	1.00 LS	594,636.000					594,636	594,636

PARENT ITEM = 6310000 BCL
Description = EARTHWORK Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 6310000:

BID ITEM = 6311000 Land Item SCHEDULE: 1 100 BCL
Description = EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

631-01 EXCAVATE --> DUMPSITE Quan: 970.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C260C Excavation -Small 24.25 CH Eff: 100.00 **Prod: 40.0000 UH** Lab Pcs: 3.00 Eqp Pcs: 2.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
5DUMP	Dump Fee	1.00	970.00 CY	4.000			3,880			3,880
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	121.26 HR	130.000			15,764			15,764

Cost Report

BID ITEM = 6311000 Land Item SCHEDULE: 1 100 BCL
Description = EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$26,057.47	0.0750 MH/CY		72.75	MH	[2.618]	4,346		19,644	2,068		26,057
631-02	**SUBGRADE PREP - FOR D/S PAD**				**Quan: 1,196.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C230A	Subgrade Compact Crew		7.97	CH	Eff: 100.00	**Prod: 150.0006 UH**		Lab Pcs:	4.00	Eqp Pcs:	2.00
$3,319.74	0.0266 MH/SY		31.88	MH	[0.985]	1,988			1,332		3,320
631-02A	**REMOVE WORKING PAD - 42"**				**Quan: 1,396.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C261A	Exc Working Pad		69.80	CH	Eff: 100.00	**Prod: 20.0000 UH**		Lab Pcs:	3.00	Eqp Pcs:	2.00
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	209.40	HR	130.000			27,222			27,222
$50,863.58	0.1500 MH/CY		209.40	MH	[5.828]	13,557		27,222	10,085		50,864
631-02B	**SUBGRADE PREP - BASE SLAB**				**Quan: 815.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C262A	Structural Base		8.15	CH	Eff: 100.00	**Prod: 100.0000 UH**		Lab Pcs:	4.00	Eqp Pcs:	3.00
$3,291.53	0.0400 MH/SY		32.60	MH	[1.479]	2,032			1,259		3,292
631-02C	**SUBGRADE PREP - FTG & BMS**				**Quan: 757.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C260C	Excavation -Small		30.28	CH	Eff: 100.00	**Prod: 25.0000 UH**		Lab Pcs:	4.00	Eqp Pcs:	3.00
$11,031.93	0.1600 MH/SY		121.12	MH	[5.914]	7,551			3,481		11,032
631-03	**STONE BASE - 6" - BASE SLAB**				**Quan: 136.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C262A	Structural Base		6.80	CH	Eff: 100.00	**Prod: 20.0000 UH**		Lab Pcs:	4.00	Eqp Pcs:	3.00
2A0108	#8 Aggregate	1.00	272.00	TN	33.660		9,156				9,156
$11,901.82	0.2000 MH/CY		27.20	MH	[7.393]	1,696	9,156		1,051		11,902
631-03A	**STONE BASE - 6" - FTG & BMS**				**Quan: 126.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C260C	Excavation -Small		12.60	CH	Eff: 100.00	**Prod: 10.0000 UH**		Lab Pcs:	4.00	Eqp Pcs:	3.00
2A0108	#8 Aggregate	1.00	252.00	TN	33.660		8,482				8,482
$13,072.88	0.4000 MH/CY		50.40	MH	[14.786]	3,142	8,482		1,448		13,073
631-04	**BACKFILL EXT - GRAN**				**Quan: 1,117.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C270A	Backfill - Small		111.70	CH	Eff: 100.00	**Prod: 10.0000 UH**		Lab Pcs:	4.00	Eqp Pcs:	4.00
2A01053	#53 Aggregate	1.00	2,234.00	TN	35.100		78,413				78,413
$123,492.39	0.4000 MH/CY		446.80	MH	[14.786]	27,855	78,413		17,224		123,492
631-04T	**BACKFILL INT - GRAN - TELEBELT**				**Quan: 1,567.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C270T	Backfill - Telebelt		75.70	CH	Eff: 100.00	**Prod: 20.7000 UH**		Lab Pcs:	4.00	Eqp Pcs:	2.00
2A0108	#8 Aggregate	1.00	3,134.00	TN	33.660		105,490				105,490
402TELBELTT	Telebelt Sub - Travel Time	1.00	9.64	HR	350.000					3,374	3,374
402TELEBELT	Telebelt Sub - 110'	1.00	77.14	HR	300.000					23,142	23,142
402TELEBELTC	Telebelt Sub - CY Charge	1.00	1,567.00	CY	4.000					6,268	6,268
$161,827.96	0.1932 MH/CY		302.80	MH	[6.519]	17,649	105,490		5,905	32,784	161,828
=====> Item Totals:	**6311000 - EXC & BF**										
$404,859.30	1,294.9500 MH/LS		1,294.95	MH	[47134.98]	79,816	201,542	46,866	43,852	32,784	**404,859**
404,859.300	1 LS					79,815.54	201,541.68	46,865.80	43,852.28	32,784.00	404,859.30

BID ITEM = 6311500 Land Item SCHEDULE: 1 100 BCL
Description = ACP Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6311500					Land Item SCHEDULE: 1 100						BCL
Description = ACP					Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
220-01	**AUGERCAST PILE**		**Quan: 4,266.00**	**LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
402ACP16A	Augercast Pile - 16" All Inc	1.00	4,266.00	LF	100.000					426,600	426,600

Total of Above Sub-Biditems

=====> Item Totals:	**6310000**	**- EARTHWORK**									
$831,459.30	**1,294.9500 MH/LS**		**1,294.95**	**MH**	**[47134.98]**	**79,816**	**201,542**	**46,866**	**43,852**	**459,384**	**831,459**
831,459.300	**1 LS**					**79,815.54**	**201,541.68**	**46,865.80**	**43,852.28**	**459,384.00**	**831,459.30**

PARENT ITEM = 6430000											TAL
Description = PROCESS EQUIPMENT PACKAGES - KII					Unit = LS	Takeoff Quan:		1.000	Engr Quan:		1.000

Listing of Sub-Biditems of Parent Item 6430000:

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 6431000					Land Item SCHEDULE: 1 100						JWA
Description = CHB EQ PKGS					Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
6432121	**CHB CHEM TRANSFER PUMPS PKG**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2EQ432121-06	CHB CHEM TRANSFER P	1.00	1.00	LS	69,750.000		69,750				69,750
6434143	**CHB POLY TANKS PKG**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2EQ434143-06	CHB POLY TANKS PKG	1.00	1.00	LS	298,000.000		298,000				298,000
6463323	**CHB CHEM SCALES PKG**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2EQ463323-06	CHB CHEM SCALES PK	1.00	1.00	LS	32,000.000		32,000				32,000
6463344	**CHB CHEM METERING PUMPS PKG**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C03N	Non-Shrink Grout	1.00	2.00	CF	35.000		70				70
2EQ463344-06	CHB CHEM METERING	1.00	1.00	LS	400,000.000		400,000				400,000
$400,070.00					[ ]		400,070				400,070
=====> Item Totals:	**6431000**	**- CHB EQ PKGS**									
$799,820.00					[ ]		799,820				**799,820**
799,820.000	1 LS						799,820.00				799,820.00

Total of Above Sub-Biditems

=====> Item Totals:	**6430000**	**- PROCESS EQUIPMENT PACKAGES - KII**									
$799,820.00					**[ ]**		**799,820**				**799,820**
799,820.000	**1 LS**						**799,820.00**				**799,820.00**

BID ITEM = 6440000 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS EQUIPMENT INSTALL - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
215501	**xx PROCESS EQUIPMENT INSTALL**		**Quan: 1.00 LS**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
415EQUISTER	Sterling Industrial Process	1.00	1.00 LS	122,927.000					122,927	122,927

Total of Above Sub-Biditems

=====> Item Totals: 6000000 - CHEMICAL BUILDING(CHB)

$8,119,450.74	**2,030.1800 MH/LS**		**2,030.18 MH**	**[69678.01]**	**125,492**	**1,780,571**	**508,419**	**43,852**	**5,661,117**	**8,119,451**
8,119,450.740	**1 LS**				**125,491.96**	**1,780,570.67**	**508,418.71**	**43,852.28**	**5,661,117.12**	**8,119,450.74**

PARENT ITEM = 8000000 CLIENT# = 9 ALL
Description = PAC - INTAKE CHEMICAL BUILDING((ICB) Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 8000000:

BID ITEM = 8032000 Land Item SCHEDULE: 1 100 BVN
Description = CONCRETE REINFORCEMENT Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03171	**REBAR-FURNISH/INSTALL FEB 2025 -MARCH 20**		**Quan: 7.00 TN**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C10ESCL2	REBAR ESCALATION 20	1.00	7.00 TN	150.000		1,050				1,050
2C10RP	Rebar-Plain	1.00	7.00 TN	1,425.950		9,982				9,982
403REBARL	Rebar Install Sub	1.00	7.00 TN	1,331.700					9,322	9,322
$20,353.55				[ ]		11,032			9,322	20,354
03171M	**REBAR- MASONRY**		**Quan: 1.00 TN**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
2C10ESCL3	REBAR ESCALATION 20	1.00	1.00 TN	250.000		250				250
2C10RP1	MASONRY REBAR	1.00	1.00 TN	1,425.950		1,426				1,426
$1,675.95				[ ]		1,676				1,676

=====> Item Totals: 8032000 - CONCRETE REINFORCEMENT

$22,029.50				[ ]		12,708			9,322	**22,030**
22,029.500	1 LS					12,707.60			9,321.90	22,029.50

PARENT ITEM = 8033000 BVN
Description = CAST-IN-PLACE CONCRETE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 8033000:

BID ITEM = 8033001 Land Item SCHEDULE: 1 100 BVN
Description = 8 - ICB Unit = CY Takeoff Quan: 103.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03003	**GROUT CLEAN**		**Quan: 272.00 SF**	**Hrs/Shft: 8.00 Cal: 508 WC: 1**						
C302	2 FINISHERS		4.08 CH	Eff: 100.00 **Prod:**		**0.0300 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
2C21R	Rub Surfaces	1.00	272.00 SF	0.075		20				20
$482.73	0.0300 MH/SF		8.16 MH	[0.929]	462	20				483

BID ITEM = 8033001 Land Item SCHEDULE: 1 100 BVN
Description = 8 - ICB Unit = CY Takeoff Quan: 103.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**		**Quan: 3,386.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		2.53	CH	Eff: 100.00	**Prod: 0.0030 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	3,386.00	SF	0.032			116			116
$667.17	0.0030 MH/SF		10.16	MH	[0.092]	551		116			667
03046	**RGHN MECH**		**Quan: 150.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		7.50	CH	Eff: 100.00	**Prod: 0.1000 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
$808.83	0.1000 MH/SF		15.00	MH	[3.024]	809					809
03047	**ROUGHEN CJ LIQUID SPRAY**		**Quan: 12.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.18	CH	Eff: 100.00	**Prod: 0.0300 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
3C01LR	ROUGHNER-LIQUI@107.	1.00	12.00	SF	0.130			2			2
$21.08	0.0300 MH/SF		0.36	MH	[0.908]	19		2			21
03048	**APPLY CEMENT SLURRY**		**Quan: 72.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.36	CH	Eff: 100.00	**Prod: 0.0100 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C23BC	Bonding-Cement Slurry	1.00	72.00	SF	0.150		11				11
$49.63	0.0100 MH/SF		0.72	MH	[0.302]	39	11				50
03050	**APPLY EPOXY BOND**		**Quan: 226.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.90	CH	Eff: 100.00	**Prod: 0.0080 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C23BE	Bonding-Epoxy	1.00	226.00	SF	1.150		260				260
$357.49	0.0080 MH/SF		1.81	MH	[0.242]	98	260				357
03063	**WATER BLAST CLEAN SURFACE**		**Quan: 784.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C309	2 LAB, 1 LAB FOREMAN		2.61	CH	Eff: 100.00	**Prod: 0.0100 MU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
$425.95	0.0100 MH/SF		7.84	MH	[0.306]	426					426
03072	**FINE GRADE TO 3000 SF**		**Quan: 1,767.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C317G2	SMALL FINE GRADE		8.83	CH	Eff: 100.00	**Prod: 0.0200 MU**		Lab Pcs: 4.00		Eqp Pcs:	2.00
$2,344.97	0.0200 MH/SF		35.35	MH	[0.649]	2,007			338		2,345
03078	**F+I PERIM INSULATION 2"THK**		**Quan: 102.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		0.81	CH	Eff: 100.00	**Prod: 0.0160 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C22P2	2" Perimeter Insulation	1.10	112.20	SF	1.400		157				157
$244.97	0.0159 MH/SF		1.63	MH	[0.483]	88	157				245
03162	**PLACE #6 WWM 6x6/W2.9xW2.9 PC HC PER 12**		**Quan: 800.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		2.00	CH	Eff: 100.00	**Prod: 0.0100 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
2C10W06	#6 WWM 6x6/W2.9xW2.9	1.10	880.00	SF	0.300		264				264
$697.82	0.0100 MH/SF		8.00	MH	[0.305]	434	264				698
03178	**D+G VERT<8"**		**Quan: 110.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C301	2 LABORERS		8.25	CH	Eff: 100.00	**Prod: 0.1500 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	110.00	EA	3.150		347				347
$1,236.22	0.1500 MH/EA		16.50	MH	[4.536]	890	347				1,236

Cost Report

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM	**= 8033001**			Land Item	SCHEDULE:	1	100				BVN
Description =	8 - ICB			Unit =	CY	Takeoff Quan:	103.000		Engr Quan:		0.000
03191	**CMU WALL D+G VERT**			**Quan:**	**72.50 EA**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C301	2 LABORERS		5.43	CH	Eff: 100.00 **Prod:**	**0.1500 MU**		Lab Pcs:	2.00	Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	72.50	EA	3.150		228				228
$815.05		0.1500 MH/EA	10.88	MH	[4.538]	587	228				815
03212	**REINFORCING MAT SUPTS-BRICKS**			**Quan:**	**1,767.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
2C30BMS	Brick Mat Supports	1.00	1,767.00	SF	0.150		265				265
03224	**JOINT SEALANT 1/2"**			**Quan:**	**91.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C305	1 LAB, 1 FINISHER		1.59	CH	Eff: 100.00 **Prod:**	**0.0350 MU**		Lab Pcs:	2.00	Eqp Pcs:	0.00
2C25N	Joint Sealant to 1/2" W	1.15	104.65	LF	0.700		73				73
$246.69		0.0349 MH/LF	3.18	MH	[1.075]	173	73				247
03239	**EXPANSION JNT MAT 1/2" CORK III**			**Quan:**	**91.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C307	1 LAB, 2 CARP		1.82	CH	Eff: 100.00 **Prod:**	**0.0600 MU**		Lab Pcs:	3.00	Eqp Pcs:	0.00
2C24C.53	1/2" Type III Cork EJM	1.00	91.00	SF	6.300		573				573
$893.60		0.0600 MH/SF	5.46	MH	[1.727]	320	573				894
03246	**WATERSTOP IN C.J. 9" PVC**			**Quan:**	**72.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C307	1 LAB, 2 CARP		2.40	CH	Eff: 100.00 **Prod:**	**0.1000 MU**		Lab Pcs:	3.00	Eqp Pcs:	0.00
2C279	9" Waterstop	1.10	79.20	LF	4.380		347				347
2C27FACMADE	FACTORY MADE INTER	1.00	2.00	EA	50.000		100				100
$869.28		0.1000 MH/LF	7.20	MH	[2.879]	422	447				869
03266	**CJ SLAB-WALL BOT (RAISED KEYS)**			**Quan:**	**68.00 LF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C312	2 CARP, 1 CARP FOREMAN		4.53	CH	Eff: 100.00 **Prod:**	**0.2000 MU**		Lab Pcs:	3.00	Eqp Pcs:	0.00
3C15SW8	S-W to 8" CJ F@107.25%	1.00	68.00	LF	2.000			146			146
$987.01		0.2000 MH/LF	13.60	MH	[5.753]	841		146			987
03282	**CJ WALL-WALL**			**Quan:**	**12.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C312	2 CARP, 1 CARP FOREMAN		1.60	CH	Eff: 100.00 **Prod:**	**0.4000 MU**		Lab Pcs:	3.00	Eqp Pcs:	0.00
3C15WW915	W-W 9"-15" CJ/@107.25%	1.00	12.00	LF	3.600			46			46
$343.21		0.4000 MH/SF	4.80	MH	[11.507]	297		46			343
03321	**EF PAC SILO PAD 16"w/3' THKNGx16'SQ EL38**			**Quan:**	**192.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C320	SMALL FORM =1L, 2C,1CF		14.40	CH	Eff: 100.00 **Prod:**	**0.3000 MU**		Lab Pcs:	4.00	Eqp Pcs:	0.00
3C10EF12+	EF > 12" Ht. E@107.25%	1.00	192.00	SF	5.463			1,125			1,125
$4,573.48		0.3000 MH/SF	57.60	MH	[8.741]	3,448		1,125			4,573
03325	**P PAC SILO PAD 16"w/3' THKNGx16'SQ EL381**			**Quan:**	**21.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C327	SMALL FLATWORK =2L,2F,1FF		4.20	CH	Eff: 100.00 **Prod:**	**1.0000 MU**		Lab Pcs:	5.00	Eqp Pcs:	0.00
2C0104	Site Concrete	1.05	22.05	CY	141.500		3,120				3,120
$4,297.20		1.0000 MH/CY	21.00	MH	[31.108]	1,177	3,120				4,297
03349	**EF BLDG FTG 1.5'THK EL382-384**			**Quan:**	**310.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C320	SMALL FORM =1L, 2C,1CF		23.25	CH	Eff: 100.00 **Prod:**	**0.3000 MU**		Lab Pcs:	4.00	Eqp Pcs:	0.00
3C10EF12+	EF > 12" Ht. E@107.25%	1.00	310.00	SF	5.463			1,817			1,817
$7,384.27		0.3000 MH/SF	93.00	MH	[8.741]	5,568		1,817			7,384

Cost Report

BID ITEM = 8033001 Land Item SCHEDULE: 1 100 BVN
Description = 8 - ICB Unit = CY Takeoff Quan: 103.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03353	**P BLDG FTG 1.5'THK EL382-384**		**Quan:**	**39.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C326	FOOTING POUR CREW = 2L,1LF,1		11.70	CH	Eff: 100.00	**Prod:**	**1.2000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C0101	Foundation Concrete	1.04	40.56	CY	141.500		5,739				5,739
$8,309.14	1.2000 MH/CY		46.80	MH	[36.828]	2,570	5,739				8,309
03361	**EF FTG STEP**		**Quan:**	**2.00 EA**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C320	SMALL FORM =1L, 2C,1CF		4.00	CH	Eff: 100.00	**Prod:**	**8.0000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C10CCF	Cont. Ftg. Ste@107.25%	1.00	2.00	EA	5.463			12			12
$969.61	8.0000 MH/EA		16.00	MH	[233.08]	958		12			970
03367	**F BLDG G BM 10"Tx2-4'Hx68LF EL382-384**		**Quan:**	**413.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C320	SMALL FORM =1L, 2C,1CF		24.00	CH	Eff: 100.00	**Prod:**	**0.2324 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C20GB	Grade Beam For@107.25%	1.00	413.00	SF	5.463			2,420			2,420
$8,167.43	0.2324 MH/SF		96.00	MH	[6.772]	5,747		2,420			8,167
03377	**P BLDG G BM 10"Tx2-4'Hx68LF EL382-384**		**Quan:**	**6.37 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C326	FOOTING POUR CREW = 2L,1LF,1		3.18	CH	Eff: 100.00	**Prod:**	**2.0000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C0101	Foundation Concrete	1.04	6.62	CY	141.500		937				937
$1,636.88	2.0015 MH/CY		12.75	MH	[61.43]	700	937				1,637
03409	**POUR MUDMAT 3"THK**		**Quan:**	**2.37 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C326	FOOTING POUR CREW = 2L,1LF,1		2.00	CH	Eff: 100.00	**Prod:**	**3.3755 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
2C0102	Mudmat Concrete	1.10	2.61	CY	129.000		337				337
$775.98	3.3755 MH/CY		8.00	MH	[103.595]	439	337				776
03416	**EF BLDG FLR SLB 1'THK EL386**		**Quan:**	**49.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C320	SMALL FORM =1L, 2C,1CF		5.00	CH	Eff: 100.00	**Prod:**	**0.4082 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00
3C10EF12	EF 7"-12" Ht. @107.25%	1.00	49.00	LF	5.463			287			287
$1,484.48	0.4081 MH/SF		20.00	MH	[11.892]	1,197		287			1,484
03427	**P BLDG FLR SLB 1'T 817SF EL386**		**Quan:**	**31.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C327	SMALL FLATWORK =2L,2F,1FF		8.19	CH	Eff: 100.00	**Prod:**	**1.3219 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
2C0105	SOG Concrete	1.04	32.24	CY	141.500		4,562				4,562
403RMPUMP1	Pump Slab =< 8"	1.00	31.00	CY	23.241					721	721
$7,579.54	1.3219 MH/CY		40.98	MH	[41.123]	2,297	4,562			721	7,580
03876	**P ROOF HC TOPPING SLAB 2"T 1588SF EL384.**		**Quan:**	**4.85 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C327	SMALL FLATWORK =2L,2F,1FF		8.00	CH	Eff: 100.00	**Prod:**	**8.2474 MU**	Lab Pcs:	5.00	Eqp Pcs:	0.00
2C01HCTOP	HC TOPPING MIX	1.05	5.09	CY	141.500		720				720
$2,962.38	8.2474 MH/CY		40.00	MH	[256.561]	2,242	720				2,962
03913	**EF CONTNMNT CURB 10"Tx2'Hx68LF EL386**		**Quan:**	**272.00 SF**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C307	1 LAB, 2 CARP		31.73	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs:	3.00	Eqp Pcs:	0.00
3C10C12+	Curb > 12" Ht.@107.25%	1.00	272.00	SF	5.463			1,594			1,594
$7,178.62	0.3500 MH/SF		95.20	MH	[10.075]	5,585		1,594			7,179
03917	**P CONTNMNT CURB 10"Tx2'Hx68LF EL386**		**Quan:**	**5.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**			
C314	2 LAB, 2 FINISHERS		4.00	CH	Eff: 100.00	**Prod:**	**3.2000 MU**	Lab Pcs:	4.00	Eqp Pcs:	0.00

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8033001					Land Item	SCHEDULE: 1	100				BVN
Description =	8 - ICB				Unit = CY	Takeoff Quan:	103.000		Engr Quan:		0.000
2C0105	SOG Concrete	1.05	5.25	CY	141.500		743				743
$1,627.52	3.2000 MH/CY		16.00	MH	[97.952]	885	743				1,628
03927	**EF INT EQ PADS <12"HT**				**Quan: 110.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C307	1 LAB, 2 CARP		12.83	CH	Eff: 100.00	**Prod:**	**0.3500 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
3C10EQ12	Equip. Pad to @107.25%	1.00	110.00	LF	5.463			645			645
$2,903.13	0.3500 MH/SF		38.50	MH	[10.075]	2,259		645			2,903
03932	**P INT EQ PADS <12"HT**				**Quan: 3.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C314	2 LAB, 2 FINISHERS		4.50	CH	Eff: 100.00	**Prod:**	**6.0000 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0105	SOG Concrete	1.05	3.15	CY	141.500		446				446
$1,440.95	6.0000 MH/CY		18.00	MH	[183.66]	995	446				1,441
=====> **Item Totals:**	**8033001 - 8 - ICB**										
$73,047.36	7.4803 MH/CY		770.48	MH	[223.024]	44,531	19,249	8,209	338	721	**73,047**
709.198	103 CY					432.34	186.88	79.70	3.28	7.00	709.20

PARENT ITEM = 8033010 BVN

Description = 8 - ELEC CONCRETE Unit = CY Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 8033010:

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8033011					Land Item	SCHEDULE: 1	100				BVN
Description =	ELEC INT PADS				Unit = CY	Takeoff Quan:	1.000		Engr Quan:		0.000
03007	**WATER CURE**				**Quan: 35.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C334	3 LAB, 1 LAB FOREMAN		0.02	CH	Eff: 100.00	**Prod:**	**0.0030 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	35.00	SF	0.032			1			1
$7.18	0.0031 MH/SF		0.11	MH	[0.096]	6		1			7
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**				**Quan: 1.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C02S	Superplasticizer	1.05	1.05	CY	5.000		5				5
03046	**ROUGHEN EXISTING MECHANICAL**				**Quan: 35.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		1.75	CH	Eff: 100.00	**Prod:**	**0.1000 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
$188.73	0.1000 MH/SF		3.50	MH	[3.024]	189					189
03050	**EPOXY BONDING AGENT <500 SF**				**Quan: 35.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		0.14	CH	Eff: 100.00	**Prod:**	**0.0080 MU**	Lab Pcs: 2.00		Eqp Pcs:	0.00
2C23BE	Bonding-Epoxy	1.00	35.00	SF	1.150		40				40
$55.35	0.0080 MH/SF		0.28	MH	[0.242]	15	40				55
03171	**REBAR-FURNISH/INSTALL SEPARATE-PLAIN**				**Quan: 0.03 TN**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C10ESCL3	REBAR ESCALATION 20	1.00	0.03	TN	250.000		8				8
2C10RP	Rebar-Plain	1.00	0.03	TN	1,425.950		43				43
403REBARL	Rebar Install Sub	1.00	0.03	TN	1,331.700					40	40
$90.23					[ ]		50			40	90

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8033011				Land Item	SCHEDULE: 1	100				BVN
Description =	ELEC INT PADS			Unit = CY	Takeoff Quan:	1.000		Engr Quan:		0.000
03178	**D & G VERT TO 8" DP >100 EA**			**Quan: 49.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		3.67 CH	Eff: 100.00	**Prod: 0.1500 MU**		Lab Pcs: 2.00		Eqp Pcs:	0.00
2C13S	Drill&Grout Dowels less 8"	1.00	49.00 EA	3.150		154				154
$550.67	0.1500 MH/EA		7.35 MH	[4.536]	396	154				551
03937	**EF EQ PADS >12" H 20-100 SF**			**Quan: 49.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C307	1 LAB, 2 CARP		5.71 CH	Eff: 100.00	**Prod: 0.3500 MU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
3C10EQ12+	Equip. Pad > 1@107.25%	1.00	49.00 SF	5.463			287			287
$1,293.18	0.3500 MH/SF		17.15 MH	[10.076]	1,006		287			1,293
03942	**P EQUIP PADS >12" H 2-8 CY**			**Quan: 0.42 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C314	2 LAB, 2 FINISHERS		0.52 CH	Eff: 100.00	**Prod: 5.0000 MU**		Lab Pcs: 4.00		Eqp Pcs:	0.00
2C0105	SOG Concrete	1.05	0.44 CY	141.500		62				62
$178.37	5.0000 MH/CY		2.10 MH	[153.048]	116	62				178
03999F	**READYMIX FUEL SURCHARGE**			**Quan: 1.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C01FUEL	READYMIX FUEL SURC	1.05	1.05 CY	2.500		3				3
03999Z	**READYMIX ESCALATION**			**Quan: 1.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C01ESCL3	2026 READYMIX ESCAL	1.05	1.05 CY	52.000		55				55
=====> **Item Totals:**	**8033011 - ELEC INT PADS**									
$2,426.19	30.4900 MH/CY		30.49 MH	[897.91]	1,728	370	288		40	**2,426**
2,426.190	1 CY				1,728.29	369.62	288.33		39.95	2,426.19

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals:**	**8033010 - 8 - ELEC CONCRETE**									
$2,426.19	**30.4900 MH/CY**		**30.49 MH**	**[897.91]**	**1,728**	**370**	**288**		**40**	**2,426**
2,426.190	**1 CY**				**1,728.29**	**369.62**	**288.33**		**39.95**	**2,426.19**

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8033015				Land Item	SCHEDULE: 1	100				BVN
Description =	WINTER CONCRETE			Unit = CY	Takeoff Quan:	1.000		Engr Quan:		0.000
03023	**Winter Concrete Protection FEB 2025 -MAR**			**Quan: 103.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C309	2 LAB, 1 LAB FOREMAN		6.86 CH	Eff: 100.00	**Prod: 0.2000 MU**		Lab Pcs: 3.00		Eqp Pcs:	0.00
2C02A	Accelerator N/C 2%	0.75	77.25 CY	11.000		850				850
2C02H	Hot Water Winter Heat	1.00	103.00 CY	5.000		515				515
3C01WINTER	WINTER CONCRET@107	1.00	103.00 CY	4.500			497			497
8CXPWINTER2	==> Winter Heater for Conc	1.00	103.00 CY	6.600				680		680
$3,660.87	0.2000 MH/CY		20.60 MH	[6.119]	1,119	1,365	497	680		3,661
=====> **Item Totals:**	**8033015 - WINTER CONCRETE**									
$3,660.87	20.6000 MH/CY		20.60 MH	[630.23]	1,119	1,365	497	680		**3,661**
3,660.870	1 CY				1,119.22	1,364.75	497.10	679.80		3,660.87

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8033020				Land Item	SCHEDULE: 1 100						BVN
Description =	READYMIX ADMIX & ESCL			Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
03040	**MACRO FIBER ADMIX - BLDG SLAB&TOPPING**	**Quan:**	**36.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
2C01MACRO	MACRO FIBER 3#/CY	1.05	37.80	CY	21.000		794				794
03043	**SUPERPLASTICIZER - ALL CONCRETE BELOW .**	**Quan:**	**108.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
2C02S	Superplasticizer	1.05	113.40	CY	5.000		567				567
03999F	**READYMIX FUEL SURCHARGE**	**Quan:**	**111.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
2C01FUEL	READYMIX FUEL SURC	1.05	116.55	CY	2.500		291				291
03999Z	**READYMIX ESCALATION FEB 2025 -MARCH 202**	**Quan:**	**111.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
2C01ESCL2	2025 READYMIX ESCLA	1.05	116.55	CY	36.000		4,196				4,196
=====> Item Totals:	**8033020 - READYMIX ADMIX & ESCL**										
$5,847.98					[ ]		5,848				**5,848**
5,847.980		1 LS					5,847.98				5,847.98

Total of Above Sub-Biditems

Item	Desc	MH/LS	MH		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> Item Totals:	**8033000 - CAST-IN-PLACE CONCRETE**										
$84,982.40		**821.5700 MH/LS**	**821.57 MH**		**[24499.63]**	**47,378**	**26,831**	**8,995**	**1,018**	**760**	**84,982**
84,982.400		**1 LS**				**47,378.31**	**26,831.47**	**8,994.53**	**1,017.64**	**760.45**	**84,982.40**

Activity / Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8034000				Land Item	SCHEDULE: 1 100						BVN
Description =	PRECAST HOLLOWCORE PLANKS			Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
03876	**POUR GROUT BETWEEN PLANKS**	**Quan:**	**1.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
C327	SMALL FLATWORK =2L,2F,1FF		4.00 CH	Eff: 100.00	**Prod: 20.0000 MU**			Lab Pcs: 5.00		Eqp Pcs:	0.00
2C01HCTOP	HC TOPPING MIX	1.05	1.05	CY	141.500		149				149
$1,269.65		20.0000 MH/CY	20.00	MH	[622.16]	1,121	149				1,270
03997	**SUB INSTALL HOLLOWCORE PLANK**	**Quan:**	**896.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**					
2H02ESCL	2025 PC ESCALATION	1.00	896.00	SF	2.720		2,437				2,437
403PC7	8 - ICB PC PLANKS	1.00	1.00	LS	36,248.410					36,248	36,248
$38,685.53					[ ]		2,437			36,248	38,686
=====> Item Totals:	**8034000 - PRECAST HOLLOWCORE PLANKS**										
$39,955.18		20.0000 MH/LS	20.00	MH	[622.16]	1,121	2,586			36,248	**39,955**
39,955.180		1 LS				1,121.07	2,585.70			36,248.41	39,955.18
BID ITEM = 8040000				Land Item	SCHEDULE: 1 100						SAE
Description =	MASONRY			Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 8040000 Land Item SCHEDULE: 1 100 SAE
Description = MASONRY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80402 MASONRY SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
404MASONRY	Masonry Sub	1.05	1.05	LS	187,849.622					197,242	197,242

BID ITEM = 8050000 Land Item SCHEDULE: 1 100 RLC
Description = METALS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05995 Misc Metal Sub Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
405MMTL	Misc Metal Sub	1.00	1.00	LS	12,680.000					12,680	12,680

BID ITEM = 8059000 Land Item SCHEDULE: 1 100 RLC
Description = METAL MATERIAL - ICB Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

05601 Metals Materials Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

S503 3 IRONWORKERS PER HOUR 24.00 CH Eff: 100.00 **Prod: 24.0000 HU** Lab Pcs: 3.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2MM01-08	08ICB Metals	1.00	1.00	LS	66,370.000		66,370				66,370
$71,224.07	72.0000 MH/LS		72.00	MH	[2443.68]	4,854	66,370				71,224

=====> Item Totals: 8059000 - METAL MATERIAL - ICB

$71,224.07	72.0000 MH/LS		72.00	MH	[2443.68]	4,854	66,370				**71,224**
71,224.070	1 LS					4,854.07	66,370.00				71,224.07

BID ITEM = 8061000 Land Item SCHEDULE: 1 100 RLC
Description = ROUGH CARPENTRY Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

06019 Install 2x6 Treated Nailer Quan: 230.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C602 (2) CARPENTER 6.00 CH Eff: 100.00 **Prod: 38.3333 UH** Lab Pcs: 2.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2W012X06NT	2x6 Treated Nailer	1.10	253.00	LF	1.800		455				455
$1,202.50	0.0521 MH/LF		12.00	MH	[1.519]	747	455				1,203

06035 Install 2x14 Treated Nailer Quan: 209.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

C603 (3) CARPENTER 6.00 CH Eff: 100.00 **Prod: 34.8333 UH** Lab Pcs: 3.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2W012X14NT	2x14 Treated Nailer	1.15	240.35	LF	8.250		1,983				1,983
$3,096.19	0.0861 MH/LF		18.00	MH	[2.478]	1,113	1,983				3,096

=====> Item Totals: 8061000 - ROUGH CARPENTRY

$4,298.69	30.0000 MH/LS		30.00	MH	[867.24]	1,860	2,438				**4,299**
4,298.690	1 LS					1,860.40	2,438.29				4,298.69

BID ITEM = 8071300 Land Item SCHEDULE: 1 100 RLC
Description = WATERPROOFING - SELF-ADHERING SHEET Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> Item Totals: 8071300 - WATERPROOFING - SELF-ADHERING SHEET
$0.00 [ ]

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 8071300 Land Item SCHEDULE: 1 100 RLC
Description = WATERPROOFING - SELF-ADHERING SHEET Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

0.000 1 LS

BID ITEM = 8075400 Land Item SCHEDULE: 1 100 SAE
Description = ROOFING - TPO Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80722 EPDM ROOFING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
407ROOFEPDM	EPDM Roofing Sub	1.05	1.05 LS	50,700.000					53,235	53,235

BID ITEM = 8079200 Land Item SCHEDULE: 1 100
Description = JOINT SEALANTS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80728 CAULKING AND SEALANTS SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
407CAULK	Caulking Sub	1.00	1.00 LS	19,300.000					19,300	19,300

BID ITEM = 8081200 Land Item SCHEDULE: 1 100 RLC
Description = ALUMINUM DOORS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> **Item Totals: 8081200 - ALUMINUM DOORS**
$0.00 [ ]
0.000 1 LS

BID ITEM = 8084500 Land Item SCHEDULE: 1 100 RLC
Description = FIBERGLASS SANDWICH PANELS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

08450 Translucent Wall & Roof Sub (LS) Quan: 497.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
408FRPPAN	FRP Translucent Panel Sub	1.00	1.00 LS	19,820.000					19,820	19,820

BID ITEM = 8099000 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING & COATING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80916 PAINTING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
409PAINTING	Painting Sub	1.05	1.05 LS	50,993.269					53,543	53,543

BID ITEM = 8099600 Land Item SCHEDULE: 1 100 SAE
Description = COATING FOR CHEMICAL AREAS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80918 CHEMICAL COATING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
409HIGHPROC	High Preformance Coat Sub	1.05	1.05 LS	100,000.000					105,000	105,000

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 8101400 Land Item SCHEDULE: 1 100 SAE
Description = SIGNS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10401 SIGN MATERIAL Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2S14-LS	Signs - LS	1.00	1.00 LS	4,113.000		4,113				4,113

10402 Install Interior ID Signs Quan: 22.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 11.00 CH Eff: 100.00 **Prod: 0.5000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$671.37 0.5000 MH/EA 11.00 MH [14.03] 671 671

=====> **Item Totals: 8101400 - SIGNS**
$4,784.37 11.0000 MH/LS 11.00 MH [308.66] 671 4,113 **4,784**
4,784.370 1 LS 671.37 4,113.00 4,784.37

BID ITEM = 8104400 Land Item SCHEDULE: 1 100 SAE
Description = FIRE PROTECTION CABINETS & FIRE EXTINGUI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

10600 *FIRE EXTINGUISHERS, CABINETS, AND ACC.* Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2S11	FIRE EXTINGUISHERS	1.00	1.00 LS	1,924.000		1,924				1,924

10606 INSTALL FIRE EXTINGUISER IN BRACKET Quan: 2.00 EA Hrs/Shft: 8.00 Cal: 508 WC: 1

C601 (1) CARPENTER 2.00 CH Eff: 100.00 **Prod: 1.0000 MU** Lab Pcs: 1.00 Eqp Pcs: 0.00
$122.07 1.0000 MH/EA 2.00 MH [28.06] 122 122

=====> **Item Totals: 8104400 - FIRE PROTECTION CABINETS & FIRE EXTINGUI**
$2,046.07 2.0000 MH/LS 2.00 MH [56.12] 122 1,924 **2,046**
2,046.070 1 LS 122.07 1,924.00 2,046.07

BID ITEM = 8210000 Land Item SCHEDULE: 1 100 ERS
Description = FIRE SUPPRESSION Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

21000 Fire Protection Sub Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415FPR	Fire Protection Sub	1.00	1.00 LS	99,000.000					99,000	99,000

BID ITEM = 8220000 Land Item SCHEDULE: 1 100 ERS
Description = PLUMBING(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

22000 PLUMBING SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415PLUMBING	Plumbing Sub	1.00	1.00 LS	65,052.000					65,052	65,052

BID ITEM = 8230000 Land Item SCHEDULE: 1 100 ERS
Description = HVAC(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

23000 HVAC SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8230000				Land Item	SCHEDULE: 1 100						ERS
Description = HVAC(STERLING)				Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
415HVAC	HVAC Sub	1.00	1.00	LS	450,492.000					450,492	450,492
BID ITEM = 8260000				Land Item	SCHEDULE: 1 100						REM
Description = ELECTRICAL(STERLING)				Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
26000	**Electrical Sub(STERLING)**			**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
416ELECTRIC	Electrical Sub	1.00	1.00	LS	715,615.000					715,615	715,615
BID ITEM = 8270000				Land Item	SCHEDULE: 1 100						REM
Description = INSTRUMENTATION & CONTROL				Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
27000	**I & C SUB(STERLING)**			**Quan:**	**1.00 LS**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
416I&C	Instrumentation-Control Su	1.00	1.00	LS	332,904.000					332,904	332,904

PARENT ITEM = 8310000 BCL
Description = EARTHWORK Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 8310000:

Activity Resource	Desc	Pcs	Quantity Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 8311000				Land Item	SCHEDULE: 1 100						BCL
Description = EXC & BF				Unit =	LS	Takeoff Quan:	1.000		Engr Quan:		0.000
831-01	**EXCAVATE --> DUMPSITE**			**Quan:**	**134.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C260C	Excavation -Small		8.00 CH	Eff: 100.00	**Prod: 16.7500 UH**		Lab Pcs:	3.00	Eqp Pcs:		2.00
5DUMP	Dump Fee	1.00	134.00 CY		4.000			536			536
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	16.75 HR		130.000			2,178			2,178
$4,829.35	0.1791 MH/CY		24.00 MH		[6.251]	1,434		2,714	682		4,829
831-02	**SUBGRADE PREP - FTG & PIERS**			**Quan:**	**305.00 SY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C260C	Excavation -Small		16.00 CH	Eff: 100.00	**Prod: 19.0625 UH**		Lab Pcs:	4.00	Eqp Pcs:		3.00
$5,829.31	0.2098 MH/SY		64.00 MH		[7.757]	3,990			1,839		5,829
831-03	**STONE BASE - 6"**			**Quan:**	**51.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C260C	Excavation -Small		8.00 CH	Eff: 100.00	**Prod: 6.3750 UH**		Lab Pcs:	4.00	Eqp Pcs:		3.00
2A0108	#8 Aggregate	1.00	102.00 TN		33.660		3,433				3,433
$6,347.98	0.6274 MH/CY		32.00 MH		[23.194]	1,995	3,433		920		6,348
831-04	**BACKFILL INT - GRAN**			**Quan:**	**66.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C270A	Backfill - Small		8.00 CH	Eff: 100.00	**Prod: 8.2500 UH**		Lab Pcs:	4.00	Eqp Pcs:		4.00
2A0108	#8 Aggregate	1.00	132.00 TN		33.660		4,443				4,443
$7,671.70	0.4848 MH/CY		32.00 MH		[17.922]	1,995	4,443		1,234		7,672
831-04A	**BACKFILL EXT - GRAN**			**Quan:**	**483.00 CY**	**Hrs/Shft:**	**8.00**	**Cal: 508**	**WC: 1**		
C270A	Backfill - Small		32.00 CH	Eff: 100.00	**Prod: 15.0938 UH**		Lab Pcs:	4.00	Eqp Pcs:		4.00

Cost Report

BID ITEM = 8311000 Land Item SCHEDULE: 1 100 BCL
Description = EXC & BF Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2A01053	#53 Aggregate	1.00	966.00	TN	35.100		33,907				33,907
$46,820.90	0.2650 MH/CY		128.00	MH	[9.796]	7,980	33,907		4,934		46,821
=====> Item Totals:	**8311000 - EXC & BF**										
$71,499.24	280.0000 MH/LS		280.00	MH	[10300.64]	17,394	41,783	2,714	9,609		**71,499**
71,499.240		1 LS				17,393.58	41,783.04	2,713.50	9,609.12		71,499.24

Total of Above Sub-Biditems

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> Item Totals:	**8310000 - EARTHWORK**										
$71,499.24	**280.0000 MH/LS**		**280.00**	**MH**	**[10300.64]**	**17,394**	**41,783**	**2,714**	**9,609**		**71,499**
71,499.240		**1 LS**				**17,393.58**	**41,783.04**	**2,713.50**	**9,609.12**		**71,499.24**

PARENT ITEM = 8430000 TAL
Description = PROCESS EQUIPMENT PACKAGES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 8430000:

BID ITEM = 8431000 Land Item SCHEDULE: 1 100 JWA
Description = ICB EQ PKGS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
8463344	**ICB CHEM METERING PUMP PKG**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						
2EQ463344-08	ICB CHEM METERING P	1.00	1.00	LS	49,623.000		49,623				49,623
8463613	**DRY SILO FEED SYSTEM PKG**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						
2C03N	Non-Shrink Grout	1.00	5.00	CF	35.000		175				175
2EQ463613-08	PAC FEED SILO SYSTEM	1.00	1.00	LS	949,500.000		949,500				949,500
$949,675.00					[ ]		949,675				949,675
=====> Item Totals:	**8431000 - ICB EQ PKGS**										
$999,298.00					[ ]		999,298				**999,298**
999,298.000		1 LS					999,298.00				999,298.00

Total of Above Sub-Biditems

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> Item Totals:	**8430000 - PROCESS EQUIPMENT PACKAGES - KII**										
$999,298.00					**[ ]**		**999,298**				**999,298**
999,298.000		**1 LS**					**999,298.00**				**999,298.00**

BID ITEM = 8440000 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS EQUIPMENT INSTALL - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
215501	**xx PROCESS EQUIPMENT INSTALL**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**						

Cost Report

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 8440000 Land Item SCHEDULE: 1 100 ERS
Description = PROCESS EQUIPMENT INSTALL - STERLING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415EQUISTER	Sterling Industrial Process	1.00	1.00 LS	58,111.000					58,111	58,111

Total of Above Sub-Biditems

=====> Item Totals: 8000000 - PAC - INTAKE CHEMICAL BUILDING((ICB)

					Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$3,482,111.55	**1,236.5700 MH/LS**	**1,236.57 MH**		**[39098.13]**	**73,401**	**1,158,051**	**11,708**	**10,627**	**2,228,325**	**3,482,112**
3,482,111.550	**1 LS**				**73,400.87**	**1,158,051.10**	**11,708.03**	**10,626.76**	**2,228,324.79**	**3,482,111.55**

PARENT ITEM = 9100000 ALL
Description = HYPO CONVERSION(RE-PURPOSE EX. CHLORINE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9100000:

BID ITEM = 9100010 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING & COATINGS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80916 PAINTING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
409PAINTING	Painting Sub	1.00	1.00 LS	75,000.000					75,000	75,000

BID ITEM = 9100020 Land Item SCHEDULE: 1 100 ERS
Description = INTERIOR PIPE & EQUIPMENT INSTALL(STERLI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215101 process piping sub Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415PROCSTER	Sterling Industrial Process	1.00	1.00 LS	75,000.000					75,000	75,000

BID ITEM = 9100030 Land Item SCHEDULE: 1 100 ERS
Description = HVAC(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

23000 HVAC SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415HVAC	HVAC Sub	1.00	1.00 LS	105,575.000					105,575	105,575

BID ITEM = 9100260 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

26000 Electrical Sub(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416ELECTRIC	Electrical Sub	1.00	1.00 LS	35,000.000					35,000	35,000

Total of Above Sub-Biditems

Cost Report

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 9100260 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

=====> Item Totals: 9100000 - HYPO CONVERSION(RE-PURPOSE EX. CHLORINE
$290,575.00 **[ ]** **290,575** **290,575**
290,575.000 **1 LS** **290,575.00** **290,575.00**

PARENT ITEM = 9200000 ALL
Description = REHAB EXIST. COAGULANT FACILITY Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9200000:

BID ITEM = 9200010 Land Item SCHEDULE: 1 100 SAE
Description = PAINTING & COATINGS Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

80916 PAINTING SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
409PAINTING	Painting Sub	1.00	1.00 LS	75,000.000					75,000	75,000

BID ITEM = 9200020 Land Item SCHEDULE: 1 100 ERS
Description = HVAC SUB(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

23000 HVAC SUB(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415HVAC	HVAC Sub	1.00	1.00 LS	80,855.000					80,855	80,855

BID ITEM = 9200260 Land Item SCHEDULE: 1 100 REM
Description = ELECTRICAL(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

26000 Electrical Sub(STERLING) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416ELECTRIC	Electrical Sub	1.00	1.00 LS	35,000.000					35,000	35,000

Total of Above Sub-Biditems

=====> Item Totals: 9200000 - REHAB EXIST. COAGULANT FACILITY
$190,855.00 **[ ]** **190,855** **190,855**
190,855.000 **1 LS** **190,855.00** **190,855.00**

PARENT ITEM = 9300000 JWA
Description = EXIST. PRIMARY SETTLING BASINS 1 & 2(130 Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9300000:

Cost Report

BID ITEM = 9300010 Land Item SCHEDULE: 1 100
Description = EX PRIMARY BASIN #1 MODIFCATIONS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**		**Quan: 13,300.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		9.97	CH	Eff: 100.00	**Prod:**	**0.0030 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	13,300.00	SF	0.032			456			456
$2,620.71	0.0030 MH/SF		39.91	MH	[0.092]	2,164		456			2,621
03063	**WATERBLAST CLEAN - GROUT TOPPING**		**Quan: 13,300.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C309	2 LAB, 1 LAB FOREMAN		44.33	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
$7,225.96	0.0100 MH/SF		133.00	MH	[0.306]	7,226					7,226
03889	**P TOPPINGS IN TK 2"THK 13260SF**		**Quan: 82.07**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C331	LRG FLATWORK W/PUMP = 5L,1LF		20.51	CH	Eff: 100.00	**Prod:**	**3.0000 MU**	Lab Pcs: 12.00		Eqp Pcs:	0.00
2C0111	Topping Grout Concrete	1.10	90.28	CY	153.000		13,813				13,813
403RMPUMP1	Pump Slab =< 8"	1.00	82.07	CY	40.000					3,283	3,283
$30,784.52	3.0001 MH/CY		246.22	MH	[92.629]	13,689	13,813			3,283	30,785
03999	**CONCRETE REHAB BUDGET**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
403CONREPAIR	Concrete Repair Sub	1.00	1.00	LS	100,000.000					100,000	100,000
03999C	**CRYSTALLINE WATERPROOFING ADMIX**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01CRYSTL	CRYSTALLINE WATERP	1.05	86.10	CY	40.000		3,444				3,444
03999F	**FUEL SURCHARGE**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	86.10	CY	2.500		215				215
03999RE	**READYMIX ESCALATION 2025**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL1	2024 READYMIX ESCAL	1.05	86.10	CY	36.000		3,100				3,100
03999S	**SUPERPLASTICIZER REQ'D IN ALL CONCRETE**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	86.10	CY	5.000		431				431
=====> Item Totals:	**9300010 - EX PRIMARY BASIN #1 MODIFCATIONS**										
$147,820.54	419.1300 MH/CY		419.13	MH	[12888.41]	23,079	21,002	456		103,283	**147,821**
147,820.540	1 CY					23,079.09	21,002.19	456.46		103,282.80	147,820.54

BID ITEM = 9300020 Land Item SCHEDULE: 1 100
Description = EX PRIMARY BASIN #2 MODIFICATIONS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**		**Quan: 13,300.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		9.97	CH	Eff: 100.00	**Prod:**	**0.0030 MU**	Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	13,300.00	SF	0.032			456			456
$2,620.71	0.0030 MH/SF		39.91	MH	[0.092]	2,164		456			2,621
03063	**WATERBLAST CLEAN - GROUT TOPPING**		**Quan: 13,300.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C309	2 LAB, 1 LAB FOREMAN		44.33	CH	Eff: 100.00	**Prod:**	**0.0100 MU**	Lab Pcs: 3.00		Eqp Pcs:	0.00
$7,225.96	0.0100 MH/SF		133.00	MH	[0.306]	7,226					7,226

BID ITEM = 9300020 Land Item SCHEDULE: 1 100
Description = EX PRIMARY BASIN #2 MODIFICATIONS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03889	**P TOPPINGS IN TK 2"THK 13260SF**		**Quan: 82.07**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C331	LRG FLATWORK W/PUMP = 5L,1LF		20.51	CH	Eff: 100.00	**Prod: 3.0000 MU**		Lab Pcs: 12.00		Eqp Pcs: 0.00	
2C0111	Topping Grout Concrete	1.10	90.28	CY	153.000		13,813				13,813
403RMPUMP1	Pump Slab =< 8"	1.00	82.07	CY	40.000					3,283	3,283
$30,784.52	3.0001 MH/CY		246.22	MH	[92.629]	13,689	13,813			3,283	30,785
03999	**CONCRETE REHAB BUDGET**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
403CONREPAIR	Concrete Repair Sub	1.00	1.00	LS	100,000.000					100,000	100,000
03999C	**CRYSTALLINE WATERPROOFING ADMIX**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01CRYSTL	CRYSTALLINE WATERP	1.05	86.10	CY	40.000		3,444				3,444
03999F	**FUEL SURCHARGE**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	86.10	CY	2.500		215				215
03999RE	**READYMIX ESCALATION 2025**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL1	2024 READYMIX ESCAL	1.05	86.10	CY	36.000		3,100				3,100
03999S	**SUPERPLASTICIZER REQ'D IN ALL CONCRETE**		**Quan: 82.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	86.10	CY	5.000		431				431

=====> Item Totals: 9300020 - EX PRIMARY BASIN #2 MODIFICATIONS

$147,820.54	419.1300 MH/CY	419.13	MH	[12888.41]	23,079	21,002	456	103,283	**147,821**
147,820.540	1 CY				23,079.09	21,002.19	456.46	103,282.80	147,820.54

BID ITEM = 9300461 Land Item SCHEDULE: 1 100
Description = TUBE SETTLER EQUIPMENT Unit = EA Takeoff Quan: 2.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
001	**TUBE SETTLER MATL COST**		**Quan: 1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2TUBESETTLER	TUBE SETTLER EQUIPM	1.00	0.67	LS	3,213,010.000		2,152,717				2,152,717
002	**TUBE SETTLER UNLOADING**		**Quan: 2.00**	**EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
M	==> MILLWRIGHT JOUR	1.00	120.00	MH	34.970	8,145					8,145
MF	==> MILLWRIGHT FORE	1.00	60.00	MH	38.320	4,305					4,305
$12,450.27	90.0000 MH/EA		180.00	MH	[3247.8]	12,450					12,450
003	**TUBE MODULE SUPPORTS**		**Quan: 18,326.88**	**CF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
S604	4 MAN IRONWORKER/MILLWRIGHT		160.00	CH	Eff: 100.00	**Prod: 0.0000**		Lab Pcs: 4.00		Eqp Pcs: 0.00	
$43,736.43	0.0349 MH/CF		640.00	MH	[1.224]	43,736					43,736
004	**TUBE MODULE INSTALLATION**		**Quan: 18,326.88**	**CF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
S604	4 MAN IRONWORKER/MILLWRIGHT		160.00	CH	Eff: 100.00	**Prod: 0.0000**		Lab Pcs: 4.00		Eqp Pcs: 0.00	
$43,736.43	0.0349 MH/CF		640.00	MH	[1.224]	43,736					43,736
005	**PROTECTIVE SURFACE GRATING**		**Quan: 8,730.48**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				

Cost Report

Activity / Resource	Desc	Quantity Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 9300461				Land Item	SCHEDULE: 1	100				
Description =	TUBE SETTLER EQUIPMENT			Unit = EA	Takeoff Quan:	2.000		Engr Quan:		0.000
S604	4 MAN IRONWORKER/MILLWRIGHT	60.00	CH	Eff: 100.00	Prod: 0.0000		Lab Pcs: 4.00		Eqp Pcs:	0.00
$16,401.16	0.0274 MH/SF		240.00 MH	[0.964]	16,401					16,401
006	**INSTALLATION SUPERVISION**			**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2MANDAY	FIELD SERVICE MANDA	1.00	2.00 DAY	2,420.000		4,840				4,840
2TRIP	FIELD SERVICE TRIP	1.00	1.00 TRIP	2,400.000		2,400				2,400
$7,240.00				[ ]		7,240				7,240
007	**SPARE PARTS**			**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2SPAREPART	SPARE PARTS	1.00	2.00 LS	25,000.000		50,000				50,000
=====> **Item Totals:**	**9300461 - TUBE SETTLER EQUIPMENT**									
$2,326,280.99	850.0000 MH/EA		1,700.00 MH	[29887.7]	116,324	2,209,957				**2,326,281**
1,163,140.495	2 EA				58,162.15	1,104,978.35				1,163,140.50
BID ITEM = 9300462				Land Item	SCHEDULE: 1	100				
Description =	CLARIFIER EQUIPMENT			Unit = EA	Takeoff Quan:	2.000		Engr Quan:		0.000
001	**CLARFIER EQUIPMENT COST**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2CLARIFIER	CLARIFIER EQUIPMENT	1.00	1.00 LS	1,300,000.000		1,300,000				1,300,000
002	**CLARIFIER EQUIPMENT UNLOADING**			**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
S604	4 MAN IRONWORKER/MILLWRIGHT	24.00	CH	Eff: 100.00	Prod: 0.0000		Lab Pcs: 4.00		Eqp Pcs:	0.00
$6,560.46	48.0000 MH/EA		96.00 MH	[1682.52]	6,560					6,560
003	**CLARIFER INSTALLATION**			**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
S604	4 MAN IRONWORKER/MILLWRIGHT	132.00	CH	Eff: 100.00	Prod: 0.0000		Lab Pcs: 6.00		Eqp Pcs:	0.00
$52,099.43	396.0000 MH/EA		792.00 MH	[13489.74]	52,099					52,099
004	**CLARIFIER PAINTING**			**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
409PAINTING	Painting Sub	1.00	1.00 LS	400,000.000					400,000	400,000
005	**CLARIFIER STARTUP & COMMISSION**			**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
M	==> MILLWRIGHT JOUR	1.00	24.00 MH	34.970	1,629					1,629
MF	==> MILLWRIGHT FORE	1.00	24.00 MH	38.320	1,722					1,722
$3,351.04	24.0000 MH/EA		48.00 MH	[879.48]	3,351					3,351
006	**DEMO EXISTING CLARIFIER EQUIPMENT**			**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C202	DEMO - 3 LAB		120.00 CH	Eff: 100.00	Prod: 60.0000 HU		Lab Pcs: 3.00		Eqp Pcs:	0.00
$19,559.02	180.0000 MH/EA		360.00 MH	[5506.8]	19,559					19,559
=====> **Item Totals:**	**9300462 - CLARIFIER EQUIPMENT**									
$1,781,569.95	648.0000 MH/EA		1,296.00 MH	[21558.54]	81,570	1,300,000			400,000	**1,781,570**
890,784.975	2 EA				40,784.98	650,000.00			200,000.00	890,784.98

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 9300469 Land Item SCHEDULE: 1 100
Description = GEODESIC DOME TANK COVER Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

001 GEODOME TANK COVER Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2GEODOME	GEODOME TANK COVE	1.00	1.00 LS	800,000.000		800,000				800,000

=====> Item Totals: 9300469 - GEODESIC DOME TANK COVER

$800,000.00				[ ]		800,000				**800,000**
800,000.000		1 LS				800,000.00				800,000.00

Total of Above Sub-Biditems

=====> Item Totals: 9300000 - EXIST. PRIMARY SETTLING BASINS 1 & 2(130

$5,203,492.02	**3,834.2600 MH/LS**		**3,834.26 MH**	**[128669.3]**	**244,052**	**4,351,961**	**913**		**606,566**	**5,203,492**
5,203,492.020		**1 LS**			**244,052.42**	**4,351,961.08**	**912.92**		**606,565.60**	**5,203,492.02**

PARENT ITEM = 9350000 JWA
Description = EXIST. SECONDARY SETTLING BASINS 1 & 2(6 Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9350000:

BID ITEM = 9350010 Land Item SCHEDULE: 1 100
Description = EX SECONDARY BASIN #1 MODIFCATIONS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

03007 WATER CURE Quan: 6,650.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

C334 3 LAB, 1 LAB FOREMAN 4.98 CH Eff: 100.00 **Prod: 0.0030 MU** Lab Pcs: 4.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
3C01WC	WATER CURE@107.25%	1.00	6,650.00 SF	0.032			228			228
$1,310.10	0.0030 MH/SF		19.95 MH	[0.092]	1,082		228			1,310

03063 WATERBLAST CLEAN - GROUT TOPPING Quan: 6,650.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

C309 2 LAB, 1 LAB FOREMAN 22.16 CH Eff: 100.00 **Prod: 0.0100 MU** Lab Pcs: 3.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$3,612.98	0.0100 MH/SF		66.50 MH	[0.306]	3,613					3,613

03889 P TOPPINGS IN TK 2"THK 13260SF Quan: 41.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

C331 LRG FLATWORK W/PUMP = 5L,1LF 10.25 CH Eff: 100.00 **Prod: 3.0000 MU** Lab Pcs: 12.00 Eqp Pcs: 0.00

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C0111	Topping Grout Concrete	1.10	45.10 CY	153.000		6,900				6,900
403RMPUMP1	Pump Slab =< 8"	1.00	41.00 CY	1.000					41	41
$13,779.65	3.0000 MH/CY		123.00 MH	[92.625]	6,838	6,900			41	13,780

03999 CONCRETE REHAB BUDGET Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
403CONREPAIR	Concrete Repair Sub	1.00	1.00 LS	50,000.000					50,000	50,000

03999C CRYSTALLINE WATERPROOFING ADMIX Quan: 41.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C01CRYSTL	CRYSTALLINE WATERP	1.05	43.05 CY	40.000		1,722				1,722

03999F FUEL SURCHARGE Quan: 41.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C01FUEL	READYMIX FUEL SURC	1.05	43.05 CY	2.500		108				108

Cost Report

BID ITEM = **9350010** Land Item SCHEDULE: 1 100
Description = EX SECONDARY BASIN #1 MODIFCATIONS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03999RE	**READYMIX ESCALATION 2025**	**Quan:**	**41.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL1	2024 READYMIX ESCAL	1.05	43.05	CY	36.000		1,550				1,550
03999S	**SUPERPLASTICIZER REQ'D IN ALL CONCRETE**	**Quan:**	**41.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	43.05	CY	5.000		215				215
=====> **Item Totals:**	**9350010 - EX SECONDARY BASIN #1 MODIFCATIONS**										
$72,297.41	209.4500 MH/CY		209.45	MH	[6440.68]	11,533	10,495	228		50,041	**72,297**
72,297.410	1 CY					11,533.20	10,494.98	228.23		50,041.00	72,297.41

BID ITEM = **9350020** Land Item SCHEDULE: 1 100
Description = EX SECONDARY BASIN #2 MODIFICATIONS Unit = CY Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03007	**WATER CURE**	**Quan:**	**6,650.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C334	3 LAB, 1 LAB FOREMAN		4.98	CH	Eff: 100.00	**Prod: 0.0030 MU**	Lab Pcs: 4.00		Eqp Pcs:		0.00
3C01WC	WATER CURE@107.25%	1.00	6,650.00	SF	0.032			228			228
$1,310.10	0.0030 MH/SF		19.95	MH	[0.092]	1,082		228			1,310
03063	**WATERBLAST CLEAN - GROUT TOPPING**	**Quan:**	**6,650.00**	**SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C309	2 LAB, 1 LAB FOREMAN		22.16	CH	Eff: 100.00	**Prod: 0.0100 MU**	Lab Pcs: 3.00		Eqp Pcs:		0.00
$3,612.98	0.0100 MH/SF		66.50	MH	[0.306]	3,613					3,613
03889	**P TOPPINGS IN TK 2"THK 13260SF**	**Quan:**	**41.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
C331	LRG FLATWORK W/PUMP = 5L,1LF		10.25	CH	Eff: 100.00	**Prod: 3.0000 MU**	Lab Pcs: 12.00		Eqp Pcs:		0.00
2C0111	Topping Grout Concrete	1.10	45.10	CY	153.000		6,900				6,900
403RMPUMP1	Pump Slab =< 8"	1.00	41.00	CY	1.000					41	41
$13,779.65	3.0000 MH/CY		123.00	MH	[92.625]	6,838	6,900			41	13,780
03999	**CONCRETE REHAB BUDGET**	**Quan:**	**1.00**	**LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
403CONREPAIR	Concrete Repair Sub	1.00	1.00	LS	50,000.000					50,000	50,000
03999C	**CRYSTALLINE WATERPROOFING ADMIX**	**Quan:**	**41.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01CRYSTL	CRYSTALLINE WATERP	1.05	43.05	CY	40.000		1,722				1,722
03999F	**FUEL SURCHARGE**	**Quan:**	**41.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01FUEL	READYMIX FUEL SURC	1.05	43.05	CY	2.500		108				108
03999RE	**READYMIX ESCALATION 2025**	**Quan:**	**41.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C01ESCL1	2024 READYMIX ESCAL	1.05	43.05	CY	36.000		1,550				1,550
03999S	**SUPERPLASTICIZER REQ'D IN ALL CONCRETE**	**Quan:**	**41.00**	**CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2C02S	Superplasticizer	1.05	43.05	CY	5.000		215				215
=====> **Item Totals:**	**9350020 - EX SECONDARY BASIN #2 MODIFICATIONS**										
$72,297.41	209.4500 MH/CY		209.45	MH	[6440.68]	11,533	10,495	228		50,041	**72,297**
72,297.410	1 CY					11,533.20	10,494.98	228.23		50,041.00	72,297.41

Cost Report

BID ITEM = 9350461 Land Item SCHEDULE: 1 100
Description = TUBE SETTLER EQUIPMENT Unit = EA Takeoff Quan: 2.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
001	**TUBE SETTLER MATL COST**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2TUBESETTLER	TUBE SETTLER EQUIPM	1.00	0.33	LS	3,213,010.000		1,060,293				1,060,293
002	**TUBE SETTLER UNLOADING**		**Quan: 1.00 EA**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
M	==> MILLWRIGHT JOUR	1.00	60.00	MH	34.970	4,073					4,073
MF	==> MILLWRIGHT FORE	1.00	30.00	MH	38.320	2,152					2,152
$6,225.13	90.0000 MH/EA		90.00	MH	[3247.8]	6,225					6,225
003	**TUBE MODULE SUPPORTS**		**Quan: 11,454.30 CF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
S604	4 MAN IRONWORKER/MILLWRIGHT		80.00	CH	Eff: 100.00	**Prod: 0.0000**	Lab Pcs: 4.00		Eqp Pcs: 0.00		
$21,868.21	0.0279 MH/CF		320.00	MH	[0.979]	21,868					21,868
004	**TUBE MODULE INSTALLATION**		**Quan: 11,454.30 CF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
S604	4 MAN IRONWORKER/MILLWRIGHT		80.00	CH	Eff: 100.00	**Prod: 0.0000**	Lab Pcs: 4.00		Eqp Pcs: 0.00		
$21,868.21	0.0279 MH/CF		320.00	MH	[0.979]	21,868					21,868
005	**PROTECTIVE SURFACE GRATING**		**Quan: 5,456.55 SF**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
S604	4 MAN IRONWORKER/MILLWRIGHT		40.00	CH	Eff: 100.00	**Prod: 0.0000**	Lab Pcs: 4.00		Eqp Pcs: 0.00		
$10,934.11	0.0293 MH/SF		160.00	MH	[1.028]	10,934					10,934
006	**INSTALLATION SUPERVISION**		**Quan: 1.00 EA**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2MANDAY	FIELD SERVICE MANDA	1.00	2.00	DAY	2,420.000		4,840				4,840
2TRIP	FIELD SERVICE TRIP	1.00	1.00	TRIP	2,400.000		2,400				2,400
$7,240.00					[ ]		7,240				7,240
007	**SPARE PARTS**		**Quan: 1.00 EA**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2SPAREPART	SPARE PARTS	1.00	1.00	LS	20,000.000		20,000				20,000
=====> Item Totals:	**9350461 - TUBE SETTLER EQUIPMENT**										
$1,148,428.96	445.0000 MH/EA		890.00	MH	[15644.9]	60,896	1,087,533				**1,148,429**
574,214.480	2 EA					30,447.83	543,766.65				574,214.48

BID ITEM = 9350462 Land Item SCHEDULE: 1 100
Description = CLARIFIER EQUIPMENT Unit = EA Takeoff Quan: 2.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
001	**CLARFIER EQUIPMENT COST**		**Quan: 1.00 LS**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2CLARIFIER	CLARIFIER EQUIPMENT	1.00	1.00	LS	700,000.000		700,000				700,000
002	**CLARIFIER EQUIPMENT UNLOADING**		**Quan: 1.25 EA**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
S604	4 MAN IRONWORKER/MILLWRIGHT		16.00	CH	Eff: 100.00	**Prod: 0.0000**	Lab Pcs: 4.00		Eqp Pcs: 0.00		
$4,373.64	51.2000 MH/EA		64.00	MH	[1794.688]	4,374					4,374
003	**CLARIFER INSTALLATION**		**Quan: 1.25 EA**		**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
S604	4 MAN IRONWORKER/MILLWRIGHT		80.00	CH	Eff: 100.00	**Prod: 0.0000**	Lab Pcs: 6.00		Eqp Pcs: 0.00		
$31,575.42	384.0000 MH/EA		480.00	MH	[13080.96]	31,575					31,575

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 9350462 Land Item SCHEDULE: 1 100
Description = CLARIFIER EQUIPMENT Unit = EA Takeoff Quan: 2.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
004	**CLARIFIER PAINTING**		**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
409PAINTING	Painting Sub	1.00	1.00 LS	200,000.000					200,000	200,000
005	**CLARIFIER STARTUP & COMMISSION**		**Quan: 2.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
M	==> MILLWRIGHT JOUR	1.00	16.00 MH	34.970	1,086					1,086
MF	==> MILLWRIGHT FORE	1.00	16.00 MH	38.320	1,148					1,148
$2,234.03	16.0000 MH/EA		32.00 MH	[586.32]	2,234					2,234
006	**DEMO EXISTING CLARIFIER EQUIPMENT**		**Quan: 1.00 EA**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
C202	DEMO - 3 LAB		80.00 CH	Eff: 100.00 **Prod: 80.0000 HU**	Lab Pcs: 3.00		Eqp Pcs: 0.00			
$13,039.34	240.0000 MH/EA		240.00 MH	[7342.4]	13,039					13,039
=====> Item Totals: 9350462	**- CLARIFIER EQUIPMENT**									
$951,222.43	408.0000 MH/EA		816.00 MH	[13554.8]	51,222	700,000			200,000	**951,222**
475,611.215	2 EA				25,611.22	350,000.00			100,000.00	475,611.22

BID ITEM = 9350469 Land Item SCHEDULE: 1 100
Description = GEODESIC DOME TANK COVER Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
001	**GEODOME TANK COVER**		**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**					
2GEODOME	GEODOME TANK COVE	1.00	1.00 LS	400,000.000		400,000				400,000
=====> Item Totals: 9350469	**- GEODESIC DOME TANK COVER**									
$400,000.00				[ ]		400,000				**400,000**
400,000.000	1 LS					400,000.00				400,000.00

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> Item Totals: 9350000	**- EXIST. SECONDARY SETTLING BASINS 1 & 2(6**									
$2,644,246.21	**2,124.9000 MH/LS**		**2,124.90 MH**	**[71280.76]**	**135,184**	**2,208,523**	**456**		**300,082**	**2,644,246**
2,644,246.210	**1 LS**				**135,184.49**	**2,208,523.26**	**456.46**		**300,082.00**	**2,644,246.21**

PARENT ITEM = 9380000 ALL
Description = NEW RAPID MIX/SPLITTER STRUCTURE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9380000:

PARENT ITEM = 9380200 BCL
Description = EARTHWORK Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9380200:

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 9380210 — Land Item SCHEDULE: 1 100
Description = EXC & BF — Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

210-01 EXCAVATE --> STOCKPILE/DUMPSITE — Quan: 1,473.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C260A	Excavation - Mass		16.36	CH	Eff: 100.00	Prod:	89.9998 UH		Lab Pcs:	4.00	Eqp Pcs:	2.00
5DUMP	Dump Fee	1.00	1,473.00	CY		4.000			5,892			5,892
5HAULEQ	Sub Trucking-Dirt Quad/Qu	1.00	98.20	HR		130.000			12,766			12,766
$26,123.89	0.0444 MH/CY		65.48	MH		[1.643]	4,082		18,658	3,384		26,124

210-02 SUBGRADE PREP — Quan: 272.00 SY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C260A	Excavation - Mass		10.88	CH	Eff: 100.00	Prod:	25.0000 UH		Lab Pcs:	3.00	Eqp Pcs:	2.00
$3,293.35	0.1200 MH/SY		32.64	MH		[4.188]	1,950			1,343		3,293

210-03 STONE BASE 12" — Quan: 91.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C260A	Excavation - Mass		9.10	CH	Eff: 100.00	Prod:	10.0000 UH		Lab Pcs:	3.00	Eqp Pcs:	2.00
2A0108	#8 Aggregate	1.00	182.00	TN		33.660		6,126				6,126
$8,880.68	0.3000 MH/CY		27.30	MH		[10.47]	1,631	6,126		1,124		8,881

210-04 BACKFILL - GRAN — Quan: 947.00 CY Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C270T	Backfill - Telebelt		47.35	CH	Eff: 100.00	Prod:	20.0000 UH		Lab Pcs:	5.00	Eqp Pcs:	3.00
2A0108	#8 Aggregate	1.00	1,894.00	TN		33.660		63,752				63,752
$87,292.29	0.2500 MH/CY		236.75	MH		[8.905]	14,361	63,752		9,179		87,292

=====> **Item Totals: 9380210 - EXC & BF**

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$125,590.21	362.1700 MH/LS		362.17	MH		[12945.42]	22,024	69,878	18,658	15,030		**125,590**
125,590.210	1 LS						22,024.06	69,878.16	18,658.00	15,029.99		125,590.21

BID ITEM = 9380220 — Land Item SCHEDULE: 1 100
Description = ACP — Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

220-01 AUGERCAST PILE — Quan: 5,047.00 LF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
402ACP16A	Augercast Pile - 16" All Inc	1.00	5,047.00	LF		100.000					504,700	504,700

BID ITEM = 9380230 — Land Item SCHEDULE: 1 100
Description = TERS — Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

230-01 TERS — Quan: 5,448.00 SF Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
402TERS	Temp Earth Retention Sub	1.00	5,448.00	SF		150.000					817,200	817,200

Total of Above Sub-Biditems

=====> **Item Totals: 9380200 - EARTHWORK**

Activity / Resource	Desc	Pcs	Quantity	Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
$1,447,490.21	**362.1700 MH/LS**		**362.17**	**MH**		**[12945.42]**	**22,024**	**69,878**	**18,658**	**15,030**	**1,321,900**	**1,447,490**
1,447,490.210	**1 LS**						**22,024.06**	**69,878.16**	**18,658.00**	**15,029.99**	**1,321,900.00**	**1,447,490.21**

Activity / Resource	Desc	Pcs	Quantity / Unit		Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

PARENT ITEM = 9380300 BVN
Description = CONCRETE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9380300:

BID ITEM = 9380310 Land Item SCHEDULE: 1 100
Description = RAPID MIX SPLITTER - B&V Unit = CY Takeoff Quan: 68.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
03001	**FILL TIE HOLES: STEEL-PLY**				**Quan: 1,400.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C302	2 FINISHERS		7.00	CH	Eff: 100.00 Prod: 0.0100 MU			Lab Pcs: 2.00		Eqp Pcs:	0.00
2C21F	Fill Tie Holes	1.00	1,400.00	SF	0.030		42				42
$835.20	0.0100 MH/SF		14.00	MH	[0.31]	793	42				835
03002	**SMOOTH FORM FINISH**				**Quan: 1,400.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C302	2 FINISHERS		21.00	CH	Eff: 100.00 Prod: 0.0300 MU			Lab Pcs: 2.00		Eqp Pcs:	0.00
2C21F	Fill Tie Holes	1.00	1,400.00	SF	0.030		42				42
$2,421.61	0.0300 MH/SF		42.00	MH	[0.929]	2,380	42				2,422
03007	**WATER CURE**				**Quan: 3,224.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C334	3 LAB, 1 LAB FOREMAN		2.41	CH	Eff: 100.00 Prod: 0.0030 MU			Lab Pcs: 4.00		Eqp Pcs:	0.00
3C01WC	WATER CURE@107.25%	1.00	3,224.00	SF	0.032			111			111
$635.05	0.0029 MH/SF		9.67	MH	[0.091]	524		111			635
03047	**ROUGHEN CJ LIQUID SPRAY**				**Quan: 42.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C301	2 LABORERS		0.63	CH	Eff: 100.00 Prod: 0.0300 MU			Lab Pcs: 2.00		Eqp Pcs:	0.00
3C01LR	ROUGHNER-LIQUI@107.	1.00	42.00	SF	0.130			6			6
$73.79	0.0300 MH/SF		1.26	MH	[0.907]	68		6			74
03072	**FINE GRADE TO 3000 SF**				**Quan: 480.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C317G2	SMALL FINE GRADE		2.40	CH	Eff: 100.00 Prod: 0.0200 MU			Lab Pcs: 4.00		Eqp Pcs:	2.00
$636.77	0.0200 MH/SF		9.60	MH	[0.649]	545			92		637
03212	**REINFORCING MAT SUPTS-BRICKS**				**Quan: 480.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C30BMS	Brick Mat Supports	1.00	480.00	SF	0.150		72				72
03246	**WSTOP IN C.J. (PVC)**				**Quan: 140.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C307	1 LAB, 2 CARP		4.66	CH	Eff: 100.00 Prod: 0.1000 MU			Lab Pcs: 3.00		Eqp Pcs:	0.00
2C276	6" Waterstop	1.10	154.00	LF	3.200		493				493
$1,314.06	0.1000 MH/LF		14.00	MH	[2.879]	821	493				1,314
03266	**CJ SLAB-WALL W. CONCAVED KEYWAY**				**Quan: 97.00 LF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C312	2 CARP, 1 CARP FOREMAN		1.29	CH	Eff: 100.00 Prod: 0.0400 MU			Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15SW8	S-W to 8" CJ F@107.25%	1.00	97.00	LF	1.250			130			130
$370.01	0.0400 MH/LF		3.88	MH	[1.151]	240		130			370
03282	**CJ WALL-WALL 9"-15" W/B.H. & KEY**				**Quan: 42.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C312	2 CARP, 1 CARP FOREMAN		7.00	CH	Eff: 100.00 Prod: 0.5000 MU			Lab Pcs: 3.00		Eqp Pcs:	0.00
3C15WW915	W-W 9"-15" CJ/@107.25%	1.00	42.00	LF	3.600			162			162
$1,461.01	0.5000 MH/SF		21.00	MH	[14.383]	1,299		162			1,461
03420	**EF FND MAT 1'Tx30'x16'**				**Quan: 92.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			

Cost Report

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 9380310					Land Item SCHEDULE: 1 100						
Description =	RAPID MIX SPLITTER - B&V				Unit = CY	Takeoff Quan:	68.000		Engr Quan:		0.000
C320	SMALL FORM =1L, 2C,1CF		6.90	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs: 4.00	Eqp Pcs:		0.00
3C10EF12+	EF > 12" Ht. E@107.25%	1.00	92.00	SF	6.000			592			592
$2,244.38	0.3000 MH/SF		27.60	MH	[8.741]	1,652		592			2,244
03431	**P FND MAT 1'Tx30'x16'**				**Quan: 17.77 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C327	SMALL FLATWORK =2L,2F,1FF		4.00	CH	Eff: 100.00	**Prod:**	**1.1255 MU**	Lab Pcs: 5.00	Eqp Pcs:		0.00
2C0105	SOG Concrete	1.04	18.48	CY	141.500		2,615				2,615
403RMPUMP2	Pump Slab 9" - 15"	1.00	17.77	CY	20.000					355	355
$4,091.39	1.1254 MH/CY		20.00	MH	[35.012]	1,121	2,615			355	4,091
03492	**F WALL 1'Tx14'Hx97LF**				**Quan: 2,744.00 SF**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C320	SMALL FORM =1L, 2C,1CF		205.80	CH	Eff: 100.00	**Prod:**	**0.3000 MU**	Lab Pcs: 4.00	Eqp Pcs:		0.00
3C20W	Straight Wall @107.25%	1.00	2,744.00	SF	6.000			17,658			17,658
$66,940.98	0.3000 MH/SF		823.20	MH	[8.74]	49,283		17,658			66,941
03595	**P WALL 1'Tx14'Hx97LF**				**Quan: 51.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
C333	POUR VERT OVER 30 CY = 2L,1L		8.00	CH	Eff: 100.00	**Prod:**	**0.9412 MU**	Lab Pcs: 6.00	Eqp Pcs:		0.00
2C0106	Wall Concrete	1.05	53.55	CY	141.500		7,577				7,577
403RMPUMP5	Pump Walls & Cols < 100	1.00	51.00	CY	33.000					1,683	1,683
$12,048.66	0.9411 MH/CY		48.00	MH	[27.934]	2,788	7,577			1,683	12,049
=====> **Item Totals:**	**9380310 - RAPID MIX SPLITTER - B&V**										
$93,144.91	15.2089 MH/CY		1,034.21	MH	[446.072]	61,515	10,841	18,658	92	2,038	**93,145**
1,369.778	68 CY					904.64	159.43	274.39	1.35	29.98	1,369.78

Activity / Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 9380320					Land Item SCHEDULE: 1 100						
Description =	READYMIX ADMIX & ESCALATIONS				Unit = LS	Takeoff Quan:	1.000		Engr Quan:		0.000
03999	**READYMIX ESCALATION**				**Quan: 68.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C01E4	2027 READYMIX ESCAL	0.25	17.00	CY	68.000		1,156				1,156
2C01ESCL2	2025 READYMIX ESCLA	0.50	34.00	CY	36.000		1,224				1,224
2C01ESCL3	2026 READYMIX ESCAL	0.25	17.00	CY	52.000		884				884
$3,264.00					[ ]		3,264				3,264
03999C	**CRYSTALLINE WATERPROOFING ADMIX**				**Quan: 68.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C01CRYSTL	CRYSTALLINE WATERP	1.05	71.40	CY	40.000		2,856				2,856
03999F	**READYMIX FUEL SURCHARGE**				**Quan: 68.00 CY**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**			
2C01FUEL	READYMIX FUEL SURC	1.05	71.40	CY	2.500		179				179
=====> **Item Totals:**	**9380320 - READYMIX ADMIX & ESCALATIONS**										
$6,298.50					[ ]		6,299				**6,299**
6,298.500	1 LS						6,298.50				6,298.50

BID ITEM = 9380330		Land Item SCHEDULE: 1 100			
Description =	WINTER CONCRETE	Unit = LS	Takeoff Quan: 1.000	Engr Quan:	0.000

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 9380330 — Land Item — SCHEDULE: 1 100
Description = WINTER CONCRETE — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

03023 — Winter Concrete Protection 25% OF 68CY — Quan: 17.00 CY — Hrs/Shft: 8.00 — Cal: 508 — WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C309	2 LAB, 1 LAB FOREMAN		8.00 CH	Eff: 100.00	**Prod:** **1.4118 MU**	Lab Pcs: 3.00		Eqp Pcs: 0.00		
2C02A	Accelerator N/C 2%	0.75	12.75 CY	11.000		140				140
2C02H	Hot Water Winter Heat	1.00	17.00 CY	6.000		102				102
3C01WINTER	WINTER CONCRET@107	1.00	17.00 CY	4.500			82			82
8CXPWINTER2	==> Winter Heater for Conc	1.00	17.00 CY	6.600				112		112
$1,740.44	1.4117 MH/CY		24.00 MH	[43.191]	1,304	242	82	112		1,740
=====> **Item Totals: 9380330**	**- WINTER CONCRETE**									
$1,740.44	24.0000 MH/LS		24.00 MH	[734.24]	1,304	242	82	112		**1,740**
1,740.440	1 LS				1,303.94	242.25	82.05	112.20		1,740.44

BID ITEM = 9380340 — Land Item — SCHEDULE: 1 100
Description = CONCRETE REINFORCEMENTS — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

03171 — REBAR-FURNISH/INSTALL 2#6@12"OC EW = 216 — Quan: 7.40 TN — Hrs/Shft: 8.00 — Cal: 508 — WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2C10ESCL2	REBAR ESCALATION 20	0.01	0.07 TN	150.000		11				11
2C10ESCL3	REBAR ESCALATION 20	0.01	0.07 TN	250.000		18				18
2C10ESCL4	REBAR ESCALATION 20	1.00	7.40 TN	350.000		2,590				2,590
2C10RP	Rebar-Plain	1.00	7.40 TN	1,425.950		10,552				10,552
403REBARL	Rebar Install Sub	1.00	7.40 TN	1,331.700					9,855	9,855
$23,024.61				[ ]		13,170			9,855	23,025
=====> **Item Totals: 9380340**	**- CONCRETE REINFORCEMENTS**									
$23,024.61				[ ]		13,170			9,855	**23,025**
23,024.610	1 LS					13,170.03			9,854.58	23,024.61

BID ITEM = 9380350 — Land Item — SCHEDULE: 1 100
Description = LEAKAGE TESTING — Unit = LS — Takeoff Quan: 1.000 — Engr Quan: 0.000

03999 — LEAKAGE TESTING — Quan: 0.50 WK — Hrs/Shft: 8.00 — Cal: 508 — WC: 1

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
C309	2 LAB, 1 LAB FOREMAN		24.00 CH	Eff: 100.00	**Prod:** **144.0000 MU**	Lab Pcs: 3.00		Eqp Pcs: 0.00		
$3,911.80	144.0000 MH/WK		72.00 MH	[4405.44]	3,912					3,912
=====> **Item Totals: 9380350**	**- LEAKAGE TESTING**									
$3,911.80	72.0000 MH/LS		72.00 MH	[2202.72]	3,912					**3,912**
3,911.800	1 LS				3,911.80					3,911.80

Total of Above Sub-Biditems

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
=====> **Item Totals: 9380300**	**- CONCRETE**									
$128,120.26	**1,130.2100 MH/LS**		**1,130.21 MH**	**[33269.85]**	**66,731**	**30,552**	**18,740**	**204**	**11,893**	**128,120**
128,120.260	**1 LS**				**66,731.12**	**30,551.83**	**18,740.42**	**203.91**	**11,892.98**	**128,120.26**

Activity / Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 9380350 Land Item SCHEDULE: 1 100
Description = LEAKAGE TESTING Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Total of Above Sub-Biditems

=====> Item Totals: 9380000 - NEW RAPID MIX/SPLITTER STRUCTURE

$1,575,610.47	**1,492.3800 MH/LS**	**1,492.38 MH**		**[46215.27]**	**88,755**	**100,430**	**37,398**	**15,234**	**1,333,793**	**1,575,610**
1,575,610.470	**1 LS**				**88,755.18**	**100,429.99**	**37,398.42**	**15,233.90**	**1,333,792.98**	**1,575,610.47**

PARENT ITEM = 9390000 JWA
Description = EXIST. SOUTH SLUDGE PS UPGRADES Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9390000:

BID ITEM = 9391500 Land Item SCHEDULE: 1 100
Description = INTERIOR PIPE & EQUIPMENT INSTALL(STERLI Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

215201 PROCESS EQUIPMENT INSTALL SUB Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
415PROCSTER	Sterling Industrial Process	1.00	1.00 LS	101,293.000					101,293	101,293

BID ITEM = 9392600 Land Item SCHEDULE: 1 100
Description = ELECTRICAL/I&C(STERLING) Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

26000 ELECTRICAL SUB(Sterling) Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
416ELECTRIC	Electrical Sub	1.00	1.00 LS	130,000.000					130,000	130,000

BID ITEM = 9394300 Land Item SCHEDULE: 1 100
Description = PROCESS EQUIPMENT PACKAGE - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

5054305 SLUDGE PS PUMPS PKG Quan: 1.00 LS Hrs/Shft: 8.00 Cal: 508 WC: 1

Activity / Resource	Desc	Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
2EQSLUDGEPU	SLUDGE PUMP PKG	1.00	1.00 LS	50,000.000		50,000				50,000

=====> Item Totals: 9394300 - PROCESS EQUIPMENT PACKAGE - KII

$50,000.00				[ ]		50,000				**50,000**
50,000.000	1 LS					50,000.00				50,000.00

Total of Above Sub-Biditems

=====> Item Totals: 9390000 - EXIST. SOUTH SLUDGE PS UPGRADES

$281,293.00				**[ ]**		**50,000**			**231,293**	**281,293**
281,293.000	**1 LS**					**50,000.00**			**231,293.00**	**281,293.00**

Cost Report

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 9501000	Land Item SCHEDULE: 1 100									SAE
Description =	CONSTRUCTION CONTINGENCY		Unit = LS	Takeoff Quan: 1.000				Engr Quan:		1.000
01364	**CONSTRUCTION CONTINGENCY**		**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
2ZCC*TC	CONSTRUCTION CONTI	1.00	1.00 LS	10,000,000.000		10,000,000				10,000,000
=====> **Item Totals:**	**9501000 - CONSTRUCTION CONTINGENCY**									
$10,000,000.00				[ ]		10,000,000				**10,000,000**
10,000,000.000		1 LS				10,000,000.00				10,000,000.00
BID ITEM = 9970000	Land Item SCHEDULE: 1 100									
Description =	SITE BASED EQUIPMENT		Unit = LS	Takeoff Quan: 1.000				Engr Quan:		1.000
01322	**50 TN RT CRANE & OPERATOR**		**Quan: 104.00 WK**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
Z103	55 TON CRANE & OPERATOR		4,160.00 CH	Eff: 100.00	**Prod: 40.0000 HU**		Lab Pcs: 1.00		Eqp Pcs:	1.00
$816,738.54	40.0000 MH/WK		4,160.00 MH	[1726.4]	291,830			524,909		816,739
01325	**10k # TELEHANDLER & OPERATOR**		**Quan: 195.00 WK**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
Z110	RT FORKLIFT & OPERATOR		7,800.00 CH	Eff: 100.00	**Prod: 40.0000 HU**		Lab Pcs: 1.00		Eqp Pcs:	1.00
$852,009.48	40.0000 MH/WK		7,800.00 MH	[1610.8]	521,133			330,876		852,009
01393	**150T crawler - Rental**		**Quan: 109.00 WK**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
Z105	230 TON CRANE, OP & OILER		4,360.00 CH	Eff: 100.00	**Prod: 40.0000 HU**		Lab Pcs: 0.00		Eqp Pcs:	0.00
812CRENTMOB	==> Rental Crane Mob	1.00	1.00 LS	17,500.000				18,769		18,769
812CRNTDEMO	==> Rental Crane Demob	1.00	1.00 LS	17,500.000				18,769		18,769
8150CRENT	==> Rental Crane 150T	1.00	4,360.00 HR	157.450				736,252		736,252
$773,789.45				[ ]				773,789		773,789
01395	**230T(M999) crawler - Rental**		**Quan: 87.00 WK**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
Z105	230 TON CRANE, OP & OILER		3,480.00 CH	Eff: 100.00	**Prod: 40.0000 HU**		Lab Pcs: 0.00		Eqp Pcs:	0.00
812CRENTMOB	==> Rental Crane Mob	1.00	3,480.00 HR	235.200				877,837		877,837
812CRNTDEMO	==> Rental Crane Demob	1.00	1.00 LS	30,000.000				32,175		32,175
8230CRENT	==> Rental Crane 230T	1.00	1.00 LS	30,000.000				32,175		32,175
$942,186.96				[ ]				942,187		942,187
=====> **Item Totals:**	**9970000 - SITE BASED EQUIPMENT**									
$3,384,724.43	11,960.0000 MH/LS		11,960.00 MH	[493651.6]	812,963			2,571,761		**3,384,724**
3,384,724.430		1 LS			812,963.22			2,571,761.21		3,384,724.43
BID ITEM = 9980000	Land Item SCHEDULE: 1 100									N/A
Description =	C, SI, V, W		Unit = LS	Takeoff Quan: 1.000				Engr Quan:		1.000
01350	**C-CODE FIELD OFFICE**		**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
3Z70C*TC	C-CODE FIELD O@107.2	1.00	203,506,117.76 $TC	0.006			1,309,562			1,309,562
01351	**SI-CODE SAFETY INCENTIVE**		**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508**	**WC: 1**				
3Z70SI*TL	SI-CODE SAFETY@107.2	1.00	22,817,287.90 $L	0.002			61,179			61,179

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total

BID ITEM = 9980000 Land Item SCHEDULE: 1 100 N/A
Description = C, SI, V, W Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
01352	**V-CODE NON-OP EQUIPMENT**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**						
8V*TL	==> V-Code Indirect	1.00	22,817,287.90 $L	0.060				1,369,037		1,369,037
01353	**W-CODE CONSUMABLE MAT'LS**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**						
3Z70W*TL	W-CODE SM TOOLS/CO	1.00	22,817,287.90 $L	0.045			1,026,778			1,026,778

=====> **Item Totals: 9980000 - C, SI, V, W**

$3,766,555.95				[ ]			2,397,519	1,369,037		**3,766,556**
3,766,555.950		1 LS					2,397,518.68	1,369,037.27		3,766,555.95

PARENT ITEM = 9380000 ALL
Description = NEW RAPID MIX/SPLITTER STRUCTURE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Listing of Sub-Biditems of Parent Item 9380000:

BID ITEM = 93804300 Land Item SCHEDULE: 1 100 JWA
Description = PROCESS EQUIPMENT PACKAGES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

Activity / Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
93844305	**RAPID MIXER EQ PKG**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**						
2EQRAPIDMIX	RAPID MIXER EQ PKG	1.00	1.00 LS	120,000.000		120,000				120,000
93844310	**RAPID MIX WEIR GATE PKG**	**Quan: 1.00 LS**	**Hrs/Shft: 8.00**	**Cal: 508 WC: 1**						
2P602	WEIR/SLIDE/SLUICE GA	1.00	1.00 LS	100,000.000		100,000				100,000

=====> **Item Totals: 93804300 - PROCESS EQUIPMENT PACKAGES - KII**

$220,000.00				[ ]		220,000				**220,000**
220,000.000		1 LS				220,000.00				220,000.00

Total of Above Sub-Biditems

=====> **Item Totals: 9380000 - NEW RAPID MIX/SPLITTER STRUCTURE**

$220,000.00				**[ ]**		**220,000**				**220,000**
220,000.000		**1 LS**				**220,000.00**				**220,000.00**

$**203,506,116.47**	*** **Report Totals** ***	319,386.78 MH			22,817,288	54,360,837	16,170,905	6,768,933	103,388,154	**203,506,116**

+ Contractor's Fee(8%): $16,280,489

Total: $219,786,605... rounded to $219,845,000 for budget purposes

>>> indicates Non Additive Activity
------Report Notes:------
The estimate was prepared with TAKEOFF Quantities.
This report shows TAKEOFF Quantities with the resources.

Bid Date: 11/01/23 Owner: EWSU Engineering Firm: AECOM
Estimator-In-Charge: SAE

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total

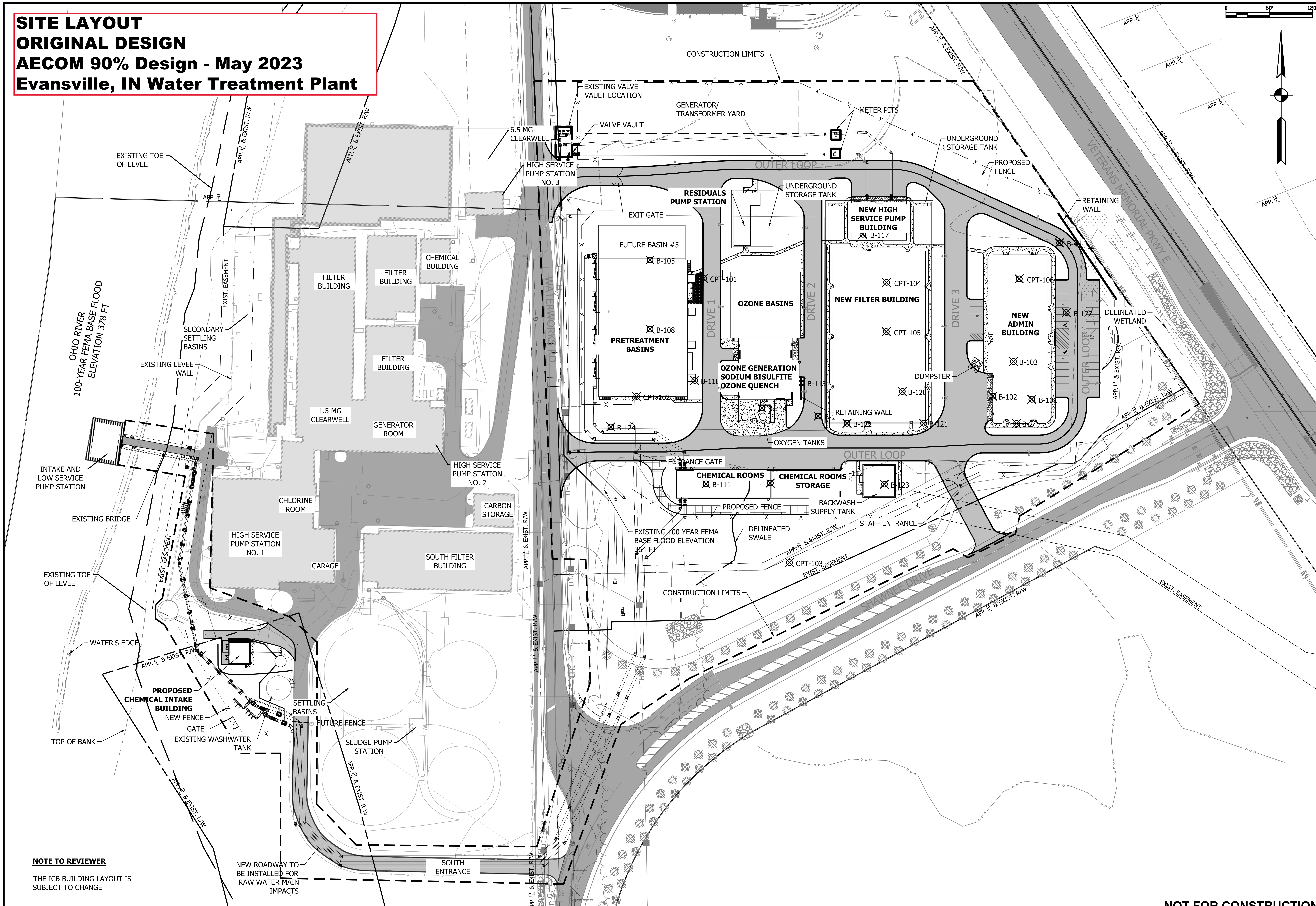
BID ITEM = 93804300 Land Item SCHEDULE: 1 100 JWA
Description = PROCESS EQUIPMENT PACKAGES - KII Unit = LS Takeoff Quan: 1.000 Engr Quan: 0.000

* on units of MH indicate average labor unit cost was used rather than base rate.
[ ] in the Unit Cost Column = Labor Unit Cost Without Labor Burdens
In equipment resources, rent % and EOE % not = 100% are represented as XXX%YYY where XXX=Rent% and YYY=EOE%

------Calendar Codes------

410	4-10'S WORK WEEK
508	**5-8'S WORK WEEK (Default Calendar)**
510	5-10'S WORK WEEK
610	6-10'S WORK WEEK
DT	DOUBLE TIME CALENDAR
OT	OVERTIME CALENDAR
SAL	SALARIED EMPLOYEE CALENDAR

SITE LAYOUT
ORIGINAL DESIGN
AECOM 90% Design - May 2023
Evansville, IN Water Treatment Plant



NOTE TO REVIEWER

THE ICB BUILDING LAYOUT IS SUBJECT TO CHANGE

NOT FOR CONSTRUCTION

DESIGNED: JLV
DATE: 05/01/2023
DRAWN: CAB
CHECKED: JLV
SCALE: 1" = 60'
APPROVED:
DATE:
TITLE:

EVANSVILLE WATER AND SEWER UTILITY
1 SE 9th Street Suite 200 - Evansville, IN 47708 (812) 421-2120

OVERALL SITE PLAN

AECOM
VS ENGINEERING
Evansville WATER AND SEWER UTILITY

REVISIONS	
DATE	DESCRIPTION
MAY 2023	90% OWNER REVIEW SET

EWSU PROJECT NO: U1032

DRAWING NO: 11-C006

SITE LAYOUT
REVISED HYBRID DESIGN
Engineering Team - October 2023
Evansville, IN Water Treatment Plant