

**REGULAR CAUCUS MEETING
OF THE COUNCIL OF THE CITY OF BROOK PARK, OHIO
TO BE HELD ON TUESDAY, MAY 9, 2023
7:00 P.M.**

I. ROLL CALL OF MEMBERS:

II. PLEDGE OF ALLEGIANCE:

III. APPROVAL OF MINUTES OF PRECEDING MEETINGS
REGULAR CAUCUS MEETING MINUTES HELD ON APRIL 11, 2023.

IV. DISCUSSION:

V. AVIATION & ENVIRONMENTAL COMMITTEE- CHAIRMAN, POINDEXTER

1. AN ORDINANCE AUTHORIZING THE MAYOR TO PARTICIPATE IN THE OHIO DEPARTMENT OF NATURAL RESOURCES, DIVISION OF OIL AND GAS RESOURCES MANAGEMENT'S (DIVISION) ORPHAN WELL PROGRAM, TO PLUG AN ORPHAN WELL LOCATED IN THE RIGHT-OF-WAY AT 5841 RUPLE ROAD, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.

FINANCE COMMITTEE- CHAIRMAN, SCOTT

1. AN ORDINANCE CREATING FUND #550, THE SHELDON ROAD BRIDGE IMPROVEMENT PROJECT FUND, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.
2. AN ORDINANCE AUTHORIZING THE CITY OF BROOK PARK TO ACCEPT DONATED FUNDS, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.

VI. LEGISLATIVE COMMITTEE- CHAIRWOMAN, COYNE

1. A RESOLUTION DECLARING THE MONTH OF MAY AS LUPUS AWARENESS MONTH IN THE CITY OF BROOK PARK, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.
2. A RESOLUTION TO EXTEND THE MORATORIUM ON VAPE AND SMOKE ESTABLISHMENTS OR SHOPS WITHIN THE CITY OF BROOK PARK FOR A PERIOD OF NOT MORE THAN 12 MONTHS, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.

VII. SAFETY COMMITTEE- CHAIRMAN, ROBERTS

1. AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT WITH SUTPHEN CORPORATION, BASED UPON SOURCEWELL CONTRACT NO. 113021-SUT FOR THE PURCHASE OF ONE NEW SUTPHEN HEAVY DUTY CUSTOM PUMPER TRUCK AND RELATED MISCELLANEOUS EQUIPMENT, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.

In Attendance: Fire Chief Mark Higgins

VIII. SERVICE COMMITTEE- CHAIRMAN, POINDEXTER

1. AN ORDINANCE AUTHORIZING THE MAYOR TO EXECUTE A PROJECT AGREEMENT WITH NORTHEAST OHIO REGIONAL SEWER DISTRICT FOR THE SHELDON ROAD PROFILE RAISING AND BRIDGE REPLACEMENT DESIGN PROJECT AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.
In Attendance: Michael S. Blair, P.G. Project Manager and Nicole Velez Watershed Team Leader
2. AN ORDINANCE AMENDING ORDINANCE 11233-2021, WHICH AUTHORIZED THE MAYOR TO ENTER INTO A CONTRACT WITH CONSTRUCTION RESOURCES, INC. TO PREPARE DETAIL DRAWINGS, SPECIFICATIONS, AND BID PACKAGES FOR THE NATATORIUM REPAIR, AND A ROOF STUDY, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.
3. AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO A COMMUNITY COST-SHARE AGREEMENT BY AND BETWEEN THE NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORSO) AND THE CITY OF BROOK PARK, FOR THE STORMWATER MCM #6 IMPLEMENTATION, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.
4. AN ORDINANCE AUTHORIZING THE MAYOR TO DISPOSE OF OBSOLETE CITY VEHICLES THAT ARE UNSAFE AND NO LONGER ROAD WORTHY, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.
5. AN ORDINANCE AUTHORIZING THE MAYOR TO TRADE-IN THE CITY'S 2007 NEW HOLLAND W170B WHEEL LOADER, AND DECLARING AN EMERGENCY. Introduced by Mayor Orcutt.

IX. ADJOURNMENT

P/C 4-18-23
CA _____
1st R _____
2nd R _____
3rd R _____
B/C _____

CITY OF BROOK PARK, OHIO

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

AN ORDINANCE AUTHORIZING
THE MAYOR TO PARTICIPATE IN THE OHIO DEPARTMENT OF NATURAL
RESOURCES, DIVISION OF OIL AND GAS RESOURCES MANAGEMENT'S
(DIVISION) ORPHAN WELL PROGRAM, TO PLUG AN ORPHAN WELL LOCATED IN
THE RIGHT-OF-WAY AT 5841 RUPLE ROAD, AND DECLARING AN EMERGENCY

WHEREAS, it has come to the attention of the administration
that there is an orphan well that needs to be plugged located in
the right-of-way at 5841 Ruple Road in the City of Brook Park,
Ohio; and

NOW THEREFORE, BE IT ORDAINED, by the Council of the City of
Brook Park, State of Ohio, that:

SECTION 1: The Mayor is hereby authorized to notify the ODNR,
Division of Oil and Gas Resources Management's Division Orphan Well
Program about said orphan well, and the Mayor is further authorized
to enter into any necessary agreements to plug the well, through
Ronald A. Gibson & Associates, Inc., further described in Exhibit
"A".

SECTION 2: It is found and determined that all formal actions
of this Council concerning and relating to the adoption of this
Ordinance were adopted in an open meeting of this Council, and that
all deliberations of this Council and of any of its committees that
resulted in such formal action were in meetings open to the public
in compliance with all legal requirements, including Section 121.22
of the Ohio Revised Code.

SECTION 3: This Ordinance is hereby declared to be an
emergency measure immediately necessary for the preservation of the
public peace, health, safety and welfare of said City, and for the
further reason to authorize the Mayor to notify and seek approval
for plugging the orphan gas well in the right-of-way at 5841 Ruple
Road; therefore, provided this ordinance receives the affirmative
vote of at least five (5) members elected to Council. It shall
take effect and be in force immediately upon its passage and

RECEIVED

APR 18 2023

approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
Clerk of Council

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.


DIRECTOR OF LAW

Ronald A Gibson & Associates, Inc.
Gibson Energy Services

32254 Country Club Drive
Avon Lake, Ohio 44012
Telephone: (440) 396-6157
Email: ragibsonpe@gmail.com



January 23, 2023

Edward A. Orcutt, Mayor
City of Brook Park, Ohio
6161 Engle Road
Brook Park, Ohio 44142

Re: Professional Services Agreement
ODNR Landowner Passthrough Project

Dear Mr. Edward Orcutt:

The ODNR's orphan well plugging program's Landowner Pass Through Payment ("LOPT") Program requires that the landowner of an approved well present three (3) qualified well plugging bids to the ODNR. The bids are subject to the ODNR form plugging contract made specific to the landowner's well and which includes a well plugging design and contractor scope of work.

The ODNR allows the landowner to seek assistance in the LOPT program process from industry experts. The ODNR will pay professional service fees to a plugging project manager, who prepares the necessary paperwork and conducts the necessary well inspections.

This agreement is intended to establish the relationship between the City of Brook Park, as landowner, and Gibson Energy Services ("Gibson") as your LOPT well plugging project manager. Under this agreement, Gibson will perform the following:

1. Conduct a well inspection and prepare and inspection report;
2. Prepare applications for the ODNR Orphan plugging program and the LOPT program;
3. Prepare a Gas Well Plugging Bid Request for 3 qualified plugging contractors;
4. Prepare a LOPT Payment Plugging Application with Well Plugging and Restoration Agreement;
5. Assist in the submission of a final invoice to the ODNR (if necessary).

The City of Brook Park, as landowner, agrees to require the plugging contractor with the successful plugging bid pay Gibson a Professional Services Fee of \$3,500 and Well Inspection Fee of \$750. These fees will be line items on the Scope of Work Offer Sheet and will be described in the plugging agreement exhibits. The plugging contractor will submit the Offer Sheet as part of its final invoice and will be reimbursed by the ODNR for Gibson's professional services fee. The landowner is not responsible for this fee or any other plugging cost.

Sincerely,
Ronald A Gibson
Ronald A. Gibson, P.E.

Agreed To and Accepted this

_____ Day of _____ 2023.

Signed: _____

Printed: _____

Well Name: 5841 Ruple Parkway #1
Location: 5841 Ruple Road
Brook Park, OH 44142
API: 34-035-61299

January 23, 2023

Mr. Jason A. Simmerman, P.E.
Natural Resource Engineer
Ohio Department of Natural Resources
Div of Oil & Gas Resources Management

Re: 5841 Ruple Parkway #1
Olmsted Township, Cuyahoga County, Ohio
API #34-035-61299

Dear Mr. Simmerman:

Attached is my Landowner Pass-Through Payment Program ("LOPT") Commitment form. Also attached is a well inspection report conducted by Gibson Energy Services. This report describes the approximate well casing and depth of the orphan well on my property.

Please begin the LOPT process as it pertains to the well on my property.

Please call my phone number of (216) 385-1010 if you have any questions regarding this matter.

Sincerely,

Paul F. Marnecheck
Commissioner of Economic Development
City of Brook Park, Ohio

Attachments: LOPT Commitment Form
Well Inspection Report
ROE for Plugging & Restoration
Wellbore Photo
ODNR Well Summary
Auditor Report



OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS RESOURCES MANAGEMENT
2045 Morse Road, F-2 • Columbus, OH 43229-6693

Orphan Well Program

Commitment to Landowner Pass-through Payment Program Rev. 01/23

To plug orphaned wells.

Surface Landowner Name:	City of Brook Park			Date:	01/23/2023
Mailing Address:	6161 Engle Road				
	Brook Park	Oh	44142		
Phone:	(216) 385-1010	Surface Property Purchase Date:		City Right-of-Way	
Email:	PMarnecheck@cityofbrookpark.com				
Well API Number:	34 -035-61299		County:	Cuyahoga	
Well Name:	5841 Ruple Parkway #1		Township:	Olmsted	
Last Known Well Owner:	Unkown				

I attest I am the surface landowner of the land on which the above-mentioned well is located. I attest that I have never operated nor produced oil or gas from the above-mentioned well. I attest that upon the completion of a Division public notice and search of county records, if no other person plugs the above-mentioned well within sixty (60) days after receiving written notice pursuant to R.C. 1509.071(D), I will apply to plug the above-mentioned well using the Landowner Pass-through Payment process. However, I understand that a Division search of county records may locate a person with rights to the above-mentioned well.

SIGNATURE OF SURFACE LANDOWNER

DATE SIGNED

SIGNATURE OF SURFACE LANDOWNER

DATE SIGNED

Return to:

ODNR Division of Oil and Gas Resources Management
c/o Orphan Well Program
2045 Morse Road, Building F-1
Columbus, Ohio 43229



OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS RESOURCES MANAGEMENT
2045 Morse Road, F-3, Columbus, OH 43229
(614) 265-6866 • Fax (330) 308-0011

Orphan Well Program

Right of Entry for Plugging and Restoration Rev. 01/21

Landowner Information

Name(s):	City Of Brook Park	Date:	1/23/2023	M/D/YYYY
Address:	6161 Engle Road	Phone:	(216) 385-1010	
	Brook Park	OH	44142	Email: pmarnecheck@cityofbrookpark.com

Well Information

County:	Cuyahoga	Lease Name:	5841 Ruple Parkway #1			
Township:	Olmsted	Permit Number:	34-035-61299			
Section/ Lot Number:	Lot 36	Last Known Well Owner:	Unknown			
Address:	5841 Ruple Road	Last Production:	Unknown			
	Brook Park	OH	44142	Date Property Purchased:	City R-O-W	M/D/YYYY
Parcel IDs:	341-32-017					

Well History Please include any information you know about this well. Attach separate sheet if necessary.

Orphan Well is located on a city Right-of-Way in front of 5841 Ruple Road, Brook Park, OH 44142.

Landowner agrees to allow agents or employees of persons contracting with the Division to enter onto Landowner's property for the purpose of plugging abandoned oil and gas wells and restoring any property disturbed by the plugging of the oil and gas wells.

Landowner relinquishes all rights and interest in equipment appurtenant to the well, and Landowner certifies that the above information is true and correct to the best of their knowledge.

X

Signature of Landowner

Date

X

Signature of Landowner

Date

RETURN TO:

OrphanWellProgram@dnr.ohio.gov

or

ODNR Division of Oil and Gas Resources Management
Orphan Well Program
2207 Reiser Avenue SE
New Philadelphia, OH 44663

WELL SUMMARY

ODNR DIVISION OF OIL & GAS RESOURCES MANAGEMENT

API Well Number	34035612990000				Permit Issued		
Well Name	5841 RUPLE PARKWAY	Acres		Well No.	1	Date Commenced	1/1/1900
Owner				Well No.		Date Completed	
Logging Co.		Core No.		Sample No.			
County	CUYAHOGA	Township	OLMSTED	Quadrangle	NORTH OLMSTED	Zone	N
Section	Lot 36	Tract		Twp. Qtr.			
Measured	950' SL & 1350' EL OF TRACT 6 LOT 36 (SCALED)			Surface X	2169874	Y	634363
				Surface Lon	-81.880756	Lat	41.406230
				Bottom X		Y	NAD27
				Bottom Lon		Lat	NAD27
				Surface X	2138408	Y	634391
				Bottom X		Y	NAD83
							SPS
				Prop TD		Class	Tool
GL	757	DF	KB	LTD		PB Depth	Date PB
TD Form.				Prod. Form.		Status	Historical Production Well
IP Natural		IP	AT		Initial Rock Pressure	Date Abandoned	
Perforations							
Stimulations							
Casing Record							
Log Types							

Formations

Formation	Top	Bottom	Source	Prod.	Non-Standard	Remarks
-----------	-----	--------	--------	-------	--------------	---------

Annual Production

Year	Quarter	Source	Oil (Barrels)	Gas (MCF)	Water (Barrels)	Remarks
------	---------	--------	---------------	-----------	-----------------	---------



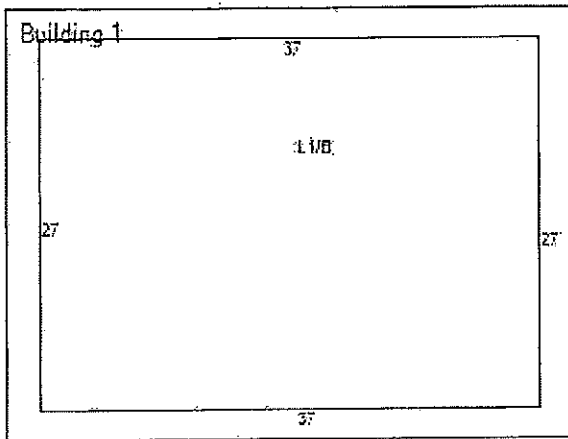
Cuyahoga County, Ohio - Property Summary Report

Parcel: 341-32-017

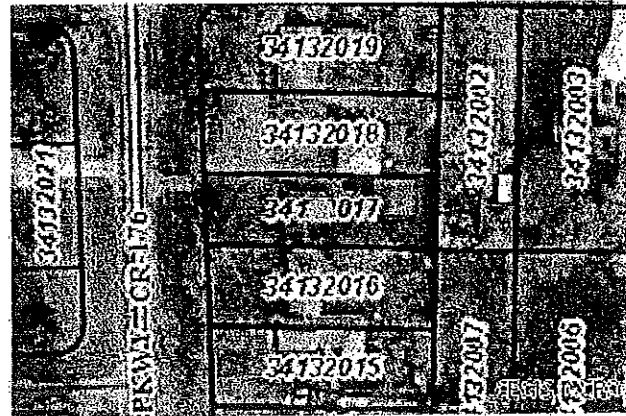


Owner MARTIN, STANLEY PAUL
Address 5841 RUPLE RD
BROOK PARK, OH. 44142
Land Use (5100) R - 1-FAMILY PLATTED LOT
Legal Description TR#6-36 VALLVEST#2 0065 ALL
Neighborhood Code 06101

SKETCH



MAP VIEW



BUILDING INFORMATION

Building Record Number	1	Occupancy	1-FAMILY	Story Height	1
Style	RANCH	Year Built	1965	Exterior Walls	BRICK
Condition	AVERAGE	Construction Quality	C+ / AVERAGE+	Roof Type	HIP
Roof Material	ASPH-SHINGLE	Heat Type	FORCED-AIR	Air Conditioning	CENTRAL
Attic Type	NONE	Basement Type	BASEMENT	Basement Square Feet	699
Basement Finished	No	Rooms	5	Bedrooms	3
Bathrooms (Full/Half)	1/0	Garage Type	DETACHED	Garage Capacity	2
Year Garage Built	1970	Garage Size	520	Living Area Basement	
Living Area 1	999	Living Area 2		Living Area Upper	
Living Area Total	999	Floor Location		Party Wall	

LAND

Code	Frontage	Depth	Acreage	Sq Ft
RRM	50	156	0.18	7,800

VALUATION

2021 Values	Taxable Market Value	Exempt Market Value	Abated Market Value	Assessed Taxable Value
Land Value	\$27,600	\$0	\$0	\$27,600
Building Value	\$113,900	\$0	\$0	\$113,900
Total Value	\$141,500	\$0	\$0	\$141,500
Land Use	5100			SINGLE FAMILY DWELLING

PERMITS

Tax Year	Reason	Tax Change	Exempt Change	Percent Complete	Reinspect	Notes
----------	--------	------------	---------------	------------------	-----------	-------

IMPROVEMENTS

Type	Description	Size	Height	Depth
------	-------------	------	--------	-------

SALES

Date	Buyer	Seller	Price
11/29/2021	MARTIN, STANLEY PAUL	GREENE, STACEY ANN	\$142,500
2/9/2010	GREENE, STACEY ANN	Nachman Sigmund W & Janet M	\$119,000
1/1/1975	Nachman Sigmund W & Janet M		\$0

Taxes

2021 Taxes	Charges	Payments	Balance Due
Tax Balance Summary	\$2,978.12	\$1,489.06	\$1,489.06

THE VALLEY VIEW LAND COMPANY'S VALLEY VIEW ESTATES SUBDIVISION N°2

THIS PART OF ORIGINAL ONSTEAD TOWNSHIP LOT N#36 TR#6, CUMBERLAND COUNTY, MD.
FROM MONUMENTS WERE FOUND ON SET. ALL POINTS INDICATED ON THIS MAP DISTANCES ARE
GIVEN IN FEET AND DECIMAL PARTS THEREOF. ALL OF WHICH I CERTIFY TO BE CORRECT.
SCALE 1"=50' AUGUST, 1924
C.S. 101 P41 ETC. ORDER No 5540

CHARLES W. ROOY
CIVIL ENGINEER

DEDICATION

We the undersigned owners of the land embraced in this subdivision hereby accept this map of the same and dedicate to the public the Butler Road, Valley View Drive, Lucille Avenue and those parts of Maple Road and Cedar Point Road as shown hereon in the red ink.

Margaret L. Hitch



The Valley View Land Co.
Robert R. Clark, Pres.
Julius Literally, Secy

On this 11th day of June, 1924, a Notary Public in and for said County personally appeared the above named, The Valley View Land Co., by Robert R. Clark, Pres. and Julius Literally, Secy, who acknowledged that they did sign the foregoing instrument and that the same is their free act and deed and that they are duly authorized to do so.



J. J. DeRra
Notary Public

On this 11th day of June, 1924, a Notary Public in and for said County personally appeared the above named Margaret L. Hitch, who acknowledged that she did sign the foregoing instrument and that the same is her free act and deed.



J. J. DeRra
Notary Public

This map was approved and accepted by the Board of County Commissioners this 1st day of Feb., 1927.

Louis Simon, Clerk

J. R. Zeman, County Commissioner

J. H. Harris, County Commissioner

There are no legal objections to the acceptance of this plat and the same is hereby approved.

Eugene C. Shubert, County Prosecutor

Frank R. Lawler, County Engineer

Plat approved this 10 day of Feb. 1927.

Approved by the City Plan Commission Dec. 20th 1927.

W. J. Robinson, Executive Secretary

The undersigned, Harry Switzer hereby consents to the dedication of the Roads Avenue and Drive as shown hereon in the red ink, and the land embraced within the said street lines is hereby released from the encumbrance of the mortgage held by him.

Harry Switzer

On this 11th day of June, 1924, a Notary Public in and for said County personally appeared the above named Harry Switzer, who acknowledged that he did sign the foregoing instrument and that the same is his free act and deed.



J. J. DeRra
Notary Public

Recommended for Approval

Robert Hoffmann, Planning Commissioner

Entered for Transfer Dec. 23, 1927

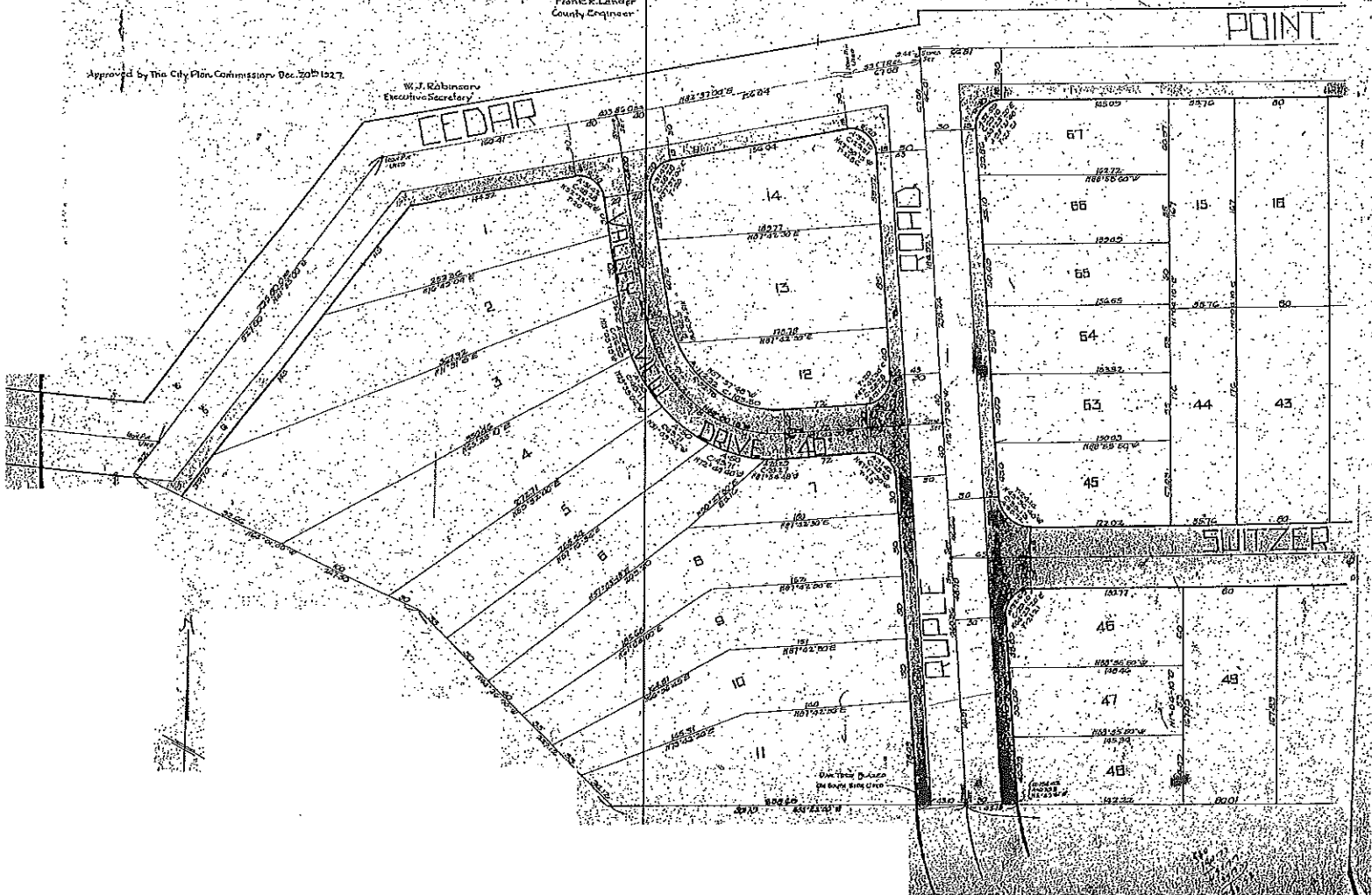
John A. Zanker, Auditor

Received for Record Dec. 23, 1927 at 1:22 P.M. No. 2075043. Fee for Record \$10.00

Lymon O. Howell, Recorder

Recorded Dec. 30, 1927

Lymon O. Howell, Recorder



CITY OF BROOK PARK, OHIO

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

Finance
P/C 5/2/23
CA _____
1st R _____
2nd R _____
3rd R _____
B/C _____

AN ORDINANCE

CREATING FUND #550, THE SHELDON ROAD BRIDGE IMPROVEMENT PROJECT FUND, AND DECLARING AN EMERGENCY.

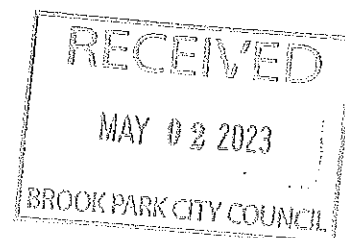
NOW THEREFORE, BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Director of Finance/Assistant Finance Director is authorized and directed to create a new Fund #550, the Sheldon Road Bridge Improvement Project Fund.

SECTION 2: Fund #550 shall serve as a reimbursement Fund. The City of Brook Park will pay Euthenics, who will be reimbursed by the Northeast Ohio Regional Sewer District, in accordance with the Project Agreement. Northeast Ohio Regional Sewer District shall reimburse the City of Brook Park, in an amount up to \$1,175,945.00.

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 4: This ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City, and for further reason that Council desires to create Fund #550, therefore, provided this ordinance receives the affirmative vote of at least (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.



PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
CLERK OF COUNCIL

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.

DIRECTOR OF LAW

FIG 5/2/23 Finance
CA _____
1st R _____
2nd R _____
3rd R _____
S/C _____

CITY OF BROOK PARK, OHIO

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

AN ORDINANCE
AUTHORIZING THE CITY OF BROOK PARK TO ACCEPT DONATED FUNDS,
AND DECLARING AN EMERGENCY

WHEREAS, Blue Line Unlimited wishes to give to those who serve and protect our community by providing a monetary donation in the amount of Two-Thousand (\$2,000.00) Dollars to the Brook Park Police Department; and

WHEREAS, Blue Line Unlimited requires that the donation be used for the necessary protective equipment and training of a Police K-9 and his/her accompanying Police handler; and

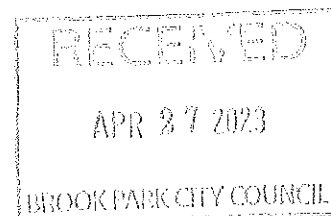
WHEREAS, all expenditures of this donation are to be used for the sole purposes listed in this ordinance.

NOW THEREFORE, BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Council of the City of Brook Park hereby authorizes the City to accept this monetary donation and to disburse the funds as requested by the donor.

SECTION 2: This Ordinance authorizes the sum of Two Thousand (\$2,000.00) Dollars to be received and recorded into Fund No. 100, Cost Center No. 412 (Police Department) of the General Fund.

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.



SECTION 5: This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City, and for the further purpose of allowing the City to receive and disburse said funding; therefore provided this ordinance receives the affirmative vote of at least five (5) members elected to Council. It shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
CLERK OF COUNCIL

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.

DIRECTOR OF LAW

CITY OF BROOK PARK, OHIO

P/C 4-18-23 Legislative
CA _____
1st R _____
2nd R _____
3rd R _____
B/C _____

RESOLUTION NO. _____

INTRODUCED BY: MAYOR ORCUTT

A RESOLUTION
DECLARING THE MONTH OF MAY AS LUPUS
AWARENESS MONTH IN THE CITY OF BROOK PARK,
AND DECLARING AN EMERGENCY

WHEREAS, lupus is an unpredictable and misunderstood autoimmune disease that can cause severe damage to the tissue and organs in the body and, in some cases, death; and

WHEREAS, more than five million people worldwide suffer the devastating effects of this cruel and mysterious disease and each year over a hundred thousand young women, men, and children around the world are newly diagnosed with lupus, the great majority of whom are woman of childbearing age; and

WHEREAS, medical research efforts into lupus and the discovery of safer, more effective treatments for lupus patients are under-funded in comparison with diseases of comparable magnitude and severity; and

WHEREAS, many physicians worldwide are unaware of symptoms and health effects of lupus, causing people to suffer for many years before they obtain a correct diagnosis and medical treatment; and

WHEREAS, there is a deep, unmet need worldwide to educate and support individuals and families affected by lupus; and

WHEREAS, there is an urgent need to increase awareness in communities worldwide of the debilitating impact of lupus.

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Brook Park, State of Ohio that:

SECTION 1: That this Council along with the Mayor does hereby designate the month of May, 2023, as Lupus Awareness Month in the City of Brook Park, and call for increases in public and private sector funding for medical research on lupus,

RECEIVED

APR 13 2023

targeted education programs for health professionals, patients and the public, and recognition of lupus as a significant public health issue.

SECTION 2: It is found and determined that all formal actions of this Council concerning and relating to this Resolution were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 3: This Resolution is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City and to show support by declaring May as Lupus Awareness Month in the City of Brook Park; therefore, provided that this Resolution receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
CLERK OF COUNCIL

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.

[Signature]

DIRECTOR OF LAW

10 5/2/23 Legislative
CA _____
1st R _____
2nd R _____
3rd R _____
B/D _____

CITY OF BROOK PARK, OHIO

RESOLUTION NO: _____

INTRODUCED BY: MAYOR ORCUTT

A RESOLUTION TO EXTEND THE MORATORIUM ON VAPE AND SMOKE ESTABLISHMENTS OR SHOPS WITHIN THE CITY OF BROOK PARK FOR A PERIOD OF NOT MORE THAN 12 MONTHS, AND DECLARING AND EMERGENCY

WHEREAS, On July 19, 2022, this Council passed Resolution 16-2022, granting a twelve (12) months moratorium on vape and smoke establishments or shops within the City of Brook Park; and

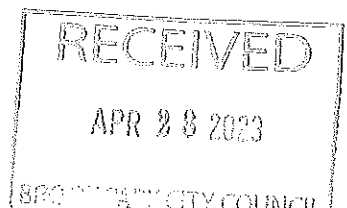
WHEREAS, this Council wishes to extend a moratorium granted by prior Resolution to further undertake a review and/or study of the Ordinances of the City of Brook Park, including zoning, building, and business regulation sections of the Brook Park Codified Ordinances; and

WHEREAS, the City's Administration, Council and the Planning and Zoning Commission require additional time to undertake a review of all applicable codes within the city; and

WHEREAS, pursuant to the Constitution of the State of Ohio and the Ohio Revised Code, municipalities have the power to enact planning and zoning laws that are for the health, safety, welfare, comfort and peace of the citizens of the municipality, including restricting areas used for business and trade; and

NOW THEREFORE, BE IT RESOLVED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: That the Council of the City of Brook Park hereby extends the moratorium on vape and smoke establishments or shops within the City of Brook Park for a period not to exceed 12 months from the effective date of this Resolution, in order to allow the City Administration, Council and the Brook Park Planning and Zoning Commissions to review applicable Ohio statutes, criminal codes and the Brook Park Zoning Code relative to such use.



SECTION 2: The moratorium shall be in effect for a period of 12 months from the effective date of this Resolution or until changes are enacted to amend the Codified Ordinances of the City of Brook Park to address these issues or until Council approves legislation explicitly revoking this moratorium, whichever occurs first.

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to this Resolution were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 4: This Resolution is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City, and for the further reason that the City of Brook Park would like to impose a 12 month moratorium on vape and smoke establishments or shops within the City of Brook Park; provided that this Resolution receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
Clerk of Council

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.

DIRECTOR OF LAW

CITY OF BROOK PARK, OHIO

170 Safety 5/2/23
C.A. _____
1st R _____
2nd R _____
3rd R _____
B/C _____

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

AN ORDINANCE

AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT WITH SUTPHEN CORPORATION, BASED UPON SOURCEWELL CONTRACT NO. 113021-SUT FOR THE PURCHASE OF ONE NEW SUTPHEN HEAVY DUTY CUSTOM PUMPER TRUCK AND RELATED MISCELLANEOUS EQUIPMENT, AND DECLARING AN EMERGENCY

WHEREAS, the City of Brook Park's Fire Department's pumper truck is 1994 model, with a life expectancy of twenty years; and

WHEREAS, this vehicle is well past its life expectancy, and needs to be replaced for the safety and security of Brook Park's residents; and

WHEREAS, this contract with Sutphen Corporation must be entered into by June 1, 2023 or the price will increase substantially; and

WHEREAS, this new fire pumper truck shall be purchased through Sourcewell Contract Number 113021-SUT, as further described in Exhibit "A"; and

WHEREAS, Herb Fire Equipment, an authorized representative of the Sutphen Corporation, has provided a quote for this new Sutphen Heavy Duty Custom Pumper Truck and related miscellaneous equipment, which is attached hereto and incorporated herein as Exhibit "B" for \$1,206,492.75.

NOW, THEREFORE, BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Mayor is hereby authorized and directed to enter into an agreement with Sutphen Corporation for the purchase of one (1) Sutphen Heavy Duty Custom Pumper and related miscellaneous equipment.

SECTION 2: The money needed for the aforesaid transaction shall not exceed \$1,206,492.75 and shall be paid from Capital Fund 401.

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 4: This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City, and for the further reason to purchase a new Sutphen Heavy Duty Custom Pumper Truck and related miscellaneous equipment; therefore this Ordinance shall take effect and be in force immediately from and after its passage and approval by the Mayor.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
Clerk of Council

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.

113021-SUT



Solicitation Number: RFP #113021



CONTRACT

This Contract is between Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 (Sourcewell) and The Sutphen Corporation, 6450 Eiterman Road, Dublin, OH 43016 (Supplier).

Sourcewell is a State of Minnesota local government unit and service cooperative created under the laws of the State of Minnesota (Minnesota Statutes Section 123A.21) that offers cooperative procurement solutions to government entities. Participation is open to eligible federal, state/province, and municipal governmental entities, higher education, K-12 education, nonprofit, tribal government, and other public entities located in the United States and Canada. Sourcewell issued a public solicitation for Firefighting Apparatus and Fire Service Vehicles from which Supplier was awarded a contract.

Supplier desires to contract with Sourcewell to provide equipment, products, or services to Sourcewell and the entities that access Sourcewell's cooperative purchasing contracts (Participating Entities).

1. TERM OF CONTRACT

- A. **EFFECTIVE DATE.** This Contract is effective upon the date of the final signature below.
- B. **EXPIRATION DATE AND EXTENSION.** This Contract expires February 10, 2026, unless it is cancelled sooner pursuant to Article 22. This Contract may be extended one additional year upon the request of Sourcewell and written agreement by Supplier.
- C. **SURVIVAL OF TERMS.** Notwithstanding any expiration or termination of this Contract, all payment obligations incurred prior to expiration or termination will survive, as will the following: Articles 11 through 14 survive the expiration or cancellation of this Contract. All other rights will cease upon expiration or termination of this Contract.

2. EQUIPMENT, PRODUCTS, OR SERVICES

- A. **EQUIPMENT, PRODUCTS, OR SERVICES.** Supplier will provide the Equipment, Products, or Services as stated in its Proposal submitted under the Solicitation Number listed above.

113021-SUT

Supplier's Equipment, Products, or Services Proposal (Proposal) is attached and incorporated into this Contract.

All Equipment and Products provided under this Contract must be new and the current model. Supplier may offer close-out, refurbished, or remounted Equipment or Products if they are clearly indicated in Supplier's product and pricing list. Unless agreed to by the Participating Entities in advance, Equipment or Products must be delivered as operational to the Participating Entity's site.

This Contract offers an indefinite quantity of sales, and while substantial volume is anticipated, sales and sales volume are not guaranteed.

B. **WARRANTY.** Supplier warrants that all Equipment, Products, and Services furnished are free from liens and encumbrances, and are free from defects in design, materials, and workmanship. In addition, Supplier warrants the Equipment, Products, and Services are suitable for and will perform in accordance with the ordinary use for which they are intended. Supplier's dealers and distributors must agree to assist the Participating Entity in reaching a resolution in any dispute over warranty terms with the manufacturer. Any manufacturer's warranty that extends beyond the expiration of the Supplier's warranty will be passed on to the Participating Entity.

C. **DEALERS, DISTRIBUTORS, AND/OR RESELLERS.** Upon Contract execution and throughout the Contract term, Supplier must provide to Sourcewell a current means to validate or authenticate Supplier's authorized dealers, distributors, or resellers relative to the Equipment, Products, and Services offered under this Contract, which will be incorporated into this Contract by reference. It is the Supplier's responsibility to ensure Sourcewell receives the most current information.

3. PRICING

All Equipment, Products, or Services under this Contract will be priced at or below the price stated in Supplier's Proposal.

When providing pricing quotes to Participating Entities, all pricing quoted must reflect a Participating Entity's total cost of acquisition. This means that the quoted cost is for delivered Equipment, Products, and Services that are operational for their intended purpose, and includes all costs to the Participating Entity's requested delivery location.

Regardless of the payment method chosen by the Participating Entity, the total cost associated with any purchase option of the Equipment, Products, or Services must always be disclosed in the pricing quote to the applicable Participating Entity at the time of purchase.

A. **SHIPPING AND SHIPPING COSTS.** All delivered Equipment and Products must be properly packaged. Damaged Equipment and Products may be rejected. If the damage is not readily

apparent at the time of delivery, Supplier must permit the Equipment and Products to be returned within a reasonable time at no cost to Sourcewell or its Participating Entities. Participating Entities reserve the right to inspect the Equipment and Products at a reasonable time after delivery where circumstances or conditions prevent effective inspection of the Equipment and Products at the time of delivery. In the event of the delivery of nonconforming Equipment and Products, the Participating Entity will notify the Supplier as soon as possible and the Supplier will replace nonconforming Equipment and Products with conforming Equipment and Products that are acceptable to the Participating Entity.

Supplier must arrange for and pay for the return shipment on Equipment and Products that arrive in a defective or inoperable condition.

Sourcewell may declare the Supplier in breach of this Contract if the Supplier intentionally delivers substandard or inferior Equipment or Products.

B. SALES TAX. Each Participating Entity is responsible for supplying the Supplier with valid tax-exemption certification(s). When ordering, a Participating Entity must indicate if it is a tax-exempt entity.

C. HOT LIST PRICING. At any time during this Contract, Supplier may offer a specific selection of Equipment, Products, or Services at discounts greater than those listed in the Contract. When Supplier determines it will offer Hot List Pricing, it must be submitted electronically to Sourcewell in a line-item format. Equipment, Products, or Services may be added or removed from the Hot List at any time through a Sourcewell Price and Product Change Form as defined in Article 4 below.

Hot List program and pricing may also be used to discount and liquidate close-out and discontinued Equipment and Products as long as those close-out and discontinued items are clearly identified as such. Current ordering process and administrative fees apply. Hot List Pricing must be published and made available to all Participating Entities.

4. PRODUCT AND PRICING CHANGE REQUESTS

Supplier may request Equipment, Product, or Service changes, additions, or deletions at any time. All requests must be made in writing by submitting a signed Sourcewell Price and Product Change Request Form to the assigned Sourcewell Supplier Development Administrator. This approved form is available from the assigned Sourcewell Supplier Development Administrator. At a minimum, the request must:

- Identify the applicable Sourcewell contract number;
- Clearly specify the requested change;
- Provide sufficient detail to justify the requested change;

- Individually list all Equipment, Products, or Services affected by the requested change, along with the requested change (e.g., addition, deletion, price change); and
- Include a complete restatement of pricing documentation in Microsoft Excel with the effective date of the modified pricing, or product addition or deletion. The new pricing restatement must include all Equipment, Products, and Services offered, even for those items where pricing remains unchanged.

A fully executed Sourcewell Price and Product Change Request Form will become an amendment to this Contract and will be incorporated by reference.

5. PARTICIPATION, CONTRACT ACCESS, AND PARTICIPATING ENTITY REQUIREMENTS

A. PARTICIPATION. Sourcewell's cooperative contracts are available and open to public and nonprofit entities across the United States and Canada; such as federal, state/province, municipal, K-12 and higher education, tribal government, and other public entities.

The benefits of this Contract should be available to all Participating Entities that can legally access the Equipment, Products, or Services under this Contract. A Participating Entity's authority to access this Contract is determined through its cooperative purchasing, interlocal, or joint powers laws. Any entity accessing benefits of this Contract will be considered a Service Member of Sourcewell during such time of access. Supplier understands that a Participating Entity's use of this Contract is at the Participating Entity's sole convenience and Participating Entities reserve the right to obtain like Equipment, Products, or Services from any other source.

Supplier is responsible for familiarizing its sales and service forces with Sourcewell contract use eligibility requirements and documentation and will encourage potential participating entities to join Sourcewell. Sourcewell reserves the right to add and remove Participating Entities to its roster during the term of this Contract.

B. PUBLIC FACILITIES. Supplier's employees may be required to perform work at government-owned facilities, including schools. Supplier's employees and agents must conduct themselves in a professional manner while on the premises, and in accordance with Participating Entity policies and procedures, and all applicable laws.

6. PARTICIPATING ENTITY USE AND PURCHASING

A. ORDERS AND PAYMENT. To access the contracted Equipment, Products, or Services under this Contract, a Participating Entity must clearly indicate to Supplier that it intends to access this Contract; however, order flow and procedure will be developed jointly between Sourcewell and Supplier. Typically, a Participating Entity will issue an order directly to Supplier or its authorized subsidiary, distributor, dealer, or reseller. If a Participating Entity issues a purchase order, it may use its own forms, but the purchase order should clearly note the applicable Sourcewell

contract number. All Participating Entity orders under this Contract must be issued prior to expiration or cancellation of this Contract; however, Supplier performance, Participating Entity payment obligations, and any applicable warranty periods or other Supplier or Participating Entity obligations may extend beyond the term of this Contract.

Supplier's acceptable forms of payment are included in its attached Proposal. Participating Entities will be solely responsible for payment and Sourcewell will have no liability for any unpaid invoice of any Participating Entity.

B. **ADDITIONAL TERMS AND CONDITIONS/PARTICIPATING ADDENDUM.** Additional terms and conditions to a purchase order, or other required transaction documentation, may be negotiated between a Participating Entity and Supplier, such as job or industry-specific requirements, legal requirements (e.g., affirmative action or immigration status requirements), or specific local policy requirements. Some Participating Entities may require the use of a Participating Addendum; the terms of which will be negotiated directly between the Participating Entity and the Supplier. Any negotiated additional terms and conditions must never be less favorable to the Participating Entity than what is contained in this Contract.

C. **SPECIALIZED SERVICE REQUIREMENTS.** In the event that the Participating Entity requires service or specialized performance requirements not addressed in this Contract (such as e-commerce specifications, specialized delivery requirements, or other specifications and requirements), the Participating Entity and the Supplier may enter into a separate, standalone agreement, apart from this Contract. Sourcewell, including its agents and employees, will not be made a party to a claim for breach of such agreement.

D. **TERMINATION OF ORDERS.** Participating Entities may terminate an order, in whole or in part, immediately upon notice to Supplier in the event of any of the following events:

1. The Participating Entity fails to receive funding or appropriation from its governing body at levels sufficient to pay for the equipment, products, or services to be purchased; or
2. Federal, state, or provincial laws or regulations prohibit the purchase or change the Participating Entity's requirements.

E. **GOVERNING LAW AND VENUE.** The governing law and venue for any action related to a Participating Entity's order will be determined by the Participating Entity making the purchase.

7. CUSTOMER SERVICE

A. **PRIMARY ACCOUNT REPRESENTATIVE.** Supplier will assign an Account Representative to Sourcewell for this Contract and must provide prompt notice to Sourcewell if that person is changed. The Account Representative will be responsible for:

113021-SUT

- Maintenance and management of this Contract;
- Timely response to all Sourcewell and Participating Entity inquiries; and
- Business reviews to Sourcewell and Participating Entities, if applicable.

B. BUSINESS REVIEWS. Supplier must perform a minimum of one business review with Sourcewell per contract year. The business review will cover sales to Participating Entities, pricing and contract terms, administrative fees, sales data reports, supply issues, customer issues, and any other necessary information.

8. REPORT ON CONTRACT SALES ACTIVITY AND ADMINISTRATIVE FEE PAYMENT

A. CONTRACT SALES ACTIVITY REPORT. Each calendar quarter, Supplier must provide a contract sales activity report (Report) to the Sourcewell Supplier Development Administrator assigned to this Contract. Reports are due no later than 45 days after the end of each calendar quarter. A Report must be provided regardless of the number or amount of sales during that quarter (i.e., if there are no sales, Supplier must submit a report indicating no sales were made).

The Report must contain the following fields:

- Participating Entity Name (e.g., City of Staples Highway Department);
- Participating Entity Physical Street Address;
- Participating Entity City;
- Participating Entity State/Province;
- Participating Entity Zip/Postal Code;
- Participating Entity Contact Name;
- Participating Entity Contact Email Address;
- Participating Entity Contact Telephone Number;
- Sourcewell Assigned Entity/Participating Entity Number;
- Item Purchased Description;
- Item Purchased Price;
- Sourcewell Administrative Fee Applied; and
- Date Purchase was invoiced/sale was recognized as revenue by Supplier.

B. ADMINISTRATIVE FEE. In consideration for the support and services provided by Sourcewell, the Supplier will pay an administrative fee to Sourcewell on all Equipment, Products, and Services provided to Participating Entities. The Administrative Fee must be included in, and not added to, the pricing. Supplier may not charge Participating Entities more than the contracted price to offset the Administrative Fee.

The Supplier will submit payment to Sourcewell for the percentage of administrative fee stated in the Proposal multiplied by the total sales of all Equipment, Products, and Services purchased

by Participating Entities under this Contract during each calendar quarter. Payments should note the Supplier's name and Sourcewell-assigned contract number in the memo; and must be mailed to the address above "Attn: Accounts Receivable" or remitted electronically to Sourcewell's banking institution per Sourcewell's Finance department instructions. Payments must be received no later than 45 calendar days after the end of each calendar quarter.

Supplier agrees to cooperate with Sourcewell in auditing transactions under this Contract to ensure that the administrative fee is paid on all items purchased under this Contract.

In the event the Supplier is delinquent in any undisputed administrative fees, Sourcewell reserves the right to cancel this Contract and reject any proposal submitted by the Supplier in any subsequent solicitation. In the event this Contract is cancelled by either party prior to the Contract's expiration date, the administrative fee payment will be due no more than 30 days from the cancellation date.

9. AUTHORIZED REPRESENTATIVE

Sourcewell's Authorized Representative is its Chief Procurement Officer.

Supplier's Authorized Representative is the person named in the Supplier's Proposal. If Supplier's Authorized Representative changes at any time during this Contract, Supplier must promptly notify Sourcewell in writing.

10. AUDIT, ASSIGNMENT, AMENDMENTS, WAIVER, AND CONTRACT COMPLETE

A. **AUDIT.** Pursuant to Minnesota Statutes Section 16C.05, subdivision 5, the books, records, documents, and accounting procedures and practices relevant to this Agreement are subject to examination by Sourcewell or the Minnesota State Auditor for a minimum of six years from the end of this Contract. This clause extends to Participating Entities as it relates to business conducted by that Participating Entity under this Contract.

B. **ASSIGNMENT.** Neither party may assign or otherwise transfer its rights or obligations under this Contract without the prior written consent of the other party and a fully executed assignment agreement. Such consent will not be unreasonably withheld. Any prohibited assignment will be invalid.

C. **AMENDMENTS.** Any amendment to this Contract must be in writing and will not be effective until it has been duly executed by the parties.

D. **WAIVER.** Failure by either party to take action or assert any right under this Contract will not be deemed a waiver of such right in the event of the continuation or repetition of the circumstances giving rise to such right. Any such waiver must be in writing and signed by the parties.

E. **CONTRACT COMPLETE.** This Contract represents the complete agreement between the parties. No other understanding regarding this Contract, whether written or oral, may be used to bind either party. For any conflict between the attached Proposal and the terms set out in Articles 1-22 of this Contract, the terms of Articles 1-22 will govern.

F. **RELATIONSHIP OF THE PARTIES.** The relationship of the parties is one of independent contractors, each free to exercise judgment and discretion with regard to the conduct of their respective businesses. This Contract does not create a partnership, joint venture, or any other relationship such as master-servant, or principal-agent.

11. INDEMNITY AND HOLD HARMLESS

Supplier must indemnify, defend, save, and hold Sourcewell and its Participating Entities, including their agents and employees, harmless from any claims or causes of action, including attorneys' fees incurred by Sourcewell or its Participating Entities, arising out of any act or omission in the performance of this Contract by the Supplier or its agents or employees; this indemnification includes injury or death to person(s) or property alleged to have been caused by some defect in the Equipment, Products, or Services under this Contract to the extent the Equipment, Product, or Service has been used according to its specifications. Sourcewell's responsibility will be governed by the State of Minnesota's Tort Liability Act (Minnesota Statutes Chapter 466) and other applicable law.

12. GOVERNMENT DATA PRACTICES

Supplier and Sourcewell must comply with the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, as it applies to all data provided by or provided to Sourcewell under this Contract and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Supplier under this Contract.

13. INTELLECTUAL PROPERTY, PUBLICITY, MARKETING, AND ENDORSEMENT

A. INTELLECTUAL PROPERTY

1. *Grant of License.* During the term of this Contract:

- a. Sourcewell grants to Supplier a royalty-free, worldwide, non-exclusive right and license to use the trademark(s) provided to Supplier by Sourcewell in advertising and promotional materials for the purpose of marketing Sourcewell's relationship with Supplier.
- b. Supplier grants to Sourcewell a royalty-free, worldwide, non-exclusive right and license to use Supplier's trademarks in advertising and promotional materials for the purpose of marketing Supplier's relationship with Sourcewell.

2. *Limited Right of Sublicense.* The right and license granted herein includes a limited right of each party to grant sublicenses to their respective subsidiaries, distributors, dealers,

resellers, marketing representatives, and agents (collectively "Permitted Sublicensees") in advertising and promotional materials for the purpose of marketing the Parties' relationship to Participating Entities. Any sublicense granted will be subject to the terms and conditions of this Article. Each party will be responsible for any breach of this Article by any of their respective sublicensees.

3. Use; Quality Control.

- a. Neither party may alter the other party's trademarks from the form provided and must comply with removal requests as to specific uses of its trademarks or logos.
- b. Each party agrees to use, and to cause its Permitted Sublicensees to use, the other party's trademarks only in good faith and in a dignified manner consistent with such party's use of the trademarks. Upon written notice to the breaching party, the breaching party has 30 days of the date of the written notice to cure the breach or the license will be terminated.

4. As applicable, Supplier agrees to indemnify and hold harmless Sourcewell and its Participating Entities against any and all suits, claims, judgments, and costs instituted or recovered against Sourcewell or Participating Entities by any person on account of the use of any Equipment or Products by Sourcewell or its Participating Entities supplied by Supplier in violation of applicable patent or copyright laws.

5. **Termination.** Upon the termination of this Contract for any reason, each party, including Permitted Sublicensees, will have 30 days to remove all Trademarks from signage, websites, and the like bearing the other party's name or logo (excepting Sourcewell's pre-printed catalog of suppliers which may be used until the next printing). Supplier must return all marketing and promotional materials, including signage, provided by Sourcewell, or dispose of it according to Sourcewell's written directions.

B. **PUBLICITY.** Any publicity regarding the subject matter of this Contract must not be released without prior written approval from the Authorized Representatives. Publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Supplier individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this Contract.

C. **MARKETING.** Any direct advertising, marketing, or offers with Participating Entities must be approved by Sourcewell. Send all approval requests to the Sourcewell Supplier Development Administrator assigned to this Contract.

D. **ENDORSEMENT.** The Supplier must not claim that Sourcewell endorses its Equipment, Products, or Services.

14. GOVERNING LAW, JURISDICTION, AND VENUE

The substantive and procedural laws of the State of Minnesota will govern this Contract. Venue for all legal proceedings arising out of this Contract, or its breach, must be in the appropriate state court in Todd County, Minnesota or federal court in Fergus Falls, Minnesota.

15. FORCE MAJEURE

Neither party to this Contract will be held responsible for delay or default caused by acts of God or other conditions that are beyond that party's reasonable control. A party defaulting under this provision must provide the other party prompt written notice of the default.

16. SEVERABILITY

If any provision of this Contract is found by a court of competent jurisdiction to be illegal, unenforceable, or void then both parties will be relieved from all obligations arising from that provision. If the remainder of this Contract is capable of being performed, it will not be affected by such determination or finding and must be fully performed.

17. PERFORMANCE, DEFAULT, AND REMEDIES

A. **PERFORMANCE.** During the term of this Contract, the parties will monitor performance and address unresolved contract issues as follows:

1. *Notification.* The parties must promptly notify each other of any known dispute and work in good faith to resolve such dispute within a reasonable period of time. If necessary, Sourcewell and the Supplier will jointly develop a short briefing document that describes the issue(s), relevant impact, and positions of both parties.
2. *Escalation.* If parties are unable to resolve the issue in a timely manner, as specified above, either Sourcewell or Supplier may escalate the resolution of the issue to a higher level of management. The Supplier will have 30 calendar days to cure an outstanding issue.
3. *Performance while Dispute is Pending.* Notwithstanding the existence of a dispute, the Supplier must continue without delay to carry out all of its responsibilities under the Contract that are not affected by the dispute. If the Supplier fails to continue without delay to perform its responsibilities under the Contract, in the accomplishment of all undisputed work, the Supplier will bear any additional costs incurred by Sourcewell and/or its Participating Entities as a result of such failure to proceed.

B. **DEFAULT AND REMEDIES.** Either of the following constitutes cause to declare this Contract, or any Participating Entity order under this Contract, in default:

1. Nonperformance of contractual requirements, or
2. A material breach of any term or condition of this Contract.

The party claiming default must provide written notice of the default, with 30 calendar days to cure the default. Time allowed for cure will not diminish or eliminate any liability for liquidated or other damages. If the default remains after the opportunity for cure, the non-defaulting party may:

- Exercise any remedy provided by law or equity, or
- Terminate the Contract or any portion thereof, including any orders issued against the Contract.

18. INSURANCE

A. REQUIREMENTS. At its own expense, Supplier must maintain insurance policy(ies) in effect at all times during the performance of this Contract with insurance company(ies) licensed or authorized to do business in the State of Minnesota having an "AM BEST" rating of A- or better, with coverage and limits of insurance not less than the following:

1. *Workers' Compensation and Employer's Liability.*

Workers' Compensation: As required by any applicable law or regulation.

Employer's Liability Insurance: must be provided in amounts not less than listed below:

Minimum limits:

\$500,000 each accident for bodily injury by accident

\$500,000 policy limit for bodily injury by disease

\$500,000 each employee for bodily injury by disease

2. *Commercial General Liability Insurance.* Supplier will maintain insurance covering its operations, with coverage on an occurrence basis, and must be subject to terms no less broad than the Insurance Services Office ("ISO") Commercial General Liability Form CG0001 (2001 or newer edition), or equivalent. At a minimum, coverage must include liability arising from premises, operations, bodily injury and property damage, independent contractors, products-completed operations including construction defect, contractual liability, blanket contractual liability, and personal injury and advertising injury. All required limits, terms and conditions of coverage must be maintained during the term of this Contract.

Minimum Limits:

\$1,000,000 each occurrence Bodily Injury and Property Damage

\$1,000,000 Personal and Advertising Injury

\$2,000,000 aggregate for Products-Completed operations

\$2,000,000 general aggregate

3. *Commercial Automobile Liability Insurance.* During the term of this Contract, Supplier will maintain insurance covering all owned, hired, and non-owned automobiles in limits of liability not less than indicated below. The coverage must be subject to terms

113021-SUT

no less broad than ISO Business Auto Coverage Form CA 0001 (2010 edition or newer), or equivalent.

Minimum Limits:

\$1,000,000 each accident, combined single limit

4. *Umbrella Insurance.* During the term of this Contract, Supplier will maintain umbrella coverage over Employer's Liability, Commercial General Liability, and Commercial Automobile.

Minimum Limits:

\$2,000,000

5. *Network Security and Privacy Liability Insurance.* During the term of this Contract, Supplier will maintain coverage for network security and privacy liability. The coverage may be endorsed on another form of liability coverage or written on a standalone policy. The insurance must cover claims which may arise from failure of Supplier's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of not public data – including but not limited to, confidential or private information, transmission of a computer virus, or denial of service.

Minimum limits:

\$2,000,000 per occurrence

\$2,000,000 annual aggregate

Failure of Supplier to maintain the required insurance will constitute a material breach entitling Sourcewell to immediately terminate this Contract for default.

B. CERTIFICATES OF INSURANCE. Prior to commencing under this Contract, Supplier must furnish to Sourcewell a certificate of insurance, as evidence of the insurance required under this Contract. Prior to expiration of the policy(ies), renewal certificates must be mailed to Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 or sent to the Sourcewell Supplier Development Administrator assigned to this Contract. The certificates must be signed by a person authorized by the insurer(s) to bind coverage on their behalf.

Failure to request certificates of insurance by Sourcewell, or failure of Supplier to provide certificates of insurance, in no way limits or relieves Supplier of its duties and responsibilities in this Contract.

C. ADDITIONAL INSURED ENDORSEMENT AND PRIMARY AND NON-CONTRIBUTORY INSURANCE CLAUSE. Supplier agrees to list Sourcewell and its Participating Entities, including their officers, agents, and employees, as an additional insured under the Supplier's commercial general liability insurance policy with respect to liability arising out of activities, "operations," or "work" performed by or on behalf of Supplier, and products and completed operations of Supplier. The policy provision(s) or endorsement(s) must further provide that coverage is

primary and not excess over or contributory with any other valid, applicable, and collectible insurance or self-insurance in force for the additional insureds.

D. **WAIVER OF SUBROGATION.** Supplier waives and must require (by endorsement or otherwise) all its insurers to waive subrogation rights against Sourcewell and other additional insureds for losses paid under the insurance policies required by this Contract or other insurance applicable to the Supplier or its subcontractors. The waiver must apply to all deductibles and/or self-insured retentions applicable to the required or any other insurance maintained by the Supplier or its subcontractors. Where permitted by law, Supplier must require similar written express waivers of subrogation and insurance clauses from each of its subcontractors.

E. **UMBRELLA/EXCESS LIABILITY/SELF-INSURED RETENTION.** The limits required by this Contract can be met by either providing a primary policy or in combination with umbrella/excess liability policy(ies), or self-insured retention.

19. COMPLIANCE

A. **LAWS AND REGULATIONS.** All Equipment, Products, or Services provided under this Contract must comply fully with applicable federal laws and regulations, and with the laws in the states and provinces in which the Equipment, Products, or Services are sold.

B. **LICENSES.** Supplier must maintain a valid and current status on all required federal, state/provincial, and local licenses, bonds, and permits required for the operation of the business that the Supplier conducts with Sourcewell and Participating Entities.

20. BANKRUPTCY, DEBARMENT, OR SUSPENSION CERTIFICATION

Supplier certifies and warrants that it is not in bankruptcy or that it has previously disclosed in writing certain information to Sourcewell related to bankruptcy actions. If at any time during this Contract Supplier declares bankruptcy, Supplier must immediately notify Sourcewell in writing.

Supplier certifies and warrants that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from programs operated by the State of Minnesota; the United States federal government or the Canadian government, as applicable; or any Participating Entity. Supplier certifies and warrants that neither it nor its principals have been convicted of a criminal offense related to the subject matter of this Contract. Supplier further warrants that it will provide immediate written notice to Sourcewell if this certification changes at any time.

21. PROVISIONS FOR NON-UNITED STATES FEDERAL ENTITY PROCUREMENTS UNDER UNITED STATES FEDERAL AWARDS OR OTHER AWARDS

Participating Entities that use United States federal grant or FEMA funds to purchase goods or services from this Contract may be subject to additional requirements including the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 C.F.R. § 200. Participating Entities may have additional requirements based on specific funding source terms or conditions. Within this Article, all references to "federal" should be interpreted to mean the United States federal government. The following list only applies when a Participating Entity accesses Supplier's Equipment, Products, or Services with United States federal funds.

A. **EQUAL EMPLOYMENT OPPORTUNITY.** Except as otherwise provided under 41 C.F.R. § 60, all contracts that meet the definition of "federally assisted construction contract" in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. §60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 C.F.R. §, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 C.F.R. § 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor." The equal opportunity clause is incorporated herein by reference.

B. **DAVIS-BACON ACT, AS AMENDED (40 U.S.C. § 3141-3148).** When required by federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. § 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 C.F.R. § 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-federal entity must report all suspected or reported violations to the federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations (29 C.F.R. § 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-federal entity must report all suspected or reported violations to the federal awarding agency. Supplier must be in compliance with all applicable Davis-Bacon Act provisions.

C. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. § 3701-3708). Where applicable, all contracts awarded by the non-federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. § 5). Under 40 U.S.C. § 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence. This provision is hereby incorporated by reference into this Contract. Supplier certifies that during the term of an award for all contracts by Sourcwell resulting from this procurement process, Supplier must comply with applicable requirements as referenced above.

D. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT. If the federal award meets the definition of "funding agreement" under 37 C.F.R. § 401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 C.F.R. § 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency. Supplier certifies that during the term of an award for all contracts by Sourcwell resulting from this procurement process, Supplier must comply with applicable requirements as referenced above.

E. CLEAN AIR ACT (42 U.S.C. § 7401-7671q.) AND THE FEDERAL WATER POLLUTION CONTROL ACT (33 U.S.C. § 1251-1387). Contracts and subgrants of amounts in excess of \$150,000 require the non-federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. § 7401- 7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251- 1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA). Supplier certifies that during the term of this Contract will comply with applicable requirements as referenced above.

F. DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689). A contract award (see 2 C.F.R. § 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. §180 that implement Executive Orders 12549 (3 C.F.R. § 1986 Comp., p. 189) and 12689 (3 C.F.R. § 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names

of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. Supplier certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency.

G. BYRD ANTI-LOBBYING AMENDMENT, AS AMENDED (31 U.S.C. § 1352). Suppliers must file any required certifications. Suppliers must not have used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Suppliers must disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the non-federal award. Suppliers must file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352).

H. RECORD RETENTION REQUIREMENTS. To the extent applicable, Supplier must comply with the record retention requirements detailed in 2 C.F.R. § 200.333. The Supplier further certifies that it will retain all records as required by 2 C.F.R. § 200.333 for a period of 3 years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

I. ENERGY POLICY AND CONSERVATION ACT COMPLIANCE. To the extent applicable, Supplier must comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

J. BUY AMERICAN PROVISIONS COMPLIANCE. To the extent applicable, Supplier must comply with all applicable provisions of the Buy American Act. Purchases made in accordance with the Buy American Act must follow the applicable procurement rules calling for free and open competition.

K. ACCESS TO RECORDS (2 C.F.R. § 200.336). Supplier agrees that duly authorized representatives of a federal agency must have access to any books, documents, papers and records of Supplier that are directly pertinent to Supplier's discharge of its obligations under this Contract for the purpose of making audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to Supplier's personnel for the purpose of interview and discussion relating to such documents.

L. PROCUREMENT OF RECOVERED MATERIALS (2 C.F.R. § 200.322). A non-federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation

and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. § 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

M. **FEDERAL SEAL(S), LOGOS, AND FLAGS.** The Supplier not use the seal(s), logos, crests, or reproductions of flags or likenesses of Federal agency officials without specific pre-approval.

N. **NO OBLIGATION BY FEDERAL GOVERNMENT.** The U.S. federal government is not a party to this Contract or any purchase by an Participating Entity and is not subject to any obligations or liabilities to the Participating Entity, Supplier, or any other party pertaining to any matter resulting from the Contract or any purchase by an authorized user.

O. **PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS.** The Contractor acknowledges that 31 U.S.C. 38 (Administrative Remedies for False Claims and Statements) applies to the Supplier's actions pertaining to this Contract or any purchase by a Participating Entity.

P. **FEDERAL DEBT.** The Supplier certifies that it is non-delinquent in its repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowance, and benefit overpayments.

Q. **CONFLICTS OF INTEREST.** The Supplier must notify the U.S. Office of General Services, Sourcewell, and Participating Entity as soon as possible if this Contract or any aspect related to the anticipated work under this Contract raises an actual or potential conflict of interest (as described in 2 C.F.R. Part 200). The Supplier must explain the actual or potential conflict in writing in sufficient detail so that the U.S. Office of General Services, Sourcewell, and Participating Entity are able to assess the actual or potential conflict; and provide any additional information as necessary or requested.

R. **U.S. EXECUTIVE ORDER 13224.** The Supplier, and its subcontractors, must comply with U.S. Executive Order 13224 and U.S. Laws that prohibit transactions with and provision of resources and support to individuals and organizations associated with terrorism.

S. **PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT.** To the extent applicable, Supplier certifies that during the term of this Contract it will comply with applicable requirements of 2 C.F.R. § 200.216.

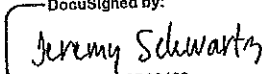
113021-SUT

T. DOMESTIC PREFERENCES FOR PROCUREMENTS. To the extent applicable, Supplier certifies that during the term of this Contract will comply with applicable requirements of 2 C.F.R. § 200.322.

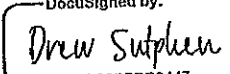
22. CANCELLATION

Sourcwell or Supplier may cancel this Contract at any time, with or without cause, upon 60 days' written notice to the other party. However, Sourcwell may cancel this Contract immediately upon discovery of a material defect in any certification made in Supplier's Proposal. Cancellation of this Contract does not relieve either party of financial, product, or service obligations incurred or accrued prior to cancellation.

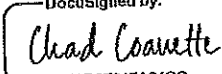
Sourcwell

DocuSigned by:

By: C0FD2A739D06489...
Jeremy Schwartz
Title: Chief Procurement Officer
2/7/2022 | 9:22 PM CST
Date: _____

The Sutphen Corporation

DocuSigned by:

By: 14FD9C38BDB0447...
Drew Sutphen
Title: President
2/8/2022 | 3:13 PM CST
Date: _____

Approved:

DocuSigned by:

By: 7E42B8F817A64CC...
Chad Coauette
Title: Executive Director/CEO
2/8/2022 | 5:16 PM CST
Date: _____



EXHIBIT

"B"

PROPOSAL

TO THE:

Brook Park Fire Department
Attn: Chief Patrick Johnson
17401 Holland Rd
Brook Park, Oh 44142

DATE: April 20, 2023

We hereby propose and agree to furnish the following firefighting equipment upon your acceptance of this proposal:

One (1) Sutphen Heavy Duty Custom Pumper\$1,206,492.75*

Pricing is based on Sourcewell Contract Number 113021-SUT

Pricing is based on Payment at time of delivery

The unit shall be manufactured completely in accordance to the following proposal and delivered in approximately **38-44** months from the date of the contract signing or purchase order, subject to delays from all causes beyond our control.

This proposal shall be valid until June 1, 2023. If the contract or purchase order is not received within this proposed duration, we reserve the right to extend, withdraw, or modify our proposal, including pricing, delivery times, and prepayment discounts as applicable.

Should any changes be required as mandated by NFPA, EPA, or other Federal, State or Local Governments, or changes due to part availability or vendor relationships, such changes shall be documented on a change order and purchaser shall be responsible for additional charges as applicable. These may include but are not limited to changes that affect the major vendors of the fire apparatus industry such as pump manufacturer, seat manufacturer, electrical power supplies (generators) and powertrain (engine & transmission).

Respectfully submitted,

Bob Jones

Bob Jones
Herb Fire Equipment
Authorized Representative
Sutphen Corporation

Herb Fire

SUTPHEN CORPORATION

6450 Eiterman Road | Dublin, OH 43016 | 1-800-848-5860



Sutphen

Component Report

Dealership: Herb Fire 3 (Bob Jones)

**HS- Brook Park Fire Dept., Ohio
Customized Pumper**

Order#: DQ14659-1

Contact:

Position:

Phone:

Mobile:

Email:

Bill To

Customer: Brook Park Fire Dept.
Contact: ,
Address: 17401 Holland Rd
Brook Park, Ohio 44142

Ship To

Customer: Brook Park Fire Dept.
Contact: ,
Address: 17401 Holland Rd
Brook Park, 44142

Comments

Project Manager:
Sales Person:
Revision Level:
Truck Type:
Body Facility:

Quote Line Number 1

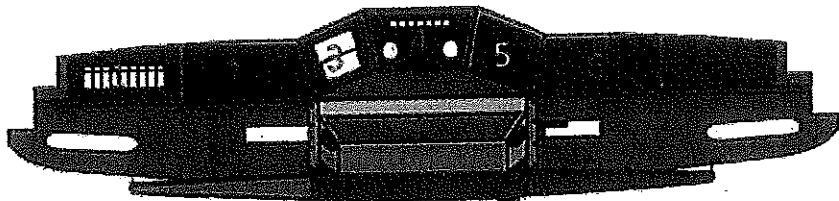
Line	Item #	Qty	Item Description/Comments
1	Sourcewell	1	Cooperative Purchasing =Sourcewell
2	10310100	1	CHASSIS
CHASSIS			
3	10010001	1	CHASSIS, CUSTOM
4	51010105	1	Wheelbase = 206.5
5	51010310	1	WHEELBASE GREATER THAN 200"
6	25010100	1	FRAME, 10" DOUBLE RAILS, SINGLE AXLE (50K PSI)
7	45040100	1	FRONT BUMPER CLIP
8	45010001	1	FRONT TOW EYES, BELOW BUMPER, PAINTED
9	46010000	1	REAR TOW EYES, PAINTED
10	40010250	1	STEERING - ROSS TAS-85
11	22010050	1	DRIVE LINE, SPICER, 1810 SERIES
12	23015100	1	ENGINE, CUMMINS X 10 450HP DOC-DPF-DEF-SCR OBD
13	23029200	1	ENGINE WARRANTY, 5 YEAR, 100,000 MILES FOR CUMMINS (X SERIES)

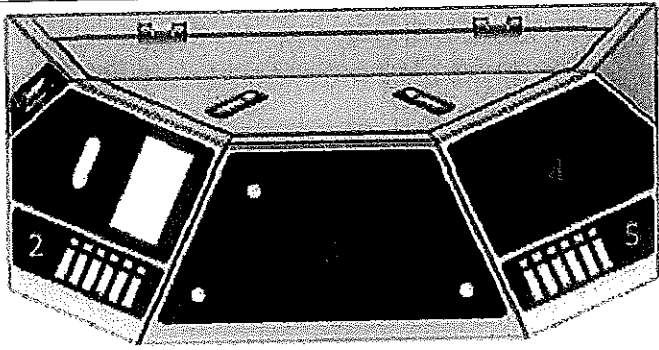
Line	Item #	Qty	Item Description/Comments
14	23029400	1	AFTERTREATMENT WARRANTY, 5 YEAR, 100,000 MILES FOR CUMMINS (X SERIES)
15	23030006	1	AIR INTAKE/EMBER SEPARATOR
16	23031176	1	FUEL FILTER/WATER SEPARATOR, PRIMARY, FLEETGUARD FUEL PRO FH230
17	23031220	1	FUEL FILTER, SECONDARY, FLEETGUARD, FF5825NN
18	47012520	1	TRANSMISSION, ALLISON GEN 6, EVS4000 (X SERIES)
19	23110000	1	JACOBS ENGINE BRAKE
20	47024050	1	TRANSMISSION COOLER
21	47030000	1	ALLISON TOUCH PAD SHIFTER
22	47030110	1	SHIFTER PAD GEARING, 6 GEARS OPEN
23	21021200	1	COOLING SYSTEM
24	21030195	1	COOLANT FILTER
25	21030000	1	FAN CLUTCH
26	21030200	1	RADIATOR COOLANT RECOVERY, PRESSURIZED SYST
27	26010010	1	FUEL TANK, STAINLESS STEEL, 65 GAL
28	26030000	1	FUEL FILL
29	26030100	1	FUEL COOLER
30	24040000	1	DIESEL EXHAUST FLUID TANK
31	24530200	1	EXHAUST ADAPTER FOR PLYMOVENT GRABBER SYSTEM
32	13010225	1	ALTERNATOR, LEECE NEVILLE 420 AMP BLP4003
33	13030100	1	LOW VOLTAGE ALARM, FLOYD BELL TXB-V86-515-QF
34	15010500	1	BATTERIES, INTERSTATE TYPE 31 MHD (4)
35	15031700	1	BATTERY JUMPER TERMINALS
36	15031540	1	BATTERY INVERTER CHARGER, KUSSMAUL AP1500W INVERTER
37	15030450	1	120V SHORELINE INLET, KUSSMAUL SUPER 20 AUTO EJECT W/ BUILT IN BAR GRAPH DISPLAY 091-55-234-XXX
38	15040100	6	120V OUTLET WIRED TO SHORELINE INLET - EA (6)
39	14022120	1	FRONT AXLE, HENDRICKSON STEERTEK NXT 20,000 LB.

Line	Item #	Qty	Item Description/Comments
40	41022120	1	FRONT SUSPENSION, HENDRICKSON 20,000 LBS. (4) 56" LEAFS
41	41040510	1	STEER ASSIST
42	43010305	1	FRONT TIRES, GOODYEAR 385/65R22.5 LRJ G296 22.5 x 12.25 WHEELS
43	14510540	1	REAR AXLE, MERITOR RS-30-185 31,000 LB.
44	14530158	1	TOP SPEED, 58 MPH
45	42010025	1	REAR SUSPENSION, FIREMAAX 31,000 LBS. AIR RIDE
46	44010335	1	REAR TIRES, GOODYEAR 315/80R22.5 ENDURANCE TSD MUD & SNOW, 31,000 GVWR
47	42910300	1	TIRE PRESSURE MONITOR, QUICK PRESSURE
48	44215210	1	WHEELS, ALUM, ALCOA, DURABRITE (max 35K rear)
49	44270100	1	HUB COVERS, FRONT & REAR, POLISHED STS (Single Axle)
50	44270300	1	CHROME LUG NUT CAPS, FRONT & REAR (Single Axle)
51	44271100	1	MUD FLAPS, FRONT (PAIR)
52	44271200	1	MUD FLAPS, REAR (PAIR)
53	54010010	1	DATA, SAFETY & WARNING TAGS APPLICATION, ADHESIVE
54	16010009	1	BRAKES MERITOR SCAM 6" FRONT, SCAM 7" REAR
55	18010043	1	AIR BRAKE SYST 5 TANKS WABCO 1200 DRYER (31K, 35K)
56	18030010	1	AIR BRAKE RELEASE VALVE, WABCO
57	18030140	1	AIR INLET CONNECTION
58	18033000	1	KUSSMAUL 091-28 AIR EJECT W/FEM COUPLING
59	18220500	1	NO ELEC STABILITY CONTROL SYS
60	18110070	1	WABCO 5 CHANNEL ANTI-LOCK BRAKES (31K, 35K)
61	53510000	1	COMPRESSION FITTINGS ON AIR SYSTEM (CHASSIS)
62	54010000	1	MISCELLANEOUS ITEMS ON CHASSIS
63	10310110	1	CAB
CAB			
64	11023270	1	CAB TSAL4G 73" 15" RR 1/2
65	11030025	1	CAB CERTIFICATION - STRUCTURAL INTEGRITY

Line	Item #	Qty	Item Description/Comments
66	11030950	1	CAB LOCKDOWN LATCHES
67	11031025	1	CAB TILT SYSTEM, AIR CONTROL VALVE
68	11031100	1	MANUAL BACK-UP TILT SYSTEM
69	11031350	1	CAB DOORS, FULL LENGTH (4)
70	11031385	1	CAB STEPS, LOWER GRIP STRUT, INTERMEDIATE DIAMONDPLATE
71	11031390	1	AUXILIARY CAB STEPS, ALUM, GRIP STRUT (SET OF 4)
72	11031399	1	CAB STEP LIGHTING, TECNIQ E45 LED STRIP LIGHTS
73	11031421	1	CAB DOOR WINDOWS, POWER (4)
74	11031401	1	CAB SIDE WINDOWS, FIXED, BOTH SIDES
75	11031460	1	NO WINDOWS, BACK WALL OF CAB
76	11031465	1	WINDOW TINTING (LIMO TINT 8%) - EACH (4)
77	52010010	1	ELECTRIC INTERMITTENT WIPERS
78	52030200	1	WINDSHIELD WASHER RESERVOIR
79	38010020	1	MIRRORS LANG MEKRA 300 SERIES HEATED & REMOTE
80	11024420	1	UPPER GRILLE, AMERICAN FLAG LEVEL STYLE FACADE (X SERIES)
81	11024510	1	FLAMING "S" LOGO, UPPER GRILLE, ILLUMINATED
82	11024615	1	LOWER GRILLE, POLISHED STAINLESS, LASER CUT LETTERING W/ BACKLIGHTING
83	20012220	1	BUMPER, 24" FORMED STEEL CHANNEL, PAINTED
84	20029830	1	BUMPER SIDES, PAINTED STEEL, W/POCKET (12-24" EXTENSION)
85	20029910	1	BUMPER ANGLES, PAINTED STEEL, FLAT (12-30" EXTENSION)
86	20030000	1	BUMPER NOTCHED FOR FRONT SUCTION
87	20040230	1	STORAGE WELL, DEEP CENTER, 3/4 WIDTH (24" BUMPER)
88	20030120	1	STORAGE WELL COVER, TREADPLATE, 4" RAISE
89	20030510	1	CUT-OUT IN STORAGE WELL COVER
90	20042140	1	PROTECTIVE BUMPER COATING, RAPTOR, TOP EDGE OF FRONT BUMPER
91	20050300	1	WINCH RECEIVER, FRONT

Line	Item #	Qty	Item Description/Comments
92	20050395	1	WIRING FOR WINCH RECEIVER (1)
93	12010400	1	AIR HORNS, DUAL, HADLEY H00978 RECTANGULAR, BEHIND PERFORATION
94	12030015	1	AIR HORNS CUTOUTS IN BUMPER, BEHIND PERFORATIONS (X SERIES)
95	12030350	1	LANYARD CONTROL FOR AIR HORNS
96	12510109	1	ELEC SIREN, WHELEN 295HFSA7, REMOTE FLUSH MOUNT WITH REMOVABLE MIC
97	12530205	1	ELEC SIREN WIRED TO STEERING WHEEL BUTTON
98	12620102	1	SIREN SPEAKER, 100W, CAST PRODUCTS, SA4201-6B-A (PAIR)
99	12670110	1	SIREN SPEAKER(S) INSTALLED BEHIND CAB GRILLE
100	12710100	1	SIREN, FEDERAL Q2B, GRILLE MOUNT
101	12730305	1	FOOT SWITCH, DRIVER'S SIDE, FOR MECH SIREN
102	12730310	1	FOOT SWITCH, OFFICER'S SIDE, FOR MECH SIREN
103	12730363	1	SIREN BRAKE SWITCH FOR MECH SIREN, DRIVER'S & OFFICER'S SIDE
104	32520520	1	HEADLIGHTS, LED, FIRETECH FT-4X6, DUAL STS HOUSINGS
105	48010300	1	FRONT TURN SIGNALS, WHELEN 400 SERIES LED (4)
106	32530754	1	ICC, LED BROW LIGHT INTEGRATED MARKERS
107	27022125	1	HANDRAILS, CAB EXTERIOR, KNURLED STAINLESS STEEL (3) SIDE
108	27030610	1	COAT HOOKS ON UPPER GRAB HANDRAILS, DRIVER'S SIDE (1)
109	27030655	1	COAT HOOKS ON UPPER GRAB HANDRAILS, OFFICER'S SIDE (2)
110	27025000	1	HANDRAILS, CAB INTERIOR, BLACK RUBBER COATED (2) FRONT ENTRY
111	27025495	1	HANDRAILS, CAB INTERIOR, BLACK RUBBER COATED (1) REAR ENTRY
112	27030120	1	HANDRAILS, REAR CAB INTERIOR DOOR, BLACK RUBBERIZED (2) AND KNURLED STS AT WINDOW (2)
113	27040100	1	INTERIOR DOOR, NYLON STRAP
114	11032021	1	EXTERIOR COMPT, SIDE OF EXT CAB, 66" H, DS
115	11032450	1	COMPT DOOR LOCK - NOT PROVIDED
116	11032200	1	INTERIOR ACCESS, NOT PROVIDED
117	11032100	1	NO OPENING TO CREW SEAT COMPT

Line	Item #	Qty	Item Description/Comments
118	11032060	1	EXTERIOR COMPT, SIDE OF EXT CAB, 38" H, OS
119	11032450	1	COMPT DOOR LOCK - NOT PROVIDED
120	11032100	1	NO OPENING TO CREW SEAT COMPT
121	11032300	1	PIKE POLE STORAGE, EXTERIOR CAB COMPT
122	11032310	2	ADJUSTABLE SHELF, EXTERIOR CAB COMPT (EA) (2)
123	11032340	1	SCBA BRACKET, EXTERIOR CAB COMPT (1)
124	11032388	1	SPECIAL ITEM, EXTERIOR CAB COMPARTMENT LIGHTING
125	11035426	1	SMOOTH METAL CAB ROOF 30" X FULL WIDTH, PAINTED ROOF COLOR
126	31010285	1	INTERIOR, MULTISPEC BLACK SPECKLE PAINT W/GRAY-BLACK DURAWEAR
127	11032929	1	DOOR PANEL, FULL STS
128	31010291	1	CAB INTERIOR FLOOR COVERING, BLACK RUBBERIZED
129	11035375	1	DIAMONDPLATE CAB FLOOR
130	22510100	1	ENGINE ENCLOSURE, FULL LENGTH
131	22510530	1	ENGINE ENCLOSURE COVERING, SCORPION BLACK URETHANE BLEND
132	11031681	1	TOOL MOUNTING PLATE, TOP OF ENGINE ENCLOSURE
133	11031677	1	CENTER CONSOLE NOT PROVIDED
134	22610050	1	ENGINE HOOD LIGHT, LED (1)
135	11031510	1	FLAT WORK SURFACE IN LIEU OF GLOVE BOX
136	11031710	1	UPPER CREW DOOR AREA, SMOOTH PANEL
137	29810100	1	CHASSIS ELECTRICAL DESCRIPTION
138	30010130	1	INSTRUMENTATION, AMETEK W/ CENTER & OVERHEAD CONSOLES
			<p>Upper Command Console:</p> 
139	30010508	1	LOWER COMMAND CONSOLE, X10HD

Line	Item #	Qty	Item Description/Comments
			
140	30010610	1	CAB PUMP SHIFTER, ELECTRIC W/ROUND KNOB (FOR HALE G-SERIES / WATEROUS C20 PUMP TRANSMISSION)
141	30011000	1	PUMP INTERLOCK, NOT CONNECTED WITH ODOMETER
142	30031615	1	DO NOT MOVE LIGHT, WHELEN ION-T LED
143	29930200	1	MAPBOOK SLOT ON BREAKER PANEL
144	29910100	1	PROGRAMMABLE LOAD MANAGER, CLASS-1 SUPERNODE II
145	30031100	1	HIGH IDLE SWITCH
146	11040000	1	CAB ACCESSORY FUSE PANEL
147	84541540	1	POWER & GROUND STUDS, UPPER COMMAND CONSOLE
148	84541550	1	POWER & GROUND STUDS, UNDER OFFICER'S SEAT
149	30110000	1	VEHICLE DATA RECORDER, AKRON/WELDON
150	30031810	2	12V DUAL POWER POINT (2)
151	30031820	4	12V DUAL POWER POINT, USB/USB (4)
152	33510030	1	INTERIOR CAB LIGHTS, WHELEN 6" ROUND RED/CLEAR LED (2)
153	34010030	1	INTERIOR CREW LIGHTS, WHELEN 6" ROUND RED/CLEAR LED (2)
154	33028888	1	SPECIAL Hand Held Spot Light CAB PILLAR LED SPOT LIGHTS
155	28010750	1	DEFROSTER, HEATER & A/C, SEVERE CLIMATE (TM-31)
156	28090003	1	HEAT TO FEET
157	28030500	1	DEFROSTER DUCTWORK, ENTIRE WINDSHIELD
158	11031687	1	TOP HEAT/AC STORAGE, TOOL MOUNTING PLATE, 25" x 19.5"
159	38510104	1	DRIVER'S SEAT, BOSTROM SIERRA HIGH BACK AIR RIDE ABTS (DURAWEAR PLUS, LOW SEAM)

Line	Item #	Qty	Item Description/Comments
160	38320000	1	HELMET STORED IN COMPARTMENT
161	39010118	1	OFFICER'S SEAT, BOSTROM TANKER 450, ABTS SCBA (DURAWEAR PLUS, LOW SEAM)
162	39030020	1	OFFICER'S SEAT COMPT, FRONT DOOR
163	38320000	1	HELMET STORED IN COMPARTMENT
164	39521129	1	CREW SEAT 1, BOSTROM TANKER 450, ABTS SCBA (DURAWEAR PLUS, LOW SEAM)
165	38320000	1	HELMET STORED IN COMPARTMENT
166	39521130	1	CREW SEAT 2, BOSTROM TANKER 450, ABTS SCBA (DURAWEAR PLUS, LOW SEAM)
167	38320000	1	HELMET STORED IN COMPARTMENT
168	39521430	1	CREW SEAT 3, BOSTROM TANKER 400CT, ABTS SCBA FLIP UP (DURAWEAR PLUS, LOW SEAM)
169	38320000	1	HELMET STORED IN COMPARTMENT
170	39588888	1	SPECIAL ITEM, EMS CABINET, FORWARD FACING DOUBLE ON SEAT LOCATIONS 6 & 4
171	39588888	1	SPECIAL ITEM, INTERIOR COMPARTMENT OPENING
172	39588888	1	SPECIAL ITEM, 2 ADJUSTABLE SHELVES
173	39588888	1	SPECIAL ITEM, DOOR LOCK
174	39550200	1	SEAT COLOR, BLACK
175	39610115	4	SCBA BRACKETS, IMMI SMART DOCK (4)
176	38410000	1	SEAT BELT WARNING SYSTEM, AKRON / WELDON
177	39710015	1	CREW SEAT COMPT, FRONT DROP-DOWN DOORS (73" CAB)
178	11031755	1	OVERHEAD STORAGE, FRONT OF 15" RR W/DOORS
179	84541601	1	MOUNTING OF CUSTOMERS RADIO-DUAL HEAD
180	84541700	1	INSTALLATION OF CUSTOMERS 2-WAY RADIO ANTENNA (1)
181	30080150	1	HD STEREO, JENSEN, AM/FM/WB/BT
182	84530205	1	WIRED INTERCOM, DAVID CLARK - 6 POSITION
183	84561105	1	CAMERA SYSTEM, FRC, INVIEW 360HD W/BUILT-IN DVR
184	11088888	1	SPECIAL ITEM, mounting of 5 vehicle chargers
185	11088888	1	SPECIAL ITEM, SUTPHEN SUPPLIED RADIO DUAL HEAD, MOUNTED

Line	Item #	Qty	Item Description/Comments
186	10310200	1	PUMP & PLUMBING
PUMP & PLUMBING			
187	60012550	1	QMAX-2000 GPM 6" SUCTION SINGLE STAGE PUMP
188	60025000	1	GEARBOX, HALE, G-SERIES, REAR MOUNTED
189	60026000	1	PUMP PACKING, HALE
190	60030365	1	MANUAL PUMP OVERRIDE
191	60035123	1	PUMP TEST, THIRD PARTY TESTING
192	61510000	1	AUXILIARY COOLER (HEAT EXCHANGER)
193	62010002	1	STAINLESS STEEL PIPING
194	66020110	1	TWO 3" TANK TO PUMP LINES W/CHECK VALVE
195	61720100	1	VALVE, AKRON HEAVY DUTY
196	61770120	1	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS
197	73010201	1	TANK FILL 2"
198	61720100	1	VALVE, AKRON HEAVY DUTY
199	61770120	1	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS
200	61010405	1	PRESSURE GOVERNOR, CLASS 1 TPGJ1939
201	61210410	1	INTAKE PRESSURE CONTROL, TFT A1831
202	63021100	1	6" MAIN SUCTION, LEFT SIDE
203	65030300	1	3" LEFT SIDE INLET
204	61720100	1	VALVE, AKRON HEAVY DUTY
205	61770100	1	ACTUATOR, VALVE, SWING HANDLE
206	60036020	1	THREADS, SPECIAL
207	63078888	1	SPECIAL Adapter for Left Suction ADAPTER, 2.5" NST M X 2.5" SPEC FE SWIVEL, W/PLUG & CHAIN
208	63025100	1	6" MAIN SUCTION, RIGHT SIDE
209	64030300	1	3" RIGHT SIDE INLET
210	61720100	1	VALVE, AKRON HEAVY DUTY
211	61770100	1	ACTUATOR, VALVE, SWING HANDLE

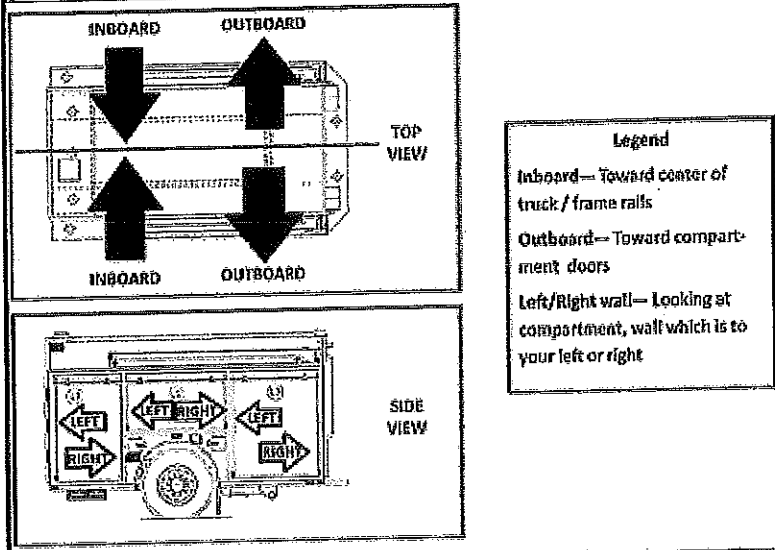
Line	Item #	Qty	Item Description/Comments
212	60036020	1	THREADS, SPECIAL
213	63034750	1	ADAPTER, 2.5" NST M X 2.5" SPEC FE SWIVEL, W/PLUG & CHAIN
214	65560300	1	5" FRONT SUCTION, THRU
215	63030400	1	HALE MASTER INTAKE VALVE, ELEC
216	63060100	1	RELIEF VALVE FOR MIV
217	65562120	1	ADAPTER, 5" NPT X 6" NST
218	65588888	1	SPECIAL ITEM, ADAPTER, 6" NST X 5" STORZ
219	70525125	1	2.5" DISCHARGE, LEFT - POSITION 1
220	61720100	1	VALVE, AKRON HEAVY DUTY
221	61770100	1	ACTUATOR, VALVE, SWING HANDLE
222	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
223	61810160	1	DISCHARGE TERMINATION, STRAIGHT
224	60036020	1	THREADS, SPECIAL
225	61850100	1	ADAPTER, 2.5" NST FM X 2.5" SPEC M W/CAP & CHAIN
226	61860100	1	ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN
227	70525125	1	2.5" DISCHARGE, LEFT - POSITION 2
228	61720100	1	VALVE, AKRON HEAVY DUTY
229	61770100	1	ACTUATOR, VALVE, SWING HANDLE
230	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
231	61810160	1	DISCHARGE TERMINATION, STRAIGHT
232	60036020	1	THREADS, SPECIAL
233	61850100	1	ADAPTER, 2.5" NST FM X 2.5" SPEC M W/CAP & CHAIN
234	61860100	1	ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN
235	71025130	1	3" DISCHARGE, RIGHT - POSITION 3
236	61720110	1	VALVE, AKRON SLOW CLOSE
237	61770100	1	ACTUATOR, VALVE, SWING HANDLE

Line	Item #	Qty	Item Description/Comments
238	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
239	61810160	1	DISCHARGE TERMINATION, STRAIGHT
240	60036010	1	THREADS, NST
241	61840260	1	ADAPTER, 3" NST FE X 5" STORZ W/CAP & CHAIN, TFT
242	71025130	1	3" DISCHARGE, RIGHT - POSITION 4
243	61720110	1	VALVE, AKRON SLOW CLOSE
244	61770100	1	ACTUATOR, VALVE, SWING HANDLE
245	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
246	61810160	1	DISCHARGE TERMINATION, STRAIGHT
247	60036010	1	THREADS, NST
248	61840260	1	ADAPTER, 3" NST FE X 5" STORZ W/CAP & CHAIN, TFT
249	71025125	1	2.5" DISCHARGE, RIGHT - POSITION 5
250	61720100	1	VALVE, AKRON HEAVY DUTY
251	61770120	1	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS
252	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
253	61810160	1	DISCHARGE TERMINATION, STRAIGHT
254	60036020	1	THREADS, SPECIAL
255	61850100	1	ADAPTER, 2.5" NST FM X 2.5" SPEC M W/CAP & CHAIN
256	61860100	1	ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN
257	71088888	1	SPECIAL ITEM, SPECIAL ITEM, CAP FOR 5" STORZ X 2.5" CLEVELAND TREAD W/CAP
258	71088888	1	SPECIAL ITEM, SPECIAL ITEM, CAP FOR 5" STORZ X 2.5" CLEVELAND TREAD W/CAP
259	71088888	1	SPECIAL ITEM, CAP FOR 5" STORZ (SHIP LOOSE) (2)
260	71088888	1	SPECIAL ITEM, ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN (SHIP LOOSE) (2)
261	71530100	1	DISCHARGE 2.5" VALVE 2.5" PIPE TO LEFT REAR
262	61720100	1	VALVE, AKRON HEAVY DUTY
263	61770120	1	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS

Line	Item #	Qty	Item Description/Comments
264	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
265	61810160	1	DISCHARGE TERMINATION, STRAIGHT
266	60036020	1	THREADS, SPECIAL
267	61850100	1	ADAPTER, 2.5" NST FM X 2.5" SPEC M W/CAP & CHAIN
268	61860100	1	ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN
269	71830100	1	DISCHARGE 2.5" VALVE 2.5" PIPE RIGHT REAR
270	61720100	1	VALVE, AKRON HEAVY DUTY
271	61770120	1	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS
272	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
273	61810160	1	DISCHARGE TERMINATION, STRAIGHT
274	60036020	1	THREADS, SPECIAL
275	61850100	1	ADAPTER, 2.5" NST FM X 2.5" SPEC M W/CAP & CHAIN
276	61860100	1	ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN
277	71888888	1	SPECIAL ITEM, 30 DEGREE ELBOW TO BE PART OF THE ADAPTORS (7)
278	72230200	1	DISCHARGE 2.5" TO FRONT BUMPER
279	61720100	1	VALVE, AKRON HEAVY DUTY
280	61770120	1	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS
281	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"
282	60036020	1	THREADS, SPECIAL
283	61850100	1	ADAPTER, 2.5" NST FM X 2.5" SPEC M W/CAP & CHAIN
284	61860100	1	ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN
285	72288888	1	SPECIAL ITEM, GATED WYE 2.5" SPEC FE X (2) 1.5" PYROLITE COUPLING M
286	72530100	1	DECK GUN DISCHARGE 3"
287	61720110	1	VALVE, AKRON SLOW CLOSE
288	61770120	1	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS
289	77021015	1	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5"

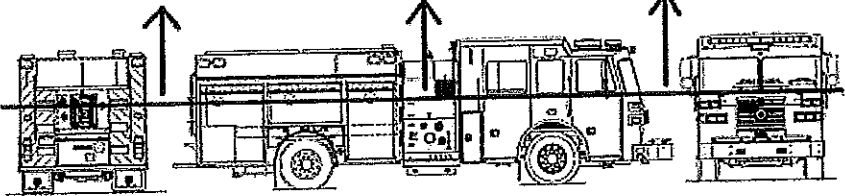
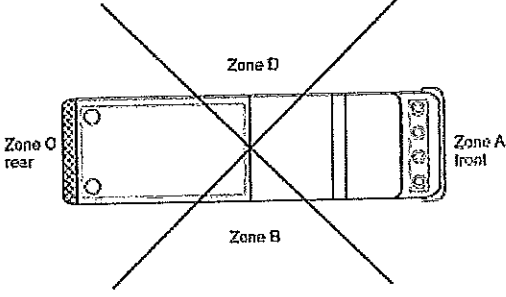
Line	Item #	Qty	Item Description/Comments
290	72570100	1	DECK GUN TERMINATION, THREADED
291	72570220	1	EXTENDER, ELKHART 8599, MANUAL
292	60036020	1	Special Threads = Cleveland thread
293	72822400	1	TWO 1.5" SPEEDLAYS W/LIFTOUT TRAY & ONE 2.5" CROSSLAY (SM)
294	61720100	3	VALVE, AKRON HEAVY DUTY (3)
295	61770120	3	ACTUATOR, VALVE, PUSH/PULL HANDLE, INNOVATIVE CONTROLS (3)
296	77021015	3	GAUGE, DISCH, INNOVATIVE CONTROLS TC SERIES, 2.5" (3)
297	60036020	3	THREADS, SPECIAL (3)
298	61850100	1	ADAPTER, 2.5" NST FM X 2.5" SPEC M W/CAP & CHAIN
299	72910802	1	COVERS, ALUM/WEBBING FOR CROSSLAY/SPEEDLAY
300	72932230	1	COVER FASTENERS, METAL AIRPLANE LATCHES
301	72888888	1	SPECIAL ITEM, speedlays
302	72888888	1	SPECIAL ITEM, 3 HOSE TRAYS
303	61742000	1	MASTER PUMP DRAIN, MULTIPOINT
304	61730005	13	DRAIN VALVES, INNOVATIVE CONTROLS, LIFT-UP (13)
305	10310210	1	FOAM SYSTEM
FOAM SYSTEM			
306	73570620	1	FOAM SYSTEM, HALE SMARTFOAM 2.1A
307	73531425	1	FOAM TANK 30 GALLON BUILT INTO BOOSTER TANK
308	73576720	1	QUARTER TURN VALVE, MANUAL FOAM FLUSH
309	73580004	1	FOAM PLUMBED TO FOUR DISCHARGES
310	10310220	1	PUMP PANEL
PUMP PANEL			
311	74910130	1	PA SM3 - SIDE MOUNT PUMP PANEL
312	74930510	1	PANEL FINISH, BRUSHED STS
313	74931000	1	ESCUTCHEON PLATES
314	74931050	1	COLOR CODING

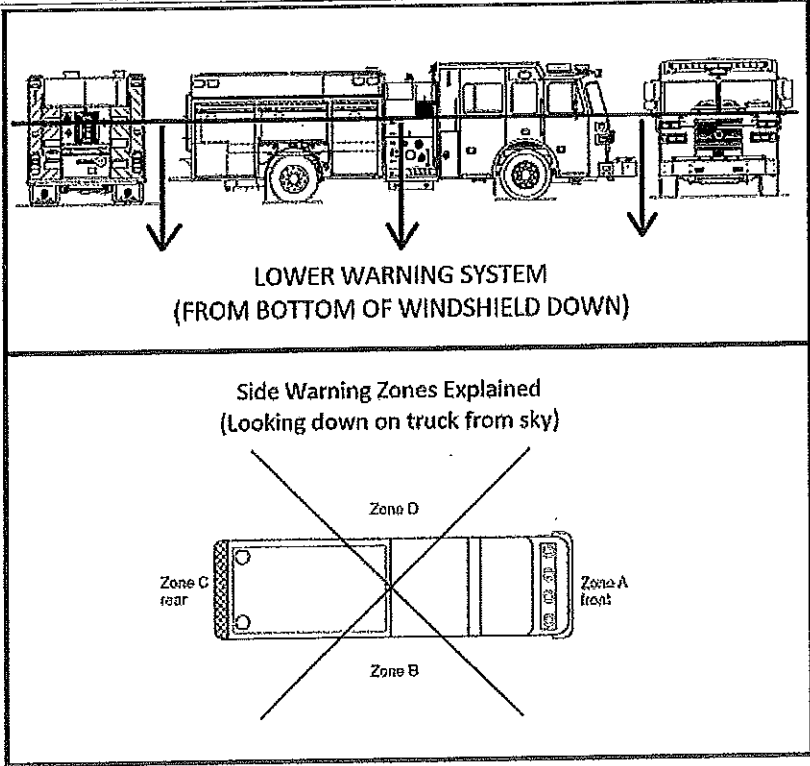
Line	Item #	Qty	Item Description/Comments
315	74931200	1	PUMP MODULE FRAMEWORK, PAINTED BY SUTPHEN
316	74931320	1	PUMP FINISH, PAINTED BY SUTPHEN
317	74931530	1	PLUMBING FINISH, PAINTED BY SUTPHEN
318	74931610	1	EXTERIOR DUNNAGE AREA PANEL, DIAMONDPLATE
319	75088888	1	SPECIAL ITEM, module extension and design
320	75040215	1	TROUGH IN RUNNING BOARD, BOTH SIDES
321	75510225	1	PUMP OPERATOR LIGHTS, TECNIQ E45 LED STRIP
322	75530115	1	PUMP PANEL LIGHTS OFFICER'S SIDE, TECNIQ E45 LED STRIP
323	75588888	1	SPECIAL ITEM, LED LIGHT IN PUMP MODULE ENCLOSURE
324	75588888	1	SPECIAL ITEM, upgrade panel lights and operator lights
325	76010105	1	PUMP PANEL GAUGES & CONTROLS
326	60028050	1	PUMP PRIMER, TRIDENT, AIR
327	60028310	1	(1) PRIMER BUTTON - MAIN SUCTION
328	76025100	1	COMPRESSION FITTINGS ON AIR SYSTEM (CTZ PUMP MODULE)
329	76031900	1	AIR HORN PUSH BUTTON SWITCH ON PUMP PANEL
330	76031920	1	BOX FOR MIC OR HEADSET ONLY
331	76510065	1	GAUGES, MASTER, INNOVATIVE CONTROLS TC SERIES, 4"
332	77510050	1	GAUGE, WATER LEVEL, INNOVATIVE CONTROLS SL-14
333	77532005	1	GAUGE, WATER LEVEL, WHELEN 500 LED MONSTER (2)
334	77540100	1	GAUGE, FOAM LEVEL, INNOVATIVE CONTROLS SL-14
335	10310230	1	WATER TANK
WATER TANK			
336	83525000	1	WATER TANK BRAND, UNSPECIFIED
337	83510205	1	WATER TANK, 1000 GAL, POLY
338	10310300	1	BODY
BODY			
339	80029900	1	BODY SUBFRAME, PUMPER/TANKER

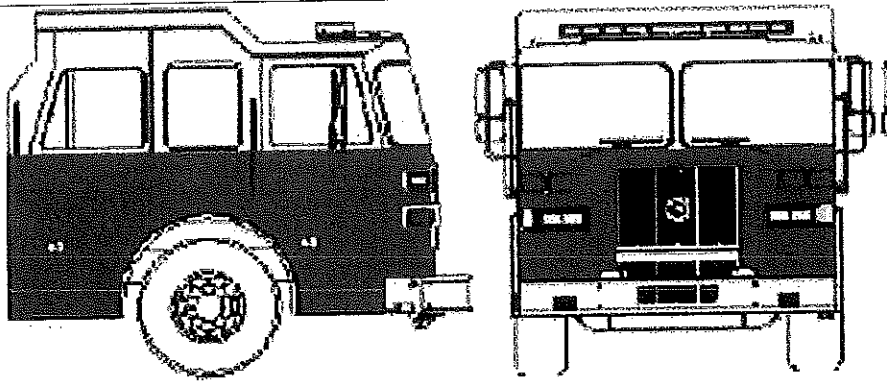
Line	Item #	Qty	Item Description/Comments
340	80110530	1	BODY PA-17 [S6] 43/53 CHUTE & DBL HATCH
341	80245125	1	OIL DRY HOPPER (IN UPPER HATCH COMPARTMENT)
342	10310302	1	BODY COMPARTMENTS
BODY COMPARTMENTS			
			<p>Standard Verbiage for locations of Outlets and other components in Body compartments</p>  <p>Legend Inboard— Toward center of truck / frame rails Outboard— Toward compartment doors Left/Right wall— Looking at compartment, wall which is to your left or right</p>
343	81130200	1	ADJUSTABLE SHELF [L1] (1)
344	81130200	1	ADJUSTABLE SHELF [L2] (1)
345	81130200	2	ADJUSTABLE SHELF [L3] (2)
346	81140100	1	FIXED VERTICAL DIVIDER [L3] (1)
347	81150000	1	250# ADJUSTABLE VERTICAL SLIDE-OUT PANEL [L3] (1)
348	81150300	1	600# SLIDE-MASTER TRAY [L3] (1)
349	81130200	2	ADJUSTABLE SHELF [R1] (2)
350	81150300	1	600# SLIDE-MASTER TRAY [R1] (1)
351	81130200	2	ADJUSTABLE SHELF [R2] (2)
352	81130200	2	ADJUSTABLE SHELF [R3] (2)
353	81150300	1	600# SLIDE-MASTER TRAY [R3] (1)
354	81150300	1	600# SLIDE-MASTER TRAY [A1] (1)

Line	Item #	Qty	Item Description/Comments
355	81165705	1	UNISTRUT TRACK IN COMPTS
356	80220110	1	COMPT DOORS, ROM ROLL-UP, PAINTED
357	80230620	1	DOOR SILL PROTECTION, BODY COMPTS, NOT FACTORY PROVIDED
358	80225025	1	REAR COMPT DOOR (A1) ROM ROLL-UP, PAINTED
359	80230650	1	DOOR SILL PROTECTION, REAR COMPT, NOT FACTORY PROVIDED
360	80230003	7	ROLL-UP DOOR DRIP PAN/GUARD (WITH DRAIN) (7)
361	80230300	1	COMPT INTERIOR FINISH, SMOOTH
362	84531120	1	COMPT LIGHTING, ROM DUROSTRIP LED LIGHT STRIPS, 2 PER COMPT
363	80288888	1	SPECIAL ITEM, ADDITIONAL GRAB HANDLES ON COFFIN COMPARTMENTS
364	80288888	1	SPECIAL ITEM, ROM WHITE/RED COMPARTMENT LIGHTS
365	10310305	1	BODY EXTERIOR
BODY EXTERIOR			
366	81310000	1	HOSEBED, ALUM FLOORING
367	81330100	1	STANDARD HOSEBED HEIGHT
368	81410200	1	COVER, ALUMINUM 2 PC, MAIN HOSE BED
369	81331155	1	ALUM HOSEBED COVER SUPPORT, REMOVABLE REAR
370	81431200	1	REAR HOSEBED COVER, VINYL
371	81440200	1	COVER FASTENERS, BUNGIE CORDS WITH ORANGE TAB
372	81330304	1	HOSE BED DIVIDERS, ADJ (4)
373	81332115	1	HOSEBED LIGHTING, SIDES, TECNIQ E44 LED LIGHT STRIPS
374	81388888	1	SPECIAL ITEM, 1 additional hose bed divider
375	81388888	1	SPECIAL ITEM, REFLECTIVE LETTERING, REAR HOSE BED FLAP
376	81910100	1	HANDRAILS, KNURLED STS
377	82210000	1	STEPS, FRONT BODY, IC FOLD DOWN W/LIGHT (ALUM PUMPERS)
378	82310000	1	STEPS, REAR BODY (14x11 & 14x8)
379	82040100	1	REAR ACCESS LADDER, STAINLESS STEEL
380	82510000	1	RUB RAILS, ANODIZED ALUM

Line	Item #	Qty	Item Description/Comments
381	83010050	1	ALUMINUM TREADPLATE (ALUM PPR, PRG1, C-SER, TANKER)
382	83030310	1	REAR STEP/TAILOBOARD CORNERS, STRAIGHT
383	80290052	1	10 SCBA CYLINDER COMPTS (3 TRIPLE-FMI, 1 SINGLE-SIG4)
384	80290220	1	DIVIDER FOR (2) TRIPLE SCBA COMPARTMENTS
385	80290310	1	DOOR FINISH, BRUSHED STAINLESS, SINGLE/DOUBLE SCBA COMPT (1)
386	80290420	3	DOOR FINISH, BRUSHED STAINLESS, TRIPLE SCBA COMPT (3)
387	88520300	1	DELETE 6" SUCTION HOSE
388	88540550	1	DELETE STD SUCTION HOSE MTG
389	88550300	1	STRAINER NOT PROVIDED
390	83030705	1	REAR FENDERS, ALUMINUM TREADPLATE
391	89010000	1	DUO-SAFETY 900A 24'2-SEC & 775A 14' ROOF & 10' FOLDING
392	89590003	1	GROUND LADDER STORAGE COMPARTMENT
393	89520220	1	LADDER ENCLOSURE, SMOOTH ALUM DOOR
394	89590025	1	FULL ENCLOSURE FOR LADDER CHUTE
395	89088888	1	SPECIAL ITEM, n/a
396	89088888	1	SPECIAL ITEM, TRASH HOOK HOLDER
397	10310310	1	ELECTRICAL
ELECTRICAL			
398	80232100	1	2" RECEIVER, SIDES
399	80232110	1	2" RECEIVER, REAR
400	80232175	3	WIRING FOR WINCH RECEIVER (3)
401	84550199	1	LICENSE PLATE BRACKET - NOT PROVIDED
402	84511100	1	BODY ELECTRICAL DESCRIPTION
403	84520000	1	BACK UP ALARM, ECCO SA917
404	85010305	1	TAILLIGHTS, WHELEN 600 SERIES, LED STOP/TAILOTURN/REVERSE, INDIVIDUALLY MOUNTED (PAIR)
405	85110100	1	ICC LIGHTS, LED
406	85510200	1	STEP LIGHTS, LED, REAR BODY & WHELEN 2G AT PUMP PANEL

Line	Item #	Qty	Item Description/Comments
407	85728888	1	SPECIAL Ground Lights MULTI COLOR GROUND LIGHTING
408	86528999	1	DELETE REAR WORK LIGHTS
409	86600000	1	OPTICAL WARNING SYSTEM, UPPER (PUMPER)
			<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">UPPER WARNING SYSTEM (FROM BOTTOM OF WINDSHIELD UP)</p>  </div> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center;">Side Warning Zones Explained (Looking down on truck from sky)</p>  </div>
410	86610230	1	UPPER WARNING LIGHTS, ZONE A (FRONT), WHELEN FREEDOM IV 81" LED LIGHT BAR, F4N1QLED, 20 MODULES
411	86920100	1	UPPER ZONE A LIGHTBAR, STANDARD CONFIGURATION
412	86699999	1	UPPER WARNING LIGHTS, ZONE B (OFFICER'S SIDE), COVERED BY ZONES A & C
413	86710200	1	UPPER WARNING LIGHTS, ZONE C (REAR), WHELEN LED BEACONS, ROTA-BEAM R316*F (PAIR)
414	86899999	1	UPPER WARNING LIGHTS, ZONE D (DRIVER'S SIDE), COVERED BY ZONES A & C
415	87100000	1	OPTICAL WARNING SYSTEM, LOWER (PUMPER)

Line	Item #	Qty	Item Description/Comments
			 <p>LOWER WARNING SYSTEM (FROM BOTTOM OF WINDSHIELD DOWN)</p> <p>Side Warning Zones Explained (Looking down on truck from sky)</p> <p>Zone D Zone C rear Zone A front Zone B</p>
416	87110110	1	LOWER WARNING LIGHTS, ZONE A (FRONT), WHELEN 600 SUPER LED, 60*02F*R (QTY 4)
417	87811130	1	LOWER, ZONE A - MOUNTING LOCATION (DUAL HOUSINGS)
418	87210130	1	LOWER WARNING LIGHTS, ZONE B (OFFICER'S SIDE), WHELEN 600 SUPER LED, 60*02F*R (QTY 1), WHELEN 500 SUPER LED, 50*02F*R (QTY 1), ION T-SERIES LED, TLI* (QTY 1)
419	87812110	1	LOWER, ZONE B - MOUNTING LOCATION (PUMPERS, TANKERS, RESCUES)
420	87310300	1	LOWER WARNING LIGHTS, ZONE C (REAR), WHELEN 600 ROTA-BEAM LED, 6RB* (QTY 2)
421	87410130	1	LOWER WARNING LIGHTS, ZONE D (DRIVER'S SIDE), WHELEN 600 SUPER LED, 60*02F*R (QTY 1), WHELEN 500 SUPER LED, 50*02F*R (QTY 1), ION T-SERIES LED, TLI* (QTY 1)
422	87814110	1	LOWER, ZONE D - MOUNTING LOCATION (PUMPERS, TANKERS, RESCUES)
423	87537732	3	ADDITIONAL WARNING LIGHTS, WHELEN 600 SUPER LED, 60*02F*R (PAIR) (3)
424	87537736	6	ADDITIONAL WARNING LIGHTS, WHELEN 600 ROTA-BEAM LED, 6RB* (PAIR) (6)
425	87537505	1	WARNING LIGHT, ROTO-RAY, LED
426	87040000	1	TRAFFIC ADVISOR, WHELEN LED, TAL65 36"
427	87588888	1	SPECIAL ITEM, ADDITIONAL LIGHTBARS, WHELEN MINI FREEDOM IV 23.25" LED ROTABEAM LIGHT BARS (PAIR)
428	88390910	8	SCENE LIGHT, FRC SPECTRA 15K, 12V LED, SURFACE MOUNT (8)
429	88390930	2	SCENE LIGHT, FRC SPECTRA 15K, 12V LED, TELESCOPIC W/SWITCH (2)

Line	Item #	Qty	Item Description/Comments
430	88390950	2	SCENE LIGHT, FRC SPECTRA 900, 12V LED, SURFACE MOUNT (2)
431	88393000	1	SCENE LIGHTS, FIRETECH 30K LUMENS, 12V LED, 72" 3-PIECE BROW, FT-B-72-ML-3PKIT-* (1)
432	88399940	1	ADDITIONAL SWITCH, 3-WAY FOR 12V LIGHTS (EA) (1)
433	86588888	1	SPECIAL ITEM, BROW LIGHT SWITCHING
434	10310410	1	PAINT & FINISH
PAINT & FINISH			
435	89910010	1	CORROSION REDUCTION PROGRAM (PROPOSALS)
436	90010020	1	PAINT SCHEME
437	90030010	1	TWO TONE CAB & BODY
438	90029910	1	PAINT BREAK #1 - BOTTOM OF WINDSHIELD
			
439	90030154	1	PAINT FRAME RAILS & BODY REAR DROP - BLACK
440	90030190	1	TEXTURED FRAME RAIL COATING
441	90030015	1	A/C CONDENSER PAINTED ROOF COLOR
442	90630610	1	1/2" 22KT GOLD STRIPE W/PRINTED EDGES AT CAB PAINT BREAK
443	90680120	1	CHEVRON STRIPING, REAR BODY OUTBOARD, REFLEXITE
444	90680320	1	CHEVRON STRIPING, ABOVE REAR COMPT DOOR, REFLEXITE
445	90684120	1	CHEVRON STRIPING, LADDER ENCLOSURE DOOR, REFLEXITE
446	10310420	1	EQUIPMENT
EQUIPMENT			
447	91010000	1	MISC EQUIP - (1) PINT TOUCH-UP PAINT, STAINLESS STEEL NUTS & BOLTS

Line	Item #	Qty	Item Description/Comments
448	91030700	1	ZIAMATIC SAC-44 FOLDING WHEEL CHOCKS (PAIR) MTD W/ SQCH-44H HOLDERS
449	89050900	1	PIKE POLE/FOLDING LADDER COMPT, RIGHT SIDE
450	92067750	6	STREAMLIGHT SL-44401 FIRE VULCAN HANDLIGHT W/12 VOLT CHARGER (6)
451	10310600	1	COMPLETION & WARRANTY
COMPLETION & WARRANTY			
452	99010100	1	MANUALS, ELECTRONIC VERSION (2-USB)
453	99031105	1	PICK-UP UNIT AT FACTORY
454	99520110	1	WARRANTY, ONE YEAR
455	99521100	1	WARRANTY, FRAME, LIFETIME
456	99521200	1	WARRANTY, CAB STRUCTURAL, 10 YR.
457	99521300	1	WARRANTY, BODY STRUCTURAL, 10 YR.
458	99521400	1	WARRANTY, PAINT, 10 YR.
459	99521900	1	WARRANTIES, MAJOR VENDOR COMPONENTS
460	99550450	1	PREMIUM 2000+ ELITE WARRANTY, VALUE PACK BUNDLE, 60 MONTHS / 75,000 MILES (INCLUDES WATER PUMP)
461	10310500	1	DEALER SUPPLIED
DEALER SUPPLIED			
462	SP Mount	1	DEALER SUPPLIED - Sensible Products Mounting
463	BJ-3	1	DEALER SUPPLIED - Ramsey- QM 8000 Winch
464	AB Rev Intake	1	DEALER SUPPLIED - Akron Brass Revolution Valve intake
465	AB Rev Intake	1	DEALER SUPPLIED - Akron Brass Revolution Valve intake
466	Deck Gun 3423	1	DEALER SUPPLIED - Akron Brass Deckgun 3423
467	Graphics	1	DEALER SUPPLIED - Dealer Graphics Package
468	Other	1	DEALER SUPPLIED - OTHER - EQUIPMENT AND CHANGE ORDER FUND



PURCHASE AGREEMENT
FOR SUTPHEN FIRE APPARATUS

THIS AGREEMENT, made and entered into this ____ day of _____, 20__ by and between SUTPHEN CORPORATION of Dublin, Ohio, hereinafter called "SUTPHEN" and the Brook Park Fire Department of Brook Park, Ohio, hereinafter called "PURCHASER",

WITNESSETH:

1. **PURCHASE:** Purchaser hereby agrees to buy and Sutphen hereby agrees to sell and furnish to Purchaser the apparatus and equipment according to the Sutphen Proposal attached hereto and made a part hereof, and to deliver the same as hereinafter provided.
2. **PURCHASE PRICE:** Purchaser agrees to pay for said apparatus and equipment the total purchase price of One million, two hundred & six thousand, four hundred & ninety-two dollars & 75/100 (\$1,206,492.75) payable in full upon delivery.

Changes to National Fire Protection Association ("NFPA"), Environmental Protection Agency ("EPA") or changes legislated by Federal, State or Local Governments or changes in part availability or vendor relationships that impact the cost to manufacture the truck may also incur additional charges which shall be borne by the purchaser. These may include but are not limited to changes that affect the major vendors of the fire apparatus industry such as pump manufacturer, seat manufacturer, electrical power supplies (generators) and powertrain (engine & transmission). Any such changes shall be memorialized by a signed change order executed by both Sutphen and Purchaser.

Sutphen shall provide written notice to Purchaser as soon as it reasonably believes any provision may be invoked. Sutphen shall provide, upon written request, documentation of such changes and increases.

3. **DELIVERY:** The apparatus and equipment being purchased hereunder shall be delivered to Purchaser at Sutphen within approximately 38-44 months after the receipt and acceptance of this agreement at Sutphen's office, provided that such delivery date shall be automatically extended for delays beyond Sutphen's control, including, without limitation, strikes, labor disputes, riots, civil unrest, pandemics, war or other military actions, sabotage, government regulations or controls, fire or other casualty, or inability to obtain materials or services.

4. SUTPHEN WARRANTIES: Sutphen warrants the apparatus purchased here under as set forth in the warranty included with bid proposal.
5. TESTING SHORTAGES: The apparatus shall be tested per NFPA #1901 at Sutphen's manufacturing facility. Purchaser agrees that the apparatus and equipment being purchased hereunder will not be driven or used in any manner until it is paid for in full, provided, however, that if there are any minor shortages, Purchaser may withhold a sum equivalent to the retail purchase price of any equipment shortages at the time of delivery and may use the apparatus and equipment during this period.
6. DEFAULT: In the case of any default in payment hereunder or in the payment on any notes, negotiable paper, obligations or other instruments issued by Purchaser, Sutphen may take full possession of the apparatus and equipment or of the piece or pieces upon which default has been made, and any payments that have been made theretofore shall be applied as rent in full for the use of the apparatus and equipment up to the date of taking possession by Sutphen.
7. PURCHASER WARRANTIES: With the signing of this agreement, Purchaser warrants that it has the full power and legal authority to enter into this agreement and guarantees that funds for its purchase are available or in the process of collection.
8. ACCEPTANCE: This agreement shall not be binding until it is signed and approved by an officer of the Sutphen Corporation.
9. TAXES, ETC.: The purchase price provided for herein does not include any federal, state or local sales tax, duties, imposts, revenues, excise or other taxes which may hereafter be imposed by governmental authority or otherwise and which are made applicable to the apparatus or equipment covered by the agreement. In the event that any such taxes are subsequently imposed and become applicable, the purchase price herein shall be increased by the amount of such taxes and such sum shall be immediately paid by Purchaser to Sutphen. To the extent applicable, the prices and deliveries set forth herein are subject to the Defense Production Act.
10. INSURANCE: Sutphen shall provide insurance insuring the apparatus and equipment against loss by fire, theft or collision and insuring against property damage and personal injury through the three (3) day delivery period.
11. GENERAL: This agreement and the Sutphen proposal provided herein take precedence over all previous negotiations, oral or written, and no representations or warranties are applicable except as specifically contained in this agreement or in the Sutphen proposal attached hereto. No alteration, modification, amendment or change of this Agreement shall be binding unless executed in writing by the parties. No waiver of any of the provisions of this Agreement shall be deemed a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver.

This Agreement shall be governed and controlled as to interpretation, enforcement, validity, construction, effect and in all other respects by the laws, statutes and decisions of the State of Ohio. Exclusive jurisdiction and venue for any litigation at all related to this Agreement, directly or indirectly, based upon contract, tort, or other theory of law, shall lie in the Franklin County Court of Common Pleas, Columbus, Ohio, and the parties hereto consent and submit to the general jurisdiction of this court. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by Sutphen, Purchaser, their successors and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be duly executed and attested by its duly authorized representatives, effective as of the date below when accepted at Sutphen Corporations offices.

SUTPHEN CORPORATION

By _____
Sales Representative

Accepted at office
SUTPHEN CORPORATION
6450 Eiterman Road
Dublin, Ohio 43016

By _____

Title _____

Date _____

PURCHASER

THE Brook Park Fire Department

By _____

Title _____

Date _____

By _____

Title _____

Date _____

Table of Contents

WIRING SCHEMATIC	14
PRE-CONSTRUCTION CONFERENCE	14
INSPECTION TRIPS.....	14
SUTPHEN MONARCH CUSTOM CHASSIS.....	14
DOUBLE FRAME RAILS	14
FRONT BUMPER CLIP	15
FRONT TOW EYES, BELOW BUMPER	15
REAR TOW EYES	15
STEERING	15
DRIVE LINE	15
ENGINE	16
AIR COMPRESSOR.....	16
STARTER.....	16
EXHAUST SYSTEM	16
STAINLESS STEEL TUBING	16
AFTERTREATMENT UNIT.....	16
INSULATED JACKETS	17
ON-BOARD DIAGNOSTIC (OBD) SYSTEM.....	17
ENGINE WARRANTY.....	17
AFTERTREATMENT WARRANTY	18
AIR CLEANER/INTAKE.....	18
PRIMARY FUEL FILTER/WATER SEPARATOR	18
SECONDARY FUEL FILTER.....	18
TRANSMISSION	18
TRANSMISSION FLUID.....	19
ENGINE BRAKE	19
TRANSMISSION COOLER	19
TRANSMISSION SHIFTER.....	20
COOLING SYSTEM	20
RADIATOR	20
CHARGE AIR COOLER	20
COOLANT	20
HOSES & CLAMPS	21

FAN	21
FAN CLUTCH.....	21
SURGE TANK	21
FUEL TANK	22
FUEL FILL.....	22
FUEL COOLER	22
DIESEL EXHAUST FLUID TANK	22
EXHAUST ADAPTER	23
ALTERNATOR	23
LOW VOLTAGE ALARM	23
BATTERIES.....	23
BATTERY JUMPER TERMINAL.....	23
BATTERY CHARGER / INVERTER.....	24
120V SHORELINE INLET & AUTO EJECT.....	24
6 120-VOLT OUTLET WIRED TO SHORELINE INLET	24
FRONT AXLE	24
SUSPENSION (FRONT).....	24
STEER ASSIST.....	25
FRONT TIRES	25
REAR AXLE.....	25
SUSPENSION (REAR)	25
REAR TIRES.....	25
TIRE PRESSURE MONITOR	25
WHEELS.....	26
HUB COVERS	26
LUG NUT CAPS	26
FRONT MUD FLAPS	26
REAR MUD FLAPS.....	26
DATA, SAFETY & WARNING TAGS.....	26
BRAKES, Front.....	26
BRAKES, Rear	26
AIR BRAKE SYSTEM	27
AIR BRAKE SYSTEM RELEASE VALVE	27
AIR INLET.....	28
AUTO-EJECT	28
AIR BRAKING ABS SYSTEM	28

COMPRESSION FITTINGS ON AIR SYSTEM	28
MISCELLANEOUS CHASSIS EQUIPMENT	29
ALUMINUM CAB	29
CAB DESIGN	29
CAB SUB-FRAME	30
ROOF DESIGN	31
FENDER CROWNS	31
CAB INSULATION.....	31
EXTERIOR GLASS	31
SUN VISORS	31
CAB STRUCTURAL INTEGRITY.....	32
SEAT BELT TESTING	32
CAB LOCKDOWN LATCHES.....	32
CAB TILT SYSTEM	32
MANUAL CAB LIFT	33
CAB DOORS.....	33
CAB STEPS	33
AUXILIARY CAB STEPS	34
STEP LIGHTS.....	34
POWER WINDOWS	34
SIDE WINDOWS	34
WINDOW TINTING	34
WINDSHIELD WIPERS.....	35
WINDSHIELD WASHER RESERVOIR	35
MIRRORS.....	35
UPPER GRILLE	35
UPPER GRILLE LOGO	35
LOWER GRILLE	35
PAINTED STEEL BUMPER	36
BUMPER SIDES.....	36
BUMPER ANGLE SIDES	36
STORAGE WELL COMPARTMENT	36
DIAMOND PLATE BUMPER LID	36
PROTECTIVE BUMPER COATING	37
RECEIVER (Front)	37
WIRING	37

AIR HORNS	37
AIR HORN BUMPER CUT-OUTS	37
LANYARD CONTROL FOR AIR HORNS	37
ELECTRONIC SIREN	37
SIREN SPEAKERS	38
SPEAKER MOUNTING	38
FEDERAL Q2B SIREN	38
FOOT SWITCH, DRIVER'S SIDE	38
FOOT SWITCH, OFFICER'S SIDE	38
SIREN BRAKE SWITCH	38
CAB EXTERIOR LIGHTING	38
HEADLIGHTS	39
FRONT TURN SIGNALS	39
ICC/MARKER LIGHTS	39
EXTERIOR CAB HANDRAILS	39
COAT HOOKS FOR GRAB HANDLES	39
COAT HOOKS FOR GRAB HANDLES	40
INTERIOR CAB HANDRAILS	40
INTERIOR CAB HANDRAILS	40
CAB DOOR HANDRAILS	40
INTERIOR DOOR STRAP	40
DRIVER'S SIDE CAB COMPARTMENT	40
OFFICER'S SIDE CAB COMPARTMENT	41
PIKE POLE STORAGE COMPARTMENT	41
ADJUSTABLE SHELF	41
SCBA BRACKET	41
EXTERIOR CAB COMPARTMENT LIGHTING	41
CAB ROOF OVERLAY	41
CAB INTERIOR	42
INTERIOR DOOR PANELS	42
CAB FLOOR COVERING	42
DIAMOND PLATE, CAB FLOOR	42
ENGINE ENCLOSURE	42
ENGINE ENCLOSURE COVERING	43
TOOL MOUNTING PLATE	43
ENGINE HOOD LIGHTS	43

WORK SURFACE	43
UPPER CREW DOOR AREA	43
CHASSIS WIRING	43
MASTER ELECTRICAL PANEL	44
INSTRUMENT PANEL.....	45
MASTER BATTERY & IGNITION SWITCH.....	45
DIESEL PARTICULATE FILTER CONTROLS.....	45
INSTRUMENTATION & CONTROLS.....	45
CENTER CONTROL CONSOLE.....	47
OVERHEAD CONTROL CONSOLE	48
ENGINE WARNING SYSTEM	48
PUMP SHIFT MODULE.....	49
PUMP INTERLOCK.....	49
DO NOT MOVE APPARATUS INDICATOR LIGHT	49
MAPBOOK SLOT.....	49
PROGRAMMABLE LOAD MANAGER	49
HIGH IDLE.....	50
CAB ACCESSORY FUSE PANEL	50
POWER & GROUND STUDS, OVERHEAD COMMAND CONSOLE	50
POWER & GROUND STUDS, UNDER OFFICER'S SEAT	51
VEHICLE DATA RECORDER	51
AUXILIARY POWER POINT	51
DUAL USB POWER POINT	51
LIGHTING CAB INTERIOR.....	51
LIGHTING CREW CAB INTERIOR.....	52
CAB PILLAR SPOT LIGHT	52
HEAVY DUTY HEATER/DEFROSTER/AIR CONDITIONER.....	52
HEATER/DEFROSTER/AIR CONDITIONING CONTROLS.....	52
FLOORBOARD HEATING DUCT	53
DEFROSTER DIFFUSER.....	53
TOOL MOUNTING PLATE	53
DRIVER'S SEAT	53
HELMET STORAGE	53
OFFICER'S SEAT	53
UNDER SEAT STORAGE COMPARTMENT	54
HELMET STORAGE	54

CREW SEAT – DRIVER’S SIDE, REAR FACING	54
HELMET STORAGE	54
CREW SEAT – OFFICER’S SIDE, REAR FACING	54
HELMET STORAGE	54
CREW SEAT – DRIVER’S SIDE, FORWARD FACING, INBOARD	55
HELMET STORAGE	55
EMS CABINET	55
INTERIOR COMPARTMENT OPENING	55
ADJUSTABLE SHELVES	55
DOOR LOCK	55
SEAT UPHOLSTERY COLOR	55
SCBA BRACKETS	55
SEAT BELT WARNING SYSTEM	56
CREW SEAT COMPARTMENT	56
IN-CAB OVERHEAD STORAGE AREA	56
ANTENNA MOUNTING	56
HD STEREO	57
COMMUNICATION SYSTEM	57
CAMERA SYSTEM	57
MOUNTING OF 5 RADIO VEHICLE CHARGERS	57
SUTPHEN SUPPLIED RADIO DUAL HEAD, MOUNTED	57
SUTPHEN SUPPLIED RADIO DUAL HEAD, MOUNTED	58
FIRE PUMP HALE QMAX-200	58
PUMP TRANSFER CASE – G SERIES	58
PUMP SEAL	59
MANUAL PUMP SHIFT OVERRIDE	59
PUMP TEST & CERTIFICATION	59
AUXILIARY COOLER	59
PUMP CONNECTIONS	60
TANK TO PUMP	60
VALVE	60
VALVE ACTUATOR	60
TANK FILL	60
VALVE	61
VALVE ACTUATOR	61
PRESSURE GOVERNOR	61

INTAKE RELIEF.....	61
6" PUMP INLET	61
3" INLET LEFT SIDE	61
VALVE.....	62
VALVE ACTUATOR.....	62
THREAD TERMINATION	62
6" PUMP INLET	62
3" INLET	62
VALVE.....	62
VALVE ACTUATOR.....	63
THREAD TERMINATION	63
INLET ADAPTER.....	63
FRONT SUCTION	63
INTAKE VALVE.....	63
INTAKE RELIEF.....	63
ADAPTER.....	64
FRONT SUCTION ADAPTER	64
DISCHARGE #1 - LEFT	64
VALVE.....	64
VALVE ACTUATOR.....	64
2.5" PRESSURE GAUGE	64
DISCHARGE TERMINATION	65
THREAD TERMINATION	65
DISCHARGE ADAPTER	65
DISCHARGE ADAPTER	65
DISCHARGE #2 - LEFT	65
VALVE.....	66
VALVE ACTUATOR.....	66
2.5" PRESSURE GAUGE	66
DISCHARGE TERMINATION	66
THREAD TERMINATION	66
DISCHARGE ADAPTER	66
DISCHARGE ADAPTER	67
DISCHARGE #3 - RIGHT	67
VALVE, SLOW CLOSE	67
VALVE ACTUATOR.....	67

2.5" PRESSURE GAUGE	67
DISCHARGE TERMINATION	68
THREAD TERMINATION	68
DISCHARGE ADAPTER	68
DISCHARGE #4 - RIGHT	68
VALVE, SLOW CLOSE	68
VALVE ACTUATOR.....	68
2.5" PRESSURE GAUGE	69
DISCHARGE TERMINATION	69
THREAD TERMINATION	69
DISCHARGE ADAPTER	69
DISCHARGE #5 - RIGHT	69
VALVE.....	69
VALVE ACTUATOR.....	70
2.5" PRESSURE GAUGE	70
DISCHARGE TERMINATION	70
THREAD TERMINATION	70
DISCHARGE ADAPTER	70
DISCHARGE ADAPTER	71
2 CAPS FOR 5 INCH STORZ	71
2 CAPS FOR 5 INCH STORZ	71
2.5" ADAPTOR X 2.....	71
2.5" DISCHARGE LEFT REAR	71
VALVE.....	71
VALVE ACTUATOR.....	71
2.5" PRESSURE GAUGE	71
DISCHARGE TERMINATION	72
THREAD TERMINATION	72
DISCHARGE ADAPTER	72
DISCHARGE ADAPTER	72
2.5" REAR DISCHARGE	72
VALVE.....	73
VALVE ACTUATOR.....	73
2.5" PRESSURE GAUGE	73
DISCHARGE TERMINATION	73
THREAD TERMINATION	73

DISCHARGE ADAPTER	73
DISCHARGE ADAPTER	74
FRONT BUMPER DISCHARGE	74
VALVE.....	74
VALVE ACTUATOR.....	74
2.5" PRESSURE GAUGE	74
THREAD TERMINATION	75
DISCHARGE ADAPTER	75
DISCHARGE ADAPTER	75
GATED WYE.....	75
DELUGE RISER	75
VALVE, SLOW CLOSE	75
VALVE ACTUATOR.....	75
2.5" PRESSURE GAUGE	76
DECK GUN TERMINATION.....	76
EXTENDER	76
THREAD TERMINATION	76
SPEEDLAYS	76
CROSSLAY.....	76
VALVE.....	77
VALVE ACTUATOR.....	77
2.5" PRESSURE GAUGE	77
THREAD TERMINATION	77
DISCHARGE ADAPTER	77
CROSSLAY COVER.....	78
SPEEDLAY COVER.....	78
COVER FASTENERS.....	78
3 HOSE TRAYS	78
MASTER PUMP DRAIN	78
DRAIN VALVES LIFT UP STYLE	78
SMARTFOAM 2.1A PROPORTIONING SYSTEM.....	78
FOAM TANK	79
FOAM FLUSH.....	80
PUMP AND GAUGE PANELS, SIDE MOUNT	80
PANEL FINISH	80
ESCUTCHEON PLATES	80

COLOR CODING.....	80
PUMP MODULE FRAMEWORK.....	81
PLUMBING FINISH.....	81
EXTERIOR DUNNAGE AREA.....	81
RUNNING BOARD TROUGHS.....	81
PUMP PANEL LIGHTING, LED	81
PUMP PANEL LIGHTING, LED	82
PUMP MODULE ENCLOSURE LED LIGHT.....	82
PUMP PANEL LIGHTS	82
PUMP PANEL GAUGES AND CONTROLS	82
PRIMING SYSTEM.....	82
(1) PRIMER BUTTON - MAIN SUCTION.....	82
COMPRESSION FITTINGS ON AIR SYSTEM	83
AIR HORN BUTTON	83
MICROPHONE COMPARTMENT.....	83
4" MASTER GAUGES	83
WATER TANK GAUGE.....	83
WATER TANK GAUGE.....	83
FOAM TANK GAUGE	84
WATER TANK	84
WATER TANK SIZE.....	85
BODY SUB-FRAME.....	85
APPARATUS BODY	85
REAR STEP COMPARTMENTATION	86
COMPARTMENTATION LEFT SIDE.....	86
COMPARTMENTATION RIGHT SIDE	86
UPPER HATCH COMPARTMENTS.....	87
OIL DRY HOPPER.....	87
COMPARTMENT INTERIOR - L1.....	87
ADJUSTABLE SHELF	87
COMPARTMENT INTERIOR - L2.....	87
ADJUSTABLE SHELF	88
COMPARTMENT INTERIOR - L3.....	88
ADJUSTABLE SHELF	88
COMPARTMENT DIVIDER.....	88
ADJUSTABLE VERTICAL SLIDE-OUT PANEL.....	88

600# SLIDE-MASTER TRAY	88
COMPARTMENT INTERIOR - R1	88
ADJUSTABLE SHELF	89
600# SLIDE-MASTER TRAY	89
COMPARTMENT INTERIOR - R2	89
ADJUSTABLE SHELF	89
COMPARTMENT INTERIOR - R3	89
ADJUSTABLE SHELF	89
600# SLIDE-MASTER TRAY	89
COMPARTMENT INTERIOR - A1	90
600# SLIDE-MASTER TRAY	90
UNISTRUT	90
ROLL-UP COMPARTMENT DOORS	90
PAINTED ROLL-UP DOORS	91
REAR COMPARTMENT DOOR	91
ROLL UP DOOR DRIP PAN/SPLASHGUARD.....	91
COMPARTMENT INTERIOR FINISH.....	91
COMPARTMENT LIGHTING	91
ADDITIONAL GRAB RAILS HANDLES.....	91
ROM WHITE/RED COMPARTMENT LIGHTS.....	91
HOSE BED.....	92
HOSE BED COVER.....	92
HOSEBED SUPPORT.....	92
REAR HOSE BED COVER	92
COVER FASTENERS.....	92
5 HOSE BED DIVIDERS.....	92
SIDE HOSEBED LIGHTING	92
REFLECTIVE LETTERING, REAR HOSE BED FLAP	92
BODY HANDRAILS	93
FRONT BODY STEPS	93
REAR STEPS	93
REAR ACCESS LADDER.....	93
RUB RAILS	94
ALUMINUM TREADPLATE	94
REAR STEP CORNERS.....	94
AIR BOTTLE COMPARTMENTS	94

DIVIDERS.....	95
DOOR FINISH.....	95
DOOR FINISH.....	95
FENDER PANELS.....	95
LADDER EQUIPMENT.....	95
GROUND LADDER STORAGE.....	95
LADDER CHUTE DOOR.....	96
LADDER ENCLOSURE.....	96
TRASH HOOK / PIPE POLE STORAGE.....	96
RECEIVER (Sides).....	96
RECEIVER (Rear).....	96
WIRING.....	96
BODY ELECTRIC SYSTEM.....	96
BACK-UP ALARM.....	97
STOP/TAIL/TURN/REVERSE LIGHTS.....	98
LED ICC/MARKER LIGHTS.....	98
STEP LIGHTS.....	98
GROUND LIGHTS.....	98
OPTICAL WARNING SYSTEM.....	98
UPPER LEVEL WARNING DEVICES.....	99
LOWER LEVEL WARNING DEVICES.....	99
ADDITIONAL WARNING LIGHTS.....	100
ADDITIONAL WARNING LIGHTS.....	100
WARNING LIGHT, ROTO-RAY, LED.....	100
TRAFFIC ADVISOR.....	100
ADDITIONAL LIGHTBARS, WHELEN MINI FREEDOM IV 23.25" LED ROTABEAM LIGHT BARS (PAIR).....	100
SURFACE MOUNTED LED SCENE LIGHT.....	100
TELESCOPIC SCENE LIGHT.....	101
SURFACE MOUNTED LED SCENE LIGHT.....	101
BROW MOUNTED LED SCENE LIGHT.....	101
ADDITIONAL 3-WAY SWITCH.....	101
BROW LIGHT SWITCHING.....	101
CORROSION REDUCTION POLICY.....	101
PAINTING.....	104
PAINT TWO TONE.....	105
CAB PAINT BREAK LOCATION.....	105

PAINTED FRAME	106
TEXTURED FRAME RAIL COATING.....	106
AIR CONDITIONING CONDENSER.....	106
CHEVRON STRIPING, REAR BODY OUTBOARD, ORAFOL REFLEXITE	106
CHEVRON STRIPING, ABOVE REAR COMPT. DOOR, ORAFOL REFLEXITE	106
CHEVRON STRIPING, LADDER CHUTE DOOR, ORAFOL REFLEXITE	106
MISCELLANEOUS EQUIPMENT FURNISHED	107
WHEEL CHOCKS	107
PIKE POLE & FOLDING LADDER COMPARTMENT.....	107
RECHARGEABLE HANDLIGHT	107
OPERATION AND SERVICE MANUALS	107
APPARATUS COMPLETION.....	107
DEALER PREP/INSPECTION	108
WARRANTIES	108
MANUFACTURING & LOCATIONS	108
SENSIBLE PRODUCT	108
WINCH	109
INTAKE VALVES	109
DECKGUN	109
GRAPHICS.....	109
EQUIPMENT AND CHANGE ORDER FUND.....	109

WIRING SCHEMATIC

Wiring diagrams of the apparatus shall be provided on a USB flash drive at the time of delivery.

PRE-CONSTRUCTION CONFERENCE

After award of the contract, and prior to construction of the apparatus, a pre-construction conference shall be held at the facility of the manufacturer.

INSPECTION TRIPS

An inspection trip shall be provided at the manufacturer's facility, prior to delivery of the completed apparatus. Bidder shall specify the number of personnel included.

SUTPHEN MONARCH CUSTOM CHASSIS

A Sutphen Monarch Severe Duty Cab and Chassis system shall be provided. The chassis shall be manufactured in the factory of the bidder. The chassis shall be designed and manufactured for heavy duty service with adequate strength and capacity of all components for the intended load to be sustained and the type of service required. The cab and chassis system, shall be considered the bidders "Top of the Line". There shall be no divided responsibility in the production of the apparatus.

DOUBLE FRAME RAILS

The chassis frame shall be of a ladder type design utilizing industry accepted engineering best practices. The frame shall be specifically designed for fire apparatus use.

Each frame rail shall be constructed of two .375" thick-formed channels. The outer channel shall be 10.188" x 3.50" x .375" and the inner channel (liner) shall be 9.31" x 3.13" x .375".

Over the entire length of the frame rail, the section modulus shall be 31.8 in.³. The resistance to bending moment (RBM) shall be 1,590,000 in./lbs.

The cross-members shall be constructed of minimum .375" formed channels and have formed gusseted ends at the frame rail attachment. Single axle rear suspensions will utilize 3 piece bolt assembled cross-members at each suspension hanger.

Each rail is media blasted to remove scale, oil, and contaminants. This blasting also ensures paint adhesion. Each rail will be primed with Cathacoat 302HB, a high performance, two component, reinforced inorganic zinc-rich primer with proven cathodic protection of steel structures, prior to assembly.

.625 inch, grade 8 flange, Huck bolt fasteners shall be used on all permanently attached brackets to the frame to eliminate the need for bolt re-tightening.

A lifetime warranty shall be provided, per manufacturer's written statement.

FRONT BUMPER CLIP

The front clip of the subframe shall be designed with a built-in skid plate to protect the engine and chassis components. The front clip shall be painted the same color as the frame.

FRONT TOW EYES, BELOW BUMPER

There shall be two front tow eyes with 3" diameter holes attached directly to the chassis frame, accessible below the front bumper.

REAR TOW EYES

There shall be two tow eyes attached directly to the chassis subframe and shall be chromate acid etched for superior corrosion resistance and painted to match the chassis.

STEERING

The steering system shall be a TRW wheel to wheel steering system that is tested and certified by TRW, consisting of a heavy duty TRW/Ross Model TAS-85 power steering gear, TRW PS36 steering pump, miter box, drag links, and a thermostatic controlled fan cooled system (set point 185 deg. F to 170 deg. F). The steering gear shall be bolted to the frame at the cross-member for steering linkage rigidity. Four (4) turns from lock to lock with an 18" diameter slip resistant rubber covered steering wheel. Steering column shall have six-position tilt and 2" telescopic adjustment. The cramp angle shall be 45 degrees with 315mm tires or 43 degrees with 425mm tires providing very tight turning ability.

DRIVE LINE

A Spicer 1810 series driveline shall be provided with Meritor dual grease l grease fitting universal joints with "half-round" end yokes. The drive shaft shall be built with a heavy-duty steel tube 4.095" outside diameter x .180 wall thickness. The shafts shall be dynamically balanced prior to installation into the chassis. A splined slip joint shall be provided in each shaft assembly. Universal joints shall be extended life. There shall be two (2) Zerk fittings in each universal joint assembly so the joint can be greased without turning the shaft.

ENGINE

The apparatus shall be powered by a Cummins Diesel X 10 450 HP and up to 1,650 ft. lb. torque @ 1800 R.P.M.

AIR COMPRESSOR

The air compressor shall be an 18.7 CFM engine driven Wabco.

STARTER

A 12-volt starter shall be provided, controlled by a switch on the left lower cab dash.

EXHAUST SYSTEM

The engine exhaust system shall be horizontal design constructed from heavy-duty truck components.

The engine exhaust system shall include the following components:

STAINLESS STEEL TUBING

Stainless Steel Flexible Bellows mounted at the turbo outlet. Stainless steel piping to the Aftertreatment Unit. Stainless steel piping from the Aftertreatment Unit to the stainless steel heat diffuser outlet.

AFTERTREATMENT UNIT

The single canister Aftertreatment Unit is a self-contained exhaust treatment system which includes:

DPF (diesel particulate filter)
DEF Injector/Reactor
SCR (selective catalytic reducer)

The DEF injector/reactor utilizes the DEF fluid, which consists of urea and purified water, to convert NOx into nitrogen and water. This will meet or exceed 2027 EPA emissions requirements. A heated aftertreatment system shall be provided that is powered from a belt-driven 48V alternator on the engine.

The Stainless Steel Flexible Bellows shall be used to isolate the exhaust system from engine vibrations. The single canister Aftertreatment Unit shall be mounted under the right side frame rail, meeting the specific engine manufacturer's specifications and current emission level requirements. The heat diffuser outlet shall be directed to the forward side of the rear wheels, exiting the right side with a heavy duty heat diffuser. The heat diffuser shall prevent the exhaust temperature from exceeding 851 deg. F during a regeneration cycle.

INSULATED JACKETS

Heat-absorbing, removable, insulated jackets shall be provided on the exhaust system from the turbo outlet in the engine compartment to the Aftertreatment Unit. The jackets will cover all piping, including the bellows, between the engine and the Aftertreatment Unit per engine manufacturers requirements insuring that the exhaust stream temperature remains elevated to ensure functionality with the Aftertreatment Unit. Additionally, the insulated jackets will protect the engine componentry from excessive heat generated by the exhaust.

ON-BOARD DIAGNOSTIC (OBD) SYSTEM

The engine shall be equipped with an on-board diagnostic (OBD) system which shall monitor emissions-related engine systems and components and alert the operator of any malfunctions. The OBD system is designed to further enhance the engine and operating system by providing early detection of emission-related faults. The engine control unit (ECU) will manage smart sensors located throughout the engine and after-treatment system. The system shall monitor component verification and sensor operation. There shall be warning lights located in the dash instrument panel to alert the operator of a malfunction. A data port shall be provided under the driver's side dash for the purpose of code reading and troubleshooting. All communication shall be provided through the J1939 data link.

ENGINE WARRANTY

The engine shall have a five (5) year or 100,000 mile warranty and approval by Cummins Diesel for Full Engine Coverage Plan (RVF) – which is their most complete engine coverage plan, which includes EGR components installation in the chassis. There shall be no deductible for the first two years. A one hundred dollar deductible shall apply for service beginning the third year.

AFTERTREATMENT WARRANTY

The engine shall have a five (5) year or 100,000 mile aftertreatment coverage warranty, which covers failures of the Aftertreatment Assembly which result, under normal use and service, from a defect in Cummins material or factory workmanship.

AIR CLEANER/INTAKE

The engine air intake and filter shall be designed in accordance with the engine manufacturer's recommendations. It shall be 99.9% effective in removing airborne contaminants when tested per the industry standard SAE J726 procedure and offer a dirt holding capacity of at least 3.0 gm/cfm of fine dust (tested per SAE J726) offering superior engine protection.

The air filter shall be located at the front of the apparatus and shall be at least 66" above the ground, to allow fording deep water in an emergency situation.

An ember separator shall be provided in the engine air intake meeting, the requirements of NFPA 1901.

An Air Restriction warning light shall be provided and located on the cab dash.

PRIMARY FUEL FILTER/WATER SEPARATOR

A Cummins approved Fleetguard Fuel Pro FH230 fuel filter/water separator shall be remote mounted to the chassis frame rail.

SECONDARY FUEL FILTER

A Cummins approved Fleetguard FF825NN fuel filter will be mounted on the driver's side of the engine.

TRANSMISSION

The chassis shall be equipped with a Generation 6 Allison EVS4000 six (6) speed automatic transmission. It shall be programmed five (5) speed, sixth gear locked out, for fire apparatus vocation, in concert with the specified engine.

The transmission is communicated on the J-1939 through the communication port. The fifth gear shall be an overdrive ratio, permitting the vehicle to reach its top speed at the engine's governed speed. The dipstick is dipped in a rubber coating for ease in checking oil level when hot.

The chassis to transmission wiring harness shall utilize Metri-Pack 280 connectors with triple lip silicone seals and clip-type positive seal connections to protect electrical connections from contamination without the use of coatings.

Ratings: Max Input (HP) 600
Max Input (Torque) 1850 (lb ft)
Max Turbine (Torque) 2600 (lb ft)

Mechanical Ratios: 1st - 3.51:1

2nd - 1.91:1

3rd - 1.43:1

4th - 1.00:1

5th - 0.74:1

Reverse - -5.00:1

TRANSMISSION FLUID

The transmission shall come filled with an Allison approved Synthetic Transmission Fluid that meets the Allison TES-295 specification.

ENGINE BRAKE

The engine shall be equipped with a Jacobs compression engine brake. An "On/Off" switch and a control for "Low/High" shall be provided on the instrument panel within easy reach of the driver.

The engine brake shall interface with the Wabco ABS brake controller to prevent engine brake operations during adverse braking conditions.

A pump shift interlock circuit shall be provided to prevent the engine brake from activating during pumping operations.

The brake light shall activate when the engine brake is engaged.

TRANSMISSION COOLER

The apparatus transmission shall be equipped with a Liquid-To-Liquid remote mounted cooler with aluminum internal components. The cooler shall be encased in an aluminum housing and mounted to the outside of the officer's side frame rail for accessibility and ease of service.

TRANSMISSION SHIFTER

An Allison "Touch Pad" shift selector shall be mounted to the right of the driver on the engine cover accessible to the driver. The shift position indicator shall be indirectly lit for nighttime operation.

COOLING SYSTEM

The cooling system shall be designed to keep the engine properly cooled under all conditions of road and pumping operations. The cooling system shall be designed and tested to meet or exceed the engine and transmission manufacturer's requirements, and EPA regulations.

The complete cooling system shall be mounted in a manner to isolate the system from vibration and stress. The individual cores shall be mounted in a manner to allow expansion and contraction at various rates without inducing stress to the adjoining core(s).

The cooling system shall be comprised of a charge air cooler to radiator serial flow package that provides the maximum cooling capacity for the specified engine as well as serviceability. The main components shall include a surge tank, a charge air cooler, bolted to the top of the radiator to maximize cooling, recirculation shields, a shroud, a fan, and required tubing. All components shall consist of an individually sealed system.

RADIATOR

The radiator shall be a cross-flow design constructed completely of aluminum with welded side tanks. The radiator shall be bolted to the bottom of the charge air cooler to allow a single depth core, thus allowing a more efficient and serviceable cooling system.

The radiator shall be equipped with a drain cock to drain the coolant for serviceability. The drain cock shall be located at the lowest point of the aluminum cooling system to maximize draining of the system.

CHARGE AIR COOLER

The charge air cooler shall be of a cross-flow design and constructed completely of aluminum with extruded tanks. The charge air cooler shall be bolted to the top of the radiator to allow a single depth core.

COOLANT

The cooling system shall be filled with a 50/50 mix. The coolant makeup shall contain ethylene glycol and de-ionized water to prevent the coolant from freezing to a temperature of -34 degrees F.

HOSES & CLAMPS

Silicone hoses shall be provided for all engine coolant lines.

All radiator hose clamps shall be spring loaded stainless steel constant torque hose clamps for all main hose connections to prevent leaks. Recirculation shields shall be installed where required to prevent heated air from reentering the cooling package and affecting performance.

FAN

The engine cooling system shall incorporate a heavy-duty composite 11- blade Z-series fan. It shall provide the highest cooling efficiently while producing the lowest amount of noise. This robust yet light-weight fan results in less wear and stress on motors and bearings.

A shroud and recirculation shield system shall be used to ensure air that has passed through the radiator is not drawn through again.

The fan tip to radiator core clearance shall be kept at a minimal distance to increase the efficiency of the fan and reduce fan blast noise.

FAN CLUTCH

A fan clutch shall be provided that shall allow the cooling fan to operate only when needed. The fan shall remain continuously activated when the truck is placed in pump gear.

SURGE TANK

The cooling system shall be equipped with an aluminum surge tank mounted to the officer's side of the cooling system core. The surge tank shall house a low coolant probe and sight glass to monitor the coolant level. Low coolant shall be alarmed with the check engine light. The surge tank shall be equipped with a dual seal cap that meets the engine manufacturer's pressure requirements, and system design requirements.

The tank shall allow for expansion and to remove entrained air from the system. There shall also be an extended fill neck to prevent system overfill and encroachment of expansion air space. Baffling shall be installed in the tank to prevent agitated coolant from being drawn into the engine cooling system.

FUEL TANK

The chassis shall be equipped with a 65-gallon stainless steel rectangular fuel tank. The fuel tank shall be certified to meet FMVSS 393.67 tests. It shall also maintain engine manufacturer's recommended expansion room of 5%.

The tank shall be removable by means of six (6) bolted connections and dropped. One (1) tank baffle shall be used.

Dual pick-up and return ports with a single 3/4" tank drawtube shall be provided for diesel generators if required.

The fuel lines shall be nylon braid reinforced fuel hose with brass fittings. The lines shall be carefully routed along the inside of the frame rails. All fuel lines are covered in high temperature rated split plastic loom. Single suction and return fuel lines shall be provided.

The fuel tank shall be mounted in a saddle with a barrier between the tank and the saddle. The bottom of the fuel tank shall contain a 1/2" drain plug.

FUEL FILL

The fuel tank shall be equipped with a 2-1/4" filler neck assembly with a 3/4" vent located on the driver's side of the truck. A fuel fill cap attached with a lanyard shall be provided.

FUEL COOLER

Installed on the apparatus fuel system shall be an Air-To-Liquid aluminum fuel cooler. The fuel cooler shall be located in the lowest module of the cooling system.

DIESEL EXHAUST FLUID TANK

The exhaust system shall include a molded cross linked polyethylene tank. The tank shall have a capacity of 5 usable gallons and shall be mounted on the left side of the chassis frame.

The DEF tank fill neck shall accept only a 19mm dispensing nozzle versus the standard 22mm diesel fuel dispensing nozzle to prevent cross contamination. The DEF tank cap shall be blue in color to further prevent cross contamination.

A placard shall accompany fill location noting DEF specifications.

EXHAUST ADAPTER

The exhaust shall terminate to accept a station mounted PlymoVent® exhaust system.

ALTERNATOR

A 420 ampere Prestolite/Leece Neville alternator with serpentine belt shall be provided. The alternator shall generate 260 amperes at idle.

LOW VOLTAGE ALARM

A Floyd Bell TXB-V86-515-QF low voltage alarm, audible and visual, shall be provided.

BATTERIES

The battery system shall be a single system consisting of four (4) negative ground, 12 volt Interstate Group 31 MHD batteries, cranking performance of 950 CCA each with total of 3800 amps, 185 minute reserve capacity with 25 ampere draw at 80 degrees Fahrenheit. Each battery shall have 114 plates. The batteries shall include a one-year warranty which shall be accepted nationwide.

The batteries shall be installed in a vented 304 stainless steel battery box with a removable aluminum cover to protect the batteries from road dirt and moisture. The battery cover shall be secured with four "T" handle rubber hold downs to provide easy access for maintenance and inspection. Stainless steel hardware will be used for installation. The batteries are to be placed on dri-deck and secured with a fiberglass hold down. The batteries shall be wired directly to starter motor and alternator.

The battery cables shall be 3/0 gauge. Battery cable terminals shall be soldering dipped, color-coded and labeled on heat shrink tubing with a color-coded rubber boot protecting the terminals from corrosion.

There shall be a 350-ampere fuse protecting the pump primer and a 250-ampere fuse protecting the electric cab tilt pump and other options as required.

BATTERY JUMPER TERMINAL

There shall be one set (two studs) of battery jumper terminals located by the battery box under the cab. The terminals shall have plastic color-coded covers. Each terminal shall be tagged to indicate positive/negative.

BATTERY CHARGER / INVERTER

A Kussmaul Auto Power 1500W 55 amp inverter charger shall be provided and installed in the cab. The unit shall include a built-in high output 3 stage charger (1-hr boost) for rapid battery replenishment- programmable for various battery types; Gel, Lead Acid, or AGM battery. The charger shall be wired to the 120V shoreline inlet.

120V SHORELINE INLET & AUTO EJECT

The apparatus shall be equipped with a 120V shoreline inlet to provide power to the battery charger from an external source. The inlet shall include a Kussmaul 091-55-234-XXX Super 20 Auto Eject featuring a built in bar graph display on the cover. Also featuring a 12 volt solenoid which shall eject the shoreline cord away from vehicle path upon sensing engine start. After ejection, a weatherproof cover shall snap into position over inlet.

A 20 amp connector shall be provided and shipped loose for connecting the external shoreline cord to the inlet.

6 120-VOLT OUTLET WIRED TO SHORELINE INLET

Six (6) 120-volt outlet shall be provided and wired to the shoreline inlet. The location of the outlet shall be determined during the pre-construction conference.

FRONT AXLE

A Hendrickson STEERTEK NXT non-driving, front steer axle with a capacity of 20,000 pound shall be provided. The axle shall have a 3.74" drop and will have a fabricated boxed shaped cross section, a one piece knuckle, and serviceable king pin. Adjustable Ackerman settings shall be available, and determine based on wheelbase. The axle shall have 10 bolt hub piloted, and furnished with oil seals.

SUSPENSION (FRONT)

The front suspension shall be a parabolic taper-leaf spring design, 56" long and 4" wide. Long life, maintenance free, threaded pin bushings in spring shackles shall be utilized. All spring and suspension

mounting shall be attached directly to frame with high strength Huck bolts and self-locking round collars. Progressive rate bump stop and custom tuned passive hydraulic damper shall be supplied. NO EXCEPTIONS.

STEER ASSIST

The steer assist provides driver assistance when turning the vehicle left or right while traveling.

FRONT TIRES

Front tires shall be Goodyear 385/65R22.5, load range J, G296 highway tread, single tubeless type with a GAWR of 20,000 pounds. Wheels shall be disc type, hub piloted, 22.5 x 12.25 10 stud 11.25 bolt circle.

REAR AXLE

The rear axle shall be a Meritor™ RS-30-185 Single reduction drive axle with a capacity of 31,000 lbs. The axles shall be hub piloted, 10 studs, furnished with oil seals.

SUSPENSION (REAR)

31,000 LB AIR RIDE

A Hendrickson FIREMAAX model FMX312 air ride rear suspension shall be provided. The suspension shall be a dual air spring design equipped with dual height control valves to maintain proper ride height. To reduce axle stress and maintain axle position and pinion angle the suspension design shall incorporate three torque rods. The ground rating of the suspension shall be 31,000 pounds.

REAR TIRES

Rear tires shall be Goodyear 315/80R22.5, load range L, Endurance TSD Mud and Snow tread, dual tubeless type with a GAWR up to 31,000 pounds. Wheels shall be disc type, hub piloted, 22.5 x 9 10 stud with 11.25" bolt circle.

TIRE PRESSURE MONITOR

A Quick Pressure mechanical tire pressure sensor/indicator shall be provided for each wheel. The pressure sensor shall indicate if the tire is properly inflated. Each indicator shall have a green & red display visible inside a sight glass on the sensor. Full green indicates that the pressure is correct. Partial green/red indicates

that the tire is under inflated by as little as 10%. Full red indicates that the tire is under inflated by 25% or more. The indicators shall replace the standard valve stem caps. A total of six (6) indicators shall be provided.

WHEELS

The front and rear wheels shall be ALCOA® brand aluminum. DURA-BRIGHT® finish shall be provided on front and outside-rear wheels.

HUB COVERS

Polished stainless steel hub covers shall be provided for the front and rear axle.

LUG NUT CAPS

Chrome plated lug nut caps shall be provided for the front and rear wheels.

FRONT MUD FLAPS

Hard rubber mud flaps shall be provided for front tires.

REAR MUD FLAPS

Hard rubber mud flaps shall be provided for the rear tires.

DATA, SAFETY & WARNING TAGS

All data, safety and warning tags shall be affixed with a commercial grade adhesive.

BRAKES, Front

The front brakes shall be Meritor S-cam style. They shall be 16.5" x 6" with heavy-duty return springs, and a double anchor pin design. They shall also have quick-change shoes for fast easy brake relining.

BRAKES, Rear

The rear brakes shall be Meritor S-cam style. They shall be 16.5" x 7" with heavy-duty return springs, and a double anchor pin design. They shall also have quick-change shoes for fast easy brake relining.

AIR BRAKE SYSTEM

The vehicle shall be equipped with air-operated brakes. The system shall meet or exceed the design and performance requirements of current FMVSS-121 and test requirements of current NFPA 1901 standards.

Each wheel shall have a separate brake chamber. A dual treadle valve shall split the braking power between the front and rear systems.

All main brake lines shall be color-coded nylon type protected in high temperature rated split plastic loom. The brake hoses from frame to axle shall have spring guards on both ends to prevent wear and crimping as they move with the suspension. All fittings for brake system plumbing shall be brass.

A Meritor Wabco System Saver 1200 air dryer shall be provided.

The air system shall be provided with a rapid build-up feature, designed to meet current NFPA 1901 requirements. The system shall be designed so the vehicle can be moved within 60 seconds of startup. The quick build up system shall provide sufficient air pressure so that the apparatus has no brake drag and is able to stop under the intended operating conditions following the 60-second buildup time. The vehicle shall not be required to have a separate on-board electrical air compressor or shoreline hookup to meet this requirement.

Five (5) supply tanks shall be provided. One air reservoir shall serve as a wet tank and a minimum of one tank shall be supplied for each the front and rear axles. A Schrader fill valve shall be mounted in the front of the driver's step well.

A spring actuated air release emergency/parking brake shall be provided on the rear axle. One (1) parking brake control shall be provided and located on the engine hood next to the transmission shifter within easy reach of the driver. The parking brake shall automatically apply at 35 \pm 10 PSI reservoir pressure. A Meritor WABCO IR-2 Inversion Relay Valve, supplied by both the Primary and Secondary air systems, shall be used to activate the parking brake and to provide parking brake modulation in the event of a primary air system failure.

Accessories plumbed from the air system shall go through a pressure protection valve and to a manifold so that if accessories fail they shall not interfere with the air brake system.

AIR BRAKE SYSTEM RELEASE VALVE

The vehicle shall be equipped with air-operated WABCO air brake release valve located in the cab within an accessible reach to the driver.

AIR INLET

An air system inlet/fill connection shall be provided. The inlet shall be connected to the air brake to allow constant air feed. The location of the inlet shall be on the left hand side of the driver's step well.

AUTO-EJECT

A Kussmaul Model 091-28 auto-eject with female coupling shall be provided.

AIR BRAKING ABS SYSTEM

A Wabco ABS system shall be provided to improve vehicle stability and control by reducing wheel lock-up during braking. This braking system shall be fitted to axles and all electrical connections shall be environmentally sealed from water and weather and be vibration resistant.

The system shall constantly monitor wheel behavior during braking. Sensors on each wheel transmit wheel speed data to an electronic processor, which shall sense approaching wheel lock and instantly modulate brake pressure up to 5 times per second to prevent wheel lock-up. Each wheel shall be individually controlled. To improve field performance, the system shall be equipped with a dual circuit design. The system circuits shall be configured in a diagonal pattern. Should a malfunction occur, that circuit shall revert to normal braking action. A warning light at the driver's instrument panel shall indicate malfunction to the operator.

The system shall consist of a sensor clip, sensor, electronic control unit and solenoid control valve. The sensor clip shall hold the sensor in close proximity to the tooth wheel. An inductive sensor consisting of a permanent magnet with a round pole pin and coil shall produce an alternating current with a frequency proportional to wheel speed. The unit shall be sealed, corrosion-resistant and protected from electromagnetic interference. The electronic control unit shall monitor the speed of each wheel sensor and a microcomputer shall evaluate wheel slip in milliseconds.

COMPRESSION FITTINGS ON AIR SYSTEM

All air line fittings installed on the chassis shall be compression style fittings.
The following locations shall utilize push-on fittings:

- Pressure protection valve (accessory block)

- Double check valve (braking system, park brake)
- One way check valve (brake valve tank)
- Elbow Male Modified 1/4" tube x 1/4" MP (low air switch)
- Elbow Male 1/4" tube x 3/8"MP (brake pedal solenoid)
- Connector 1/4" x 3/8"MPT (brake pedal solenoid)
- Switch stoplight (Wabco sealed switch/brake light and service brake switch)
- Low pressure switch (PTC) (Wabco sealed switch/low air switch)

MISCELLANEOUS CHASSIS EQUIPMENT

Fluid capacity plate affixed below driver's seat.
 Chassis filter part number plate affixed below driver's seat.
 Maximum rated tire speed plaque near driver.
 Tire pressure label near each wheel location.
 Cab occupancy capacity label affixed next to transmission shifter.
 Do not wear helmet while riding plaque for each seating position.
 NFPA compliant seat belt and standing warning plates provided.

ALUMINUM CAB

The cab shall be a full tilt 8-person 15" rear raised roof cab designed specifically for the fire service and manufactured by the chassis builder. Apparatus cabs that are not manufactured by the apparatus manufacturer shall not be acceptable.

CAB DESIGN

The apparatus chassis shall be of an engine forward, fully enclosed tilt cab design. There shall be four (4) side entry doors.

The cab shall be of a fully open design with no divider wall or window separating the front and rear cab sections. The cab shall be designed in a manner that allows for the optimum forward facing vision for crew. Cab designs that utilize roof mounted air conditioning units, are not desired.

The cab shall be constructed of high strength 5052H32 aluminum plate welded to 6061-T6 extruded aluminum framing.

The cab roof shall utilize 5" x 5" honeycomb re-enforced 6061 T6 aluminum extrusion, with fully radiused outer corner rails with integral drip channel and 6061 T6 3/4" x 2" x 3/16" aluminum box tubing type cross brace supports. Structures that do not include an integral drip channel will not be accepted. The box tubing

type cross brace supports shall be installed in a curved fashion beginning from the midline of the apparatus cab and curving toward the exterior corner rails. This curvature will allow for increased strength in the event of a roll over while not allowing for rainwater buildup on the apparatus cab roof.

The cab sides shall be constructed from 1 ½" x 3" x 3/16" 6061 T6 extruded door pillars and posts that provide a finished door opening, extruded and formed wheel well openings supports, formed aluminum wheel well liners and box tubing type support braces.

The cab floor and rear cab wall shall utilize 1 ¾" x 4" x 3/16" 6061 T6 extruded box tubing type framing and support bracing.

The framework shall be of a welded construction that fully unitizes the structural frame of the cab.

The structural extrusion framework shall be overlaid with interlocked aluminum alloy sheet metal panels to form the exterior skin of the cab. The cab sides shall be constructed of 3/16" thick 5052H32 aluminum plate that slides into an integral channel of the extrusion framework. The plate is then skip welded into that channel to allow for tolerable flex while the apparatus travels down the roadway. Cab designs that utilize 1/8" thick aluminum for the cab sides shall not be acceptable.

The structural extrusion framework shall support and distribute the forces and stresses imposed by the chassis and cab loads and shall not rely on the sheet metal skin for any structural integrity.

The cab face extrusion framework shall be overlaid with 1/8" thick 5052H32 aluminum plate to allow for an aesthetically pleasing radiused cab face.

CAB SUB-FRAME

The cab shall be mounted to a 4" x 4" x 3/8" steel box tube sub-frame, and shall be isolated from the chassis, through the use of no less than six (6) elastomeric bushings. This substructure shall be completely independent of the apparatus cab. The sub frame shall be painted to match the primary chassis color.

The sub-frame shall be mounted to the chassis through the use of lubricated Kaiser Bushings for the front pivot point, and two (2) hydraulically activated cab latches, to secure the rear.

Cab mounting that does not include a sub-frame shall not be considered. NO EXCEPTIONS.

CAB DIMENSIONS

The cab shall be designed to satisfy the following minimum width and length dimensions:

Cab Width (excluding mirrors) 98"

Cab Length (from C/L of front axle)
To front of cab (excluding bumper) 70"
To rear of cab 73"
Total Cab Length (excluding bumper) 143"

ROOF DESIGN

The cab shall be of a one-half 15" raised roof design with side drip rails and shall satisfy the following minimum height dimensions:

Cab Dimensions Interior
Front 59"
Rear 74"

Cab Dimensions Exterior
Front 65"
Rear 80"

FENDER CROWNS

Polished stainless steel front axle fenderettes with full depth radiused wheel well liners shall be provided.

CAB INSULATION

The exterior walls, doors, and ceiling of the cab shall be insulated from the heat and cold, and to further reduce noise levels inside the cab. The cab interior sound levels shall not exceed 80 decibels at 45 mph in all cab seat positions. NO EXCEPTIONS

EXTERIOR GLASS

The cab windshield shall be of a two piece curved design utilizing tinted, laminated, automotive approved safety glass. The window shall be held in place by an extruded rubber molding. The cab shall be finished painted prior to the window installation.

SUN VISORS

The sun visors shall be made of dark smoke colored transparent polycarbonate. There shall be a visor located at both the driver and officer positions, recessed in a molded form for a flush finish.

CAB STRUCTURAL INTEGRITY

The cab of the apparatus shall be designed and so attached to the vehicle as to eliminate, to the greatest possible extent, the risk of injury to the occupants in the event of an accident.

The apparatus cab shall be tested to specific load and impact tests with regard to the protection of occupants of a commercial vehicle.

A test shall be conducted to evaluate the frontal impact strength of the apparatus cab to conform to the test J2420 and the "United Nations Regulation 29, Annex 3, paragraph 4, (Test A). A second test shall be conducted to evaluate the roof strength of the apparatus cab to conform to the Society Of Automotive Engineers (SAE) SAE J2422/SAE J2420 and "United Nations Regulation 29, Annex 3, paragraph 5, (Test B) and SAE J2420. The evaluation shall consist of the requirements imposed by ECE Regulation 29, Paragraph 5.

The test shall be conducted by a certified independent third party testing institution.

A letter stating successful completion of the above test on the brand of cab being supplied shall be included in the bid. There shall be "no exception" to this requirement.

↳

SEAT BELT TESTING

The seat belt anchorage system shall be tested to meet FMVSS 207 Section 4.2a and FMVSS 210 section 4.2. Testing shall be conducted by an independent third party product evaluation company.

A copy of the certification letter shall be supplied with the bid documents.

CAB LOCKDOWN LATCHES

Cab lockdown latches shall be provided to prevent the cab from being tilted in the down position. Once the cab tilt switch is engaged the cab latches will release to allow the cab to be tilted.

CAB TILT SYSTEM

An electrically powered hydraulic cab tilt system shall be provided and shall lift the cab to an angle of 45 degrees, exposing the engine and accessories for fluid checks and service work. The system shall be interlocked to only operate when the parking brake is set.

The lift system shall be comprised of two (2) hydraulic lift cylinders, an electrically driven hydraulic pump, and a control switch. The hydraulic pump shall be located on the exterior of the frame rail on the driver's side of the chassis that can be easily accessible when the cab is tilted. A mechanical locking system consisting of an air operated actuator and a heavy radiused wall 3" x 3" aluminum extrusion will be provided to ensure the cab remains in the raised position in the event of a hydraulic failure. Additionally, each of the hydraulic lift cylinders shall incorporate a check valve, and velocity fuses that will activate should a sudden drop in pressure be detected. The cab tilt controls shall be interlocked to the parking brake to ensure the cab will not move, unless the parking brake is set. The cab tilt controls will consist of a momentary raise/lower switch and a two position cab safety lock switch.

The hydraulic lift cylinders will be connected to a steel cab sub-frame, and not directly to the cab. NO EXCEPTIONS

MANUAL CAB LIFT

There shall be a manually operated hydraulic pump for tilting the cab in case the main pump should fail. Access to the pump shall be located under the left corner of the front bumper.

CAB DOORS

The cab doorframes shall be constructed from 6061 T6 aluminum extrusions fitted with a 5052 H32 aluminum sheet metal skin and shall be equipped with dual weather seals. The outside cab door window opening shall be framed by a black anodized aluminum trim, to provide a clean appearance. The cab doors shall be equipped with heavy-duty door latching hardware, which complies with FMVSS 206. The door latch mechanism shall utilize control cable linkage for positive operation. A rubber coated nylon web doorstop shall be provided.

The doors shall be lap type with a 10 gauge full-length stainless steel flange and 3/8" diameter hinge pin and shall be fully adjustable.

All openings in the cab shall be grommeted or equipped with rubber boots to seal the cab from extraneous noise and moisture.

The cab doors shall be designed to satisfy the following minimum opening and step area dimensions:

Door Opening:

Front	36.5" x 73"
Rear	36.5" x 73"

CAB STEPS

The lower cab steps shall be no more than 22" from the ground. Grip strut material shall be installed on the stepping surface.

An intermediate step shall be provided, mid way between the lower cab step, and the cab floor. The intermediate step shall be slightly inset to provide for safer ingress and egress. Diamondplate material shall be installed on the stepping surface.

All steps shall be covered with material that meets or exceeds the NFPA requirements for stepping surfaces.

AUXILIARY CAB STEPS

There shall be one additional step under each cab door to assist with entrance and exit of the cab. The steps shall be constructed of aluminum with a grip strut stepping surface.

STEP LIGHTS

A white TecNiq E45 LED strip light shall illuminate each interior cab step. These lights shall illuminate whenever the battery switch is on and the cab door is opened.

POWER WINDOWS

All four cab entry doors shall have power windows. Each door shall be individually operated and the driver's position shall have master control over all windows. All four windows shall roll down completely.

SIDE WINDOWS

Fixed position side window shall be provided on each side of the cab between the forward cab area and the crew cab area. The windows shall be approximately 20.5" high x 16.50" wide to provide maximum visibility. The side windows shall be held in place by an extruded rubber molding with a chrome plated decorative locking bead.

WINDOW TINTING

The crew cab windows and doors, with the exception of the driver's and officer's doors, and the windshield, shall be tinted with deep "limo" tint. The tint shall be incorporated into the window glass with eight percent (8%) light transmittance. Film tinting shall not be acceptable.

WINDSHIELD WIPERS

Two (2) black anodized finish two speed electric windshield wiper system. Dual motors with positive parking. System includes large dual arm wipers with built in washer system. One (1) master control works the wiper, washer and intermittent wipe features. Washer bottle is a remote fill with a 4 quart capacity. Washer fill is located just inside of officer cab door.

WINDSHIELD WASHER RESERVOIR

A four quart capacity windshield washer reservoir shall be provided. The fill access shall be located in the forward officer's step well area.

MIRRORS

Two (2) Lang Mekra 300 Series smooth chrome plated Aero style main and convex mirrors shall be installed on each side of the vehicle. The main mirror shall be 4-way remote adjustable with heat, 7" x 16" 2nd surface chromed flat glass. The convex shall be 6" x 8" 2nd surface chromed 400 mm radius glass. Each mirror housing assembly shall be constructed of lightweight textured chrome ABS with on truck glass and housing back cover replacement. In the event the mirror breaks the glass shall be replaceable in (3) minutes or less. The glass shall include a safety adhesive backing to keep broken glass in place. The mirror assembly shall be supported by a "C" loop bracket constructed of polished stainless steel tube utilizing two point mounting reducing vibration of mirror glass during normal vehicle operation. The lower section of the holder shall include a spring loaded single detent position 20 degrees forward with easy return to operating position without refocusing.

UPPER GRILLE

The front of the cab shall be equipped with a raised polished stainless steel grille that is laser cut to resemble an American flag with sufficient area cut out to allow proper airflow into the cooling system and engine compartment. Plastic chrome plated grilles shall not be acceptable.

UPPER GRILLE LOGO

The upper grille shall have a laser cut flaming "S" logo in the upper portion of the grille. The cut out shall be illuminated by LED lights.

LOWER GRILLE

The front of the cab shall be equipped with a polished stainless steel lower grille with custom laser engraved design per customer specifications. The lower grille shall also be backlit with LEDs. Color shall be specified by customer. The design shall allow proper airflow into the cooling system and engine compartment. Plastic chrome plated lower grille shall not be acceptable.

PAINTED STEEL BUMPER

There shall be a 12" high painted formed steel wrap-around (45 degree) bumper provided at the front of the apparatus. The bumper shall be mounted to a reinforcement plate constructed of 1/4" x 12" x 70" carbon steel. The frame rail extension shall be a reinforced four-sided boxed frame rail for superior safety protection. A gravel shield shall be provided, constructed of .188" aluminum diamond plate. The bumper extension shall be approximately 24".

BUMPER SIDES

The sides of the bumper shall also be painted steel in lieu of diamond plate. Each side shall feature a recessed painted steel pocket for the marker light and any auxiliary lighting option selected. The pocket shall be a welded integral part of the bumper skin.

BUMPER ANGLE SIDES

The angled sides of the bumper shall feature a recessed painted steel pocket for any auxiliary lighting option selected. The pocket shall be a welded integral part of the bumper skin.

The bumper shall be notched to accommodate the pipe for the front suction.

STORAGE WELL COMPARTMENT

There shall be a hose well compartment located in the center of the front bumper. The compartment shall run 3/4 the length of the bumper and measure approximately 60" long x 16" wide x 6" deep at the ends and 12" deep in the center. The compartment shall be constructed of .125" smooth aluminum plate.

DIAMOND PLATE BUMPER LID

There shall be a 1/8" diamond plate cover with latches provided for the front bumper trough. The cover shall have a 4" rise to accommodate the storage well requirements.

The storage well cover lid shall be provided with a cut-out to accommodate the front discharge. Location to be determined at the preconstruction conference.

PROTECTIVE BUMPER COATING

A Raptor texture coating shall be provided along the top edge of the front steel bumper. The color of the coating shall be determined at precon.

RECEIVER (Front)

A 2" receiver shall be provided and mounted directly to the apparatus chassis. The receiver shall be 2" x 2" heavy wall tube and solidly re-enforced. The receiver shall be rated with a maximum capacity of 5,000 lbs. The receiver shall be designed for a 2-1 straight pull capacity (10,000lbs).

WIRING

Sufficient power shall be provided at the receiver for the intent of powering a winch.

AIR HORNS

Two (2) Hadley H00978 rectangular, chrome plated, air horns shall be provided.

AIR HORN BUMPER CUT-OUTS

The air horns shall be installed behind perforations in the front bumper.

LANYARD CONTROL FOR AIR HORNS

The air horns shall be activated by a split "Y" lanyard in cab ceiling.

ELECTRONIC SIREN

One (1) Whelen 295HFSA7 electronic siren shall be installed at the cab instrument panel complete with noise canceling removable microphone. The remote control head shall be flush mounted in a location specified by the fire department.

The electronic siren shall be wired through the steering wheel button. A selector switch shall be provided on the instrument panel to switch between functions.

SIREN SPEAKERS

Two (2) Cast Products SA4201-5-A 100 watt weatherproof siren speakers shall be provided and wired to the electronic siren.

SPEAKER MOUNTING

The electronic siren speaker(s) shall be installed behind the main cab grille.

FEDERAL Q2B SIREN

There shall be a Federal Q2B-NN siren installed in the center of the cab grille. The siren shall be securely mounted and activated by means of a solenoid and shall include a brake.

FOOT SWITCH, DRIVER'S SIDE

A foot switch for the mechanical siren shall be provided on the driver's side.

FOOT SWITCH, OFFICER'S SIDE

A foot switch for the mechanical siren shall be provided on the officer's side.

SIREN BRAKE SWITCH

A brake switch for the mechanical siren shall be provided in the lower command console for both the driver's and officer's position.

CAB EXTERIOR LIGHTING

Exterior lighting and reflectors shall meet or exceed Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements.

HEADLIGHTS

The front low and high beam headlights shall be FIRETECH model FT-4X6 LED, rectangular shaped, quad style installed in custom rectangular shaped stainless steel housings on the front of the cab. Each housing shall accommodate a forward-facing turn signal in the outboard location and a side-facing warning light.

An additional pair of rectangular shaped stainless steel housings shall be installed on the front of the cab above the headlight housings. Each housing shall accommodate two (2) forward-facing warning lights and a side-facing turn signal.

FRONT TURN SIGNALS

There shall be four (4) Whelen 400 Series Model 40A00AAR LED rectangular amber turn signal lights mounted one (1) each side in the front of the headlight housings and one (1) mounted on the side of each warning light housing.

ICC/MARKER LIGHTS

Five (5) ICC, LED marker lights shall be integrated in the brow light mounted on the front of the cab to meet D.O.T. requirements.

EXTERIOR CAB HANDRAILS

There shall be three (3) 24" long, handrails provided and installed, one at each front cab entrance, and one on the side opposite of tall exterior compartment. The handrails shall be constructed of type 304 stainless steel 1.25 inch diameter tubing with bright finish and knurled gripping surface. Mounting flanges shall be constructed from 7 gauge, .180 thick, stainless sheet. Each grab rail shall have 90 degree returns to flanges. The ends of grab rail shall pass through the flanges and be welded to form one structural unit. The handrails shall be mounted using 1.25" SS Hex bolts, with a barrier rubber gasket at each flange.

Sufficient space shall allow for a gloved hand to firmly grip the rail.

COAT HOOKS FOR GRAB HANDLES

There shall be a coat hook installed on the upper portion of the exterior cab handrail, on the driver's side, for hanging of coats, turnout gear, etc.

COAT HOOKS FOR GRAB HANDLES

There shall be a coat hook installed on the upper portion of the two exterior cab handrails, on the officer's side, for hanging of coats, turnout gear, etc.

INTERIOR CAB HANDRAILS

There shall be two (2) rubber coated grab handles provided and mounted on the interior of the cab, one each side, on the windshield post for ingress assistance. The handrail on the driver's side shall be approximately 11" long and the handrail on the officer's side shall be approximately 18" long.

INTERIOR CAB HANDRAILS

There shall be one (1) rubber coated grab handle provided and mounted on the interior of the rear-crew cab area for ingress assistance. This handrail shall be installed at the entry point that does not have an exterior handrail. The handrail shall be approximately 11" long.

CAB DOOR HANDRAILS

There shall be two (2) rubber coated grab handles provided and mounted, one on the inside of each rear crew door, just below the windowsill. The handrails shall be approximately 11" long.

There shall also be two (2) 1.25" diameter knurled stainless steel handrails shall be provided and mounted, one on the inside of each rear crew door, just above the windowsill. The handrails shall be approximately 22" long.

INTERIOR DOOR STRAP

A nylon strap shall be provided on the lower hinge of each interior cab door to assist with entry.

DRIVER'S SIDE CAB COMPARTMENT

There shall be a cabinet constructed of .125 aluminum plate recessed in the cab behind driver's side rear crew door. The compartment shall be approximately 66" high x 15" wide x 22.25" deep.

The compartment shall have a hinged door that is hinged at the front. The doors shall have an Austin Hardware slam catch single-point "D"-ring door closure and held open with gas struts.

The compartment shall be operated by an individual switch and illuminated with (1) LED light.

OFFICER'S SIDE CAB COMPARTMENT

There shall be a cabinet constructed of .125 aluminum plate recessed in the cab behind officer's side rear crew door. The compartment shall be approximately 38" high x 15" wide x 20.25" deep (12.75" deep if front suction)

The compartment shall have a hinged door that is hinged at the front. The doors shall have an Austin Hardware slam catch single-point "D"-ring door closure and held open with gas struts.

The compartment shall be operated by an individual switch and illuminated with (1) LED light.

PIKE POLE STORAGE COMPARTMENT

The transverse compartment shall be provided with storage for up to two (2) pike poles mounted on the back wall. The pike pole compartment shall be approximately 7" wide x 10" high x 84" long.

ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188 aluminum plate and have two 1.5" x 1.5" x .188" aluminum angles welded to the underside of the shelf for support.

SCBA BRACKET

A SCBA air pack bracket with strap shall be provided and installed in the lower section of the compartment.

EXTERIOR CAB COMPARTMENT LIGHTING

Each exterior cab compartment will have a red/white led light.
The light color will tied into the switch in Overhead Console Position 2, marked day/night

CAB ROOF OVERLAY

The rear exterior section roof of the cab shall have a smooth aluminum overlay, painted to match the cab roof. The overlay shall be constructed of .125" aluminum measure 30" x 91".

CAB INTERIOR

The metal surfaces of the cab interior shall be coated and sealed with MultiSpec black speckle, urethane modified, mar resistant paint. The textured coating shall provide paramount durability and wear resistance against foreign objects and normal wear and tear.

The front and rear headliners, as well as the rear cab wall, shall be finished in Gray-Black Durawear covered padded panels.

INTERIOR DOOR PANELS

The interior of the cab entry doors shall have a 304 brushed stainless steel scuff plate, contoured to the door, from the door window sill down.

CAB FLOOR COVERING

The cab interior floor shall be covered with a 5/16" thick, black rubberized material to provide a rugged but cosmetically pleasing stepping surface throughout the cab. The floor covering shall provide superior durability and resistance against foreign objects as well as normal wear and tear.

DIAMOND PLATE, CAB FLOOR

The cab floor shall be covered with 1/8" embossed diamondplate.

ENGINE ENCLOSURE

An integral, formed aluminum and composite engine enclosure shall be provided. The engine enclosure shall be contoured and blended in an aesthetically pleasing manner with the interior dash and flooring of the cab. The enclosure shall be kept as low as possible, to maximize space and increase crew comfort.

The enclosure shall be constructed from 5052 H2 aluminum plate and GRP composite materials, providing high strength, low weight, and superior heat and sound deadening qualities.

Additionally, the underside of the engine enclosure shall be coated in with a ceramic spray on insulation and sound control. This coating is an environmentally-friendly coating that is applied seamlessly and rapidly while providing superior thermal insulation and protection against vibration and noise, and will prevent future corrosion from forming by sealing the substrate. NO EXCEPTIONS

ENGINE ENCLOSURE COVERING

The top of the engine enclosure shall be covered with Scorpion heavy duty, black polyurethane blended coating. The textured coating shall provide paramount durability and wear resistance against foreign objects and normal wear and tear as well as sound deadening and insulation. The rubberized cab floor covering shall extend up the lower exterior sides of the engine enclosure to aid in sound deadening and heat resistance.

TOOL MOUNTING PLATE

There shall be a 3/16" smooth aluminum plate installed on the engine enclosure between the driver and the officer for use in mounting of equipment. The mounting plate shall feature beveled edges on the front and sides for a finished appearance. The plate shall be coated with the same finish as the engine enclosure and shall be secured to the engine cover with screws for easy replacement.

ENGINE HOOD LIGHTS

An LED work light shall be installed in the engine enclosure with an individual switch located on the base of the light.

WORK SURFACE

There shall be a flat work surface in front of the officer's seat.

UPPER CREW DOOR AREA

Each upper cab crew door area shall be finished with a smooth aluminum panel, painted to match cab interior.

CHASSIS WIRING

All chassis wiring shall have XL high temperature crosslink insulation. All wiring shall be color-coded, and the function and number stamped at 3" intervals on each wire. All wiring shall be covered with high temperature rated split loom for easy access to wires when trouble shooting. All electrical connectors and main connectors throughout the chassis shall be treated to prevent corrosion.

MASTER ELECTRICAL PANEL

The main chassis breaker panel shall be wired through the master disconnect solenoid and controlled by the three-position ignition rocker switch. The breaker panel shall be located in front of the officer on the interior firewall and shall be protected by a removable aluminum cover. The cover shall have an aluminum notebook holder on the exterior face accessible to the officer. The cover shall be painted with a durable finish to match the interior of the cab and shall be secured with two (2) thumb screws.

The breaker panel shall include up to 22 ground switched relays with circuit breaker protection. An integrated electrical sub-panel shall be provided and interfaced to the body and chassis through an engineered wire harness system.

Twelve (12) 20-ampere relays and one (1) 70-ampere relay shall be provided for cab light bar and other electrical items. If the option for a mechanical siren has been selected two (2) additional relays shall be provided.

Up to two (2) additional relay boards with circuit breaker protection shall be provided for additional loads as required. Each board shall contain four (4) relays. The relay boards shall be configured to trip with input from switch of positive-negative or load manager by moving the connector on the board (no tools required).

All relay boards shall be equipped with a power-on indicator light (red), input indicator light (green) and power output indicator light (red).

Up to twenty-three (23) additional automatic reset circuit breakers for non-switched loads that are remotely switched (ie: heater fans, hood lights, etc.) shall be provided.

All relays and circuit breakers on the relay boards shall be pull-out/push-in replaceable.

All circuit breakers on the relay boards shall be 20 ampere automatic reset which can be doubled or tripled for 40 or 60-ampere capacity.

The system shall utilize Deutsch DRC weather resistant connectors at the breaker panel, toe board and main dash connections.

All internal wire end terminals, including locking connectors, shall be mechanically affixed to the wire ends by matching terminal crimping presses to assure the highest quality terminations.

All internal splices shall be ultrasonically welded connections and all internal wiring shall be high temperature GXL type wire that is protected by wiring duct wherever possible.

All switches shall be ground controlled; no power going through any rocker switch.

Any switch controlling a relay in the breaker panel shall be capable of being set to function only when the parking brake is set. All relays shall be tagged with the function that the relay is controlling.

INSTRUMENT PANEL

The main dash shroud, which covers the area directly in front of the driver from the doorpost to the engine hood, shall be constructed of vacuum formed ABS material with scorpion texture. The dash shall be a one-piece hinged panel that tilts outward for easy access to service the internal components. The gauge panel shall be constructed with a .125" aluminum panel, covered with a scratch resistant reverse printed and laminated poly carbonite.

The gauges shall be AMETEK Vehicular Instrumentation Systems (VIS), Next Generation Instrumentation System (NGI) with built-in self-diagnostics and red warning lights to alert the driver of any problems. All gauges and controls shall be backlit for night vision and identified for function. All main gauges and warning lights shall be visible to the driver through the steering wheel.

MASTER BATTERY & IGNITION SWITCH

The vehicle shall be equipped with a keyless ignition, with a three (3)-position Master Battery rocker switch, "Off/ACC/On" and a two (2)-position Engine Start rocker switch, "Off/Start".

DIESEL PARTICULATE FILTER CONTROLS

There shall be two (2) controls for the diesel particulate filter. One control shall be for regeneration and one control shall be to inhibit engine regeneration. These shall be located below the steering wheel in the kick panel.

INSTRUMENTATION & CONTROLS

Instrumentation on dash panel in front of the driver:

Tachometer/hourmeter with high exhaust system regeneration temperature, and instrument malfunction indicators

Speedometer/odometer with built in turn signal, high beam, and re-settable trip odometer

Voltmeter

Diesel fuel gauge

DEF (Diesel Exhaust Fluid) gauge

Engine oil pressure

Transmission temperature

Engine temperature

Primary air pressure

Secondary air pressure

Indicators and warning lights in front of the driver:

Parking brake engaged

Low air with buzzer

Antilock brake warning

Check transmission

Transmission temperature

Upper power indicator

Seat belt

Engine temperature

Low oil indicator

Low voltage indicator

Air filter restriction light

Low coolant indicator

High idle indicator

Power on indicator

Check engine

Stop engine

Check engine MIL lamp

DPF indicator

High exhaust temperature

Wait to start

Other indicator and warning lights (if applicable):

Differential locked

PTO (s) engaged

Auto-slip response

Retarder engaged

Retarder temperature

ESC indicator

Controls located on main dash panel in front of the driver:

- Master power disconnect with ignition switch
- Engine start switch
- Headlight switch
- Windshield wiper/washer switch
- Differential lock switch (if applicable)
- Dimmer switch for backlighting

Controls included in steering column:

- Horn button
- Turn signal switch
- Hi-beam low-beam switch
- 4-way flasher switch
- Tilt-telescopic steering wheel controls

CENTER CONTROL CONSOLE

There shall be an ergonomically designed center control console. The console shall be constructed of 1/8" smooth aluminum and shall be mounted on the engine hood between the driver and officer. The console shall have a durable coating to match the color of the engine hood covering and shall feature surfaces on each side that are contoured to face the driver and the officer for easy viewing and accessibility. The switches and other customer specified electrical items shall be mounted in removable 1/8" smooth aluminum panels with a black wrinkle finish. The console shall have an aluminum lift-up lid with quick release latch. The lid shall be held in the open position with a gas strut to allow for easy access and serviceability.

Controls located in the console conveniently accessible to the driver:

- Transmission shifter
- Pump shift control with OK TO PUMP and PUMP ENGAGED lights
- Remote mirror control
- Illuminated rocker switches to control high idle, Jacob's brake, siren/horn, siren brake, master emergency, and other customer specified components
- 12V power point (if applicable)

Controls located in the console conveniently accessible to the driver and the officer (center):

- Parking brake control with a guard to prevent accidental engagement

Controls located in the console conveniently accessible to the officer:

- Illuminated rocker switches to control customer specified components that are easily reachable to the officer and do not allow for compromise of the driver's view, and eliminate the need for foot switches

Surface to recess siren head, radio head, or other desired items as space permits
12V power point (if applicable)

Driving compartment warning labels shall include:

HEIGHT OF VEHICLE
OCCUPANTS MUST BE SEATED AND BELTED WHEN APPARATUS IS IN MOTION
DO NOT USE AUXILIARY BRAKING SYSTEMS ON WET OR SLIPPERY ROADS
EXIT WARNINGS

Additional labels included:

COMPUTER CODE SWITCH
ABS CODE SWITCH
FLUID DATA TAG
CHASSIS DATA TAG

OVERHEAD CONTROL CONSOLE

An ergonomically designed overhead console shall be provided above the driver and officer, running the full width of the cab. The overhead console shall be constructed from 1/8" aluminum plate and shall be painted with a durable finish to match the inside of the cab. There shall be seven (7) removable 1/8" smooth aluminum plates with a black wrinkle finish to house switches and other electrical items.

Directly above the driver there shall be two (2) panels with no cutouts, unless otherwise specified by the customer.

There shall be a panel located to the right of the driver that shall be designated for defroster, heat, and air conditioning controls (if specified).

The center overhead panel shall be designated for up to seven (7) door ajar indicators. Upon releasing the apparatus parking brake, one or more of these lights shall automatically illuminate (flash) when any of the following conditions occur that may cause damage if the apparatus is moved: cab or compartment door is open; ladder or equipment rack is not stowed; stabilizer system deployed; any other device has not been properly stowed.

There shall be a panel to the left of the officer as well as two (2) directly above the officer. These panels shall have no cutouts, unless otherwise specified by the customer.

ENGINE WARNING SYSTEM

An engine warning system shall be provided to monitor engine conditions such as low oil pressure, high engine temperature and low coolant level. Warning indication shall include a STOP ENGINE (red) light with audible buzzer activation and a CHECK ENGINE (amber) light. Note: (Some engine configurations may also include a fluid warning light.)

There shall be a master information light bar with 24 lights located across the center of the dash panel that covers up to 24 functions. These are defined under Indicators and Warning Lights above.

PUMP SHIFT MODULE

An electronic pump shift module with a round knob toggle switch for shifting road mode/none/pump mode shall be within easy reach of the driver. The module shall be constructed of an aluminum composite panel and flush mount LED indicators with backlit verbiage. A gear lockup will be provided interlocked with park brake to hold the transmission in direct drive for pump operation.

PUMP INTERLOCK

While the apparatus is in pump gear the odometer shall not be connected so that engine miles are not counted during pumping operations. The user shall still reference the engine RPM and light indicated in the lower console to verify that the unit is in pump gear.

DO NOT MOVE APPARATUS INDICATOR LIGHT

A Whelen ION-T LED light shall be installed in the cab near the driver. The light shall illuminate when the parking brake is released and any cab or body door is open or any other item on the apparatus is not properly stowed that may cause damage.

MAPBOOK SLOT

A mapbook slot shall be installed on exterior of the breaker panel located on the officer's side of the cab.

PROGRAMMABLE LOAD MANAGER

Load manager shall have the ability to sequence loads on and off. The Super Node II has twenty-four (24) inputs and twenty-four (24) outputs. Eighteen (18) are positive polarity outputs and six (6) are ground polarity outputs. It shall also be able to establish a 8 priority levels to shedding loads when the vehicle is

stationary, starting at 12.8 volts lowest priority load to be shed, then respectively at 12.7, 12.5, 12.3, 12.1, 11.9, 11.5 and never shed volts DC. An output is shed (turned OFF) when the system voltage drops below the designated priority level's shed voltage for thirty (30) seconds. If the voltage has dropped below multiple priority level shed voltages then each higher priority level will shed before the lower priority levels. An output is unshed (turned back ON) when the system voltage rises above the designated priority level's unshed voltage for ten (10) seconds. If the voltage has risen above multiple priority level unshed voltages then each lower priority level will unshed before the upper priority levels.

MASTER SWITCH

All outputs can be tied or not tied to the stage switch. In fire apparatus this switch is typically referred to as the master switch. The state of the stage switch is controlled by Utility Module output memory space 3. When this output is active the stage switch is active. Any output tied to the stage switch will be OFF if the stage switch is not active regardless of the output's multiplex equation. Set an output to be tied to the stage switch by checking the stage switch box in its "Output Port Load Settings" under the "Settings" tab. The name of the stage switch can be changed from the standard "stage" to anything desired by modifying the text in the "Output Port Load Settings" area.

AUTOMATIC HIGH IDLE ACTIVATION

The Utility Module's high idle request (input memory space 2) is activated when the system voltage drops below the high idle threshold (12.8 volts standard or 25.6 volts if 24 volt load management is enabled) for 8 seconds or longer AND load management has been enabled (Utility Module output memory space 1 is active). The high idle request will remain active as long as the voltage remains below the voltage threshold and for 3 minutes after the system voltage rises above the voltage threshold. High idle can be canceled by activating the Utility Module's high idle cancel (output memory space 0).

HIGH IDLE

The engine shall have a "high idle" switch on the dash that shall maintain an engine RPM of 1,000. The switch shall be installed at the cab instrument panel for activation/deactivation. The "high idle" mode shall become operational only when the parking brake is on and the truck transmission is in neutral.

CAB ACCESSORY FUSE PANEL

A fuse panel shall be located underneath the rear facing seat on the officer's side. The fuse panel shall consist of six (6) battery hot and six (6) ignition switch circuits. Each circuit shall be capable of 10-ampere 12-volt power and total output of 50-amps. The fuse panel shall be capable of powering accessories such as hand held spotlights, radio chargers, hand lantern chargers and other miscellaneous 12-volt electrical components.

POWER & GROUND STUDS, OVERHEAD COMMAND CONSOLE

There shall be a set of four (4) threaded power studs provided in the cab's overhead Command Console for future installation of two-way radios.

The studs shall be wired as follows:

- One (1) 12-volt 60-amp, direct to the battery ignition off.
- One (1) 12-volt 30-amp switched battery first position on ignition switch.
- One (1) 12-volt 30-amp ignition power second position on ignition switch.
- One (1) 12-volt 125-amp ground.

POWER & GROUND STUDS, UNDER OFFICER'S SEAT

There shall be a minimum of four (4) threaded power studs provided under the officer's seat to accommodate the future installation of two-way radios.

The studs shall be wired as follows:

- One (1) 12-volt 40-amp controlled by the battery switch
- One (1) 12-volt 60-amp controlled by the ignition switch
- One (1) 12-volt 60-amp, direct to the battery
- One (1) 12-volt 100-amp ground

VEHICLE DATA RECORDER

An Akron / Weldon vehicle data recorder as required by the 2009 edition of NFPA 1901 shall be installed. Vehicle data shall be sampled at the rate of 1 second per 48 hours, and 1 minute per 100 engine hours.

Free software is available to allow the fire department to collect the data as needed.

AUXILIARY POWER POINT

A 12-volt 20-ampere auxiliary lighter socket type plug-in, shall be provided in the cab.

DUAL USB POWER POINT

A 12-volt dual port USB power point shall be provided in the cab.

LIGHTING CAB INTERIOR

Interior lighting shall be provided inside the front of the cab for passenger safety. Two (2) Whelen 6" round ceiling mounted combination red/clear LED dome lights with a push button on/off switch in the light lens. One light shall be located over each the officer and driver's position. The lights shall also activate from the open door switch located in each cab doorjamb.

LIGHTING CREW CAB INTERIOR

Interior lighting shall be provided inside the crew cab for passenger safety. Two (2) Whelen 6" round ceiling mounted combination red/clear LED dome lights with a push button on/off switch in the light lens shall be provided. The lights shall also activate from the open door switch located in each cab doorjamb.

CAB PILLAR SPOT LIGHT

UNITY LED "A" pillar spotlights, one each side front of Cab.
-Black Housing.

HEAVY DUTY HEATER/DEFROSTER/AIR CONDITIONER

There shall be a minimum 80,000 cool BTU and 65,000 heat BTU single unit, heater/air conditioner mounted over the engine cover. The unit shall be mounted in center of the cab on the engine hood/enclosure. Unit shall have a shutoff valve at the right side of the frame, next to the engine. Airflow of the heater/air conditioner shall be a minimum 1200 CFM. To achieve maximum cooling, a TM-31 Compressor (19.1 cu. in.) will be used.

The defroster/heater shall be a minimum of 35,000 BTU and shall be a separate unit mounted over the windshield. There shall be eight (8) louvers/diffusers to direct to windshield and door glass. Airflow of the defroster/heater shall be a minimum 350 CFM. The unit shall be painted Zolatone greystone to match the cab ceiling.

The condenser shall be roof mounted and have 80,000 BTU rating. The unit shall include two fan motors. Airflow of the condenser shall be a minimum 2250 CFM. (This roof-mounted condenser shall work at full rated capacity at an idle with no engine heat problems.)

HEATER/DEFROSTER/AIR CONDITIONING CONTROLS

The heater/defroster/air conditioning shall be located in the overhead console in the center of the apparatus cab within reach of the driver and officer. The controls shall be illuminated for easy locating in dark conditions. The controls shall be located in such a way that the driver will not be forced to turn away from the road to make climate control adjustments. Control of all heater/defroster/air conditioning functions for the entire apparatus cab shall be achieved through these controls.

FLOORBOARD HEATING DUCT

There shall be ductwork to the floor of the cab, facing forward to provide heat for the front of cab floor area.

DEFROSTER DIFFUSER

A molded diffuser made of durable ABS plastic ductwork system shall be provided. It shall be form fitted and shall attach to the cab's overhead defroster unit to provide temperature controlled air to the windshields. Air flow of up to 280 cfm is balanced and directed across the entire windshield for optimum defrosting capability in all types of weather.

TOOL MOUNTING PLATE

There shall be a 3/16" smooth aluminum plate installed on top of the heat/ air conditioning unit for use in mounting of equipment. The plate shall measure approximately 25" wide x 19.5" long and shall be spaced up 1". The mounting plate shall feature beveled edges on the front and rear for a finished appearance. The plate shall be coated with the same finish as the heat/air conditioning unit and shall be secured with screws for easy replacement.

DRIVER'S SEAT

A H.O. Bostrom Sierra high back ABTS seat with air suspension shall be provided for the driver. The seat shall be equipped with a red 3-point shoulder harness with lap belt. The seat shall have fore/aft adjustment and shall be upholstered with heavy duty Low Seam Durawear Plus material.

HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

OFFICER'S SEAT

An H.O. Bostrom Tanker 450 ABTS SCBA seat shall be provided for the officer. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

UNDER SEAT STORAGE COMPARTMENT

There shall be a storage area under the officer's seat, accessible from the front through a hinged door with Southco C5 compression lever latch. The door shall be painted with a durable finish to match the inside of the cab and shall be vertically hinged near the engine enclosure.

The storage area shall be approximately 19.5" wide x 14.375" high x 21.75" deep. The lower rear portion of the compartment shall be tapered to accommodate the wheel well and wiring chase. The opening shall be approximately 15.5" wide x 10.5" high.

HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

CREW SEAT – DRIVER'S SIDE, REAR FACING

One (1) H.O. Bostrom Tanker 450 ABTS SCBA fixed base seat shall be installed behind the driver. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

CREW SEAT – OFFICER'S SIDE, REAR FACING

One (1) H.O. Bostrom Tanker 450 ABTS SCBA fixed base seat shall be installed behind the officer. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

CREW SEAT – DRIVER'S SIDE, FORWARD FACING, INBOARD

One (1) H.O. Bostrom Tanker 400CT ABTS SCBA flip-up base seat shall be installed in the driver's side forward-facing inboard position. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

EMS CABINET

EMS CABINET, FORWARD FACING DOUBLE ON SEAT LOCATIONS 6 & 4

INTERIOR COMPARTMENT OPENING

The compartment shall come complete with a single interior access opening with a R.O.M. satin finished roll-up door to cover that opening.

ADJUSTABLE SHELVES

There shall be two (2) adjustable shelves provided and installed in the compartment. The shelves shall be fabricated of .188 aluminum plate and have two 1.5" x 1.5" x .188" aluminum angles welded to the underside of the shelf for support.

DOOR LOCK

The interior door shall be equipped with a combination lock.

SEAT UPHOLSTERY COLOR

The cab seat upholstery shall be black in color.

SCBA BRACKETS

Each SCBA seat in the cab shall feature an IMMI SmartDock hands-free self contained breathing apparatus (SCBA) storage bracket within the seat back.

The bracket shall consist of a main vertical support bracket, lower guide plate with valve retaining tabs, top claw assembly with wings, and an integral height adjustment knob. The top claw shall be adjustable for different diameters of SCBA cylinders. The head height shall be adjustable with the integrated adjustment knob for different heights of SCBA cylinders.

The bracket shall feature single-motion SCBA insertion and hands-free release when the fire fighter stands up to exit the seat. In the event of a collision, the top claws lock from inertial forces for a secure hold.

SEAT BELT WARNING SYSTEM

An Akron / Weldon seat belt warning system shall be provided, and shall monitor each seating position. Each seat shall be supplied with a sensor that, in conjunction with the display module located on the dash, shall determine when the seat belt was fastened and if the seat is occupied. An icon shall represent that the seat is properly occupied. An audible and visual alarm shall be activated if the seat is occupied and/or the belt is not fastened in the proper sequence.

CREW SEAT COMPARTMENT

A compartment shall be provided under the forward facing crew seats on the back wall of the cab. Two drop down doors shall be provided on the front face of the compartment. Compartment dimensions are 91.5"L x 14"H x 19"W.

IN-CAB OVERHEAD STORAGE AREA

An overhead storage area shall be provided at the front of the raised roof portion inside of the cab above the rear-facing crew seats. The full-width storage area shall be approximately 84" wide x 15.5" high x 17" deep and shall have a Zolatone gray/black rubberized, textured finish to match the cab interior. The storage area shall be equipped with aluminum lift-up doors.

Provisions shall be made for the installation of customer furnished radio.

ANTENNA MOUNTING

The customer supplied radio antenna shall be installed in the cab roof with the coax cable run to the radio mounting area. The radio location shall be determined at the pre-construction meeting.

HD STEREO

A Jensen HD AM/FM/WB Bluetooth stereo shall be provided with four speakers.

COMMUNICATION SYSTEM

A six position David Clark intercom system shall be provided in the cab. The six positions include: driver, officer and four crew seats. The driver and officer positions shall be interfaced with radio.

CAMERA SYSTEM

A FRC, powered by SEON, model SNB100-C00 InView™ 360 Video system kit shall be provided, which includes four (4) cameras, an Electronic Control Unit (ECU), required harnesses and a manual camera switch, and a SNB100-C00-MH0 7" HD monitor mounted in the cab. The kit shall provide split video feeds with bird's-eye view and individual camera views. It shall be capable of integrating with an existing vehicle system for an automatic camera view, which seamlessly switches from front/left/right/rear views based on turn signal and reverse activation. It shall also feature a switch module that allows the operator to override the default camera view. The system shall feature NTSC video inputs for (4) four cameras, and also have NTSC, CVBS (SD) 2-channel view output. It shall have a 150 degree horizontal camera view angle, and have a resolution of 720 x 480 at 30 FPS (frames per second). The ECU shall feature built-in recording to record each camera input separately and support (4) four 256GB SD cards (SD card sold separately). The system shall support (6) six different view modes, configure & customize set up shall be supported via monitor and IR remote control.

The system shall operate from 10 to 32 VDC, and shall consume no more than 2.2 amps of power. It shall operate from -22° F to 158° F. It shall weigh less than 9 lbs. The ECU (Electronic Control Unit) shall have dimensions of 6.8" L x 4.9" H x 1.5" D. The camera shall have dimensions of 1.3" L x 1.9" H x 2.4" W.

MOUNTING OF 5 RADIO VEHICLE CHARGERS

- Sutphen will supply and mount 5 radio vehicle chargers.
- Part number from B&C NNTN7624. Customer to confirm number. TBD
- Location near each of the seat positions.

SUTPHEN SUPPLIED RADIO DUAL HEAD, MOUNTED

ENG Radio Information

- (2) H1930A Motorola E5 Control Heads.
- (1) H1853D Retro Fit Kit.
- (1) HKN6188B Power Cable.
- (1) HSN404A Water Resistant Speaker.

- (2) HKN6168B 30ft. Power Cable.
- (2) HKN6186A Control Head Trunion.

SUTPHEN SUPPLIED RADIO DUAL HEAD, MOUNTED

ENG Radio Information

- (2) H1930A Motorola E5 Control Heads.
- (1) H1853D Retro Fit Kit.
- (1) HKN6188B Power Cable.
- (1) HSN404A Water Resistant Speaker.
- (2) HKN6168B 30ft. Power Cable.
- (2) HKN6186A Control Head Trunion.

FIRE PUMP HALE QMAX-200

Fire pump shall be midship mounted. The fire pump shall be of the double suction single stage centrifugal type, carefully designed in accordance with good modern practice.

The pump shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI.

The pump body shall be horizontally split, on a single plane, casing type with removable lower casing for easy removal of the entire impeller assembly including wear rings and bearings from beneath the pump without disturbing piping or the mounting of the pump in the chassis.

All moving parts in contact with water shall be of high quality bronze or stainless steel. Easily replaceable bronze labyrinth wear rings shall be provided. Discharge passage shall be designed to accomplish uniform pressure readings as the actual pump pressure. The rated capacity of the fire pump shall be 2000 gallons per minute in accordance with NFPA# 1901.

The pump shaft shall be rigidly supported by three bearings for a minimum deflection. One high lead bronze sleeve bearing shall be located immediately adjacent to the impeller (on side opposite the drive unit). The sleeve bearing shall be lubricated by a force fed, automatic lubrication system, pressure balanced to exclude foreign material. The remaining bearings shall be heavy-duty type, deep groove ball bearings in the gearbox and they shall be splash lubricated.

PUMP TRANSFER CASE – G SERIES

The drive unit shall be designed of ample capacity for lubricating reserve and to maintain the proper operating temperature. Pump drive unit shall be of sufficient size to withstand up to 16,000 lbs. ft. torque of the engine in both road and pump operating conditions.

The gearbox drive shafts shall be heat treated chrome nickel steel input and output shafts shall be at least 2-3/4" in diameter, on both the input and output shafts. They shall withstand the full torque of the engine in both road and pump operating conditions.

The engagement of the pump transmission shall be of such design so as to permit transfer of power from road to pump operation only after vehicle is completely stopped. The pump shift shall be air actuated from the cab and have both a green "Pump Engaged" light, and a green "O.K.-To-Pump" light. A third green light shall be provided on the pump operator's panel for "Throttle Ready".

The pump drive unit shall be cast and completely manufactured and tested at the pump manufacturer's factory.

PUMP SEAL

The pump shaft shall have only one packing gland located on the inlet side of the pump. It shall be of split design for ease of repacking. The packing gland must be a full circle threaded design to exert uniform pressure on the packing to prevent "cocking" and uneven packing load when it is tightened. It shall be easily adjustable by hand with a rod or screwdriver and requiring no special tools or wrenches. The packing rings shall be of a unique combination of braided graphite filament and braided synthetic packing and have sacrificial zinc foil separators to protect the pump shaft from galvanic corrosion.

MANUAL PUMP SHIFT OVERRIDE

A manual emergency override shift shall be provided on the pump panel and may be used by placing both the chassis transmission and the pump air shift control in "neutral" position.

PUMP TEST & CERTIFICATION

The pump shall be tested and certified by a third party independent testing agency, in accordance with NFPA 1901. A 3 hour pumping test from draft shall be conducted consisting of 2 hours of continuous pumping at 100% of rated capacity at 150PSI net pump pressure, followed by ½ hour of continuous pumping at 70% of rated capacity at 200PSI net pump pressure, and ½ hour of continuous pumping at 50% of rated capacity at 250PSI net pump pressure). The testing shall also include a pressure control system test, priming system test, vacuum test, a gauge/flowmeter test, and a pumping engine overload test. If the apparatus is equipped with a water tank, the water tank-to-pump test shall also be included.

AUXILIARY COOLER

An auxiliary cooler shall be furnished to provide additional cooling to the engine under extreme pumping conditions. Water from the pump is to be piped to the coils of the heat exchanger allowing the engine fluid to be cooled as required.

PUMP CONNECTIONS

All suction and discharge lines (except pump manifolds) 1" and larger shall be heavy-duty stainless steel pipe. Where vibration or chassis flexing may damage or loosen piping or where a coupling is necessary for servicing, a flexible connection shall be furnished. All lines shall be drained by a master drain valve or a separate drain provided at the connection. All individual drain lines for discharges shall be extended with a 90 degree fitting in order to drain below the chassis frame. All water carrying gauge lines shall utilize nylon tubing.

TANK TO PUMP

The booster tank shall be connected to the intake side of the pump with heavy-duty piping and check valves. The two (2) tank to pump lines shall run straight from the pump into the front face of the booster tank and down into the sump. A flexible rubber coupling shall be included in these lines to prevent damage from vibration or chassis flexing.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

TANK FILL

A 2" tank fill line shall be provided, using a quarter turn full flow ball valve controlled from the pump operator's panel.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

PRESSURE GOVERNOR

Apparatus shall be equipped with a Class1 Pressure Governor that is connected to the Electronic Control Module (ECM) mounted on the engine. The Governor will operate as a pressure sensor (regulating) governor (PSG) utilizing the engine's data for optimal resolution and response. Programmable presets for RPM and Pressure settings shall be easily configurable using the menu structure. Engine RPM, system voltage, engine oil pressure and engine temperature with audible alarm output for all shall be provided.

INTAKE RELIEF

There shall be a Task Force Tips A1831 intake relief valve installed on the intake side of the pump. The surplus water shall be discharged away from the pump operator and terminate with Male NPT pipe thread. System is field adjustable.

6" PUMP INLET

A 6" diameter suction port with 6" NST male threads shall be provided, on the left side of vehicle. The inlet shall extend through the side pump panels and come complete with removable strainer and long handle chrome-plated cap.

3" INLET LEFT SIDE

One 3" gated inlet valve shall be provided on the left side pump panel. The valve shall be supplied with chrome plate female swivel, plug, chain, and removable strainer.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by a swing type handle located at the operator's panel. The handle shall have a full 90 degree movement.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

6" PUMP INLET

A 6" diameter suction port with 6" NST male threads shall be provided, on the right side of vehicle. The inlet shall extend through the side pump panels and come complete with removable strainer and long handle chrome-plated cap.

3" INLET

A 3" gated inlet valve shall be provided on the right side pump panel. The valve shall be supplied with chrome plate female swivel, plug, chain, and removable strainer.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by a swing type handle located at the operator's panel. The handle shall have a full 90 degree movement.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

INLET ADAPTER

One (1) 2.5" NST male x 2.5" special thread female swivel adapter with 2.5" special thread plug and chain shall be provided for the above inlet.

FRONT SUCTION

A front suction, with chrome long handle cap, shall be provided. The inlet pipe shall be constructed of 5" stainless steel pipe. An air bleeder line shall be provided to eliminate trapped air. The inlet shall terminate at the front bumper.

INTAKE VALVE

A Hale Master Intake valve shall be installed on the above specified intake. It shall be electrically actuated from the pump panel and include a manual override hand wheel on the pump panel. The valve shall include a pressure relief valve to guard against incoming pressure surges.

INTAKE RELIEF

A relief valve shall be installed on the intake side of the pump. The surplus water shall be discharged away from the pump operator and terminate with Male NST hose thread.

ADAPTER

A 5" NPT x 6" NST adapter shall be provided for the front suction.

FRONT SUCTION ADAPTER

One (1) 6" NST x 5" Storz with cap and chain

DISCHARGE #1 - LEFT

The discharge in position #1 on the left side of the apparatus shall include the following features.

A 2.5" discharge shall be provided on the left side of the apparatus.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by a swing type handle located at the operator's panel. The handle shall have a full 90 degree movement.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DISCHARGE TERMINATION

The discharge valve shall be equipped with a straight termination that is capped and chained.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

DISCHARGE ADAPTER

One (1) 2.5" NST female x 2.5" special thread male chrome plated adapter with 2.5" special thread chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE ADAPTER

One (1) 2.5" special thread female x 1.5" NST male chrome plated adapter with 1.5" NST chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE #2 - LEFT

The discharge in position #2 on the left side of the apparatus shall include the following features.

A 2.5" discharge shall be provided on the left side of the apparatus.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by a swing type handle located at the operator's panel. The handle shall have a full 90 degree movement.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DISCHARGE TERMINATION

The discharge valve shall be equipped with a straight termination that is capped and chained.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

DISCHARGE ADAPTER

One (1) 2.5" NST female x 2.5" special thread male chrome plated adapter with 2.5" special thread chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE ADAPTER

One (1) 2.5" special thread female x 1.5" NST male chrome plated adapter with 1.5" NST chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE #3 - RIGHT

The discharge in position #3 on the right side of the apparatus shall include the following features.

A 3" discharge shall be provided on the right side of the apparatus.

VALVE, SLOW CLOSE

The valve shall be an Akron slow close type Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by a swing type handle located at the operator's panel. The handle shall have a full 90 degree movement.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and

vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from – 40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DISCHARGE TERMINATION

The discharge valve shall be equipped with a straight termination that is capped and chained.

THREAD TERMINATION

The above shall terminate with National Standard Threads.

DISCHARGE ADAPTER

One (1) Task Force Tips #AA3ST-NL 3" NST female x 5" Storz adapter with #A01ST 5" Storz cap and chain shall be provided for the above discharge.

DISCHARGE #4 - RIGHT

The discharge in position #4 on the right side of the apparatus shall include the following features.

A 3" discharge shall be provided on the right side of the apparatus.

VALVE, SLOW CLOSE

The valve shall be an Akron slow close type Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall have a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by a swing type handle located at the operator's panel. The handle shall have a full 90 degree movement.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -- 40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DISCHARGE TERMINATION

The discharge valve shall be equipped with a straight termination that is capped and chained.

THREAD TERMINATION

The above shall terminate with National Standard Threads.

DISCHARGE ADAPTER

One (1) Task Force Tips #AA3ST-NL 3" NST female x 5" Storz adapter with #A01ST 5" Storz cap and chain shall be provided for the above discharge.

DISCHARGE #5 - RIGHT

The discharge in position #5 on the right side of the apparatus shall include the following features.

A 2.5" discharge shall be provided on the right side of the apparatus.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DISCHARGE TERMINATION

The discharge valve shall be equipped with a straight termination that is capped and chained.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

DISCHARGE ADAPTER

One (1) 2.5" NST female x 2.5" special thread male chrome plated adapter with 2.5" special thread chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE ADAPTER

One (1) 2.5" special thread female x 1.5" NST male chrome plated adapter with 1.5" NST chrome plated cap and chain shall be provided for the above discharge.

2 CAPS FOR 5 INCH STORZ

2 CAPS FOR 5" STORZ X 2.5" CLEVELAND TREAD W/CAP

2 CAPS FOR 5 INCH STORZ

Ship 2 caps for 5 inch storz loose

2.5" ADAPTOR X 2

ADAPTER, 2.5" SPEC FE X 1.5" NST M W/CAP & CHAIN (SHIP LOOSE) (2)

2.5" DISCHARGE LEFT REAR

There shall be a 2.5" gated discharge piped to the left rear, adjacent to the hose bed. The discharge shall be installed with proper clearance for spanner wrenches or adapters. Plumbing shall be 2.5" piping and a full flow 2.5" ball valve with the control at the pump operator's panel.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DISCHARGE TERMINATION

The discharge valve shall be equipped with a straight termination that is capped and chained.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

DISCHARGE ADAPTER

One (1) 2.5" NST female x 2.5" special thread male chrome plated adapter with 2.5" special thread chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE ADAPTER

One (1) 2.5" special thread female x 1.5" NST male chrome plated adapter with 1.5" NST chrome plated cap and chain shall be provided for the above discharge.

2.5" REAR DISCHARGE

There shall be a 2.5" gated discharge piped to the right rear, adjacent to the hose bed. The discharge shall be installed with proper clearance for spanner wrenches or adapters. Plumbing shall be 2.5" piping and a full flow 2.5" ball valve with the control at the pump operator's panel.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DISCHARGE TERMINATION

The discharge valve shall be equipped with a straight termination that is capped and chained.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

DISCHARGE ADAPTER

One (1) 2.5" NST female x 2.5" special thread male chrome plated adapter with 2.5" special thread chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE ADAPTER

One (1) 2.5" special thread female x 1.5" NST male chrome plated adapter with 1.5" NST chrome plated cap and chain shall be provided for the above discharge.

FRONT BUMPER DISCHARGE

A 2.5" discharge with 2.5" plumbing shall be provided at the front bumper. The valve shall be remote controlled at the pump panel.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

DISCHARGE ADAPTER

One (1) 2.5" NST female x 2.5" special thread male chrome plated adapter with 2.5" special thread chrome plated cap and chain shall be provided for the above discharge.

DISCHARGE ADAPTER

One (1) 2.5" special thread female x 1.5" NST male chrome plated adapter with 1.5" NST chrome plated cap and chain shall be provided for the above discharge.

GATED WYE

2.5" SPEC FE X (2) 1.5" PYROLITE COUPLING M

DELUGE RISER

A 3" deluge riser shall be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping shall be rigidly braced. The riser shall be gated and controlled from the pump operators panel.

VALVE, SLOW CLOSE

The valve shall be an Akron slow close type Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from — 40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

DECK GUN TERMINATION

The deck gun piping shall terminate with NPT threads.

EXTENDER

An Elkhart Brass Model 8599 Manual Extender shall be provided and installed. The Extender shall provide capability of raising the water monitor 18". It comes with a 3" hard-anodized aluminum waterway and be furnished with a 3" NPT or 3" Victaulic inlet coupling, and a 3" NPT outlet.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

SPEEDLAYS

Two (2) speedlays shall be provided in the body below the crosslays equipped each with a lift-out tray and accessible from both sides of the apparatus. The piping and valves shall be 2", the swivel shall be 1.5". The valves shall be the "drop-out" style, push/pull controlled from the pump panel. Each compartment shall hold 200 ft. of 1.75" double jacket hose.

CROSSLAY

One (1) crosslay hose bed shall be supplied. The piping and valve shall be 2.5", the swivel shall be 2.5". The valve shall be the "drop-out" style, push/pull controlled from the pump panel. Compartment shall have capacity for 200 ft. of 2.5" double jacket hose.

VALVE

The valve shall be an Akron Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance by the removal of six bolts. The valve shall a 10-year warranty covered by Akron Brass.

VALVE ACTUATOR

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator's panel.

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

THREAD TERMINATION

The above shall terminate to the thread requirements of the fire department. The purchaser shall specify the actual thread dimensions required during the pre-construction conference.

DISCHARGE ADAPTER

One (1) 2.5" NST female x 2.5" special thread male chrome plated adapter with 2.5" special thread chrome plated cap and chain shall be provided for the above discharge.

CROSSLAY COVER

An aluminum diamond plate cover shall be installed over the crosslay hose beds. It shall include a chrome grab handle at each end for opening and closing the cover. The cover shall be equipped with webbing on the sides which shall be securely fastened.

SPEEDLAY COVER

Black webbing shall be provided to enclose the ends of the speedlays.

COVER FASTENERS

The crosslay cover shall be secured with airplane seatbelt style latches.

3 HOSE TRAYS

3 hose trays will be supplied and large enough to hold 250 ft of 2" hose double stacked

MASTER PUMP DRAIN

A multiport master drain valve shall be provided and plumbed to multiple locations on the main pump body. The valve assembly shall be clearly marked as the Master Drain.

DRAIN VALVES LIFT UP STYLE

Vertical lift up style, quarter turn style drain valves shall be provided for each suction inlet, or discharge outlet as specified. Each drain shall be clearly marked and color coded to match the corresponding suction or discharge.

SMARTFOAM 2.1A PROPORTIONING SYSTEM

The apparatus shall be equipped with a Hale SmartFOAM 2.1A fully automatic electronically controlled, direct injection, discharge side foam proportioning system. Foam proportioning operation shall be based on direct measurement of water flow, and remain consistent within the specified flows and pressures. With a maximum operating pressure of 250 psi.

A 12-volt DC powered variable-speed electronic direct-injection foam-concentrate proportioning system with a 2.1-gpm-foam concentrate pump shall be integrated into the apparatus to provide foam proportioning. The pump shall be capable of handling Class A or Class B foam concentrate only and be operated by a full-function panel mounted digital display.

The system shall operate via a paddlewheel flow sensor mounted in a 3-inch stainless steel check-valve manifold that includes a chemical injection point.

The inlet of this stainless steel manifold/check-valve assembly will be connected to the fire pump, and the outlet connected to the foam capable discharge outlet(s) on the fire apparatus, as specified. The flow sensor/stainless-steel foam manifold combination shall be capable of water or foam solution flow rates of 30- to 750-gpm. The foam proportioning system shall be equipped with a panel mounted digital display control unit with a microprocessor that monitors total water flow and foam concentrate pump output to provide the operator preset proportional amount of foam concentrate injected on the discharge side of the fire pump. Total foam concentrate pump concentrate output shall be 2.1 gallons per minute. Proportioning rate is push-button set by the pump operator on the digital display from 0.1% to 10%, in 0.1% increments.

The digital display panel mounted electronic operator control unit shall provide concentrate injection readout in tenths of a percent while also being able to read water flow, total water flowed and total amount of foam concentrate used. The control shall flash a warning indicating low concentrate in the reservoir to the operator, and shall be able to shut off the concentrate pump to prevent damage to the pump. A bar graph on the control unit shall provide visual indication of system operating capacity and will indicate when capacity is exceeded.

The foam concentrate pump shall be fed concentrate by a non-metallic housing foam concentrate strainer that is equipped with a service shut-off valve.

The unit will be fed 12-volt DC power from the apparatus electrical system, and be equipped with a chassis frame ground strap, per the foam proportioner manufacturer's installation and operating instruction manual.

FOAM TANK

There shall be a 30-gallon foam tank. The tank shall be part of the main booster tank. There shall be a 3" PVC fill tower and cap and a tank vent. There shall be a 1-1/2" flanged outlet and drain valve at the lowest point in the tank.

FOAM FLUSH

A manually operated quarter turn flush valve shall be provided and installed.

PUMP AND GAUGE PANELS, SIDE MOUNT

The pump controls and gauges shall be located at the left side of the apparatus. The pump and gauge panels shall be flush mounted.

Pump panels on both sides shall be easily removable. The gauge and control panels shall be two separate panels for ease of maintenance. The upper gauge panel shall be hinged with a full-length stainless steel hinge held closed with a 1/4-turn latch. There shall be one (1) hinged access door as large as possible located over the right side pump panel. This door shall have a full-length stainless steel hinge and a 1/4 turn latching mechanism.

The control panel shall be laid out in a user-friendly manner. All valve controls shall have the corresponding discharge gauge located immediately adjacent to control handle to allow operator to view the discharge pressure without searching the panel.

PANEL FINISH

The panels shall be constructed of brushed stainless steel for maximum protection against abrasion caused during normal use.

ESCUTCHEON PLATES

The pump panel shall be equipped with color-coded removable escutcheon plates around the suction and discharge valves.

COLOR CODING

Each discharge valve control, outlet, and corresponding line gauge shall be color-coded. The color-coding shall be (as applicable):

- #1 Discharge - Yellow
- #2 Discharge - White
- #3 Discharge - Navy Blue
- #4 Discharge - Black
- #5 Discharge - Green
- #1 Pre-Connect - Orange
- #2 Pre-Connect - Red

#3 Pre-Connect - Brown
#4 Pre-Connect - Magenta
Front Bumper Line - Turquoise
Large Diameter Discharge – Yellow with White Border
Left Hose Bed Pre-Connect - Tan
Right Hose Bed Pre-Connect - Lavender
Left Rear Discharge - Olive
Right Rear Discharge – Light Blue
Deck Gun – Silver
Inlets – Burgundy
Tank Fill - Lime Green
Tank to Pump – Burgundy

PUMP MODULE FRAMEWORK

The pump module framework shall be painted as specified by the customer at the pre-construction meeting. The paint finish shall be applied before the installation of any wiring, gauge lines, valve linkages, or operator's panel. The paint shall be the same material used for the finished body and cab.

PLUMBING FINISH

The plumbing shall be painted as specified by the customer at the pre-construction meeting. All fittings, pipe ends and valve ends shall be properly taped off prior to applying paint. The paint finish shall be applied before the installation of any wiring, gauge lines, valve linkages, or operator's panel. The paint shall be the same material used for the finished body and cab.

EXTERIOR DUNNAGE AREA

The exterior dunnage panels shall be constructed of aluminum diamondplate.

RUNNING BOARD TROUGHS

A trough shall be provided in the running boards on both the driver's side and officer's side, each capable of holding a 15-foot length of 5" hose.

PUMP PANEL LIGHTING, LED

The driver's side pump panel controls and gauges shall be illuminated by a full width white TecNiq E45 LED light strip, controlled at the pump panel.

PUMP PANEL LIGHTING, LED

The officer's side pump panel shall be illuminated by a full width white TecNiq E45 LED light strip, controlled at the pump panel.

PUMP MODULE ENCLOSURE LED LIGHT

An LED work light shall be installed in the pump module enclosure with an individual switch located on the officer side of the module

PUMP PANEL LIGHTS

UPGRADE EACH SIDE PANEL AND OPERATOR LIGHTS TO MULTICOLOR WHITE/RED CONTROLLED BY A SWITCH ON THE PUMP PANEL.

PUMP PANEL GAUGES AND CONTROLS

The following gauges and controls shall be provided at the pump panel:

- Two (2) certified laboratory test gauge outlets.
- Pump primer control.
- Master drain control and additional drains as needed.
- Tank-fill and pump cooler valve controls.
- Tank to pump valve control.
- Pump capacity rating plate.
- All discharge controls.
- Two (2) master pump gauges.
- Gauges on all 1-1/2" and larger discharge lines.

PRIMING SYSTEM

The priming pump shall be a Trident Emergency Products compressed air powered, high efficiency, multi-stage, venturi based AirPrime System. All wetted metallic parts of the priming system are to be of brass and stainless steel construction. The priming system shall have a five year warranty.

(1) PRIMER BUTTON - MAIN SUCTION

A single panel mounted control will activate the priming pump and open the priming valve to the pump.

COMPRESSION FITTINGS ON AIR SYSTEM

Compression style fittings shall be provided on air lines within the pump module.

AIR HORN BUTTON

A push button switch shall be provided on pump operators panel to activate the air horns.

MICROPHONE COMPARTMENT

A compartment shall be provided adjacent to the pump operator's panel to hold a microphone or headset.

4" MASTER GAUGES

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly-polished stainless steel bezel pump pressure and vacuum gauges shall be provided. The gauges shall be 4" in diameter with a white face, and black enhanced lettering. The gauges shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauges shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauges shall display a range from -30 to 400 psi with enhanced black markings on a white dial.

WATER TANK GAUGE

An Innovative Controls SL-14 weather proof encapsulated (14) super bright LED light indicator shall monitor the water tank level and shall be mounted on the pump operator's panel. The fourteen LED lights are arranged in a "V" pattern for easy identification of liquid level. When the liquid level reaches less than a 1/4 full the refill level begins to flash. The tank-sensing probe shall be chemical resistant PVC with stainless steel sensing wires. The cover plate shall be aluminum sub-plate, black background and blue graphics, with an outdoor exposure rated composite overlay.

WATER TANK GAUGE

Two (2) water tank gauges consisting of four (4) Whelen Model 500 Series LED lights shall be provided. The lights shall be green, blue, amber, and red to indicate full, three-quarter, half, and red, respectively. The lights shall correspond with the water level gauge on the pump module.

FOAM TANK GAUGE

An Innovative Controls SL-14 weather proof encapsulated (14) super bright LED light indicator shall monitor the foam tank level and shall be mounted on the pump operator's panel. The fourteen LED lights are arranged in a "V" pattern for easy identification of liquid level. When the liquid level reaches less than a 1/4 full the refill level begins to flash. The tank-sensing probe shall be chemical resistant PVC with stainless steel sensing wires. The cover plate shall be aluminum sub-plate, black background and red graphics, with an outdoor exposure rated composite overlay.

WATER TANK

The water tank shall be constructed of polypropylene sheet stock. This material shall be non-corrosive, stress relieved thermoplastic, black in color and U.V. stabilized for maximum protection. The tank shall be of a special configuration and is so designed to be completely independent of the body and compartments.

The tank shall be constructed with transverse and longitudinal swash partitions. All partitions shall be equipped with vent and air holes to permit movement of air and water between compartments. The partitions shall be designed to provide maximum water flow and meet NFPA rules. All swash partitions shall interlock with one another and welded to each other as well as to the walls and floor of the tank.

The tank shall have a combination vent and fill tower. The fill tower shall be constructed of 1/2" thick polypropylene and shall be a minimum dimension of 8"x 8" outer perimeter. The tower shall have a 1/4" thick removable screen and a hinged-type cover. Inside the fill tower, there shall be a combination vent overflow pipe. The vent overflow shall be a minimum I.D. of 4" that is designed to run through the tank, and shall be piped behind the rear wheels where specified by the purchaser so as to maximize traction.

There shall be one (1) sump standard per tank. The sump shall be constructed of 1/2" black polypropylene and located in the left front corner of the tank, unless specified otherwise. On all tanks that require a front suction, a schedule 40 polypropylene pipe shall be installed that will incorporate a dip tube from the front of the tank to the sump location. The sump shall have a minimum 3" FNPT threaded outlet on the bottom for a drain plug. This shall be used as a combination cleanout and drain. The tank shall have an anti-swirl plate above the dip tube.

There shall be two (2) standard tank outlets: one for tank to pump suction line and one for a tank fill line. All tank fill couplings shall be backed with flow deflectors to break up the stream of water entering the tank. All auxiliary outlets and inlets must meet N.F.P.A. 1900 guidelines in effect at the time of manufacture.

The tank shall rest on the body cross members to adequately support the water tank per the tank manufacturer's specifications.

The tank shall be isolated from the cross members through the use of hard rubber strips with a minimum thickness $\frac{1}{4}$ ". Additionally, the tank shall be supported around the entire bottom outside perimeter and captured front and rear as well as side to side to prevent tank from shifting during vehicle operation.

The tank shall be completely removable without disturbing or dismantling the apparatus structure.

The tank shall come with a lifetime warranty. The tank manufacturer shall mark the tank and furnish notice that indicates proof of warranty.

WATER TANK SIZE

The water tank shall have a capacity of 1,000 U.S. gallons.

BODY SUB-FRAME

The chassis shall be fitted with a sub-frame system consisting of a series of steel plate gusseted legs, extending down and out from the chassis frame rails on each side. This system will provide additional structural support to the running boards and side compartments. A heavy-duty rear platform shall be constructed of the same material to support the rear compartments and rear step. The entire assembly will be attached to the chassis frame by a series of heavy-duty U-bolts. Self-supporting bodies will not be acceptable. NO EXCEPTIONS

APPARATUS BODY

The body shall be constructed of 3/16" #5052 aluminum sheet, #3003 bright aluminum diamond plate and structural aluminum extrusions. The body shall be of the modular design to allow for proper flexing of the truck chassis. The body shall be custom built and engineered for proper load distribution on the chassis. An insulator material shall be used where aluminum and steel are in contact to prevent corrosion.

The ceilings, sidewalls and floors of the body compartments shall be constructed of 3/16" 5052-H32 smooth aluminum plate with a tensile strength range of 32,000 to 44,000 psi. Continuous 4043 fill welding shall seal compartment panels.

The body framework shall be constructed of custom-designed aluminum alloy 6063-T5 extrusions with a tensile strength of 35,000 psi.

To eliminate "dead space" and to maximize compartment interior space, there shall be no more than 1/4" between outer and inner walls.

The compartment extrusions shall be slotted full-length on backside for uniform fitting of the aluminum plate work that forms the compartment interiors.

The aluminum extrusion profiles shall incorporate 1" x 1-3/4" recessed continuous door seal at the bottom of the compartment. The extrusions shall be designed to allow unobstructed, sweep-out floors in all compartments.

The front, top, and rear surfaces of body shall be covered with .125" bright aluminum diamond treadplate. The forward and rear recessed surfaces shall be flush with the corner extrusions.

The compartment tops shall extend downward over the extrusions and form a drip molding. The material shall be .125 aluminum treadplate with approved aerated service for walking.

The compartment assemblies are to be fastened to the sub-frame with mechanical Huck-type bolts.

The apparatus body shall be a separate module from the pump enclosure and shall not be fastened together in any manner.

Each compartment shall be properly vented with louvers.

REAR STEP COMPARTMENTATION

A1 - There shall be a compartment provided at the rear step. The compartment shall be approximately 40" wide x 40" high x 30-1/2" deep inside. The compartment shall be provided with a roll-up door.

COMPARTMENTATION LEFT SIDE

L1- There shall be a compartment ahead of the rear wheels approximately 43" wide x 66" high x 27-1/4" deep.

L2- There shall be a compartment above the rear wheels, approximately 61-1/2" wide x 36-1/2" high x 27-1/4" deep.

L3- There shall be a compartment behind the rear wheels approximately 53-1/2" wide x 66" high x 27-1/4" deep.

COMPARTMENTATION RIGHT SIDE

R1- There shall be a compartment ahead of the rear wheels approximately 43" wide x 66" high x 27-1/4" deep. The upper portion of the compartment shall be 16" deep to accommodate ladder storage.

R2- There shall be a compartment above the rear wheels approximately 61-1/2" wide x 36-1/2" high x 16" deep.

R3- There shall be a compartment behind the rear wheels approximately 53-1/2" wide x 66" high x 27-1/4" deep. The upper portion of the compartment shall be 16" deep to accommodate ladder storage.

UPPER HATCH COMPARTMENTS

There shall be a compartment located at the top of each body side with lift up doors and pneumatic stays. The compartments shall be approximately 21" wide x 26" high x 162" long. Two (2) lift-up NFPA compliant serrated aggressive diamond plate doors shall be provided on each side, with chrome handles. The tops of the compartments shall be constructed of NFPA compliant embossed aggressive diamond plate.

OIL DRY HOPPER

An oil dry hopper will be constructed and located in the rear upper portion of the hatch compartments. The hopper will have a capacity to hold up to 150# of oil dry material. The hopper construction shall be of aluminum plate fabricated and solidly welded in a manner to allow the material to flow downward into the delivery pipe. The delivery pipe shall be constructed of 3" PVC and equipped with a PVC flange to provide a maintenance free seal at the bottom of the hopper. The pipe shall be routed through the back corner of the rear compartment. The point of material discharge shall be either in the rear compartment or directly under the rear compartment as directed by the fire department. A 3" PVC sliding type valve shall be provided and located in the rear compartment for controlling the dispensing of the material.

COMPARTMENT INTERIOR - L1

The L1 compartment on the left side of the apparatus shall include the following features:

ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188" aluminum plate.

COMPARTMENT INTERIOR - L2

The L2 compartment on the left side of the apparatus shall include the following features:

ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188" aluminum plate.

COMPARTMENT INTERIOR - L3

The L3 compartment on the left side of the apparatus shall include the following features:

ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188" aluminum plate.

COMPARTMENT DIVIDER

There shall be a vertical divider/partition provided in a compartment as specified. The divider shall be constructed of .188" thick smooth aluminum plate. The top and bottom of the divider shall have a formed flange bolted to the interior of the compartment.

ADJUSTABLE VERTICAL SLIDE-OUT PANEL

There shall be an adjustable vertical slide-out tool board with a 250 lb. capacity supplied and mounted on unistrut tracks. Extra compartment lights shall be provided and located as needed to properly illuminate the compartment.

600# SLIDE-MASTER TRAY

There shall be a Slide-Master pullout drawer provided and installed. The drawer shall have a distributed load capacity of 600 lbs. and be capable of extending 70% of its depth. The tray shall be fabricated of .188" aluminum plate and have a formed lip that measures 2".

COMPARTMENT INTERIOR - R1

The R1 compartment on the right side of the apparatus shall include the following features:

ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188" aluminum plate.

600# SLIDE-MASTER TRAY

There shall be a Slide-Master pullout drawer provided and installed. The drawer shall have a distributed load capacity of 600 lbs. and be capable of extending 70% of its depth. The tray shall be fabricated of .188" aluminum plate and have a formed lip that measures 2".

COMPARTMENT INTERIOR - R2

The R2 compartment on the right side of the apparatus shall include the following features:

ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188" aluminum plate.

COMPARTMENT INTERIOR - R3

The R3 compartment on the right side of the apparatus shall include the following features:

ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188" aluminum plate.

600# SLIDE-MASTER TRAY

There shall be a Slide-Master pullout drawer provided and installed. The drawer shall have a distributed load capacity of 600 lbs. and be capable of extending 70% of its depth. The tray shall be fabricated of .188" aluminum plate and have a formed lip that measures 2".

COMPARTMENT INTERIOR - A1

The A1 compartment on the rear of the apparatus shall include the following features:

600# SLIDE-MASTER TRAY

There shall be a Slide-Master pullout drawer provided and installed. The drawer shall have a distributed load capacity of 600 lbs. and be capable of extending 70% of its depth. The tray shall be fabricated of .188" aluminum plate and have a formed lip that measures 2".

UNISTRUT

Each compartment shall come equipped with 1.625" x .875" x .125" aluminum Unistrut channel. The Unistrut shall be securely fastened to the interior walls of the compartment.

ROLL-UP COMPARTMENT DOORS

The apparatus body shall be equipped with R.O.M Robinson Shutter doors. The door slats shall be double wall box frame, manufactured from anodized aluminum. The doors shall have the following features:

- Manufactured wholly in the United States.
- Concave individual slat design to prevent loose equipment from hindering door operation.
- Co-Extruded stretch resistant inner seal between slats to prevent metal-to-metal contact and inhibit moisture and dust penetration.
- Interlocking swaged/dimpled end shoes shall be utilized to provide a tight fitting assembly and allow for easy removal in the event of damage.
- Effective counter balancing for ease of lifting and lowering the doors.
- One-piece side rail and track to provide an unobstructed slide area and reduce the risk of binding.
- Non-abrasive replaceable water and dust barrier to keep compartment equipment clean and dry.
- A magnetic type switch integral to the door shall be supplied for door ajar indication and compartment light activation.
- A full width positive latch bar shall be operable with one hand, even with heavy gloves.

A door open indicator light shall be provided in the cab.

A 3M clear protective material shall be provided along the outer edge of the compartment floor to protect this area from scratches that could occur when installing or removing equipment from the compartments.

PAINTED ROLL-UP DOORS

These doors shall be wet painted before assembly by the door manufacturer. The paint shall be the same as the apparatus to achieve an exact match of paint color and have the look and durability the same as on the rest of the truck.

REAR COMPARTMENT DOOR

The rear compartment door shall be equipped with ROM brand roll-up door. The door shall be wet painted before assembly by the door manufacturer. The paint shall be the same as the apparatus to achieve an exact match of paint color and have the look and durability same as on the rest of the truck.

ROLL UP DOOR DRIP PAN/SPLASHGUARD

The specified roll-up door(s) shall be equipped with a drip pan with built in splashguard. The drip pan shall attach to the pennant plate with spring pins to allow for easy removal and cleaning. The construction of the pan shall be of a corrosion resistant material. The drip pan shall have a drainage tube that shall route water that collects inside the pan to the exterior of the compartment.

COMPARTMENT INTERIOR FINISH

The interior non-painted surface of the compartments shall have a smooth, natural finish.

COMPARTMENT LIGHTING

Each compartment shall be equipped with two (2) white ROM DuroStrip LED light strips which shall provide a consistent pattern to illuminate to entire compartment.

ADDITIONAL GRAB RAILS HANDLES

Two (2) additional grab rail handles will be provided, one to be located on the rear of each rear coffin compartment.

ROM WHITE/RED COMPARTMENT LIGHTS

Compartment lights to either red or white controlled by a switch.

HOSE BED

The hose bed shall be provided with aluminum slatted flooring radiused at the edges to prevent hose damage from sharp edges. Each hose bed floor section shall be removable for easy access to the water tank.

HOSE BED COVER

An aluminum two-piece, hinged hose bed cover constructed of .125" aluminum diamond plate and square aluminum extrusion shall be provided for the main hose bed.

HOSEBED SUPPORT

A removable aluminum support bar shall be provided at the rear of the hosebed to support the aluminum hosebed cover.

REAR HOSE BED COVER

A vinyl flap shall be provided and installed on the rear of the hose bed to prevent the hose from unintentional deployment. The vinyl flap shall be secured, and fastened to the rear of the hose bed.

COVER FASTENERS

The hose bed cover shall be secured with black bungee cords with orange pull tabs.

5 HOSE BED DIVIDERS

The hose bed shall be divided by five (5) 3/16" aluminum partitions that are fully adjustable by sliding in tracks located at the front and rear of the hose bed. The dividers shall be located as needed.

SIDE HOSEBED LIGHTING

TecNiq E44 LED light strips shall be provided on the interior hosebed walls, one each side.

REFLECTIVE LETTERING, REAR HOSE BED FLAP

Lettering to be = BROOK PARK
-Lettering Color to match upper Job Color Blue.

BODY HANDRAILS

Handrails shall be constructed of type 304 stainless steel 1.25 inch diameter tubing with bright finish and knurled gripping surface. Mounting flanges shall be constructed from 7 gauge, .180 thick, stainless sheet. Each grab rail shall have 90 degree returns to flanges. The ends of grab rail shall pass through the flanges and be welded to form one structural unit. The handrails, shall be mounted using 1.25" SS Hex bolts, with a barrier rubber gasket at each flange. Sufficient space shall allow for a gloved hand to firmly grip the rail. The rails shall be located in the following areas:

(Note: These are in addition to those previously mentioned in the cab section):

There shall be one (1) vertical handrail at rear of the body one each side of the rear compartment.

There shall be two (2) handrails mounted horizontally, above the pump panel, one (1) on each side as large as possible.

FRONT BODY STEPS

There shall be up to five (5) Innovative Control fold-down steps with integrated step lights mounted on each side of the front face of body to provide access to the top of the pump module and dunnage area.

The quantity and location of steps and handrails shall meet the Current NFPA 1901 pamphlet in effect at the time the apparatus is ordered.

REAR STEPS

The rear of the body shall be equipped with up to six (6) fixed steps. The bottom step shall measure 14" x 11" to provide a stable footing position. Each additional step above shall measure 14" x 8" for clearance while climbing. Thinly fabricated aluminum steps shall not be utilized.

The quantity and location of steps and handrails shall meet the Current NFPA 1901 pamphlet in effect at the time the apparatus is ordered.

REAR ACCESS LADDER

There shall be a ladder located at the driver's side rear of the apparatus to access the top of the vehicle body. The ladder shall be a swing-out and fold-down type. The ladder shall be constructed of 1/8" formed

stainless steel and shall be 16.5" wide. Each step shall be 3.25" deep x 16" wide with a perforated non-skid stepping surface. The ladder shall be held in the closed and open positions with two (2) gas struts.

RUB RAILS

The body shall be equipped with anodized aluminum channel style rub rails at the sides. Rub rails shall be spaced away from the body by 1/2" polymer spacers. The rub rails shall be polished to a bright finish.

ALUMINUM TREADPLATE

All load bearing aluminum treadplate running boards shall be .155 thick bright-annealed finish. Running boards and rear step edges shall be flanged down for added strength. Running boards shall also be flanged up to form kick plates. All non-load bearing aluminum shall be .125" thick bright annealed finish. In areas where aluminum treadplate shall function as a load-bearing surface, there shall be a heavy steel sub-structure. This structure shall consist of 3" channel and 1-1/2" angle welded support. This shall assure that there shall be no flexing or cracking of running boards. The aluminum shall be insulated from the steel by closed cell foam body barrier material.

Treadplate locations:

1. Skirting around front bumper.
2. The step at the cab entrance.
3. The jump seat steps.
4. The body header.
5. The running boards.
6. The rear step.
7. The top of the compartments.
8. The rear of the apparatus.

REAR STEP CORNERS

The rear step/tailboard corners shall form a 90 degree angle, and a cast corner cap with reflective makers shall be installed on each corner.

AIR BOTTLE COMPARTMENTS

There shall be four (4) spare breathing air cylinder compartments recessed in the rear fender wells, two (2) left and two (2) right. Three of the compartments shall be capable of holding three bottles and the remaining compartment shall be capable of holding one bottle, for a combined total capacity of ten (10) SCBA bottles. The interior compartment shall be constructed of a high-density polyethylene plastic.

DIVIDERS

A divider shall be provided for two (2) triple SCBA compartments.

DOOR FINISH

The single or double SCBA compartments shall have a brushed stainless door equipped with a weather resistant flush fitting thumb latch. The interior of the door shall incorporate a rubber seal to keep the compartment free of road debris and moisture.

DOOR FINISH

The triple capacity SCBA compartments shall have a brushed stainless door equipped with a weather resistant flush fitting thumb latch. The interior of the door shall incorporate a rubber seal to keep the compartment free of road debris and moisture.

FENDER PANELS

The rear side fenders shall be removable aluminum treadplate panels. The wheel liners shall be constructed of pre-formed material to provide a maintenance free, damage resistant surface.

LADDER EQUIPMENT

The apparatus shall be equipped with the following ladders:

- One (1) Duo-Safety Series 900A 24 ft. two-section aluminum extension ladder.
- One (1) Duo-Safety Series 775A 14 ft. aluminum roof ladder.
- One (1) Duo-Safety Series 585A 10 ft. folding attic ladder with mounting.

GROUND LADDER STORAGE

There shall be a ground ladder storage compartment located behind the right side upper compartments in an area accessible from the rear of the apparatus. The ladders shall be individually stored on beam in fiberglass angle slides at the bottom of the compartment. --The ladder storage compartment shall hold one (1) 24' 2-section ladder and one (1) 14' roof ladder.

The storage compartment shall be enclosed at the rear by a vertically hinged smooth aluminum door with chevron striping and 1/4-turn T-handle latch. The door shall be tied into the "Compartment Door Open" indicator in the cab by means of a plunger switch. An LED light strip light shall illuminate the interior of the compartment.

LADDER CHUTE DOOR

A smooth aluminum door shall enclose the ladders at the rear.

LADDER ENCLOSURE

The ladder chute compartment shall be fully enclosed to protect the ladders from road debris.

TRASH HOOK / PIPE POLE STORAGE

One trash hook will be stored above the ladders on the left side, a latching door will be provided. Plus 3 New york pike poles

RECEIVER (Sides)

A 2" receiver shall be provided and mounted directly to the apparatus chassis, extending out of the rear sides of the body. The receiver shall be 2" x 2" heavy wall tube and solidly re-enforced. The receiver shall be rated with a maximum capacity of 5,000 lbs. The receiver shall be designed for a 2-1 straight pull capacity (10,000 lbs).

RECEIVER (Rear)

A 2" receiver shall be provided and mounted directly to the apparatus chassis, under the body sub frame. Receivers that mount to the body subframe shall not be acceptable. The receiver shall be 2" x 2" heavy wall tube and solidly re-enforced. The receiver shall be rated with a maximum capacity of 5,000 lbs. The receiver shall be designed for a 2-1 straight pull capacity (10,000 lbs).

WIRING

Sufficient power shall be provided at the receiver for the intent of powering a winch.

BODY ELECTRIC SYSTEM

All body electrical wiring in the chassis will be XLP cross link-insulated type. Wiring is to be color-coded and include function codes every three (3) inches. Wiring harnesses will be routed in protective, heat resistant loom, securely and neatly installed. Two power distribution centers will be provided in central locations for greater accessibility. The power distribution centers contain automatic thermal self-resetting breakers, power control relays, flashers, diode modules, daytime driving light module, and engine and transmission data links. All breakers and relays are utilized in circuits which amp loads are substantially lower than the respective component rating thus ensuring long component life. Power distribution centers will be composed of a system of interlocking plastic modules for ease in custom construction. The power distribution centers are function oriented. The first is to control major truck function and the second controls overhead switching and interior operations. Each module is single function coded and labeled to aid in troubleshooting. The centers also have accessory breakers and relays for future installations. All harnesses and power distribution centers will be electrically tested prior to installation to ensure the highest system reliability.

All external harness interfaces will be of a triple seal type connection to ensure a proper connection. The cab/chassis and the chassis/body connection points will be mounted in accessible locations. Complete chassis wiring schematics will be supplied with the apparatus.

The wiring harness contained on the chassis shall be designed to utilize wires of stranded copper or copper alloy of a gauge rated to carry 125% of maximum current for which the circuit is protected without exceeding 10% voltage drop across the circuit. The wiring shall be uniquely identified by color code or circuit function code, labeled at a minimum of every three (3) inches. The identification of the wiring shall be referenced on a wiring diagram. All wires conform to SAEJ1127 (Battery Cable), SAEJ1128 (Low Tension Primary Cable), SAEJ1560 (Low Tension Thin Wall Primary Cable).

All harnesses shall be covered with moisture resistant loom with a minimum rating of 300 Degrees Fahrenheit and a flammability rating of VW-1 as defined in UL62. The covering of jacketed cable has a minimum rating of 289 degree Fahrenheit.

All harnesses are securely installed in areas protected against heat, liquid contaminants and damage. The harness connections and terminations use a method that provides a positive mechanical and electrical connection and are in accordance to the device manufacturer's instructions. No connections within the harness utilize wire nut, insulation displacement, or insulation piercing.

All circuits conform to SAE1292. All circuits are provided with low voltage over current protective devices. These devices are readily accessible and protected against heat in excess of component rating, mechanical damage, and water spray. Star washers are not used for ground connections.

BACK-UP ALARM

An Ecco model SA917 automatic self-adjusting electronic back-up alarm producing 87-112 db shall be installed at the rear between the frame rails. It shall operate whenever the transmission's reverse gear is selected.

STOP/TAIL/TURN/REVERSE LIGHTS

The rear stop/tail/turn/reverse lights shall be Whelen 600 series lights individually installed each side on the rear of the apparatus body. The stop/tail lights shall be LED model 60BTT located in the top position. The amber arrow turn signals shall be LED model 60A00TAR located below the stop/tail lights. The reverse lights shall be LED model 60C00WCR (maximum intensity) located below the turn signals.

LED ICC/MARKER LIGHTS

LED type ICC/marker lights shall be provided to meet D.O.T. requirements.

STEP LIGHTS

The pump module running board area shall be illuminated by Whelen 2G 4" diameter LED lights mounted one each side on the front of the body in chrome flanges.

LED strip lighting or individually mounted lights shall be provided at the rear of the body to illuminate all stepping surfaces based on the body style.

GROUND LIGHTS

Red and White ground lights.

- Activated when the Brake switch is applied.
 - Switched in Cab Overhead Console Position 1 and Main Pump Panel "Day/Night"
 - White for Day and Red for Night operations.
 - Part Number TUXTLED-4X40 4" Round Dual Revolution Red & White SST Reverse Combo Light.
- www.raneystruckparts.com

OPTICAL WARNING SYSTEM

The optical warning system shall be capable of two separate signaling modes during emergency operations. One mode shall signal to drivers and pedestrians that the apparatus is responding to an emergency and is calling for the right-of-way and the other mode shall signal that the apparatus is stopped and is blocking the right-of-way.

A momentary rocker switch shall be provided near the driver and labeled Master Emergency to energize all

of the optical warning devices provided. A secondary momentary rocker switch shall be provided near the officer. All lights shall operate at not less than the minimum flash rate per minute as specified by NFPA.

UPPER LEVEL WARNING DEVICES

The upper level shall be divided into zones A (front), B (officer's side), C (rear) and D (driver's side).

Zone A (front) shall have one (1) Whelen Freedom IV 81" Model F4N1QLED light bar, with twenty (20) LED modules. The light bar shall have two (2) end red LED modules, four (4) corner red LED modules, twelve (12) forward-facing red LED modules and two (2) forward-facing white LED modules. The light bar shall have all clear outer lenses. The light bar shall be installed on the cab roof as far forward as possible with two (2) MK8H 5" cast aluminum risers.

Zone B (officer's side) shall be covered by the module from the light bar and the rear beacon.

Zone C (rear) shall have two (2) Whelen Model R316*F Rota-Beam LED beacons installed one (1) each side on the upper rear of the apparatus.

Zone D (driver's side) shall be covered by the module from the light bar and the rear beacon.

LOWER LEVEL WARNING DEVICES

The lower level shall be divided into zones A (front), B (officer's side), C (rear) and D (driver's side).

Zone A (front) shall have four (4) Whelen 600 series model 60*02F*R Super LED warning lights.

The lights shall be installed two (2) each side on the front of the cab in the warning light housings.

Zone B (officer's side) shall have one (1) Whelen 600 series model 60*02F*R Super LED warning light, one (1) Whelen 500 series model 50*02F*R Super LED warning light, and one (1) Whelen ION T-Series TLI* Super LED warning light.

The lights shall be installed one (1) near the front corner of the apparatus, one (1) near the rear axle, and one (1) near the rear corner of the apparatus.

Zone C (rear) shall have two (2) Whelen 600 series model 6RB* Rota-Beam LED warning lights installed one (1) each side on the lower rear of the apparatus.

Zone D (driver's side) shall have one (1) Whelen 600 series model 60*02F*R Super LED warning light, one (1) Whelen 500 series model 50*02F*R Super LED warning light, and one (1) Whelen ION T-Series TLI* Super LED warning light.

The lights shall be installed one (1) near the front corner of the apparatus, one (1) near the rear axle, and one (1) near the rear corner of the apparatus.

ADDITIONAL WARNING LIGHTS

There shall be two (2) additional Whelen 600 series model 60*02F*R Super LED warning lights installed on the apparatus.

ADDITIONAL WARNING LIGHTS

There shall be two (2) additional Whelen 600 series model 6RB* Rota-Beam LED warning lights on the apparatus.

WARNING LIGHT, ROTO-RAY, LED

There shall be one LED Roto-Ray warning light mounted on the front of the cab below the windshield. The Roto-Ray shall contain three (3) independent LED lights, one (1) white LED with clear lens and two (2) red LED with clear lens. The lights shall be mounted in a motorized housing and shall be activated by a switch in the cab. The light shall be wired to the parking brake to deactivate when the parking brake has been depressed.

TRAFFIC ADVISOR

One (1) Whelen TAL65.36" LED traffic advisor shall be installed at the rear of the apparatus. The advisor shall have six (6) amber LED light heads. A diamond plate lip shall be installed above the traffic advisor to protect it from hose couplings. The TACTL5 control head shall be mounted in a location specified by the fire department.

ADDITIONAL LIGHTBARS, WHELEN MINI FREEDOM IV 23.25" LED ROTABEAM LIGHT BARS (PAIR)

There shall be (2) additional Whelen Freedom IV 23.25" LED light bars, each with five (5) LED modules. Each light bar shall have one (1) end red LED module, two (2) corner red Rota-Beam modules, and two (2) forward-facing red LED red modules. The light bars shall have all clear outer lenses. The light bars shall be installed on the cab roof each with two (2) MK8H 5" cast aluminum risers.

-Move as far outboard as possible.

-All Red Lights

SURFACE MOUNTED LED SCENE LIGHT

One (1) Fire Research Spectra SPA260-Q15 surface mounted LED scene light shall be provided. The lamp head shall operate at 12 volts DC, draw 13 amps, and generate 15,000 lumens of light. The light shall be mounted at a fire department specified location and shall be controlled from a switch in the cab.

TELESCOPIC SCENE LIGHT

One (1) Fire Research Spectra SPA530-Q15-SR LED telescopic scene light shall be provided. The lamp head shall operate at 12 volts DC, draw 13 amps, and generate 15,000 lumens of light. The light shall be installed at a fire department specified location with Steady Rest bottom bracket and shall be controlled from a switch in the cab.

SURFACE MOUNTED LED SCENE LIGHT

One (1) Fire Research Spectra SPA900-Q70 surface mounted LED scene light shall be provided. The lamp head shall operate at 12 volts DC, draw 6 amps, and generate 7,000 lumens of light. The light shall be mounted at a fire department specified location and shall be controlled from a switch in the cab.

BROW MOUNTED LED SCENE LIGHT

One (1) FireTech 72" 3-piece FT-B-72-ML-3PKIT-* brow mounted LED scene lights shall be provided. The lamp head shall operate at 12 volts DC, draw 23.8 amps, and generate over 30,000 lumens of light. The light shall be mounted at the front brow of the cab and shall be controlled from a switch in the cab. All custom mounting brackets shall be supplied by OEM.

ADDITIONAL 3-WAY SWITCH

An additional 3-way switch shall be provided per the customer's location.

BROW LIGHT SWITCHING

- Switched in Overhead Console Position 1 "Front Scene"/"Front Flood"/"Front All".
- Black Housing and Bracket.
- Mount as high as possible to accommodate the 360 camera.

CORROSION REDUCTION POLICY

It is understood that fire apparatus will operate in harsh environments. The Sutphen Corporation has in place a formal corrosion reduction program and detailed assembly procedures, designed for reducing and

eliminating the possibility of corrosion. A formal program following the processes as set forth in ASTM B117, and is described below.

Frame Rails

The chassis frame rails shall be coated with a high performance, two component, reinforced inorganic zinc rich primer with a proven cathodic protection makeup preferably Cathacoat 302HB. The surface shall be clean and free of all salts, chalk and oils prior to application. Where the primer has been broken during the frame assembly process the area shall be touched up to reestablish the seal. Prior to finish paint a second primer Devran 201 shall be applied. Once the assembly of the frame is complete and the second primer is applied the entire assembly shall be covered with high quality top coat paint preferably Imron 5000 or equal.

Electro Plating

Steel and Iron brackets such as the pump module bracket shall be Zinc or cadmium plated to protect against corrosion. Plating shall be in accordance with ASTM B663.

Fasteners

In any area that a stainless steel screw or bolt head is to come in contact with aluminum or steel, painted or non-painted, the fastener shall have the underside of the head pre-coated with nylon. The nylon coating shall act as a barrier between the fastener head and the metal or painted surface.

Screw or bolt taped into the metal shall be pre-coated with a Threadlocker type material pre-applied on the threads.

When bolting together stainless steel the pan-head bolts with nylon coating under the head, a stainless washer with a rubber backing, and a Stover flange nut to secure the bolt, shall be utilized.

When mounting aluminum components such as a step to the apparatus body, stainless steel washers with rubber backing shall be used. All mounted components shall utilize barrier material between the two surfaces.

All rivet or huck type fasteners shall be of the same material being secured.

Whenever possible, holes shall be pre-drilled and taped when mounting components such as lights, steps, and hand rails prior to the paint process to reduce the corrosion opportunity. If a hole must be drilled into a previously painted surface, the paint barrier around the hole shall be re-established and a flange-type nutsert with a gasket under the flange shall be used.

When possible, the use of stainless trim screws shall be minimized. Structural tape and or adhesive shall be used where possible for mounting trim to the body or cab.

If a pre-treated screw or bolt is not available, hand applied Dynatex Boltlocker or Theadlocker shall be placed on the threads of the screw, bolt or nutsert. This will help seal threads from moisture and help prevent the fasteners from loosening. If lubricant is used when tapping the hole, the hole will be cleaned of lubricant and the shavings before applying.

Barrier Tape

Barrier tape shall be used on the backsides of all lights, trim pieces, or other components when bolting them to the apparatus; also when attaching stainless steel over an aluminum surface or when attaching aluminum treadplate to the stainless steel. All instances of dis-similar metals contacting each other require the addition of barrier tape between the metals where contact is made.

Before applying the tape, all metal surfaces shall be clean from oil or dirt with a 50/50 mix of alcohol and water or a similar solvent.

Gaskets

Gaskets shall be used under all snaps, loops and fasteners for such items as for hose bed covers. The paint seal shall be re-established around the mounting hole edges after drilling.

Rollup Doors

1 3/4" X 1/16" barrier tape shall be used on the frame opening to act as barrier between the aluminum door rail and the painted door opening surface.

Hinged Doors

Barrier tape shall be applied to the painted surface of the body and on the painted hinge side of the door.

Painting Steel

Steel shall be wiped of any oil residue, rust, and weld slag or smoke shall be removed. All surfaces shall be cleaned with solvent, primed, and then sprayed with a topcoat. After bolts are tightened to the proper torque, bolts shall be touched up with primer or cold galvanizing coating.

Mounting Emergency Lights and Options

All emergency lights, accessory mountings, Kussmaul covers, and 110 outlet boxes mounted to the body should be mounted with pre-coated Threadlocker and nylon under the head screws or bolts to minimize corrosion between dissimilar metals.

Electrical Grounding

Grounding straps shall be installed consisting of a minimum 2-gauge strap bolted to the chassis frame.

A ground cable from the cab to the right side frame rail

From the alternator to the right side frame rail

From the pump module frame to the right side truck frame.

Aerials: from the hydraulic and pump module framework.

From the pump mount to the truck frame rail.
From the body module to the right side truck frame.

Proper grounding will help eliminate grounding problems, and will reduce the possibility for electrolysis and corrosion to occur, as a result of impressed current be presented to the chassis. All electrical connection points shall be sprayed with electrical sealer as necessary.

SALT SPRAY TESTING

All fasteners and coatings have been chosen after extensive salt spray testing. Salt spray tests are used to confirm the relative resistance to corrosion of coated and uncoated metallic specimens, when exposed to a salt spray climate at an elevated temperature. Test specimens are placed in an enclosed chamber and exposed to a continuous indirect spray of neutral (pH 6.5 to 7.2) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0 ml/80cm²/hour, in a chamber temperature of +35C., steady state condition.

Method

Salt fog testing is performed by placing samples in a test cabinet that has been designed in accordance with Paragraph 4 (Apparatus) of ASTM B117 and operated in accordance with Paragraph 10 (Conditions) of ASTM B117.

A 5% salt solution, prepared by dissolving sodium chloride into water that meets the requirements of ASTM D1193 Specification for Reagent Water, Type IV is supplied to the chamber. At the time the samples are placed into test, the cabinet is pre-conditioned to the operating temperature of 35°C and fogging a 5% salt solution at the specified rate.

Orientation

The samples are placed at a 15-30 degree angle from vertical or tested in the "installed" position. This orientation allows the condensation to run down the specimens and minimizes condensation pooling. An important aspect of the test is the utilization of a free-falling mist, which uniformly settles on the test samples. This simulates a "real world" condition.

Test durations

Test durations are 500 hours, and the test cabinet will remain closed for the duration of the test.

PAINTING

All exposed metal surfaces not chrome plated, polished stainless steel or bright aluminum tread plate shall be thoroughly cleaned and prepared for painting. All irregularities in painted surfaces shall be rubbed down and all seams shall be caulked before the application of the finish coat.

All removable items such as brackets, compartment doors, door hinges, trim, etc. shall be removed and painted separately to insure finish paint behind all mounted items. Body assemblies that cannot be finish

painted after assembly shall be finish painted before assembly. Both aluminum and steel surfaces to be painted shall be primed with a two (2)-component primer which is compatible with the finish coat. The apparatus shall be finish painted with a polyurethane base/clear system. "No Exception"

A barrier gasket/washer of "High Density Closed Cell Urethane Foam" shall be used behind all lights, handrails, door hardware and any miscellaneous items such as stainless steel snaps, hooks, washers and acorn nuts. The gaskets/washers shall be coated with pressure sensitive acrylic adhesive. All screws used to penetrate painted surfaces shall be pre-treated/coated under the head with nylon and the threads shall have pre-coat #80. This procedure shall be strictly adhered to for corrosion prevention and damage to the finish painted surfaces.

The following paint process shall be utilized:

Surface Preparation:

1. Wash surface thoroughly with mild detergent.
2. Clean and de-grease with Prep-Sol 3812S.
3. Sand and feather edge using 400 grit or finer on a dual action sander.
4. Remove sanding dust with a cleaner compatible with polyurethane base coat/clear coat final finish.

Substrate treatment:

1. Use a Metal Conditioner followed with a Conversion Coating product.

Priming:

1. Use a priming 615S pretreatment.
2. Use a self etching primer applied to achieve a 1.5 mil dft minimum.
3. Use Prime N Seal sealer compatible with polyurethane base coat.

Color Coat:

1. Apply polyurethane base coat 1-2 mil dft minimum.

Clear coat:

1. Apply polyurethane clear coat 2 mil dft minimum.

PAINT TWO TONE

The cab and body shall be two (2) colors. The placement of the paint break shall be determined at the pre-construction conference.

CAB PAINT BREAK LOCATION

The paint break line shall be at the bottom of the windshield.

PAINTED FRAME

The frame rails and body rear drop shall be painted glossy black.

TEXTURED FRAME RAIL COATING

The area of the frame rails where the pump module shall be located. Shall be applied with a textured coating that matches the frame rail color.

AIR CONDITIONING CONDENSER

The air conditioning condenser shall be painted to match the cab roof.

A 1/2" 22KT gold stripe with printed edges stripe shall be provided along the cab paint break.

CHEVRON STRIPING, REAR BODY OUTBOARD, ORAFOL REFLEXITE

The apparatus shall have 6" red and yellow reflective Orafol Reflexite Chevron style striping affixed to the outboard rear body panels. The striping will be set in a manner to have the effect of an inverted "V" shape. The stripe will travel low to high from the outside to the inside.

CHEVRON STRIPING, ABOVE REAR COMPT. DOOR, ORAFOL REFLEXITE

In addition to the outboard rear body panels, the panel above the rear compartment door shall also be covered with 6" red and yellow reflective Orafol Reflexite Chevron style striping.

CHEVRON STRIPING, LADDER CHUTE DOOR, ORAFOL REFLEXITE

The ladder chute door shall have 6" red and yellow reflective Reflexite Chevron style striping affixed to it. The striping will be set in a manner to have the effect of an inverted "V" shape. The stripe will travel low to high from the outside to the inside.

MISCELLANEOUS EQUIPMENT FURNISHED

1 pt. touch-up paint

A bag of stainless steel nuts and bolts, as used in the construction of the apparatus.

WHEEL CHOCKS

Two (2) Ziamatic #SAC-44 folding wheel chocks with SQCH-44H holders shall be provided. The wheel chocks shall be located in an area close to the rear axles easily accessible from the side of the apparatus.

PIKE POLE & FOLDING LADDER COMPARTMENT

A compartment shall be provided behind the right side upper compartments above the ladder storage compartment. The compartment shall have three (3) tubes to accommodate standard pike poles and an enclosed chute for the 10' folding ladder.

A smooth aluminum door with chevron striping and 1/4-turn latch shall enclose the ladders at the rear.

RECHARGEABLE HANDLIGHT

One (1) Streamlight® SL-44401 Fire Vulcan® rechargeable handlight with 12 volt charger shall be provided and mounted.

OPERATION AND SERVICE MANUALS

Complete "Operation and Service" manuals shall be supplied on two (2) USB flash drives with the completed apparatus. Service manual instructions shall include service, maintenance and troubleshooting for major and minor components of the truck. The apparatus manufacturer shall supply part numbers for major components (i.e. Engine, Axles, Transmission, Pump, etc.). A table of contents, hydraulic, air brake and overall apparatus wiring schematics shall be included.

A video demonstration on the operation of the truck shall be supplied on the flash drive.

APPARATUS COMPLETION

The customer shall be notified approximately seven (7) days prior to the completion of the apparatus so they may make necessary travel arrangements to pickup the apparatus at the factory.

DEALER PREP/INSPECTION

The apparatus dealer responsible for the sale of the Sutphen apparatus shall perform a pre-delivery inspection of the apparatus prior to the customer taking possession of the vehicle. This inspection allows for the dealer to record all applicable part and serial numbers for the apparatus so that service and parts can be easily facilitated during the service life of the vehicle. This inspection also allows for a second quality control check, prior to the apparatus being placed in service.

WARRANTIES

The following warranties shall be supplied. See warranty documents for complete coverage details of each warranty provided.

The apparatus shall be warranted to be free from mechanical defects in workmanship for a period of one (1) year. The apparatus shall be covered for parts and labor costs associated with repairs for a period one (1) year.

Life-time warranty on the frame.

Ten (10) year cab structural warranty.

Ten (10) body structural warranty.

Ten (10) year warranty on paint.

The OEM warranties shall be applied for all major components.

MANUFACTURING & LOCATIONS

The apparatus will be manufactured in facilities wholly owned and operated by the company. A complete stock of service parts, and service shall be provided on a 24 hours around the clock basis. The company shall maintain parts and service for a minimum period of twenty (20) years on each apparatus model manufactured.

SENSIBLE PRODUCT

A \$19,000 allowance is included in the bid price for the mounting of loose fire equipment by Sensible Products in Richfield, Ohio.

Once the truck has completed production at Sutphen the fire department will come to Sutphen for final inspection, acceptance and final payment of the apparatus.

Once Sensible Products is complete with their work the fire department will come to pick up the truck from Sensible Products. If the amount spent at Sensible Products exceeds the amount of the allowance the excess portion will be billed directly to the fire department from Sensible Products. If the amount spent at Sensible Products does not meet the amount of the allowance a credit of the difference will be created for the fire department with the dealer. This credit can be used for loose equipment.

WINCH

One (1) Ramsey - QM 8000 winch will be supplied with the engine

INTAKE VALVES

Two (2) Akron Brass Revolution Valves intake will be supplied.

DECKGUN

One Akron Brass Deckgun model 3423 will be supplied

GRAPHICS

One standard engine graphic package will be supplied.

EQUIPMENT AND CHANGE ORDER FUND

\$50,000 is available for the purchase of equipment and/or changes during the production of the engine

CITY OF BROOK PARK, OHIO

Service
P/C 5/2/23
CA _____
1st R _____
2nd R _____
3rd R _____
B/C _____

ORDINANCE NO. _____

INTRODUCED BY: MAYOR ORCUTT

**AN ORDINANCE AUTHORIZING THE MAYOR TO EXECUTE A PROJECT
AGREEMENT WITH NORTHEAST OHIO REGIONAL SEWER DISTRICT FOR
THE SHELDON ROAD PROFILE RAISING AND BRIDGE REPLACEMENT
DESIGN PROJECT,
AND DECLARING AN EMERGENCY**

WHEREAS, the City of Brook Park (the "City") and the Northeast Ohio Regional Sewer District (the "District") entered into a Regional Stormwater Management Program Service Agreement dated August 18, 2016 (the "RSMP Service Agreement"); and

WHEREAS, the Sheldon Road Bridge ("the Bridge") has been shown to be hydraulically deficient, causing flooding within Abram Creek; and

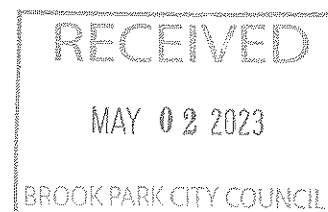
WHEREAS, the 100-year Federal Emergency Management Agency (FEMA) flood map and the District's Rocky River Stormwater Master Plan study indicate that the Bridge and Sheldon Road are inundated and impassable during certain rain events; and

WHEREAS, the District's Rocky River Stormwater Master Plan identified stand-alone problem area "AC00126" in the Abram Creek Subwatershed; and

WHEREAS, the District's Rocky River Stormwater Master Plan study found that the current bridge span needs to be increased to convey the 100-year storm event through the structure without causing properties adjacent to the Bridge, Sheldon Road, and upstream of the Bridge to flood; and

WHEREAS, the City and the District desire to perform the Sheldon Road Profile Raising & Bridge Replacement Design Project (the "Project"), which includes the expansion of the Bridge opening to convey the 100-year storm event with acceptable passable conditions along Sheldon Road, in furtherance of the goals of the District's Regional Stormwater Management Program; and

WHEREAS, the Cities of Brook Park and Middleburg Heights share responsibility for the routine maintenance and repair of Sheldon Road and Sheldon Road Bridge as the municipal jurisdictional boundary serves as the centerline of such Road while Cuyahoga County (the "County") is the owner of the Sheldon Road Bridge; and



WHEREAS, the District has prepared a Project Agreement for the execution of the Project and is included as Attachment "A"; and

WHEREAS, the City agrees to retain a consultant to perform the engineering design for the Project as detailed in the Scope of Services (Exhibit "C" of Attachment "A"), and the District has agreed to disburse funds to the City for reimbursement of engineering design, document development, right-of-way acquisition and utility coordination costs incurred for the Project; and

WHEREAS, the construction costs will be shared among the City of Brook Park, the City of Middleburg Heights, the District, and Cuyahoga County, which will be addressed in a separate agreement; and

NOW THEREFORE, BE IT ORDAINED by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Mayor is hereby authorized and directed to execute on behalf of the City the Project Agreement prepared by the District (Attachment "A").

SECTION 2. Consulting City Engineer (Euthenics, Inc.) is hereby authorized to provide the engineering services for the Project as detailed in the Scope of Services (Exhibit "C" of Attachment "A"). Payment for the services shall be in accordance with the Scope of Services (Exhibit "C" of Attachment "A").

SECTION 3. The money needed for the aforesaid transaction shall be paid from the Sheldon Road Bridge Improvement Project Fund #550 and will be reimbursed by the District in accordance with the Project Agreement and in an amount not to exceed \$1,175,945.00.

SECTION 4: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 5: This Ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, health, safety of said City, and authorizing the Mayor to enter into a Project Agreement for the Sheldon Road Profile Raising & Bridge Replacement Design Project with the District; therefore, provided this Ordinance receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
CLERK OF COUNCIL

APPROVED: _____

MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS



DIRECTOR OF LAW

Attachment "A"

PROJECT AGREEMENT
BY AND BETWEEN
NORTHEAST OHIO REGIONAL SEWER DISTRICT
AND
CITY OF BROOK PARK
FOR
SHELDON ROAD PROFILE RAISING & BRIDGE REPLACEMENT DESIGN
PROJECT

This Project Agreement ("Agreement") is entered into as of this _____ day of _____, 2023 ("Effective Date") by and between the Northeast Ohio Regional Sewer District ("District"), a regional sewer district organized and existing as a political subdivision under Chapter 6119 of the Ohio Revised Code, pursuant to the authority of its Board of Trustees Resolution No. _____, adopted _____ (attached as Exhibit "A"), and the City of Brook Park ("City"), a Charter Municipality of the State of Ohio, acting pursuant to Ordinance No. ____, passed by its City Council on _____, 2023 (attached hereto as Exhibit "B").

RECITALS

WHEREAS, the District, pursuant to the authority of Ohio Revised Code Chapter 6119, and Title V Stormwater Management Code of the District's Code of Regulations ("Title V") is authorized to provide overall Stormwater Management of the Regional Stormwater System, including planning, financing, design, improvement, construction, inspection, monitoring, maintenance, operation, and regulation for the proper handling of stormwater runoff and the development and provision of technical support information and services to member communities; and

WHEREAS, the City and the District entered into a Regional Stormwater Management Program Service Agreement dated August 18, 2016 (the "RSMP Service Agreement"); and

WHEREAS, the Sheldon Road Bridge (“the Bridge”) has been shown to be hydraulically deficient, causing flooding within Abram Creek; and

WHEREAS, the 100-year Federal Emergency Management Agency (FEMA) flood map and the District’s Rocky River Stormwater Master Plan study indicate that the Bridge and Sheldon Road are inundated and impassable; and

Whereas, the District's Rocky River Stormwater Master Plan identified stand alone problem area "AC00126" in the Abram Creek Subwatershed; and,

WHEREAS, Abram Creek lies within the Rocky River watershed which is part of the Regional Stormwater System (RSS) (District Asset ID: AC00126), as such term is defined in Title V; and

WHEREAS, the District’s Rocky River Stormwater Master Plan study found that the current bridge span needs to be increased to convey the 100-year storm event through the structure without causing properties adjacent to the Bridge, Sheldon Road, and upstream of the Bridge to flood; and

WHEREAS, the District desires to perform the Sheldon Road Profile Raising & Bridge Replacement Design Project (“the Project” or “the Water Resource Project”), which includes the expansion of the Bridge opening to convey the 100-year storm event with acceptable passable conditions along Sheldon Road, in furtherance of the goals of the District’s Regional Stormwater Management Program; and

WHEREAS, the Cities of Brook Park and Middleburg Heights share responsibility for the routine maintenance and repair of Sheldon Road as the municipal jurisdictional boundary serves as the centerline of such Road while Cuyahoga County (“County”) is the owner of and responsible for the maintenance of the Sheldon Road Bridge.

WHEREAS, the City agreed to retain a consultant to perform the engineering design for the Project as detailed in the Scope of Services (Exhibit “C”), and the District has agreed to disburse funds to the City for engineering design costs incurred for the Project, up to an amount not-to-exceed One Million One Hundred Seventy-Five Thousand Nine Hundred and Forty-Five

Dollars and 00/100 (\$1,175,945.00). The construction costs will be shared among the City of Brook Park, the City of Middleburg Heights, the District, and the County, which will be addressed in a separate agreement; and

WHEREAS, the District is authorized to enter into this agreement, generally, under Ohio Revised Code Section 6119.09, and specifically, under Ohio Revised Code Section 6119.06(G) to contract with any political subdivision to construct, reconstruct, enlarge, improve, maintain, repair, and operate Water Resource Projects; and under Ohio Revised Code Section 6119.09 to enter into agreements with political subdivisions for the effective cooperative action and safeguarding of the respective interests of the parties for the construction and funding of projects by one or more of the parties; and is authorized under Ohio Revised Code Section 6119.06 (O) to make and enter into all contracts and agreements and execute all instruments necessary or incidental to the performance of its duties and the execution of its powers under Chapter 6119 of the Ohio Revised Code.

NOW, THEREFORE, in consideration of the foregoing and the agreements set forth herein for the continued benefit of the Regional Stormwater System, the parties agree as follows:

SECTION 1. CITY OF BROOK PARK

1.1. Performance of the Project. The City shall be responsible for the performance of the Project in accordance with the Scope of Services attached hereto as Exhibit "C", which shall involve the engineering design for the replacement of the Sheldon Road Bridge and raising Sheldon Road to improve stream function and mitigate flooding as described in the in the Rocky River Stormwater Master Plan and in the 1606 Sheldon Road Profile Raising and Reconstruction Study (Exhibit "D").

1.1.1. Hydraulic Analysis of regional Stormwater System. The City shall perform a hydraulic analysis of the Regional Stormwater System within the Project area to confirm the benefits of the Project to the Regional Stormwater System and provide the hydraulic analysis to the District. If the hydraulic analysis determines that the installation of the Project does not eliminate flooding and/or road inundation up to a 50-year event the District will not be obligated to contribute funds toward the

design or construction of the Project. The City shall provide the District with all final models or model updates developed for the Project.

1.1.2. Design. The City shall perform all design and develop the plans, specifications and bid documents as described in the Scope of Services, attached as Exhibit "C". The City shall include the District in the design process as further outlined in this agreement.

1.1.3. Provision of Data. The City shall provide the District any data collected in furtherance of its performance of the Project.

1.1.4. Right-of Way Acquisition & Utilities Coordination. The City shall perform the acquisition of all the properties and easements as necessary for the construction and maintenance of the Project and will coordinate with all utility companies in finalizing the plans and specifications.

1.1.4.1. The City shall be responsible for negotiating with and compensating the property owners for the acquisition of all easements and other real estate interests necessary for the Project. The District shall compensate the City the total amount of such real estate acquisitions based upon documentation demonstrating such amount, including but not limited to settlements and jury awards. The City shall seek written approval from the District for the acquisition of any real estate interest exceeding 10% of the appraised value, as such appraisal is performed by an appraiser with a State of Ohio Certified General Appraiser License and the Appraisal Institute's MAI designation.

1.1.4.2. Subject to approval by the Brook Park Planning Commission and City Council, the City agrees to donate to the Project all real estate interests, including, but not limited to, temporary and permanent highway easements, located on City-owned property, in accordance with the right-of-way plans prepared for the Project. Where necessary, the City shall

prepare and record dedication plats with the Cuyahoga County Fiscal Office.

The City shall coordinate with the City of Middleburg Heights to acquire at no cost all real estate interests including, but not limited to, temporary and permanent highway easements, located on the City of Middleburg Heights-owned property, in accordance with the right-of-way plans prepared for the Project. Where necessary, the City shall work with the City of Middleburg Heights to prepare and record dedication plats with the Cuyahoga County Fiscal Office.

- 1.1.5. Compliance with Laws and Regulations. The City shall comply with all applicable local, state, and federal laws, rules, regulations, and requirements in performing the Project. The City shall apply for and obtain any permits necessary to comply with the above.
- 1.1.6. Plan approval. The City shall obtain approval of the final plans and specifications from Cuyahoga County, Department of Public Works and the District.
- 1.1.7. Project Coordination. The City shall coordinate with the District's representatives during all critical stages and milestones of the design to allow sufficient time for the District to review and provide comments related to the design documents. The City shall obtain final approval for the plans.
- 1.1.8. Modifications to Project Components. The City shall submit written requests for District approval to modify the budget, deadline(s), deliverables, or other components of the Project to the District at least five (5) business days prior to the desired date of execution of such modification.
- 1.1.9. Disbursement Requests. The City shall provide requests for disbursement to the District no more than monthly in accordance with the disbursement procedure outlined in Section 1.1.10 below. All disbursement requests must include the Payment Request Accuracy Verification and Progress Report (Exhibit "E").

- 1.1.10. Utilization of District Funds. The City shall use 100% of the District Funds for activities and/or expenses related to the regional stormwater functions of the Project, as approved by the District. Any other use of District-provided funding shall require prior written approval by the District.
- 1.1.10.1. Application for Payment of Funds. The City must submit consultant invoices to the District monthly or such other timing as mutually agreed by the City and the District, prior to payment for any costs incurred by the City related to design, property acquisition, along with the consultant's detailed invoicing detailing the Project costs that are eligible for District payment. Any such consultant invoice submitted by the City to the District for payment shall include cost and work details and other information in accordance with this Agreement, and shall also include a signed, then-current PRAV document. The PRAV may be updated or otherwise amended by the District from time to time. The PRAV shall include supporting document(s), including the relevant procurement documentation, such as an itemized bill, receipt, invoice, and/or timecard.
- 1.1.10.2. The City understands, and agrees, that the PRAV document may only be signed by a duly authorized representative of the City and that signature of the PRAV by such representative shall be an affirmative representation of the City that the City has verified the accuracy of the consultant invoice, that the consultant's services were furnished and performed in accordance with the conditions of the contract for the work and performed to the satisfaction of the City, that the consultant invoice is not in dispute by either the City or its consultant, that the City's representative recommends payment, and that the City shall pay the consultant as expeditiously as possible and consistent with City's policies following receipt of approved funds from the District and within the time period prescribed in City's contract with the consultant to avoid any late fees or other penalties for late payment. The District

agrees that the signatory to this Agreement may, by designation, authorize an appropriate City staff member to execute the PRAV on behalf of the City.

1.1.10.3. The PRAV form is submitted to the District and reviewed for completeness by the District. Provided that such any undisputed consultant invoice is accompanied by a complete and duly executed PRAV and is otherwise compliant with District requirements and this Agreement, upon District review and approval by the District's Director of Watershed Programs, the District shall pay its approved amount directly to City within forty-five (45) days of receipt. The absence of written inquiry or objection of an invoice within the 45-day period shall not be deemed approval of the invoice by the District. Notwithstanding anything to the contrary in this Agreement, the District shall not pay any Project costs until such work is completed and accepted by the District as satisfactory, which acceptance shall not be unreasonably withheld, conditioned or delayed.

1.1.10.4. All invoicing shall be in accordance with an agreed-upon format between the District and the City. The District shall not be responsible for payment of any late fees and/or other penalties invoiced by consultants. The City shall submit proof of payment to its consultant within forty-five (45) days of the District's payment to the City. Should the City fail to submit such proof within forty-five (45) days, the District shall have the right to withhold future payment(s) to the City until such time that the City provides proof of payment of District approved funds to the consultant, and any failure of the City to comply with the material payment requirements in this Agreement may be considered a material breach of this Agreement and be cause for termination of the Agreement, in addition to any other remedies available to the District.

- 1.1.10.5. All requests for payment of District Funds for project management and design services shall be documented to the District in reasonable satisfaction based on the agreed-upon scope and fee for the design services.
- 1.1.10.6. All requests for payment of District Funds shall be documented to the District in reasonable satisfaction. All requests shall be submitted in a form sufficient to allow the District to review, inspect and approve the services provided for the Project.
- 1.1.10.7. The City shall keep all records and documents relevant to the Project, including but not limited to, an accurate, current, and complete accounting of all financial transactions for the Project. Such records and documents shall be available at reasonable times and places for inspection and copying by the District or any authorized representative thereof and will be submitted upon request together with any other compliance information which may be reasonably required.
- 1.1.10.8. The City shall bear the risk and remain solely responsible for any payments made by the City to third parties for work not approved by the District.
- 1.1.11. Prevailing Wages. The City shall be responsible for determining whether the specifications and the bid documents include the payment of prevailing wages, as set forth in Chapter 4115 of the Ohio Revised Code, are required for labor used in constructing the Project, and shall ensure compliance with any prevailing wage requirements in said Chapter.
- 1.1.12. Project Schedule. The City shall complete the Project in accordance with a Project schedule developed by the City and approved by the District.
- 1.2. Warranty Period. The specifications and the bid documents shall require the contractor to provide a one (1) year warranty period that commences upon substantial completion of the Project construction ("Warranty Period"). The warranty period shall comply

with the requirements of the County's Department of Public Works. At the completion of the warranty period, the City shall provide the District with a final warranty inspection report including how all warranty items were addressed.

- 1.3. Public Participation, Outreach, and Signage. The City shall acknowledge the District in presentations or publications related to the Project. The City shall lead, and the District will assist, the development of a public notification plan to inform the public of the Project. The City shall acknowledge the District on Project-related public outreach communications and in City public meetings that discuss the Project. The City shall provide the District no less than fifteen (15) days' notice prior to any public meetings relative to the Project.
- 1.4. Access. The City hereby grants the District access to the public rights-of-way, and shall grant any necessary easements and/or other rights of entry to the District for access to the Project for stormwater inspection and maintenance in accordance with the RSMP Service Agreement.

SECTION 2. NORTHEAST OHIO REGIONAL SEWER DISTRICT

- 2.1. Disbursement of District Funds. The District agrees to compensate the City one hundred percent (100%) of the City's actual costs associated with engineering design, document development, right-of-way acquisition and utility coordination for the Project in a total amount not-to-exceed \$1,175,945.00 (the "District Funds"). The District shall compensate the City after receipt of documentation to the District's reasonable satisfaction and submitted in a form sufficient to allow the District to review, inspect and approve the City's invoices.

For the avoidance of doubt, the amount of District Funds described above includes all real estate acquisition costs, appropriation costs, as well as the estimated cost of the permanent and temporary easements that the City will pay to the private property owners for acquiring the property rights necessary to construct the Project in accordance with this Agreement.

In the event that the initial amount of District Funds authorized hereunder is insufficient to fully compensate the City up to one hundred percent (100%) of the City's actual costs associated with the engineering design, right-of-way acquisition and utility coordination for the Project, the District and the City shall discuss in good faith whether additional District funds will be added to this Agreement through an Agreement amendment. The District's disbursement of the Project costs shall be conditioned on the District's approval of the deliverables as outlined below.

- 2.2. Deliverables. All deliverables included in Exhibit "C" shall also be provided to the District as well as the hydraulic models in native format.
- 2.3. Meeting Participation. The District shall have the right to attend all Project progress meetings, for which the District will receive at least two (2) working days' advance notice. The District shall receive the meeting minutes from each meeting from the City within ten (10) working days of the meeting for review and comment.
- 2.4. Project Presentations. The District shall acknowledge the City in presentations or publications related to the Project.

SECTION 3. TERM

- 3.1. Expiration of Agreement. This Agreement shall expire upon successful completion of the obligations contained herein.

SECTION 4. MISCELLANEOUS

- 4.1. Execution in Counterparts. This Agreement may be executed in any number of counterparts. Each counterpart, when so executed, shall be deemed to be an original and all of which together shall constitute one and the same Agreement.
- 4.2. Severability. If any term or provision of this Agreement is determined to be illegal, unenforceable, or invalid, in whole or in part for any reason, such provision shall be stricken from this Agreement and such provision shall not affect the validity of the remainder of this Agreement.

- 4.3. Heading. The headings in this Agreement are included for convenience only and shall neither affect the construction nor the interpretation of any provision in this Agreement.
- 4.4. Governing Law. The terms and provisions of this Agreement shall be construed under and governed by the laws of Ohio (to which all Parties hereto consent to venue and jurisdiction).
- 4.5. Remedies. The Parties agree that, after exhausting the dispute resolution process outlined above, all claims, counterclaims, disputes and other matters in question between the Parties arising out of or relating to this Agreement, or the breach thereof, will be decided at law.
- 4.6. Disclaimer of Joint Venture. This Agreement is not intended to create a joint venture, partnership or agency relationship between the Parties, and such joint venture, partnership, or agency relationship is specifically hereby disclaimed.
- 4.7. No Third-Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to or shall confer upon any person other than the parties hereto, any legal or equitable right, benefit, or remedy of any nature under or by reason of this Agreement.
- 4.8. Authority to Execute. Each person executing this Agreement represents and warrants that it is duly authorized to execute this Agreement by the party on whose behalf it is so executing.
- 4.9. Modification of Agreement. This Agreement may only be modified by written instrument executed by each party.
- 4.10. Merger Clause. This Agreement, along with any exhibits attached hereto, encompasses the entire agreement of the parties, and supersedes all previous understandings and agreements between the parties, whether oral or written.
- 4.11. Relationship of Agreement to Exhibits. The Exhibits attached to this Agreement are incorporated into and made part of this Agreement though expressly rewritten herein. In the event of a conflict between the provisions of this Agreement and the Exhibits, these documents shall be given priority in the following order: 1) the District's

Resolution; 2) the main body of this Agreement; 3) the Scope of Services; 4) 1606 Sheldon Road Profile Raising and Reconstruction Study; 5) Payment Request Accuracy Verification and Progress Report; and 6) the City's Ordinance.

Exhibit "A" – District's Resolution

Exhibit "B" – City's Ordinance

Exhibit "C" – Scope of Services

Exhibit "D" – 1606 Sheldon Road Profile Raising and Reconstruction Study

Exhibit "E" – Payment Request Accuracy Verification and Progress Report

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

The parties hereto have executed and delivered this Agreement as of the date first above written.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

By: _____
Kyle Dreyfuss-Wells
Chief Executive Officer

and: _____
Darnell Brown, President
Board of Trustees

CITY OF BROOK PARK

By: _____
Edward Orcutt
Mayor

The legal form and correctness
of this instrument is approved.

Carol Dillon Horvath
Director of Law

By: _____

Date: _____

This Instrument Prepared By:

Anka M. Davis
Assistant General Counsel
Northeast Ohio Regional Sewer District

Each party agrees that this Agreement may be executed and distributed for signatures via email, and that the emailed signatures affixed by both parties to this Agreement shall have the same legal effect as if such signatures were in their originally written format.

AGREEMENT NO.

NORTHEAST OHIO REGIONAL
SEWER DISTRICT

WITH

CITY OF BROOK PARK

FOR

SHELDON ROAD PROFILE RAISING
& BRIDGE REPLACEMENT DESIGN
PROJECT

Total Approximate Cost: \$1,175,945.00

The legal form and correctness of the
within instrument are hereby approved.

ERIC J. LUCKAGE
CHIEF LEGAL OFFICER

Date

CERTIFICATION

It is hereby certified that the amount
required to meet the contract,
agreement, obligation, payment or
expenditure, for the above, has been
lawfully appropriated or authorized or
directed for such purpose and is in the
Treasury or in process of collection to
the credit of the fund free from any
obligation or certification now
outstanding.

KENNETH J. DUPLAY
CHIEF FINANCIAL OFFICER

Date

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.



DIRECTOR OF LAW

EXHIBIT A



REGIONAL STORMWATER MANAGEMENT

RESOLUTION REQUEST

To: Kyle Dreyfuss-Wells
Chief Executive Officer

Date: January 31, 2023

From: Frank P. Greenland, P.E.
Director of Watershed Programs

Re: Authorization to Enter into an
Agreement

Project Name: Sheldon Road Profile Raising & Bridge Replacement Design	Project Number: 1606
Agreement Title: Agreement between the City of Brook Park and the Northeast Ohio Regional Sewer District for the Sheldon Road Profile Raising & Bridge Replacement project	Entity/Agency: City of Brook Park
Professional Services Firm: N/A	Agreement Amount: \$1,175,945
Term: 2 Years	District Project Manager: Michael Blair
Budget Center: 8100.11111	

Recommended Action

The Watershed Programs Department requests a resolution be prepared authorizing the District to enter into an agreement with the City of Brook Park for the design of the Sheldon Road Raising and Bridge Replacement project. Representatives of the Watershed Programs Department supported by the District's Legal Department led a comprehensive review and negotiation effort to determine the terms and provisions of the subject agreement.

Public Purpose

The project supports the mission of the District and purpose of the Regional Stormwater Management Program (RSMP) to develop a water resource project to eliminate public roadway flooding and improve stream flow conveyance along the regional stormwater system (RSS) in Abram Creek, a major Rocky River tributary.

Background

Abram Creek flows through the City of Middleburg Heights and into the City of Brook Park via a stream crossing located on Sheldon Road owned by Cuyahoga County. Sheldon Road is one of the most frequently flooded public roads in the District's stormwater service area due to the low elevation at which a portion of the roadway and crossing were built. The District evaluated several alternatives under the Rocky River Stormwater Master Plan and an additional predesign study. The final recommendation from the predesign study is to replace the existing concrete crossing with an

upsized bridge and to raise approximately 880 linear feet of Sheldon Road by an average of 3.25 feet. This will provide flood inundation relief to Sheldon Road at and adjacent to the Abram Creek crossing by increasing the crossing's level of service to the 100-year design storm.

The City of Brook Park will manage the detailed project design in coordination with the District and the Cuyahoga County Engineers Office. The City of Brook Park shall perform the acquisition of all easements and all other real estate interests necessary to perform the Project and will coordinate with all utility companies in finalizing the project plans and specifications.

The District will reimburse the City of Brook Park for project design and easement acquisition. Construction of the project will be overseen by the Cuyahoga County Engineers Office who will also partially fund the construction along with the Cities of Middleburg Heights and Brook Park under a future agreement.

Funding

Funding for the District's portion of the project will be provided through the Watershed Programs Regional Stormwater Management Program budget.

Approved*

Kyle Dreyfuss-Wells Digitally signed by Project Controls (LimE@neorsd.org)

Kyle Dreyfuss-Wells, Chief Executive Officer

02/02/2023

Date

Eric J. Luckage Digitally signed by Project Controls (LimE@neorsd.org)

Eric J. Luckage, Chief Legal Officer

02/01/2023

Date

Kenneth J. Duplay Digitally signed by Project Controls (LimE@neorsd.org)

Kenneth J. Duplay, Chief Financial Officer

02/02/2023

Date

**Executive signatures certified by District Project Controls after verification of approvals from SharePoint workflow records.*

cc: All copies distributed electronically via SharePoint automated workflows

EXHIBIT B

EXHIBIT C

**NORTHEAST OHIO REGIONAL
SEWER DISTRICT
AND
CUYAHOGA COUNTY
DEPARTMENT OF PUBLIC WORKS**

**SCOPE OF SERVICES
PRELIMINARY ENGINEERING THROUGH CONSTRUCTION SERVICES**

February 27, 2023

**Replacement of Sheldon Road (C.R. 131) Bridge 01.61
Over Abram Creek (NEORS D Asset AC00126)
And the Profile Raising and Reconstruction of Sheldon Road
In the Cities of Brook Park and Middleburg Heights,
Ohio**

PROJECT DESCRIPTION:

This project requires the design consultant to provide engineering services and detailed construction plans for the replacement of Sheldon Road (C.R. 131) Bridge 01.61 (SFN 1830996) over Abram Creek located in the cities of Brook Park and Middleburg Heights, Ohio. The existing bridge is a cast-in-place reinforced concrete rigid frame (box) structure with a clear span of 20'-0". The structure is located downstream of Lake Abram and upstream of the confluence of the CSX railroad crossing. It has an out-to-out width of 60'-0"± (face-of-headwall to face-of-headwall), including a 22'-0"± wide roadway measured from edge line to edge line with 1'-0"± paved shoulder on each side, carrying one lane of traffic in each direction, and a 5'-0"± wide sidewalk on the north side only. According to the record plans, the cast-in-place box structure and wingwalls are all founded on 16-inch diameter timber piles closely spaced and driven to a minimum depth of 40-ft. The structure also has no skew relative to the roadway centerline. The structure was originally constructed in 1934 and has never undergone a major rehabilitation. In accordance with the 2021 inspection field report, the crossing has a General Appraisal of 4 (i.e., poor condition rating) and it currently has no load limit restrictions. Abram Creek inundates Sheldon Road in the vicinity of the structure frequently. Roadway flooding depths typically exceed 2' and make Sheldon Road impassable for the traveling public and emergency services for an extended period. This project will raise the profile of approximately 900' of Sheldon Road by approximately 3.25' to significantly reduce the frequency of overtopping of Abram Creek onto Sheldon Road. The deteriorated condition of the existing reinforced concrete structure in conjunction with the advanced age of the bridge and its hydraulic inadequacy has led the Cuyahoga County and other stakeholders to pursue complete replacement to restore a safe, functional, and structurally sufficient crossing at this location. If the designer determines that the low point of the proposed bridge superstructure will clear the 25-year high water by less than 5 feet, then a smooth-bottomed structure, such as adjacent box beams, concrete slab or a precast three-sided concrete structure, should be specified.

Background: In 2020 the Northeast Ohio Regional Sewer District (NEORS D) commissioned GPD Group to study the Abram Creek watershed at the Sheldon Road crossing. The study is titled "1606 Sheldon Road

Profile Raising and Reconstruction – Schematic Planning Level Study Final Pre-Design Report Dated: December 2020”. The purpose of the study was to evaluate alternatives to reduce or eliminate the overtopping of Abram Creek at Sheldon Road. The study included preliminary geotechnical and environmental investigations.

The study evaluated two bridge envelopes with an overall width of 60 feet measured perpendicular to the roadway with a pedestrian sidewalk on the north side for an “apples to apples” with the existing crossing. The 10, 25, 50, and 100-year storm events were considered. The first bridge envelope consisted of a single span bridge with a trapezoidal shaped waterway opening with spill through abutments. The clear span for this envelope is 60 feet as measured from face to face of abutment. In keeping with the CCDPW standards for low waterway crossings (i.e., smooth-bottomed superstructure for alternatives with less than 2 feet of clearance between the 25-year water surface elevation and the low chord), the bridge would include a smooth-bottomed superstructure consisting of adjacent ODOT standard CB27 precast composite box beams and integral type reinforced concrete abutments supported on driven piles.

The second bridge envelope was a prefabricated, reinforced concrete, 3-sided arch-topped crossing structure with outward sloping legs. This 3-sided structure configuration is the CON/SPAN® O-Series® and would comply with ODOT 611 and 706.052 Type A conduit specifications. The crossing units for Alternatives 1 and 2 would have 44-foot span, and approximate 9-foot 9-inch rise. Alternative 3 would have a 49-foot span, and approximate 8-foot 7-inch rise. All three Alternatives would be set on reinforced concrete strip footings constructed below the streambed. Preliminary design indicates that the crossing footings would be supported by two rows of 14” diameter driven pipe piles with the back row on the buried side of the footing being battered away from the stream to provide lateral restraint for the sloped-leg arch sections.

A box beam bridge structure does provide wide-open conveyance area and efficient trapezoidal channel that improves hydraulic performance. However, when a prefabricated 3-sided structure is found to be feasible for the same waterway crossing, it is often preferred over a conventional bridge. Benefits of the 3-sided crossing structure include reduced maintenance and life cycle costs since there is no bridge deck, nor approach slabs subject to wear and tear from direct application of vehicular traffic, snowplows and deicing chemicals. The outward sloping leg crossing reduces the weight of the individual units by about 15% and permits longer clear spans when compared to the vertical leg 3-sided arch top units. Based on discussions with the CCDPW, a buried bridge structure would be preferred when feasible. Therefore, this is the bridge envelope in which costs were developed for the study.

The following is a brief summary of the studied alternatives:

Alternative 1 – Replacement Structure: 44-ft wide by 9.65-ft tall CON/SPAN® O-Series® culvert. Roadway: Raise approximately 1,000’ of Sheldon Road by an average of 4.5’. Results: The 100-year storm event does not overtop Sheldon Road and provides 2.5” of freeboard for 25-year storm.

Alternative 2 – Replacement Structure: 44-ft wide by 9.65-ft tall CON/SPAN® O-Series® culvert. Roadway: Raise approximately 880’ of Sheldon Road by an average of 3.25’. Results: The 100-year storm event overtops Sheldon Road by 7.56”. Roadway considered passible for 100-year storm event. The 10-year storm event submerges the low chord at the inlet by approximately 2-inches.

Alternative 3 – Replacement Structure: 49-ft wide by 8.58-ft tall CON/SPAN® O-Series® culvert. Roadway: Raise approximately 800’ of Sheldon Road by an average of 1.75’. Results: The 100-year storm

event overtops Sheldon Road by approximately 2'. Roadway not passable for 100-year storm event. The 10-year storm event submerges the low chord at the inlet by approximately 16 inches.

Based on discussions with NEORSD and the County, the study concluded that Alternative 2 is the recommended alternative to move forward to detailed design. See study for additional information. The scope of this project includes advancing Alternative 2 to detailed engineering and construction.

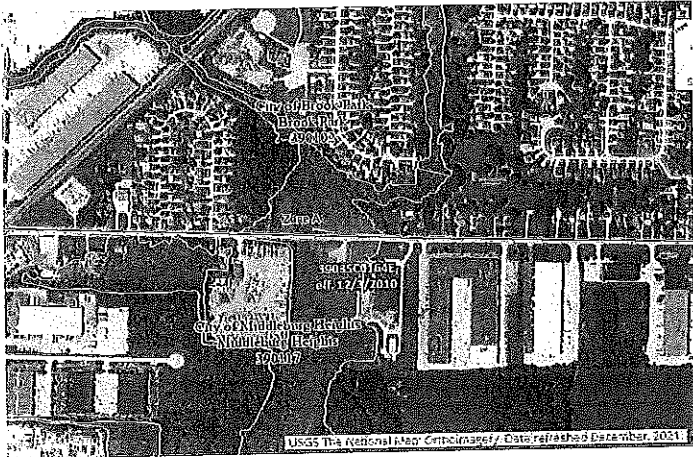
The study identified two areas where retaining walls will likely be needed and include the northeast and southeast quadrants of the bridge to retain new embankments and prevent, or greatly reduce, filling and disturbance to existing wetland features. The study notes that the final wall type would need to be considered along with subgrade improvement method used. In future project development phases, limits of retaining walls and alternative wall types can be evaluated.

Preliminary geotechnical exploration found substantial organic subsurface deposits which will result in significant settlement because of the raised roadway profile and associated new embankment. Measures to mitigate settlement to acceptable levels will be included in the project design.

A preliminary environmental investigation was performed which included an Asbestos Survey, Ecological Report, Cultural Resources Scoping Request Form, and a draft Waterway Permit Determination Request. The information contained within the environmental investigation will be reviewed and updated for project permitting.

The study identified several utilities within the project corridor, and they include the following: Cleveland Water Department (12" main on the north side, 30" main on the south side); Dominion Ohio (4" gas north side); Columbia Gas (4" gas south side); The Cleveland Electric Illuminating Company (combined transmission/distribution lines on north side); Unknown Owners (Telephone, Cable, and Fiber currently on Cleveland Electric Illuminating poles); NEORSD (48" sanitary on the north side – no impact anticipated). Storm sewers within the project limits will be modified or replaced as needed to accommodate the new roadway footprint. Due to the soft compressible subsoil condition and the weight of embankment fill, the utility relocations should occur beyond the limits of the new roadway fill to avoid differential settlement forces that will likely be result within the new roadway fills. This would apply to existing utilities located within the roadway fill footprint. Early and frequent communication with private utilities will be required to make certain their facilities are relocated prior to construction. Waterline relocation plans will be developed for the existing 12" and 30" waterlines.

Permanent right of way will likely be required to accommodate the new roadway footprint. Temporary right of way is anticipated for grading and for drive reconstruction. Utility easements will likely be needed for the private utilities which are anticipated to relocate beyond the roadway lateral fill limits.



The Sheldon Road bridge over Abram Creek is located within FEMA Flood Zone A. The project will place fill within a Special Flood Hazard Area and based on the prior study will increase the 100-year water surface elevation by less than one foot. A flood plain permit will be required from both the city of Brook Park and Middleburg Heights. Additional coordination with FEMA is anticipated because the project will likely increase the 100-year water surface elevation.

Aesthetic enhancements such as form-lined and/or stained concrete headwalls and aesthetic steel railing shall be incorporated into the design.

The project will be let by Cuyahoga County. Construction administration and inspection will be performed by Cuyahoga County.

ANTICIPATED ENGINEERING SERVICES:

For this bridge replacement and roadway re-profiling project, the engineering services include:

- Preliminary engineering studies (Retaining Wall Justification)
- Hydraulic Study - Finalize hydraulics analysis
- Bridge design
- Roadway and drainage design
- Maintenance of traffic and traffic control design
- Water main relocation design (12" and 30" mains)
- Floodplain Development Permit for Brook Park and Middleburg Heights
- USACE/Environmental permitting
- Geotechnical exploration and geotechnical engineering
- Subsurface Utility Locating
- Utility coordination including preparation of the Utility (4A) Proposal Note
- Plan development including preparation of Stage 1 Plans, Stage 2/3 Plans and Final Construction Plans
- Construction Cost Estimates
- Preliminary and Final Right-of-Way Plan preparation and legal description with closure calculation
- Title Reports
- Right-of-Way Acquisition Services
- City of Brook Park and City of Middleburg Heights coordination
- FEMA Coordination
- NEORSRD coordination
- County coordination
- On-going services during construction
- Project Summary submission to OEPA and Cleveland Water Department for water main relocation post-construction (i.e., as-builts)

DESIGN CONTRACT:

The design contract will be executed under a single authorization.

The design contract will include the preliminary engineering and study phase including field survey, base mapping, subsurface utility locating, geotechnical services, environmental field studies, utility coordination, preliminary stakeholder coordination, roadway and drainage design, retaining wall justification, maintenance of traffic, hydraulic analysis, Final Hydraulic Evaluation Report, detailed design and plan development phase including the Stage 1, Stage 2/3, Conformance and Final Construction Plans, Preliminary and Final R/W Plans, final utility and stakeholder coordination, and final environmental reports and waterway permitting.

Right of way acquisition and services during construction are also included.

PROPOSAL STRUCTURE:

The consultant shall transmit the proposal with a cover letter. The proposal shall contain the following items:

1. The consultant shall include this approved Scope of Services outline with the cost proposal. The consultant shall provide necessary additional narrative required to clarify or expand upon the Scope of Services outline.
2. A preliminary Project Work Schedule (PWS) for the project reflecting the timelines for task completions, deliverables, review times and project milestones. The proposed PWS shall be discussed and agreed upon by both parties prior to County approval of the cost proposal. Both the County and the consultant shall mutually agree upon the PWS used for the development of this project.
3. The consultant's proposal, including subconsultant proposals, shall include fees to perform all phases of work defined in the agreed upon Scope of Services. The proposal shall be broken down by man-hours and tasks for each phase of work.

DIVERSITY GOALS:

There are no diversity goals for this contract.

DESIGN CRITERIA:

Engineering design plans and specifications shall be developed in accordance with the current editions of the AASHTO LRFD Bridge Design Specifications, the ODOT Bridge Design Manual (BDM), the ODOT Location & Design Manual (L&D) and the Ohio Manual of Uniform Traffic Control Devices. The consultant shall also design in accordance with ODOT's 2019 Construction and Material Specifications (CMS) and governing ODOT Supplemental Specifications and Proposal Notes, all applicable ODOT and CCDPW standard construction drawings, and all CCDPW supplements to ODOT's bridge and highway design manuals.

ODOT's design manuals, standard construction drawings, supplemental specifications, proposal notes and other materials are available for download on its website: <http://www.dot.state.oh.us/drrc>.

CCDPW's standard construction drawings, general notes, supplements to ODOT's L&D and BDM, and other CCDPW design standards are available for download on its ftp website: <ftp://CCDPW:cuyahoga@ftp.publicworks.cuyahogacounty.us>.

The project design shall accommodate all temporary and permanent relocations of both existing public (water, sanitary, etc.) and private utilities (telephone, electric, cable, gas, etc.), as coordinated by the design consultant with all utilities impacted by the proposed work. Relocation of publicly owned utilities is generally project-eligible for funding. Relocation of privately owned utilities is generally not project-eligible and they are usually relocated at the utility owner's expense.

Water work associated with this replacement project shall be designed in accordance with City of Cleveland, Division of Water (CWD) design standards, specifications and plan details as provided on its website: [Design & Construction Specifications | Cleveland Water Department](#). Waterline relocation designs (12" and 30" mains) are included with this contract. The project is anticipated to be exempt from obtaining plan approval from the OEPA, prior to construction, provided the replacement complies with Sections 8.0 to 8.12 of "The Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers' Recommended Standards for Water Works" (10 State Standards). However, a Project Summary shall be submitted post-construction to the local OEPA district office summarizing the replacement and identifying any unusual conditions encountered during construction, if applicable. The cost for preparation of this Project Summary is included in Phase K as detailed herein.

The fee for utility coordination efforts with CWD will be included in Phase B of the Project to meet their plan review procedures and design requirements. Additionally, discussions are anticipated during this design phase to determine CWD's preferred waterline alignment and temporary bypass considerations during construction.

The existing 48-inch Northeast Ohio Regional Sewer District sanitary sewer that crosses under Sheldon Road at the east end of the project, then traverses westerly and parallel with Sheldon Road will not be impacted as part of this project.

The proposed vehicular bridge shall be designed for the HL-93 loading per AASHTO's LRFD Specifications as well as a future wearing surface of 60 pounds per square foot in accordance with CCDPW standards. The Bridge Load Rating & Analysis shall be completed by the precast supplier of the structure per the ODOT BDM.

The project plans and specifications shall take into account all governing local storm water management best management practices (BMP's), including construction site and post-construction BMP's that may be required due to earth disturbance activities related to the proposed improvement. This project is partially funded by the Northeast Ohio Regional Sewer District (NEORS); therefore, NEORS coordination will be required, and plans will be provided to them for their review.

WORK BREAKDOWN:

The following summarizes the various Phases of the project:

Phase A – Gather Existing Data (Lump Sum)

1. Field Surveying and Base mapping Services:

The design Consultant, acting as the City of Brook Park's agent, may enter upon any lands within the County for the purpose of inspecting, surveying, leveling, digging, drilling, or doing any work deemed necessary in the execution of any survey authorized by the City of Brook Park in accordance with Sections 163.03 and 5517.01 of the Ohio Revised Code and Section 204 of ODOT's Survey & Mapping Specifications, and the latest version of the Cuyahoga County Electronic File Specifications (CCEFS). Prior to performing the survey, the Consultant shall send notification letters indicating the date and duration of entry to the affected property owners no less than forty-eight (48) hours nor more than thirty (30) days prior to the date of entry for the survey. The Consultant shall forward copies of all notification letters to the CCDPW for record purposes.

All survey work shall be performed under the direct supervision of a professional surveyor registered in the State of Ohio. The use either field surveys or aerial photography to establish base mapping shall be pre-approved by the County. If using aerial photogrammetry or LiDAR, perform ground survey work as necessary to assure the accuracy of the base mapping. The survey shall meet all CCEFS requirements, including datum. All existing monumentation for centerline control shall be located and referenced per the County's 4-point cross section method so it may be reestablished for construction purposes. The preliminary centerline control and acquisition plan (if needed) shall be recorded with the County, then upon completion of the project, verification of the reset monuments, pinning of any acquired ROW and recording of parcels that have changed, the updated plat shall be re-recorded, taking the place of the preliminary centerline control plat.

Base mapping and plan sheets shall be developed in AutoCAD 2019 ".dwg" or newer format using the CCDPW CAD standards modified as necessary to achieve the desired finished product.

For all work, use only English units (U.S. Survey Foot). Ground to Grid conversion factors shall not be used, rather the deliverables, both CAD and printed (PDF), shall meet the CCEFS.

The Consultant shall perform all survey and base mapping services, at a minimum, per ODOT's Survey & Mapping Specifications, but in cases of ambiguity or absence of direction, follow the CCEFS as follows:

- Control Survey: Project Control (Section 502.2), Differential Leveling (Section 502.3).
 - (a) Gather and review existing data (existing plans, monuments, etc.)
 - (b) Establish a minimum of two (2) benchmarks (ODOT Type B Monuments). Locate benchmarks outside of the proposed construction limits. This shall be the only work performed by means of GPS and shall follow the protocols set forth in the CCEFS. In the absence of direction established in the CCEFS, the Surveyor of Record shall make requests for procedural specifications to the County Chief Surveyor before performing any GPS surveying.
 - (c) Establish horizontal and vertical roadway control.

- Boundary Survey: Property Surveys (Section 503.2), Right-of-Way & Highway Centerline Surveys (Section 503.3) and OAC 4733-37.
 - (a) Gather and review existing property line information (tax maps, record deeds, record plats, existing survey pins if readily found, etc.). Locate property lines within the limits of the project, approximately 600 feet west of Abram Creek (Wedgewood Drive) to approximately 1,000 feet east of Abram Creek. All cadastral survey work shall be performed per CCEFS.
 - (b) Establish the construction centerline of the structure and approach roadways.
 - (c) Obtain centerline elevations at 25-foot intervals along the roadway for the limits of the project.
 - (d) Calculate the existing right-of-way and property lines (areas, lengths, bearings, etc.) within the limits of Boundary Survey described above. Cite all records required to defend the Surveyor's Opinion. Provide a citation table to facilitate drafting.
- Conventional Mapping Survey (Section 504.3): Topographic Survey, Planimetric Features, and Bridge Survey
 - (a) Contact the OHIO811 at phone no. 811 or 800-362-2764 to obtain existing utility information within the project limits. Request field markings for design purposes and locate all underground and overhead utilities along the roadway and within the railroad right-of-way including manholes, inlets, valve boxes, catch basins, fire hydrants, utility poles, signal control boxes, signal standards, etc. Include information regarding location, conduit size, type, direction, and depth on the final base map. If any utility does not respond to requests for existing records, the Surveyor is not absolved from a more thorough investigatory search to determine the subsurface locations of any utilities, past or present.
 - (b) Define the centerline alignment and cite all record sources used to ascertain said alignment and control of the roadway and any intersecting streets within the project limits. Perform a topographic survey to identify above ground features which include but are not limited to: residential and business buildings, driveways, signs, billboards, monuments, top and bottom of embankments, sidewalks, edges of shoulders, edges of pavement, lane lines, curbs, loop detectors, guardrails, fences, mailboxes, trees and significant foliage.
 - (c) Obtain roadway cross sections at 25-foot intervals along the centerline of the roadway. Cross sections shall extend 75 feet normal to and on each side of the roadway centerline, or 40 feet past the existing right-of-way (ROW), whichever is greater, within the longitudinal limits of the survey. In areas where the ROW is greater than 60' in width, the topographic and location survey shall extend a minimum of 15' beyond the ROW limits or extend to the limits of grading as required by the design of the project.
 - (d) Perform a drainage survey of all ditches, inlets, storm sewers and sanitary sewers including casting elevations, pipe inverts and material types. Locate and record elevations of all sewer inverts and obtain all pipe sizes and materials.
 - (e) Obtain profile of Abram Creek extending at least 500 feet upstream and downstream of Sheldon Road. Each cross section shall have an equal number of shots for breakline consistency and the development of the DTM.
 - (f) Obtain channel cross sections of Abram Creek at 50-foot interval 500 upstream and 500 feet downstream of Sheldon Road.
 - (g) Survey strategic points to define the bridge shape, including bridge geometry at its openings. Record all measurements of the existing structure including abutments, wingwalls, parapets,

retaining walls, etc. necessary for detailing and describing the removal of the existing structure. Obtain elevations where existing slopes meet the abutments, wingwalls and any visible bridge foundations as well as the tops of structures.

- (h) Survey the normal water surface and the elevation of the Ordinary High-Water Mark (OHWM). The OHWM will be flagged in the field by the environmental subconsultant. The elevation will be surveyed by Euthenics. Survey the WSE at the time of survey as well.
- (i) Create a Digital Terrain Model (DTM) and base map of the project area (1" = 20' scale). Verify the completed DTM and base map in the field at the project site. Make corrections to the DTM by swapping edges, adding or removing TIN lines as needed. TIN lines shall not cross any breaklines or lines representing the edges of any objects.

Any claims for compensation due to damages incurred while the field surveys are being performed will be negotiated between the Consultant and the affected property owners with final approval from the City of Brook Park. Any subsequent entries onto private property for the purpose of obtaining additional survey information will be made in accordance with the specifications referenced above.

2. Subsurface Investigation:

Field exploration, soil borings, sampling and laboratory testing will be required for the design of this project. In addition to the borings required for the design of the structure, pavement cores and roadway borings will be required on the roadway approaches to verify the composition of the existing pavement and subgrade and to properly engineer the approach roadway fill which has already been determined to contain a high concentration of organic material. Pavement cores should penetrate the entire pavement structure, through the subbase and into the subgrade to determine the thickness of each layer of material encountered (including the subbase). The prior NEORS study had identified the need for retaining walls at the northeast and southeast quadrant of the Sheldon Road/Abram Creek crossing. Soils borings will also be obtained for the design of these walls. The number and locations of the soil borings and pavement cores shall be proposed by the consultant and approved by the County and City of Brook Park prior to field operations being conducted. A geotechnical report shall be provided by the consultant that summarizes the results of the subsurface exploration and provides the geotechnical recommendations for the bridge and roadway design.

Phase B – Utility and Stakeholder Coordination (Lump Sum)

1. Utility Coordination:

Whenever possible and feasible, the proposed work shall be designed to avoid utility conflicts. It is likely that utility impacts will be unavoidable on this project given the poor quality of material below the proposed roadway footprint. Early and close coordination between the Consultant and all utility owners in the project area will be required for the successful delivery of this project. The Consultant must anticipate conflicts with both overhead and underground facilities within the proposed construction limits. The Consultant's utility correspondence shall conform to the CCDPW's Utility Manual.

Utilities that may be impacted by the work must be located by station, elevation and offset. Above ground utilities that may be impacted by the project and are not visible on the aerial base-mapping must be located by station and offset. Storm sewers and sanitary sewers shall include pipe invert

elevations at all manholes, catch basins and outlets within the proposed work limits. In addition, the existing pipe materials and direction of flow shall be noted at all existing drainage and sanitary sewer structures. The Consultant shall assume that the respective utility companies will provide the locations for underground utilities; however, the Consultant shall request precise locations where the Consultant reasonably expects that conflicts may occur. As necessary, the Consultant shall utilize SUE to precisely locate underground utilities. Potentially impacted utilities shall be clearly plotted on the plan and profile sheets and appropriate detail and cross section sheets.

As directed above, the Consultant shall contact the OHIO811 at phone no. 811 or 800-362-2764 to obtain the contact information for all utility owners located within the project area and to request existing utility plans. The Consultant must directly contact all non-members located within the project limits. The date each utility is contacted, either through the protection service or by the Consultant directly, shall be recorded by the Consultant along with the date that existing utility plans were subsequently received from the utility. If any utility companies are nonresponsive during the utility coordination process, the Consultant shall document in detail all communication efforts and follow-ups (letters, e-mails and/or telephone conversation logs) to contact and seek information or responses. Only after reasonable and repeated follow-up communication efforts have failed to elicit an appropriate response shall the Consultant notify the County for our direct involvement.

The Cleveland Water Department (CWD) has a 12-inch main and 30-inch main that will be impacted by the project and will require relocation. The Consultant shall coordinate all aspects of the water line relocation with CWD.

The Consultant shall provide early and close coordination with all involved utilities throughout plan development, including preparation and submission of the Initial Utility Transmittal Letter to each utility company identified, and the Consultant shall resolve all utility company requests for redesign/relocation prior to the Stage 2/3 Detailed Design Review submittal. The Stage 2/3 Review submittal shall include copies of all prior correspondence with each utility company. The submittal shall also include a summary of the specific disposition for each utility (permanent or temporary relocations, temporary support or protection, or a statement that the utility will be unaffected by the project). The Final Plan submittal shall include copies of all final utility disposition communications and draft Utility (4A) Proposal Note outlining required utility relocation work in conjunction with the proposed contract work. The Consultant's Final Plan submittal to the County shall also include the Exhibit "B" Utility Adjustments form and final Utility (4A) Proposal Note that is to be included in the County's Bid Package. In addition to the Final Plan submittal to the County, the Consultant shall submit one (1) set of the final plans directly to each utility company impacted by the project.

Utility Coordination will consist of coordinating with utilities throughout the duration of project development, to ensure that the proposed work does not affect their utility, or in the case of relocations (Dominion, CWD, CEI, Overhead Telecomm, etc.) that the proposed relocations are reasonable and can be accommodated with the project schedule. Euthenics will follow the CCDPW "Instructions to Designers/Consultants Concerning Utility Correspondence and Coordination". Utility conflicts will be tracked using a utility conflict matrix, which will be sent to the County with each deliverable.

Phase C – Environmental Services

The items below are anticipated for the proposed project. The Consultant shall define and scope their proposed activities related to the environmental services anticipated for this project in their cost proposal.

- Asbestos Survey
- Ecological Surveys including Wetland Delineation
- Stream and Wetland Mitigation
- Waterway Permits
- Section 106 Request for Review for Cultural Resources
- Environmental Site Assessment (ESA) Screening
- Public Involvement (Press Release to local newspaper)

An asbestos survey shall include the OEPA Notice of Intent form. Whether or not ACM is found to be present as a result of the survey, the project plans shall include general notes and pay items to cover the potential identification of ACM during construction activities.

In addition to the above environmental surveys the following permits are anticipated for the project:

- Nationwide Permit (NWP) from the U.S. Army Corps of Engineers (USACE)
- Local Flood Hazard Permit
- Local Roadway and Site Impact Permits from Middleburg Heights and Brook Park
- SWPPP Permit from Cuyahoga County Soil and Water Conservation District
- Ohio Environmental Protection Agency (OEPA) Notice of Intent (NOI)
- OEPA Permit to Install (PTI) for water and sanitary sewer

The services listed above will be authorized on an as-needed basis and are subject to change pending the outcome of the preliminary environmental investigation. The Consultant shall complete and submit all environmental documentation and reports to the County for review and approval. The Consultant shall incorporate and dispose of all comments resulting from the County's reviews until environmental clearance is granted for this project.

Phase D – Preliminary Engineering and Hydraulic Analysis (Lump Sum)

This phase shall include the efforts required to prepare the Project Initiation Package (PIP), and H&H Report in general conformance with the ODOT PDP, L&D and Bridge Design manuals. Specific considerations for the tasks and effort required for the preparation of the preliminary engineering stage is included below. Submittal and review requirements are listed below under "Reviews". This phase will be considered complete once the H&H Report is approved by the County and NEORSD, with concurrence from the other involved agencies.

The plan development process shall begin with the preparation and submittal of an H&H Report and simplified Structure Type Study including a Hydrology and Hydraulics Analysis. The Structure Type Study will be limited to the prefabricated 3-sided structure type that was evaluated in the NEORSD study (CON/SPAN® O-Series® culvert). The hydrology from the NEORSD study (10, 25, 50, and 100-year design flows) will be used for the hydraulic analysis. This data was obtained from the District's Abram Creek

SWMM model and represents the most accurate data available. Hydraulic analysis will be performed based on the final roadway profile. Consideration will also be given to a structure with a waterway opening wider than 44 feet. The efforts required to conduct the studies and prepare the report are expected to be in general accordance with the requirements/directions provided in the ODOT PDP, Location & Design, and Bridge Design manuals.

The Cleveland Water Department (CWD) has a 12-inch main and 30-inch main that will be impacted by the project and will require relocation. The Consultant shall coordinate all aspects of the water line relocation with CWD.

1. Preliminary Engineering

The roadway limits will be established based on the need to replace the bridge and raise the profile of Sheldon Road per Alternative 2 of the NEORS study. The horizontal alignment will not change.

Detouring traffic during construction is the preferred approach for this project.

Retaining Wall Justification in accordance with ODOT L&D Volume 3, Section 1407.2 to compare the impacts and costs of the project with and without retaining walls. The justification study will evaluate reinforced concrete walls on driven piles, gravity type precast concrete segmental walls, and a wall type that allows differential settlement including a comparison of the practicality, constructability, and economics of each wall type.

The design of the proposed structure, including the headwalls, wingwalls, foundations, parapets, railings, flanking retaining walls, etc., shall meet all applicable current AASHTO LRFD and ODOT BDM standards in addition to the requirements of the County's supplement thereto. The culvert will be prefabricated, and the culvert supplier will be responsible for the design and details of the culvert including shop drawings. The headwalls and foundations will be designed and detailed by the consultant.

Determination of the final bridge size will be based upon the results of a "simplified" or abbreviated Structure Type Study that will be in accordance with Section 201 of the most current ODOT Bridge Design Manual, except that a bridge profile shall only be provided for the recommended bridge type. The Structure Type Study will be included as part of the H&H Report.

2. Hydrology and Hydraulics

The Consultant shall prepare a Hydrology and Hydraulics (H&H) Report including a Flood Hazard Evaluation in accordance with ODOT L&D Volume 2 and the CCDPW Supplement to the ODOT Bridge Design Manual.

The proposed project consists of replacing the existing structure on Sheldon Road over Abram Creek. The assumed ADT is greater than 2,000, and per the CCDPW Supplement to the ODOT Bridge Design Manual, the design year frequency is the 25-year storm with a 100-year check storm. FEMA has identified this section of the Abram Creek as a Zone A flood hazard area with no base flood elevations established, as shown on FEMA flood insurance rate map 39035C0192E, effective date 10/3/2010.

The H&H analysis will help determine that the bridge satisfies the design year frequency headwater and discharge requirements and will be conducted for both the existing condition and proposed alternatives. The CCDPW requires that the 25-year design storm clear the bridge low chord by at least 2' as a general rule. Exceptions where this is not possible will be considered on an individual basis.

It is preferred that the replacement structure not increase the 25-year and 100-year backwater upstream of the bridge nor increase the risk of other potential damage upstream or downstream resulting from hydraulic considerations."

The H&H report will analyze the following single-span precast alternatives, for a total of two (2) alternatives:

- Single span CON/SPAN® O-Series® culvert with the same size evaluated as Alternative 2 in the NEORSD Study with final design roadway profile by Euthenics
- Single span CON/SPAN® O-Series® culvert with the largest size manufactured to determine if no-rise is feasible.

HEC-RAS software with 1-D modeling will be used for the hydraulic analysis. The backwater of the railroad bridge located to the north will be the downstream boundary condition used for the analysis. This information will be obtained from the prior NEORSD study.

Peak discharges will be obtained from the prior NEORSD study. Channel cross-sections and will be supplemented with LIDAR for the overbanks. Survey data will also be collected for the existing bridge for inclusion in the hydraulic model. An H&H report will be prepared to summarize the methodology and results per ODOT L&D Section 1118. With the project being located in a Zone A special flood hazard area, floodplain coordination will be required, with notification provided to the local Floodplain Administrator at the time of the H&H Report. Scour analysis will be included utilizing the stream boring grain size distributions for the areas of the proposed piers and/or abutments. This task will also consist of scour mitigation recommendations to protect the structure and proposed banks.

3. Deliverables

A Hydrology and Hydraulics (H&H) Report and Flood Hazard Evaluation, Retaining Wall Justification study, and Geotechnical Report will be submitted. All deliverables will be provided 8 ½ x 11 or 11 x17 pdf format as appropriate.

It is assumed that the H&H Report will include the following sections:

- Executive Summary
- Background/Purpose and Need
- Traffic Assessment
- MOT Alternatives Assessment
- Roadway Assessment
- Structure Assessment
- Retaining Wall Assessment (which summarizes the results from the Retaining Wall Justification study)
- Geotechnical Assessment (which summarizes the results from the Geotech Report)

- Hydraulic Assessment (which summarizes the results from the H&H Report)
- Right of Way Assessment
- Utility Assessment
- Environmental Assessment (which summarizes the results from the Environmental Report)
- Recommended Alternative
- Construction Cost Estimate for the project considering the recommended structure alternative

The following will be included as part of the H&H Report:

- The preliminary Site Plan for the recommended alternative and preliminary retaining wall sections.
- The Hydrology and Hydraulics Report will be prepared to summarize the methodology and results per ODOT L&D Section 1118.
- Preliminary Roadway Plans will be included, including plan and profile, typical sections, and cross sections
- Retaining Wall Justification Study
- Preliminary Geotechnical Report
- Construction Cost Estimator File

See the section below titled "Submittals & Reviews" for additional information in this regard.

4. Project Management

This task includes the project setup, general management, and oversight of the project as well as monthly invoicing, progress reports and direct expenses. It also includes QA/QC review and monthly virtual project progress meetings. It is assumed up to five (5) meetings will be required as outlined in Phase I.

Phase E – Detailed Design Plans and Calculations (Lump Sum)

Plans will be prepared per the ODOT Location and Design (L&D) Manual and Bridge Design Manual, Cuyahoga County Supplements to those manuals, and Cuyahoga County Standard Drawings as appropriate. This phase includes the Stage 1, Stage 2/3, Conformance, and Final plans, construction cost estimate and calculations for the project, as discussed for each deliverable below.

Stage 1 (Preliminary): The Stage 1 plans will be prepared per L&D Section 1406.5 Stage 1 Design. Estimated number of sheets are provided below.

- Roadway and Drainage
 1. Title Sheet
 2. Typical Sections (2 Sheets)
 3. Sidewalk Details (1 Sheet)
 4. General Notes (2 Sheets)
 5. Plan and Profile (3 Sheets)
 6. Cross Sections (9 Sheets)
 7. Storm Sewer Profiles (2 Sheets)

8. Drive Details (1 Sheet)
 9. Drive Profile (1 Sheet)
 10. Private Utility Relocation Plan (Shown on Plan and Profile Sheets)
- Traffic
 1. Maintenance of Traffic Notes (1 Sheet)
 2. Detour Plan (1 Sheet)
 3. Preliminary Signing & Pavement Marking Plan (1 Sheet, double stacked)
 - Waterworks (Separate Plan and Profiles for 12" and 30" Mains and separate notes for distribution and transmission lines)
 1. Preliminary 12" Waterline Plan and Profile (3 Sheets)
 2. Preliminary 30" Waterline Plan and Profile (3 Sheets)
 3. General Notes for 12" distribution line (10 Sheets)
 4. General Notes for 30 transmission line (10 Sheets)
 - Sanitary Sewer (No need anticipated-Not in scope)
 - Retaining Walls
 1. Preliminary Retaining Wall Plan & Elevation at Northeast quadrant of crossing (1 Sheet)
 2. Preliminary Retaining Wall Section Northeast quadrant (1 Sheet)
 3. Preliminary Retaining Wall Plan & Elevation at Southeast quadrant of crossing (1 Sheet)
 4. Preliminary Retaining Wall Section Southeast quadrant (1 Sheet)
 - Bridge Plans
 1. Structure Site Plan
 2. Bridge Transverse Section
 3. Preliminary Headwall Section at Upstream (1 Sheet)
 4. Preliminary Headwall Section at Downstream (1 Sheet)
 5. Preliminary Structure Foundation Plan and Details (2 Sheets)
 - Right of Way Plans (Preliminary)
 1. Preliminary Legend Sheet
 2. Preliminary Centerline Survey Plat (1 Sheet)
 3. Preliminary Property Map (1 Sheet)
 4. Summary of Additional Right of Way (12 PPN's on the north side of Sheldon, 6 PPN's on the south side) (4 Sheets)
 5. Right of Way Topo Sheets (3 Sheets)
 6. Right of Way Boundary Sheets (3 Sheets)
 7. Legal Descriptions and Closure Calculations (Estimate 18 Permanent Parcel Numbers requiring takes. Assume proposed permanent right of way will encompass the majority of the construction limits so temporary easements are anticipated for drive reconstruction only. Assume exclusive easement will be required for each utility requiring relocation including Cleveland Water, CEI (including those utilities currently on their poles, and Dominion Gas) Estimate the number of Legal Descriptions: Assume 1 WD or SH from each PPN (18 Legal Descriptions); Assume 1 Temporary Easement for each drive (3 Legal Descriptions); Assume 2 Utility Easements for each PPN (36 Legal Descriptions) TOTAL = 57 Legal Descriptions.

8. Title Reports – 42 Year Title Reports will be obtained for each PPN within the project limits. Title Reports will be obtained as part of the Preliminary Right of Way plan development activities and will be submitted with the Preliminary Right of Way Plans.
 9. Preliminary Closure Calculations
- The following will also be submitted with Stage 1
 1. Drainage Calculations
 2. Post Construction BMP Calculations
 3. Construction Cost Estimate with Contingency and Inflation (Estimator format and Cuyahoga County spreadsheet format)
 4. Approved Floodplain Permit from the City of Brook Park and Middleburg Heights

Stage 2/3 (Final): Stage 2 and 3 plans will be combined into one deliverable and be prepared per L&D Sections 1406.7 Stage 2 Detailed Design and 1406.9 Stage 3 Detailed Design. Estimated number of sheets are provided below.

- Disposition to Stage 1 Review Comments
- Roadway and Drainage
 1. Title Sheet (update)
 2. Typical Sections (update 2 Sheets)
 3. Sidewalk Details (update 1 Sheet)
 4. General Notes (update 2 Sheets from Stage 1)
 5. General Notes (5 Sheets (new))
 6. General Summary (3 Sheets)
 7. Roadway Subsummary (2 Sheets)
 8. Drainage Subsummary (1 Sheet)
 9. Project Site Plan (1 Sheet) – for SWPPP by Contractor
 10. Cross Sections (update 9 Sheets)
 11. Plan and Profile (update 3 Sheets)
 12. Roadway/Drainage Miscellaneous Details (4 Sheets)
 13. Storm Sewer Profiles (update 2 Sheets)
 14. Drive Details (update 1 Sheet)
 15. Drive Profiles (update 1 Sheet)
 16. Special Embankment Detail (1 Sheet)
 17. Miscellaneous Details (4 Sheets)
 18. Private Utility Relocation Plan (Update – Shown on Plan and Profile Sheets)
 19. Project Site Plan, Earth Disturbed Area exceeds 1 acre (1 Sheet)
- Traffic
 1. Maintenance of Traffic Notes (update 1 Sheet)
 2. Maintenance of Traffic Notes (1 Sheet)
 3. Maintenance of Traffic Subsummary (1 Sheet)
 4. Detour Plan (update)
 5. Signing & Pavement Marking Plan (update)
 6. Signing & Pavement Marking Subsummary (1 Sheet)

- Waterworks (Separate Plan and Profiles for 12" and 30" Mains and separate notes for distribution and transmission lines)
 1. 12" Waterline Plan and Profile (update)
 2. 30" Waterline Plan and Profile (update)
 3. General Notes for 12" distribution line (update 10 Sheets)
 4. General Notes for 30" transmission line (update 10 Sheets)
 5. Waterworks Standard Details (8 Sheets)
 6. Waterworks Details, Project Specific Details (2 Sheets)
 7. Waterworks Subsummary
 8. Cathodic Protection Design for 30" Waterline
- Sanitary Sewer (No need anticipated-Not in scope)
- Retaining Walls
 1. Retaining Wall Plan & Elevation at Northeast quadrant of crossing (update)
 2. Retaining Wall Foundation Plan Northeast quadrant (1 sheet)
 3. Retaining Wall Section Northeast quadrant (update)
 4. Retaining Wall Details Northeast quadrant (1 Sheet)
 5. Retaining Wall Plan & Elevation at Southeast quadrant of crossing (update)
 6. Retaining Wall Foundation Plan Southeast quadrant (1 sheet)
 7. Retaining Wall Section Southeast quadrant (update)
 8. Retaining Wall Details Southeast quadrant (1 Sheet)
 9. Retaining Wall General Notes (3 Sheets)
 10. Estimated Quantities
 11. Temporary Shoring Details (Not required, road closed)
 12. Reinforcing Steel List (1 Sheet)
- Bridge Plans
 1. Final Structure Site Plan
 2. Structure General Notes (3 Sheets)
 3. Bridge Transverse Section (update)
 4. Structure Foundation Plan and Details (update)
 5. Headwall Section at Upstream (update)
 6. Headwall Section at Upstream – Details (1 Sheet)
 7. Headwall Section at Downstream (update)
 8. Headwall Section at Downstream – Details (1 Sheet)
 9. Railing Details (1 sheet)
 10. Estimated Quantities
 11. Temporary Shoring Details (Not required, road closed)
 12. Reinforcing Steel List (3 Sheets)
- Right of Way Plans (Final)
 1. Legend Sheet (update)
 2. Centerline Survey Plat (update)
 3. Property Map (update)
 4. Summary of Additional Right of Way (12 PPN's on the north side of Sheldon, 6 PPN's on the south side) (update 4 Sheets)
 5. Right of Way Topo Sheets (update 3 Sheets)

6. Right of Way Boundary Sheets (update 3 Sheets)
 7. Legal Descriptions and Closure Calculations (update - Estimate 18 Permanent Parcel Numbers requiring takes. Assume permanent right of way will encompass the majority of the construction limits so temporary easements are anticipated for drive reconstruction only. Assume exclusive easement will be required for each utility requiring relocation including Cleveland Water, CEI (including those utilities currently on their poles, and Dominion Gas). Estimate number of legal descriptions: Assume 1 WD or SH from each PPN (18 legals); 3 Temporary Easements for drives (3 legals); 2 Utility Easements from each PPN (36 legals) TOTAL = 57 Legal Descriptions.
 8. Final Closure Calculations
- The following will also be submitted with Stage 2/3:
1. Construction Cost Estimate with Contingency and Inflation (Estimator format and Cuyahoga County spreadsheet format)
 2. Pavement Calculations (Office Calculations)
 3. Structure Quantity Calculations
 4. OEPA Permit-to-Install Application (for waterline)
 5. Project Manual

Conformance Plans: Conformance Plans and Cost Estimate will be prepared, addressing comments from the Stage 2/3 Submittal. Conformance submittal will include a disposition to Stage 2/3 Plans

Final Plans: Final Construction Plans and Final Cost Estimate will be prepared, addressing comments from the Conformance Plan submission. Final Plan submittal will include a disposition to the Conformance Plan comments.

Phase F – Bridge Load Rating & Analysis (Not in Scope)

The proposed structure is precast therefore the Bridge Load Rating will be provided by the Contractor.

Phase G – Right-of-Way Plan Preparation (Lump Sum)

This task includes the preliminary and final Right-of-Way Exhibit sheet, legal description, and closure calculation for the project with the deliverables described in Phase E. Title Reports will be obtained to aid with the preparation of the Preliminary Right of Way Plan.

Phase H – Right-of-Way Acquisition Services

Task 1: Task Management:

1. Kick-off meeting - A kickoff meeting/video call with the City of Brook Park, NEORS, and CCDPW staff shall take place to define new and assess existing goals of the project including expectations, schedule, communication, etc.
2. As-needed telephone calls with the City of Brook Park Project Manager
3. Identify project milestones and deliverables. Propose a meeting schedule to discuss milestones and present deliverables.

4. Status updates – Written project status updates must be submitted a minimum of once per month. These short memo type updates should include percent complete for each task; key task activities performed over the period; budget, scope, or scheduling issues; key activities to be performed over the next period and upcoming milestone dates.
5. Deliverables: Project schedule and Status updates.

Task 2: Preparation of Legal Instruments and Title Work Preparation of Legal Instruments:

The Consultant and/or subconsultants will be responsible for preparing all instruments and forms necessary for the acquisition of the parcel, including deeds, easements, contracts, letters, agreements and all other forms required. ODOT Real Estate LPA Forms will be utilized, unless otherwise authorized by the City of Brook Park's and CCDPW's representative. If other documents are to be used, they will be provided by the City of Brook Park and CCDPW and transmitted electronically to the consultant.

These items are required for the preparation of the legal instrument:

1. Current owner(s) name and marital status including nka and aka per the current title report
2. Auditor's parcel number - listing all parcels in the area to be acquired
3. Volume and page of the instrument through which the grantor claims title
4. Surveyor statement and number
5. Agreed compensation amount

Title Work: Our ODOT Prequalified team will search the public records concerning the titles to the highway parcels of such real estate in a form acceptable and will comply with the ODOT policy and procedures as set forth in the Office of Real Estate's Policy and Procedures Manual. All notes and reports are to be type written. Our team will submit a written report as to each parcel by the agreed upon due date. In addition, each report will include, to the extent that such information can be ascertained from a search of the public records relating to the title of said real estate, the following factual information:

1. The name, address, telephone number and marital status of all record holders or holders of title, including partnerships. The marital status of each owner in the chain shall be included.
2. The recorded deed description of the land or parcels of land which make up an owner's property which are used as a unit with the land taken for highway purposes, together with the recording reference and dates thereof, and any transfers for the period of time established at the task scoping meeting.
3. The names and address of the owners of any encumbrances upon, or interest in, the real estate, such as mortgages, land contracts, leases, easements, rights of way, mineral rights or reservations, etc.
4. Unsatisfied executions and living judgments, foreign or domestic, or pending suits of record in the courts of record, or on file in the Sheriff's Office or the Clerk of Courts Office of said county, which may affect said title to the real estate under examination.
5. Any other tax liens, mechanic liens, recognizance, Division of Aid for Aged Liens, or any other infirmity, encumbrance, lien, or cloud on title disclosed by the public records of said county, including all tax assessing agencies within the county or district.
6. The tax description, Auditor's parcel number, and current tax valuation, including statement of taxes, assessment liens, penalties, and interest, which have not been paid and are a lien.
7. Copy of the Auditor's Card.
8. Copy of the Tax Map
9. Copy of the root deed for full title reports.
10. Deliverables: Legal instruments required for acquisition; Title Report

Task 3: Appraisal

Consultant will be responsible for all activities related to establishing the current fair market value of the property, utilizing whatever format and approach is appropriate to arrive at an opinion of value for the parcel to be acquired. Consultant will be responsible for all appraisal activities. All valuation activities will be done in accordance with Title III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, USPAP and ODOT Real Estate Manual Section 4000 etc. seq. The appraisal format to be used for each parcel will be in accordance with the schedule of appraisal. Appraisal Revisions are defined as changes made to previously prepared appraisals to reflect a change in the facts of a parcel (plan changes or incorrect deed descriptions, etc.).

1. Deliverables: Appraisal Reports

Task 4: Acquisition (Negotiations and Closing):

Consultant will perform all work necessary to negotiate with all affected landowners having an interest in the property to be acquired. If conditions merit it may be necessary to ask the Client Representative to be involved with this process as a property owner may request a meeting with either the City and/or Design Engineer/Surveyor. Consultant will be responsible for all acquisition activities. All acquisition activities shall be done in accordance with Title III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act), Section 163 of the Ohio Revised Code and Sections 5100-5700 of the ODOT Real Estate Manual. In addition:

1. All negotiator notes and reports shall be type written.
2. The Consultant shall give a copy of the offer letter, plan summary letter and approved appraisal or the Value Analysis, to the property owner(s) when making the initial offer to the owner(s).
3. The Consultant during the initial meeting with the owner(s) shall: Reference the date of the meeting on the Negotiation Report (RE-60); Present the brochure "When ODOT Needs Your Property," and/or a prepared brochure provided by the CCDPW; Verify the accuracy of the Title Report, especially ownership issues; Explain the right of way and construction plans to the owner(s); Explain the appraisal process; Explain the offer of the Fair Market Value Estimate (FMVE); Explain the property owner's appropriation rights; Explain real property tax procedures; If appropriate, explain structure retention. Document the owner's questions, issues and concerns.
4. If appropriate, provide these negotiation services jointly with the relocation offer.
5. Consultant will ensure that the signed instruments are signed exactly as the names appear to include any applicable nka or aka name of the owner(s) on the instrument and that the forms are properly notarized.
6. Consultant will obtain a signed IRS form W-9 from each property owner listed on the most recent title report.
7. Retention values for structures or any other items will be prepared by our team (unless otherwise directed by the City of Brook Park).
8. Consultant will inform the property owner of the need for Lien releases and assist the owners with obtaining these items. All costs (Lender Processing fee, surveyor requirements, etc...) to the owner for obtaining such releases will be paid by the City of Brook Park. The City of Brook Park will be reimbursed by NEORSF for said costs.

Preparation of Individual Parcel Files: Consultant will be responsible for the assemblage and maintenance of acquisition files. Upon the close out for the project the original files and an electronic copy will be provided to the Client.

Billing Packages: Consultant will submit the billing package i.e., signed parcels, appropriations, or Relocation Assistance payments, to the City of Brook Park for review and processing. All billing requests will be reviewed, and Warrants/Checks will be processed by the City of Brook Park's personnel. In the case of signed parcels, the warrant/checks will be mailed to Euthenics for further processing (closing, etc.). Warrants/Checks will be issued for the agreed upon settlement for the property owner, a separate Warranty for Closing Recording and Conveyance Fees as listed on the Warrant/check Request to process this transaction with the County. In the case of appropriations, the warrant/check will be sent to the Client's Legal Representative to be placed on deposit with the Court. Consultant will utilize approved ODOT LPA forms when performing all right of way functions contained in this scope, excepted as indicated by the Client.

Closing: All closing activities are the responsibility of the Consultant. Closing activities include to:

1. Conduct closings, disbursing and collecting monies as required; Assist the property owner in the execution of required instruments and forms.
2. Secure the necessary approvals from required local agencies to permit the transfer of ownership property rights in the county auditor's office. Record the instruments and releases with the county recorder's office.
3. Title updates required for closing are part of the closing. They will not be considered a separate pay item.
4. After the completion of the closing process consultant will prepare a packet for each right of way parcel and will forward it to the Client upon project close.

Project Certification: The final work product may need to be certified as clear in conformance with ODOT policies and procedures, the Ohio Administrative Code, the Ohio Revised Code, Uniform Standards for Professional Appraisal Practices (USPAP), the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended (the Uniform Act), and all other local, state and federal laws, policies, ordinances or regulations.

Phase I – Project Management (Lump Sum)

This phase will include monthly project oversight, subconsultant management/review, invoicing, meetings, and coordination with CCDPW. We will plan on attending up to five (5) meetings for this project with the County at their Cleveland office. Attendance at the meetings will be Project Manager, Lead Bridge Engineer and Lead Roadway Engineer. We will prepare the meeting minutes for distribution and review. The following are the anticipated meetings:

1. Kickoff Meeting
2. Stage 1 Review Meeting
3. Utility Coordination Meeting
4. Stage 2/3 Review Meeting
5. Conformance Plans Review Meeting

Phase J – If Authorized Additional Services (Cost Plus Net Fee)

This task includes if-authorized unforeseen tasks falling outside of the agreement scope of services.

Phase K – Pre-Bid Services (Cost Plus Net Fee)

Provide assistance to the County during the bidding phase as directed, including attendance at the pre-bid meeting (if any), assistance in answering contractor questions, and the assessment of the need for addenda.

Phase L – If Authorized Construction Consultation (Cost plus Net Fee)

This task includes the construction services for the project. This work will include responding to pre-bid questions, attendance at the pre-construction meeting, responding to RFI's, reviewing contractor shop drawings and other submittals, and site visits if necessary. This task does not include construction administration and inspection, which will be by others.

Phase M – OEPA Project Summary (Cost plus Net Fee)

A Project Summary will be prepared and submitted to the OEPA following the construction activities of the proposed water utility relocation. This submission shall provide an updated distribution map (or plan location map depending on stakeholder involvement) and summarize the extent of water utility replacement as well as identifying any unusual conditions encountered during construction.

SUBMITTALS AND REVIEWS:

For each phase of the project, Euthenics will submit a PDF file of the plans and associated deliverables to the CCDPW for a brief initial review of its contents and a determination of its completeness. Following the initial review and any resulting modifications or revisions, the consultant shall submit an updated PDF file of the accepted deliverables to the CCDPW for formal review. The consultant shall also submit electronic review materials to the City of Brook Park, the City of Middleburg Heights, the Northeast Ohio Regional Sewer District, and all utilities. Paper copies of the submittal items will be provided to the stakeholders and review agencies if hard copies are requested. The consultant shall schedule and coordinate the reviews and collect comments in accordance with the agreed upon Project Work Schedule.

PAYMENTS

Euthenics will submit monthly invoices as the work progresses. The maximum compensation paid for by the City of Brook Park and NEORSD shall not exceed the following percentages of the total compensation:

- Upon approval by the City of Brook Park and NEORSD of the H&H Report: 25%
- Upon approval by the City of Brook Park and NEORSD of the Stage 1 Plans: 65%
- Upon approval by the City of Brook Park and NEORSD of the Stage 2/3 Plans: 90%
- Upon approval by the City of Brook Park and NEORSD of the Final Construction Plans: 98%
- Upon completion of all services including R/W Acquisition and Construction Services: 100%

SCHEDULE:

The updated Project Work Schedule is attached to the proposal as an exhibit.

ABBREVIATIONS:

AASHTO - American Association of State Highway & Transportation Officials

AC(B)M - Asbestos Containing (Building) Material

AER - Alternatives Evaluation Report

BDM - Bridge Design Manual

BMP - Best Management Practice

CA(D)D - Computer Aided (Design and) Drafting

CCDPW - Cuyahoga County Department of Public Works

CE - Categorical Exclusion

CMP - Cleveland Metroparks

CMS - Construction and Material Specifications

C.R. - County Route

CWA - Clean Water Act

CWD - Cleveland Water Department

DTM - Digital Terrain Model

ESA - Environmental Site Assessment

FEMA - Federal Emergency Management Agency

FHWA - Federal Highway Administration

GER - Geotechnical Engineering Report

H&H - Hydrology and Hydraulics

L&D - Location and Design

L.F. - Left Forward

LFD - Load Factor Design

LRFD - Load and Resistance Factor Design

LWCF - Land and Water Conservation Fund

MBE - Minority Business Enterprise

MOT - Maintenance of Traffic

NAD 83 - North American Datum of 1983

NAVD 88 - North American Vertical Datum Of 1988

NEORS - Northeast Ohio Regional Sewer District

NEPA - National Environmental Protection Act

NESHAP - National Emission Standards for Hazardous Air Pollutants

ODNR - Ohio Department of Natural Resources

ODOT - Ohio Department of Transportation

OEPA - Ohio Environmental Protection Agency

OES - Office of Environmental Services

OGPUPS - Oil and Gas Producers Underground Protection Service

OHW - Ordinary High Water Mark

OMUTCD - Ohio Manual of Uniform Traffic Control Devices

OUPS - Ohio Utilities Protection Service

PDP - Project Development Process

PE - Preliminary Engineering

PWS - Project Work Schedule

R.F. - Right Forward

R/W - Right-of-Way

SBE - Small Business Enterprise

SFN - Structure File Number

STS - Structure Type Study

SUL - Subsurface Utility Locating

USACE - U.S. Army Corps of Engineers

USGS - U.S. Geologic Survey

WBE - Women Business Enterprise

EXHIBIT D



STORMWATER GES 2 – TASK ORDER #13

**1606 SHELDON ROAD PROFILE RAISING AND
RECONSTRUCTION – SCHEMATIC PLANNING LEVEL STUDY**

Final Pre-Design Basis of Design Report

**Exhibit on file in the
Brook Park City Council Office**

EXHIBIT E



**Regional Stormwater Management Program Project
PAYMENT REQUEST ACCURACY VERIFICATION AND PROGRESS REPORT**

Project Information

Project Partner: _____

Project Title: _____

Payment Request Amount: _____

Authorized Signature

Pursuant to the terms of the Agreement between the Project Partner and the Northeast Ohio Regional Sewer District (the "District") for the above-referenced Project, I am the duly authorized representative of the Project Partner with respect to said Agreement and related consultant invoices/contractor pay/draw applications.

I hereby verify that the consultant invoice/contractor pay/draw application attached hereto from consultant/contractor is accurate, that the consultant's/contractor's materials and/or services reflected in the consultant invoice/contractor pay/draw application was furnished and performed in accordance with the conditions of the contract for the work and is to the satisfaction of the Project Partner, that the consultant invoice/contractor pay/draw application is not in dispute by the consultant/contractor or the Project Partner, that I recommend payment of same, and that information contained therein is true and correct to the best of my knowledge.

I also confirm that the Project Partner shall pay the consultant/contractor such District-approved amount distributed to the Project Partner as expeditiously as possible following receipt of funds from the District and within the time period prescribed in the Project Partner's contract with the contractor/consultant to avoid any late fees or other penalties for late payment.

Further, I confirm that all information included in the Progress Report is verified and accurate.

Name (print or type): _____

Title: _____

Telephone Number: _____

Email Address: _____

Signature: _____

Date: _____

Progress Report

Provide a summary of the accomplishments with respect to objectives, degree of completion based on the Project application, and any problems encountered. Progress Reports must be submitted with all payment requests.

- 1) Summarize progress and/or accomplishments during this reporting period as related to your project implementation schedule. (500 word maximum)

2) Difficulties and delays encountered during this reporting period. (500 word maximum)



Instructions:

Record all expenses and attach relevant procurement documentation, such as an itemized bill, receipt, invoice, time card and/or other documentation to substantiate purchase and compensation as deemed acceptable by the District. Attach all documentation in the order presented on the Project Expenditures form. Combine all requested items into one complete document for submission.

All reports, requests, and inquiries should be submitted to:

Linda Mayer, Grant Programs Administrator II, mayerl@neorsd.org

[illegible]

5/2/23 Service
CA _____
1st R _____
2nd R _____
3rd R _____
4th R _____

CITY OF BROOK PARK, OHIO

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

AN ORDINANCE
AMENDING ORDINANCE 11233-2021, WHICH AUTHORIZED THE MAYOR TO
ENTER INTO A CONTRACT WITH CONSTRUCTION RESOURCES, INC. TO
PREPARE DETAIL DRAWINGS, SPECIFICATIONS, AND BID PACKAGES FOR THE
NATATORIUM REPAIR, AND A ROOF STUDY
AND DECLARING AN EMERGENCY

WHEREAS, Construction Resources, Inc., prepared a comprehensive study of the natatorium's roof and walls, which are in need of repair; and

WHEREAS; this Council found that design services are needed to prepare the necessary detail drawings and construction documents for the exterior envelope and to assist with preparing the specifications for the bid packages for the repairs to the natatorium; the services proposed are attached and incorporated as Exhibit "A";

WHEREAS, this Council further finds that a roof study is needed for the overall City Hall building and shall retain Construction Resources, Inc. for said study as proposed in Exhibit "B"; and

WHEREAS, Construction Resources is updating the current plans for the natatorium's roof and walls, a fee of \$4,000.00 has been proposed in addition to the existing \$171,600.00, bringing the total to \$175,600.00, as proposed in Exhibit "C".

NOW THEREFORE, BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Council for the City of Brook Park authorizes the Mayor to enter into an agreement with Construction Resources, Inc., for the design services proposed in Exhibits "A", "B" and "C".

SECTION 2: The money needed for the aforesaid transaction

RECEIVED

APR 27 2023

shall be paid from fund 401, and shall not exceed \$175,600.00.

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 4: This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare, **and to amend ordinance 11233-2021;** therefore, provided this ordinance receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
Clerk of Council

APPROVED: _____
MAYOR

DATE

HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS


DIRECTOR OF LAW

CONSTRUCTION RESOURCES, INC.
33900 Station Street
Solon, OH 44139
(440) 248-9800 Fax (440) 248-9939

EXHIBIT

PROPOSAL
FOR CONSULTING SERVICES

Page No. 1 of 1 Page

To: Mr. Mark J. Elliott
Recreation Director
City of Brook Park
17400 Holland Road
Brook Park, OH 44142

SERVICE: Design Service

LOCATION: Natatorium

PHONE: (216) 433-1545

DATE: 11/8/21

We hereby submit the following outline for consulting services:

Upon your acceptance of this proposal, Construction Resources, Inc. will be engaged to prepare detail drawings and construction documents for the exterior envelope repair to the natatorium building segment. Makarch Structural Engineering LLC will assist us in design of the structural components and their fee of \$5,000 is included in the fee stated below. The liability for the work to be contracted lies with the awarded contractor and the manufacturers of the products they install.

We will prepare a draft package of full specifications and drawings for your approval, in keeping with the recommendations made in our recent study report. Subsequent to your approval of the design documents, we will provide a listing of qualified contractors that should be invited to the prebid meeting. We will be present at the prebid meeting to answer appropriate bidder questions and explain the scope of the project. We will assist in reviewing the bids that are submitted to the Client in sealed envelopes and in recommending the bid to accept.

The draft plans and specifications will be reviewed with you within 90 days from acceptance of this proposal and your approval to proceed, weather permitting.

A separate proposal for a field observation and/or contract administration and project meeting service will be submitted, upon your request.

WE PROPOSE hereby to furnish consulting services—complete according to this outline, for the sum of:
One Hundred Thirty Three Thousand and zero/100—dollars (\$133,000.00)

Payable as follows: Net 30 days billing.

The Consultant's services consist of those services done by Construction Resources, Inc., its employees, or outside consultants who may be required to perform the intended scope of work as outlined. The services provided by the Consultant, its findings, or reports prepared will be in accordance with its proposal, Owner's acceptance of these agreements, and generally accepted principles and practices of the industry. In performing its services, the Consultant will use that degree of care and skill ordinarily exercised under similar circumstances by members of its industry. Statements made in reports by the Consultant are opinions based on judgment and are not to be construed as representations of fact. Consultant's liabilities are limited to the total amount of the fee charged to the client.

Authorized signature:

Bud Griffith, President

NOTE: This proposal may be withdrawn by us if not accepted within 10 days.

ACCEPTANCE OF PROPOSAL - The prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature _____

Date _____

Signature

Date 11/21/21

CONSTRUCTION RESOURCES, INC.

33900 Station Street
Solon, OH 44139
(440) 248-9800 Fax (440) 248-9938

EXHIBIT**"b"****PROPOSAL**

FOR CONSULTING SERVICES

Page No. 1 of 1 Page

To: Mr. Mark J. Elliott
Recreation Director
City of Brook Park
17400 Holland Road
Brook Park, OH 44142

SERVICE: Roof Study

BUILDING: City Hall overall building

PHONE: (216) 433-1545

DATE: 11/15/21

We hereby submit the following outline for consulting services:

Upon your acceptance of this proposal, Construction Resources, Inc. will be engaged to conduct a study of the remaining low-sloped roof areas on the Brook Park City Hall at large, as defined by the Client. The Client agrees that Construction Resources will be relieved from all responsibility and liability of any warranty or other issues that may be caused by this study. Terik Roofing will assist us and their costs for materials and labor of \$3,600 is included in the fee below.

The Client will offer us copies of all construction documents, submittals, a history of the roof areas, renovations drawings, past study reports, and any other pertinent information that should be shared about the roof systems.

Destructive testing will be done for the roof areas as part of the fieldwork. Our study procedures will include a physical inspection of the roof areas, including the deck underside where the Owner can give us access. The fieldwork will be done on Monday through Friday during the hours of 8AM and 5PM. We will attempt ascertain the condition of the roof system, its components, including walls and projections above roofline. No drawings will be prepared within the study report, but digital photos will be taken and included in the report.

Recommendations for repairs and restoration will be included in the study results, along with costs and budgets to assist in planning future repair or replacement expenditures. The study report will be delivered to you and reviewed. The study will be completed within 90 days from the acceptance of this proposal, weather permitting.

A separate proposal will be made, upon request, for a Phase II (plans and specifications for repairs/replacement work to bid) and a Phase III (contract administration and project meetings of awarded projects) engagement.

WE PROPOSE hereby to furnish consulting services—complete according to this outline, for the sum of:

Thirty Eight Thousand Six Hundred and zero/100— dollars (\$ 38,600.00)

Payable as follows: Net 30 days billing.

The Consultant's services consist of those services done by Construction Resources, Inc., its employees, or outside consultants who may be required to perform the intended scope of work as outlined. The services provided by the Consultant, its findings, or reports prepared will be in accordance with its proposal, Owner's acceptance of these agreements, and generally accepted principles and practices of the industry. In performing its services, the Consultant will use that degree of care and skill ordinarily exercised under similar circumstances by members of its industry. Statements made in reports by the Consultant are opinions based on judgment and are not to be construed as representations of fact. Consultant's liabilities are limited to the total amount of the fee charged to the client.

Authorized signature:

Bud Griffith, President

NOTE: This proposal may be withdrawn by us if not accepted within 10 days.

ACCEPTANCE OF PROPOSAL — The prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature

Date

Signature

Date

11/15/21

EXHIBIT

CONSTRUCTION RESOURCES, INC.

33900 Station Street
Solon, OH 44139
(440) 248-9800 Fax (440) 248-9939

PROPOSAL

FOR CONSULTING SERVICES

Page No. 1 of 1 Page

To: Mr. Andres Gonzalez, Jr. Director of Recreation City of Brook Park 17400 Holland Road Brook Park, OH 44142	SERVICE: Completion of Design Services	
	LOCATION: Natatorium	
	PHONE: (216) 433-1545	DATE: 1/25/23

We hereby submit the following outline for consulting services:
 Upon your acceptance of this proposal, Construction Resources, Inc. will be engaged to finalize preparation of the detail drawings and construction documents for the exterior envelope repair to the natatorium building segment. Makarich Structural Engineering LLC will assist us in design finalization of the structural components and their fee of \$1,000 is included in the fee stated below. The City acknowledges by acceptance of this proposal that the liability for the work to be contracted lies with the awarded contractor and the manufacturers of the products they install.

In our phone call today, you said the City wants the envelope designed for a functioning natatorium in the future; that all conduits, light fixtures, etc. are to be removed and discarded in the scope of work; the City wants the new roof deck to be acoustical in design; that the waterpark will be open this summer so the Contractor will need to fence off the work area and take steps to keep the patrons safe; the employee parking lot and entrance will be closed for the project's duration; the City will acknowledge that the roof over the locker rooms, hot tub, sauna, etc. is not part of this scope of work; the City will acknowledge that the West PUF roof at the base of the natatorium walls will not be dealt with by CRI and leaks at the wall base is not the responsibility of the project's scope of work.

You will need to assist us in arranging the West Roofing scope of work for protecting the PUF roof, which will get incorporated into the scope of work and the Prime Contractor will need to engage West Roofing to deal with this issue.

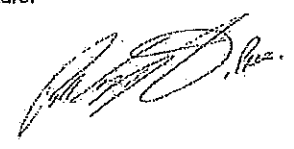
We will prepare a draft package of full specifications and drawings for your approval, in keeping with the recommendations made in our past study report. The project estimate of \$3,103,000 will be updated when final design is complete and shared with the City. Subsequent to your approval of the design documents, we will provide a listing of qualified contractors that should be invited to the prebid meeting. We will be present at the prebid meeting to answer appropriate bidder questions and explain the scope of the project. We will assist in reviewing the bids that are submitted to the Client in sealed envelopes and in recommending the bid to accept.

The finalized plans and specifications will be reviewed with you within 60 days from acceptance of this proposal and your approval to proceed, weather permitting.

A separate proposal for a field observation and/or contract administration and project meeting service will be submitted, upon your request.

WE PROPOSE hereby to furnish consulting services--complete according to this outline, for the sum of:
 Four Thousand and zero/100-----dollars (\$4,000.00)

Payable as follows: Net 30 days billing.

The Consultant's services consist of those services done by Construction Resources, Inc., its employees, or outside consultants who may be required to perform the intended scope of work as outlined. The services provided by the Consultant, its findings, or reports prepared will be in accordance with its proposal, Owner's acceptance of these agreements, and generally accepted principles and practices of the industry. In performing its services, the Consultant will use that degree of care and skill ordinarily exercised under similar circumstances by members of its industry. Statements made in reports by the Consultant are opinions based on Judgment and are not to be construed as representations of fact. Consultant's liabilities are limited to the total amount of the fee charged to the client.	Authorized signature:  Bud Griffith, President
	NOTE: This proposal may be withdrawn by us if not accepted within 10 days.

ACCEPTANCE OF PROPOSAL -- The prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature _____ Date _____ Signature _____ Date _____

CITY OF BROOK PARK, OHIO

P/C 4-18-23 Service
CA _____
1st R _____
2nd R _____
3rd R _____
E/C _____

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO
A COMMUNITY COST-SHARE AGREEMENT BY AND BETWEEN
THE NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORS D)
AND THE CITY OF BROOK PARK, FOR THE STORMWATER MCM #6
IMPLEMENTATION, AND DECLARING AN EMERGENCY

WHEREAS; THE City of Brook Park entered into a regional
Stormwater Management Program Service (SMP Service Agreement) as
evidenced by Ordinance No. 10032-2016, passed August 2, 2016 and

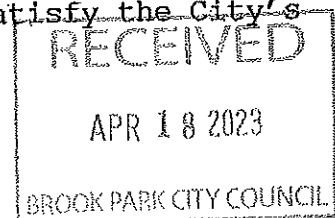
WHEREAS, as a component of implementing a regional stormwater
management program a "Community Cost-Share Account" has been
created; and

WHEREAS, the Community Cost-Share Account is to provide
funding to assist the City of Brook Park with the District approved
project; and

WHEREAS, the District supports the Community Cost-Share
project proposed by the City of Brook Park to clean approximately
300 stormwater catch basins and dispose of the approximately 400
cubic yards of materials. The City will use BFI Lorain Co. Landfill
to test and dispose of the solid waste that is removed from the
catch basins. The catch basin cleaning will be done during the
spring and fall of 2023 and be completed by December 2023; and

WHEREAS, the City will street sweep approximately 500 miles of
City streets three times during 2023; the City will use City
equipment and personnel to complete the work. The City will use
BFI Lorain Landfill to test and dispose of the solid waste that is
removed from the City streets; and

WHEREAS, no permits will be required to complete the work, the
materials will be tested by BFI to make sure it is appropriate for
disposal in a solid waste facility and not a hazardous waste
facility, and the work being performed will also satisfy the City's
SWMP under 2015-2019 MS4 Permit obligations; and



WHEREAS, the NEORS D will reimburse funds up to \$200,000.00 to the City for this project.

NOW THEREFORE, BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Mayor is authorized and directed to execute on behalf of the Municipality a Community Cost-Share project for the Stormwater MCM #6 Implementation, by and between the Northeast Ohio Regional Sewer District and the City of Brook Park, set forth in the Agreement attached hereto as Exhibit "1."

SECTION 2: The money needed for the aforesaid transaction shall be paid from Fund 100.

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 4: This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City, and authorizing the Mayor to enter into an Agreement for a Community Cost-Share Catch Basin Cleaning, Street Sweeping and Landfill testing and Safe Disposal with Northeast Ohio Regional Sewer District; therefore, provided this ordinance receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
Clerk of Council

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.



**COMMUNITY COST-SHARE AGREEMENT
BY AND BETWEEN
THE NORTHEAST OHIO REGIONAL SEWER DISTRICT
AND
CITY OF BROOK PARK**

This Agreement is made and entered into this _____ day of _____, 2023, by and between the Northeast Ohio Regional Sewer District (District) acting pursuant to Resolution No. 114-13, adopted by the Board of Trustees of the District on May 16, 2013 (Exhibit "A"), and City of Brook Park (City) acting pursuant to Ordinance/Resolution No. _____, adopted on _____, 20____ (Exhibit "B").

Recitals

WHEREAS, the District, as a component of implementing a regional stormwater management program, manages a financial account termed the "*Community Cost-Share Account*" that is for the aggregation and dissemination of funds derived from revenues collected from the Stormwater Fee; and

WHEREAS, the purpose of the Community Cost-Share Account is to provide funding to assist the City with District-approved projects through the Community Cost-Share Program; and

WHEREAS, the Community Cost-Share Program funds are used for construction, operation, and maintenance of the Local Stormwater System or Regional Stormwater System, including administrative costs directly associated with such projects as well as costs related to repair or upgrade; and

WHEREAS, the District supports the Community Cost-Share Street Sweeping And Catch Basin Cleaning – Stormwater MCM#6 Implementation project (the "Project") as a Community Cost-Share project proposed by the City; and

NOW THEREFORE, in consideration of the foregoing, the payment and the mutual promises contained in this Agreement, the parties agree as follows:

Article 1.0 City Obligations

1.1 The City agrees to perform as follows:

1.1.1 Complete work as detailed in the District approved Community Cost-Share application. (Exhibit "C")

1.1.2 Complete and submit Progress Reports when submitting Request for Payment as needed, or within 30 days of close of the Project, in accordance with the *Community Cost-Share Program Policy*.

- 1.1.3 Notify the City's Watershed Team Leader at least 7 business days prior to the start of the Project.
- 1.1.4 Meet with District staff when requested to review the Project status.
- 1.1.5 Obtain all necessary legal agreements with affected property owners to perform the Project and to bind any successor in title to maintain compliance as specified in this Agreement between the District and City for the Project.
- 1.1.6 Comply with all applicable local, state and federal requirements. This may include, but is not limited to, U.S. Army Corp of Engineers Section 404, Ohio EPA Section 401 water quality certification, and Ohio Department of Natural Resources Dam Safety Laws.
- 1.1.7 If the City fails to maintain the Project in accordance with this Agreement, the City shall be liable for the full amount of any Community Cost-Share Program funds paid for the Project. Such amount shall be offset against the City Community Cost-Share Account.
- 1.1.8 Submit requests for approval to modify the budget, deadline, deliverables, or other components of the Project to the City's Watershed Team Leader at least 30 business days prior to the desired date of execution of the modification.
- 1.1.9 Acknowledge the District on any public advertisement or outreach efforts including all publications and signage related to the Project which shall include the following disclaimer:

This project was funded in part or totally through the Northeast Ohio Regional Sewer District (NEORS D) Community Cost-Share Program in coordination with City, under the provisions of the NEORS D Regional Stormwater Management Program. The contents and views, including any opinions, findings, or conclusions or recommendations, contained in this publication are those of the authors and have not been subject to NEORS D review and may not necessarily reflect the views of NEORS D, and no official endorsement should be inferred.
- 1.1.10 Provide the District the opportunity to have design approval for any signage or public education and outreach efforts related to the Project.
- 1.1.11 Permit the District to photograph the Project and to incorporate the Project into the District's overall public education and outreach efforts for stormwater management.
- 1.2 Failure to meet any of the requirements listed in Article 1.1 may result in termination of this Agreement and reimbursement of disbursed funds to the District.

Article 2.0 **District's Obligations**

2.1 The District agrees to perform as follows:

- 2.1.1 Allocate \$200,000.00 to the City for the Project from the City's Community Cost-Share Account.
- 2.1.2 Provide reimbursement of funds up to \$200,000.00 to the City within 60 days of receipt of a complete Request for Payment from the City, detailing costs related to the Project.
- 2.1.3 Timely review and approval or disapproval of requests to modify the budget, deadline, deliverables, or other components of the Project.
- 2.1.4 Acknowledge the City in presentations or publications related to the Project.

2.2 The District is not liable for any and all claims, damages, losses, liens, causes of action, suits, judgments and expenses of any nature, kind or description, that result from and to the extents caused by the acts or omissions of the City, the design professional, and the contractor, including all of their officers, owners, principals, subcontractors, employees, and agents. The District is not responsible for the accuracy, correctness and reliability of the plans as it is not reviewing or approving any plans as to suitability of the design/fitness for a particular purpose.

Article 3.0 **Dispute Resolution**

- 3.1 The Parties shall continue the performance of their obligations under this Agreement notwithstanding the existence of a dispute.
- 3.2 The Parties shall first try to resolve the dispute at the level of the designated representatives as follows:

District Representative	City Representative
Watershed Team Leader	Director of Public Service

If the Parties are unable to resolve the dispute at that level within ten (10) working days, the Parties shall escalate the dispute to the following level to resolve the dispute:

District Representative	City Representative
Director of Watershed Programs	Mayor

- 3.3 If the Parties remain unable to resolve the dispute within an additional ten (10) working days, the Parties shall proceed to mediation upon request by either party. The mediator shall review all documents and written statements, in order to accurately and effectively resolve the dispute. The mediator shall call a meeting between the Parties within ten (10) working days after mediator appointment, which meeting shall be attended by at least the respective representatives listed in paragraph 3.02 above. The Parties shall attempt in good faith to resolve the dispute. The Parties agree to follow the Uniform Mediation Act, Chapter 2710 of the Ohio Revised Code. The Parties shall share the cost of the mediator equally.
- 3.4 Such mediation shall be non-binding between the Parties and, to the extent permitted by law, shall be kept confidential. If the dispute is resolved and settled through the mediation process, the decision will be implemented by a written agreement signed by both Parties. If the dispute is unable to be resolved through mediation, the Parties agree to submit the dispute to the appropriate jurisdiction as per Article 4, Remedies, below.

Article 4 **Remedies**

- 4.1 The Parties agree that, after exhausting the dispute resolution process outlined above, all claims, counter-claims, disputes and other matters in question between the Parties arising out of or relating to this Agreement, or the breach thereof, will be decided at law. This Agreement shall be governed by and interpreted according to the laws of the State of Ohio.

Article 5 **Counterpart Signatures**

- 5.1 This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but which counterparts when taken together shall constitute one Agreement.

Article 6 **Governing Law**

- 6.1 The terms and provisions of this Agreement shall be construed under and governed by the laws of Ohio (to which all Parties hereto consent to venue and jurisdiction).

Article 7 **Disclaimer of Joint Venture**

- 7.1 This Agreement is not intended to create a joint venture, partnership or agency relationship between the Parties, and such joint venture, partnership, or agency relationship is specifically hereby disclaimed.

Article 8 **Authority to Execute**

- 8.1 Each person executing this Agreement represents and warrants that it is duly authorized to execute this Agreement by the party on whose behalf it is so executing.

Article 9 **Exhibits**

The following exhibits are attached hereto and incorporated herein:

- Exhibit "A" – District Resolution
- Exhibit "B" – City Ordinance/Resolution
- Exhibit "C" – District-Approved Community Cost Share Application

The parties have executed this Agreement on the day and year first above written.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

BY: _____
Kyle Dreyfuss-Wells
Chief Executive Officer

AND

BY: _____
Darnell Brown, President
Board of Trustees

CITY OF BROOK PARK

By: _____

Title: _____

The Legal Form and Correctness of this
Instrument is hereby Approved:

CITY OF BROOK PARK


Assistant/Director of Law

This Instrument Prepared By:

Anka M. Davis
Assistant General Counsel
Northeast Ohio Regional Sewer District

Each party agrees that this Agreement may be executed and distributed for signatures via email, and that the emailed signatures affixed by both parties to this Agreement shall have the same legal effect as if such signatures were in their originally written format.

[FOR NEORS D USE]

AGREEMENT NO.

NORTHEAST OHIO REGIONAL SEWER
DISTRICT

WITH

CITY OF BROOK PARK

FOR

COMMUNITY COST-SHARE PROJECT:
STREET SWEEPING AND CATCH BASIN
CLEANING - STORMWATER MCM#6
IMPLEMENTATION PROJECT

Total Approximate Cost:	\$200,000.00
-------------------------	--------------

The legal form and correctness of the within
instrument are hereby approved.

ERIC J. LUCKAGE
CHIEF LEGAL OFFICER

Date

CERTIFICATION

It is hereby certified that the amount required to
meet the contract, agreement, obligation, payment
or expenditure, for the above, has been lawfully
appropriated or authorized or directed for such
purpose and is in the Treasury or in process of
collection to the credit of the fund free from any
obligation or certification now outstanding.

KENNETH J. DUPLAY
CHIEF FINANCIAL OFFICER

Date

Budget Center 8100

EXHIBIT A

NORTHEAST OHIO REGIONAL SEWER DISTRICT
RESOLUTION NO. 114-13

Authorizing the Executive Director to enter into Regional Stormwater
Management Program Community Cost-Share Program Agreements
with Member Communities.

WHEREAS, the Code of Regulations of the Northeast Ohio Regional Sewer District, Title V – Stormwater Management Code Chapter 9 outlines the Community Cost-Share Program developed to provide funds to District Member Communities for construction, operation and maintenance activities of community-specific stormwater management projects; and

WHEREAS, under the Community Cost-Share Program, 25% of the annual collected stormwater revenue from each Member Community will be held by the District in a Community Cost-Share account, whereby Communities, with review and approval by the District, through specific applications outlining the community-specific stormwater work to be performed can access reimbursement of their funds; and

WHEREAS, the District is seeking authority to enter into Regional Stormwater Management Program Community Cost-Share Program Agreements with Member Communities for the purpose of detailing and memorializing responsibilities of the District and Member Communities under specific applications to the Community Cost-Share Program;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE NORTHEAST OHIO REGIONAL SEWER DISTRICT:

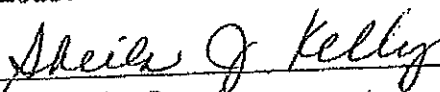
Section 1. That this Board finds that for the reasons stated in the preamble hereof it is in the best interests of the District to enter into Regional Stormwater Management Program Cost-Share Program Agreements with Member Communities to memorialize responsibilities of the District and Member Communities under specific applications to the Community Cost-Share Program.

Section 2. That this Board hereby authorizes the Executive Director to enter into Regional Stormwater Management Program Cost-Share Agreements with Member Communities to memorialize responsibilities of the District and Member Communities under specific applications to the Community Cost-Share Program under such terms and conditions that are satisfactory to the Director of Law and in the best interests of the District.

Section 3. That this Board authorizes the Executive Director to execute all documents and do all things necessary to effect the terms and conditions of the Stormwater Management Program Direct Billing Agreements with Member Communities.

Section 4. That this Board declares that all formal actions of the Board concerning and relating to the adoption of this resolution and that all deliberations of the Board and any of its committees that resulted in said formal action were conducted in meetings open to the public and in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

On motion of Mayor Starr seconded by Mr. O'Malley, the foregoing resolution was unanimously adopted on May 16, 2013.

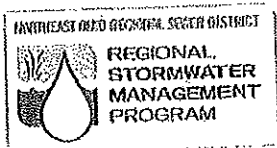


Sheila J. Kelly, Secretary
Board of Trustees
Northeast Ohio Regional Sewer District

EXHIBIT B

(Insert Member Community
Ordinance/Resolution)

EXHIBIT C



Community Cost-Share Program
Application

Community Cost-Share Program
APPLICATION

Member Community Information

Community:

City of Brook Park

Primary Project Contact:
(Name & Title)

Brian Beyer

Director of Public Service

Mailing Address:

19065 Holland Road

Brook Park, Ohio 44142

Phone Number:

216-433-7192

Email:

bbeyer@cityofbrookpark.com

Project Information

Project Title:

Street Sweeping & Catch Basin Cleaning ~\$

Address or Location of Project:

City Wide Project

Project Start Date:

April 10, 2023

Project End Date:

December 2023

Community Cost-Share Fund Request:

\$200,000.00

Submission Date:

March 8, 2023



*Community Cost-Share Program
Application*

Project Narrative

1) Project Summary (1,000 word maximum)

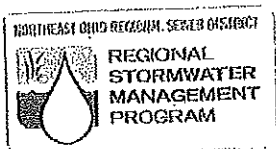
Describe the Project and include the following information, as applicable:

- Describe the Project and deliverables; provide a map if applicable
- Submit a deliverable worksheet listing tasks and deliverables with start dates and end dates for the significant benchmarks.
- List permitting requirements necessary to initiate and complete project and how the requirements will be met.

The City would like to clean approximately 300 stormwater catch basins and dispose of the approximately 400 cubic yards of materials. The City will use BFI Lorain County Landfill to test and dispose of the solid waste that is removed from the catch basins. The catch basin cleaning will most likely be done during the spring and fall of 2023 and be completed by December 2023.

Street sweeping approximately 500 miles of City streets three (3) times during 2023. The City will use City equipment and personnel to complete the work. The City will use BFI Lorain County Landfill to test and dispose of the solid waste that is removed from the City streets.

No permits will be required to complete the work, the materials will be tested by BFI to make sure it is appropriate for disposal in a solid waste facility and not a hazardous waste facility. The work being performed will also satisfy the City's SWMP under its 2015-2019 MS4 Permit obligations.



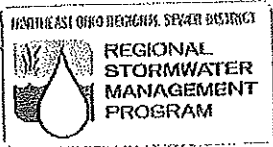
*Community Cost-Share Program
Application*

2) Ability to Provide Long Term Maintenance (500 word maximum)

Describe the plans for long-term maintenance, addressing the following question:

- Who is responsible to provide on-going maintenance for the project and how will maintenance be ensured?
- Provide documentation of scheduled maintenance and operation for completed stormwater project(s).

The City will maintain the streets and catch basins under its normal maintenance program under its SWMP.



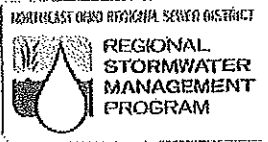
*Community Cost-Share Program
Application*

3) Visibility and Public Outreach: (500 word maximum)

Public outreach is required if appropriate for your project.

- What audiences will be exposed to this Project (neighbors, students, community groups, general public)?

There is no planned public education and outreach events for this work, but the Service Director will update the City Council during normal Council Meetings on the work that is being performed. The meetings are open to the public.



*Community Cost-Share Program
Application*

4) Budget Summary (500 words maximum)

The Budget Summary and Project Budget (*see page 3*) represent the Community Cost-Share Project components exclusively. Include details on the provider of all services such as design, engineering, construction management and materials including specific material cost, equipment, and hourly rate.

If an engineer's estimate is included with the application, indicate which line items are included in the Community Cost-Share Project application.

The City Service Director will submit cost reimbursement requests as the work is completed. The City will use its standard salary and fringe benefits for employees and will show invoices and cancelled checks for other costs such as landfill costs.

The City Service Director estimates the proposed work to cost + \$200,000.00 and will be performed during 2023.



Community Cost-Share Program Application

Vendor Registration

Prior to submission, ensure that the Member Community is a registered vendor with the District. Vendor Registration can be done by accessing http://www.neorsd.org/isupplier_homepage.php and completing the New Vendor Registration. If unsure of the Member Community vendor status, by initiating the New Vendor Registration a message of active registration will appear if currently registered as a vendor.

Project Budget

Project Expenses	Community Cost-Share Expense	Line Item Description
Professional Services		
Personnel (Member Community staff only)	\$ 155,000.00	Street sweeping, catch basin cleaning work
Subcontract	\$ 45,000.00	BFI Lorain Co. Landfill & to test & dispose of material
Equipment		
Materials		
Other		
TOTAL	\$ 200,000.00	

CITY OF BROOK PARK, OHIO

S. V. V.
P/C 4-18-23 Service
CA _____
1st R _____
2nd R _____
3rd R _____
B/C _____

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

AN ORDINANCE AUTHORIZING THE MAYOR TO
DISPOSE OF OBSOLETE CITY VEHICLES THAT ARE UNSAFE
AND NO LONGER ROAD WORTHY,
AND DECLARING AN EMERGENCY

WHEREAS, the City of Brook Park has certain vehicles that are no longer road worthy, in disrepair, and are unsafe to operate; and

WHEREAS, the Service Director has set up an account with McMahan's Scrapping that will offer a fair market value based upon daily metal pricing; and

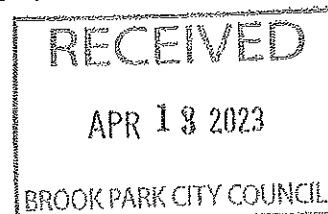
WHEREAS, McMahan Scrapping will provide the towing service and deduct the towing cost from the gross proceeds; and

WHEREAS, it is in the best interest of the City of Brook Park to dispose of said vehicles and receive the value for same.

NOW THEREFORE BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Mayor is hereby authorized and directed to dispose of obsolete city vehicles that are unsafe and no longer road worthy by delivering them with McMahan Scrapping as listed in the attached Exhibit "A."

SECTION 2: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.



SECTION 3: This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City, and for the further reason to dispose of obsolete city vehicles; therefore provided this Ordinance receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
Clerk of Council

APPROVED: _____
MAYOR

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.

DIRECTOR OF LAW



- (1) 2006 FORD F150 VIN 1FTRF14W16NB73824 (Rusted Out)
- (2) 2005 FORD F150 VIN 1FTRF14W45NB86338 (Rusted Out, Bad transmission)
- (3) 1999 INTERNATIONAL LP4700 VIN 1HTSLABM6XH600364 (Blown Engine, Frame Delaminating)
- (4) 1985 FORD L8000 VIN 1FDXK80UXGVA01644 (Bad Frame)

TO Service 5/2/23
CA _____
1st R _____
2nd R _____
3rd R _____
4th R _____

CITY OF BROOK PARK, OHIO

ORDINANCE NO: _____

INTRODUCED BY: MAYOR ORCUTT

AN ORDINANCE

**AUTHORIZING THE MAYOR TO TRADE-IN THE CITY'S 2007 NEW HOLLAND W170B
WHEEL LOADER, AND DECLARING AN EMERGENCY**

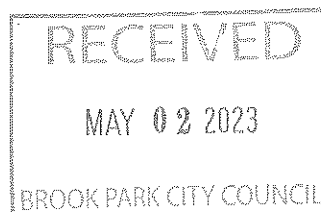
NOW THEREFORE, BE IT ORDAINED, by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The Mayor is hereby authorized to trade-in a 2007 New Holland Wheel Loader Model W170B Serial Number N7F201081.

SECTION 2: Murphy Tractor did a professional survey/evaluation of the W170B Wheel Loader and they are offering \$30,000.00 towards the purchase of a new 2023 John Deere 544P Wheel Loader.

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 4: This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of said City, and authorizing the Mayor to trade-in our 2007 New Holland Wheel Loader, therefore, provided this ordinance receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.



PASSED: _____

PRESIDENT OF COUNCIL

ATTEST: _____
CLERK OF COUNCIL

APPROVED: _____
MAYOR

DATE

I HEREBY APPROVE THE WITHIN
INSTRUMENT AS TO LEGAL FORM
AND CORRECTNESS.



DIRECTOR OF LAW