Medway Town Hall
155 Village Street
Medway, MA 02053
Phone (508) 533-3264
Fax (508) 321-4988

TOWN OF MEDWAY
COMMONWEALTH OF MASSACHUSETTS

Board of Selectmen's Meeting
August 21, 2017 7:00 PM
Sanford Hall, Town Hall
155 Village Street
Agenda

7:00 PM

- Call to order; Recitation of the Pledge of Allegiance
- Public Comments

Other Business

1. Appointment Consideration – Cultural Council – Winnie Nayak
2. Introduction – Metropolitan Area Planning Council (MAPC), SouthWest Advisory Planning Committee (SWAP) Coordinator, Kasia Hart
3. Discussion – Potential Fiscal Year 2018 Tax Title Auction
4. Report – Other Post-Employment Benefits (OPEB) Trust Fund Management
5. Grant Expenditure Authorizations
    a. Exelon Foam Appliance Vehicle & Training Donation – $650,000
    b. MIIA Flex Grant - $1700
    c. Commcan, Inc. Donation - $65,000
6. Approval – Contract with Bulldog Fire Apparatus for new Fire Truck - $638,841
7. Approval – Contract with MAPC for Hazard Mitigation Plan Update - $21,000
8. Route 109 Project – Town Funding Responsibility and Change Order
9. Opening of November 13, 2017 Fall Town Meeting Warrant
10. Annual Appointments – See full list beginning on following page
11. One-day liquor License Applications -
    a. DeSorbo – Thayer Homestead – 8/25/17
    b. Lambert – Thayer Homestead – 8/26/2017
    c. Joanette – Thayer Homestead – 9/1/2017
    d. Lumala – Thayer Homestead – 9/16/17
    e. Balajan/Doherty – Thayer Homestead – 9/17/17
    f. Collier – Thayer Homestead – 9/23/17
    g. Williams – Thayer Homestead – 9/30/17
    h. Rooney/Hakim = Thayer Homestead – 10/15/17
    i. Pillard – Thayer Homestead – 12/10/17

12. Action Items from Previous Meeting
13. Approval of Minutes
14. Town Administrator's Report
15. Selectmen's Reports
16. Executive Session, Exemption 3: To discuss strategy with respect to collective bargaining or litigation of an open meeting may have a detrimental effect on the government's bargaining or litigating position and the Chair so declares [Collective Bargaining] and Exemption 6: To consider the purchase, exchange, taking, lease, or value of real property if such discussion may have a detrimental effect on the negotiating position of the governmental body and the Chair so declares [123 Holliston St, 158 Main St]

For more information on agenda items, please visit the Board of Selectmen's page at www.townofmedway.org

Upcoming Meetings, Agenda and Reminders

September 5, 2017 ---- Regular Meeting (holiday week)

September 18, 2017 ---- Regular meeting

Board or Committee	**Name**	**Action Needed**
Affordable Housing Committee	Judi LaPan	Reappoint for a 2 year term
	Michael Leone	Reappoint for a 2 year term
	John Parlee	Reappoint for a 2 year term
	Susan Rorke	Reappoint for a 2 year term
	Alison Slack	Reappoint for a 2 year term
Agricultural Committee	Margaret Perkins	Reappoint for a 3 year term
Board of Assessors	Lindsay Tosca	Reappoint for a 3 year term
Board of Registrars	Christine Lorenzen	Reappoint for a 3 year term
Cable Advisory Committee	John Foresto	Reappoint for a 3 year term
	Shelley Wieler	Reappoint for a 3 year term
	Richard Boucher	Reappoint for a 3 year term
	Robert O'Neill	Reappoint for a 3 year term
	Glenn Trindade	Reappoint for a 3 year term
Capital Improvement Planning Committee	Kelly O'Rourke	Reappoint for a 4 year term
Cemetery Commission	Jeanne Johnson	Reappoint for a 1 year term
	Bruce Hamblin	Reappoint for a 1 year term
Christmas Parade Committee	Scott Guyette	Reappoint for a 3 year term
	Allen Tingley	Reappoint for a 3 year term
	Richard Parrella	Reappoint for a 3 year term
Community Preservation Committee	Jim Wieler	Reappoint for a 3 year term
Conservation Commission	Ken McKay	Reappoint for a 3 year term
Council on Aging	Nanette Glenny	Reappoint for a 3 year term
	Siri Krishna Khalsa	Reappoint for a 3 year term
	Marylou Staples	Reappoint for a 3 year term
Evaluation of Parks, Fields & Recreation	Richard D'Innocenzo	Reappoint for a 1 year term

Areas Committee	Michael Francis	Reappoint for a 1 year term
	Robert Pearl	Reappoint for a 1 year term
	Paul Mahoney	Reappoint for a 1 year term
	David Travalini (alt)	Reappoint for a 1 year term
	David Blackwell	Reappoint for a 1 year term
	Michael Schrader	Reappoint for a 1 year term
	Ellen Hillery (alt)	Reappoint for a 1 year term
	Cathy Morgan	Reappoint for a 1 year term
	Kari Macleod (alt)	Reappoint for a 1 year term
Historical Commission	Paul Russell	Reappoint for a 1 year term
Memorial Committee	Douglas Downing	Reappoint for a 1 year term
	John Larney	Reappoint for a 1 year term
	Michael Matondi	Reappoint for a 1 year term
	Richard Parrella	Reappoint for a 1 year term
	Robert Saleski	Reappoint for a 1 year term
	Francis Saunders	Reappoint for a 1 year term
	Paul Trufant	Reappoint for a 1 year term
	Allen Tingley	Reappoint for a 1 year term
Medway Pride Day Committee	Sarah Stone	Reappoint for a 1 year term
Thayer Governance Committee	John Foresto	Reappoint for a 1 year term
	Dennis Crowley	Reappoint for a 1 year term
	Carl Rice	Reappoint for a 1 year term

AGENDA ITEM #1

Appointment Consideration – Cultural Council – Winnie Nayak

Associated back up materials attached.

- E-mail from Winnie Nayak

Note: E-mail from Chair Carla Cataldo confirming recommendation on file in Town Administrator's Office.

Proposed motion:

I move that the Board appoint Ms. Nayak to the Cultural Council for a three-year term.

Allison Potter

From: Winnie Nayak <[redacted]
Sent: Tuesday, August 01, 2017 12:37 PM
To: Lindsey Rockwood
Subject: Medway Cultural Council

Hello Ms. Rockwood,

My name is Winnie Nayak and I am a new resident of Medway. It's been 2 years since my husband and I moved here and I am looking for opportunities to contribute towards this wonderful community.

I would like to express my interest in joining the Medway Cultural Council and would like to bring awareness of the Asian (Indian) culture into our community and would love to contribute towards assisting with cultural activities.

I spoke with Ms. Carla Cataldo yesterday regarding my interest and was wondering if I can be considered on the August Selectmen's agenda if possible.

Please let me know if you need additional information from me.

Thank you,
Winnie Nayak

AGENDA ITEM #2

Introduction – Metropolitan Area Planning Council (MAPC), SouthWest Advisory Planning Committee (SWAP) Coordinator, Kasia Hart

Associated back up materials attached.

- Memo from Susy Affleck Childs dated 8/16/17

TOWN OF MEDWAY
Planning & Economic Development
155 Village Street
Medway, Massachusetts 02053

MEMORANDUM

August 16, 2017

TO: Board of Selectmen
FROM: Susy Affleck-Childs, Planning and Economic Development Coordinator
RE: Presentation by Metropolitan Area Planning Council at 8-21-17 BOS Meeting

MAPC, the Metropolitan Area Planning Council, is the Boston area's regional planning agency. Established in 1963, MAPC is a public entity created under Massachusetts General Law as one of 12 regional planning organizations in the Commonwealth. MAPC's mission is to serve the people who live and work in the Boston metropolitan region by promoting smart growth and regional collaboration. MAPC's regional plan, MetroFuture, guides its work as MAPC engages the public in responsible stewardship of the region's future.

Through its planning initiatives and technical assistance services, MAPC works toward sound municipal management, sustainable land use, protection of natural resources, efficient and affordable transportation, a diverse housing stock, public safety, economic development, clean energy, healthy communities, an informed public, and equity and opportunity among people of all backgrounds. You can learn more about MAPC at: http://www.mapc.org.

MAPC is governed by representatives from each of the 101 cities and towns in the region, as well as gubernatorial appointees and designees of major public agencies. Stephanie Mercandetti serves as Medway's representative to MAPC.

The MAPC region is divided into 8 sub-regions. Medway is included in the SWAP sub-region (Southwest Advisory Planning Committee) along with Bellingham, Dover, Franklin, Hopkinton, Milford, Millis, Norfolk, Sherborn and Wrentham. Representatives of the SWAP communities meet monthly from September – June. I presently serve as one of the SWAP co-chairs. Planning staff from the abutting SWAP communities of Holliston, Medfield and Foxborough also often attend SWAP gatherings.

Kasia Hart was recently appointed as MAPC's staff liaison for the SWAP sub-region. She is visiting the SWAP communities to familiarize herself with each municipality, its issues and interests. Ms. Hart will be visiting Medway on August 21st for a tour, a meeting with Michael Boynton and Maryjane White, and dinner with Stephanie Mercandetti and Andy Rodenhiser. She will attend the August 21st BOS meeting to brief you on MAPC's activities. Of particular interest is MAPC's new initiative in arts and cultural planning. MAPC's Regional Arts and Culture Planner Annis Sengupta will also attend the BOS meeting to tell you about this exciting new programming area and the services MAPC can provide.

cc: Stephanie Mercandetti
Andy Rodenhiser

Telephone: 508-533-3291 Fax: 508-321-4987
saffleckchilds@townofmedway.org

AGENDA ITEM #3

Discussion – Potential Fiscal Year 2018 Tax Title Auction

Associated back up materials attached.

- PowerPoint presentation
- Tax title list as of 8/15/2017

NOTE: Map showing the tax title parcels listed in backup will be presented at the meeting.

Tax Title Auction

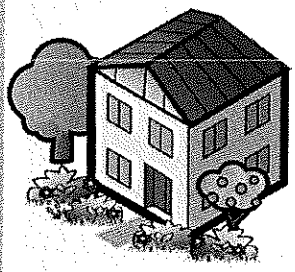
Presentation

Joanne Russo

Treasurer/Collector

08/21/2017

116 Parcels in Tax Title



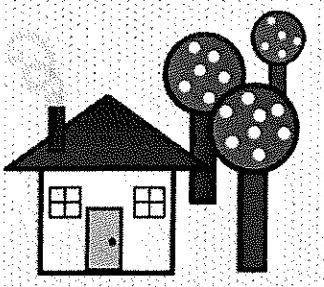
$2.8 Million Outstanding Revenue

Why a **Tax Title Auction**?

~Immediate INCREASE Revenue
~DECREASE Receivables Outstanding
~DECREASES Future Parcels entering into Tax Title

Initial Collections

An average of 30% of Parcels would be redeemed immediately.



$800,000.00
(est. collection)

Auction

Approximate Value of Tax Titles to be sold

$600,000.00
(est. collection)

BEGINNING OUTSTANDING
$2.8 MILLION

- COLLECTION
- ($800,000.00)
- AUCTION
- ($600,000.00)

(Estimated) ENDING OUTSTANDING
$1.4 MILLION

ENDING OUTSTANDING

$1.4 MILLION

- FOREBEARANCE/PAYMENT PLANS
- LAND OF LOW VALUE $300,000.00 (45 Parcels)
- TOWN INTEREST

SETTING UP TAX TITLE ASSIGNMENT SALE AUCTION

TIMELINE

ACTION ITEM	MGL CHAPTER 60 SECTION 52	TOWN OF MEDWAY PROTOCOL
CREATE A LIST OF TAX TITLE PARCELS THE TOWN WOULD LIKE TO SELL	ONE MONTH PRIOR TO AUCTION	75 DAYS
1ST NOTICE TO RESIDENTS (PRE-AUCTION NOTIFICATIONS)	10 DAYS	60 DAYS
2ND NOTICE TO RESIDENTS W/ADVERISING DATE	N/A	35 DAYS
ADVERTISE IN NEWSPAPER AND 2 PUBLIC PLACES	14 DAYS	3 WEEKS
GENERATE NEW LIST AND PAYOFFS	1 DAY	SAME
AUCTION DATE		

FACTS:

- THERE IS NO COST TO THE TOWN OF MEDWAY
- FULL PAYMENT RECEIVED 14 DAYS AFTER AUCTION
- LIEN IS TRANSFERRED TO INVESTMENT COMPANY

QUESTIONS & ANSWERS

TOWN OF MEDWAY - TAX TITLE

MAP KEY TITLE #	OWNER OF RECORD	ADDRESS	YEAR	TOTAL DUE as of 8/15/17
101	LEWIS BERNARD S	14 RYAN RD.	1989	69,932.58
102	VEINER MARTIN I &	13 RYAN RD.	1989	11,764.89
103	LEWIS BERNARD S TRS	2 R LAKESHORE D	1989	7,129.30
104	TRI VALLEY REALTY TRUST	53 VILLAGE ST.	1994	46,719.04
107	CASEY THOMAS	R CHESTNUT ST	2000	8,506.56
108	JONES ROBERT	8 POPULATIC ST	1999	49,513.93
111	REARDON JAMES M & KATHLEEN J	4 R NEW CITY RD	2006	30,680.38
112	ADAMS HAROLD L	20 BROAD ST	1999	245,848.93
114	OZELLA ANTHONY M JR	256 VILLAGE ST	2006	16,852.40
115	UNKNOWN OWNER	6 N CENTER ST.	2000	3,023.36
116	PROFF JOSEPH & MARILYN	2 N RIVERVIEW S	2003	4,878.28
119	UNKNOWN OWNER	403 R VILLAGE S	2000	6,499.55
125	SUMMER MILFORD REALTY TRUST	27 A SUMMER ST	2004	12,334.17
126	UNKNOWN OWNER	47 A MILFORD ST	2000	3,374.78
129	DIBONA MARIO N	11 GUERNSEY ST.	1982	44,996.83
130	JAY REALTY TRUST J POTTS TR	10 NORFOLK AVE.	1991	15,046.64
131	UNKNOWN OWNER	26 WELLINGTON S	2000	3,152.35
134	UNKNOWN OWNER	50 COTTAGE ST.	2000	3,433.64
135	UNKNOWN OWNER	15 GUERNSEY ST.	2000	3,568.23
136	UNKNOWN OWNER	R CUTLER ST.	2000	7,071.23
137	UNKNOWN OWNER	13 R CUTLER ST	2000	4,172.54
138	GROEHL GEORGE W & CAROL A	238 MAIN ST	2006	412.43
144	PAIGE STELLA & WALTER	OAK GROVE	1988	3,109.81
145	LIPTON SIDNEY C ESTATE	OAK GROVE	1989	3,762.63
146	HARTFORD WALTER W.	OAK GROVE	1991	1,425.50
147	PAIGE STELLA C & WALTER	OAK GROVE	1988	2,533.58
148	FREED MANUAL	111 MILFORD ST	2005	365.06
149	COYE FLORENCE M	OAK GROVE	2000	2,418.02
150	UNKNOWN OWNER	47 N CLARK ST.	2000	2,041.17
151	UNKNOWN OWNER	47 N CLARK ST.	2000	2,822.92
152	KOBRYN CORP	R STONE END RD.	1989	93,108.71
153	UNKNOWN OWNER	7 R LEDGEWOOD R	2000	83,253.76
157	KNORR ROBERT C /LINDA L	8 KINGSON LN	2005	8,117.41
159	GOGGIN EDMUND HEIRS OF	71 R SUMMER ST.	1987	100,490.01
160	BALTIC REALTY CORPORATION	13 AZALEA DR	2002	9,461.46
161	RED GATE ESTATES RLTY TR	2 REDGATE DR	2002	5,919.86
168	RICE RICHARD C	5 BUTTERCUP LN	2006	95,513.19
170	BROOKSIDE REALTY TRUST	28 EVERGREEN ST	1992	112,138.04
171	500 MEDFIELD COLONIAL TRUST	7 R KINGS LN	2000	9,394.94
172	LEVY ROBERT C	20 VILLA DR	2000	46,128.13
173	LEVY ROBERT C	22 VILLA DR	2000	52,518.21
174	LEVY ROBERT C	24 VILLA DR	2000	52,903.14
175	LEVY ROBERT C	25 VILLA DR	2000	53,439.09

176	LEVY ROBERT C	23 VILLA DR	2000	49,282.99
177	LEVY ROBERT C	21 VILLA DR	2000	49,684.94
178	LEVY ROBERT C	19 VILLA DR	2000	53,904.13
179	LEVY ROBERT C	17 VILLA DR	2000	56,747.87
180	LEVY ROBERT C	15 VILLA DR	2000	56,803.17
181	KINGS LANE REALTY TRUST	13 VILLA DR	2000	150,499.46
184	UNKNOWN OWNER	R OAKLAND ST.	2000	4,083.81
186	NORTH AVE INCORPORATED	102 R OAKLAND S	1994	25,903.82
188	UNKNOWN OWNER	R OAKLAND ST.	2000	6,526.75
192	PINE TREE REALTY TRUST & THOMA	6 BROKEN TREE R	2003	92,465.22
193	NEWTON KATIE ESTATE & HEIRS	R ELLIS ST	2003	42,006.54
197	HOPKINTON-HOLLISTON REALTY TR.	R FISHER ST	1997	6,376.54
198	UNKNOWN OWNER	139 R WINTHROP	2000	3,359.32
201	DUNNEBIER ENTERPRISES INC	1 KIMBERLY DR	2003	96,380.15
202	LEWIS BERNARD S	26 R VILLAGE ST	1989	12,840.67
217	TRI VALLEY REALTY TRUST	CEDAR FARMS RD.	1991	169,555.62
218	CAHILL ROBERT E & RITA A	5 WEST ST.	1991	139,489.82
1001	DEROSA, JEFFREY	333 VILLAGE ST	2008	19,669.69
1009	WALSH EUGENE V & KARYL L TRTS	168 -B HOLLISTO	2009	11,358.21
1010	WALSH EUGENE V & KARYL L TRTS	168 -R HOLLISTO	2009	12,684.92
1011	WALSH EUGENE V. & KARYL L TRTS	168 A HOLLISTON	2009	18,572.11
1014	EAST JOHN R & DARLENE L	2 A FLINTLOCKE	2011	36,846.15
1015	FIRST COUNTY BUILDERS LLC	57 ELLIS ST	2011	10,348.25
2011	MEDWAY POWER AND ELECTRIC	309 VILLAGE ST.	2010	3,159.32
2023	SNOW WALTER & ANGIE	1 CAROLE LN.	2009	7,321.68
2030	MANGELY, COSTA	OAK GROVE	2007	1,395.62
2032	SAMMARTANO, VINCENT/CONCETTA	129 MILFORD ST	2007	588.46
2061	BERGHELLI WAYNE B.P./PAULENE R	8 BRIGHAM ST	2012	3,605.82
2062	BROAD ACRES MANAGEMENT TRUST	6 BROAD ACRES F	2012	3,478.38
2063	BROAD ACRES MANAGEMENT TRUST	4 BROAD ACRES F	2012	3,807.77
2065	BURKE, KELLY JO	383 B VILLAGE ST	2012	30,311.95
2067	DEMOSTHENES JOSUE PAULETTE	118 VILLAGE ST A	2012	948.26
2073	PINE TREE REALTY TRUST	22 HICKORY DR	2012	2,948.20
2074	PITMAN NORMA PHILLIPS	CHARLES ST	2012	2,394.90
2076	SIDNEY SMITH TRUST	OAK GROVE	2012	498.57
2077	SIDNEY SMITH TRUST	OAK GROVE	2012	794.73
2078	SMITH, SYDNEY	121 N MILFORD ST	2012	404.92
2079	VAN RYE, JOHN	1 JOHN ST	2012	36,541.86
2083	WOODARD ERIC S./SYLVIA STUDER	12 CLARK ST	2012	18,192.05
2087	BURR RANDALL W II	32 MILFORD ST.	2009	1,219.02
2091	BOCZANOWSKI CONSTRUCTION INC.	R SUMMER HILL R	2013	4,273.43
2093	BROAD ACRES MANAGEMENT	33 CEDAR FARMS	2013	2,501.48
2094	BROAD ACRES MANAGEMENT	2 WINTERBERRY L	2013	2,897.60
2099	MEARLS ROBERT H &	225 FARM ST	2013	2,254.54
2104	ROCHE`S BUILDING CO., INC.	N WEST ST	2013	1,721.40
2105	ROCHE`S BUILDING CO., INC.	41 R WEST ST	2013	4,954.77
2109	WOOD KENNETH J. & JULIE A.	48 MAIN ST	2013	15,447.52

2112	BARLOW JOHN R JR	STONE ST	2014	392.56
2113	BARLOW JR JOHN R	STONE ST	2014	574.19
2116	BRIGGS ROBERT A	30 WINTHROP ST	2014	24,065.31
2118	CEREL, STANLEY & RUTH	15 MAIN ST	2014	6,409.50
2123	SHADY OAKS RLTY.TR.	38 WINTHROP ST	2014	34,262.70
2125	REILLY THOMAS & BONNIE	180 HOLLISTON ST	2010	3,161.23
2132	CHLEBDA RONALD	14 MEADOW RD	2015	3,612.96
2134	COOPERSTEIN JACK I	3 TULIP WAY	2015	5,823.94
2137	MAHAN ANDREW J	35 MILFORD ST	2015	4,051.78
2142	OROURKE MICHAEL K.	27 GORWIN DR	2015	4,670.41
2143	PENDLETON EDWARD S	43 LOVERING ST	2015	2,692.04
2145	ROUNDS BARRY D	37 FIELD RD	2015	8,140.07
2147	SILVA ALFRED, JR	26 HIGHLAND ST	2015	1,887.42
2148	ST. JOSEPHS MENS CLUB	155 A VILLAGE S	2015	2,656.20
2154	WEST CHARLES M	19 PINE ST	2015	3,993.20
2155	WHEELER ARTHUR	80 WEST ST	2015	25,444.39
2157	GAZIANO JOANNE M	4 SUMMER HILL R	2015	1,528.39
2160	AZAR JACK	143 MAIN ST	2016	8,675.71
2161	BRADY SCOTT E & LYNNE	135 HOLLISTON S	2016	24,585.71
2162	CLARK STEPHEN E	284 VILLAGE ST	2016	1,628.80
2167	HIMEL, RAYMOND *& VERONICA	50 CEDAR FARMS RD	2016	494.85
2168	HOWES RALPH L.	390 VILLAGE ST	2016	6,369.80
2169	SHEEHAN ROBERT G./LYNNE M.	33 BROKEN TREE	2016	3,175.56
2170	GRIMES SCOTT C	31 WELLINGTON S	2015	2,445.52
2171	HOOLEY LEAH M	3 GABLE WAY	2015	1,901.82
				2,799,473.14

AGENDA ITEM #4

Report – Other Post-Employment Benefits (OPEB) Trust Fund Management

Associated back up materials attached.

- Proposed OPEB Investment Policy Statement
- OPEB Declaration of Trust approved by BOS 5/30/2017

TOWN OF MEDWAY
OPEB TRUST INVESTMENT POLICY STATEMENT

The primary purpose of this Investment Policy Statement (the "IPS") is to provide a clear understanding regarding the Town of Medway (the "Entity") OPEB Trust's (the "Trust") investment objectives, performance goals, and risk tolerance. And to establish investment guidelines and responsibilities.

A. Scope

This IPS purpose is to ensure that the Town's public funds achieve the highest possible, reasonably available interest rate while following prudent standards associated with safety, liquidity and yield. This IPS applies to all funds that are separately designated as long-term OPEB funds for the Town or any of its separately identified enterprises. Any additional contributions to the Trust will be maintained in the same manner.

B. Authority

Massachusetts General Law Chapter 32B, Section 20 allows a city, town, district, county or municipal lighting plant to set up a special trust fund, the Other Post Employment Benefits (OPEB) Liability Trust Fund. The governmental unit's Treasurer is the custodian of the fund or in the case of a light plant, an officer designated by the board. Through this statement, the Town accepts the allowable investment instruments, diversification principals, and investment restrictions allowed by state statues, as updated by Massachusetts General Law Chapter 218 of the Acts of 2016 and as published by the Massachusetts Collectors and Treasurer's Association (MTCA). Interest earned on the investment of fund monies belongs to the fund.

C. Relationship with Financial Institutions

The Treasurer shall consider soundness and stability when selecting financial institutions. Brokers should be recognized, reputable dealers. All cash and securities shall be held in either a bank that is allowable for the deposit of public funds, provided funds on deposit are insured by the Federal Deposit Insurance Corporation (FDIC), or in an Investment Brokerage Account that is insured by the Securities Investor Protection Corporation (SIPC). If a banking institution is selected as manager, the Treasurer shall subscribe to use one or more of the recognized bank rating services, such as Veribanc or Sheshunoff, and will work with only recognized, reputable brokers/dealers.

When using the Veribanc rating service, the Treasurer may invest in banks that show green ratings and will subsequently monitor the ratings quarterly. If a banking institution's rating turns yellow, the Treasurer will contact the appropriate banking institution and request a written explanation for the rating change and the expected timetable for changing back to green. If the rating is still yellow for a second quarter, the Treasurer should consider removing all funds that are not collateralized or do not carry some form of depositor's insurance. If a rating moves to red, all money shall be immediately collateralized, or covered by some form of depositors insurance, or be removed from the banking institution. The Treasurer shall require any brokerage houses and brokers/dealers wishing to do business with the Town to supply the following information:

- Annual financial statements
- If acting as a Registered Investment Adviser, Form ADV Part II report
- Errors & Omissions insurance amounting to, at a minimum, the total fair market value of the Trust Funds Portfolio.

- A statement that the Advisor has read the Town's IPS and will comply with it on an annual basis
- Annual review all advisors through www.finra.org: Broker Check

If the Treasurer choses to use the services of a third party Investment Manager, the Treasurer will identify several candidates and a selection will be made with the recommendation of the Finance Director and the Town Administrator.

D. Investment Objectives

To secure the highest return consistent with safety of principal while meeting the Town's daily cash needs, the Treasurer shall adhere to the following guidelines on safety, liquidity and yield:

- Investments shall be undertaken in a manner that seeks to ensure the preservation of capital through the mitigation of credit and interest rate risks. The Treasurer will mitigate these risks by prudently selecting and diversifying investment instruments and depository choices.

- The Treasurer shall ensure the overall investment portfolio remains sufficiently liquid to meet all reasonably anticipated operating requirements. Since all possible cash demands cannot be anticipated, the Treasurer shall carry out investment activities in a manner that provides for meeting unusual cash demands without liquidating investments and thereby potentially forfeiting accrued interest earnings and losing principal.

- The Treasurer's investments shall be undertaken so as to achieve a fair market average rate of return, taking into account safety and liquidity constraints as well as all legal requirements.

E. Diversification

The following asset classes can be included in the Trust in order to construct a diversified investment portfolio that is both prudent and appropriate given the Town's actuarial assumed discount rate, target rate of return, investment objective, and risk tolerance. Sample investment parameters and asset allocation definitions that will govern the Investment Manager of the diversified portfolio are included in the addendums to this IPS.

Equities

The primary objective of the Trust's equity allocation is to provide long–term total returns that are, at a minimum, consistent with appropriate broad market indexes through full market cycles.

The Investment Manager of the diversified portfolio can purchase and manage the equity allocation using individual equities, such as domestic common stocks, preferred stocks, and/or American-Depository Receipts (ADRs).

The Investment Manager can also utilize other investments such as, mutual funds, exchange traded funds, closed-end funds, etc. Total equity exposure is able to include, both domestic and international equities, both developed and emerging countries and geographic regions, as well as large-, mid-, and small-market capitalization weighted companies. Direct holdings of common stock, preferred stock, and/or ADRs in any one company should not exceed 5% of the market value of the invested portfolio.

Investing directly in real estate, private placements, letter stock, or initial public offerings is strictly prohibited. The Investment Manager of the diversified portfolio shall not engage directly in margin transactions, short sales, or any other leveraged or inverse investment vehicles. Mutual funds, exchange-traded funds, and closed-end funds, however, may engage in margin, leverage, and/or short sales. Investing directly in unit-investment trusts (UITs) and business development companies (BDCs) are strictly prohibited.

Fixed Income

The primary objectives of the Trust's fixed income allocation are to preserve capital and generate a reasonable level of cash flow. The secondary objective is to provide price returns that exhibit lower correlation to the broad global equity markets in order to reduce the overall risk of the portfolio.

The Investment Manager of the diversified portfolio can purchase and manage the fixed income allocation using individual bonds that are United States Dollar denominated only. Issuer selection can include domestic corporate bonds and any obligations of the United States Government and/or its agencies.

The Investment Manager can also utilize other investment vehicles such as, mutual funds, exchange traded funds, closed-end funds, etc. Total fixed income exposure is able to include, both domestic and international bonds, both developed and emerging countries and geographic regions. Direct holdings of individual corporate bonds in any one company should not exceed 5% of the market value of the invested portfolio; however, this is not applicable to the United States Government and/or its agencies. Lower-quality investments may only be held through diversified vehicles, such as mutual funds or exchange-traded funds.

Investing directly in real estate, mortgages, collateral or non-collateral loans, private placements, fixed income or interest rate futures, or any other specialized fixed income ventures is strictly prohibited. Investing directly in unit-investment trusts (UITs) and business development companies (BDCs) are strictly prohibited.

Alternative Investments

The primary objective of the Trust's alternative allocation is to provide long-term capital appreciation that is less correlated to broad global equity and fixed income indexes.

The Investment Manager of the diversified portfolio can only purchase those strategies that are deemed to be alternative through daily-liquid diversified investment vehicles such as, mutual funds, exchange-traded funds, closed-end funds, etc.

Investing directly in unit-investment trusts (UITs) and business development companies (BDCs) are strictly prohibited.

Cash and Cash Equivalents

Cash will be maintained to provide periodic cash distributions, if and when necessary. Cash will not normally be held as a strategic investment asset, although the Investment Manager may seek to allow cash to build to the maximum level in times of market uncertainty.

E. Specific Risks

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations.

The Town will manage credit risk several ways. There will be no limit to the amount of United States Treasury and United States Government Agency obligations.

In regards to fixed-income investments, the Town will only purchase investment grade securities. Lower-quality investments may only be held through diversified vehicles, such as mutual funds or exchange-traded funds. Investments in fixed income securities will be made primarily for income and capital preservation.

Custodial Risk

The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party.

The Town will review the financial institution's financial statements and the background of the sales representative. The intent of this qualification is to limit the Town's exposure to only those institutions with a proven financial strength, Capital adequacy of the firm, and overall affirmative reputation in the municipal industry.

Further, all securities not held directly by the Town, will be held in the Town's name and tax identification number by a third party custodian approved by the Treasurer and evidenced by safekeeping receipts showing individual CUSIP numbers for each security.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer.

The Town will minimize Concentration of Credit Risk by diversifying the investment portfolio so that the impact of potential losses from any one type of security or issuer will be minimized. As stated above, securities of a single corporate issuer (with the exception of the United States Government and its Agencies) will not exceed 5% of the portfolio value.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Town will manage interest rate risk by managing duration, as a measure of interest rate sensitivity, in the Trust.

Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign monetary exchange rates will adversely affect the fair value of an investment or a deposit.

The Town will, as much as feasible, mitigate foreign currency risk.

F. Standards of Care

The Treasurer shall separately maintain the OPEB Trust funds as to individually receive their proportionate interest and any realized and unrealized gains or losses. All trust funds shall fall under the Treasurer's control.

The standard of prudence to be used by the Treasurer shall be the "Prudent Person" standard and shall be applied in the context of managing an overall portfolio. The Treasurer acting in accordance with written procedures and this IPS, and exercising reasonable due diligence, shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided the purchases and sale of securities is carried out in accordance with the terms of this IPS.

Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs; not for speculation, but for investment considering the probable safety of their capital as well as the probable income to be derived.

In addition this section would also apply to M.G.L. Chapter 44 Section 55A which refers to the liability of the Treasurer for losses due to bankruptcy.

G. Ethics

The Treasurer and Assistant Treasurer shall refrain from any personal activity that may conflict with the proper execution of the investment program or which could impair or appear to impair ability to make impartial investment decisions. The Treasurer shall disclose to the Finance Director and Town Administrator any material financial interest in financial institutions that do business with the Town. They shall also disclose any large personal financial investment positions or loans that could be related to the performance of the Town's investments.

H. Reporting Requirements

On an annual basis, a report containing the following information will be prepared by the Treasurer and distributed to the BOS, Finance Committee, Finance Director and the Town Administrator. The report will include the following information, as a minimum requirement:

- A listing of the individual accounts and individual securities held at the end of the reporting period.
- A listing of the short-term investment portfolio by security type and maturity to ensure compliance with the diversification and maturity guidelines established in the "Diversification" section of this IPS.
- A summary of the income earned on a monthly basis and year-to-date basis shall be reported.
- The Treasurer shall include in the report a brief statement of general market and economic conditions and other factors that may affect the Town's cash position.
- The report should demonstrate the degree of compliance with the tenets set forth in the IPS.

Any major changes will be reported to the BOS, Finance Committee, Finance Director and Town Administrator as appropriate.

I. Performance Measurement and Evaluation

- The individual and custom benchmarks that will be monitored for performance reporting and analysis of the Trust's portfolio are stated and described in the sample addendums to this IPS.
- It is expected that the respective asset classes of the Trust's diversified portfolio will outperform their respective benchmarks, net of fees and expenses, on a long term (market cycle) basis.

J. Supervision

- The Treasurer will meet with the investment manager(s) semi-annually, and as needed, to monitor the performance of the funds and the investment manager(s) compliance with these guidelines. The Treasurer will receive and review portfolio management reports quarterly.
- The Treasurer will review this Investment Policy Statement at least once a year to ensure that it remains appropriate and complete.
- The Treasurer has the option to put the management of funds out for bid periodically, and may consider such option with the recommendation of the Finance Director and Town Administrator.

K. Legal References

- Massachusetts General Law Chapter 18 of the Acts of 2016
- M.G.L. c. 44, §54
- M.G.L. c. 44, §55
- M.G.L. c. 44, §55A
- M.G.L. c. 44, §55B
- M.G.L. c. 29, §38A
- M.G.L. c. 167, §15A

I _____, Treasurer of the Town of Medway have reviewed this IPS and will manage the Town's OPEB Trust under my control in accordance with this IPS and any attached Addendums.

_____
Treasurer's Signature

_____
Treasurer's Printed Name

_____
Date

ADDENDUM #1
SAMPLE INVESTMENT PARAMETERS

The information contained herein shall dictate the long-term asset allocation targets as well as minimum and maximum parameters, when applicable, that will govern the management of the investable portion of the Trust. The methodology for determining specific security and investment strategy definitions is detailed in Addendum #2.

Category	***Min***	***Target***	***Max***
Equity	35%	45%	55%
Domestic Equity	20%	30%	40%
International Equity	5%	15%	25%
Preferred Equity	0%	0%	10%
Balanced	0%	0%	10%
Fixed Income	25%	35%	45%
Domestic Bonds	15%	25%	35%
International Bonds	0%	10%	20%
Alternatives	10%	20%	30%
Cash	0%	0%	10%
Total	---	100%	---

Treasurer's Signature

Date

ADDENDUM #2
SAMPLE ASSET ALLOCATION DEFINITIONS

Asset Class	*Asset Category*	*Morningstar Category*	
Domestic Equity	Large Cap	Large-Cap Blend	Energy
		Large-Cap Growth	Financial
		Large-Cap Value	Healthcare
		Communications	Industrials
		Consumer Cyclical	Technology
		Consumer Defensive	Utilities
		Consumer Staples	Miscellaneous Sector
	Mid Cap	Mid-Cap Blend	Mid-Cap Value
		Mid-Cap Growth	
	Small Cap	Small-Cap Blend	Small-Cap Value
		Small-Cap Growth	
	Preferred Equity	Preferred Stock	
International Equity	Developed	Foreign Large-Cap Blend	Foreign Small/Mid Blend
		Foreign Large-Cap Growth	Foreign Small/Mid Growth
		Foreign Large-Cap Value	Foreign Small/Mid Value
		World Stock	Japan
		Europe	
	Emerging Markets	Emerging Markets	Pacific/Asia
		India	Pacific/Asia ex-Japan
		Latin America	Miscellaneous Region
		China	
Balanced	Balanced	Aggressive Allocation	World Allocation
		Moderate Allocation	Target Date
		Conservative Allocation	Retirement Income
		Tactical Allocation	
Domestic Bond	Investment Grade	Corporate Bond	Muni National Intermediate
		Inflation Protected Bond	Muni National Long-Term
		Intermediate Gov't Bond	Muni National Short-Term
		Intermediate Term Bond	Muni Single State
		Long-Term Bond	Short-Term Bond
		Long-Term Gov't	Short-Term Gov't Bond
		Stable Value	Ultrashort Bond
	Multisector	Multisector Bond	
	High Yield	High-Yield Bond	Bank Loans
		High-Yield Muni	
International Bond	World Bond	World Bond	
	Emerging Markets Bond	Emerging Markets Bond	
Alternatives	Equity Alternatives	Long/Short Equity	Market Neutral
		Private Equity	
	Bond Alternatives	Nontraditional Bond	
	Real Estate	Real Estate	Global Real Estate
		Direct Property	
	Managed Futures	Managed Futures	Currency
	Other Alternatives	Arbitrage	Precious Metals
		Hedge Funds	Commodities
		Multi-Alternative	Natural Resources
		Trading/Tactical	Bear Market

Treasurer's Signature _____ Date _____

ADDENDUM #3
PERFORMANCE REPORTING

The information contained herein shall dictate the individual and blended benchmark(s), when applicable, to be utilized in monitoring the performance of the investable assets of the Trust.

Category	***Index***	***Percentage***
Equity	MSCI AC World Index	45%
Domestic Equity	---	
International Equity	---	
Preferred Equity	---	
Balanced	---	0%
Fixed Income	Barclays Capital Global Aggregate Bond	35%
Domestic Bonds	---	
International Bonds	---	
Alternatives	HFRI Fund of Funds Composite	20%
Cash	---	0%
Total		100%

Treasurer's Signature

Date

TOWN OF MEDWAY

OTHER POST-EMPLOYMENT BENEFITS ("OPEB") DECLARATION OF TRUST

DECLARATION OF TRUST made this 30th day of May, 2017 by the Town of Medway, acting through its Board of Selectmen ("Town"), and the Trustee of the Town's Other Post-Employment Benefits ("OPEB") Fund.

W I T N E S S E T H:

WHEREAS, the Town has established certain other post employment benefits, other than pensions, for eligible former employees of the Town; and

WHEREAS, following acceptance of the provisions of G.L. c. 32B, §20, the Town established a trust for the purpose of funding OPEB obligations as required to be reported under General Accounting Standards Board ("GASB") Statements 43 and 45; and

WHEREAS, following amendments to G.L. c. 32B, §20, Town Meeting accepted the amended statute on May 8, 2017;

WHEREAS, the Trust, in accordance with the amended provisions of G.L. c. 32B, §20, is established by the Town with the intention that it qualify as a tax-exempt trust performing an essential governmental function within the meaning of Section 115 of the Code and Regulations issued thereunder and as a trust for OPEB; and

NOW, THEREFORE, the Town and the Trustee hereby declare and agree as follows.

ARTICLE I
DEFINITIONS

As used herein, the following terms shall have the following meanings:

1.1 "Code" means the Internal Revenue Code of 1986, as amended from time to time.

1.2 "ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time and any successor statute.

1.3. "GASB 43 and 45," shall mean Government Accounting Standards Board, Statement No. 43 and Statement No. 45, Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions.

1.4. "Other post-employment benefits" or "OPEB," shall mean post-employment benefits other than pensions as that term is defined in GASB 43 and 45 including post-employment healthcare benefits, regardless of the type of plan that provides them, and all post-

employment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

1.5. "Retired Employee" means those persons who have retired from employment with the Town and who are qualified to receive retirement benefits pursuant to G.L. c. 32, or as otherwise provided by law.

1.6. "Trust" means the Town's OPEB Trust as hereby established.

1.7. "Trustee" means the Treasurer/Collector of the Town.

1.8. "Trust Fund" means all the money and property, of every kind and character, including principal and income, held by the Trustee under the Trust.

ARTICLE 2
PURPOSE

2.1. The Trust is created for the sole purpose of providing funding for OPEB, as determined by the Town, or as may be required by collective bargaining agreement, or by any general or special law providing for such benefits, for the exclusive benefit of the Town's Retired Employees and their eligible dependents and for defraying the reasonable administrative, legal, actuarial and other expenses of the Trust. The assets held in the Trust shall not be used for or diverted to any other purpose, except as expressly provided herein.

2.2. It is intended that the Trust shall constitute a so called "Qualified OPEB Trust" according to the standards set forth in GASB 43 and 45 and that it further qualify as a Integral Part Trust for all purposes under Article 115(c) of the Code or under any comparable provision of future legislation that amends, alters, or supersedes the Code.

ARTICLE 3
ESTABLISHMENT OF TRUST

3.1. In accordance with the provisions of G.L. c. 32B, §20, the Town hereby establishes this Trust which shall be known as the "Medway OPEB Trust."

3.2. The Trust shall be irrevocable, and no Trust funds shall revert to the Town until all benefits owed to Retired Employees have been satisfied or released.

3.3. The principal location of the Trust shall be the office of the Town Treasurer/Collector, located at 155 Village Street, Medway, MA 02053.

3.4. The Trustee hereby accepts the duties imposed upon him/her by this Declaration of Trust and agrees to perform said duties as a fiduciary duty in accordance with the terms and conditions of this Declaration of Trust.

3.5. The Trustee shall hold legal title to any property of the Trust and neither the Town, nor any employee, official, or agent of the Town, nor any individual, shall have any right title or interest to the Trust.

3.6. The Trust shall consist of such sums of money as shall from time to time be paid or delivered to the Trustee by the Town, which together with all earnings, profits, increments and accruals thereon, without distinction between principal and income, shall constitute the Trust hereby created and established. Nothing in this Declaration requires the Town to make contributions to the Trust to fund OPEB. Any obligation of the Town to pay or fund benefits shall be determined in accordance with applicable law and any agreement to provide OPEB.

ARTICLE 4
TRUST FUNDING

4.1. The Trust Fund shall be credited with all amounts appropriated or otherwise made available by the Town and employees of the Town as a contribution to the Trust for the purposes of meeting the current and future OPEB costs payable by the Town, or any other funds donated or granted specifically to the Town for the Trust, or to the Trust directly.

4.2. The Trustee shall be accountable for all delivered contributions but shall have no duty to determine that the amounts received are adequate to provide the OPEB Benefits determined by the Town.

4.3. The Trustee shall have no duty, expressed or implied, to compel any contribution to be made by the Town, but shall be responsible only for property received by the Trustee under this Declaration of Trust.

4.4 The Town shall have no obligation to make contributions to the Trust to fund OPEB, and the size of the Trust may not be sufficient at any one time to meet the Town's OPEB liabilities. This Declaration of Trust shall not constitute a pledge of the Town's full faith and credit or taxing power for the purpose of paying OPEB, and no retiree or beneficiary may compel the exercise of taxing power by the Town for such purposes.

4.5 The obligation of the Town to pay or fund OPEB obligations, if any, shall be determined by the Town or applicable law. Distributions of assets in the Trust are not debts of the Town within the meaning of any constitutional or statutory limitation or restriction.

4.6. Earnings or interest accruing from investment of the Trust shall be credited to the Trust. Amounts in the Trust Fund, including earnings or interest, shall be held for the exclusive purpose of, and shall be expended only for, the payment of the costs payable by the Town for OPEB obligations to Retired Employees and their dependents, and defraying the reasonable expenses of administering any plan providing OPEB Benefits as provided for in this Declaration of Trust.

4.7. Amounts in the Trust Fund shall in no event be subject to the claims of the Town's general creditors. The Trust Fund shall not in any way be liable to attachment, garnishment, assignment or other process, or be seized, taken, appropriated or applied by any legal or equitable process, to pay any debt or liability of the Town, or of retirees or dependents who are entitled to OPEB.

ARTICLE 5
POWERS OF THE TRUSTEE

5.1. The Trustee shall have the power to control and manage the Trust and the Trust Fund and to perform such acts, enter into such contracts, engage in such proceedings, and generally to exercise any and all rights and privileges, although not specifically mentioned herein, as the Trustee may deem necessary or advisable to administer the Trust and the Trust Fund or to carry out the purposes of this Trust. In addition to the powers set forth elsewhere in this Declaration, the powers of the Trustee, in connection with his/her managing and controlling the Trust and the Trust Fund, shall include, but shall not be limited to, the following:

5.1.1. To enter into an administrative services contract or other contracts with one or more insurance companies, nonprofit hospital, medical or dental service corporations, or with one or more health care organizations or health maintenance organizations, or with one or more third-party administrators or other entities to organize, arrange, or provide for the delivery or payment of health care coverage or services (including dental services), whereby the funds for the payment of claims of eligible persons, including appropriate service charges of the insurance carrier, third party administrator or other intermediary, shall be furnished by the Trustee from the Trust Fund for the payment by such intermediary to the health care vendors or persons entitled to such payments in accordance with the terms and provisions of said contract.

5.1.2. To purchase contracts of insurance or reinsurance through such broker or brokers as the Trustee may choose and to pay premiums on such policies.

5.1.3. To receive, hold, manage, invest and reinvest all monies which at any time form part of the Trust, whether principal or income, provided however that there shall be no investment directly in mortgages or in collateral loans and further provided that the Trustee shall comply with the provisions of Article 7 of this Declaration of Trust, applicable law and any investment policy adopted by the Trustee concerning the investment and management of the Trust Funds.

5.1.4. To borrow or raise money for the purposes of the Trust, in such amount, and upon such terms and conditions as the Trustee shall deem advisable, subject to applicable law and statutes; and for any sum so borrowed to issue the promissory note of the Trust, and to secure the repayment thereof by creating a security interest in all or any part of the Trust or the Trust Fund; and no person lending such money shall be obligated to see that the money lent is applied to Trust purposes or to inquire into the validity, expedience or propriety of any such borrowing.

5.1.5. To hold cash, uninvested, for such length of time as the Trustee may determine without liability for interest thereon.

5.1.6. To employ suitable agents, advisors and counsel as the Trustee may deem necessary and advisable for the efficient operation and administration of the Trust, to delegate duties and powers hereunder to such agents, advisors and counsel, and to charge the expense thereof to the Trust. The Trustee is entitled to rely upon and may act upon the opinion or advice of any attorney approved by the Trustee in the exercise of reasonable care. The Trustee shall not be responsible for any loss or damage resulting from any action or non-action made in good faith reliance upon such opinion or advice.

5.1.7. To hire employees or independent contractors as the Trustee may deem necessary or advisable to render the services required and permitted for the proper operation of the Trust, and to charge the expense thereof to the Trust Fund.

5.1.8. To continue to have and to exercise, after the termination of the Trust and until final distribution, all of the title, powers, discretions, rights and duties conferred or imposed upon the Trustee hereunder, by any by-laws adopted by the Trustee or by law.

5.1.9. To construe and interpret this Declaration of Trust and other documents related to the purposes of the Trust.

5.1.10. To maintain bank accounts for the administration of the Trust and the Trust Fund and to authorize certain persons to make payments from any appropriate account for purposes of the Trust.

5.1.11. To receive and review reports of the financial condition and of the receipts and disbursements of the Trust and the Trust Fund.

5.1.12. To adopt by-laws, rules, regulations, formulas, actuarial tables, forms, and procedures by resolution from time to time as he/she deems advisable and appropriate for the proper administration of the Trust, including participation criteria, provided the same are consistent with the terms of this Declaration of Trust.

5.1.13. To purchase as a general administrative expense of the Trust so-called director's liability insurance and other insurance for the benefit of the Trust and/or the protection of the Trustee, Trust officers, employees, or agents against any losses by reason of errors or omissions or breach of fiduciary duty or negligence.

5.1.14. To enter into any and all contracts and agreements for carrying out the terms of this Declaration of Trust. and for the administration and operation of the Trust and to do all acts as he/she, in his/her discretion, may deem necessary or advisable. All such contracts and agreements, or other legal documents herein authorized, shall be executed by the Trustee.

5.1.15. To receive contributions or payments from any source whatsoever but such contributions or payments may not be utilized for any purpose unrelated to the provision of OPEB as herein provided or properly authorized expenses.

5.1.16. To pay taxes, assessments, and other expenses incurred in the collection, care, administration, and protection of the Trust.

5.1.17. To take all actions, whether or not expressly authorized herein, which the Trustee may deem necessary or proper in connection with the administration of the Trust, although the power to take such actions is not specifically set forth herein.

5.1.18. To compromise, settle or arbitrate any claim, debt, or obligation of or against the Trust or Trust Fund; to enforce or abstain from enforcing any right, claim, debt or obligation, and to abandon any shares of stock, bonds, or other securities, or interests determined by him/her to be worthless; to prosecute, compromise and defend lawsuits, but without the obligation to do so, all at the risk and expense of the Trust;

5.1.19. To hire one or more consultants, actuaries, accountants, attorneys or other professionals to assist with the administration of the Trust Fund and to pay such amounts that the Trustee deems to be reasonable, including, without limiting the generality of the foregoing, third party firms to provide legal, tax, accounting and audit services to the Trust.

5.1.20. To comply with all requirements imposed by applicable provisions of law.

ARTICLE 6
LIMITATION OF TRUSTEE'S POWERS, DUTIES AND RESPONSIBILITIES

6.1 Nothing contained in the Declaration of Trust, either expressly or by implication, shall be deemed to impose any powers, duties or responsibilities on the Trustee other than those set forth in this Declaration of Trust.

6.2. The Trustee shall have such rights, powers and duties as are provided to a named fiduciary for the investment of assets under ERISA. The Trustee shall not be liable for the making, retention or sale of any investment or reinvestment made by the Trustee as herein provided or for any loss to or diminution of the Trust Fund or for anything done or admitted to be done by the Trustee with respect to the Declaration of Trust or the Trust Fund except as and only to the extent that such action constitutes a violation of the law or gross negligence.

6.3. The Trustee, in his/her discretion, may purchase as an expense of the Trust Fund such liability insurance for him/herself or any other fiduciary as may be reasonable. The Town, in its discretion, may also purchase liability insurance for the Trustee, and as the Town may select, for any person or persons who serve in a fiduciary capacity with respect to the Trust.

6.4. The Town shall not assume any obligation or responsibility to any person for any act or failure to act of the Trustee, any insurance company, or any beneficiary of the Trust Fund.

The Trustee shall have no obligation or responsibility with respect to any action required by this Declaration of Trust to be taken by the Town, any insurance company, or any other person, or for the result or the failure of any of the above to act or make any payment or contribution, or to otherwise provide any benefit contemplated by this Declaration of Trust.

6.5. Neither the Trustee nor the Town shall be obliged to inquire into or be responsible for any action or failure to act on the part of the other. No insurance company shall be a party to this Declaration of Trust, for any purpose, or be responsible for the validity of this Declaration of Trust, it being intended that such insurance company shall be liable only for the obligations set forth in the policy or contract issued by it.

6.6. The Trustee shall invest and manage Trust assets as a prudent investor would, using the judgment and care under the circumstances then prevailing that persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital, pursuant to G.L. c.203C.

ARTICLE 7
ACTIONS BY THE TRUSTEE

7.1. The Trustee may delegate to any attorney, agent or employee such other powers and duties as he/she deems advisable, including the power to execute, acknowledged or deliver instruments as fully as the Trustee might him/herself and to sign and endorse checks for the account of the Trustee.

7.2. The Trustee shall be required to give bond.

ARTICLE 8
LIABILITY OF THE TRUSTEE

8.1. The Trustee shall not be liable for any mistake of judgment or other action made, taken or omitted by him/her in good faith, nor for any action taken or omitted by any agent or employee selected with reasonable care, and the duties and obligations of the Trustee hereunder shall be expressly limited to those imposed upon him/her by this Declaration of Trust.

8.2. No successor Trustee shall be held responsible for an act or failure of a predecessor Trustee.

8.3. The Trustee is a public employee for purposes of G.L. c. 258, and shall be indemnified by the Town against any civil claim, action, award, compromise, settlement or judgment by reason of an intentional tort to the same extent and under the same condition as other public employees of the Town.

8.4. The Trustee shall not be indemnified for violation of the civil rights of any person if he acted in a grossly negligent, willful or malicious manner, or in connection with any matter

where it is shown to be a breach of fiduciary duty, an act of willful dishonesty or an intentional violation of law by the Trustee.

ARTICLE 9
TAXES, EXPENSES, AND COMPENSATION

9.1. It is intended that the Trust will be a Code Article 115 trust. As such, it is expected that there will be no income taxes owed by the Trust. To the extent that any taxes are imposed on the Trust, the Trustee shall use the assets of the Trust Fund to pay for any taxes owed.

9.2. All reasonable costs and expenses of managing and administering the Trust and the Trust Fund, including such compensation for the Trustee as may be approved by Town Meeting from time to time, and reimbursement for reasonable fees incurred through the use of third party vendors or agents, shall be paid from the Trust Fund unless the Town chooses to pay the expenses directly.

ARTICLE 10
ACCOUNTS

10.1. The Trustee shall keep complete and accurate accounts of all of the Trust's receipts, investments and disbursements under this Declaration of Trust. Such records, as well as all other Trust records, shall be retained and made available for public inspection and/or copying in accordance with the requirements of the Public Records Law, G.L. c. 66, §10 and G.L. c.4, §7, clause 26th and their implementing regulations. Any person or persons designated by the Town shall be entitled to inspect such records upon request at any reasonable time.

10.2. The books and records of the Trust shall be audited annually by an independent auditor in accordance with accepted accounting practices. The results of the audit shall be provided to the Town at the same time as it is presented to the Trustee.

10.3. The Trust Fund shall be subject to the Commonwealth of Massachusetts Public Employee Retirement Administration Commission's triennial audit.

ARTICLE 11
ANNUAL REPORTS

11.1. The Trustee shall furnish to the Town annually, or more frequently if the Town so requests, a statement of account showing the condition of the Trust Funds and all investments, sales, income, disbursements and expenses of the Trust and the Trust Fund.

ARTICLE 12
INVESTMENT OF TRUST FUNDS

12.1. The Trustee is authorized to invest and reinvest the amounts in the Trust Fund not needed for current disbursement, consistent with the prudent investor rule, and as provided in the Investment Policy, if applicable.

12.2. In no event shall any funds be invested directly in mortgages or in collateral loans.

ARTICLE 13
CUSTODY OF THE TRUST FUNDS

13.1. The Trustee is hereby appointed as custodian of the Trust Fund and authorized to employ an outside custodial service to maintain custody of the Trust Funds. All funds in the Trust Fund shall be accounted for separately from all other funds of the Town.

13.2. The Trustee shall establish one or more checking accounts, which may be interest bearing or non-interest bearing accounts. Such checking account or accounts shall be funded solely from the Trust Funds, and the Trustee may draw on such checking accounts for the payment of OPEB and for the administrative expenses of the Trust.

ARTICLE 14
TERMINATION OF TRUST

14.1. The Trust shall continue unless and until terminated pursuant to law or by an instrument in writing signed by the Trustee, provided, however, that continuance of the Trust shall not be deemed to be a contractual obligation of the Town.

14.2. Upon termination of the Trust, subject to the payment of or making provision for the payment of all obligations and liabilities of the Trust and the Trustee, the net assets of the Trust shall be transferred to the Town and held by the Town Treasurer to be used exclusively for providing OPEB to Retired Employees and their eligible dependents and for no other purpose.

14.3. The powers of the Trustee shall continue until the affairs of the Trust are concluded.

ARTICLE 15
AMENDMENTS

15.1. The Trust may only be amended as set forth herein. The Town may amend the Trust at any time as may be necessary to comply with the requirements for tax exemption under Section 115 of the Code, to conform the Trust to the laws of the Commonwealth of Massachusetts and to meet the standards set forth in GASB 43 and GASB 45 to be treated as funded through a qualifying trust or equivalent arrangement.

15.2. This Declaration of Trust may be amended, but not revoked, from time to time by the Town, subject to the following limitations:

15.2.1. The assets of the Trust may not be used for or diverted to any other purposes prior to satisfaction of the Town's OPEB obligations, and reasonable expenses of administering the Trust.

15.2.2. The duties and liabilities of the Trustee cannot be substantially changed without his/her written consent.

15.3 Any amendment to this Trust shall be executed in writing.

ARTICLE 16
MERGER

16.1. The Town may provide for the merger of the Trust with one or more other trusts established by the Town or other government entities for similar purposes as may be provided by law.

ARTICLE 17
SEVERABILITY OF INVALID PROVISIONS

17.1. If any provision of this Declaration of Trust is determined invalid, illegal, or unenforceable for any reason, then the provision shall be severed from the remaining provisions of the Declaration of Trust for any reason, and the remaining parts of the Declaration shall be construed to give the maximum practical effect to the purposes stated herein, as if the invalid, illegal, or unenforceable provision was never a part.

ARTICLE 18
MISCELLANEOUS

18.1. This Declaration of Trust shall be interpreted, construed and enforced, and the Trust hereby created shall be administered in accordance with and governed by the laws of the United States and of the Commonwealth of Massachusetts.

18.2. The titles to Articles of this Declaration of Trust are placed herein for convenience of reference only, and the Declaration of Trust is not to be construed by reference thereto.

18.3. No person shall be obliged to see to the application of any money paid or property delivered to the Trustee, or as to whether or not the Trustee has acted pursuant to any authorization herein required, or as to the terms of this Declaration of Trust. In general, each person dealing with the Trustee may act upon any advice, request or representation in writing by the Trustee, or by the Trustee's duly authorized agent, and shall not be liable to any person in so doing. The certification of the Trustee that he/she is acting in accordance with this Declaration of Trust shall be conclusive in favor of any person relying thereon.

18.4. This Declaration of Trust may be executed in any number of counterparts, each of which shall be deemed to be an original but all of which together shall constitute but one instrument, which may be sufficiently evidenced by any counterpart.

18.5. Until advised to the contrary, the Trustee may assume this Trust is entitled to exemption from taxation under Section 115 of the Code or under any comparable section or sections of future legislation that amend, supplement or supersede one or both of those sections of the Code.

IN WITNESS WHEREOF, the parties hereto have caused this Declaration of Trust to be executed in their respective names by their duly authorized officers as of the day and year first above written.

IN WITNESS WHEREOF, this Declaration of Trust has been duly executed on the date written above.

BOARD OF SELECTMEN

Maryjane White, Chairman

Richard D'Innocenzo, Vice Chairman

Dennis Crowley, Clerk

Glenn Trindade, Member

John Foresto, Member

Dated: _____

OREB FUND TRUSTEE

Joanne Russo

Dated: 6-16-17

AGENDA ITEM #5a

Donation/Grant Authorization – Exelon Foam Appliance Vehicle & Training- $650,000

Associated back up materials attached.

- Donation Expenditure Authorization Form

Proposed motion:
I move that the Board approve the expenditure of the Exelon donation for the Foam Appliance Vehicle & Training in the amount of $650,000.

TOWN OF MEDWAY
NOTICE OF DONATION FUND / AUTHORIZATION TO SPEND

DEPARTMENT: Town Administrator DATE: 8/16/2017

PERSON RESPONSIBLE FOR EXPENDITURE: Jeff Lynch, Fire Chief

NAME OF DONATION: Exelon Foam Appliance Vehicle & training

SOURCE OF FUNDS: Exelon Generation Co., LLC

INTIAL AMOUNT: $650,000.00

DURATION: n/a

DESIGNATED PURPOSE:

To purchase the above noted vehcile and training for appropriate use

Host Community Agreement payment

ARE MATCHING TOWN FUNDS REQUIRED? no

IF MATCHING IS NON-MONETARY (MAN HOURS, ETC.) PLEASE SPECIFY:

IF MATCHING IS MONETARY PLEASE GIVE ACCOUNT NUMBER AND DESCRIPTION OF TOWN FUNDS TO BE USED:

ANY OTHER EXPOSURE TO TOWN?

no

BOARD OF SELECTMEN:

ACTION DATE 8/21/2017

DEPARTMENT HEAD MUST SUBMIT THIS FORM AND A COPY OF THE DONATION APPROVAL TO THE TOWN ADMINISTRATOR'S OFFICE FOR APPROVAL BY THE BOS TO EXPEND THE FUNDS RECEIVED FOR THE PURPOSE OF THE DONATION *MGL 44 S53A*

ONCE APPROVED - ORIGINAL TO TOWN ACCOUNTANT

AGENDA ITEM #5b

Grant Expenditure Authorization – MIIA Flex Grant - $1,700

Associated back up materials attached.

- Notice of Grant Award and Application

Proposed motion:
I move that the Board approve the expenditure of the MIIA Flex Grant in the amount of $1,700.

TOWN OF MEDWAY
NOTICE OF GRANT AWARD

DEPARTMENT: Town Administrator DATE: 8/15/2017

PERSON RESPONSIBLE FOR GRANT EXPENDITURE: Allison Potter

NAME OF GRANT: MIIA Rewards Flex Grant

GRANTOR: MIIA Property & Casualty Group Inc.

GRANT AMOUNT: $1,700

GRANT PERIOD: FY18

SCOPE OF GRANT/ ITEMS FUNDED: purchase of height adjustable standing desks (ergonomic equipment)

IS A POSITION BEING CREATED: no

IF YES: CAN FRINGE BENEFITS BE PAID FROM GRANT? n/a

ARE MATCHING TOWN FUNDS REQUIRED? no

IF MATCHING IS NON-MONETARY (MAN HOURS, ETC.) PLEASE SPECIFY:

n/a

IF MATCHING IS MONETARY PLEASE GIVE ACCOUNT NUMBER AND DESCRIPTION OF TOWN FUNDS TO BE USED:

n/a

ANY OTHER EXPOSURE TO TOWN?

no

BOARD OF SELECTMEN:

ACTION DATE

DEPARTMENT HEAD MUST SUBMIT THIS FORM AND A COPY OF THE GRANT APPROVAL TO THE TOWN ADMINISTRATOR'S OFFICE FOR APPROVAL BY THE BOS TO EXPEND THE FUNDS RECEIVED FOR THE PURPOSE OF THE GRANT *MGL 44 S53A*

ONCE APPROVED - ORIGINAL TO TOWN ACCOUNTANT

MIIA Rewards

MIIA Rewards Flex Grant Program Application
Fiscal Year 2018

The MIIA Flex Grant provides an additional option for use of earned MIIA Rewards credits. Currently Rewards credits are designed to reduce premiums in the following fiscal year.

The MIIA Flex Grant gives members the additional option of having a portion of the MIIA Rewards credit, not to exceed 50%, applied to a Rewards Flex Grant. Rewards credits under this option are released to the member in the form of a payment to be used for risk management purposes, subject to MIIA's approval.

Eligible items to be considered under the MIIA Flex Grant in addition to those currently eligible under the MIIA Risk Management Grant Program include but are not limited to:

- Personal Protective Equipment: hard hats, clothing, safety goggles, turnout gear, bulletproof vests, raingear etc.
- Equipment: chainsaws, ladders, generators, automatic external defibrillators, two-way radios, infrared scanners, GPS, tablets, street signs, garage door openers, etc.
- Repairs: roofs, gutters, walkways, stairs, lighting, etc.
- Services: tree pruning/removal, catch basin cleaning, sewer video/cleaning, parking lot paving, sidewalk repairs
- Remediation/removal: asbestos, lead, mold, underground tanks, floor drains, hazardous waste
- Playground/skatepark maintenance and repairs, replacement of safety surfacing
- Ergonomic equipment: desks, chairs, monitor stands, keyboard trays, etc.

MIIA Flex Grant Designation

Total earned FY17 MIIA Rewards credit $ 9962 Amount to be applied for

$ 4,700 Amount eligible for Flex Grant is 50% of total Rewards credit.

Email completed form to miiaflexgrant@mma.org by December 22, 2017.

MIIA Member: Medway, Town of Contact Person: Allison Potter

Phone: 508-533-3264 E-Mail: apotter@townofmedway.org

Purpose and Description of Grant: Summarize what you plan to do, who will do it, and when it will be done.

Ergonomic equipment: Height adjustable standing desk (4)
See attached example

Approved by:

7/17/17

Grant Amount: $_____ Submit formal vendor estimate covering cost per item/training/consultation
Chief Executive Officer and Chief Procurement Officer must sign the grant application attesting to the above.
By signing and submitting this application, I (we) attest that all applicable state and local purchasing regulations and guidelines have been followed.

Chief Executive Officer Signature: _____ Print: Michael F. Boynton Date: 7/11/17

Chief Procurement Officer Signature: _____ Print: _____ Date: _____

Email application to miiaflexgrant@mma.org Questions : Lin Chabra lchabra@mma.org and 1-800-882-1498 x 250

AGENDA ITEM #5c

Donation Expenditure Authorization – COMMCAN, INC. for Breathing Apparatus Devices- $65,800

Associated back up materials attached.

- Donation Expenditure Authorization Form
- Excerpt from COMMCAN HCA

Proposed motion:
I move that the Board approve the expenditure of the COMMCAN, INC. donation for the breathing apparatus devices in the amount of $65,800.

TOWN OF MEDWAY
NOTICE OF DONATION FUND / AUTHORIZATION TO SPEND

DEPARTMENT: Town Administrator DATE: 8/18/2017

PERSON RESPONSIBLE FOR EXPENDITURE: Jeff Lynch, Fire Chief

NAME OF DONATION: COMMCAN, INC. - SBCA Devices

SOURCE OF FUNDS: COMMCAN, INC.

INTIAL AMOUNT: $65,800.00

DURATION: four installments over four years, beginning FY18

DESIGNATED PURPOSE:

Purchase of self-contained breathing apparatus (SCBA) devices for Fire Dept.
Host Community Agreement payment (sec. 1.a.); first installment; total value: $263,30(
(see attached excerpt form COMMCAN Host Community Agreement)

ARE MATCHING TOWN FUNDS REQUIRED? no

IF MATCHING IS NON-MONETARY (MAN HOURS, ETC.) PLEASE SPECIFY:

IF MATCHING IS MONETARY PLEASE GIVE ACCOUNT NUMBER AND DESCRIPTION OF TOWN FUNDS TO BE USED:

ANY OTHER EXPOSURE TO TOWN?

no

BOARD OF SELECTMEN:

ACTION DATE 8/21/2017

DEPARTMENT HEAD MUST SUBMIT THIS FORM AND A COPY OF THE DONATION APPROVAL TO THE TOWN ADMINISTRATOR'S OFFICE FOR APPROVAL BY THE BOS TO EXPEND THE FUNDS RECEIVED FOR THE PURPOSE OF THE DONATION *MGL 44 S53A*

ONCE APPROVED - ORIGINAL TO TOWN ACCOUNTANT

NOW, THEREFORE, in consideration of the above, OPERATOR offers the TOWN and the TOWN accepts this Host Community Agreement in accordance with MGL ch.44 §53A:

1. In the event that OPERATOR obtains a Final Certificate of Registration from DPH for the operation of a RMD cultivation and processing facility in the TOWN and receives any and all necessary and required permits and licenses issuable by the TOWN, which said permits and/or licenses allow OPERATOR to locate, occupy and operate the RMD cultivation and processing facility in the TOWN, then OPERATOR agrees to provide the TOWN with the following benefits:

   a. Self-contained Breathing Apparatus (SCBA) devices for the fire department, with a total value of two hundred sixty-three thousand two-hundred dollars ($263,200). This gift will be provided in four (4) equal annual installments of sixty-five thousand eight hundred ($65,800), commencing on August 1, 2017 ("Payment Commencement Date"), with the following three (3) payments due on or before that anniversary date;
   b. A Youth Activity Program through the Medway Public Library funding at the rate of ten thousand dollars ($10,000) per year, with such gift commencing on February 1, 2018, and provided annually thereafter for the duration of this Agreement;
   c. School Department health and substance abuse prevention curriculum funding at the rate of ten thousand dollars ($10,000) per year, with such gift commencing on February 1, 2018, and provided annually thereafter for the duration of this Agreement; and
   d. Department of Public Services Department of Transportation ("DPS DOT") Drug Testing Program Funding at the rate of ten thousand dollars ($10,000) per year, with such gift commencing on February 1, 2018, and provided annually thereafter for the duration of this Agreement.

2. In addition to the items identified above in Paragraphs 1 (a)-(d), OPERATOR shall provide an annual financial contribution of twenty-five thousand dollars ($25,000) to the Town for any municipal purpose, provided that such payments shall commence on February 1, 2018, and shall continue on an annual basis thereafter, with each annual gift to be made on or before February 1st of each year for the duration of this agreement.

AGENDA ITEM #6

Approval – Contract with Bulldog Fire Apparatus for new Fire Truck - $638,841

Associated back up materials attached.

- Bulldog Fire Apparatus, Inc. Contract
- DRAFT letter to KME Fire Apparatus Inc. re: purchasing of new Fire Truck

Proposed motion:

1. I move that the Board of Selectman award a contract for the purchase of a new KME Severe Service foam and structural firefighting vehicle as proposed and specified to Bulldog Fire Apparatus, Inc. of Woodville, MA in the amount of $638,841, and further authorize the Chair of the Board of Selectmen and Town Administrator to sign the contract on behalf of the Town.
2. I move that the Board authorize the Town Administrator and Fire Chief to take all appropriate steps to dispose of the 1990 Pemfab/FMC fire engine, Engine #4, at a time and in a manner that they best serves the Town of Medway, which may include offering the vehicle to other Fire Departments who may have an interest in utilizing this vehicle as an active appliance in their community.

FIRE & EMERGENCY

AGREEMENT OF SALE FOR FIRE APPARATUS

THIS AGREEMENT is made between Bulldog Fire Apparatus Inc., of 17 Winter Street Woodville, MA 01784 ("Company") and:

Town of Medway

Legal Name of Buyer

155 Village Street	Medway		Ma	02053
Address	*City*	*County*	*State*	*Zip*

508-533-3264

"Buyer" Phone Number

BUYER INFORMATION (check one):

Municipal Corporation ☑ Non-Profit Corporation ☐

Business Corporation ☐ Sole Proprietorship ☐

Other (specify): _____

State of Incorporation: MA Date of Incorporation: 1713

1. ACCEPTANCE: Company agrees to sell and Buyer agrees to purchase the fire apparatus ("Apparatus") described in the Specifications incorporated as Exhibit A of this contract, as may be amended in writing, and the equipment listed herein, all in accordance with the terms and conditions set forth herein.

2. DELIVERY SCHEDULE: The Apparatus shall be ready for delivery F.O.B. _____ at approximately 240-270 days after receipt of ☑ Contract ☐ Chassis subject to extension due to changes made by Buyer or in accordance with Sections 5 or 12 below.

3. PRICE: Buyer shall pay to Company as the Purchase Price for the Apparatus the sum of Six Hundred Thirty-eight Thousand Eight Hundred Forty-one and 00/00 **Dollars U.S. Dollars**

($ 638,841.00 **)**

This purchase price includes the following taxes: $ N/A

Any applicable taxes not specifically noted above will be paid by the Buyer directly, or will be added to the Purchase Price and paid by Company. If Buyer claims exemption from any tax, Buyer agrees to promptly furnish the applicable exemption certificate(s) and to indemnify and save Company harmless from any such tax, interest or penalty, which may at any time be assessed against Company as a result of this transaction.

4. TERMS OF PAYMENT: Terms of payment shall be:

(A) Due upon signing .....$ _____

Due upon completion/receipt of chassis...$ _____

Due upon delivery ..... _____ $638,841.00

(B) Check applicable method of payment for remaining balance due:

☐ Cash/cash equivalent at time of delivery

☐ Installment Sales Contract - Financing*

☐ Lease-Purchase Agreement - Financing*

* Lender/Leasing Company: _____

(C) No payment of any amount due under this Agreement shall be made directly to a KME Sales Representative without prior written approval from Company.

(D) Payment pursuant to this Section 4 shall only be made by the Town of Medway following delivery of the fully completed (as specified) vehicle to the Medway Fire Headquarters, 44 Milford Street, Medway, Massachusetts and inspection & acceptance of same by the Fire Chief or his designee.

5. CONTINGENCIES: Company will not be liable for any delay, failure to make delivery, or other default due to strikes or labor unrest, war, riot, federal, state or local government action, fire, flood or other disaster or acts of God, accidents, breakdown of machinery, lack of or inability to obtain materials, parts or supplies, or any other causes or circumstances beyond the reasonable control of Company which prevent or hinder Company's manufacture and/or delivery of the Apparatus.

6. WARRANTY: The Company shall meet all warranty requirements stated its proposal; to the extent there is a conflict, the Company shall meet the warranty requirement that provides the greatest coverage and protection for Buyer. The parties recognize and acknowledge that the Apparatus being constructed and provided is to withstand the severe and continuous use encountered during emergency firefighting services."

SEE SEPARATE WARRANTY STATEMENT(S) FOR COMPLETE INFORMATION.

7. DISCLAIMER OF CONSEQUENTIAL DAMAGES: COMPANY EXPRESSLY DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES WHICH MAY BE SUSTAINED BY BUYER, INCLUDING BUT NOT LIMITED TO THOSE ARISING FROM THE USE, INABILITY TO USE, MAINTENANCE OR REPAIR OF THE APPARATUS, WHETHER UNDER THEORIES OF BREACH OF EXPRESS OR IMPLIED WARRANTY, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE.B

8. CANCELLATION: This contract is not subject to cancellation by Buyer, unless for material breach by Company, except upon payment to Company of reasonable cancellation charges, which shall take into account expenses already incurred and commitments made by Company and Company's anticipated profit.

9. ENTIRE AGREEMENT; AMENDMENTS: This contract, including its appendices, embodies the entire understanding between the parties relating to the subject matter contained herein and merges all prior discussions and agreements between them. No agent or representative of Company has authority to make any representations, statements, warranties or agreements not herein expressed. All modifications or amendments of this contract, including the appendices, and Change Orders, must be in writing signed by an authorized representative of each of the parties hereto.

10. SEVERABILITY: If any provision hereof shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision, and this contract shall be construed as if the invalid, illegal or unenforceable provision had never been contained in it, unless to do so clearly negates the overall intent or purpose of the parties in entering into this contract.

11. CHANGES IN COMMERCIAL SPECIFICATIONS: Specifications for all commercial components of the Apparatus, manufactured by companies other than KME, are subject to change without notice. Specifications for such components will be as available at the time of manufacture of the Apparatus. Company shall provide written notice of any changes in commercial specifications.

12. CHANGES IN REGULATIONS/INDUSTRY STANDARDS: The Purchase Price is subject to adjustment for changes to the Apparatus necessitated by changes in applicable government regulations (such as FMVSS or emissions regulations), industry standards (such as NFPA standards), replacement of discontinued models or components from vendors, or freight charges. Buyer is responsible for any cost increases due to such changes beyond Company's control. Company shall provide written notice of any changes in regulations and industry standards.

13. GOVERNING LAW: This Agreement shall be subject to the laws of the Commonwealth of Massachusetts and the Parties consent to venue in the Court of Common Pleas of Worcester County to resolve any dispute, if necessary

14. ASSIGNABILITY: This Agreement is not assignable by either Party without the prior written consent of the other Party.

EXPLANATION OF CONTRACT AMOUNT

BASE BID PRICE: $ 610,000.00

OPTIONS: $ 28,841.00

1. Heated pump compartment; ADD to the proposal price	**$1,783.00**
2. Air Bags in the following locations; ADD to the proposal price Driver's seat Officer's seat Rear facing seat on the Driver's side Steering wheel Officer's side knee bolster	**$10,561.00**
3. Light tower; ADD to the proposal price Model # Command Light, Knight-2 Model KI415a The Command Light will be equipped with the following bank of floodlights: Floodlight manufacturer:Whelen Engineering Number of lamp heads: Six (6) Pioneer Plus LED Voltage: 120 volt Watts of each lamp head: 150 watt Total watts of light tower: 900 watts Amperage per lamp head: 1.25 amps Total Lumens of light tower: 90,000 lumens	**$25,626.00**
4. Hale QMAX 2000GPM pump in lieu of the Hale 8F 2000GPM pump; Deduct	**($5,129.00)**
5. Purchase under the HGAC Contract in lieu of the FCAM contract; Deduct	**($4,000.00)**

FINAL CONTRACT PRICE WITH OPTIONS: $ 638,841.00

IN WITNESS WHEREOF, Buyer and Company have caused this Agreement to be executed by their duly authorized representatives this _____, day of _____, 2017.

TOWN OF MEDWAY
(Buyer's Legal Name)

By: _____ Signature

Title: Chair, Medway Board of Selectmen

By: _____ Signature

Title: Town Administrator

By: _____ Signature

Title: _____

By: _____ Signature

Title: _____

Availability of funds: 26712202 5852

Sales Representative: Kenneth W Franks III

APPROVED AS TO FORM: _____ Town Counsel

Organization Name: Bulldog Fire Apparatus Inc.

By: Kenneth w. Franks III Digitally signed by Kenneth w. Franks III DN: CN = Kenneth w. Franks III email = kfranks@bulldogfe.com C = US Date: 2017.08.14 17:37:49 -05'00' Signature

Title: Senior Sales Representative

This contract is not a valid and binding obligation until approved, dated and executed by Bulldog Fire Apparatus Inc., Delivery times begin with the date below.

ACCEPTED AND APPROVED BY BULLDOG FIRE APPARATUS Inc:

By: _____

Title: _____
Date: _____

FEDERAL EXCISE TAX EXEMPTION CERTIFICATE

(For use by United States, Territories, District of Columbia, or Political subdivisions.)

Date: _____

The undersigned hereby certifies that he/she is: _____
Title

Of _____
(United States, States, Territory, District of Columbia or Political Subdivision)

and that he/she is authorized to execute this certificate and that the article or articles specified in the accompanying order or on the reverse side hereof are purchased from Bulldog Fire Apparatus Inc. , for the exclusive use of

_____
(United States, States, Territory, District of Columbia, or political subdivision.)

It is understood that the exemption from tax in the case of sales or articles under this exemption certificate to the United States, States, etc. is limited to the sale of articles purchased for their exclusive use; and it is agreed that, if articles purchased tax free under exemption certificates are used otherwise, or are sold to employees or others, such fact must be reported to the Federal Tax Office of the article or articles covered by this certificate. It is also understood that the fraudulent use of this certificate to secure exemption will subject the undersigned and all guilty parties to a fine of not more than $10,000.00 or to imprisonment for not more than five years, or both, together with costs or prosecution.

_____
(Name of Organization)

By _____ (Signature)

SALES OR USE TAX EXEMPTION CERTIFICATE

Name of Buyer:

_____

Address: _____
City State Zip

The above named business, holder of the following State permit number
Number: _____ State: _____
respectively certifies that all tangible property purchased from Bulldog Fire Apparatus Inc., Woodville, Massachusetts is exempt from Sales of Use Tax for reasons(s) checked below:

☐ Resale as tangible personal property ☐ Governmental Unit or Instrumentality

☐ Non or Charitable Unit

☐ Other (Explain Fully)_____

Signature: _____ Title: _____

Date: _____

Federal Excise Tax and State Sales Tax will be added if the above form is not completed and signed.

BULLDOG FIRE APPARATUS

CERTIFICATE OF NON-COLLUSION

The undersigned certifies, under penalties of perjury, that this Bid or proposal is genuine and has been made and submitted in good faith and without collusion or fraud, with and other bidder or person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals. We further certify that we have not colluded, conspired, connived or agreed (directly or indirectly) with any bidder or person to put in a sham bid, or that such other person shall refrain from bidding, and has not in any manner sought by agreement or collusion, communication or conference with any person to fix the bid price of the bidder or any other bidder from the written contract, or to fix any overhead, profit or cost element of said price, or that of any other bidder, or to secure any advantage against the owner, or any other person interested in the proposed contract; and that all statements contained in said bid are to the best of our knowledge true; and further, that the bidder has not, prior to the official opening of the bid, directly or indirectly, submitted this bid, or the contents thereof, or divulged information or data relative thereto, to any association or to any member or agent thereof, or to any person who is not an employee of the bidder, except the Surety which furnished bid security or to a financial institution which provided a lease/ purchase proposal which is part and parcel of this bid.

Jeffrey R. Mazza
Authorized Officer

Authorized Signature

BULLDOG FIRE APPARATUS
Name of Business

20-2744533
Federal Identification No.

CERTIFICATE OF TAX COMPLIANCE

Pursuant to Chapter 62C of the Massachusetts General Laws, Section 49A(b), I,

__Jeffrey R. Mazza_____, authorized signatory for

__Bulldog Fire Apparatus_____, do hereby certify under the pains and penalties
(Name of Contractor)

of perjury that said contractor has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

CONTRACTOR

By: _____
(Signature of Authorized Representative)

Title: _President_____

Date: _August 16, 2017___

CERTIFICATE OF CORPORATE AUTHORITY

At a duly authorized meeting of the Board of Directors of __Bulldog Fire Apparatus_____
(Name of Corporation)
held on __December 28, 2016_____ it was VOTED that:
(Date)

_Jeffrey R. Mazza_____President__
(Name) (Officer)

of this corporation, be and he/she hereby is authorized to execute contracts, deeds and bonds in the name and on behalf of said corporation, and affix its corporate seal hereto; and such execution of any contract, deed or obligation in this corporation's name on its behalf by such __President_____ under seal of the company, shall be valid and binding upon this
(Officer)
corporation.

A True Copy,

ATTEST: Pamela L. Mazza

TITLE: __Clerk_____

PLACE OF BUSINESS: Bulldog Fire Apparatus

DATE OF THIS CERTIFICATE: __August 16, 2017__

I hereby certify that I am the clerk of the Bulldog Fire Apparatus that __Pamela L. Mazza_____ is the duly elected __Clerk_____ of said corporation, and that the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

(Clerk)

CORPORATE SEAL:

290666/99999/0003

FINAL SPECIFICATION

FOR THE

MEDWAY FIRE DEPARTMENT

2000GPM

1000/250/30

SEVERE SERVICE CUSTOM FOAM PUMPER

August 16, 2017

== CUSTOM PUMPER - 405.017 04/05/17 ==

GENERAL INFORMATION

The proposed apparatus will be constructed to withstand the severe and continuous use encountered during emergency firefighting services. The apparatus will be of the latest type, carefully designed and constructed with due consideration to the nature and distribution of the load to be sustained.

This proposal details the general design criteria of cab and chassis components, aerial device (if applicable), fire pump and related components (if applicable), water tank (if applicable), fire body, electrical components, painting, and equipment.

All items of these proposal specifications will conform to the fullest extent possible with the National Fire Protection Association Pamphlet No. 1901, latest edition, except as noted in the Statement-of-Exceptions.

KME will furnish satisfactory evidence of our ability to construct, supply service parts and technical assistance for the apparatus specified.

FIRE APPARATUS DOCUMENTATION

KME will supply, at the time of delivery, at least one (1) copy of the following documents:

KME's record of apparatus construction details, including the following information:

- Owners name and address
- Apparatus manufacturer, model and serial number
- Chassis make, model and serial number
- Front tire size and total rated capacity in pounds
- Rear tire size and total rated capacity in pounds
- Chassis weight distribution in pounds with water and manufacturer mounted equipment, front and rear
- Engine make, model, serial number, rated horsepower, rated speed and governed speed
- Type of fuels and fuel tank capacity
- Electrical system voltage and alternator output in amps.
- Battery make, model and total capacity in cold crank amps (CCA)
- Transmission make, model and serial number. If so equipped chassis transmission PTO(s) make, model and gear ratio
- Pump make, model, rated capacity in gallons per minute (liters per minute where applicable) and serial number
- Pump transmission make, model, serial number and gear ratio
- Auxiliary pump make, model, rated capacity in gallons per minute (liters per minute where applicable) and serial number
- Water tank certified capacity in gallons or liters
- Paint manufacturer and paint number(s)

Certification of slip resistance of all stepping, standing and walking surfaces.

If the apparatus has a fire pump or an industrial supply pump, the pump manufacturer's certification of suction capability.

If the apparatus has a fire pump or an industrial supply pump, a copy of the apparatus manufacturer's approval for stationary pumping applications.

If the apparatus has a fire pump or an industrial supply pump, the engine manufacturers certified brake horsepower curve for the engine furnished, showing the maximum governed speed.

If the apparatus has a fire pump or an industrial supply pump, the pump manufacturers certification of hydrostatic test (if applicable).

If the apparatus has a fire pump or an industrial supply pump, the Underwriters Laboratory certification of inspection and test for the fire pump (if applicable).

If the apparatus has an aerial device the Underwriters Laboratory certification of inspection and test for the aerial device.

If the apparatus has an aerial device, all the technical information required for inspections to comply with NFPA 1911, Standards for Testing Fire Department Aerial Devices.

If the apparatus has a fixed line voltage power source, the certification of the test for the fixed power source (if applicable).

If the apparatus is equipped with an air system, test results of the air quality, the SCBA fill station, and the air system installation.

Weight documents from certified scale - showing actual loading on the front axle, rear axle(s) and overall vehicle (with the water tank full but without personnel, equipment and hose) will be supplied with the complete vehicle to determine compliance with NFPA-1901

Written load analysis and results of electrical performance tests.

If the apparatus is equipped with a water tank, the certification of water tank capacity by the tank manufacturer.

The proposed chassis will be certified by KME as conforming to all applicable Federal Motor Vehicle Safety Standards (FMVSS) in effect at the date of contract. This will be attested to by the attachment of a FMVSS certify caution label on the vehicle by KME, who will be recognized as the responsible final manufacturer.

KME will be responsible for preparing and maintaining a record file of parts and assemblies used to manufacture the proposed apparatus. These records will be maintained in KME's factory for a minimum of twenty (20) years. The file will contain copies of any and all reported deficiencies, all replacement parts required to maintain the apparatus, and original purchase documents including specifications, contract, invoices, incomplete chassis certificates, quality control reports and final delivery acceptance documents. The purchaser will have access to any and all documents contained in this file upon official written request.

"TOP OF THE LINE" CHASSIS

KME is proposing a custom built chassis, which is "Top Of The Line" including the cab structure and design, Multiplex electrical system, drive train and frame assembly.

GENERAL CONSTRUCTION

The proposed apparatus, assemblies, subassemblies, component parts, etc., will be designed and constructed with the due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the apparatus is subjected to when placed in service. All parts of the apparatus will be designed with a factor of safety, which is equal to or greater than that which is considered standard and acceptable for this class of equipment in fire fighting service. All parts of the proposed apparatus will be strong enough to withstand general service under full load. The apparatus will be so designed that the various parts are readily accessible for lubrication, inspection, adjustment and repair.

The apparatus will be designed and constructed, and the equipment so mounted, with due consideration to distribution of the load between front and rear axles that all specified equipment, including a full complement of specified ground ladders, full water tank, loose equipment, and firefighters will be carried without overloading or injuring the apparatus.

SINGLE-LINE RESPONSIBILITY

KME is a true "sole source" manufacturer. KME engineers, designs, manufactures, builds and paints our own fire apparatus cab, chassis, body, aerial devices and electrical systems. All work is done in KME owned and operated manufacturing facilities by KME direct employees. This capability provides consistent design and manufacturing procedures that will reduce warranty issues and provide ease in parts replacement.

PRODUCT LIABILITY INSURANCE

KME provides liability and facility insurance equaling $30,000,000.00, which is one of the highest available in the fire industry. Reference attached documentation.

PAINT PERFORMANCE CERTIFICATION

The proposed KME apparatus meets or exceeds the required Commercial Vehicle Paint Performance Standards.

PRICES AND PAYMENTS

The bid price will be F.O.B. Destination, on a delivered and accepted basis at the Medway Fire Department.

Total price on KME's proposal sheet will include all items listed in these specifications.

KME has computed pricing less federal and state taxes. It is understood that any applicable taxes will be added to the proposed prices, unless the purchaser furnishes appropriate tax-exempt forms.

PERFORMANCE BOND

A performance bond will be supplied by the KME upon acceptance of the signed sales contract for the apparatus. The performance bond will be for an amount equal to the full contract price (i.e. 100% bond).

FAIR, ETHICAL AND LEGAL COMPETITION

In order to ensure fair, ethical, and legal competition, neither original equipment manufacturer (OEM) nor parent company of the OEM will have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

NON-COLLUSIVE BIDDING CERTIFICATION

By submission of this bid, KME and each person signing on behalf of any bidder, certifies, and in the case of a joint bid, each party thereof certifies as to its own organization, under penalty of perjury, that to the best of their knowledge and belief:

- The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for purpose of restricting competition, as to any matter relating to sell prices with any other bidder or any competitor.
- Unless otherwise required by law, the prices that have been quoted in this bid have not been knowingly disclosed by KME and will not knowingly be disclosed by KME prior to opening, directly or indirectly, to any other bidder or to any competitor
- No attempt has been made by KME to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.
- That all requirements of the law including amendatory provisions as to non-collusive bidding have been complied with.

MATERIAL AND WORKMANSHIP

All equipment furnished will be guaranteed to be new and of current manufacture, to meet all requirements of purchaser's specifications.

All workmanship will be of high quality and accomplished in a professional manner so as to insure a functional apparatus with a pleasing, aesthetic appearance.

CONTRACT SPECIALIST

KME will designate an in house individual to perform KME's contract specialist functions. The contract administrator will provide a single point interface between the purchaser and KME on all matters concerning the contract.

APPROVAL DRAWING

A detailed drawing of the apparatus will be provided to the Medway Fire Department for approval before construction begins. A copy of this drawing will also be provided to KME's representative. Upon Medway Fire Department approval, the finalized drawing will become a part of the total contract.

The drawing will show, but is not limited to, such items as the chassis make and model, major components, location of lights, sirens, all compartment locations and dimensions, special suctions, discharges, etc. The drawing will be a visual interpretation of the apparatus as it is to be supplied.

INSPECTION VISITS

KME will provide two (2) factory inspection trips to KME's facility. Transportation, meals, lodging, and other requisite expenses will be KME's responsibility.

Accommodations will be for three (3) Fire Department representatives per trip.

The factory visits will occur at the following stages of production of the apparatus:

- Pre-construction / blueprint review.
- Final inspection upon completion.

Travel arrangements less than 500 miles from the manufacturing facility will be via ground transportation.

The Medway Fire Department maintains the right to inspect the apparatus, within KME's normal business hours. At any other point during construction expenses incurred during non-specified inspection visits will be the responsibility of the Medway Fire Department.

During inspection visits, the Medway Fire Department reserves the right to conduct actual performance tests to evaluate completed portions of the unit. Testing will be accomplished with the assistance and resources of the contractor.

DELIVERY

Delivery of the apparatus to the Medway Fire Department will remain KME's responsibility.

A qualified and responsible representative of KME will deliver the apparatus to the Medway Fire Department.

DELIVERY TIME

KME is proposing to complete the apparatus delivery time based on the number of calendar days, starting from the date the sales contract is signed and accepted by KME Fire Apparatus.

Delivery Time:_____240-270_____ Calendar Days

DELVERY AND FAMILIARIZATION

Upon delivery, a KME certified delivery engineer with over 500 similar deliveries over his 20 year career to his credit, will come to the Medway Fire Department to demonstrate the unit to the Department and familiarize Department personnel with the apparatus. At the heart of the presentation there will be an **AS BUILT** PowerPoint presentation of the specific apparatus as delivered, that covers each and every control and feature of the unit. The program will be delivered to each Department shift and maintenance personnel as the Department may request. A copy of the PowerPoint program, in CD format, will be provided to the Department for future use.

INSTRUCTION MANUALS/DRAWINGS, SCHEMATIC

KME will supply at time of delivery, two (2) CD copies of a complete operation and service manual covering the complete apparatus as delivered and accepted.

The manual will contain the following:

- Descriptions, specifications, and ratings of chassis, pump (if applicable), and aerial device.
- Wiring diagrams.
- Lubrication charts.
- Operating instructions for the chassis, any major components such as a pump and any auxiliary systems.
- Instructions regarding the frequency and procedures recommended for maintenance.
- Parts replacement information.

VEHICLE FLUIDS PLATE

As required by NFPA-1901, KME will affix a permanent plate in the driver's compartment specifying the quantity and type of the following fluids used in the vehicle:

A permanent plate in the driving compartment will specify the quantity and type of the following fluids used in the vehicle:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Pump transmission lubrication fluid
- Pump primer fluid
- Drive axle(s) lubrication fluid
- Air-conditioning refrigerant
- Air-conditioning lubrication oil
- Power steering fluid
- Cab tilt mechanism
- Transfer case fluid
- Equipment rack fluid
- Air compressor system lubricant
- Generator system lubricant
- Aerial systems

PRIMARY PLANT CONSTRUCTION

In order to insure top quality construction, maximum assembly line and engineering communication and the highest level of manufacturing supervision the entire apparatus will be built at KME's (headquarters) manufacturing facility.

PROPOSAL BLUEPRINT

KME is providing a scaled drawing of the specific apparatus being proposed WITH THE BID. The drawing has been generated by KME's engineering department in order to maintain the accuracy of the drawing.

FAMA MEMBERSHIP

KME Fire Apparatus is a leading and proud member of the Fire Apparatus Manufacturer's Association (FAMA).

U.S.A. MANUFACTURER

The entire apparatus will be assembled within the borders of the Continental United States to insure more readily available parts (without added costs and delays caused by tariffs and customs) and service.

QUALITY MANAGEMENT

KME is certified ISO 9001 at all company locations. KME received its certification from Eagle Registrations Inc. after they assessed the company's quality system and found it to be in full compliance with ISO 9001. Eagle is accredited as a registrar by ANSI-ASQ National Accreditation Board (ANAB), the organization responsible for qualifying registrars as competent to audit and certify organizations conforming to ISO 9001 or other management system standards.

The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies from 130 countries. Its ISO 9001 standard is a quality assurance model made up of 20 sets of quality system requirements. This model applies to organizations that design, develop, produce, install, and service products.

This business management system allows KME to monitor processes to ensure they are effective; keep adequate records; check output for defects, with appropriate and corrective action where necessary; regularly review individual processes and the quality system itself for effectiveness; and facilitate continual improvement.

A copy of KME's certificate is included in this proposal.

TABLE OF CONTENTS

To provide for ease of bid comparison and to clearly locate all proposed items, KME has generated a Table of Contents that is provided at the beginning of the proposed bid specifications.

AMP DRAW REPORT

KME will provide with their bid proposal and at the time of delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

A written load analysis, which will include the following:

- The rating of the alternator.
- The minimum continuous load of each component that is specified per: Applicable NFPA-1901.
- Additional loads that, when added to the minimum continuous load, determine the total connected load.
- Each individual intermittent load.

All of the above listed items will be provided by KME per the applicable NFPA-1901.

COOPERATIVE PURCHASING

KME is pleased to allow other public agencies to use the purchase agreement resulting from this invitation to bid. The condition of such use by other agencies will be that any such agency must make and pursue contact, purchase order/contract, and all contractual remedies with KME. Such tag-on's will be done so that the original purchasing agency has no responsibility for performance by either KME or the agency using the contract.

GENERAL APPARATUS DESCRIPTION "PUMPER"

The unit will be designed to conform fully to the "Pumper Fire Apparatus" requirements as stated in the NFPA 1901 Standard (2016 Revision), which will include the following required chapters as stated in this revision:

- Chapter 1 Administration
- Chapter 2 Referenced Publications
- Chapter 3 Definitions
- Chapter 4 General Requirements
- Chapter 5 Pumper Fire Apparatus
- Chapter 12 Chassis and Vehicle Components
- Chapter 13 Low Voltage Electrical Systems and Warning Devices
- Chapter 14 Driving and Crew Areas
- Chapter 15 Body, Compartments and Equipment Mounting
- Chapter 16 Fire Pumps and Associated Equipment
- Chapter 18 Water Tanks
- Chapter 20 Foam Proportioning Systems
- Chapter 22 Line Voltage Electrical Systems

CAB SAFETY SIGNS

The following safety signs will be provided in the cab:

- A label displaying the maximum number of personnel the vehicle is designed to carry will be visible to the driver.
- “Occupants will be seated and belted when apparatus is in motion” signs will be visible from each seat.
- “Do Not Move Apparatus When Light Is On” sign adjacent to the warning light indicating a hazard if the apparatus is moved (as described in subsequent section).
- A label displaying the height, length, and GVWR of the vehicle will be visible to driver.
- This label will indicate that the Medway Fire Department will revise the dimension if vehicle height changes while vehicle is in service.

CHASSIS DATA LABELS

The following information will be on labels affixed to the vehicle:

Fluid Data

- Engine Oil
- Engine Coolant
- Chassis Transmission Fluid

- Pump Transmission Lubrication Fluid
- Pump Primer Fluid (if applicable)
- Drive Axle(s) Lubrication Fluid
- Air Conditioning Refrigerant
- Air Conditioning Lubrication Oil
- Power Steering Fluid
- Cab Tilt Mechanism Fluid
- Transfer Case Fluid (if applicable)
- Equipment Rack Fluid (if applicable)
- Air Compressor System Lubricant
- Generator System Lubricant (if applicable)
- Front Tire Cold Pressure
- Rear Tire Cold Pressure
- Aerial Hydraulic Fluid (if applicable)
- Maximum Tire Speed Rating

Chassis Data

- Chassis Manufacturer
- Production Number
- Year Built
- Month Manufactured
- Vehicle Identification Number

Manufacturers weight certification:

- Gross Vehicle (or Combination) Weight Rating (GVWR or GCWR)
- Gross Axle Weight Rating, Front
- Gross Axle Weight Rating, Rear

ROLLOVER STABILITY

The apparatus will meet the criteria defined in 4.13.1 for rollover stability as defined in the 2016 NFPA Standard for Automotive Fire Apparatus.

PRINCIPAL APPARATUS DIMENSIONS & G.V.W.R.

- OVERALL LENGTH: 407"
- OVERALL WIDTH: 100"
- OVERALL HEIGHT: 122"
- WHEELBASE: 210"

The axle and total weight ratings of the completed apparatus will not be less than the following minimum acceptable weight ratings:

- MINIMUM FRONT G.A.W.R.: 21,500 lbs.
- MINIMUM REAR G.A.W.R.: 31,000 lbs.
- MINIMUM TOTAL G.V.W.R.: 52,500 lbs.

KME will include the principal dimensions, front G.A.W.R., rear G.A.W.R., and total G.V.W.R. of the proposed apparatus. Additionally, KME will provide a weight distribution of the fully loaded, completed vehicle; this will include a filled water tank, specified hose load, miscellaneous equipment allowance in accordance with NFPA-1901 requirements, and an equivalent personnel load of 250 lbs. per seating position.

SEAT BELT ANCHOR TESTING

Each seat belt anchor will be tested to withstand 3,000lbs of pull on both the lap and shoulder belt in accordance with FMVSS 210 section 4.2.

SEAT MOUNTING TESTING

Each seat mounting position will be tested to withstand 20G's of force in accordance with FMVSS 207 section 4.2(c).

Both tests will be performed and verified at a third party testing and evaluation center.

"PREDATOR™ SS" (SEVERE SERVICE) CAB TYPE

- **FULL TILT**
- **CONTOUR WINDSHIELD**

The cab will be a custom tilt style, built specifically for fire service. The cab will be a cab over engine design, with integral tilt mechanism and engine access from inside the cab.

Cab will be designed, fabricated, assembled in its entirety, and installed on the frame rails in KME's factory. This requirement will eliminate any split responsibility in warranty and service.

OPEN SPACE DESIGN

The cab interior will be the "Open-Space" design with no wall, window or vertical support posts between the front and rear crew areas to allow direct communication, better visibility and air circulation in the cab.

CAB MATERIAL - ALUMINUM

The cab will be fabricated from 5052-H 32 aluminum alloy, utilizing the minimum material thickness as follows:

- Cab side panels 0.125 thick (1/8")
- Cab roof 0.125 thick (1/8")
- Forward cab front sheet 0.125 thick (1/8")
- Interior cab panels 0.125 thick (1/8")
- Other panels 0.125 thick (1/8")
- Cab doors 0.1875 thick (3/16")
- Engine enclosure side panels 0.250 thick (1/4")

CAB - BASE CONSTRUCTION

Cab sub-frame will be a welded assembly fabricated of 6063 structural aluminum alloy. This frame will extend the full length and width of the cab and be secured to the chassis frame through two (2) rear urethane self-centering load cushions, two (2) forward pivot brackets, and two (2) cab locks. The cab will be of entirely welded construction.

The front cab wall will be of double wall type construction, featuring an inner and outer panel.

CRASH TESTING CERTIFICATION

To ensure the safety of the cab occupants and cab integrity, proof of third party testing will be provided. The cab will be certified for SAEJ2422 side impact, SAEJ2420 with ECER29 cab front impact, and ECER29 cab roof strength.

Furthermore, proof of testing and certification will be provided that the cab, in accordance to SAE J2420 was front impact tested at 2.1 times the standard energy required in SAE J2420, thus exceeding the NFPA requirement.

This test will be performed with no support immediately behind the cab, thus providing an authentic test result.

DIMENSIONS – EXTENDED MEDIUM FOUR DOOR STYLE CAB

Minimum Cab Dimensions:

- Overall width 100"
- Inside width across ceiling 92"
- Front area floor to ceiling 61-3/4"
- Top of front seat to ceiling 44" (depending upon seat type)
- Seat back to steering wheel 21-1/4" (depending upon seat type)
- Inside width (door to engine enclosure) 24" (driver's side, at floor)
- Inside width (door to engine enclosure) 20-1/2" (officer's side, at floor)
- Crew seat area width 92"
- Outer crew seat risers to rear wall 41-1/2"
- Centerline axle to rear wall 59-1/2"

Glass Area Dimensions:

- Windshield (Contour) 3,422 sq. in.
- Side door window, retractable 625 sq. in. each
- Side fixed crew windows 550 sq. in. each

Cab Entry Door Width Dimensions

- Forward door opening 37" wide
- Rear door opening 37" wide

Cab Entry Step Dimensions

- Forward door recessed step 30" wide x 8-1/2" deep
- Rear door recessed step 20" wide x 8-1/2" deep

Cab Entry Door Height Dimensions

- Forward door opening 74-1/4" high
- Rear door opening 84-1/4" high

CAB ROOF

The roof will be of a split-level design with radius edges for an aesthetic, streamline appearance. The roof will be constructed the same material as the main structure and will be internally reinforced using framing which will span the entire width and length of the cab for maximum structural integrity. This will allow the roof to support personnel and roof mounted equipment without the need for additional reinforcement.

The cab roof over the rear crew area will be raised ten (10) inches higher than the front driver and officer area. The front face of the raised roof section will be sloped at a 45-degree angle, creating a streamlined interface with the standard, lower, forward roof section. The forward section of the raised roof will be notched to accommodate the roof mount air conditioning system. This design will allow for additional interior height in the rear crew area.

The rear crew area doors will be "Vista-Style", extending full height to the radius edge of the raised roof.

Approximate dimensions:

- Crew area floor to ceiling 64"
- Top of crew seat to ceiling 46" (depending upon seat type)

CAB ROOF OVERLAY

A bright finish aluminum tread plate overlay will be placed on the cab roof, starting at a point rearward of the light bar location and extending back to the end of the cab roof. This tread plate overlay will be sealed with caulking around the edges to prevent moisture from entering the area between the cab roof and the overlay.

CAB ROOF DRIP RAIL

For enhanced protection from inclement weather, a drip rail will be furnished on the sides of the cab. The drip rail will be constructed of bright polished extruded aluminum, and be fastened to the sides of the cab rood edge. The drip rail will extend the full length of the cab roof.

STEPWELL BATTERY ACCESS DOORS

The battery access door(s) will be 1/8" aluminum tread plate, drop down doors with thumb latches at each side rear cab step well.

BARRIER HEIGHT CAB DOORS

Four (4) side-opening doors will be provided. The cab doors will be shortened to the floorboard level, thus leaving an exposed step well area at each cab entrance. The cab doors will be totally aluminum construction with an extruded aluminum frame and an aluminum outer door skin.

The forward cab door opening will be a minimum of 37" wide, and the rear cab door opening will be a minimum of 37" wide. The rearward cab doors will have a radius cutout allowing the door opening to protrude forward over the cab wheel well, while providing full access to the rear crew area.

There will be a heavy-duty piano type stainless steel hinge on each door of a minimum pin diameter of 5/16". Hinges will be slotted for ease of horizontal and vertical adjustment. There will be a cab door seal and the doors will close flush with the side of the cab. A heavy-duty 6" wide belting material will be utilized to prevent the cab doors from opening greater than 90 degrees.

CAST OPEN GRATE STEPS

The front entrance steps will be a minimum of 9" deep. Each step will be a cast aluminum, open grate style step fabricated by Cast Products Inc. with a polished aluminum outer surface. The cab step risers will be overlaid with .063" polished aluminum tread plate.

The rear entrance steps will be a minimum of 9" deep. Each step will be a cast aluminum, open grate style step fabricated by Cast Products Inc. with a polished aluminum outer surface. The cab step risers will be overlaid with .063" polished aluminum tread plate.

BOLT ON WEATHER STRIP

The cab doors will be equipped with a weather strip, seal track on the lower portion of the door. Bolt-on tracks will be provided to allow for a snap-on, replaceable weather stripping to be changed easily, and will be fastened in place with neuters to ensure longevity.

DOOR LATCHES

Heavy-duty, bright finish cast paddle latches will be provided on the interior and exterior of each cab door. Door latch mechanisms which utilize spring steel clamps will not be considered due to their tendency to both rust and break. The interior door latch cables are to be designed to reduce adjustment or possible wear at the adjustment turnbuckles.

ELECTRIC WINDOWS

Each side cab door will have a tinted retractable window. The window track will be designed into the door frame extrusion, which will be extruded with a track groove to house a window track and seal. The window will be capable of being removed from an access slot designed in the bottom of the door frame.

All side cab doors will be equipped with electrically operated windows.

The driver will have a control to operate the officer's side window and the rear cab windows, located on the driver's door panel. The officer side window control will be on the officer's door panel.

The control for each rear door will be a rocker type automotive style switch located on the inside door panel within easy reach.

DOOR WINDOW TRIM

Each side cab door window will be designed with a custom extruded trim plate, which will conform to the perimeter of the window opening in each door. The trim plate will extend from the edge of the door skin to the window and will have a silver anodized finish.

INNER DOOR PANELS

The cab door interior panels will be covered with a one piece, full height, brushed aluminum panel for ease of maintenance. The panel will be 1/8" aluminum with a brushed finish and will be designed to allow easy access to the inner door.

Each interior cab door panel will be equipped with reflective ScotchLite material that will cover at least 96 in^2.

EXTERIOR CAB WALL OVERLAY

A bright finish aluminum tread plate overlay will be provided over the entire exterior rear cab wall. The tread plate overlay will be sealed with caulking around the edges to prevent moisture from getting between the cab and the overlay.

WINDSHIELD/GLASS

A two piece, symmetrical, safety glass windshield will be provided on the cab for the driver and officer providing a clear viewing area. The windshields will be full width to the center of the front cab support for each side and provide the occupants with a panoramic view. To provide enhanced peripheral vision on each side of the cab, the windshield and cab structure will be designed with radius corners, which provide a minimum of 8" of glass area, measured from the glass face to the side edge near the door post. The windshield will consist of three (3) layers; the outer light, the middle safety laminate and the inner light.

The thick outer light layer will provide superior chip resistance, the middle safety laminate layer will prevent the windshield glass pieces from detaching in the event of breakage and the inner light will provide yet another chip resistant layer.

The windshield will be a contour design with 3422 sq. in. of area for improved visibility and style. The windshield glass will be designed so it can be used on either the driver or officer side. Single piece windshields that utilize epoxy or that are bonded to the cab structure will not be acceptable.

WINDSHIELD WIPERS AND WASHER

Dual, electric operated, pantographic type windshield wipers will be provided. One (1) electric drive motor will be provided for each wiper.

Wipers will have "HI/LO" and "INTERMITTENT" operating speeds. "HI/LO" speeds will be controlled by a steering column control, within the turn signal control stem. "INTERMITTENT" operation will be controlled by a twist switch within the control on the steering column. The wipers will be of the self-parking type.

Windshield washers will be electric operated wet-arm type with a 3/4-gallon washer fluid reservoir, mounted inside the engine enclosure and readily accessible through the engine hatch at the rear of the engine enclosure. The washer control will be integral with the intermittent wiper control switch.

There will be individual removable panels on the front face of the cab for access to the wiper motor assemblies.

WINDSHIELD WIPER DURABILITY CERTIFICATION

Windshield wipers will survive testing in excess of 3 million cycles in accordance with section 6.2 of SAE J198 “Windshield Wiper Systems – Trucks, Buses and Multipurpose Vehicles”. KME will certify that the wiper system design has been “Third party tested” and that the wiper system has met this criteria.

CAB SIDE VIEWING WINDOWS

A fixed, tinted window with 620 sq. in of glass area will be provided on each side of the cab behind the forward cab doors. This window will be the same height as the window in the rear cab door for maximum visibility.

DARK TINTED REAR WINDOW GLASS

The windshield and the forward cab door glass will be provided with standard DOT green automotive tint. The side cab windows to the rear of the front doors, the rear cab door windows and any rear viewing windows will be equipped with a dark automotive tint.

GRAB HANDLES

Four (4) 1-1/4" diameter x 28" long, knurled bright anodized aluminum handrails will be provided, one (1) at each cab door entrance. Grab rail stanchions will be chrome plated and offset when necessary to prevent "hand-pinching" when opening or closing the doors. Formed rubber gaskets will be provided between each stanchion base and the cab surface.

INTERIOR GRAB RAILS

Grab rails will be provided to assist in entry and exiting of the cab. Each grab rail will be a cast aluminum "D" style handle that will have a wheelabrated finish and will be located in the following locations:

- One (1) 11" long, horizontally mounted, on each front cab door on the interior door panel
- One (1) 11" long, horizontally mounted, on each rear cab door on the interior door panel
- One (1), horizontally mounted, on each rear cab door, located at the same height as the window in the lowered position

FRONT CAB GRILL

A square mirror finished stainless steel grille will be installed to allow for maximum air flow to the charge air cooler and the radiator. A four (4) inch wide solid band will extend across the middle of the grill for lettering or lighting purposes.

AIR INTAKE/OUTLET

Two (2) SHAPED RECTANGLE, mirror finished stainless steel air inlets/outlets will be provided horizontally above the wheel well opening, one on each side of the cab. The grilles will be equipped with a mesh screen to serve as a secondary ember separator. The design will permit proper ducting of air through the engine compartment and cooling system.

ENGINE AIR INTAKE SYSTEM

The left side inlet, used for the air intake to the air cleaner, will be equipped with dual ember separators for separating burning embers from the air intake system. This system will be such that particles larger than .039 inches (1 mm) in diameter cannot reach the air filter element.

No part of the air intake system for the engine will be lower than the top of the frame rails to ensure the vehicle can navigate pooled water without any part of the air intake system being exposed to water when the vehicle is stopped or in motion. Chassis designs, which the engine air intake system is lower than the frame rails will not be acceptable!

CAB WHEEL WELL LINERS

The front cab wheel wells will be equipped with fully removable, bolt-in, aluminum inner wheel well liners. The liners will extend full depth into the truck frame. The completely washable wheel well liners will be designed to protect the cab substructure, inner panels, and other miscellaneous installed components from road salts, debris, dirt accumulation and corrosion.

CAB FENDERETTES

The cab wheel well openings will be trimmed with replaceable, bolt-in, polished aluminum fenderette. The fenderette will be secured to the cab with stainless steel threaded fasteners along the internal perimeter of the wheel well. Dissimilar metal tape and black vinyl trim molding will be used where the cab and fender meet.

FRONT MUD FLAPS

Heavy duty, black rubber type mud flaps will be provided behind the front wheels.

FOLD STEPS REAR CAB WALL

A folding step will be provided on the exterior rear wall of the cab, on the driver and officer side, to provide easy access to the pump house walkway. The steps will mount approximately 13" from the bottom of the rear cab sheet and centered 6" from the outer edge of the cab. The step will match the folding steps utilized on the apparatus body.

LANG-MEKRA 300 SERIES WEST COAST STYLE

Two (2) Lang-Mekra 300 Series West Coast style mirror assemblies will be furnished, one on each front cab door. Each mirror assembly will have a 17 x 6 shatterproof flat glass head mounted in a chrome plated housing and a 6-3/4 x 6-3/4 shatterproof convex head mounted in its own chrome plated housing. All heads will be electrically heated. The upper flat glass portion will be electrically controlled from the driver's seating position and the lower convex sections will be manually adjustable.

The mirror heads will be installed on a one piece break away style stainless steel loop mounted to the forward portion of the door with two (2) brackets, forward of the windows.

MIRROR CONTROL/S

To minimize wire circuits roughed from the dash to the door, the mirror position and heat (if applicable) controls will be programmed into and controlled from the multiplex control screen.

INTERIOR TRIM

The cab interior will be constructed to create an ergonomically designed interior to be user friendly and functional for the driver and officer.

The forward overhead panel will be a fabricated module, which will have six (6), 3" diameter, adjustable, windshield defroster/heat vents and four (4) comfort vents.

All interior upholstery panels will be gray in color. The upholstered cab overhead and side wall portions will utilize Durawear upholstery with padding underneath to provide additional insulation.

The interior metal surfaces of the cab will be finish painted with a textured gray paint.

INTERIOR REAR WALL

The interior rear wall of the cab will be covered with Durawear upholstery. This material will match the other upholstered areas of the cab.

A twelve (12) inch high bright finish aluminum tread plate scuff plate will be provided on the lower portion of the rear interior cab wall.

UNDER SEAT STORAGE COMPARTMENTS

There will be a compartment provided under each front seat. Each compartment will be accessible from the front of the seat riser when the door is opened.

BARYFOL FLOORING

The floor of the driver's compartment and the floor of the crew area will be lined with BARYFOL vinyl composite flooring to comply with NFPA noise and heat requirements.

CAB ACOUSTICAL INSULATION

One (1) inch thick acoustical insulation will be provided on the cab roof and rear and side walls of the cab. This material will be fitted between the cab structural members and secured with adhesive to provide an insulation barrier for noise and heat.

ENGINE ENCLOSURE

The forward portion of the engine enclosure will be covered with a Durawear material formed overlay to match the balance of the cab interior. To allow maximum "elbow room" for the driver and officer, the forward portion of the engine enclosure will feature a contour shape. The engine enclosure will not significantly obstruct the driver's vision in any direction. The enclosure will be an integral part of the cab structure, which will be constructed from material providing adequate strength to support radio, map boxes, etc. The engine enclosure will be insulated to protect from heat and sound. The noise insulation will keep the DBA level within the limits stated in the current NFPA series 1901 pamphlet.

A padded, hinged access door will be provided in the top rearward portion of the engine enclosure. The door will allow access to the engine oil, transmission fluid, power steering fluid level dipsticks and the windshield washer fluid reservoir. The access door will be provided with two (2) flush mounted latches and gas shock holders. There will be a Durawear material cover over the access door to give a cleaner look to the top of the engine enclosure and doghouse area.

The enclosure will be an integral part of the cab structure, which will be constructed from a minimum of .25" 5052-H32 aluminum. This material will be welded to the floor sub frame on each side of the cab and will extend from the very front of the cab to the rear of the engine enclosure.

ADDITIONAL ENGINE ENCLOSURE INSULATION

Premium soundproofing/insulation material, Barymat BTRLAX3-14BY will be installed in the engine enclosure. To ensure a clean, smooth surface, this material will be retained by flat aluminum panels fastened to studs that are welded to cab as needed. These panels will be removable. Any gaps in this insulation barrier will be sealed with 3M #425 aluminized high temperature tape.

To further reduce the noise and heat levels inside the cab, 1/4" foam upholstery material will be installed on all interior surfaces of the engine enclosure, below the upholstery material.

SUN VISORS

To provide maximum protection for the driver and officer, two (2) dark polycarbonate sun visors will be mounted in the cab overhead on each side.

ADVANCED OCCUPANT RESTRAINT SYSTEM

The cab will be equipped with advanced occupant restraint systems. This system will function in the event of a side roll over and will be compatible with occupants ranging from a 5^{th} percentile female to 95^{th} percentile male.

This system consists of a roll sensor, seat and occupant pretensioners; buckle pretensioners and inflatable side airbags. This system will be functionally active while the truck is in operation.

A hybrid or pyrotechnic inflator will inflate the side airbags. The bag should remain inflated to the extent of providing head cushioning for 10 seconds after inflation.

Pretensioners should be compatible with either ABTS or body mounted seats and seat belts. Buckle pretensioners will be used on static or power seats where there is no air suspension. The buckle pretensioners must be capable of stroking 125 mm.

ROLL SENSOR

The roll sensor continually monitors the roll rate and angle of the vehicle, and deploys safety devices when a roll event occurs. Deployment determination is made by a combination of vehicle angle and angular rate. Vehicle deployment angle will never exceed 60 degrees.

The roll sensor performs self-diagnostics each time the vehicle is started. A dash-mounted light will turn off after approximately 10 seconds if the sensor is functioning. During operation, the roll sensor monitors for proper connection to each safety device in the vehicle once per second. If improper connection is measured at any device or if an internal fault occurs, the roll sensor will illuminate the dash-mounted light. The system will continue to function in the event of non-critical faults. System diagnostics are on the SAE J1587 bus.

DRIVERS SEAT

The driver's seat will be a H. O. Bostrom Sierra EX8, high back bucket ABTS LH seat with Side Curtain Airbag.

The Side Air Curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stored position.

A suspension seat safety system will be included. When activated the system will pretension the seat belt around the occupant to firmly hold them in place in there event of a collision.

The seat will have a tapered and padded seat cushion with lumbar support. The seat will have an eight-inch fore and aft adjustment, a 2 inch height adjustment, front of seat tilt, rear of seat tilt and a reclining seat back. All seat movements will be electrically controlled from a control panel on the forward lower edge of the seat.

The seat will be equipped with a red integrated 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly.

OFFICERS SEAT

The officer's seat will be a H. O. Bostrom Tanker 450 ABTS RH series fixed base SCBA seat with Side Curtain Airbag.

The Side Air Curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stored position.

A suspension seat safety system will be included. When activated the system will pretension the seat belt around the occupant to firmly hold them in place in the event of a collision.

The seat will have a tapered and padded seat cushion with lumbar support. The seat will include a SCBA storage area with integral headrest.

The seat will be equipped with a red integrated 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly.

The officer's seat will include a H. O. BOSTROM Secure All™ SCBA Locking System. The bracket system will be free of straps and clamps that may interfere with auxiliary equipment on SCBA units. The center guide fork will keep the tank in-place for a safe and comfortable fit in seat cavity. Fire fighters will simply push the SCBA unit against the pivot arm to engage the patented auto-locking system. Once the lock is engaged, the top clamp will surround the top of the SCBA tank for a secure fit in all directions.

The standard release handle will be integrated into the seat cushion for quick and easy release and will eliminate the need for straps or pull cords to interfere with other SCBA equipment.

REAR FACING, OUTBOARD, DRIVER SIDE SEAT

The driver's side outboard rear facing crew seat will be a H. O. Bostrom Tanker 450 ABTS RH series fixed base SCBA seat with Side Curtain Airbag. The seat will have a tapered and padded seat cushion with lumbar support. The seat will include a SCBA storage area with integral headrest.

The Side Air Curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stored position.

A suspension seat safety system will be included. When activated the system will pretension the seat belt around the occupant to firmly hold them in place in the event of a collision.

The seat will be equipped with a red integrated 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly.

The driver's side rear facing outboard seat will include a H. O. BOSTROM Secure All™ SCBA Locking System. The bracket system will be free of straps and clamps that may interfere with auxiliary equipment on SCBA units. The center guide fork will keep the tank in-place for a safe and comfortable fit in seat cavity. Fire fighters will simply push the SCBA unit against the pivot arm to engage the patented auto-locking system. Once the lock is engaged, the top clamp will surround the top of the SCBA tank for a secure fit in all directions.

The standard release handle will be integrated into the seat cushion for quick and easy release and will eliminate the need for straps or pull cords to interfere with other SCBA equipment.

DELETE REAR FACING, OUTBOARD, OFFICER SIDE SEAT

There will not be a crew seat provided in the rear facing officer's side position to allow for mounting of compartments and/or other specified equipment.

CENTER FORWARD FACING CREW SEATS

Two (2) center inboard forward-facing crew seats will be provided. Each seat will be H. O. Bostrom Tanker 450 ABTS series fixed SCBA seat and will have a tapered and padded seat cushion with lumbar support.

Each seat will include an SCBA storage area with integral headrest.

Each seat will be equipped with a red integrated 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly.

The two (2) center inboard forward-facing crew seats will have standard seat.

Each center forward facing seat will include a H. O. BOSTROM Secure All™ SCBA Locking System. The bracket system will be free of straps and clamps that may interfere with auxiliary equipment on SCBA units. The center guide fork will keep the tank in-place for a safe and comfortable fit in seat cavity. Fire fighters will simply push the SCBA unit against the pivot arm to engage the patented auto-locking system. Once the lock is engaged, the top clamp will surround the top of the SCBA tank for a secure fit in all directions.

The standard release handle will be integrated into the seat cushion for quick and easy release and will eliminate the need for straps or pull cords to interfere with other SCBA equipment.

FORWARD FACING CREW SEAT RISER

The center forward facing seats will be mounted on an aluminum riser that will be mounted in the center of the cab. The riser will match the interior of the cab and will have open compartments with no doors.

SEAT UPHOLSTERY MATERIAL

The seats will be upholstered with heavy duty gray tweed Durawear material as provided by Bostrom.

SEAT ADJUSTMENT NOTICE

If equipped, adjustable seats may be limited by outside factors such as optional installed equipment (ie. ems compartments, battery chargers, scba cylinder brackets) and seat placement.

SEAT BELT CUSHION SENSORS AND BELT SENSORS

The apparatus will be equipped with a Class 1 seat belt warning system. The system will consist of a Seat Belt module and will display the seating positions through the main UltraView screen.

Seat belt and seat cushion sensors will be provided on the five (5) specified seating positions.

VEHICLE DATA RECORDER

A Class 1 Vehicle Data Recorder (VDR) system will be provided. The system will include an NFPA compliant "Black Box" with reporting software that will be capable of data storage to coincide with the NFPA requirements.

Data storage capabilities will include interfaces with the following systems:

- Display module (Master Optical Warning Device)
- VDR, date & time stamp
- Max Vehicle speed (MPH)
- Vehicle acceleration / deceleration (MPH/Sec.)
- Engine Speed (RPM)
- ABS event
- Data password protected
- Data sampled once per second, in 48-hour loop
- Data sampled min by min for 100 engine hours
- Throttle position (% of Throttle)
- Data software

- PC / Mac Compatible
- Data summary reports

The VDR data will be downloadable by USB cable to a computer using either Microsoft or Apple operating systems.

EXTERNAL CAB STORAGE COMPARTMENT WITH A HINGED DOOR + INTERNAL ACCESS DOOR

A storage compartment will be mounted in the cab in lieu of the officer's side rearward facing crew seat. The compartment will be approximately 23 7/8" deep x 41 3/4" high x 22 3/4" wide. The door opening will be approximately 35 7/8" high x 20" wide.

The compartment will be constructed of aluminum, painted with textured paint matching the interior color of the cab and will be equipped with a hinged flush mount door with a painted finish and an internal access door, latched and painted. The exterior door will be held in the open position by a gas shock stay arm.

The interior of the compartments will be finish painted with Multispec #7247 White Marble Stone scuff resistant paint to provide a protective application over all of the compartment interior surfaces.

The EMS compartment will be equipped with one (1) Amdor LED interior light(s). The lighting will be wired to automatically activate when the compartment door is open and the master battery switch is in the "on" position.

The officers side EMS compartment will be equipped with a Blue Sea 5025 power point with power and ground connections conveniently positioned in the upper area inside the compartment, connected directly to the chassis batteries.

Two (2) adjustable shelf(s) will be provided in the EMS compartment. The shelf(s) will be constructed from 3/16" brush aluminum mounted to uni-strut tracking material.

ANTENNA INSTALLATION

Three (3) antenna mounting base(s) model #MATM with 17' of coaxial cable will be provided and installed on the lower cab roof, behind the light bar. The attached antenna wire(s) will be run to the right side cab dash area.

The Medway Fire Department is responsible to have the correct antenna whip installed once the apparatus is delivered.

******* CAB INSTRUMENTATION & CONTROLS *******

DASH & CENTER CONSOLE

The dash will be a custom formed, vinyl overlaid aluminum housing to create an ergonomically designed interior that will be user friendly and functional for the driver and officer.

The instrument cluster will be centered in front of the driver and all gauges will be installed in a non glare, pewter finish panel.

All warning lights and indicators will be located in either the gauge itself or in the lower center portion. Each gauge will be equipped with an international symbol that is easily recognizable; denoting the system being monitored .Instrumentation will be backlit for easy identification when activated.

The transmission gear selector will be located on the left side of the center dash assembly, toward the driver for easy access.

DRIVER'S DASHBOARD PANEL

The main instrument panel will be centered in front of the driver and will have a hinged bottom with two ¼ turn latches at the top. The panel will be made of 1/8" aluminum with an anti-glare, pewter brushed surface and will contain the primary gauges, an instrument warning light cluster and the ignition and engine start switches.

The lower portion of this panel can be used for the installation of up to five (5) guarded type rocker switches. Examples of the switches that will be installed in this area are automatic chains, fan clutch over-ride, ATC mud-snow, inter-axle diff lock, electric fuel pump, all wheel drive, etc.

The main instrument panel will contain the primary gauges. An ignition and engine start switch will be located on a panel to the left upper portion of the driver's side dash panel.

Each gauge will have a raised glass lens with a black matte finish trim ring and be backlit by integral white LEDs. Each gauge will also possess an integral red warning light with a pre-programmed warning point. Each gauge warning indicator will be capable of activating an audible alarm inside the dashboard.

The primary gauges will consist of:

- Vehicle speedometer, (0-80 mph)
- Engine tachometer, (0-3000 rpm)
- Engine oil pressure, (0-100 psi); low oil warning
- Engine coolant temperature (100-280 °F); high engine temp warning
- Transmission oil temperature (100-350 °F); high transmission fluid temp warning
- Vehicle battery voltage (9-18 VDC); low voltage warning
- Front air system gauge (0-150 psi); low air pressure warning at 65 psi
- Rear air system gauge (0-150 psi); low oil pressure warning at 65 psi
- Fuel level (E - 1/2 - F); low fuel level warning
- Air cleaner restriction gauge (0-40), warning at 25"

Additional auxiliary control switches and instruments (if applicable) will be located within the dash panel and overhead panel located near the driver's position.

- Diesel Exhaust Fluid level (E-1/2-F); low fuel level warning @ 1/8 tank

- Engine Compression Brake Controls

CLASS 1 DISPLAY

An UltraView 450 4.3" display will be provided on the dash for the electrical Class One ES-Key multiplex system. The exact location will be determined by the totality of instruments and switches on the cab dash.

INDICATOR CLUSTER

The driver's dashboard panel will consist of Ametek gauges, an 18 item instrument warning light cluster and a 16 item, dead front type alarm panel.

This display will contain the system control unit that collects data from the vehicle data bus (J1939), analog sensors, and switches throughout the vehicle. This data will be presented using gauges, telltales and the two (2) display panels. The warning light display will include a 2 x 20 dot matrix display, 18 telltales and 2 buttons to navigate through the screen menus.

The LCD dot matrix display will be a 2 line by 20-character display with each character being 7 dot by 5 dot configuration. FSTN technology will be used on the display for wide viewing capability. The module will be backlit with amber LEDs. The unit will also be supplied with a heater to ensure proper operation over the entire 40 to +85 deg. C.

This display contains a series of two (2) screens to provide information about the vehicle. To control the display of that information, the screens are divided into two (2) menus; one that can be displayed while the vehicle is in motion and one that can only be accessed when the parking brake is set.

On the Road displays include:

- Two (2) configurable displays that can show any of the parameters the unit collects. This includes odometer, trip information, fuel economy information; all gauge data, and virtually any other data available on the vehicle that the display has access to, either through the data bus or via analog inputs.
- Two (2) trip displays for miles and hours that are capable of being reset.
- Two (2) fuel data screens: will be provided; one for fuel remaining until empty and one for fuel economy. The fuel economy display will be capable of being reset so that average economy over a predetermined period can be displayed.

The displays that can be accessed when the parking brake is set include:

- Engine hours as maintained by the engine ECU
- Service Alarm screens to report miles to next service or miles past required service. These screens will allow the operator to choose the length of the service interval and will have the ability to reset it.
- Message screens with warning messages the display has collected during the current ignition cycle. These screens will be divided into configured warnings such as “Low Air Pressure” and the data bus faults reported by ECU's on the vehicle. Both lists will allow the operator to review the last 12 events that occurred on the vehicle for maintenance and troubleshooting purposes.
- Diagnostic screens will test the instrumentation system to verify it is working correctly.
- Setup screens will be used to select either English or metric display. They will also allow the operator to choose the data that will be displayed by the configurable on-the-road screens.

The system will be configured with user defined warning messages such as Low Air Pressure or High Coolant Temperature. When these events occur the warning message will come up on the screen and can be accompanied by a buzzer. The messages will be prioritized so the most important messages are always displayed. Whether the message can be dismissed by pressing a button will be configurable. Messages that have been dismissed but are still active will be retained in the message screens for review until the ignition is turned off. Listed below are the defined telltales and their indicators.

- "Right And Left Directional" arrows (green in color)
- "Ignition ON" Indicator (amber in color)
- "Hi Beam" indicator (blue in color)
- "Battery ON" indicator (green in color)
- "Parking Brake ON" indicator (red in color)
- "Check Transmission" indicator (amber in color)
- "Cab Not Latched" indicator (red in color)
- "Stop Engine" indicator (red in color)
- "Check Engine" indicator (amber in color)
- "ABS Warning" indicator (red in color)
- "Low Coolant Level" (red in color)
- "Fuel Restriction" indicator (amber in color)
- "Water In Fuel" indicator (amber in color)
- "Fasten Seat Belts" indicator (red in color)
- "Fast Idle" Indicator (amber in color)
- "Do Not Move Truck" indicator (red in color)
- "DPF Regeneration" (amber in color)
- "Exhaust High Temperature" (amber in color)
- "Engine Diagnostic Fault" (amber in color)
- "Retarder On" (green in color)

Listed below are indicators that may be included, depending upon the vehicle configuration:

- "Wait To Start" indicator (amber in color)
- "Exhaust System Fault" (amber in color)
- "Topps System Fault" (amber in color)
- "Lube System Active" (amber in color)
- "Jacks Not Stowed" (red in color)
- "PTO Engaged" (green in color)
- "Inter Axle Lock" (amber in color)
- "Driver Controlled Diff Lock" (green in color)
- "Ok to Pump" (green in color)
- "Auto Traction Control" (amber in color)
- "Retarder Active" (amber in color)
- "Auxiliary Brake Active" (amber in color).

LOWER RIGHT AUXILIARY SWITCH PANEL

The driver's lower right panel will be capable of housing five (5) guarded type rocker switches. Examples of the switches that will be installed in this area are automatic chains, fan clutch over-ride, ATC, inter-axle diff lock, electric fuel pump, all wheel drive, etc.

PUMP SHIFT CONTROL

The pump shift control and pump engaged indicator light will be mounted in the driver's lower left panel.

The pump shift control will be a Mil Spec toggle switch with mechanical detents mounted in a fully backlit panel that will have indicators for "Pump Engage" and "Ok To Pump". The mode of the transfer case will be controlled by remotely mounted air solenoids which will be activated and monitored through the chassis control logic of the multiplex system.

MOBILE TERMINAL AREA

There will be a flat surface area in front of the officer for placement of a laptop computer.

CENTER OVERHEAD PANEL

An overhead console with a removable pewter panel will be provided on the cab roof between the driver and officer to permit installation of cab stereo, intercom systems, arrow stick controls, etc. The overhead console will be approximately 27" wide x 4" high x 13" deep and will be painted to match the interior of the cab. The overhead console will not obstruct the driver's vision through the officer's side window.

HEATER/DEFROSTER AND AIR CONDITIONING SYSTEM

System will utilize one (1) International Components Engineering #TM-31 HD compressor, mounted as close to level as practicable. The compressor will have a serpentine Poly "V" drive belt system installed in accordance with the compressor and belt manufacturer's requirements.

Air conditioning hoses and fittings will be appropriately sized to the compressor and other specified air conditioning components. Minimum hose size, will be #10 hose for discharge and #12 hose for suction. Steel hose end fittings will be provided at the compressor. The air conditioner hose will be the Aeroquip “Easy Clip” style hoses as recommended by Aeroquip.

One (1) condenser, rated at a minimum of 72,000 BTU cooling and 104,000 BTU heating will be provided on the cab roof. Both the front and rear overhead units will include the heating units. (if applicable the raised roof will be equipped with notch to accommodate the condenser unit)

Two (2) evaporators, with a minimum blower output of 720 CFM through the louvers will be provided. Both evaporator units will be mounted on the cab roof, enclosed by aluminum panels painted white. The evaporator louvers and controls will penetrate the cab roof into occupant compartments to the least extent practicable. Fourteen (14) 3" diameter adjustable louvers will be furnished, four (4) in the front crew area and eight (8) in the rear crew area of the cab. The A/C drain lines will be routed to the inside of the cab wheel well area. Draining condensation into the interior of the cab or onto the occupants, roof or windshield will not be acceptable under any conditions.

The dual evaporator will be roof mounted to allow service and maintenance without the need to remove interior components or upholstery.

System will be compatible with R134A refrigerant.

The 12-volt system for the air conditioners will have first priority to be load managed. The system will utilize clearly labeled automatic reset-type circuit breakers.

The controls panel will actuate the air-distribution system with air cylinders, which are to be separated from the brake system by an 85-90 psi pressure protection valve.

The air conditioning system will be configured to only operate when the vehicle's engine is running.

The blowers, in both evaporators, will be in operation whenever the air conditioning system is activated.

Heater-defroster will have a three-speed electric fan with a minimum output of 720 CFM through the louvers. Six (6) 3" diameter adjustable defroster outlets will be provided for directing warm air to the windshields. Heater-defroster unit controls will be illuminated. Water lines from the engine to heater-defroster will be 5/8" heater hose with readily accessible flexible connections at each end. The water lines to the heater will have brass shut-off valves mounted on the engine to isolate the heater-defroster unit. The heater hose installation will not incorporate a copper tube manifold.

The heater/defroster unit will clear the windshield in half-the-time required by SAE Standards.

A serviceable foam intake filter will be installed on the rear of the evaporator.

ROOF MOUNT CONDENSER

A 12-volt roof top dual condenser will be strategically positioned on the cab roof so as not to interfere with any emergency lighting systems. The condenser will be designed with high performance, long life fan assemblies. The fan motors are to be equipped with sealed housings and shaft.

The condenser and coil design will include rifled tubing for maximum efficiency. Each coil will be painted black. The condenser unit must include a receiver drier with a high and low pressure switch. The wire harness will include necessary wiring for the clutch circuit as well as a separate power relay circuit.

Mounting design will enable easy servicing of all components and unit replacement if necessary.

The roof mounted air conditioning condenser housing(s) will be painted to match the cab roof color.

CLIMATE CONTROL SWITCHES

The multiplex system control screen will contain all controls for the cab HVAC control system. The following controls will be programmed into the control/display: mode selector switch, front fan speed switch, rear fan speed switch, air conditioning on/off switch, and temperature control dial.

CAB TILT ASSEMBLY

A hydraulic cab lift system will be provided, consisting of an electric-powered hydraulic pump, fluid reservoir, dual lift cylinders, remote cab lift controls and all necessary hoses and valves.

The cab tilt mechanism will be custom designed for ease of maintenance and consist of two (2) hydraulic cylinders. Hydraulic lines will be rated at 20,000 PSI burst pressure. The hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the cab is in the tilt position.

Hydraulic cylinders will be detachable to allow removal of the engine for major service. A remote cable operated mechanical cylinder stay bar and release will be provided to insure a positive lock in the tilted position.

The two (2) rear outboard cab latches will be of the hydraulic pressure release, automatic re-latching type, and provide an automatic positive lock when the cab is lowered. The latch will not disengage or experience any damage when subjected to a pull apart tensile load of 6,000 lbs. The hydraulic pressure required to unlock the latch will not exceed 550 PSI. The latch will withstand 5,000 PSI without leaks or damage and withstand 1,000 continuous cycles of operation under a load of 1,000 lbs at liftoff. The tilt pump will be electric over hydraulic type, with a pressure rating of not less than 4,000

PSI. Additionally, the cab tilt device will be both electrically and hydraulically interlocked to prevent inadvertent activation of the cab tilt system.

- A "CAB NOT LATCHED" indicator will be provided in the cab dash-warning cluster.
- A dual switch control system will be provided for the cab tilt, located on the passenger side of the vehicle or on the optional tether control. System will consist of a three (3) position toggle switch along with a rubber covered push button switch.

AUXILIARY MANUAL CAB LIFT

An auxiliary manual cab lift backup system will be furnished inside the passenger side of the pump enclosure or front compartment for use in the event of total electrical shutdown.

The cab tilt control will be equipped with an interlock that will disable the cab tilt system in the event the parking brake is not applied.

CHASSIS FRAME ASSEMBLY

The chassis frame will be fabricated in its entirety at KME's facility. This will prevent any split responsibility in warranty or service.

The frame will consist of two (2) channels fastened together by cross members. All structural fasteners used in the frame will be Grade 8 hardware. Hardened steel washers will be used under all bolt heads and nuts to avoid stress concentrations. Top flange will be free of bolt heads. All spring hangers will be machined steel castings. Frame assemblies that are welded or assembled with “Huck” type fasteners are not acceptable.”

Each main frame rail will be 10-1/4" x 4" x 3/8", fabricated from Domex™ 110,000 PSI minimum yield steel, with a minimum section modulus of 18.396 cu in and a resisting bending moment (RBM) of 2,023,560 inch pounds. The frame rails will be drilled “together” (back to back) on a frame drilling machine with an internally cooled drill bit in order to minimize the deviation in hole diameter or location. Frames are built for the specific apparatus under construction so that no unnecessary holes or modifications are made to the frame assembly.

A full length inner frame liner 9.44" X 3.63" X 3/8" will be installed. Total section modulus of each rail, with liner, will be 33.56 cu in and the total resisting bending moment (RBM) will be a minimum of 3,691,050 in-lbs, per rail.

The chassis frame assembly, consisting of frame rails, cross members, axles and steering gear(s), will be finish painted before installation of any electrical wiring, fuel system components, or air system components. All components or brackets fastened to the frame rails will be cleaned, primed and painted prior to being attached to the frame rails.

PAINTED STEEL FRONT BUMPER

A 12" high, 101" wide, painted steel front bumper will be provided. The bumper will be constructed from 3/8" steel, which will be designed with 45-degree welded corners and a 2" flange on the top and bottom. The ends of the bumper will be supported by horizontal channels, which will extend from the frame rails to the sides of the bumper. The color of the bumper will match the cab and body base color.

BUMPER EXTENSION

The bumper will be extended 20" with a polished aluminum tread plate gravel shield enclosing the top and ends.

The polished aluminum tread plate gravel shield will extend over the top bumper flange. The gravel shield will match the contour of the front bumper.

STORAGE WELL - CENTER

One (1) storage well constructed of 1/8" aluminum will be installed in the gravel shield. This storage well will be center mounted between the chassis frame rails. The bottom of the storage well will have a minimum of four (4) drain holes.

The center front bumper hose well will be furnished with a MESH NET cover to secure the hose stored in the well. The cover will be attached to the hose well with Velcro.

CENTER WELL - HOSE CAPACITY

The center storage well will have the desired capacity of:

- 150' of 1 3/4" hose

FRONT TOW EYES

Two (2) painted steel, tow eyes will be fastened directly to the frame web, extending below the bumper. The tow eyes will be fastened with grade 8 bolts and nuts.

LICENSE PLATE BRACKET

A chrome plated license plate bracket will be provided on the front bumper of the apparatus.

FRONT AXLE

Front axle will be a Meritor MFS-20-133 A-N, includes low friction "Easy Steer" bushing technology for maximum steering ease and longer life.

The front axle will be rated at 21,500 lbs.

FRONT BRAKES

Brakes will be "S" Cam 16.5" x 6" and will be full air actuated with automatic slack adjusters.

FRONT SUSPENSION

Front suspension will be progressive rate front leaf springs. The spring will be permanently pinned at the front and have a shackle double pinned mounting at the rear.

The front leaf springs will have a minimum of 10 leaves, a minimum length of 51", and a minimum width of 3-1/2". The capacity at ground will be 21,500 lbs. All springs will be of center bolt design. All spring pins will be positively restrained from rotating in brackets and shackles.

FRONT AXLE SHOCK ABSORBERS - SPECIAL FOR FRONT SUCTION - MONROE "MAGNUM "

The front suspension system will be equipped with Monroe, "Magnum", double acting hydraulic shock absorbers. Shock absorbers to have a minimum bore of 1.38" and an outside diameter of approximately 3-1/4".

REAR AXLE

Rear axle will be a single, Meritor RS-30-185 with a capacity of 31,000 lbs. (Minimum). Axle will be a single reduction axle with hypoid gearing and oil-lubricated wheels bearing. Oil seals will be provided as standard equipment.

REAR BRAKES

Brakes will be "S" Cam, 16-1/2" x 7" size and will be full air actuated with automatic slack adjusters.
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REAR AXLE TOP SPEED

The rear axle/s will be geared for a vehicle top speed in accordance with NFPA sections 4.15.2 and 4.15.3.

Units with GVWR over 26,000 pounds will be limited to 68 mph. If the combined tank capacity is over 1250 gallons of foam and water or the GVWR is over 50,000 pounds, the vehicle top speed will be limited to 60 mph or the fire service rating of the tires, whichever is lower.

REAR SUSPENSION

The rear suspension will be leaf type, variable rate with a 31,000 lb. rating. The main spring assembly will consist of 14 leaves with the main spring measuring 60.5" L x 3" W.

There will be a rubber block helper mounted above the leaf springs, rated at 4,500 lbs. Two (2) fully wrapped leaves will transmit driving and braking torque. The rating will be designed to match or exceed the rear axle.

BRAKE SYSTEM

A dual circuit, air operated braking system, meeting the design and performance requirements of FMVSS -121 and the operating test requirements of NFPA 1901 current edition will be installed. It will be direct air type with dual air treadle in the cab. The system will be powered by an engine mounted, gear driven air compressor protected by a heated air dryer.

The air system will be plumbed with reinforced, air brake tubing/hose in conformance to SAE J 844-94, Type B and U.S.D.O.T. standards. The compressor discharge will be plumbed with stainless steel braided hose lines with a Teflon lining. Eaton Synflex Eclipse Air Brake tubing will be run along the inside frame rails and connected with push to connect type fittings that meet or exceed all industry standards. All Synflex tubing will be secured with non-conductive, corrosion resistant strapping mounted with standoff fasteners.

Cord reinforced rubber hose lines with brass fittings will be installed from the frame rails to axle mounted air connections.

The air system will provide a rapid air build-up feature and low-pressure protection valve with light and buzzer, designed to meet the requirements of NFPA 1901, current edition.

ABS SYSTEM

An Anti-Skid Braking System (ABS) will be provided to improve braking control and reduce stopping distance. This braking system will be fitted to all of the axles. All electrical connections will be environmentally sealed, water, weatherproof, and vibration resistant.

The system will constantly monitor wheel behavior during braking. Sensors on each wheel will transmit wheel speed data to an electronic processor which will sense approaching wheel lock causing instant brake pressure modulation up to 5 times per second in order to prevent wheel lockup. Each wheel will be individually controlled.

To improve service trouble shooting, provisions in the system for an optional diagnostic tester will be provided. The system will test itself each time the vehicle is started. A dash-mounted light will go out once the vehicle has attained 4 mph after successful ABS start-up. To improve field performance; the system will be equipped with a dual circuit design. The system circuits will be configured in a diagonal pattern. Should a malfunction occur, the defective circuit will revert to normal braking action. A warning light will signal malfunction to the operator. The system will consist of a wheel mounted toothed ring, sensor, sensor clip, electronic control unit and solenoid control valve.

The sensor clip will hold the sensor in close proximity to the toothed ring. An inductive sensor consisting of a permanent magnet with a round pole pin and coil will produce an alternating current with a frequency proportional to wheel speed. The unit will be sealed, corrosion resistant and protected from electromagnetic interference. The electronic control unit will monitor the speed of each wheel. A deviation will be corrected by cyclical brake application and release. If a malfunction occurs, the defective circuit will signal the operator and the malfunctioning portion of the system will shut down. The system will be installed in a diagonal pattern for side-to-side control. The system will insure that each wheel is braking to optimum efficiency up to 5 times a second.

The system will also control application of the auxiliary engine exhaust or drive line brakes to prevent wheel lock.

This system will have a three (3) year or 300,000 mile parts and labor warranty as provided by Meritor Wabco Vehicle Control Systems.

BRAKE AIR RESERVOIRS

There will be a minimum of three (3) air reservoirs installed in conformance with best automotive practices. Reservoir capacity total will be a minimum of 4693 cubic inches.

The air reservoirs will be color coded to match the air lines for easy identification, ease of maintenance and troubleshooting. The reservoirs will be painted the following colors:

- Wet Tank — Black
- Primary Tank — Green
- Secondary Tank — Blue

STAINLESS STEEL AIR TANK BRACKETS

Stainless steel air tank brackets will be provided to secure the air tanks to the chassis frame.

For ease of daily maintenance, each air system reservoir will be equipped with a brass 1/4 turn drain valve.

AIR DRYER

A Bendix AD-9, 12 volt heated air dryer will be furnished. An automatic moisture ejector on the primary or wet tank will also be furnished.

AIR LINES

The entire chassis air system will be plumbed utilizing reinforced, Synflex air lines, which will be equipped with quick release type fittings. All of the airlines will be color coded to correspond with an air system schematic and will be adequately protected from heat and chafing.

AIR COMPRESSOR

Air compressor will be a Wabco brand, minimum of 18.7 cubic feet per minute capacity. Air brake system will be the quick build up type. The air compressor discharge line will be stainless steel braid reinforced Teflon hose.

A pressure protection valve will be installed to prevent the use of air horns or other air operated devices should the air system pressure drop below 80 psi (552 kPa).

The chassis air system will meet NFPA 1901, latest edition for rapid air pressure build-up within sixty (60) seconds from a completely discharged air system. This system will provide sufficient air pressure so that the apparatus has no brake drag and is able to stop under the intended operating conditions following the sixty (60) seconds build-up time.

BRAKE TREADLE VALVE

A Bendix dual brake treadle valve will be mounted on the floor in front of the driver. The brake control will be positioned to provide unobstructed access and comfort for the driver.

PARKING BRAKE

Parking brake will be of the spring-actuated type, mounted on the rear axle brake chambers. The parking brake control will be mounted on the cab center instrument panel, offset toward the driver. A red indicator light will be provided in the driver dash panel that will illuminate when the parking brake is applied.

AUXILIARY AIR INLET

One (1) air inlet with male coupling will be provided. It will allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet will be located in the driver side lower step well of cab. A check valve will be provided to prevent reverse flow of air. The inlet will discharge into the "wet" tank of the brake system. A mating female coupling will also be provided with the loose equipment.

This inlet will allow a purchaser furnished external air supply to be connected to the chassis air system.

FRONT WHEELS & TIRES

The front wheels will be 22.5" x 12.25" ten stud, hub piloted steel disc type, painted job color.

The steel disc front wheels will be provided with bright nut covers and hub caps.

The front tires will be Goodyear 425/65R22.5 "20 Ply" tubeless radial G296 MSA on/off road tread. The tires will be fire service rated up to 24,400 lbs and will have a top speed of 68 mph when inflated to 120 psi.

Fire Service Rating defined as no more than 50 miles of continuous operation at maximum load, or without stopping for at least 20 minutes. Emergency vehicle will reduce its speed to no more than 50 mph after the first 50 miles of travel.

Industry load and inflation standards are in a constant state of change. Printed material may not reflect the latest load and inflation standards.

REAR WHEELS & TIRES

The rear wheels will be 22.5" x 9" ten stud, hub piloted steel disc type, painted job color.

The single rear axle steel disc wheels will be provided with bright nut covers and hub caps.

The rear tires will be Goodyear 315/80R22.5 "18 Ply" tubeless radial RHD II+ traction tread. The tires will be fire service rated up to 32,000 lbs and will have a top speed of 75 mph when inflated to 125 psi.

Fire Service Rating defined as no more than 50 miles of continuous operation at maximum load, or without stopping for at least 20 minutes. Emergency vehicle will reduce its speed to no more than 50 mph after the first 50 miles of travel.

Industry load and inflation standards are in a constant state of change. Printed material may not reflect the latest load and inflation standards.

TIRE PRESSURE MONITORING DEVICES

Each tire will be equipped with an LED tire alert pressure management system (Vecsafe equal) that will monitor tire pressure. A chrome plated brass sensor will be provided on the valve stem of each tire.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 8 psi.

ENGINE

Engine will be a Cummins, Model IS12 500, diesel, turbo-charged, per the following specifications.

- Max. Horsepower — 500 HP @ 1800 RPM
- Governed Speed — 2100 RPM
- Peak Torque — 1645 lb. ft. @ 1100 RPM
- Cylinders — Six (6)
- Operating Cycles — Four (4)
- Bore & Stroke — 5.11 x 5.91 in.
- Displacement — 729 cu. in.

- Compression Ratio 16.6:1
- Governor Type Limiting Speed
- Drive line Size 1810 Series.

Engine oil filters will be engine manufacturers branded or approved equal. Engine oil filters will be accessible for ease of service and replacement.

A fuel/water separator will be provided.

ENGINE CHASSIS CERTIFICATION

The engine will be installed in accordance with engine manufacturer's instructions. KME will be able to furnish proof of engine installation approval by the engine manufacturer.

COOLING/RADIATOR

The radiator and the complete cooling system will meet or exceed NFPA and engine manufacturer cooling system standards.

To provide maximum corrosion resistance and cooling performance, the entire radiator core will be constructed using long life aluminum alloy. The core will be made of aluminum fins, having a serpentine design, brazed to aluminum tubes. The tubes will be brazed to aluminum headers. No solder joints or leaded material of any kind will be acceptable in the core assembly.

The radiator core will have a height of 35.92" x a width of 37.62". Supply and return tanks made of glass-reinforced nylon will be crimped on to the core assembly using header tabs and a compression gasket to complete the radiator core assembly. The radiator will be compatible with commercial antifreeze solutions.

There will be a full steel frame around the entire radiator core assembly. The radiator core assembly will be isolated within the steel frame by rubber inserts to enhance cooling system durability and reliability. The radiator will be mounted in such a manner as to prevent the development of leaks caused by twisting or straining when the apparatus operates over uneven ground. The radiator assembly will be isolated from the chassis frame rails with rubber isolators.

The cooling system will include a surge tank mounted to the top of the radiator framework that will remove air in the system. The surge tank will be equipped with a sight glass to monitor the level of coolant. The radiator will be equipped with a dual seal cap that will allow for expansion and recovery of coolant into a separate integral chamber.

The cooling system will be designed for a maximum of fifteen (15) PSI operation.

A drain port will be located at the lowest point of the cooling system and/or the bottom of the radiator to permit complete flushing of the coolant from the system.

Extended life engine coolant will provide anti-freeze protection to -30° F. The mixture will be per the engine manufacture's specifications.

The engine cooling system will have an inline coolant filter that will have a shut off valve for ease of maintenance.

The engine cooling system will be certified by the engine manufacturer to meet cooling index requirements for a minimum ambient temperature or 110-degrees Fahrenheit.

TRANSMISSION COOLER

A shell and tube transmission oil cooler will be provided using engine coolant to control the transmission oil temperature. The cooler will have an aluminum shell and copper tubes. The cooler will be assembled using pressed in rubber tube sheets to mechanically create a reliable seal between the coolant and the oil. No brazed, soldered, or welded connections will be used to separate the coolant from the oil.

RADIATOR CROSSMEMBER

The radiator installation will include a radiator crossmember for additional strength and durability. This crossmember will be designed so the angle of approach is not effected.

CHARGE AIR COOLER

The charge air cooler will be constructed of aluminum with cast aluminum side tanks. To not restrict air flow to the radiator, the charge air cooler will be designed to be an integral part of the radiator assembly, mounted directly on top of the radiator. Rubber isolators will be used at the mounting points to reduce transmission of vibrations.

Where applicable, the charge air cooler pipes will be constructed of appropriately sized aluminized steel tubing with 0.06" wall thickness and formed hose barbs. The connections between these pipes, the engine and charged air cooler, will be made using high temperature silicone hoses rated for use in temperature up to 500°F, and heavy duty constant tension T-Bolt spring hose clamps. These connections will adequately allow for movement of the engine relative to the charged air cooler.

Charge air coolers that are located in front of the radiator, that block or restrict air flow into the engine radiator or introduce above ambient temperature air into the radiator in any way will not be used.

COOLING SYSTEM FAN

The engine cooling system will incorporate a heavy-duty fan, installed on the engine and include a shroud.

The fan will be equipped with an air operated clutch fan, which will activate at a pre-determined temperature range.

Recirculation shields will be installed to ensure that air which has passed through the radiator is not drawn through it again.

COOLANT HOSE AND PIPING

All coolant piping will be constructed of appropriately sized powder coated steel tubing with 0.06" wall thickness and formed hose barbs. All connections between coolant pipes and chassis components will be made using appropriately sized silicone hoses or elbows, rated for use in temperatures ranging from -60°F to +350°F, and appropriately sized constant torque hose clamps. These connections will be minimal in number to reduce the number potential leak points, and will adequately allow for movement of the engine relative to chassis mounted components. All integral hoses supplied with the engine will be as supplied by the engine manufacturer.

HEATER HOSES

Premium Goodyear Hi-Miler® blue heater hoses will be furnished for the heater system. The Hi-Miler® hose will have a core of black Versigard (EPDM) with spiral Flextan reinforcement and blue Versigard coating. All heater hoses will be equipped with constant torque type hose clamps. All integral hoses supplied with the engine will be as supplied by the engine manufacturer.

LOW COOLANT INDICATOR LIGHT AND ALARM

A low engine coolant indicator light located in the dash instrument panel will be provided. An audible alarm will be provided to warn of the low coolant condition.

ENGINE BRAKE

An engine compression brake will be furnished for increased braking capabilities. Controls will be as provided by the engine manufacturer and will be activated by releasing the throttle pedal to the idle position.

The engine compression brake will have dash mounted control switches to turn the brake on or off as well as to control the operational level of the brake.

The engine brake will be wired in such a manner so as to illuminate the chassis brake lights when the engine brake is engaged and operating.

The engine brake will be interlocked with the PTO operation and will automatically disengage any time the apparatus is operating with the PTO active.

ENGINE FAST IDLE

A fast idle for the electronic controlled engine will be provided. The fast idle will be controlled by switches located on the smart wheel.

An electronic interlock system will prevent the fast idle from operating unless the transmission is in "Neutral" and the parking brake is fully engaged. If the fast-idle control is used in conjunction with a specified engine/transmission driven component or accessory, the fast idle control will be properly interlocked with the engagement of the specified component or accessory.

AIR CLEANER

An engine air cleaner will be provided. The air cleaner will include a dry type element and will be installed in accordance with the engine manufacturer's recommendations. The air cleaner will be located to the rear of the engine, with streamline air pipes and hump hose connections from the inlet to the air cleaner and from the air cleaner to the turbo. The air cleaner will be easily accessible when the cab is tilted. The air cleaner will be plumbed to the air intake system that will include a self-sealing connection between the cab and air cleaner assembly to allow the cab to be tilted.

To draw fresh clean air, the intake for the air cleaner will be on the side of the cab on the driver's side. The inlet will be a minimum of 41" above the ground to allow the vehicle to navigate through water without any part of the air intake system being below the frame rail, preventing any type of water intake.

SPARK ARRESTOR

A spark arrestor will be installed in the chassis air intake system. This arrestor will be mounted behind the intake grille to filter out airborne embers. The spark arrestor housing must be easily accessible when the cab is tilted.

ACCELERATOR CONTROL

A floor mount accelerator pedal will be installed on the floor in front of the driver. The pedal will be positioned for comfort with ample space for fire boots and adequate clearance from the brake pedal control.

REMOTE THROTTLE CONTROL HARNESS

An apparatus interface wiring harness for the engine will be supplied with the chassis. The harness will include a connector for connection to the chassis harness which will terminate in the left frame rail behind the cab for reconnection to required throttle control harnesses. The harness will contain necessary connectors for a pressure governor and a multiplexed gauge. Separate circuits will be included for pump controls, “Pump Engaged” and “OK to Pump” indicator lights, open compartment ground, start signal, park brake ground, ignition signal, master power, customer ignition, air horn solenoid switch, high idle switch and high idle indication light.

An apparatus interface wiring harness will also be included which will be wired to the cab harness interface connectors and will incorporate circuits with relays to control pump functions. This harness will control the inputs for the transmission lock up circuits, governor/hand throttle controls and dash display which will incorporate “Pump Engaged” and “OK to Pump” indicator lights. The harness will contain circuits for the apparatus builder to wire in a pump switch.

ENGINE PROGRAMMING REMOTE THROTTLE

The engine ECM (Electronic Control Module) discreet wire remote throttle circuit will be turned off for use with a J1939 based pump controller or when the discreet wire remote throttle controls are not required.

TRANSMISSION

An Allison World Transmission, Model 4000 EVS electronically controlled, automatic transmission will be provided. Transmission specifications will be as follows:

- Max. Gross Input Power 600 HP
- Max. Gross Input Torque 1850 lb. ft.
- Input Speed (Range) 1700- 2300 RPM
- Direct Gear (Pumping) 4th (Lock-up)

Transmission installation will be in accordance with the transmission manufacturer's specification. The transmission will be readily and easily removable for repairs or replacement.

One (1) PTO opening will be provided on both the left and right side of the converter housing (positions one (1) o'clock and eight (8) o'clock).

The transmission will be calibrated for five (5) forward gears and one (1) reverse gear. Each gear will have the following ratios:

- First 3.51:1
- Second 1.91:1
- Third 1.43:1
- Fourth 1.00:1
- Fifth 0.74:1
- Reverse -4.80:1

TRANSMISSION SHIFT SELECTOR

An illuminated, touch-pad type shift control will be mounted in the cab, convenient to the driver. Shift control will be approved by the transmission manufacturer.

TRANSMISSION OIL LEVEL SENSOR

The transmission will be equipped with the oil level sensor (OLS); this sensor will allow the operator to obtain an indication of the fluid level from the shift selector. The sensor display will provide the following checks, correct fluid level, low fluid level and high fluid level.

PARK TO NEUTRAL

The transmission, upon application of the parking brake, will automatically shift into neutral.

PRESELECT PROGRAMMING

The transmission will have Allison Pre-select enabled to automatically downshift when the secondary engine brake is active.

The transmission will be programmed at the factory to automatically downshift to 4th gear.

This feature will be enabled/disabled with the main on/off switch for the engine brake.

SYNTHETIC TRANSMISSION FLUID

TES 295 transmission fluid will be utilized to fill the 4000 EVS transmission.

DRIVE LINES

Drive lines will be Dana (Spicer) 1810 heavy duty series or equal, with "glide coat" splines on all slip shafts. The chassis manufacturer will utilize an electronic type balancing machine to statically and dynamically balance all drive shafts. KME will provide proof of compliance with all drive shaft manufacturer's standards and specifications.

Where applicable, the universal joints will be the half loop style joints.

DIESEL EXHAUST FLUID TANK

A five (5) gallon diesel exhaust fluid (DEF) tank will be provided and installed. The tank will be mounted in the area of the battery box and will be accessible through a door in the crew area step well.

The tank will include an internal heater that will be fed by engine coolant directly from the engine block to ensure it is always kept at the proper temperature per EPA requirements. The tank will include a temperature sensor to control the flow of the engine coolant from the heater valve to the DEF tank.

A DEF fluid level senor will be provided with the DEF tank and connected to the level gauge on the dashboard.

EXHAUST SYSTEM

The exhaust system will be installed in accordance with the engine manufacturer's requirements and meet all Environmental Protection Agency and State noise level requirements. Exhaust system components will be securely mounted and easily removable.

The diesel particulate filter/muffler will be fabricated from stainless steel and of a size compatible with the engine exhaust discharge.

Exhaust tubing will be a minimum of 16-gauge stainless steel from the turbocharger on the engine to the inlet of the diesel particulate filter. Any flexible exhaust tubing will be HDT stainless steel type. To minimize heat build-up, exhaust tubing within the engine compartment will be wrapped with an insulating material. Exhaust will be wrapped from the turbocharger to the entrance of the muffler. Material will be held in place with worm gear type clamps.

An exhaust diffuser will be provided to reduce the temperature of the exhaust as it exits the tailpipe.

Separate "regeneration" enable and prohibit switches will be provided under the dash board on the driver's side. Each switch will be provided with a spring loaded protective cover and will be clearly marked as to function.

SELECTIVE CATALYTIC REDUCTION (SCR)

The vehicle will be equipped with SCR technology that uses a urea based diesel exhaust fluid (DEF) and a catalytic converter to significantly reduce oxides of nitrogen (NOx) emissions.

The SCR system will reduce levels of NOx (oxides of nitrogen emitted from engines) by injecting small quantities of diesel exhaust fluid (DEF) into the exhaust upstream of a catalyst, where it vaporizes and decomposes to form ammonia and carbon dioxide. The ammonia (NH3), in conjunction to the SCR catalyst, converts the NOx to harmless nitrogen (N2) and water (H2O).

The exhaust tailpipe extending from the SCR catalyst to the side of the vehicle will be constructed from 16-gauge aluminized steel tubing. The exhaust discharge will be on the officer side of the apparatus forward of the rear axle.

FUEL TANK

Fuel tank will be a minimum of fifty (50) gallon capacity. It will have a minimum fuel filler neck of 2" ID and 1/4 turn fill cap. A 1/2" minimum diameter drain plug will be provided. The tank will be fabricated from hot rolled, pickled and oiled steel. Provisions for an additional feed line and fuel level float will be provided for future use.

The fuel tank will be installed behind the rear wheels between the frame rails.

The fuel tank will meet all FHWA 393.67 requirements including a fill capacity of 95% of tank volume.

The fuel tank will be able to withstand a longitudinal acceleration of -23.0g at 0.166 seconds in accordance to SAE J211 standards using a channel frequency class 600 filter. Testing will be performed at and verified by a third party testing and evaluation center.

FUEL TANK STRAPS

The straps supporting the diesel fuel tank will be made of Type 304L stainless steel with grade 8, zinc coated steel hardware.

The fuel tank mounting straps will utilize dense rubber between the straps and the fuel tank to prevent chaffing.

All fuel lines will be provided as recommended by the engine manufacturer. The lines will be sized to meet engine manufacture's requirements, and will be carefully routed and secured along the inside of the frame rails.

FUEL FILTER/WATER SEPARATOR

A fuel filter/water separator will be provided in the fuel system. A "water in fuel" indicator will be provided on the dash.

SECONDARY ELECTRIC FUEL PUMP

In addition to the primary fuel pump, a secondary electric fuel pump for re-priming will be furnished in the main fuel line. A labeled control switch will be provided on the main dash panel.

FUEL POCKET

A fuel fill will be provided in the left side rear wheel well area. A Cast Products heavy duty cast aluminum spring loaded hinged fill door will be provided.

A label indicating "Ultra Low Sulfur Diesel Fuel Only" will be provided adjacent to the fuel fill.

DUAL POWER STEERING

A dual power steering system will be provided utilizing a Sheppard model #M110 main steering gear on the driver side of the chassis and a Sheppard model #M90 steering gear on the officer side of the chassis.

The power steering gear on the officer side of the chassis will increase performance in turning the officer side wheel assembly, reducing loads and forces on the main gear and components.

The steering system will be designed to maximize the turning capabilities of the front axle no matter the rating and tire size. The use of a power assist cylinder on the officer side of the chassis is NOT ACCEPTABLE on front axles of this capacity.

The system will be designed utilizing an engine driven hydraulic pump, with a maximum operating pressure of 2000 PSI. Steering design will permit a maximum of 5.6 turns from stop to stop. Steering system components will be mounted in accordance with the steering gear manufacturer's instructions.

STEERING COLUMN

The steering column will be a “Douglas Autotech” tilt and telescope column. A lever mounted on the side of the column will control the tilt and telescope features.

The steering shaft from the column to the miter box will have a rubber boot to cover the shaft slip and a second rubber boot to seal the passage hole in the floor.

There will be a ergonomically designed, self-canceling lever, that will control the following functions:

- Left and right turn signals
- High beam activation
- Hazard warning switch
- Two speed with intermittent windshield wiper control
- Windshield washer control

STEERING WHEEL

The steering wheel will be a four (4) spoke, vinyl padded, minimum 18" diameter, with a center hub mounted horn button.

SMARTWHEEL STEERING WHEEL

The steering wheel will be equipped with "Smart Wheel" multiplexed control pods. The "Smart Wheel" will be designed so that the driver's hands never need to leave the steering wheel once the engine is running and the parking brake is released.

The "Smart Wheel" steering wheel will include ten (10) multiplexed switches that control the following functions:

- Air Horn
- Q2B (If Equipped)
- Q2B Brake (If Equipped)
- Master Warning Switch
- Mic (Push to talk)
- Siren
- Auxiliary Braking
- High Idle
- Throttle Up - High Idle Function
- Throttle Down - High Idle Function

The functions will be multiplexed through a clock spring circuit board. Collector rings switch wiring is not acceptable!

In addition to the Smart Wheel switches the electric horn switch will be located in the center of the steering wheel.

4FRONT® - FRONTAL AIR BAG PROTECTION

The cab will be equipped with a frontal impact protection system consisting of one (1) air bag in front of the driver in the steering wheel. The steering wheel air bag will be designed to protect the driver in the event of a frontal or oblique impact.

The driver seat will be equipped with a S4 pretensioner for suspension seat (if required) and a seat belt pretensioner.

4FRONT® - FRONTAL AIR BAG PROTECTION FOR OFFICER SIDE KNEE BOLSTER

Frontal impact protection system consisting of one (1) knee bolster air bag, in front of the officer mounted in the firewall panel below the dash panel. The officer seat will be equipped with a S4 pretensioner for a suspension seat (if required) and a seat belt pretensioner.

The officer side knee bolster air bag will be designed to protect the legs of the occupant, when used in combination with the 3 point seat belt, in the event of a frontal or oblique impact.

The frontal air bag system will be designed specifically for the cab configurations they are used in. The cab and chassis design will have been subjected, via third party test facility, to a 21 MPH crash impact during frontal and oblique impact testing. Testing will include all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspension components, frame rail cross members, engine and transmission and their mounts, pump house and mounts, frame extensions and body mounts. The testing will provide configuration specific information used to optimize the timing for firing the air bags.

The driver side air bag will be mounted in the steering wheel and will be designed to protect the head and upper torso of the occupant, when used in combination with the 3 point seat belt, in the event of a frontal or oblique impact. The passenger side knee bolster air bag will be mounted in the modesty panel below the dash panel and will be designed to protect the legs of the occupant, when used in combination with the 3 point seat belt, in the event of a frontal or oblique impact.

In the event of a frontal or oblique impact, the system will deploy air bag/s, and activate the following components integrated into seating position equipped with an air bag:

Suspension seats will be retracted to lowest travel position. Seat belts will be pretensioned to firmly hold the occupants in place.

CHASSIS ELECTRICAL SYSTEM

All electrical wiring in the chassis will be GXL cross link insulated type. Wiring is to be color coded and include function codes every three (3) inches on both sides. Wiring harnesses will be routed in protective, heat resistant loom, securely and neatly installed. Two (2) power distribution centers will be provided in central locations for greater accessibility. The power distribution centers will contain thermal automatic reset breakers, power control relays, flashers, diode modules, daytime driving light module, and engine and transmission data links. All breakers and relays will have a capacity substantially greater than the expected load on the related circuit, 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. The second will control center to overhead switching and interior operations. Each module is single function coded and labeled to aid in troubleshooting. The centers will 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.

WIRING HARNESS DESCRIPTION

The wiring harness contained on the chassis will 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. Wiring will be uniquely identified by color code or circuit function code, labeled at a minimum of every three (3) inches. The identification of the wiring will 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).

The covering of harnesses will be moisture resistant loom with a minimum rating of 289 Degrees Fahrenheit and a flammability rating of VW-1 as defined in UL62. The covering of jacketed cable will have a minimum rating of 289 degree Fahrenheit.

All harnesses will be securely installed in areas protected against heat, liquid contaminants and damage. The harness connections and terminations will use a method that provides a positive mechanical and electrical connection and are in accordance with the device manufacturers instructions. No connections within the harness may utilize wire nut, insulation displacement, or insulation piercing components.

All circuits will conform to SAEJ1292. All circuits will be provided with low voltage over current protective devices. These devices will be readily accessible and protected against heat in excess of component rating, mechanical damage, and water spray. Star washers will not be used for ground connections.

DIRECT GROUNDING STRAPS

Direct grounding straps will be mounted to the following areas; frame to cab, frame to body and frame to pump enclosure.

All exposed electrical connections will be coated with "Z-Guard 8000" to prevent corrosion.

12 VOLT ELECTRICAL SYSTEM TESTING

The apparatus low voltage electrical system will be tested and certified by KME. The certification will be provided with the apparatus. All tests will be performed with air temperature between 0°F and 100°F.

The following three (3) tests will be performed in order. Before each test, the batteries will be fully charged.

TEST #1-RESERVE CAPACITY TEST

The engine will be started and kept running until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine will be shut off and the minimum continuous electrical load will be activated for 10 minutes. All electrical loads will be turned off prior to attempting to restart the engine. The battery system will then be capable of restarting the engine. Failure to restart the engine will be considered a test failure.

TEST #2-ALTERNATOR PERFORMANCE TEST AT IDLE

The minimum continuous electrical load will be activated with the engine running at idle speed. The engine temperature will be stabilized at normal operating temperature. The battery system will be tested to detect the presence of battery discharge current. The detection of battery discharge current will be considered a test failure.

TEST #3-ALTERNATOR PERFORMANCE TEST AT FULL LOAD

The total continuous electrical load will be activated with the engine running up to the engine manufacturers governed speed. The test duration will be a minimum of 2 hours. Activation of the load management system will be permitted during this test. However, an alarm sounded due to excessive battery discharge, as detected by the system, or a system voltage of less than 11.7 volts DC for a 12 volt system, for more than 120 seconds, will be considered a test failure.

LOW VOLTAGE ALARM TEST

Following completion of the preceding tests, the engine will be shut off. The total continuous electrical load will be activated and will continue to be applied until the excessive battery discharge alarm is activated.

The battery voltage will be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts will be considered a test failure. The battery system will then be able to restart the engine.

At time of delivery, documentation will be provided with the following information:

- Documentation of the electrical system performance test
- A written load analysis of the following;
- Nameplate rating of the alternator
- Alternator rating at idle while meeting the minimum continuous electrical load
- Each component load comprising the minimum continuous electrical load.
- Additional loads that, when added to the minimum continuous load, determine the total connected load.
- Each individual intermittent load.

ELECTRICAL MANAGEMENT SYSTEM

A Class 1 ES-Key Electrical Management System will be utilized on the chassis for all functions applicable. The system will consist of the following components:

A Modem with a RS232 computer interface and standard telephone jack used to not only program the multiplex system but also serve as a factory direct gateway into the vehicle from any Class 1 multiplex authorized service facility.

A Universal System Manager (USM), which acts as the main controlling component of the multiplexing system will be provided and factory programmed to DOT, NFPA, SAE, KME and Medway Fire Department specifications. The programming will be done by KME's engineering department. The ES-Key system installation will comply with SAE J 551 requirements regarding Electromagnetic and Radio Frequency interference (EMI, RFI), as well as utilize components and wiring practices that insure the system is protected against corrosion, excessive temperatures, water, excessive physical, and vibration damage by any equipment installed on the vehicle at the time of delivery.

A series of Multiplexing Input/Output Modules will be installed. The Input/Output modules will permit the multiplexing system to reduce the amount of wiring and components used as compared to non-multiplexed apparatus. These modules will vary in I/O configuration, be waterproof allowing installation outside of enclosed areas and will possess individual output internal circuit protection. The modules will also have three status indicators visible from a service persons vantage point that will indicate the status of the module. In the event a load requires more than 7.5 AMPS of operating current, the module will activate a simple relay circuit integral to any of the 3 dillbox assemblies installed in the cab.

Diagnostic software will be provided to download data from the on board ES-KEY system. This software will have the ability to view system input/output (I/O) information, and include a connection from a computer to the vehicle.

A Class1 UltraView # UV450 4.3" color transmissive TFT display for monitoring critical apparatus and engine information will be provided an installed. The displays will be CAN based utilizing J1939 message protocol. The display will utilize a bonded LCD display screen for optimal visibility in direct sunlight.

The display will be fully configurable and when used in conjunction with the Class1 ES-Key system and will be custom programmed to control multiple apparatus functions and perform onboard apparatus and engine diagnostics.

INTERLOCK INTERFACE MODULE

A Vocation Module, which is the interface between the multiplexing system and the pump system will be provided. This module will serve as the interface between the operator, engine, transmission and pumping system. The module will be installed under the driver's side dash, in a sealed enclosure that will possess green indicating LEDs that will indicate to service personnel the interlock state of the apparatus. In the event of a multiplexing error involving pump operation can be activated to ensure reliable pumping operations at ALL times. In addition to controlling pump function, this vocation module will be able to provide automatic and/or manual activation of engine “Fast Idle”, to maintain adequate alternator output and thus, chassis voltage.

CHASSIS DIAGNOSTICS SYSTEM

Diagnostic ports will be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel will allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches will allow engine and ABS systems to provide blink codes should a problem exist.

The diagnostic system will include the following:

- A single port to monitor the engine, transmission and ABS system and diagnostics of the roll sensor (if applicable)
- Engine diagnostic switch (blink codes)
- ABS diagnostic switch (blink codes)
- Allison Transmission Codes (through touch pad shifter)

VOLTAGE MONITOR SYSTEM

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning when the system voltage is below or above optimum levels.

The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

INDICATOR LIGHT AND ALARM PROVE-OUT SYSTEM

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

12 VOLT SEQUENCER

A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a gradual increase or decrease in alternator output, rather than loading or dumping the entire 12 volt load to prolong the life of the alternator.

Emergency light sequencing will operate in conjunction with the emergency master light switch. When the emergency master switch is activated, the emergency lights will be activated one by one at half second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.

When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.

Rear of cab Air-Conditioning and Heat will be load managed.

ELECTRICAL HARNESS REQUIREMENT

To ensure dependability, all 12-volt wiring harnesses installed by KME will conform to the following specifications:

- SAE J 1128 - Low tension primary cable
- SAE J 1292 - Automobile, truck, truck-tractor, trailer and motor coach wiring
- SAE J 163 - Low tension wiring and cable terminals and splice clips
- SAE J 2202 - Heavy duty wiring systems for on-highway trucks

- NFPA 1901 - Standard for automotive fire apparatus
- FMVSS 302 - Flammability of interior materials for passenger cars, multipurpose passenger vehicles, trucks and buses
- SAE J 1939 - Serial communications protocol
- SAE J 2030 - Heavy-duty electrical connector performance standard
- SAE J 2223 - Connections for on board vehicle electrical wiring harnesses
- NEC - National Electrical Code
- SAE J 561 - Electrical terminals - Eyelet and spade type
- SAE J 928 - Electrical terminals - Pin and receptacle type A.

For increased reliability and harness integrity, harnesses will be routed throughout the cab and chassis in a manner which allows the harnessing to be laid into its mounting location. Routing of harnessing which requires pulling of wires through tubes is never allowed at KME.

Wiring will be run in loom or conduit where exposed, and have grommets or other edge protection where wires pass through metal. Wire colors will be integral to each wire insulator and run the entire length of each wire. Harnessing containing multiple wires and uses a single wire color for all wires will not be allowed. Function and number codes will be continuously imprinted on all wiring harness conductors at 3.00" intervals. All wiring installed between the cab and into doors will be protected by a wire conduit to protect the wiring. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Electrical wiring and equipment will be installed utilizing the following guidelines:

- All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
- Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
- For low cost of ownership, electrical components designed to be removed for maintenance will be quickly accessible. For ease of use, a coil of wire will be provided behind the appliance to allow them to be pulled away from the mounting area for inspection and service work.
- Corrosion preventative compound will be applied to non-waterproof electrical connectors located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation of the plug.
- Any lights containing non-waterproof sockets in a weather-exposed area will have corrosion preventative compound added to the socket terminal area.
- All electrical terminals in exposed areas will have protective coating applied completely over the metal portion of the terminal.
- Rubber coated metal clamps will be used to support wire harnessing and battery cables routed along the chassis frame rails.
- Heat shields will be used to protect harnessing in areas where high temperatures exist. Harnessing passing near the engine exhaust will be protected by a heat shield.
- Cab and crew cab harnessing will not be routed through enclosed metal tubing. Dedicated wire routing channels will be used to protect harnessing therefore improving the overall integrity of the vehicle electrical system. The design of the cab will allow for easy routing of additional wiring and easy access to existing wiring.
- All standard wiring entering or exiting the cab will be routed through sealed bulkhead connectors to protect against water intrusion into the cab.

BATTERY CABLE INSTALLATION

All 12-volt battery cables and battery cable harnessing installed by the apparatus manufacturer will conform to the following requirements:

- SAE J 1127 - Battery Cable
- SAE J 561 - Electrical terminals, eyelets and spade type
- SAE J 562 - Nonmetallic loom
- SAE J 836 A - Automotive metallurgical joining
- SAE J 1292 - Automotive truck, truck-tractor, trailer and motor coach wiring
- NFPA 1901 - Standard for automotive fire apparatus.

Battery cables and battery cable harnessing will be installed utilizing the following guidelines:

- Splices will not be allowed on battery cables or battery cable harnesses.
- For ease of identification and simplified use, battery cables will be color coded. All positive battery cables will be marked red in color. All negative battery cables will be black in color.
- For ease of identification, all positive battery cable isolated studs throughout the cab and chassis will be red in color.
- For increased reliability and reduced maintenance, all electrical buss bars located on the exterior of the apparatus will be coated to prevent corrosion.
- An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

ALTERNATOR

There will be a Delco Remy Model 40SI, 320 amp brushless, serpentine belt driven alternator. The brushless design of the 40SI transfers magnetic fields between the rotor and stator air-gap without brushes.

The alternator installation will be designed to provide maximum output at engine idle speed, by using “Remote Sense” in order to meet the minimum continuous electrical load of the apparatus as required.

The alternator will carry a 3 Year/Unlimited Mile warranty.

BATTERY SYSTEM

Six (6) Exide # HP-31D, maintenance free batteries will be provided. Each battery will be rated at 925 CCA and will have a reserve capacity of 180 minutes.

Wiring for the batteries will be 4/0 welding type dual path starting cables for SAEJ541.

BATTERY STORAGE

Batteries will be securely mounted in fixed 3/16” GR50 steel trays located on each side of the chassis frame. Complete access will be provided when the cab is fully tilted. Batteries will be mounted on non-corrosive matting material.

The battery tray will be able to withstand a longitudinal acceleration of -46.5g at 0.246 seconds in accordance to SAE J211 standards using a channel frequency class 600 filter. Testing will be performed at and verified by a third party testing and evaluation center.

BATTERY DISCONNECT SWITCH

The chassis batteries will be wired in parallel to a single 12 volt electrical system, controlled through a heavy duty master disconnect switch. The master disconnect switch will be located within easy access of the driver upon entering or exiting the cab.

BATTERY JUMPER STUDS

A set of Cole Hersee battery jumper studs, model #46210-02 (red) and #46210-03 (black) will be provided to allow the battery system to be jump started or charged from an external source. The studs will be located on the bottom of the battery box on the driver's side of the chassis. Each stud will be equipped with both a rubber protector cap and a 2" square non-conductive plate to prevent accidental shorting.

120 VOLT SHORELINE CONNECTION - "SUPER" AUTO EJECT

One (1) Kussmaul "Super" Auto Eject model 091-55-20-120, automatic, 120 volt, 20 amp shoreline disconnect will be provided for the on board, 110 volt battery charging systems.

The disconnect will be equipped with a NEMA 5-20 P male receptacle, which will automatically eject the shoreline when the vehicle starter is energized. The mating connector will be included with the auto eject and will be provided as loose equipment. A label will be provided indicating voltage and amperage ratings.

SHORELINE POWER INLET PLATE

A shoreline power receptacle information plate will be permanently affixed at or near the power inlet. The plate will indicate the following:

- Type of Line Voltage
- Current Rating in Amps Power Inlet Type (DC or AC).

The Kussmaul auto-eject connection will be equipped with a Red weatherproof cover.

The shoreline receptacle will be located in the area directly adjacent to the driver's side cab door in a pre determined location by KME.

BATTERY CHARGER / AIR COMPRESSOR SYSTEM

A Kussmaul model #091-187-12-REMOTE, "Auto Charge 1200" high output, fully automatic battery charger will be provided for maintaining the vehicle battery system. Unique electronic sensing circuits sense the true battery voltage while eliminating the need for external sense wires. Output current will be 40 amperes @ 12 volt DC.

A Kussmaul 091-9HP air compressor will maintain the air pressure in the chassis air brake system while the vehicle is not in use. The air compressor will have a rated input at 120 volts AC @ 3.5 amps and a maximum of 125 psi.

A LED bar graph display will be located near the shoreline connection to monitor the battery status.

A Kussmaul # 091-9-090 Auto Drain ACHP will be installed to protect the Auto Pump from built up moisture.

OUTLET STRIP

One (1) 3' long outlet strip will be installed in the EMS / Overhead compartment. Each outlet strip will have four (4) duplex household receptacles.

"LED" CAB INTERIOR LIGHTING

Four (4) Whelen # 60CREGCS, 6" round, interior LED combination red/white dome lights will be furnished in the cab, two (2) in the forward section and two (2) in the rear crew section. Each dome light will have individual switches to control the red or white LEDs. Each dome light will also activate when the respective, adjacent cab door is opened.

"DO NOT MOVE APPARATUS" WARNING LIGHT WITH AUDIBLE ALARM

A 1" round, red flashing warning light with an integral audible alarm, will be functionally located in the cab to signal when an unsafe condition is present such as an open cab door or body compartment door, an extended ladder rack, a deployed stabilizer, an extended light tower or any other device which is opened, extended or deployed which may cause damage to the apparatus if it is moved.

This light will be activated through the parking brake switch to signal when the parking brake is released. This light will be labeled "DO NOT MOVE TRUCK".

12 VOLT POWER PORT NEAR DRIVER

One (1) 12 volt power port accessory outlet(s) will be installed in the cab of the truck for the Medway Fire Departments accessory devices. The port(s) will be located as directed near the driver's seating position for devices such as cellular phones.

12 VOLT POWER PORT NEAR OFFICER

One (1) 12 volt power port accessory outlet(s) will be installed in the cab of the truck for the Medway Fire Departments accessory devices. The port(s) will be located as directed near the officer's seating position for devices such as cellular phones.

USB CHARGING PORT NEAR DRIVER

One (1) round USB charging port(s) will be installed in the cab of the truck for the Medway Fire Departments accessory devices. Each port will have two (2) USB connections and will have a 5 volt, 2.1 amp max output. The port(s) will be located as directed near the driver's seating position for devices such as cellular phones.

USB CHARGING PORT NEAR OFFICER

One (1) round USB charging port(s) will be installed in the cab of the truck for the Medway Fire Departments accessory devices. Each port will have two (2) USB connections and will have a 5 volt, 2.1 amp max output. The port(s) will be located as directed near the officer's seating position for devices such as cellular phones.

USB CHARGING PORT - EMS COMPARTMENT

One (1) round USB charging port(s) will be installed in the cab of the truck for the Medway Fire Departments accessory devices. Each port will have two (2) USB connections and will have a 5 volt, 2.1 amp max output. The port(s) will be located in the rear EMS compartment, as directed, for devices such as cellular phones.

12 VOLT ACCESSORY CIRCUIT - CAB DASH

One (1) dedicated circuit; 12 volt, 40 Amp, power and ground on 3/8 stud and fused at battery will be provided in the cab dash. The circuit will be for future installation of radios or accessories.

12 VOLT ACCESSORY CIRCUIT - BEHIND OFFICERS SEAT

One (1) dedicated circuit; 12 volt, 40 amp, power and ground on 3/8 stud and fused at battery will be provided behind the officer seat.

An additional 12 volt, 20 amp, power stud will be installed next to the studs above and will be switched with the ignition circuit.

The circuit will be for future installation of radios or accessories.

BLUE SEA FUSE BLOCK - 12 CIRCUIT IN REAR CREW AREA

A Blue Sea 5026B, 12 circuit fuse block, will be installed behind the officers seat. This block has a maximum amperage of 60 Amps per block and 30 Amps per circuit.

MULTI - USE POWER POINT IN REAR OF CAB

A Mobile Vision multi-use power point with built in two (2) usb ports, and two (2) 12 volt sockets will be installed in the rear of the cab on the back of the engine enclosure. This will be cabable of up supplying the USB ports with up to three (3) amps and have a 15 amp fuse for overall protection.

IGNITION STUD - REAR CREW AREA

An ignition stud will be installed in the rear crew area for items needing an ignition circit (ie. mobile radio). This stud has a maximum amperage of 20 Amps.

HEADLIGHTS CLUSTER

Two (2) dual, rectangular, Peterson LED headlight modules in bright finish bezels will be furnished, one (1) each side, on the front of the cab. Each head light module will incorporate an individual LED low beam and a LED high beam headlight. High beam actuation will be controlled on the turn signal lever.

DAYTIME RUNNING LIGHTS

The chassis head lights will have integrated circuitry to actuate the low beam headlights at a maximum of 80 percent of capacity whenever the chassis engine is running.

The daytime running lights will be interlocked with the parking brake.

UPPER LIGHT MODULE

Two (2) Whelen 60*00F*R super LED light heads will be provided, one (1) in each side dual light module, above the headlights, in matching chrome plated bezels.

Each light head will be equipped with red LEDs and a colored lens.

An individual control switch will be provided on the cab switch console, which will be wired through the load management system to prevent excessive amperage draw.

The lights noted above will be provided in addition to the NFPA required, minimum optical warning light package.

The NFPA required, Zone "A" lower warning lights will be incorporated into each side dual light module noted above.

ARROW TURN SIGNALS

Two (2) Whelen 60A00TAR arrow shaped, amber LED turn signals will be provided in chrome plated housings, mounted one (1) each side between the windshield and the dual light modules.

DOT MARKER LIGHTS AND REFLECTORS

Five (5) DOT approved Optronics model # MCL13 Light Emitting Diode (LED) cab marker lamps will be mounted on the front upper edge of the cab, above the windshield.

Optronics Model MCL48 amber LED marker lights with chrome bezel will be provided on the side of the cab behind the front cab doors, one (1) each side.

Optronics model MCL82RB red LED marker lights with integral reflectors will be provided at the lower side rear, one (1) each side.

Optronics Model #STL71AMB yellow LED side marker and turn lights will be provided on the apparatus lower side, forward of rear axle, one (1) each side if the apparatus is 30' long or longer.

Optronics MCL65 red LED clearance lights will be provided on the apparatus rear upper, one (1) each side at the outermost practical location.

Optronics MCL12 LED 3-lamp identification bar will be provided on the apparatus rear center. The lights will be red in color.

Truck-Lite # 98034Y yellow reflectors will be provided on the apparatus body lower side, as far forward and low as practical, one (1) each side if the apparatus is 30' long or longer.

Truck-Lite # 98034R red reflectors will be provided on the apparatus rear, one (1) each side at the outermost practical location.

Truck-Lite # 98034Y yellow reflectors will be provided on the side of the cab lower side, as far forward and low as practical, one (1) each side.

LED LICENSE PLATE LIGHT - REAR

One (1) Tecniq model #L10 LED license plate light will be provided above the mounting position of the license plate. The light will be clear in color and will have a chrome finish.

TAIL, STOP, TURN AND BACK-UP LIGHTS

Two (2) Whelen 600 series, 4-1/8" x 6-1/2", LED red combination tail and stop lights, will be mounted one each side at the rear of the body.

Two (2) Whelen 600 series, 4-1/8" x 6-1/2", LED amber arrow turn signal lights, will be mounted one each side, on a vertical plane with the tail/stop lights.

Two (2) Whelen 600 series, 4-1/8" x 6-1/2", LED white back-up lights, will be mounted one each side on a vertical plane with the turn/tail/stop signals. These lights will activate when the transmission is placed in reverse gear.

Two (2) Whelen PLAST4V mounting flanges, installed one (1) on each side, will be provided to mount the lights described above in one common mounting flange. The fourth opening will be for the lower rear warning lights.

The lights will be mounted in order, from top to bottom, as described above.

CAB STEP LIGHTS

Polished stainless steel, TecNiq Eon 3-LED horizontal surface mounted chassis step lights will be provided and controlled with marker light actuation. Step lights will be located to properly illuminate all chassis access steps and walkway areas and will include a mounting gasket to provide a watertight seal.

BODY STEP LIGHTS

Polished stainless steel, TecNiq Eon 3-LED horizontal surface mounted body step lights will be provided and controlled with marker light actuation. Step lights will be located to properly illuminate all body access steps and walkway areas and will include a mounting gasket to provide a watertight seal.

DUNNAGE AREA LIGHTING

Two (2) stainless steel, TecNiq Eon 3-LED horizontal surface mounted lights will be provided in the dunnage area to provide adequate illumination of this area. These lights will be switched in the same manner as the step lights.

HOSE BED LIGHTS

Two (2) Amdor LED strip surface mounted lights will be mounted in the hose bed on the side walls to illuminate the hose bed area.

HOSEBED WORKLIGHT SWITCH- RECESSED

The hose bed work light switch will be installed in a recessed pocket.

HOSE BED WORK LIGHT - SWITCH

The hose bed work light will have a protected 12-volt switch at the rear body panel. The switch will be labeled "HOSE BED WORK LIGHTS".

SCENE LIGHTS - BEHIND FRONT CAB DOORS

Two (2) Whelen # 9SC0ENZR super LED scene lights will be provided, one on each side of the cab, directly behind the front cab entrance door in a chrome plated flange. The scene lights will be wired through the load management system.

SCENE LIGHTS - REAR OF BODY

Two (2) Whelen # 9SC0ENZR super LED scene lights will be provided, one on each side of the rear body panel in a chrome plated flange. The scene lights will be wired through the load management system.

SCENE LIGHTS - DRIVER SIDE OF BODY

Two (2) Whelen # 9SC0ENZR super LED scene lights will be provided. The scene lights will be installed one rearward and one forward on the driver side of the body in a chrome plated flange. The scene lights will be wired through the load management system.

SCENE LIGHTS - OFFICER SIDE OF BODY

Two (2) Whelen # 9SC0ENZR super LED scene lights will be provided. The scene lights will be installed one rearward and one forward on the officer side of the body in a chrome plated flange. The scene lights will be wired through the load management system.

CAB DOOR LIGHT SWITCHING - CAB

Two (2) switches will be provided in the cab warning light switch console to turn the lights at the cab doors on and off. One (1) switch will control the driver side light and one (1) switch will control the officer side light.

CAB DOOR LIGHT SWITCHING - PUMP PANEL

Two (2) switches will be provided on the pump panel to turn the lights at the cab doors on and off. One (1) switch will control the driver side light and one (1) switch will control the officer side light.

REAR OF BODY LIGHT SWITCHING - CAB

A switch will be provided in the cab warning light switch console to turn the rear of body lights on and off.

REAR OF BODY LIGHT SWITCHING - PUMP PANEL

A switch will be provided on the pump panel to turn the rear of body lights on and off.

DRIVER SIDE OF BODY LIGHT SWITCHING - CAB

A switch will be provided in the cab warning light switch console to turn the driver side of body lights on and off.

DRIVER SIDE OF BODY LIGHT SWITCHING - PUMP PANEL

A switch will be provided on the pump panel to turn the driver side of body lights on and off.

OFFICER SIDE OF BODY LIGHT SWITCHING - CAB

A switch will be provided in the cab warning light switch console to turn the officer side of body lights on and off.

OFFICER SIDE OF BODY LIGHT SWITCHING - PUMP PANEL

A switch will be provided on the pump panel to turn the officer side of body lights on and off.

GROUND LIGHTS - CAB

One (1) JW Speaker 880 XD ground light will be provided under each side cab door entrance step, four (4) total. The ground lights will turn on automatically with each respective door jamb switch and also by a master ground light switch in the warning light switch console.

Each light will illuminate an area at a minimum 30" outward from the edge of the vehicle. The rear crew door ground lights will be positioned at an angle rearward to provide illumination at the pump panel and the front of the body work areas.

GROUND LIGHTS - FRONT BUMPER

One (1) JW Speaker 880 XD ground lights will be provided under each side of the front bumper facing forward, two (2) total. The ground lights will be activated by a master ground light switch in the cab and will be wired through the load management system.

GROUND LIGHTS - PUMP PANEL

One (1) JW Speaker 880 XD ground light will be provided under each side pump panel running board, two (2). The ground lights will be activated by a master ground light switch in the cab and will be wired through the load management system.

GROUND LIGHTS - FRONT BODY

One (1) JW Speaker 880 XD ground light will be provided under each front body corner, two (2) total. The ground lights will be activated by a master ground light switch in the cab and will be wired through the load management system.

GROUND LIGHTS - REAR

One (1) JW Speaker 880 XD ground light will be provided under each rear body corner, two (2) total. The ground lights will be activated by a master ground light switch in the cab and will be wired through the load management system.

GROUND LIGHT SWITCHING

The cab and body ground lights will activate by engaging the parking brake.

ROOF MOUNT 150W LED BROW LIGHTS - ABOVE WINDSHIELD

Two (2) Whelen Pioneer Plus #PFP2 super LED roof mount lights will be provided and installed. The mounting bracket will attach to the lamp head and be machined to conform to the roof radius.

Each lamp head will have two (2) dual stacked white LED modules and will draw 13 amps and generate 16,000 lumens. Each lamp head will incorporate an adjustable downward angle to maximize the light effectiveness.

The lamp head and brackets will be powder coated white.

The Whelen brow mounted flood lights will be located one (1) each side above the windshield.

LIGHT(S) ABOVE WINDSHIELD SWITCHING - CAB

A switch will be provided in the cab warning light switch console to turn the light(s) above windshield on and off.

LIGHT(S) ABOVE WINDSHIELD SWITCHING - PUMP PANEL

A switch will be provided on the pump panel to turn the light(s) above the windshield on and off.

12 VOLT BODY ELECTRICAL SYSTEM

All electrical lines in the body will be protected by automatic circuit breakers, conveniently located to permit ease of service. Flashers, heavy solenoids and other major electrical controls will be located in a central area near the circuit breakers.

All lines will be color and function coded every 3", easy to identify, oversized for the intended loads and installed in accordance with a detailed diagram. A complete wiring diagram will be supplied with the apparatus.

Wiring will be carefully protected from weather elements and snagging. Heavy duty loom will be used for the entire length. Grommets will be utilized where wiring passes through panels.

In order to minimize the risk of heat damage, wires run in the engine compartment area will be carefully installed and suitably protected by the installation of heat resistant shielded loom.

All electrical equipment will be installed to conform to the latest federal standards as outlined in NFPA 1901.

POWER DISTRIBUTION MODULES

Class 1 Power distribution modules will be provided in strategic areas of the chassis to allow body harnesses to interface to multiplex system.

The Remote Power Modules (RPM) provide a method of controlling loads on the vehicle, outside the cab, without running individual wires from each switch to the load. This electronic module distributes and controls power to various devices on the vehicle as commanded by the control system inside the cab. The RPM is connected to the Electrical System Controller via the J1939 datalink. Each module receives power from a power cable, protected by a fusible link to the main battery circuit.

The power distribution modules will be mounted in a location to provide complete access for service or trouble shooting.

PUMP ENCLOSURE WORK LIGHTS

Two (2) Tecniq model #E18 lights will be provided inside the pump enclosure providing 800 lumens each. Each light will have their own independent switch incorporated into the light head.

ENGINE COMPARTMENT WORK LIGHTS

Two (2) Tecniq model #E18 LED lights will be provided inside the engine enclosure that will provide 800 lumens each. Each light will have their own independent switch incorporated into the light head.

COMPARTMENT LIGHT ACTIVATION

Compartment lighting will be switched either from an integral switch as provided by the roll up door manufacturer or a magnetic proximity switch if it is a KME manufactured door.

AMDOR LUMA BAR COMPARTMENT LIGHTS - LED

Each individual, equipment storage compartment will be equipped with the AMDOR Luma Bar LED light fixture mounted one each side of the forward (and rear) vertical door frame.

NFPA AUDIBLE AND LIGHTING WARNING PACKAGE

The following warning light package will include all of the minimum warning light and actuation requirements for the current revision of the NFPA 1901 Fire Apparatus Standard. The lighting as specified will meet the requirements for both "Clearing Right of Way" and "Blocking Right of Way" which includes disabling all white warning lights when the apparatus is in "Blocking Right of Way" mode.

LIGHT PACKAGE ACTUATION CONTROLS

The entire warning light package will be actuated with a single warning light switch located on the cab switch panel. The wiring for the warning light package will engage all of the lights required for "Clearing Right of Way" mode when the vehicle parking brake is not engaged. An automatic control system will be provided to switch the warning lights to the "Blocking Right of Way" mode when the vehicle parking brake is engaged.

WARNING LIGHT FLASH PATTERN

All of the perimeter warning lights will be set to a default NFPA compliant flash pattern as provided by the light manufacturer.

UPPER LEVEL LIGHTING - WHELEN

NFPA ZONE A, UPPER

A Whelen # F4N9QLED "Edge Freedom Series IV", 92" cab roof warning light bar will be furnished and rigidly mounted on top of the cab roof.

The light bar will be equipped with the following:

- Clear Lenses
- Two Front Corner Red Linear LEDs
- Two Red Forward Facing Linear LEDs
- Two White Forward Facing Linear LEDs
- Two Red End Linear LEDs.

If equipped, the forward facing white lights will be automatically disabled for the "Blocking Right of Way" mode.

The Freedom light bar will be equipped with a # 795H Low Profile LED Opticom emitter. The Opticom emitter will be disabled automatically for the "Blocking Right of Way" mode.

The Freedom light bar will be equipped with four (4) pair(s) of # F4DLR red LED warning lights.

NFPA ZONE C, UPPER

Two (2) Whelen 90**5F*R, 900 super LED light heads will be furnished and mounted one (1) each side on the upper rear face of the body, facing rear.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

NFPA ZONES B & D REAR, UPPER

Two (2) Whelen 90**5F*R, 900 super LED light heads will be furnished and mounted one (1) each side on the upper side face, towards the rear of the body, facing to each side of the unit.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

NFPA ZONES B & D FRONT, UPPER

Two (2) Whelen 90**5F*R, 900 super LED light heads will be furnished and mounted one (1) each side on the upper side face, towards the front of the body, facing to each side of the unit.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

LOWER LEVEL LIGHTING - WHELEN

NFPA ZONE A, LOWER

Two (2) Whelen 60*02F*R 600 super LED light heads will be provided and installed one (1) each side.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

The lower Zone A warning lights will be mounted in the custom chassis headlight bezels.

NFPA ZONE C, LOWER

Two (2) Whelen 60*02F*R 600 super LED light heads will be provided and installed one (1) each side directly below the DOT stop, tail, turn and backup lights.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

NFPA ZONES B & D FRONT, LOWER

Two (2) Whelen 60*02F*R 600 super LED light heads will be provided and installed one (1) each side.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

The lower Zone B & D warning lights will be mounted on the sides of the custom chassis front bumper.

NFPA ZONES B & D MIDSHIP, LOWER

Two (2) Whelen 60*02F*R 600 super LED light heads will be provided and installed one (1) each side.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

NFPA ZONES B & D REAR, LOWER

Two (2) Whelen 60*02F*R 600 super LED light heads will be provided and installed one (1) each side.

Each light head will be equipped with red LEDs and a colored lens.

The lights will be installed with a chrome plated mounting flange.

WARNING LIGHT SYSTEM CERTIFICATION

The warning light system(s) specified above will not exceed a combined total amperage draw of 45 AMPS with all lights activated in either the "Clearing Right of Way" or the "Blocking Right of Way" mode.

The warning light system(s) will be certified by the light system manufacturer(s), to meet all of the requirements in the current revision of the NFPA 1901 Fire Apparatus Standard as noted in the General Requirements section of these specifications. The NFPA required "Certificate of Compliance" will be provided with the completed apparatus.

Any large truck as defined by NFPA will have the lower zone warning lights mounted no higher than 62" to the optical center of the warning light from ground level.

******* AUDIBLE WARNING EQUIPMENT *******

ELECTRIC HORN

A single electric horn activated by the steering wheel horn button will be furnished.

BACK-UP ALARM

A Code 3, model # CA278, 87dBA back-up alarm, will be provided and installed at the rear of the apparatus under the tailboard. The back-up alarm will activate automatically when the transmission is placed in reverse gear and the ignition is "on".

AIR HORNS

Two (2) Grover 24 inch chrome plated air horns will be at the front of the vehicle. The air horns will be mounted in full compliance with NFPA-1901. The supply lines will be dual 1/4" lines with equal distance from each horn.

Both air horns will be recessed in the front bumper.

The air horn(s) will be controlled by a single ceiling mounted lanyard cable, located in the center of the cab.

ELECTRONIC SIREN AND SPEAKER

One (1) Whelen # 295HFS2, 100 watt electronic siren will be provided featuring: flush mount remote control head recessed in center dash panel as space allows, "Si-Test" self diagnostic feature, six (6) function siren, radio repeat and public address.

The electronic siren and speaker will meet the NFPA required SAE certification to ensure compatibility between the siren and speaker.

One (1) Whelen, model # SA315P composite black siren speaker, will be provided, recessed in the front bumper and wired to the electronic siren.

FEDERAL Q2B MECHANICAL SIREN

One (1) Federal Model #Q2B mechanical siren will be provided to provide audible warning.

The Q2B siren will be fully-recessed into the bumper on the driver's side. The siren will be recessed so the front grille portion of the siren is flush with the front of the bumper.

A DASH mounted switch will be provided for the officer. A siren brake button will be provided near the driver's position.

A second push button siren brake switch will be provided on the cab dash near the officers seating position.

PUMP

- **HALE QMAX-200**
- **2000 G.P.M.**
- **Single Stage**

The pump must deliver the percentage of rated capacity at the pressure listed below:

- 100% of rated capacity at 150 P.S.I. net pump pressure
- 100% of rated capacity at 165 P.S.I. net pump pressure
- 70% of rated capacity at 200 P.S.I. net pump pressure
- 50% of rated capacity at 250 P.S.I. net pump pressure.

PUMP ASSEMBLY

The pump will be of a size and design to mount on the chassis rails of commercial and custom truck chassis, and have the capacity of 2000 gallons per minute (U.S. GPM), NFPA-1901 rated performance.

PUMP CONSTRUCTION

The entire pump will be manufactured and tested at the pump manufacturer's factory.

The pump will be driven by a drive line from the truck transmission. The engine will provide sufficient horsepower and RPM to enable the pump to meet and exceed its rated performance.

The entire pump, both suction and discharge passages, will be hydrostatically tested to a pressure of 600 PSI. The pump will be fully tested at the pump manufacturer's factory to performance specs as outlined by the latest NFPA-1901. Pump will be free from objectionable pulsation and vibration.

The pump body and related parts will be of fine grain alloy cast iron with a minimum tensile strength of 30,000 PSI. All moving parts in contact with water will be of high quality bronze or stainless steel. Pumps utilizing castings made of lower tensile strength cast iron are not acceptable.

Pump body will be horizontally split, on a single plane in two sections for easy removal of entire impeller assembly including wear rings and bearings from beneath the pump without disturbing piping or the mounting of the pump in chassis.

PUMP SHAFT

Pump shaft to be rigidly supported by three bearings for minimum deflection. One high lead bronze sleeve bearing will be located immediately adjacent to the impeller (on side opposite the gearbox). The sleeve bearing is to be lubricated by a force fed, automatic oil lubricated design, pressure balanced to exclude foreign material.

The pump shaft will be heat-treated, electric furnace, corrosion resistant stainless steel to be super-finished under packing with galvanic corrosion (zinc foil separators in packing) protection for longer shaft life. Pump shaft must be sealed with double-lip oil seal to keep road dirt and water out of gearbox.

PUMP IMPELLER

The pump will have one double suction impeller. The pump body will have two opposed discharge volute cutwaters to eliminate radial unbalance. (No exceptions)

Pump impeller will be hard, fine grain bronze of the mixed flow design; accurately machined and individually balanced. The vanes of the impeller intake eyes will be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

Impeller clearance rings will be bronze, easily renewable without replacing impeller or pump volute body, and of wrap-around double labyrinth design for maximum efficiency.

PUMP PACKING GLAND

The pump shaft will have only one (1) packing gland located on inlet side of the pump. It will be a split design for ease of repacking. The packing gland must be a full circle threaded design to exert uniform pressure on packing and to prevent cocking and uneven packing load when it is tightened. It will be easily adjusted by hand with rod or screwdriver with no special tools or wrenches required. The packing rings will be of a unique permanently lubricated, long life graphite composition and have sacrificial zinc foil separators to protect the pump shaft from galvanic corrosion.

PUMP DRIVE UNIT

The drive unit will be completely assembled and tested at the pump manufacturer's factory.

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

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

All gears, both drive and pump, will be of the highest quality electric furnace chrome nickel steel. Bores will be ground to size and teeth integrated, chrome-shaven and hardened, to give an extremely accurate gear for long life, smooth, quiet running and higher load carrying capability. An accurately cut spur design will be provided to eliminate all possible end thrust.

PUMP RATIO

The pump ratio will be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected.

KME will supply at time of delivery copies of the pump manufacturer's certification of hydrostatic testing, the engine manufacturer's current certified brake horsepower curve.

PUMP SHIFT CONTROL

The drive unit will be equipped with a power shift. The shifting mechanism will be a heat treated, hard anodized aluminum power cylinder with stainless steel shaft. An in-cab control for rapid shift will be provided that locks in road or pump, with a manual override is required.

EMERGENCY PUMP SHIFT

An emergency manual pump shift control will be furnished on the left side pump panel which may be utilized if the air shift control does not operate.

A transmission, manual lock-up switch will be furnished in the cab to ensure positive lock-up of the transmission.

MAIN PUMP - PUMP SHIFT INDICATOR LIGHTS

For automatic transmissions, three (3) green warning lights will be provided to indicate to the operator(s) when the pump has completed the shift for Road to Pump position. Two (2) green lights to be located in the truck driving compartment and one (1) green light on pump operator's panel adjacent to the throttle control. For manual transmissions, one (1) green warning light will be provided for the driving compartment. All lights to have appropriate identification/instruction plates.

TRANSMISSION LOCK

The automatic transmission furnished in the chassis will have a lock-up assembly which brings the transmission to direct drive and prevents the transmission from shifting gears while in the pumping mode.

BRAKING SYSTEM

A positive braking system will be provided to prevent vehicle movement during pumping operations. The air brakes furnished must satisfy this requirement.

MAIN PUMP MOUNTS

Extra heavy duty pump mounting brackets will be furnished. These will be bolted to the frame rails in such a position to perfectly align the pump so that the angular velocity of the drive line joints will be the same on each end of the drive shaft. This will assure full capacity performance with a minimum of vibration. Mounting hardware will utilize Grade 8 bolts.

CLASS ONE "CAPTAIN" PRESSURE GOVERNOR

A Class 1 "Captain" engine/pump governor/throttle system that is connected directly to the Electronic Control Module (ECM) mounted on the engine will be provided on the pump operator's panel. The "Captain" is to operate as a pressure sensor (regulating) governor (PSG) eliminating any need for a relief valve on the discharge side of the pump.

A special preset feature will permit a predetermined pressure or RPM to be set. The preset pressure or RPM will be displayed on the message display of the "Captain". The preset will be easily adjustable by the operator.

When operating in "pressure" mode, the PSG system will automatically maintain the discharge pressure set by the operator, regardless of flow. The pressure will remain with the engine's and pump's operating capabilities.

When operating in "rpm" mode, the PSG system will automatically maintain the set engine speed, regardless of engine load. The rpm will remain with the engine's operating capabilities.

INTAKE RELIEF VALVE

A Task Force Tips relief valve will be provided. The valve will be adjustable from 50 to 300 psi (3 to 14 bar) with easy to see 25 psi (2 bar) increments. The aluminum casting will be hardcoat anodized, and powder coat finished inside and out for maximum corrosion protection.

PUMP CERTIFICATION

The pump will be third party performance tested to meet the requirements of NFPA-1901. To ensure top quality and integrity, the test company will be Underwriters Laboratories (UL).

PUMP PRIMER

The priming pump will be a Trident air primer system. A push in primer handle will open the priming valve and prime the pump.

CAB MOUNTED PUMP REMOTE PRIMING VALVE

An additional primer control valve will be furnished to prime the pump from the cab. The Trident Emergency products RPV (remote priming valve) will activate using the same air that powers the AirPrime™ system when the coinciding panel valve is depressed.

MASTER DRAIN VALVE

A rotary type, 12 port master drain valve will be provided and controlled at the lower portion of the side pump panel. The valve will be located in pump compartment lower than the main body and connected in such a manner as to allow complete water drainage of the pump body and all required accessories. Water will be drained below the apparatus body and away from the pump operator.

INDIVIDUAL BLEEDERS AND DRAINS

All lines will drain through the master drain valve or will be equipped with individual drain valves, easily accessible and labeled.

One (1) individual "Innovative Control" lift up drain valve will be furnished for each 1-1/2" or larger discharge port and each 2-1/2" gated auxiliary suction.

Drain/bleeder valves will be located at the bottom of the side pump module panels.

All drains and bleeders will discharge below the running boards.

SYNFLEX SUCTION, DISCHARGE, PRESSURE AND CONTROL LINES

Small lines within the pump enclosure will be constructed from Synflex hose. Uses include, but are not limited to such lines as priming control, gauge lines, drain lines, air control valves, pump shift, supplemental cooling, foam flush and air bleeder valves.

HALE ANODE BLOCKS - ALLOY - 2 TOTAL

Two (2) Hale Alloy Anode blocks will be provided and located one (1) on the suction side and one (1) on the discharge side of the pump to protect the pump from corrosion.

The Anodes will be painted Safety Yellow for identification purposes.

TOP MOUNT PUMP MODULE

The pump module will be a self-supported structure mounted independently from the body and chassis cab.

The design must allow normal frame deflection without imposing stress on the pump module structure or side running boards. The pump module will be securely mounted to the chassis frame rails.

The pump module will incorporate a formed structure on the top front to support the top mount control panel and required mechanical control handles.

TOP MOUNTED VALVE CONTROLS

The valves will be controlled by vertically operated swing handles. Each handle will be equipped with a twist-lock, easy-grip knob. The valve control handles will be mounted in-line. Each valve control handle will be connected to its respective valve via a control rod and a bell crank mechanism, if needed. Each control rod will consist of a 1/2" pipe welded to a threaded stud to form a rigid linkage. Each pressure gauge will be located directly above its respective discharge control handle, and will be clearly marked by color coded name plates.

The pump module will be a welded frame work utilizing structural steel components properly braced to withstand the rigors of chassis frame flex.

DUNNAGE AREA

A dunnage area will be provided above the pump enclosure, behind the top mount control panel, for equipment mounting and storage. This area will be furnished with a removable 3/16" aluminum tread plate floor and will be enclosed on the sides.

NOTE: The size of this storage area may vary when top mounted crosslays, booster reel(s), etc., are specified and located in this area.

TRANSVERSE WALKWAY

There will be a transverse walkway located at the rear of the chassis cab, ahead of the pump module. The walkway will be constructed of 3/16" aluminum tread plate and will be clear and unobstructed for through traffic. Folding step(s) will be provided if necessary to maintain NFPA step heights. If steps adjacent to walkway (such as commercial chassis cab access steps) provide NFPA compliant step height, folding steps will not be provided.

A miscellaneous equipment storage compartment will be provided at either side of the walkway, outboard of the chassis frame rails. A vertically hinged, aluminum tread plate door with positive closure latch will be provided on the outboard face of each compartment. Compartments will be ventilated.

The pump house walkway will be approximately 20" wide.

FOLD STEPS REAR CAB WALL

A folding step will be provided on the exterior rear wall of the cab, on the driver and officer side, to provide easy access to the pump house walkway. The steps will mount approximately 13" from the bottom of the rear cab sheet and centered 6" from the outer edge of the cab. The step will match the folding steps utilized on the apparatus body.

PUMP ENCLOSURE HEATER

The pump enclosure will be equipped with one (1) Hades 20,000 BTU hot water heater which utilizes chassis engine coolant run through heater hoses to prevent freezing of pump components during pumping operations in low temperature climates. The heater will be switched on the pump operator's panel.

PUMP HEAT PAN

A bolt-on pump heat pan fabricated from 1/8" aluminum will be provided on the underside of the pump enclosure to act as a supplementary heating system by entrapping chassis exhaust heat during low temperature pumping operations.

The heat pan will have a slide out, removable bottom panel which should be removed for warm weather usage.

SUCTION INLETS

Two (2) 6" N.S.T. suction inlets will be provided, one on the driver side and one on the officer side pump panel. A removable strainer will be installed on each inlet.

PUMP SUCTION ENDS

The main pump suction inlets will be furnished with a short suction end, terminating with only the suction threads protruding through the side panel to minimize the distance an exterior appliance protrudes beyond the pump panel.

A 6" NST chrome plated long handle pressure vented cap will be installed on each main inlet of the pump.

One (1) 6" NH x 4" Storz TFT Ball Intake Valve AB1SP-NX 30°-degree adapter and 4" Storz cap will be provided for the driver side main suction inlet.

One (1) 6" NH x 4" Storz TFT Ball Intake Valve AB1SP-NX 30°-degree adapter and 4" Storz cap will be provided for the officer side main suction inlet.

FRONT SUCTION

A 6" N.S.T. front suction inlet will be provided at the front of the vehicle, plumbed from the pump.

The front inlet will be located above the right-hand side of the front bumper extension and will terminate with a chromed brass, chicksan style swivel to allow a minimum of 180 degree rotation of the inlet for suction hose attachment.

The front suction pipe will be equipped with a chrome 6" NSTM thread adapter.

The front inlet will be plumbed utilizing 5", schedule 10 stainless steel piping, 45-degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the front of the cab. A manual drain will be provided ahead of the front wheel and a panel controlled drain will be provided aft of the front wheel.

A minimum of two (2) grooved pipe couplings will be furnished in this assembly to allow for flex and serviceability.

The front suction inlet will be gated with a 5" Bray in-line, full flow butterfly valve, located in the pump compartment.

An Akron model 59 inlet relief valve will be provided as part of the front suction plumbing, situated outboard of the rear suction gate valve.

The front suction valve will be air operated with a control switch located on the operator's panel with function plate.

One (1) 6" NST chrome plated long handle vented cap(s) will be installed on front suction.

AUXILIARY SIDE SUCTION(S)

One (1) 2-1/2" auxiliary suction will be provided at the driver side pump panel, to the rear of the main inlet. The 2-1/2" auxiliary suction will terminate with a removable strainer, chrome plated 2-1/2" NST female swivel with a chrome plated plug and retaining chain.

An Akron Brass 2 1/2" Generation II Swing-Out™ Valve will be provided for the driver's side rear auxiliary suction. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

A 1/4 turn swing control handle will be provided on the driver side rear auxiliary suction valve

All side gated inlet valves will be recess mounted behind the side pump panels or body panels.

TANK TO PUMP

One (1) 4" tank to pump line will be, piped through the front bulkhead of the tank with a 90 degree elbow down into the tank sump. This line will be plumbed directly into the rear of the pump suction manifold for maximum efficiency.

A check valve will be provided to prevent accidental pressurization of the water tank through the pump connection. Connection from the valve to the tank will be made by using a non-collapsible flexible rubber hose.

An Akron Brass 4" Heavy Duty Swing-Out™ Valve will be provided between the pump suction manifold and the water tank. The valve will have an all brass body with flow optimizing flat ball and dual polymer seats.

The tank to pump valve will be air operated with an Akron control switch located on the operator's panel and on the cab dash with function plate.

An indicator light will be provided at each switch to indicate that the valve is open or closed.

TANK FILL

One (1) 2" gated full flow pump to tank refill line controlled at the pump panel will be provided. A deflector shield inside the tank will be furnished. Tank fill plumbing will utilize 2" high pressure hose for tank connection to accommodate flexing between components.

An Akron Brass 2" Generation II Swing-Out™ Valve will be provided between the pump discharge manifold and the water tank. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

A locking push/pull swing control handle will be located on the operator's panel with function plate.

DRIVER'S SIDE MAIN DISCHARGE #1

A discharge will be provided and located at the driver's side pump panel. The driver's side discharges # 1 will terminate with NST threads, through the left panel above the main pump intake.

The main pump discharge will be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

An Akron Brass 2 1/2" Generation II Swing-Out™ Valve will be provided for the driver's side #1 discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The discharge valve will be equipped with a straight 2 1/2" NST adapter that will be equipped with a 2 1/2" NST, 30-degree, chrome plated elbow.

The driver's side #1 discharge cap provided as standard equipment will be deleted.

One (1) 2-1/2" NSTF X 1-1/2" NSTM reducer with cap will be provided on the driver's side # 1 discharge.

The driver's side # 1 discharge valve will be controlled by a locking push/pull swing handle located on the top mount operator's panel.

The driver's side # 1 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

DRIVER'S SIDE MAIN DISCHARGE #2

A discharge will be provided and located at the driver's side pump panel. The driver's side discharges # 2 will terminate with NST threads, through the left panel above the main pump intake.

The main pump discharge will be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

An Akron Brass 2 1/2" Generation II Swing-Out™ Valve will be provided for the driver's side #2 discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The discharge valve will be equipped with a straight 2 1/2" NST adapter that will be equipped with a 2 1/2" NST, 30-degree, chrome plated elbow.

The driver's side # 2 discharge cap provided as standard equipment will be deleted.

A 2-1/2" NSTF X 1-1/2" NSTM reducer with cap will be provided on the driver's side # 2 discharge.

The driver's side # 2 discharge valve will be controlled by a locking push/pull swing handle located on the top mount operator's panel.

The driver's side # 2 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

OFFICER'S SIDE MAIN DISCHARGE #1

A discharge will be provided and located at the officer's side pump panel. The officer's side discharges #1 will terminate with NST threads, through the officer's side panel above the main pump intake.

The main pump discharge will be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

An Akron Brass 4" Heavy Duty Swing-Out™ Valve will be provided for the officer's side #1 discharge. The valve will have an all brass body with flow optimizing flat ball and dual polymer seats.

The discharge valve will be equipped with a straight 4" NST adapter.

The officer's side # 1 discharge cap provided as standard equipment will be deleted.

A 4" NSTF X 4" Storz Kochek SKE-R 30° adapter with cap will be provided on the officer's side # 1 discharge.

The officer's side # 1 discharge valve will be gated with an Akron Hand wheel controlled, inline valve. The valve will be controlled at the pump operator's panel with a chrome plated hand wheel and mechanical valve position indicator.

The officer's side # 1 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

OFFICER'S SIDE MAIN DISCHARGE #2

A discharge will be provided and located at the officer's side pump panel. The officer's side discharges #2 will terminate with NST threads, through the officer's side panel above the main pump intake.

The main pump discharge will be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

An Akron Brass 2 1/2" Generation II Swing-Out™ Valve will be provided for the officer's side #2 discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The discharge valve will be equipped with a straight 2 1/2" NST adapter that will be equipped with a 2 1/2" NST, 30-degree, chrome plated elbow.

The officer's side #2 discharge cap provided as standard equipment will be deleted.

A 2-1/2" NSTF X 1-1/2" NSTM reducer w/cap will be provided on the officer's side #2 discharge.

The officer's side #2 discharge valve will be controlled by a locking push/pull swing handle located on the top mount operator's panel.

The officer's side #2 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

TOP MOUNT DISCHARGE CONTROLS

All top mount valves will be controlled by a locking push/pull swing handle unless otherwise noted in the individual discharge below.

DRIVER SIDE REAR DISCHARGE

A 2 1/2" NST rear discharge will be provided at the rear of the vehicle, plumbed from the pump.

The rear discharge will terminate on the rear body panel, on the driver side of the body.

The driver side rear discharge pipe will be equipped with a chrome 2 1/2" NSTM thread adapter.

The driver side rear discharge will be plumbed utilizing 2 1/2" schedule 10 stainless steel piping, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the rear of the vehicle.

A minimum of one (1) grooved pipe coupling will be furnished in this assembly to allow for flex and serviceability.

An Akron Brass 2 1/2" Generation II Swing-Out™ Valve will be provided for the driver's side rear discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The driver side rear discharge valve will be controlled by a push/pull handle located on the operator's panel.

The driver side rear discharge cap provided as standard equipment will be deleted.

One (1) 2-1/2" NSTF X 1-1/2" NSTM reducer(s) w/cap will be provided on the driver's side rear discharge.

The driver side rear discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

OFFICER SIDE REAR DISCHARGE

A 2 1/2" NST rear discharge will be provided at the rear of the vehicle, plumbed from the pump.

The rear discharge will be plumbed through a pipe sleeve integrated into the water tank that will terminate on the rear body panel, on the officer side of the body.

The officer side rear discharge pipe will be equipped with a chrome 2 1/2" NSTM thread adapter.

The officer side rear discharge will be plumbed utilizing 2 1/2" schedule 10 stainless steel piping, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the rear of the vehicle.

A minimum of one (1) grooved pipe coupling will be furnished in this assembly to allow for flex and serviceability.

An Akron Brass 2 1/2" Generation II Swing-Out™ Valve will be provided for the officer's side rear discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The officer side rear discharge valve will be controlled by a push/pull handle located on the operator's panel.

The officer side rear discharge cap provided as standard equipment will be deleted.

One (1) 2-1/2" NSTF X 1-1/2" NSTM reducer(s) with cap will be provided on the officers side rear discharge.

The officer side rear discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

DECK GUN DISCHARGE

A deck gun discharge will be plumbed from the pump to an area on top of the vehicle. The deck gun piping will be firmly supported and braced.

The deck gun discharge will be located in the center of the dunnage area above the pump module. A pedestal type, 1/4" steel plate support assembly will be provided to stabilize deck gun plumbing below deck gun mount flange.

The deck gun discharge pipe will terminate with 3" NPT threads.

To improve the operation range of the deck gun, the discharge pipe will be outfitted with an electric TFT (18") Extend-A-Gun RC3, part # XGA38VL-PL. The electric Extend-A-Gun will be equipped with a up/down control. The Extend-A-Gun will be wired to the hazard light on the cab dash.

WARNING LIGHT - IN CAB - "DECK GUN RAISED"

A hazard warning light will be installed to alert the driver, "Deck Gun Raised".

The deck gun piping will be designed so the overall height of the deck gun in the mounted/stowed position does not exceed the tallest point on the cab/body.

The deck gun discharge will be plumbed utilizing 3" schedule 10 stainless steel piping, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the deck gun location.

A minimum of one (1) grooved pipe coupling will be furnished in this assembly to allow for flex and serviceability.

An Akron Brass 3" Generation II Swing-Out™ Valve will be provided for the deck gun discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The deck gun discharge valve will be controlled by a push/pull handle located on the operator's panel.

The deck gun discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

TFT ELECTRIC DECK GUN

A TFT Monsoon RC monitor will be supplied and mounted on the deck gun discharge of the unit to provide the maximum travel clearance. The monitor will be controlled from the pump operator's panel.

TFT MASTER STREAM NOZZLE

A TFT model "MASTER STREAM" 1500 GPM electric nozzle will be supplied with the deck gun.

TFT OPERATOR STATION

The electric deck gun will be controlled using a TFT panel mount controller.

FRONT DISCHARGE

A 1 1/2" front #1 discharge will be plumbed to the front bumper of the vehicle.

The front #1 discharge will terminate on the top driver's side of the front bumper extension gravel shield with a chrome 1 1/2" NST chicksan swivel adapter.

The front #1 discharge will be plumbed utilizing 2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the front of the vehicle.

A minimum of one (1) grooved pipe coupling will be furnished in this assembly to allow for flex and serviceability. Automatic discharge drains will be provided at all low points in the plumbing.

An Akron Brass 2" Generation II Swing-Out™ Valve will be provided for the front #1 discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The front #1 discharge valve will be controlled by a push/pull handle located on the operator's panel.

A 1 1/2" NST chrome plated pressure vented cap will be installed the front #1 discharge.

The front #1 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

FRONT DISCHARGE AIR BLOW DOWN

One (1) FRONT DISCHARGE air blowout utilizing a quarter turn shuttle valve to redirect chassis air to the FRONT DISCHARGE will be provided at the pump operator's panel for cold weather operations.

HORIZONTAL CROSSLAY #1

A crosslay hose bed will be provided and plumbed from the pump in a transverse design, located above the pump enclosure for quick attack deployment. The crosslay hose bed flooring will be designed to be removable, constructed from brushed finish, perforated aluminum material.

Crosslay #1 will be designed to have a minimum total capacity of 3.5 cubic feet as required by NFPA -1901 to accommodate a minimum of 200 feet of 2 1/2" fire hose.

Crosslay #1 hosebed will be designed to accommodate the fire hose in a double stack configuration.

The crosslay discharge will terminate below the hosebed floor with a 2 1/2" NSTM chicksan swivel adapter. The crosslay hose bed floor will be slotted to allow the swivel to extend up through the floor, allowing the pre-connected hose to be pulled off either side of the apparatus without kinking the hose at the coupling connection.

The crosslay #1 discharge will be plumbed utilizing 2 1/2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to crosslay hosebed.

A minimum of one(1) grooved pipe coupling will be furnished in this assembly, if necessary, to allow for flex and serviceability.

An Akron Brass 2 1/2" Generation II Swing-Out™ Valve will be provided for the crosslay #1 discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The crosslay #1 discharge valve will be controlled by a push/pull handle located on the operator's panel.

The crosslay #1 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

HORIZONTAL SPEEDLAY #1

Speedlay #1 will be a transverse hose bed, which will be designed as an integral part of the pump module design, located forward of the pump just above the frame rails. Hose deployment will be accomplished from either side of the apparatus. The speedlay hose bed flooring will be designed to be removable, constructed from brushed finish, perforated aluminum material.

The hose will be capable of being reloaded from either side of the vehicle and from access slots provided on the front of the pump module when standing in the pump module walkway.

The outer edge of the speedlay #1 hosebed will be trimmed stainless steel scuff plates.

The speedlay #1 discharge will terminate through the rear wall of the hosebed with a 1 1/2" NSTM chicksan swivel adapter. The hosebed rear wall will be slotted to allow the swivel to through the wall, allowing the pre-connected hose to be pulled off either side of the apparatus without kinking the hose at the coupling connection.

Speedlay #1 will be designed to have a minimum total capacity of 3.5 cubic feet as required by NFPA -1901 to accommodate a minimum of 200 feet of 1-3/4" fire hose. The hose will be loaded in a double stack configuration.

The speedlay #1 discharge will be plumbed utilizing 2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to speedlay hosebed.

A minimum of one (1) grooved pipe coupling will be furnished in this assembly to allow for flex and serviceability.

An Akron Brass 2" Generation II Swing-Out™ Valve will be provided for the speedlay #1 discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The speedlay #1 discharge valve will be controlled by a push/pull handle located on the operator's panel.

The speedlay #1 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

HORIZONTAL SPEEDLAY #2

Speedlay #2 will be a transverse hose bed, which will be designed as an integral part of the pump module design, located forward of the pump just above the lower speedlay. Hose deployment will be accomplished from either side of the apparatus. The speedlay hose bed flooring will be designed to be removable, constructed from brushed finish, perforated aluminum material.

The hose will be capable of being reloaded from either side of the vehicle and from access slots provided on the front of the pump module when standing in the pump module walkway.

The outer edge of the speedlay #2 hosebed will be trimmed stainless steel scuff plates.

The speedlay #2 discharge will terminate through the rear wall of the hosebed with a 1 1/2" NSTM chicksan swivel adapter. The hosebed rear wall will be slotted to allow the swivel to through the wall, allowing the pre-connected hose to be pulled off either side of the apparatus without kinking the hose at the coupling connection.

Speedlay #2 will be designed to have a minimum total capacity of 3.5 cubic feet as required by NFPA -1901 to accommodate a minimum of 200 feet of 1-3/4" fire hose. The hose will be loaded in a double stack configuration.

The speedlay #2 discharge will be plumbed utilizing 2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to speedlay hosebed.

A minimum of one (1) grooved pipe coupling will be furnished in this assembly to allow for flex and serviceability.

An Akron Brass 2" Generation II Swing-Out™ Valve will be provided for the speedlay #2 discharge. The valve will have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

The speedlay #2 discharge valve will be controlled by a push/pull handle located on the operator's panel.

The speedlay #2 discharge will be equipped with a 2 ½" diameter Innovative Controls pressure gauge. The gauge will have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge. The gauge will be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F.

The gauge will exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel will be provided to prevent corrosion and protect the lens and gauge case. The gauge will have black graphics on a white background.

SPARE SPEEDLAY TRAYS

Two (2) additional speedlay trays will be provided to allow the Medway Fire Department to pre-load spare hose for a desired speedlay. The two (2) trays will be designed to have the same capacity of hose, matching the existing speedlay trays. The tray will be shipped loose with the vehicle.

PUMP ENCLOSURE HOSEBED HOSE RETENTION

A CARGO NET cross lay cover will be provided. It will be securely fastened at the front with snaps and Velcro at the rear, with straps to secure each end flap.

The crosslay cover will be black in color.

SPEED LAY HOSEBED HOSE RETENTION

CARGO NETTING covers will be provided on each side of the speed lays to retain hose in the speed lays. The covers will be secured with expandable loops sewn into the covers and hooks on the apparatus.

The speed lay end flap will be black in color.

FRONT BUMPER TURRET

An Elkhart Brass model # 8494-01, Sidewinder Wildland Monitor will be provided and installed on the specified front bumper extension. The turret will be controlled in the cab only, using a remotely operated valve, interfaced to a joy stick controller, model # 81172001, mounted in the cab. The turret will be equipped with a remote controlled fog nozzle model # 6000-200E (set at 125 gpm.). The completed installation will allow full operation of the turret from the cab.

The bumper turret will be mounted on the officer's side of the front bumper extension gravel shield.

The bumper turret discharge will be plumbed utilizing 2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the front of the vehicle.

A minimum of one (1) grooved pipe coupling will be furnished in this assembly to allow for flex and serviceability. Automatic discharge drains will be provided at all low points in the plumbing.

2" Elkhart valve, will be provided for the bumper turret discharge.

CAB DASH THROTTLE CONTROL

A cab dash mounted FRC twister throttle controller will be provided to control the throttle when the pump is engaged to allow the front bumper turret to be utilized from within the cab without exiting the truck.

The Twister throttle is a J1939 CAN based throttle device that will operate the engine throttle either clockwise of counter clockwise. The twister control has LED indicators that will indicate "throttle ready" and "throttle active"

A switch will be provided on the pump panel to allow for throttle control to be transferred from the cab to the pump panel.

BUMPER TURRET BLOW OUT

One (1) bumper turret air blowout utilizing a quarter turn shuttle valve to redirect chassis air to the bumper turret will be provided at the pump operator's panel for cold weather operations.

FOAM PIPING - 1 INCH

All foam concentrate plumbing from the tank or auxiliary foam inlet to the foam system components will be PVC.

The foam system piping will incorporate a check valve to prevent water from entering the foam tank; the discharge piping will also include a check valve to prevent foam solution from back feeding into the discharge side of the pump. Individual discharge piping will be as specified for each discharge.

The complete foam system will be tested in accordance with NFPA-1901.

AROUND-THE-PUMP CLASS A and CLASS B FOAM SYSTEM

WATP-1500V High Head Around the Pump Foam System

GENERAL DESCRIPTION

The Williams 'High Head' Around-the Pump 1500V Foam System is designed to be installed within the apparatus piping to provide foam proportion at .25% / .5% / 1%/ 3% / 6% foam solutions up to 4800 / 4500 / 4000/ 1500 / 750 GPM respectively. The system will operate against hydrant pressures up to 33% of pump main discharge pressure. This economical system is easy to use and completely water driven - there is no foam pump to maintain. The WATP can proportion foam from on-board foam cell(s) or remote source via an external auxiliary foam inlet (apparatus manufacturer supplied).

Optional clear PVC foam concentrate pick-up hose(s) and single/double 'stinger' tubes are available for use with external foam concentrate sources.
Designed as a dual agent system for use with Class 'A' and Class 'B' foam concentrates, the system features a variable metering valve that allows infinite adjustment to accommodate accurate foam solution flows between any two specific metering valve positions.

FEATURES / BENEFITS

Operates against 33% Pump Suction Pressure. (Example: Master Pressure @150 PSI, Suction Pressure

@ 50 PSI)
Proportions Class "B" Foam up to 4000 GPM at 1%.
Proportions Class "B" Foam up to 1500 GPM at 3%.
Proportions Class "B" Foam up to 750 GPM at 6%.
Positive Shut-Off on Metering Valve.
Requires no maintenance.
Water Powered.
External Foam Source Capabilities.
NFPA 1901 Compliant When Equipped With Williams 4" WPRV/4T Intake Pressure Reducing Valve.

Basic System Includes:
Jet Pump, Metering Valve, Check Valve, In-Line Strainer, Motive Water Control Valve, Control Panel and Block Valves.

Materials of Construction:

Brass, Stainless Steel and Stainless Steel Trim.

FOAM SYSTEM CONTROL VALVE

The control valve to allow water flow through the foam system will be provided as an air operated valve. Two (2) control switches for this valve will be furnished, one will be on the pump panel and the second will be located within the cab near the tank to pump valve controller. An indicator light will be provided at each switch to indicate that the valve is open or closed.

The foam proportioning system will be supplied from the foam concentrate storage tank/s. The tank/s will be constructed of materials compatible with foam concentrates being used in the system. Tank capacity, venting, fill opening and foam outlet plumbing connections will be in accordance with NFPA requirements. Foam tank lid will be sealed and latched in accordance with NFPA standards. If required a provision will be made for installation of low tank level sensors and routing of the wiring for the sensors.

HALE EZ-FILL FOAM TANK A/B REFILL SYSTEM

The apparatus will be equipped with a Hale EZ-Fill foam transfer system for refilling the on-board foam cells. The system operates by attaching a suction hose to a pre-plumbed panel connection using a positive seal quick connect fitting. The pickup wand is then placed in the foam concentrate container. EZ-Fill is an easy-to-operate fixed-mount 12-volt, 5-gpm foam tank refill pump system. EZ-Fill features push-button smart switch technology. Just press the “Fill” or “Flush” button for a moment and the unit will cycle either filling the foam concentrate reservoir or running through a flush cycle.

FOAM CONCENTRATE

The foam system will be capable of injecting the following foam concentrates:

- Class A - Silvex Foam manufactured by Ansul.
- Class B - Universal Gold 1% - 3% AR-AFFF manufactured by Kidde Fire Fighting / National Foam.

PUMP PANEL - TOP MOUNT

The pump operator's control panel will be located above the pump towards the rear of the transverse walkway area with the operator facing the rear of the apparatus to operate the pump controls.

The top and side panels will be completely removable and designed for easy access and servicing.

TOP MOUNT GAUGE PANEL

The top operator's panel will be fabricated from 12-gauge 304L stainless steel with a #4, (150/180 grit), standard polished finish.

SIDE PUMP PANEL MATERIAL

The left and right side pump panel will be fabricated from 12-gauge 304L stainless steel with a #4, (150/180 grit), standard polished finish.

HINGED GAUGE PANEL

An angled full width, horizontally hinged gauge access panel will be provided at the top mount operator's position. Chrome plated positive locks will be provided along with chain holders to secure the panel in the opened position.

VERTICALLY HINGED, SPLIT PUMP PANEL DRIVER SIDE

The driver side pump panel will be split, vertically hinged, to provide complete access to the pump and plumbing on the driver side of the pump enclosure. The panels will be equipped with stainless steel hinges and secured with push type locks to hold the panels closed. The drains located on the driver side panel will be fastened to the lower panel, which will be stationary.

VERTICALLY HINGED, SPLIT PUMP PANEL OFFICER SIDE

The officer's side pump panel will be split, vertically hinged, to provide complete access to the pump and plumbing on the officer side of the pump enclosure. The panels will be equipped with stainless steel hinges and secured with push type locks to hold the panels closed. The drains located on the officer's side panel will be fastened to the lower panel, which will be stationary.

PANEL FASTENERS

Stainless steel machine screws and lock washers will be used to hold these panels in position. The panels will be easily removable to provide complete access to the pump for major service.

CAPS AND ADAPTERS SAFETY TETHER

All applicable discharge and suction caps, plugs and adapters will be equipped with chrome plated ball chain and secured to the vehicle.

PUMP PANEL TRIM PLATES

A high polished trim plate will be provided around each discharge port and suction inlet opening to allow accessibility to the respective valve for service and repairs.

DISCHARGE GAUGE TRIM BEZELS

Each individual discharge gauge will be installed into a decorative chrome-plated mounting bezel that incorporates valve-identifying verbiage and color labels.

COLOR CODED IDENTIFICATION TAGS

Color coded identification tags will be provided for all gauges, controls, connections, switches, inlets and outlets.

PUMP OPERATOR'S PANEL LIGHT SHIELD

The pump operator’s panel will be equipped with a light shield that will be full width of the control panel, and will be positioned to cover the lights and prevent glare.

The light shield will be equipped with the following lights:

- Six (6) Tecniq #E18 LED lights.

One (1) light under the operator's panel light shield will be actuated when fire pump is engaged in addition to the pump engaged light.

DRIVER SIDE PUMP PANEL LIGHTING

The driver side pump panel and running board will be illuminated by the following lights:

- Four (4) TecNiq Eon, 3-LED illumination lights mounted in horizontal stainless steel bezels and mounting gaskets.

The lights will be switched with the top mount panel lights.

TOP MOUNT WALKWAY LIGHTING

The top mount walkway will be illuminated by the following lights:

- Four (4) TecNiq Eon, 3-LED illumination lights mounted in horizontal stainless steel bezels and mounting gaskets.

The lights will be controlled with the marker lights.

OFFICER SIDE PUMP PANEL LIGHTING

The officer side pump panel and running board will be illuminated by the following lights:

- Four (4) TecNiq Eon, 3-LED illumination lights mounted in horizontal stainless steel bezels and mounting gaskets.

The lights will be switched with the top mount panel lights.

PUMP OPERATOR'S PANEL

Particular attention is to be given to functional arrangement of all controls. The pump operator's panel will accommodate the following:

- Hinged gauge panel
- Water tank fill valve
- Auxiliary suction valve control
- All discharge valve controls
- Auxiliary engine cooler controls
- Water tank suction control valve
- Pump primer valve
- Engine throttle control
- Master compound vacuum gauge
- Master pressure gauge
- Individual discharge gauges
- Pump shift engaged indicator light
- Water tank water level indicator
- Engine tachometer
- Engine oil pressure gauge with audible alarm
- Engine water temperature gauge with audible alarm
- Low voltage light and audible alarm
- Pump panel light switch
- Speed counter (Underwriters)
- Pump performance plate (Underwriters)
- Pump serial No. plate
- Master pump drain valve
- Individual drains
- Voltmeter
- Air inlet/outlet at lower driver side panel

- Pump panel air horn actuation button labeled "EVACUATION" in white letters with a red background.

- Class One "Captain" pressure governor control

PUMP TEST PORTS

The pump panel will be equipped with Vacuum & Pressure test plugs to allow for test equipment to monitor pump pressure and vacuum levels. Chrome plugs and labels will be provided for the test ports.

MASTER GAUGES

One (1) 4" diameter pressure gauge (labeled: "PRESSURE") and one (1) 4" diameter compound vacuum gauge (labeled: "INTAKE") will be provided. The master gauges will be Innovative Controls glycerin filled. The gauge faces will be white with black numerals.

PRESSURE & COMPOUND GAUGE RANGES

All applicable pressure gauges will have a range of 0 - 400 P.S.I., and the compound gauge will have a range of -30" - 0 - 400 P.S.I.

CLASS 1 ENFO IV ENGINE STATUS SYSTEM

A Class 1 "ENFO IV" display head will be provided for the SAE J1939 engine, to display the engine oil pressure, engine water temperature, engine RPM and chassis volt meter functions. The display head will include the required NFPA warning lights and alarms.

ENGINE COOLER

An auxiliary cooler or heat exchanger will be installed in the engine compartment between the engine and the chassis radiator. The cooler will permit the use of water from the pump for cooling the engine. The cooling will be done without mixing engine and pump water.

TANK LEVEL GAUGE

A Fire Research, model #WLA300-A00, "TANKVISION" gauge that shows the actual volume of water in the tank will be provided on the pump operator's panel. The "TANKVISION" gauge is designed for both ease of operation and installation. The "TANKVISION" gauge utilizes ultra bright multi color LEDs for sunlight readability and also uses 2 specially designed wide-viewing lens for 180° of clear viewing. The "TANKVISION" gauge utilizes a pressure sender to measure the liquid volume. The gauge will be equipped with a self-calibration feature that allows the LEDs TANKVISION gauge to be used on tanks of different shapes and sizes.

Features:

- Flashes warning when the volume is less than 25%. Rapid down scrolling LEDs alert the operator when the tank is almost empty. Remote audio warning available.
- One size fits all'. The self-calibration feature allows for easy calibration of any shape or size tank.
- Multiple displays are possible with a single sender through the FRC data bus.
- Rugged waterproof cast aluminum housing.
- No fitting needed for poly tank.
- Special fittings available for other tank materials.
- Connector disconnects at back of display.

CAB TANK LEVEL GAUGE

A Fire Research model, WLA205-A00 miniature "TANKVISION" gauge that shows the actual volume of water in the tank will be provided in the cab. The "TANKVISION" gauge is designed for both ease of operation and installation. The "TANKVISION" gauge utilizes ultra bright LEDs for sunlight readability and also uses 2 specially designed wide-viewing lens for 180° of clear viewing. The "TANKVISION" gauge utilizes a pressure sender to measure the liquid volume. The gauge will be equipped with a self-calibration feature allows the TANKVISION gauge to be used on tanks of different shapes and sizes.

The gauge will use a pressure transducer installed near the bottom of the water tank to determine the correct volume in the tank.

FOAM TANK LEVEL GAUGE - FOAM TANK "A"

A Fire Research, model #WLA360-A00, "TANKVISION" gauge that shows the actual volume of foam in the tank will be provided on the pump operator's panel. The "TANKVISION" gauge is designed for both ease of operation and installation. The "TANKVISION" gauge utilizes ultra bright multi color LEDs for sunlight readability and also uses 2 specially designed wide-viewing lens for 180° of clear viewing. The "TANKVISION" gauge utilizes a pressure sender to measure the liquid volume. The gauge will be equipped self-calibration feature allows the TANKVISION gauge to be used on tanks of different shapes and sizes.

CAB FOAM TANK LEVEL GAUGE - FOAM TANK "A"

A Fire Research, miniature #WLA265-A00 "TANKVISION" gauge that shows the actual volume of foam in the tank will be provided in the cab. The "TANKVISION" gauge is designed for both ease of operation and installation. The "TANKVISION" gauge utilizes ultra bright LEDs for sunlight readability and also uses 2 specially designed wide-viewing lens for 180° of clear viewing. The "TANKVISION" gauge utilizes a pressure sender to measure the liquid volume. The gauge will be equipped self-calibration feature allows the TANKVISION gauge to be used on tanks of different shapes and sizes.

The gauge will use a pressure transducer installed near the bottom of the foam tank to determine the correct volume in the tank.

FOAM TANK LEVEL GAUGE - FOAM TANK "B"

A Fire Research, model #WLA370-A00, "TANKVISION" gauge that shows the actual volume of foam in the tank will be provided on the pump operator's panel. The "TANKVISION" gauge is designed for both ease of operation and installation. The "TANKVISION" gauge utilizes ultra bright multi color LEDs for sunlight readability and also uses 2 specially designed wide-viewing lens for 180° of clear viewing. The "TANKVISION" gauge utilizes a pressure sender to measure the liquid volume. The gauge will be equipped self-calibration feature allows the TANKVISION gauge to be used on tanks of different shapes and sizes.

CAB FOAM TANK LEVEL GAUGE - FOAM TANK "B"

A Fire Research, miniature #WLA275-A00 "TANKVISION" gauge that shows the actual volume of foam in the tank will be provided in the cab. The "TANKVISION" gauge is designed for both ease of operation and installation. The "TANKVISION" gauge utilizes ultra bright LEDs for sunlight readability and also uses 2 specially designed wide-viewing lens for 180° of clear viewing. The "TANKVISION" gauge utilizes a pressure sender to measure the liquid volume. The gauge will be equipped self-calibration feature allows the TANKVISION gauge to be used on tanks of different shapes and sizes.

The gauge will use a pressure transducer installed near the bottom of the foam tank to determine the correct volume in the tank.

WATER TANK

The water tank will have a capacity of 1000 gallons, constructed from Poly material.

FOAM TANK "A"

In addition to the water capacity of the tank, a 30 gallon integral foam storage area will be built into the water tank. The foam tank will have a latched fill tower, properly labeled as the foam fill point. A valved drain will be provided.

FOAM TANK "B"

In addition to the total capacity of the water tank, a 250 gallon integral foam storage area will be built into the water tank. The foam tank will have a latched fill tower, properly labeled as the foam fill point. A valved drain will be provided.

WATER TANK CONSTRUCTION

The Poly water tank will be constructed of PT3 polypropylene material. This material will be a non-corrosive stress relieved thermoplastic and UV stabilized for maximum protection. Tank shell thickness may vary depending on the application and may range from 1/2 to 1" as required. Internal baffles are generally 3/8" in thickness.

The tank will be of a specific configuration and is so designed to be completely independent of the body and compartments. Joints and seams will be fused using nitrogen gas as required and tested for maximum strength and integrity. The tank construction will include PolyProSeal technology wherein a sealant will be installed between the plastic components prior to being fusion welded. This sealing method will provide a liquid barrier offering leak protection in the event of a weld compromise. The top of the booster tank is fitted with removable lifting assembly designed to facilitate tank removal. The transverse and longitudinal swash partitions will be manufactured of a minimum of 3/8" PT3 polypropylene. All partitions will be equipped with vent and air holes to permit movement of air and water between compartments. The partitions will be designed to provide maximum water flow. All swash partitions interlock with one another and are completely fused to each other as well as to the walls of the tank. All partitions and spacing will comply with NFPA 1901. The walls will be welded to the floor of the tank providing maximum strength as part of the tank's unique Full Floor Design. Tolerances in design allow for a maximum variation of 1/8" on all dimensions.

WATER CAPACITY CERTIFICATION

All tanks will be tested and certified as to capacity on a calibrated and certified tilting scale. Each tank will be weighed empty and full to provide precise fluid capacity. Each Poly-Tank's III is delivered with a Certificate of Capacity delineating the weight empty and full and the resultant capacity based on weight.

WATER TANKNOLOGY TAG

A tag will be installed on the apparatus in a convenient location and contain pertinent information including a QR code readable by commercially available smart phones. The information contained on the tag will include the capacity of the water and foam (s), the maximum fill and pressure rates, the serial number of the tank, the date of manufacture, the tank manufacturer, and contact information. The QR code will allow the user to connect with the tank manufacturer for additional information and assistance.

WATER TANK ISO CERTIFICATION

The tank must be designed and fabricated by a tank manufacturer that is ISO 9001:2000 certified in each of its locations. The ISO certification must be to the current standard in effect at the time of the design and fabrication of the tank.

WATER TANK LID

The tank cover will be constructed of 1/2" thick PT3 polypropylene and UV stabilized, to incorporate a multi-piece locking design, which allows for individual removal and inspection if necessary. The tank cover(s) will be flush or recessed 3/8" from the top of the tank and will be fused to the tank walls and longitudinal partitions for maximum integrity. Each one of the covers will have hold downs consisting of 2" minimum polypropylene dowels spaced a maximum of 40" apart. These dowels will extend through the covers and will assist in keeping the covers rigid under fast filling conditions. A minimum of two lifting dowers will accommodate the necessary lifting hardware.

WATER TANK FILL TOWER

The tank will have a combination vent and manual fill tower. The fill tower will be constructed of 1/2" PT3 polypropylene and will be a minimum dimension of 12" x 12" outer perimeter. The fill tower will be blue in color indicating that it is a water-only fill tower. The tower will be located in the left front corner of the tank unless otherwise specified by the tank manufacturer to the purchaser. The tower will have a 1/4" thick removable polypropylene screen and a PT3 polypropylene hinged cover. The capacity of the tank will be engraved on the top of the fill tower lid. Inside the fill tower there will be a combination vent/overflow pipe. The vent overflow will be a minimum of schedule 40 polypropylene pipe with a minimum I.D. of that is designed to run through the tank, and will be piped to discharge water behind the rear wheels as required in NFPA 1901 so as to not interfere with rear tire traction.

WATER TANK OVERFLOW AND VENT PIPE

The fill tower will be fitted with an integral 4" I.D. schedule 40 P.V.C. combination overflow/vent pipe running from the fill tower through the tank to a 4" coupling flush mounted into the bottom of the tank to allow water to overflow behind the chassis rear axle.

WATER TANK SUMP

The tank sump will be a minimum of 10" wide x 10" long x 3" deep. An anti-swirl plate will be mounted inside the sump, approximately 1" above the bottom of the sump.

WATER TANK 3" SUMP DRAIN

A 3" drain plug will be provided.

THROUGH POLY WATER TANK - LADDER STORAGE

The ground ladders will be stored horizontally within a sleeve in the water tank.

WATER TANK FLANGES/OUTLETS - PUMPER

There will be two (2) standard tank outlets; one for tank-to-pump suction line which will be a minimum of 4" coupling and one for a tank fill line which will be a minimum of a 2" NPT coupling. All tank fill couplings will be backed with flow deflectors to break up the stream of water entering the tank.

WATER TANK MOUNTING ALL "T" TANKS - PUMPER

The tank will rest on the body cross members spaced a maximum of 22" apart, and will be insulated from these cross members with a minimum of 3/8" nylon webbing or 1/2" rubber, 2-1/2" wide. The tank will sit cradle-mounted using four (4) corner angles of 6 x 6 x 4 x 0.250 welded directly to the body cross members. The angles will keep the tank from shifting left to right or front to rear. The tank is designed on the free-floating suspension principle and will not require the use of hold downs. The tank will be completely removable without disturbing or dismantling the apparatus body structure. The body or hose bed cross braces will act as water tank retainers.

DIRECT TANK FILL - DRIVER SIDE

One (1) 4" Storz direct tank fill will be provided at the rear of the body, on the driver side, as low as possible. The direct tank fill will be gated with a 4" Fireman's Friend (TTMA 8-bolt attachment pattern) check-type fill valve. The fill valve will be capable of flowing at a rate in excess of 1,000 gallons per minute and will be of a self deflecting design, requiring no additional diffusion device. The fill valve will be constructed of stainless steel, with a spring actuated piston-type sealing mechanism to minimize seal wear and provide positive sealing of the valve. The fill will be equipped with a 30 degree elbow terminating with a 4" Storz connection.

DIRECT FOAM "B" TANK FILL - DRIVER SIDE PUMP PANEL

One (1) 1-1/2" NST direct FOAM B tank fill will be provided on the driver side pump panel. The direct tank fill will be located in the lower section of the panel, behind the main suction inlet. The direct tank fill will be gated with a 2" Akron ball valve with a swing handle. The fill will terminate with a 1-1/2" NST female swivel connection. A quarter turn drain valve will be supplied to bleed off excess pressure with a drain hose routed beneath the running board.

APPARATUS BODY DESIGN CONSTRUCTION

The body side and compartment assemblies will be designed and assembled to provide maximum strength and durability under all operating conditions.

Special attention will be taken to minimize corrosion on all fabricated parts and structural members of the body. All bolt-on components will be provided with a dissimilar metals isolation barrier to prevent electric corrosion. The body design will also incorporate removable panels to access spring hangers, rear body mounts and fuel tank sending units.

The body assembly will be an all-welded configuration. The body will be completely isolated from the cab and pump module structure.

Dimensions used in this specification will be the general outer dimension taken from a typical line diagram of the apparatus. These dimensions will not take into account items like material thickness, access panels, doors, and other installed options.

COMPARTMENT TOPS

Compartment ceilings will be a fully welded design as part of the body construction process. Compartment designs that do not have a welded in ceiling will not be acceptable.

COMPARTMENT DRIP MOLDING

Compartment tops over all side compartments will have a flange formed to provide protection against water runoff. For bodies with wide hosebeds or coffin compartments a secondary extruded drop molding will be provided above the compartments.

REAR BODY PANEL

The rear body panel will extend the full width between the body side compartments. This panel will be full height from the rear step to the hose bed floor. No part of the rear panel will be attached to the booster tank. The rear body panel material will be aluminum tread plate as standard. If Chevron striping is specified for the rear of the body then smooth aluminum will be utilized.

BODY AND COMPARTMENT FABRICATION - 3/16" ALUMINUM

All compartment panels and body side sheets will be fabricated entirely of 3/16" aluminum (5052-H32). Each side compartment assembly will be both plug welded and stitch welded to ensure proper weld penetration on all panels while avoiding the possible warping caused by a full seam weld. The side compartments will be welded on a fixture to ensure true body dimensions of all door openings. The side compartments and body side panels are then set into a body squaring fixture where the super structure is installed and the entire body is aligned to be completely symmetrical. The super structure is then welded to the compartment side panels and reinforcement plates are inserted which allows the compartment panels to become an integral component of the body support structure. A full seam weld will not be used due to the applied heat which will distort sheet metal and remove the protective coating from the perimeter of the welded area. All seams will be caulked prior to finish paint to ensure proper compartment seal.

SUB STRUCTURE - ALUMINUM

The body sub structure will be an all welded configuration utilizing a combination of 3” x 1-1/2” 6061-T6 thick walled structural tubing and 6061 structural channel.

This structure will be designed to totally support the full length and width of the body and will be welded to the body side compartments by use of reinforcement plates to incorporate the compartments into an integral part of the body weldment.

The sub structure will be bolted to the sides of the chassis frame at four (4) points. The two (2) forward mounting points will utilize a spring mount to help isolate the body from chassis deflection.

This design will provide storage capacity in each side compartment for a minimum of 500 lbs of equipment, and a minimum of 1000 lbs of equipment in the rear step compartment.

FIRE BODY WIDTH

The fire body will be 100" wide to provide the maximum amount of usable hose bed and compartment space. The side body compartments will be 29" deep in any full depth areas, and 14" deep in any split depth areas.

BODY FENDER

The body fender will be 64" long, this will allow for the suspension and related components to be contained within the fender, preventing any intrusion into the body compartment storage area. Bodies with notches in the front and/or rear compartment for suspension components are not acceptable.

DRIVER SIDE - FRONT SECTION OF FENDER

A storage compartment will be inserted into the fender to provide a storage area for three (3) customer supplied SCBA cylinders (or fire extinguishers of similar size). The storage area will be sized as tall and wide as possible in the fender (minimum of 14" wide x 15" tall with an angled floor by fender radius), and will be 26" deep. The compartment will have a non-abrasive lined cradle storage area for each of the three (3) devices.

This storage compartment will provide a minimum of 2.3 cubic feet of storage space.

DRIVER SIDE - REAR SECTION OF FENDER

A storage compartment will be inserted into the fender to provide a storage area for two (2) customer supplied SCBA cylinders (or fire extinguishers of similar size). The storage area will be sized as tall and wide as possible in the fender (minimum of 15" wide x 7-3/4" tall), and will be 26" deep. The compartment will have a non-abrasive lined cradle storage area for each of the devices.

This storage compartment will provide a minimum of 1.6 cubic feet of storage space.

OFFICER SIDE - FRONT SECTION OF FENDER

A storage compartment will be inserted into the fender to provide a storage area for three (3) customer supplied SCBA cylinders (or fire extinguishers of similar size). The storage area will be sized as tall and wide as possible in the fender (minimum of 14" wide x 15" tall with an angled floor by fender radius), and will be 26" deep. The compartment will have a non-abrasive lined cradle storage area for each of the three (3) devices.

This storage compartment will provide a minimum of 2.3 cubic feet of storage space.

OFFICER SIDE - REAR SECTION OF FENDER

A slide out absorbent bin will be installed in this fender position. The storage bin will be constructed of smooth aluminum and will be sized to store a minimum of 40 lbs of absorbent material. The bin will be installed on sliding locking tracks that allow the bin to extend out of the body fender for dumping/filling. There will be a hinged lid on top of the storage bin to add material to the bin, and a spring loaded valve at the bottom to dispense material out of the bin.

Absorbent bins that are built into the fender and do not provide a means for sliding the bin out for loading and dispensing will not be acceptable due to the difficulty in loading/unloading.

FENDER STORAGE DOORS

The fender storage area(s) will be enclosed by a hinged door fabricated from mirror finish stainless steel. The back side of the door will have a section of Nylatron installed to protect the door surface from the items stored in the compartment. Each door will be tied into the compartment door ajar/do not move apparatus warning system.

DRIVER SIDE BODY COMPARTMENTATION

One full height/full depth compartment will be provided forward of the rear wheels. The compartment dimensions will be 35" wide x 68" tall x 29" deep.

One high side compartment will be provided above the rear wheels. The compartment dimensions will be 64" wide x 37" high x 29" deep.

One full height/full depth compartment will be provided behind the rear wheels. The compartment dimensions will be 56" wide x 68" tall x 29" deep.

The driver side compartments will provide approximately 144 cubic feet of storage space.

OFFICER SIDE BODY COMPARTMENTATION

One full height/split depth compartment will be provided forward of the rear wheels. The compartment dimensions will be 35" wide x 68" tall x 29" deep in the lower 30" tall area, and 14" deep in the upper 38" tall area.

One high side compartment will be provided above the rear wheels. The compartment dimensions will be 64" wide x 37" high x 14" deep.

One full height/split depth compartment will be provided behind the rear wheels. The compartment dimensions will be 56" wide x 68" tall x 29" deep in the lower 30" tall area, and 14" deep in the upper 38" tall area.

The officer side compartments will provide approximately 95 cubic feet of storage space.

REAR STEP COMPARTMENT

An equipment storage compartment will be provided on the rear of the body at the rear step area. The rear step compartment will be 42" Wide x 40" High x 29" Deep.

The rear step compartment will provide approximately 28 cubic feet of storage space.

The rear step compartment will be designed to have open through storage to the side body compartments. This open through storage area will be in the lower section of the side body compartments only.

The rear step compartment will be equipped with a hinged style compartment door. The door will be a double door configuration. The door will be aluminum and painted to match the balance of the rear body panel.

The right side door will be notched at the top to accommodate the 4" LDH to be pre-connected the hydrant assist valve.

BLITZ GUN STORAGE COMAPRTMENT

Individual compartment at the driver side rear of the body recessed into the driver's side rear compartment will be provided. Compartment dimensions will be 12” wide x 30" high and 12" deep with a single hinged door. The door will be constructed out of aluminum tread plate and notched at the top to accommodate a 2-1/2" hose and a pre-connected blitz type gun. The door will be hinged on the same side as the suction hose storage door.

EXTENDED REAR STEP - SQUARE CORNERS

The extended rear step will be 12" deep, extended beyond the body compartments. The step will be 100" wide, with square corners. The step will be fabricated from 3/16" polished aluminum tread plate, and will be rigidly reinforced.

The rear edge of the step will be designed to accommodate the rear clearance lights, recessed for protection in the step reinforcement channel. The step will be bolted into place with a minimum 1/2" clearance gap between the step and rear body panel.

HOSE BED (94" WIDE)

The hose bed will be located directly above the booster tank and will be free from all sharp objects such as bolts, nuts, etc., to avoid damage to fire hose.

For added strength, the hose bed side walls will be approximately 3" thick, this will provide a mounting surface for devices like warning lights and scene lights. The inner hosebed side walls will be brushed aluminum panels, which will prevent damage to painted surfaces when deploying hose. The front wall will be flanged inward 2" with a 1" downward return to provide additional rigidity to the front wall.

HOSE BED CAPACITY

The hose bed will be designed with enough storage capacity to carry the following customer specified hoseload:

- 1000 Feet of 4" supply hose
- 400 Feet of 3" supply hose
- 400 Feet of 1 3/4" attack hose

(the addition of a light tower will reduce the total hosebed capacity as listed above)

HOSE BED FLOORING

Flooring to be constructed from extruded aluminum and be properly spaced for ventilation. The flooring will be smooth and free from sharp edges to avoid hose damage. The hose bed floor will be removable to provide access to inner body framework.

HOSE BED PARTITION

Two (2) fully adjustable 3/16", aluminum hose bed partition will be provided. Partition will be easily adjustable by means of channels located at the front and rear of the hose bed. Partition will be removable for access to the booster tank.

HOSE BED COVER, ALUMINUM TREAD PLATE

An aluminum tread plate hose bed cover will be mounted to the side body flanges utilizing a full length stainless steel hinge on each side. The cover will be constructed of 3/16” aluminum tread plate with aluminum extrusion frame. The cover will be supported by a fixed center partition which will be 1-1/2” higher than the side body flanges to allow water runoff.

Handles will be provided at the rear for lifting. Gas springs and cables will be provided at the front to hold open the doors.

Switches will be provided on each side cover, which will be tied into the "Do Not Move Apparatus When Light Is On" warning light in the cab.

A hinged access door will be provided over the water tank fill tower area to allow access to the fill tower when the hose bed cover is in the closed position. The access door will be hinged to the front to help prevent the door from opening when the apparatus is in motion.

VINYL FLAPS

Two (2) vinyl flaps at the rear of the tread plate hose bed cover. They will be secured to the hose bed cover with quarter turn fasteners and to the rear body with bungee cords.

The Hypalon material will be red in color.

COMPARTMENT DOORS

The compartment doors will be flush type with the outer skin fabricated from 3/16" (5052 H32) aluminum. The door skin will have a formed flange on one (1) side used as a hinge mounting flange. The door skin will have reinforcing channels welded internally which accommodate the inner door pan mounting.

The 2" thick compartment doors will reduce the overall specified compartment depth by 2".

All horizontally hinged doors will be 1" thick to provide additional compartment storage area. The 1" thick horizontally hinged doors will reduce the overall specified compartment depth by 1-1/4".

Each inner pan will be constructed from 1/8" aluminum material, which will be provided with a brushed finish. The brushed finish will allow the Medway Fire Department to remove scratches from the inner door pan with sand paper or scuff pad. Each inner door pan will be fastened to the door frame channels to provide a smooth, snag-free inner door surface.

The inner door pan on the running board compartments will enclose the latch and reinforcements completely. The pan will be easily removable to access the enclosed latch mechanism.

COMPARTMENT DOOR HINGES

Hinges will be full length polished stainless steel piano type. The hinges will be mounted with stainless steel hardware.

COMPARTMENT DOOR SEALS

Enclosed body compartment doors will be equipped with a closed cell gasket. The gasket material will be EPDM to provide a gasket resistant to weather, temperature extremes, and aging.

COMPARTMENT DOOR LATCHES – ROTARY WITH EASY GRAB MALTESE

Externally latched body doors will be equipped with Easy Grab Maltese door handles.

Rotary door latches will be provided for all full height body doors, which will incorporate rotary latches at the top and bottom of all externally latched single or double doors. Linkages will be provided between the actuation handle and the latch mechanisms.

The blank door of a double door configuration will have rotary latches at the top and bottom of each door with the latch release lever accessible thru the door frame, which eliminates the need to reach inside the compartment to release the door. Linkages will be provided between the actuation handle and the latch mechanisms.

Horizontally hinged doors will be equipped with a single rotary door latch.

COMPARTMENT DOOR STAY ARMS

Eberhard gas shock type door hold open devices will be provided for each vertically and horizontally hinged door.

SWEEP-OUT COMPARTMENT FLOORS

Compartment floors will be welded to the compartment walls and have a sweep out design for easy cleaning.

Compartments with hinged doors will have the door opening flanges bend down to produce the sweep-out design.

Compartments with roll-up style doors will have the external floor flange stepped down, 1/2" high x 2" deep, to produce a sealing surface for the roll-up doors below the compartment floor. The sweep out design will also permit easy cleaning.

COATED FASTENERS

All exterior fasteners will be coated stainless steel screws. Screw threads will be coated with reusable, self-locking, sealing material to provide vibration resistance. Screw heads will be coated with a sealing element to prevent galvanic corrosion between dissimilar metals. Non-coated screws will only be provided as part of vendor supplied component installations.

COMPARTMENT LOUVERS

Ventilation between compartments to atmosphere will be provided and located to avoid water entry into compartments.

ACCESS PANELS

Removable access panels will be provided (if applicable) to access fuel tank sender, electrical junction compartment and rear body mounts.

Protective panels will be located in the rear compartments providing access to the lights and associated wiring. The covers will also serve as protective covers to prevent inadvertent damage to lights or wiring from tools or equipment located in the compartment.

BODY PROTECTION PANELS

The front face of the side compartments, next to the driver and officer pump panels will be overlaid with full height aluminum tread plate protection panels. The overlays will cover the front face of the compartments only, they will not wrap around to the door opening.

Warning lights referenced in the warning light package Zone C - Upper will be surface mounted on the upper rear and upper rear sides of the body.

BODY RUB RAILS

Sacrificial aluminum tread plate rub rails will be mounted at the base of the body, extend outward a minimum 3/4", downward 2" and flange inward 1". The rub rails will extend the full length of the main body and extend to the rear step or wrap around the rear body corners. Rub rails will be designed to bolt to the body from the bottom side of the compartment area, so as not to damage the body side panels on initial impact and to provide for ease of replacement.

RUNNING BOARD STEPS

The driver and officer running board steps will be fabricated of 3/16" polished aluminum tread plate. The outside edge on each step will be fabricated with a double break, return flange. The steps will be rigidly reinforced with a heavy duty support structure. The running boards will not form any part of the compartment design, and will be bolted into place with a minimum 1/2" clearance gap between any panel to facilitate water runoff.

OFFICER SIDE RUNNING BOARD STORAGE WELL - FLOATING

A floating storage well, constructed of 1/8" aluminum, will be recessed into the officer's side running board. The storage well will measure 9" deep x 9" wide x as long as possible between the running board support members. Drain holes will be located in the bottom corners to allow water to drain from the storage well. The front and rear bottom corners of the well will have an angled face to help the well slide up if it strikes an object. The entire well will be a "floating" style that can easily shift up if an object is struck.

The officer's side running board hose well will be furnished with Velcro straps to secure the hose stored in the well. The straps will be attached to each side of the hose well with stainless steel footman loops.

OFFICER'S SIDE WELL - HOSE CAPACITY

The officer's side storage well will have the desired capacity of:

- 25' of 5" LDH hose

INTERMEDIATE REAR STEP

An eight (8) inch deep, bolt on intermediate rear step, fabricated from 3/16" aluminum tread plate, will be installed. The step will be approximately 8" deep x 48" wide.

GRAB RAILS

All hand rails will be 1-1/4" outer diameter, knurled bright anodized aluminum extrusion, designed to meet NFPA 1901 requirements.

Molded gaskets will be installed between the handrail stanchion castings and body surfaces to prevent electrolytic reaction between dissimilar metals and to protect paint.

GRAB RAIL LOCATIONS:

Grab rails will be provided at the following specified locations. Additional grab rails will be provided adjacent to any additional steps specified to comply with NFPA 1901.

Two (2) vertical rails will be mounted on the rear edge of the body, one (1) each side.

One (1) horizontal, full width handrail will be installed on the rear, below the level of the hose bed.

FOLDING STEP(S)- BODY REAR DRIVER SIDE

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, will be provided on driver side body rear to provide NFPA compliant access (maximum 18” height between steps) to an upper horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

FOLDING STEP(S)- BODY REAR OFFICER SIDE

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, will be provided on officer side body rear to provide NFPA compliant access (maximum 18” height between steps) to an upper horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

SAFETY SIGN(S) AT REAR STEP AND CROSS WALKWAY(S)

Safety sign(s) will be located on the vehicle at the rear step, and at any cross walkway(s), to warn personnel that riding in or on these areas while the vehicle is in motion is prohibited.

REAR WHEEL WELL LINERS

Fully removable, one piece, bolt-in, aluminum rear wheel well liner and fenderette will be provided. The wheel well liners will be natural metal finish and will protect the front and rear compartments and main body supports from damage. Wheel well liners and fenderette which are welded in place or are only partially removable will not be considered.

REAR MUD FLAPS

Heavy duty mud flaps will be provided behind the rear wheels.

REAR TOW EYES

Two (2) painted tow eyes will be furnished on the rear of the vehicle. The tow eyes will be made from plate steel and will be bolted directly to the chassis frame rails with grade 8 bolts and will extend below the body. The tow eyes will be smooth and free from sharp edges, and have a minimum eyelet hole of 2-1/2". The tow eyes will be painted.

LADDER STORAGE

The ground ladders will be stored horizontally within a sleeve in the water tank.

To secure the ground ladders, a hinged rear access door will be provided and tied into the "Do Not Move Apparatus" warning system.

PIKE POLE STORAGE

Two (2) pike pole tube(s) will be provided. Each holder will be accessible from the rear of the apparatus. Each pike pole holder will be labeled to indicate the pike pole length.

The pike pole tube(s) will be mounted in the ladder storage compartment.

SUCTION HOSE STORAGE

The suction hoses will be located beneath the hose bed on the driver side of the body. The hose storage area will be accessed from the rear of the apparatus. The storage area will be enclosed with a hinged door on the rear of the body that will be tied into the "Do Not Move Apparatus" warning system.

Note: On bodies with roll up style doors this storage area will be behind the roll of the door and will not affect usable compartment space. On bodies with hinged style doors this storage area will be in the top corner of the compartment.

120/240 VOLT ELECTRICAL SYSTEM TESTING

All line voltage wiring and permanently connected devices and equipment will be subjected to a dielectric voltage withstand test of 900 volts for one minute. The test will be conducted between live parts and the neutral conductor and between live parts and the vehicle frame with any switches in the circuits closed. The test will be conducted after all bodywork has been completed. The dielectric tester will have a minimum 500 VA transformer with a sinusoidal output voltage that can be verified.

Electrical polarity verification will be made of all permanently wired equipment and receptacles to determine that connections have been properly made.

OPERATIONALTESTING

The apparatus manufacturer will perform the following operation test and will certify that the power source and any devices that are attached to the line voltage electrical system are properly connected and in working order.

The generator will be started from a cold start condition and the line voltage electrical system will be loaded to 100 percent of the nameplate voltage rating.

The following items will be monitored and documented every 15 minutes:

- The cranking time until the generator starts and runs.
- The voltage, frequency, and amperes at continuous full rated load.
- The generator oil pressure, water temperature, transmission temperature, hydraulic temperature, and the battery rate charge, as applicable.
- The ambient temperature and altitude.

The generator will operate at 100 percent of its nameplate wattage for a minimum of two (2) hours.

HYDRAULIC GENERATOR

Smart Power 10 kW Emergency/Rescue Series Hydraulic Generator

A Smart Power, model ER-110, fully enclosed 10000 watt hydraulic generator will be provided.

The generator system will come with a standard 5 year/1,000 hour fully transferable warranty from KME.

The unit will come equipped with: enclosed generator tray assembly (which includes the generator, hydraulic motor, cooler, fan, electronics package, 10 micron spin-on fluid filter and internal reservoir), axial piston hydraulic pump with pressure compensated control, and Command and Control Center (CCC) display with all required wiring harnesses. The CCC will be an interactive operator control center, equipped with smart touch solid state buttons, with displays for voltage, frequency, amperage, hour meter, service reminders, operator warnings, system faults and diagnostics. Standard electronics package will include smart start engagement to reduce mechanical stress, precise voltage and frequency control, cold start system, automatic load and temperature compensation, integrated diagnostics system, and other automated control features to protect system, vehicle and operator.

The hydraulic motor, generator, fan, cooler, reservoir and other necessary hydraulic components will be mounted in a rugged stainless steel case.

The body of the generator tray assembly will be 30.25" long x 15.75" wide x 13.75" high and weigh approximately 220 pounds. The reservoir will be mounted internally. The hydraulic pump will be driven by a chassis transmission mounted power take off (PTO).

The wiring from the generator to the breaker box will be type SO with suffix WA flexible cable.

Ratings and Capacity*

- Rating: 12000 watts peak - 10000 watts continuous
- Volts: 120/240 volts
- Phase: Single, 4 wire
- Frequency: 60 Hz
- Amperage: 83 amps @ 120 volts or 42 amps @ 240 volts
- Engine speed at engagement: Standard soft start feature allows for any speed engagement
- Operation range: 850 to 3240 RPM

Testing
The generator will be tested in accordance with all current NFPA 1901 standards.

Notes
*All ratings and capacities will be derived utilizing current NFPA 1901 test parameters.

GENERATOR PTO

A hot shift PTO will be provided on the transmission for the Smart Power generator. The PTO will be controlled from the cab. The control will include a PTO engagement switch and a PTO engaged indicator light.

GENERATOR WARRANTY

The specified generator will have a five (5) year or one thousand (1000) hour warranty as provided by the generator manufacturer. A copy of the generator warranty will be provided at time of delivery.

LINE VOLTAGE ELECTRICAL SYSTEM CERTIFICATION

When the unit successfully meets all the requirements outlined in NFPA 1901, 2016 Edition, UL will issue a Certificate of Automotive Fire Apparatus Examination and Test stating the unit's compliance with the required line voltage section of NFPA.

GENERATOR LOCATION

The generator will be permanently mounted in the officer side walkway storage compartment and will be equipped with perforated or louvered panels for proper ventilation.

Locating the generator greater than 144" from the main breaker panel may require the installation of an additional power disconnecting means.

120/240 VOLT LOAD CENTER

The generator output line conductors will be wired from the generator output connections to a Square D, model #QO112L125G breaker panel. The breaker panel will be equipped with a properly sized main breaker using two (2) of the twelve (12) spaces which leaves a total of ten (10) available spaces.

The generator output conductors will be sized to 115% of the main breaker rating and will be installed as indicated in the wiring section.

Ten (10) appropriately sized, 120 volt, circuit breakers will be provided.

The breaker panel will be located on the rear wall of the driver side front compartment.

120/240 VOLT WIRING METHODS

Wiring/conduit will not be attached to any chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components or low voltage wiring.

All wiring will be installed at a minimum of 12 inches away from any exhaust piping and a minimum of 6 inches from any fuel lines.

All wiring will be securely clamped within 6 inches of any junction box and at a minimum of every 24 inches of run. All supports will be of nonmetallic material or corrosion protected metal. All supports will not cut or abrade conduit or cable and will be mechanically fastened to the vehicle.

All power supply assembly conductors, including neutral and grounding conductors, will have an equivalent amperage rating and will be sized to carry not less than 115% of the main breaker rating.

All Type SO or Type SEO cable not installed in a compartment will be installed in wire loom. Where Type SO or Type SEO cable penetrates a metal surface, a rubber or plastic grommet or bushing will be provided.

The installation of all 120/240 wiring will meet the current NFPA-1901 Standards .

120/240 VOLT WIRING IDENTIFICATION

All line voltage conductors located inside the main breaker panel box will be individually and permanently identified. When pre-wiring for future power wiring installations, the non-terminated ends will be labeled showing function and wire size.

120/240 VOLT GROUNDING

The neutral conductor of the power source will be bonded to the vehicle fame only at the power source.

The grounded current carrying conductor (neutral) will be insulated from the equipment grounding conductors and from the equipment enclosures and other grounded parts. The neutral conductor will be colored white or gray.

In addition to the bonding required for the lower voltage return current, each body and driving/crew compartment enclosure will be bonded to the vehicle frame by a copper conductor. The conductor will have a minimum amperage rating of 115 percent of the name plate current rating of the power source specification label.

120/240 VOLT CIRCUIT BREAKER / RECEPTACLE INSTALLATION

The system will be installed by highly qualified electrical technicians to assure the required level of safety and protection to the fire apparatus operators.

When multiple circuit are required, the circuits will be wired to the breaker panel in a staggered configuration to minimize electrical loads on each breaker or generator (leg) circuit. The wiring, electrical fixtures and components will be to the highest industry quality standards available on the domestic market. The equipment will be the type as designed for mobile type installations subject to vibration, moisture and severe continuous usage.

ELECTRIC CABLE REEL

One (1) Akron Brass Model #ERWC-15-10 electric, 120 volt, electric rewind cord reel (able to accommodate 200 feet of 10 gauge or 250 feet of 12 gauge electric cable). The reel will be provided and wired to the breaker panel. The reel will be equipped with a universal frame that will allow the 12-volt motor to be mounted in four different positions. The Medway Fire Department will have the ability to move the motor from front to back or side to side without having to purchase extra parts. The reel will be securely mounted and equipped with a rewind control adjacent to the reel.

The cord reel will be CEILING mounted in the driver front compartment.

The circuit breaker used to protect any device attached to the cord reel will be sized to the smallest electrical connection used.

One (1) reel rewind switch(s) will be provided on the compartment wall

One (1) Hannay 4-way stainless steel roller assembly will be provided. The roller assembly opening will be the full width of the reel drum.

One (1) cable ball stop(s) will be installed on the cable to keep the end from passing through the roller assembly.

ELECTRIC CABLE

Two hundred (200) feet of Type SO yellow 10/3 heavy duty electric cable will be provided on the reel.

JUNCTION BOX

One (1) Circle-D Model #PF51G-5, four (4) outlet junction box(es) with TWO (2) NEMA L5-20R twist-lock receptacles AND TWO (2) 20 AMP STRIAGHT BLADE receptacles direct wired on the end of the cable will be provided.

ELECTRIC CABLE REEL

One (1) Akron Brass Model #ERWC-10-28 low profile electric, 120 volt, electric rewind cord reel (able to accommodate 200 feet of 10 gauge or 250 feet of 12 gauge electric cable). The reel will be provided and wired to the breaker panel. The reel will be equipped with a universal frame that will allow the 12 volt motor to be mounted in four different positions. The Medway Fire Department will have the ability to move the motor from front to back or side to side without having to purchase extra parts. The reel will be securely mounted and equipped with a rewind control adjacent to the reel.

The AKRON BRASS #ERWC-10-28 LOW PROFILE, cord reel will be mounted on the back wall as high as possible in the Officer's front compartment.

The circuit breaker used to protect any device attached to the cord reel will be sized to the smallest electrical connection used.

One (1) reel rewind switch(s) will be provided on the compartment wall

One (1) Hannay 4-way stainless steel roller assembly will be provided. The roller assembly opening will be the full width of the reel drum.

One (1) cable ball stop(s) will be installed on the cable to keep the end from passing through the roller assembly.

ELECTRIC CABLE

Two hundred (200) feet of Type SO yellow 10/3 heavy duty electric cable will be provided on the reel.

JUNCTION BOX

One (1) Circle-D Model #PF51G-5, four (4) outlet junction box(es) with TWO (2) NEMA L5-20R twist-lock receptacles AND TWO (2) 20 AMP STRIAGHT BLADE receptacles direct wired on the end of the cable will be provided.

COMMAND LIGHT, KNIGHT-2 MODEL KL415A LIGHT TOWER

The apparatus will be equipped with an all-electric floodlight tower. The unit will not require tapping into vehicle braking system to be operated, eliminating the chance for vehicle brake problems. Hydraulic or pneumatic type floodlights are not acceptable alternatives to the all-electric light tower specified.

The light tower assembly will be of aluminum construction, with stainless steel shafts and bronze bushings for long life and low maintenance. It will extend 87-1/2" above the mounting surface and will extend to full upright position in less than 15 seconds. The light tower will weigh approximately 165 pounds.

The electrically controlled unit will not require usage of the vehicle's air supply for operation, thereby eliminating the chance for air leaks in the vehicle braking system. Hydraulic or pneumatic type floodlights are not acceptable alternatives to the specified all electric light tower.

The light tower will be tested to in wind conditions of 90 mph (150 kph) minimum. Other type floodlights that have not been tested to these conditions are not acceptable.

The light tower will be capable of overhanging the side or back of the vehicle to provide maximum illumination to the vicinity adjacent to the vehicle for the safety of emergency personnel in high traffic conditions. Any tower that is only capable of rotations at the top of a pole is not an acceptable alternative to the specified tower.

The light tower will be a two-stage articulating device with a lighting bank on top of the second stage capable of continuous 360-degree rotation. The light will be elevated by electric linear actuators, one (1) actuator will elevate the lower stage and one (1) actuator will adjust the light bank angle from 0 to 110 degrees. Power for the light bank will be supplied through power collecting rings thus allowing continuous 360-degree rotation in either direction.

The tower base will have a light that illuminates the envelope of motion during any movement of the light tower mast as required by NFPA1901.

The light tower will be controlled with a hand-held 15 foot umbilical line remote control. The storage station for the remote control unit will be equipped with a button to activate the "Auto-Park" automatic nesting feature. The light tower control will be mounted in the proximity of the electrical breaker panel.

The controls on the remote box will be:

- Two (2) switches, one (1) for each light bank.
- One (1) light bank rotation switch.
- One (1) switch for elevating lower and upper stage.
- One (1) indicator light to indicate when light bank is out of roof nest position.
- One (1) indicator light to indicate when light bank is rotated to proper nest position.

The Command Light will be equipped with the following bank of floodlights:

Floodlight manufacturer:	Whelen Engineering
Number of lamp heads:	Six (6) Pioneer Plus LED
Voltage:	120 volt
Watts of each lamp head:	150 watt
Total watts of light tower:	900 watts
Amperage per lamp head:	1.25 amps
Total Lumens of light tower:	90,000 lumens

The light heads will be mounted three (3) on each side of the light tower, giving two (2) vertical lines of three (3) when the lights are in the upright position.

The six (6) 150-watt light heads will require one (1) 120-volt, two pole 15-amp circuit breaker.

The light tower will be mounted at the front of the hose bed.

LOOSE EQUIPMENT

The following items will be provided and shipped loose with the completed apparatus at the time of delivery:

GROUND LADDERS

The following Alco-Lite ground ladder complement will be provided:

- One (1) Alco-Lite model PEL-24; 24', aluminum, two (2) section extension ladder will be provided.
- One (1) Alco-Lite model PRL-16; 16', aluminum, straight roof ladder with folding hooks will be provided.
- One (1) Alco-Lite model FL-10; 10', folding, aluminum, attic ladder will be provided.

SUCTION HOSE

Two (2) 10 foot sections of six (6) inch PVC lightweight suction hose will be furnished (Kochek or Firequip Maxi-Flex). Suction hose will be for suction only and not to be used on pressurized hydrants or for relay pumping. Couplings will include a long handle, female swivel on one end and a rocker lug male on the other end. All threads will be six (6) inch N.S.T.

NOTE: All PVC suction hoses are strictly drafting hoses and must not be used on hydrants or in pressure applications, as serious personal injury or death may occur.

STRAINER

One (1) 6" NST, Red Head 140-60001 barrel type strainer(s) will be provided to attach to the suction hose. A compartment mounting bracket will also be provided to store the strainer(s) when not in use.

HYDRANT ADAPTER

A double female swivel hydrant adapter will be provided along with a screw base mounting bracket. One end will attach to the suction hose and the other end to be 4-1/2" N.S.T. thread.

ADDITIONAL ITEMS SUPPLIED WITH THE VEHICLE

- 1 - Pint of touch up paint for each color
- 1 - Bag of assorted stainless steel nuts and bolts

ROAD SAFETY KIT

A road safety kit will be furnished with the following equipment:

- 2 1/2 lb. B-C fire extinguisher
- Triangle safety reflectors.

WHEEL CHOCKS

Two (2) Kochek #SWC wheel chocks will be mounted forward of the rear wheels on the driver side below the side running board compartments.

DEALER EQUIPMENT MOUNTING ALLOWANCE

A dealer equipment mounting allowance of $ 5,000.00 is included in the contract price. This allowance will be used for the purchase of equipment and mounting brackets.

PAINT, PREPARATION AND FINISH

The apparatus body will be painted Sikkens [#COL]. The paint process will meet or exceed current state regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water, and soil. Contractor will, upon demand, provide evidence that the manufacturing facility is in compliance with State EPA rules and regulations.

The exterior will have no mounted components prior to painting to assure full coverage of metal treatments and paint to the exterior surfaces of the body. Any vertically or horizontally hinged smooth-plate compartment doors will be painted separately to assure proper paint coverage on body, door jambs and door edges.

Paint process will feature Sikkens high solid LV products and be performed in the following steps:

- Corrosion Prevention - all aluminum surfaces will be pre-treated with the Alodine 5700 conversion coating to provide superior corrosion resistance and excellent adhesion of the base coat.
- Sikkens Sealer/Primer LV - acrylic urethane sealer/primer will be applied to guarantee excellent gloss hold-out, chip resistance and a uniform base color.
- Sikkens High Solid LVBT650 (Base coat) - a lead-free, chromate-free high solid acrylic urethane base coat will be applied, providing excellent coverage and durability. A minimum of two (2) coats will be applied.
- Sikkens High Solid LVBT650 (Clear coat) - high solid LV clear coat will be applied as the final step in order to ensure full gloss and color retention and durability. A minimum of two (2) coats will be applied.

Any location where the material is penetrated after painting, for the purpose of mounting steps, hand rails, doors, lights, or other specified components will be treated at the point of penetration with a corrosion inhibiting pre-treatment (ECK Corrosion Control). The pre-treatment will be applied to the aluminum sheet metal or aluminum extrusions in all locations where the aluminum has been penetrated. All hardware used in mounting steps, hand rails, doors, lights, or other specified components will be individually treated with the corrosion inhibiting pre-treatment.

After the paint process is complete, the gloss rating of the unit will be tested with a 20 degree gloss meter. Coating thickness will be measured with a digital MIL gauge and the orange peel with a digital wave scan device.

BODY PRIMER & PREPARATION

All exposed welds will be ground smooth for final finishing of areas to be painted. The compartments and doors are totally degreased and phosphatized. After final body work is completed, grinding (36 and 80 grit), and finish sanding will be used in preparation for priming.

BODY FINISH PAINT

The body will be finish sanded and prepared for final paint. Upon completion of final preparation, the body will be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint. Finish paint will be applied in multiple coats to ensure proper paint coverage with a high gloss finish.

The entire body will be buffed and detailed.

BODY PAINT

The inside and underside areas of the complete body assembly will be painted black using a Sikkens paint system, prior to the installation of the body on the chassis or torque box.

COMPARTMENT PAINT

The interior of the compartments will be finish painted with Multispec #7247 White Marble Stone scuff resistant paint to provide a protective application over all of the compartment interior surfaces.

BODY PAINT

The body paint finish will be Sikkens paint system in a single color, to match customer furnished paint codes and requirements.

PUMP / PIPING PAINT

The pump enclosure and pump/plumbing within the pump enclosure will be painted black.

FENDER STORAGE COMPARTMENT PAINT

The interior of the fender storage compartments (if fender compartments are specified) will be finish painted with Multispec #7247 White Marble Stone finish to provide a protective finish.

CAB PRIMER & PREPARATION

The cab primer will be a two (2) stage process. First stage will be a coating with a two part component, self etching, and corrosion resistant primer to chemically bond the surface of the metal for increased adhesion. Second stage will be multiple coats of a catalyzed, two component, polyurethane primer applied for leveling of small imperfections and top coat sealing.

CAB FINISH PAINT

The entire cab will be finish sanded and prepared for final paint. Upon completion of final preparation, the cab will be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint. Finish paint will be applied in multiple coats to ensure proper paint coverage with a high gloss finish.

The cab exterior will be painted with Sikkens paint system to match purchaser's furnished paint codes. A two-tone paint finish will be provided with the two-tone break line located approximately 3" below the cab side windows.

The roof mounted air conditioning condenser housing(s) will be painted to match the cab roof color.

The entire exterior finish of the cab will be buffed and detailed.

CAB INTERIOR PAINT

The interior metal surfaces of the cab will be finish painted with a textured gray paint.

CHASSIS PAINT

The chassis frame rails, suspension, axles, and drivelines (with the exception of any PTO drivelines which will be safety yellow) will be painted black with a polyurethane base paint prior to installation of any air lines or electric systems to ensure proper serviceability.

WHEEL PAINT

The chassis wheels, (except aluminum wheels) will be painted job color with silver trim around the perimeter. All outer wheels on the rear axle will be job color with the inner being a color selected by the wheel manufacturer suitable for inner wheel use.

PAINT CODES

The paint will match customer furnished paint code(s) and layout. The paint code(s) will be as indicated below:

- **PRIMARY PAINT COLOR**

  Single Color: RED Paint Code# TBD

- **SECONDARY PAINT COLOR**

  Two/Tone Color: BLACK Paint code# FLNA 41532

TOUCH-UP PAINT

One (1) pint of each exterior color paint for touch-up purposes will be supplied when the apparatus is delivered to the end user.

FINALIZATION & DETAILING

Prior to delivery the vehicle, the interior and exterior be cleaned and detailed. The finalization process detailing will include installation of NFPA required labels, checking fluid levels, sealing and caulking required areas of the cab and body, rust proofing, paint touch-up, etc.

RUST PROOFING

The entire unit will be thoroughly rust proofed utilizing rustproof and sound deadening materials applied in manufacturer recommended application procedures. Rust proofing will be applied during the assembly process and upon completion to insure proper coverage in all critical areas.

DEALER SUPPLIED LETTERING AND STRIPING

Bulldog Fire Apparatus will supply all gold leaf or equal lettering, decals, special emblems and non NFPA required striping.

FRONT CAB DOOR LETTERING

Gold leaf, "Sign Gold", with drop shadow lettering will be provided on the cab driver's and officer's doors per the Medway Fire Department requirements. The design of the lettering on the cab doors will be designed to fit in the 496 sq. inches available.

Lettering provided on the driver's and officer's cab doors will be custom height per Fire Department and engineering design.

REAR CAB DOOR LETTERING

Gold leaf, "Sign Gold", with drop shadow lettering will be provided on the cab crew doors per the Medway Fire Department requirements. The design of the lettering on the cab doors will be designed to fit in the 496 sq. inches available.

Lettering provided on the crew cab doors will be custom height per Fire Department and engineering design.

LETTERING ABOVE WINDSHIELD

Gold leaf, "Sign Gold", with drop shadow lettering will be provided on the area of the cab above the windshield per the Medway Fire Department requirements. The design of the lettering above the windshield will be designed to fit in the 224 sq. inches available.

FRONT BUMPER LETTERING

Scotch-Cal without drop shadow lettering will be provided on the front BUMPER per the Medway Fire Department requirements. The design of the lettering on the front of the cab will be designed to fit in the 167 sq. inches available.

FRONT OF CAB LETTERING

Gold leaf, "Sign Gold", with drop shadow lettering will be provided on the front of the cab per the Medway Fire Department requirements. The design of the lettering on the front of the cab will be designed to fit in the 167 sq. inches available.

Lettering provided on the front BUMPER WILL be custom height per the Medway Fire Department’s design.

CAB SIDE PANEL LETTERING

Gold leaf, "Sign Gold", with drop shadow lettering will be provided on the cab side panel per the Medway Fire Department requirements. The design of the lettering on the cab side panel will be designed to fit in the 150 sq. inches available.

Lettering provided on the cab side panel will be custom height per Fire Department and engineering design.

REAR DOOR

Lettering provided on the rear DOOR be custom height per Fire Department and engineering design.

CUSTOM FIRE DEPARTMENT LOGO

A pair of custom fire department logos will be computer generated and will be no larger than the 496 sq. inches available.

The custom logo will be printed on Scotch-Cal with two computer generated printed colors.

The custom logo will be located as directed by the Medway Fire Department.

SCOTCH-LITE STRIPE

A six (6) inch high "Scotch-Lite" stripe will be provided. The stripe will be applied on a minimum of 60 percent of each side of the unit, 60 percent on the rear of the unit and 40 percent on the front of the unit. The Scotch-Lite stripe layout will be determined by the Medway Fire Department.

The Scotch-Lite will be black in color.

A six (6) inch simple "Z" effect will be incorporated into the Scotch-Lite scheme on the body. Final layout of this configuration will be determined by the Medway Fire Department.

REAR CHEVRON STRIPING

At least 50% of the rear facing vertical surface will be covered with alternating strips of reflective striping.

The striping will be 6" Diamond Grade Scotch-Lite.

The Diamond Grade Scotch-Lite will be Red and Fluorescent Yellow Green in color.

KME WARRANTY, STARTING ON DELIVERY DATE

Warranty coverage by KME will begin on the date of delivery to the Medway Fire Department.

VEHICLE WARRANTY

The purchaser requires a Five (5) year new vehicle warranty to be provided, upon delivery and acceptance of the vehicle. The warranty will ensure that the vehicle has been manufactured to the contract specifications and will be free from defects in material and workmanship that may appear under normal use and service within the warranty period. The warranty may be subject to different time and mileage limitations for specific components and parts. This warranty is issued to the original purchaser of the vehicle.

The warranty will not apply to tires, batteries, or other parts or components that are warranted directly by their manufacturers. The warranty will not apply to routine maintenance requirements as described in the service and operators manual. No warranty whether express, implied, statutory or otherwise including, but not limited to any warranty of merchantability or fitness for purpose will be imposed.

KME will either repair or replace any defective components or parts. Repair or replacement of the defective item will be at the sole discretion of KME. All components and parts are covered by the Basic Vehicle Warranty unless specifically covered by other descriptions or otherwise excluded herein. Repair or replacement of components will be done without cost to the purchaser when performed within the warranty period. Warranty repairs will not constitute an extension of the original warranty period, either for the entire apparatus or any specific components or parts.

The warranty will be inclusive and in lieu of all other warranties whether written, oral or implied, including but not limited to any warranty of merchantability or fitness for purpose. The warranty will be void and KME will not be obligated to repair or replace any component or part where the necessity of such replacement or repair, in the opinion of KME, is due in whole or in part to loads in excess of factory rated capacities, modification or alteration, accident or other misuse or abuse of the vehicle. In no event will KME be liable for special or consequential damages including but not limited to injuries to persons or damage to property or loss of vehicle use.

The apparatus will be maintained and serviced, by the purchaser, according to the prescribed schedules outlined in the operators and service manuals. Receipted bills or other evidence that required maintenance and service has been performed may be required by KME as a condition of the warranty.

WARRANTY - ENGINE

The proposed unit will be equipped with a Fire Service rated engine, which will come furnished with a five (5) year Engine Manufacturer's warranty. A copy of KME's warranty will be supplied to define additional details of the warranty provisions.

WARRANTY - TRANSMISSION

The proposed Allison transmission will be provided with a five (5) year warranty. A copy of the Allison transmission warranty will be supplied to the purchaser to define additional details of the warranty provisions.

WARRANTY - CUSTOM CHASSIS FRAME RAILS

The proposed KME custom chassis frame and cross members will be warranted to the original purchaser for the life of the vehicle. A copy of KME's frame rail warranty will be supplied to define additional details of the warranty provisions.

WARRANTY - STEERING UNIT

The proposed Sheppard steering gear will be warranted for a period of three(3) years from the first date of service or 150,000 miles (241,401 kilometers), whichever occurs first. The product will be free from defects in material and workmanship under normal use in applications approved in advance by Sheppard.

WARRANTY - FRONT AXLE

The Meritor axle/s will be provided with a five (5) year warranty. The first two (2) years will be parts and labor; the remaining three (3) years will be parts only. Wheel seals, gaskets and wheel bearings will be covered for one year. A copy of Meritor's warranty will be supplied to define additional details of the warranty provisions. Vehicles that operate full or part time outside the United States and Canada will have a one (1) year, parts only warranty.

WARRANTY - REAR AXLE

The Meritor axle/s will be provided with a five (5) year warranty. The first two (2) years will be parts and labor; the remaining three (3) years will be parts only. Wheel seals, gaskets and wheel bearings will be covered for one year. A copy of Meritor's warranty will be supplied to define additional details of the warranty provisions. Vehicles that operate full or part time outside the United States and Canada will have a one (1) year, parts only warranty.

WARRANTY - CAB STRUCTURE

The proposed cab will be warranted against structural defects for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

WARRANTY - BODY STRUCTURE

The proposed body will be warranted against structural defects for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

WARRANTY - CORROSION

The proposed cab and body will be warranted against rust-through or perforation, due to corrosion from within, for a period of ten (10) years. Perforation is defined as a condition in which an actual hole occurs in a sheet metal panel due to rust or corrosion from within. Surface rust or corrosion caused by chips or scratches in the paint is not covered by this warranty.

WARRANTY - PAINT

The proposed paint finish will be warranted for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

WARRANTY - REAR SUSPENSION

KME hereby warrants to the original Buyer, that leaf spring products installed will be free of defects in material and workmanship for one (1) year. The “Warranty Period” commences on the date the original Buyer takes delivery of the product from KME.

WARRANTY - WATER TANK

The proposed water tank will be warranted by the water tank manufacturer for the "Lifetime" of the unit. A copy of KME's warranty will be supplied to define additional details of the warranty provisions.

WARRANTY - FIRE PUMP

Hale Products, Incorporated ("Hale") hereby warrants to the original buyer that products manufactured by Hale will be free of defects in material and workmanship for a period of five (5) years from the date product is first placed into service or five and one-half (5 1/2) years from date of shipment by Hale, whichever period will be first to expire. Within this warranty period Hale will cover parts and labor for the first two (2) years and parts only for years three (3) through five (5).

WARRANTY - HEAVY DUTY VALVES

Akron Brass warrants Heavy Duty Swing-Out Valves for a period of ten (10) years after purchase against defects in material or workmanship. Akron Brass will repair or replace any Heavy Duty Swing Out Valve which fails to satisfy this warranty.

DEALER PICK-UP AND DELIVERY DURING WARRANTY PERIOD

Dealer will furnish pick-up and delivery service to and from fire department during the first two (2) years of the specified warranty period.

TOWN OF MEDWAY
COMMONWEALTH OF MASSACHUSETTS

Medway Town Hall
155 Village Street
Medway, MA 02053
Phone (508) 533-3264
Fax (508) 321-4988
Email: mboynton@townofmedway.org

Town Administrator
Michael E. Boynton

DRAFT

August 22, 2017

KME Fire Apparatus Inc.
One Industrial Complex
Nesquehoning, PA. 18240

To Whom It May Concern:

The Town of Medway Fire Department is purchasing from KME Fire Apparatus Inc. One (1 KME Custom Severe Service, 4-Door, Full-Tilt, Aluminum Cab, Aluminum Body, Single Axle, 2000 GPM Pump, 1000 Gal Tank-Flex Foam pumper under HGAC contract # FS12-15 Model #MC06 for $638,841.00

Thank you.

Very truly yours,

Michael E. Boynton,
Town Administrator

AGENDA ITEM #7

Approval – Contract with MAPC for Hazard Mitigation Plan Update - $21,000

Associated back up materials attached.

- MAPC Contract

Proposed motion:
I move that the Board approve a contract with the MAPC in the amount of $21,000 for the Hazard Mitigation Plan update subject to Town Counsel and Town Accountant approval.

TOWN OF MEDWAY, MASSACHUSETTS

AGREEMENT

THIS AGREEMENT made this ____ day of _____, 2017 by and between the TOWN of MEDWAY, a municipal corporation duly organized under the laws of Massachusetts and having a usual place of business at 155 Village Street, Medway, Massachusetts, hereinafter referred to as the "TOWN", and the Metropolitan Area Planning Council (MAPC), a public agency, having a usual place of business at 60 Temple Place, Boston, MA 02111 hereinafter referred to as the "CONTRACTOR".

WITNESSETH:

WHEREAS, the TOWN invited the submission of proposals for the purchase and delivery of Hazard Mitigation Plan Update Consulting Services, hereinafter "the Project"; and

WHEREAS, the CONTRACTOR submitted a Proposal to perform the work required to complete the Project; and

WHEREAS, the TOWN has decided to award the contract therefor to the CONTRACTOR.

NOW, THEREFORE, the TOWN and the CONTRACTOR agree as follows:

1. CONTRACT DOCUMENTS. The Contract Documents consist of this Agreement and the CONTRACTOR's Proposal. The Contract Documents constitute the entire Agreement between the parties concerning the work, and all are as fully a part of this Agreement as if attached hereto.

2. THE WORK. The Work consists of assisting the Town in updating the Town of Medway's Hazard Mitigation Plan, as more fully described in the Contract Documents as defined above.

3. TERM OF CONTRACT. This Agreement shall be in effect from August 21, 2017 and shall expire on September 30, 2018, unless terminated earlier pursuant to the terms hereof.

4. COMPENSATION.
   A. The TOWN shall pay the CONTRACTOR as full compensation for the performance of the work outlined in Section 2 above the contract sum of $20,545.

   B. The acceptance by the CONTRACTOR of final payment for items and/or services provided shall be deemed a release of the TOWN from any and all claims and liabilities under this Agreement.

C. Neither the TOWN's review, approval or acceptance of, nor payment for any of the items and/or services provided shall be construed to operate as a waiver of any rights of the TOWN under the Agreement or any cause of action arising out of the performance of the Agreement.

D. The TOWN shall cancel this Agreement if funds are not appropriated or otherwise made available to support continuation of performance in any fiscal year succeeding the current fiscal year as required by G.L. c. 30B, 12(c)(3).

5. PAYMENT OF COMPENSATION. The TOWN shall make payments within thirty (30) days after its receipt of Invoice.

6. LIABILITY OF THE TOWN. The TOWN's liability hereunder shall be to make all payments when they shall become due, and the TOWN shall be under no further obligation or liability. Nothing in this Agreement shall be construed to render the TOWN or any elected or appointed official or employee of the TOWN, or their successors in office, personally liable for any obligation under this Agreement.

7. INDEPENDENT CONTRACTOR. The CONTRACTOR acknowledges and agrees that it is acting as an independent contractor for all work and services rendered pursuant to this Agreement, and shall not be considered an employee or agent of the TOWN for any purpose.

8. INDEMNIFICATION.

The CONTRACTOR shall hold the TOWN harmless from and against any and all claims, demands, liabilities, actions, causes of actions, costs and expenses, including attorney's fees, arising out of the CONTRACTOR's breach of this Agreement or the negligence or misconduct of the CONTRACTOR, or the CONTRACTOR's agents or employees.

9. INSURANCE.

A. The CONTRACTOR shall obtain and maintain in full force and effect during the term of this Agreement the insurance coverage in companies licensed to do business in the Commonwealth of Massachusetts, and acceptable to the TOWN, as set forth below:

General Liability	
Bodily Injury Liability	$1,000,000 per occurrence
Property Damage Liability	$ 500,000 per occurrence
(or combined single limit)	$1,000,000 per occurrence
Automobile Liability	
Bodily Injury Liability	$1,000,000 per occurrence
Property Damage Liability	$ 500,000 per occurrence
(or combined single limit)	$1,000,000 per occurrence

Workers' Compensation Insurance
Coverage for all employees in accordance with Massachusetts General Laws

Professional Liability Insurance
Minimum Coverage $1,000,000 per occurrence

B. All policies shall identify the TOWN as an additional insured (except Workers' Compensation) and shall provide that the TOWN shall receive written notification at least 30 days prior to the effective date of any amendment or cancellation. Certificates evidencing all such coverages shall be provided to the TOWN upon the execution of this Agreement. Each such certificate shall specifically refer to this Agreement and shall state that such insurance is as required by this Agreement. Failure to provide or to continue in force such insurance shall be deemed a material breach of this Agreement and shall be grounds for immediate termination.

10. ASSIGNMENT. The CONTRACTOR shall not assign, sublet or otherwise transfer this Agreement, in whole or in part, without the prior written consent of the TOWN, and shall not assign any of the moneys payable under this Agreement, except by and with the written consent of the TOWN.

11. TERMINATION. A. Termination for Cause. If at any time during the term of this Agreement the TOWN determines that the CONTRACTOR has breached the terms of this Agreement by negligently or incompetently performing the work, or any part thereof, or by failing to perform the work in a timely fashion, or by failing to perform the work to the satisfaction of the TOWN, or by not complying with the direction of the TOWN or its agents, or by otherwise failing to perform this Agreement in accordance with all of its terms and provisions, the TOWN shall notify the CONTRACTOR in writing stating therein the nature of the alleged breach and directing the CONTRACTOR to cure such breach within ten (10) days. The CONTRACTOR specifically agrees that it shall hold the TOWN harmless from any loss, damage, cost, charge, expense or claim arising out of or resulting from such breach regardless of its knowledge or authorization of the actions resulting in the breach. If the CONTRACTOR fails to cure said breach within ten (10) days, the TOWN may, at its election at any time after the expiration of said ten (10) days, terminate this Agreement by giving written notice thereof to the CONTRACTOR specifying the effective date of the termination. Upon receipt of said notice, the CONTRACTOR shall cease to incur additional expenses in connection with this Agreement. Upon the date specified in said notice, this Agreement shall terminate. Such termination shall not prejudice or waive any rights or action which the TOWN may have against the CONTRACTOR up to the date of such termination, and the CONTRACTOR shall be liable to the TOWN for any amount which it may be required to pay in excess of the compensation provided herein in order to complete the work specified herein in a timely manner. Upon such termination, the CONTRACTOR shall be entitled to compensation for all satisfactory work completed prior to the termination date, as determined by the TOWN.

B. Termination for Convenience. The TOWN may terminate this Agreement at any time for convenience by providing the CONTRACTOR written notice specifying therein the termination date which shall not be sooner than ten days from the issuance of said notice. Upon receipt of said notice, the CONTRACTOR shall cease to incur additional expenses in connection with this Agreement. Upon such termination, the CONTRACTOR shall be entitled to compensation for all satisfactory work completed prior to the termination date, as determined by the TOWN, such payment not to exceed the fair value of the services provided hereunder.

12. INSPECTION AND REPORTS. The TOWN shall have the right at any time to inspect the work of the CONTRACTOR, including the right to enter upon any property owned or occupied by CONTRACTOR, whether situated within or beyond the limits of the TOWN. Whenever requested, CONTRACTOR shall immediately furnish to the TOWN full and complete written reports of his operation under this Contract in such detail and with such information as the TOWN may request.

13. ROYALTIES AND PATENTS. The CONTRACTOR shall pay all applicable royalties and license fees. In addition, the CONTRACTOR hereby represents that it is duly authorized to use any process or other intellectual property rights held by third parties in the performance of this Agreement, it shall defend all suits or claims for infringement of any patent or other intellectual property rights and shall hold the TOWN harmless from loss on account thereof.

14. SUCCESSOR AND ASSIGNS. This Agreement is binding upon the parties hereto, their successors, assigns and legal representatives. Neither the TOWN nor the CONTRACTOR shall assign or transfer any interest in the Agreement without the written consent of the other.

15. COMPLIANCE WITH LAWS. The CONTRACTOR shall comply with all Federal, State and local laws, rules, regulations and orders applicable to the work provided pursuant to this Agreement, such provisions being incorporated herein by reference, and shall be responsible for obtaining all necessary licenses, permits, and approvals required for the performance of such work.

16. NOTICE. Any and all notices, or other communications required or permitted under this Agreement, shall be in writing and delivered by hand or mailed postage prepaid, return receipt requested, by registered or certified mail or by other reputable delivery service, to the parties at the addresses set forth on Page 1 or furnished from time to time in writing hereafter by one party to the other party. Any such notice or correspondence shall be deemed given when so delivered by hand, if so mailed, when deposited with the U.S. Postal Service or, if sent by private overnight or other delivery service, when deposited with such delivery service.

17. SEVERABILITY. If any term or condition of this Agreement or any application thereof shall to any extent be held invalid, illegal or unenforceable by the court of competent jurisdiction, the validity, legality, and enforceability of the remaining

terms and conditions of this Agreement shall not be deemed affected thereby unless one or both parties would be substantially or materially prejudiced.

18. GOVERNING LAW. This Agreement shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Massachusetts and the CONTRACTOR submits to the jurisdiction of any of its appropriate courts for the adjudication of disputes arising out of this Agreement.

19. ENTIRE AGREEMENT. This Agreement, including all documents incorporated herein by reference, constitutes the entire integrated agreement between the parties with respect to the matters described. This Agreement supersedes all prior agreements, negotiations and representations, either written or oral, and it shall not be modified or amended except by a written document executed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

I certify that an appropriation is available in the amount of this Contract.

_____
Town Accountant

TOWN OF MEDWAY
BOARD OF SELECTMEN

_____

_____

_____

_____

_____

Approved as to Form:

_____
Town Counsel

METROPOLITAN AREA
PLANNING COUNCIL

_____
(Signature)

_____
(Name and Title)

PROPOSAL FOR THE MEDWAY HAZARD MITIGATION PLAN UPDATE

Metropolitan Area Planning Council, Boston, MA

In response to the request issued by the Town of Medway, the Metropolitan Area Planning Council (MAPC) proposes to prepare the town's Hazard Mitigation Plan Update under Medway's Pre-Disaster Mitigation Grant with the Massachusetts Emergency Management Agency.

MAPC is designated Regional Planning Agency under Massachusetts Statutefor 101 cities and towns in the greater Boston metropolitan area, including the Town of Medway. MAPC provides a wide range of planning technical assistance to member communities, including Hazard Mitigation Plans as described below.

MAPC provides responses to the following items in Medway's request:

1. **Have completed at least five plans previously.**

MAPC has prepared Hazard Mitigation Plans for 83 communities since FEMA launched the program in 2004, and has since prepared 39 Plan Updates. The list of communities is shown in Attachment A. Of note, MAPC prepared Medway's first Hazard Mitigation Plan, which was approved by FEMA in 2011.

2. **Have worked with local hazard mitigation committees and done public outreach as part of hazard mitigation planning process.**

In all of the Hazard Mitigation plans previously prepared, MAPC has worked with local hazard mitigation committees and has conducted public outreach. During the course of preparing a community's plan, MPAC typically convenes three to four meetings of the local team. MAPC prepares agendas, schedules meetings with the team's coordinator, maintains a contact list for meeting notifications, and prepares materials for presentation and review by the local team.

During the planning process, MAPC will coordinate public outreach, including two public meetings on the plan, press releases, website postings, and direct outreach to local officials, neighboring towns, and a variety of local stakeholders such as businesses, institutions, community-based organizations, service providers, and local media. Any comments or input received from the public will then be documented in the town's plan.

3. **Able to meet proposed timeline (last page of attached document).**

The MEMA contract extends to September 30, 2018. Assuming that MAPC begins work in September 2017 after the town conducts selection and hiring of a vendor, MAPC will conduct the planning tasks and prepare the Hazard Mitigation Plan for submittal to MEMA for review by April 30, 2018. Following that MEMA and FEMA will review the plan, and MAPC will make any revisions that may be required by that review.

Once approved by FEMA, the Town will adopt the plan, completing the final step in the process. If the MEMA/FEMA review and/or local adoption process takes place later than the September 30, 2018 contract date, MAPC will prepare a no-cost contract extension to accommodate the final review and adoption of the plan.

4. Two references for communities for which you have done hazard mitigation plans.

MAPC provides the following two references, each of whom serves as the coordinator of their town's local hazard mitigation team:

Margaret E. Walker, P.E.
Town Engineer
Town Hall
135 School Street
Walpole, MA 02081
508-660-7213
mwalker@walpole-ma.gov
[Please note that Ms. Walker will be out of the office the week of July 17-21, but she will have access to email]

Scott Boothby
Fire Chief/Emergency Management Director
Ashland Fire Department
sboothby@ashlandfire.com
508-532-7993

5. Explanation of price proposal.

MAPC has prepared a cost proposal based on the tasks included in the Scope of Work attached to the Town's contract with MEMA. The first two tasks, [1] Grant Award and Contracting and [2] Select and Hire a Vendor) would be conducted by the town. MAPC's cost proposal includes all the tasks beginning with [3] Convene a Local Hazard Mitigation Planning team through the final task [12] Plan Review and Approval. The total cost proposal is $20,545, which includes $20, 145 in staff costs and $400 in travel costs. The breakdown of the cost proposal by task is shown below:

MAPC BUDGET BY TASK FOR MEDWAY HAZARD MITIGATION PLAN UPDATE			
TASK	**Category**	**Hours**	**Cost**
Convene Local Hazard Mitigation Planning Committee	Personnel	40	$3,400.00
Update Hazard Profiles	Personnel	20	$1,700.00
Update Critical Facilities Inventory	Personnel	20	$1,700.00
Update Hazard Vulnerability	Personnel	20	$1,700.00
Update Mitigation Goals	Personnel	30	$2,550.00
Update Actions	Personnel	50	$4,250.00
Plan Review, Evaluation, and Implementation	Personnel	25	$2,125.00
Plan Maintenance	Personnel	8	$680.00
Public Review of Draft Plan	Personnel	12	$1,020.00
Plan Review and Approval	Personnel	12	$1,020.00
TOTAL LABOR COSTS	Personnel	237	$20,145.00
NON-LABOR COSTS	Travel		$400.00
TOTAL PROJECT COST			**$20,545.00**

Attachment A

Hazard Mitigation Plans and Plan Updates Prepared by MAPC, 2005-2017

Community	Original Plan	Plan Update	Community	Original Plan	Plan Update
Acton	X		Maynard	X	
Arlington	X		Medfield	X	
Ashland	X		Medford	X	X
Bedford	X		Medway	X	
Bellingham	X		Middleton	X	
Belmont	X		Milford	X	
Beverly	X	X	Millis	X	
Bolton	X		Milton	X	X
Boston	X	X	Nahant	X	X
Boxborough	X		Natick	X	
Braintree	X	X	Needham	X	
Brookline	X	X	Newton	X	X
Burlington	X	X	Norfolk	X	
Cambridge	X	X	Norwood	X	
Canton	X		Peabody	X	X
Carlisle	X		Quincy	X	X
Chelsea	X	X	Randolph	X	X
Cohasset	X	X	Reading	X	X
Concord	X	X	Revere	X	X
Danvers	X		Rockport	X	
Dedham	X		Salem	X	X
Dover	X	X	Saugus	X	X
Essex	X		Scituate	X	X
Everett	X	X	Sharon	X	
Foxborough	X		Somerville	X	X
Franklin	X		Southborough	X	
Gloucester	X		Stoneham	X	
Hamilton	X		Stow	X	
Hanover	X		Sudbury	X	
Hingham	X	X	Swampscott	X	X
Holliston	X	X	Walpole	X	X
Hopkinton	X	X	Wayland	X	
Hudson	X	X	Wenham	X	
Hull	X		Weston	X	
Ipswich	X		Westwood	X	
Lexington	X		Weymouth	X	X
Littleton	X	X	Wilmington	X	X
Lynn	X	X	Winthrop	X	X
Lynnfield	X		Woburn	X	X
Malden	X	X	Wrentham	X	
Manchester	X				
Marlborough	X	X	**TOTAL**	**83**	**39**

AGENDA ITEM #8

Route 109 Project – Town Funding Responsibility and Change Order

Associated back up materials attached.

- Change Order for fiber wiring - Comm-Tract Corp.

Proposed motion:
I move that the Board authorize the Town Administrator to execute a change order with Comm-Tract Corp in the amount of $29,700 for the Route 109 Fiber Optic Municipal Area Network.

Comm-Tract

Town of Medway
Scope of Work – ITC 54
Route 109 Traffic Control Boxes onto Fiber Network
Fiber Optic Municipal Area Network

Prepared by:	Comm-Tract Corp. 235 Summer Road, Bldg. # 4 Boxborough, MA 01719	**Contact:** **Telephone:** **Email:**	Bryan Hopkins (781) 890-5070 x6952 bhopkins@comm-tract.com
Date:	May 24, 2017		

Bid No.	Route 109 Traffic Control Boxes onto Fiber Network
Customer Number	Rev 2

Bill To:		**Ship To:**	
Company:	Town of Medway	**Company:**	Town of Medway
Address:	45 Holliston Street Medway, MA 02053	**Address:**	45 Holliston Street Medway, MA 02053
Contact Name:	Richard Boucher	**Contact Name:**	Richard Boucher
Phone:	(508) 533-3227 x5113	**Phone:**	(508) 533-3227 x5113
Fax:		**Fax:**	
Email:	rboucher@medway.k12.ma.us	**Email:**	rboucher@medway.k12.ma.us

Description of Work

Fiber Optic Municipal Area Network - Route 109 Traffic Control Boxes onto Fiber Network

The following scope of work and pricing has been developed at the request of the Town of Medway, Comm-Tract will provide and install the following:

- We propose to furnish and install (1) Corning 12 Count Single Mode Fiber Optic Cable(SMF-28e) from the intersection of Holliston Street and Main Street west along Main Street to the intersection of Main Street at Highland Street. We will ring-cut the backbone at Holliston Street and Main Street, prepare, splice and test 6 fibers back to the Police Department, 2 of the 6 fibers will be installed into (6) traffic control boxes along Main Street, in daisy chain topology. The 6 traffic control boxes along Main Street are (1 at Main and Holliston signal, 1 cross walk between Holliston and the Shopping Plaza, 1 at Main and Shopping Plaza signal, 1 at Winthrop Street signal, 1at Choate Park cross walk and 1 at Main and Highland Street).
- We will also ring-cut the backbone at Main Street and Highland Street, prepare, splice and test 6 fibers back to the Town Hall and or High School.
- We propose to furnish and install (4) Corning SC/PC fiber optic connectors in each of the traffic control boxes.

Comm-Tract Corp
235 Summer Road, Bldg. # 4
Boxborough, MA 01719
(781) 890-5070
bhopkins@comm-tract.com

Comm-Tract

Town of Medway
Scope of Work – ITC 54
Route 109 Traffic Control Boxes onto Fiber Network
Fiber Optic Municipal Area Network

- All fibers will be OTDR, Power Meter Tested and labeled.

Bill of Materials	
Quantity	**Description**
7,950 feet	Corning 12 Count Altos Figure 8 Self-Support SMF-28e Fiber Optic Cable
24	Corning SC/PC Single-mode Connectors
6	Corning SC/PC 6 Way Bulkheads
6	Snow Shoes for Aerial Slack Storage
6	Corning 12 Way Fan-out Kit
6	Corning Outside Plant Splice Case
36	Fusion Heat Shrinks
50	Galvanized 5/8" Pole Line Hardware

Comm-Tract Corp
235 Summer Road, Bldg. # 4
Boxborough, MA 01719
(781) 890-5070
bhopkins@comm-tract.com

Comm-Tract

Town of Medway
Scope of Work – ITC 54
Route 109 Traffic Control Boxes onto Fiber Network
Fiber Optic Municipal Area Network

Special Terms

Customer agrees to the following payment schedule:	
Final Balance upon Implementation and Acceptance by Customer:	$ 29,700.00

- The Project Price shall be subject to adjustment in the event of any mutually agreed upon written changes made to the Scope of Work. Any changes during the project to the Scope of Work will be mutually agreed to in writing with Customer prior to any changes, or additional charges being added or deleted to the project.
- Prices are valid for 30-days.
- The Project Price does not include licensing of pole or underground facilities.
- The Project Price does not include police details.
- The Project Price does not include permitting with the town.
- The Project Price does not include any new underground construction.
- The Project Price includes shipping charges.
- The Project Price assumes access to each location is free and clear.
- Comm-Tract will perform during normal business hours – Monday through Friday, 8:00 a.m. to 5:00 p.m., unless otherwise specified in the Description of Work.
- Customer hereby agrees to the terms and conditions set forth in the Scope of Work by signing below or issuing a Purchase order referencing this Scope of Work.
- This Scope of Work is governed by the terms and conditions of the Commonwealth of Massachusetts ITC 54 blanket contract.

Est. Completion Date:	
Material	
Labor	
Total	$ 29,700.00

Customer Name:	
Authorized Signature:	
Name:	
Date:	

Comm-Tract Corp
235 Summer Road, Bldg. # 4
Boxborough, MA 01719
(781) 890-5070
bhopkins@comm-tract.com

AGENDA ITEM #9

Opening of November 13, 2017 Fall Town Meeting Warrant

Associated back up materials attached.

- 2017 Fall Town Meeting Calendar

Proposed motion:
I move that the Board open the November 13, 2017 Fall Town Meeting Warrant.

2017 Fall Town Meeting Calendar

Activity	Date
Board of Selectmen (BOS) Adopts Warrant	October 16, 2017
Fall Town Meeting (FTM)	November 13, 2017

Date	Activity	Responsibility
Aug 21-Sep 18	Opening/Closing of FTM Warrant	BOS & Town Admin.
Sep 19-22	Legal Review and Approval of Warrant	Town Counsel
Oct 2	Adopt Warrant	BOS
Oct 3	Transmittal of Warrant to Finance Committee (FinCom)	BOS
Oct 3-27	Review of Warrant by FinCom	FinCom
Oct 16	Vote Recommendations	BOS
14 days before FinCom Public Hearing*	***Post Date of FinCom Public Hearing in:*** ***1. Milford Daily News (must be provided 3-4 days prior to date you want published)*** ***2. FinCom Website Page*** ***3. Town Clerk to Post***	FinCom
Week of Oct 16*	***FinCom Public Hearing***	FinCom
Oct 25**	FinCom Votes Warrant Recommendations	FinCom
Oct 27	Warrant Posted per Charter	BOS
Nov 13	Fall Town Meeting	BOS, FinCom, Town Clerk, Moderator

Activity	Date
Constable Posts Warrant	**Oct 27, 2017**

* 1. Recommended date of Public Hearing Wed., Oct. 18, 2017
2. Notify Community News. Co. of public hearing notice to be placed in *Milford Daily News.* CNC needs three to four business days advance notice to place a legal ad; CNC's phone#: 800-624-7355, email:legals@wickedlocal.com.

** Charter reference (7-5-2) The finance committee shall report its recommendations, in writing, on the articles for which it held public hearings in accordance with the board of selectmen's budgeting calendar for the annual town meeting, and at least 10 days before any other town meeting.

AGENDA ITEM #10

Annual Committee Appointments

Associated back up materials attached.

- List of incumbents that have requested reappointment
- Attendance records received as of 7/14/17:
    - Affordable Housing, Agricultural Committee, Board of Assessors, Cable Advisory Committee, Capital Improvement Planning Committee, Christmas Parade Committee, Memorial Committee, Community Preservation Committee, Conservation Commission, Council on Aging, EPFRAC, Thayer Governance Com.

Note: EPFRAC Historical Commission rep has stated he is not interested in reappointment to EPFRAC – also has not attended any EPFRAC meetings; Medway Pride Day Committee has only one appointed member, so it cannot technically meet (no attendance record to provide).

Proposed motion:
I move that the Board appoint the incumbent board and committee members as listed on the agenda.

Board or Committee	Name	Action Needed
Affordable Housing Committee	Judi LaPan	Reappoint for a 2 year term
	Michael Leone	Reappoint for a 2 year term
	John Parlee	Reappoint for a 2 year term
	Susan Rorke	Reappoint for a 2 year term
	Alison Slack	Reappoint for a 2 year term
Agricultural Committee	Margaret Perkins	Reappoint for a 3 year term
Board of Assessors	Lindsay Tosca	Reappoint for a 3 year term
Board of Registrars	Christine Lorenzen	Reappoint for a 3 year term
Cable Advisory Committee	John Foresto	Reappoint for a 3 year term
	Shelley Wieler	Reappoint for a 3 year term
	Richard Boucher	Reappoint for a 3 year term
	Robert O'Neill	Reappoint for a 3 year term
	Glenn Trindade	Reappoint for a 3 year term
Capital Improvement Planning Committee	Kelly O'Rourke	Reappoint for a 4 year term
Cemetery Commission	Jeanne Johnson	Reappoint for a 1 year term
	Bruce Hamblin	Reappoint for a 1 year term
Christmas Parade Committee	Scott Guyette	Reappoint for a 3 year term
	Allen Tingley	Reappoint for a 3 year term
	Richard Parrella	Reappoint for a 3 year term
Community Preservation Committee	Jim Wieler	Reappoint for a 3 year term
Conservation Commission	Ken McKay	Reappoint for a 3 year term
Council on Aging	Nanette Glenny	Reappoint for a 3 year term
	Siri Krishna Khalsa	Reappoint for a 3 year term
	Charlene Saunders	Reappoint for a 3 year term
	Francis Saunders	Reappoint for a 3 year term
	Marylou Staples	Reappoint for a 3 year term
Evaluation of Parks, Fields & Recreation Areas Committee	Richard D'Innocenzo	Reappoint for a 1 year term
	Michael Francis	Reappoint for a 1 year term
	Robert Pearl	Reappoint for a 1 year term
	Paul Mahoney	Reappoint for a 1 year term
	David Travalini (alt)	Reappoint for a 1 year term
	David Blackwell	Reappoint for a 1 year term
	Michael Schrader	Reappoint for a 1 year term
	Ellen Hillery (alt)	Reappoint for a 1 year term
	Cathy Morgan	Reappoint for a 1 year term
	Kari Macleod (alt)	Reappoint for a 1 year term
Historical Commission	Paul Russell	Reappoint for a 1 year term
Memorial Committee	Douglas Downing	Reappoint for a 1 year term
	John Larney	Reappoint for a 1 year term
	Michael Matondi	Reappoint for a 1 year term
	Richard Parrella	Reappoint for a 1 year term
	Robert Saleski	Reappoint for a 1 year term
	Francis Saunders	Reappoint for a 1 year term
	Paul Trufant	Reappoint for a 1 year term
	Allen Tingley	Reappoint for a 1 year term
Medway Pride Day Committee	Sarah Stone	Reappoint for a 1 year term
Thayer Governance Committee	John Foresto	Reappoint for a 1 year term
	Dennis Crowley	Reappoint for a 1 year term
	Carl Rice	Reappoint for a 1 year term

Affordable Housing Committee and Trust

Meeting Date	Member	Member	Member	Member	Member
		COMMITTEE			
	SHERRY	LAPAN	MACQUIRE	TRINDADE	PARLEE
7/7/2016	X	X	X		X
8/4/2016	X		X	X	X
9/1/2016	X	X	X		X
10/6/2016		X	X	X	X
11/3/2016	X	X	X	X	X
12/1/2016	X		X	X	X
1/5/2017	X	X	X	X	X
Feb-17	X		X	X	X
3/2/2017	X		X		X
5/4/2017	X		X	X	X
6/15/2017	X	X	X	X	X

		TRUST				
	FERRARI	LAPAN	LEONE	RORKE	SLACK	PARLEE
7/7/2016		X	X	X	X	X
8/4/2016		X	X	X	X	
9/1/2016	X	X	X	X		X
10/6/2016	X	X	X	X		X
11/3/2016	X	X		X		X
12/1/2016	X	X			X	X
1/5/2017	X	X	X	X	X	X
Feb-17	X	X	X	X	X	X
3/2/2017	X	X		X	X	X
5/4/2017	X		X	X		X
6/15/2017	X	X	X	X	X	X

Agricultural Committee Attendance Record

July 1, 2016-June 30, 2017

Committee Members: Chairman Paul Atwood, Vice Chairman Bruce Hamblin, and Secretary Margaret Perkins

Meeting Date	Committee Members		
	Atwood	Hamblin	Perkins
7/20/16	✓		✓
8/24/16	✓	✓	✓
9/14/16	✓		✓
10/26/16	✓	✓	✓
12/14/16	✓		✓
1/25/17	✓		✓
3/8/17	✓		✓
4/12/17	✓	✓	✓
5/17/17	✓	✓	✓
6/21/17	✓		✓

Notes:

- Pending Committee Member Mike Kassel was present at the meetings held on 3/8/17 and 5/17/17
- Pending Committee Member Alison Dempsey was present at the meetings held on 5/17/17 and 6/21/17

Respectfully submitted,

Filipa LeClair

Meeting Recording Secretary

July 16, 2017

Board of Assessors - Meeting Attendance

DATE	PRESENT
5/24/2017	KATHRYN, LINDIE, CRISTINA
5/2/2017	KATHRYN, LINDIE, CRISTINA
3/22/2017	KATHRYN, CRISTINA
2/27/2017	KATHRYN, LINDSIE
1/23/2017	KATHRYN, LINDSIE
7/3/2016	KATHRYN. CRISTINA
10/3/2016	CRSSITNA, KATHRYN
10/27/2016	KATHRYN, LINDSIE, CRISTINA
11/21/2016	KATHRYN, CRISTINA
12/5/2016	KATHRYN, LINDSIE, CRISTINA

DONNA AT ALL THE ABOVE

*

Cable Advisory Committee

Attendance, Fiscal Year 2017

Members	11/3/16	3/13/17	4/10/17
Richard Boucher	X	No quorum	X
John Foresto	X	No quorum	X
Glenn Trindade	X	No quorum	
Shelley Wieler	X	No quorum	X
Robert O'Neill	X	No quorum	

CIPC Members List (attendance) in FY2017:

Member Name	11-Oct-16	21-Oct-16	8-Nov-16	10-Jan-17	24-Jan-17	15-Feb-17	7-Mar-17	21-Mar-17	25-Apr-17	8-May-17	23-May-17
Kelly O' Rourke	X	X	X	X	X	X	X	X	X	X	X
Peter Sigrist	X		X	X	X	X	X	X	Absent with Notice	Absent without Notice	Absent without Notice
Leonard Mitchell	X	X	X	X	X	X	X	X	Absent with Notice	X	X
Tracy Malcolm	X	X	X	X	X	X	X	X	X	X	X
Debi Rossi	Not a Member	X		X	X	X	X	Absent with Notice	X	X	X

Sent: Monday, July 17, 2017 11:37 AM
Subject: RE: **FY17 Committee Attendance Records**

Excerpted from email response:

Christmas Parade Committee:
Of 8 official meetings, members Paul Trufant, Allen Tingley and Richard Parrella were at all meetings . Scott Guyette was not at any meetings....he did help out the night of our parade! I am not sure if he wishes to continue.

Memorial Committee:
Of the 8 official meetings, each member was in attendance 7 of the 8 meetings! It is important to note that meetings are scheduled during the day time and has on occasion conflicted with individual schedules! Also, all committee members have stepped forward to assist in any manner possible to help with the needs of our committee!

Both committees are wonderful and individuals involved are fantastic. It is a pleasure to serve with each of them!

Regards
Richard A Parrella

FY 17 COMMUNITY PRESERVATION ATTENDANCE RECORDS

COMMITTEE MEMBER	12-Sep-16	13-Oct-16	7-Nov-16	6-Feb-17	6-Mar-17	13-Mar-17	3-Apr-17	1-May-17	5-Jun-17
Mark Cerel, Chairman	X	X	X	X	X	X	X		X
Jim Wieler, Citizen At Large		X	X	X	X	X	X	X	X
Tom Emero, Citizen At Large	Joined Committee in March 2017				X	X	X	X	X
David Travalini, Con Com	Joined Committee in February 2017			X	X	X	X	X	X
Matthew Hayes, Ec Devlop	X	X	X	X			X	X	X
Gene Liscombe, Historical	X	X	X	X	X	X	X	X	X
Paul Mahoney, Park Comm	X	X		X	X	X	X	X	
Alison Slack Afford Housing	X		X	X	X	X	X		
Tina Wright, Open Space		X	X	X			X	X	
Ellen Hillery, FinCom Liaison	X	X	X	X	X	X	X	X	

Council on Aging

NAME	ROLE	8/10/2016	9/13/2016	10/11/2016	11/1/2016	12/13/2016
Courtney Riley	Director	X	X	X	X	X
Mary Lou Staples	Chairperson	X	X	X	X	X
Judy Lane	Secretary	X	X	X	X	X
Vonnie Clark	Vice Chair	EXCUSED ABSENCES	X	X	X	X
Mary Anderson	Member	X	X	X	X	X
Nanette Glenny	Member	X	X	X	X	X
Frank Saunders	Member	X	X	X	EXCUSED ABSENCES	X
Grace Rossetti	Member	X	X	X	X	X
Charlene Saunders	Member	X	X	X	EXCUSED ABSENCES	X
William Caton	Member	NOT ON BOARD YET	X	X	X	X
Siri Krishna Khalsa	Member	EXCUSED ABSENCES	X	X	X	EXCUSED ABSENCE
Paul DeSimone	Member	X	X	X	EXCUSED ABSENCES	X

Council on Aging

1/10/2017	2/14/2017	SNOW DAY IN MARCH	4/11/2017	5/9/2017	6/12/2017
X	X	N/A	X	X	X
X	X	N/A	X	X	X
EXCUSED ABSENCES	X	N/A	X	EXCUSED ABSENCES	X
X	X	N/A	X	X	X
X	IN FLA.	N/A	IN FLA.	IN FLA.	X
X	X	N/A	X	X	EXCUSED ABSENCES
X	X	N/A	X	X	X
X	X	N/A	X	X	X
X	X	N/A	X	X	X
X	X	N/A	X	EXCUSED ABSENCES	X
X	X	N/A	X	X	X
X	EXCUSED ABSENCES	N/A	X	EXCUSED ABSENCES	X

EPFRAC FY17 Attendance

Name*	23-Aug-16	1-Sep-16	12-Sep-16	27-Sep-16	25-Oct-16	1-Nov-16	2-Nov-16	22-Nov-16	20-Dec-16
Dr. Richard D' Innocenzo	X	X	X	X	X	X	X	X	X
Michael Francis	X	X	X	X	X	X	X	X	X
Robert Pearl		X	X	X				X	X
Paul Mahoney	X	X	X	X	X	X	X	X	X
David Blackwell		X	X	X	X	X	X	X	X
Alex Burinsky									
Michael Schrader	X	X	X	X	X	X	X	X	X
Cathy Morgan	X	X	X	X	X	X	X	X	X
Ellen Hillery (Alt)		X	X	X	X	X	X	X	X
David Travalini (Alt)	X		X	X	X	X	X		X
Kari MacLeod (Alt)						X			x

*Not included, as no longer on committee: Ross Rackliff and Mark Diebus

Michael Tudino appointed in May; has attended both EPFRAC meetings since appointment (6/6 and 7/11)

EPFRAC FY17 Attendance

Name*	4-Jan-17	5-Jan-17	19-Jan-17	31-Jan-17	6-Feb-17	14-Feb-17	13-Mar-17	28-Mar-17	3-Apr-17
Dr. Richard D' Innocenzo	X	X	X	X	X	X	X	X	X
Michael Francis	X	X	X	X	X	X	X		
Robert Pearl			X		X		X		X
Paul Mahoney	X	X		X	X	X	X	X	X
David Blackwell	X	X	X	X	X			X	X
Alex Burinsky									
Michael Schrader	X	X	X			X	X	X	X
Cathy Morgan	X	X		X	X			X	
Ellen Hillery (Alt)	X	X	X	X	X		X	X	X
David Travalini (Alt)		X	X		X	X	X	X	X
Kari MacLeod (Alt)	X	X	X		X	X	X	X	X

EPFRAC FY17 Attendance

Name*	6-Jun-17	11-Jul-17
Dr. Richard D' Innocenzo	X	X
Michael Francis		X
Robert Pearl	X	
Paul Mahoney	X	X
David Blackwell	X	X
Alex Burinsky		
Michael Schrader	X	
Cathy Morgan	X	X
Ellen Hillery (Alt)	X	X
David Travalini (Alt)	X	X
Kari MacLeod (Alt)	X	X

Thayer Governance Committee

Attendance, Fiscal Year 2017

Members	3/3/17
John Foresto	X
Dennis Crowley	X
Carl Rice	X

AGENDA ITEM #11

Approval of One-Day Liquor License Applications

a. **DeSorbo – Thayer Homestead – 8/25/17**
b. **Lambert – Thayer Homestead – 8/26/17**
c. **Joannette – Thayer Homestead – 9/1/17**
d. **Lumala – Thayer Homestead – 9/16/17**
e. **Balajan/Doherty – Thayer Homestead – 9/17/17**
f. **Collier – Thayer Homestead – 9/23/17**
g. **Williams – Thayer Homestead – 9/30/17**
h. **Rooney/Hakim – Thayer Homestead – 10/15/17**
i. **Pillard – Thayer Homestead – 12/10/17**

Associated back up materials attached.

- Police Chief's recommendations for: Kirsten DeSorbo, Anthony Lambert, Robert Joannette, Deborah Lumala, Lorien Balajan & Jennah Doherty, Emily Collier, Molly Williams, Liz Rooney & George Hakim, Molly Pillard

Note: One-day applications on file in Board of Selectmen's office.

Proposed motion:
I move that the Board approve one-day liquor licenses for the requested events, subject to the Police Chief's recommended conditions and evidence of appropriate insurance coverage.

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

July 27, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One day liquor license- Thayer Property- Neighborhood party/ fundraiser

I have reviewed the request from Kirsten DeSorbo for a one day alcohol license for a neighborhood party/fundraiser, to be held at the Thayer House, August 25, 2017. I approve of the issuance of this one day alcohol license with the stipulation that there will be no on-street parking on Mechanic Street and Oak Street. Alcohol service will be provided by AT Your Service Bartending.

Sincerely,

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

August 14, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One-Day Liquor request – Thayer House – Lambert Wedding Reception

I have reviewed the application for the one day liquor license request for the Lambert wedding reception scheduled for August 26, 2017 at the Thayer House.

I approve of the issuing of the permits with the following condition.

There will be no on-street parking on either side of Oak Street or Mechanic Street. Additional parking may be found at the Choate Park complex and in the rear parking lot off of Winthrop Street.

The serving of the beer, wine and alcohol will comply with the standards set forth in the Town of Medway's liquor policy for a one day alcoholic beverage license. The serving of the alcohol beverages will be handled by Amanda Smith a TIPS certified bartender.

Respectfully Submitted

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

August 16, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One-Day Liquor request – Thayer House – Wedding Reception

I have reviewed the application for the one day liquor license request from Robert Joannette for a wedding reception scheduled for September 1, 2017 at the Thayer House.

I approve of the issuing of the permit with the following conditions.

There will be no on-street parking on either side of Oak Street or Mechanic Street. Additional parking may be found at the Choate Park complex and in the rear parking lot off of Winthrop Street.

The serving of the beer, wine and alcohol will comply with the standards set forth in the Town of Medway's liquor policy for a one day alcoholic beverage license, including the stipulation that all alcohol/wine served at the event will be purchased from a licensed alcohol liquor distributor, as indicated on the license application.

A responsible adult will be checking ID's of individuals being served alcohol at this event.

Respectfully Submitted

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

May 31, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One-Day Liquor request – Thayer House – Wedding Reception (Lumala)

I have reviewed the application for the one day liquor license request for the wedding reception scheduled for September 16, 2017 at the Thayer House.

I approve of the issuing of the permits with the following condition.

There will be no on-street parking on either side of Oak Street or Mechanic Street. Additional parking may be found at the Choate Park complex and in the rear parking lot off of Winthrop Street.

The serving of the beer, wine and alcohol will comply with the standards set forth in the Town of Medway's liquor policy for a one day alcoholic beverage license.

I would also recommend the hiring of one four hour detail officer for this event to assist with traffic movement and parking of motor vehicles for this event. It was reported in the application that up to 150 guests could be attending this event.

Respectfully Submitted

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

July 25, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One day liquor license- Thayer Property- Bridal Shower

I have reviewed the request from Lorien Balayan and Jennah Doherty for a one day Alcohol license for a bridal shower, to be held at the Thayer House, September 17, 2017. I approve of the issuance of this one day alcohol license with the stipulation that the wine and malt and alcohol will be purchased from a licensed alcohol wholesale distributor, as indicated on the license application and the Town of Medway's Alcohol Policy. There will be no on-street parking on Mechanic Street and Oak Street. A responsible adult, with some knowledge of Mass alcohol laws will be checking ID's of individuals served alcohol at this event.

Sincerely,

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

May 31, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One-Day Liquor request – Thayer House – Wedding Reception (Collier)

I have reviewed the application for the one day liquor license request for a wedding reception scheduled for September 23, 2017 at the Thayer House.

I approve of the issuing of the permits with the following condition.

There will be no on-street parking on either side of Oak Street or Mechanic Street. Additional parking may be found at the Choate Park complex and in the rear parking lot off of Winthrop Street.

The serving of the beer, wine and alcoholic beverages will comply with the standards set forth in the Town of Medway's liquor policy for a one day alcoholic beverage license.

A responsible adult with some knowledge of Mass Liquor laws will be checking ID'S of all individuals being served alcoholic beverages at this event.

Respectfully Submitted

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

July 20, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One-Day Liquor request – Thayer House – Williams/Ferrante's Wedding Reception

I have reviewed the application for the one day liquor license request for the Williams/Ferrante's wedding reception scheduled for September 30, 2017 at the Thayer House.

I approve of the issuing of the permits with the following condition.

There will be no on-street parking on either side of Oak Street or Mechanic Street. Additional parking may be found at the Choate Park complex and in the rear parking lot off of Winthrop Street.

The serving of the beer, wine and alcohol will comply with the standards set forth in the Town of Medway's liquor policy for a one day alcoholic beverage license. Alcohol service will be provided by Extra Hands for Your Events.

Respectfully Submitted

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

May 9, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One-Day Liquor request – Thayer House – Wedding Reception (Rooney/Hakim)

I have reviewed the application for the one day wine and malt license request for a wedding reception scheduled for October 15, 2017 at the Thayer House.

I approve of the issuing of the permits with the following condition.

There will be no on-street parking on either side of Oak Street or Mechanic Street. Additional parking may be found at the Choate Park complex and in the rear parking lot off of Winthrop Street.

The serving of the beer, wine and alcoholic beverages will comply with the standards set forth in the Town of Medway's liquor policy for a one day alcoholic beverage license. All wine and malt served at this event shall be purchased form a wholesale distributor.

A responsible adult with some knowledge of Mass Liquor laws will be checking ID'S of all individuals being served alcoholic beverages at this event.

Respectfully Submitted

Allen M. Tingley
Chief of Police

Medway Police Department

315 Village Street
Medway, MA 02053

Phone: 508-533-3212
FAX: 508-533-3216
Emergency: 911

Allen M. Tingley
Chief of Police

April 28, 2017

To: Michael Boynton
Town Administrator

From: Allen M. Tingley
Chief of Police

Re: One day liquor license- Thayer Property- Family Christmas Party

I have reviewed the request from Molly Edgett/Pillard for a one day wine and malt license for a family Christmas Party, to be held at the Thayer House, 2B Oak Street, on December 10, 2017. I approve of the issuance of this one day liquor license with the stipulation that the wine and malt will be purchased from a licensed alcohol wholesale distributor, as indicated on the license application and the Town of Medway's Alcohol Policy. There will be no on-street parking on Mechanic Street and Oak Street and that a responsible adult with some knowledge of Mass liquor laws will be checking ID's of individuals being served beer and wine at the party

Sincerely,

Allen M. Tingley
Chief of Police

AGENDA ITEM #12

Action Items from Previous Meeting

Associated back up materials attached.

- Action Item list dated 7/18/17

	DATE	ACTION ITEMS BOS	WHO	COMPLETED
1	**7/6/2010**	Street acceptance progress	S. Affleck-Childs	Ongoing
2	**9/20/2010**	Route 109 Project	DPS	Ongoing
3	**2/3/2014**	Cable license renewals ; Mtg of Cable Advisory Com; Ascertainment Process	TA/CAC	Ongoing
4	**7/28/2014**	DPS Facility Building Project	DPS/TA/Committee	On hold
5	**4/4/2016**	Recreational Facility Improvements	BOS	Ongoing
6	**10/17/2016**	Benches at memorial park across from Police Station	TA/DPS	
7	**12/5/2016**	Urban Renewal Plan submission to State	Redevel. Authority	
8	**5/1/2017**	Ch. 90 funds expenditure policy (roads & sidewalks)	TA/BOS	
9	**5/30/2017**	OPEB trust management	Finance Director	
10	IWRMP Task Force Mtg	Unaccounted for water loss status report	DPS	Oct BOS Mtg
11	**7/17/2017**	Centralized v Individual Well Water Treatment Options	DPS	Oct BOS Mtg

AGENDA ITEM #13

Approval of Minutes

Associated back up materials attached.

- 2/6/17 draft minutes
- 3/6/17 draft minutes
- 3/20/17 draft minutes

Board of Selectmen's Meeting
February 6, 2017 - 6:30 PM
Medway High School - Library
88 Summer Street

Present: Glenn Trindade, Chair; Maryjane White, Vice Chair; Richard D'Innocenzo, Clerk; Dennis Crowley, Member (6:39 PM); and John Foresto, Member.

Staff Present: Michael Boynton, Town Administrator; Allison Potter, Assistant Town Administrator;

Others Present: Susy Affleck-Childs, Planning and Economic Development Coordinator; members of the Community Preservation Committee and members of EPFRAC.

****

At 6:32 PM Chairman Trindade called the meeting to order and led the Pledge of Allegiance.

Approval – Transfer of Entity from PGC Associates, Inc. to PGC Associates, LLC:
The Board reviewed the following information: (1) Correspondence from Gino D. Carlucci, Jr. Requesting Entity Change; and (2) EIN Confirmation from the Internal Revenue Service.

Mr. Boynton explained that this is a change in corporate ownership and name.

Selectman Foresto moved that the Board approve a change in entity currently referred to as PGC Associates, Inc. to PGC Associates, LLC as requested; Selectman White seconded. NO discussion. VOTE: 4-0-0.

Vote – Close May 8, 2017 Annual Town Meeting Warrant
The Board reviewed the following information: (1) Fiscal Year 2018 Budget Calendar; and (2) 2017 Town Meeting Calendar.

Mr. Boynton reminded the Board that the Warrant has been open for a few weeks. There are around 50 articles including Planning and Zoning articles. He briefly highlighted some of them, noting that many are of an annual housekeeping and accounting nature.

Selectman D'Innocenzo moved that the Board close the May 8th Annual Town Meeting /warrant on February 6, 2017; Selectman White seconded. No discussion. VOTE: 4-0-0.

Mr. Boynton pointed out that, if the need arises, the Board can open and close the Warrant to allow the addition of articles up until the date it is officially posted.

Approval – 6th Annual Shamrock Shuffle – March 11, 2017
The Board reviewed the following information: (1) Email dated January 17, 2017 requesting event; (2) Map of Race Route; and (3) Police Chief's Recommendation.

It was noted that this is an annual event.

Selectman Foresto moved that the Board approve a special events permit for the 6th Annual Shamrock Shuffle to be held on March 11, 2017 subject to fulfillment of the Police Chief's recommendations; Selectman White seconded. No discussion. VOTE: 4-0-0.

Approval – One-Day Liquor License Requests for Events at Thayer Homestead

The Board reviewed applications and Police Chief recommendations for the following Thayer Homestead events: (a) Daniel Benabou, February 15, 2017; (b) Mariah Mellor, February 25, 2017; (c) Michelle Callahan, March 5, 2017; (d) Martine Metelus, March 18, 2017; and (e) Sweta Girgenrath, April 22, 2017.

Selectman Foresto moved that the Board approve one-day liquor licenses for Daniel Benabou, Mariah Mellow, Michelle Callahan, Martine Metelus and Sweta Girgenrath for events to be held at the Thayer Homestead on February 15, February 25, March 5, March 18, and April 22, 2017 subject to Police Chief's recommendations and proof of appropriate insurance coverage; Selectman White seconded. No discussion. VOTE: 4-0-0.

Discussion - New Recreational Marijuana Law

The Board reviewed a spreadsheet listing possible actions by the Town relative to enacting local regulations.

Mr. Boynton reported that the required letters have been sent out. A placeholder zoning moratorium article for the Annual Town Meeting has been drafted. Discussion followed. It is possible that the Attorney General may propose a one-year moratorium. What does a moratorium mean? Should we create a list of definitions? What information should be posted on the website?

Selectman Crowley suggested that a non-binding ballot question be the first step to get a sense of what the community feels. Selectman White asked about the differences between some of the options. Selectman D'Innocenzo agreed with Selectman Crowley on first doing the non-binding question. After brief discussion, the Board decided to leave it to the Town Administrator on consultation with Town Counsel as to the wording of the question. Selectman Crowley suggested that a ballot question could be on the ballot even if the Warrant article goes forward.

Chairman Trindade theorized that a one-year moratorium may be good until the state decides what it wants to include in its regulations. Mr. Boynton noted that his preference would be an 18-month moratorium.

Mr. Boynton stated he will work with Town Counsel to prepare the question ready by the end of the week and take it from there.

Action Items from Previous Meeting

The Board reviewed the Action Items List.

Selectman Crowley asked about the Urban Renewal Plan and if it was delayed again. Mr. Boynton responded that he spoke with Ms. Mercandetti who reported that the final draft is being reviewed.

Approval of Warrants

The Board reviewed Warrants 17-33S, 17-33P and 17-33SP.

Selectman D'Innocenzo, Clerk, read aloud Warrants 17-33S, 17-33P and 17-33SP, dated 2/9/2017, presented for approval:

17-33S	School Expense	$ 436,585.28
17-33P	Town Payroll	310,490.96

17-33SP	School Payroll	828,305.88
	TOTAL	$1,575,382.12

Selectman Foresto moved that the Board approve the Warrants as read; Selectman White seconded. No discussion. VOTE: 5-0-0.

Approval of Minutes

The Board reviewed draft meeting minutes from October 4, 2016; October 17, 2016; November 14, 2016; November 21, 2016 and November 30, 2016.

Selectman D'Innocenzo moved that the Board approve meeting minutes from October 4, 2016, as presented; Selectman White seconded. No discussion. VOTE: 3-0-2 Crowley and Foresto abstained.

Selectman White moved that the Board approve meeting minutes from October 17, 2016, as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.

Selectman Foresto moved that the Board approve meeting minutes from November 14, 2016, as presented; Selectman Crowley seconded. No discussion. VOTE: 4-0-1 -- D'Innocenzo abstained.

Selectman Foresto moved that the Board approve meeting minutes from November 21, 2016, as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 3-0-2 – Crowley and White abstained.

Selectman Foresto moved that the Board approve meeting minutes from November 30, 2016, as presented; Selectman White seconded. No discussion. VOTE: 4-0-1 -- D'Innocenzo abstained.

Town Administrator's Report:

Mr. Boynton reported that later this week the Finance Director will have draft budget projections and health insurance estimates. At this time an increase of 28% for health insurance premiums has been built into the Town budget. The budget cannot be finalized until the health insurance piece has been resolved. He asked the Board to consider Saturday March 4 as a budget workshop meeting. Brief discussion followed. Selectman Crowley asked for hard copy of the proposed budget.

Mr. Boynton provided the Board with a Snow & Ice Update along with storm removal expenses from this year as well as the past five years. Brief discussion followed on procedures utilized to mobilize crews. If the budget is exceeded, we may need to get a budget transfer authorization.

Selectmen's Reports:

Selectman Crowley asked if the Capital Improvement Planning Committee was to be part of this Joint Meeting. Ms. Potter responded that the CIPC Chair had indicated they were not prepared to meet with Board. Selectman Crowley asked if the Board could get the CIPC recommendations in advance of the meeting where they will meet with the Board, whenever that will be.

Brief discussion followed on meals tax and how that revenue is apportioned. The original warrant article specified how it would be used, but that was a one-time deal. There is no obligation to put it into the OPEB account. Each year the repository account needs to be identified.

Executive Session:

As the Joint Meeting was about to begin, the Executive Session was postponed.

Public Comment:

All attendees were present to see the presentation.

At 7:22 PM Chairman Trindade moved that the Board suspend its meeting; Selectman White seconded. No discussion. VOTE: 5-0-0.

Joint Meeting with Community Preservation Committee and Evaluation of Parks, Fields and Recreational Areas Committee – Parks and Playgrounds Improvements Project:
The Board reviewed a PowerPoint presentation entitled Medway Parks & Playground Project.

At 7:30 PM Mr. Mark Cerel, Chair, called the meeting of the Community Preservation Committee to order as there was a quorum of members present.

At this time, Selectmen D'Innocenzo moved that the Board of Selectmen reconvene the its meeting; Selectman White seconded. No discussion. VOTE: 5-0-0.

At 7:35 PM Mr. Cerel declared the annual Public Hearing open for formal proposals.

Ms. Susy Affleck-Childs provided copies of a proposal to revisit the Open Space and Recreational Plan, requesting $25,000 from CPC in FY18 to fund a study. It was last developed in 2009 and 2010 under the Open Space Committee. That plan will expire in June 2017 and we would like to see it revisited and updated. There has been a lot of activity in Medway in terms of open space and we feel the timing is appropriate to undertake an more official process. To establish an open space and recreation plan. The goals of the plan are outlined on the proposal. One of the key points is that access to grant funds as well as state funds is the requirement of having a plan in place. She briefly reviewed various components of the plan. CPC members briefly discussed the proposal with some members expressing concern about the timing, and possible lack of funding due to constraints and commitment to other projects.

Chairman Trindade summarized the history of the million which was to improve handicap accessibility to existing recreational venues. Brief discussion followed. Selectman Crowley asked if the Town has the option to add additional funds should the state funds not come through. Should we wait until the EPFRAC plan is in place and then bring in a consultant? Mr. Cerel noted that this Open Space Recreation Plan is a "big picture" kind of thing. Mr. Wieler suggested that, as long as the plan is not inconsistent with the EPFRAC plan, it should be part of the overall Open Space Master Plan. This helps make the Town eligible for various sources of funding.

Responding to a question from Selectmen Crowley, Ms. Affleck-Childs stated that there is no reason why this study should impact the EPFRAC initiative. She noted that they looked at plans from other communities. Referring to a suggestion about issuing an RFP, she responded that she has no interest in doing so and believes the $25,000 is an appropriate amount.

Mr. Boynton reported that the Town would also like to consider digitalization of historical records at Town Hall to make those records more accessible and to preserve them. Mr. Cerel pointed out that CPC has already spent significant money to digitize some financial records.

Aside from this presentation, is there any other proposal for the upcoming fiscal year. There being none, Mr. Cerel declared the public hearing closed at 7:59 PM.

EPFRAP Presentation – Parks Rehab Project:

Mr, Cerel noted that Town Meeting voted to fund design services, the RFP was issued, a design firm retained, a series of meetings were held with some open to the public, and the results of these efforts are ready to share with CPC tonight.

Ms. Clara Batchelor and Mr. DJ Chagnon, CBA Landscape Architects, were on hand to present information on the proposed Parks Improvement Project. Ms. Batchelor stated they were hired to look at three specific parks: Choate Park, Cassidy Field and Oakland Park as well as the Medway Middle School. The fields are actually in good shape, so the project is intended to improve the parking to lessen the conflict between the field and the senior center as well as help improve facilities at the middle school to support programs there.

Utilizing a PowerPoint presentation, Ms. Batchelor began with the Choate Cassidy Master Plan, pointing out the core area. She noted that they will talk about first phases of implementation, how they redeveloped the core area where one enters the park area, considered areas around the pond, playing fields, and a new entrance to Choate as part of Route 109 redesign project. Components covered included 68 parking spaces in the parking lot; improved pedestrian access, reworking the playground with separate equipment designed for children ages 2-5 years or 6-12, a picnic area and pavilion. She clarified that they do not envision redesigning the existing building.

How would you divide this into phases? Start with the core area which would provide a fresh face to the park for about $1.5 million. An additional $96,000 to add a splash area where the water can be recirculated instead of down the drain. A pathway that is handicap accessible would be another $50,000, and if it were to be lit, that would cost another $40,000. Adding lights to a second field is another component at $312,000. A path around the pond is not accessible all the way around, and to make it less than 5% incline we would have to add handrails partial path for $92,000. It would not go all the way around but it would be a walking path. Adding a walkway along the pond near an old fire pit, and to connect it to a lookout platform would be $104,000.

It was noted that there was no particular order to some of these additional improvements. The core area is the most important area to start with. With input from the community, CPC and other groups, a list can be compiled in order of priority. Many combinations of improvements are possible.

Mr. Chagnon briefly reviewed areas and noted that additional plans are posted on the Town website. For the Cassidy Field/Senior Center area, if the $1.5 million is too high a price tag, the additional parking lot of 35 more spaces could be left for another time. For Medway Middle School, additional improvements could include resurfacing or rebuilding the track, better seating, or the addition of sports lighting. Brief discussion followed on whether the bathrooms at Choate Park would satisfy the needs of Camp Sunshine participants, many of whom are disabled. The existing swimming area and sand beach at Choate has been deemed unhealthy by the Board of Health.

Mr. Cerel opened the discussion to questions from CPC members. Ms. Wright wanted to know about the concession stand. Ms. Batchelor responded that the structures they have been looking at have an openable window which could also serve as a concession stand. Right now the existing concession stand is non-functional.

It was that field lighting could cost $300,000. This cost seems high, and perhaps lighting could be added to Little Fenway Field. Mr. Chagnon responded that they assumed everything would go through the public bidding process, adding that they based their estimated on recent field projects. Yet there could be existing items that could be funded privately.

Brief discussion followed on the splash area and possibly recirculating the water, lowering the flow to save water, low flow systems and water connections.

Referring to communicating this project to Medway voters, Mr. Wieler asked what level of compliance must be met for these three areas. What budget number do we need to reach? Mr. Cerel pointed out that the existing equipment is beyond its useful life. The Phase 1 portion of the project addresses ADA compliance for the playground areas. Mr. Chagnon clarified that they did not prepare a workup that addressed only the ADA-safety-traffic issues. Items such as the pavilion could be left out.

An Oakland Street resident asked for additional handicapped spaces at the Senior Center and expressed support for Camp Sunshine as it needs its own space. Was there any consideration of putting the splash pad at Oakland Street instead of at Choate Park? It was noted that residents who attended the meetings felt that Choate was a more appropriate location. The location should not have a significant impact on the cost. Discussion followed on the uniqueness of the Camp Sunshine users.

A resident asked if the parking lot at the Senior Center could be restriped to allow more handicapped spaces. Ms. Batchelor stated that the building code specifies one handicapped space for every 25 regular ones. She added that their directive was to consider the parking in the area, not necessarily to help the Senior Center, but to increase parking so that Senior Center activities were not hindered. The configuration of the asphalt will not change no matter how many handicapped spaces are provided.

Mr. Chuck Hodge stated his property abuts the area next to the tennis courts. He asked about the relocation of the storage area as it currently seems to be a dumping ground for broken equipment. Is there any kind of discussion on a privacy buffer? Are we going to be drowned in light with all the new lighting? It was noted that trees will not be removed to improve the tennis courts. The storage area will be revamped to consolidate its functions to eliminate it being an eyesore.

Discussion followed on the approximate $3 million available in the CPC budget. It is unclear how much would be proposed for consideration at Town Meeting as this is the first time the CPC has seen this presentation. Chairman Trindade briefly explained how the CPC allocates its funds, especially if another piece of open space became available or historical property. The Board of Selectmen wants to be able to have funds available in case one of those should occur.

There were no additional comments or questions from the audience.

Selectman D'Innocenzo, EPFRAC Chair, asked the Community Preservation Committee what it would like to do as EPFRAC has worked very hard to evaluate the surveys, hold meetings and determine what needs to happen first. He asked that the Community Preservation Committee to review it and give us their thoughts. Mr. Cerel responded that his suggestion would be to determine which items would qualify as an expenditure from CPA funds; for example, Senior Center property does not while playground equipment does. Once that is done, the design elements need to be prioritized. It was noted that the CPC budget is around $3 million but not all of that may be available. Some borrowing could also occur.

Mr. Boynton emphasized that EPFRAC did a tremendous job on this project. The scope still needs to be refined based on funds available. Is there anything in this design that should come out or be re-evaluated? Mr. Cerel noted that there were earlier versions that may have impact on conservation and wetland issues. Mr. Travalini clarified that there is work that would be done in a resource area (Chicken Brook). The Conservation Commission worked with the landscape architects on what kinds of activities could occur in the resource area.

Mr. Wieler asked how much of the removal of old equipment will come out of CPC funds. He also expressed concern about significantly altering the terrain to create a 5% incline for ADA compliance. Mr. Chagnon stated that, at Choate/Cassidy, the only point that will have minor grading is the path to the overlook. The very steep hill at the end of the ball field down to the existing playground area is the only spot where there will be significant regrading. Selectman Foresto expressed concern that the project design puts infrastructure into a parking lot which is then ruined by regrading.

Representing the Planning and Economic Development Board, Mr. Matt Hayes explained that the surveys were done online, and, for the most part, the items that showed up as high priority ended up in Phase 1. Ice skating facilities did not rank as they are quite expensive at a cost of $500,000 for a permanent rink for the winter in addition to its operating costs.

Mr. Liscombe asked which of these items previously mentioned would be paid for with CPA funds, noting that there is really nothing historical about any of these improvements. Mr. Cerel added that maintenance or deferred maintenance definitely cannot be funded with CPA funds.

Mr. Paul Mahoney, EPFRAC member committee, noted that they tried to prepare this without any kind of operating budget. Can we count on the state money? Should we move forward without knowing for sure? Should we go to bid first and then see how things can be bundled? Ms. Batchelor theorized that, if it was a million-dollar budget, they would aim at $950,000 to leave wiggle room for the add-on alternates that will bring it close to the one million-dollar mark.

Mr. Cerel noted that the Board of Selectmen and EPFRAC are both getting some feedback tonight. CPC is not going to design this project. Take the input and work with it. We then make a recommendation. If it turns into a positive recommendation, it will go to Town Meeting.

Ms. Allison Slack, CPC Member, expressed concern about the ADA compliancy issue. Mr. Cerel pointed out that ADA issues are more than trails and boardwalks. It's providing equipment that a handicapped child can actually use and have an enjoyable experience. What about a handicapped parent who accompanies their able-bodied child to the playground? What are the playground surfaces now?

Regarding the splash pad, CPC members wanted to know how much water would be used and how would it work. Whether it is recirculating or not, there is a push button a child can press, and the spray lasts for 30 seconds. A timer controls the hours of operating, which would prevent teenagers at midnight getting any water. A similar size splash pad in Somerville used 475,000 gallons, 4,000 gallons a day, for this past summer. Mr. Cerel cautioned that there may be costs for chemicals or perhaps liability insurance to cover individuals using the splash pad. Brief discussion followed on a facility in Walpole.

At this time, Chairman Trindade polled the Selectmen. Selectman Foresto asked that if people want to spend $2.5 or $3 million, say so now so the Board can work on the financial planning. Selectman White concurred, noting that they need to know what the numbers are so we can pick and choose components. Where will we get the money from? Selectman Crowley responded that $1.5 million would come from Community Preservation Act funds distributed by the Community Preservation Committee, $1 million from the state and the rest from Town Meeting appropriation. The proposed revenue coming from assisted living, Exelon expansion and other things should be enough to cover it. Discussion followed during which it was noted that mentioning ADA issues in a phone call with Senator Spilka helped push the project to the top of the list. Brief discussion followed on DOR regulations, cash on hand and the ability to bond the necessary amounts. Mr. Cerel stated that he is comfortable using a chunk of cash that is in reserves. He emphasized that, while there is more money in the CPA account, we need to know that the $1.5 million is your target amount.

Selectman D'Innocenzo, EPFRAC Chair, asked how the committee can help. Do you want us to break the project into pieces? Mr. Wieler suggested that the budget be broken down to help see what things could be paid for with that $1.5 million. Mr. Cerel suggested that breakdown go up to $2 million, pointing out that all kinds of things that figure into public construction, i.e., prevailing wage, etc. and asked that the budget show us what can be done for 2 million even though he was not committing to the $2 million. Mr. Mahoney suggested that anything over $1.5 million should be placed on the add-on list. It was also suggested that the estimates be labeled to indicate which ones could be paid with CPC funds according to CPA guidelines.

It is noted that the rest of the meeting agenda was for CPC review only; the EPFRAC and Board of Selectmen meeting was concluded. **At 9:43 PM Selectman Foresto moved to adjourn; Selectman White seconded. No discussion. VOTE: 5-0-0.**

Respectfully submitted,
Jeanette Galliardt
Night Board Secretary

Board of Selectmen's Meeting
March 6, 2017 -- 7:00 PM
Sanford Hall, Town Hall
155 Village Street

Present: Glenn Trindade, Chair; Maryjane White, Vice Chair; Richard D'Innocenzo, Clerk; Dennis Crowley, Member and John Foresto, Member.

Staff Present: Michael Boynton, Town Administrator; Allison Potter, Assistant Town Administrator; Carol Pratt, Finance Director; Bridget Graziano, Conservation Agent; David D'Amico, Director, Department of Public Works; Margaret Perkins, Director, Medway Public Library; Jeffrey Lynch, Fire Chief; Allen Tingley, Police Chief.

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At 7:00 PM Chairman Trindade called the meeting to order and led the Pledge of Allegiance

Public Comments: None.

Vote – File for Town of Medway Intervenor Status in Exelon West Medway, LLC and Exelon West Medway II, LLC Petition before Energy Facilities Siting Board, Docket #17-01

There were no background materials.

Mr. Boynton provided a brief update on the approvals for the construction of the facility and DEP air permits. The DEP permits have been challenged by the Conservation Law Foundation. Exelon has exercised a legal option and asked the Siting Board to issue the appropriate certificate. It alters the appeals process. Other local permits have been issued and would be included in this encompassing certificate. They are willing to work with the Town on these permits. We expect to continue a dialogue with Exelon, but with a March 20 deadline to file for intervenor status which would protect the Town's interests, the timing is tight. This will allow a cooperative relationship while protecting the Town's interests.

Selectman Foresto moved that the Board of Selectmen direct that our Special Counsel, BCK Law P.C., for the Exelon project file a Petition for the Town to Intervene as a Full Party in the energy Facility Siting Board docket #17-01 and fully represent the Town's interests in that docket and in all other current matters before the Energy Facility Siting Board regarding the proposed Exelon power station project in Medway; Selectman D'Innocenzo seconded. Mr. Boynton confirmed that the motion had been approved by BCK Law, P.C. Brief discussion followed on the construction timeline during which Selectmen Crowley asked for a pre-construction meeting. Mr. Boynton stated the agreement calls for this to occur. VOTE: 5-0-0.

Appointment Consideration – Conservation Commission (1 Vacancy)

The Board reviewed applications, letters of interest and/or resumes from Kathy Clark, Kimberly Kaolides and Margery Queenan as well as a Letter from the Conservation Agent. It is noted that the term length for the appointee will be three years, expiring on 6/30/2020.

Present: Bridget Graziano, Conservation Agent; Kathy Clark; Margery Queenan.

Chairman Trindade welcomed both candidates and asked each to introduce themselves and speak to their experience and qualifications.

Ms. Kathy Clark stated she is interested in the environment more than ever. She moved here a couple of months ago and this is a good way to get involved. Selectman White asked if she had a particular interest in conservation. Ms. Clark responded she did and also for animals, adding that she has no previous experience on a board. Chairman Trindade explained that the job of a commissioner is to follow the law while allowing residents their right to a hearing on their project. Medway's conservation regulations are stricter than the state's.

Ms. Margery Queenan stated she has lived in Medway almost three years and had been watching for something to open up. She is originally from Dedham, lived in NH for 8 years, and during that time became interested in zoning, conservation, etc. While living there, she worked with a local organization who worked with cleanups. Ms. Queenan had a regulatory background in health insurance interpreting regulations and hope to utilize that skill in this position.

Ms. Clark saw the posting in the local paper. Ms. Queenan saw it on Facebook.

Selectman Crowley emphasized that there will be a lot of learning on conservation issues. He asked if they would be interested in another board or commission if not appointed to this one. Both indicated they would be interested in learning about other opportunities.

Brief discussion followed. Selectman Foresto suggested taking a week to think it over, talk to existing commissioners, view the taped interviews, and come back with a decision at the next meeting. Chairman Trindade pointed out that it is a Board of Selectmen appointment, but important for candidates to know that it is a significant commitment of time and energy. This position really needs someone who wants to do it, coupled with the detailed learning.

Ms. Potter will make a list of other openings and email them to the candidates.

Presentation – Draft Stormwater By-law

The Board reviewed the following information: (1) Draft Stormwater Bylaw; and (2) PowerPoint presentation.

Present: Bridget Graziano, Conservation Agent; David D'Amico, Director, Department of Public Works.

Ms. Graziano reported that the Conservation Commission put out a bid for a consultant. This individual and I have drafted stormwater bylaws in other communities and this is much the same as those.

Mr. D'Amico point out that many of the things in this bylaw are things we are already doing. While there is a stormwater bylaw in place right now, these requirements are mandated by the MS4 Stormwater Permit. Discussion followed during which Selectman Crowley expressed concern that this may be premature and suggested waiting until the November Special Town Meeting. By that time, the federal government may have issued more definitive information.

Ms. Graziano urged Board members to read through the bylaw, theorizing that it will make sense. This permit will be issued along with the construction permits for homes, projects, and developments. Mr. D'Amico noted that housing developments that are not tied into the public system will need to have a homeowners' association to keep their systems clean and be in charge of the maintenance. Ms. Graziano added that the Planning Board requires that all developments have homeowners' associations in compliance with the Massachusetts Stormwater Association. That is also part of the Wetlands Protection Act.

Selectman Crowley expressed concern that this will create additional steps for a developer who may only want to build three houses.

At this time, Ms. Graziano began the PowerPoint presentation, noting that compliance will be required from any new development, redevelopment or small projects over 20,000 square feet up to one acre of land disturbance. This is not the size of the project, but the amount of land disturbance.

There are both similarities and differences between existing bylaw and Proposed Bylaw. Ms. Graziano clarified that the purpose is to prevent potentially contaminated water from entering our system where the Town is responsible for it. Mr. Boynton clarified that, to the best extent possible, residents should avoid situations where discharge into the Town system occurs to the best of their ability. We acknowledge that emergency situations will come up.

Ms. Graziano continued with the presentation by briefly reviewing Land Disturbance & Construction Activities, Stormwater Bylaw Flow Chart, Components of the Bylaw, Erosion and Sediment Control Plan and Post-Construction Stormwater Management Plan and Illicit Discharges. Non-stormwater that discharges to the storm drain system typically contains bacteria and other pollutants. This would be a laundromat or commercial car-washing business.

Chairman Trindade expressed concern that, if this is approved, how well are we prepared to follow it. Mr. Boynton responded that there is always a learning curve, adding that there is a very active team in DPW working with Kleinfelder as well as a possible new compliance officer. We need to be up to speed with what the federal government requires. It was noted that the Town will not be in compliance if it is not voted in. Compliance with it is a requirement of the MS4 permit. This is very important. Discussion followed. Ms. Graziano emphasized that this is protection for Medway and protecting our drinking water, not necessarily a negative as another mandate from the EPA.

Chairman Trindade stressed the importance of successfully explaining the examples of where this will apply from the perspective of an individual homeowner or small business owner. Mr. Boynton added that we should also offer some suggestions for best practices to avoid discharge into the street.

Selectman Crowley suggested that this could be voted in November. Mr. D'Amico pointed out that the Town will submit a Notice of Intent for the MS4 permit and some parts of the permit will not be in compliance. If we don't get an MS4 permit, what happens? Discussion followed.

Review – Draft May 8 Special Town Meeting Warrant

The Board reviewed the Draft May 8 Special Town Meeting Warrant. It is anticipated that the Board will vote its recommendations at the March 20 meeting.

Mr. Boynton reported that, as of last week, the Snow and Ice Budget was currently in deficit, having spent a total of $449,000 so far. This is Article 1, and the actual number will be available in time for Town Meeting. It is expected that the deficit can be made up with free cash.

Brief discussion followed on the remaining articles.

Selectman Foresto moved that the Board approve the articles in the May 8 Special Town Meeting Warrant as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.

Vote Articles and Recommendations - May 8 Annual Town Meeting Warrant (Except Those Submitted by the Planning & Economic Development Board)

The Board reviewed the following information: (1) May 9 Annual Town Meeting Warrant; and (2) Draft Stormwater Bylaw.

Article 1 – ESCO Stabilization Reserve Transfer – **Selectman Foresto moved that the Board approve and recommend Article 1 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 2 – Appropriation: FY19 Operating Budget – Mr. Boynton reported that they are still waiting for health insurance premium information based on collective bargaining discussions. **Selectman Foresto moved that Article 2 carry a TBD (To Be Determined) designation for the time being; Selectman D'Innocenzo seconded. No further discussion. VOTE: 5-0-0.**

Article 3 – Appropriation: FY18 Water Enterprise Fund – Selectman Crowley would like to wait until the Water and Sewer Commissioners to approve and recommend it first. TBD designation.

Article 4 – Appropriation: FY18 Sewer Enterprise Fund – TBD.

Article 5 – Appropriation: FY18 Solid Waste Enterprise Fund – TBD.

Article 6 – Appropriation: FY18 Ambulance Enterprise Fund – TBD.

Article 7 – Free Cash Appropriation: Capital and Other Items – TBD.
Brief discussion followed on the snow and ice budget, a van to transport small sports teams, liability for a driver, stipend for a driver and related topics.

Article 8 – Free Cash Appropriation: Capital and Other Items – This article is to provide funding for the Oak Grove project, in particular, acquisition costs. Discussion followed on the redevelopment plan. TBD.

Article 9 – Repurpose Community Development Funds – Master Plan -- **Selectman Foresto moved that the Board approve and recommend Article 9 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 10 – Transfer – Retained Earnings – Sewer Enterprise -- **Selectman Foresto moved that the Board approve and recommend Article 10 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 11 –Transfer – Retained Earnings – Water Enterprise – This article is for the replacement of a 2004 truck as well as water system improvements consisting of replacing valves at the wells, etc. TBD.

Article 12 – Free Cash Transfer to General Stabilization -- **Selectman Foresto moved that the Board approve and recommend Article 12 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 13 – Lease-Purchase Air Packs – Mr. Boynton reminded the Board that this is part of a host community agreement with CommCan, Inc. Chief Lynch reported that this new equipment is much more advanced than what we have now. **Selectman D'Innocenzo moved that the Board approve and recommend Article 13 as presented; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

Article 14 – Appropriation: Health Care Reimbursement Account – Mr. Boynton reported that this article will be passed over if the approval does not come from the unions. **Selectman Foresto moved that the Board approve and recommend Article 14 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 15 – Appropriation: OPEB Trust – Chairman Trindade explained the meals tax for viewers and that the Board has to vote it every year. **Selectman Foresto moved that the Board approve and recommend Article 15 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 16 – Appropriation: Medway Day -- Selectman Foresto reported that the total cost is about $30,000, and the rest is from contributions. There is no charge for the rides, etc. **Selectman Foresto moved that the Board approve and recommend Article 16 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 17 – Transfer to Athletic Fields Stabilization Fund -- **Selectman D'Innocenzo moved that the Board approve and recommend Article 17 as presented; Selectman White seconded. No discussion. VOTE: 5-0-0.**

Article 18 – Appropriation – Community Preservation Committee – It was noted that the dollar amounts are estimates. TBD

Article 19 – Fund Trail Kiosks and Signage – It was noted that the Open Space Committee will be in charge of ordering signage and determining placement, but DPS staff will do the work. **Selectman Foresto moved that the Board approve and recommend Article 19 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 20 – Fund Adams Street Meadow Parking Area -- **Selectman D'Innocenzo moved that the Board approve and recommend Article 20 as presented; Selectman Foresto seconded. No discussion. VOTE: 5-0-0.**

Article 21 – Fund Open Space Master Plan – Mr. Boynton reported that various offices have concerns. Chairman Trindade stated that they went out and looked at the communities that have Open Space plans and they look remarkably similar. Selectman Crowley suggested waiting until a decision is made on what will happen with recreational facilities. Selectman Foresto asked if the plan was necessary in order to get state funding. Mr. Boynton responded that the Town would not be eligible for some things like the Parks grant. Chairman Trindade noted that all the Open Space Committee did was make a few calls. They did not issue the RFP. He suggested postponing a decision for a couple weeks in order to do a little research. If CPC doesn't vote the money tonight, it's a dead issue. TBD.

Article 22 – Repurpose Borrowing – Library Fixtures and Equipment – Library Director Margaret Perkins was present for this discussion. She reported the library needs to replace some of the upholstered chairs as they are very worn and have been around since 1999. That would be about $6,000. The front and back parking lots need light improvements; the farther away one gets from the building, the darker it is. We can use the existing light poles and attach the LED light, or extend the pole so that the light extends farther. We would also like to put heating coils under the handicap ramp. It was done at the Town Hall and has worked out well. Ms. Carol Pratt, Finance Director, advised that the Town cannot purchase furniture with these funds as it was a borrowing, and its use must be building-related. Ms. Perkins theorized that the funds could be used to replace the HVAC unit that is slowly deteriorating. Chairman Trindade suggested considering the chairs at the November Special Town Meeting. **Selectman Foresto moved that the Board approve and recommend Article 22 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Articles 23 and 24 – Land Acquisition Articles for a DPS Facility – Mr. Boynton reported that he has had favorable conversations with both property owners. TBD

Article 25 – Accept MGL. Ch. 138 Cordials & Liqueurs -- This would come under the Beer and Wine license fee of $1000. **Selectman Foresto moved that the Board approve and recommend Article 25 as presented; Selectman White seconded. No discussion. VOTE: 5-0-0.**

Article 26 – Amend General Bylaws – Revolving Funds -- Brief discussion on the Thayer Homestead amount for proposed modifications. **Selectman Foresto moved that the Board approve and recommend Article 26 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 27 – Amend General Bylaws: License or Permit Denial -- **Selectman Foresto moved that the Board approve and recommend Article 27 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 28 – Amend General Bylaws: Fire Department – This article was drafted as a result of a conversation at Budget Review. It requires "on call" firefighters to live in Medway or a contiguous community. **Selectman Foresto moved that the Board approve and recommend Article 28 as presented; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.**

Article 29 – Amend General Bylaws – Stormwater Regulations – This article is in place of inserting the bylaw within the Warrant. The Board asked that copies of the bylaw be available at Town Meeting as well as posting it on the Town website. **Selectman Foresto moved that the Board approve and recommend Article 29 as presented; Selectman D'Innocenzo seconded. Brief discussion followed during which it was noted that the Commonwealth of Massachusetts has applied to take over the administration of stormwater regulations from the CPA. It is an unfunded mandate, and it is unclear what the new administration will do with it. VOTE: 4-1-0 – Selectman Crowley opposed because he believes it is too soon to vote this based on the fact that the federal regulations are not yet known.**

Article 30 – Amend Zoning and General Bylaws – New Noise Bylaw – Chief Tingley stated that there is variation in interpretation and the officers responding to a complaint will simply make a judgment based on common sense and experience. Ms. Potter reported that she spoke to the Ashland Police Department who indicated that the decibel-reading equipment is not reliable unless a very expensive one is purchased. Selectman Crowley suggested referring it to an acoustical professional for review. TBD.

The rest are Planning and Zoning Articles and will be reviewed at another time.

Discuss/Vote – Accept Mass. General Law Chapter 32B, Sections 21-23 (Employee/Retiree Health Insurance)

The Board reviewed the current vs. proposed plan relative to health insurance.

Referring to Article 6, Mr. Boynton suggested that the Board table this matter until a date specific, noting that the Town is still working with collective bargaining units. If they do not reach agreement, we may miss the July 1 insurance renewal and may have to go with an August 1 renewal date. If all unions agree to Option b, no vote is necessary. Brief discussion followed.

Selectman Foresto moved that the Board table discussion and action on this matter until such time as the collective bargaining discussions have been concluded; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.

Discuss - Recreational Marijuana Law Non-Binding Referendum Questions

The Board reviewed a list of non-binding referendum questions relative to recreational marijuana.

Chairman Trindade suggested putting the word "recreational" into the wording along with non-medical so there is no confusion.

Selectman Crowley moved that the Board approve Question number 1 as follows: Should the Town of Medway prohibit all non-medical recreational marijuana retail sales in the town? He added that the Board ask the Town Administrator to develop some language that defines what a YES or NO vote means. Selectman White seconded both parts of the motion. No discussion. VOTE: 5-0-0.

Vote – Designation of Board of Selectmen Member to Review and Approve Bills or Payment Warrants:

The Board reviewed the Municipal Modernization Act, Chapter 218. It is noted that the Board will appoint one member to review and approve warrant payments.

Chairman Trindade clarified that this is part of the Municipal Modernization Act so that if case the Board is not meeting, a designated individual can review and sign off on the accounts payable warrants.

Selectman Foresto moved that the Board designate Selectman Crowley to review and approve payment warrants; Selectman D'Innocenzo seconded. No discussion. VOTE: 4-0-1. Selectman Crowley abstained.

Chairman Trindade moved that the Board designate an alternate as John Foresto to review and approve payment warrants in the absence of Selectman Dennis Crowley; Selectman D'Innocenzo seconded. No discussion. VOTE: 4-0-1 Selectman Foresto abstained.

One-day Liquor License Requests for Events to be Held at Thayer Homestead

The Board reviewed Applications and Police Chief Recommendations for the following events at the Thayer Homestead: (1) Michael Curran –March 11, 2017; (2) Barbara Hutt – March 19, 2017; (3) Pragathi Sanshi – April 7, 2017; and (4) Pam Pavlick – April 8, 2017.

Selectman Foresto moved that the Board approve one-day liquor licenses for Michael Curran, Barbara Hutt, Pragathi Sanshi and Pam Pavlick for events to be held at the Thayer Homestead on March 11, March 19, April 7, and April 8, 2017 subject to Police Chief's recommendations and proof of appropriate insurance coverage; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.

Banner Display Requests – Clean Sweep & Medway Pride Day

The Board reviewed Banner Display Requests relative to Clean Sweep and Medway Pride Day.

Selectman Foresto moved that the Board approve the banner display requests for Clean Sweep and Medway Pride Day: Selectman D'Innocenzo seconded. It was noted that there is a break in the time the banner will be displayed due to the Town Election using it for the week in between. VOTE: 5-0-0.

Action Items from Previous Meeting

Review of the Action Items List was postponed.

Approval of Warrants

The Board reviewed Warrants 17-37S, 17-37P, and 17-37SP.

Selectman D'Innocenzo, Clerk, read aloud Warrant 17-37S, 17-37P, and 17-37SP, dated 3/9/2017, presented for approval:

17-37S	School Expense	$ 475,396.75
17-37P	Town Payroll	$ 319,007.47
17-37SP	School Payroll	$ 802,489.64
	TOTAL	$1.596.893.86

Selectman Foresto moved that the Board approve the Warrants as read; Selectman White seconded. No discussion. VOTE: 5-0-0.

Approval of Minutes

The Board reviewed draft minutes from December 12, 2016 and January 3, 2017.

Selectman Foresto moved that the Board approve the minutes of December 12, 2016, as amended; Selectman White seconded. No discussion. VOTE: 5-0-0.

Selectman Foresto moved that the Board approve the minutes of January 3, 2017; Selectman White seconded. Review was postponed until the review could be reviewed to confirm discussion points.

Town Administrator's Report

Mr. Boynton reported that he has appointed David D'Amico as the Director of the Department of Public Services. Barry Smith will be moving up as Deputy Director. Congratulations to both.

There have been significant wetlands violations on the Briggs Property necessitating enforcement actions. Discussion followed on the details of the violations. The letter was hand-delivered by a police officer along with the Conservation Agent.

Mr. Boynton provided an update on St. Joseph's Men's Club, a historic structure located behind Town Hall. It is in deplorable disrepair and will be demolished. However, the Town has to go before the Historical Commission before demolition can occur.

A big Thank You to all the department heads for coming to the budget review meeting on Saturday. Mr. Boynton added that a lot of hard work goes into budget preparation.

Selectmen's Reports

Selectman Crowley expressed concern for the cash reserves in the Parks department, noting that there is over $200,000 sitting there when it could be used.

Selectman Foresto reported on a review of the pricing on Thayer Homestead rentals which revealed that more than 50% of the rentals were from Non-Medway residents. The committee decided to increase the price for out-of-towners. The increase in revenue will help fund some upgrades including a new lawn with an irrigation system and lights on the patio.

Executive Session:

At 9:44 PM Chairman Trindade moved that the Board enter Executive Session under Exemption 2: To conduct strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel; (Town Administrator's Contract). The Board will be returning to public session. Selectman D'Innocenzo seconded the motion. No discussion. Roll Call Vote: 5-0-0 (Crowley, aye; D'Innocenzo, aye; Foresto, aye; Trindade, aye; White; aye).

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At 9:53 PM Chairman Trindade reconvened public session.

Mr. Boynton re-entered the meeting room.

Chairman Trindade announced that the Board voted unanimously to renew Mr. Boynton's contract for another three years. It is the consensus of the Board that he has done an excellent job with his duties and responsibilities. Selectman White and Selectman Foresto conducted a rigorous review of his performance. They will meet with him to discuss the details of the review. Chairman Trindade emphasized that it was a unanimous vote to renew on that.

Mr. Boynton thanked the Board for its confidence in his abilities, noting that he looks forward to working with Board members for another three years.

Chairman Trindade stated that this announcement will be forwarded to the Communications Director.

At 9:57 PM Selectman Foresto moved to adjourn; Selectman D'Innocenzo seconded. No discussion. VOTE: 5-0-0.

Respectfully submitted,
Jeanette Galliardt
Night Board Secretary

Board of Selectmen's Meeting
March 20, 2017 -- 7:00 PM
Sanford Hall, Town Hall
155 Village Street

Present: Glenn Trindade, Chair; Maryjane White, Vice Chair; Dennis Crowley, Member; John Foresto, Member.

Absent: Richard D'Innocenzo, Clerk.

Staff Present: Michael Boynton, Town Administrator; Allison Potter, Assistant Town Administrator; Carol Pratt, Finance Director; Joanne Russo, Treasurer/Collector; Mary Becotte, Communications Director; Susy Affleck-Childs, Planning and Economic Development Coordinator; Stephanie Mercandetti, Community Development Director; David D'Amico, Director, Department of Public Services; Barry Smith, Deputy Director; Department of Public Services.

Others Present: Andy Rodenhiser, Chair; Planning and Economic Development Board; Water and Sewer Commissioners: Leo O'Rourke, Chair; Robert Wilson, Member; Francis E. (Ted) Kenney, Member.

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At 7:00 PM Chairman Trindade called the meeting to order and led the Pledge of Allegiance

Public Comments: None.

Fiscal Year 2016 Audit Presentation – Melanson & Heath; Quarterly Investment Report and Tax Title Informational Discussion:
The Board reviewed the following information: (1) FY16 Audit Materials; and (2) Update from Finance Director on Accounts Receivable and Tax Title Process (at meeting).

Present: Jen Reddington, Melanson and Heath; Carol Pratt, Finance Director; Joanne Russo, Treasurer/Collector.

Ms. Reddington introduced herself, noting that Melanson and Heath have been auditors for the Town for 12 years. She began her review by drawing the Board's attention to page 4 of the report which is the management discussion, a narrative that puts the numbers of the audit into words.

Chairman Trindade noted that there is no management letter. Ms. Reddington responded there would be if there were areas of concern, and the Town's financial position and processes have gotten a lot better over the years. This year there is only a side letter which addresses future procedures. In response to a question from Selectman Crowley, she reviewed the Financial Highlights, noting that the bullets can be either positive or negative. Additionally, she explained that the outflow reflects predominantly changes in the receivables.

Continuing with the review, she covered the Town's net position, enterprise funds, net pension and OPEB. Ms. Reddington stated that a couple of GASB reports will be included in the Town's books next year which will show increased figures, specifically, $36 million instead of $23 million. Brief discussion followed on the general fund and stabilization funds, use of free cash and trust funds.

Ms. Reddington summarized that the Town is doing great. Things were perfect when the auditors came in and the audit went smoothly. She added that they try to look at different things each year so that all aspects are reviewed.

Selectman Foresto asked the Town Administrator to post the report on the Town website. Mr. Boynton credited the successful audit to Ms. Pratt and all the financial staff in the Accounting Department and Treasurer/Collector office.

Selectman Crowley stated that the Town wants to be able to use the money in the Operational Reserve (Stabilization) but if it is used, does the amount have to be made up somewhere else to avoid a hit on the town's credit rating. Ms. Reddington responded that the auditors look more closely at the unassigned funds and that particular stabilization fund is included in the assigned funds. Mr. Pratt would be able to provide a more detailed breakdown on the stabilization funds.

Quarterly Report

At this time, Ms. Russo came to the table. Ms. Pratt explained that this update will be prepared every year.

Referring to the tax collection/title process, Ms. Russo briefly described the process on collecting back taxes which includes several mailings to property owners. The Town does not want to put people in tax title if it can be avoided, and payment plans can be set up if necessary. The Town wants to work with property owners to resolve their tax issues. The last resort is putting a lien on the parcel which prevents clear title to the property should the owner attempt to sell it. Ms. Pratt added that a foreclosure process takes about 36 months, and we always hope that the payments will be made or a payment plan initiated.

Ms. Russo stated that she would like to engage with a company who will, in effect, purchase a bundle of our tax title properties when they come up for auction and then assume the collection process. We would get the full amount owed the Town if it is collected. They make their money on the eventual sale of the property, which is hopefully more than they paid the Town for the taxes.

Selectman Crowley stated he would prefer the company come in and talk to the Board. Board members concurred.

Discussion with Board of Water/Sewer Commissioners – Fiscal Year 2018 Budget:

The Board reviewed the following information: (1) Associated Warrant Articles; (2) Water Rate Analysis, Scenarios 1-3; and (3) Sewer Rate Analysis, Scenarios 1-3.

Present: David D'Amico, Director, Department of Public Services; Barry Smith, Deputy Director, Department of Public Services; Water and Sewer Commissioners: Leo O'Rourke, Chair; Robert Wilson, Member; Francis E. (Ted) Kenney, Member.

At 7:47 PM Mr. O'Rourke made a motion to convene a meeting of the Water and Sewer Commissioners. Motion was seconded and unanimously voted 3-0-0.

Mr. O'Rourke clarified that they will maintain $500,000 in retained earnings for Water. Mr. D'Amico stated that the final numbers will be available by Town Meeting. He spoke briefly on two wells that will need attention. Oakland Well has iron problems that will need to be dealt with as there are complaints about brown water from time to time. He suggested the idea of a well field with smaller wells that could be managed a little easier.

Chairman Trindade stated the residents are concerned about chlorine in the water, noting that his own experience is to let the water run for a few seconds, otherwise he too smells the chlorine. What are we doing about it? Mr. D'Amico responded that the DEP instituted chlorination in our systems a few years when the Highland Tank was a problem. We have requested that it (the restriction) be removed, but they have not allowed it. The EPA has changed the lower limits for chloroforms in the water, i.e., e-coli. Brief discussion followed on bacteria, where it hides from the chlorine, and how it builds up. Chlorine will continue to be in the water but we watch it. Depending on where a home is located along the line, some homes will receive more chlorine smell than others. Selectman Foresto noted that his house is at the end of the line and his water is fine. Mr. D'Amico confirmed that running the water for 30 seconds will clear the line of built-up chlorine.

Referring to the FY18 budget, Selectman Foresto asked why it is assumed that consumption will be down. Mr. D'Amico confirmed that usage was down by 1%. Projected increases in scenario 2 (the one W&S prefer) reflects an approximate increase each year of around $5.

Selectman Crowley expressed concern that $500,000 retained earnings benchmark is too low, based on consultant recommendations, adding that it should be around $800,000. Mr. D'Amico responded that the reports present recommended ranges rather than specific amounts. General discussion followed on the use of retained earnings to keep rates down, purchase equipment, or provide emergency maintenance. Mr. Boynton theorized that there are going to be necessary repairs or maintenance on water lines as they continue to age. He suggested building an equipment line item into the Enterprise Fund base. Mr. D'Amico pointed out that the scenarios include the five-year capital plan numbers. Additionally, it is preferred to update water lines when a roadway will be torn up for road work. That way traffic is impacted only once.

The Board asked about the commercial rates. Mr. D'Amico responded that the commercial rate is in this report, though it is not specifically pointed out. Selectman Crowley noted that the Town's permitting capacity is 920,000 gallons a day. An updated number that would consider proposed housing projects would bring our usage to approximately 910,000 gallons a day. How can we reduce the Unaccounted for Water and get down to a 10% level so we can apply to the State? Mr. D'Amico responded that DPS keeps some funds in reserve to perform water leak detection and other investigative procedures. Brief discussion followed on having an increased amount in retained earnings closer to the $800,000 in order to keep money moving forward for future use as well as water rate increases.

General discussion followed on the wells.

Upon motion from the Commission, Mr. O'Rourke adjourned the meeting of the Water and Sewer Commission at 8:29 PM.

Consideration of Appointment – Conservation Commission – (1 Vacancy) Kathy Clark, Margery Queenan:

The Board reviewed Resumes and Letters of Interest from candidates Kathy Clark and Margery Queenan. It is noted that the term length for the appointee will be three years, expiring on 6/30/2020. Both candidates were notified of tonight's meeting and potential vote.

Present: Margery Queenan, candidate.

It was noted that both candidates were interviewed at a previous meeting.

Selectman Foresto moved that the Board appoint Margery Queenan to the Conservation Commission for a term to expire on June 30. 2020; Selectman White seconded. No discussion. VOTE: 4-0-0.

Selectman Crowley asked the Town Administrator to please contact the other candidate and let her know there are other positions available.

Vote Articles and Recommendations - May 8, 2017 Annual Town Meeting Warrant (ATM Articles 3, 4, 5, 7, 10, 11 and 31-49):

The Board reviewed the following information: (1) May 8 Annual Town Meeting Warrant; and (2) Summary of Proposed Amendments, Planning & Economic Development Board.

Article 3: Appropriation: FY18 Water Enterprise Fund – Mr. Boynton reported that the total cost of health insurance has been determined. **Selectman Foresto moved that the Board approve and recommend Article 3 as presented; Selectman White seconded. Selectman Crowley expressed concern about the indirect costs, noting he would not question it this year but will revisit it next year. No further discussion. VOTE: 4-0-0.**

Article 4: Appropriation: FY18 Sewer Enterprise Fund – Mr. Boynton reported that the indirect cost number is actually $116,121, down from 123,301. **Selectman Foresto moved that the Board approve and recommend Article 4 as presented; Selectman White seconded. Selectman Crowley asked about retained earnings; Mr. Boynton responded it is zero at this point. Brief discussion followed. VOTE: 4-0-0.**

Article 5: Appropriation: FY18 Solid Waste Enterprise Fund – **Selectman White moved that the Board approve and recommend Article 5 as amended with indirect costs of $158,841 and total costs of $1,633,234; Selectman Foresto seconded. Selectman Crowley emphasized that the Town cannot always use retained earnings to cover costs. No further discussion. VOTE: 4-0-0.**

Article 6: Appropriation: FY18 Ambulance Enterprise Fund – There are updated dollar amounts based on changes in health insurance costs. **Selectman Foresto moved that the Board approve and recommend Article 6 with updated indirect costs of $140,531 and updated total costs of $865,465; Selectman White seconded. No discussion. 4-0-0.**

Article 7: Free Cash Appropriation: Capital and Other Items – Mr. Boynton recommended that this article carry a TBD designation until all the Snow and Ice expenses are known.

Article 10: Transfer – Retained Earnings – Sewer Enterprise – **Selectman Foresto moved that the Board approve and recommend Article 10 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Article 11: Transfer – Retained Earnings – Water Enterprise – **Selectman Foresto moved that the Board approve and recommend Article 11 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Planning and Zoning Articles

Present: Susy Affleck-Childs, Planning and Economic Development Coordinator; Andy Rodenhiser, Chair; Planning and Economic Development Board; Stephanie Mercandetti, Community Development Coordinator.

It was noted that the Planning Board public hearing will be tomorrow evening. Mr. Rodenhiser stated that many of these articles were ready in November, but, at the Board's request to wait, they are now bringing them forward for Annual Town Meeting.

Article 30: Amend Zoning and General Bylaws: New Noise Bylaw -- No discussion.

Article 31: Amend Zoning Bylaws: Nonconforming Uses and Structures -- This article changes the length of time within which construction must begin, and it mirrors state regulations. **Selectman Foresto moved that the Board approve and recommend Article 31 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Article 32: Amend Zoning Bylaw: Flood Plain/Westland Protection District – **Selectman White moved that the Board approve and recommend Article 32 as presented; Selectman Foresto seconded. No discussion. VOTE: 4-0-0.**

Article 33: Amend Zoning Bylaw: Correct Internal Cross References – A major recodification process took place a couple of years ago and there are spots where the numbering is incorrect. This article will correct them. **Selectman Foresto moved that the Board approve and recommend Article 33 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Article 34: Amend Zoning Bylaw: New Definitions – This represents the addition of new definitions, and revision to existing definitions. Mr. Rodenhiser stated it offers a better explanation of buffer. Ms. Affleck-Childs added that it expands on the definition for lot line, corner lot, etc, and manufacturing. It was clarified that components of the zoning bylaw in effect on the day a building permit is issued will be the ones governing that construction. **Selectman Foresto moved that the Board approve and recommend Article 34 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Article 35: Amend Zoning Bylaw: Schedule of Uses, Table 1 – **Selectman Foresto moved that the Board approve and recommend Article 35 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Article 36: Amend Zoning Bylaw: Open Space Residential Development – This article revises some language in the open space residential section of the bylaw as well as adds a new section. **Selectman White moved that the Board approve and recommend Article 36 as presented; Selectman Foresto seconded. No discussion. VOTE**: 4-0-0.

Article 37: Amend Zoning Bylaw: ARCPUD Definition and ARCPUD Regulations – This article clarifies that a two-family structure can be included in the ARCPUD and considered for affordable housing designation. Mr. Boynton added that wording regarding "right of way" was unclear. **Selectman Foresto moved that the Board approve and recommend Article 37 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Article 38: Amend Zoning Bylaw: Special Permits – This article modifies the criteria for permit granting authority. It freshened the criteria and added a few while expanding the list of conditions that could be imposed on an applicant in the Special Permit process. **Selectman Foresto moved that the Board approve and recommend Article 38 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.**

Article 39: Amend Zoning Bylaw: Accessory Building or Use Definition – This article presents revised definition of accessory uses, accessory building and structures, etc. and established criteria on size of said structure. It reassigns the responsibility for approving oversized structures to the Zoning Board of Appeals for a Special Permit process to keep structures in line with their neighborhood. Selectman Crowley asked if this will increase costs to the applicant. Mr. Boynton noted that the Building Commissioner would still require a plot plan, building plans, and other supporting documentation. The ZBA permit application and Assessors Abutter List would be the additional costs. The changed do not prevent the structure but keeps it

in perspective with the surrounding structures. Mr. Rodenhiser added that it also addresses whether the primary use of the structure is changing from residential to perhaps truck repair in a very large garage, for example. **Selectman Foresto moved that the Board approve and recommend Article 39 as presented; Selectman White seconded. No discussion. VOTE: 3-0-1 Crowley abstained.**

Article 40: Amend Zoning Bylaws: Lot Frontage and Setbacks – This clarifies how we measure lot frontage with respect to end or corner lots. It will help residents determine their frontage with respect to improvements to their property. **Selectman White moved that the Board approve and recommend Article 40 as presented; Selectman Foresto seconded. No discussion. VOTE: 4-0-0.**

Article 41: Amend Zoning Bylaws: Affordable Housing – This represents a reworking of the affordable housing section of the bylaw based on the report of an MAPC consultant who met with developers in round table discussion. Staff was not present for these discussions. Definitions and project size were adjusted. Ms. Mercandetti explained how the discussion went, exploring scenarios that may or may not be preferred by developers. Local developers were invited. Brief discussion followed. It was noted that the Payment in Lieu of Units option was made a little less attractive. The Board preferred to postpone its recommendation until after tomorrow's public hearing; the article will carry a TBD for now.

Article 42: Amend Zoning Bylaw: Section 8. Special Regulations, Add Section 8.10 Temporary Moratorium on Non-Medical Marijuana Establishments – **Selectman Foresto moved that the Board approve and recommend Article 42 as presented; Selectman White seconded. No discussion. VOTE: 4-0-0.** Mr. Boynton stated that there was a provision in the host community agreement with the existing cultivation center for producing non-medical product. It was noted that staff has been to workshops only to learn that the state regulations are still not determined. Once that happens, we can move ahead. Discussion followed. This article will be in tandem with the ballot question. Mr. Rodenhiser reported that this is the recommendation coming from MAPC and Town Counsel, specifically, to wait and see what the regulations will be so that planning can be thoughtfully accomplished.

Resident Liam McDermott suggested that a committee be formed to review these things. Ms. Affleck-Childs responded that they did that for the medical dispensaries, and it was comprised of staff and Town Counsel. Mr. Rodenhiser added that is the way staff approaches all projects. Since there are no state regulations yet, we cannot determine our first steps.

The article will carry a TBD designation for the time being.

Article 43: Amend Zoning Bylaw: AR-I & AR-II Zoning Bylaw Boundary Changes – Ms. Affleck-Childs stated that Articles 43 – 49 represent changes to the zoning map to align zoning district boundaries to follow best practices. She reported that 68 property owners were invited to a forum as well as tomorrow's public hearing. Thus far there have been no negative comments, just questions. After brief discussion, the Board decided to place a TBD designation on Articles 43 – 49.

Discuss/Vote – Accept Mass. General Law Chapter 32B, Sections 21-23 (Employee/Retiree Health Insurance):

There were no backup materials.

Mr. Boynton reminded the Board that this discussion was tabled at the last meeting and recommended that it remain there for the time being. He added that Agenda Item #12 will allow the Town Administrator to sign the agreement.

Special Event Approval – 15th Annual ALS TDI Tri-State Trek – June 23, 2017:

The Board reviewed the following information: (1) Correspondence with event details; and (2) Police Chief's Recommendations.

Selectman Foresto moved that the Board approve the request for cyclists to travel through Medway for the Tri-State Trek annual fundraising event on June 23, 2017, subject to fulfillment of the Police Chief's recommendations; Selectman White seconded. No discussion. VOTE: 4-0-0.

One-day Liquor License Requests for Events to be Held at Thayer Homestead:

The Board reviewed applications and Police Chief's Recommendations for the following events to be held at the Thayer Homestead: (1) Caroline Ferns –March 24, 2017; (2) Shari Daly/Medway HS Gymnastics – April 27, 2017; (3). Richard MacDougall – June 3, 2017; and (4) d. Karyl Wong – July 23, 2017.

Selectman Foresto moved that the Board approve one-day liquor licenses for Caroline Ferns, Shari Daly, Richard MacDougall and Karyl Wong for their events to be held at the Thayer Homestead on March 24, April 27, June 3 & July 23, 2017 subject to Police Chief's recommendations and proof of appropriate insurance coverage; Selectman White seconded. No discussion. VOTE: 4-0-0.

Action Items from Previous Meeting:

The Board reviewed the Action Items List.

Mr. Boynton reported that the Route 109 project should get going in the next month. The Community Communications Team will be up and running to help disseminate information.

Approval of Minutes:

The Board reviewed draft minutes from February 21, 2017.

Selectman Foresto moved that the Board approve the open session minutes of February 21, 2017 as amended; Selectman White seconded. No discussion. VOTE: 3-0-1 Crowley abstained.

Town Administrator's Report

Mr. Boynton reported that, as health insurance premiums were reduced from a projected 28.7% to 7.9%, the FY18 budget can restore some things previously removed. He directed the Board's attention to page 2 of his report which featured a breakdown of restored items. Discussion followed. He suggested that the Board could vote to state that the Board is revising the budget by reinserting the restored budget items.

Selectman Crowley moved that the Board will support the budget restorations as presented by the Town Manager contingent upon the collective bargaining units accept the health insurance plan design change reducing the overall impact to 7.9%; Selectman Foresto seconded. No discussion. VOTE: 4-0-0

Mr. Boynton reported that there had been a fire at Restaurant 45, smoke coming from the building originating in the kitchen. He commended the public safety crews on their swift action to save the building. Crew members were working together as a cohesive unit including police officers helping to drag hoses to get a line connected.

Referring to the most recent snow storm, Mr. Boynton reported that sidewalks were cleared in time for school to be open the next morning. A job well done.

Selectmen's Reports

Selectman Crowley gave a shout out to Medway athletic teams. Gymnastics went to state, basketball quarter finals, other teams made it to state. He offered an additional shout out to all the students who

attended, noting they were noisy but polite. Comments were received from outsiders who were impressed with the good behavior of the students.

Speaking as Town Clerk, Selectman White announced that Friday is the last day people may take out nomination papers for Town Election. They have until 5 pm at Town Hall.

Selectman Foresto reminded that the Fifth Annual Clean Sweep will take place in April. He emphasized that they want to get neighborhoods organized to do local sweeps in residential neighborhoods.

Approval - Authorization for Town Administrator to Execute Health Insurance Agreement

The Board reviewed the following information: (1) Proposed Healthcare Plan; (2) Health Care Reimbursement Arrangement; and (3) Insurance Side Letter Agreement.

Mr. Boynton reported that, based on what we negotiated with the unions, the Board of Selectmen can authorize the Town Administrator to sign the agreement.

Selectman Foresto moved that the Board authorize the Town Administrator to execute the health insurance agreement as negotiated between the Town and Union as presented on March 20, 2017; Selectman White seconded. No discussion. VOTE: 4-0-0.

Executive Session

At 9:41 PM Chairman Trindade moved that the Board enter Executive Session under Exemption 6: To consider the purchase, exchange, lease or value of real property if the chair declares that an open meeting may have a detrimental effect on the negotiating position of the public body; (58 Oakland Street). The Board will not return to public session. Selectman Foresto seconded the motion. No discussion. Roll Call Vote: 4-0-0 (Crowley, aye; Foresto, aye; Trindade, aye; White, aye).

Respectfully submitted,
Jeanette Galliardt
Night Board Secretary

AGENDA ITEM #14

Town Administrator's Report

No associated back up materials.

AGENDA ITEM #15

Selectmen's Reports

No associated back up materials.