CITY COUNCIL
MEETING AGENDA
March 1, 2018

Marc D. Tall, Mayor
Ronald J. Beauchamp, Mayor Pro Tem
Ralph B. Blasier, Council Member
Michael R. Satter, Council Member
Peggy O. Schumann, Council Member

Patrick S. Jordan, City Manager
Robert S. Richards, CMC City Clerk
Ralph B. K. Peterson, City Attorney

City Council Chambers located at: City Hall – 410 Ludington Street – Room C101 – Escanaba MI 49829

The Council has adopted a policy to use a Consent Agenda, when appropriate. All items with an asterisk (*) are considered routine by the City Council and will be enacted by one motion. There will be no separate discussions of these items unless a Council Member or citizen so requests, in which event, the item will be removed from the General Order of Business and considered in its normal sequence on the Agenda.

Regular Meeting
Thursday, March 1, 2018, at 7:00 p.m.

CALL TO ORDER
ROLL CALL
INVOCATION/PLEDGE OF ALLEGIANCE – Pastor Chris Johnson of Christ the King Lutheran Church
APPROVAL/CORRECTION(S) TO MINUTES – Special Meeting - February 13, 2018; Regular Meeting - February 15, 2018
APPROVAL/ADJUSTMENTS TO THE AGENDA
CONFLICT OF INTEREST DECLARATION(S)
BRIEF PUBLIC COMMENT(S)
PUBLIC HEARING(S)

   Explanation: Administration is requesting the condemnation of a building located at 910 Ludington Street, Escanaba, MI. Administration advises the 3,075 sq. ft. structure is deemed as unsafe, a public nuisance, and unfit for human occupancy.

NEW BUSINESS

1. APPROVAL: NORTH SHORE SUBSTATION TESTING/COMMISSIONING
   Explanation: Administration will seek Council approval to hire Energis High Voltage Resources of Green Bay, WI to complete the needed testing and commissioning of the new North Shore Substation. This cost is in the budget as part of the North Shore Substation project.

2. Public Meeting – Resolution for Road Repair, Maintenance and Improvements.
   Explanation: A public discussion will be held to review a millage request for road repairs, maintenance and improvements that would include underground utilities.

3. Approval – Inflow and Intrusion (I&I) Study and Flow Monitoring – Wastewater Department.
   Explanation: Administration is requesting approval to retain C2AE of Escanaba, MI to conduct an Inflow and Intrusion (I&I) Study and oversee the Flow Monitoring as written in the proposal dated February 20, 2018, at a cost not to exceed $95,000.

4. Approval – Tree Trimming Bid – Electric Department.
   Explanation: Administration is seeking Council approval to accept the Tree Trimming bid received from Bugle Contracting of Cornell, MI to conduct the tree trimming services required for the City as written in the RFP, at a cost not to exceed $25,000. Funds for this project are allotted in the 2017/2018 FY Budget.
Explanation: Administration is seeking Council approval to accept the Digger / Derrick bid received from Utility Sales and Service of Appleton, WI for the purchase of a Versalift TMD-2045B on an International chassis with a fiberglass utility body for $242,899.94. Funds for this purchase are allotted in the 2017/2018 FY Budget.

Explanation: Administration is requesting a review of the criteria set forth when appointing new members to the Downtown Development Authority Board.

Explanation: Administration requested the Council discuss and take action regarding a March 1, 2018 – June 30, 2020 collective bargaining agreement between the City of Escanaba and International Brotherhood of Electrical Workers Local 876, Electrical Department Group.

Explanation: Administration wishes to go into Closed Session to update the Council on the Menards vs. City of Escanaba case.

APPOINTMENTS
BOARD, COMMISSION, AND COMMITTEE REPORTS
GENERAL PUBLIC COMMENT
ANNOUNCEMENTS
ADJOURNMENT

Respectfully Submitted

[Signature]

Patrick S. Jordan
City Manager
Pursuit to a special meeting notice posted February 7, 2018, the meeting was called to order by the Honorable Mayor Marc D. Tall at 9:00 a.m. in the Council Chambers of City Hall located at 410 Ludington Street.

Present: Mayor Marc D. Tall, Council Members, Ronald J. Beauchamp, Ralph B. Blasier, Michael R. Sattem, and Peggy O’Connell Schumann.

Absent: None

Also Present: City Manager Patrick S. Jordan, City Controller Melissa Becotte, City Treasurer/Human Resources Director Robert Valentine, Public Works Director Keith Marenger and Assistant Engineer II Wendy Taavola, media, and members of the public.

Sattem moved, Schumann seconded, CARRIED UNANIMOUSLY, approved the agenda as presented.

BRIEF PUBLIC COMMENT – None

CONFLICT OF INTEREST DECLARATION – None

NEW BUSINESS

Discussion – Road Funding Options

Mayor Tall stated the City was not keeping up with road improvements. It was time to discuss options for the City. The Public Works Department advised their staff could make $300,000 worth of roads improvements a year. If the City wanted to do more than $300,000 worth of improvements, the additional work would need to be contracted out. The State of Michigan increased road funding to the City, but that would not be enough to solve the problem. It will take a number of years to catch up with road repairs. A proposed Road Millage was discussed. Discussion ensued on the following:

- Individual Council Members received comments from members of the public to put the road millage question to a vote of the people, and let the public decide;
- Discussed what amount of millage would be asked for and how long. This would be multi-year project;
- Would not want endless requests brought before the voters;
- Discussed City continue applying for Grants and Matching Funds when possible;
- Discussed the need to keep in mind needed underground infrastructure improvements;
- City should not rely on proposed funds from State and Federal Budgets;
- Suggested a higher millage to include roads and below ground infrastructure;
- Discussed educational information to bring to the public;
- Discussed length of the millage, certain length, or indefinite, or 30 years, and
City Council Minutes
February 13, 2018 – cont.

- Council directed Administration to bring to Council on February 15th, two resolutions, indefinite or term length, and to include only roads, or roads and infrastructure below ground;
- Administration stated the City would need legal counsel if the decision was to raise the millage through the Charter provision;
- Administration advised the City Street Fund current balance was approximately 3 million, and would be receiving additional funds from the new gas tax. Would need to address those points to the members of the public during the education process;

GENERAL PUBLIC COMMENT – None

Hearing no further public comment, the Council adjourned at 9:35 a.m.

Respectfully submitted,

Robert S. Richards, CMC
City Clerk

Approved: ______________________

Marc D. Tall, Mayor
The meeting was called to order by the Honorable Mayor Marc D. Tall at 7:00 p.m. in the Council Chambers of City Hall located at 410 Ludington Street.

Present: Mayor Marc D. Tall, Council Members, Ronald J. Beauchamp, Ralph B. Blasier, Michael R. Sattem, and Peggy O’Connell Schumann.

Absent: None

Also Present: City Manager Patrick S. Jordan, City Department Heads, media, and members of the public.

City Clerk Robert S. Richards led Council in the Pledge of Allegiance.

Blasier moved, Sattem seconded, CARRIED UNANIMOUSLY, to approve Regular Meeting minutes from February 1, 2018, as submitted.

ADJUSTMENTS TO THE AGENDA

Mayor Tall with Council consensus, moved to the end of the agenda discussion regarding the Road Millage, and added discussion on appointments to the Downtown Development Authority.

Schumann moved, Blasier seconded, CARRIED UNANIMOUSLY, to approve the Agenda as amended.

CONFLICT OF INTEREST DECLARATION – None

BRIEF PUBLIC COMMENT

City resident Tony Fittante, stated he was happy to see Council discussion on improving City Streets. He believed tax payers would be willing to pay a reasonable amount for 5 years, and the funds only be used for road improvements. Residents can only be assured if the City put road millage funds in a separate fund. He would also like to see an audit of those funds each year, and an estimate of cost for the following years. Tax payers would see what was accomplished and if done properly tax payers would approve another five years. Mr. Fittante thanked Council and Staff for all their work.

PUBLIC HEARINGS

A public hearing was conducted to facilitate input from citizens for the City’s next fiscal year budget. This was the second of five (5) scheduled public hearings.

This being a public hearing, Mayor Tall asked if there were any public comment.

The Bonifas Art Center Director, Sue Roll, thanked Council for their past support, briefly reviewed how their funds were used, and encouraged Council to approve City support in the next fiscal.

Hearing no further public comment, Mayor Tall closed the public hearing.

**Public Hearing – Escanaba CDBG Façade Improvement Projects – CUPPAD.**

A public hearing was conducted to close-out the 2016 Community Block Grant Funds (CDBG) Façade Improvement Grants for 613-615, 812-814, 922, 1110, 1206 and 1513 Ludington Street.

Peter VanSteen, of the Central Upper Peninsula Planning and Development (CUPPAD), briefly reviewed the CDBG Façade Projects. He stated there were six project businesses, as the process began. 1110 Ludington Street dropped out of the program. Mr. VanSteen stated the outside facades were improved and some of the businesses made interior improvements. Mr. VanSteen stated $666,396 in CDBG funds were invested in the five buildings, and $237,613 of private investment funds, made up the 75-25 required match. Mr. VanSteen further advised the funds, which were not used, would be returned.

This being a public hearing, Mayor Tall asked if there was any public comment.

Council Member Blasier asked why 1110 Ludington Street, Ludington Grill, did not participate. Mr. Van Steen stated he believed a combination of the up-front required matching funds and that he ended up contemplating selling the business.

Hearing no further public comment, Mayor Tall closed the public hearing.

**NEW BUSINESS**

**Approval – Resolution for Designation of Street Administrator – City Engineering.**

Administration recommended Council approval of selecting Interim City Engineer Wendy Taavola as the City of Escanaba’s Street Administrator which was required by the Michigan Department of Transportation per Public Act 51.

**NB-1** By Council Member Blasier, seconded by Council Member Beauchamp:

**RESOLUTION FOR DESIGNATION OF STREET ADMINISTRATOR**

**Whereas,** Section 13(9) of Act 51, Public Acts of 1951 provided that each incorporated
city and village to which funds are returned under the provisions of this section, that, "the responsibility for street improvements, maintenance, and traffic operations work, and the development, construction, or repair of off-street parking facilities and construction or repair of street lighting shall be coordinated by a single administrator to be designated by the governing body who shall be responsible for and shall represent the municipality in transactions with the State Transportation Department pursuant to this act.

Therefore, be it resolved, that this Honorable Body designate Interim City Engineer Wendy Taavola as the single Street Administrator for the City of Escanaba in all transactions with the State Transportation Department as provided in Section 13 of the Act.

Ayes: Blasier, Beauchamp, Schumann, Sattem, Tall
Nays: None

RESOLUTION DECLARED ADOPTED.

Approval – Resolution for Street Add Certification – City Engineering.

Administration recommended Council approval to add North 26th Street to the City of Escanaba’s Mileage Certification as per Public Act 51.

NB-2 By Council Member Blasier, seconded by Council Member Schumann;

RESOLUTION
FOR
STREET CERTIFICATION

Whereas, the City of Escanaba did on September 21, 2005 acquire the title to North 26th Street, and;

Whereas, it is necessary to furnish certain information to the State of Michigan to place this street within the City Street System for the purpose of obtaining funds under Act 51, P.A. 1951 as amended.

NOW THEREFORE IT IS RESOLVED:

1. That the center line of said street is described as:
FROM THE NW CORNER OF E1/4 OF NE1/4 OF SECTION 25 T.39N., R.23W. MEASURE S.00°02’00”W. ALONG THE WEST LINE OF SAID E1/2 OF NE1/4 A DISTANCE OF 40.00 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF 6TH AVENUE NORTH AND THE POINT OF BEGINNING OF THE CENTERLINE HEREIN DESCRIBED, THENCE CONTINUE S.00°02’00”W. ALONG SAID WEST LINE A DISTANCE OF 1622.86 FEET TO THE NORTH RIGHT-OF-WAY LINE OF 3RD AVENUE NORTH AND THE POINT OF ENDING.
THE EAST AND WEST RIGHT-OF-WAY LINES ARE TO BEGIN AT THE SOUTH RIGHT-OF-WAY LINE OF 6TH AVENUE NORTH AND TERMINATE THE NORTH RIGHT-OF-WAY LINE OF 3RD AVENUE NORTH.

2. That said street is located within the City right-of-way and is under the control of the City of Escanaba.

3. That said street is a public street and is for public street purposes.

4. That said street is accepted into the City Local Street System and was open to the public on May 5, 2017.

Ayes: Blasier, Schumann, Sattem, Beauchamp, Tall
Nays: None

RESOLUTION DECLARED ADOPTED.

Approval – Leak Detection Bid – Water Department.

Administration sought Council approval to accept the Leak Detection Services bid received from Utility Services Associates of Seattle, WA to conduct the Leak Detection specifications as written in the RFP, at a cost not to exceed $13,141. Funds for this project were allotted in the 2017/2018 FY Budget.

Water/Wastewater Superintendent Jeff Lampi briefly reviewed scope of the project and advised the past two leak detection projects obtained good results. This was the third round leak detection project. After further discussion, the following motion was made;

NB-3 Sattem moved, Schumann seconded, to approve to accept the Leak Detection Services bid received from Utility Services Associates of Seattle, WA to conduct the Leak Detection specifications as written in the RFP, at a cost not to exceed $13,141.

Upon a call of the roll, the vote was as follows:

Ayes: Sattem, Schumann, Blasier, Beauchamp, Tall
Nays: None

MOTION CARRIED.

Approval – Fire Hydrant Painting Bid – Water Department.

Administration sought Council approval to accept the Fire Hydrant Painting bid received from Bosk Corporation of Escanaba, MI to paint one-hundred (100) fire hydrants as written in the RFP, at a cost not to exceed $50,000. $42,500 of the required funds for this project were allotted in the 2017/2018 FY Budget; the remainder of the
funds will be taken from the 2017/2018 Capital Improvements Fund.

Water/Wastewater Superintendent Jeff Lampi briefly reviewed the history of hydrant maintenance and painting. Administration advised there were approximately 800 hydrants in the City. City hydrants were last painted in 1989 and reviewed test painting over the last few years. Discussed in depth testing hydrants prior to painting and what it would entail, and discussed potential future State mandatory hydrant checks.

**NB-4** Schumann moved, Beauchamp seconded, to approve to accept the Fire Hydrant Painting bid received from Bosk Corporation of Escanaba, MI, to paint one-hundred (100) fire hydrants as written in the RFP, at a cost not to exceed $50,000.

Upon a call of the roll, the vote was as follows:

Ayes: Schumann, Beauchamp, Blasier, Sattem, Tall
Nays: None

**MOTION CARRIED.**

**Approval – Digester Roof Restoration Bid – Wastewater Department.**

Administration sought Council approval to accept the Digester Roof Replacement bid received from Terrazzo Creations and Renewal of Norway, MI to conduct the repairs as written in the RFP, at a cost not to exceed $93,000. Funds for this project were allotted in the 2017/2018 FY Budget.

Water/Wastewater Superintendent Jeff Lampi briefly reviewed the scope of the project and future of the building.

**NB-5** Blasier moved, Sattem seconded, to approve to accept the Digester Roof Replacement bid received from Terrazzo Creations and Renewal of Norway, MI to conduct the repairs as written in the RFP, at a cost not to exceed $93,000.

Upon a call of the roll, the vote was as follows:

Ayes: Blasier, Sattem, Beauchamp, Schumann, Tall
Nays: None

**MOTION CARRIED.**

**Approval – Confidential Secretary Position – Human Resources/City Manager.**

Administration sought Council approval to upgrade the current Part-Time Confidential Secretary position to a Full-Time position. Manager Jordan briefly reviewed the need to make the position full-time.
NB-6 Beauchamp moved, Schumann seconded, CARRIED UNANIMOUSLY, to approve to upgrade the current Part-Time Confidential Secretary position to a Full-Time position.

Upon a call of the roll, the vote was as follows:

Ayes: Beauchamp, Schumann, Blasier, Sattem, Tall
Nays: None

MOTION CARRIED.

Condemnation proceedings for 910 Ludington Street.

Administration requested Council to approve the condemnation, and if required, demolition of a commercial building located at 910 Ludington Street. If approved Administration requests scheduling a condemnation public hearing for March 1, 2018.

Code Official/Property Maintenance Inspector, Blaine DeGrave, provided a presentation on the property, its history, and details regarding the structure, which included information on the collapsing deteriorating brick walls. The property was owned by Caleb Hayes of Green Bay Wisconsin. Mr. DeGrave stated he did not receive responses from citations and letters. It was Administration’s recommendation that the property was deemed unsafe, a public nuisance, unfit for human occupancy and recommended setting a condemnation hearing for March 1, 2018. A title search would be conducted prior to the hearing and to determine if the building was insured.

NB-8 Blasier moved, Schumann seconded, CARRIED UNANIMOUSLY, to set a condemnation hearing for March 1, 2018, for a commercial building located at 910 Ludington Street.

Upon a call of the roll, the vote was as follows:

Ayes: Blasier, Schumann, Beauchamp, Sattem, Tall
Nays: None

MOTION CARRIED.

Consideration of a Resolution for Road Repair, Maintenance And Improvements.

NB-9 Council Members discussed a proposed road millage for approval to be placed before the voters in 2018.

- Discussed future improvements of infrastructure underground;
- Discussed cost sharing with other utility providers;
- Much planning would need to occur;
- Discussed need for further meetings and more public comment;
City Council Minutes
February 15, 2018 – cont.

- Reviewed two proposed sample resolution languages.

After further discussion, Blasier moved, Schumann seconded, **CARRIED UNANIMOUSLY**, to schedule a public hearing on March 1, 2018, with Option B, improving roads and infrastructure.

**DDA Appointments.**

Council Members discussed the process of appointing members to the DDA Board. Council change made to DDA appointment requirements in 2017. The Following was discussed:

- Council went to far limiting DDA applicants to just the owner of properties in the DDA District. Appointments must follow the State Law, which has a much broader interpretation of interest in the property;
- City Attorney Mr. Peterson stated State Law must be followed. Board Members having an interest in the property of the DDA District include a property owner, or a tenant. An individual who was an employee of the property owner or tenant also qualifies as an individual who has an interest in the property;
- DDA Board must also have a majority who have interest in the DDA District;
- Council needed to change back DDA appointments requirements as defined by State Law;

After further discussion, it was suggested to table the item for further research.

**NB-10** Blasier moved, Beauchamp seconded, **CARRIED UNANIMOUSLY**, to bring DDA Appointments to the March 1, 2018, regular meeting for further review.

**APPOINTMENT(S) TO CITY BOARDS, COMMISSIONS, AND COMMITTEES** – None

**BOARD, COMMISSION, AND COMMITTEE REPORTS**

Council Members reviewed City Board and Commission meetings each attended since the last City Council Meeting.

**GENERAL PUBLIC COMMENT**

Ed Legault commented on the DDA appointments, and advised the Statue was clear, and employees of major companies in the DDA District would be very qualified members on the DDA Board.

**ANNOUNCEMENTS - None**

**Discussion – Closed Session to Discuss Labor Negotiations – City Manager.**
Schumann moved, Blasier seconded, to go into Closed Session to discuss labor negotiations with the City Attorney.

Upon a call of the Roll, the vote was as follows:

Ayes: Schumann, Blasier, Sattem, Beauchamp, Tall.
Nays: None

**MOTION CARRIED.**

The time was 8:30 p.m.

Blasier moved, Schumann seconded, to come back into open session.

Upon a call of the Roll, the vote was as follows:

Ayes: Blasier, Schumann, Beauchamp, Sattem, Tall
Nays: None

**MOTION CARRIED.**

The time was 8:44 p.m.

No Council Action was made while in closed Session.

Hearing no further public comment, the Council adjourned at 8:45 p.m.

Respectfully submitted

Robert S. Richards, CMC
City Clerk

Approved: ______________________

Marc D. Tall, Mayor
MEMORANDUM

February 12, 2018

TO: Patrick Jordan, City Manager

FROM: Blaine R. DeGrave, Code Official

SUBJECT: Condemnation Proceedings, 910 Ludington Street

Request for the City Council to approve the condemnation and if required, demolition of the commercial building known as the Performance Audio building at 910 Ludington Street. The building was last used by Performance Audio for retail sales of remote starters, audio systems and window tinting for vehicles with a residential rental unit in the upper floor. The owner, Mr. Caleb Hayes does not respond to certified mail or other contact methods.

A final correction notice was sent out on December 1, 2017 asking for repairs to be made to bring the building up to the City of Escanaba’s Property Maintenance Code or to demolish the structure. No reply has been received to date.

An examination of the structure finds that the exterior wall studs have been exposed on both the East and West sides of the building which has substantially deteriorated the wood fiber of the studs. A substantial list/lean of the building to the West is evident by viewing from Ludington Street. Numerous complaints have been received at City Hall concerning this building. Past complaints of broken windows and pigeons being trapped within the building have been documented.

All visible signs show that the property is blight within our downtown and also a Public Nuisance by definition under section 302.1 DEFINITION “PUBLIC NUISANCE”. The building condition reflects all parts of paragraph 1, 2, 3, 4, 5, 6, 7, and is best defined by paragraph 8 stated below: (Attachment 1)

ANY STRUCTURE THAT IS IN A STATE OF DILAPIDATION, DETERIORATION OR DECAY; FAULTY CONSTRUCTION; OVERCROWDED; OPEN, VACANT OR ABANDONED; DAMAGED BY FIRE TO THE EXTENT SO AS NOT TO PROVIDE SHELTER; IN DANGER OF COLLAPSE OR FAILURE; AND DANGEROUS TO ANYONE ON OR NEAR THE PREMISES.

The property is also in violation of the City of Escanaba’s Property Maintenance Code PM-108.1.1 Unsafe Structure.
The building's condition reflects all parts of paragraph: A, B, C, E, F, G, H, I, and J, of the Property Maintenance Code, (Attachment 2) with paragraph J best defining the condition as:

AN UNSAFE STRUCTURE IS ONE THAT IS FOUND TO BE DANGEROUS TO LIFE, HEALTH, PROPERTY OR SAFETY OF THE PUBLIC OR THE OCCUPANTS OF THE STRUCTURE BY NOT PROVIDING MINIMUM SAFEGUARDS TO PROTECT OR WARN OCCUPANTS IN THE EVENT OF FIRE, OR BECAUSE SUCH STRUCTURE CONTAINS UNSAFE EQUIPMENT OR IS SO DAMAGED, DECAYED DILAPIDATED, STRUCTURALLY UNSAFE, OR OF SUCH FAULTY CONSTRUCTION OR UNSTABLE FOUNDATION, THAT PARTIAL OR COMPLETE COLLAPSE IS LIKELY.

An independent assessment was also conducted by a third-party engineer from Dynamic Design Group, Inc. to validate my findings. Please see the attached report. (Attachment 3)

In conclusion, it is my opinion that the building located at 910 Ludington should be completely demolished for health and safety reasons stemming from the physical condition of the structure.
**Occupant:** Any person living or sleeping in a building; or having possessions of space within a building.  
(Implemented: Ordinance 907 as of May 17, 1996)

**Operator:** Any person who has charge, care or control of a structure or premises which is let or offered for occupancy.  
(Implemented: Ordinance 907 as of May 17, 1996)

**Owner:** Any person, agent, operator, firm or corporation having a legal or equitable interest in the property; or recorded in the official records of the state, county or municipality as holding title to the property; or otherwise having control of the property, including the guardian of the estate of any such person, and the executor or administrator of the estate of such person if ordered to take possession of real property by a court.  
(Implemented: Ordinance 907 as of May 17, 1996)

**Person:** An individual, corporation, partnership or any other group acting as a unit.  
(Implemented: Ordinance 907 as of May 17, 1996)

**Premises:** A lot, plot or parcel of land including any structures thereon.  
(Implemented: Ordinance 907 as of May 17, 1996)

**Public Nuisance:** Includes the following:

1. The physical condition or occupancy of any premises regarded as a public nuisance at common law; or
2. Any physical condition or occupancy of any premises or its appurtenances considered an attractive nuisance to children, including, but not limited to, abandoned wells, shafts, basements, excavations and unsafe fences or structures; or
3. Any premises that has unsanitary sewerage or plumbing facilities; or
4. Any premises designated as unsafe for human habitation; or
5. Any premises that is manifestly capable of being a fire hazard, or is manifestly unsafe or unsecure so as to endanger life, limb, or property; or
6. Any premises from which the plumbing, heating or facilities required by this code have been removed, or from which utilities have been disconnected, destroyed, removed or rendered ineffective, or the required precautions against trespassers have not been provided; or
7. Any premises that is unsanitary, or that is littered with rubbish or garbage, or that has an uncontrolled growth of weeds; or
8. Any structure that is in a state of dilapidation, deterioration or decay; faulty construction; overcrowded; open, vacant or abandoned; damaged by fire to the extent so as not to provide shelter; in danger of collapse or failure; and dangerous to anyone on or near the premises.  
(Implemented: Ordinance 907 as of May 17, 1996)

**Rubbish:** Combustible and non-combustible waste materials, except garbage; the term shall include the residue from the burning of wood, coal, coke and other combustible materials, paper, rags, cartons, boxes, wood, excelsior, rubber, leather, tree branches, yard trimmings, tin cans, metals, mineral matter, glass, crockery and dust and other similar materials.  
(Implemented: Ordinance 907 as of May 17, 1996)

**Yard:** An open space on the same lot with a structure.  
(Implemented: Ordinance 907 as of May 17, 1996)
SECTION PM - 108.0 UNSAFE STRUCTURES AND EQUIPMENT

PM - 108.1 General: When a structure or equipment is found by the code official to be unsafe, or when a structure is found unfit for human occupancy, or is found unlawful, such structure shall be condemned pursuant to the provisions of this code. (Implemented: Ordinance 907 as of May 17, 1996)

PM - 108.1.1 Unsafe Structure: An unsafe structure means a building or structure that has one or more of the following defects or is in one or more of the following conditions:

A. A door, aisle, passageway, stairway or other means of exit does not conform to the approved Escanaba Property Maintenance Code adopted by the City of Escanaba.

B. A portion of the building or structure is damaged by fire, wind, flood, or other cause so that the structural strength or stability of the building or structure is appreciably less than it was before the catastrophe and does not meet the minimum requirements of the Escanaba Property Maintenance Code adopted by the City of Escanaba for a new building or structure, purpose or location.

C. A part of the building or structure is likely to fall, become detached or dislodged or collapse and injure persons or damage property.

D. A portion of the building or structure has settled to such an extent that wall or other structural portions of the building or structure have materially less resistance to wind than is required in the case of new construction by the Escanaba Property Maintenance Code adopted by the City of Escanaba.

E. The building or structure, or a part of the building or structure, because of dilapidation, deterioration, decay, faulty construction or the removal or movement of some portion of the ground necessary for the support, or for other reason, is likely to partially or completely collapse or some portion of the foundation or underpinning of the building or structure is likely to fall or give way.

F. The building, structure or a part of the building or structure is manifestly unsafe for the purpose for which it is used.

G. The building or structure is damaged by fire, wind or flood or is dilapidated or deteriorated and becomes an attractive nuisance to children who might play in the building or structure to their danger, or becomes a harbor for vagrants, criminals or immoral persons, or enables persons to resort to the building or structure for committing a nuisance or an unlawful or immoral act.

H. A building or structure used or intended to be used for dwelling purposes, including the adjoining grounds, because of dilapidation, decay, damage, faulty construction or arrangement, or otherwise, is unsanitary or unfit for human habitation, is in a condition that the health officer determines is likely to cause sickness or disease, or is likely to injure the health, safety, or general welfare of people living in the dwelling.

I. A building or structure is vacant, dilapidated and open at door or window, leaving the interior of the building exposed to the elements or accessible to entrance by trespassers.

J. An unsafe structure is one that is found to be dangerous to life, health, property or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation, that partial or completely collapse is likely.

(Implemented: Ordinance 907 as of May 17, 1996, Amended: Ordinance 1111 as of July 5, 2010)

PM - 108.1.2 Unsafe Equipment: Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the premises or within the structure which is in such disrepair or condition that such equipment is a hazard to life, health, property or safety of the public or occupants of the premises or structure. (Implemented: Ordinance 907 as of May 17, 1996)
February 12, 2018

Mr. Blaine DeGrave
Code Enforcement Official
410 Ludington Street
Escanaba, MI 49829

Re: Building Observation at 910 Ludington Street

Dear Mr. DeGrave:

On September 29, 2017, I visited the property located at 910 Ludington Street to observe the conditions of the buildings. The observation included the main, two story building fronting on Ludington Street; the single-story, masonry, garage building alongside the back alley; and the wood-framed, single-story building tying both buildings together.

On the day of the observation, I was not able to access the interiors of the buildings to observe structural components, so I observed the exterior of the buildings only. Since the time of my observation, it is my understanding that you have attempted to contact the Owner of the property, to schedule an observation of the interior of the buildings, however, the Owner has not responded. As a result, my current observation of the property is based upon the exterior conditions only, as viewed from grade.

Main Two Story Building
The exterior of the building is generally in poor condition.

- The shingles and flashings on the roof surface have deteriorated to the extent that they may no longer be effective at preventing water infiltration. I expect that there is ongoing water damage inside the building associated with the roof.
- The roof also appears to be sagging in several places. This suggests that the structural roof members and roof decking material are no longer adequate to provide the proper support. This is likely due to damage associated with water infiltration.
- The brick chimney is crumbling apart and there is potential for pieces to fall. The deterioration is likely due to re-occurring freeze/thaw cycles of water infiltration through the chimney cap, mortar joints and deteriorated brick. The current condition of the chimney is a safety concern, not only for potential damage to the neighboring building, but also for the potential to severely injure or kill a person on the ground between the two buildings.
• On the north side of the building, a window opening had previously been covered with plywood, however, some of the plywood is missing providing direct access into the building for rain, insects, birds and/or animals.

• On the south side of the building, the horizontal lap siding and vertical siding have some damaged and/or missing pieces that may allow water infiltration into the walls of the building. Additionally, this may allow insect, bird and/or animal infestation.

• On the north, east and west sides of the building, the exterior shingle siding is experiencing deterioration to the extent that the finish may no longer be effective at preventing water infiltration. This is especially true in the confined spaces between adjacent buildings of both the east and west walls, where the extreme amount of moisture has caused mold, mildew or algae to grow on the siding. The affected siding is predominantly just under the eave and along the bottom of the wall at the foundation.
  o For the eave areas, the water infiltration is consistent with water infiltration from the roof. The roof water infiltration travels down the roof framing and enters the eave and the walls.
  o For the wall areas along the foundation, there are locations where the siding has completely disintegrated, exposing the old wood lap siding and the wood stud framing. As a result, the wood stud framing has severe deterioration. This is a structural concern. Additionally, this exposed area is allowing direct access of water into the foundation and basement space along with the possibility for insect, bird and animal infestation.
  o On the east side of the building, additional water damage is likely due to the lack of gutters along the eave, which allows the roof water to flow into the confined space and onto the adjacent building. As a result, the siding of the adjacent building is also experiencing mold, mildew and algae growth. It is possible that the adjacent building is also experiencing some accelerated deterioration, due to the cascading water. It is apparent that gutters along the eave did exist at one time because there is a downspout on the north side of the building that would have tied into the gutter.
  o On the west side of the building, a gutter does exist along the eave, however, the adjacent building does not have a gutter. Therefore, the roof water from the adjacent building is cascading onto the west wall and into the confined space. This is promoting the same issues as the east side of the building.

• The most significant and noticeable issue with the building is that both the east and west walls of the building are 2" to 3" out of plumb, in 8ft. The building is leaning to the west. This is a structural concern and is likely caused by the amount of water that enters the confined spaces between the adjacent buildings. The water cannot escape, therefore it flows into the exposed foundation areas and also saturates the soils around the foundations.
The water that enters the foundation areas is causing the deterioration of the wood framing. As the wood framing deteriorates, the building settles, because the deteriorated studs are no longer able to carry the full weight of the building.

- The reoccurring saturation of the foundation soils has likely caused the soils to consolidate, causing the building to settle and lean. This is especially true at the northwest corner of the building, where the downspout drops the concentration of gutter water directly on the ground, alongside the foundation wall.
- Both the east and west walls have a wavering appearance but more critically, a definite bowing near the center. This suggests a structural issue associated with the framing inside the building. It is possible that the floor framing members of the second floor and/or the roof framing members are sagging to such extreme that the members are pulling the exterior walls in toward the center of the building.
- Due to the likely water infiltration, interior mold conditions may exist.

**Masonry Building**
This building is generally in good condition.

- The roofing of this building has also deteriorated. It is expected that there may be minor water infiltration into the building, however, there are no exterior indications that the roof framing is experiencing any structural issues.
- The masonry walls have experienced some cracks typical for masonry buildings. These are not a structural concern.

**Wood Framed Single Story Building**
The exterior of the building is generally in poor condition.

- The roofing and siding conditions of this building are consistent with the conditions of the Two Story Building described above. It is likely that the roof framing and wall framing are also experiencing the same deterioration.
- At the intersection of this building with the Two Story Building, on the east side, there is water damage and deterioration near the base of both buildings. The damage has exposed the wall framing of both buildings, which is allowing ongoing water infiltration and the potential for insect, bird and animal infestation. This damage is likely due to the abandoned downspout mentioned earlier. When gutters did exist on the east side of the building, the concentration of water was directed out of the downspout at this location.
- The west side of this building has exterior stairs up to the second floor of the Two Story Building. The stairs are partially attached to the exterior wall, however, a significant amount of the fasteners have pulled out of the wall, leaving very little securoment. This is a safety concern for occupants of the stairs.
- There is an animal hole dug under the stair post. This hole may cause the post to shift or settle unexpectedly.
- Due to the likely water infiltration, interior mold conditions may exist.
Summary:
For the Two Story Building, with the likely water damages, deteriorated chimney and the structural concerns associated with the building lean, bowed walls, sagging roof, settling foundations and deteriorated stud walls, it is apparent that significant structural repairs are required to keep the building and chimney intact and protect the occupants of the building, the public and the neighboring property.
For the Single Story Building, with the likely water damage and structural concerns, it is apparent that structural repairs are required to keep the building intact and protect the occupants.
For both the Two Story Building and the Single Story Building, prior to occupancy on any level, mold testing should occur, to verify that the building is safe for use. For all three buildings, when the required structural repairs are made, it is imperative that the exterior finishes be replaced with new products (shingles, flashing, siding, etc.) to provide the necessary protection of the structural systems.
Lastly, gutters should be installed on the eaves of all buildings to prevent further water from entering the confined spaces. Downspouts should be installed to direct the water away from the buildings.

It is suggested that structural repairs, exterior finishes and gutter/downspout work be completed as soon as possible, to prevent further building deterioration.

It is highly expected that an observation of the interior of the buildings will confirm the information found during the exterior observation, and will likely provide additional information about the structural integrity of the buildings. An interior observation should be coordinated to allow a complete analysis of the buildings.

If you should have any questions or require any additional information, please do not hesitate to contact my office.

Thank you.

Sincerely,

[Signature]
Daniel S. Block, P.E.
Project Engineer
February 21, 2018

Ludington Street Rentals LLC  
Attn: Caleb Hayes  
1674 Eisenhower Road  
De Pere, WI 54115

RE: 910 Ludington Street

Dear Mr. Hayes:

A Condemnation Hearing for the building located at 910 Ludington Street has been scheduled to go before the Escanaba City Council on Thursday, March 1, 2018, at 7:00 p.m. at the Escanaba City Hall, 410 Ludington Street. As the property owner, you are hereby advised of the meeting date and time.

If you have any questions or concerns prior to the meeting, please feel free to contact me at (906) 786-9402 or via email at bdegrave@escanaba.org.

A regular scheduled meeting of the Escanaba City Council has been scheduled for Thursday, March 1, 2018, at 7:00 p.m. The following item will be on the agenda:

Sincerely,

Blaine DeGrave  
Code Official  
Community Development
February 21, 2018

«Owner_Name»
«Owner_Address»
«City», «State» «Zip»

RE: 910 Ludington Street

Dear Property Owner/Occupant of «Physical_Address»:

A regular scheduled meeting of the Escanaba City Council has been scheduled for Thursday, March 1, 2018, at 7:00 p.m. at the Escanaba City Hall, 410 Ludington Street. The following item will be on the agenda:

**Condemnation Hearing – 910 Ludington Street**

Administration is requesting the condemnation of a building located at 910 Ludington Street, Escanaba, MI. Administration advises the 3,075 sq. ft. structure is deemed unsafe, a public nuisance, and unfit for human occupancy.

You are cordially invited to attend this meeting should you have any interest in this project. If you have comments, but are unable to attend this meeting, please submit your written comments to the City of Escanaba – Community Development Department prior to March 1, 2018. All written and signed comments will be read into the public record.

The City of Escanaba will provide all necessary, reasonable aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting to individuals with disabilities at the meeting/hearing upon five (5) days’ notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling the City of Escanaba at (906) 786-9402.

Sincerely,

Blaine DeGrave
Community Development

**PROOF OF SERVICE – MAILING**

This document was enclosed in sealed envelope, first class postage fully prepaid, and deposited in the U.S. Government Mail.

Addressee(s): Assessed Property Owner/Occupant
300’ Radius of 910 Ludington Street
Mailing Date: February 21, 2018
Attest To By: Lisa Gilish
City of Escanaba - City Hall

*Mission Statement:*

Enhancing the enjoyment and livability of our community by providing quality municipal services to our citizens.

*The City of Escanaba is an equal opportunity employer and provider.*
<table>
<thead>
<tr>
<th>Physical Address</th>
<th>Owner Name</th>
<th>Owner Address</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>901 Ludington Street</td>
<td>AT &amp; CO Escanaba Real Estate</td>
<td>901 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>1000 Ludington Street</td>
<td>Bert &amp; Paula Jonsson</td>
<td>8141 N 3th Ln</td>
<td>Gladstone</td>
<td>MI</td>
<td>49837</td>
</tr>
<tr>
<td>909 Ludington Street</td>
<td>Brian M Malmsten</td>
<td>11992 Us Highway 41</td>
<td>Rapid River</td>
<td>MI</td>
<td>49878</td>
</tr>
<tr>
<td>904 Ludington Street</td>
<td>C &amp; S LLC Attn: Leigh Schmidt</td>
<td>209 S 12th St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>1006 Ludington Street</td>
<td>Cashen Floral Co Inc</td>
<td>1006 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>922 Ludington Street &amp; 112 North 10th Street</td>
<td>Charles &amp; Lisa Dubord</td>
<td>5729 Main St</td>
<td>Wells</td>
<td>MI</td>
<td>49894</td>
</tr>
<tr>
<td>918 Ludington Street</td>
<td>Chris &amp; Lea Economos</td>
<td>1652 16th Ave S</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>902 1st Avenue North</td>
<td>Cynthia F Daigneault</td>
<td>902 1st Ave N</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>917 Ludington Street</td>
<td>David Moyle</td>
<td>917 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>923 Ludington Street</td>
<td>David O Pries &amp; Sun Byung C/O Treasure Chest</td>
<td>923 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>113 South 10th Street</td>
<td>Dennis &amp; Sally O Bittner</td>
<td>PO Box 713</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>912 Ludington Street</td>
<td>Donald Counceine &amp; Megan Mackowiak</td>
<td>912 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>1005 Ludington Street</td>
<td>Dorry Corporation C/O State Farm Insurance</td>
<td>317 S Lincoln Rd</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>821 1st Avenue North</td>
<td>Duane Beauchamp C/O Cory Pangborn</td>
<td>5808 G 5 Rd</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>816 Ludington Street</td>
<td>Gabe R Kluka</td>
<td>518 S 28th St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>823 Ludington Street</td>
<td>Garceau Insurance Agency Inc</td>
<td>823 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>1001 Ludington Street</td>
<td>Jell LLC</td>
<td>1616 16th Ave S</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>906 Ludington Street</td>
<td>John A &amp; Shannen Luft</td>
<td>906 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>112 South 9th Street</td>
<td>Joseph D &amp; Rachelle Mead</td>
<td>13110 Nw Germantown Rd</td>
<td>Portland</td>
<td>OR</td>
<td>97231</td>
</tr>
<tr>
<td>923 1st Avenue North</td>
<td>K &amp; M Industrial Attn: Joshua L King</td>
<td>80 Delta Ave</td>
<td>Gladstone</td>
<td>MI</td>
<td>49837</td>
</tr>
<tr>
<td>817.5 Ludington Street</td>
<td>Kenneth J Ozimac</td>
<td>817 1/2 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>111 North 9th Street</td>
<td>Kevin D &amp; Ann M Wendt</td>
<td>517 Ogden Ave</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>204 North 10th Street</td>
<td>Kimberly K Holden</td>
<td>204 N 10th St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>910 Ludington Street</td>
<td>Ludington Street Rentals LLC</td>
<td>1674 Eisenhower Rd</td>
<td>De Pere</td>
<td>WI</td>
<td>54115</td>
</tr>
<tr>
<td>912 1st Avenue North</td>
<td>Matthew S &amp; Shannon M Scheuren</td>
<td>6396 F Ln</td>
<td>Bark River</td>
<td>MI</td>
<td>49807</td>
</tr>
<tr>
<td>900 Ludington Street</td>
<td>Paula A Marvick &amp; Sue Hurley</td>
<td>5457 Portage Point 11.4 Ln</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>907 Ludington Street</td>
<td>Pencom Development Corporation</td>
<td>PO Box 297</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>823 1st Avenue North</td>
<td>Rhonda Danforth &amp; William Multhaupt</td>
<td>823 1st Ave N</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>916 Ludington Street</td>
<td>Robert Sullivan</td>
<td>2552 Us Highway 41 W Ste 100</td>
<td>Marquette</td>
<td>MI</td>
<td>49855</td>
</tr>
<tr>
<td>908 Ludington Street</td>
<td>Roy &amp; Shirley Hivala Trust C/O Book Store</td>
<td>908 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>914 Ludington Street</td>
<td>Russell &amp; Jamie Beaver</td>
<td>201 S 3rd St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>819 Ludington Street</td>
<td>Sertati Associates Inc C/O Restaurant</td>
<td>819 Ludington St</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>919 1st Avenue North</td>
<td>Steven A Rogers</td>
<td>919 1st Ave N</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>207 North 9th Street</td>
<td>David O Talbert &amp; Mickey P Salmi</td>
<td>1585 Aspen Dr</td>
<td>Ishpeming</td>
<td>MI</td>
<td>49849</td>
</tr>
<tr>
<td>200 North 10th Street</td>
<td>Thomas G &amp; Mary K Rymkos</td>
<td>7399 S Lake Bluff O.5 Dr # 0.5</td>
<td>Gladstone</td>
<td>MI</td>
<td>49837</td>
</tr>
<tr>
<td>112 North 10th Street &amp; 12 North 11th Street</td>
<td>Triad Investment Properties LLC</td>
<td>5808 G 5 Rd</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
<tr>
<td>919 Ludington Street</td>
<td>Wishful Thinking / Sunsalutions Attn: Dale &amp; Heidi Gartland</td>
<td>4160 12th Rd</td>
<td>Escanaba</td>
<td>MI</td>
<td>49829</td>
</tr>
</tbody>
</table>
MEMORANDUM

To: Patrick Jordan

From: Mike Furmanski

Date: 27FEB18

Re: Energis High Voltage Resources Proposal

We are nearing completion of the construction phase on the new North Shore Substation. It will soon be time to begin the testing and commissioning phase. Attached is a proposal from Energis High Voltage Resources, Inc. of Green Bay, WI to do this work. We have used Energis for many other projects on our electrical system and have been very happy with their work. They did the testing and commissioning on the North sub, which was built last year.

I am recommending that we accept the proposal from Energis High Voltage Resources, Inc of Green Bay, WI, which is estimated to cost $38,363.00. This cost is in the budget for the North Shore Substation.
Mike Furmanski  
Escanaba Electric Utility  
1711 Sheridan Road  
Escanaba, MI 49829  

RE: 106900 EEU NorthshoreSub Test-Commission-StartUp  

Dear Mike,

We are pleased to offer you the following time and material estimate to perform work at the Northshore Substation.

**Scope of Services**

Energis to travel to the Northshore Substation in Escanaba, MI to perform the following acceptance testing, commissioning and start-up services.

**POWER TRANSFORMER**  
Virginia transformer, 28 MVA, S/N 47017MA001U-HA267A, quantity 1, from “temporary” sub

- Visual and Mechanical Inspection  
  - Open and check radiator valves for leaks.  
  - Commission nitrogen system per manufacturer’s specification  
  - Inspect physical and mechanical condition.  
  - Inspect impact recorder, if applicable.  
  - Inspect anchorage, alignment, and grounding.  
  - Verify the presence of PCB content labeling.  
  - Verify removal of any shipping braces.  
  - Verify bushings are clean.  
  - Verify correct liquid level in tanks and bushings.  
  - Verify that a positive pressure is maintained on gas-blanketed transformers.  
  - Verify control cabinet heaters and associated thermostats operational.  
  - Verify the presence of surge arresters.  
  - Perform inspections as recommended by the manufacturer.  
  - Obtain DGA and Oil Quality samples from the main tank and load tap changer (LTC).  
  - Verify de-energized tap changer (DETC) position is left as-specified.  
  - Verify bolted electrical connections by calibrated torque-wrench per NETA table.

- Electrical Tests  
  - Power factor overall test.  
  - Power factor bushing test.
o Turns ratio test (All DETC and LTC positions).
  o Core ground test.

INSTRUMENT TRANSFORMERS
ABB, VOG-11, 60:1, single-bushing voltage transformer, quantity 3
GE, current transformer, 750/1500:5 ratio, quantity 3
Metering Unit CTs, PTs, from “temporary” sub

- Visual and Mechanical Inspection
  o Compare equipment nameplate data with drawings and specifications.
  o Inspect physical and mechanical condition.
  o Verify correct connection of transformers with system requirements.
  o Verify that adequate clearances exist between primary and secondary circuit wiring.
  o Verify the unit is clean.
  o Inspect bolted electrical connections for high resistance by the use of low-resistance ohmmeter.
  o Verify that all required grounding and shorting connections provide contact.
  o Verify correct operation of transformer withdrawal mechanism and grounding operation.
  o Verify correct primary and secondary fuse sizes for voltage transformers.
  o Verify appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.

- Electrical Tests - CTs
  o Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable.
  o Perform insulation-resistance test of each current transformer and its secondary wiring with respect to ground at 1000 volts DC for one minute. For units with solid-state components that cannot tolerate the applied voltage, follow manufacturer’s recommendations.
  o Perform a polarity test of each CT.
  o Perform a ratio-verification test.
  o Perform an excitation test on transformer used for relaying applications.
  o Measure current circuit burdens at transformer terminals.
  o When applicable, perform insulation-resistance test on the primary winding with the secondary grounded.
  o Perform power-factor or dissipation-factor tests.
  o Verify that CT secondary circuits are grounded and have only one grounding point.

- Electrical Tests - VTs
  o Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable.
  o Perform insulation-resistance tests winding-to-winding and each winding-to-ground. Test voltages shall be applied for one minute. For units with solid-state components that cannot tolerate the applied voltage, follow manufacturer’s recommendations.
  o Perform a polarity test of each transformer to verify the polarity marks or $H_1 - X_1$ relationship as applicable.
  o Perform a turns-ratio test on all tap positions.
  o Measure voltage circuit burdens at transformer terminals.
o Perform dielectric withstand test on the primary windings with the secondary windings connection to ground. The dielectric voltage shall be in accordance with Table 100.9. The test should be applied for one minute.

o When applicable, perform insulation-resistance test on the primary winding with the secondary grounded.

o Perform power-factor or dissipation-factor tests.

o Verify that CT secondary circuits are grounded and have only one grounding point.

SF6 GAS CIRCUIT BREAKER
Siemens, SPS2-72.5-40-2, S/N 30093923-2, quantity 1, from “temporary” sub

- Visual and Mechanical Inspection
  o Inspect physical and mechanical condition.
  o Inspect anchorage, alignment, and grounding.
  o Verify unit is clean.
  o Inspect operating mechanism and its components.
  o Verify breaker has proper gas pressure.
  o Verify control cabinet heaters and associated thermostats operational.
  o Verify pole heaters and associated thermostat operational.
  o Verify counter operational.
  o Verify bolted electrical connections by calibrated torque-wrench per NETA tables 100.12.1-100.12.4.
  o Verify alarms operational (with updated prints and DC power available).

- Electrical Tests
  o Time travel analysis test (test brackets can be an issue if not onsite).
  o Contact resistance test.
  o SF6 gas test for moisture, purity and SO2.
  o Current transformer (CT) saturation turns ratio and insulation resistance test.

VACUUM CIRCUIT BREAKER
Siemens, SDV6, S/N 39907720-100-2, quantity 1, from “temporary” sub

- Visual and Mechanical Inspection
  o Record serial number, manufacturer and catalog number.
  o Record breaker frame and trip unit size.
  o Inspect physical and mechanical condition.
  o Inspect anchorage, alignment and grounding.
  o Inspect arc chutes.
  o Verify unit is clean.
  o Inspect operating mechanism and its components.
  o Verify counter operational.
  o Inspect moving and stationary contacts for condition, wear, and alignment.
  o Perform all mechanical operation tests on the operating mechanism in accordance with manufacturer’s published data.
  o Inspect vacuum bottle assemblies.
  o Measure critical distances as recommended by the manufacturer.
  o Apply appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
  o Verify circuit breaker operation.
- Verify bolted electrical connections by calibrated torque-wrench per NETA table 100.12.1-100.12.4.
  - If recommended by manufacturer, slow close/open breaker and check for binding, friction, contact alignment, contact sequence, and penetration. Verify that contact sequence is in accordance with manufacturer’s published data.

- Electrical Tests
  - Contact resistance test.
  - Insulation resistance test at 5000 Volts D.C.
  - Contact resistance test through bolted connections, if applicable.
  - Perform a vacuum bottle integrity (dielectric withstand voltage) test across each vacuum bottle with the breaker in the open position in strict accordance with manufacturer’s published data.

**SWITCH**

Turner, TMX, 69 kV, VERTICAL GROUP-OPERATED SWITCH, quantity 1, new

- Visual and Mechanical Inspection
  - Compare equipment nameplate data with drawings and specifications.
  - Inspect physical and mechanical condition.
  - Inspect anchorage, alignment, grounding, and required clearances.
  - Verify the unit is clean.
  - Perform mechanical operator tests in accordance with manufacturer’s published data, if applicable.
  - Verify correct operation and adjustment of motor operator limit switches and mechanical interlocks, if applicable.
  - Verify correct blade alignment, blade penetration, travel stops, arc interrupter operation, and mechanical operation.
  - Verify operation and sequencing of interlocking systems.
  - Verify that each fuse has adequate mechanical support and contact integrity, if applicable.
  - Verify that fuse sizes and types are in accordance with drawings, short-circuit study, and coordination study.
  - Inspect bolted electrical connections for high resistance.
    - Use of low-resistance ohmmeter in accordance with Section 7.5.1.3.2.
  - Verify correct operation of all indicating and control devices, if applicable.
  - Verify appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
  - Record as-found and as-left operation counter readings.

- Electrical Tests
  - Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable, in accordance with Section 7.5.1.3.1.
  - Perform contact-resistance test across each switchblade and fuseholder.
  - Perform insulation-resistance tests for one minute on each pole, phase-to-phase and phase-to-ground with switch closed, and across each open pole. Apply voltage in accordance with manufacturer’s published data.
  - Perform dielectric withstand voltage test on each pole with switch closed. Test each pole-to-ground with all other poles grounded. Test voltage shall be in accordance with manufacturer’s published data.
RECLOSES and RECLOSE CONTROLS
G&W, VIP378ER-12S, 15.5 kV, 800A, solid dielectric recloser, quantity 4, new

- Visual and Mechanical Inspection
  - Compare equipment nameplate data with drawings and specifications.
  - Inspect physical and mechanical condition.
  - Inspect anchorage, alignment, and grounding.
  - Verify the unit is clean.
  - Perform all mechanical operation and contact alignment tests on both the recloser and its operating mechanism in accordance with manufacturer’s published data.
  - Inspect bolted electrical connections for high resistance by the use of low-resistance ohmmeter.
  - Verify appropriate insulating liquid level.

- Electrical Tests
  - Perform resistance measurements through bolted connections with a low-resistance ohmmeter, if applicable.
  - Perform insulation resistance test on each pole, phase-to-phase and phase-to-ground with recloser closed, and across each open pole for one minute. Apply voltage in accordance with manufacturer’s published data.
  - Perform a contact/pole-resistance test.
  - Perform insulation-resistance tests on all control wiring with respect to ground. Applied potential shall be 500 volts DC for 300-volt rated cable and 1000 volts DC for 600-volt rated cable. Test duration shall be one minute. For units with solid-state components, follow manufacturer’s recommendation.
  - Take a DGA and Oil Quality sample.
  - Perform minimum pick-up voltage tests on trip and close coils in accordance with manufacturer’s published data.
  - Perform power-factor or dissipation-factor tests on each bushing equipped with a power-factor/capacitance tap. In the absence of a power-factor/capacitance tap, perform hot-collar tests.
  - Perform vacuum bottle integrity test, if applicable, across each vacuum bottle with the contacts in the open position in strict accordance with manufacturer’s published data.
  - Perform dielectric withstand voltage tests on each pole-to-ground and pole-to-pole with recloser in closed position.
  - Verify operation of heaters, if applicable
  - Test all protective functions.
  - Test all metering and instrumentation.
  - Test instrument transformers.

STATION TRANSFORMER
Cooper, 37.5 kVA, 7200-120/240 V transformer, quantity 1

- Visual and Mechanical Inspection
  - Perform a visual inspection of the unit.
  - Inspect insulator for chips/cracks.
  - Inspect unit for leaks.
  - Verify tank is properly grounded.
  - Verify unit is mounted securely.

- Electrical Tests
- Perform an insulation resistance test.
- Perform a turns ratio test on all taps (as applicable).

ARRESTERS
Ohio Brass, surge arrester, 57 kV, MCOV, STATION CLASS, POLYMER, quantity 3
Ohio Brass surge arrester, 9 kV, MCOV, DISTRIBUTION RISER OR HEAVY-DUTY CLASS, quantity 13

Transformer arresters
- Visual and Mechanical Inspection
  - Perform a visual inspection of the arrester.
  - Verify arrester is properly mounted.
  - Verify arrester is properly grounded.
- Electrical Tests
  - Perform insulation resistance tests using minimum 10 kV test set.

DISCONNECT SWITCHES
Royal Switch, 15 kV, 2000A, BT DISCONNECT SWITCH, SINGLE POLE, SINGLE THROW, quantity 3
S&C, 15 kV, 900A, STATION VERITICAL HOOKSTICK, quantity 24

- Visual and Mechanical Inspection
  - Perform a visual inspection of the unit.
    - Inspect insulator for chips/cracks
    - Inspect live parts for cracks or damaged components.
    - Switch is properly fastened to structure.
    - Switch is properly grounded.
    - Switch mats are installed and properly grounded.
  - Verify switch operates properly. Includes the following:
    - Proper blade angle when OPEN.
    - Synchronous closing of blades.
    - Proper contact with arcing horns where utilized.
    - Proper blade alignment with switch jaw.
    - Proper blade penetration in jaw when fully closed.
    - Proper blade angle when fully closed.
    - Proper over toggle of switch linkage.

GROUND GRID
- Fall of Potential Test
  - Subcontractor shall perform a 3 point ‘Fall of Potential’ test on the ground grid.
  - Test shall be executed in accordance with IEEE 80 requirements.
  - Results of this test shall be compared with the station’s grounding report to ensure an adequate ground grid is installed. Facility engineer shall be consulted once the test is completed to review the results.
BATTERIES
BAE, 4OPzS 200 LA, from “temporary” sub

- Visual and Mechanical Inspection
  - Verify that batteries are adequately located.
  - Verify that battery area ventilation system is operable.
  - Verify existence of suitable eyewash equipment.
  - Compare equipment nameplate data with drawings and specifications.
  - Inspect physical and mechanical condition.
  - Verify adequacy of battery support racks or cabinets, mounting, battery spill containment system, anchorage, alignment, grounding, and clearances.
  - Verify electrolyte level.
  - Verify the units are clean.
  - Verify application of an oxide inhibitor on battery terminal connections.
  - Inspect bolted electrical connections for high resistance from the use of a low-resistance ohmmeter.

- Electrical Tests
  - Perform resistance measurements through all bolted connections with a low-resistance ohmmeter.
  - Measure charger float and equalizing voltage levels. Adjust to battery manufacturer’s recommended settings.
  - Verify all charger functions and alarms.
  - Measure each cell voltage and total battery voltage with charger energized and in float mode of operations.
  - Measure intercell connection resistances.
  - Perform internal ohmic measurement tests.
  - Perform load test in accordance with manufacturer’s published data.
  - Measure the battery system voltage from positive-to-ground and negative-to-ground.

BATTERY CHARGER & SYSTEM WIRING
Sens, DC120-12-A643, S/N 2219-14, from “temporary” sub

- Visual and Mechanical Inspection
  - Verify unit is free from damage.
  - Verify charger is adequately mounted.
  - Verify conductor raceway system is adequate.
  - Verify connections are properly torqued.

- Electrical Tests
  - Verify equipment is adequately rated for application.
  - Verify system is free of shorts/grounds.
  - Verify float and equalize levels are set properly.
  - Verify all alarm points functionality.

RELAYS (Electromechanical and Solid-State)
- Visual and Mechanical Inspection
  - Compare equipment nameplate data with drawings and specifications.
  - Inspect relays and cases for physical damage.
  - Verify the unit is clean.
  - Relay case
    - Tighten case connections.
- Inspect cover for correct gasket seal.
- Clean cover glass. Inspect shorting hardware, connection paddles, and knife switches.
- Remove any foreign material from the case.
- Verify target reset.

  o Relay
  - Inspect relay for foreign material, particularly in disk slots of the damping and electromagnets.
  - Verify disk clearance. Verify contact clearance and spring bias.

- Electrical Tests
  o Perform an insulation-resistance test on each circuit-to-frame.
  o Inspect targets and indicators.
    - Determine pick up and dropout of electromechanical targets.
    - Verify operation of all light-emitting diode indicators.
    - Set contract for liquid-crystal display readouts.
  o Control Verification
    - Functional tests
      - Verify that each of the relay contacts performs its intended function in the control scheme including breaker trip tests, close inhibit tests, 86 lockout tests, and alarm functions.
    - In-service monitoring
      - After the equipment is initially energized, measure magnitude and phase angle of all inputs and compare to expected values.

RELAYS (Microprocessor-Based)
- Visual and Mechanical Inspection
  o Record model number, style number, serial number, firmware revision, software revision, and rated control voltage.
  o Verify operation of light-emitting diodes, display, and targets.
  o Clean the front panel and remove foreign material from the case.
  o Check tightness of connections.
  o Verify that the frame is grounded in accordance with manufacturer’s instructions.
  o Set the relay in accordance with the coordination study.
  o Download settings from the relay and compare the settings to those specified in the coordination study or site documentation.
  o Connect back up battery.
  o Set clock if not controlled externally.

- Electrical Tests
  o Perform insulation-resistance tests from each circuit to the grounded frame in accordance with manufacturer’s published data.
  o Apply voltage or current to all analog inputs and verify correct registration of the relay meter functions.
  o Functional Operation
    - Check function operation of each element used in the protection scheme.
  o Control Verification
- Functional tests
  - Check operation of all active digital inputs.
  - Check all output contacts or SCRs, preferably by operating the controlled device such as circuit breaker, auxiliary relay, or alarm.
  - Check all internal logic functions used in the protection scheme.
  - For pilot schemes, perform a loop-back test to check the receive and transmit communication circuits.
  - For pilot schemes, perform satellite synchronized end-to-end tests.
  - For pilot schemes with direct transfer trip (DTT), perform transit and received DTT at each terminal.
  - Upon completion of testing, reset all min/max recorders, communication statistics, fault counters, sequence of events recorder, and all even records.
- In-service monitoring
  - After the equipment in initially energized, measure magnitude and phase angle of all inputs and compare to expected values.

ALARMS
- Ensure alarms are functioning properly.

WIRING CHECKS
- All circuit wiring shall be visually verified to validate accuracy of wiring diagrams. This task can be documented by highlighting wiring documents and turning them over as a part of the test results package. This would include verifying control cable shield wires (if applicable) or CT/PT grounds are landed only in the appropriate locations as shown on the schematics and drawings.

FUNCTIONAL TESTING
- All circuits and equipment shall be functionally operated to prove the installation is per the schematics.
- All portions of each circuit shall be tested to verify proper operation.
- Testing shall be documented by highlighting a commissioning set of documents.
- Functional testing shall include but not be limited to the following:
  - Circuit breaker
  - Close circuit
  - Trip circuits
  - Alarm circuit
  - Motor circuit
  - Auxiliary circuits
- Protective schemes
  - Line protection schemes
  - Breaker failure schemes
  - Transformer protection schemes
  - Bus protection schemes
  - Transformer control schemes
- Feeder protection schemes
- Motor operated disconnects
- Alarms and annunciation circuits
- Interlocks

**IN-SERVICE TESTS**

- Station Service
  - Verify correct voltage magnitudes (P-P, P-N, P-G)
  - Confirm operation of transfer scheme by executing an in-service transfer of sources.
- Instrument transformer secondaries
  - These should be confirmed at each relay and the marshaling box(es) at a minimum. Locations may be increased based on facility design.
  - Voltages
    - Verify correct magnitudes
    - Verify correct phasing
    - Verify correct phase angles
  - Currents
    - Verify correct magnitudes
    - Verify correct phasing
    - Verify correct phase angles
  - Voltages & Currents
    - Verify phase angles between voltages and currents are correct based on operating conditions
  - Differential Relays
    - Verify restraint and operate magnitudes.

**Assumptions:**

- This is an estimate.
- All equipment is treated as new in a new location.
- The customer or customer's engineer will provide Issued for Construction Prints, nameplate information for all apparatuses, and all settings for equipment.
- This does not include cable testing.
- Delays outside of Energis' control will be billed at time and material rates.

**Estimate:** $38,363.00

If you have any questions, please feel free to call me on my cell number below.

Sincerely,

Olle Bohm-Hegedorn

Project Manager
Energis High Voltage Resources, Inc.
Cell 715-584-2501
TERMS AND CONDITIONS

1. Acceptance and Governing Provisions. No Proposal shall be binding upon Seller until accepted in writing by an authorized representative of Buyer. Seller's performance of its obligations under this Proposal is conditioned upon Buyer's acceptance of the terms and conditions set forth herein (the "Terms") and Buyer's agreement to be bound by and comply with the Terms. These Terms, the terms on the face of this document and all referenced attachments constitute the entire agreement between Buyer and Seller, and no amendment or modification shall be binding on Seller unless signed by an officer of Seller. The failure of Seller to object to provisions contained in any purchase order, proposal or other document of Buyer shall not be construed as a waiver by Seller of the Terms or an acceptance of any such provisions. Any conflicting or additional terms or conditions set forth by Buyer in a purchase order, proposal or other document are not binding upon Seller, and Seller hereby expressly objects thereto.

2. Disclaimer. EXCEPT AS EXPRESSLY SET FORTH HEREIN, SELLER MAKES NO WARRANTY OF ANY KIND WHATSOEVER, AND SELLER EXPRESSLY DISCLAIMS ANY WARRANTIES IMPLIED BY LAW, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

3. Delivery and Delay. Unless otherwise agreed to in writing signed by Seller: (a) any goods ordered by Buyer shall be delivered F.O.B. point of shipment, with delivery to the initial carrier constituting delivery to Buyer; (b) title to the goods and risk of damage or loss shall pass to Buyer upon delivery to the initial carrier; (c) transportation costs shall be paid by Buyer; and (d) Buyer shall have sole responsibility for filing any claims with any carrier for delay, loss or damage. Dates of delivery or performance of services are estimates only and are based on timely receipt from Buyer of all information required by Seller to provide the goods or services. Seller shall not be liable for any delay beyond its reasonable control or caused by accident, bad weather, embargo, act of Buyer or third parties, labor disputes, transportation shortages, national emergency, riots, non-delivery of suppliers, delays of carriers or delivery agents, inability to obtain labor, materials or manufacturing facilities, acts of God or government restrictions, prohibitions or requirements. In the event of any such delay, Seller's time period for delivery of goods or performance of services shall be extended accordingly. REGARDLESS OF THE CAUSE, SELLER SHALL HAVE NO LIABILITY FOR PENALTIES OF ANY NATURE AS A RESULT OF A DELAY. During any period of shortage due to the stated or similar causes, Seller may prorate its supply of goods and services among its internal demand and its customers in whatever manner it chooses.

4. Limitation of Liability. Seller shall not be liable under any theory of relief, including, without limitation, breach of warranty, breach of contract, tort (including negligence), strict liability, or otherwise, arising out of or related to this Proposal or Seller's acts or omissions, for: (a) incidental, special or consequential damages of any nature, including, without limitation, loss of profits, damage to property or loss of use; or (b) any damage or loss in excess of the purchase price actually paid by Buyer. Any action by Buyer must be commenced within one (1) year after the cause of action has accrued.

5. Changes and Substitutions. Any changes requested by Buyer are not effective unless accepted in writing by an authorized representative of Seller. Any changes accepted by Seller which affect the specifications or scope of work of this Proposal shall entitle Seller, as appropriate, to an adjustment to the price, delivery or performance schedule or other terms affected by such change. Seller may furnish suitable substitutes for goods unobtainable due to regulations of governmental authorities or unavailability of materials from suppliers. Details of design, construction and services in this Proposal are approximate and subject to revision by Seller. If changes in performance of services or in materials, design, layout or arrangement of goods are desired or required by conditions of which Seller was unaware or which were unforeseen by Seller, the price is subject to revision.

6. Prices and Payment. Unless other terms have been expressly stated by Seller in writing, Seller's prices: (a) are F.O.B. point of shipment; (b) do not include customs duties or any domestic or foreign sales, use, excise or similar taxes under existing or future laws (with Buyer to be charged for same, unless Buyer has provided Seller with an appropriate tax exemption certificate); (c) are valid for thirty (30) days from the proposal date; and (d) do not include costs for installation of goods. All quoted prices are subject to correction for clerical errors. Unless otherwise noted on the face hereof, the payment terms shall be net thirty (30) days from the date of invoice. Pro-rata payments shall become due with partial shipments of goods or partial delivery of services. Seller shall charge one and one-half percent (1 1/2%) per month (or such lower percentage as required by applicable law) of the unpaid invoice balance, commencing thirty (30) days following the invoice date. Any delay in delivery or performance of an installment shall not relieve Buyer of its obligation to accept and make payment for remaining installments. If Buyer is notified by Seller that the goods are ready for shipment and there is an unreasonable delay in shipment for reasons beyond Seller's control (including Buyer's failure to provide shipping instructions), the date of completion shall be
treated as the date of shipment for payment purposes, and completed goods shall be held at Buyer's risk of loss or damage, with Buyer paying all storage and insurance expenses. Seller may, at its option, decline to deliver goods or provide services, except for cash, or stop goods in transit whenever, for any reason, if Seller doubts Buyer's financial responsibility or stability.

7. Safety. Buyer shall take all necessary precautions, at all times, for the health and safety of Seller's personnel at Buyer's site. These include, but are not limited to: providing to Seller for review, and instructing Seller's personnel regarding, Buyer's safety practices; proper and safe handling of, and protection of Seller's personnel from exposure to hazardous materials; energization and de-energization of all power systems (electrical, mechanical and hydraulic) using safe and effective lock-out/tag-out procedures; and conducting periodic safety meetings. Seller may, from time to time, conduct safety audits to ensure the existence of a safe site and working conditions and make recommendations to Buyer concerning them. Whether or not Seller conducts safety audits or makes recommendations, Buyer will remain responsible for providing a work environment that is safe and that complies with all applicable legal requirements. Buyer will make its local medical facilities and resources available to Seller personnel who need medical attention, for the duration of their needs. If, in Seller's opinion, the safe execution of this Proposal at Buyer's site is, or could be, imperiled by security concerns, local conditions, war (declared or undeclared), armed conflict or threatened conflict, civil unrest, terrorist acts or threats, threat to safety or well-being of Buyer's site or personnel or Seller's persons or interests, the presence of or threat of exposure to hazardous materials, or unsafe working conditions, Seller may, in addition to other rights or remedies available to it, evacuate some or all of its personnel from the Site, suspend performance of all or any part of this Proposal and/or transfer such performance and supervise it at a location solely determined by Seller. Buyer shall assist in any evacuation. Any delay that results shall be considered excusable. Before issuing its purchase order, Buyer shall advise Seller in writing of all applicable site-specific rules, regulations, safety codes and laws that apply to the goods and services to be provided by Seller. If Buyer requires or permits Seller's personnel to operate Buyer's equipment at Buyer's site, Buyer shall indemnify and save Seller, its employees and agents, harmless from expense and liability (including reasonable attorneys' fees) incurred by or imposed upon Seller, its employees and agents, based upon exposure to hazardous materials, injury to persons (including death) or damage to property resulting from operation of equipment at Buyer's site by Seller personnel.

8. Inspection and Acceptance. Inspection of goods and services at Seller's facility by Buyer, or Buyer's representatives, will be permitted insofar as such inspection does not interfere with Seller's obligations herein and provided that complete written details of such inspection are submitted to Seller ten (10) days in advance. The goods and services shall be deemed accepted, and any claim of Buyer against Seller with respect to this Proposal shall be waived and not enforceable, unless: (i) Buyer has promptly inspected the goods and services, and written notice from Buyer of any defect has been received by Seller within forty-eight (48) hours of rejection of any goods or services inspected at Seller's facility or, if no facility inspection has taken place within thirty (30) days following any delivery of goods or performance of services; and (ii) Seller has been given by Buyer reasonable advance notice and authorization to attend any tests designed to demonstrate that goods are not defective, and the test conditions are mutually agreed to by Buyer and Seller. Goods may not be returned without obtaining written authorization and shipping instructions from an authorized representative of Seller.

9. Termination and Suspension. Seller shall have the right to suspend or cancel this Proposal (or any portion thereof) immediately for cause if: (a) Buyer becomes insolvent, makes an assignment for the benefit of its creditors, has a receiver or trustee appointed for the benefit of its creditors or files for protection from creditors under any bankruptcy or insolvency laws; (b) there is an excusable delay lasting longer than one hundred twenty (120) days; (c) any representation or warranty made by Buyer herein or in any document or certificate furnished by Buyer in connection herewith proves to be incorrect in any material respect; or (d) Buyer fails to comply with any terms herein, including, but not limited to, failure to make any payment when due or to fulfill any payment conditions. If this Proposal (or any portion thereof) is cancelled for any reason other than those set forth above, Buyer shall pay Seller for all goods provided or ordered on behalf of Buyer, and services performed before the effective date of termination, plus a cancellation charge equal to the higher of: (i) twenty-five percent (25%) of the purchase price set forth in this Proposal or (ii) any loss of Buyer, including, without limitation, engineering costs, reconditioning costs, labor, materials and Seller's profit margin. The following shall apply when determining the amount due from Buyer for services performed before the date of termination: (i) for services performed under time and material pricing, Buyer shall pay for all hours performed at Seller's then-current standard time and material rates and (ii) for services performed under a firm fixed price, Buyer shall pay (a) the applicable price for all milestones achieved and (b) for any milestone not yet achieved, all hours performed in connection with the unachieved milestone(s) at Seller's then-current standard time and material rates. Buyer shall pay any reasonable expenses incurred
by Seller in connection with a cancellation, including expenses for repossession, fee collection, demobilization/remobilization or costs of storage upon submission of Seller's invoice(s).

10. **Indemnification.** Buyer shall defend, hold harmless, and indemnify Seller and its officers, members, directors, employees, agents and representatives from and against all damages, claims, liabilities and expenses (including attorneys' fees) to the extent caused by (a) any breach of Buyer's obligations under this Proposal and (b) any other act or omission of Buyer, related to this Proposal. Seller shall defend, hold harmless, and indemnify Buyer and its officers, members, directors, employees, agents and representatives from and against all damages, claims, liabilities and expenses (including attorneys' fees) to the extent caused by (a) any breach of Seller's obligations under this Proposal and (b) any other act or omission of Seller, related to this Proposal. These provisions shall survive the termination of this Proposal and/or the completion of Seller's obligations hereunder.

11. **Insurance.** Each party shall obtain, maintain and pay for such insurance as may be reasonably required by the other party or by law and comprehensive general liability insurance protecting the other party against claims for bodily injury or death or for damage to property caused by the first party or its agents, with limits in amounts as reasonably required by the other party. Each party agrees to furnish the other party a copy of its insurance certificate prior to Seller providing its services or the goods in connection with this Proposal and each party agrees that said insurance policy will not be cancelled before final completion of the services or delivery of the goods provided under this Proposal. The comprehensive general liability policy to be obtained hereunder shall name the other party as an additional insured thereunder and shall not be cancelled without prior written consent of the other party. The Seller and Buyer waive all rights against each other for damages caused by peril to the extent covered by the proceeds of any insurance policy, except such rights as they may have to the insurance proceeds.

12. **Miscellaneous.** The contract resulting from the acceptance of this Proposal shall be interpreted in accordance with the laws of the State of Wisconsin. Both parties irrevocably submit to the exclusive jurisdiction of the Circuit Court of Brown County, Wisconsin, for any action or proceeding relating to this Proposal. No waiver of any of the provisions contained in this Proposal shall be valid unless made in writing and executed by Seller. Failure of Seller to insist upon strict performance of the terms of this Proposal shall not constitute a waiver of any of the provisions of this Proposal or waiver of any other default. This Proposal contains the entire understanding between the parties related to the transactions contemplated herein and supersedes all prior or contemporaneous agreements or understandings. No modification, amendment, discharge or change of this Proposal shall be valid unless set forth in writing and signed by both parties. This Proposal shall not be construed against one party in favor of the other by reason of craftsmanship. This Proposal is not assignable by Buyer.

13. **Waste Materials.** If the service to be performed by Seller under this Proposal in any way concern waste materials of Buyer, then Buyer grants Seller the authority to enter into any agreement Seller deems necessary with Seller's contractors or subcontractors with respect to such waste materials. Furthermore, Buyer represents and warrants that Buyer is under no legal restraint which would prohibit the transfer of possession of such waste materials from Buyer to Seller's contractors or subcontractors and Buyer shall, upon request of Seller, execute any and all documentation necessary to effectuate such transfer of possession. If Seller requests that work areas located at Buyer's facilities or premises be secured, Buyer shall cooperate with Seller in securing such work areas and in preventing anyone other than Seller, Seller's contractors or subcontractors, and their respective personnel from entering the designated work areas. Buyer represents and warrants that it has delivered to Seller all information Buyer has regarding the waste materials and the surface and subsurface conditions in the vicinity of the premises where Seller is to perform its services and if Buyer receives information that the waste materials present, or may present, a hazard or risk to persons or the environment, Buyer shall promptly report and deliver such information to Seller.
CITY OF ESCANABA
DELTA COUNTY, MICHIGAN

RESOLUTION OF THE CITY COUNCIL

WHEREAS, the City Council of the City of Escanaba wishes to provide Roads Maintenance, Equipment, Improvements and Repair, Underground Utility Improvements and Payment of Debt Service; and

WHEREAS, cities may impose and levy ad valorem property taxes to finance lawful public services, as authorized by the Michigan Constitution of 1963 and other laws; and

WHEREAS, the City Council of the City of Escanaba wishes to levy _____ mills for the provision of Roads Maintenance, Equipment, Improvements and Repair, Underground Utility Improvements and Debt Service Payments.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Escanaba, Delta County, approves the following question as the appropriate ballot language and directs the Clerk to submit it to be placed on the _____________. 2018 election ballot:

ROADS MAINTENANCE, EQUIPMENT, IMPROVEMENTS and REPAIR,
UNDERGROUND UTILITY IMPROVEMENTS and DEBT SERVICE
PAYMENTS

Shall the City of Escanaba levy against all real and personal property a tax not to exceed _____ mills ($___ per $1,000 of taxable valuation) beginning 2019 and ending ________ for the purpose of Roads Maintenance, Equipment, Improvements and Repair, Underground Utility Improvements and Payment of Debt Service and such levy shall increase the tax limitation under Article IX, Section 6 of the Michigan Constitution; and if this millage is approved and levied in its entirety, the City would collect an estimated $_________ in the first year of such levy?

( ) YES

( ) NO

Motion made by ________________ Seconded by __________________

Upon roll call vote the following voted

"Aye"

"Nay"

Absent:

The (title) declared the resolution adopted.
CERTIFICATE

I, Robert Richards, the duly appointed and acting Clerk of the City of Escanaba, hereby certify that the foregoing resolution was adopted by the City Council by a roll call vote at a regular meeting of the Council held on ______________, at which meeting a quorum was present; and that this resolution was ordered to take immediate effect.

Robert Richards, Clerk
Memo

To: Patrick Jordan, City Manager
From: Jeff Lampi, W & WW Supt
Date: 2/21/18
Re: Conducting a small I & I Study – Flow Monitoring

Patrick,

I’ve been tasked with preventing any more partially treated wastewater by-passes at the Wastewater plant. In a means to do anything related to this task, we will need to conduct an Inflow and Intrusion (I&I) study to determine the most feasible and cost effective approach to plan for this mitigation. Possible means of mitigation include; repairing the collection system & removing I&I sources, plant expansion, or adding equalization (EQ) tanks.

As part of this process we will need to obtain a loan, most likely via the State Revolving Funds (SRF) program. This program has very rigid rules that must be followed. The State will want to make sure we are making the best use of resources, so they require a lot of planning before any money will be committed. So, depending upon the results for the I&I study a more extensive Sewer System Evaluation Survey (SSES) may also be required before proceeding to project design stage. The SSES will have much higher costs than the I&I study, due to the added detail and level of effort that will be needed. Conducting the flow monitoring now is an attempt to avoid the SSES costs and efforts later.

Break down of I&I an SSES work:

I&I study (as planned):
- Evaluate and analyze information collected in the SAW Grant—which include the items below
  o Man hole inspections
  o Evaluating of existing Flow monitoring
  o Use of hydraulic model
  o Evaluation of data of pump stations and WW flow meter
- Additional flow monitoring for at four locations for three months
- Discuss and identify where roof top drains and sump pumps may be located
- I&I study will provide information on where the low hanging fruit may or may not exist

SSES study (which may still be required before SFR funding is approved):
- Smoke testing
  o ID roof top drain connections to sanitary sewer
  o ID possible storm sewer connections to sanitary sewer
- Possibly more sanitary sewer flow monitoring & lift station testing
- ID and perform residential sump pump inspections
- Possible additional Televising of sewers
- Additional hydraulic modeling
I feel asking C2AE to oversee this work makes the most sense in regards to meeting existing time lines, and more importantly addressing this in the most cost effective method possible. C2AE is our logical choice to conduct this I&I study because they have all the intimate and detailed experience of gathering the information within the SAW Grant, and they have been and remain to be our engineering firm of choice. I have hopes to further reduce the cost of this flow monitoring, because I would like to utilize travel costs associated with the flow monitoring being conducted as part of the Storm Sewer System via SAW.

Complete details for services from C2AE can be found in the proposal attached to this memo.

The proposal as written; for this I&I study will cost $95,000.00. I would like to utilize the existing budgeted money in the following accounts dedicated for professional services; 555-600-801-000 (~$30,800.00) and 555-620-801-000 (~$18,000.00) to conduct this work, with the remaining costs (~$47,000.00 +/-) being drawn from the Wastewater Fund Balance.

I would like your authorization along with Council Approval to retain C2AE of Escanaba, MI to conduct the I&I Study and oversee the Flow Monitoring as written in the proposal dated Feb 20th, 2018; at a cost not to exceed $95,000.00.

Cc: Melissa Becotte, City Controller
February 20, 2018

Mr. Jeff Lampi  
Wastewater Superintendent  
City of Escanaba  
410 Ludington Street  
Escanaba, MI 49829

Re: Proposal for Professional Services, System Evaluation and Planning

Dear Mr. Lampi,

Thank you for working with CZAE through the recent SAW and Preliminary Treatment Evaluation projects. It has been gratifying to be able to help our home community and participate in the long term future infrastructure planning. The SAW Grant program and other related evaluations have revealed important needs in the Wastewater utility. This proposal is offered to clarify Wastewater challenges and needs to move forward with critical asset improvements. Input from yourself and wastewater staff has been a valuable contributor to this proposal.

PROJECT UNDERSTANDING

The City of Escanaba is nearing the end of their SAW funded Wastewater Asset Management Plan development, which is the basis for long term system planning. Since 2015 Wastewater managers have targeted an important WWTP project to upgrade primary treatment because the existing structures were deteriorating at a very rapid rate and major plant equipment was at the end of its useful life. In 2015 the SAW project was imminent, and it was decided to delay pursuit of a major WWTP project until SAW data was available. In 2014 and again 2017 high flows and secondary treatment bypasses have accentuated the need for system improvements to avoid further violations of State law.

For Escanaba the most viable funding assistance for a wastewater project comes from the State Revolving Fund (SRF), which has been a successful partner for both Water and Wastewater in the past. MDEQ requires that clean water Infiltration and Inflow (I/I) must be within established limits before SRF funding for WWTP improvements could be approved without the study of sewer system I/I. Escanaba was outside of acceptable I/I guidance limits but was also on the good side of communities with high I/I. In comparison with other older communities Escanaba was fairly low in I/I, and meetings with MDEQ were held hoping to continue focus on the target WWTP rather than spreading the study efforts to include the collection system. MDEQ’s position was that normal steps and studies to quantify I/I would be required.

Manhole inspections, sewer televising, hydraulic modelling, and flow monitoring were conducted on the Escanaba sanitary sewer system under the SAW program. This contributed important information regarding the condition of the system and nature of I/I that would normally be part of the I/I study process. This information, along with historic experience, assisted the SAW team in proposing capital budget items for collection system studies to pave the way for funding of wastewater system improvements through the SRF. The following summary applies to the current situation:

- The amount of collection system I/I is significant but on the low side when compared to some older collection systems.
- An Infiltration and Inflow study will be needed to enable SRF funding to move forward. The I/I study will assess available information and compare the cost for the primary overriding options to handle peak flows:
  - Collection system work to reduce I/I.
  - WWTP improvements and the associated O&M cost to treat I/I.
  - Equalization facilities to store peak flow until treatment is possible.
• To access State funding it will be necessary to demonstrate that the most cost effective strategy is proposed.

IN FUTURE PHASES

• A Sewer System Evaluation Survey (SSES) of some scope will likely be needed to look at additional collection system characteristics to define the best approaches and locations at which to eliminate I/I.
• A project plan report will be needed to summarize a proposed improvement project and obtain State funding approval through the SRF.
• Project Plan development can occur simultaneously with the I/I and SSES studies.
• Design can begin upon approval of the Project Plan by MDEQ.

This engineer’s proposal is written to help describe and clarify the pathway for the City.

Final decisions directing the next 50 years of wastewater infrastructure upgrades must factor immediate concerns regarding infiltration/inflow/WWTP capacity, but should also consider the structure lifespan of system pipe and manhole assets along with impacts on other City infrastructure assets such as pavement.

SCOPE

Peak flow rates reaching the Escanaba WWTP result in illegal secondary treatment bypasses and per capita flows that exceed MDEQ guidance criteria. This will drive approval of SRF funding for needed projects only if the cost effective actions are pursued. To move forward it will be necessary to accomplish one or more of the following:

1. Reduce peak flow from the collection system reaching the WWTP
2. Increase the WWTP capacity to accept and fully treat peak flows
3. Construct equalization or storage facilities to hold excess flow and provide full treatment during low flow periods.

To choose the final direction, Michigan’s DEQ will require an Infiltration and Inflow Study to identify the cost effective strategy and may then require a Sewer System Evaluation Survey to define specific improvements if collection system work is cost effective.

The purpose of the I/I study will be assess available data, compile additional data if needed, and make an initial recommendation regarding the most cost effective long term control approach. The options again are Collection work to reduce I/I, WWTP improvements to upgrade capacity, or Storage/Equalization construction.

The Purpose of SSES study will be to collect more detailed collection system information, if suggested by the I/I, to focus on collection components and areas of the City in which to make improvements. A SSES of some scope will likely be required under the SRF program. Depending upon the results of the I/I, the SSES could be larger or smaller in scope. An SSES could potentially include more flow monitoring, smoke testing, dye testing, added hydraulic modeling of the major sewers, and sanitary sewer TV work.

Infiltration and Inflow Study (I/I) – Current Proposal Scope (Winter/Spring 2018)

The I/I study will define the nature and quantity of infiltration and inflow reaching the WWTP. Under the SAW program Escanaba has previously completed:

• Detailed inspections of all manholes
• A hydraulic model of the collection system
• Flow monitoring at 4 junctions used for calibrating the hydraulic model
Limited TV inspection

This is valuable information normally needed to make critical decisions. Flow monitoring and other SAW data; system experience of operators/managers; and flow records form the WWTP will be used to undertake the I/I study. Our proposed scope is outlined below.

1. **Kickoff Meeting:** We will meet with City staff to discuss known physical aspects of the collection system.

2. **SAW Flow Monitoring Report:** The final flow monitoring report from the SAW program will be reviewed and assessed for its impact on the City I/I control program. This has largely been done under the ongoing SAW effort.

3. **Summarize WWTP Flows:** WWTP flows have been summarized in the SAW Process Evaluation Report. Numbers will be revisited and confirmed based on most recent records.

4. **Pump Station Records:** Records from each of the pump stations will be reviewed to evaluate I/I impacts in each pump station service district.

5. **Estimate Infiltration and Inflow:** Based on WWTP flow records and SAW flow monitoring estimates of relative inflow and infiltration quantities will be confirmed for five collection system basins utilized in SAW program:
   a. No. 1 – Northeast District (Wells)
   b. No. 2 – South East District
   c. No. 3 – Ludington Street and Tributary Areas
   d. No. 4 – West Side (Willow Creek, Fair Ground, Danforth, Etc.)
   e. No. 5 – WWTP (Entire System)

6. **Conduct Preliminary Assessment of Roof Drain Leads:** With input from City Staff and visual observation, make a rough count of potential roof drain connections with tributary area. This will aid an estimate of the amount of inflow that could potentially be removed if roof drains were disconnected. Disconnecting of roof drains will likely require construction of an alternative disposal point.

7. **Flow Monitoring:** Additional flow monitoring of the collection system will be included in the I/I Study to contribute added information to aid analysis. This will allow more precise definition of collection needs early. We are proposing 4 flow monitors each for period of 3 months in March, April, and May of 2018. This is needed quickly to capture the important spring melt. Again, DEQ permission to begin work on the WWTP at the earliest possible time is critical.

8. **Evaluation of Control Approach:** With above information a cost effectiveness analysis will be conducted to compare the long-term control approach options (Collection Improvements – Treatment Capacity – Equalization). This analysis will consider both long-term capital and O&M costs.

9. **Meetings:** Meeting with City personnel will be held at this time to verify a complete understand of options and impacts. It may also be especially important to share findings with MDEQ to get input as it affects final decisions.

10. **Recommendations:** The I/I study will recommend the cost effective actions going forward based on infiltration, inflow, and treatment capacity. These could range from WWTP work only to various efforts on the Sanitary Sewer System. If any collection system work is needed a SSSE study will be needed to focus the effort to gain maximum I/I removal with least money spent. The scope of the SSSE will be recommenced and could include:
   a. Smoke testing
b. Additional Flow Monitoring
c. Additional Sewer Televising
d. Inspections for Sump Pumps
e. Additional hydraulic modeling or pump station testing
f. Additional subsystem cost effective analyses.

11. Report: Results will be formalized in a written report and incorporated into the future SRF program Project Plan.

Sewer System Evaluation Survey (SSES) – Future Phase (Fall 2018)

It is possible that the I/I study could recommend some level of inflow reduction that is cost effective. This will require an SSES per MDEQ requirements to determine how and where to make improvements in a cost effective manner. The final scope of the SSES can only be established after the I/I Study is completed. Potential components of the SSES may include:

1. **Smoke Testing:** This will likely be needed to some degree. It can be completed by a paid contractor or City staff. Smoke testing is most valuable at identifying illegal Sanitary Sewer connections such as roof drains. Smoke testing can be cost effective and valuable information provided.

2. **Flow Monitoring:** If the I/I results recommends significant pipe or service replacement it may be necessary monitor sewer flows in certain areas to learn locations which contribute the most I/I. Cost of flow monitoring may be in the $25,000 to $100,000 range depending upon the number and duration of flow monitors needed.

3. **Inspections:** It may be necessary to inspect sewer customers for ineligible sump pump connections if access can be obtained/granted.

4. **Sewer Televising:** Television of the sewer pipe inside is most valuable information available but costly for a given length of sewer. It may be desirable to budget additional televising in important areas.

Budgets are discussed in the SAW Process Evaluation for the SSES. It is hoped that this allowance will cover the potential range in costs, but again the final scope will only be known after completion of the I/I study.

**SRF Project Plan - Future Phase (Winter/Spring 2019)**

Scheduling mechanisms for the State MDEQ/ SRF program are undergoing changes now. Final rules are not known. It is assumed that SRF funding will be the means of financing SAW Capital Improvements as selected by the City. A Project Plan report is required and this can be done concurrently with the I/I and SSES efforts as approved by MDEQ. Our proposed scope of services to complete and submit a SRF Project Plan are as listed below. The Project Plan will comply with the latest addition of Michigan’s “Clean Water Revolving Funds-Project Plan Preparation Guidance.” There are seven distinct elements that must be included in a project plan:

- Project Background
- Need for the Project
- Analysis of Alternatives
- The Selected Alternative
- Evaluation of Environmental Impacts
- Mitigation of Environmental Impacts
- Public Participation
It is also noted that the exact complete scope of the project plan is not final until the I/I and SSES Studies are completed. These will establish the degree to which collection system work is needed, which is important to the scope of the Project Plan.

Because of the strong need for WWTP improvements, the City may focus on a Phase 1 project targeted at the treatment plant. If the results of the I/I and SSES suggest that significant Collection work is needed this may be recommended as a Phase 2 project. Decisions by the City as to project scope and the need for phasing will be made during the Project Plan development.

1. **Mapping:** Additional aerial mapping for evaluation or future design of WWTP/Collection improvements will be needed. Mapping allowed to be acquired under the SAW program was too low a resolution for design.

2. **Evaluation of Infiltration and Inflow Impacts:** I/I Impacts will be summarized from the I/I Study and available SSES information as components move ahead concurrently. A summary will be provided in MDEQ SRF format to develop an argument for the proposed project. It is expected that the I/I will be completed at the time of initial Project Plan preparation.

3. **Sanitary Sewer improvements:** Collection improvements will be defined under the SSES. The City, with input from MDEQ, will decide whether collection improvements are needed under the Priority 1 project or if they can be deferred to the future. If they become a part of the first funded project, SSES information will be summarized and presented to MDEQ. Early thoughts on potential collection improvements include:
   a. Ludington Street Roof Drain Leads
   b. Ludington Street Sanitary Sewer
   c. Ludington Street Storm Sewer to capture Roof Drains
   d. Southside Sump Pumps

4. **WWTP Improvements:** Technical Evaluation or the Wastewater Treatment Plant were completed under the SAW program and are summarized in the 2017 Process Evaluation Report. Overall wastewater management alternatives are compared under the I/I and SSES. This work must be summarized in a final comparison of alternatives. We propose to compare the major options for combining WWTP and Collection improvements to accomplish City and MDEQ long-term goals.

The WWTP was constructed in 1931, 1972, 1993, and 1998. A large share of the plant is over 50 years old including short-lived mechanical and electrical systems. Improvements are needed immediately. The highest priority WWTP improvements include:

   a. Replacement of primary treatment system
   b. Upgrade of the grit removal system
   c. Elimination of Secondary Treatment Bypasses
   d. Upgrade of the SCADA system
   e. Increased Raw Sewage pumping capacity
   f. Addition of fine screening
   g. Replacement of brick veneer on building faces
   h. Upgrade of support systems

At this early time it is estimated that the scope of WWTP improvements needed may be in the $10 Million to $13 Million range depending upon the results of the I/I and SSES evaluations.
5. **Selected Alternative:** We will detail under a MDEQ format the plan selected to move forward.

6. **Environmental Evaluation:** This must comply with NREPA (Natural Resources Environmental Protection Act). An analysis of direct and indirect environmental impacts is needed. In addition:
   a. Input from numerous Native American tribes must be sought.
   b. A State Historical Preservation Office (SHPO) analysis must be obtained.

7. **Mitigation:** This section will describe actions and means to reduce environmental impacts.

8. **Public Participation:** Requires a precisely documented public hearing. Public information meetings can be undertaken but are not felt highly necessary with this project because it is upgrade to an existing system.

The process is exacting and must be followed to the finest detail. A Plan submittal, Hearing Advertisement, Public Hearing, and Hearing Transcription, and final plan of action are needed. This currently must be done by specific annual dates; however, the timeline may be modified by MDEQ in the near future.

**Quality Based Selection - Future Phase (Fall 2019)**

If the City elects to borrow from the SRF for design costs, the city will implement a quality based selection process as described by MDEQ. The Engineer for the rest of the project will be chosen by the City through this process.

**SRF Project Design - Future Phase (Fall 2019 or Based on Desired Construction Start Date)**

The project design will be required to start and finish according to a definite schedule selected by the City at the time of commitment. The final scope of the project design will be as outlined in the Project Plan and as decided upon by the City following the I/I and SSES Reports. A proposed tentative schedule is suggested in this proposal.

**ASSUMPTIONS**

- C2AE proposes to rely upon the 2017 SAW Program Summary and WWTP Process Evaluation to form the basis for treatment system related Need for the Project, Analysis of Alternatives and The Selected Alternatives Project Plan elements.
- This proposal is based on the concept that Collection system work (I/I elimination) to meet MDEQ criteria can be limited to high benefit to cost I/I reductions such as roof drain removal. The amount of excess I/I in Escanaba is lower than is some communities. It may be possible to cost effectively avoid some collection system work in favor of additional WWTP work. If Collection system work on a high percentage of the service district were to be ultimately needed the additional flow monitoring and other reconnaissance work could not be done within time limits outlined here.
- Private property inspections such as for sump pumps will be by City personnel.
- Smoke testing methods and personnel will be finalized following completion of the I/I Study.
- The City of Escanaba will be responsible for all public hearing costs, including but not limited to publishing the Notice of Hearing publication and a court recorder to provide a verbatim transcript (a summary transcript is not acceptable to MDEQ).
- Part I, Part II, and Part III SRF Applications will be led by C2AE. Each has components which will require help from the City.
DELIVERABLES

General Deliverables under this scope will include draft and final versions of:
- I/I Study w/limited additional flow monitoring
- Revised SSES Scope

Future Phases:
- SSES Study
- Project Plan
- Part I SRF Application
- Part II SRF Application
- Basis of Design
- Preliminary Design
- Opinion of Cost
- Final Bidding Documents

The above information shall be compiled to a State Revolving Fund (SRF) Project Plan for submittal to MDEQ for approval. Recommended phases of work shall be identified with the intent of seeking funding for the first phase through the SRF process and placement on the 2019 Priority List.

SCHEDULE

The driving force for this schedule is to accomplish WWTP improvements at the earliest possible date and to comply with MDEQ SRF Program planning and scheduling criteria.

- 2018 Wastewater Budgeting January 25, 2018
- Authorized to Proceed March 5, 2018
- Start Infiltration and Inflow Study March 5, 2018
- Install Flow Monitors March 20, 2018
- Remove Flow Monitors June 19, 2018
- Complete Infiltration and Inflow Draft Analysis July 13, 2018
- Revise Proposal and Scope For SSES July 23, 2019
- Flow Monitor Installation (If Required) August 6, 2018
- Initiate Project Plan Development August 6, 2018
- Complete Quality Based Selection of Engineer September 19, 2018
- Additional Flow Monitoring (if Required) October 1, 2018
- Start Design October 1, 2018
- Smoke Testing Required Area November 12, 2018
- SSES Final Report January 7, 2019
- Submit Project Plan (Phase 1 If Divided) March 15, 2019
- Public Hearing May 1, 2019
- Final Project Plan Submittal June 15, 2019
- MDEQ, SRF Financing Commitment August 1, 2019
- MDEQ, Approval, Part I of SRF Application August 30, 2019
- MDEQ, Approval, Part II of SRF Application September 21, 2019
- MDEQ, Approval of User Charge System September 21, 2019
- Bid Add Published September 21, 2019
- Part III Application (W/Bid Information) Due November 2, 2019
FEE

We propose to provide the services, as outlined herein, for time-and-material, not-to-exceed fees as noted below:

I&I Study w/flow monitoring $ 95,000

For future budgeting, subject to revision based on the I&I Study results, the SSES study at $100,000 and a Project Plan of $50,000 estimated cost should be anticipated.

Invoices will be forwarded on a monthly basis reflecting the level of work completed.

We have included our Standard Contract Provisions for the I&I, SSES, and Project Plan Studies as part of our proposal. If the terms and conditions as stated are acceptable, please countersign and return one (1) copy to our office. Please do not hesitate to contact us should you have any questions or concerns, or if you need additional information.

Sincerely,

C2AE

Charles Lawson
Project Manager

Accepted by:

__________________________
City of Escanaba

__________________________
Date
The parties to this agreement, Capital Consultants, Inc., a Michigan Corporation doing business as C2AE in the State of Michigan, hereinafter called the A|E CONSULTANT and the City of Escanaba, Michigan, hereinafter called the OWNER, hereby agree to the following conditions:

A. **Limit of Scope:** The services provided by the A|E CONSULTANT shall be limited to those described in the Scope of Services.

B. **Changed Conditions:** If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to the A|E CONSULTANT are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks or other material terms of this Agreement, the A|E CONSULTANT may call for renegotiation of appropriate portions of this Agreement. The A|E CONSULTANT shall notify the OWNER of the changed conditions necessitating renegotiation, and the A|E CONSULTANT and the OWNER shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement.

C. **Additional Services:** Additional services not specifically identified in the Scope of Services shall be paid for by the OWNER in addition to the fees previously stated, provided the OWNER authorizes such services in writing. Special services will be billed monthly as work progresses and invoices are due upon receipt.

D. **Standard of Care:** In providing services under this Agreement, the A|E CONSULTANT will endeavor to perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. Upon notice to the A|E CONSULTANT and by mutual agreement between the parties, the A|E CONSULTANT will without additional compensation, correct those services not meeting such a standard.

E. **Opinions of Probable Construction Cost:** In providing opinions of probable construction cost, the OWNER understands that the A|E CONSULTANT has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that the A|E CONSULTANT's opinions of probable construction costs are made on the basis of the A|E CONSULTANT's professional judgment and experience. The A|E CONSULTANT makes no warranty, express or implied, that the bids or the negotiated cost of the work will not vary from the A|E CONSULTANT's opinion of probable construction cost.

F. **Schedule for Rendering Services:** The A|E CONSULTANT shall prepare and submit for OWNER approval a schedule for the performance of the A|E CONSULTANT's services. This schedule shall include reasonable allowances for review and approval times required by the OWNER, performance of services by the OWNER's consultants, and review and approval times required by public authorities having jurisdiction over the project. This schedule shall be equitably adjusted as the project progresses, allowing for changes in scope, character or size of the project requested by the OWNER, or for delays or other causes beyond the A|E CONSULTANT's reasonable control.

G. **Ownership of Reports, Drawings and Other Materials:** The OWNER agrees that all reports, drawings, letters, work sheets, plans, preliminary material tables, supportive data, documents and other materials produced by the A|E CONSULTANT in the course of and for the purpose of meeting this contract are the property of the A|E CONSULTANT, and shall remain in the possession of the A|E CONSULTANT. The OWNER shall have access to the above named material during normal business hours of the A|E CONSULTANT during and after completion of this contract. The OWNER may obtain copies of any of the above named materials. Copies of electronic media may be obtained by the OWNER via execution of this Agreement. (See Alteration and Reuse of CAD Information provision of this Agreement.)

H. **Alteration and Reuse of CAD Information:** Because computer aided design/drafting (CAD) information stored in electronic form can be modified by other parties, intentionally or otherwise, without notice or indication of said modifications, the A|E CONSULTANT reserves the right to remove all indications of its ownership and/or involvement in the material from each electronic medium not held in its possession. The OWNER may retain copies of the work performed by the A|E CONSULTANT in CAD form. Copies shall be for Information and used by the OWNER for the specific purpose for which the A|E CONSULTANT was engaged. Said material shall not be used by the OWNER, or transferred to any other party, for use in other projects, additions to the current project, or any other purpose for which the material was not strictly intended without the A|E CONSULTANT's express written permission. Any unauthorized modification or reuse of the materials shall be at the OWNER's
sole risk, and the OWNER agrees to defend, indemnify, and hold the A|E CONSULTANT harmless, from all claims, injuries, damages, losses, expenses, and attorneys fees arising out of the unauthorized modification of these materials.

I. **Payment Terms:** Invoices will be submitted by the A|E CONSULTANT monthly, are due upon presentation and shall be considered past due if not paid within thirty (30) calendar days of the due date.

J. **Disputed Invoices:** If the OWNER objects to any portion of an invoice, the OWNER shall so notify the A|E CONSULTANT in writing within ten (10) calendar days of receipt of the invoice. The OWNER shall identify in writing the specific cause of the disagreement and the amount in dispute and shall pay that portion of the invoice not in dispute in accordance with other payment terms of this Agreement. Any dispute over invoiced amounts due which cannot be resolved within ten (10) calendar days after presentation of invoice by direct negotiation between the parties shall be resolved within thirty (30) calendar days in accordance with the Dispute Resolution provision of this Agreement. Interest at one-and-one-half (1.5) percent (or the maximum rate allowable by law, whichever is less) shall be paid by the OWNER on all disputed invoice amounts that are subsequently resolved in the A|E CONSULTANT’s favor and shall be calculated on the unpaid balance from the due date of the invoice.

K. **Abandonment of Work:** If any work is abandoned or suspended, the A|E CONSULTANT shall be paid for services performed prior to receipt of written notice from the OWNER of abandonment or suspension.

L. **Errors and Omissions Insurance:** The A|E CONSULTANT maintains an errors and omissions insurance policy as part of normal business practice. The OWNER agrees to limit the A|E CONSULTANT’s liability to the OWNER and to all Construction Contractors and Subcontractors on the project due to the A|E CONSULTANT’s negligent acts, errors, or omissions, such that the total aggregate liability of the A|E CONSULTANT to all those named shall not exceed $95,000.

M. **Indemnification:** The A|E CONSULTANT agrees, to the fullest extent permitted by law, to indemnify and hold harmless the OWNER against damages, liabilities and costs arising from the negligent acts of the A|E CONSULTANT in the performance of professional services under this Agreement, to the extent that the A|E CONSULTANT is responsible for such damages, liabilities and costs on a comparative basis of fault and responsibility between the A|E CONSULTANT and the OWNER. The A|E CONSULTANT shall not be obligated to indemnify the OWNER for the OWNER’s own negligence.

N. **Consequential Damages:** Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the OWNER nor the A|E CONSULTANT, their respective officers, directors, partners, employees, contractors or subcontractors shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation or any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both the OWNER and the A|E CONSULTANT shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

O. **Dispute Resolution:** The OWNER agrees that all claims, disputes, and other matters in question between the parties arising out of or relating to this Agreement or breach thereof first shall be submitted for nonbinding mediation to any one of the following, as agreed to by the parties: American Arbitration Association, American Intermediation Service, Americard, Dispute Resolution, Inc., Endispute, or Judgecate. Any party hereto may initiate mediation within the time allowed for filing per State law and the parties hereto agree to fully cooperate and participate in good faith to resolve the dispute(s). The cost of mediation shall be shared equally by the parties hereto.

If mediation fails to resolve the claim or dispute, the matter shall be submitted to a court of competent jurisdiction.
MEMORANDUM

To: Patrick Jordan

From: Mike Furmanski

Date: 22FEB18

Re: Tree Trimming Bid Recommendation

On February 20, 2018, the Electric Department received bids for tree trimming near our power lines in various locations on our system. The bid request included some defined areas that were to be bid on a lump-sum basis and hourly rates. Bids were sent to 5 tree trimming contractors and 2 bids were received. Both bidders that submitted a bid are qualified to do this type of work.

The lump-sum bid and hourly rates submitted by the bidding contractors were as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bugle Contracting</th>
<th>Klee Logging and Tree Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined locations</td>
<td>$9,200</td>
<td>$23,200</td>
</tr>
<tr>
<td>Hourly - 2 man crew</td>
<td>$96</td>
<td>$150</td>
</tr>
</tbody>
</table>

I am recommending accepting the bid from Bugle Contracting of Cornell, MI for a not to exceed amount of $25,000. There is $25,000 in the current budget for a tree trimming contractor. The bid noted that this contract could have a total value of $25,000.
<table>
<thead>
<tr>
<th>Company</th>
<th>Bid Amount</th>
<th>Description</th>
<th>Price 1</th>
<th>Price 2</th>
<th>Price 3</th>
<th>Price 4</th>
<th>Date 1</th>
<th>Date 2</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ace Laying &amp; Raising</td>
<td>150.00</td>
<td>10,450.00</td>
<td>10,450.00</td>
<td>450.00</td>
<td>1,100.00</td>
<td>750.00</td>
<td>7/27/18</td>
<td>9/8/18</td>
<td>Yes</td>
</tr>
<tr>
<td>Beagle Contracting</td>
<td>96.00</td>
<td>4,500.00</td>
<td>3,200.80</td>
<td>800.00</td>
<td>500.00</td>
<td>500.00</td>
<td>7/15/18</td>
<td>7/15/18</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Official Bidder's Proposal

Date: 2/20/18

City of Escanaba
Escanaba, MI 49829

NOTE: The total contract is limited to $25,000.

We, the undersigned, agree to furnish all labor, materials, and construction equipment necessary for completion of contracted Work in accordance with the attached minimum specifications, which are part of this proposal, at the following price(s):

Lump Sum for defined locations

Along M35, from 3929 to E 5204, from white line to edge of Right-of-Way. This area is approximately 2000' long X 30' wide. All trees and brush in this area shall be removed down to ground level.

Just west of South Lincoln Rd, from 8th Ave So to 14th Ave So, plus the north side of 14th Ave So, from South Lincoln Road to airport fence

Behind 2210 (Lincoln Storage Units)

East side of No 26th St from 16th Ave No to 14th Ave No

Alley west of So 22nd St, between 25th Ave So and 26th Ave So

$10,450.00

$450.00

$1,100.00

$750.00

Total $23,200.00

Hourly Rates for Trimming

Two (2) man crew with 35' working height bucket truck, chipper, pickup truck, and all necessary equipment on the job, including, but not limited to: signage, ropes, climbing equipment, saws, fuels, lube, etc.

$150.00/hour

Soonest Available Start Date: Feb 23, 2018

CERTIFIED CHECK, CASHIER'S CHECK, OR BIDDER'S BOND ENCLOSED IN THE AMOUNT OF:

$1,000.00

(Must be included to qualify)
2/7/2018

SUBMITTED BY:

FIRM: Klee Logging & Tree Service
ADDRESS: N17012 Belle Feuille Lane D3
Wilson, MI 49896

NAME (PRINT): Spencer Klee
SIGNED: 
TITLE: Driver
PHONE: 906-280-2906
906-280-2410
Bugle Contracting

11880 County 426 E Road
Cornell, Michigan 49818

2/20/2018

City of Escanaba Electric Department
1711 Sheridan Road
Escanaba MI 49829

Dear Sir,

Thank you for the opportunity to provide you with a quote for line clearing and tree trimming. We are able to do the work, if requested, in the required time period.

If you have any questions or need more information, please email or call at the number below.

Sincerely,

Ron Sanville

Bugle Contracting
dukentades@yahoo.com
(906)280-0001
Official Bidder's Proposal

Date: **2/20/2018**

City of Escanaba
Escanaba, MI 49829

**NOTE:** The total contract is limited to $25,000.

We, the undersigned, agree to furnish all labor, materials, and construction equipment necessary for completion of contracted Work in accordance with the attached minimum specifications, which are part of this proposal, at the following price(s):

**Lump Sum for defined locations:**

- Along M38, from 3929 to E 5204, from white line to edge of Right-of-Way. This area is approximately 2000' long x 38' wide. All trees and brush in this area shall be removed down to ground level. **$4500.00**

- Just west of South Lincoln Rd, from 8th Ave So to 14th Ave So, plus the north side of 14th Ave So, from South Lincoln Road to airport fence **$3200.00**

- Behind 2210 (Lincoln Storage Units) **$500.00**

- East side of No 26th St from 16th Ave No to 14th Ave No **$500.00**

- Alley west of So 22nd St, between 25th Ave So and 26th Ave So **$500.00**

**Hourly Rates for Trimming**

Two (2) man crew with 55' working height bucket truck, chipper, pickup truck, and all necessary equipment on the job, including, but not limited to: signage, ropes, climbing equipment, saws, fuels, lube, etc. **$96 / hour**

**Soonest Available Start Date:** **3/15/18**

**CERTIFIED CHECK, CASHIER'S CHECK, OR BIDDER'S BOND ENCLOSED IN THE AMOUNT OF:**

**$1000.00**

(Must be included to qualify)
SUBMITTED BY:

FIRM: Bugle Contracting

ADDRESS: 1880 County 426 E Road
Cornell MI 49818

NAME (PRINT): Rog Sanville

SIGNED: Ronald J. Sanville

TITLE: Supervisor

PHONE: (906) 280-0001
MEMORANDUM

To: Patrick Jordan  
From: Mike Furmanski  
Date: 22FEB18  
Re: Digger/Derrick Bid Recommendation

Bid Recommendation for one (1) new 2018 digger/derrick truck with utility body.

Number of bids sent: 3  
Number of bids received: 1

The bid from Utility Sales and Service of Appleton, WI meets our specifications. Their base bid was in the amount of $217,134.94 for a new Versalift TMD-2045B on an International chassis with a fiberglass utility body. With the options we requested in our bid, the total cost is $242,899.94. There is $250,000 in the budget for this truck.

I am recommending that we purchase a Versalift TMD-2045B on an International chassis with a fiberglass utility body from Utility Sales and Service of Appleton, WI for $242,899.94.
<table>
<thead>
<tr>
<th>DESCRIPTION OF ITEM: Utility Sales &amp; Service</th>
<th>$17,134.94</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF BIDDER: Digert/Derrick Bid - 2018</td>
<td></td>
</tr>
<tr>
<td>STATUS:</td>
<td>YES</td>
</tr>
<tr>
<td>ACO:</td>
<td>2018</td>
</tr>
</tbody>
</table>

City of Escanaba

Record of Bids

Present:

[Signature]
Mr. Mike Furmanski
Escanaba Water and Light
1711 Sheridan Rd.
Escanaba, MI. 49829

February 8, 2018

Sales Quotation # 18-01-19

Dear Mr. Furmanski:

UTILITY SALES and SERVICE, INC. is pleased to submit the following Sales Quotation for your review. USSI shall provide one (1) Versalift model TMD-2045B digger derrick aerial device with Boom Tip winch, one (1) Brand FX Model BFXB-108T fiberglass line body and accessories installed on a 2019 International 4300 SBA 4x2 Regular Cab chassis with 37,000 GVWR, 120" Cab-to-Axle, Cummins B6.7 240 HP diesel engine, Allison 6-speed wide automatic transmission with PTO opening and drive gear and dual rear wheels.

VERSALIFT TMD-2045B DIGGER DERRICK

VERSALIFT TMD-2045B DIGGER DERRICK

GENERAL SPECIFICATIONS - Rear mounted 45 foot, hydraulic rotating digger derrick with a tip mounted winch shall be provided and installed. The digger derrick shall have the following specifications.

RIDING SEAT LOWER CONTROLS WITH SINGLE STICK – Consists of a turntable mounted deck, seat, and control console. Includes full pressure, full flow hydraulic controls with a single handle joystick for boom raise-lower, rotate, and intermediate boom extend-retract. Additional hydraulic valve levers are included to control winch, dig, upper boom extend, pole guide tilt, and pole claw open-close.

PANEL LIGHT – Two 12VDC lights help illuminate the lower control panel.

THROTTLE CONTROL – Variable speed foot operated pedal used to control the engine speed from the lower control station.

ENGINE START/STOP CONTROL – Operated by a toggle switch at the lower controls.

RIDING SEAT ACCESS STEPS – Aluminum grip-strut access steps shall be fabricated and mounted on top of the flatbed to aid in access to the rider seat.
SUBFRAME – The full length subframe is constructed of 6 x 6 square tubing and 5/16” plate. Shear plates are provided to attach to the vehicle frame.

DIGGER ASSEMBLY – Consists of the digger hanger and auger stow bracket. The digger hanger is automatically transferred from the lower boom to the intermediate boom when the auger is not stowed. The auger stow bracket includes an over stow protection valve.

DIGGER SELECTOR - A dual pressure digger selector to allow the derrick operator to reduce the pressure on the 14,000 lb. digger motor to only dig at a maximum torque of 10,000 lbs with indicator light shall be provided. This is intended to be used when setting screw anchors.

DIGGER DRIVES – Two-speed digger drive shall be provided with 12,000 ft-lb outputs.

AUGER – A Terex #65355604 18” Carbide dirt auger with 2-5/8” hex and 60” flite shall be provided.

AUGER EXTENSION SHAFT – A 2-5/8” hex by 93.5” long hex hollow auger extension shaft with adjustment holes and adapter coupler Terex part #402331 shall be provided.

AUGER STOW SLING – A 7/8” diameter synthetic rope sling shall be provided.

WINCH LINE – 65 ft. of 1” diameter Stable Braid winch line shall be provided and installed.

SWIVEL HOOK – A 5 ton rated swivel hook shall be provided and installed.

BOOM ASSEMBLY – The boom assembly consists of the lower boom, intermediate boom, upper boom, and extension system. The lower boom is constructed of high strength steel forming a 9.75 x 12.75 rectangular section. The intermediate boom is constructed of high strength steel forming an 8 x 10.13 rectangular section. The upper boom is constructed of high strength, filament wound, epoxy resin, fiberglass with a 7 x 9 rectangular section and incorporates a fiberglass tip. The extension system includes two double-acting hydraulic cylinders. Each cylinder incorporates dual counterbalance holding valves.

BOOM LIFT CYLINDER – A single double-acting cylinder equipped with a counterbalance holding valve and self-aligning spherical bearing.

BOOM STOW REST - A boom support and a ratchet-type boom tie-down strap shall be included.

BOOM PRESSURE GAUGE – The pressure gage on the lower control panel senses the pressure generated while using the boom control valve.

TRANSFERABLE POLE GUIDE – This option can be pinned to either the inner boom tip or the intermediate boom. The pole guide includes hydraulic tilt and hydraulic operation of the pole claws. Holding valves are included to lock both cylinders in position.

POLE GUIDE INTERLOCK – Prevents inner boom from extending unless either of the following conditions is satisfied: 1. The pole guide tilt is fully raised and, 2. The pole guide is properly pinned to the upper boom.
PEDESTAL – The standard 52 inch tall pedestal is provided and installed. It is a fabricated steel structure incorporating a 1.5” thick top plate which is machined flat to support the rotation bearing.

TURNTABLE – The fixture welded steel structure is constructed from 5/8” plate wings and a 1.5” thick base plate. The base plate is machined flat to support the rotation bearing.

WINCH - A Boom Tip Mounted Winch Including Transferable Pole Buddy Assembly: Approx. 15,000 lb. bare drum capacity worm gear winch equipped with hydraulic counterbalance valve. It shall be equipped with flanged pole buddy transferable from intermediate boom to upper boom. The 15,000 lb maximum capacity winch consists of a worm gearbox, hydraulic motor, holding valve, and drum. At 40gpm flow, the winch provides an average line speed of 35 fpm.

HYDRAULIC SYSTEM – Open center tandem system provides 40gpm for the digger and winch circuit and 15 gpm for the boom functions. The digger/winch circuit operates at 2300 psi and the boom circuit operates at 2600 psi.

HYDRAULIC PUMP – Tandem gear pump supplies 15 and 25 gpm, which combine for 40 gpm.

ROTATION DRIVE – Consists of a hydraulically driven worm and spur gear acting on a shear ball rotation bearing. The gearbox incorporates a load sense feature to measure the side loads applied to the boom.

CONTINUOUS ROTATION – Rotation is continuous and unrestricted in either direction.

HYDRAULIC OIL RESERVOIR – An external bulkhead mounted 50 gallon tank reservoir includes a cleanout, 10 micron return filter that can be replaced without draining the reservoir, dipstick, 100 mesh (149 micron) suction screen, gate valve, and magnetic drain plug.

HYDRAULIC OVERLOAD PROTECTION – The overload protection is purely hydraulic and uses no electronics or electrical components. The system senses the boom lift cylinder pressure and side loads at the rotation gearbox. When an overload condition is detected, the system disables the following: digger dig, winch raise, boom lower, upper boom extend, and intermediate boom extend.

MAIN A-FRAME OUTRIGGERS - A-frame outriggers are designed and constructed from high-strength steel. At maximum extension the outriggers provide 158” (4.0 m) of spread and 7.9” of penetration based on a 40” (1.02 m) frame height. Outriggers are equipped with pilot operated check valves, internal thermal relief valves, and separate operating controls for each outrigger. Slide pads at each leg ensure smooth operation. The standard pivot feet swivel a minimum of 10 deg each way.

AUXILIARY A-FRAME OUTRIGGERS - A-frame outriggers are designed and constructed from high-strength steel. At maximum extension the outriggers provide 147.5” (4.0 m) of spread and 6.1” of penetration based on a 40” (1.02 m) frame height. Outriggers are equipped with pilot operated check valves, internal thermal relief valves, and separate operating controls for each outrigger. Slide pads at each leg ensure smooth operation. The standard pivot feet swivel a minimum of 100 each way.

OUTRIGGER/BOOM INTERLOCK – The outrigger/boom interlock system is designed to prevent the boom from operating until the outriggers contact the ground. It also prevents the outriggers from being retracted before the boom is properly stowed.
INSULATION – The fiberglass is certified for 46kV and below in accordance with ANSI A10.31 dielectric rating requirements.

PINS, BEARINGS, AND LUBRICATION – The main pivot and cylinder joints use high strength hard chrome plated steel pins with fiberglass reinforced Teflon non-lube bearings.

SLOPE INDICATORS – Two (2) slope indicators shall be provided and installed.

CUSTOM LOAD CAPACITY CHART – Based on as built configuration.

PAINTING – The complete unit is primed and painted school bus yellow prior to assembly.

MANUALS – Two operator’s manuals and two service manuals are included.

**FIBERGLASS LINE BODY**

**DIMENSIONS BFXB-108T FIBERGLASS LINE BODY**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Length</td>
<td>156&quot;</td>
</tr>
<tr>
<td>Overall Width</td>
<td>94&quot;</td>
</tr>
<tr>
<td>Compartment Depth</td>
<td>18&quot;</td>
</tr>
<tr>
<td>Compartment Height</td>
<td>48&quot;</td>
</tr>
<tr>
<td>Load-bed Width</td>
<td>58&quot;</td>
</tr>
<tr>
<td>Cab-to-Axle Application</td>
<td>108&quot; (allows room for outriggers between the cab and body)</td>
</tr>
</tbody>
</table>

**EXTERIOR WALLS & SURFACES** - Body side compartments shall include a laminated PVC core to provide sufficient compression for strength and rigidity. Core shall be minimum 3/8" thickness, providing a density of 5 to 6 pounds per cubic foot. Minimum 18 mil fiberglass skin shall fully enclose the inner PVC core. All exterior surfaces shall have a minimum 20 mils. gelcoat and .50 mil. skin coat. The front corners of the side compartments shall be protected with aluminum treadplate rock guards.

**NON-SKID COMPARTMENT TOPS** – The compartment tops shall have textured non-skid surfaces.

**CARGO FLOOR (Aluminum)** – The load bed floor shall be constructed of 3/16" aluminum treadplate. The load bed floor shall be flanged up body sidewalls a minimum of 4" and shall be painted with a black non-skid coating.

**UNDERSTRUCTURE (Steel)** - A steel understructure shall consist of 4" x 5.4 foot-pound longitudinals. All cross members shall be 4" x 5.4 foot-pound minimum dimension. To insure maximum structural integrity, 6" x 5.4 foot-pound front and rear channels shall be provided. Understructure shall be primed with a premium epoxy primer and finished with an acrylic enamel coating.

**BULKHEAD (Aluminum)** - A full-width front bulkhead shall be constructed from minimum 3/16" smooth aluminum.
DOORS - All body compartment doors shall be sandwich-style construction, consisting of a 1/2" thick lower density PVC core enclosed by a 1/8" fiberglass skin on each side. Structural core material shall have minimum shear strength of 151 PSI and minimum 3,995 PSI shear modulus. All doors shall be manufactured using a closed mold system to provide a high quality automotive finish on both sides and insure structural strength. All compartment doors shall have radius corners to maintain a positive seal and insure maximum weather protection.

WEATHERSTRIP - All doors shall be fitted with a specially designed automotive-type weather strip, for maximum assurance of weather tight compartments. The weather strip shall be removable to facilitate its replacement as required.

DOOR RESTRAINTS (Vinyl-Coated Cables) - Each vertical and horizontal compartment door shall be equipped with a vinyl-coated stainless steel cable door stop. The horizontal compartment door cables shall be detachable to provide for greater access to the interior of the compartment. Each horizontal compartment shall have rubber bumpers to prevent direct contact between the door and body.

DOOR LOCKS - All doors, vertical and horizontal, shall be equipped with a stainless steel, key locking, spring, loaded rotary paddle latch, to be flush mounted in the door. An adjustable striker plate shall be mated to the door latch.

HINGES - Each compartment door shall be equipped with two (2) stainless steel hinges. Piano-type hinges shall not be acceptable.

BOLTS & FASTENERS - All bolts and screws shall be stainless steel, and shall include self-locking stainless steel nuts.

DRIP RAILS - An extruded aluminum drip rail shall be provided above exterior compartment doors.

SHELVING CONSTRUCTION - All shelves and hanger brackets shall be constructed of pultruded fiberglass. Shelves shall have 2" lips. Shelf dividers shall also be constructed of pultruded fiberglass.

LIGHTS & ELECTRICAL - All exterior lights shall be provided in compliance with FMVSS-108 standards. All exterior body lighting shall be LED including the backup lights. All exterior lights shall be flush-mounted and include rubber grommet shock mount fixtures. A lighted license plate bracket shall be furnished. NOTE: The rear lights shall be installed in the rear tail shelf.

COMPARTMENTS:
CURBSIDE - Front to Rear
First vertical compartment with single door.
- Two (2) adjustable fiberglass shelves with dividers.
Second vertical compartment with single door.
- Access way with grip-strut steps.
- Two (2) grab handles.
Third vertical compartment with single door
- Five (5) locking swivel hooks mounted 1-3-1 at top of compartment.
- Two (2) adjustable shelves with dividers
- Three (3) 2" aluminum pullout drawers mounted at bottom of compartment.
Horizontal compartment with single door.
- One (1) fixed shelf with dividers.
- 12 drawer parts cabinet mounted on angled riser centered in compartment.

Rear vertical compartment with single door.
- Outrigger cutout in compartment.
- Five (5) locking swivel hooks mounted 1-3-1 at the top of the compartment.

**STREET-SIDE - Front to Rear**

First vertical compartment with single door.
- Three (3) adjustable fiberglass shelves with dividers beneath the hotstick shelf.

Second vertical compartment with single door.
- Two (2) adjustable fiberglass shelves with dividers beneath the hotstick shelf.

Third vertical compartment with single door.
- Five (5) locking swivel hooks mounted 1-3-1 under hotstick shelf.

Horizontal compartment with single door.
- Four (4) vertical aluminum dividers equally spaced in front portion of compartment under hotstick shelf.
- Three (3) 2" aluminum pullout drawers mounted to bottom of compartment at rear half of compartment.

Rear vertical compartment with single door.
- Outrigger cutout in compartment.
- Seven (7) locking swivel hooks mounted 2-3-2 beneath the hotstick shelf.

**COMPARTMENT LIGHTING** - All compartments shall be illuminated by LED rope-type compartment lights mounted vertically on both sides of the door openings and horizontally across the top of each compartment. The lights shall be manually activated by an illuminated rocker switch, furnished and mounted on the chassis dash.

**HOTSTICK SHELF** - A full-length fiberglass through shelf shall be provided in the STREET-SIDE of the body. A rear drop down door shall be installed to provide access to the hotstick shelf.

**WHEEL CHOCK HOLDERS** - Four (4) wheel chock holders shall be provided and formed into the CURBSIDE and STREET SIDE body fender skirt. Four (4) rubber wheel chocks shall be provided.

**SIDE ACCESS STEP** - One (1) rubber mounted grip strut side access step shall be installed beneath the side access way.

**BODY PAINT** - The body shall be gelcoated school bus yellow.

**ACCESSORIES**

**ALUMINUM TAIL SHELF WITH CROSS BOX** - One (1) approximately 6"H x 24"W x 94"L Tail shelf shall be constructed from minimum 1/8" aluminum treadbrite. The tail shelf shall include a 5.5" high thru-storage shelf with 6" high horizontally hinged doors on both sides and automotive type crimp on gaskets. Latches and hinges shall be stainless steel and keyed to match the body. The top of the tail
shelf shall be coated with black non-skid paint.

REAR STEP BUMPER with RECESS - One (1) heavy-duty steel grip-strut rear bumper step shall be fabricated and installed. The hitch shall be at a height of 24" as delivered. The bumper shall include a suitable recess for a hitch.

TOWING PACKAGE - One (1) towing package shall be provided to include one (1) 25 ton swivel type pintle hook with spring cushion and one (1) pair of safety D-Rings. Hitch shall be reinforced with suitable channels to the chassis frame.

SWING STEPS - Two (2) Rubber grip strut flex steps shall be mounted at the rear curbside and street-side under the bumper.

GRAB RAILS - Two (2) steel hoop style grab rails shall be provided and installed on the outward rear curbside and street-side of the tail shelf to assist access to the cargo area *(mounting locations to be determined at the pre-paint inspection).* The grab rails shall be painted yellow.

BACK-UP ALARM - One (1) electronic backup alarm shall be provided and installed.

MUD FLAPS - One (1) pair of rubber mud flaps shall be provided and installed behind the rear wheels.

OUTRIGGER PADS and PAD HOLDERS - Four (4) aluminum outrigger pad holders shall be provided and installed *(mounting location to be determined at the pre-paint inspection).* Four (4) high density 1" thick polyethylene outrigger pads shall be provided.

STROBE LIGHTS - One (1) Star model 200S strobe light shall be provided and mounted off a bracket of the street-side of the front boom rest with expanded metal guard. The strobe light shall be manually activated by an illuminated rocker switch provided and mounted on the chassis dash.

WORK LIGHTS – Two (2) 5" Round LED work lights, Super Bright model #WLS-42W-R60, shall be provided and installed *(mounting locations to be determined at pre-paint inspection).* The lights include a switch located on the back of the lights for manual activation and shall be manually activated by an illuminated rocker switch mounted on the chassis dash.

DOOR MOUNT SPOT LIGHTS – Two (2) Unity door mounted spot lights, 201042 & 201043 with 248 & 248RH Brackets, shall be provided and installed, one in the STREETSIDE and one in the CURBSIDE door.

WARNING LIGHTS - Two (2), Superior Signal model SYFLAT6-A LED flat style warning lights shall be installed in the chassis grill area. Two (2), Star model DLXTHR-4A, 4" round LED warning lights shall be installed in the rear of the tail shelf. These warning lights will be manually activated by a single illuminated rocker switch mounted on the chassis dash.

EXTENSION SHAFT – A Terex model # 43594 ECR shaft shall be provided for reel take up or a capstan at the boom tip.

CONE HOLDER - One (1) cone holder shall be fabricated and installed *(mounting location to be determined at a pre-paint inspection).*
COLOR SCHEME

The body and aerial features shall be finished as follows:
- The steel portions of the aerial shall be manufacturer's SCHOOL BUS YELLOW.
- The fiberglass portions of the aerial shall be gelcoated manufacturer's standard WHITE.
- The body exterior shall be gelcoated to manufacturer's SCHOOL BUS YELLOW.
- The compartment interiors and shelving shall be left in natural fiberglass.
- All steel surfaces normally painted shall be painted BLACK.
- Any stainless steel, chrome or aluminum surfaces shall be left in an unpainted state.
- The top of the tail shelf and floor of the body shall be painted with a BLACK non-skid coating.

CHASSIS SPECIFICATIONS

2019 International 4300 SBA 4x2 Regular Cab Chassis

MA02500  Base Chassis, 4300 SBA 4X2 with 187.00 Wheelbase, 119.90 CA & 83.00 Axle to Frame.
1570     TOW HOOK, FRONT (2) Frame Mounted
1CAH     FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.375" x 3.705" x 0.438"  
         (263.5mm x 94.1mm x 11.1mm); 456.0" (11582mm) Maximum OAL
1LLD     BUMPER, FRONT Full Width, Aerodynamic, Steel  
         Includes: BUMPER, FRONT Powder Coated Gray (Argent) Color
1WEH     WHEELBASE RANGE 134" (340cm) Through and Including 197" (500cm)
2AST     AXLE, FRONT NON-DRIVING (Meritor MFS-14-122A) I-Beam Type, 14,000-lb Capacity
3ADD     SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 14,000-lb Capacity; With Shock  
         Absorbers Includes: SPRING PINS Rubber Bushings, Maintenance-Free
4091     BRAKE SYSTEM, AIR Dual System for Straight Truck Applications  
         Includes: BRAKE LINES Color and Size Coded Nylon  
         : DRAIN VALVE Twist-Type  
         : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster  
         : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel  
         : PARKING BRAKE VALVE For Truck  
         : QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for  
9x4  
         : SLACK ADJUSTERS, FRONT Automatic  
         : SLACK ADJUSTERS, REAR Automatic  
         : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4  
         Notes: Front and Rear Dust Shields not Included  
         : Rear Axle is Limited to 19,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Code  
04NCL BRAKES, REAR, AIR CAM Regardless of Axle/Suspension Ordered.  
         : Rear Axle is Limited to 20,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Code  
04NCG BRAKES, REAR, AIR CAM Regardless of Axle/Suspension Ordered.  
         : Rear Axle is Limited to 23,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and  
Standard Rear Air Cam Brakes Regardless of Axle/Suspension Ordered.
4AZA  AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)

4EBT  AIR DRYER {Bendix AD-IP} With Heater
Includes: AIR DRYER LOCATION Inside Left Rail, Back of Cab

4EXP  BRAKE CHAMBERS, FRONT AXLE {Bendix} 20 Sq In

4EXU  BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 30/30 Spring Brake

4JCJ  BRAKES, FRONT, AIR CAM S-Cam; 16.5" x 5.0"; Includes 20 Sq. In. Long Stroke Brake Chambers
Notes: Front Axle with 14,000-lb GAWR is Limited to 13,200-lb GAWR when used in conjunction with 15" BRAKES, FRONT, AIR CAM.

4NDB  BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and Spring Actuated Parking Brake

4SPA  AIR COMPRESSOR {Cummins} 18.7 CPM Capacity

5708  STEERING COLUMN Tilting

5CAL  STEERING WHEEL 2-Spoke, 18" Diam., Black

5PSA  STEERING GEAR {Sheppard M-100} Power

7BKY  EXHAUST SYSTEM Single, Horizontal Aftertreatment Device, Frame Mounted Under Right Rail, Back of Cab, Includes Short Horizontal Tailpipe

8000  ELECTRICAL SYSTEM 12-Volt, Standard Equipment
Includes
: BATTERY BOX Steel
: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab
: FUSES, ELECTRICAL SAE Blade-Type
: HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover
: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever
: JUMP START STUD Located on Positive Terminal of Outermost Battery
: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light
: STARTER SWITCH Electric, Key Operated
: STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector
: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature
: TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted
: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pro-Set Delays), Integral with Turn Signal Lever
: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted
: WIRING, CHASSIS Color Coded and Continuously Numbered

8541  HORN, ELECTRIC (2) Disc Style

8GXD  ALTERNATOR {Leece-Neville AV1160P2013} Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, With Remote Sense

8HAB  BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/Backup/Accessory
Power/ground and Sealed Connector for Stop/Turn

8HAG ELECTRIC TRAILER BRAKE/LIGHTS Accommodation Package to Rear of Frame; for Separate Trailer Stop, Tail, Turn, Marker Light Circuits; Includes Electric Trailer Brake accommodation package With Cab Connections for Mounting Customer Installed Electric Brake Unit, Less Trailer Socket

8MEZ BATTERY SYSTEM (International) Maintenance-Free, (2) 12-Volt 1850CCA Total

8RKB RADIO (Panasonic CQ 120) AM/FM, Includes Multiple Speakers, Includes Auxiliary Input

8THB BACK UP ALARM Electric, 102dba

8VUX BATTERY BOX Steel, with Plastic Cover, 25" Wide, 2 or 3 Battery Capacity, Mounted Right Side Under Cab

8WCL HORN, AIR Black, Single Trumpet, Air Solenoid Operated

8WGL WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time

8WPZ TEST EXTerior LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back up Lights

8WRB HEADLIGHTS ON W/WIPERS Headlights will Automatically Turn on if Windshield Wipers are turned on

8WWJ INDICATOR, LOW COOLANT LEVEL With Audible Alarm

8WXD ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, with Ignition "OFF" and any Door Opened

8WZK HEADLIGHTS Halogen; Composite Aero Design for Two Light System

8XAH CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses

8XKL STARTING MOTOR (Mitsubishi Electric America 90P47) 12-Volt with Soft Start

9HBM GRILLE Stationary, Chrome

9WAY FRONT END Tilting, Fiberglass, With Three Piece Construction

10661 PAINT, Non-Reflecting Paint Includes: PAINT SCHEMATIC ID LETTERS "FA"

10761 PAINT TYPE Base Coat/Clear Coat, 1-2 Tone

10WJH PROMOTIONAL PACKAGE Government and Municipal Silver Package: Two Year Limited Subscription of On-Command Service Information (Formerly Fleet ISIS) and On-Command Parts Information (Formerly Fleet Parts Catalog) Requires Specific Feature Combinations

11001 CLUTCH Omit Item (Clutch & Control)

12703 ANTI-FREEZE Red, Extended Life Coolant : to -40 Degrees F / -40 Degrees C, Freeze Protection
ENGINE, DIESEL {Cummins B6.7 240} EPA 2017, 240 HP @ 2400 RPM, 560 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 240 Peak HP (Max) Includes: ANTI-FREEZE Red Extended Life Coolant, -40 Degrees F/-40 Degrees C; for Cummins ISB Engines

VENDOR WARRANTY, ENGINE (Cummins) B6.7 Engine, 3-Year Unlimited Miles Standard Warranty

FAN DRIVE {Horton Drivemaster} Direct Drive Type, Two Speed With Residual Torque Device for Disengaged Fan Speed. Includes: FAN Nylon

RADIATOR Aluminum; 2-Row, Cross Flow, Over Under System, 717 Sq In Louvered, With 313 Sq In Charge Air Cooler. With In-Tank Transmission Cooler Includes: DEABRATION SYSTEM with Surge Tank. HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps. RADIATOR HOSES Premium, Rubber

AIR CLEANER With Service Protection Element Includes: GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted

FEDERAL EMISSIONS (Cummins B6.7) EPA, OBD AND GHG Certified for Calendar Year 2018

THROTTLE, HAND CONTROL Engine Speed Control for PTO; Electronic, Stationary Pre-Set, Two Speed Settings; Mounted on Steering Wheel

OIL PAN 15 Quart Capacity, For Cummins ISB Engines

EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations

ENGINE CONTROL, REMOTE MOUNTED Provision for: Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for Cummins ISB Engines

TRANSMISSION, AUTOMATIC {Allison 3500_RDS_P} 5th Generation Controls; Wide Ratio, 6-Speed, With Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.

TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000 & 4000 Series Transmission

TRANSMISSION OIL Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction

SHIFT CONTROL PARAMETERS Allison 3000 or 4000 Series Transmissions, 5th Generation Controls, Performance Programming

PTO Location Left Side of Transmission

14VAH  SUSPENSION, RR, SPRING, SINGLE Vari-Rate; 23,500-lb Capacity, With 4500 lb Auxiliary Rubber Spring

15LMS  FUEL/WATER SEPARATOR Cummins Supplied on Engine, with 12 Volt DC Heater, with Water-in-Fuel Sensor

15SRE  FUEL TANK Top Draw; D-Style, Non-Polished Aluminum, 19” Deep, 50 U.S. Gal., 189 L Capacity, with Quick Connect Outlet, Mounted Left Side, Under Cab
Notes: N/A with 19.5” Tires

15WDG  DEF TANK 7 U.S. Gal. 26.5L Capacity, Frame Mounted Outside Left Rail, Under Cab

16030  CAB Conventional
Includes:
  : ARM REST (2) Molded Plastic; One Each Door
  : CLEARANCE/MARKER LIGHTS (5) Flush Mounted
  : COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window
  : CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel
  : DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted
  : GLASS, ALL WINDOWS Tinted
  : GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side
  : GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side
  : INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color

16HBA  GAUGE CLUSTER English With English Electronic Speedometer
Includes:
  : GAUGE CLUSTER (5) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter
  : ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout
  : WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)

16HKT  IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

16HLJ  GAUGE, DEF FLUID LEVEL

16JNT  SEAT, DRIVER (National 2000) Air Suspension, High Back With Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, With 2 Position Front Cushion Adjust, -3 to +14 Degree Angle Back Adjust. Includes: SEAT BELT 3-Point, Lap and Shoulder Belt Type

16SMH  SEAT, TWO MAN PASSENGER (National) Fixed Back, Integrated Headrest in Both Occupant Positions, Vinyl, with Under Seat Storage

16SED  GRAB HANDLE (2) Black Aluminum; for Cab Entry mounted Left and Right each Side at “B” Pillar

16SDT  MIRRORS (2) (Lang Mekra) Rectangular, Power Both sides Glass only, Thermostatically Controlled Heated Heads, Clearance Lights LED, Black Heads, Brackets and Arms, Breakaway Type, 7.09” x 15.75” & Integral Convex Both Sides, 102” Inside Spacing

16WCT  AIR CONDITIONER (Blend-Air) With Integral Heater & Defroster
Includes:
  : HEATER HOSES Premium
  : HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps
  : REFRIGERANT Hydrofluorocarbon HFC-134A
16WJS  INSTRUMENT PANEL Center Section, Flat Panel

16WRZ  CAB INTERIOR TRIM Premium
        Includes
        : CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed
          Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with
          a Full Bench Seat the Back Panel is Completely Void of Covering
        : CAB SOUND INSULATION Includes Dash and Engine Cover Insulators
        : CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and
          CB Radio Pocket
        : COURTESY LIGHT (2) Mounted in Front Map Pocket Left and Right Side
        : DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors
        : FLOOR COVERING Rubber, Black
        : HEADLINER Soft Padded Cloth
        : INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section
        : STORAGE POCKET (2) Molded Plastic (Carpet Texture) Full-Length; Driver Door and
          Passenger Doors
        : SUN VISOR (3) Padded Vinyl; 2 Moveable (Front to Side) Primary Visors, Driver Side with
          Vanity Mirror and Toll Ticket Strap, Plus 1 Auxiliary Visor (Front Only) Driver Side

26DTJ  WHEEL, SPARE, DISC (Maxion 90541) 22.5x8.25 Rims, Painted Steel, 2-Hand Hole, 10-Stud
        285.75mm BC, Hub-Piloted

27DTJ  WHEELS, FRONT (Maxion 90541) DISC; 22.5" Painted Steel, 2-Hand Hole, 10-Stud
        (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs

28DTJ  WHEELS, REAR (Maxion 90541) DUAL DISC; 22.5" Painted Steel, 2 Hand Hole, 10 Stud
        (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs

29007  TIRE, SPARE Equal to Model Standard Notes: Only One Spare Tire per Truck Ordered. Order
        Must Reflect Number of Tires Required (Including Spare) 10-Digit Tire Code and Spare
        Rim/Wheel Code Must be Specified

29PAR  PAINT IDENTITY, FRONT WHEELS Disc Front Wheels; With Vendor Applied White Powder
        Coat Paint

29PAS  PAINT IDENTITY, REAR WHEELS Disc Rear Wheels; With Vendor Applied White Powder
        Coat Paint

60AAA  BDY INTG, REMOTE POWER MODULE Mounted Under Cab or On Battery Box; Up to 6
        Outputs & 6 Inputs, Max. 20 amp. per Channel, Max. 80 amp. Total (Includes 1 Switch Pack With
        Latched Switches)

60ABD  BDY INTG, REMOTE START/STOP To Start and Stop Vehicle Engine, Will Start Emergency
        Pump Motor, Programmable Time Intervals

60ABE  BDY INTG, PTO ACCOMMODATION for Electric over Hydraulic PTO, Does Not Include
        Solenoids, With Latched Switch Mounted on Dash Includes Audible Alarm and Indicator Light in
        Gauge Cluster (Requires 1 Remote Power Module input & 1 output)

60AJG  BDY INTG, THROTTLE CONTROL Accommodation for Single Customer Mounted External
        Engine Speed Control Switch, for Utility Applications, Programmable Mode for Various Switch
        Actions and Engine Speed Control Option, Only with Vehicle Stopped and Park Brake is Applied
        (requires 1 Remote Power Module input)
        Includes: Default Parameters: Input is Momentary Ground = Engine Speed Toggles Between
        Preset Speed and Idle each Time the Input is Grounded

13
7372135423 (4) TIRE, REAR 11R22.5 Load Range G HDR2 (CONTINENTAL) 491 rev/mile, 75 MPH, Drive
7382155415 (3) TIRE, FRONT 12R22.5 Load Range H HSR2 (CONTINENTAL) 483 rev/mile, 75 MPH, All Position

RIGHT SIDE LOWER WINDOW
REAR TIRE AND RIM FRONT FROM FACTORY

Services Section:

40116 WARRANTY Standard for Durastar 1000/4000 Series, Effective with Vehicles Built January 2, 2015 or Later, CTS-2475P

PRICE SUMMARY

AERIAL, BODY, ACCESSORIES AND INSTALLATION: $145,307.00

CHASSIS - 2019 INTERNATIONAL 4300 SBA 4x2 REG. CAB: $71,827.94
(See NOTES Section #6 for NET 10 Days payment $800.00 chassis discount)

NET PRICE, F.O.B. ESCANABA, MI: $217,134.94

OPTIONS

OPTION #1 – AIR COMPRESSOR – Install Boss above deck model # BA 440 air compressor.
(mounting location to be determined at the pre-paint inspection).

ADD TO NET PRICE: $6,184.00

OPTION #2 – SHOVEL RACK HOLDER – A pipe style shovel rack shall be fabricated and installed. (exact design and location to be determined at the pre-paint inspection).

ADD TO NET PRICE: $400.00

OPTION #3 – INVERTER – A Sensata TMC12/1500N Pure sine 1500 Watt inverter shall be installed in the curbside front vertical compartment on a riser in the bottom of compartment.

ADD TO NET PRICE: $1,600.00
OPTION #4 – BRADEN FRONT MOUNT WINCH AND BUMPER PACKAGE - One (1) Braden #06979 (PD18C-11DBFE) front mount winch and bumper assembly with toolbox and curbside extended shaft shall be provided and installed at the front of the chassis. Provide a tandem hydraulic pump with one (1) control valve located at the curbside front of the bumper and One (1) control valve in the cab. Install an electronic throttle control at the CURBSIDE front bumper. 200 feet of 1/2” 6x37 IWRC cable with a loop eye and 5-ton clevis slip hook on the end shall be provided and installed.

Notes: This price includes air controls for the winch.

ADD TO NET PRICE: $ 10,987.00

OPTION #5 – REEL HOLDER – Fabricate and install removable reel holder to hold 48” reel.

ADD TO NET PRICE: $ 347.00

OPTION #6 – POLE CARRIER RACK – A pole carrier rack shall be fabricated and installed on the street-side of the truck. The front portion of the rack shall be permanently mounted off the boom rest and the rear portion shall be pinned and removable. The front and rear brackets are to have pole spikes and straps to secure the pole in transit. Two (2) 2” ratchet straps with hooks shall be provided to secure pole in transit.

ADD TO NET PRICE: $ 860.00

NOTE: The use of this rack with more than one pole may overload the GVWR and GAWRs of the chassis. USSI bears no responsibility for use of this rack with more than one pole.

OPTION #7 – HYDRAULIC HOSE REEL - One (1) Hannay model N617-25-26-15.5B spring rewind hose reel with hose stop, 50' set of 1/2” diameter hose (pressure & return) and one (1) set of Parker #FF371-8FP & FF372-8FP quick disconnect couplers with dust covers shall be provided and installed (mounting location to be determined at the pre-paint inspection).

ADD TO NET PRICE: $ 1,651.00

OPTION #8 – TRAILER SOCKET – Provide and install #1235 6-way trailer socket at rear of truck.

ADD TO NET PRICE: $ 188.00
OPTION #9 – HYDRAULIC TAMPER – Reliable model # TMP60V hydraulic tamper shall be provided (mounting location to be determined at the pre-paint inspection).

ADD TO NET PRICE: $ 1,676.00

OPTION #10 – PIKE POLE CARRIER – Fabricate and install pike holder rack to hold 4 pike poles on top of street side compartments towards outside edge. (See Picture of previous build)

ADD TO NET PRICE: $ 447.00

OPTION #11 – ALUMINUM MATERIAL TROUGH - One (1) approximately 8”H x 16”W x 130”L aluminum treadbrite material trough shall be fabricated and installed on top of the street-side compartments from front of body to end of horizontal compartment. The trough shall have punched sides and bottom with drain holes for clean out.

ADD TO NET PRICE: $ 1,076.00

OPTION #12 – MATERIAL RAIL AND SLIDING HOOKS – Provide and install a round steel rail with six sliding material hooks installed on street side material trough inboard.

ADD TO NET PRICE: $ 349.00

NOTES

1. Your terms this order: Net 30 Days.

2. Days from receipt of order to delivery Approximately 300 - 330 Days.

3. The USSI portion of this quotation is valid for: 60 Days.

4. This quotation does not include any applicable sales taxes, title or license fees.

5. Brand FX, Inc. and USSI do not guarantee to match the color of the body to the chassis cab or other painted components.
   <A close match can be achieved by the customer providing an approved, non-metallic dry sample of paint, prior to ordering gelcoated materials.
   <When metallic paint is used, the closest possible match can only be achieved by painting the body with metallic paint.
   <Contact USSI for cost of painting the body, if desired.
6. If USSI supplies a chassis and the chassis is paid for on a Net 10 Day basis at the time of delivery to USSI: **DEDUCT: $800.00 from the chassis price.**

7. **CLARIFICATION:**
   When Utility Sales and Service, Inc. (USSI) is requested to provide a chassis in response to a bid specification we do so as a service to our valued customer. **USSI does not assume the chassis manufacturer’s warranty.** In addition, **USSI does not provide transportation to or from our customer’s preferred chassis dealer.** USSI is responsible for assuring that the chassis conforms to the letter of the written specification (if said spec. is appropriate, available and feasible) in the bid request provided by our customer. USSI administers all equipment and body manufacturer’s warranties applicable to components we install onto the chassis and provide a one year warranty (from the date of delivery of the completed unit) on USSI workmanship.

   Thank you for considering **Utility Sales & Service Inc.** to meet your special needs in utility equipment. We look forward to serving you.

Sincerely,

Bruce Pirkel
Sales / Materials Assistant
Items to be determined at pre-paint / options

Note: This drawing is a layout drawing for quotations only.

All drawings are preliminary and subject to change until the end user has signed off on the drawings.

Options may not be shown on cutout sheet for options.
NOTICE TO BIDDERS

Sealed bids will be received by the City of Escanaba at the office of the City Clerk, on or before 2:00 p.m. - local time - on February 20th, 2018.

Digger/Derrick Bid

The bids will be publicly opened and read in the City Clerk’s Office at said time and date.

Bidder’s proposals and/or specifications may be obtained from the office of the City Clerk, located at 410 Ludington Street, Escanaba, Michigan 49829. No bid will be considered unless the proposal is enclosed in a sealed envelope marked:

Digger/Derrick Bid

In addition, the City of Escanaba, Michigan, will not consider any proposal which has not been received prior to the published time, date and year of bid opening. FAX transmittals will not be accepted.

A certified check, cashier’s check, or Bidder’s Bond, drawn payable - without condition - to the City of Escanaba, Michigan, in an amount not less than 10% of the bid will be submitted with each proposal as a guarantee that if the bid is accepted, the bidder will furnish materials or services as stated in his/her proposal. On failure of the successful bidder to fulfill the conditions of his/her proposal, he/she shall forfeit said deposit to the City of Escanaba, Michigan, as liquidated damages. The acceptance of the proposal will be contingent upon the bidder’s acceptance of this provision.

The City of Escanaba, Michigan, reserves the right to reject any or all bids, or any part thereof, at its discretion and to waive any irregularities in the bidding. The City of Escanaba, Michigan, may also split bids at its discretion. The City further reserves the right to negotiate directly with any and all bidders concerning any matter related to any bid.

All City of Escanaba, Michigan, bids are prepared so as to afford all vendors the equal opportunity for fair and equitable competition. The City of Escanaba, Michigan, assumes no liability or responsibility for any errors or oversights in the preparation and/or publication of bids.

Any questions concerning this bid should be directed to the City of Escanaba Electric Superintendent Mike Furmanski @ (906) 786-0061 or mfuranski@escanaba.org
Introduction

The City of Escanaba Electric Department is seeking bids for a new Digger/Derrick truck. The minimum specifications for the truck we desire are attached.

Please contact Mike Furmanski with any questions at mfurmanski@escanaba.org or (906) 786-0061
BIDDER’S PROPOSAL

DATE: 2/8/2018

City of Escanaba
Escanaba, MI 49829

We, the undersigned, agree to furnish the City of Escanaba, Michigan, a new Digger/Derrick truck in accordance with the attached minimum specifications, which are part of this proposal, at the following price:

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Versalift TMD-2045B Digger Derrick</td>
<td>$217,134.94</td>
</tr>
</tbody>
</table>

DELIVERY DATE: 300-330 Days from Receipt of PO

FOB: CITY OF ESCANABA

CERTIFIED CHECK, CASHIER’S CHECK, OR BIDDER’S BOND ENCLOSED IN THE AMOUNT OF: $21,713.50

(Must be included to qualify)

SUBMITTED BY:

FIRM: Utility Sales and Service

ADDRESS: 412 Randolph Drive

Appleton, Wisconsin 54913

BY: Bruce Pirkel

PRINTED NAME: Bruce Pirkel

TITLE: Sales / Materials Assistant

PHONE: 920-788-2699

FAX: 920-788-4699
# SPECIFICATIONS

**ONE (1) NEW 2018 DIGGER/DERRICK, UTILITY BODY, AND CHASSIS**

<table>
<thead>
<tr>
<th>MINIMUM SPECIFICATIONS REQUIRED</th>
<th>SPECIFICATIONS PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. TRUCK</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>WEIGHT: GROSS VEHICLE WEIGHT</td>
<td></td>
</tr>
<tr>
<td>RATING 37,000 POUNDS</td>
<td></td>
</tr>
<tr>
<td><strong>II. CAB</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>A. CONVENTIONAL STEEL WITH TILT FORWARD HOOD AND FENDERS</td>
<td>Comply</td>
</tr>
<tr>
<td>1. SOUND INSULATION</td>
<td></td>
</tr>
<tr>
<td>2. SINGLE AIR OPERATED DRIVER SEAT AND TWO MAN BENCH SEAT WITH UNDER SEAT STORAGE</td>
<td>Comply</td>
</tr>
<tr>
<td>3. POWER MIRRORS: WEST COAST TYPE 6&quot; X 16&quot; RIGHT AND LEFT WITH 6&quot; BUG EYE TO BE BELOW EACH MIRROR</td>
<td>Comply</td>
</tr>
<tr>
<td>4. HEAVY DUTY FRESH AIR HEATER AND DEFROSTER AND AIR CONDITIONING</td>
<td>Comply</td>
</tr>
<tr>
<td>5. SUNVISORS, BOTH SIDES</td>
<td>Comply</td>
</tr>
<tr>
<td>6. CAB GRABHANDLES: BOTH SIDES, INSIDE AND OUT</td>
<td>Comply</td>
</tr>
<tr>
<td>7. INTERIOR CAB LIGHT</td>
<td>Comply</td>
</tr>
<tr>
<td>8. CLEARANCE, MARKER, HAZARD SIGNAL AND SELF-CANCELLING TURN SIGNAL LIGHTS</td>
<td>Comply</td>
</tr>
<tr>
<td>9. LOWER DOOR WINDOW, RIGHT SIDE</td>
<td>Comply</td>
</tr>
<tr>
<td>10. SINGLE PEDESTAL DUAL AIR HORN</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>B. ELECTRICAL SYSTEM</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. 12 VOLT</td>
<td></td>
</tr>
<tr>
<td>2. 160 AMP ALTERNATOR</td>
<td>Comply</td>
</tr>
<tr>
<td>3. 1200 CCA BATTERY</td>
<td>Comply</td>
</tr>
<tr>
<td>4. AUDIO BACKUP ALARM</td>
<td>Comply</td>
</tr>
<tr>
<td>5. AM/FM RADIO</td>
<td>Comply</td>
</tr>
<tr>
<td>6. INTERMITTENT WINDSHIELD WIPERS</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>C. GAUGES</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. VOLTMETER</td>
<td></td>
</tr>
<tr>
<td>2. OIL PRESSURE</td>
<td>Comply</td>
</tr>
<tr>
<td>3. COOLANT TEMPERATURE</td>
<td>Comply</td>
</tr>
<tr>
<td>4. TACHOMETER</td>
<td>Comply</td>
</tr>
<tr>
<td>5. TRANSMISSION TEMPERATURE</td>
<td>Comply</td>
</tr>
<tr>
<td>6. HOUR METER</td>
<td>Comply</td>
</tr>
<tr>
<td>7. AIR PRESSURE WITH LOW PRESSURE AUDIO ALARM</td>
<td>Comply</td>
</tr>
<tr>
<td>8. FUEL LEVEL</td>
<td>Comply</td>
</tr>
<tr>
<td>9. DEF FLUID LEVEL</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>D. ENGINE</strong></td>
<td>No Comply</td>
</tr>
<tr>
<td>1. DIESEL 240 HP</td>
<td></td>
</tr>
<tr>
<td>2. FUEL PRE-HEATER</td>
<td>Comply</td>
</tr>
<tr>
<td>3. HEAVY DUTY COOLING SYSTEM</td>
<td>Comply</td>
</tr>
<tr>
<td>4. HORIZONTAL EXHAUST SYSTEM</td>
<td>Comply</td>
</tr>
<tr>
<td>5. COOLING SYSTEM CONDITIONER FILTER WIX #24019 KIT OR EQUAL</td>
<td>Comply</td>
</tr>
<tr>
<td>MINIMUM SPECIFICATIONS REQUIRED</td>
<td>SPECIFICATIONS PROPOSED</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>E. TRANSMISSION</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. AUTOMATIC SIX SPEED, WITH ON/OFF HWY</td>
<td>Comply</td>
</tr>
<tr>
<td>2. ALLISON 3500_RDS_P</td>
<td>Comply</td>
</tr>
<tr>
<td>3. HEAVY DUTY TRANSMISSION OIL COOLER</td>
<td>Comply</td>
</tr>
<tr>
<td>4. EXTERNAL FLUID FILTER KIT #23012366 OR EQUAL</td>
<td>Comply</td>
</tr>
<tr>
<td>5. POWER TAKE-OFF GEAR HEAVY DUTY SINGLE SPEED</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>F. AXLES</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. FRONT: 14,000 POUND RATING WITH HEAVY DUTY POWER STERRING</td>
<td>Comply</td>
</tr>
<tr>
<td>2. REAR: 23,000 POUND RATING.</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>G. SPRINGS</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. FRONT: 14,000 POUNDS</td>
<td>Comply</td>
</tr>
<tr>
<td>2. REAR: 23,500 POUNDS</td>
<td>Comply</td>
</tr>
<tr>
<td>3. AUXILIARY: 4,500 POUNDS</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>H. TIRES</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. TUBELESS TYPE, RADIAL</td>
<td>Comply</td>
</tr>
<tr>
<td>2. FRONT: 12R22.5 LOAD RANGE H HSR2 HI-WAY TREAD</td>
<td>Comply</td>
</tr>
<tr>
<td>3. REAR: 11R22.5 LOAD RANGE G HDR2 MUD/SNOW TREAD</td>
<td>Comply</td>
</tr>
<tr>
<td>4. SPARE: ONE FRONT, ONE REAR TO MATCH BOTH WHEEL AND TIRE</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>I. BRAKES</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. AIR BRAKES, S CAM TYPE WITH ABS</td>
<td>Comply</td>
</tr>
<tr>
<td>2. AIR DRYER</td>
<td>Comply</td>
</tr>
<tr>
<td>3. HEATER TYPE MOISTURE DEACTORS</td>
<td>Comply</td>
</tr>
<tr>
<td>4. AIR OPERATED PARKING BRAKE</td>
<td>Comply</td>
</tr>
<tr>
<td>5. 13 CFM COMPRESSOR</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>J. FRAME</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. STRAIGHT RAIL, FULL LENGTH CHANNEL 120,000 PSI YIELD STRENGTH STEEL</td>
<td>Comply</td>
</tr>
<tr>
<td>2. FACTORY REINFORCED</td>
<td>Comply</td>
</tr>
<tr>
<td>3. TWO TOW HOOKS FRONT AND REAR</td>
<td>Comply</td>
</tr>
<tr>
<td>4. 18.0 SECTION MODULUS INVERTED L REINFORCED</td>
<td>Comply</td>
</tr>
<tr>
<td>5. CAB TO AXLE 116 INCH</td>
<td>Comply</td>
</tr>
<tr>
<td>6. FRAME MUST EXTENDPast FRONT OF CAB FOR FRONT MOUNTED WINCH</td>
<td>Not Needed USSI will fabricate brackets if bumper winch is installed and bulkhead cargo area Hyd Tank for digger</td>
</tr>
<tr>
<td><strong>K. FUEL TANK</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. 50 GALLON</td>
<td>Comply</td>
</tr>
<tr>
<td>2. STEP SADDLE-MOUNT DRIVER'S SIDE</td>
<td>Comply</td>
</tr>
<tr>
<td>3. MATCHING 50 GALLON STEP SADDLE-MOUNT CURB SIDE FOR HYDRAULIC FLUID</td>
<td>Engine 3 Year Unlimited Miles</td>
</tr>
<tr>
<td><strong>L. COLOR</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. SCHOOL BUS YELLOW</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>M. WARRANTY</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. BIDDER TO STATE</td>
<td>Comply</td>
</tr>
<tr>
<td><strong>N. MANUALS</strong></td>
<td>Comply</td>
</tr>
<tr>
<td>1. TWO COMPLETE SETS OF PARTS AND SERVICE MANUALS FOR SERVICE BODY AND CHASSIS</td>
<td>Comply</td>
</tr>
</tbody>
</table>
MINIMUM SPECIFICATIONS REQUIRED

III. DIGGER
A. 2 SPEED 6,000 FT. POUNDS OF TORQUE
B. AUGER SPEED 41 RPM
C. DIGGER ASSEMBLY WITH DOUBLE PLANETARY GEARS, A DIRECT COUPLED HYDRAULIC GEAR MOTOR, AND TORQUE RESISTANT ATTACHING BAIL
D. 2 ½" BY 60" INCH HOLLOW HEX DRIVE WITH HEAVY DUTY SPLIT COUPLING AND SELF-STORING KELLY BAR
E. 18 INCH STANDARD AUGER
F. ONE INCH POLYESTER AUGER SPOOLER ROPE OR NYLON STRAP WITH BRAIDED EYE
G. AUGER LOCK
H. AUGER STORED ON STREET SIDE OF DERRICK

SPECIFICATIONS PROPOSED

Comply
Comply
Comply
2 5/8" Hex Drive by 93.5"
Comply
Comply
Comply
Comply

IV. DERRICK
A. ROTATION 360° CONTINUOUS
B. BOOM ACTUATION, WITH ANGLE INDICATOR:
   1. 80° ABOVE HORIZONTAL
   2. 20° BELOW HORIZONTAL
C. THREE STAGE HYDRAULIC OPERATED EXTENSION
D. DUAL LIFT CYLINDERS, EACH CAPABLE OF HOLDING THE RATED CAPACITY OF THE DERRICK
   Single Cylinder
F. HYDRAULIC FIBERGLASS THIRD STAGE
   1. TESTED AND RATED FOR 46Kv AC
   2. CAPABLE OF LIFTING THE HYDRAULIC CAPACITY OF THE DERRICK IN ALL POSITIONS
G. WIND
   1. BOOM Tip 15,000 POUNDS
   2. 1" X 60' POLYESTER ROPE WITH BRAIDED EYE AT EACH END-36,300 POUND BREAKING STRENGTH
   3. WIND EXTENSION SHAFT FOR CAPSTAN AND TAKE-UP REELS, 2-3/8" DIAMETER
G. BOOM REST
H. HYDRAULIC OVERLOAD PROTECTION
I. ADEQUATE SIDE LIFT ROLLOVER PROTECTION
J. MOUNTED OVER THE CENTER OF THE REAR AXLE
K. COMMAND CHAIR ON CURB SIDE OF DERRICK TO MOVE WITH DERRICK
L. REMOTE START/STOP AT COMMAND CHAIR
M. TRANSFERRABLE POLE CLAWS BETWEEN SECOND AND THIRD STAGE, TILT AND CLAMP
N. 44 FOOT AT 80° FROM GROUND LEVEL
O. TOOL CONTROL CIRCUIT AT CURB SIDE JACK CONTROL FOR POLE TAMPER AND POLE PULVER
P. CAPACITIES: BARE BOOM CAPACITIES AS FOLLOWS:
   1. 80°-ALL RETRACTED-16,500 LBS
   2ND EXTENSION OUT-11,500 LBS
   2ND & 3RD EXTENSION OUT-9,000 LBS
   2. 50°-ALL RETRACTED 9,000
   2ND EXTENSION OUT 7,700
   2ND & 3RD EXTENSION OUT 4,700
   3. 0°-ALL RETRACTED 7,100

Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
Comply
### Minimum Specifications Required

<table>
<thead>
<tr>
<th>Specification</th>
<th>Specification Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Extension Out 3,300</td>
<td>Comply</td>
</tr>
<tr>
<td>2nd &amp; 3rd Extension Out 2,400</td>
<td>Comply</td>
</tr>
</tbody>
</table>

### Jacks
1. "A" Frame Type
2. Four

### Controls
A. Full Hydraulic Controls for All Operations
   - Derrick at Command Chair
     1. Single Handle, Pistol Grip, to Operate Rotation, Up-Down, and In-Out of Stage Two and Three
     2. Gas Pedal Variable Speed Control for All Hydraulic Digger/Derrick Operations

B. Jack Controls:
   1. Two-Street Side
   2. Two-Curb Side
   3. Variable Speed Control at Street Side Jack Controls

C. Courtesy Lights at Each Control Station to Illuminate All Controls

### Utility Body
A. Fiberglass
B. Self-Closing Latches
C. Lighted Compartment
   1. One in Each Compartment
   2. Switch and Compartment Light On Light Installed in Cab

D. Bins in accordance with attachment "A"
E. Warranty-Bidder to State
F. Color: Body to Match Cab - Schell Bus Yellow

### Options
A. Air Compressor - 100 PSI, 35 CFM to Operate Air Tools
B. Shovel Storage
C. 120 Volt/1500 Watt Electric Generator That Operates Off the Truck
D. 20,000 Pound Front Mounted Winch, 2 Speed Electric Hydraulic Operated, Extended Shaft for Capstan and Wire Take-Up Reel, Dual Control
E. Reel Holder for 48" Reel, Removable
F. Pole Carrier, Removable
G. 6-Prong Receptacle for Trailer Lights
H. Hose Reel for Hydraulic Tamper Mounted Under Body with 25 Feet of Hose and Tool Control Handle at Curb Side Jack Control
I. Hydraulic Tamper
J. Pike Pole Carrier

1500 Watt Inverter
50' of Hydraulic Hose
**MINIMUM SPECIFICATIONS REQUIRED**

### MII. MISCELLANEOUS

A. ELECTRIC ENGAGE/DISENGAGE HYDRAULIC PUMP WITH PROPER PRESSURE TO OPERATE ALL HYDRAULIC FUNCTIONS AT ENGINE IDLE  
B. PTO ENGAGED WARNING LIGHT INSTALLED IN CAB  
C. "BOOM NOT STORED" WARNING LIGHT INSTALLED IN CAB  
D. "JACKS NOT STORED" WARNING LIGHT INSTALLED IN CAB  
E. ELECTRIC PTO ENGAGE/DISENGAGE SWITCH INSTALLED IN CAB  
F. SPOTLIGHTS:  
   1. TWO-HANDLE TYPE INSTALLED IN CAB, ONE ON EACH SIDE, NOT TO INTERFERE WITH ACCESS OR REAR CLEARANCE  
   2. TWO, ONE ON EACH SIDE, ON TOP OF UTILITY BODY (AS SPECIFIED IN ATTACHMENT "A")  
G. YELLOW STROBE LIGHT MOUNTED STREET SIDE ON BOOM REST WITH REMOVABLE WIRE MESH PROTECTOR. MUST BE VISIBLE FROM 360°  
H. STROBE LIGHT SWITCH WITH STROBE LIGHT ON LIGHT INSTALLED IN CAB  
I. PINTLE HITCH AND CHAIN LOOPS INSTALLED AT REAR OF VEHICLE. TOWING CAPACITY 48,000 LBS, 29 INCHES HEIGHT TO CENTER OF PINTLE HITCH  
J. REAR WHEEL CHOCKS, TWO FOR EACH WHEEL  
K. JACK PAD, FOUR  
L. CAPACITY AND LIFT CHARTS  
M. WARNING/DANGER SIGNS  
N. WARRANTY-BIDDER TO STATE  
O. SUCCESSFUL BIDDER OF DIGGER/DERRICK RESPONSIBLE FOR COMPLETE ASSEMBLY AND DELIVERY F.O.B. TO THE CITY OF ESCANABA, MI  
P. MUST MEET ALL ANSI AND OSHA REQUIREMENTS  
Q. MANUALS: TWO COMPLETE SETS PARTS & SERVICE  

**SPECIFICATIONS PROPOSED**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Comply</td>
</tr>
<tr>
<td>B</td>
<td>Comply</td>
</tr>
<tr>
<td>C</td>
<td>Comply</td>
</tr>
<tr>
<td>D</td>
<td>Comply</td>
</tr>
<tr>
<td>E</td>
<td>Comply</td>
</tr>
<tr>
<td>F</td>
<td>Comply</td>
</tr>
<tr>
<td>G</td>
<td>Comply</td>
</tr>
<tr>
<td>H</td>
<td>Comply</td>
</tr>
<tr>
<td>I</td>
<td>Comply</td>
</tr>
<tr>
<td>J</td>
<td>Comply</td>
</tr>
<tr>
<td>K</td>
<td>Comply</td>
</tr>
<tr>
<td>L</td>
<td>Comply</td>
</tr>
<tr>
<td>M</td>
<td>Comply</td>
</tr>
<tr>
<td>N</td>
<td>Comply</td>
</tr>
<tr>
<td>O</td>
<td>Comply</td>
</tr>
<tr>
<td>P</td>
<td>Comply</td>
</tr>
<tr>
<td>Q</td>
<td>Comply</td>
</tr>
</tbody>
</table>

ANY QUESTIONS SHOULD BE ADDRESSED TO:

MIKE FURMANSKI  
CITY ELECTRIC DEPARTMENT  
1711 SHERIDAN ROAD  
ESCANABA, MI 49829  
(906) 786-0061
----Original Message----
From: "DeGrand, Reardon & Hall" <degrandlaw@gmail.com>
To: Patrick Jordan <pjordan@escanaba.org>
Date: Wed, 21 Feb 2018 15:26:34 -0500
Subject: RE: DDA APPOINTMENTS

In Section 4 of the DDA Enactment Statute the language provides that members of the DDA board shall be appointed by the chief executive officer of the municipality. In this case it is the mayor subject to approval by the city council. The statute further provides that not less than a majority of the members shall be persons having an interest in property located in the downtown district or officers, members, trustees, principals, or employees of a legal entity having an interest in property located in the downtown district.

The pertinent language, I believe, is "having an interest in property located in the downtown district".

I believe the statute is clear and that it provides that individuals who own property in the downtown district would be qualified to serve on the DDA board. I also believe that "an interest in property" would include a tenant located in the downtown district, and finally I believe that an employee of an owner or tenant would be qualified to serve on the Downtown Development Authority Board.

There is one Attorney General opinion which was issued in October of 1999 which touches somewhat on the question at hand. The Attorney General determined that although the state legislation has authorized a DDA board to adopt rules governing its procedure and the holding of regular meetings, there is nothing in the state statute which would authorize a DDA board to adopt rules limiting or otherwise prescribing a selection of members of the DDA board. In the question that was before the Attorney General, the DDA board adopted a rule which would require that all members of the board have an interest in property located in the DDA district. The Attorney General ruled that the statute provides that only a majority of the members have such an interest and that the law would have to be followed.

Ralph

--
DeGrand, Reardon & Hall, P.C.
517 Ludington Street
Escanaba, Michigan 49829
(906) 786-6009

IMPORTANT: This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you received this communication in error, please notify us immediately by telephone 906-786-6009.
DOWN TOWN DEVELOPMENT AUTHORITY
Act 197 of 1975

AN ACT to provide for the establishment of a downtown development authority; to prescribe its powers and duties; to correct and prevent deterioration in business districts; to encourage historic preservation; to authorize the acquisition and disposal of interests in real and personal property; to authorize the creation and implementation of development plans in the districts; to promote the economic growth of the districts; to create a board; to prescribe its powers and duties; to authorize the levy and collection of taxes; to authorize the issuance of bonds and other evidences of indebtedness; to authorize the use of tax increment financing; to reimburse downtown development authorities for certain losses of tax increment revenues; and to prescribe the powers and duties of certain state officials.


Popular name: DDA
Popular name: Downtown Development Authority Act

The People of the State of Michigan enact:

125.1851 Definitions.
Sec. 1. As used in this act:
(a) "Advance" means a transfer of funds made by a municipality to an authority or to another person on behalf of the authority in anticipation of repayment by the authority. Evidence of the intent to repay an advance may include, but is not limited to, an executed agreement to repay, provisions contained in a tax increment financing plan approved prior to the advance, or a resolution of the authority or the municipality.
(b) "Assessed value" means 1 of the following:
(i) For valuations made before January 1, 1995, the state equalized valuation as determined under the general property tax act, 1893 PA 206, MCL 211.1 to 211.155.
(ii) For valuations made after December 31, 1994, the taxable value as determined under section 27a of the general property tax act, 1893 PA 206, MCL 213.27a.
(c) "Authority" means a downtown development authority created pursuant to this act.
(d) "Board" means the governing body of an authority.
(e) "Business district" means an area in the downtown of a municipality zoned and used principally for business.
(f) "Captured assessed value" means the amount in any 1 year by which the current assessed value of the project area, including the assessed value of property for which specific local taxes are paid in lieu of property taxes as determined in subdivision (a), exceeds the initial assessed value. The state tax commission shall prescribe the method for calculating captured assessed value.
(g) "Catalyst development project" means a project that is located in a municipality with a population greater than 500,000, is designated by the authority as a catalyst development project, and is expected to result in at least $300,000,000.00 of capital investment. There shall be no more than 1 catalyst development project designated within each authority.
(h) "Chief executive officer" means the mayor or city manager of a city, the president or village manager of a village, or the supervisor of a township or, if designated by the township board for purposes of this act, the township superintendent or township manager of a township.
(i) "Development area" means that area to which a development plan is applicable.
(j) "Development plan" means that information and those requirements for a development plan set forth in section 17.
(k) "Development program" means the implementation of the development plan.
(l) "Downtown district" means that part of an area in a business district that is specifically designated by ordinance of the governing body of the municipality pursuant to this act. A downtown district may include 1 or more separate and distinct geographic areas in a business district as determined by the municipality if the municipality enters into an agreement with a qualified township under section 3(7) or if the municipality is a city that surrounds another city and that other city lies between the 2 separate and distinct geographic areas. If the downtown district contains more than 1 separate and distinct geographic area in the downtown district, the separate and distinct geographic areas shall be considered 1 downtown district.
(m) "Eligible advance" means an advance made before August 19, 1993.
(n) "Eligible obligation" means an obligation issued or incurred by an authority or by a municipality on behalf of an authority before August 19, 1993 and its subsequent refunding by a qualified refunding

Rendered Friday, February 3, 2017
© Legislative Council, State of Michigan

Page 1  Michigan Compiled Laws Complete Through PA 416 of 2016

Courtesy of www.legislature.mi.gov
public hearing on the establishment of the authority, creation of the district, or approval of the development plan or tax increment financing plan, or on the amendment, was not published, posted, or mailed at least 20 days before the hearing, provided that the notice was either published or posted at least 10 days before the hearing or that the authority was established in 1990 by a municipality that filed the ordinance with the secretary of state not later than July 1, 1991. This section applies only to an ordinance or an amendment adopted by a municipality before January 1, 1999 and shall include any bonds or amounts to be used by the authority to pay the principal of and interest on bonds that have been issued or that are to be issued by the authority or the incorporating municipality. An authority for which an ordinance or amendment to the ordinance establishing the authority has been published before February 1, 1991 is considered for purposes of section 3(3) to have promptly filed the ordinance or amendment to the ordinance with the secretary of state if the ordinance or amendment to the ordinance is filed with the secretary of state before December 31, 2002. The validity of the proceedings or findings establishing an authority described in this section, or of the procedure, adequacy of notice, or findings with respect to the approval of a development plan or tax increment financing plan for an authority described in this section is conclusive with respect to the capture of tax increment revenues for a bond issued after June 1, 2002 and before June 1, 2006. As used in this section, “notice was either published or posted” means either publication or posting of the notice occurred at least once.


Popular name: DDA

Popular name: DDA: DOWNTOWN DEVELOPMENT AUTHORITY ACT

125.1654 Board; appointment, terms, and qualifications of members; vacancy; compensation and expenses; election of chairperson; appointment as public official; oath; conducting business at public meeting; public notice; special meetings; removal of members; review; expense items and financial records; availability of writings to public; single board governing all authorities; member as resident or having interest in property; planning commission serving as board in certain municipalities; modification by interlocal agreement.

Sec. 4. (1) Except as provided in subsections (7), (8), and (9), an authority shall be under the supervision and control of a board consisting of the chief executive officer of the municipality and not less than 5 or more than 12 members as determined by the governing body of the municipality. Members shall be appointed by the chief executive officer of the municipality, subject to approval by the governing body of the municipality. Not less than a majority of the members shall be persons having an interest in property located in the downtown district or officers, members, trustees, principals, or employees of a legal entity having an interest in property located in the downtown district. Not less than 1 of the members shall be a resident of the downtown district, if the downtown district has 100 or more persons residing within it. Of the members first appointed, an equal number of the members, as near as is practicable, shall be appointed for 1 year, 2 years, 3 years, and 4 years. A member shall hold office until the member's successor is appointed. Thereafter, each member shall serve for a term of 4 years. An appointment to fill a vacancy shall be made by the chief executive officer of the municipality for the unexpired term only. Members of the board shall serve without compensation, but shall be reimbursed for actual and necessary expenses. The chairperson of the board shall be elected by the board. The rules of procedure or the bylaws of the authority may provide that a person be appointed to the board in his or her capacity as a public official, whether appointed or elected. The rules of procedure or bylaws may also provide that the public official's term shall expire upon expiration of his or her service as a public official. In addition, the public official's membership on the board expires on his or her resignation from office as a public official.

(2) Before assuming the duties of office, a member shall qualify by taking and subscribing to the constitutional oath of office.

(3) The business which the board may perform shall be conducted at a public meeting of the board held in compliance with the open meetings act, 1976 PA 267, MCL 15.261 to 15.275. Public notice of the time, date, and place of the meeting shall be given in the manner required by the open meetings act, 1976 PA 267, MCL 15.261 to 15.275. The board shall adopt rules consistent with the open meetings act, 1976 PA 267, MCL 15.261 to 15.275, governing its procedure and the holding of regular meetings, subject to the approval of the governing body. Special meetings may be held if called in the manner provided in the rules of the board.

(4) Pursuant to notice and after having been given an opportunity to be heard, a member of the board may be removed for cause by the governing body. Removal of a member is subject to review by the circuit court.

(5) All expense items of the authority shall be publicized monthly and the financial records shall always be open to the public.

Rendered Friday, February 3, 2017
© Legislative Council, State of Michigan

Page 6 Michigan Compiled Laws Complete Through PA 418 of 2016

Courtesy of www.legislature.mi.gov
City of Escanaba
Downtown Development Authority

Rules of Procedure

Revision Date: June 18, 2014
Revised Addition Changes- Date only
City of Escanaba, Downtown Development Authority - Rules of Procedure

1. **AUTHORITY**

1.1 **General.** In order to carry-out the duties and responsibilities conveyed under the Downtown Development Authority, Act 197 of 1975, as amended, and Escanaba Ordinance 792, of the Escanaba Code of Ordinance there has been created a Downtown Development Authority (hereafter referred to as “Authority”) and a Board of Trustees (hereafter referred to as “Trustee”) consisting of the Mayor and City Manager of the City of Escanaba and seven (9) members appointed by the Mayor of the City of Escanaba, subject to approval by the City Council of the City of Escanaba. The role of the Board is to pass on matters pertaining to the Downtown Development District. The Board shall appoint a Director who shall act as the Chief Executive Officer of the Board and shall act as the Secretary to the Board. The Director shall have no vote on any matter before the Board. The Board shall adopt Rules of Procedure for conducting its business, and shall render all decisions and findings in writing. (MCL 125.1655(1)/Ordinance #792, Section 6. (a).

The major duties of the Board include:

A. Creation, maintenance, and public promotion of the Downtown Development Authority District (MCL 125.1652).

B. Conduct board business at public meetings which are held in compliance with the open meetings act, Act 267 of the Public Acts of 1976, as amended (MCL 125.1654(3)).

C. Prepare an analysis of economic changes taking place in the downtown district (MCL 125.1657(a)).

D. Study and analyze the impact of metropolitan growth upon the downtown district (MCL 125.1657(b)).

E. Plan and propose the construction, renovation, repair, remodeling, rehabilitation, restoration, preservation, or reconstruction of a public facility, an existing building, or a multiple-family dwelling unit which may be necessary or appropriate to the execution of a plan which, in the opinion of the board, aids in economic growth of the downtown district (MCL 125.1657(c)).

F. Plan, propose, and implement an improvement to a public facility within the development area to comply with barrier free design requirements of the state construction code (MCL 125.1657(d)).