			July 20	20		
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4 JULY 4 [™]
5	6 SPECIAL CIVIL SERVICE MTG. 4:00 (COMMUNITY ROOM #2)	7 COUNCIL AND CAUCUS 7:00 STORM WATER, STREETS AND UTILITIES 6:00	<i>8</i> PLANNING COMMISSION 7:00 CAUCUS 6:45	9	10	11
12	13 CIVIL SERVICE COMM 4:00 (COMMUNITY ROOM #2)	14	15 FAIR HOUSING BOARD MTG 5:00 (COMMUNITY ROOM #1)	16	17	18
19	20	21 COUNCIL AND CAUCUS 7:00 B&BC, FINANCE AND SAFETY AND SPECIAL R&O 6:00	22	<i>23</i> BOARD OF ZONING APPEALS 7:00 CAUCUS 6:45	24	25
26	27	<i>28</i> RECREATION BOARD 6:00	29	30	31	

All meetings will be held at City Hall 14600 State Road, unless otherwise noted.

NORTH ROYALTON CITY COUNCIL A G E N D A JULY 7, 2020

7:00 p.m. Caucus

Council Meeting 7:00 p.m.

REGULAR ORDER OF BUSINESS

- 1. Call to Order.
- 2. Opening Ceremony (Pledge of Allegiance).
- 3. Roll Call.
- 4. Approval of Consent Agenda: Items listed under the Consent Agenda are considered routine. Each item will be read individually into the record and the Consent Agenda will then be enacted as a whole by one motion and one roll call. There will be no separate discussion of these items. If discussion by Council is desired on any Consent Agenda item, or if discussion is requested by the public on any legislative item on the Consent Agenda, that item will be removed from the Consent Agenda and considered in its normal sequence under the Regular Order of Business.
 - a. Approval of Minutes: June 16, 2020 and Special Council Work Session and Special Council Meeting of June 30, 2020.
 - b. Motion to recess Council and Committee meetings for the month of August 2020.
 - c. Receipt and acknowledgement without objection to Ohio Dept. of Liquor Control request for a new D1, permit for Manta United LLC, 10701 Royalton Road, Ste G, North Royalton, Ohio 44133.
- 5. Communications.
- 6. Mayor's Report.
- 7. Department Head Reports.
- 8. President of Council's Report.
- 9. Committee Reports:

Building & Building Codes Finance Review & Oversight Safety Storm Water Streets Utilities Linda Barath Paul Marnecheck Jeremy Dietrich

Jessica Fenos Vincent Weimer Mike Wos

10. Report from Council Representatives to regulatory or other boards:

Board of Zoning AppealsPaul MarnecheckPlanning CommissionPaul MarnecheckRecreation BoardJeremy Dietrich

- 11. Public Discussion: Five minute maximum, on current agenda legislation only.
- 12. LEGISLATION

THIRD READING CONSIDERATION

1. **20-79** - AN ORDINANCE AUTHORIZING THE MAYOR TO ACCEPT THE BID OF TRANSPORT SERVICES INC. AND THERRIEN PROPERTIES FOR THE PURCHASE OF CERTAIN REAL PROPERTY KNOWN AS PPN 483-23-011 PURSUANT TO OHIO REVISED CODE CHAPTER 721 AND ORDINANCE 20-46 FOR THE SUM OF \$350,000, AND DECLARING AN EMERGENCY. **First reading May 5, 2020. Second reading May 19, 2020.**

FIRST READING CONSIDERATION

- 1. **20-91-** AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON A CERTAIN AMENDMENT TO ARTICLE III, THE COUNCIL, OF THE CHARTER OF THE CITY OF NORTH ROYALTON IN ORDER TO ALLOW COUNCIL TO MEET REMOTELY OR POSTPONE MEETINGS DURING DECLARED EMERGENICES THAT ENCOMPASS THE CITY OF NORTH ROYALTON, AND DECLARING AN EMERGENCY.
- 2. **20-92** AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON AN AMENDMENT TO THE CHARTER OF THE CITY OF NORTH ROYALTON CREATING A NEW ARTICLE VII, DEPARTMENT OF PUBLIC SAFETY AND REPEALING THE EXISTING ARTICLE VII, POLICE AND FIRE DEPARTMENT IN ORDER TO ESTABLISH A MODERN SAFETY DEPARTMENT AND ALLOW FOR A LARGER POOL OF QUALIFIED CANDIDATES FOR FIRE AND POLICE CHIEFS, AND DECLARING AN EMERGENCY.
- 3. **20-93** AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON A CERTAIN AMENDMENT TO "ARTICLE X MUNICIPAL CEMETERY" OF THE CHARTER OF THE CITY OF NORTH ROYALTON IN ORDER TO PROPERLY IDENTIFY THE OFFICER RESPONSIBLE FOR THE ADMINISTRATION OF THE MUNICIPAL CEMETERY, AND DECLARING AN EMERGENCY.
- 4. **20-94** AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON A CERTAIN AMENDMENT TO ARTICLE XVI, FINANCE, OF THE CHARTER OF THE CITY OF NORTH ROYALTON IN ORDER TO ALLOW COUNCIL THE DISCRETION TO WAIVE PUBLIC BIDDING IN THE EVENT OF AN EMERGENCY AND TO SELECT THE LOWEST AND/OR BEST BIDDER WHEN APPROPRIATE, AND DECLARING AN EMERGENCY.
- 5. **20-95** AN ORDINANCE ACCEPTING THE BID OF BROWN AND CALDWELL FOR THE NORTH ROYALTON WASTEWATER TREATMENT PLANT "A" BLOWER BUILDING, CONTROL BUILDING AND MISCELLANEOUS IMPROVEMENT PROJECT FOR AN AMOUNT NOT TO EXCEED \$5,873,400.00 AS THE LOWEST AND BEST BID, CONTINGENT UPON BEING APPROVED FOR A LOAN FROM THE OHIO WATER DEVELOPMENT AUTHORITY, AND DECLARING AN EMERGENCY.
- 6. **20-96** AN ORDINANCE AUTHORIZING THE MAYOR TO EXECUTE AND RECORD DEEDS TRANSFERRING PERMANENT PARCEL NUMBERS 481-12-095 (YORK ROAD), 482-03-004 (POTOMAC), 484-17-016 (KINGSTON WAY), 489-30-012 (APOLLO DRIVE), AND 489-31-037 (APOLLO DRIVE) FROM THE NORTH ROYALTON LAND REUTIILZATION PROGRAM TO THE CITY OF NORTH ROYALTON, AND DECLARING AN EMERGENCY.
- 7. **20-97** AN ORDINANCE AMENDING THE CODIFIED ORDINANCES OF THE CITY OF NORTH ROYALTON, PART TWO ADMINISTRATION CODE, CHAPTER 214 GENERAL FEE SCHEDULE, SECTION 214.06 FEES IN THE STREETS, UTILITIES AND PUBLIC SERVICES CODE, PARAGRAPH (j), AND DECLARING AN EMERGENCY.
- 13. Miscellaneous.
- 14. Adjournment.

AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON A CERTAIN AMENDMENT TO ARTICLE III, THE COUNCIL, OF THE CHARTER OF THE CITY OF NORTH ROYALTON IN ORDER TO ALLOW COUNCIL TO MEET REMOTELY OR POSTPONE MEETINGS DURING DECLARED EMERGENICES THAT ENCOMPASS THE CITY OF NORTH ROYALTON, AND DECLARING AN EMERGENCY

- <u>WHEREAS</u>: Article III of the Charter mandates that Council meet twice per month and provides no alternative even in the event of an emergency; and
- <u>WHEREAS</u>: Recent events have provided an abject lesson in the need for flexibility in the requirement of regular meeting and the ability to employ modern technology to allow the Council to meet its' obligations to fulfill its' duties in non-traditional style meetings during emergencies; and
- <u>WHEREAS</u>: The 2020 North Royalton Charter Review Commission has determined to provide a ballot issue to allow City Council the authority to meet remotely or suspend or postpone meetings during declared emergencies that include the City of North Royalton; and
- WHEREAS: This amendment will serve to allow the Council flexibility as described above; and
- <u>WHEREAS</u>: In order to provide for the above it is necessary to recommend amending Article III, The Council, Section (f) Meetings of the Charter of the City of North Royalton; and
- <u>WHEREAS</u>: Pursuant to Article XVIII, Subsection (f) of the Charter, the Council is obligated to submit the Charter Review Commission recommendations to the electors.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

<u>Section 1</u>. Pursuant to Article XVIII, Section 9 of the Ohio Constitution and Article XVIII, Section (f) of the Charter of the City of North Royalton, the Council hereby authorizes and directs the submission to the electors of the City of North Royalton, at an election to be held in usual places of voting in said city on November 3, 2020, an amendment to Article III, The Council, Section (f) Meetings of the Charter of the City of North Royalton read as follows:

ARTICLE III THE COUNCIL

(f) MEETINGS.

The Council shall meet at the Municipal Building of the Municipality at such time as may be prescribed by ordinance or resolution, but *and* shall meet at least twice each month, except that the Council may designate one month in the summer season for vacation. Meetings of the Council shall be open to the public in accordance with State law, with the exception of Executive Sessions, which shall only be permitted in accordance with the provisions set forth in the Codified Ordinances of the City of North Royalton, or in the laws of the State of Ohio. *In the event of a declared emergency that encompasses the City of North Royalton, Council retains the authority to meet remotely or suspend or postpone its meetings until practicable.*

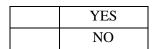
Public Hearings conducted by Council, and notice for same, shall be handled in such manner as Council may by Ordinance provide.

Section 2. The ballot for said question shall be in substantially the following form:

PROPOSED CHARTER AMENDMENT

A majority affirmative vote is necessary for passage.

SHALL THE CHARTER OF THE CITY OF NORTH ROYALTON, ARTICLE III, THE COUNCIL, SECTION (f) MEETINGS BE AMENDED TO ALLOW COUNCIL TO MEET REMOTELY OR SUSPEND OR POSTPONE MEETINGS DURING DECLARED EMERGENCIES THAT ENCOMPASS THE CITY OF NORTH ROYALTON?



Ordinance No. 20-91 Page 2

Section 3. The foregoing proposed amendment, if approved by a majority of the electors voting thereon at the aforesaid election to be held on November 3, 2020, shall become a part of the Charter of this city and shall be effective as of the date that said amendment or amendments have been certified by the Cuyahoga County Board of Elections as having been approved by a majority of the voters.

Section 4. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed to deliver immediately to the Board of Elections a certified copy of this Ordinance.

Section 5. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed, pursuant to laws passed by the General Assembly, to give notice of these proposed amendments by newspaper advertising.

Section 6. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 7. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that this Ordinance must be effective immediately in order to permit necessary arrangements to be made in sufficient time for said election.

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PRESIDENT OF COUNCIL

APPROVED:

MAYOR

DATE PASSED: _____ DATE APPROVED: _____

ATTEST:

DIRECTOR OF LEGISLATIVE SERVICES

YEAS:

NAYS:

INTRODUCED BY: Marnecheck, Fenos, Barath, Dietrich, Weimer, Wos

AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON AN AMENDMENT TO THE CHARTER OF THE CITY OF NORTH ROYALTON CREATING A NEW ARTICLE VII, DEPARTMENT OF PUBLIC SAFETY AND REPEALING THE EXISTING ARTICLE VII, POLICE AND FIRE DEPARTMENT IN ORDER TO ESTABLISH A MODERN SAFETY DEPARTMENT AND ALLOW FOR A LARGER POOL OF QUALIFIED CANDIDATES FOR FIRE AND POLICE CHIEFS, AND DECLARING AN EMERGENCY

- <u>WHEREAS</u>: The existing Article VII is largely the work product of the original Charter Commission in 1952 when North Royalton was a village; and
- <u>WHEREAS</u>: The existing Article VII mandates that the Chiefs of the Police and Fire Departments be chosen only from within the department and only from between the two such candidates scoring highest on an examination; and
- <u>WHEREAS</u>: The needs of a city of over thirty thousand people for a modern, professional safety department call for the Mayor to be able to select Fire and Police Chiefs of the highest professional caliber from the largest available pool of qualified candidates; and
- <u>WHEREAS</u>: The 2020 North Royalton Charter Review Commission has determined to provide a ballot issue to both repeal the existing Article VII and replace it with a new Article VII to allow for the Mayor to choose both Fire and Police Chiefs from the largest available pool of qualified candidates to serve at his pleasure and subject to confirmation by Council and; and
- <u>WHEREAS</u>: In order to provide for the above it is necessary to repeal Article VII Police and Fire Department, and adopt the new Article VII Department of Public Safety; and
- <u>WHEREAS</u>: Pursuant to Article XVIII, Subsection (f) of the Charter, the Council is obligated to submit the Charter Review Commission recommendations to the electors.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

<u>Section 1</u>. Pursuant to Article XVIII, Section 9 of the Ohio Constitution and Article XVIII, Section (f) of the Charter of the City of North Royalton, the Council hereby authorizes and directs the submission to the electors of the City of North Royalton, at an election to be held in usual places of voting in said city on November 3, 2020, the repeal of Article VII, Police and Fire Department and adoption of Article VII, Department of Public Safety of the Charter of the City of North Royalton which shall, upon adoption, read as follows:

ARTICLE VII POLICE AND FIRE DEPARTMENT

(a) COMPOSITION

There shall be a Police Department, which shall be composed of the Chief of Police and such other officers, policemen and deputies as may from time to time be provided by ordinance of the Council, and a Fire Department, which shall be composed of the Chief of the Fire Department and such other officers and firemen, on a full or part time basis, as may from time to time be provided by ordinance of the Council.

(b) CHIEFS; APPOINTMENT; VACANCY.

The Chief of Police and the Chief of the Fire Department shall be appointed by the Mayor from the ranks of the respective departments, in the manner hereinafter provided. When either office shall for any reason become vacant a suitable examination shall be given by and under the direction of the Civil Service Commission, to such members of the department who have obtained the rank of sergeant or higher, and desire to be considered therefor. The Mayor shall make the appointment from among the two persons receiving the highest grade on the examination and certified as such by the Civil Service Commission. Such appointment to be subject to confirmation by the majority vote of the members elected to Council. Such appointee shall serve during good behavior, as is hereafter provided. (11-7-67)

(c) CHIEFS; REMOVAL.

The Council may remove the Chief of Police or the Chief of the Fire Department for gross misconduct or malfeasance, misfeasance, or nonfeasance in or disqualification for office or conviction while in office of a crime involving moral turpitude; provided, however, that such removal shall not take place without the concurrence of two thirds (2/3) of the members elected to Council. In addition thereto, the Council may remove the Chief of Police or the Chief of the Fire Department from office for any cause deemed by it sufficient upon the concurrence of three fourths (3/4) of the members elected to Council. In the event removal of the Chief of Police or the Chief of the Fire Department is sought for any cause, such official shall be notified in writing of the charge against him or her at least ten (10) days in advance of any hearing upon such charge and he or she or his or her counsel shall be given an opportunity to be heard, present evidence and examine any witnesses appearing in support of such charge. The resolution removing such official shall set forth in full reasons therefor. (11-4-97)

(d) EXISTING CHIEFS.

The persons holding the offices of Chief of Police and Chief of the Fire Department at the time of the taking effect of this Charter shall not be required to be reappointed hereunder, but shall continue to hold such offices, subject to all provisions and terms herein: but further provided, that until such time as the Council shall by ordinance provide and establish a Fire Department having a full-time Chief, the Chief of the Fire Department shall be appointed by the Mayor with the concurrence of a majority of the members elected to Council and may be removed by the Mayor at any time for any cause with the concurrence of two-thirds (2/3) of the members elected to Council.

(e) APPOINTMENTS, FULL-TIME, FIRE DEPARTMENT.

When the Council, pursuant to paragraph (a) of this Article, establishes one or more full time positions in the Fire Department, original appointments to such full-time positions as are initially established by the Council and to any additional full-time positions created within 730 days following the establishment of the initial full-time positions together with appointment to any vacancy occurring in any such position occurring within 730 days following the establishment of the initial full-time positions, shall be made pursuant to competitive Civil Service examinations among the then members of the Volunteer Fire Department of the Municipality without limitation as to the age of the applicant; except that the first original appointments to full-time positions shall be appointments to the full-time positions of Chief and subordinate officers and during such 730 day period appointments to the positions of Chief and subordinate officers shall be made directly by majority vote of the members of Council from among the then members of the Volunteer Fire Department without competitive examination and without limitation as to the age of the appointee. Such examinations shall be administered and graded in the manner provided in Article XI of this Charter. The eligibility list resulting from the examinations shall remain in force until all applicants receiving a passing grade have received or declined appointments or until the expiration of said 730 days, whichever occurs first.

If the eligibility list resulting from examinations under this paragraph (e) is exhausted prior to the expiration of said 730 days, a subsequent eligibility list may be established in the manner provided for the original eligibility list. If no eligibility list results from examinations given pursuant to this paragraph, then such appointments in the Fire Department shall be made pursuant to Article XI. Following the expiration of said 730 days, appointments to full time positions shall be made pursuant to Article XI.

Appointments to full-time positions in the Fire Department shall be original appointments and shall not be considered promotions from Volunteer Fireman. To the extent possible, officers of the Fire Department shall be full-time firemen. (11-8-60)

(f) APPOINTMENTS; PAID CALL FIREFIGHTER.
 Appointments to the position of Paid Call Firefighter shall be made in the manner prescribed by ordinance of Council, and shall not be subject to Civil Service.
 (11-3-81; 11-4-97)

ARTICLE VII DEPARTMENT OF PUBLIC SAFETY

(a) DIRECTOR OF PUBLIC SAFETY.

The Mayor may appoint a Director of Public Safety subject to confirmation by a majority of the members of City Council. The Director of Public Safety shall have charge of the Department of Public Safety. The Director of Public Safety shall supervise both the Division of Fire and the Division of Police, shall approve of and is responsible for the enforcement all necessary rules and regulations for the governance of the Department. The Director of Public Safety shall perform such other duties as may be required by this Charter, by ordinance or as directed by the Mayor. In the absence of a Director all such duties and obligations of Safety Director shall be the responsibility of the Mayor.

(b) DIVISIONS.

- The Department of Public Safety shall consist of the following Divisions:
- (i) The Division of Fire
- (ii) The Division of Police

Ordinance No. 20-92 Page 3

(c) DIVISION OF FIRE.

The Division of Fire shall be headed by a Fire Chief who shall have active charge of and responsibility for organization and operation of said Division. All appointments to the Division, except the Chief, shall be made in accord with the Civil Service Rules and Regulations of the City of North Royalton.

(d) DIVISION OF POLICE.

The Division of Police shall be headed by a Police Chief who shall have active charge of and responsibility for organization and operation of said Division. All appointments to the Division, except the Chief, shall be made in accord with the Civil Service Rules and Regulations of the City of North Royalton.

(e) APPOINTMENT OF FIRE CHIEF AND POLICE CHIEF.

The Fire Chief and the Police Chief shall be appointed by the Mayor from among those qualified candidates who apply. Such appointment is subject to confirmation by a majority of the members of City Council. Such appointee shall serve at the pleasure of the Mayor. The Mayor may select a chief from within or without the Division of Fire or Division of Police, respectively. Any candidate selected must have had at least ten (10) years of experience in the profession. A candidate selected from within the Division may choose, upon removal, to be reinstated to that individual's former rank with full benefits within fourteen (14) days of removal. In the event of a vacancy in the office of chief said position shall be filled in the same manner as provided for original appointment.

Section 2. The ballot for said question shall be in substantially the following form:

PROPOSED CHARTER AMENDMENT

A majority affirmative vote is necessary for passage.

SHALL THE CHARTER OF THE CITY OF NORTH ROYALTON BE AMENDED TO REPEAL ARTICLE VII, POLICE AND FIRE DEPARTMENTS AND ADOPT NEW ARTICLE VII, DEPARTMENT OF PUBLIC SAFETY.

YES
NO

<u>Section 3</u>. The foregoing proposed amendment, if approved by a majority of the electors voting thereon at the aforesaid election to be held on November 3, 2020, shall become a part of the Charter of this city and shall be effective as of the date that said amendment or amendments have been certified by the Cuyahoga County Board of Elections as having been approved by a majority of the voters.

<u>Section 4</u>. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed to deliver immediately to the Board of Elections a certified copy of this Ordinance.

<u>Section 5</u>. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed, pursuant to laws passed by the General Assembly, to give notice of these proposed amendments by newspaper advertising.

<u>Section 6</u>. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

<u>Section 7</u>. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that this Ordinance must be effective immediately in order to permit necessary arrangements to be made in sufficient time for said election.

Ordinance No. 20-92 Page 4

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

	APPROVED:		
PRESIDENT OF COUNCIL		MAYOR	
DATE PASSED:	DATE APPROVI	ED:	
ATTEST:			
DIRECTOR OF LEGISLATIVE SERVICES			

YEAS:

NAYS:

INTRODUCED BY: Marnecheck, Fenos, Barath, Dietrich, Weimer, Wos

AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON A CERTAIN AMENDMENT TO "ARTICLE X MUNICIPAL CEMETERY" OF THE CHARTER OF THE CITY OF NORTH ROYALTON IN ORDER TO PROPERLY IDENTIFY THE OFFICER RESPONSIBLE FOR THE ADMINISTRATION OF THE MUNICIPAL CEMETERY, AND DECLARING AN EMERGENCY

- <u>WHEREAS</u>: The 2020 North Royalton Charter Review Commission has determined to provide a ballot issue to properly identify the officer responsible for the administration of the Municipal Cemetery; and
- <u>WHEREAS</u>: For many years the actual day-to-day responsibility for the operation and administration of the municipal cemeteries is placed with the city's Director of Municipal Parks, Properties, Cemeteries and Recreation; and
- <u>WHEREAS</u>: The existing language identifies the Director of Public Service as the responsible officer; and
- <u>WHEREAS</u>: This amendment will serve to correct the language and properly identify the officer responsible for the administration of the municipal cemetery; and
- <u>WHEREAS</u>: In order to provide for the above it is necessary to recommend amending Article X Municipal Cemetery of the Charter of the City of North Royalton, and
- <u>WHEREAS</u>: Pursuant to Article XVIII, Subsection (f) of the Charter, the Council is obligated to submit the Charter Review Commission recommendations to the electors.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

<u>Section 1</u>. Pursuant to Article XVIII, Section 9 of the Ohio Constitution and Article XVIII, Section (f) of the Charter of the City of North Royalton, the Council hereby authorizes and directs the submission to the electors of the City of North Royalton, at an election to be held in usual places of voting in said city on November 3, 2020, an amendment to Article X Municipal Cemetery of the Charter of the City of North Royalton which shall upon adoption read as follows:

ARTICLE X MUNICIPAL CEMETERY

The Council shall have the power by ordinance to provide, expand and establish fees and costs to maintain lands for a Municipal Cemetery. The Director of Public Service Director of Municipal *Parks, Properties, Cemeteries and Recreation* shall be responsible for the administration of the Municipal Cemetery.

<u>Section 2</u>. The ballot for said question shall be in substantially the following form:

PROPOSED CHARTER AMENDMENT

A majority affirmative vote is necessary for passage.

SHALL THE CHARTER OF THE CITY OF NORTH ROYALTON, ARTICLE X MUNICIPAL CEMETERY BE AMENDED TO PROPERLY IDENTIFY THAT THE DIRECTOR OF MUNICIPAL PARKS, PROPERITIES, CEMETERIES AND RECREATION SHALL BE RESPONSIBLE FOR THE ADMINISTRATION OF THE MUNICIPAL CEMETERY?

YES
NO

<u>Section 3</u>. The foregoing proposed amendment, if approved by a majority of the electors voting thereon at the aforesaid election to be held on November 3, 2020, shall become a part of the Charter of this city and shall be effective as of the date that said amendment or amendments have been certified by the Cuyahoga County Board of Elections as having been approved by a majority of the voters.

<u>Section 4</u>. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed to deliver immediately to the Board of Elections a certified copy of this Ordinance.

Ordinance No. 20-93 Page 2

<u>Section 5</u>. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed, pursuant to laws passed by the General Assembly, to give notice of these proposed amendments by newspaper advertising.

<u>Section 6</u>. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

<u>Section 7</u>. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that this Ordinance must be effective immediately in order to permit necessary arrangements to be made in sufficient time for said election.

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

	APPROVED:	
PRESIDENT OF COUNCIL		MAYOR
DATE PASSED:	DATE APPROVED:	
ATTEST:		
DIRECTOR OF LEGISLATIVE SERVICES		

YEAS:

NAYS:

AN ORDINANCE PROVIDING FOR THE SUBMISSION TO THE ELECTORS OF THE CITY OF NORTH ROYALTON A CERTAIN AMENDMENT TO ARTICLE XVI, FINANCE, OF THE CHARTER OF THE CITY OF NORTH ROYALTON IN ORDER TO ALLOW COUNCIL THE DISCRETION TO WAIVE PUBLIC BIDDING IN THE EVENT OF AN EMERGENCY AND TO SELECT THE LOWEST AND/OR BEST BIDDER WHEN APPROPRIATE, AND DECLARING AN EMERGENCY

- <u>WHEREAS</u>: The 2020 North Royalton Charter Review Commission has determined to submit a ballot issue to grant City Council the authority to respond swiftly in the event of an emergency and waive public bidding in limited circumstances and, where public bidding is employed, to allow City Council the authority to choose the bidder which is "lowest and/or best" as Council shall determine; and
- <u>WHEREAS:</u> The Constitution of the State of Ohio allows Chartered Municipalities to order their own communities to suit their own local circumstances and to vary from the state laws in certain instances if they choose to do so; and
- <u>WHEREAS:</u> The state statutes do not provide city councils with the emergency authority to waive public bidding nor to allow council the discretion to select a bid that is "lowest and/or best"; and
- <u>WHEREAS:</u> This amendment will allow City Council the authority in the case of emergencies to waive public bidding to respond in a timely manner to any such emergency and, in cases where bidding is employed, to select the "lowest and/or best" bid; and
- <u>WHEREAS:</u> In order to provide for the above it is necessary to recommend amending Article XVI, Finance, Section (h) Public Bidding of the Charter of the City of North Royalton; and
- <u>WHEREAS:</u> Pursuant to Article XVIII, Subsection (f) of the Charter, the Council is obligated to submit the Charter Review Commission recommendations to the electors.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

Section 1. Pursuant to Article XVIII, Section 9 of the Ohio Constitution and Article XVIII, Section (f) of the Charter of the City of North Royalton, the Council hereby authorizes and directs the submission to the electors of the City of North Royalton, at an election to be held in usual places of voting in said city on November 3, 2020, an amendment to Article XVI, Finance, Section (h) Public Bidding of the Charter of the City of North Royalton read as follows:

ARTICLE XVI FINANCE

(h) PUBLIC BIDDING

The Council may authorize, in specific cases, expenditures of the funds of the Municipality without public biddings: in the instance of an emergency that significantly affects the duties and obligations of the municipality, for the acquisition of real estate, for the discharge of noncontractual claims against the Municipality, for personal services, for the joint use of facilities or exercise of power with other political subdivisions, or for the product or services of public utilities (including those Municipally operated). But-No other expenditures in excess of the amount allowed by Section 733.22, 735.05 and 737.03 and other pertinent sections of the Ohio Revised Code shall be made except pursuant to contracts made with the lowest and/or best bidder after public advertising and receipt of bids in the manner provided by ordinance. Nothing herein shall be construed to require Council to accept any bid.

Section 2. The ballot for said question shall be in substantially the following form:

PROPOSED CHARTER AMENDMENT

A majority affirmative vote is necessary for passage.

SHALL THE CHARTER OF THE CITY OF NORTH ROYALTON, ARTICLE XVI FINANCE (h) PUBLIC BIDDING BE AMENDED TO AUTHORIZE CITY COUNCIL IN EMERGENCY CIRCUMSTANCES TO WAIVE THE REQUIREMENT OF PUBLIC BIDDING TO RESPOND RAIDLY TO THAT EMERGENCY AND, WHERE PUBLIC BIDDING IS EMPLOYED, TO ALLOW CITY COUNCIL TO CHOOSE THE LOWEST AND/OR BEST BID WHERE APPROPRIATE?

YES
NO

Section 3. The foregoing proposed amendment, if approved by a majority of the electors voting thereon at the aforesaid election to be held on November 3, 2020, shall become a part of the Charter of this city and shall be effective as of the date that said amendment or amendments have been certified by the Cuyahoga County Board of Elections as having been approved by a majority of the voters.

Section 4. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed to deliver immediately to the Board of Elections a certified copy of this Ordinance.

Section 5. The Director of Legislative Services in her capacity as Clerk of Council is hereby authorized and directed, pursuant to laws passed by the General Assembly, to give notice of these proposed amendments by newspaper advertising.

<u>Section 6</u>. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 7. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that this Ordinance must be effective immediately in order to permit necessary arrangements to be made in sufficient time for said election.

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PRESIDENT OF COUNCIL

APPROVED:

MAYOR

DATE PASSED: _____ DATE APPROVED: ____

ATTEST:

DIRECTOR OF LEGISLATIVE SERVICES

YEAS:

NAYS:

INTRODUCED BY: Wos, Dietrich, Weimer

AN ORDINANCE ACCEPTING THE BID OF BROWN AND CALDWELL FOR THE NORTH ROYALTON WASTEWATER TREATMENT PLANT "A" BLOWER BUILDING, CONTROL BUILDING AND MISCELLANEOUS IMPROVEMENT PROJECT FOR AN AMOUNT NOT TO EXCEED \$5,873,400.00 AS THE LOWEST AND BEST BID, CONTINGENT UPON BEING APPROVED FOR A LOAN FROM THE OHIO WATER DEVELOPMENT AUTHORITY, AND DECLARING AN EMERGENCY

- WHEREAS: The City of North Royalton has advertised for bids for the North Royalton Wastewater Treatment Plant "A" Blower Building, Control Building and Miscellaneous Improvement Project; and
- It has been determined that the bid of Brown and Caldwell for an amount not to exceed WHEREAS: \$5,873,400.00 is the lowest and best bid; and
- WHEREAS: The city has applied to the Ohio Water Development Authority (OWDA) for a loan to finance the costs of this project; and
- WHEREAS: Council desires to accept this bid contingent upon being approved for the OWDA loan.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

Section 1. Council hereby accepts the bid of Brown and Caldwell for the North Royalton Wastewater Plant "A" Blower Building, Control Building and Miscellaneous Improvement Project for an amount not to exceed \$5,873,400.00 as the lowest and best bid as outlined in Exhibit A attached hereto, contingent upon being approved for the loan from the OWDA.

Section 2. The Mayor is hereby authorized to enter into a contract with Brown and Caldwell in a form approved by the Director of Law.

Section 3. The Wastewater Superintendent is hereby authorized and directed to forward a certified copy of this Ordinance to Brown and Caldwell and all certified checks and bonds are hereby authorized to be returned to the unsuccessful bidders.

Section 4. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 5. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that it is immediately necessary to accept the bid of Brown and Caldwell for the North Royalton Wastewater Plant "A" Blower Building, Control Building and Miscellaneous Improvement Project so that this work may commence, contingent upon being approved for the loan from the OWDA.

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PRESIDENT OF COUNCIL

APPROVED: MAYOR

DATE PASSED: _____ DATE APPROVED: _____

ATTEST:

DIRECTOR OF LEGISLATIVE SERVICES

YEAS:

NAYS:

6055 Rockside Woods Boulevard, Suite 350 Independence, OH 44131

T: 216.606.1300



June 17, 2020

Mark Smith City of North Royalton 11675 Royalton Road North Royalton, Ohio 44133

Subject: EOPCC update

Dear Mr. Smith

Attached is the updated Engineer's Opinion of Probable Construction Cost (EOPCC) for the North Royalton WWTP 'A' Blower Building, Control Building and Miscellaneous Improvement Project. The EOPCC has been updated to reflect the following scope changes to the Project:

- Relocation of the ferric chloride tanks
- · Modifications to the men's locker room to accommodate more staff
- New eyewash station at the Filter Building
- Various I&C component replacements

The overall project cost has identified a savings as a result of moving the ferric chloride feed system into the Operations Buildings even with the additional expenses for altering the Operations Building (new roof, removable FRP panel walls, new HVAC systems, etc.). The subtotal for construction is estimated to be \$4.6 mil without allowances.

The allowances account for nearly \$1 mil of work under this project and are used to better control cost for unit price concrete repair work, provide a mechanism to pay for electric utility, and address a few individual scope items added to the project. The project allowances are as identified below:

General Allowance: \$250,000

For payment of any unforeseen work items other than as specified or shown on the Contract Drawings. This allowance may be used for field orders to address additional plant needs and BC will have the ability to review contractor costing to recommend if the price is fair market value prior to authorization using these funds.

Aeration Tank Repairs: \$113,000

This allowance will be used for concrete crack and spall repair of the aeration tanks walkways and walls. The contractor will provide a unit cost for each type of repair as part of their bid to control cost.

Electric Utilities: \$60,000

For payment to The Illuminating Company for work related to the installation of the new utility transformer, power conductors, and power pole. The invoice will be sent to the contractor without markup and paid through the project.

Mark Smith City of North Royalton June 17, 2020 Page 2

Wiring Unlimited (WUL) PLC Replacements: \$730,000

This scope of work was negotiated by the city to include upgrade of 5 PLCs, fiber optics, network cabinets, and new SCADA computer hardware throughout the plant. The previous I&C budgetary estimate was limited to the work in the Operations "Blower" Building and did not include the upgrades for the other buildings. The original estimate was estimated at \$100,000 for the limited scope.

WUL BACNet retrofit: \$23,400

For installation of BACnet communications interfaces on the two existing RTU's in the Administration Building.

Furniture purchasing: \$60,000

Lastly for the purchase of office furniture for the Administration and Control Buildings. Similar to electric utility allowance, the City can purchase new furniture and submit the invoice to the contractor to be paid through the contract.

Total project cost as to advertised will be a lump sum amount for general construction \$5,873,400.00. This value includes all allowances and a 5% contingency for unforeseen conditions related to scoped items. We would be happy to address any questions and look forward to supporting the City into bidding and construction.

Very truly yours,

Brown and Caldwell

Michael Garnes, Project Manager

cc: Tony Blanc, Brown and Caldwell

Attachments (1)

Attachment A: 100% EOPCC

ATTACHMENT A

100% EOPCC

City of North Royalton Operations Building, Control Building and Miscellaneous Improvements 100% Design General Comments

GENERAL COMMENTS

- 1 The Engineer's Opinion of Probable Construction Cost (EOPCC) for this 100% Design Estimate includes labor, equipment, materials, tools, supervision, and incidentals for the proposed construction project.
- 2 The total cost for the Project is anticipated to be in the range noted on the Summary page in December <u>2019</u> dollars escalated through the anticipated mid point of construction of February 2021. The single point estimate is for the detailed costs as prepared and itemized by major component.
- 3 Labor rates are based on Cuyahoga County Davis Bacon prevailing wages and fringe benefits as of December <u>2019</u>.
- 4 An allowance for General Contractor Overhead & Profit of <u>10%</u> has been applied to the sum of Labor Cost + Construction Equipment Cost + Material Cost + Engineered Equipment Cost for work performed by the General Contractor. <u>15%</u> for Overhead and Profit has been applied for work to be performed by the Mechanical, Electrical and Plumbing Contractors.
- 5 This opinion of probable construction cost includes a contingency of $\frac{5\%}{2}$ at the 100% Design stage of project definition. Based on the level of project definition, the AACE recommended practice suggests the expected accuracy range to be $\frac{-10\%}{10\%}$ for this Class 2 estimate. The contingency considers the level of engineering and design documentation available at the time the opinion of cost is prepared, pricing uncertainty related to local construction market competitive conditions at the time of bid and pricing uncertainty related to the contractor's assessment of project risks.
- 6 General Conditions are included at <u>10%</u> of the Construction Cost.
 - Throughout this document each building will be referred to by the following acronyms:
 - AB Administration Building
 - CB Control Building
 - OB Operations Building
 - AT Aeration Tanks
 - FB Filter Building
- 8 The estimate is based on 100% drawings, specifications and budget information provided by Brown & Caldwell.

Clarifications :

7

DIVISION 2 - EXISTING CONDITIONS

- 1 We assume hazardous material abatement is not required nor included.
- 2 Demolition of existing roofs is included at the Administration and Control Buildings.
- 3 Demolition of existing walls, doors, and finishes is included as indicated.
- 4 Demolition of existing Operations Building recessed Storage area floor slab, steps and railings is included to allow for the new level floor for the new Electrical equipment in this area.

DIVISION 3 - CONCRETE

- 1 Removing spalled concrete and patching floor is included at the Operations Building.
- 2 New 6" SOG over 3' aggregate base and turn downs doweled into existing slab along the exterior perimeter is included at the Operations Building recessed Storage OB-101.
- 3 3'-6" thick CIP foundation pad with varying height walls is included at the new Containment Area.
- 4 Existing Aeration tank concrete repairs are included per the Repair Quantity Table on S-00-003.

DIVISION 4 - MASONRY

- 1 New interior walls at the Control Building are included as 6" CMU at an assumed height of 11 feet.
- 2 Masonry Infill at existing exterior and interior doorways is included.at the Control Building.
- 3 Exterior and interior opening masonry infills with tooth-ins to match existing masonry are included at the Operations Building.

DIVISION 5 - METALS

- 1 Replacing existing exterior stair handrails with new aluminum wall mounted handrails is included.
- 2 Rooftop guardrail is included at the Administration and Control Buildings as galvanized steel pipe.
- 3 New roof access ladder including walk-over platform is included at the Operations Building.

4 Aeration Tank area pipe supports are included as carbon steel HSS 6x6x3/8" Columns & Beams, including base plates.

DIVISION 6 - WOOD, PLASTIC AND COMPOSITE

- 1 Rough blocking for new roofing and metal coping is included.
- 2 FRP Grating, including framing is included at the Aeration Tanks new Containment Area.
- 3 Solid surface window sills are included at the new windows in the Control Building.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

- 1 New EPDM roofing systems are included at the Administration and Control Buildings. New copings are included at the Operations Building.
- 2 New roof access hatch is included at the Administration Building.
- 3 Replacing backer rod and sealants is included per the elevations provided at each building.

DIVISION 8 - OPENINGS

- 1 New doors are included at the Control and Operations Building per the Door Schedule provided.
- 2 Painting existing doors and frames along with removing and reinstalling hardware is included at the Administration Building.
- 3 New exterior aluminum framed windows are included at the Control Building. New exterior transom panels are included above doorways at the Operations Building.

DIVISION 9 - FINISHES

- 1 New finishes are included per the Room Finish Schedules at the Administration and Control Buildings.
- 2 Painting of existing walls and exposed ceiling structure is only included at the Operations Building.
- 3 Patching around new windows is included at the new Control Building per the window type 2 details.

DIVISION 10 - SPECIALTIES

- 1 Metal lockers are included at the Control Building.
- 2 Toilet room accessories are included at the Control Building per the Interior Elevations provided.

DIVISION 11 - EQUIPMENT

1 Installing owner provided refrigerator, range and over the range re-circulating exhaust hood are included at the Control Building.

DIVISION 12 - FURNISHINGS

- 1 P-Lam base, countertop, & wall cabinets are included at the Administration and Control Buildings Lunch Rooms.
- 2 Manual roller shades are included at the Administration and Control Buildings per the Room Finish Schedules.

DIVISION 13 - SPECIAL CONSTRUCTION

1 This division is not used.

DIVISION 14 - CONVEYING SYSTEMS

1 This division is not used.

DIVISION 21 - FIRE SUPPRESSION

1 No fire suppression included.

DIVISION 22 - PLUMBING SYSTEMS

1 Plumbing fixtures for the Administration Building and Control Building renovation are included as indicated on drawings with connection and routing of piping as part of renovation. The Operations Building and Aeration Tank plumbing related to the new emergency shower-eyewash stations is included based on drawings and information provided.

DIVISION 23 - HVAC

- 1 Replacement of diffusers & grilles, removal & reinstallation of thermostats and coordination of HVAC equipment and roof contractor work is included as indicated on drawings for the Administration building.
- 2 Replacement of diffusers & grilles, removal of specified equipment, new equipment per equipment schedules, ductwork and piping are included as indicated on drawings for the Control building.
- 3 HVAC work is included for the Operations building as indicated.

DIVISION 26 - ELECTRICAL

- 1 Pricing is based on 100% drawings issued in December 2019.
- 2 Light fixture material pricing is based on quotes received.
- 3 No material quotations were received for the Operations Building switchgear or motor control center.

DIVISION 27 - COMMUNICATIONS

- 1 Pricing is included for new data outlets at the Control Building as shown on the drawings.
- 2 Pricing is included to remove and reinstall intercom speakers at the Control Building as shown.
- 3 No communication devices are shown at any buildings other than the Control Building at this time.

DIVISION 28 - ELECTRONIC SAFETY & SECURITY

- 1 Fire alarm work is included in the buildings as shown on the drawings. Fire alarm work is not indicated at the Operations Building.
- 2 Reworking wiring to existing door strikes is included at the Operations Building. No other security system work is included. We assume any other security work will be performed by others.

DIVISION 31 - EARTHWORK

- 1 Excavation and hauling on site is included for the new Ferrous Chloride containment area and new pavements.
- 2 SWPP erosion control is included as an allowance.
- 3 Site restoration is assumed required and included as an allowance.

DIVISION 32 - EXTERIOR IMPROVEMENTS

- 1 8" concrete walk with rebar reinforcing, near the new Ferrous Chloride containment area is included.
- 2 Standard duty asphalt paving near the new Ferrous Chloride containment area is included.
- 3 Existing pavement patching allowance due to construction work is assumed required and included.

DIVISION 33 - UTILITIES

1 An allowance of \$50,000 is included for C.E.I. to Provide Transformer, New Pole, 15kv Wiring at the Operations Building.

DIVISION 40 - PROCESS INTEGRATION

- 1 Material quotations have not been received for PLCs, control panels or local instruments. Pricing is based on general historical data.
- 2 No provisions are included to assemble loose instruments that may be shipped separately with a vendor skid. We assume all skids will be delivered complete with local instruments installed and wired.
- 3 The Digester Blower VFDs are skid mounted with the blowers. Pricing is included with the blower. See Div. 46.
- 4 The Aeration Blower Vendor Control Panels are skid mounted with the blowers. Pricing is included with the blower. See Div. 46.

DIVISION 43 - PROCESS GAS AND LIQUID HANDLING

- 1 Process piping, valves, fittings and connections are included as indicated on drawings in the Operations Building and Aeration Tank Area.
- 2 No Process piping work is included in the Administration or Control Building.
- 3 See Division detail for additional clarifications.

DIVISION 46 - WATER AND WASTEWATER EQUIPMENT

- 1 Two (2) Multistage blowers and Two (2) Positive displacement blowers along with intake filters are included as indicated on drawings and information provided by engineer for the Operations Building.
- 2 (1) new FECL 5,000 gallon storage tank, Ferric Chloride (2) pump skid along with prefabricated Chlorination shelter are included as indicated on drawings and information provided by engineer.
- 3 See Division detail for additional clarifications.

Probable Cost Note:

Since RCSI has no control over Market Conditions, the cost of labor, materials or the contractor's method of determining prices, or competitive bidding, our opinions of probable construction cost are made on the basis of our experience and qualifications. These opinions represent our best judgment as professionals familiar with the construction industry. However we cannot and do not guarantee that proposals, bids or the construction cost will not vary from our opinions of probable construction cost.

	BREAKDOWN		LAE			C	CONSTRUCTION				ENGINEERED				
Facility	Work Element	Description	Manhours		Labor Cost		EQUIPMENT		MATERIAL ⁽¹⁾		EQUIPMENT	OVER	HEAD & PROFIT		Total Cost
AB		Administration Building	2,068	¢	121,914	¢	14,961	\$	194,305	¢		\$	36,669	\$	368,000
AD		Administration Building	2,000	φ	121,914	φ	14,901	φ	194,303	φ		φ	30,009	φ	308,000
CB		Control Building	4,302	\$	260,939	\$	18,383	\$	393,364	\$	-	\$	82,178	\$	755,000
		Ŭ	,							-			,		,
OB		Operations Building	8,251	\$	518,958	\$	30,908	\$	680,758	\$	791,703	\$	277,904	\$	2,300,000
AT		Aeration Tanks	2,999	\$	188,729	\$	15,675	\$	356,832	\$	48,010	\$	78,746	\$	688,000
FB		Filter Building	74	¢	4,944	¢		\$	27,536	¢		\$	4,724	¢	37,000
ГD			74	φ	4,944	φ	-	φ	27,550	φ	-	ð	4,724	φ	37,000
		Sub-Totals (1,2)	17,695	\$	1,095,484	\$	79,927	\$	1,652,794	\$	839,713	\$	480,222	\$	4,148,000
		General Conditions at 10% (included in	each facility)												
		Contingency (5% of A+B)			5.0%									\$	207,000
		Insurance (% of A, B & C)			3.00%									\$	130,650
	E	Bond (% of A, B, C & D)	.)		1.00% 2.34%									\$	44,857
	G	Escalation (% of A+ B+C+D+E) (14 mo Single Point Opinion of Probable			2.34%									\$ \$	106,000 4,637,000
	-	Allowances	Construction Cost			1								⊅ \$	986,400
		Aeration Tank Repairs		\$	113,000									φ	900,400
		Electric Utilities		\$	60,000										
		WUL PLC Replacements		\$	730,000										
		WUL BacNet Retrofit		\$	23,400										
		Furniture Purchasing		\$	60,000										
	I	General Allowance												\$	250,000
		Total Construction Cost Dudget												\$	5,873,400
		Total Construction Cost Budget											Low	Ψ	5,673,400 High
													LOW		піўп

Based on the level of project definition the AACE recommended practice suggests the expected accuracy range to be -10% to +10% of the Single Point Opinion of Probable Construction Cost (Item G). This range does NOT apply to the General Allowance (Item H) which is added separately.

\$5,409,700 \$6,337,100

(1) Where breakout costs were not available, the total cost was applied to the material column.

(2) Total man-hours estimated for the project may not be fully reflected as some items have the labor component part of an "installed" cost. In these cases, the labor is built into the MATERIAL number.

Administration Building

Construction Cost Breakdown

	ESTIMATE SUMMARY BY CSI DIVIS	SION	
CSI NO.	DESCRIPTION		AMOUNT
1	GENERAL REQUIREMENTS	\$	32,618
2	EXISTING CONDITIONS	\$	14,099
3	CONCRETE	\$	-
4	MASONRY	\$ \$ \$	-
5	METALS	\$	9,874
6	WOOD, PLASTIC & COMPOSITE	\$	7,572
7	THERMAL AND MOISTURE PROTECTION	\$	163,365
8	OPENINGS	\$	-
9	FINISHES	\$	38,305
10	SPECIALTIES	\$	-
11	EQUIPMENT	\$ \$ \$	-
12	FURNISHINGS	\$	5,280
13	SPECIAL CONSTRUCTION	\$	-
14	CONVEYING SYSTEMS	\$ \$ \$	-
21	FIRE SUPPRESSION		-
22	PLUMBING SYSTEMS	\$ \$	6,427
23	HVAC SYSTEMS	\$	29,685
26	ELECTRICAL	\$	35,361
27	COMMUNICATIONS	\$	-
28	ELECTRONIC SAFETY & SECURITY	\$	5,981
31	EARTHWORK	\$	-
32	EXTERIOR IMPROVEMENTS	\$	-
33	UTILITIES		-
40	PROCESS INTEGRATION	\$ \$	-
43	PROCESS GAS AND LIQUID HANDLING	\$	-
46	WATER AND WASTEWATER EQUIPMENT	\$	-
	TOTAL	\$	348,568
	ROUNDED	\$	349,000

	BID ITEMS		
ITEM NO.	DESCRIPTION		AMOUN
1	General Trades	\$	315,950
2		\$	
3		\$	
4		\$	
5		\$	
6		\$	
7		\$	
8	General Conditions	\$	32,61
9		\$	
10		\$	
11		\$	
12		\$	
13		\$	
	TOTAL	~	240 50
	TOTAL	\$	348,56
	ROUNDED	\$	349,00

														es except MEP &		10% 15%	
	WORK BREA	AKDOWN			1	I	LAE	BOR		CONSTRUCT	ION EQUIP.		ess (DIV. 21, 22, 23, TERIALS		1, 43, 46) OH&P	OH & P	
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Total Manhours	Labor Rate La	bor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
FB			Administration Building														
AB	2 2-1	A-AB-102	Division 2 - Site Work and Demolition Demo Existing Roofing System, including Copings and Roof Hatch	4,589	SF	0.04	183.56	\$54.33 \$	9,973	\$0.00	¢	\$0.00	¢	\$0.00	¢	\$ 997	\$ 29,161 \$ 10,970
AB	2-1	A-AB-102 A-AB-101	Demo Existing Flooring for new Finishes per General Note 3	1,476	SF SF	0.04	44.28	\$54.33	2,406	\$0.00		\$0.00		\$0.00		\$ <u>997</u> \$ 241	\$ 2,646
AB	2-3	A-AB-101	Demo Existing Shades at Existing Windows per Keynote A	144	SF	0.03	4.32	\$54.33 \$	235	\$0.00	\$ -	\$0.00		\$0.00		\$ 23	\$ 258
AB	2-4	A-AB-101	Demo Existing Casework per Keynote G	5	LF	0.75	3.75	\$54.33 \$	204	\$0.00		\$0.00		\$0.00		\$ 20	
AB	2.5	A-AB-102	Demo Existing RTUs	1	LS	160	160.00	\$54.33 \$	8,693	\$5,000	\$ 5,000	\$0.00	\$ -	\$0.00	\$ -	\$ 1,369	\$ 15,062
	5		Division 5 - Metals			·											\$ 9,874
AB	5-1	A-AB-102	Guardrail, Galv. Steel, Painted	85	LF	0.20	17.00	\$62.63 \$	1,065	\$1.00		\$65.00		\$0.00		\$ 667	\$ 7,342
AB	5-2	A-AB-101	Replace Ext. Stair Handrails w/ Aluminum Wall Mntd Handrails	26	LF	0.20	5.20	\$62.63 \$	326	\$1.00	\$ 26	\$75.00	\$ 1,950	\$0.00	\$ -	\$ 230	\$ 2,532
	6		Division 6 - Wood, Plastic & Composite														\$ 7,572
AB	7-1	A-AB-102	Rough Wood Blocking at Roof	4,589	SF		0.00	\$58.35	-	\$0.00		\$1.50		\$0.00	\$ -	\$ 688	\$ 7,572
							0.00	\$0.00 \$ \$0.00 \$	-	\$0.00 \$0.00		\$0.00 \$0.00	\$-	\$0.00 \$0.00	\$ - \$ -	\$- \$-	\$ - \$ -
	7		Division 7 - Thermal and Moisture Protection												•		\$ 163,365
AB	7-1	A-AB-102	EPDM Membrane over Cover Brd, Rigid Insul., Tapered, Vapor Barrier, Substrate Brd. Includes Flashing and Crickets all Rooftop HVAC	4,589	SF	0.135	619.52	\$59.78 \$	37,035	\$0.00		\$18.23		\$0.00		\$ 12,068	\$ 132,746
AB AB	7-2 7-3	A-AB-102 A-AB-201	Prefinished metal Coping Sealant w/backer rod - Control Joints	300 56	LF LF	0.20	60.00 6.16	\$59.78 \$ \$59.78 \$	3,587 368	\$1.00 \$1.00		\$20.00 \$1.50		\$0.00 \$0.00		\$ 989 \$ 51	\$ 10,875 \$ 559
AB	7-3	A-AB-201 A-AB-201	Sealant w/backer rod - Control Joints Split Face & CMU Joint Sealants, incl. Removing Mortar Joints	236	LF	0.11	51.92	\$59.78 \$	368	\$1.00		\$1.50		\$0.00		\$ 51 \$ 369	\$ 559
AB	7-5	A-AB-201	Windows & Doors Sealants	292	LF	0.11	32.12	\$59.78 \$	1,920	\$1.00	\$ 292	\$1.50	\$ 438	\$0.00	\$ -	\$ 265	\$ 2,915
AB AB	7-6	A-AB-201 A-AB-101	Pipe Penetration Sealant	1 50	EA LE	2.00 0.11	2.00 5.50	\$59.78 \$ \$59.78 \$	120 329	\$10.00 \$1.00		\$10.00 \$1.50		\$0.00 \$0.00		\$ 14 \$ 45	\$ 154 \$ 499
AB	7-8	A-AB-101 A-AB-101	Steps Joint Sealants per Keynote E East Steps remove concrete spall and patch per Keynote G	<u> </u>	LF	8.00	8.00	\$59.78 \$	478	\$0.00		\$1.50		\$0.00		\$ 45 \$ 58	
AB	7-9	A-AB-201	West Steps Cracking Joints Tuck Pointing	1	LS	8.00	8.00	\$59.78 \$	478	\$0.00	\$ -	\$100.00	\$ 100	\$0.00	\$ -	\$ 58	\$ 636
AB	7-10	A-AB-201	Cracked Cap Sealant	1	LS	2.00	2.00	\$59.78 \$	120	\$0.00		\$10.00				\$ 13	
AB AB	7-11 7-12	A-AB-102 A-AB-102	Roof Hatch, including Guardrail System Extend / Remove Equip. Curbs & Cover Openings	1	LS LS	12.00 0.00	12.00 0.00	\$59.78 \$ \$59.78 \$	717	\$0.00 \$0.00		\$2,500.00 \$5,000.00		\$0.00 \$0.00		\$ 322 \$ 500	\$ 3,539 \$ 5,500
AB	7-13	A-AB-102	Walkway Pads	1	LS	0.00	0.00	\$59.78	-	\$0.00		\$1,000.00		\$0.00		\$ 100	\$ 1,100
			District A. Enclose														* 00.005
AB	9 9-1	A-AB-101	Division 9 - Finishes Clean Floor Tile and Grout	805	SF	0.01	8.05	\$58.35 \$	470	\$0.00	\$ -	\$0.50	\$ 403	\$0.00	\$ -	\$ 87	\$ 38,305 \$ 959
AB	9-2	A-AB-101	Clean Base Tile and Grout	124	SF	0.01	1.24	\$58.35	72	\$0.00		\$0.50		\$0.00	\$ -	\$ 13	\$ 148
AB	9-3	A-AB-101	Grout Joints where Grout is missing per Keynote B	1	ALLOW		0.00	\$58.35 \$	-	\$0.00		\$1,000.00		\$0.00		\$ 100	\$ 1,100
AB	9-4	A-AB-101	Replace Damaged Ceramic Tile per Keynote D	1	ALLOW		0.00	\$58.35 \$	-	\$0.00		\$500.00		\$0.00		\$ 50	\$ 550
AB AB	9-5 9-6	A-AB-101 A-AB-101	Tile Carpeting Flooring Vinyl Plank Flooring	1,147 212	SF SF		0.00	\$58.35 \$ \$58.35 \$	-	\$0.00 \$0.00		\$5.00 \$6.50		\$0.00 \$0.00		\$ 574 \$ 138	\$ 6,309 \$ 1,516
AB	9-7	A-AB-101	VCT Tile Flooring	57	SF		0.00	\$58.35	-	\$0.00		\$3.50		\$0.00		\$ 20	\$ 219
AB	9-8	A-AB-101	Concrete Floor Sealer	60	SF		0.00	\$58.35 \$	-	\$0.00		\$1.50	\$ 90	\$0.00		\$ 9	\$ 99
AB	9-9	A-AB-101	Rubber Base	481	LF		0.00	\$58.35 \$	-	\$0.00		\$3.00		\$0.00		\$ 144	\$ 1,587
AB AB	9-10 9-11	A-AB-101 A-AB-101	Clean Wall Tile and Grout Paint Existing Walls	992 4,329	SF SF	0.01 0.01	9.92 43.29	\$58.35 \$ \$52.00 \$	579 2,251	\$0.00 \$0.00		\$0.50 \$0.85		\$0.00 \$0.00		\$ 107 \$ 593	\$ 1,182 \$ 6,524
AB	9-12	A-AB-102	Gypsum Board Ceilings	55	SF	0.30	16.50	\$52.86 \$	872	\$0.00		\$3.00		\$0.00		\$ 104	
AB	9-13	A-AB-102	Acoustical Ceilings	2,233	SF	0.04	78.16	\$52.86 \$	4,131	\$0.00	\$-	\$2.25	\$ 5,024	\$0.00	\$ -	\$ 916	\$ 10,071
AB	9-14	A-AB-101	Paint Existing Doors & Frames both sides, incl. removal and reinstallation of Hardware and adjusting per Keynote C	10	EA	8.00	80.00	\$58.35 \$		\$0.00		\$0.00		\$0.00		\$ 467	\$ 5,135
AB	9-15 9-16	A-AB-101	Prep, Prime & Paint Interior Hollow Metal Window Frame and Mullions both sides per Keynote H Carpet to Tile Transition Strip per Keynote J	1 46	EA LF	8.00	8.00	\$58.35 \$ \$58.35 \$	467	\$0.00 \$0.00		\$0.00		\$0.00 \$0.00		\$ 47 \$ 14	\$ 513 \$ 152
AB	9-16 9-17	A-AB-101 A-AB-101	Paint existing gas piping per General Note on Roof Plan	1	LF LS	0.00	0.00	\$52.00 \$	-	\$0.00		\$3.00 \$1,000.00		\$0.00		\$ 14 \$ 100	
AB	12	A-AB-101	Division 12 - Furnishings	-	LF		0.00	\$58.35		#0.00	¢	\$600.00	\$ 3.000	* 0.00	¢	\$ 300	\$ 5,280 \$ 3,300
AB	12-1 12-2	A-AB-101 A-AB-101	P-Lam Base Cabinets, Countertop, & Wall Cabinets Manual Roller Shades at Existing Windows per Finish Schedule	5 144	LF SF		0.00	\$58.35 \$	-	\$0.00 \$0.00		\$600.00		\$0.00 \$0.00		\$ 300 \$ 180	\$ 3,300 \$ 1,980
	+ +																
	21		Division 21 - Fire Suppression														\$-
AB	21-1	No drawings	No Work Included - No drawings assume not required				0.00	\$0.00	-	\$0.00	\$-	\$0.00	\$	\$0.00	\$ -	\$-	N.I.C.
	++																
			1		J	1						1					
	<u> </u>																

	WORK BRI	EAKDOWN		1	1		LAB	OR		CONSTRUC	TION EQUIP.	MAT	ERIALS	ENGINEERED		OH & P	1
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Total Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
FB			Administration Building														
FD																	
	22		Division 22 - Plumbing Systems														\$ 10,646
AB	22-1	PD-AB-101 (Note A & B) REMOVED FROM PROJECT at 100% Plans	Remove existing (2) Water closets, (1) Urinal, (3) Lavatories & (1) Kitchen Sink and make safe in preparation of new fixtures in same location using existing domestic & sanitary piping	0	LS	8.000	0.0	\$67.67	\$-	\$0.00	\$ -	\$150.00	\$-	\$0.00	\$ -	\$-	\$ -
AB	22-2	P-AB-101 (Note A) REMOVED FROM PROJECT at 100% Plans	LAV-1: Lavatory - countertop mounted, vitreous china with standard faucet & mixing valve with minor pipe connection modifications	0	EA	4.264	0.0	\$67.67	\$ -	\$0.00	\$ -	\$650.00	\$ -	\$0.00	\$-	\$-	\$-
AB	22-3	P-AB-101 (Note B) REMOVED FROM PROJECT at 100% Plans	WC-1 Water Closet - w/manual flush valve, Replace in existing location with minor pipe & connection modifications	0	EA	5.759	0.0	\$67.67	\$-	\$0.00	\$-	\$1,025.00	\$-	\$0.00	\$-	\$-	\$ -
AB	22-4	P-AB-101 (Note C) REMOVED FROM PROJECT at 100% Plans	UR-1 Urinal Wall mounted - w/manual flush valve, Replace in existing location with minor pipe & connection modifications	0	EA	5.333	0.0	\$67.67	\$-	\$0.00	\$ -	\$760.00	\$ -	\$0.00	\$-	\$-	\$-
AB	22-5	P-AB-101 (Note A) + P-AB-601	SK-1 Countertop stainless steel single bowl sink with gooseneck faucet with wrist blade handles, Drain strainer, mixing valve installed in new countertop provided by others in approximately same location with minor pipe & connection modifications (JUST SL-1517-B-GR, MOEN 8799)	1	EA	3.500	3.5	\$67.67	\$ 237	\$0.00	\$ -	\$955.00	\$ 955	\$0.00	\$-	\$ 179	\$ 1,371
AB	22-6	P-AB-101 (Note B)	Cap sanitary connections from drinking fountain (Assume removal of drinking fountain, not noted on plans)	1	EA	2.000	2.0	\$67.67	\$ 135	\$0.00	\$ -	\$40.00	\$ 40	\$0.00	\$-	\$ 26	\$ 202
AB	22-7	P-AB-101 (Note C) + P-AB-601	DWH-1 Domestic hot water heater 75 gallon, and concentric vent kit. Remove and replace existing tank. (Rheem G75UN)	1	EA	8.000	8.0	\$67.67	\$ 541	\$0.00	\$ -	\$2,680.00	\$ 2,680	\$0.00	\$-	\$ 483	\$ 3,705
AB	22-8	P-AB-101	Misc. piping and connection additional allowance	1	ALLOW	0.000	0.0	\$67.67		\$0.00		\$1,000.00		\$0.00		\$ 150	
AB	22-9	P-AB-101	ES-4 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light)	1	EA	4.000	4.0	\$67.67	\$ 271	\$0.00	\$-	\$3,397.85	\$ 3,398	\$0.00	\$-	\$ 550	\$ 4,219
	23		Division 23 - HVAC Systems														\$ 29,685
AB	23-1	MD-AB-101 (Note A thru C)	Remove existing diffusers & grilles in preparation of new work reusing existing ductwork	1	LS	8.000	8.0	\$69.95	\$ 560	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ 84	\$ 644
AB	23-2	MD-AB-101 (Note D)	Remove Thermostat for painting wall (5 based on drawing)	5	EA	0.500	2.5	\$69.95	\$ 175	\$0.00	\$ -	\$0.00	\$-	\$0.00	\$-	\$ 26	\$ 201
AB	23-3	M-AB-101 (Note A)	Install new CD-1 Supply Diffuser 24/24 with flex connection to existing duct	17	EA	0.843	14.3	\$69.95	\$ 1,002	\$0.00	\$ -	\$91.70	\$ 1,559	\$0.00	\$-	\$ 384	\$ 2,946
AB	23-4	M-AB-101 (Note B)	Install new RG-1 Return Air Grille 24/24	7	EA	0.727	5.1	\$69.95	\$ 356	\$0.00	\$-	\$52.00	\$ 364	\$0.00	\$-	\$ 108	\$ 828
AB	23-5	M-AB-101 (Note C)	Install new EG-1 Exhaust Air Grille 12/12	2	EA	0.444	0.9	\$69.95	\$ 62	\$0.00	\$-	\$31.50	\$ 63	\$0.00	\$-	\$ 19	\$ 144
AB	23-6	M-AB-101 (Note E)	Re-install Thermostat (Assume 3 based on existing rooftop equipment	5	EA	0.500	2.5	\$69.95	\$ 175	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ 26	\$ 201
AB	23-7	A-AB-102 (Note A) provided 12/19/19	above renovation area) Disconnect (8) rooftop equipment, remove & reset after roof replacement, coordinate with roofing contractor.	1	LS	50.000	50.0	\$69.95	\$ 3,498	\$8,000.00	\$ 8,000	\$4,000.00	\$ 4,000	\$0.00	\$-	\$ 2,325	\$ 17,822
AB	23-8	A-AB-102 (Note B) provided 12/19/19	Remove and replace Rooftop Exhaust Fan EF-1 (not on schedule however Per M-AB-102 Note B	1	ALLOW	0.000	0.0	\$69.95	\$-	\$0.00	\$-	\$3,000.00	\$ 3,000	\$0.00	\$-	\$ 450	\$ 3,450
AB	23-9	A-AB-102 (Note C) provided 12/19/19	Remove and replace Rooftop Exhaust Fan EF-2 (not on schedule however Per M-AB-102 Note B	1	ALLOW	0.000	0.0	\$69.95	\$-	\$0.00	\$-	\$3,000.00	\$ 3,000	\$0.00	\$-	\$ 450	\$ 3,450
	26		Division 26 - Electrical Systems														\$ 35,361
	26-1		Lighting				0.00	\$69.60	\$-	\$0.00	\$ -	\$0.00	\$ -	\$0.00	\$-	\$ -	\$ -
AB	26-2		Demo Light Fixtures	77	EA	1.00	77.00	\$69.60		\$0.00	\$-	\$0.00	\$-	\$0.00		\$ 804	
AB AB	26-3 26-4		Demo Devices, (Receptacles) Recycle Fluorescent Bulbs and Ballasts	11 1	EA LS	0.30 8.00	3.30 8.00	\$69.60 \$69.60		\$0.00 \$0.00		\$0.00 \$400.00		\$0.00 \$0.00		\$ 34 \$ 144	\$ 264 \$ 1,100
AB	26-5	quote	Type "LA" 2x4 LED Lay-In Fixture	60	EA	1.00	60.00	\$69.60	\$ 4,176	\$0.00	\$-	\$99.00	\$ 5,940	\$0.00	\$ -	\$ 1,517	\$ 11,633
AB AB	26-6 26-7	quote quote	Type "LB" 2 x 2 LED Lay-In Fixture Type "LC" 24" LED Fixture Above Mirror, Direct / Indirect	7	EA EA	1.00 2.00	7.00 4.00	\$69.60 \$69.60		\$0.00 \$0.00		\$97.00 \$150.00		\$0.00 \$0.00		\$ 175 \$ 87	
AB	26-7	quote	Type "LC" 24" LED Fixture Above Mirror, Direct / Indirect Type "EL" 2-Head LED Battery Pack	6	EA	1.50	9.00	\$69.60		\$0.00		\$150.00		\$0.00			
AB	26-9	quote	Type "EX" LED Exit With Ni-Cad Battery	4	EA	1.25	5.00	\$69.60	\$ 348	\$0.00	\$-	\$167.00	\$ 668	\$0.00	\$	\$ 152	\$ 1,168
AB AB	26-10 26-11	quote	Type "EM" Exterior Wallpack LED Fixture Occupancy Sensor, Ceiling Mount, Dual Technology	3 20	EA EA	2.00 1.00	6.00 20.00	\$69.60 \$69.60		\$0.00 \$0.00		\$493.00 \$110.00		\$0.00 \$0.00		\$ 284 \$ 539	
AB	26-12		Replace Toggle Switch Cover Plate, ss	17	EA	0.20	3.40	\$69.60	\$ 237	\$0.00	\$ -	\$9.88	\$ 168	\$0.00	\$-	\$ 61	\$ 465
AB	26-13		New Lighting Conduit and Wiring - Misc.	50	LF	0.16	8.00	\$69.60		\$0.00		\$7.00		\$0.00		\$ 136	
AB	26-14		20A, 120V GFI Receptacle, Replace With New / Reuse Wiring	12	EA	0.50	6.00	\$69.60	\$ 418	\$0.00	\$ -	\$45.00	\$ 540	\$0.00	5 -	\$ 144	\$ 1,10

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	WORK BREAK	DOWN			ſ	I	LAB	BOR		CONSTRUC	CTION EQUIP.	MA	TERIALS	ENGINEEREI	DEQUIPMENT	OH & P	T
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Total Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
FB			Administration Building														1
AB	26-15		Mechanical Equipment		1	1	0.00	\$69.60	\$-	\$0.00)\$-	\$0.00	\$-	\$0.00	\$-	\$-	\$ -
AB	26-16		Disconnect Mechanical Equipment on Roof	8	EA	1.00	8.00	\$69.60	\$ 557	\$0.00)\$ -	\$0.00	\$ -	\$0.00	\$ -	\$ 84	\$ 640
AB	26-17		Reconnect Mechanical Equipment on Roof	8	EA	2.00	16.00	\$69.60		\$0.00		\$0.00		\$0.00		\$ 167	
	27		Division 27 - Communications														c
	21		No Work Included				0.00	\$0.00	¢	\$0.00	n e	\$0.00	¢	\$0.00	¢	¢	\$-
							0.00	\$0.00	ф -	\$0.00)	\$0.00	ф -	\$0.00	φ -	φ -	
	28		Division 28 - Electronic Safety & Security														\$ 5,981
	28-1		Fire Alarm System				0.00	\$69.60		\$0.00		\$0.00		\$0.00	\$-	\$ -	\$ -
AB	28-2		Demo Fire Alarm Devices	15	EA	0.50	7.50	\$69.60				\$0.00		\$0.00	\$-	\$ 78	
AB	28-3		New Smoke Detector	2	EA	1.50	3.00	\$69.60		\$0.00		\$225.00		\$0.00		\$ 99	
AB	28-4		Reinstall Smoke Detector	5	EA	1.00	5.00	\$69.60				\$0.00		\$0.00			\$ 400
AB	28-5		Reinstall Speaker	6	EA	1.00	6.00	\$69.60				\$0.00		\$0.00		\$ 63	
AB	28-6		Reinstall Strobe	2	EA	1.00	2.00	\$69.60				\$0.00		\$0.00	\$ -	\$ 21	
AB	28-7		Reinstall Horn / Strobe	2	EA	1.50	3.00	\$69.60		\$0.00		\$0.00		\$0.00	<u> </u>	\$ 31	
AB	28-8		Fire Alarm Conduit and Wiring	50	LF	0.16	8.00	\$69.60		\$0.00		\$7.00		\$0.00		\$ 136	
AB	28-9		Testing	1	LS	0.00	0.00	\$69.60	\$ -	\$0.00	5 -	\$2,000.00	\$ 2,000	\$0.00	\$ -	\$ 300	\$ 2,300
						-											
	40		Division 40 - Process Integration														\$ -
AB	40-1		No Work Included				0.0	\$0.00	\$ -	\$0.00	\$ -	\$0.00	\$ -	\$0.00	\$ -	\$-	\$-
	43		Division 43 - Process Gas and Liquid Handling														\$ -
AB	43-1		No Work Included														+
AD	43-1		No work included														<u> </u>
																	<u> </u>
	46		Division 46 - Water and Wastewater Equipment														\$-
AB	46-1		No Work Included														
			General Conditions														\$ 32,618
			Percentage for all general conditions items including but not limited	10	%		221.7	\$50.00	\$ 11.083	\$0.00	\$ 906	\$0.00	\$ 17.664	\$0.00	\$	\$ 2.965	
			Contractor supervision	10	70		221.1	ψ00.00	φ 11,005	ψ0.00	φ <u>300</u>	ψ0.00	φ 17,004	ψ0.00	Ψ	φ 2,900	φ 52,010
			Temporary facilities for trailers														<u> </u>
			Computer systems and job support items			l				1							
			Project cleanup, dumpsters, etc.			1				t							
			Temporary toilets			1				t							
			Hauling			1				1		1					
			Project safety systems and items			1				1		1					
										1							
			Sub-Totals				2,068		\$ 121,914		\$ 14,961		\$ 194,305		0	\$ 36,669	\$ 368,000

Control Building Construction Cost Breakdown

	ESTIMATE SUMMARY BY CSI DIVIS	ION	
CSI NO.	DESCRIPTION		AMOUNT
1	GENERAL REQUIREMENTS	\$	64,765
2	EXISTING CONDITIONS	\$	28,684
3	CONCRETE	\$ \$ \$	-
4	MASONRY	\$	51,699
5	METALS		26,020
6	WOOD, PLASTIC & COMPOSITE	\$	5,254
7	THERMAL AND MOISTURE PROTECTION	\$	95,087
8	OPENINGS	\$	47,375
9	FINISHES	\$	63,929
10	SPECIALTIES	\$ \$	19,025
11	EQUIPMENT	\$	513
12	FURNISHINGS	\$ \$	9,598
13	SPECIAL CONSTRUCTION	\$	-
14	CONVEYING SYSTEMS	\$ \$	-
21	FIRE SUPPRESSION	\$	-
22	PLUMBING SYSTEMS	\$	53,168
23	HVAC SYSTEMS	\$	122,795
26	ELECTRICAL	\$	126,913
27	COMMUNICATIONS	\$	2,769
28	ELECTRONIC SAFETY & SECURITY	\$	37,269
31	EARTHWORK	\$	-
32	EXTERIOR IMPROVEMENTS	\$	-
33	UTILITIES		-
40	PROCESS INTEGRATION	\$ \$	-
43	PROCESS GAS AND LIQUID HANDLING	\$	-
46	WATER AND WASTEWATER EQUIPMENT	\$	-
	TOTAL	\$	754,864
	ROUNDED	\$	755,000

	BID ITEMS	
ITEM NO	. DESCRIPTION	AMOUNT
1	General Trades	\$ 690,098
2		\$
3		\$
4		\$
5		\$
6		\$
7		\$
8	General Conditions	\$ 64,76
9		\$
10		\$
11		\$
12		\$
13		\$
	TOTAL	\$ 754,864
	ROUNDED	\$ 755,000

												MEP & Proce	all trad ss (DIV. 21, 22, 23	es except MEP 8		10% 15%	
	WORK BREA	KDOWN			I	1	LAE	BOR		CONSTRUC	TION EQUIP.		TERIALS		D EQUIPMENT	OH & P	
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Total Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
Facility	DIV-ITEN	Notes	Description	Quantity	Units	MH/OHIC	Walliours	Labor Kate	Labor Cost	Unit \$	COSI	Unit ș	Material Cost	Onit \$	COSt	See // Above	TOTAL COST
FB			Control Building														
	2		Division 2 - Site Work and Demolition														\$ 28,684
CB CB	2-1 2-2	A-CB-103 AD-CB-101	Demo Existing Roofing System, including Copings Demo 8" CMU Walls, assume non-load bearing, 11' high	2,651 396	SF SF	0.04 0.25	106.04 99.00	\$54.33 \$54.33		\$0.00 \$0.00		\$0.00 \$0.00		\$0.00 \$0.00		\$ 576 \$ 538	\$ 6,337 \$ 5,917
CB	2-2	AD-CB-101	Demo 4" CMU Chase Walls, 11' high	264	SF	0.23	55.44	\$54.33		\$0.00		\$0.00		\$0.00		\$ 301	
CB	2-4	AD-CB-101	Demo exterior single Doors and frames	5	EA	3.00	15.00	\$54.33	\$ 815	\$0.00)\$-	\$0.00	\$-	\$0.00		\$ 81	\$ 896
CB	2-5	AD-CB-101	Demo interior single Doors and frames	12	EA	3.00	36.00	\$54.33		\$0.00		\$0.00		\$0.00		\$ 196	\$ 2,151
CB CB	2-6 2-7	AD-CB-101 AD-CB-101	Demo exterior & interior Windows and frames, incl. Shades Demo exterior Louver	10	EA EA	4.00 2.00	40.00 2.00	\$54.33 \$54.33		\$0.00 \$0.00		\$0.00 \$0.00		\$0.00 \$0.00		\$ 217 \$ 11	\$ 2,391 \$ 120
CB	2-8	AD-CB-101	Demo Toilet Partition	2	EA	2.00	4.00	\$54.33		\$0.00		\$0.00		\$0.00		\$ 22	
CB	2-9	AD-CB-101	Demo Urinal Screen	1	EA	1.00	1.00	\$54.33				\$0.00		\$0.00		\$5	
CB	2-10	AD-CB-101	Demo Toilet Room Flooring, abrade floors for new flooring	187	SF	0.05	9.35	\$54.33		\$0.00		\$0.00		\$0.00		\$ 51	\$ 559
CB CB	2-11	AD-CB-101 AD-CB-101	Demo Flooring, prep for new flooring Demo ACT Ceilings	1,975 1,682	SF SF	0.03 0.02	59.25 33.64	\$54.33 \$54.33		\$0.00 \$0.00		\$0.00 \$0.00		\$0.00 \$0.00		\$ 322 \$ 183	\$ 3,541 \$ 2,010
CB	2-12 2-13	AD-CB-101 AD-CB-101	Demo Lockers	1,002	EA	1.00	11.00	\$54.33		\$0.00		\$0.00		\$0.00		\$ 60	\$ 2,010 \$ 657
CB	2-14	AD-CB-101	Demo Base, Countertop, and Wall Cabinets	7	LF	0.75	5.25	\$54.33		\$0.00		\$0.00		\$0.00		\$ 29	\$ 314
CB	2-15	AD-CB-101	Demo Range	1	EA	1.50	1.50	\$54.33				\$0.00		\$0.00		\$ 8	\$ 90
CB	2-16	AD-CB-101	Demo Fridge	1	EA	1.50	1.50	\$54.33	\$ 81	\$0.00	\$-	\$0.00	\$-	\$0.00	\$ -	\$8	\$ 90
	╂────╂																
65	4	A OF 101	Division 4 - Masonry	707	05	0.75	550.75	AF0 10	• • • • • • • •	A.1.00		* 0.55	A		¢	A	\$ 51,699
СВ	4-1	A-CB-104	6" CMU Wall w/ #5 Reinforcing @ 32" o.c. Grout Solid, #5 Dowels Drilled and Grouted into Ex. Concrete Slab w/ 4" Embed, Cont. Bond Beam along top of wall w/ #5 Reinf. Grouted Solid.	737	SF	0.75	552.75	\$56.12	\$ 31,020	\$1.00	\$ 737	\$3.00	\$ 2,211	\$0.00	\$ -	\$ 3,397	\$ 37,365
СВ	4-2	A-CB-104	4" CMU Chase Wall	83	SF	0.45	37.13	\$56.12	\$ 2,083	\$1.00	\$ 83	\$3.00	\$ 248	\$0.00	\$-	\$ 241	\$ 2,655
СВ	4-3	A-CB-101, -104	8" CMU Infill at (2) Ex. Doorways , Tooth Into Adjacent Block per Keynote A	48	SF	1.50	71.63	\$56.12	\$ 4,020	\$1.00	\$ 48	\$5.00	\$ 239	\$0.00	\$ -	\$ 431	\$ 4,737
СВ	4-4	A-CB-104, -201	Exterior Split Face CMU Infill w/ Core-Fill Insulation at (2) Ex. Doorways and Louver, Tooth Into Adjacent Block	54	SF	1.50	80.63	\$56.12	\$ 4,525	\$3.00	\$ 161	\$7.00	\$ 376	\$0.00	\$-	\$ 506	\$ 5,569
СВ	4-5	A-CB-201	Tuck Point Existing Brick	67	SF	0.30	20.10	\$56.12	\$ 1,128	\$0.80	\$ 54	\$1.00	\$ 67	\$0.00	\$ -	\$ 125	\$ 1,373
0.0	5	A OB 400	Division 5 - Metals	400		0.00	00.00	\$00.00	* 0.440	¢4.00	400	\$05.00	¢ 40.545	* 0.00	•	A 540	\$ 26,020
CB CB	5-1 5-2	A-CB-103 S-CB-101	Guardrail, Galv. Steel, Painted W10x26 Beams below exist. Precast Plank, incl. Beam Pockets	193 0.62	LF TONS	0.20	38.60 61.75	\$62.63 \$62.63		\$1.00 \$1,500.00				\$0.00 \$0.00		\$ 1,516 \$ 850	\$ 16,671 \$ 9,349
	6		Division 6 - Wood, Plastic & Composite														\$ 5,254
CB CB	6-1 6-2	A-CB-103 A-00-602	Rough Wood Blocking at Roof Solid Surface Window Sills at New Windows w/ Type 2 Sill Detail	2,651 20	SF LF		0.00	\$0.00		\$0.00 \$0.00		\$1.50 \$40.00		\$0.00 \$0.00		\$ 398 \$ 80	\$ 4,374 \$ 880
	0-2	A-00-602	Solid Surface Window Shi's at New Windows w/ Type 2 Shi Detail	20			0.00	\$0.00	φ -	\$0.00	γφ -	\$40.00	\$ 800	\$0.00	φ -	φ OU	\$ 000
	7		Division 7 - Thermal and Moisture Protection														\$ 95,087
СВ	7-1	A-CB-103	EPDM Membrane over Cover Brd, Rigid Insul., Tapered, Vapor Barrier. Includes Flashing and Crickets all Rooftop HVAC Equipment	2,651	SF	0.158	417.53	\$59.78	\$ 24,960	\$0.00	\$-	\$18.23	\$ 48,320	\$0.00	\$ -	\$ 7,328	\$ 80,608
СВ	7-2	A-CB-103	Prefinished metal Coping	211	LF	0.20	42.20	\$59.78	\$ 2,523	\$1.00	\$ 211	\$20.00	\$ 4,220	\$0.00	\$ -	\$ 695	\$ 7,649
CB	7-3	A-CB-201	Sealant w/backer rod - Control Joints	11	LF	0.11	1.21	\$59.78	\$ 72	\$1.00	\$ 11	\$1.50	\$ 17	\$0.00	\$ -	\$ 10	\$ 110
CB	7-4	A-CB-201	Louvers Sealants	12 1	LF	0.11	1.32	\$59.78		\$1.00 \$0.00						\$ 11 \$ 500	
CB CB	7-5 7-6	A-CB-103 A-CB-103	Extend / Remove Equip. Curbs & Cover Openings Walkway Pads	1	LS LS	0.00	0.00	\$59.78 \$59.78		\$0.00		\$5,000.00 \$1,000.00				\$ 500 \$ 100	
													+ .,				+ .,
00	8		Division 8 - Openings	4	F ^	8.00	0.00	A50.05	¢ 407	#0.00		¢0.750.00	¢ 0.750	* 0.00	¢	¢ 000	\$ 47,375
СВ	8-1	A-CB-101	Exterior 4'-0" x 7'-2" FRP / Glass Door w/ FRP Frame incl. Hardware	1	EA	8.00	8.00	\$58.35		\$0.00		\$2,750.00				\$ 322	\$ 3,538
СВ	8-2	A-CB-101	Exterior 3'-0" x 7'-2" FRP / Glass Door w/ FRP Frame incl. Hardware	2	EA	8.00	16.00	\$58.35				\$2,550.00				\$ 603	
СВ	8-3	A-CB-101	Interior 3'-8" x 7'-0" Hollow Metal Door w/ HM Frame incl. Hardware	1	EA	8.00	8.00	\$58.35		\$0.00		\$2,100.00				\$ 257	
СВ	8-4	A-CB-101	Interior 3'-0" x 7'-0" Hollow Metal Door w/ HM Frame incl. Hardware	9	EA	8.00	72.00	\$58.35		\$0.00		\$1,850.00				\$ 2,085	
CB	8-5	A-CB-201	Exterior Aluminum Window w/1" insulated glass	136	SF	0.26	35.36	\$58.35	\$ 2,063	\$1.30) \$ 177	\$60.00	\$ 8,160	\$0.00	\$ -	\$ 1,040	\$ 11,440
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1	WORK BREA	KDOWN			1	1	LAE	SOR		CONSTRUCT		МАТ	ERIALS	ENGINEERE	DEQUIPMENT	OH & P	
							Total				Equipment		-				1
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Manhours	Labor Rate	Labor Cost	Unit \$	Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
FB			Control Building														
10			Control Dunung														
	9		Division 9 - Finishes														\$ 63,929
CB	9-1 9-2	A-CB-101 A-CB-101	Clean Floor Tile and Grout	38 649	SF SF	0.01	0.38 6.49	\$58.35 \$58.35		\$0.00 \$0.00		\$0.50 \$0.50		\$0.00 \$0.00		\$ 4 \$ 70	\$ 45 \$ 774
CB CB	9-2	A-CB-101 A-CB-101	Clean Base Tile and Grout Tile Carpeting Flooring	417	SF	0.01	0.00	\$58.35		\$0.00		\$0.50		\$0.00		\$ 70 \$ 209	
CB	9-4	A-CB-101	Porcelain Tile Flooring	216	SF		0.00	\$58.35		\$0.00		\$18.00		\$0.00		\$ 389	\$ 4,277
CB	9-5	A-CB-101	Epoxy Flooring	697	SF		0.00	\$58.35	\$ -	\$0.00		\$16.25	\$ 11,326	\$0.00			\$ 12,459
CB	9-6	A-CB-101	VCT Tile Flooring	874	SF		0.00	\$58.35		\$0.00		\$3.50		\$0.00		\$ 306	\$ 3,365
CB	9-7	A-CB-101	Clean Wall Tile and Grout	48	LF	0.00	0.00	\$58.35		\$0.00		\$3.00		\$0.00		\$ 14	
CB CB	9-8 9-9	A-CB-101 A-CB-101	Ceramic Wall Tile Epoxy Paint Existing Walls	224 6,039	SF SF	0.32	71.68 60.39	\$58.35 \$52.00		\$0.00 \$0.00		\$10.00 \$0.95		\$0.00 \$0.00		\$ 642 \$ 888	\$ 7,065 \$ 9,765
CB	9-10	A-CB-101	Latex Paint Existing Walls	1,278	SF	0.01	12.78	\$52.00		\$0.00		\$0.55		\$0.00		\$ 137	
CB	9-11	A-CB-101	Gypsum Board Ceilings	401	SF	0.30	120.30	\$52.86		\$0.00		\$3.00		\$0.00		\$ 756	
CB	9-12	A-CB-101	Acoustical Ceilings	1,294	SF	0.04	45.29	\$52.86		\$0.00		\$2.25		\$0.00		\$ 531	
CB	9-13 9-14	A-CB-101 A-CB-101	Paint existing exposed structure	586	SF LS	0.04 0.00	23.44 0.00	\$52.00 \$52.00		\$0.00 \$0.00		\$0.20 \$2.000.00	\$ 117 \$ 2,000	\$0.00 \$0.00		\$ 134 \$ 200	
CB CB	9-14	A-00-602	Floor Leveler floor prep per Sheet Note Patch around New Windows per Type 2 Window Details	1	LS	0.00	0.00	\$52.00		\$0.00		\$2,000.00		\$0.00		\$ 200 \$ 300	
CB	9-16	A-CB-103	Paint existing gas piping per General Note on Roof Plan	1	LS	0.00	0.00	\$52.00		\$0.00		\$1,000.00		\$0.00		\$ 100	
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	10		Division 10 - Specialties														\$ 19,025
СВ	10-1	A-CB-104	Metal Locker: 12" x 18"	24	EA		0.00	\$58.35	\$ -	\$0.00	\$ -	\$400.00	\$ 9,600	\$0.00	\$ -	\$ 960	\$ 10,560
CB	10-2	A-CB-104	Phenolic Toilet Partition	2	EA		0.00	\$58.35		\$0.00		\$1,500.00		\$0.00		\$ 300	
СВ	10-3	A-CB-104	Shower Seat	2	EA		0.00	\$58.35		\$0.00		\$250.00		\$0.00	\$-	\$ 50	\$ 550
CB	10-4	A-CB-104	Shower Grab Bar	2	EA		0.00	\$58.35		\$0.00		\$200.00		\$0.00		\$ 40	
CB	10-5	A-CB-104	42" Grab Bar 36" Grab Bar	2	EA		0.00	\$58.35		\$0.00 \$0.00		\$145.00		\$0.00 \$0.00		\$ 29	
CB CB	10-6 10-7	A-CB-104 A-CB-104	18" Grab Bar	2	EA EA		0.00	\$58.35 \$58.35		\$0.00		\$130.00 \$115.00		\$0.00		\$ 26 \$ 23	
CB	10-7	A-CB-104	Urinal Screen	1	EA		0.00	\$58.35		\$0.00		\$550.00		\$0.00		\$ 55	
CB	10-9	A-CB-104	24" x 36" Mirror	3	EA		0.00	\$58.35		\$0.00		\$300.00		\$0.00		\$ 90	
CB	10-10	A-CB-104	Soap Dispenser	3	EA		0.00	\$58.35		\$0.00		\$75.00		\$0.00		\$ 23	
CB	10-11	A-CB-104	TP Dispenser	2	EA		0.00	\$58.35		\$0.00		\$95.00		\$0.00		\$ 19	
CB CB	10-12	A-CB-104 A-CB-104	San Nap Disposal	1	EA		0.00	\$58.35 \$58.35		\$0.00		\$150.00 \$200.00		\$0.00		\$ 15 \$ 40	
СВ	10-13 10-14	A-CB-104 A-CB-104	Shower Curtan & Rod Wood Bench, Floor Mounted	2	EA EA		0.00	\$58.35		\$0.00 \$0.00		\$200.00		\$0.00 \$0.00		\$ 40 \$ 60	
00	10 14						0.00	\$00.00	Ŷ	φ0.00	Ŷ	<i>\\</i> 000.00	ф <u>000</u>	\$0.00	, ¢	φ 00	φ 000
СВ	11 11-1	A-CB-202	Division 11 - Equipment Installation of Owner Provided Appliances: Fridge, Range, Over range re-	1	LS	8.00	8.00	\$58.35	\$ 467	\$0.00	¢	\$0.00	¢	\$0.00	¢	\$ 47	\$ 513 \$ 513
CB	11-1	A-00-202	circulating Exhaust Hood	1	LS	0.00	0.00	φ.0.55	φ 407	φ0.00	φ -	φ0.00	φ -	φ0.00	φ -	φ 47	φ 515
	40																
СВ	12 12-1	A-CB-202	Division 12 - Furnishings P-Lam Base Cabinets. & Countertop	13.5	LF		0.00	\$58.35	¢	\$0.00	¢	\$400.00	\$ 5,400	\$0.00	¢	\$ 540	\$ 9,598 \$ 5,940
CB	12-1	A-CB-202 A-CB-202	P-Lam Base Wall Cabinets	9			0.00	\$58.35		\$0.00		\$225.00		\$0.00		\$ 203	
CB	12-3	A-CB-101	Manual Roller Shades at Windows per Room Finish Schedule Notes	104	SF		0.00	\$58.35		\$0.00		\$12.50		\$0.00		\$ 130	
	22		Division 22 - Plumbing Systems														\$ 53,168
СВ	22-1	PD-CB-101	Remove existing (2) Water closets, (2) showers, (1) Urinal, (2)	1	LS	18.000	18.0	\$67.67	\$ 1,218	\$0.00	\$ -	\$400.00	\$ 400	\$0.00	\$ -	\$ 243	
Ű		(Note A thru F)	Lavatories, (1) Kitchen Sink & 1 floor drain and make safe in preparation			10.000	10.0	<i>Q</i> 01.01	- 1,210	ψ0.00	÷ -	φ+00.00	00	φ0.00		243	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		. ,	of new fixtures in different location														
СВ	22-2	P-CB-101 (Note A)	LAV-1 Lavatory - wall mounted, vitreous china with sensor faucet &	3	EA	11.221	33.7	\$67.67	\$ 2,278	\$0.00	\$-	\$1,039.00	\$ 3,117	\$0.00	\$-	\$ 809	\$ 6,204
			mixing valve (ADA) includes rough-in			10		· · ·									
СВ	22-3	P-CB-101 (Note B)	WC-1 Water Closet - wall mounted w/manual flush valve, ADA includes	2	EA	12.009	24.0	\$67.67	\$ 1,625	\$0.00	\$-	\$2,325.00	\$ 4,650	\$0.00	\$ -	\$ 941	\$ 7,217
СВ	22-4	P-CB-101 (Note C)	rough-in UR-1 Urinal Wall mounted - w/sensor flush valve, ADA includes rough-	1	EA	10.987	11.0	\$67.67	\$ 743	\$0.00	\$	\$1,245.00	\$ 1,245	\$0.00	\$	\$ 298	\$ 2,287
00	∠∠- ' 4		in	1	L7.	10.907	11.0	φ07.07	¢ 743	φ0.00	÷ -	ψ1,240.00	φ 1,240	φ0.00	÷ -	¥ 290	Ψ 2,207
СВ	22-5	P-CB-101 (Note D)	SH-1 Shower Control Valve & head + trim, 36/36 shower receptor for tile	3	EA	6.000	18.0	\$67.67	\$ 1,218	\$0.00	\$-	\$1,080.00	\$ 3,240	\$0.00	\$-	\$ 669	\$ 5,127
		. ,	& shower drain														
СВ	22-6	P-CB-101 (Note E)	SK-1 Countertop stainless steel single bowl sink with std faucet, mixing	1	EA	10.810	10.8	\$67.67	\$ 732	\$0.00	\$-	\$1,243.00	\$ 1,243	\$0.00	\$-	\$ 296	\$ 2,271
			valve installed in new countertop provided by others includes rough-in														
	00.7	D OD 404 (11 / 1)				0.000	6.0	A07.0-	6 511	* • • •	¢	#0 500 65	A	* •• •	A	• • • • • •	• • • • • • • • • • • • • • • • • • •
СВ	22-7	P-CB-101 (Note I)	DWH-1 Domestic hot water heater 75 gallon, Remove and replace existing tank. Not on schedule P-CB-601 however drawing Note I New	1	EA	8.000	8.0	\$67.67	\$ 541	\$0.00	\$ -	\$2,530.00	\$ 2,530	\$0.00	\$-	\$ 461	\$ 3,532
			Hot water Heater. Assume (Rheem G75UN)														
СВ	22-8	P-CB-102	Domestic Piping 1/2" to 2" & Insulation for new fixtures with connection to	1	LS	0.000	0.0	\$67.67	\$	\$0.00	\$	\$4,867.00	\$ 4,867	\$0.00	\$	\$ 730.05	\$ 5,597.05
00	22-0	1-00-102	existing	1		0.000	0.0	φ07.07	Ψ -	φ0.00	Ψ -	φ-,007.00	φ 4,007	φ0.00	÷ -	¢ 750.05	φ 3,331.03
CB	22-9	P-CB-101	Sanitary & Vent 1-1/4" to 4" with connection to existing	1	LS	0.000	0.0	\$67.67		\$0.00		\$5,065.00		\$0.00		\$ 760	
CB	22-10	P-CB-101	Sawcut & slab replacement for interior below grade sanitary 2" 3" & 4"	1	LS	0.000	0.0	\$67.67		\$0.00		\$9,135.00		\$0.00			
CB	22-11	P-CB-101	Sanitary VTR, core roof plank and seal	1	EA	4.000	4.0	\$67.67		\$0.00		\$150.00		\$0.00			
CB CB	22-12 22-13	P-CB-101 P-CB-101	GD-1 Garbage Disposal for SK-1 sink (Badger 5XP) WCO Wall Cleanout	1	EA EA	2.000 0.800	2.0 0.8	\$67.67 \$67.67		\$0.00 \$0.00		\$190.00 \$197.00					
CB	22-13	P-CB-101	FCO Floor Clean Out	1	EA	1.333	1.3	\$67.67		\$0.00		\$483.00		\$0.00		1 · · · · · · · · · · · · · · · · · · ·	\$ 659
	22-15	P-CB-101	FD-1 Floor Drain	2	EA	1.500	3.0	\$67.67				\$306.00				\$ 122.25	

	WORK BRE	AKDOWN			1		LAB	OR		CONSTRUCTION	ON EQUIP.	МА	TERIALS	ENGINEERE	D EQUIPMENT	OH & P	
E a ailite a	-	-	Description	Quantita	11	M11/11-14	Total		Labar 0		Equipment						TOTAL COST
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Manhours	Labor Rate	Labor Cost	Unit \$	Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
FB			Control Building														
1 D			Control Building														
CD	23	MD CD 101 Note A	Division 23 - HVAC Systems	2	٢.	2 200	6.4	¢60.65	¢ 446	0.0.0		¢25.00	¢ 50	¢0.00	¢	¢ 74	\$ 122,795
CB CB	23-1 23-2	MD-CB-101 Note A MD-CB-101	Demo existing electric unit heater & make safe Remove existing ductwork, diffusers, grilles + (3) VAV boxes in all areas	2,286	EA SF	3.200	6.4 0.0	\$69.65 \$69.65	\$ 446 \$	\$0.00 \$0.00	-	\$25.00 \$1.15		\$0.00 \$0.00		\$ 74 \$ 394	\$ 570 \$ 3,023
CD	25-2	(Notes B, C, D, F, G & H)		2,200	51		0.0	φ09.00	φ -	\$0.00 ¢	-	φ1.13	φ 2,029	φ0.00	φ -	φ 394	φ 3,023
		(1000 0, 0, 0, 1, 0 0 1)															
CB	23-3	MD-CB-101 Note E	Demo existing electric baseboard heater & make safe	2	EA	1.000	2.0	\$69.65		\$0.00	-	\$25.00		\$0.00	\$-	\$ 28	
CB	23-4	MC-CB-101 Note A	SAHU-1 / HP-1 Horizontal Concealed Ducted Split system indoor unit &	1	EA	14.154	14.2	\$69.65	\$ 986	\$750.00 \$	750	\$5,550.00	\$ 5,550	\$0.00	\$-	\$ 1,093	\$ 8,379
		& M-CB-601	outdoor roof mounted Heat Pump condensing unit (2 ton) (BOD:														
СВ	23-5	MC-CB-101 Note B	Mitsubishi PEAD-A24AA7 / PUZ-A24NHA7) SAHU-2 / HP-2 Horizontal Concealed Ducted Split system indoor unit &	1	EA	12.821	12.8	\$69.65	\$ 893	\$750.00 \$	750	\$4,715.00	\$ 4,715	\$0.00	¢	\$ 954	\$ 7,312
CD	23-5	& M-CB-601	outdoor roof mounted Heat Pump condensing unit (1-1/2 ton) (BOD:	1	LA	12.021	12.0	φ09.00	φ 095	\$750.00 ¢	750	φ4,715.00	φ 4,713	φ0.00	φ -	φ 904	φ 7,312
			Mitsubishi PEAD-A18AA7 / PUZ-A18NKA7)														
CB	23-6	MC-CB-101 Note C	SAHU-3 / HP-3 Horizontal Concealed Ducted Split system indoor unit &	1	EA	14.154	14.2	\$69.65	\$ 986	\$750.00 \$	750	\$5,550.00	\$ 5,550	\$0.00	\$ -	\$ 1,093	\$ 8,379
		& M-CB-601	outdoor roof mounted Heat Pump condensing unit (2 ton) (BOD:														
			Mitsubishi PEAD-A24AA7 / PUZ-A24NHA7)														
CB	23-7	MC-CB-101 Note D	FCU-1 / CU-1 Ceiling 4 way ceiling Cassette Split system indoor unit &	1	EA	12.054	12.1	\$69.65	\$ 840	\$750.00 \$	750	\$4,385.00	\$ 4,385	\$0.00	\$-	\$ 896	\$ 6,871
		& M-CB-601	outdoor roof mounted condensing unit (1 ton) (BOD: Mitsubishi PLA-														
СВ	23-8	MC-CB-101 Note E	A12EA7 / PUY-A12NKA7)	1	EA	12.054	12.1	\$69.65	\$ 840	\$750.00 \$	750	\$4,385.00	\$ 4,385	\$0.00	¢	\$ 896	\$ 6,871
CD	23-0	& M-CB-601	FCU-2 / CU-2 Ceiling 4 way ceiling Cassette Split system indoor unit & outdoor roof mounted condensing unit (1 ton) (BOD: Mitsubishi PLA-	I	EA	12.004	12.1	\$09.05	φ 040	\$150.00 \$	750	φ4,365.00	ψ 4,305	Φ 0.00	φ -	φ 696	ψ 0,0/1
		S 35 001	A12EA7 / PUY-A12NKA7)														
СВ	23-9	MC-CB-101 Note F	ERV-1 Rooftop Energy Recovery Ventilator 640 CFM, (BOD: Renewaire	1	EA	21.333	21.3	\$69.65	\$ 1,486	\$750.00 \$	750	\$7,448.00	\$ 7,448	\$0.00	\$-	\$ 1,453	\$ 11,136
		& M-CB-601	HE1XRT) Includes cutting concrete plank for ductwork to roof														
CB	23-10	MC-CB-101	Ductwork (Galvanized)	1,630	LBS	0.098	159.7	\$69.65	\$ 11,126	\$0.00	-	\$1.58	\$ 2,575	\$0.00	\$-	\$ 2,055	\$ 15,756
CB	23-11	MC-CB-101	Ductwork Insulation 1-1/2", .75 density	1,078	SF	0.050	53.9	\$69.65		\$0.00	-	\$0.30		\$0.00		\$ 612	
CB	23-12	MC-CB-101	Install new CD-1 Supply Diffuser 24/24 with flex connection	6	EA	0.843	5.1	\$69.95		\$0.00 \$	-	\$91.70		\$0.00		\$ 136	\$ 1,040
CB CB	23-13 23-14	MC-CB-101 MC-CB-101	Install new CD-2 Supply Diffuser 12/12 with flex connection Install new RG-1 Return Air Grille 24/12	8	EA EA	0.843	6.7 2.9	\$69.95 \$69.95		\$0.00 \$0.00	-	\$81.20 \$42.00		\$0.00 \$0.00		\$ 168 \$ 56	
CB	23-14	MC-CB-101 MC-CB-101	Install new RG-1 Return Air Grille 24/12	4	EA	0.433	0.4	\$69.95		\$0.00	-	\$24.00		\$0.00		\$ 50	
CB	23-16	MC-CB-101	Install new EG-1 Exhaust Air Grille 6/4	1	EA	0.433	0.4	\$69.95		\$0.00	-	\$20.00		\$0.00		\$ 8	
CB	23-17	MC-CB-101	Install new EG-1 Exhaust Air Grille 6/6	2	EA	0.433	0.9	\$69.95	\$ 61	\$0.00 \$	-	\$24.00	\$ 48	\$0.00	\$ -	\$ 16	\$ 125
CB	23-18	MC-CB-101	Install new EG-1 Exhaust Air Grille 8/6	2	EA	0.433	0.9	\$69.95		\$0.00 \$	-	\$24.50				\$ 16	
CB	23-19	MC-CB-101	4" Volume Damper	3	EA	0.381	1.1	\$69.95		\$0.00	-	\$33.50		\$0.00		\$ 27	
CB CB	23-20 23-21	MC-CB-101 MC-CB-101	6" Volume Damper 8" Volume Damper	3	EA EA	0.381 0.464	1.1 2.8	\$69.95 \$69.95	\$80 \$195	\$0.00 \$0.00	-	\$39.50 \$42.00		\$0.00 \$0.00		\$ <u>30</u> \$67	
CB	23-22	MC-CB-101	RCP-1, 2, 4 & 5 Radiant Electric Ceiling Panel, 24"x28", 500 watts,	4	EA	1.500	6.0	\$69.95		\$0.00	-	\$552.00		\$0.00		\$ 394	\$ 3,022
			208/1/60 (Qmark CP508F) (Locker Rooms)						•				• _,		Ť		• • • • • • • • • • • • • • • • • • • •
CB	23-23	MC-CB-101	RCP-3 Radiant Electric Ceiling Panel, 24"x24", 310 watts, 208/1/60	1	EA	1.500	1.5	\$69.95	\$ 105	\$0.00	-	\$382.00	\$ 382	\$0.00	\$-	\$ 73	\$ 560
			(Qmark CP318F) (Locker Room)														
CB	23-24	MC-CB-101	EUH-1 & EUH-2 Electric Unit Heater, 3 KW, 480/3/60 (Qmark	2	EA	2.500	5.0	\$69.95	\$ 350	\$0.00	-	\$815.00	\$ 1,630	\$0.00	\$-	\$ 297	\$ 2,277
			MUH0341) (Room CB-111 & CB-112)														
CB	23-25	A-CB-103 (Note B & J)	Disconnect (12) rooftop equipment, remove (9) & reset (3) after roof	1	LS	44.800	44.8	\$69.95	\$ 3,134	\$9,600.00	9,600	\$5,500.00	\$ 5,500	\$0.00	\$-	\$ 2,735	\$ 20,969
05	00.00	MO OD 404 8 400	replacement, coordinate with roofing contractor		411.014	0.000	0.0	* ~~ ~ ~	^	¢0.00		\$7.050.00	¢ 7.050	\$0.00	¢	* 1.000	¢ 0.000
CB	23-26	MC-CB-101 & 102	Refrigerant piping, roof pipe curbs & condensate piping for (5) new split system units (Assume pipe routing)	1	ALLOW	0.000	0.0	\$69.95	Ъ -	\$0.00	-	\$7,250.00	\$ 7,250	\$0.00	ъ -	\$ 1,088	\$ 8,338
СВ	23-27	MC-CB-101 & 603	Interface of new equipment with existing BAS	1	ALLOW	0.000	0.0	\$69.95	\$-	\$0.00	-	\$9,000.00	\$ 9.000	\$0.00	\$-	\$ 1,350	\$ 10,350
	26		Division 26 - Electrical Systems														\$ 126,913
	26-1		Equipment				0.00	\$69.60	\$ -	\$0.00	-	\$0.00	\$-	\$0.00	\$ -	\$-	\$ -
CB	26-2		Disconnect / Remove Existing Panel CB-1	1	EA	8.00	8.00	\$69.60		\$0.00 \$		\$0.00	\$-	\$0.00		\$ 84	
CB	26-3	Recessed	Install New Panel CB-1 and Reconnect All Wiring	1	EA	40.00	40.00	\$69.60		\$0.00 \$		\$4,500.00		\$0.00		+ .,	
CB	26-4		Disconnect / Remove Existing Panel CB-2	1	EA	8.00	8.00	\$69.60		\$0.00		\$0.00		\$0.00		\$ 84	
CB	26-5		Disconnect / Remove CB-2 Transformer, 15kva	1	EA	6.00	6.00	\$69.60		\$0.00		\$0.00		\$0.00		17	
CB CB	26-6 26-7		Disconnect / Remove CB-2 Feeders primary / secondary Install 50A Breaker MCC Bucket in MCC-CB-1	1	EA EA	16.00 8.00	16.00 8.00	\$69.60 \$69.60	\$ 1,114 \$ 557	\$0.00 \$ \$0.00 \$		\$0.00 \$2,500.00		\$0.00 \$0.00		\$ 167 \$ 459	
CB	26-7		30 kva Transformer, 480 - 208 / 120V, 3ph, 4W	1	EA	24.00	24.00	\$69.60		\$0.00 \$		\$2,500.00		\$0.00		\$ 459 \$ 566	
CB	26-9		Transformer Primary Circuit	80	LA	0.20	16.00	\$69.60		\$0.00		\$9.00		\$0.00		\$ 300 \$ 275	
CB	26-10		Transformer Secondary Circuit	40	LF	0.30	12.00	\$69.60		\$0.00		\$12.00		\$0.00			
CB	26-11	schedule says recessed	Install New Panel CB-2 and Reconnect All Wiring - Surface	1	EA	24.00	24.00	\$69.60	\$ 1,670	\$0.00 \$	-	\$4,000.00	\$ 4,000	\$0.00	\$-	\$ 851	\$ 6,521
CB	26-12		Extend Existing Circuits to New Relocated Panel CB-2	40	LF	0.40	16.00	\$69.60		\$0.00 \$		\$10.00		\$0.00		\$ 227	
CB	26-13		Disconnect / Remove Existing Panel CB-3	1	EA	8.00	8.00	\$69.60		\$0.00		\$0.00		\$0.00			
CB	26-14	schedule says recessed	Install New Panel CB-3 and Reconnect All Wiring - Surface	1	EA	24.00	24.00	\$69.60		\$0.00 \$		\$4,000.00		\$0.00		\$ 851	
CB CB	26-15 26-16		Replace Breakers in Existing Panel CB-4 Disconnect / Remove Existing HVAC Feeders	7 12	EA EA	1.00 6.00	7.00 72.00	\$69.60 \$69.60		\$0.00 \$0.00		\$56.00 \$0.00		\$0.00 \$0.00		\$ 132 \$ 752	
			Disconnect / Nemove LAIStilly HVAC Feeders	12	EA	0.00	72.00	00.60¢	ψ 0,011	φU.UU \$	-	φ υ.υυ	Ψ -	Φ 0.00	φ -	φ / 52	Ψ 0,/03

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	WORK BREA				1	Ĩ.	LAE	ROP		CONSTRUCT		MA	TERIALS	ENGINEERE	EQUIPMENT	OH & P	1
				_			Total				Equipment						
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Manhours	Labor Rate	abor Cost	Unit \$	Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
FB			Control Building					+									
CB	26-17		Roof Top HVAC Disconnect Switch, 240V, N.F. Nema 4X	6	EA	4.00	24.00	\$69.60	\$ 1,670	\$0.00		\$800.00	\$ 4,800	\$0.00	\$ -	\$ 971	\$ 7,441
CB	26-18		New Feeder to Roof Top HVAC Equipment	6	EA	16.00	96.00	\$69.60	\$ 6,682	\$0.00	, ; ;	\$1,000.00	\$ 6,000	\$0.00		\$ 1,902	\$ 14,584
CB	26-19		Interior HVAC Disconnect Switch, 240V, N.F. Nema 1	12	EA	3.00	36.00	\$69.60		\$0.00) -	\$250.00		\$0.00		\$ 826	\$ 6,331
CB	26-20	unit heaters	Interior HVAC Feeders, Radiant Panels, Split Air Handling Units	260	LF	0.16	41.60	\$69.60		\$0.00	<u> </u>	\$7.00		\$0.00		\$ 707	\$ 5,423
CB CB	26-21 26-22		Relocate Manual Starter and Connect Wiring Lighting	1	EA	8.00	8.00 0.00	\$69.60 \$69.60		\$0.00 \$ \$0.00 \$	-	\$200.00 \$0.00		\$0.00 \$0.00		<u>\$ 114</u> \$ -	\$ 870
CB	26-22		Demo Light Fixtures	58	EA	1.00	58.00	\$69.60	• - \$ 4,037	\$0.00	- -	\$0.00		\$0.00		\$ 606	\$ 4,642
CB	26-24		Demo Devices, (Switches & Receptacles)	40	EA	0.40	16.00	\$69.60		\$0.00	3 -	\$0.00		\$0.00		\$ 167	\$ 1,281
CB	26-25		Recycle Fluorescent Bulbs and Ballasts	1	LS	8.00	8.00	\$69.60		\$0.00	· -	\$400.00		\$0.00		\$ 144	\$ 1,100
CB	26-26	quote	Type "LA" 2 x 4 LED Lay-In Fixture	17	EA	1.00	17.00	\$69.60		\$0.00	<u> </u>	\$99.00	1 ,	\$0.00		\$ 430	\$ 3,296
CB CB	26-27 26-28	quote	Type "LA-EM" 2 x 4 LED Lay-In Fixture w/ Battery Pack Type "LB" 2 x 2 LED Lay-In Fixture	15	EA	1.00	0.00	\$69.60 \$69.60	•	\$0.00 \$ \$0.00 \$	-	\$400.00 \$97.00	\$- \$1,455	\$0.00 \$0.00		\$- \$375	N.I.C. \$ 2,874
CB	26-29	quote	Type "LC" 48" LED Fixture Above Mirror. Direct / Indirect	2	EA	2.00	4.00	\$69.60		\$0.00	, - ; -	\$150.00		\$0.00		\$ 87	\$ 665
CB	26-30	quote	Type "LD" 1 x 4 LED Pendant Mounted Fixture	5	EA	1.50	7.50	\$69.60		\$0.00	3 -	\$365.00	\$ 1,825	\$0.00		\$ 352	\$ 2,699
CB	26-31	quote	Type "LE" 2 x 2 LED Flat Panel Lay-In Fixture	8	EA	1.00	8.00	\$69.60		\$0.00	i -	\$69.00		\$0.00		\$ 166	\$ 1,275
CB	26-32	quote	Type "EL" 2-Head LED Battery Pack	9	EA	1.50	13.50	\$69.60		\$0.00	<u> </u>	\$212.00		\$0.00		\$ 427	\$ 3,275
CB CB	26-33 26-34	quote quote	Type "EX" LED Exit With Ni-Cad Battery Type "EM" Exterior Wallpack LED Fixture	5	EA EA	1.25 2.00	6.25 12.00	\$69.60 \$69.60		\$0.00 \$ \$0.00 \$	<u>;</u>	\$167.00 \$493.00	\$ 835 \$ 2.958	\$0.00 \$0.00		\$ 191 \$ 569	\$ 1,461 \$ 4,362
CB	26-35	44010	Wet Well Lighting - Nothing Shown	0		3.50	0.00	\$69.60		\$0.00	-	\$1,000.00		\$0.00		\$ -	• 4,302 N.I.C.
CB	26-36		Roof Top Mechanical Equipment - Light, Recept., Switch	1	EA	8.00	8.00	\$69.60	\$ 557	\$0.00 \$	i -	\$1,500.00	\$ 1,500	\$0.00	\$ -	\$ 309	\$ 2,365
CB	26-37		Occupancy Sensor, Ceiling Mount, Dual Technology	11	EA	1.00	11.00	\$69.60		\$0.00	-	\$110.00		\$0.00		\$ 296	\$ 2,272
CB	26-38		Occupancy Sensor, Wall Switch	2	EA	1.00	2.00 3.00	\$69.60		\$0.00	<u> </u>	\$70.00 \$32.00		\$0.00 \$0.00		\$ 42	\$ 321 \$ 461
CB CB	26-39 26-40		20A, 1P Toggle Switch \$k Key Operated Switch	6	EA EA	0.50	3.00	\$69.60 \$69.60		\$0.00 \$ \$0.00 \$	<u>-</u>	\$32.00 \$40.00		\$0.00 \$0.00		\$ 60 \$ 67	\$ 461 \$ 516
CB	26-40		\$D Dimmer Switch	2	EA	0.50	1.00	\$69.60		\$0.00	, - ; -	\$40.00	\$ 240 \$ 80	\$0.00		\$ 22	\$ 172
CB	26-42		New Lighting Conduit and Wiring	200	LF	0.16	32.00	\$69.60	\$ 2,227	\$0.00	<u> </u>	\$7.00	\$ 1,400	\$0.00	\$-	\$ 544	\$ 4,171
CB	26-43		20A, 120V Receptacle, Replace With New / Reuse Wiring	17	EA	0.50	8.50	\$69.60		\$0.00	i -	\$25.00	\$ 425	\$0.00		\$ 152	\$ 1,169
CB CB	26-44 26-45		20A, 120V GFI Receptacle, Replace With New / Reuse Wiring 20A, 120V GFI WP Receptacle, Replace With New / Reuse Wiring	4 4	EA EA	0.50	2.00 2.40	\$69.60 \$69.60	\$ <u>139</u> \$167	\$0.00 \$ \$0.00 \$	<u> </u>	\$45.00 \$55.00	\$ 180 \$ 220	\$0.00 \$0.00		\$ 48 \$ 58	\$ 367 \$ 445
CB	26-45		20A, 120V GFT WP Receptacle, Replace with New / Reuse Wiring 20A, 120V Receptacle	2	EA	1.50	3.00	\$69.60		\$0.00		\$55.00		\$0.00		\$ 58 \$ 46	\$ 445 \$ 355
CB	26-47		20A, 120V GFI Receptacle	8	EA	1.50	12.00	\$69.60		\$0.00	- -	\$70.00		\$0.00		\$ 209	\$ 1,604
CB	26-48		New Receptacle Conduit and Wiring	200	LF	0.16	32.00	\$69.60	\$ 2,227	\$0.00) -	\$7.00	\$ 1,400	\$0.00		\$ 544	\$ 4,171
CB	26-49		Relocate 50A Receptacle and Wiring	1	EA	16.00	16.00	\$69.60	\$ 1,114	\$0.00	- ⁻	\$500.00	\$ 500	\$0.00	\$ -	\$ 242	\$ 1,856
	27		Division 27 - Communications														\$ 2,769
СВ	27-1		Replace Data Outlets	8	EA	1.00	8.00	\$69.60	\$ 557	\$0.00	i -	\$20.00	\$ 160.00	\$0.00	\$ -	\$ 108	\$ 824
CB	27-2		Replace Telephone Outlet	1	EA	1.00	1.00	\$69.60		\$0.00	- -	\$20.00		\$0.00		\$ 13	\$ 103
CB	27-3		Demo Existing Intercom Speakers	7	EA	1.00	7.00	\$69.60		\$0.00	· -	\$0.00		\$0.00		\$ 73	\$ 560
CB	27-4		Reinstall Existing Intercom Speakers	7	EA	2.00	14.00	\$69.60		\$0.00	3 -	\$20.00		\$0.00		\$ 167	\$ 1,282
							0.00	\$0.00	\$ -	\$0.00	; -	\$0.00	\$ -	\$0.00	\$ -	\$ -	\$-
	28		Division 28 - Electronic Safety & Security														\$ 37,269
	28-1		New Fire Alarm System				0.00	\$69.60	\$-	\$0.00	<u>;</u> -	\$0.00		\$0.00		\$-	\$ -
CB	28-2		Demo Existing Fire Alarm Devices and Wiring	1	LS	16.00	16.00	\$69.60	\$ 1,114	\$0.00	3 -	\$0.00		\$0.00		\$ 167	\$ 1,281
CB CB	28-3 28-4		Fire Alarm Panel Smoke Detector	1 9	EA EA	32.00 1.50	32.00 13.50	\$69.60 \$69.60	\$ <u>2,227</u> \$940	\$0.00 \$ \$0.00 \$	-	\$5,000.00 \$225.00	\$ 5,000 \$ 2,025	\$0.00 \$0.00		\$ 1,084 \$ 445	\$ 8,311 \$ 3,409
CB	28-5		Pull Station, Weatherproof	2	EA	2.00	4.00	\$69.60		\$0.00	<u> </u>	\$180.00		\$0.00		\$ 96	\$ 5,409 \$ 734
CB	28-6		Weatherproof Horn	4	EA	2.00	8.00	\$69.60	\$ 557	\$0.00	6 -	\$260.00	\$ 1,040	\$0.00	\$ -	\$ 240	\$ 1,836
CB	28-7		New Strobe	4	EA	1.50	6.00	\$69.60		\$0.00	-	\$180.00		\$0.00		\$ 171	\$ 1,308
CB CB	28-8 28-9		Fire Alarm Conduit and Wiring Fire Alarm Panel 120V Power Wiring to Existing Panel LP	600 50	LF LF	0.16	96.00 8.00	\$69.60 \$69.60		\$0.00 \$0.00	<u> </u>	\$8.00 \$7.00	\$ 4,800 \$ 350	\$0.00 \$0.00		\$ 1,722 \$ 136	\$ 13,204 \$ 1,043
CB	28-10		Testing and Programming to Tie Into Existing System	50 1	LF	48.00	48.0	\$69.60		\$0.00	- 	\$2,000.00		\$0.00		\$ 801	\$ 6,142
										l l							
	40		Division 40. Drosson Intermetica														¢
СВ	40 40-1		Division 40 - Process Integration No Work Included				0.00	\$0.00	¢	\$0.00		\$0.00	\$	\$0.00	\$	\$	ф - ф
						1	0.00	φυ.υυ	÷ -	φυ.υυ τ	, -	φ0.00	Ψ -	φ0.00	Ф -	Ψ -	Ψ -
	43		Division 43 - Process Gas and Liquid Handling														\$ -
СВ	43-1		No Work Included														
0.5	46		Division 46 - Water and Wastewater Equipment					1									\$ -
CB	46-1		No Work Included														
			General Conditions														\$ 64,765
			Percentage for all general conditions items including but not limited	10	%		428.9	\$50.00	\$ 21,446	\$0.00	5 1,671	\$0.00	\$ 35,760	\$0.00	\$ -	\$ 5,888	\$ 64,765
			Contractor supervision														
	┟───┤		Temporary facilities for trailers Computer systems and job support items			∦											
	+ +		Project cleanup, dumpsters, etc.														
	† †		Temporary toilets														
			Hauling														
	<u> </u>		Project safety systems and items		<u> </u>			L		ļļ							
	╂────┤					╂		├									
	•		Sub-Totals				4,302	1	\$ 260,939		\$ 18,383		\$ 393,364		0	\$ 82,178	\$ 755,000
Risson (-		*		-										

Operations Building Construction Cost Breakdown

	ESTIMATE SUMMARY BY CSI DIVIS	ION	
CSI NO.	DESCRIPTION		AMOUNT
1	GENERAL REQUIREMENTS	\$	199,805
2	SITEWORK AND DEMOLITION	\$	12,808
3	CONCRETE		20,475
4	MASONRY	\$ \$ \$ \$	14,405
5	METALS	\$	11,635
6	WOOD, PLASTIC & COMPOSITE	\$	36,426
7	THERMAL AND MOISTURE PROTECTION	\$	11,370
8	OPENINGS	\$	23,748
9	FINISHES	\$ \$ \$	20,334
10	SPECIALTIES	\$	-
11	EQUIPMENT	\$	-
12	FURNISHINGS	\$	-
13	SPECIAL CONSTRUCTION	\$	-
14	CONVEYING SYSTEMS	\$ \$	-
21	FIRE SUPPRESSION	\$	-
22	PLUMBING SYSTEMS	\$	17,428
23	HVAC SYSTEMS	\$ \$	89,118
26	ELECTRICAL	\$	946,119
27	COMMUNICATIONS	\$	-
28	ELECTRONIC SAFETY & SECURITY	\$	25,876
31	EARTHWORK	\$	-
32	EXTERIOR IMPROVEMENTS	\$	-
33	UTILITIES	\$ \$ \$	-
40	PROCESS INTEGRATION	\$	15,658
43	PROCESS GAS AND LIQUID HANDLING	\$	261,930
46	WATER AND WASTEWATER EQUIPMENT	\$	294,071
	TOTAL	\$	2,001,205
	ROUNDED	\$	2,001,000

	BID ITEMS	
ITEM NO.	DESCRIPTION	AMOUN [.]
1	General Trades	\$ 1,801,40
2		\$
3		\$
4		\$
5		\$
6		\$
7		\$
8	General Conditions	\$ 199,80
9		\$
10		\$
11		\$
12		\$
13		\$
	TOTAL	\$ 2,001,20
	ROUNDED	\$ 2,001,00

1	WORK BREAK	DOWN	_				LAB Total	OR		CONSTRU	CTION EQUIP.	MA	TERIALS	ENGINEERE	DEQUIPMENT	OH & P	
ility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COS
ЭB			Operations Building													╂─────╂	
	2		Division 2 - Site Work and Demolition														\$ 26
)В	2-1	A-OB-101	Demo Existing Roof Access Ladder including walk-over platform	1	LS	12.00	12.00	\$54.33	\$ 652	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ 65	\$
ЭB	2-2	A-OB-101	Demo Existing Roof Copings, including blocking	241	LF	0.06	14.46	\$54.33	\$ 786	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ 79	\$
)B	2-3	A-OB-101	Remove exterior single doors and frames	4	EA	3.00	12.00	\$54.33		\$0.00		\$0.00		\$0.00		\$ 65	
DB	2-4	A-OB-101	Remove interior single doors and frames	2	EA	3.00	6.00	\$54.33		\$0.00		\$0.00		\$0.00		\$ 33	
ЪВ	2-5	A-OB-201	Demo exterior Transom Panels	4	EA	3.00	12.00	\$54.33		\$0.00		\$0.00		\$0.00		Ψ	
ЪВ	2-6	SD-OB-101	Demo existing Tank Pad and SOG at Recessed Storage OB-101, including Steps, Landing, Curb, Railings, etc.	305	SF	0.3	91.5	\$54.33		\$3.00		\$0.00		\$0.00	•	\$ 589	\$ 6
DB	2-7	SD-OB-101	Demo existing Equipment Pads including SOG for new Pads	194	SF	0.2	38.8	\$54.33 \$54.33		\$3.00 \$47.50		\$0.00	\$ -	\$0.00 \$0.00		\$ 269	
DB DB	2-8 2-9	SD-OB-101 SD-OB-101	Demo existing frost slab and slab on grade Demolish existing 8" slab and excavation for containment area	291	CY CY	2.2 0.4	2.2 116.4	\$54.33		\$47.50		\$0.00 \$0.00		\$0.00		\$ 17 \$ 923	
Б	2-9	3D-0B-101	Demolouvers	43	SF	0.09	3.9	\$54.33		\$10.00		\$0.00		\$0.00		\$ <u>923</u> \$ 42	
			Demo exterior masonry wall	169	SF	0.09	42.3	\$54.33		\$3.00		\$0.00		\$0.00		\$ 281	
				100		0.0	0.0	\$0.00		\$0		\$0.00		\$0.00		\$ -	\$
	3		Division 3 - Concrete														\$ 13
DB	3-1	A-OB-101	Remove Spalled Concrete and Patch Floor	24	SF	1.0	24.0	\$55.93			\$ -	\$15.00		\$0.00		\$ 170	\$
рв	3-2	S-OB-101	6" SOG over 3' Aggregate Base at floor recess, includes turn down walls	305	SF	0.5	152.5	\$55.93	\$ 8,529	\$0.20	\$ 61	\$9.60	\$ 2,928	\$0.00	\$-	\$ 1,152	\$
	2.0	0.00.404	w/ dowels drilled into existing slab along Ext. perimeter	40	05	0.0	0.0	AFF 65	¢ 101	AA 65	¢	A0.00	¢	** **	¢	¢ 00	¢
B	3-3	S-OB-101	8" SOG Infill Slab w/ dowels drilled along perimeter at old pads	43	SF	0.2	8.6 50.7	\$55.93		\$0.20		\$8.00		\$0.00		\$ 83	¢
B B	3-4	S-OB-101, -301	12" thick Equipment Isolation Pads, doweled into Exist. Pads	169	SF	0.3		\$55.93		\$0.20				\$0.00		\$ 456 \$ 170	¢
D	3-5	S-OB-101, -301	Cast in Place Stairs & Landings	1	CY	28.0	23.8	\$55.93	\$ 1,331	\$20.00	φ 17	\$518.00	φ 440	\$0.00	φ -	\$ 179	φ
3	3-6	S-OB-103, -302	8" thick Roof Containment Area	8	CY	7.0	58.2	\$55.93	\$ 3,253	\$20.00	\$ 166	\$250.00	\$ 2,078	\$0.00	\$-	\$ 550	\$
3	3-7	S-AT-102, -302	1'-3" avg Thick CIP Foundation below Containment: 17'-8" x 25'-10"	98	CY	7.0	686.0	\$55.93	\$ 38,368	\$20.00	\$ 1,960	\$250.00	\$ 24,500	\$0.00	\$	\$ 6,483	\$
3	3-8	S-AT-102, -302	5' Avg. High x 8" Thick CIP Walls at Containment Area	18	CY	20.0	358.0	\$55.93		\$20.00		\$250.00		\$0.00		\$ 2,486	
B	3-9	S-AT-102, -302	8" Thick CIP Pad below FECL Tank	3	CY	10.0	25.0	\$55.93		\$20.00		\$300.00		\$0.00		\$ 220	
3	3-10	C-00-101	Concrete Pipe bollards	4	EA	3.000	12.0	\$55.93		\$0.00		\$500.00		\$0.00		\$ 267	
							0.0	\$0.00	\$ -	\$0.00	\$ -	\$0.00	\$ -	\$0.00	\$ -	\$ -	\$
	4		Division 4 - Masonry														\$
3	4-1	S-OB-101	Ext. Temp. Opening & Masonry Infill, Tooth In to Match Existing, including Lintel	54	SF	1.50	80.59	\$56.12	\$ 4,523	\$3.00	\$ 161	\$3.00	\$ 161	\$0.00	\$-	\$ 485	\$
В	4-2	S-OB-101, note only	Ext. Openings with Lintels for Process / Mechanical Penetrations	3	LS	0.00	0.00	\$56.12	\$-	\$0.00	\$-	\$750.00	\$ 2,250	\$0.00	\$-	\$ 225	\$
В	4-3	S-OB-101, note only	Interior Masonry Infill, Tooth In to Match Existing, including Lintel	1	LS	0.00	0.00	\$56.12		\$0.00		\$5,000.00		\$0.00			
В	4-4	A-OB-201	Exterior Masonry Tuckpointing per Note L	1	LS	0.00	0.00	\$56.12		\$0.00		\$1,000.00		\$0.00		\$ 100	
			Int. 8" CMU, Non-Load Bearing, Reinforced	620	SF	0.330	204.66	\$56.12	\$ 11,486	\$1.25	\$ 775	\$4.20	\$ 2,605	\$0.00	\$-	\$ 1,487	\$
	5		Division 5 - Metals														\$
В	5-1	A-OB-101	Roof Access Ladder including walk-over platform	19	VLF	0.94	17.86	\$62.63	\$ 1,119	\$1.13	\$ 21	\$101.00	\$ 1,919	\$0.00	\$ -	\$ 306	\$
В	5-2	S-OB-101, -301	HVAC Equip. Supports: HSS 6x6x3/8" Columns & Beams, including Base Plates w/ (4) 3/4" Dia. Anchors drill & epoxy w/ 6" Embeds into existing	0.80	TONS	84.00	67.29	\$62.63		\$680.00		\$3,445.00		\$0.00		\$ 752	\$
			slab				0.0	\$0.00	\$ -	\$0.00	¢	\$0.00	¢	\$0.00	¢	¢	¢
							0.0	\$0.00	\$ -	φ0.00	\$ -	\$0.00	\$ -	φ0.00	ə -	\$-	\$
	6		Division 6 - Wood, Plastic & Composite														\$
В	6-1	A-OB-101	Blocking for Roof Copings	241	LF	0.08	19.28	\$58.35	\$ 1,125	\$0.00	\$-	\$3.50	\$ 844	\$0.00	\$-	\$ 197	\$
В	6-2	A-OB-301	Removable FRP Panel Wall	148	SF	0.18	26.34	\$62.63		\$0.00		\$100.00		\$0.00		φ 1,010	
3	6-3	S-OB-101	FRP Grating, including Framing at Containment Area	389	SF	0.00	0.00	\$62.63	\$-	\$0.00	\$-	\$80.00	\$ 31,146	\$0.00	\$-	\$ 3,115	\$
	7		Division 7 - Thermal and Moisture Protection				-										\$
В	7-1	A-OB-101	Prefinished metal Coping	241	LF	0.20	48.20	\$59.78	\$ 2,881	\$1.00	\$ 241	\$20.00	\$ 4,820	\$0.00	\$ -	\$ 794	Ŧ
B	7-2	A-OB-201	Sealant w/backer rod - Control Joints	86	LF	0.11	9.46	\$59.78		\$1.00		\$1.50		\$0.00			
В	7-3	A-OB-201	Windows & Louvers Sealants	147	LF	0.11	16.17	\$59.78	\$ 967	\$1.00	\$ 147	\$1.50	\$ 221	\$0.00	\$	\$ 133	\$
3	7-4	A-OB-201	Pipe Penetration Sealant	2	EA	2.00	4.00	\$59.78 \$0.00	\$ 239	\$10.00 \$0.00	\$ 20	\$10.00 \$0.00	\$ 20	\$0.00 \$0.00	\$ -	\$ 28 \$ -	
								φ0.00		ψ0.00		φ0.00	•		-		
	8		Division 8 - Openings														\$
В	8-1	A-OB-101	Exterior FRP doors w/ Frame incl. Hardware	4	EA	8.00	32.00	\$58.35		\$0.00		\$2,550.00		\$0.00		\$ 1,207	
)B)B	8-2	A-OB-101	Interior FRP doors w/ Frame incl. Hardware	2	EA	8.00	16.00	\$58.35		\$0.00		\$2,350.00		\$0.00		\$ 563	
	8-3	A-OB-201 A-OB-201	Aluminum Storefront Transon Window w/1" insulated glass	40	SF SF	0.26	10.40 3.42	\$58.35 \$58.35		\$1.30 \$0.00		\$60.00		\$0.00 \$0.00		\$ 306 \$ 83	
3	8-4	A-00-201	Metal Louvers Screen	18	35	0.19	0.00	\$58.35		\$0.00		\$35.00 \$0.00		\$0.00		¢ 03 \$ -	\$
	9		Division 9 - Finishes Paint existing interior block walls, assumed 14' biob	E 500	0E	0.02	167.50	¢50.00	¢ 0.744	¢0.00	¢	¢0.45	¢ 000	¢0.00	¢	\$ 055	\$
B B	9-1 9-2	A-OB-101 A-OB-101	Paint existing interior block walls, assumed 14' high	5,586 3,041	SF SF	0.03 0.04	167.58 121.64	\$52.00 \$52.00		\$0.00		\$0.15		\$0.00		\$ 955	¢ Q
B	9-2	A-OB-101 A-OB-101	Paint existing exposed structure, ducts, conduits, piping, etc. Paint existing gas piping per General Note on Roof Plan	3,041	LS	0.04	0.00	\$52.00		\$0.00 \$0.00		\$0.20 \$1,000.00		\$0.00 \$0.00		\$	
B	9-3	A-OB-101 A-OB-101	Coat existing floor per Key Note M	1	LS	0.00	0.00	\$52.00		\$0.00		\$1,000.00		\$0.00		\$ 100	
	1																

Facility DIV-I OB 2' OB 21' OB 22' OB 23' OB 23' OB 23' OB 23' OB 23'	JORK BREAKD V-ITEM 21 21-1 22 22-1 22-2 22-3 22-4 22-5 22-6 22-7 22-8 22-7 22-8 23-1 23-2 23-2 23-3	Notes No drawings PD-OB-101 (Note A thru D) P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101	Description Operations Building Division 21 - Fire Suppression No Work Included - No drawings assume not required Division 22 - Plumbing Systems Remove existing Hot water heater, Emergency Shower, Tepid water storage tank and related piping and make safe in preparation of new work. Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1*, 2* & 3* piping + 3* below grade piping and connection to 6* Main and repair pavement 3* pipe wall sleeve and link seal, includes coring wall for water main 2* pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in preparation of new work	Quantity	Units	MH/Unit 17.300 17.300 0.00 0.00 0.00 2.89 2.60 4.00 4.000 12.00	LABO Total Manhours 0.00 17.3 0.00 0.00 0.00 0.00 2.89 2.60 4.00 4.00		- - 1,171 - - 195 176 271 271 1,624	CONSTRUCT Unit \$ E	Equipment Cost	Unit \$ \$ \$0.00 \$ \$25.00 \$ \$7,805.00 \$ \$7,805.00 \$ \$5,470.00 \$ \$148.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$ \$ \$3,397.85 \$ \$ \$3,397.85 \$ \$ \$3,397.85 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 25 \$ 7,805 \$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00	Cost \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 1,171 \$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 6,291 \$ 414 \$ 372 \$ 4,219 \$ 4,219
OB 2' OB 21 OB 21 OB 22 OB 23 OB 23 OB 23 OB 23 OB 23	21 21-1 22 22-1 22-2 22-3 22-3 22-4 22-5 22-6 22-7 22-8 22-8 22-8 23-1 23-2	No drawings PD-OB-101 (Note A thru D) P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101	Operations Building Division 21 - Fire Suppression No Work Included - No drawings assume not required Division 22 - Plumbing Systems Remove existing Hot water heater, Emergency Shower, Tepid water storage tank and related piping and make safe in preparation of new work. Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1 1 1	LS LS LS EA EA EA EA	17.300 0.00 0.00 2.89 2.60 4.00 4.000	0.00 17.3 0.00 0.00 2.89 2.60 4.00 4.00	\$0.00 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	- 1,171 - - - - - - - - - - - - - - - - - -	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	β - β - β - β - β - β - β - β -	\$0.00 \$ \$25.00 \$ \$7,805.00 \$ \$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ - \$ 25 \$ 7,805 \$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ 179 \$ 1,171 \$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ N.I.C. \$ 68,186 \$ 1,375 \$ 8,976 \$ 6,291 \$ 6,291 \$ 4,219
2 OB 21- OB 22- OB 23- OB 23- OB 23- OB 23- OB 23-	21-1 22 22-1 22-2 22-3 22-4 22-5 22-6 22-7 22-8 22-8 23-1 23-2	PD-OB-101 (Note A thru D) P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	Division 21 - Fire Suppression No Work Included - No drawings assume not required Division 22 - Plumbing Systems Remove existing Hot water heater, Emergency Shower, Tepid water storage tank and related piping and make safe in preparation of new work. Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1 1	LS LS EA EA EA EA	0.00 0.00 2.89 2.60 4.00 4.000	17.3 0.00 0.00 2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	- - 195 176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	5 - 5 - 6 - 5 - 6 - 6 - 6 - 6 -	\$25.00 \$ \$7,805.00 \$ \$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 25 \$ 7,805 \$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 1,171 \$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 68,186 \$ 1,375 \$ 8,976 \$ 6,291 \$ 414 \$ 372 \$ 4,219
OB 21 OB 22 OB 23 OB 23 OB 23 OB 23 OB 23	21-1 22 22-1 22-2 22-3 22-4 22-5 22-6 22-7 22-8 22-8 23-1 23-2	PD-OB-101 (Note A thru D) P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	No Work Included - No drawings assume not required Division 22 - Plumbing Systems Remove existing Hot water heater, Emergency Shower, Tepid water storage tank and related piping and make safe in preparation of new work. Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1 1	LS LS EA EA EA EA	0.00 0.00 2.89 2.60 4.00 4.000	17.3 0.00 0.00 2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	- - 195 176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	5 - 5 - 6 - 5 - 6 - 6 - 6 - 6 -	\$25.00 \$ \$7,805.00 \$ \$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 25 \$ 7,805 \$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 1,171 \$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 68,186 \$ 1,375 \$ 8,976 \$ 6,291 \$ 414 \$ 372 \$ 4,219
22 OB 22: OB 23: OB 23: OB 23: OB 23:	22 22-1 22-2 22-3 22-4 22-5 22-6 22-7 22-7 22-8 23-1 23-2	PD-OB-101 (Note A thru D) P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	Division 22 - Plumbing Systems Remove existing Hot water heater, Emergency Shower, Tepid water storage tank and related piping and make safe in preparation of new work. Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian B330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1 1	LS LS EA EA EA EA	0.00 0.00 2.89 2.60 4.00 4.000	17.3 0.00 0.00 2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	- - 195 176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	5 - 5 - 6 - 5 - 6 - 6 - 6 - 6 -	\$25.00 \$ \$7,805.00 \$ \$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 25 \$ 7,805 \$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 1,171 \$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 68,186 \$ 1,375 \$ 8,976 \$ 6,291 \$ 414 \$ 372 \$ 4,219
OB 22- OB 23- OB 23- OB 23- OB 23-	22-1 22-2 22-3 22-3 22-4 22-5 22-6 22-7 22-8 22-8 23-1 23-2	PD-OB-101 (Note A thru D) P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	Remove existing Hot water heater, Emergency Shower, Tepid water storage tank and related piping and make safe in preparation of new work. Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1 1	LS LS EA EA EA EA	0.00 0.00 2.89 2.60 4.00 4.000	0.00 0.00 2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	- - 195 176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	6 - 6 - 6 - 6 - 6 -	\$7,805.00 \$ \$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 7,805 \$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 1,171 \$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 1,375 \$ 8,976 \$ 6,291 \$ 4,14 \$ 372 \$ 4,219 \$ 4,219
OB 22 OB 23 OB 23 OB 23 OB 23 OB 23	22-2 22-3 22-3 22-5 22-6 22-7 22-8 22-8 23-1 23-2	(Note A thru D) P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	storage tank and related piping and make safe in preparation of new work. Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1 1	LS LS EA EA EA EA	0.00 0.00 2.89 2.60 4.00 4.000	0.00 0.00 2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	- - 195 176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	6 - 6 - 6 - 6 - 6 -	\$7,805.00 \$ \$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 7,805 \$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 1,171 \$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 8,976 \$ 6,291 \$ 414 \$ 372 \$ 4,219 \$ 4,219
OB 22: OB 23: OB 23: OB 23: OB 23:	22-3 22-4 22-5 22-6 22-7 22-8 22-8 23-1 23-2	P-OB-101 (Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	Piping & connections for re-routed domestic water in building and to service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1 1	LS EA EA EA EA	0.00 2.89 2.60 4.00 4.000	0.00 2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	5 - 5 - 5 - 5 - 6 - 6 -	\$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ -	\$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 6,291 \$ 414 \$ 372 \$ 4,219 \$ 4,219
OB 22: OB 23: OB 23: OB 23: OB 23:	22-3 22-4 22-5 22-6 22-7 22-8 22-8 23-1 23-2	(Note A thru D) P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	service IWH Heater to NW corner of building. (1", 2" & 3" piping + 3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1 1	LS EA EA EA EA	0.00 2.89 2.60 4.00 4.000	0.00 2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	5 - 5 - 5 - 5 - 6 - 6 -	\$5,470.00 \$ \$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 5,470 \$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ - \$ - \$ -	\$ 821 \$ 54 \$ 49 \$ 550 \$ 550	\$ 6,291 \$ 414 \$ 372 \$ 4,219 \$ 4,219
OB 22. OB 23. OB 23. OB 23. OB 23.	22-4 22-5 22-6 22-7 22-8 22-8 23-1 23-2	P-OB-101 (Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	3" below grade piping and connection to 6" Main and repair pavement 3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 1 1 1	EA EA EA EA	2.89 2.60 4.00 4.000	2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$ \$67.67 \$	176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	<u>5 -</u> 5 - 6 -	\$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ -	\$ 54 \$ 49 \$ 550 \$ 550	\$ 414 \$ 372 \$ 4,219 \$ 4,219
OB 22 OB 23 OB 23 OB 23 OB 23	22-4 22-5 22-6 22-7 22-8 22-8 23-1 23-2	(Note A) P-OB-101 P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	3" pipe wall sleeve and link seal, includes coring wall for water main 2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1	EA EA EA	2.60 4.00 4.000	2.89 2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$	176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$	<u>5 -</u> 5 - 6 -	\$165.00 \$ \$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 165 \$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00 \$0.00	\$ - \$ - \$ -	\$ 54 \$ 49 \$ 550 \$ 550	\$ 414 \$ 372 \$ 4,219 \$ 4,219
OB 22. OB 22. OB 22. OB 22. OB 22. OB 23. OB 23. OB 23. OB 23.	22-5 22-6 22-7 22-8 22-8 22-8 22-1 23-1 23-2	P-OB-101 P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	2" pipe wall sleeve and link seal, includes coring wall for branch to IWH Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1	EA EA EA	2.60 4.00 4.000	2.60 4.00 4.00	\$67.67 \$ \$67.67 \$ \$67.67 \$	176 271 271	\$0.00 \$ \$0.00 \$ \$0.00 \$	5 - 5 - 5 -	\$148.00 \$ \$3,397.85 \$ \$3,397.85 \$	\$ 148 \$ 3,398 \$ 3,398	\$0.00 \$0.00 \$0.00	\$ - \$ - \$ -	\$ 49 \$ 550 \$ 550	\$ 372 \$ 4,219 \$ 4,219
OB 22: OB 22: OB 22: OB 22: OB 23: OB 23: OB 23: OB 23:	22-6 22-7 22-8 22-8 22-8 22-1 23-1 23-2	P-OB-101 P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	Heater ES-1 Emergency Eye Wash Shower, Outdoor With heat trace Freeze Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1	EA	4.00	4.00	\$67.67 \$ \$67.67 \$	271	\$0.00 \$ \$0.00 \$	6 - 6 -	\$3,397.85 \$	\$ 3,398 \$ 3,398	\$0.00 \$0.00	\$ - \$ -	\$ 550 \$ 550	\$ 4,219 \$ 4,219
OB 22 OB 22 OB 22 OB 23 OB 23 OB 23 OB 23	22-7 22-8 23-1 23-2	P-OB-101 P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	Protection & alarm light package. (HAWS or Guardian GFR3100 and alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1	EA	4.000	4.00	\$67.67 \$	271	\$0.00	ş -	\$3,397.85	\$ 3,398	\$0.00	\$-	\$ 550	\$ 4,219
OB 22 OB 23 OB 23 OB 23 OB 23 OB 23	22-8	P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	alarm light) ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	2												·	
OB 22 OB 23 OB 23 OB 23 OB 23 OB 23	22-8	P-OB-101 MD-OB-101 (Notes A & B) MD-OB-101	(HAWS or Guardian 8330 and alarm light) IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	1 2 												·	
2: OB 23: OB 23: OB 23: OB 23:	23 23-1 23-2	MD-OB-101 (Notes A & B) MD-OB-101	IWH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in	2	EA	12.00	24.00	\$67.67 \$	1,624	\$0.00	3	¢17 E00 00 0		#0.00	2	¢ 5.500	
OB 23 OB 23 OB 23 OB 23	23-1 23-2	MD-OB-101 (Notes A & B) MD-OB-101	Division 23 - HVAC Systems Remove Gas fired Furnace and ductwork system and controls in								-	\$17,588.00	\$ 35,176	\$0.00	φ -	\$ 5,520	\$ 42,320
OB 23 OB 23 OB 23 OB 23	23-1 23-2	MD-OB-101 (Notes A & B) MD-OB-101	Remove Gas fired Furnace and ductwork system and controls in														
OB 23 OB 23 OB 23 OB 23	23-1 23-2	MD-OB-101 (Notes A & B) MD-OB-101	Remove Gas fired Furnace and ductwork system and controls in		∦												
OB 23 OB 23 OB 23 OB 23	23-1 23-2	MD-OB-101 (Notes A & B) MD-OB-101	Remove Gas fired Furnace and ductwork system and controls in														
OB 23- OB 23-	23-2	(Notes A & B) MD-OB-101															\$ 116,675
OB 23-		MD-OB-101	preparation of new work	1	LS	32.000	32.0	\$69.65 \$	2,229	\$250.00 \$	5 250	\$0.00	β -	\$0.00	\$-	\$ 372	\$ 2,851
OB 23-			Remove flue through roof for hot water heater and patch. Balance of hot	1	EA	4.000	4.0	\$69.65 \$	279	\$100.00 \$	5 100	\$200.00 \$	\$ 200	\$0.00	\$ _	\$ 87	\$ 665
	23-3		water heater work in Plumbing Division		LA	4.000	4.0	φ03.05 φ	215	\$100.00 \$	0 100	φ200.00	¢ 200	φ0.00	φ -	φ 07	φ 000
		MD-OB-101	Remove (5) rooftop exhaust fans and controls	1	LS	25.000	25.0	\$69.65 \$	1,741	\$250.00 \$	5 250	\$0.00	\$ -	\$0.00	\$-	\$ 299	\$ 2,290
OB 23-	23-4	(Notes D thru G) MD-OB-101	Remove existing actuator for dampers and replace actuator an linkage	1	LS	20.000	20.0	\$69.65 \$	1,393	\$0.00 \$		\$3,750.00 \$	\$ 3,750	\$0.00	¢	\$ 771	\$ 5,914
OB 23-	23-4	(Notes H thru J)	assembly at (5) locations	1	LS	20.000	20.0	\$09.05 \$	1,393	\$0.00 \$	-	\$3,750.00	¢ 3,750	\$0.00	φ -	φ //1	φ 5,914
OB 23-	23-5	M-OB-101	H&V-1 Heating and ventilation unit, Constant Volume 2,700 CFM,	1	LS	30.000	30.0	\$69.65 \$	2,090	\$1,500.00	5 1,500	\$19,000.00	\$ 19,000	\$0.00	\$-	\$ 3,388	\$ 25,978
		(Note N)	indirect modulating, 2 stage heat, 200 MBH (BOD: Trane GXCA025P (Support steel frame in DIV 5)														
OB 23-	23-6	M-OB-101	EF-1 & EF-2 Rooftop louvered Exhaust Fan 8,500 CFM, 2 HP, (BOD:	2	LS	10.000	20.0	\$69.65 \$	1,393	\$300.00 \$	600	\$4,615.00	\$ 9,230	\$0.00	\$-	\$ 1,683	\$ 12,906
		(Note K)	Greenheck LBP-30-20)														
OB 23-	23-7	M-OB-101	EF-3, EF-4 & EF-5 Rooftop louvered Exhaust Fan 7,000 CFM, 1-1/2 HP,	3	LS	10.000	30.0	\$69.65 \$	2,090	\$300.00 \$	900	\$4,560.00	\$ 13,680	\$0.00	\$-	\$ 2,500	\$ 19,170
		(Note K)	(BOD: Greenheck LBP-30-15)														
OB 23-	23-8	M-OB-101	Ductwork (Galvanized)	785	LBS	0.098	76.9	\$69.65 \$	5,358	\$0.00 \$		\$1.58	\$ 1,240	\$0.00	¢	\$ 990	\$ 7,588
	23-9	M-OB-101	Ductwork Insulation 1-1/2", .75 density	416	SF	0.050	20.8	\$69.65 \$	1,449	\$0.00		\$0.30				\$ 236	\$ 1,810
	23-10	M-OB-101	SR-1 Supply Register Grille 24/10	1	EA	0.615	0.6	\$69.95 \$	43	\$0.00 \$	-	\$76.88	\$ 77		\$-	\$ 18	
	23-11 23-12	M-OB-101 M-OB-101	SR-1 Supply Register Grille 18/6 RG-1 Return Grille 24/16	4	EA EA	0.444	1.8 0.4	\$69.95 \$69.95 \$	124 31	\$0.00 \$ \$0.00 \$		\$49.50 \$36.00	<u>\$ 198</u> \$ 36			\$ 48 \$ 10	
	23-12	M-OB-101 M-OB-101	RG-1 Return Grille 30/12	1	EA	0.444	0.4	\$69.95 \$	31	\$0.00 \$		\$30.00	\$ <u>30</u>			\$ 10	
	23-14	M-OB-101	14/12 Volume Damper	1	EA	0.471	0.5	\$69.95 \$	33	\$0.00 \$		\$44.50	\$ 45			\$ 12	\$ 89
	23-15		18/6 Volume Damper	4	EA	0.400	1.6	\$69.95 \$	112	\$0.00 \$		\$45.00				\$ 44	
	23-16 23-17	M-OB-101 M-OB-101	24/16 Volume Damper 24/16 Fire Damper	1	EA EA	0.727	0.7	\$69.95 \$69.95 \$	<u>51</u> 51	\$0.00 \$ \$0.00 \$		\$94.50 \$435.00			\$ <u>-</u> \$-	\$ 22 \$ 73	
	23-17 23-18	M-OB-101 M-OB-101	24/16 Fire Damper 24/10 Fire Damper	1	EA EA	0.727	0.7	\$69.95 \$	51 37	\$0.00 \$		\$435.00 \$				\$ 73 \$ 68	
	23-19	M-OB-101	24/24 Fire Damper (Clean existing transfer grille per Note L) Assume	1	EA	1.000	1.0	\$69.95 \$	70	\$0.00		\$505.00		\$0.00		\$ 86	
OB 23-:	23-20	M-OB-101	added Fire Damper Horizontal Concentric vent kit for H&V-1 along with 5" vent combustion &	1	ALLOW	0.000	0.0	\$69.95 \$		\$0.00	3	\$1,550.00	\$ 1,550	\$0.00	\$ -	\$ 233	\$ 1,783
			vent piping from unit to wall						-								
	23-21 23-22	M-OB-602 M-OB-102	Interface of new equipment with existing BAS MAU-1 make air unit, 1,500 cfm, 1-1/2 hp	1	ALLOW EA	0.000 15.545	0.0	\$69.95 \$ \$69.95 \$	- 1,087	\$0.00 \$ \$0.00 \$		\$4,500.00 \$14,700.00		\$0.00 \$0.00		\$ 675 \$ 2,368	
	23-22	M-OB-102 M-OB-102	New louver (48x36)	1	EA	15.545 2.500	15.5 2.5	\$69.95 \$	1,087	\$0.00 \$		\$2,817.32		\$0.00			
	23-24	M-OB-102	New louvers (48x64)	1	EA	2.500	2.5	\$69.95 \$	175	\$0.00 \$		\$5,008.56				\$ 778	
20	26		Division 26 - Electrical Systems														\$ 986,185
	26-1		Incoming Electrical Service				0.00	\$69.60 \$	-	\$0.00	š -	\$0.00	\$-	\$0.00	\$ -	\$ -	\$ -
	26-2	Utility Company	New Utility Power Pole - by Utility Co.				0.00	\$69.60 \$	-	\$0.00 \$		\$0.00 \$		\$0.00		\$ -	N.I.C.
	26-3	E-00-101	Install Bollards at New Utility Pole	2	EA	ļ	0.00	\$69.60 \$	-	\$0.00 \$		\$1,000.00		\$0.00		\$ 300	\$ 2,300
	26-4	E-00-101	Ductbank From New Utility Pole to Transformer Vault, 2-4" PVC	170	LF	ł	0.00	\$69.60 \$	-	\$0.00		\$110.00		\$0.00		\$ 2,805	\$ 21,505
	26-5 26-6	E-00-101 Utility Company	New Utility Co. Transformer Vault / Concrete Pad 1000 kva Transformer, 13.2kv - 480 / 277V, 3ph, Dry Type	1	EA		0.00	\$69.60 \$ \$69.60 \$	-	\$0.00 \$ \$0.00 \$		\$5,000.00 \$0.00		\$0.00 \$0.00		\$ 750 \$ -	\$ 5,750 N.I.C.
	26-0		Equipment		∦	1	0.00	\$69.60 \$	-	\$0.00 \$		\$0.00		\$0.00		Ψ	\$ -
	26-8		1200A, 480V CT Cabinet With Meter	1	EA	24.00	24.00	\$69.60 \$	1,670	\$0.00 \$		\$2,500.00		\$0.00		Ŧ	\$ 4,796
	26-9		Concrete Housekeeping Pad For SWGR and MCC	1	EA		0.00	\$69.60 \$	-	\$0.00	-	\$3,000.00		\$0.00	\$-	\$ 450	\$ 3,450
	26-10	TAG: SWBD-1	1200A, 480V Dual Feed Switchboard With ATO, 4-Section	1	EA	208.00	208.00	\$69.60 \$	14,477	\$1,000.00		\$0.00		\$300,000.00	\$ 300,000	\$ 47,322	\$ 362,798
	26-11	TAO. 1400.00	Switchboard Circuit Breaker Remote Control Station	1	EA	4.00	4.00	\$69.60 \$	278	\$0.00		\$0.00		\$1,000.00			\$ 1,470
	26-12 26-13	TAG: MCC-OB	1200A, 480V MCC, 7-Section Switchgear Commissioning, Training, O&M	1	EA EA	136.00 80.00	136.00 80.00	\$69.60 \$ \$69.60 \$	9,466 5,568	\$500.00 \$ \$0.00 \$		\$0.00 \$ \$0.00 \$		\$140,000.00 \$20,000.00			\$ 172,460 \$ 29,403

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OB 28-40 IDMA Federic New MCC-08 I EA 32.00 \$89.00 \$ \$2.27 \$0.00 \$ • \$53.00.00 \$ \$0.00 \$ • \$53.00.00 \$ \$0.00 \$ • \$53.00	406 \$ 3 2,172 \$ 16														-		
OB 29-47 100 HP Forder to Existing Avariant Blower #1 400 LF 0.42 12.72 500 00 \$ 1.100 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 8.43 50.00 \$ - 528.10 \$ 51.02 \$ 58.10 \$ 50.00 \$ - 51.02 \$ 58.10 \$ 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ - 50.00 \$ 50.00 \$ 50.00 \$	784 \$ 6												00 1				
DCB 22-49 150 HP Feeder to New Aeration Blower Skid #3 500 LF 0.42 2120 580.00 § - 528.10 § 1,425 500.00 § - 528.10 § 1,426 500.00 § - 528.10 § 1,426 500.00 § - 528.10 § 1,426 500.00 § - 528.10 § 1,426 500.00 § - 528.10 § 1,426 500.00 § - 528.10 § 1,426 500.00 § - 528.10 § 1,426 500.00 § - 528.10 § 1,426 500.00 § - 510.22 § 818 500.00 § - 510.22 § 818 500.00 § - 510.22 § 810.00 § - 500.00 § - 510.22 § 810.00 § - 500.00 § - 510.22 § 800.00 § - 830.00 § - 830.00 § - 830.00 § - 830.00 § - 830.00 § - 830.00 § - 830.00 § - 830.00 § - 830.00 § - 830.00 § -	346 \$												40				
DB 26-50 150 HP Feeder to New Aration Blower Skid #1 YFD 80 LF 0.42 19.66 \$80.00 \$ \$22.10 \$ 11.24 50.00 \$ \$ 0B 22-52 75 HP Feeder to New Digester Blower Skid #2 VFD 65 LF 0.28 18.33 \$\$60.00 \$ \$\$10.02	259 \$ ·					\$-	\$0.00 \$		\$69.60 \$			LF	30	Feeder to Existing Aeration Blower #2	6-48 150 HP	B 26-48	OB
OB 28-51 75 HP Federt to New Digester Blower Stud #1 VFD 60 LF 0.28 1.570 50.00 \$ - 510.22 \$ 818 50.00 \$ - 510.22 \$ 818 50.00 \$ - 510.22 \$ 818 50.00 \$ - 510.22 \$ 818 50.00 \$ - 510.22 \$ 818 500.00 \$ - 510.22 \$ 818 500.00 \$ - 510.22 \$ 818 500.00 \$ - 510.20 \$ 520.00 \$ 2.00 \$ 5.00 \$ 2.00 \$ 500.00 \$ - 510.22 \$ 500.00 \$ 2.00 \$ 5.00 \$ <	432 \$ 3										-						
OB 28-52 75 HP Feeder to New Digester Blower Skidt #2 VPD 65 LF 0.28 18.33 569.60 \$1.276 \$50.00 \$ \$102.01 \$66.60 \$10.00 \$ \$100.00 \$ \$100.00 \$ \$100.00 \$ \$2.400 \$1.400 \$50.60 \$10.00 \$ \$100.00 \$ \$2.400 \$1.400 \$50.60 \$10.00 \$ \$100.00 \$	346 \$ 2 358 \$ 2										-						
OB 28-53 Feeder to New Aration Blower Motorized Valves 6 EA 24:00 144:00 56:00 \$ 10:02 50:00 \$ - 54:00 00 \$ 2.4:00 50:00 \$ - 54:00 00 \$ - 56:00 \$ 50:00 \$ - 56:00 \$ 50:00 \$ - 56:00 \$ 50:00 \$ - 56:00 \$ 50:00 \$ - 56:0	291 \$																
OB 26-55 Install New 22A Feeder to New Panel OB-1 10 LF 0.43 4.30 \$980.00 \$ 2.20 \$9.00 \$ - \$281 to \$ 281 to \$ 28	1,863 \$ 14												-	0			
OB 26-66 assume size Install New 100A Feeder to New Panel OB-3 Fit 0.28 19.74 \$60.60 1.374 \$00.00 5 \$10.22 \$115 \$00.00 \$ \$ OB 28-57 Install New 100A Feeder to New Panel OB-3 60 LF 0.28 16.02 \$60.00 \$ \$10.22 \$13.000 \$	403 \$													Install New 100A Feeder to Transformer T-OB-1			-
OB 26-57 Install New 100A Feeder to New Panel OB-3 60 LF 0.28 16.82 \$9.90\$ 1.178 \$0.00\$. \$10.22\$ 613 \$0.00\$. \$ OB 26-58 assume bottom entry Install Publicx / Spice Existing Feeder at old Dist. SWB Location 6 EA 24.00 144.00 \$66 0.6\$ 10.022 \$0.00\$ - \$0.00\$ 4.500 \$ \$0.00\$ - \$0.00\$<	87 \$																
OB 28-58 assume bottom enty Install Pullbox (>Splice Existing Feeder at od Dist WBD Location 6 EA 24.00 144.00 \$96.60 \$ 10.02 \$ 0.00 \$ \$ \$750.00 \$ 4.500 \$ \$0.00 \$	313 \$ 2 269 \$ 2																
OB 26-59 Extend Feeder From Pulloxia New Switchgear SWGR-OB: 000 \$99.60 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$000 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 1,124 \$0.00 5 \$28.10 5 \$28.10 5 \$28.10 5 \$28.10 5 \$28.10 5 \$28.10 5 \$28.10 5 \$28.10 5 \$28.10	2,178 \$ 16																
OB 26-f1 200A Feeder to Admin & Lab Building 40 LF 0.42 16.96 \$89.60 \$ 1.180 \$0.00 \$ \$ \$26.10 \$ 1.124 \$0.00 \$ \$ \$ \$26.10 \$ \$1.124 \$0.00 \$ \$ \$ \$26.10 \$ \$1.124 \$0.00 \$ \$ \$ \$26.10 \$ \$1.124 \$0.00 \$ \$ \$ \$50.00 \$	- \$							-									
OB 26-62 150A Feeder to Sludge Dewatering Building 40 LF 0.33 13.28 \$606.01 \$24 \$0.00 \$ \$16.00 \$0.00 \$ \$ OB 26-63 500A Feeder to Sludge Dump Building 40 LF 0.88 35.04 \$69.60 \$2,439 \$0.00 \$ \$58.66 \$2,321 \$1,244 \$0.00 \$ <td>346 \$ 2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>°</td> <td></td> <td></td> <td></td>	346 \$ 2										-			°			
OB 26-63 500A Feeder to Screen & Grit Building 40 LF 0.88 35.04 \$69.60 \$ 2.439 \$0.00 \$ \$58.86 \$ 2.354 \$0.00 \$ \$ OB 26-64 200A Feeder to Sludge Pump Building 40 LF 0.42 16.96 \$69.60 \$ 1.180 \$0.00 \$ \$ \$28.10 \$ 1.124 \$ \$0.00 \$ \$ OB 26-65 600A Feeder to Filter Influent Building 40 LF 1.10 44.00 \$ \$ \$0.00 \$ \$ \$ \$ \$2.8.10 \$ 1.124 \$ \$0.00 \$ \$ OB 26-65 600A Feeder to Exhaust Fans, 5 @ 70 ft 350 LF 0.17 59.50 \$ \$69.60 \$ 1.141 \$ \$0.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	346 \$ 2										-		-				
OB 26-64 200A Feeder to Sludge Pump Building 40 LF 0.42 16.96 \$69.60 \$1,180 \$0.00 \$ \$28.10 \$1,124 \$0.00 \$ \$ OB 26-65 600A Feeder to Filter Influentsuiding 40 LF 1.10 44.00 \$69.60 \$3,062 \$0.00 \$ \$89.40 \$3,576 \$0.00 \$	229 \$ 7 719 \$																
OB 26-66 20A Feeder to Exhaust Fans, 5 @ 70 ft 350 LF 0.17 59.50 \$69.60 \$ 4,141 \$0.00 \$ - \$10.00 \$ 3,500 \$0.00 \$ - \$ OB 26-67 20A Feeder to AHU 100 LF 0.17 17.00 \$69.60 \$ 1,183 \$0.00 \$ - \$10.00 \$ 50.00 \$ - \$ <	346 \$													°			
OB 26-67 20A Feeder to AHU 100 LF 0.17 17.00 \$69.60 \$ 1,183 \$0.00 \$ \$1,000 \$0.00 \$0.00 \$ \$ OB 26-68 70A Feeder to Safety Shower Electric Water heater 100 LF 0.28 28.20 \$69.60 \$ 1,963 \$0.00 \$ \$ \$10.22 \$ 1,022 \$0.00 \$	996 \$							1			-		-				-
OB 26-68 70A Feeder to Safety Shower Electric Water heater 100 LF 0.28 28.20 \$69.60 \$ 1.963 \$0.00 \$ - \$10.22 \$ 1.022 \$0.00 \$ - \$ OB 26-69 100A Disconnect Switch, Safety Shower Heater 1 EA 4.00 4.00 \$69.60 \$ 278 \$0.00 \$ - \$1,000 \$0.00 \$ - \$ <td< td=""><td>1,146 \$ 8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1,146 \$ 8																
OB 26-69 100A Disconnect Switch, Safety Shower Heater 1 EA 4.00 4.00 \$69.60 \$ 278 \$0.00 \$ - \$1,000.00 \$0.00 \$ - \$ OB 26-70 Heat Tracing - - 0.00 \$69.60 - \$0.00 \$ - \$0.00 \$ \$0.00 \$ - \$0.00 \$ \$0.00 \$ \$0.00 \$ - \$0.00 \$ \$0.00 \$ \$ \$0.00 \$ \$ \$0.00 \$ \$ \$0.00 \$ \$ \$ \$0.00 \$ \$ \$ \$0.00 \$ \$ \$ \$0.00 \$ <t< td=""><td>327 \$ 2 448 \$</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	327 \$ 2 448 \$																
OB 26-70 Heat Tracing 0.00 \$69.60 \$ \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$0.00 \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$ \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$ \$0.00 <th< td=""><td>192 \$</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></th<>	192 \$												1				
OB 26-72 Heat Trace Cable on Process Pipe 1 LS 32.00 \$69.60 \$ 2,227 \$0.00 \$ \$ 3,200 \$ 0.00 \$ - \$ \$ OB 26-73 Lighting - - 0.00 \$69.60 \$ - \$0.00 \$ - \$0.00 \$ - \$ 0.00	- \$	\$ -	\$0.00	\$0.00 \$ -		\$ -	\$0.00 \$	-	\$69.60 \$	0.00				Heat Tracing	6-70	B 26-70	OB
OB 26-73 Lighting 0.00 \$69.60 \$- \$0.00 \$0.00	1,234 \$ 9												4				
OB 26-74 Demo 1 x 4 Fluorescent Light Fixtures 53 EA 1.00 \$3.00 \$0.00 \$- \$0.00 \$- \$0.00 \$ - \$ \$0.00 \$ - \$ \$ \$ \$ \$ \$ \$ \$ <	814 \$ 6				\$3,						32.00	LS	1	· · · · · · · · · · · · · · · · · · ·			
OB 26-75 Recycle Fluorescent Bulbs and Ballasts 1 LS 8.00 \$69.60 \$557 \$0.00 \$- \$400 \$0.00 \$<- \$ OB 26-76 quote Type "LA" 1 x 4 LED Pendant Mounted Fixture 41 EA 1.50 61.50 \$69.60 \$ 4,280 \$0.00 \$ - \$ 400.00 \$ - \$	- \$ 553 \$ 4				1						1.00	EA	53				
OB 26-76 quote Type "LA" 1 x 4 LED Pendant Mounted Fixture 41 EA 1.50 61.50 \$69.60 \$ 4,280 \$0.00 \$ - \$ 400.00 \$ - \$ \$ OB 26-77 quote Type "EX" LED Exit With Ni-Cad Battery 4 EA 1.50 6.00 \$ 69.60 \$ 418 \$0.00 \$ - \$ 440.00 \$ 1,760 \$ 0.00 \$ - \$	144 \$				\$								1				
	3,127 \$ 23																
	327 \$ 2																
OB 26-79 quote Type "EL" 2-rreate Datery rate 9 EA 2.00 10.00 \$00.00 \$ - \$440.00 \$ 4.107 \$00.00 \$ - \$ OB 26-79 quote Type "EL" relation Wallack LED Fixture 5 EA 2.00 10.00 \$00.00 \$ - \$4403.00 \$ 2.465 \$00.00 \$ - \$493.00 \$ 2.465 \$00.00 \$ - \$ \$400.00 \$ - \$	813 \$ 6 474 \$ 3												0				
OB 26-76 quote Type Exterior Wall Mounted Flood Light w/ Photocell 2 EA 2.00 \$60.00 \$ 348 \$0.00 \$ - \$472.00 \$ 944 \$0.00 \$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	194 \$,			
OB 26-81 20A, 3-Way Toggle Switch, Replace With New / Reuse Wiring 19 EA 0.60 11.40 \$69.60 793 \$0.00 \$ \$ \$665 \$0.00 \$ \$	219 \$	\$-	\$0.00	\$35.00 \$ 665		\$-	\$0.00 \$	793	\$69.60 \$	11.40	0.60	EA		20A, 3-Way Toggle Switch, Replace With New / Reuse Wiring	6-81	B 26-8	OB
OB 26-82 New Lighting Conduit and Wiring 30 LF 0.16 4.80 \$69.60 \$ 334 \$0.00 \$ - \$ \$7.00 \$ 210 \$0.00 \$ - \$ OB 26-82 New Lighting Conduit and Wiring 30 LF 0.16 4.80 \$69.60 \$ 334 \$0.00 \$ - \$ \$ 0.00 \$ - \$ \$ \$ 0.00 \$ - \$ \$ \$ \$ 0.00 \$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	82 \$																
OB 26-83 20A, 120V Receptacle, Replace With New / Reuse Wiring 17 EA 0.50 8.50 \$69.60 \$592 \$0.00 \$ - \$\$0.00 \$ - \$\$ \$\$0.00 \$ - \$\$ OB 26-84 30A Twist Lock Receptacle, Nema 4 Stainless Steel, WP 1 EA 2.00 \$69.60 \$ 139 \$0.00 \$ - \$\$ \$0.00 \$ - \$\$	203 \$ 58 \$												1/				
OB 26-85 Instrument and Control Wiring 0.0 \$69.60 - \$0.00 \$ - \$0.00 \$ - \$0.00 \$ - \$0.00 \$ - \$	- \$	\$ -	\$0.00		, a						2.00	X	1				
OB 26-86 Instrument Hook-up; 12 EA 2.00 24.0 \$69.60 \$ 1,670 \$0.00 \$ - \$ 45.00 \$ 540 \$ 0.00 \$ - \$	332 \$ 2	\$ -	\$0.00					1,670	\$69.60 \$	24.0				Instrument Hook-up;	6-86	B 26-86	OB
OB 26-87 Extend Raceway From Existing PLC Location to New PLC 80 LF 0.20 16.00 \$69.60 1.114 \$0.00 \$ 400 \$0.00 \$ \$ 00 00 00 00 00 00 00 00 \$ 00 \$ 00 \$ 00 \$ 00 \$ 00 \$ \$ 00 \$ \$ \$ 00 \$ \$ \$ 00 \$ \$ \$ 00 \$ \$ \$ \$ 00 \$<	227 \$																
OB 26-88 Replace Wiring to Network Switch in Control Bldg (to New PLC) 1 LS 24.00 \$69.60 \$ 1,670 \$0.00 \$ - \$ \$500 \$ \$0.00 \$ - \$ \$ OB 26-89 Network Wiring From PLC to New MCC-OB 1 LS 24.00 \$69.60 \$ 1,670 \$0.00 \$ - \$ \$500 \$ \$0.00 \$ - \$ \$	326 \$ 2 326 \$ 2												1				
OB 26-89 INetwork Wiring From PLC to New MCC-OB 1 LS 24.00 \$69.60 \$1,670 \$0.00 \$ - \$500 \$0.00 \$ - \$ OB 26-90 Network Wiring From Generator Control Panel to New MCC-OB 1 LS 24.00 \$69.60 \$ 1,670 \$0.00 \$ - \$ 500 \$0.00 \$ - \$	326 \$ 2												1				
OB 26-50 return wing From PLC to VCP Vendor Control and Contrel and Control and Contrel and Control and Contrel and C	788 \$ 6												-				
OB 26-92 120V Feed to Local Instruments 1 EA 20.00 \$69.60 \$ 1,392 \$0.00 \$ 400 \$0.00 \$ - \$	269 \$												1				

	WORK BRE		и — п		n	1	LABO			CONSTRUC	CTION EQUIP.	MA	TERIALS	ENCINEEDE	D EQUIPMENT	OH & P	n
-	_						Total						-				70741 0007
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
OB			Operations Building														
OB	26-93		120V Feed to Blower Skid	4	EA	16.00	64.00	\$69.60	\$ 4,454	\$0.00		\$300.00		\$0.00		\$ 848	
OB	26-94		I/O MCC to Blowers	12	EA	6.00	72.00	\$69.60	\$ 5,011	\$0.00		\$300.00		\$0.00		\$ 1,292	\$ 9,903
OB OB	26-95 26-96		I/O MCC to PLC I/O MCC to VCP	8	EA EA	4.00 4.00	32.00 24.00	\$69.60 \$69.60	\$ 2,227 \$ 1,670	\$0.00 \$0.00		\$100.00 \$100.00		\$0.00 \$0.00		\$ 454 \$ 341	\$ 3,481 \$ 2,611
OB	26-97		I/O VFD to Blower	6	EA	2.00	12.00	\$69.60	\$ 835	\$0.00		\$100.00		\$0.00		\$ 341 \$ 170	
OB	26-98		I/O Local Instruments to PLC	6	EA	8.00	48.00	\$69.60	\$ 3,341	\$0.00		\$200.00		\$0.00		\$ 681	\$ 5,222
OB	26-99		I/O Valves to VCP Vendor Control Panel	10	EA	4.00	40.00	\$69.60	\$ 2,784	\$0.00		\$100.00		\$0.00		\$ 568	\$ 4,352
OB	26-100		Instrument Hook-up;	4	EA	2.00	8.00	\$69.60	\$ 557	\$0.00		\$45.00		\$0.00		\$ 111	\$ 847
OB OB	26-101 26-102		Fill Station I/O Fill Station 120V Feed	7	EA EA	8.00 12.00	56.00 36.00	\$69.60 \$69.60	\$ 3,898 \$ 2,506	\$0.00 \$0.00		\$300.00 \$500.00		\$0.00 \$0.00		\$ 900 \$ 601	\$ 6,897 \$ 4,606
OB	26-102		FIL Station 1200 Feed FECL Storage Tank I/O	17	EA	12.00	170.00	\$69.60	\$ 2,506 \$ 11.832	\$0.00 \$0.00		\$300.00		\$0.00		\$ 2,540	\$ 4,000 \$ 19,472
OB	23-104		FECL Storage Tank 120V Feed	4	EA	20.00	80.00	\$69.60	\$ 5.568	\$0.00		\$400.00		\$0.00		\$ 1,075	\$ 8.243
	27		Division 27 - Communications														\$ -
	27-1		No Work Included				0.00	\$69.60	\$-	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ -	\$ -
	28		Division 28 - Electronic Safety & Security														\$ 25,876
	28-1		New Fire Alarm System				0.00	\$69.60	\$-	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ -	\$ -
OB	28-2		Fire Alarm Panel	1	EA	16.00	16.00	\$69.60	\$ 1,114	\$0.00		\$5,000.00		\$0.00		\$ 917	
OB	28-3		Smoke Detector	2	EA	1.50	3.00	\$69.60	\$ 209	\$0.00		\$225.00		\$0.00		\$ 99	
OB OB	28-5 28-6		Weatherproof Horn Fire Alarm Conduit and Wiring	1 570	EA LF	2.00 0.15	2.00 85.50	\$69.60 \$69.60	\$ 139 \$ 5.951	\$0.00 \$0.00		\$260.00 \$8.00		\$0.00 \$0.00		\$ 60 \$ 1.577	
OB	28-7		Fire Alarm Panel 120V Power Wiring to Existing Panel LP	50	LF	0.15	8.00	\$69.60	\$ 557	\$0.00		\$4.25		\$0.00		\$ 1,577 \$ 115	
OB	28-8		Testing	1	LS	16.00	16.0	\$69.60	\$ 1,114	\$0.00	\$-	\$2,000.00		\$0.00	\$ -	\$ 467	\$ 3,581
OB	28-9		Security System				0.0	\$69.60	\$ -	\$0.00		\$0.00		\$0.00		\$ -	\$ -
OB	28-10		Rework Wiring to Existing Door Strikes	4	EA	3.00	12.0	\$69.60	\$ 835	\$0.00	\$-	\$25.00	\$ 100	\$0.00	\$-	\$ 140	\$ 1,075
	33		Division 33 - Utilities														\$ -
OB	33-1		C.E.I. to Provide Transformer, New Pole, 15kv Wiring	0	ALLOW		0.0	\$69.60	\$-	\$0.00		\$50,000.00	\$ -	\$0.00		\$ -	\$ -
OB	33-2		1-1/2" CU - NPW	0	LF		0.0	\$0.00	\$-	\$0.00	\$-	\$36.50	\$-	\$0.00	\$-	\$-	\$ -
	40		Division 40 - Process Integration														\$ 35,935
OB	40-1		Install PLC-OB Panel Blower Building	0	LS	120.00	0.0	\$69.60	\$ -	\$500.00		\$0.00		\$70,000.00		\$ -	\$ -
OB	40-2		Differential Pressure Switch	1	EA	5.00	5.0	\$72.76	\$ 364	\$0.00		\$0.00		\$650.00			\$ 1,166
OB OB	40-3 40-4		FE/FIT Flow Transmitter PE/PIT Pressure Transmitter	1	EA EA	10.00 10.00	10.0 10.0	\$72.76 \$72.76	\$ 728 \$ 728	\$0.00 \$0.00		\$0.00 \$0.00		\$3,500.00 \$2,800.00		\$ 634 \$ 529	
OB	40-5		TE/TIT Temperature Transmitter	1	EA	8.00	8.0	\$72.76	\$ 582	\$0.00		\$0.00		\$1,700.00		\$ 342	
OB	40-6		Pressure Gauge	2	EA	4.00	8.0	\$72.76	\$ 582	\$0.00		\$0.00	\$ -	\$350.00		\$ 192	\$ 1,474
OB	40-7		Temperature Gauge	2	EA	4.00	8.0	\$72.76		\$0.00		\$0.00		\$350.00			
OB	40-8 40-9		FECL Fill Station LCP Local Control Panel LSH Level Switch	1	EA EA	16.00 5.00	16.0 5.0	\$69.60 \$72.76	\$ 1,114	\$0.00 \$0.00		\$200.00 \$0.00		\$7,500.00			
OB OB	40-9		FSH Flow Switch	1	EA	5.00	5.0	\$72.76	\$ <u>364</u> \$364	\$0.00		\$0.00		\$350.00 \$550.00			
OB	40-11		LE/LIT Level Transmitter	1	EA	10.00	10.0	\$72.76	\$ 728	\$0.00		\$0.00		\$4,200.00		\$ 739	
OB	40-12		Tank Level Gauge	1	EA	16.00	16.0	\$72.76	\$ 1,164	\$0.00	\$-	\$350.00	\$ 350	\$750.00	\$ 750	\$ 340	\$ 2,604
	43		Division 43 - Process Gas and Liquid Handling														\$ 261,930
OB	43-1	DD-0B-101 & 301	Flush Ferrous Tank & piping prior to demo (assume owner will drain tank	1	ALLOW	16.00	16.0	\$67.71	\$ 1,083	\$750.00	\$ 750.00	\$500.00	\$ 500	\$0.00	\$ -	\$ 350	\$ 2,683
			& system to minimal level)														
OB	43-2	DD-0B-101 & 301	Remove & Demo Ferrous Chloride Storage tank, piping, valves & controls	1	LS	96.00	96.0	\$67.71	\$ 6,500	\$500.00	\$ 500.00	\$0.00	\$-	\$0.00	\$-	\$ 1,050	\$ 8,050
OB	43-3	(Note A) DD-0B-101	associated with Tank in Pit Area Remove & Demo chloride feed pumps and piping & controls associated	1	LS	16.00	16.0	\$67.71	\$ 1,083	\$0.00	¢	\$0.00	¢	\$0.00	¢	\$ 163	\$ 1,246
ОВ	43-3	(Note B)	with chemical treatment pump in Pit Area	I	LS	16.00	16.0	\$07.71	\$ 1,003	\$0.00	ф -	\$0.00	ф -	\$0.00	ф -	р 103	φ 1,240
OB	43-4	DD-0B-101	Remove (5) Exterior Intake Air filter / Silencer	5	EA	8.00	40.0	\$67.71	\$ 2,708	\$1,000.00	\$ 5,000.00	\$0.00	\$-	\$0.00	\$ -	\$ 1,156	\$ 8,865
		(Note D &E)										-					
OB	43-5	DD-0B-101 & 301	Disconnect, Remove & Demolish Aerobic Digester Blower for removal	3	EA	32.00	96.0	\$67.71	\$ 6,500	\$500.00	\$ 1,500.00	\$0.00	\$-	\$0.00	\$-	\$ 1,200	\$ 9,200
		(Note D &E)	from building														
OB	43-6	DD-0B-101 & 301	Disconnect, Remove with limited demo Aeration Tank Blower for removal	2	EA	26.00	52.0	\$67.71	\$ 3,521	\$500.00	\$ 1,000.00	\$0.00	\$ -	\$0.00	\$ -	\$ 678	\$ 5,199
	40.7	(Note D &E)	from building		1.0	0.00		007.74	<u>^</u>	AA AA	•	<u> </u>	^	* 0.00	•	A 1 105	A 11 000
OB	43-7	DD-0B-101 (Note F)	Remove existing process air piping 8" - 16" as indicated on drawings	1	LS	0.00	0.0	\$67.71	\$-	\$0.00	\$ -	\$9,897.00	\$ 9,897	\$0.00	ъ -	\$ 1,485	\$ 11,382
OB	43-8	DD-0B-101	Remove existing 3/4" PVC-FECL and Cap at wall + PVC at wall up to	1	LS	6.00	6.0	\$67.71	\$ 406	\$0.00	¢ _	\$250.00	\$ 250	\$0.00	\$	\$ 98	\$ 755
56	+3-0	(Note G & I)	above roof at original loading fill pit. Photo 3	1	10	0.00	0.0	φ07.71	Ψ 400	φ 0.00	÷ -	φ200.00	φ 250	φ0.00	÷ -	Ψ 90	¢ 155
OB	43-9	D-0B-101	16" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports +	87	LF	1.513	131.6	\$67.71	\$ 8,912.74	\$3.57	\$ 311	\$292.00	\$ 25,404	\$0.00	\$-	\$ 5,194	\$ 39,821
OB	43-10	D-0B-101	14" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports +	12	LF	1.328	15.9	\$67.71	\$ 1,079.03	\$3.12	\$ 37	\$250.00	\$ 3,000	\$0.00	\$-	\$ 617	\$ 4,734
OB	43-11	D-0B-101	10" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports +	39	LF	0.960	37.4		\$ 2,535.06	\$1.70				\$0.00		\$ 1,408	
OB	43-12	D-0B-101	8" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports +	158	LF	0.727	114.9		\$ 7,777.58	\$1.70		\$126.00		\$0.00		\$ 4,193	
OB OB	43-13 43-14	DD-AT-101 D-0B-101	4" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports + Stainless Steel Fittings: Elbows, Tee's, reducers & added flanges for	20	LF ALLOW	0.381 0.000	7.6 0.0	\$67.71 \$67.71		\$1.34 \$0.00		\$62.00 \$49,135.00		\$0.00 \$0.00		\$ 267 \$ 7,370	
55		2 02 101	stainless steel piping in blower building (4"- 16" piping)	'		0.000	5.0	<i>\\\\</i>	•	\$0.00	•	φ.0,100.00	+ +0,100	φ0.00	*	÷ ,,,,,,	
OB	43-15	D-0B-101	8" blind flange at existing steel piping	1	EA	2.000	2.0	\$67.71	\$ 135.42	\$0.00	\$ -	\$515.00	\$ 515	\$0.00	\$ -	\$ 98	\$ 748
			· · · · · · · · · · · · · · · · ·														

Facility	DIV-ITEM					LABOR				CONSTRUCTION EQUIP.		MATERIALS		ENGINEERED EQUIPMENT		OH & P	
0.5	DIV-II EM	Notes	Description	Quantity	Units	MH/Unit	Total Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
OB			Operations Building														
OB	43-16	D-0B-101	8" Mechanical Coupling	2	EA	1.263	2.5		\$ 171.04	\$0.00		\$445.00		\$0.00	<u> </u>	\$ 159	
OB OB	43-17 43-18	changed to 16" D-0B-101	14" Mechanical Coupling 16" Mechanical Coupling	0	EA EA	2.500	0.0	\$67.71 \$67.71		\$0.00 \$0.00	\$- ¢	\$870.00 \$1.015.00		\$0.00 \$0.00	<u>\$</u> -	\$- \$548	\$ - \$ 4.203
OB	43-18	D-0B-101 & Valve	8" Butterfly valve, flanged, Manual Operation (Blowers 1 thru 4)	4	EA	5.333	21.3	\$67.71		\$0.00	φ - \$	\$1,500.00		\$0.00	 \$ -	\$ 546 \$ 744	
		Schedule 40 05 64-6													•		
OB	43-20		8" Butterfly valve, flanged, Manual Operation (Chain wheel) (Digester Blowers 1 & 2)	2	EA	5.333	10.7	\$67.71	\$ 722	\$0.00	\$-	\$1,800.00	\$ 3,600	\$0.00	\$-	\$ 432	\$ 4,754
OB	43-21	D-0B-101	8" Pipe Mechanical wall seal for air piping	2	EA	2.222	4.4	\$67.71	\$ 301	\$0.00	\$-	\$370.00	\$ 740	\$0.00	\$ -	\$ 104	\$ 1,145
OB	43-22	changed to 16"	14" Pipe Mechanical wall seal for air piping	0	EA	3.077	0.0	\$67.71	\$ -	\$0.00	\$ -	\$745.00	\$ -	\$0.00	\$ -	\$ -	\$ -
OB	43-23	D-0B-101	16" Pipe Mechanical wall seal for air piping	3	EA	4.000	12.0	\$67.71	\$ 813	\$0.00		\$1,125.00	\$ 3,375	\$0.00	\$-	\$ 419	
OB	43-24	D-0B-101	4" Pipe Mechanical wall seal for air piping	1	EA	1.667	1.7	\$67.71	\$ 113	\$0.00		\$138.00		\$0.00	\$-	\$ 25	
OB	43-25	D-0B-101, 302 & I-OB-601	8" Check Valve, Twin Disc, flanged, (CV-1 thru 4) for blowers	4	EA	5.333	21.3	\$67.71	\$ 1,444	\$0.00	\$-	\$1,600.00	\$ 6,400	\$0.00	\$-	\$ 784	\$ 8,629
OB	43-26	D-OB-101	3" sch 80 PVC Ferrous Chloride piping in 6" containment piping	90	LF	0.58	52.3	\$67.71	\$ 3,541	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ 354	\$ 3,895
OB	43-27		Misc. Fittings for PVC piping from existing reused Fill Station through	0	ALLOW	18.302	0.0	\$67.71	\$-	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$-	\$-
OB	43-28	building D-OB-101	blower building 6" Pipe Mechanical wall seal for Ferrous Chloride piping containment pipe	1	EA	2.000	2.0	\$67.71	\$ 135	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$ 14	\$ 149
OB	43-29	D-OB-101	Core drill wall for 6" Ferrous Chloride containment piping to tank on site	1	EA	2.169	2.2	\$67.71		\$0.00		\$0.00		\$0.00	\$ -	\$ 15	
OB	43-30	D-OB-302	Cap / Blind flange existing 3" PVC piping at old fill station (Concrete grout and cover by others)	1	ALLOW	0.000	0.0	\$67.71	\$-	\$0.00	\$-	\$1,100.00	\$ 1,100	\$0.00	\$-	\$ 110	\$ 1,210
OB	43-31	D-0B-101 & 302 + Valve Schedule 40 05 57.73-9	8" Butterfly valve, flanged, Electric Operated (Aeration Blowers 3 & 4)	2	EA	7.333	14.7	\$67.71	\$ 993	\$0.00	\$-	\$6,500.00	\$ 13,000	\$0.00	\$-	\$ 1,399	\$ 15,392
OB	43-32		4" Butterfly valve, flanged, Electric Operated (Aeration Blowers 3 & 4)	2	EA	5.200	10.4	\$67.71	\$ 704	\$0.00	\$-	\$5,700.00	\$ 11,400	\$0.00	\$ -	\$ 1,816	\$ 13,920
			· · · · · · · · · · · · · · · · · · ·														
	46		Division 46 - Water and Wastewater Equipment				-										\$ 294,071
OB	46-1	D-OB-102	OB-A-BL-3 & 4 Multistage Centrifugal Aeration Tank Blower including	2	SKID	80.00	160.0	\$67.71	\$ 10,834	\$500.00	\$ 1,000.00	\$1,000.00	\$ 2,000	\$55,000.00	\$ 110,000	\$ 18,575	
			intake & outlet silencers, check valve & Starter, 150 HP (BOD: Lone Star Blower)														
		Environmental 8/13/19															
OB	46-2	D-OB-102 SPEC: 43 11 33	OB-CA-BL-1 & 2 Rotary Positive Displacement Aerobic Digester Blower Skid Package including intake & outlet silencers, check valve VFD and sound enclosure, 60 HP (BOD: Aerzen)	2	SKID	80.00	160.0	\$67.71	\$ 10,834	\$500.00	\$ 1,000.00	\$1,000.00	\$ 2,000	\$52,000.00	\$ 104,000	\$ 17,675	\$ 135,509
		Aerzen Givi-Sol 6/15/19	sound enclosure, of HF (BOD. Aeizen)														
OB	46-3	D-OB-102	Intake & discharge silencer filters for blowers	4	EA	4.00	16.0	\$67.71	\$ 1,083	\$0.00	\$-	\$300.00	\$ 1,200	\$2,000.00	\$ 8,000	\$ 1,543	\$ 11,826
OB	46-4	Solberg 8/13/19	Testing, Training, Start-Up	1	LS				\$325.01		\$30.00		\$78.00		\$3,330.00	\$ 564.45	\$ 4,327.46
			General Conditions														\$ 199,805
			Percentage for all general conditions items including but not limited	10	%		908.8	\$50.00	\$ 45.442	\$0.00	\$ 2.339	\$0.00	\$ 61.887	\$0.00	\$ 71.973	\$ 18.164	
			Contractor supervision	10	/0		500.0	φ50.00	ψ 40,442	φ 0.00 ;	φ 2,339	φ 0.0 0	ψ 01,007	φυ.υυ	φ /1,9/3	ψ 10,104	φ 199,605
			Temporary facilities for trailers							1							
			Computer systems and job support items														
			Project cleanup, dumpsters, etc.														
			Temporary toilets														
			Hauling Project safety systems and items														
			, , , ,														
			Sub-Totals				8,251		518,958		30,908		680,758		791,703	277,904	\$ 2,300,000

Aeration Tanks Construction Cost Breakdown

	ESTIMATE SUMMARY BY CSI DIVIS	ION	
CSI NO.	DESCRIPTION		AMOUNT
1	GENERAL REQUIREMENTS	\$	60,924
2	EXISTING CONDITIONS		-
3	CONCRETE	\$ \$ \$ \$	4,661
4	MASONRY	\$	-
5	METALS	\$	181,649
6	WOOD, PLASTIC & COMPOSITE	\$	-
7	THERMAL AND MOISTURE PROTECTION	\$	-
8	OPENINGS	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-
9	FINISHES	\$	-
10	SPECIALTIES	\$	-
11	EQUIPMENT	\$	-
12	FURNISHINGS	\$	-
13	SPECIAL CONSTRUCTION	\$	-
14	CONVEYING SYSTEMS	\$	-
21	FIRE SUPPRESSION	\$	-
22	PLUMBING SYSTEMS	\$	-
23	HVAC SYSTEMS	\$	-
26	ELECTRICAL	\$	36,568
27	COMMUNICATIONS	\$	-
28	ELECTRONIC SAFETY & SECURITY	\$	-
31	EARTHWORK	\$ \$	7,150
32	EXTERIOR IMPROVEMENTS	\$	40,048
33	UTILITIES	\$	550
40	PROCESS INTEGRATION	\$	-
43	PROCESS GAS AND LIQUID HANDLING	\$	298,691
46	WATER AND WASTEWATER EQUIPMENT	\$	57,750
	TOTAL	\$	687,991
	ROUNDED	\$	688,000

	BID ITEMS					
ITEM NO.	DESCRIPTION		AMOUN [.]			
1	General Trades	\$	627,066			
2		\$				
3		\$				
4		\$				
5		\$				
6		\$				
7		\$				
8	General Conditions	\$	60,92			
9		\$				
10		\$				
11		\$				
12		\$				
13		\$				
	TOTAL	\$	687,99			
	ROUNDED	\$	688,00			

												MEP & F		ades except MEP & Process OH8 23, 26, 27, 28, 40, 41, 43, 46) OH8	P 15%	
		EAKDOWN	-				Total	BOR			RUCTION EQUIP.		ERIALS	ENGINEERED EQUIPMENT	OH & P	
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Manhours	Labor Rate Labo	or Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$ Cost	See % Above	TOTAL COST
AT			Aeration Tanks													¢ 1.240
AT	2 2-1	S-AT-101	Division 2 - Site Work and Demolition Sawcut & Demo Existing 5" Concrete SOG	227	SF		0.00	\$0.00	-	\$0	\$ -	\$5.00	\$ 1,135	\$0.00 \$ -	\$ 114	\$ 1,249 \$ 1,249
			Division 0. Ocumento													.
	3		Division 3 - Concrete Existing Aeration Tanks													\$ 4,661
AT	3-1		/ Control Joint Sealant Replacement	400	LF	0.1	40.0	\$55.93 \$	2,237		\$ -	\$5.00	\$ 2,000	\$0.00 \$	- \$ 424	\$ 4,661
		Table														
					-											
	5		Division 5 - Metals													\$ 181,649
AT	5-1	S-AT-101, -501	Pipe Supports: HSS 6x6x3/8" Columns & Beams, including Base Plates w/ (4) 1/2" Dia. Anchors drill & epoxy w/ 6" Embeds into existing concrete "Y" Walls	13.00	TONS	84.00	1091.84	\$62.63 \$	68,382	\$680.00	\$ 8,839	\$3,445.00	\$ 44,778	\$0.00 \$	- \$ 12,200	\$ 134,198
AT	5-2	S-AT-101, -501	Drilling & Epoxy Grout 1/2" Dia. Anchors w/ 6" Embeds into existing	196	EA	0.94	185.02	\$62.63 \$	11,588	\$0.00	\$-	\$5.39	\$ 1,056	\$0.00 \$	- \$ 2,529	\$ 15,173
AT	5-3	S-AT-101, -501	concrete "Y" Walls: 35 Columns @ 4 anchors each Cut / Modify / Relocate existing guard rails at new Columns	49	EA	4.00	196.00	\$62.21 \$	12,193	\$0.00	\$	\$350.00	\$ 17,150	\$0.00 \$ -	\$ 2,934	\$ 32,277
					-											
	6		Division 6 - Wood, Plastic & Composite													¢
	0		Division 6 - Wood, Plastic & Composite				0.00	\$0.00	-	\$0.00		\$0.00		\$0.00 \$ -	\$ -	\$ -
							0.00	\$0.00	-	\$0.00	\$ -	\$0.00	\$-	\$0.00 \$ -	\$-	\$ -
	22		Division 22 - Plumbing Systems								•				-	\$ -
							0.00	\$0.00 \$	-	\$0.00	\$ -	\$0.00	- 5	\$0.00 \$ -	\$ -	\$-
	26		Division 26 - Electrical Systems													\$ 36,568
AT	26-1		Ductbank Civil Work From Blower Bldg. to FECL Storage Tank	140	LF		0.00	\$69.60 \$	-	\$0.00		\$35.00		\$0.00 \$ -	φ 100	\$ 5,635
AT AT	26-2 26-3	E-AT-101	Conduit Penetrations Through Blower Building Wall 20A, 120V GFI WP Receptacle at Walkway - Mtd on Strut	1 6	LS EA	2.50	0.00 15.00	\$69.60 \$ \$69.60 \$	- 1,044	\$0.00 \$0.00		\$2,500.00 \$250.00		\$0.00 \$ - \$0.00 \$ -	¢ 0.0	
AT	26-4	E-AT-101	Receptacle Wiring in PVC Coat RGS Conduit	380	LF	0.21	79.80	\$69.60 \$	5,554	\$0.00	\$-	\$14.29	\$ 5,430	\$0.00 \$ -	\$ 1,648	\$ 12,632
AT AT	26-5 26-6		Instrument and Control Wiring				0.00	\$69.60 \$ \$69.60 \$	-	\$0.00 \$0.00		\$0.00 \$0.00		\$0.00 \$ - \$0.00 \$	- \$ -	\$- \$-
AT	26-7	S-AT-101, -501	Move / Modify / Reattach existing Electrical at new Columns	21	EA	6.00	126.00	\$69.60 \$	8,770	\$0.00	\$ -	\$100.00	\$ 2,100	\$0.00 \$ -	\$ 1,630	\$ 12,500
	27		Division 27 - Communications													\$-
			No Work Included				0.00	\$0.00 \$	-	\$0.00	\$ -	\$11.00	\$-	\$0.00 \$ -	\$-	\$ -
															_	
	28		Division 28 - Electronic Safety & Security													\$-
			No Work Included				0.00	\$0.00	-	\$0.00	\$ -	\$0.00	\$-	\$0.00 \$ -	\$-	\$ -
AT	31 31-1	C-00-101, S-AT-102	Division 31 - Earthwork SWPP Erosion Control; Inlet Protection, Silt Fence, etc.	1	ALLOW		0.00	\$61.23 \$		\$0.00	¢	\$1,500.00	\$ 1,500	\$0.00 \$ -	\$ 150	\$ 7,150 \$ 1,650
AT	31-2	C-00-101, S-AT-102	Site Restoration Allowance	1	ALLOW		0.00	\$61.23 \$	-	\$0.00		\$5,000.00		\$0.00 \$ -	\$ 500	
	32		Division 32 - Exterior Improvements													\$ 38,799
AT	32-1	S-AT-101	5" Concrete SOG w/ #3 @ 8" OC EW	227	SF	0.13	28.38	\$55.93 \$	1,587	\$0.20		\$4.66		\$0.00 \$ -	\$ 269	\$ 2,958
AT AT	32-2 32-3	C-00-101 C-00-101	SD Asphalt Pavement: 8" Asphalt over 8" Aggregate Base Existing Pavement Patching Allowance	440	SY ALLOW	0.13	56.00 0.00	\$61.23 \$ \$55.93 \$	3,429	\$5.11 \$0.00		\$49.84 \$5,000.00		\$0.00 \$ - \$0.00 \$ -	\$ 2,758 \$ 500	
											·					
AT	33 33-1	C-00-101	Division 33 - Utilities Adjust Casting to Finish Grade	1	LS		0.0	\$0.00	_	\$0.00	\$	\$500.00	\$ 500	\$0.00 \$ -	\$ 50	\$ 550 \$ 550
		5 00 101					0.0	\$0.00	-	\$0.00		\$0.00		\$0.00 \$ -	\$ -	\$ -
	40		Division 40 - Process Integration No Work Included				0.0	¢		\$0.00	\$	\$0.00	\$	\$0.00 \$ 	\$	\$ - \$-
							0.0	\$	-	\$0.00		\$0.00		\$0.00 \$ -		\$- \$-
	40		Division 43 - Process Gas and Liquid Handling													\$ 298,691
AT	43 43-1	DD-AT-101	Remove existing process air piping 4" - 16" as indicated on drawings at	1	LS	0.00	0.0	\$67.71 \$	_	\$0.00	\$	\$10,649.76	\$ 10,650	\$0.00 \$ -	\$ 1,597	\$ 12,247

	WORK B	REAKDOWN					LA	BOR		CONSTR	UCTION EQUIP.	MATE	RIALS	ENGINEERED	EQUIPMENT	OH & P	
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Total Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
AT			Aeration Tanks														
AT	43-2	DD-AT-101	16" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports + welded	42	LF	1.513	63.5	\$67.71	\$ 4,302.70	\$3.57	\$ 150	\$292.00	\$ 12,264	\$0.00	\$-	\$ 2,507	\$ 19,224
AT	43-3	DD-AT-101	12" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports +	280	LF	1.143	320.0	\$67.71		\$2.67		\$208.00		\$0.00		\$ 12,099	
AT AT	43-4 43-5	DD-AT-101 DD-AT-101	6" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports + 4" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports +	58 132	LF LF	0.600	34.8 50.3	\$67.71 \$67.71		\$1.40 \$1.34		\$85.50 \$62.00		\$0.00 \$0.00		\$ 1,109 \$ 1,765	
AT	43-5	DD-AT-101 DD-AT-101	2" Stainless Steel Piping Sch 10, Type 316 w/Hangers & Supports +	40		0.239	9.6	\$67.71		\$1.34		\$02.00		\$0.00		\$ 1,705	
AT	43-7	D-AT-101	Stainless Steel Fittings: Elbows, reducers, couplings & added flanges for stainless steel piping in Aeration Tank area	1	ALLOW	0.000	0.0	\$67.71		\$0.00		\$75,990.25		\$0.00		\$ 11,399	
AT	43-8	D-AT-101 & Valve Schedule 40 05 64-6	12" Butterfly valve, flanged, Manual Operation (Chain wheel)	2	EA	8.000	16.0	\$67.71		\$53.50		\$2,600.00		\$0.00		\$ 959	
AT	43-9	D-AT-301 & Valve Schedule 40 05 64-6	6" Butterfly valve, flanged, Manual Operation	3	EA	4.800	14.4	\$67.71		\$0.00		\$1,100.00		\$0.00		\$ 641	
AT	43-10	D-AT-301 & Valve Schedule 40 05 64-6	4" Butterfly valve, flanged, Manual Operation	6	EA	3.200	19.2	\$67.71		\$0.00		\$700.00		\$0.00		\$ 825	
AT	43-11	D-AT-301	2" Ball Drain valve, Manual Operation	2	EA	0.889	1.8	\$67.71		\$0.00		\$245.00		\$0.00		\$ 91.56	
AT AT	43-12 43-13	D-AT-301 D-AT-301	6" Mechanical Coupling for connection to Aeration Tank diffusers 4" Mechanical Coupling for connection to Aeration Tank diffusers	3	EA EA	1.000 0.727	3.0 2.9	\$67.71 \$67.71		\$0.00 \$0.00		\$253.00 \$146.00		\$0.00 \$0.00		\$ 144 \$ 117	
AT	43-13	3" pipe is in the	3" sch 80 PVC Ferrous Chloride piping in 6" containment piping.	4	LF	0.58	0.0	\$67.71		\$0.00		\$146.00		\$0.00			\$ <u>090</u> \$-
AT	43-15	containment area at FECL D-AT-102 & 302	(assume containment pipe not required) 3" sch 80 PVC Ferrous Chloride piping	30	LF	0.32	9.6	\$67.71	\$ 650	\$0.00	\$-	\$14.60	\$ 438	\$0.00	\$-	\$ 163	\$ 1,251
AT	43-16	D-AT-302	2" sch 80 PVC Drain piping (Below grade) (assume required to drain sump)	32	LF	0.29	9.3	\$67.71	\$ 631	\$6.25	\$ 200	\$11.25	\$ 360	\$0.00	\$-	\$ 179	\$ 1,369
AT	43-17	D-AT-101 & 102	1" sch 80 PVC Ferrous Chloride piping in 3" containment piping	215	LF	0.41	88.8	\$67.71	\$ 6,012	\$0.00	\$ -	\$20.15	\$ 4,332	\$0.00	\$-	\$ 1,552	\$ 11,896
AT	43-18	D-AT-101 , 102 & D-PST-101	1" sch 80 PVC Ferrous Chloride piping	228	LF	0.19	42.4	\$67.71		\$0.00		\$9.25		\$0.00		\$ 747	
AT	43-19	D-AT-102 & 302	6" sch 80 PVC FECL overflow & vent piping	15	LF	0.42	6.3	\$67.71	\$ 428	\$0.00	\$ -	\$35.00	\$ 525	\$0.00	\$ -	\$ 143	\$ 1,095
AT	43-20	D-AT-102 & 302	2" sch 80 PVC Ferrous Chloride piping	10	LF	0.29	2.9	\$67.71	\$ 197	\$0.00	\$-	\$11.55	\$ 116	\$0.00	\$-	\$ 47	\$ 359
AT	43-21	D-AT-101 , 102 & D-PST-101	Misc. Fittings for PVC piping from outside of blower building to new tank location	1	ALLOW	54.751	54.8	\$67.71	\$ 3,707	\$0.00	\$-	\$ 2,717.49	\$ 2,717	\$0.00	\$-	\$ 964	\$ 7,388
AT	43-22	I-OB-601 + Valve Schedule 40 05 57.73-9	Electric Operated added to existing 24" slide gate at MLSS Channel. (Not on process mechanical plans)	1	ALLOW	16.000	16.0	\$67.71	\$ 1,083	\$0.00	\$-	\$10,000.00	\$ 10,000	\$0.00	\$-	\$ 1,108	\$ 12,192
	46		Division 46 - Water and Wastewater Equipment														\$ 57,750
AT	46-1	D-AT-102 & D-00-601	FECL-TNK-1 Ferric Chloride Storage FRP Tank 5,000 gallons	1	EA	40.0	40.0	\$67.71	\$ 2,708	\$1,500.00	\$ 1,500	\$0.00	\$-	\$23,000.00	\$ 23,000		
AT	46-2	D-AT-102	FECL-MP-1 & MP-2 Ferric Chloride Metering Feed Pump, (2) pump Skid Mounted	1	SKID	32.0	32.0	\$67.71	\$ 2,167	\$100.00	\$ 100	\$0.00	\$-	\$20,000.00	\$ 20,000	\$ 3,340	\$ 25,607
AT	46-3		Aeration Diffuser System (NO work included) Only connection to existing				0.00	\$0.00	\$-	\$0.00	\$-	\$0.00	\$ -	\$0.00	\$-	\$-	N.I.C.
AT	46-4		Testing, Training, Start-Up	1	LS				\$73.13		\$24.00		\$0.00		\$645.00	\$ 111.32	\$ 853.45
							-										
			Constrait Constituines														¢ 00.001
			General Conditions Percentage for all general conditions items including but not limited	10	0/		242.4	*FO O O	¢ 47.457	#0.00	¢ 4.405	#0.00	¢ 00.400	* 0.00	¢ 4.005	¢ 5.500	\$ 60,924
			Contractor supervision	10	%	L	343.1	\$50.00	\$ 17,157	\$0.00	\$ 1,425	\$0.00	\$ 32,439	\$0.00	\$ 4,365	\$ 5,539	\$ 60,924
			Temporary facilities for trailers														
			Computer systems and job support items														
\vdash			Project cleanup, dumpsters, etc.]												
			Temporary toilets		∦							├					
			Hauling Project safety systems and items														
			Sub-Totals				2,999		\$ 188,729		\$ 15,675		\$ 356,832		48,010	\$ 78,746	\$ 688,000
		1	Sub-1 Oldis		I		2,999		φ 100,729		φ 10,6/5		\$ 356,832		40,010	φ /0,/4b	φ 000,000

Filter Building Construction Cost Breakdown

ESTIMATE SUMMARY BY CSI DIVISION						
CSI NO.	DESCRIPTION		AMOUNT			
1	GENERAL REQUIREMENTS	\$	3,248			
2	EXISTING CONDITIONS	\$	-			
3	CONCRETE	\$ \$ \$ \$	-			
4	MASONRY	\$	-			
5	METALS	\$	-			
6	WOOD, PLASTIC & COMPOSITE	\$	-			
7	THERMAL AND MOISTURE PROTECTION	\$	-			
8	OPENINGS	\$	-			
9	FINISHES	\$ \$ \$ \$	-			
10	SPECIALTIES	\$	-			
11	EQUIPMENT	\$	-			
12	FURNISHINGS	\$	-			
13	SPECIAL CONSTRUCTION	\$	-			
14	CONVEYING SYSTEMS	\$ \$ \$	-			
21	FIRE SUPPRESSION	\$	-			
22	PLUMBING SYSTEMS	\$	29,054			
23	HVAC SYSTEMS	\$	-			
26	ELECTRICAL	\$	4,903			
27	COMMUNICATIONS	\$	-			
28	ELECTRONIC SAFETY & SECURITY	\$ \$ \$ \$	-			
31	EARTHWORK	\$	-			
32	EXTERIOR IMPROVEMENTS	\$	-			
33	UTILITIES	\$	-			
40	PROCESS INTEGRATION	\$	-			
43	PROCESS GAS AND LIQUID HANDLING	\$	-			
46	WATER AND WASTEWATER EQUIPMENT	\$	-			
	TOTAL	\$	37,205			
	ROUNDED	\$	37,000			

	BID ITEMS	
ITEM NO.	DESCRIPTION	AMOUN [.]
1	General Trades	\$ 33,956
2		\$
3		\$
4		\$
5		\$
6		\$
7		\$
8	General Conditions	\$ 3,24
9		\$
10		\$
11		\$
12		\$
13		\$
	TOTAL	\$ 37,20
	ROUNDED	\$ 37,00

-	all trades except MEP & Process OH&P 10% MEP & Process (DIV. 21, 22, 23, 26, 27, 28, 40, 41, 43, 46) OH&P 15%																
	WORK B	REAKDOWN						BOR		CONSTR	RUCTION EQUIP.	MAT	ERIALS	ENGINEERED	EQUIPMENT	OH & P	
Facility	DIV-ITEM	Notes	Description	Quantity	Units	MH/Unit	Total Manhours	Labor Rate	Labor Cost	Unit \$	Equipment Cost	Unit \$	Material Cost	Unit \$	Cost	See % Above	TOTAL COST
FB			Filter Building														
			i noi Dunanig														
	22		Division 22 - Plumbing Systems														\$ 29,054
FB	22-1	Not on Plans (Filter Bldg. Per BC 12/18/19)	ES-1 Emergency Eye Wash Shower, Indoor & alarm light package. (HAWS or Guardian 8330 and alarm light)	1	EA	4.00	4.00	\$67.67	\$ 271	\$0.00	\$ -	\$3,397.85	\$ 3,398	\$0.00	\$-	\$ 550	\$ 4,219
FB	22-2	Not on Plans (Filter Bldg. Per BC 12/18/19)	WH-1 Instantaneous Hot Water Heater, electric heater for emergency shower (HAWS model 9326) 54 KW, 480/3 phase	1	EA	12.000	12.0	\$67.67	\$ 812	\$0.00	\$ -	\$17,588.00	\$ 17,588	\$0.00	\$-	\$ 2,760	\$ 21,160
FB	22-3	Not on Plans (Filter Bldg. Per BC 12/18/19)	Piping & Plumbing connections to existing emergency water system in filter building	1	ALLOW	0.00	0.00	\$67.67	\$-	\$0.00	\$ -	\$2,000.00	\$ 2,000	\$0.00	\$-	\$ 300	\$ 2,300
FB	22-4	P-FB-101	Remove existing Emergency Shower, Tepid water storage tank and related piping and make safe in preparation of new work.	1	LS	17.300	17.30	\$67.67	\$ 1,171	\$0.00	\$-	\$25.00	\$ 25	\$0.00	\$-	\$ 179	\$ 1,375
	26		Division 26 - Electrical Systems														\$ 4,903
FB	26-1		Filter Building				0.00	\$69.60	\$-	\$0.00	\$-	\$0.00	\$-	\$0.00	\$-	\$-	
FB	26-2		70A Feeder to Safety Shower Electric Water heater	100	LF	0.28	28.20	\$69.60		\$0.00		\$10.22		\$0.00		\$ 448	
FB	26-3		100A Disconnect Switch, Safety Shower Heater	1	EA	4.00	4.00	\$69.60		\$0.00		\$1,000.00		\$0.00		\$ 192	
							0.0	\$69.60	\$ -	\$0.00	\$ -	\$45.00	\$ -	\$0.00	\$ -	\$ -	\$ -
							0.00	\$69.60	\$ -	\$0.00	\$ -	\$300.00	\$ -	\$0.00	\$ -	\$ -	\$ -
							0.00	\$69.60	\$ -	\$0.00	\$-	\$500.00	\$-	\$0.00	\$-	\$ -	\$-
								-									
			General Conditions														\$ 3,248
			Percentage for all general conditions items including but not limited	10	%		9.0	\$50.00	\$ 449	\$0.00	\$-	\$0.00	\$ 2,503	\$0.00	\$-	\$ 295	
			Contractor supervision						· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , , ,				,	· · · · · · · · · · · · · · · · · · ·		
			Temporary facilities for trailers														
			Computer systems and job support items														
			Project cleanup, dumpsters, etc.														
			Temporary toilets														
			Hauling														
			Project safety systems and items														
			Sub Tatala										¢ 07.500				¢ 07.000
			Sub-Totals				74		\$ 4,944		ک -		\$ 27,536		0	\$ 4,724	\$ 37,000

Northeast Ohio Regional Sewer District

Construction Type:									
	Davis-E	Bacon Pr	evailing R	ates, Cuyahoga (County, Ol	nio			
Labor Classification	Base Hourly Rate (BHR)	Fringes	Total Prevailing Wage Rate (PWR)	Effective Date of Wage	Taxes & Insurance (@ 25% of Base Rate)*	Total Labor Rate	Sub OH & P (@ 15%)	Total Labor Rate	W/C Rate Ohio
1 Asbestos Abatement	\$26.63	\$21.04	\$47.67	5/1/2019	\$6.66	\$54.33	By GC	\$54.33	
2 Asbestos Insulation Worker	\$37.68	\$21.95	\$59.63	8/1/2018	\$9.42	\$69.05	By GC	\$69.05	
3 Boilermaker	\$38.05	\$29.71	\$67.76	4/3/2019	\$9.51	\$77.27	By GC	\$77.27	14.8%
4 Bricklayer	\$34.85	\$17.47	\$52.32	5/1/2019	\$8.71	\$61.03	\$9.15	\$70.19	12.7%
5 Carpenter/Millwright	\$30.40	\$20.35	\$50.75	9/19/2018	\$7.60	\$58.35	By GC	\$58.35	14.8%
6 Cement Mason	\$31.10	\$17.05	\$48.15	5/1/2018	\$7.78	\$55.93	By GC	\$55.93	12.3%
7 Drywall Finisher	\$29.64	\$15.81	\$45.45	5/25/2018	\$7.41	\$52.86	By GC	\$52.86	
8 Electrician	\$39.13	\$20.69	\$59.82	5/1/2019	\$9.78	\$69.60	\$10.44	\$80.04	6.1%
9 Elevator Mechanic	\$44.04	\$27.60	\$71.64	5/30/2012	\$11.01	\$82.65	By GC	\$82.65	
10 Glazier	\$32.07	\$17.65	\$49.72	5/1/2019	\$8.02	\$57.74	By GC	\$57.74	
11 Ironworker	\$31.30	\$23.50	\$54.80	5/24/2017	\$7.83	\$62.63	\$9.39	\$72.02	29.2%
12 Laborer	\$26.63	\$21.04	\$47.67	5/1/2019	\$6.66	\$54.33	By GC	\$54.33	14.8%
13 Lineman	\$46.93	\$18.60	\$65.53	4/24/2019	\$11.73	\$77.26	By GC	\$77.26	
14 Operator, Heavy Equipment	\$38.63	\$15.20	\$53.83	5/1/2019	\$9.66	\$63.49	By GC	\$63.49	14.8%
15 Painter	\$28.36	\$16.55	\$44.91	5/1/2019	\$7.09	\$52.00	By GC	\$52.00	12.4%
16 Piledriver	\$30.71	\$20.04	\$50.75	9/19/2018	\$7.68	\$58.43	By GC	\$58.43	19.1%
17 Pipefitter	\$37.67	\$25.67	\$63.34	7/18/2018	\$9.42	\$72.76	By GC	\$72.76	7.0%
18 Plasterer	\$29.11	\$18.48	\$47.59	5/25/2018	\$7.28	\$54.87	By GC	\$54.87	
19 Plumber	\$35.78	\$25.58	\$61.36	5/25/2018	\$8.95	\$70.31	\$10.55	\$80.85	7.0%
20 Roofer	\$32.80	\$18.78	\$51.58	5/25/2018	\$8.20	\$59.78	By GC	\$59.78	
21 Sheet Metal Worker	\$37.53	\$25.45	\$62.98	5/7/2018	\$9.38	\$72.36	\$10.85	\$83.22	9.7%
22 Truck Driver	\$26.90	\$14.85	\$41.75	8/12/2015	\$6.73	\$48.48	By GC	\$48.48	14.8%

Labor Rates (OHIO Wage and Hour Division, May 2019 or as noted; Cuyahoga County)

*FICA~7.65%, FUTA/SUTA~1.4%, W/C Ohio~14.8%; Total=23.85%, rounded to 25% GC experience and actual ratings unknown.

Source: http://www.com.ohio.gov/laws (As of May 14, 2019)

Where unavailable, 14.8% Ohio Avg. used.

Civil Work (2 Laborers, 1 Operator, 1 Fitter)	\$61.23
Process Mech (2 Fitters, 1 Apprentice, 1 Operator)	\$67.71
Incinerator Equipment Installation (3 Boilermakers, 1 Laborer)	\$71.54
Other Equipment (2 Millwrights, 1 Apprentice, 1 Operator)	\$57.45
Sheet metal Work (3 Sheet metal Workers, 1 Apprentice)	\$69.65
Electrical Work (3 Electricians, 1 Apprentice)	\$66.99
Plumbing Work (3 Plumber, 1 Apprentice)	\$67.67
Masonry (3 Bricklayers, 2 Laborers)	\$58.35
Steel Erection (Ironworker)	\$62.63
Building Finishes (Carpenter)	\$58.35
Pile driving (1 Operator, 3 Pile drivers)	\$59.69
Fire Suppression Work (3 Pipe Fitters, 1 Apprentice)	\$68.81

INTRODUCED BY: Mayor Antoskiewicz

AN ORDINANCE AUTHORIZING THE MAYOR TO EXECUTE AND RECORD DEEDS TRANSFERRING PERMANENT PARCEL NUMBERS 481-12-095 (YORK ROAD), 482-03-004 (POTOMAC), 484-17-016 (KINGSTON WAY), 489-30-012 (APOLLO DRIVE), AND 489-31-037 (APOLLO DRIVE) FROM THE NORTH ROYALTON LAND REUTIILZATION PROGRAM TO THE CITY OF NORTH ROYALTON, AND DECLARING AN EMERGENCY

- Pursuant to O.R.C 5722 the City of North Royalton has created the North Royalton Land WHEREAS: Reutilization Program; and
- Inadvertently the parcels of land identified herein, which all serve as storm water detention WHEREAS: basins, were taken into the Land Bank and ought not be there as they have no saleable value and must not be alienated but preserved and maintained; and
- Council desires to remove said parcels from the Reutilization Program bank and transfer them WHEREAS: to the City of North Royalton for preservation as important storm water facilities which are to be maintained by the city.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

Section 1. Council authorizes the Mayor to execute and record deeds from the North Royalton Land Reutilization Program to the City of North Royalton transferring Permanent Parcels Numbers 481-12-095, 482-03-004, 484-17-016, 489-30-012, and 489-31-037 as noted above for preservation as necessary storm water facilities to be maintained by the city.

Section 2. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 3. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that it is immediately necessary to authorize the Mayor to execute and record deed from the North Royalton Land Reutilization Program to the City of North Royalton transferring Permanent Parcels Numbers 481-12-095, 482-03-004, 484-17-016, 489-30-012, and 489-31-037 to retain title and maintain them as important storm water facilities.

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PRESIDENT OF COUNCIL

APPROVED:

MAYOR

DATE PASSED: _____ DATE APPROVED: _____

ATTEST:

DIRECTOR OF LEGISLATIVE SERVICES

YEAS:

NAYS:



City of North Royalton

Mayor Larry Antoskiewicz Thomas J. Jordan Community Development Director 11545 Royalton Road, North Royalton, OH 44133

Phone: 440-237-5484 Email: tjordan@northroyalton.org

Fax: 440-582-3089

TO:	Thomas Kelly Donna Vozar
CC:	Mayor Larry Antoskiewicz
FROM:	Thomas Jordan
DATE:	June 17, 2020
RE:	Land Bank Properties/North Royalton Properties

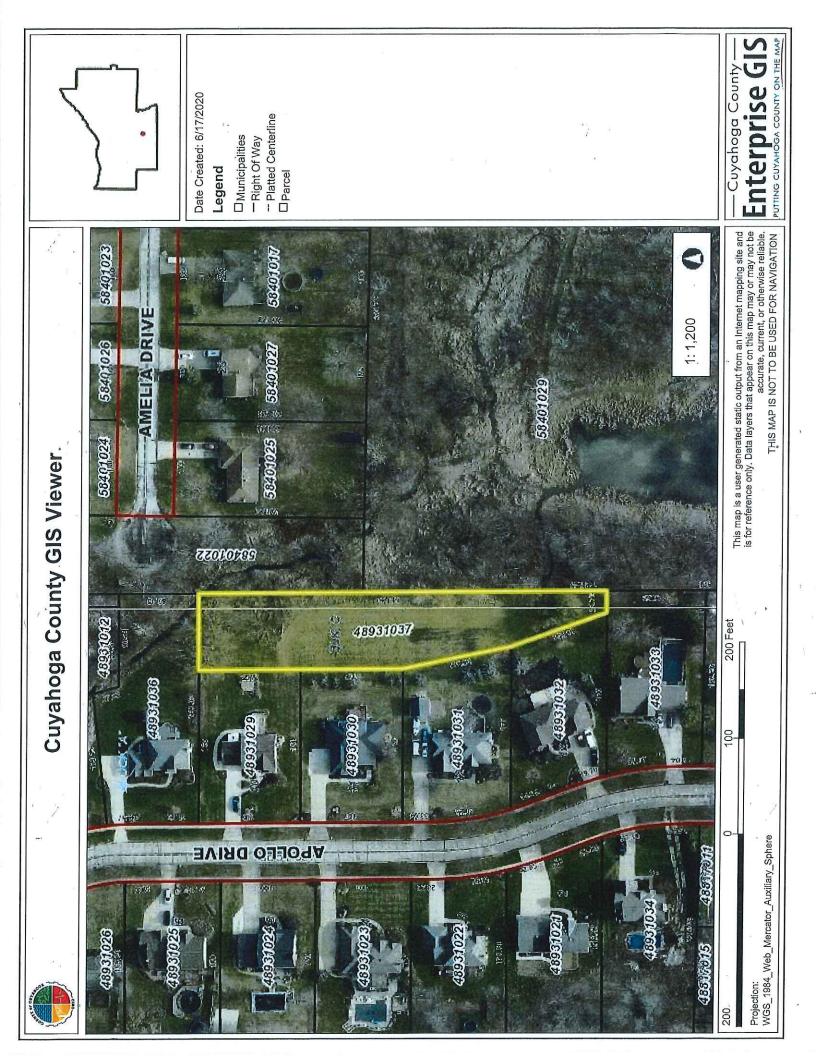
The City of North Royalton has acquired the attached properties through the tax foreclosure process and are in the City of North Royalton Land Bank. We are in the process of placing all of the Land Bank parcels up for sale. We would like to keep these parcels and transfer them to the City of North Royalton and out of the Land Bank. You will see these are storm water detention facilities.

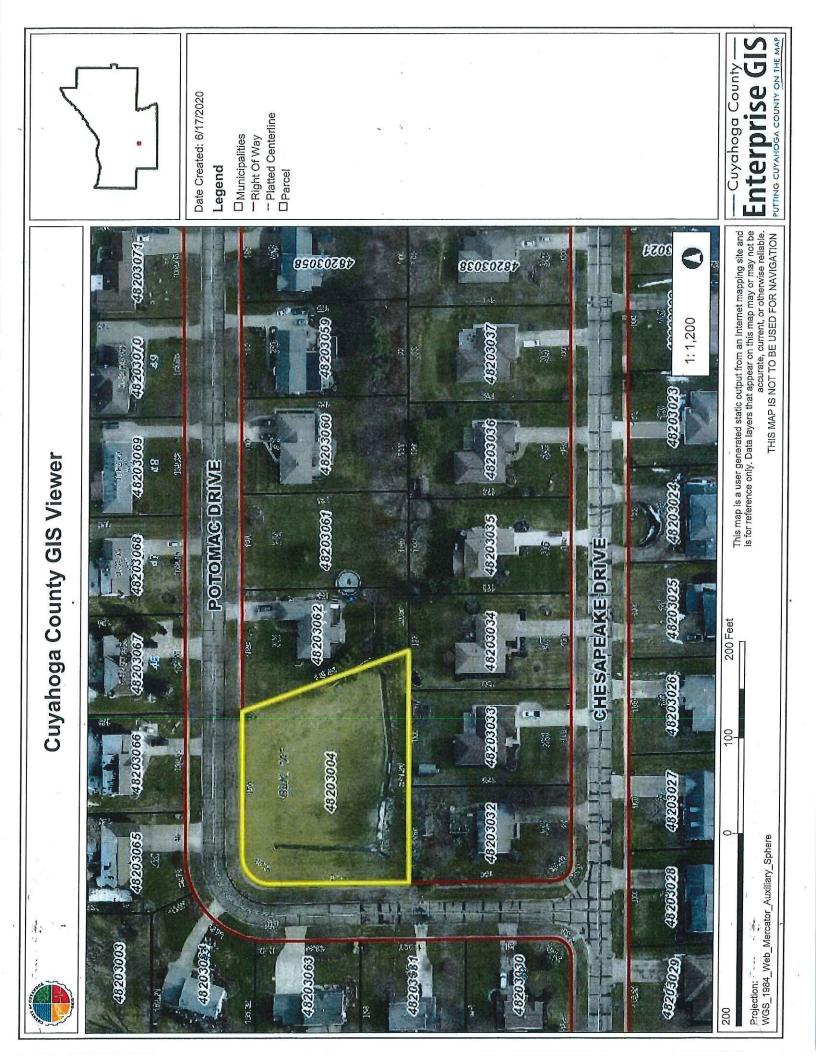
The following parcels are those that we would like to transfer:

481-12-095	York Road
482-03-004	· Potomac
484-17-016	Kingston Way
489-30-012	Apollo Drive
489-31-037	Apollo Drive

Please let me know what our next steps are to have these parcels transferred.

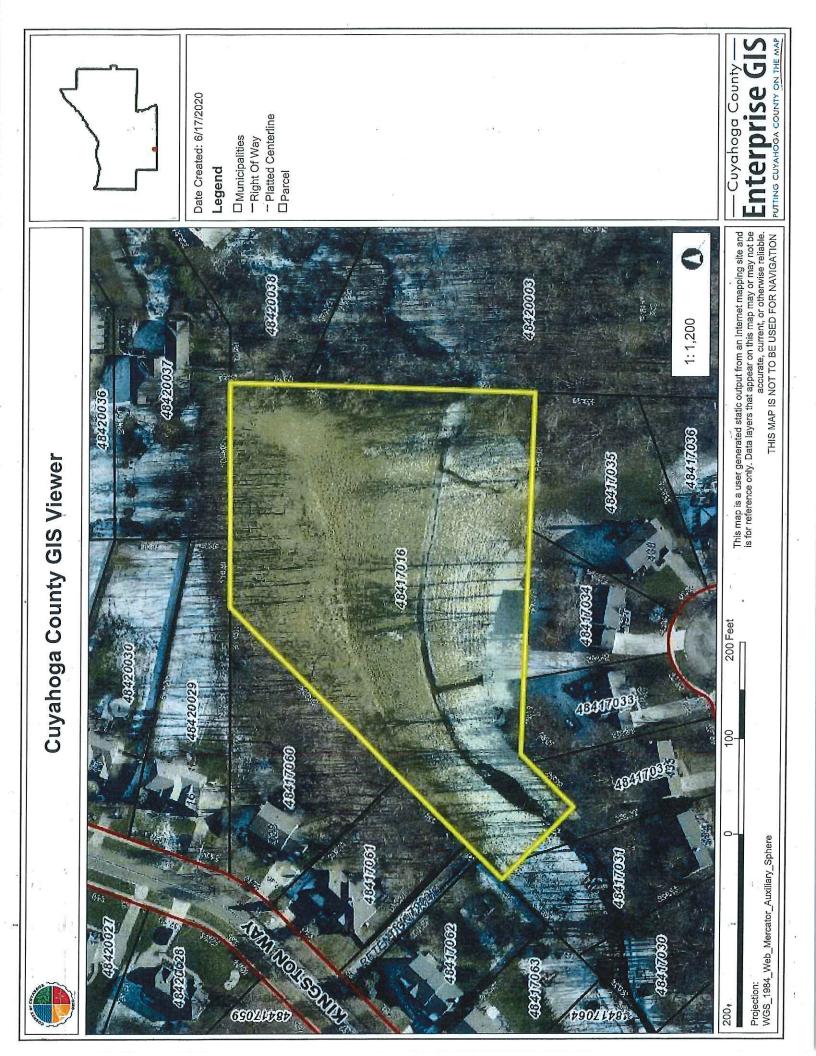












ORDINANCE NO. 20-97

INTRODUCED BY: Marnecheck, Barath, Wos

AN ORDINANCE AMENDING THE CODIFIED ORDINANCES OF THE CITY OF NORTH ROYALTON, PART TWO ADMINISTRATION CODE, CHAPTER 214 GENERAL FEE SCHEDULE. SECTION 214.06 FEES IN THE STREETS, UTILITIES AND PUBLIC SERVICES CODE, PARAGRAPH (j), AND DECLARING AN EMERGENCY

- WHEREAS: In an effort to raise revenue from housing prisoners from other agencies and self-pay prisoners and enhance the overall revenue of the city jail, the jail administration proposes increasing the fee schedule as noted below; and
- It is therefore necessary to amend the Codified Ordinances of the City of North Royalton, Part WHEREAS: Two Administration Code, Chapter 214 General Fee Schedule, Section 214.06 Fees in the General Offenses Code, Paragraph (j) in order to adjust this fee; and
- Council desires to provide for this amendment. WHEREAS:

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

Section 1. Council hereby amends the Codified Ordinances of the City of North Royalton, Part Two Administration Code, Chapter 214 General Fee Schedule, Section 214.06 Fees in the Streets, Utilities and Public Services Code, Paragraph (j) which shall hereafter read as follows:

	Use of City Jail facilities for ing of prisoners by other governmental ies: (1066.01(a))	Not less than \$55.00 and not more than \$100.00 \$125.00 per day per prisoner, as negotiated by the Chief of Police and approved by the Mayor
(2)	Private Pay Prisoners (1066.01(d))	\$75.00 \$125.00 per day; \$50.00 for any stay less than 8 hours
(3) Corr	Registration in the North Royalton ections Officer Training Academy	\$500.00

Section 2. Part Two Administration Code, Chapter 214 General Fee Schedule, Section 214.06 Fees in the Streets, Utilities and Public Services Code, Paragraph (j) of the Codified Ordinances of the City of North Royalton is hereby amended as provided for herein and all other provisions of Chapter 214 shall remain in full force and effect.

Section 4. This Ordinance shall supersede all previously adopted Ordinances in direct conflict herewith.

Section 4. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that it is immediately necessary for Council to amend the fees for use of city jail facilities for housing of prisoners by other governmental entities and self-pay prisoners.

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

_____ APPROVED: _____

PRESIDENT OF COUNCIL

MAYOR

DATE PASSED: _____ DATE APPROVED: _____

ATTEST:

DIRECTOR OF LEGISLATIVE SERVICES

YEAS:

NAYS: