

#### AMENDED AGENDA

# Regular and Possible Executive Session Queen Creek Town Council

Community Chambers, 20727 E. Civic Parkway September 5, 2018 5:30 PM

Public Hearings will not be held prior to 7:00 p.m.

Pursuant to ARS 38-431.02, notice is hereby given to the members of the Town Council and to the general public that, at this Regular Meeting, the Town Council may vote to go into Executive Session, which will not be open to the public, for legal advice and discussion with the Town Attorney(s) for legal advice on any item listed on the following agenda, pursuant to ARS 38-431-03(A)(3). An Executive Session may be called at any time during the Council Meeting.

- 1. Call to Order:
- 2. Roll Call: (one or more members of the Council may participate by telephone)
- 3. Pledge of Allegiance:
- 4. Invocation/Moment of Silence:
- 5. <u>Motion to Adjourn into Executive Session (to be held in the Ironwood Conference</u> Room in the Community Chambers Building) for the following purposes):
  - A. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives to consider the Town's position and instruct its representatives regarding a development agreement for the Town-owned property at the SWC of Ellsworth & Rittenhouse Roads. A.R.S. 38-431.03(A)(3) & (4)
  - B. Discussion and consultation with the Town's attorney for legal advice and with the Town's attorney and representatives to consider the Town's position and instruct its representatives regarding a possible intergovernmental agreement with the City of Mesa for Ellsworth Road, Signal Butte Road and Meridian Road. A.R.S. 38-431.03(A)(3) & (4)
  - C. Discussion and consultation with the Town's attorney for legal advice and with the Town attorney to consider the Town's position and instruct its attorneys regarding a pending lawsuit: Johnson Utilities vs. Town of Queen Creek. A.R.S. 38-431.03(A)(3) & (4)
  - D. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives regarding the Arizona Corporation Commission actions related to Johnson Utilities. A.R.S. 38-431.03(A)(3) & (4)

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- E. Discussion and consultation with the Town's attorney and with the Town's representatives regarding annexations and providing utility services. A.R.S. 38-431.03(A)(3) & (4)
- 6. <u>Consent Agenda:</u> Matters listed under the Consent Agenda are considered to be routine and will be enacted by one motion and one vote. Members of the Council and or staff may comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration. (Items that the Council wishes to discuss may be considered under #11).
  - A. Consideration and possible approval of the following minutes: May 16, 2018 Regular Session; July 18, 2018 Regular Session; July 25, 2018 Special Session and August 1, 2018 Regular Session.
  - B. Consideration and possible approval of Expenditures over \$25,000. (FY19 budgeted item)
  - 1. Swain Electric-electrical services:\$350,000 (Utilities)
  - 2. Crafco, Inc.-crack seal equipment: \$59,995 (Public Works)
  - 3. Vehicle purchase/replacements:Courtesy Chevrolet-one 1/2 ton pickup: \$27,585 (Fire & Medical); Courtesy Chevrolet-one 3/4 ton pickup: \$31,810 (Public Works); Midway Chevrolet-one 3/4 ton utility truck: \$41,850 (Utilities)
  - 4. Cactus Asphalt-unpaved road surfacing: \$150,000 (Public Works)
  - 5. Holbrook Asphalt-surface seal: \$500,000 (Public Works)
  - 6. CDW-G-computer replacement: \$80,000 (Workforce Technology)
  - C. Consideration and Possible approval of Ordinance 670-18, annexing certain real property to the Town of Queen Creek pursuant to A.R.S. §9-471.N adding right-of-way to the existing Town limits, generally described as Riggs Road from Ellsworth Road to one quarter mile east of Ellsworth Road, located in Section 27, Township 2 South, Range 7 East, Maricopa County.
  - D. Consideration and possible approval of a first amendment to the purchase agreement with Queen Creek Hospitality Group, LLC for a 90-day extension of the close of escrow for the Town owned land located on the SWC of Ellsworth and Rittenhouse Roads.
  - E. Consideration and possible approval of a Purchase Agreement with Rosenbauer America, LLC through the Sourcewell National Cooperative for the acquisition of a new fire apparatus in an amount not to exceed \$1,040,100 (Project MF008). (FY18 budgeted item)
  - F. Consideration and possible approval of a contract for financial advisor services with Wedbush Securities Inc.
  - G. Consideration and possible approval of Work Order #16 with AJP Electric, Inc., in an amount not to exceed \$84,100 for the installation of ITS conduit and pull boxes along Gary Road (CIP Project A0510). (FY19 budgeted item)
  - H. Consideration and possible approval of the granting of an easement to the United States Bureau of Reclamation to replace an abandoned easement due to the Riggs Road from Ellsworth Road to Meridian Road project.
  - I. Consideration and possible approval of Project Order #6 with Stanley Consultants, Inc. in an amount not to exceed \$31,842 for architectural and engineering services for the covered arena improvements for Horseshoe Park & Equestrian Centre. (FY18/19 budgeted item)
  - J. Consideration and possible approval of the FY19 Transportation Advisory Committee Work Plan.

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- K. Consideration and possible approval of Resolution 1232-18 Canvass of the August 28, 2018 Primary and Alternative Expenditure/Home Rule Election results.
- 7. <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Depending on time remaining, the Council may carryover any discussion agenda item to #15.
  - A. Discussion on possible amendments to the Town Council Policies and Procedures on Town committees and the Standard Form Bylaws for Designated Town Committees.

# 8. <u>Ceremonial Matters (Presentations, Proclamations, Awards, Guest Introductions and Announcements):</u>

- A. Volunteer Recognition: Life Link Church
- 9. <u>Public Comments:</u> Members of the public may address the Town Council on items not on the printed agenda and during Public Hearings. Please complete a "Request to Speak Card", located on the table at the rear of the Community Chambers and turn it in to the Town Clerk prior to the beginning of the meeting. The Town Council may not discuss or take action on any issue raised during public comment until a later meeting. There is a time limit of three (3) minutes for each speaker.

### 10. Committee Reports:

- A. Council summary reports on meetings and/or conferences attended. This may include but is not limited to Phoenix-Mesa Gateway Airport; MAG; East Valley Partnership; CAG. The Council will not propose, discuss, deliberate or take legal action on any matter in the summary unless the specific matter is properly noticed for legal action.
- B. Committee and outside agency reports (only as scheduled)
- 1. Boys and Girls Club of the East Valley Queen Creek Branch FY18 Annual Report
- 2. Transportation Advisory Committee August 9, 2018
- 3. Economic Development Commission August 22, 2018
- **11.** Carryover Consent Agenda Items: Any Consent Agenda item that was pulled for a separate discussion and vote will be heard at this time.
- 12. <u>Public Hearings Consent Agenda:</u> Prior to consideration of the Public Hearings Consent Agenda, the Mayor will ask whether any member of the public wishes to remove a Public Hearing item for separate consideration. Members of the Council and or staff comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration.

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- A. Public Hearing and possible action on Ordinance 676-18, "Queen Creek Station Phase I: Rezone (Case P18-0027), Site Plan (Case P18-0029), and Conditional Use Permit (Case P18-0026)", a request by Kelly Hayes (Kaidence Group) to rezone from R1-43 to C-2 (General Commercial) with Site Plan and Conditional Use Permit for a new multi-tenant shops building with a drive-thru restaurant on a 2.03 acre site located at the northeast corner of Ellsworth Loop Road & Walnut Road.
- **13.** Public Hearings: If you wish to speak to the Council on an item listed as a Public Hearing, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.
- **14. <u>Final Action:</u>** If you wish to speak to the Council on an item listed under Final Action, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.
  - A. Discussion and possible approval of Ordinance 675-18, Section 10-10; a staff initiated amendment to Chapter 10 Health and Sanitation, of the Town Code to include Stormwater Management obligations required by federal and state law.
- **15.** <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Any agenda items listed for discussion under #7 and were postponed may also be discussed at this time.
- **16.** Motion to Adjourn to Executive Session The Council may reconvene the Executive Session for any of the items listed on the Executive Session Agenda.

#### 17. Adjournment

Pursuant to A.R.S. 38-431.02 notice is hereby given to the members of the Queen Creek Town Council and to general public that the Queen Creek Town Council will hold a meeting open to the public as set forth above.

I, Jennifer Robinson, do hereby certify that I caused to be posted this 4th day of September 2018 the Amended Agenda for the September 5, 2018 Regular and Possible Executive Session of the Queen Creek Town Council in the following places: 1) Queen Creek Town Hall; 2) Queen Creek Library; 3) Queen Creek Community Center bulletin board.

Jennifer F. Robinson, MMC

The Town of Queen Creek encourages the participation of disabled individuals in the services, activities, and programs provided by the Town. Individuals with disabilities who require reasonable accommodations in order to participate should contact the Town Clerk's office at (480) 358-3000.



#### Requesting Department

Town Clerk

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: JENNIFER ROBINSON, TOWN CLERK JENNIFER ROBINSON

RE: Consideration and possible approval of the following minutes:

May 16, 2018 Regular Session; July 18, 2018 Regular Session; July 25, 2018 Special Session and August 1, 2018 Regular

Session.

DATE: September 5, 2018

#### **Staff Recommendation:**

Approve draft minutes as presented.

#### **Proposed Motion:**

To approve the draft minutes as presented.

#### **Alternatives:**

Council can request revisions be made to any of the draft minutes and approve w/revisions or continue to a future meeting.

#### Attachment(s):

Regular Session Minutes 05-16-18

Regular Session Minutes 07-18-18

Special Session Minutes 07-25-18

Regular Session Minutes 08-01-18



# Minutes Regular Session Queen Creek Town Council

Community Chambers, 20727 E. Civic Parkway
May 16, 2018
5:30 PM

- 1. Call to Order: The meeting was called to order at 5:30 pm.
- 2. Roll Call: (one or more members of the Council may participate by telephone)

Robin Benning	Council Member	Present
Jeff Brown	Council Member	Present
Jake Hoffman	Council Member	Present – arrived at 5:45 pm
Dawn Oliphant	Council Member	Present
Julia Wheatley	Council Member	Present
Emilena Turley	Vice Mayor	Present – arrived at 5:34 pm
Gail Barney	Mayor	Present

- 3. Pledge of Allegiance: Led by Mayor Barney
- **4.** <u>Invocation/Moment of Silence:</u> A moment of silence was held in observance of National Police Week.
- 5. <u>Motion to Adjourn into Executive Session (to be held in the Ironwood Conference</u> Room in the Community Chambers Building) for the following purposes):
  - A. Discussion and consultation with the Town attorney for legal advice and with the Town's representatives regarding a possible development agreement with Fulton Homes Barney Farms. A.R.S. 38-431.03(A)(3) & (4)
  - B. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives regarding the Arizona Corporation Commission actions related to Johnson Utilities. A.R.S. 38-431.03(A)(3) & (4)
  - C. Discussion and consultation with the Town attorney for legal advice and with the Town attorney to consider the Town's position and instruct its attorneys regarding a pending lawsuit Johnson Utilities vs. Town of Queen Creek. A.R.S. 38.431.03(A)(3) & (4)
  - D. Discussion and consultation with the Town attorney and with the Town's representatives regarding annexations and providing utility services. A.R.S. 38-431.03(A)(3) & (4)

- E. Discussion and consultation with the Town attorney for legal advice and with the Town attorney to consider the Town's position and instruct its attorney regarding Notice of Claim filed by Riggs Ellsworth 40, LLC and JMN Riggs 40, LLC. A.R.S. 38-431.03(A)(3) & (4)
- F. Discussion and consultation with the Town attorney for legal advice and with the Town's representatives regarding purchase of water credits. A.R.S. 38-431.03(A)(3) & (7)
- G. Discussion and consideration of the Town Manager's evaluation. A.R.S. 38-431.03(A)(1)

**MOTION:** To adjourn to Executive Session at 5:32 pm:

RESULT: Approved 5-0

MOVER: Council Member Wheatley SECONDER: Council Member Brown

AYES: Barney, Wheatley, Benning, Brown, Oliphant

**ABSENT:** Hoffman, Turley

The Regular Session reconvened at 7:06 pm.

6. <u>Consent Agenda:</u> Matters listed under the Consent Agenda are considered to be routine and will be enacted by one motion and one vote. Members of the Council and or staff may comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration. (Items that the Council wishes to discuss may be considered under #11).

Items I & K were pulled for separate votes.

MOTION: To approve the Consent Agenda A-H, J, L-P:

RESULT: Approved unanimously
MOVER: Council Member Wheatley
SECONDER: Council Member Benning

AYES: Barney, Wheatley, Benning, Brown, Oliphant, Turley, Hoffman

MOTION: To approve Consent Agenda I:

RESULT: Approved 5-2

MOVER: Council Member Brown SECONDER: Council Member Wheatley

AYES: Barney, Wheatley, Benning, Brown, Oliphant

**NAYES:** Hoffman, Turley

MOTION: To approve Consent Agenda K:

RESULT: Approved unanimously
MOVER: Council Member Brown
SECONDER: Council Member Benning

**AYES:** Barney, Wheatley, Benning, Brown, Oliphant, Turley, Hoffman

- A. Consideration and possible approval of the following minutes: March 7, 2018 Regular Session and March 21, 2018 Regular Session.
- B. Consideration and Possible Approval of Expenditures Over \$25,000. (FY 18 Budgeted Item)
  - 1. Vertech well equipment: \$125,000 (Utilities)
  - 2. Ferguson building & plumbing materials: \$250,000 (Utilities)
- 3. Econolite traffic control cabinet: \$26,345 (Public Works/Traffic)
- 4. Climatec fire systems & alarms: \$76,000 (Public Works)
- C. Consideration and possible approval of Resolution 1205-18 creating new Street Light Improvement District Number 96, No. 2018-01 for Church Farm Parcel G2.
- D. Consideration and possible approval of Resolution 1206-18 creating new Street Light Improvement District Number 102, No. 2018-007 for Terravella Phase 1.
- E. Consideration and possible approval of Resolution 1207-18 creating new Street Light Improvement District Number 97, (No. 2018-002 for Gateway Quarter Parcel 1); Resolution 1208-18 creating new Street Light Improvement District Number 98, (No. 2018-003 Gateway Quarter Parcel 2); Resolution 1209-18 creating new Street Light Improvement District Number 99, (No. 2018-004 for Gateway Quarter Parcel 3); Resolution 1210-18 creating new Street Light Improvement District Number 100, (No. 2018-005 Gateway Quarter Parcel 4); and Resolution 1211-18 creating new Street Light Improvement District Number 101, (No. 2018-006 for Gateway Quarter Parcel 5)

- F. Consideration and possible approval of Resolution 1216-18 of the Mayor and Common Council of the Town of Queen Creek, Arizona, authorizing the purchase agreement with RDC, Inc., in the amount not to exceed \$37,000 (including closing and other associated costs) for property located at Sossaman Road and Twin Acres Drive, also known as a portion of Assessor's Parcel Number 304-68-778A for the Mansel Carter Oasis Park/Sossaman Road (Project # A1803). (FY 17/18 budgeted item).
- G. Consideration and possible approval of Resolution 1217-18 of the Mayor and Common Council of the Town of Queen Creek, Arizona, authorizing the purchase agreement with Shane and Melinda Dyet, in the amount not to exceed \$30,000 (including closing and other associated costs) for property located at Sossaman Road and Aster Drive, also known as a portion of Assessor's Parcel Number 314-04-985, for the Mansel Carter Oasis Park/Sossaman Road (Project # A1803). (FY 17/18 budgeted item).
- H. Consideration and possible approval of Resolution 1218-18 modifying Assessment No. 20.01.01 for Improvement District No. 001 of the Town of Queen Creek, Arizona.
- Consideration and possible approval of Work Order #1 with Haydon Building Corp through a Job Order Contract with the City of Peoria (ACON51913D) for improvements to the ballfields at Desert Mountain Park in an amount not to exceed \$188,000. (FY 2017/18 budgeted item)
- J. Consideration and possible approval of a Job Order with B&F Contracting for the construction of the Ellsworth and Rittenhouse water line (WA104) in an amount not to exceed \$42,034; and the necessary budget adjustments.
- K. Consideration and possible approval of purchase contracts with Goodmans Interiors (US Communities #4400003403), Swain Electric (Town of Queen Creek #2015-002), and BPG Technologies (State of AZ #ADSPO17-169278) in an amount not to exceed \$78,790 for workstation remodel services at the Recreation Annex, including necessary budget adjustments.
- L. Consideration and possible approval of First Amendment to Town of Queen Creek Contract #2017-070 with AZ Code Consultants in an amount not to exceed \$47,000 for Building Safety Plan Review and Inspection Services. (FY 2017/18 budgeted item)
- M. Consideration and possible approval of an Intergovernmental Agreement with the Queen Creek Unified School District No. 95 and delegating to the Town Manager the authority to execute any and all documents in connection with the Orchard Park Quit Claim Deed for the property located at Orchard Ranch - Southeast Corner of Ellsworth Road and Riggs Road known as Assessor's Parcel Number 304-91-989.
- N. Consideration and possible approval of an amended power distribution easement to be granted to Salt River Project at Mansel Carter Oasis Park.
- O. Consideration and possible approval of a one-year lease of premises located at 22249 S. Ellsworth Road with Painting Wonderland LLC.

- P. Consideration and possible approval of the Farm Winery Fair/Festival License Application (Series 16) submitted by Su Vino Winery for the Vintage & Vino event at Horseshoe Park & Equestrian Centre on May 18-19, 2018.
- 7. <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Depending on time remaining, the Council may carryover any discussion agenda item to #15.
  - A. Discussion on the 2018-2023 Corporate Strategic Plan.

Tracy Corman, Assitant to Town Manager and Torin Sadow, Management Assistant, reviewed the updated Goals and Strategic Priorities:

- 1. Effective Government
- 2. Safe Community includes a new goal for construction of new stations
- 3. Secure Future includes two new goals relating to development standards and procedures; and customer rate structure
- 4. Superior Infrastructure
- 5. Quality Lifestyle
- B. Presentations by Citizen Leadership Institute participants.

Debra Kuffner, Marketing Specialist, provided an overview of the Citizen Leadership Program and the project requirement. The following presentations were given:

Cherie Gores – Queen Creek Rocks project: The group hopes to project will build community goodwill by painting rocks with special messages and placing them where others will find them. Ms. Backslee reported that 1500 rocks were painted – with a goal of 2000, by the eight team members.

Carol Prellberg – Desert Mountain Rock Garden project: The group of eleven designed the garden, obtained the materials and built the garden for students to place their painted rocks.

Derek Zeigler – Queen Creek Veteran's Memorial: The group designed the memorial space and identified three possible locations: Mansel Carter Oasis Park, Queen Creek Library or the Law Enforcement campus. The group will continue with fundraising, exploring grant opportunities and/or non-profit funding for the construction of the memorial.

Larry Fleischer – Explore QC Trails: The group created a Facebook page to promote and encourage the use of the trail system. The page has trail information and allows for photo uploads. Currently there are 225 members and 160 photos posted.

# 8. <u>Ceremonial Matters (Presentations, Proclamations, Awards, Guest Introductions and Announcements):</u>

A. Citizen Leadership Institute Graduation – the following were recognized for completing the 2018 Citizen Leadership Institute:

Certificates were presented to the following graduates: Sherry Arce, Eduardo Balli, Joellen Barriga, Rick Blake, Natalya Brown, Robert Burgess, Brittany Chatterson, Tiffany Cloud, Hayley Dean, Pamela Dean, Mark Dillehay, Larry Fleischer, Jennifer Flynn, Tom Glow, Maria Gonzalez, Cherie Gores, Amber Gough, Lisa Gould, Lamar Keener, Bradley Kendrex, Warren Lanphere, Steven Lord, Echo Love, Jeremy Love, Dave McCormick, Brian McKean, Dana McKell, Linda Moyer, Amanda Neff, Pamela Palmer, Carol Prellberg, Rick Oliphant, Talaya Russell, Thomas Sanfilippo, John Utsch, Tracy Werner, Benjamin Wheatley, Russ Young and Derek Zeigler.

- B. Recognition of Queen Creek Middle School Girls 8th Grade Basketball team for winning conference title.
- C. Recognition of Heritage Academy Junior High Boys Cross Country team for winning Arizona state title and Junior High Co-ed Soccer team for making playoffs.

Each school and team members were recognized and presented a certificate.

- D. Proclamation Police Week May 20-27
- E. Proclamation Public Works Week May 20-27
- 9. <u>Public Comments:</u> Members of the public may address the Town Council on items not on the printed agenda and during Public Hearings. Please complete a "Request to Speak Card", located on the table at the rear of the Community Chambers and turn it in to the Town Clerk prior to the beginning of the meeting. The Town Council may not discuss or take action on any issue raised during public comment until a later meeting. There is a time limit of three (3) minutes for each speaker.

None.

# 10. Committee Reports:

A. Council summary reports on meetings and/or conferences attended. This may include but is not limited to Phoenix-Mesa Gateway Airport; MAG; East Valley Partnership; CAG. The Council will not propose, discuss, deliberate or take legal action on any matter in the summary unless the specific matter is properly noticed for legal action.

See attached slide

- B. Committee and outside agency reports (only as scheduled)
  - A. Transportation Advisory Committee May 10, 2018

Vice Mayor Turley reported on the nomination of Bob Estler as Vice Chair; Town Center Plan presentation; discussion on the Bike & Pedestrian Masterplan; and discussion on Open Meeting Law, annexations and meeting start time.

- **11.** Carryover Consent Agenda Items: Any Consent Agenda item that was pulled for a separate discussion and vote will be heard at this time.

  None.
- **12. Public Hearings Consent Agenda:** Prior to consideration of the Public Hearings Consent Agenda, the Mayor will ask whether any member of the public wishes to remove a Public Hearing item for separate consideration. Members of the Council and or staff comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration.

  None.
- **13.** Public Hearings: If you wish to speak to the Council on an item listed as a Public Hearing, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.

  None.
- **14. <u>Final Action:</u>** If you wish to speak to the Council on an item listed under Final Action, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.
  - A. Discussion and possible approval of the Parks & Recreation Master Plan Update.

Marnie Schubert, Communications, Marketing & Recreation Director, provided an overview of the two-year master plan update process that included numerous outreach activities, resident input, stakeholder group meetings and public workshops. New state laws regarding parks and open space were also incorporated into the plan.

David Dobbs, Parks & Recreation Advisory Committee (PRAC) Chair, discussed the changes between the 2007 Five Park Master Plan and the updated 2018 plan. He also provided detail on the process and public participation in the update process. Mr. Dobbs discussed how the Level of Service (LOS) has changed over the past 10 years due mostly to changing demographics in the Town. He stated the PRAC recommends and supports the draft master plan.

Adam Robinson, Recreation Superintendent, discussed the Level of Service proposed in the master plan update which is decreasing from the 61 acres per 10,000 as approved in the 2005 Parks, Trails and Open Space Master Plan to 40 acres per 10,000 as recommended by Council and budgetary constraints, with the ultimate goal of a LOS of 51 acres per 10,000 that is in the master plan update, and keeping the same goals of previous master plan. He added that lakes/ponds and special features are new items. Mr. Robinson also reviewed the 11-mile loop trail system comprised of the Queen Creek Wash and Sonoqui Wash with connections.

Scott McCarty, Finance Director, discussed the financing of the park plan and improvements through an Infrastructure Improvement Plan (IIP) with an annual budget and updated impact fees. He stated there were no new taxes or fees proposed. Mr. McCarty explained that Carter Mansel Oasis Park was budgeted in FY17/18; East Park in FY18/19; and the remainder of the plan is identified in FY19/20.

Dru Alberti, Vice Chair of PRAC, discussed the master plan's importance to the community and how the constituents created it. She said the Town needs to continue to grow the parks and trails.

Council discussed the commitment and involvement of residents and stakeholders throughout the update process; the benefits parks provide to communities; addressing the resident's needs and prioritizing improvements; and providing parks in areas that have the most need. There was also discussion on the previous removal of the aquatics center; BMX track and multi-generational center from the 10-year plan but leaving those items in for the ultimate LOS of 51 as well as the costs to build and maintain pools/aquatic centers.

MOTION: To approve the Parks & Recreation Master Plan Update as

proposed:

**RESULT:** Approved 5-2

MOVER: Council Member Brown SECONDER: Council Member Benning

**AYES:** Barney, Wheatley, Benning, Brown, Oliphant

NAYES: Hoffman, Turley

Discussion was concerning the costs to implement the Parks Master Plan Update.

**ALTERNATE** 

MOTION: To approve "Plan C" presented at previous meeting that

includes only the 90-acre East Park plus trails:

RESULT: Failed 2-5

**MOVER:** Council Member Hoffman

**SECONDER:** Vice Mayor Turley **AYES:** Hoffman, Turley

**NAYES:** Barney, Wheatley, Benning, Brown, Oliphant

B. Consideration and possible action on the Town's FY 2018/19 Tentative Budget of \$251.9M. In addition, setting the public hearing for June 6, 2018 for both the Final Budget and the Truth in Taxation per requirements under Arizona State Statutes.

Town Manager John Kross explained that adopted policies and plans help to set priorities within the budget and how the budget is then developed between Council and staff. Mr. Kross explained the budget adoption process, which begins with the approval of the tentative budget, which sets the ceiling, followed by the adoption of the final budget. He reported that infrastructure (roads & parks) comprise a large portion of the proposed budget and that new financial policies address the unfunded liability for public safety retirement.

Mr. Kross provided information on the Budget Committee's recommendation on a \$251.9M, based on the addition of \$22M for north/south roadways and \$500K for covered arena at Horseshoe Park & Equestrian Centre. He noted the Town Manager's recommended budget was \$229.4K. Mr. Kross also discussed the

proposed increase in FTE's within the Fire & Medical Department, Public Works and Utilities.

Finance Director Scott McCarty reviewed the overall operating budget that provides day-to-day services to the community and the funding of the 5-year Transportation Plan; increased public safety staffing and reducing/eliminating reliance on construction sales tax. Mr. McCarty also reviewed the operating revenues that come mainly from sales tax and state shared revenues. The property tax levied for public safety, as Mr. McCarty explained that the levy rate was remaining at \$1.95/\$100 av. but with increased valuations the revenue would also increase.

Mr. McCarty provided additional information on the Budget Committee recommendation to add \$22M for road infrastructure for north/south roads outside of the Town of Queen Creek limits (Mesa and Pinal County); the Water, Wastewater and Solid Waste Enterprise Funds (all self-funded) and the design of East Park.

Mr. McCarty stated that the adoption of the final budget is scheduled for June 6, 2018 and adoption of the tax levy on June 20, 2018.

Council Member Benning, Budget Committee Chair, commented on the responsibility of the Town to provide services to the community and his support of the additional \$22M for road infrastructure outside of Town and the additional \$500K for the 2<sup>nd</sup> covered arena at Horseshoe Park & Equestrian Centre (HPEC).

Council Member Hoffman, Budget Committee member, commented on the preparation of the budget.

Council Member Oliphant, Budget Committee member, commented on the detailed information provided to the Committee. She also stated her support of the 2<sup>nd</sup> covered arena at HPEC, explaining that there are many other activities and events scheduled at HPEC that aren't horse related.

The meeting was opened for Public Comment.

Terry Randall, representing the AZ Cutting Horse Board, discussed their activities at HPEC, with 27 nights booked through October-April attracting 300 or more people to the park for each event. Mr. Randall discussed the association's donation towards the covered arena, which will assure their events aren't cancelled due to rain or other weather. He stated HPEC was an investment for the community.

Dru Albert, Queen Creek and representing Friends of Horseshoe Park, commented on how HPEC is an asset to the community and economic driver.

There was further Council discussion on the preparation of the budget through the Council, staff, Budget Committee and other stakeholders. The history of funding, Horseshoe Park & Equestrian Centre was discussed.

MOTION: To approve the FY18/19 Tentative Budget of \$251.9M and set

the Public Hearings for both the FY18/19 Final Budget as well as Truth in Taxation as required under Arizona Revised Statutes to occur June 6, 2018 at 7 pm in the Community

**Chambers:** 

**RESULT:** Approved 5-2

MOVER: Council Member Benning SECONDER: Council Member Oliphant

AYES: Barney, Wheatley, Benning, Brown, Oliphant

**NAYES:** Hoffman, Turley

- **15.** <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Any agenda items listed for discussion under #7 and were postponed may also be discussed at this time. *None.*
- **16.** Motion to Adjourn to Executive Session The Council may reconvene the Executive Session for any of the items listed on the Executive Session Agenda.

The Council reconvened to Executive Session at 10:28 pm.

#### 17. Adjournment

The Regular Session reconvened and adjourned at 11:07 pm.



# MINUTES Regular Session Queen Creek Town Council

Community Chambers, 20727 E. Civic Parkway
Council Chambers
July 18, 2018
5:45 PM

1. Call to Order: The meeting was called to order at 5:45 p.m.

2. Roll Call: (one or more members of the Council may participate by telephone)

Gail Barney	Mayor	Present
Jeff Brown	Council Member	Present
Robin Benning	Council Member	Present
Jake Hoffman	Council Member	Present – arrived 6:09 p.m.
Dawn Oliphant	Council Member	Absent
Emilena Turley	Vice Mayor	Present
Julia Wheatley	Council Member	Present –telephonically at 7:25 p.m.

- 3. Pledge of Allegiance: Led by Mayor Barney.
- 4. <u>Invocation/Moment of Silence:</u> A moment of silence was held in honor of men and women in uniform including Queen Creek Fire and Medical department and local MCSO officers.
- 5. <u>Motion to Adjourn into Executive Session (to be held in the Council Conference Room in the Town Hall Building) for the following purposes):</u>

MOTION: To adjourn to Executive Session at 5:46 p.m.

RESULT: Approved unanimously
MOVER: Council Member Brown
SECONDER: Council Member Benning

**AYES:** Barney, Benning, Brown, Turley

A. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives regarding the Arizona Corporation Commission actions related to Johnson Utilities. A.R.S. 38-431.03(A)(3) & (4)

- B. Discussion and consultation with the Town attorney for legal advice and with the Town attorney to consider the Town's position and instruct its attorney regarding a pending lawsuit Johnson Utilities vs. Town of Queen Creek. A.R.S. 38-431.03 (A)(3) & (4)
- C. Joint discussion and consultation with the Town's attorney for legal advice and with the Town's representatives, and the Florence Town Council and appropriate members of the Florence town staff, regarding the Towns' Intervention in the Matter of the Commission's Investigation into the Billing Practices, Water Quality Issues, and Water Outages and rate case of Johnson Utilities, LLC before the Arizona Corporation Commission. A.R.S. 38-431.03(A)(3) & (4)
- D. Joint discussion and consultation with the Town's attorney for legal advice and with the Town's representatives, and the Florence Town Council and appropriate members of the Florence town staff, regarding the Southeast Valley Regional Cooperative Intergovernmental Agreement for the Management, Operations and Planning for Effluent, Water and Wastewater Treatment Services in the Region between the Town of Florence and the Town of Queen Creek. A.R.S. 38-431.03(A)(3) & (4)
- E. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives regarding acquiring a public utility easement from Victoria Estates Home Owners Association. A.R.S. 38-431.03 (A)(3) & (4)
- F. Discussion and consultation with the Town's attorney and with the Town's representatives regarding annexations and providing utility services. A.R.S. 38-431.03(A)(3) & (4)

The Regular Session reconvened at 7:25 p.m. and Council Member Wheatley joined the meeting telephonically at this time.

- **6.** Consent Agenda: Matters listed under the Consent Agenda are considered to be routine and will be enacted by one motion and one vote. Members of the Council and or staff may comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration. (Items that the Council wishes to discuss may be considered Item #12).
  - A. Consideration and Possible Approval of Expenditures over \$25,000. (FY 19 Budgeted Item)
  - 1. Core and Main Water distribution parts: \$500,000 (Utility Services)
  - 2. Courtesy Chevrolet 5 vehicles: \$162,000 (Public Works)
  - 3. Bingham Equipment Tractor: \$51,000 (Public Works)

- B. Consideration and possible approval of the following minutes: May 2, 2018 Regular Session; June 6, 2018 Regular & Special Session and June 20, 2018 Regular Session.
- C. Consideration and possible approval of the Economic Development Commission Work Plan for FY18-19.
- D. Consideration and possible approval of the appointment of Brian McKean and Gordon Mortensen to the Economic Development Commission.
- E. Consideration and possible approval of an Extension of Premises Application submitted by Brian McKean on behalf of Old Ellsworth Brewing Company, LLC, 22005 S. Ellsworth Road for a 1st year anniversary party to be held on July 21, 2018. The restaurant has a current liquor license #1207A857 and #03073108.
- F. Consideration and possible approval of a Second Amendment to the Professional Services Contract with Sisu Global for Project Management and Engineering Consulting Services increasing the total contract amount by \$176,800 for a total amended contract not to exceed \$301,300. (FY 19 Budgeted Item)
- G. Consideration and possible approval of a Second Amendment to the Professional Services Contract with WTK, LLC for Project Management Services increasing the total contract amount by \$50,000 for total amended contract not to exceed \$202,110. (FY 19 Budgeted Item)
- H. Consideration and possible approval of a Cooperative Purchase Agreement with Thirkettle Corporation, through the Houston-Galveston Area Council of Governments (HGAC) national contract WM08-16, for Water Meter Replacement Services in the amount not to exceed \$923,444. (FY 19 budgeted item).
- I. Consideration and possible approval of the "Final Plat" for Victoria Heights, a request by Taylor Morrison Arizona, Inc.
- J. Consideration and possible approval of the "Map of Dedication" for the Rittenhouse Road LDS Church, a request by Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter-Day Saints.
- K. Consideration and possible approval of a one-year Consulting Services Contract, with up to four possible one-year renewals, with TruePoint Solutions for technical support on the operations and maintenance of the Town's Land Management System, Accela in an amount not to exceed \$40,000. (FY19 Budgeted Item)

- L. Consideration and possible approval of a reciprocal non-exclusive access easement between the Town and Queen Creek AZ, LLC (QCAZ) for existing access between the Town parcel and the property known as QC District bounded by Rittenhouse Road, Ellsworth Road, Maya Road and Ellsworth Loop Road.
- M. Consideration and possible approval of Annexation Ordinance 671-18 extending and increasing the corporate limits of the Town of Queen Creek, Maricopa County, State of Arizona, pursuant to the provisions of A.R.S. §9-471.02 by annexing certain County right-of-way contiguous to the existing Town limits, generally described as a portion of Ocotillo Road right-of-way from Power Road to Recker Road, located in Section 13, Township 2 South, Range 7 East, Maricopa County
- N. Consideration and possible approval of an Intergovernmental Agreement (IGA) for FY 2019-2023 between Maricopa County and the Town of Queen Creek for the purpose of regional emergency operations management and disaster services in the amount of \$2,488 for FY2019. (This is a budgeted item FY 19)
- O. Consideration and possible approval of an agreement with Queen Creek Irrigation District (QCID) in an amount not to exceed \$696,375 for pipeline design and construction services related to a pipeline conflict relocation for CIP Project A1002 Phase 1, Queen Creek and Signal Butte Intersection Improvements and necessary carry forward budget adjustments.
- P. Consideration and possible approval of an Intergovernmental Agreement with Pinal County for design of Meridian Road from Combs Road to Germann Road estimated at \$650,000. (Project A1505; FY18/19 Budgeted Item).
- Q. Consideration and possible approval of Resolution 1227-18 of the Mayor and Common Council of the Town of Queen Creek, Arizona, declaring a public purpose; authorizing and directing the Town Manager, Town Attorney and Town Clerk to take any and all action necessary; and to sign any and all documents; and to pay any and all costs or fees in order to acquire interest in real and/or personal property located in Tract A of Victoria Estates and also known as Maricopa County Assessor's parcel 304-66-818 from owner Victoria Estates Homeowners Association, through gift, purchase, or eminent domain; identifying the real property as being for the purpose of location of utility improvements, including relocation of electric power distribution, to serve Mansel Carter Oasis Park.
- R. Consideration and possible approval of a Power Distribution Easement to be granted to Salt River Project at Combs Road and Meridian Road for the Riggs Road from Ellsworth Road to Meridian Road Project (A0510)

- S. Consideration and possible approval to use SRP Aesthetic Funds for three utility construction contracts in an amount not to exceed \$215,025 with Salt River Project along Ellsworth, Ellsworth Loop and Queen Creek Road for construction of utility relocations, utility improvements, overhead utility line removal and new street lights for the Ellsworth and Queen Creek Road Intersection CIP project (I0010), (FY17/18 Carry Forward Budget Item).
- T. Consideration and possible approval of a Power Distribution Easement, for service to the street lights, to be granted to Salt River Project along Crismon Road from Queen Creek Road to Germann Road and along 220th Street from Queen Creek Road to Ryan Road for the Crismon Road from Queen Creek Road to Germann Road Project (A0702) and along 220th Street from Queen Creek Road to Ryan Road Project (A1702)
- U. Consideration and possible approval of a Power Distribution Easement to be granted to Salt River Project along Riggs/Combs Road and along Meridian/Gary Road for the Riggs Road from Ellsworth Road to Meridian Road Project (A0510)
- V. Consideration and possible approval of Project Order #13 for on-call professional services with Southwest Traffic Engineers in an amount not to exceed \$37,226 for intersection survey and design at Ocotillo and Meridian (Project A0115), (FY18/19 Budgeted Item).
- W. Consideration and possible approval of the purchase agreement with SD Crane (State Contract #ADSPO17-174291) in an amount not to exceed \$115,878 for the construction of underground plumbing and electrical at the Utilities Field Operation Facility Building (MF005). (FY 19 Budgeted Item)
- X. Consideration and possible approval of a First Amendment to the Professional Services Contract with Southwest Groundwater Consultants for Physical Availability Demonstration Services increasing the total contract amount by \$7,800 for a total amended contract not to exceed \$26,610. (FY 19 Budgeted Item)

Item P was pulled for a separate vote and Mayor Barney declared a conflict.

**MOTION:** To approve Consent Agenda Items A-O and Q-X:

**RESULT:** Approved (6-0)

MOVER: Council Member Brown SECONDER: Council Member Benning

AYES: Wheatley, Benning, Brown, Turley, Hoffman, Barney

**ABSENT:** Oliphant

**MOTION:** To approve Consent Agenda Item P:

**RESULT:** Approved (5-0)

MOVER: Council Member Brown SECONDER: Council Member Hoffman

**AYES:** Benning, Brown, Hoffman, Turley, Wheatley

ABSENT: Oliphant ABSTAIN: Barney

(Agenda Item 13 was moved up prior to Item 7).

- 7. <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Depending on time remaining, the Council may carryover any agenda item listed prior to the scheduled recess to the reconvened meeting that begins at 7:00p.m.
  - A. Status update on Home Rule and preparation for upcoming primary election on August 28, 2018.

Constance Halonen-Wilson, Public Information Officer, reported on public outreach efforts for Home Rule. She reviewed the various formats used to distribute information to voters and Town boards, committees and commissions. She said a final phase of outreach will continue as the early ballots arrive and the election date approaches.

Scott McCarty, Finance Director, provided an overview of Home Rule and explained why it is critical for the Town. He explained the consequences if we do not operate under Home Rule and outlined Town expenses in the areas of public safety, utilities, streets, parks and capital projects. He concluded with a timeline of the home rule process from the initial public hearings to the election on August 28.

8. <u>Ceremonial Matters (Presentations, Proclamations, Awards, Guest Introductions and Announcements):</u>

None.

9. <u>Public Comments:</u> Members of the public may address the Town Council on items not on the printed agenda and during Public Hearings. Please complete a "Request to Speak Card", located on the table at the rear of the Council Chambers and turn it in to the Town Clerk prior to the beginning of the meeting. The Town Council may not discuss or take action on any issue raised during public comment until a later meeting. There is a time limit of three (3) minutes for each speaker.

None.

#### 10. Committee Reports:

A. Council summary reports on meetings and/or conferences attended. This may include but is not limited to Phoenix-Mesa Gateway Airport; MAG; East Valley Partnership; CAG. The Council will not propose, discuss, deliberate or take legal action on any matter in the summary unless the specific matter is properly noticed for legal action.

See attached slide.

- B. Committee and outside agency reports (only as scheduled)
  - A. Economic Development Commission June 27, 2018

Committee Chair Lee Ester reported on chair and vice chair appointments, Economic Development Work Plan priorities, planning details for the 2019 Economic Development Summit and a Home Rule presentation by Finance staff.

B. Pinal County Regional Transportation Authority/ Citizen Transportation Advisory Committee Meeting - June 28, 2018

Beth Riley reported on vice chair appointments and estimates for engineering costs at the Park and Ride at Arizona Farms Road. The next meeting is on August 3, 2018.

- 11. <u>Carryover Consent Agenda Items:</u> Any Consent Agenda item that was pulled for a separate discussion and vote will be heard at this time.
  None.
- 12. <u>Public Hearings Consent Agenda:</u> Prior to consideration of the Public Hearings Consent Agenda, the Mayor will ask whether any member of the public wishes to remove a Public Hearing item for separate consideration. Members of the Council and or staff comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration.
  - A. Public hearing and possible action on "Del Taco Restaurant Conditional Use Permit (Case P18-0025) and Site Plan (Case P18-0024)", a request by Othoniel Bejarano (Food Service Concepts, Inc.) for a Conditional Use Permit and Site Plan for a new Del Taco drive-thru restaurant on Pad J within Queen Creek Marketplace. The project site is located west of the southwest corner of Ellsworth Road and Rittenhouse Road.

B. Public hearing and possible action on P16-0079 (Ordinance 666-18), a staff initiated repeal and replacement of Chapter 10: Heath and Sanitation, of the Town Code to decriminalize sections, allow the Board of Adjustment to hear Hearing Officer appeals consistent with other jurisdictions, incorporate previously approved fines and revise outdated language and definitions.

Staff pulled Public Hearing Consent Item B. Town Manager John Kross said staff recommends approval minus the abandoned vehicle section of the code in order to do further investigation and recommended a continuance of this section to the August 15 meeting.

MOTION: To approve Public Hearing Consent Item A and Consent Item B

minus the section related to abandoned vehicles:

**RESULT:** Approved (6-0)

MOVER: Council Member Brown SECONDER: Vice Mayor Turley

AYES: Barney, Benning, Brown, Hoffman, Turley, Wheatley

**ABSENT:** Oliphant

Council made an additional motion on Public Hearing Consent Item B.

MOTION: To continue the abandoned vehicle section in Consent Item B.

Chapter 10: Health and Sanitation, of the Town Code (Ordinance

666-18) to the August 15 Town Council meeting:

RESULT: Approved (6-0)

MOVER: Council Member Brown

**SECONDER:** Vice Mayor Turley

**AYES:** Barney, Benning, Brown, Hoffman, Turley, Wheatley

**ABSENT:** Oliphant

- **13. Public Hearings:** If you wish to speak to the Council on an item listed as a Public Hearing, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.
  - A. Public hearing for annexation Case P18-0064 "Empire Ellsworth Annexation", a proposed annexation of Pinal County parcels totaling approximately 24.8 acres, generally located at the southwest corner of Empire Boulevard and Ellsworth Avenue.

Planner Christine Sheehy gave a brief presentation on the Empire Ellsworth Annexation for the 24.8-acre area located at the southwest corner of Empire Boulevard and Ellsworth Avenue.

The Public Hearing was opened. No one came forth and the Public Hearing was closed.

- **14. <u>Final Action:</u>** If you wish to speak to the Council on an item listed under Final Action, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.
  - A. Consideration and possible approval of Resolution 1228-18 approving a Southeast Valley Regional Cooperative Intergovernmental Agreement for the Management, Operation and Planning for Effluent, Water and Wastewater Treatment Services in the Regions between the Town of Florence and the Town of Queen Creek.

Town Attorney Scott Holcomb provided an overview of the Intergovernmental Agreement between Queen Creek and the Town of Florence to provide regional cooperation for joint supervision and responsibility if appointed as interim manager of Johnson Utilities LLC. Mr. Holcomb summarized some of the important features of the judge's order including direction to the Arizona Corporation Commission (ACC) to take immediate action to obtain an agreement for interim management effective immediately. Mr. Holcomb said the ACC solicitation was distributed to twenty-two entities and outlined some of the major questions relating to experience, jurisdiction of operation, compliance status and familiarity with ACC rules and procedures. Mr. Holcomb gave a summary of the joint submittal by Queen Creek & Florence, which demonstrated their concerns, qualifications, immediate and long-term solutions and their commitment to establish a cooperative relationship.

MOTION: To approve Resolution 1228-18 approving a Southeast Valley

Regional Cooperative IGA for the management, operation and planning for effluent, water and wastewater treatment services in the regions between the Town of Florence and Town of Queen

Creek:

**RESULT:** Approved (6-0)

MOVER: Council Member Brown SECONDER: Council Member Turley

**AYES:** Barney, Benning, Brown, Hoffman, Turley, Wheatley

**ABSENT:** Oliphant

C. Consideration and possible action of Ordinance 668-18 setting the secondary property tax levy for Streetlight Improvement Districts (SLID) for FY 2018/19 at \$452,468, and authorizing the necessary transfers from the General Fund of \$232,547 and necessary budget modifications.

Finance Director Scott McCarty explained how the town levies property tax for residential street light improvement districts (SLID). He said each SLID has a different property tax levy rate based on the number of streetlights, the number of parcels, age of streetlights and assessed value. Mr. McCarty explained the process recently put in place to maintain individual SLID account balances. He said that staff reconstructed each indidvual SLID account balance and identified over and under tax payments. Some of the discrepancies go back 10 years and corrections are needed in some areas to balance the reconstructed accounts. He said the proposed ordinance would set the property tax rate and make the necessary budget adjustments with no cost to the taxpayer.

MOTION: To approve Ordinance 668-18 setting the secondary property

tax levy for Streetlight Improvement Districts (SLID) for FY 2018/19 at \$452,468, and authorizing the necessary transfers from the General Fund of \$232,547 and necessary budget

modifications.

**RESULT:** Approved (5-1)

MOVER: Council Member Brown SECONDER: Council Member Benning

**AYES:** Barney, Benning, Brown, Turley, Wheatley

NAYES: Hoffman ABSENT: Oliphant

**15.** <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Any agenda items listed for discussion prior to the scheduled recesses and were postponed will also be discussed at this time.

None.

**16.** <u>Motion to Adjourn to Executive Session</u> The Council may reconvene the Executive Session for any of the items listed on the Executive Session Agenda.

### 18. Adjournment

The meeting adjourned at 8:20 p.m.

TOWN OF QUEEN CREEK

Gail Barney, Mayor

Joy Maglione, CMC

I, Joy Maglione , do hereby certify that, to the best of my knowledge and belief, the foregoing Minutes are a true and correct copy of the Minutes of the July 18, 2018 Regular Session of the Queen Creek Town Council. I further certify that the meeting was duly called and that a quorum was present.



#### **MINUTES**

# Special Session Queen Creek Town Council

Community Chambers, 20727 E. Civic Parkway July 25, 2018 5:00 PM

- 1. Call to Order: The meeting was called to order at 5:00 pm.
- 2. Roll Call: (one or more members of the Council may participate by telephone)

Council Members present:

Council Member Benning
Council Member Brown
Council Member Hoffman
Council Member Oliphant
Council Member Wheatley
Vice Mayor Turley (arrived at 6:02 pm)
Mayor Barney

3. <u>Motion to Adjourn into Executive Session (to be held in the Ironwood Conference Room in the Community Chambers Building) for the following purposes):</u>

**MOTION**: To adjourn to Executive Session at 5:01 pm:

1st: Council Member Wheatley 2nd: Council Member Brown VOTE: 6-0 (Unanimous) ABSENT: Vice Mayor Turley

A. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives regarding the Arizona Corporation Commission actions related to Johnson Utilities. A.R.S. 38-431.03(A)(3) & (4)

#### 4. Adjournment

The Special Session reconvened and adjourned at 6:35 pm.



# Minutes Regular Session Queen Creek Town Council

Community Chambers, 20727 E. Civic Parkway
August 1, 2018
5:30 PM

- 1. <u>Call to Order:</u> the meeting was called to order at 5:30 pm.
- 2. Roll Call: (one or more members of the Council may participate by telephone)

Robin Benning	Council Member	Present
Jeff Brown	Council Member	Present
Jake Hoffman	Council Member	Present – arrived at 6:22 pm
Dawn Oliphant	Council Member	Present
Julia Wheatley	Council Member	Present
Emilena Turley	Vice Mayor	Present
Gail Barney	Mayor	Present

#### 3. Pledge of Allegiance:

Council Member Brown led the Pledge of Allegiance.

#### 4. Invocation/Moment of Silence:

A moment of silence was observed for those impacted by drowning incidents.

5. <u>Motion to Adjourn into Executive Session (to be held in the Ironwood Conference</u> Room in the Community Chambers Building) for the following purposes):

MOTION: To adjourn to Executive Session at 5:31 pm:

RESULT: Approved unanimously
MOVER: Council Member Wheatley
SECONDER: Council Member Hoffman

**AYES:** Barney, Wheatley, Benning, Brown, Oliphant, Turley

ABSENT: Hoffman

A. Discussion and consultation with the Town's representatives to consider the Town's position and instruct its representatives regarding acquisition by donation and dedication of real property related to the Creek View Ranches common area tracts for the trail system and future Hawes Road roadway improvements. A.R.S. 38-431.03(A)(3) & (4)

- B. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives regarding the Arizona Corporation Commission actions related to Johnson Utilities. A.R.S. 38-431.03(A)(3) & (4)
- C. Discussion and consultation with the Town attorney for legal advice and with the Town attorney to consider the Town's position and instruct its attorneys regarding a pending lawsuit: Johnson Utilities vs.Town of Queen Creek. A.R.S. 38.431.03(A)(3) & (4)
- D. Discussion and consultation with the Town attorney and with the Town's representatives regarding annexations and providing utility services. A.R.S. 38-431.03(A)(3) & (4)
- E. Discussion and consultation with the Town's attorney for legal advice and with the Town's representatives to consider the Town's position and instruct its representatives regarding the lease of Town-owned property north of the northwest corner of Ellsworth and Ocotillo Roads. A.R.S. 38-431.03(A)(7)
- F. Discussion and consideration of the Town Manager's evaluation. A.R.S. 38-431.03(A)(1)
- G. Discussion and consideration of the Town Clerk's evaluation. A.R.S. 38-431.03(A)(1)

The Regular Session reconvened at 6:31 pm.

**6.** Consent Agenda: Matters listed under the Consent Agenda are considered to be routine and will be enacted by one motion and one vote. Members of the Council and or staff may comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration. (Items that the Council wishes to discuss may be considered under #11).

**MOTION:** To approve the Consent Agenda as presented:

RESULT: Approved unanimously
MOVER: Council Member Benning
SECONDER: Council Member Brown

**AYES:** Barney, Wheatley, Benning, Brown, Oliphant, Turley, Hoffman

- A. Consideration and possible approval of the FY 18/19 Parks and Recreation Advisory Committee Work Plan.
- B. Consideration and possible approval of the reappointments of David Dobbs, Karl Kleinebreil, Marvin Smith and David Sobeck and the appointments of Ashley Fuller and Brady Hamilton to the Parks and Recreation Advisory Committee (PRAC).
- C. Consideration and possible approval of Mansel Carter Oasis Park ramada names.
- D. Consideration and possible approval of the special event liquor license for the Grand Canyon Pro Rodeo Association event scheduled for September 21 and 22 at Horseshoe Park & Equestrian Centre.

- E. Consideration and possible approval of the "Final Plat" of Church Farm Parcel F2, a request by William Lyon Homes Inc.
- F. Consideration and Possible Approval of the "Final Plat" of Ovation at Meridian Parcel P, a request by William Lyon Homes Inc.
- G. Consideration and possible approval of the "Final Plat" of Ovation at Meridian Parcel Q, a request by William Lyon Homes Inc.
- H. Consideration and possible approval of Ordinance 669-18, annexing certain real property to the Town of Queen Creek pursuant to A.R.S. §9-471.N adding right-of-way to the existing Town limits, generally described as the Rittenhouse Road Bridge over Queen Creek Wash, located in Section 25, Township 2 South, Range 7 East, Maricopa County.
- I. Consideration and possible approval of a one-year professional services contract, with up to four possible 1-year renewals, with AZ Code Consultants, Brown and Associates, Bureau Veritas North America, and Shums Coda Associates for building plan review and inspection services on an as-needed basis. (FY 18/19 budgeted item).
- J. Consideration and possible action on, Ordinance 672-18, (Case P18-0064) "Empire Ellsworth Annexation", a proposed annexation of Pinal County parcels totaling approximately 24.8 acres, generally located at the southwest corner of Empire Boulevard and Ellsworth Avenue.
- 7. <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Depending on time remaining, the Council may carryover any discussion agenda item to #15.
  - A. Presentation from Sheriff Penzone regarding the collaboration between the Town, Maricopa County Sheriff Office (MCSO), Queen Creek Unified School District (QCUSD) and the Arizona Department of Education concerning school resource officers.

Maricopa County Sheriff Penzone expressed his appreciation for the Town's continued committment to safety in schools and being efficient and fiscally responsible with taxpayer funds. He discussed future opportunities to provide the SRO program in all schools and build positive relationships with citizens and officers.

# 8. <u>Ceremonial Matters (Presentations, Proclamations, Awards, Guest Introductions and Announcements):</u>

A. Recognition of an Intergovernmental Agreements with Pinal County for design of Meridian Road from Combs Road to SR 24.

Troy White, Public Works Director, commented on the importance to both the Town of Queen Creek and Pinal County - San Tan Valley of the Meridian Road

improvements, as shown by the approval of two intergovernmental agreements between the Town and Pinal County for the design and improvements of Meridian Road to the future SR24. Mr. White said the design period is 2018-2020 with construction 2020-2022, with completion expected to coordinate with the SR24 extension.

Mr. White recognized the following representatives from Pinal County: Honorable David Cook, Representative Dist. 8; Pinal County Supervisor Mike Goodman, District 2; Pinal County Supervisor Todd House, District 5, and Pinal County Public Works Director Louis Andersen.

Rep. Cook, addressed the Council and commended the Pinal County Supervisors for supporting HB2251 through to approval.

- B. Proclamation: Drowning Awareness Month- August 2018
- 9. <u>Public Comments:</u> Members of the public may address the Town Council on items not on the printed agenda and during Public Hearings. Please complete a "Request to Speak Card", located on the table at the rear of the Community Chambers and turn it in to the Town Clerk prior to the beginning of the meeting. The Town Council may not discuss or take action on any issue raised during public comment until a later meeting. There is a time limit of three (3) minutes for each speaker.

None.

# 10. Committee Reports:

A. Council summary reports on meetings and/or conferences attended. This may include but is not limited to Phoenix-Mesa Gateway Airport; MAG; East Valley Partnership; CAG. The Council will not propose, discuss, deliberate or take legal action on any matter in the summary unless the specific matter is properly noticed for legal action.

See attached report.

- B. Committee and outside agency reports (only as scheduled)
  - 1. Queen Creek Chamber of Commerce Annual Report

Chris Clark, President & CEO of the Queen Creek Chamber of Commerce, presented highlights of the annual report. Mr. Clark reviewed the organizational structure of the Chamber; results of the Business Retention Expansion (BRE) survey; and the community and EVCCA events throughout the year. He also provided an update on the Visitor Center activities; membership structure and committee activities.

**11.** Carryover Consent Agenda Items: Any Consent Agenda item that was pulled for a separate discussion and vote will be heard at this time.

None.

**12.** Public Hearings Consent Agenda: Prior to consideration of the Public Hearings Consent Agenda, the Mayor will ask whether any member of the public wishes to remove a Public Hearing item for separate consideration. Members of the Council and or staff comment on any item without removing it from the Consent Agenda or remove any item for separate discussion and consideration.

MOTION: To approve the Public Hearings Consent Agenda as presented:

RESULT: Approved unanimously
MOVER: Council Member Wheatley
SECONDER: Council Member Brown

**AYES:** Barney, Wheatley, Benning, Brown, Oliphant, Turley, Hoffman

- A. Public hearing and possible action on P18-0037 / P18-0038 "AT&T Schnepf Farms Monopalm", a request for approval of a Site Plan and Conditional Use Permit for an 80-foot tall monopalm wireless communication tower at the northwest corner of Rittenhouse and Combs Roads.
- **13.** Public Hearings: If you wish to speak to the Council on an item listed as a Public Hearing, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.

None.

- **14. <u>Final Action:</u>** If you wish to speak to the Council on an item listed under Final Action, please complete a Request to Speak Card and turn it in to the Town Clerk. Speakers will be called upon in the order in which their cards are received. Speakers are limited to three (3) minutes each.
  - A. Discussion and possible action of the Town's support for the 2018 League of Arizona Cities and Towns Resolutions.

Intergovernmental Affairs Coordinator Jamie Bennett, reviewed the 12 resolutions submitted by cities/towns for the League Resolution Committee for possible legislative action. See attached list

(Mayor Barney suspended discussion of this item and returned to Agenda Items #8A & 10)

**BFED 1**: collaborative discussions with homebuilding stakeholders on impact fee statutes

Motion to support

1<sup>st</sup>: Council Member Brown 2<sup>nd</sup>: Council Member Benning VOTE: 5-2 (Hoffman; Turley)

**BFED 2:** transaction privilege sales tax on remote sellers

Motion to be neutral

1<sup>st</sup>: Council Member Brown 2<sup>nd</sup>: Council Member Hoffman

Discussion was regarding imposing sales tax on independent business owners and across state lines

2<sup>nd</sup> motion to oppose

1st: Council Member Hoffman

2<sup>nd</sup>: Vice Mayor Turley

VOTE: 6-1 (Benning)

BFED 3: expand permissible travel in Arizona for Mexican tourists

Motion to support

1<sup>st</sup>: Council Member Brown 2<sup>nd</sup>: Council Member Hoffman

**VOTE: Unanimous** 

**GAHRE 1:** allow city/town elected officials to transfer campaign contributions to statewide or legislative office

Motion to support

1st: Council Member Brown

2<sup>nd</sup>: Vice Mayor Turley

**VOTE: Unanimous** 

**GAHRE 2:** excess revenues from legacy volunteer fire departments profit sharing plans – PSPRS

Motion to support

1<sup>st</sup>: Council Member Brown 2<sup>nd</sup>: Council Member Hoffman

**VOTE: Unanimous** 

**GAHRE 3:** Revolving Emergency Telecommunications Fund

Motion to support

1<sup>st</sup>: Council Member Brown 2<sup>nd</sup>: Council Member Wheatley

**VOTE: Unanimous** 

**NSQL 1:** local regulation of short-term home rentals

Motion to be neutral

1<sup>st</sup>: Council Member Brown 2<sup>nd</sup>: Council Member Wheatley

**VOTE: Unanimous** 

NSQL 2: create a state workforce housing tax credit model

Motion to be neutral

1st: Council Member Brown

2<sup>nd</sup>: Council Member Wheatley

VOTE: 5-2 (Hoffman, Turley)

**NSQL 3**: advocate for statewide non-discrimination policy including gender identity & sexual orientation

Motion to oppose

1st: Council Member Hoffman

2<sup>nd</sup>: Vice Mayor Turley

VOTE: 6-1 (Benning)

**NSQL 4**: support legislation for safety of children in school buildings located near airports while preserving airports long-term viability

Motion to be neutral

1st: Council Member Brown

2<sup>nd</sup>: Council Member Benning

Discussion was in regard to communication and targeted entities

VOTE: 5-2 (Hoffman/Turley)

Motion to oppose

1<sup>st</sup>: Council Member Hoffman

2<sup>nd</sup>: Vice Mayor Turley

VOTE: 2-5 (Benning; Brown; Oliphant; Wheatley; Barney)

**PSMAC1**: Liquor Board representation for cities/towns

Motion to support

1<sup>st</sup>: Benning 2<sup>nd</sup>: Wheatley

Discussion was in regard to supporting neighborhood concerns and the State Board overriding cities/towns recommendations

2<sup>nd</sup> Motion to be neutral

1st: Council Member Brown

2<sup>nd</sup>: Council Member Hoffman

VOTE: 4-3 (Benning; Oliphant; Wheatley)

**League Staff 1:** PSPRS enrollees election for one-time irrevocable election to convert from DB to DC plan

Motion to support

1st: Council Member Hoffman

2<sup>nd</sup>: Council Member Brown

**VOTE: Unanimous** 

- **15.** <u>Items for Discussion:</u> These items are for Council discussion only and no action will be taken. In general, no public comment will be taken. Any agenda items listed for discussion under #7 and were postponed may also be discussed at this time. *None.*
- **16.** Motion to Adjourn to Executive Session The Council may reconvene the Executive Session for any of the items listed on the Executive Session Agenda.

The Council reconvened to Executive Session at 7:49 pm.

#### 17. Adjournment

The Regular Session reconvened and adjourned at 8:30 pm.



### Requesting Department

**Finance** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: MELISSA BAUER, PROCUREMENT MANAGER

RE: Consideration and possible approval of Expenditures over

\$25,000. (FY19 budgeted item)

DATE: September 5, 2018

### **Staff Recommendation:**

Staff recommends approval of expenditures \$25,000 and over.

### Relevant Council Goal(s):

N/A

### **Proposed Motion:**

Move to approve Town expenditures \$25,000 and over, pursuant to Town Purchasing Policy.

### Discussion:

The following items being requested are:

- 1. Electrical Services
- 2. Crack Seal Equipment
- 3. One 1/2 Ton Pickup
- 4. One 3/4 Ton Pickup
- 5. One 3/4 Ton Utility Truck
- 6. Surfacing Unpaved Roads
- 7. Preventive Pavement Maintenance Surface Seal
- 8. Computer Replacement

### **Fiscal Impact:**

The fiscal impact of the requested spending authority for the above expenditures is \$1,241,240.00. Funds have been identified within their line item budgets as approved in the FY 2019 budget or subsequently approved by Council.

### Attachment(s):

September 5, 2018 Expenditures Attachment

# Attachment: September 5, 2018 Expenditures Attachment (Expenditures Over \$25,000 - September 5,

### Budgeted in Fiscal Year 2018-19 September 5, 2018

Item #	Vendor(s)	Description	Purpose	Requesting Dept(s)	Fiscal Impact \$	Procurement Method	Alternative
1	Swain Electric	Electrical Services	Contract spending authority for as-needed and emergency electrical services to meet the needs of the Utility Services Department and for various electrical installations for various Well Site Improvement CIP Projects. (FY19 budgeted item)	Utility Services	\$350,000	Town Contract 2015-002	The Town issued RFP No. 15-006 for Electrical Services in which vendor was awarded contract. Coul could choose not to approved the expenditure. The impact of this action would prevent staff from required maintenance on the Town's water well sites and other electrical services needed by the Town. This would all prevent timely responses for emergencies which would jeopardize the water availability to our customers. In addition, this would require staff to complete the bid process for each invidual CIP project and delay many planned and budgeted projects for the fiscal year.
2	Crafco, Inc.	Crack Seal Equipment	Purchase of a crack seal melter/applicator for pavement preservation work. (FY19 budgeted item)	Public Works	\$59,995	Crafco Cooperative Contract #052417-CFC through Sourcewell (formerly NJPA)	Council could choose to retain the existing unit, with tunderstanding that the old machine is frequently down for repairs, extending the time needed to complete the crack sealing projects.
3	Courtesy Chevrolet	One ½ ton pickup	Contract spending authority for the purchase of a pick up to be used by the Deputy Chief within the Fire division. (FY 19 budgeted item)	Fire & Medical	\$27,585	Arizona state contract #ADSPO17- 166120	Council could choose not to approve this expenditure The impact would have an adverse effect on the Dep Chiefs ability to perform his duties in a timely manner.
4	Courtesy Chevrolet	One ¾ ton pickup	Contract spending authority for the replacement of current truck #09. This is to be purchased from the Streets fund. The replacement of the existing unit is based on an index that takes into consideration age, mileage, condition, and current value compared to likely repair cost. This vehicle will be auctioned off, per Town policy (FY19 budgeted item)	Public Works/Streets	\$31,810	Arizona State Contract #ADSPO17- 166120	Council could choose not to approve this expenditure The impact of this would have an adverse effect on the Street division to repair and maintain the streets and adjacent right of way, resulting in longer repair times and unsafe road conditions.
5	Midway Chevrolet	One ¾ ton utility truck	Contract spending authority for the purchase of a utility truck to be used by a new position within Water utilities. (FY 19 budgeted item)	Utility Services	\$41,850	Arizona State Contract #ADSPO14- 063239	Council could choose not to approve this expenditure The result of this would leave the Water department short of vehicles, causing slower response time for repair and maintenance of water facilities and infrastructure.
6	Cactus Asphalt	Surfacing Unpaved Roads	Apply binder and chips to two segments of Town owned and maintained roadway that are not currently paved - Bell Road south of Skyline, and Twin Acres south of Quail Trail subdivision – to resolve dust problems. (FY19 budgeted item)	Public Works	NTE \$150,000	Pinal County JOC #175923	Council could choose not to approve the expenditure, and Streets would continue to grade the roads and apply dust suppressant as needed, which presently occurs several times per year, while both Maricopa County and the Town receive complaints about dust generation.

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7	Holbrook Asphalt	Preventive Pavement Maintenance- Surface Seal	Apply surface seal to Town-owned roadways in order to preserve good pavements and extend the life. The planned project includes the subdivisions of Saddlewood, Queen Creek Station, Ocotillo Heights, La Sentiero, Crismon Heights II, and Ironwood Crossing. (FY19	Public Works	NTE \$500,000	#2016162	Council could choose not to approve the expenditure, and direct staff to consider and propose a different surface seal product. However, the product, HA5, has been selected for durability, with a proven life-cycle of 7 years.
8	CDW-G	Computer Replacement	budgeted item)  Purchase computer hardware to replace aging equipment, and provide equipment for new staff approved to be hired (FY19 budgeted item)	Workforce Technology	\$80,000	National IPA Technology Solutions (2018011-01)	Council could choose not to approve this expenditure Alternatives would be to continue staff to work on end life equipment resulting in additional downtime. Or, direct staff to issue solicitation (this alternative may delay planned project by 90+ days)on



### Requesting Department

**Public Works** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: TROY WHITE, PUBLIC WORKS DIRECTOR

RE: Consideration and Possible approval of Ordinance 670-18,

annexing certain real property to the Town of Queen Creek pursuant to A.R.S. §9-471.N adding right-of-way to the existing Town limits, generally described as Riggs Road from Ellsworth Road to one quarter mile east of Ellsworth Road, located in Section 27, Township 2 South, Range 7 East, Maricopa County.

DATE: September 5, 2018

### **Staff Recommendation:**

Staff recommends approval of Ordinance 670-18, annexing certain real property to the Town of Queen Creek Pursuant to A.R.S. §9-471.N adding right-of-way to the existing Town limits, generally described as Riggs Road from Ellsworth Road to one quarter mile east of Ellsworth Road, located in Section 27, Township 2 South, Range 7 East, Maricopa County.

### Relevant Council Goal(s):



Superior Infrastructure - Capital Improvement Program

### **Proposed Motion:**

Move to approve Ordinance 670-18, annexing certain real property to the Town of Queen Creek Pursuant to A.R.S. §9-471.N adding right-of-way to the existing Town limits, generally described as Riggs Road from Ellsworth Road to one quarter mile east of Ellsworth Road, located in Section 27, Township 2 South, Range 7 East, Maricopa County

### **Discussion:**

The Town entered into an Intergovernmental Agreement (IGA) with Maricopa County (TT251) wherein the Town agreed to annex any unincorporated area within the project limits upon substantial completion of the project. The IGA was approved by the Town Council on June 1, 2016. The TT251 portion of the project (Riggs Road from Ellsworth Road to Crismon Road) was completed January 2018. The only portion of this stretch that was not already annexed is the westernmost quarter mile of the project area. This resolution adopts an annexation ordinance, authorizing the annexation of the previously un-annexed portion of Riggs Road that lies in Section 27.

The annexation includes only Maricopa County roadway right-of-way with no taxable real property. Pursuant to A.R.S. Article 9-471.N, such rights-of-way may be annexed into the Town by mutual consent of the Town Council and the Maricopa County Board of Supervisors if the property is adjacent to the town for the entire length and both the Town and the County approve of the proposed annexation as a published agenda item at a regular public meeting of their governing bodies.

### Fiscal Impact:

There is no fiscal impact to the annexation. Maintenance obligations are included in the IGA as Town's responsibility.

### **Alternatives:**

The Town Council agreed to the IGA and the annexation obligation.

### Attachment(s):

- a. Ord 670-18
- b. Site Map

### **ORDINANCE NO. 670-18**

AN ORDINANCE OF THE MAYOR AND COMMON COUNCIL OF THE TOWN OF QUEEN CREEK EXTENDING AND INCREASING THE CORPORATE LIMITS OF THE TOWN OF QUEEN CREEK, MARICOPA COUNTY, STATE OF ARIZONA, PURSUANT TO THE PROVISIONS OF TITLE 9, CHAPTER 4, ARTICLE 7, ARIZONA REVISED STATUTES BY ANNEXING CERTAIN COUNTY RIGHT OF WAY CONTIGUOUS TO THE EXISTING TOWN LIMITS IN SECTION 27 TOWNSHIP 2 SOUTH, RANGE 7 EAST.

WHEREAS, pursuant to Maricopa County's approval of the incorporation of the Town of Queen Creek, a legal description was prepared, submitted, and approved, in which certain existing right-of-way and roadway corridors were not included within the incorporated limits of the Town of Queen Creek; and

WHEREAS, Arizona state law (ARS Section 9-471(N)) provides that a county right-ofway or roadway may be annexed to an adjacent town by mutual consent of the governing bodies of the county and town if the property annexed is adjacent to the annexing town for the entire length of the annexation and if the town and county each approve the proposed annexation as a published agenda item at a regular public meeting of their governing bodies; and

WHEREAS, the territory legally described in Exhibit "A" and depicted in Exhibit "B" to this Ordinance is contiguous to the Town, is not now embraced within its limits, is adjacent to the Town for the entire length of annexation, and consists of county right of way; and

WHEREAS, the Mayor and Common Council of the Town of Queen Creek, Arizona, are desirous of extending and increasing the corporate limits of the Town to include said territory; and

WHEREAS, The Town of Queen Creek and Maricopa County entered into an Intergovernmental Agreement whereby the Town of Queen Creek agreed to annex any previously unannexed portion of Riggs Road from Ellsworth Road to Meridian Road; and

WHEREAS, Exhibit "A" sets forth a true and correct description of all the exterior boundaries of the entire area proposed to be annexed to the Town of Queen Creek, and attached thereto are accurate maps of the territory desired to be annexed; and

**WHEREAS**, the provisions of Section 9-471, Arizona Revised Statutes, and amendments thereto, have been fully observed.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COMMON COUNCIL OF THE TOWN OF QUEEN CREEK, ARIZONA, AS FOLLOWS:

[Type text]

SECTION 1. That a copy of this Ordinance, together with an accurate map of the territory hereby annexed to the Town of Queen Creek, Arizona, certified by the Clerk of the Town, be forthwith filed with the Maricopa County Clerk for publication as an agenda item at the next regular public meeting of Maricopa County governing body.

SECTION 2. That upon approval of the proposed annexation as a published agenda item at a regular public meeting of Maricopa County governing body, the following described territory is hereby annexed to the Town of Queen Creek, Arizona, and that the present corporate limits are hereby extended and increased to include the territory described in Exhibit "A" and depicted in Exhibit "B" contiguous to the present Town limits, to wit:

### SEE EXHIBITS "A" AND "B" ATTACHED HERETO

PASSED AND ADOPTED by the Mayor and Common Council of the Town of Queen Creek, Arizona, this 5th day of September, 2018.

FOR THE TOWN OF QUEEN CREEK:	ATTESTED TO:		
Gail Barney, Mayor	Jennifer Robinson, Town Clerk		
REVIEWED BY:	APPROVED AS TO FORM:		
John Kross, Town Manager	Dickinson-Wright PLLC Town Attorneys		



### **EXHIBIT A**

Job No. 17-123.06 August 19, 2018

A portion the Southwest Quarter of Section 27, Township 2 South, Range 7 East, of the Gila and Salt River Meridian, Maricopa County, Arizona, and more particularly described as follows:

COMMENCING at a 3" MCDOT brass cap in a hand hole at the southwest corner of said Section 27, from which a 2" Maricopa county aluminum cap in a hand hole at the south quarter corner of said Section 27, bears North 89 degrees 33 minutes 17 seconds East (an assumed bearing) at a distance of 2,636.17 feet;

thence North 89 degrees 33 minutes 17 seconds East, along the south line of said Southwest Quarter, 105.00 feet to a point on the east line of the west 105.00 feet of said Southwest Quarter, said point being the POINT OF BEGINNING;

thence North 0 degrees 09 minutes 11 seconds West, along said east line, 85.00 feet to a point on the north line of the south 85.00 feet of said Southwest Quarter;

thence North 89 degrees 33 minutes 17 seconds East, along said north line, 244.57 feet;

thence South 0 degrees 26 minutes 43 seconds East, 15.00 feet to a point on a non-tangent curve, concave southerly, from which the radius point bears South 0 degrees 30 minutes 05 seconds East at a distance of 3070.00 feet;

thence easterly 343.33 feet along the arc of said curve to the right through a central angle of 6 degrees 24 minutes 28 seconds to a point of tangency;

thence South 84 degrees 05 minutes 37 seconds East, 299.82 feet to the beginning of a curve, concave northerly, having a radius of 2930.00 feet;

thence easterly 324.81 feet along the arc of said curve to the left through a central angle of 6 degrees 21 minutes 06 seconds to a point on the south line of said Southwest Quarter;

thence South 89 degrees 33 minutes 17 seconds West, along said south line, 1209.76 feet to the POINT OF BEGINNING.

Containing an area of 54,902 square feet or 1.2604 acres, more or less.

This description is based on record information and has not been field verified.



EXPIRES: 3/31/2021

EPS Group, Inc. • 2045 S. Vineyard, Suite 101 • Mesa, AZ 85210 Tel (480) 503-2250 • Fax (480) 503-2258

Attachment: a. Ord 670-18 (Annex Ord 670-18 Riggs, Ellsworth to Crismon)

Attachment: b. Site Map (Annex Ord 670-18 Riggs, Ellsworth to Crismon)



Requesting Department

**Economic Development** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: DOREEN COTT, ECONOMIC DEVELOPMENT DIRECTOR

RE: Consideration and possible approval of a first amendment to the

purchase agreement with Queen Creek Hospitality Group, LLC for a 90-day extension of the close of escrow for the Town owned land located on the SWC of Ellsworth and Rittenhouse

Roads.

DATE: September 5, 2018

**Staff Recommendation:** Staff recommends approval of the first amendment to the purchase agreement with Queen Creek Hospitality Group, LLC, granting a 90-day extension of the close of escrow, for the Town owned land located on the SWC of Ellsworth and Rittenhouse Roads.

### **Proposed Motion:**

Move to approve the first amendment to the purchase agreement with Queen Creek Hospitality Group, LLC granting a 90-day extension of the close of escrow, for the Town owned land located on the SWC of Ellsworth and Rittenhouse Roads.

### **Discussion/Background:**

On March 21, 2018, Council approved the purchase agreement with Queen Creek Hospitality Group. The agreement was signed and executed on April 18, 2018. This agreement outlined the terms for the purchase of the property and stipulated that the purchase is contingent upon an approved Development Agreement. Staff and development team are still working on the terms of the Development Agreement.

The Purchase Agreement Terms for the 4.9-acres include:

- Purchase Price: \$2,561,328 (\$522,720/acre or \$12.00 SF)
- \$150,000 Earnest Money to be paid within two business days after the execution of the purchase agreement.
- The Town and Queen Creek Hospitality Group will share closing costs equally.
- The closing and purchase of the property will occur only after the Council has approved a development agreement.

Closing date on or before September 17, 2018.

The Queen Creek Hospitality Group has been working cooperatively and diligently with staff to move this project forward and in no means has caused any unnecessary delays. The amendment to the purchase agreement will allow for a 90-day extension and would provide the development team ample time for filing and approval of the construction documents. If the extension is granted, Queen Creek Hospitality Group has indicated that they are on track to submit construction documents the first week of October 2018 and will be ready to close on or before December 13, 2018.

### **Fiscal Impact:**

The amendment to the Purchase Agreement will require Queen Creek Hospitality Group to deposit with the Escrow Agent an extension payment of \$25,000, which will be credited against the purchase price but is non-refundable, except in the event of a default by the Town.

### **Alternatives:**

- 1. Direct staff to increase the extension payment amount.
- 2. If the extension is not approved this could jeopardize the future purchase and the development of the property.

### Attachment(s):

• First amendment to the Purchase Agreement and Escrow instructions.

## FIRST AMENDMENT TO PURCHASE AGREEMENT AND ESCROW INSTRUCTIONS

\_\_\_\_\_

- 1. <u>Parties</u>. The parties to this First Amendment to Purchase Agreement and Escrow Instructions (the "<u>Amendment</u>") are the Town of Queen Creek, an Arizona municipal corporation ("<u>Seller</u>"); and Queen Creek Hospitality Group, LLC, an Arizona limited liability company ("<u>Buyer</u>"). Each of Seller and Buyer may be referred to as a "<u>Party</u>," or collectively as the "Parties."
- 2. <u>Amendment</u>. The Parties are parties to that certain Purchase Agreement and Escrow Instructions dated April 18, 2018, for the purchase and sale of 215,138 net square feet of unimproved real property located at the southwest corner of Ellsworth Loop Road and Rittenhouse Road, in Queen Creek, Arizona (the "<u>Purchase Agreement</u>"). In consideration of the payment to Escrow Agent, for the benefit of Seller, of the sum of Twenty-Five Thousand and no/100 Dollars (\$25,000.00, and referred to in this Amendment as Buyer's "<u>Additional Earnest Money</u>"), made concurrently with Buyer's execution of this Amendment and to be applied to the Purchase Price at Closing, the Parties agree that <u>Section 4(b)</u> of the Purchase Agreement is deleted and replaced in its entirety with the following:
  - (b) <u>Close of Escrow</u>. The "<u>Close of Escrow</u>" or "<u>Closing</u>" will be on or before December 13, 2018 (the "<u>Closing Date</u>").
- 3. <u>Satisfaction of Feasibility and Title Matters</u>. Buyer states and confirms that it has satisfied itself as to the suitability, in Buyer's sole discretion, of the Property for Buyer's proposed use, and has no right to cancel the Agreement pursuant to <u>Section 5(f)</u> of the Agreement; and Buyer further states and confirms that it approves, as an exception to title to the Property, that certain "Grant of Easement" (the "<u>Easement</u>") dated July 18, 2018, between the Town of Queen Creek and Queen Creek AZ, LLC, a Delaware limited liability company, which Easement was recorded on August 14, 2018, as Recording No. 20180616843 in the Official Records of Maricopa County, Arizona. Buyer waives any right to object to the Easement pursuant to <u>Section 6(b)</u> of the Agreement.
- 4. <u>Non-Refundability of Additional Earnest Money; No Other Changes.</u> Buyer agrees that Buyer's Additional Earnest Money is non-refundable to Buyer in all events except the default of Seller. Except as expressly set forth in <u>Section 2</u> of this Amendment, the Purchase Agreement is unchanged and remains in full force and effect. Defined terms that are not otherwise defined in this Amendment, have the meanings given to them in the Purchase Agreement.

Signatures are on the following page.

- 5. <u>Signature</u>. This Amendment may be executed and delivered in multiple counterparts, and each counterpart so delivered which bears the original signature of a party shall be binding as to such party, and all counterparts shall together constitute one original and the same instrument. Furthermore, signatures may be transmitted via facsimile or electronically scanned and e-mailed, and delivery thereby shall be deemed sufficient for all purposes to the same extent as would be delivery of an original signature.
- 6. <u>Effective Date</u>. This Amendment has been executed by the Parties or their representatives to be effective as of September \_\_\_\_\_, 2018.

	SELLER:
	Town of Queen Creek, Arizona, an Arizona municipal corporation
	By:Gail Barney, Mayor
Attest:	
Jennifer Robinson, Town Clerk	
Approved:	
Scott A. Holcomb, Town Attorney	
	BUYER:
	Queen Creek Hospitality Group, LLC, an Arizona limited liability company
	By:Nirav Patel, Manager
	By:



### Requesting Department

Fire / EMS

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: VANCE GRAY, FIRE CHIEF

RE: Consideration and possible approval of a Purchase Agreement

with Rosenbauer America, LLC through the Sourcewell National Cooperative for the acquisition of a new fire apparatus in an amount not to exceed \$1,040,100 (Project MF008). (FY18

budgeted item)

DATE: September 5, 2018

### **Staff Recommendation:**

Staff recommends approval of a Purchase Agreement with Rosenbauer America, LLC through the Sourcewell National Cooperative for the acquisition of a new fire apparatus in an amount not to exceed \$1,040,100 (FY 19 budgeted item).

### **Relevant Council Goal(s):**



KRA 9: Public Safety (Fire, Emergency Services, and Police/Sheriff)

### **Proposed Motion:**

Move to approve a Purchase Agreement with Rosenbauer America, LLC in the amount of \$1,040,100 for the acquisition of a new fire apparatus for the Fire Department.

### Discussion:

This Purchase Agreement allows the Town to purchase one new fire apparatus and more specifically, a ladder truck or aerial apparatus. This is a specialized fire apparatus that carries an eighty-eight foot extendable ladder capable of reaching heights to place firefighters in elevated tactical positions and/or providing the ability to place water streams in operation from high above a fire. The operational need and importance of having a ladder truck in Queen Creek has been identified in previous public safety master plan and will continue to increase as a vital component to fire operations; ensuring both citizen and firefighter safety. Today, if a ladder truck is needed in Queen Creek, it is dispatched as part of the automatic aid system. The closest aerial apparatus, when available, comes from the Town of Gilbert. This response model has

served Queen Creek adequately in the past, but with changes such as but not limited to, this apparatus proximity on Germann Road about ¾ of a mile west of Power Road and changes in Queen Creek's service obligations, such as a multi-story hospital it is recommended proceeding with this acquisition at this time. The proximity of a neighboring ladder truck to Queen Creek cannot be guaranteed in the future. The request for the purchase of this fire apparatus has been identified in the Town's 5-year CIP for a number of years and is included in the FY18/19 Capital Improvement Plan. The ladder truck will take approximately twelve months to complete and delivered to Queen Creek.

A ladder truck is a key element to both a major structure fire or large medical incident response. Every structure fire, residential home or commercial business, includes the response of at least one aerial apparatus to handle various needs specific to a ladder truck; ventilating roofs, establishing an elevated water stream to fight fires from above or performing rescues from buildings that are too high for ladders on the ground to reach. Large medical incidents also may dictate the need for mechanical extrication (Jaws of Life) operations on vehicles that are heavily damaged to remove injured persons. With the current commercial building in Queen Creek, Banner Ironwood Hospital, multi-level schools that have recently been constructed and two multifamily/apartment complexes in the Town Center, as well as future growth such as the new Hampton Inn a ladder truck is a critical addition to the community. Additionally, as Queen Creek grows and more people drive the roadways in Queen Creek, the amount of motor vehicle accidents also will increase and the need for a fire unit that can perform vehicle extrication tasks.

In any of the emergency response scenarios mentioned above the National Fire Protection Association (NFPA) recommends that the initial first alarm assignment should be assembled in eight minutes or less. For a structure fire, a ladder truck is a part of the response along with three fire engines and for a large medical incident the aerial apparatus responds with two engines to complete the initial first alarm assignment.

The addition of an aerial apparatus to the fleet of fire department units also has a positive impact on Insurance Service Office (ISO) ratings. This could benefit Queen Creek residents and business partners in further lowering the ISO rating in our town. The Center of Public Safety Management study completed for Queen Creek in 2015 states that ISO recommends that a ladder truck be stationed geographically every two and a half miles to meet distribution needs of fire stations and to meet response time criteria.

### **Fiscal Impact:**

The cost of this apparatus is \$1,040,100 and will be purchased under the Sourcewell (formerly NJPA) National Cooperative Contract #022818-RSB. The Sourcewell National Cooperative Contract provides a pre-payment discount of \$25,092 in the purchase of this fire apparatus.

The FY18/19 budget includes \$1.2M for the purchase of this fire apparatus. Of the \$1.2M, Fire Impact Fees will be used to fund 82% (\$984K) for this ladder truck and related equipment. Funding resources for the entire purchase derive from two (2) sources as described below:

Project Name	Funding Source	F	und Source Amount	oposal Amount pparatus Only)	Availa	ble Budget
Ladder Truck (MF008)	Operating (18%)	\$	216,000			
	Fire Impact Fees					
	(82%)	\$	984,000			
		\$	1,200,000	\$ 1,040,100	\$	159,900

Should this contract be awarded, an approximate \$160,000 will remain as available expenditure authority, and will be used to outfit the truck with operational gear and equipment.

### **Alternatives:**

The acquisition could be delayed requiring continued reliance on neighboring jurisdictions apparatus.

### Attachment(s):

Rosenbauer Purchase Contract

### TOWN OF QUEEN CREEK

### CONTRACT FOR GOODS WITH ROSENBAUER AMERICA, LLC

This Contract is made and entered into effective as of the 5th day of September, 2018, by and between the Town of Queen Creek, an Arizona municipal corporation ("Town"), and Rosenbauer America, LLC a South Dakota limited liability corporation ("Vendor"). Town and Vendor may be referred to in this Contract collectively as the "Parties" and each individually as a "Party."

### **RECITALS**

The Town wishes to enter into a contract to purchase certain goods from Vendor, described as Rosenbauer FX 88' Mid-Mount Aerial Platform with Commander 4000 Chassis; and

Vendor is qualified to provide the Goods as a selected Offeror for Solicitation No. 022818-RSB by Sourcewell formally known as National Joint Powers Alliance ("Sourcewell") which is a government-to-government procurement service for states, state agencies, local governments, districts, authorities and qualifying not-for-profit corporations ("End Users" or "Members"). Sourcewell, on behalf of its Members, solicits competitive offerings for the furnishing of products and/or services which may be purchased by Members. Members, such as the Town, may issue purchase orders directly to contractors, such as Vendor; and

The Mayor is authorized and empowered by the Town Code to execute contracts for the purchase of products; and

Now therefore, in consideration of the foregoing Recitals, the mutual promises and obligations set forth in this Contract, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

### **AGREEMENTS**

### REAFFIRMATION OF SOURCEWELL MASTER CONTRACT

The Parties agree that the contract between the Sourcewell ("Sourcewell") and Rosenbauer America, LLC dated April 16, 2018, including all Instructions, Terms and Conditions, General and Technical Specifications, Sales and Service Expectations, Special Terms and accepted Offeror responses for solicitation no. 022818-RSB (the "Master Contract"), are hereby incorporated by reference into this Contract (the "End User Agreement" or "Contract"). The Parties acknowledge and agree that Section 6.27 of the Solicitation provides that a Member may choose to enter into a separate contract. In the Master Contract, the terms "Member", "Participant" and "End User" shall be deemed to be and refer to the Town, and the terms "Bidder", "Offeror", "Proposer", "Contractor" and "Vendor" shall be deemed to be and refer to Vendor. In the event of any conflict between this Contract and Master Contract, the terms of this Contract shall prevail. The amount paid under this Contract shall not exceed \$1,040,070.

### **ARTICLE 1. GOODS**

1. Vendor shall provide the Goods described in **Exhibit "B"** attached hereto and incorporated herein (the "Goods"). All Goods received by the Town are subject to inspection, testing and acceptance by the Contract Administrator to determine compliance with any requirements for the Goods. Acceptance takes place when the Town agrees with the Vendor that the terms and conditions of the Master Contract and Contract have been met and verified. Acceptance is not the same as receipt, and can only occur after intact shipping, inspection by Town, and any onsite testing that has been stipulated as part of the order. Inspection, approval and acceptance by the Contract Administrator shall not relieve Vendor of any liability for defective, non-conforming or inadequate Goods provided pursuant to this Contract. Goods failing to meet the requirements of this Contract and the Town's Purchase Order will be held at Vendor's risk and may be returned to the Vendor. If so returned, the cost of transportation, unpacking,

inspection, repacking, reshipping, or other like expenses are the responsibility of Vendor. Town may elect to do any or all of the following: Waive the non-conformance; stop the work or delivery immediately; or bring the Goods into compliance at the Vendor's sole expense.

### 2. REQUIREMENTS APPLICABLE TO GOODS. All Goods must:

- a. Meet or exceed the specifications and requirements of the Town's specifications and purchase order, including the Master Contract.
  - b. Be new, unused, and not refurbished.
- c. Be designed and constructed using current industry accepted engineering and safety practices, and materials. Be fit for the intended purposes for which the Goods are used.
- d. Be available for inspection at any time prior to or after procurement. Conform to the written promises or affirmations of fact made by the Vendor.
- e. Include any and all accessories which may or may not be specifically mentioned herein, but which are normally furnished or which are necessary to make a delivered product ready for its intended use. Such accessories shall be assembled, installed and adjusted such that the product is ready for continuous operation at the time of delivery.
- f. Have assemblies, sub-assemblies and component parts that are standard and interchangeable throughout the entire quantity of a particular product as may be purchased simultaneously by the Town.
- g. Not be a prototype insofar as the general design, operation and performance. This requirement is not meant to preclude Vendor from offering new models or configurations, which incorporate improvements in a current design or add functionality, but which in such new model or configuration may be new to the marketplace.
- h. Include at least one (1) copy of a safety and operating manual. The cost of any such manuals shall be included in the base price for any product delivered hereunder. If more detailed and technically oriented parts and maintenance manuals are available for a product, at a cost, they shall be offered by Vendor to the Town.
- 3. PRODUCT DELIVERY. Title to Goods, and responsibility and liability for loss, and/or damage in shipping pass to the Town at the delivery destination after receipt, approval and acceptance have taken place. Vendor shall be responsible for delivery and acceptance according to the requirements of this Contract, the Purchase Order and Master Contract. The execution of all required tests, certifications and/or licensing, and costs thereof, shall be the responsibility of Vendor. Upon request by the Town, the Vendor shall provide any documentation or certification related to such tests, certifications or licensing.
- 4. DEFECTIVE GOODS. All defective Goods shall be replaced and exchanged by the Vendor. The cost of transportation, unpacking, inspection, repacking, reshipping or other like expenses shall be paid by the Vendor. All replacement Goods must be received by Town within 7 business days of initial notification.

### ARTICLE 2. PAYMENT FOR GOODS

- 1. The total amount paid to Vendor under this Contract shall not exceed \$1,040,070. Prices stated include all freight, insurance, performance/payment bonds, warranty costs, and any other applicable costs.
- 2. Vendor shall be paid according to the terms set forth in **Exhibit "B"** attached hereto and incorporated herein.
- 3. The Town will make every effort to process payment for the purchase of Goods within thirty (30) calendar days after receipt and acceptance of the Goods and a correct notice of amount due, unless a good faith dispute exists as to any obligation to pay all or a portion of the account. A Town issued written Purchase Order ("Purchase Order") is required prior to any Goods being accepted by the Town. A Town purchasing card is an acceptable method of payment.

4. If for any reason the Vendor fails to fulfill in a timely and proper manner its obligations under this Contract or Master Contract, or if the Vendor violates any of the covenants, agreements, or stipulations of this Contract or Master Contract, the Town may withhold from payment due to the Vendor such amounts as are necessary to protect the Town's position for the purpose of set-off until such time as the exact amount of damages due to the Town from Vendor is agreed to by the parties in writing, or is finally determined by a court of competent jurisdiction.

### **ARTICLE 3. TERM OF CONTRACT**

- 1. This Contract shall be in full force and effect when approved by the Town Council of Queen Creek, Arizona and signed by its Mayor as attested by the Town Clerk. This Contract is not an exclusive contract for providing the Goods to the Town, and Vendor shall have no right to receive a specific Purchase Order from the Town, nor shall have any right to any compensation or payment of any kind if the Town receives Goods, or contracts to receive Goods, from another source or vendor.
- 2. In the event the delivery of Goods cannot be completed within the time specified in a specific Purchase Order, the Contract Administrator may, in their sole discretion, approve a written extension of the time for delivery of the Goods, or contract with another provider for the Goods, with no liability to the Vendor therefore. An extension of the time for delivery of the Goods pursuant to this subparagraph shall not entitle the Vendor to additional compensation.
- 3. Unless terminated, cancelled or extended as provided herein, the term of this Contract shall be <u>one year</u>. The Town has no obligation to extend or renew this contract, and any decision to do so is at the sole discretion of the Town.

### ARTICLE 4. TERMINATION OF CONTRACT

- 1. The Town has the right to terminate this Contract for cause or convenience, or to terminate any portion of a specific Purchase Order that has not been delivered to the Town by the Vendor or accepted by the Town.
- 2. In the event the Town terminates this Contract or any Purchase Order as herein provided, the Town shall notify the Vendor in writing, and immediately upon receipt of such notice, the Vendor shall discontinue all work and/or delivery under this Contract.
- 3. Upon such termination, the Vendor shall immediately deliver to the Town any and all documents or work product generated by the Vendor under the Contract (collectively, the "Work Product"), together with all unused material supplied by the Town, if any. Vendor shall be responsible only for such portion of the Goods as has been delivered to, and accepted by, the Town. Use of incomplete data by the Town shall be the Town's sole responsibility.
- 4. The Vendor shall receive payment as set forth in Article 2 as compensation in full for Goods actually received, approved and accepted by the Contract Administrator prior to the date of such termination only.

### **ARTICLE 5. ASSIGNMENT**

This Contract may not be assigned in whole or in part without the prior written consent of the Town, and any such attempted unauthorized assignment shall be null and void and a material breach of this Contract, and shall transfer no rights to the purported assignee.

### **ARTICLE 6. WARRANTY**

1. The Vendor shall be responsible for, and shall and hereby does warrant the that all Goods provided shall: (i) be new; (ii) be of good quality and manufacture; (iii) conform to the requirements of this Contract, the Master Contract, and the specific Purchase Order (including all applicable descriptions, specifications, drawings and samples); (iv) be free from defects in material, workmanship, or design; (v) be fit for the intended purpose; (vi) meet or exceed all specifications, requirements and legal regulations, statues and/or codes that apply thereto, including,

without limitation, all federal, state, county, and Town rules regulations, ordinances and/or codes that may apply; and (vii) be fully covered by Vendor's and manufacturers' warranties applicable to the Goods running in favor of the Town.

- 2. Copies of all applicable manufacturers' warranties shall be delivered to the Town with or before delivery of the Goods to the Town. The Contract Administrator may at any time require Vendor to deliver to the Contract Administrator written warranties from the Vendor and/or the manufacturers of the Goods for review and approval by the Town. These warranties shall be in form and content satisfactory to the Town, the Town's lender(s), if any, and any other person reasonably requested by the Town, or the Town's lender(s). If the Vendor fails to deliver such warranties, or if the warranties are determined by the Contract Administrator to be inadequate or unacceptable, the Vendor shall be considered to be in material breach of this Contract.
- 3. Immediately upon notice from the Contract Administrator thereof, Vendor shall correct or replace as required by the Contract Administrator, at Vendor's expense, all defects, noncompliance, or inadequacies which may be discovered in any of the Goods. The Town's acceptance or approval of the Goods shall in no way relieve the Vendor of any of Vendor's responsibilities hereunder. Unless a longer period is provided in the Contract Documents, the Vendor's or manufacturers' written warranties, and this obligation to correct or replace, shall continue for a period of two (2) years after acceptance of the specific Goods. The warranties shall begin on the date of acceptance of the Goods by the Town, during which, the Vendor shall replace or repair defective Goods, at no expense to the Town.
- 4. DAMAGE TO TOWN PROPERTY. Vendor shall repair any damage caused to the Town's property (personal, real and improvements) and facilities to the satisfaction of the Town at no cost to the Town.
  - 5. WARRANTIES, SALES AND SERVICE. The following requirements shall apply to all Goods:
- a. Any warranties offered by a dealer shall be in addition to the manufacturer's standard warranty, and shall not be a substitute for such. The Vendor's base price for any Goods shall be inclusive of the standard warranty. The warranties set forth in this Contract are not affected by inspection or testing of or payment for the Goods by the Town.
- b. The Vendor shall be responsible for the execution and effectiveness of all product warranties, and shall be the sole source for solution to problems arising from warranty claims. The Vendor agrees to respond directly to correct warranty claims and to ensure reconciliation of warranty claims that have been assigned to a third party.
- c. The Vendor shall provide detailed parts and labor warranty information. If the Vendor submits a warranty which does not meet the minimum requirements herein, the Vendor agrees that such warranty shall be considered to be amended to meet those minimums.
- d. The Vendor must be a properly franchised dealer authorized to sell and service, including warranty service, all products offered and sold under this Contract, the Master Contract and the Town's Purchase Order.

### **ARTICLE 7. INDEMNIFICATION**

1. To the fullest extent permitted by law, the Vendor shall defend, indemnify, save and hold harmless the Town and its council members, officials, officers, employees and agents (collectively "Indemnitees") from and against any and all damages, claims, losses, liabilities, actions or expenses (including, but not limited to, attorneys' fees, court costs, and the cost of appellate proceedings) (collectively, "Claims") relating to, arising out of or alleged to have resulted from the Goods, and/or Vendor's performance (or lack thereof) pursuant to this Contract. The Vendor's duty to defend, hold harmless and indemnify Indemnitees pursuant to this section shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, including death, or to injury to, impairment, or destruction of property including loss of use resulting therefrom, caused in whole or in part by the Goods, acts, errors, mistakes, omissions, work or services of the Vendor or anyone for whose acts the Vendor may be legally liable. It is the specific intention of the Parties that the Indemnitees shall be indemnified by Vendor from and

against all Claims other than those arising from the Indemnitees' sole negligence. The Vendor shall be responsible for primary loss investigation and defense and judgment costs where this Indemnification applies.

- 2. In the event that any action or proceeding shall at any time be brought against any of the Indemnitees by reason of any Claim referred to in this Article, the Vendor, at Vendor's sole cost and upon at least 10 day's written notice from Town, shall defend the same with counsel acceptable to Town, in Town's sole discretion.
- 3. The Vendor's obligations under this Article shall survive the expiration or earlier termination of this Contract.
- 4. The insurance provisions set forth in this Contract are separate and independent from the indemnity provisions of this Article and shall not be construed in any way to limit the scope and magnitude of this Indemnification, nor shall this Indemnification be construed in any way to limit the scope, magnitude or applicability of the insurance provisions.

### ARTICLE 8. INSURANCE

Vendor shall secure and maintain during the life of this Contract, the insurance coverages set forth on **Exhibit "A"** attached hereto and incorporated herein.

### **ARTICLE 9. ADDITIONAL DISCLOSURES BY VENDOR**

- 1. The Vendor shall reveal fully and in writing any financial or compensatory agreements which the Vendor has with any prospective contractor prior to the Town's publication of requests for proposals or comparable documents.
- 2. The Vendor hereby warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Vendor, to solicit or secure this contract, and that the Vendor has not paid or agreed to pay any person, company, corporation, individual or firm other than a bona fide employee working solely for the Vendor any fee, commission, percentage, gift or any other consideration contingent upon or resulting from the award or making of this contract.
- 3. The Vendor shall comply with Executive Order No. 11246 entitled "Equal Opportunity Employment" as amended by Executive Order no. 11375, and supplemented Department of Labor Regulations 41 CFR, Part 16.

### ARTICLE 10. CONTRACT ADMINISTRATOR

The Town's Contract Administrator for this Contract shall be the Town Manager or his/her designee(s).

### **ARTICLE 11. NOTICE**

All notices or demands required to be given, pursuant to the terms of this contract, shall be given to the other Party in writing, delivered in person, sent by facsimile transmission, deposited in the United States mail, postage prepaid, registered or certified mail, return receipt requested or deposited with any commercial air courier or express service at the addresses set forth below, or to such other address as the Parties may substitute by written notice, given in the manner prescribed in this paragraph.

Town: Town of Queen Creek

Attn: John Kross

22358 S. Ellsworth Road Queen Creek, AZ 85142 Facsimile: (480) 358-3133

With a copy to:	1850 N. Central Avenue, Suite 1400 Phoenix, Arizona 85004 Att'n: Scott Holcomb			
	Facsimile: (602) 285-5100			
Vendor:	Rosenbauer America. LLC			
	100 Third Street			
	Lyons, SD 57041			
With a copy to:				
	Facsimile: ( )			

A notice shall be deemed received on the date delivered, if delivered by hand, on the day it is sent by facsimile transmission, on the second day after its deposit with any commercial air courier or express services or, if mailed, three (3) working days (exclusive of United States Post Office holidays) after the notice is deposited in the United States mail as above provided, and on the delivery date indicated on receipt, if delivered by certified or registered mail. Any time period stated in a notice shall be computed from the time the notice is deemed received. Notices sent by facsimile transmission shall also be sent by regular mail to the recipient at the above address. This requirement for duplicate notice is not intended to change the effective date of the notice sent by facsimile transmission. E-mail is not an acceptable means for meeting the requirements of this section unless otherwise agreed in writing.

### **ARTICLE 12. GENERAL PROVISIONS**

- A. RECORDS AND AUDIT RIGHTS. Vendor's records (hard copy, as well as computer readable data), and any other supporting evidence deemed necessary by the Town to substantiate charges and claims related to this contract shall be open to inspection and subject to audit and/or reproduction by Town's authorized representative to the extent necessary to adequately permit evaluation and verification of cost of the Goods, and any invoices, change orders, payments or claims submitted by the Vendor or any of his payees related to or arising out of this Contract. The Town's authorized representative shall be afforded access, at reasonable times and places, to all of the Vendor's records and personnel throughout the term of this Contract and for a period of three years after last or final payment.
- B. INCORPORATION OF RECITALS AND EXHIBITS. The Recitals, Exhibits and Appendices attached hereto are acknowledged by the Parties to be substantially true and correct, and hereby incorporated as agreements of the Parties.
- C. ATTORNEYS' FEES. In the event either Party brings any action for any relief, declaratory or otherwise, arising out of this Contract, or an account of any breach or default hereof, the prevailing Party shall be entitled to receive from the other party reasonable attorneys' fees and reasonable costs and expenses (including, but not limited to, the costs of expert witnesses, transportation, lodging and meal costs of the parties and witnesses, costs of transcript preparation and other reasonable and necessary direct and incidental costs of such dispute), determined by the arbitrator or court sitting without a jury, which fees shall be deemed to have accrued on the commencement of such action and shall be enforced whether or not such action is prosecuted through judgment.
- D. ENTIRE AGREEMENT. This Contract constitutes the entire understanding of the Parties and supersedes and/or replaces any prior agreements, understandings, proposals, and representations, written or oral, with respect to the Goods specified herein.
- E. GOVERNING LAW. This Contract shall be governed by and construed in accordance with the substantive laws of the State of Arizona, without reference to conflict of laws and principles. Any action brought to

interpret, enforce, or construe any provision of this Contract shall be commenced and maintained in the Superior Court of the State of Arizona in and for the County of Maricopa (or, as may be appropriate, in the Justice Courts of Maricopa County, Arizona or in the United States District Court for the District of Arizona, if but only if, the Superior Court lacks or declines jurisdiction over such action). The Parties irrevocably consent to jurisdiction and venue in such courts for such purposes and agree not to seek transfer or removal of any action commenced in accordance with the terms of this paragraph.

- F. INDEPENDENT CONTRACTOR. The services and Goods Vendor provides under the terms of this Contract to the Town are that of an Independent Contractor, not an employee, or agent of the Town. As an independent contractor, Vendor shall: (a) have discretion in deciding upon the method of performing the services provided; (b) not be entitled to worker's compensation benefits from the Town; (c) not be entitled to any Town sponsored benefit plan; (d) shall select the hours of his/her work; (e) shall provide her/her own equipment and tools; and (f) to the extent required by law, be responsible for obtaining and remaining licensed to provide the Goods. No partnership, employment relationship or joint venture is created by this Contract.
- G. TAXES. Vendor shall be solely responsible for any and all tax obligations which may result out of the Vendor's performance of this contract. The Town shall have no obligation to pay any amounts for taxes, of any type, incurred by the Vendor. The Town will report the value paid for these Goods each year to the Internal Revenue Service (I.R.S.) using Form 1099. The Town shall not withhold income tax as a deduction from contractual payments. Vendor acknowledges that Vendor may be subject to I.R.S. provisions for payment of estimated income tax. Vendor is responsible for consulting the local I.R.S. office for current information on estimated tax requirements. Sales tax for Goods received by the Town in relation to this Contract shall be indicated as a separate item.
- H. AMENDMENTS. Any amendment, modification or variation from the terms of this Contract shall be in writing and signed by all Parties hereto.
- I. COMPLIANCE WITH LAW. The Vendor specifically agrees and hereby warrants to the Town that in the performance of the services and provision of Goods, Vendor and anyone acting on Vendor's behalf, including but not limited to Vendor's subvendors, will comply with all state, federal and local statues, ordinances and regulations, and will obtain all permits and licenses applicable for performance under this contract.
- J. SEVERABILITY. In the event that any provision of this Contract shall be held to be invalid and/or unenforceable, the remaining provisions shall be valid and binding upon the Parties.
- K. WAIVER. None of the provisions of this Contract shall be deemed to have been waived by any act or knowledge of any Party or its agent or employees, but only by a specific written waiver signed by an authorized officer of such Party and delivered to the other Party. One or more waivers by either Party of any provisions, terms, conditions, or covenants of this Contract, or any breach thereof, shall not be construed as a waiver of a subsequent breach by the other Party.
- L. COUNTERPARTS. This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, binding on all of the Parties. The Parties agree that this Contract may be transmitted between them via facsimile. The Parties intend that the faxed signatures constitute original signatures and that a faxed contract containing the signatures (original or faxed) of all the Parties is binding upon the Parties.

### M. COMPLIANCE WITH IMMIGRATION LAWS AND REGULATIONS.

Pursuant to the provisions of A.R.S. §41-4401, the Vendor warrants to the Town that the Vendor and all its subvendors are in compliance with all Federal Immigration laws and regulations that relate to their employees and with the E-Verify Program under A.R.S. §23-214(A). Vendor acknowledges that a breach of this warranty by the Vendor or any of its subvendors is a material breach of this Contract subject to penalties up to and including termination of this Contract or any subcontract. The Town retains the legal right to inspect the papers of any employee of the Vendor or any subvendor who works on this Contract to ensure compliance with this warranty.

The Town may conduct random verification of the employment records of the Vendor and any of its subvendors to ensure compliance with this warranty.

The Town will not consider Vendor or any of its subvendors in material breach of the foregoing warranty if Vendor and its subvendors establish that they have complied with the employment verification provisions prescribed by 8 USCA § 1324(a) and (b) of the Federal Immigration and Nationality Act and the e-verify requirements prescribed by Arizona Revised Statutes § 23-214(A).

The provisions of this section must be included in any contract the Vendor enters into with any and all of its subvendors who provide services or Goods under this Contract or any subcontract. As used in this Section M "services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

- N. CANCELLATION FOR CONFLICT OF INTEREST. Pursuant to the provisions of A.R.S. § 38-511, the Town may cancel any contract or agreement, without penalty or obligation if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the Town is, at any time while the contract or any extension thereof is in effect, an employee of any other party to the contract in any capacity or a Vendor to any other party to the contract with respect the subject matter of the contract.
- O. LICENSES. Vendor shall maintain in current status all Federal, State, and Local licenses and permits required for the operation of the business conducted by Vendor and the Goods to be provided under this Contract.
- P. PERMITS AND RESPONSIBILITIES. Vendor shall, without additional expense to the Town, be responsible for obtaining any necessary licenses and permits and for complying with any applicable Federal, State and Municipal Laws, codes and regulations in connection with the execution of the work, provision of services and provision of Goods.
- Q. LIENS. Vendor shall cause all Goods, materials, service, or construction provided or performed under this Contract to be free of all liens, and if the Town requests, Vendor shall deliver appropriate written releases, in statutory form, of all liens to the Town.
- R. WORKPLACE COMPLIANCE. Vendor understands and acknowledges the applicability to it of the American with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989.
- S. PERFORMANCE AND PAYMENT BONDS. Vendor shall provide a performance and payment bond to cover any specific order by the Town, if required by the Town. The Vendor must quote a price to Town for provisions of the payment and performance bond and must furnish the payment and performance bond within 10 business days of the receipt of the Town's purchase order.
- T. NON-EXCLUSIVE REMEDIES. The rights and the remedies of Town under this Contract are not exclusive. Election of one remedy shall not preclude the use of other remedies. Town shall be entitled to offset against any sums due to Vendor, any expenses or costs incurred by Town, or damages assessed by Town concerning Vendor's non-conforming performance or failure to perform the Contract, including costs and damages incurred by Town.
- U. CONSTRUCTION. The terms and provisions of this Contract represent the results of negotiations between the Parties, each of which has been or has had the opportunity to be represented by counsel of its own choosing, and neither of which has acted under any duress or compulsion, whether legal, economic or otherwise. Consequently, the terms and provisions of this Contract shall be interpreted and construed in accordance with their usual and customary meanings, and the Parties each hereby waive the application of any rule of law which would otherwise be applicable in connection with the interpretation and construction of this Contract that ambiguous or

conflicting terms or provisions contained in this Contract shall be interpreted or construed against the Party whose attorney prepared the executed Contract or any earlier draft of the same.

### ARTICLE 13. FUNDS APPROPRIATION

If the term of this Contract or provision of any Goods hereunder extends beyond the current fiscal period of the Town and the Town Council does not appropriate funds to continue this Contract and pay for charges or Goods hereunder, the Town may terminate this Contract at the end of the current fiscal period. The Town agrees, to the extent reasonably practical, to give written notice of such termination pursuant to Article 11 of this Agreement at least thirty (30) days prior to the end of the current fiscal period and will pay to the Vendor approved charges incurred through the end of such period.

THE REST OF THIS PAGE INTENTIONALLY LEFT BLANK.

In witness whereof, the parties hereto have executed and caused to be signed by their duly authorized representatives, this Contract on the date first written above.

TOWN OF QUEEN CREEK:	ROSENBAUER AMERICA, LLC:
BY:	BY:
Mayor	
ATTEST:	
Town Clerk	
REVIEWED AS TO FORM:	
Dickinson Wright	
Town Attorneys	

### EXHIBIT A

### **INSURANCE**

- 1. <u>Insurance Certificate</u>: The Town requires a complete and valid certificate of insurance prior to the award of any contract or issuance of any purchase order. Vendor shall submit a copy of the insurance certificate for coverage with minimum amounts stated below. The coverage shall be maintained in full force and effect during the term of the Contract and shall not serve to limit any liabilities or any other Vendor obligations. Insurance evidenced by the certificate shall not expire, be canceled, or materially changed without thirty (30) days prior written notice to the Town, and a statement to that effect must appear on the face of the certificate and the certificate shall be signed by a person authorized to bind the insurer.
- 2. <u>Deductible</u>: The amount of any deductible shall be stated on the face of the certificate. The Contract Administrator may require Vendor to furnish a financial statement establishing the ability of Vendor to fund the deductible. If in the sole judgment of the Contract Administrator the financial statement does not establish Vendor's ability to fund the deductible, and no other provisions acceptable to the Contract Administrator are made to assure funding of the deductible, the Contract Administrator may, in his/her sole discretion, terminate this Contract and the Town will have no further obligation to Vendor.
- 3. General Liability: Vendor shall secure and maintain, at his or her own expense, until completion of the contract, general liability as shall protect Vendor and the Town from claims for bodily injury, personal injury, and property damage which may arise because of the Goods provided under this contract. Vendor shall provide general liability and excess general liability coverage in the following amounts, at a minimum in an amount not less than \$2,000,000. For example, coverage may include \$1,000,000 primary and \$1,000,000 excess, \$2,000,000 primary, or other equivalent combinations.
- **4.** <u>Automobile Liability</u>: Vendor shall secure, and maintain at his or her own expense, until the completion of the Contract, coverage for any auto, including non-owned and hired autos, with a combined single limit of \$1,000,000 per occurrence. The Town shall be named as an Additional Insured.
- **5.** Worker's Compensation Insurance: Before beginning work or providing Goods, Vendor shall furnish to the Town satisfactory proof that he or she has, for the period covered under the Contract, full Worker's Compensation coverage for all persons whom Vendor may employ directly, or indirectly, and shall hold the Town free and harmless for all personal injuries of all persons whom Vendor may employ directly or indirectly.
- **6.** <u>Additional Insured</u>: Vendor shall name the Town of Queen Creek as an "Additional Insured" on all insurance policies, except Worker's Compensation, and this shall be reflected on the Certificate of Insurance.
- 7. Rating of Insurance Company(ies): Any and all insurance company(ies) supplying coverage to Vendor must have no less than an "A" rating in accordance with the A.M. Best rating guide.
- **8.** <u>Waiver:</u> The Town Manager, in consultation with the Risk Manager and/or Town Attorney, reserves the right to waive, reduce, or increase insurance requirements should it be in the best interest of the Town.
- Additional Insurance Requirements: The Vendor is primarily responsible for the risk management of its Goods under this Contract, including but not limited to obtaining and maintaining the required insurance and establishing and maintaining a reasonable risk control and safety program. Town reserves the right to amend the requirements herein at any time during the Contract subject to at least 30 days written notice. The Vendor shall require any and all subvendors to maintain insurance as required herein naming Town and Vendor as "Additional Insured" on all insurance policies, except Worker's Compensation, and this shall be reflected on the Certificate of Insurance. The Vendor's insurance coverage shall be primary insurance with respect to all other available sources. Coverage provided by the Vendor shall not be limited to the liability assumed under the Indemnification provision of this Contract. To the extent permitted by law, Vendor waives all rights of subrogation or similar rights against Town, its representatives, agents, and employees. All insurance policies, except Workers' Compensation required by this Contract, and self-insured retention or deductible portions, shall name, to the fullest extent permitted by law for claims arising out of the performance of this contract, Town of Queen Creek, its council members, agents, representatives, officers, directors, officials and employees as Additional Insureds. The Town reserves the right to require complete copies of all insurance policies required by this Contract at any time. Failure to maintain the insurance policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.



# Bid Price and Delivery Schedule For \*\*\*\*\*\*\*\*\* Queen Creek Fire & Medical Department \*\*\*\*\*\*\*

Rosenbauer South Dakota LLC is pleased to provide this bid proposal. The proposed apparatus has been tailored around the requirements of the fire service industry and we are confident that our proposal will meet and exceed the needs of the department. The proposed apparatus will be constructed utilizing only the highest quality materials and workmanship available in the industry. The apparatus will provide the upmost firefighter safety and efficiency on the fire ground along with extended life and lower maintenance cost throughout the life of the vehicle.

# One (1) Rosenbauer FX 88' Mid-Mount Aerial Platform: \$1,010,006.00 plus tax\* With Commander 4000 Chassis

The contract pricing listed above is in accordance with the Sourcewell (formerly NJPA) National Cooperative Contract #022818-RSB.

\*Includes two (2) factory trips for three (3) department personnel and a \$5,000.00 contingency fund and a 100% performance bond.

The specifications herein contained shall form a part of the final contract, and are subject to changes desired by the purchaser, provided such alterations are interlined prior to the acceptance by the company of the order to purchase, and are provided such alterations do not materially affect the cost of the construction of the apparatus.

The proposal for fire apparatus conforms to all Federal Department of Transportation (DOT) rules and regulations in effect at the time of bid, and with all National Fire Protection Association (NFPA) guidelines for automotive fire apparatus as published at the time of bid, except as modified by customer specifications. Any increased costs incurred by the first party because of future changes in or additions to said DOT or NFPA standards will be passed along to the customers as an addition to the price set forth above.

### **Contract Terms**

**Delivery:** The proposed apparatus shall be completed within 395-calendaer days after the completion of the preconstruction meeting and final production specifications have been approved by the Queen Creek Fire & Medical Department

### **Price Terms:**

This offer shall remain valid for sixty, (60) calendar days from the quotation submittal date of July 30, 2018.

### **Additional Discounts:**

Should the department decide to prepay the unit 100% at the time of order, a discount of \$25,092.00 would be deducted from the contract price lowering it to \$984,914.00 and would also drop the tax rate from 8.3% to 5.6%. The net sell price for the unit with the prepayment discount including the 5.6% tax rate would be \$1,040,069.18.

### **Payment:**

Contract payment of one-hundred percent (100%) of the purchase price shall be paid upon delivery and acceptance of the completed unit.

I want to thank the Queen Creek Fire & Medical Department for the opportunity to serve the needs of the department.

Sincerely

Chad Horne

### **Chad Horne**

**Rosenbauer America** 

(602) 705-5101

03-00-0101

### NFPA 2016 STANDARDS

This unit shall comply with the NFPA standards effective January 1, 2016.

Certification of slip resistance of all stepping, standing and walking surfaces shall be supplied with delivery of the apparatus.

A plate that is highly visible to the driver while seated shall be provided which states the overall height, length, and gross vehicle weight rating.

The manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company shall designate, in writing, which is qualified to witness and certify test results.

08-09-0102

### PRO RATED PAINT WARRANTY TEN YEAR

### TERMS AND CONDITIONS

Rosenbauer hereby warrants the paint on the cab of each new fire & rescue vehicle to be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection for a period of ten (10) years, starting on the date the vehicle is delivered to the original purchaser. Under this warranty, Rosenbauer agrees to furnish any item or items to replace those that have been found to be defective in material or workmanship where there is no indication of abuse, neglect or other than normal service. Such an item or items, at the option of Rosenbauer must be made available for our inspection at our request and returned to our factory or another location designated by Rosenbauer. Transportation of such an item or items will be arranged and covered by buyer within thirty (30) days after the date of failure and with ten (10) years from the date of delivery of the apparatus to the original purchaser. The inspection must indicate that the failure was attributed to an adhesion defect caused by defective manufacturing methods or paint material selection. Authorization for repair must be sought from Rosenbauer customer service department prior to repair occurring.

### PRO-RATED WARRANTY COVERAGE

Color Retention & Cracking	Adhesion, Blistering & Bubbling	Corrosion, Dissimilar Meta
0-72  Months = 100%	0-36  Months = 100%	0-36  Months = 100%
73-96  Months = 50%	37-84  Months = 50%	37-48  Months = 50%
97-120  Months = 25%	85-120  Months = 25%	73-120  Months = 25%

10203-0016 07/30/18

### THIS WARRANTY SHALL NOT APPLY TO OR COVER THE FOLLOWING:

- Any item that has been repaired, repainted or altered by a facility not approved in advance by Rosenbauer.
- Special, incidental or consequential damages including, but not limited to, loss of time, inconvenience, loss of use, lost profits or transportation fees or charges to or from any facility.
- Any defect resulting from misuse, negligence, alteration, accident or lack of normal or required
  maintenance or adjustments, exposure to corrosive agents, fire, severe environmental conditions
  or acts of God.
- Painted items which are manufactured by a party other that Rosenbauer and which are separately warranted by that party including cabs not manufactured or painted by Rosenbauer.

### **EXCLUSIONS OF DAMAGES BOTH INCIDENTAL AND CONSEQUENTIAL**

At no time shall Rosenbauer be held liable for any incidental, consequential, indirect, special and/or punitive damages whatsoever, whether coming from breach of contract, warranty, tort or equity. Such items shall include the chassis or other items sold by Rosenbauer, or their operation or their failure to operate, or defects herein or any undertakings, acts or omissions related to, regardless whether Rosenbauer's knowledge of the possibility of any such damage.

Without limitation of the generality of the preceding statements, Rosenbauer categorically disclaims any and all liability for property and personal injury, damage, penalties for lost revenue and/or profit, loss of chassis or products and associated pieces of equipment, the expense of substituting chassis and/or products or the out of service expenses, resulting from damages and/or delays that creates down time expense and/or create economic losses, or any third party claims for damages.

This warranty in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability or make any alteration to this warranty in connection with the sale of our apparatus unless expressly given in writing by Rosenbauer.

NOTE: Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

08-09-0104

### **CAB STRUCTURE WARRANTY**

The cab structure shall be warranted for a period of ten (10) years with the complete detail of the warranty outlined in a document provided upon request.

08-09-0105

### TRANSMISSION WARRANTY

The Allison EVS transmission shall be warranted for a period of five (5) years with the complete detail of the warranty outlined in a document provided upon request.

10203-0016 07/30/18

08-09-0106

### **ENGINE WARRANTY**

The Cummins engine shall be warranted for a period of five (5) years or 100,000 miles, whichever comes first, with the complete detail of the warranty outlined in a document provided upon request.

08-09-0107

### FRAME WARRANTY

The frame and cross members shall carry a lifetime warranty with the complete detail of the warranty outlined in a document provided upon request.

08-09-0109

### FRONT AND REAR AXLE WARRANTY

The front axle shall be warranted by Hendrickson for five (5) years or 500,000 miles, whichever comes first, under the general service application.

08-09-010A

### REAR AXLE WARRANTY

The rear axle(s) shall be warranted by Meritor for two (2) years with unlimited miles under the general service application.

08-09-0111

### **CAB AND CHASSIS WARRANTY**

The cab and chassis shall carry a twenty-four (24) month warranty providing limited parts and labor from the date the complete apparatus is delivered to the end user. The complete detail of the warranty shall be outlined in a document provided upon request.

08-09-0301

### STATIC LOAD SEAT TEST INFORMATION

This model of seat shall have successfully completed the static load tests set forth by FMVSS 207/210. This testing shall include a simultaneous forward load of 3000 pounds each on the lap and shoulder belts and twenty (20) times the weight through the center of gravity. This model of seat installed in the cab model, as specified, shall have successfully completed the dynamic sled testing using FMVSS 208 as a guide with the following accommodations. In order to reflect the larger size outfitted firefighters, the test dummy used shall be a 95th percentile hybrid III male weighing 225 pounds rather than the 50th percentile male dummy weighing 165 pounds as referenced in FMVSS 208.

The materials used in construction of the seat shall also have successfully completed testing with regard to the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which dictates the allowable burning rate of materials in the occupant compartments of motor vehicles.

10203-0016 07/30/18

08-09-0302

### **CAB TEST INFORMATION**

The cab as built shall have successfully completed the pre-load side impact, static roof load application and frontal impact without encroachment to the occupant survival space when tested in accordance with Section 4 of SAE J2420 COE Frontal Strength Evaluation Dynamic Loading Heavy Trucks, Section 5 of SAE J2422 Cab Roof Strength Evaluation Quasi –Static Loading Heavy Trucks and ECE R29 Uniform Provisions Concerning the Approval of Vehicles with regard to the Protection of the Occupants of the Cab of a Commercial Vehicles Annex 3 Paragraph 5.

The above tests shall have been witnessed by and attested to by an independent third party. The test results shall have been recorded using cameras, high speed imagers, accelerometers and strain gauges.

Documentation of the testing shall be provided upon request.

08-09-0303

### CAB INTEGRITY CERTIFICATION

The manufacturer shall provide a cab crash test certification with this proposal including SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading for Heavy Trucks and SAE J2420 COE Frontal Strength Evaluation - Dynamic Load for Heavy Trucks.

08-09-0304

### **CAB TEST INFORMATION**

### Roof Crush

The cab shall be subjected to a roof crush test of 120,000-pounds exceeding the requirements of ECE 29 criteria. The 120,000-pound requirement is important to ensure to most structurally sound and safe cab in the event of a crash or roll over.

### Side Impact

The cab shall be subjected to dynamic moving barrier slammed into the side of the cab at 7.5 mph, striking with an impact of 15,157-foot pounds of energy. This test will closely represent the forces a cab would incur in a rollover incident.

### **Frontal Impact**

The cab shall withstand a frontal force produced from a moving barrier slammed into the front of the cab traveling at 10.5 mph, striking with an impact of 42,587-foot pounds of energy.

The same cab shall withstand all tests without any measurable intrusion into the survival space of the occupant area.

08-09-0501

### **OPERATION AND PARTS LIST MANUALS**

Each cab and chassis shall include two (2) electronic copies of the operation manuals and parts listings. The manuals shall include information specific to the components included on the apparatus.

08-09-0503

### **ENGINE AND TRANSMISSION MANUALS**

One (1) paper copy of the specific engine and transmission manuals shall accompany each cab and chassis.

08-09-0530

### AS BUILT WIRING DIAGRAMS

Each cab and chassis shall include one (1) digital copy of the wiring schematics and component wiring. The wiring schematics shall be developed on a software program such as VeSys Design or equal that provides continuity in files and diagram. The software shall allow you to trace through the design schematics to identify cross referenced items such as in-line connectors and wires. The software shall be interactive which allows you to view one electrical assembly drawing, click on a wire routing and the program will take you to the related circuit assembly or termination point. The software shall also provide a searchable function allowing you to view multiple diagrams using readily available pdf viewers. The digital copy of the wiring schematics shall be compatible with hand held devices such as I-Pads.

08-09-0540

### **USB STORAGE**

For ease of service the chassis shall come with an on-board USB flash drive. The flash drive shall have a minimum of 8 GB of storage capacity; and shall be located behind the access panel on the driver side kick panel, next to the data port for the engine.

The following items shall be stored on the Flash Drive. No Exception.

- As built wiring diagrams
- Plumbing diagram
- Chassis, body and aerial manuals

The USB shall be accessible through a USB-A to USB-B cable.

08-80-0200

### ROAD SAFETY KIT

One (1) 2-1/2# ABC DOT Approved fire extinguisher shall be provided. The fire extinguisher shall be shipped loose with the chassis.

One (1) set of DOT approved hazard triangles shall be supplied with the chassis. They shall be stored in a plastic case and shipped loose with the chassis.

One (1) first aid kit

03-00-0761

## **CAB CUSTOM STYLE**

The cab shall be a custom, cab over engine style, with the driver and officer positions ahead of the engine and front axle. The cab shall be specifically designed and manufactured for the fire service industry.

The cab shall be designed and assembled by the apparatus manufacturer in a facility located on the manufacturer's premises. No Exceptions.

The cab shall be of a totally enclosed full tilt design, with the interior area completely open to improve visibility and verbal communication between the occupants. The cab shall be capable of tilting 45-degrees, allowing the chassis engine to be removed, if required, without tilting the cab beyond 45-degrees. No Exceptions.

The cab shall include a four (4)-point rubber isolated cab pivot and mounting system. The rear histic mounts shall be isolated from the chassis frame to reduce the transfer of road vibrations and frame torque into the cab, while providing superior handling characteristics. No solid mounted rear lock downs shall be acceptable. No Exceptions.

The front cab pivot assemblies shall be 1/2" A36 steel plate with a .31" thick 2-1/2" diameter tube cross member mechanically attached to the cab and frame. There shall be two (2) greaseable rubber isolated engineered bushings to reduce the transfer of road vibrations into the cab.

The cab shall be locked down by a two (2)-point automatic spring-loaded hook mechanism that actuates after the cab has been lowered.

The cab super-structure shall be designed with high strength 6061-T6 aluminum extrusions and 3/16" 5052-H32 aluminum plate. This shall include the "A", "B", "C" and "D" extruded pillars, triple wall front end reinforced by 3/16" thick x 2"x3" extrusion tubes, 3/16" side walls and rear wall. This shall offer superior occupant protection in the event of vehicle impact.

The extrusions shall provide adequate space for routing of wiring and hoses which will provide service accessibility. Routing of harnessing which requires pulling of wires through tubes will not be allowed. No Exceptions.

The "A" pillar shall be of a closed section, one-piece extrusion extending from the cab header to the bottom of the cab. This design shall ensure strength and superior resistance to buckling in the event of a frontal impact.

The cabs front corners shall be constructed of 5052-H32 stamped aluminum to provide a consistent material composition. The stamping process alleviates the high tendency of fractures through the fusing of dissimilar metal composition as appears with a casting process.

Cast cab components, including cab corners, "A" pillars and front fascia components shall not be acceptable due to the high tendency of fractures. No Exceptions.

Additional cab strength shall be obtained through closed section, dual extrusions in the construction of the "D" pillars.

The front facade shall be constructed with dual wall .19" thick 5052-H32 aluminum plates which make up the front bulkhead, reinforced by .19" thick 6061-T6 aluminum extrusion (box-sections), though-out the inner and outer perimeter of the front end / facade. The reinforcing third wall / barrier is .13" thick 5052-H32 work hardened aluminum facade panels. All panels shall be welded, no adhesive.

The cab side wall of the cab shall be 3/16" thick 5052-H32 aluminum plate. The cab side plate shall wrap the corner of the cab b pillar and slam post. The cab rear wall plates shall be reinforced with a minimum of two (2)  $3/16 \times 3$ " aluminum sections; the cab side reinforcements shall be a minimum of 28" apart and span from the cab B pillar and cab C pillar.

The rear wall of the cab shall be 3/16" thick 5052-H32 aluminum plate. The rear cab plate shall wrap the corner of the cab and attach to the cab D pillar and slam post. The cab rear wall plates shall be reinforced with four horizontal and dual vertical support sections; the dual vertical support structure shall consist of 1/8" thick x 2" 6061-T6 aluminum tubes and the horizontal hat sections shall consist of 1/8" thick x 4" 5052-H32 aluminum. The dual vertical support sections shall be 40" a-part, and the cab shall contain a minimum of four (4) 4" hat section horizontal supports.

Additionally, the rear edge of the floor shall include a 3/16" 6061-T6 aluminum tube extrusion (under the floor) and a 7" 5052-H32 aluminum cab floor support section (above the floor)

The outside cab width shall measure 99" across. The interior cab shall have a width of 93".

The cab length shall measure 77.3" from the center of the front axle to the front cab skin and 70" from center of the front axle to the back of the cab, for a total cab length of 147.3".

The cab shall also feature ample driver and officer foot room, a total of 3.7 square feet for the driver and 4.45 square feet of floor space at the officer's feet. (No exceptions)

The crew floor shall feature a complete flat floor design, including provisions for a one o'clock PTO inclusion, while still offering an uninterrupted 25 total square feet of space.

The leading edge of the cab floor from the steps shall meet NFPA 15.7.4 slip resistance requirements on both the front and rear cab doors. No Exceptions.

The cab shall meet or exceed cab impact test (SAE J-2420, cab rollover test (SAE J2422), and cab seating requirements (FMVSS 210, and FMVSS 208).

The cab shall include 4 doors. They shall have a front two (2) cab doors shall have a minimum clear opening of 42.5" wide by 81" high measured from the top of the lower cab step to the top of the door opening.; and the rear two (2) crew doors shall be a minimum clear door opening of 38.5" wide by 91.5" high measured from the top of the lower cab step to the top of the door opening. The length of the door will vary depending on door type.

### **ROOF STYLE - 11" RAISED**

The cab roof design shall incorporate an angled front roof, transitioning into a rolled extrusion for a swept back design.

The roof height shall feature an 11" raise starting over the driver and officer positions and continuing back to the roof and rear wall joint. Raised roof designs that do not include a raised portion over the driver and officer positions will not be acceptable. No Exceptions.

The roof of the cab shall feature dual .25" thick interlocked structural member extrusions running the entire width of the cab defending against buckling in the event of a rollover.

The cab header shall feature dual 6061-T6 aluminum extrusions which shall offer superior rigidity and strength.

The raised roof shall offer a crew head height area of 66-1/2" from the floor to the ceiling in the crew areas for optimum headroom.

The crew roof super structure shall include a reinforcement hat-section structure 1/8" thick 5052-H32 aluminum bracing. The for-aft support braces will be 24" on center apart, the side to side

support braces will stretch from cab side to cab side and centered between the dual 3/16" extruded and plate reinforced roll-cage section.

The forward cab roof section shall include a combination of 1/8" 6061-T6 extruded tube reinforcements and a hat-section structure 1/8" thick 5052-H32 aluminum bracing. The bracing shall wrap the entire perimeter of the cab forward roof, and the condenser support structure.

The condenser support structure shall include 1/8" triple sections, supporting the outer perimeter and center of the condenser mounting pad.

Additionally, the entire roof super structure is reinforced by a .25" thick roof edge corner extrusion around the entire cab perimeter.

A drip rail shall be provided along the top radius of each cab side. The drip rails shall help prevent water from the cab roof running down the cab side.

03-06-1015

### CAB DOORS

The cab shall include a total of four (4) doors, two (2) forward and two (2) rear crew doors.

The forward cab doors shall be a minimum of 45" wide, and have a cab structure opening of 42.5" wide; and the rear crew doors shall be a minimum of 41" wide, and a cab structure opening of 38.5" wide to provide enhanced entry and egress of the cab.

Each cab door shall feature:

- Superior strength and rigidity from 3/16" closed section extruded door frames
- Damping inside each door for a solid feel and minimized reverberation when closed
- A rolled rubber bulb seal style gasket shall be utilized around the door ensuring a weather tight fit
- Integrated, mechanical door stop
- A full length, hidden piano style 10 gauge stainless steel door hinge with a 1/4" pin, which shall be mounted inside the panel of the door prohibiting dirt and debris from becoming trapped in the hinge

• An integrated one-piece inner door assembly that includes a glass track, mounting provisions for window regulator, door handle and door panel shall be utilized. The inner door assembly shall be easily removed with nut inserts. Self-tapping screws shall not be acceptable.

03-06-0015

#### **CAB STEPS**

The cab steps shall meet NFPA 13-7.3 in size and slip resistance requirements.

The cab shall incorporate a two-step design at each door, with a first step height of approximately 22" from the ground. The leading edge of the first step shall be 5" further outboard than the second step to provide a staircase design for safer egress.

The front cab first step shall measure a minimum of 33" wide x 10" deep. The front cab intermediate step shall measure a minimum 31" wide x 8" deep.

The crew cab first step shall measure a minimum of 26" wide x 10" deep. The crew cab intermediate step shall measure a minimum 28" wide x 9" deep.

The top crew step shall incorporate an angle approximately midway from the rear wall to the crew door hinge extending out the flooring under the rear facing outer seat positions, offering foot placement for safety while seated in this position.

### **CAB STEP TRIM**

The cab steps shall include a 12 gauge 304 Grip Strut stainless steel construction on the first step, the step closest to the ground. The stainless steel finish shall be a number 7 mirror. The step shall include a frame which is integral with the construction of the cab for rigidity and strength. The Grip Strut shall allow water and other debris to flow through rather than becoming packed under the step. The middle step shall be integral with the cab in construction and shall be trimmed in 3003-H22 embossed aluminum tread plate which is 0.084" thick.

03-06-0150

### **AUXILIARY CAB STEPS**

The cab shall be equipped with four (4) auxiliary stirrup style steps. There shall be one installed below each cab door opening. The frame shall be constructed of marine grade aluminum, and the stepping surface shall be constructed of heavy duty stainless steel Grip Strut. The step surface shall be designed to function under the most adverse conditions.

03-06-1025

# **FULL LENGTH DOORS**

All doors shall be full length from the roof of the cab extending down to cover and protect the entrance step areas.

03-06-1500

#### **DOOR FILL PANEL**

The door fill panel shall have the same finish as the door.

03-06-1100

#### **DOOR HANDLES**

The exterior door handles shall be constructed of die-cast steel and chrome plated for a pleasing appearance. They shall feature a vertically oriented heavy duty pull style handles which are extended out and suitable for easy grasping with a gloved hand.

The interior door handle shall be a paddle style which shall be chrome in color. The paddle shall be hinged towards the rear of the cab.

Each door latch shall feature a military grade aligning dove tail guide striker assembly for precision door closure which prevents sagging throughout the life of the vehicle. No exceptions.

03-06-1120

### CAB DOOR LOCKS

All cab doors shall include manual door locks with keys. The door lock shall include a toggle and shall be an integral part of the interior door handle which is red in color. The exterior door lock is integral with the door latch. The cab doors may be unlocked from the exterior with a key or through a thumb turn from inside the cab.

03-06-1135

#### **INTERIOR CAB DOORS**

All cab doors shall consist of a one-piece formed and stamped aluminum interior panel. The panel shall include a formed collar around the interior door latch. The door panels shall be attached to the door with nutserts. ABS material shall not be acceptable. No Exceptions.

03-06-1201

## INTERIOR CAB DOOR FINISH

All cab doors shall be finished with a polyurethane coating for durability. The finish shall be gray in color.

04-05-0105

## **INTERIOR FRONT DOOR PULL**

The interior driver and officer cab doors shall each include one (1) customized cast aluminum single piece door grab pulls designed specifically for the fire service.

The single piece door pull shall have a curved designed in an "L" formation to provide multiple points for grasping with a gloved hand. The horizontal dimension shall be a minimum of 28" and the vertical dimension shall be a minimum of 20". The door pulls shall have an ergonomic curve making them easier to grasp when entering and exiting the cab. No Exceptions.

The door pull shall feature secure mounting in three separate locations of the pull utilizing stainless steel fasteners with nut inserts in each location. Self-taping screws or other mounting techniques shall not be allowed for interior door pulls or grab handles.

Each handle shall be constructed of A356 aluminum casting and shall feature a black powder coated finish.

04-05-0150

### **INTERIOR GRAB HANDLE REAR DOOR**

A black powder coated cast aluminum grab handle shall be provided on the inside of each rear crew door. The handle shall extend horizontally the width of the window just above the windowsill. The handle shall assist with entry and egress from the crew area of the vehicle.

The interior driver and officer rear cab crew doors shall include one (1) customized cast aluminum single piece door grab pulls designed specifically for the fire service.

The door pulls shall have an ergonomic curve making them easier to grasp when entering and exiting the cab. No Exceptions.

The door pull shall feature secure mounting with stainless steel fasteners with nut inserts in each location. Self-taping screws or other mounting techniques shall not be allowed for interior door pulls or grab handles.

Each handle shall be constructed of A356 aluminum casting and shall feature a black powder coated finish.

03-08-0101

#### **WINDSHIELD**

A one (1)-piece, safety glass full width windshield with more than 3,228 square inches of area will be provided. No Exceptions.

The windshield shall feature:

- A completely uninterrupted view from both the driver and officer positions
- The windshield will consist of three (3) layers; the outer layer, the middle safety laminate, and the inner layer. The .114" 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.

- Economical replacement readily available from auto glass supplier
- Easily removable for replacement using standard automotive techniques
- A frit band will be provided along with an outer trim seal on the outside perimeter of the windshield for a finished automotive appearance.

03-08-0102

### WINDSHIELD WIPER SYSTEM

A single windshield wiper system shall be incorporated in conformance with FMVSS and SAE requirements. Two (2) 22" windshield wiper arms shall be mounted below the windshield. Each arm shall include a 26" long wiper to provide optimum windshield clearing.

The windshield wiper fluid reservoir can be filled without raising the cab.

08-02-0135

# WINDSHIELD WIPER ACTIVATION

The windshield wipers shall be activated through a switch on the driver's panel, with intermittent control.

03-08-0151

#### **DRIVER WINDOW**

The driver's door shall include a window which measures a minimum 25.5" wide x 21" high with a minimum clear viewing area of 694 square inches. The glass shall include a dark tint and through a powered operation shall completely roll into the door housing.

Both windows shall be trimmed in a black anodized aluminum ring and rubber seal to prevent water from entering the cab when closed.

08-01-0301

### **POWER WINDOW SWITCHES**

The Driver shall have switches for each of the cab door windows. The powered windows of the officer door, and each respective crew door, shall be activated by a switch on the respective door.

The switches for the driver and officer door windows shall be located in a customized door grab handle. No Exception

03-08-0153

# **OFFICER WINDOW**

The officer's door shall include a window which measures 25.5" wide x 21" high with a minimum clear viewing area of 694 square inches. The glass shall include a 50% dark tint and through a powered operation shall completely roll into the door housing.

Both windows shall be trimmed in a black anodized aluminum ring and rubber seal to prevent water from entering the cab when closed.

03-08-0226

#### REAR DRIVER SIDE WINDOW

The rear driver's side door shall include a window which is 26.75" wide x 21.75" high with a minimum clear viewable area of 581 square inches. The glass shall include a 50% dark tint and through power actuation shall roll completely into the door housing. The power window shall be activated through a switch located on the top of the door panel.

03-08-0252

#### **REAR OFFICER SIDE WINDOW**

The rear officer's side crew door shall include a window measuring 26.75" wide x 21.75" high with a minimum clear viewable area of 581 square inches. The glass shall include a 50% dark tint and through powered actuation shall roll completely into the door housing. The power window shall be activated through a switch located on the top of the door panel.

03-08-0320

#### **DRIVER MIDDLE WINDOW**

The cab shall include a fixed driver's side window glass which shall be located between the cab front and rear doors. The glass shall be 17.5" wide x 23.5" high and shall include a 50% dark tint and shall be trimmed in a black anodized rubber ring for a tight seal when closed.

03-08-0370

#### **OFFICER MIDDLE WINDOW**

The cab shall include a fixed officer's side window glass which shall be located between the cab front and rear doors. The glass shall be 17.5" wide x 23.5" high and shall include a 50% dark tint and shall be trimmed in a black anodized rubber ring for a tight seal when closed.

03-09-8010

#### **CAB INSULATION**

The cab shall be completely insulated from road and vehicle resonance, exterior sound and thermal intrusion.

The cab insulation system shall be comprised of three separate components each designed to assure optimal thermal and acoustic properties are achieved. Two layers of insulation material shall be utilized in conjunction with a .2" air barrier.

The cab shall utilize at a minimum 10 mils of flexible extensional visco elastic vibration damping insulation offering excellent acoustic reduction properties.

A minimum of .8" of SCbond Polyurethane Foam insulation shall be applied as an additional insulation between the cab skin and all interior ceiling surfaces. The insulation shall have a density of 10 lb/ft3 +/-.5 providing better thermal properties and acoustic reduction properties.

The interior cab insulation system shall ensure that no seated position within the cab exceeds 72dB as certified by the manufacture. This decibel rating shall be measured with the apparatus traveling 45 mph with climate control settings off.

All insulation used in the construction of the cab shall be marine grade featuring longevity and resistance to degradation.

The interior of the cab including the rear wall, side walls and ceiling panels shall be insulated.

Use of open cell material as the primary insulation will not be acceptable. No exceptions.

03-09-8015

## ENGINE TUNNEL INSULATION

The engine tunnel shall include an insulated barrier from noise on the underside of each tunnel surface. This barrier shall be engineered for surrounding engines.

The insulation barrier shall provide an acceptable decibel level within the cab meeting or exceeding the recommendations of NFPA 1901.

The thickness of the engine tunnel insulation shall be 1" thick. The insulating material shall be open cell polyether based foam with a textured surface, specifically designed for acoustic absorption.

Use of aluminized faced material on the engine tunnel shall not be acceptable. No exceptions.

The engine tunnel insulation shall be precisely cut and sealed to fit each segment on the underside of the tunnel surface. The insulation shall then be affixed by a pressure sensitive adhesive.

The insulation shall meet or exceed FMVSS 302 flammability testing.

03-09-8017

### CAB UNDERBODY INSULATION

The underside of the cab shall include at a minimum of 1" of a uni-seal Cab-Foam insulation offering reducing vibration noise and thermal effect to the interior of the cab.

03-09-8020

## **DAMPING INSULATION**

The entire cab, including the ceiling and walls shall include additional insulation reducing structure borne noise from vibration, impact and resonance within the cab.

04-01-1100

### INTERIOR TRIM MATERIAL

The interior trim shall feature a 31 oz. marine grade vinyl which features a tensile strength of ASTM D751 of excellent, tear strength meeting the Federal standard 191-5134 of excellent and shall be oil resistant passing the CID-A-A-2950A requirement for no permeation.

Due to the excellent qualities of the marine grade vinyl material, no other type of interior trim shall be acceptable. No Exceptions.

The soft trim vinyl shall feature mildew resistance passing ASTM G21-90 and shall be rated to - 25 degrees Fahrenheit.

The vinyl shall be flame retardant meeting California Fire Code 117, UFAC Class 1, and BIFMA Class 1 and shall have a high resistance to abrasion.

The interior of the cab including the ceiling panels shall feature this soft trim and shall be gray in color.

04-02-1610

## REAR WALL INTERIOR MATERIAL

The rear wall of the cab shall be coated with a polyurethane coating for a durable finish. The color shall be gray.

04-02-1001

#### THROTTLE AND BRAKE PEDALS

The apparatus shall have floor mounted throttle and brake pedals.

04-02-1120

#### FLOOR MAT

The interior flooring of the cab shall be covered with an advanced gray multi-layer acoustic dampening mat. The floor matting shall be an open/closed cell, flexible polyurethane polyamide material with frictional dampening and dissipation properties. The mat shall be a fire and skid resistant non-wicking material.

04-02-1702

#### **SUN VISORS**

The driver and officer seats shall feature a sun visor mounted in the header over each seating position. The sun visors shall be gray tinted plastic.

04-02-1798

Cab Coating Interior Color

05-01-1055

#### **INTERIOR CAB FINISH**

The interior cab shall be finished in a high performance polyurethane coating including the interior A, B, C and D pillars, all occupant seat frames and any surrounding surfaces extending to the ball seal around each door. This type of coating shall feature:

- Durability, scratch, chemical and abrasion resistance
- Consistent, even coverage and a uniform texture
- Resistance from fading from exposure to UV light
- Gray in color

04-03-0010

#### **ENGINE TUNNEL**

The distance from the back of the tunnel to the interior wall shall be 56" measured at floor level and 62" at top of engine tunnel. No Exception.

04-03-1000

### CAB DASH

The cab dash shall offer heavy duty, durable construction using resin transfer molding (RTM) technology formed composite material. The composite material shall be .28" thick for improved resistance and military type strength.

RTM is a low pressure, closed molding process which offers a dimensionally accurate and high quality surface finish composite molding, using liquid thermoset polymers reinforced with various forms of fiber reinforcements. The matrix selection of polymer and reinforcement dictates molding mechanical and surface finish performance.

ABS polymer construction shall not be acceptable. No Exceptions.

The cab dash shall offer a finish of a polyurethane coating for a rugged design and finish. No Exceptions.

The polyurethane finish shall provide a tough, flexible, impact-absorbing, chemical & abrasion-resistant, even-textured and skid-resistant surface. The polyurethane finish shall offer durability and scratch resistance even against today's advanced firefighting turnout materials with consistent, even coverage and a uniform texture. The polyurethane coating finish shall resist fading from UV light.

This construction shall allow for a clean, seamless dash area that shall reduce unnecessary joining of cab dash components. This design allows for the following features:

- Optimal heating and cooling of cab occupants, HVAC louvers shall be integrated into the gauge panel with a total of six (6) louvers; three louvers pointing at the driver and three louvers pointing at the officer.
- The cab dash instrument cluster shall be installed on a painted panel. This panel shall provide for easy removal to increase serviceability and provide ease of maintenance.
- For improved safety cab switches and controls shall be ergonomically located within easy reach of the driver when in the seated position with seatbelts fastened. This design will reduce driver distraction and increase safety by putting frequently accessed driver controls within easy reach to allow the driver more time to focus on the road.
- The officer side cab dash shall have a painted fire service grade RTM composite fiberglass panel that shall house the three HVAC louvers on the officer side. This panel will also provide ergonomically located switches and controls for the officer. All controls shall be within easy reach while in the seated position with seatbelts fastened.
- Access panels on the top of the dash for both the driver and officer sides easing maintenance access to controls, components and gauge assemblies
- The driver side dash shall include gauges for primary air pressure, secondary air pressure, a Pacific Insight instrumentation gauge panel and the DEF gauge as standard
- The driver side dash shall also include two (2) lower panels to the left and right of the steering column for FMVSS switches such as the Off/Ignition and start switches and the park brake assembly
- The driver dash shall include a panel for inclusion of an optional Weldon Vista screen and six (6) additional switches or the HVAC controls and additional switching to the right of the Driver
- The officer dash shall include a recessed area for optional mounting cradles or brackets for a laptop computer, mobile data terminal, map compartment or clip board

• The officer dash shall include a panel for inclusion of an optional Weldon Vista screen and or provisions for switches and gauges to the left of the Officer

#### **ENGINE TUNNEL**

The engine tunnel shall be constructed of aluminum offering superior durability in addition to thermal and acoustic resistance. Covering the engine tunnel shall be a layer of formed composite material for a contoured transition into the dash and offering a pleasing appearance.

The tunnel shall feature a polyurethane coating which shall match the dash and header in texture and color for a consistent appearance and robust finish with a thickness of approximately .28".

The engine tunnel shall feature:

- A low profile design measuring approximately 46.5" wide and 23-1/2" in height from the crew floor shall offer optimum visibility of the windshield and cab interior from any seated position. No Exception.
- The engine tunnel at the driver's position shall be a tapered design, featuring 24" clear width at floor level, first taper shall start 16" from floor level and taper inward for a clear width of 25.5" and the final taper shall start at 20.5" from floor level and taper inward for a clear width of 33".
- The engine tunnel at the officer's position shall be a tapered design, featuring 22-1/2" clear width at floor level, first taper shall start 16" from floor level and taper inward for a clear width of 24" and the final taper shall start at 20.5" from floor level and taper inward for a clear width of 31-1/2".
- The design shall offer a minimum of 30" for the driver and 28-1/2" for the officer as measured from the inside door pan to the top edge of the tunnel. The dimension measured at the "H" (hip) point, with the seat in the lowest position, shall be a minimum of 28-1/2" for the driver and 27" for the officer. No Exception.
- Recessed sections for ease of mounting equipment at the rear of the tunnel or for compartments and bases which can be used for installing Fire/EMS equipment and components such as flashlights and light boxes

04-03-1010

#### **CAB DASH & ENGINE TUNNEL**

The cab dash and the engine tunnel of the cab shall be coated with a polyurethane coating for a durable finish. The color shall be gray.

04-03-2000

## MOBILE DATA TERMINAL PROVISION

The officer dash shall feature a mobile data terminal base which shall support a customer provided docking station for their laptop computer or a tablet and keyboard. This provision shall include a slide out which shall offer easy access and storing to the Officer.

04-03-2100

#### OFFICER GLOVE COMPARTMENT

The officer side of the cab dash shall include a glove compartment with door and latch.

04-04-1100

#### MODULAR CENTER DASH CONSOLE

The dash and front portion of the tunnel shall include an angled modular console centered between the driver and officer positions.

The console shall feature:

- A heavy duty housing constructed from 14 gauge steel which is powder coated with a durable semi-gloss textured black finish to provide glare and corrosion resistance
- The console top constructed of black anodized aluminum extruded rails which allow for mounting brackets, plates, and other console options
- Integral nut tracks which allow mounting of equipment to the sides of the console by way of sliding 1/4"-20 hex nuts
- A hinged lid constructed from 16 gauge steel also powder coated for corrosion resistance
- The availability of pre wiring for specific components
- A modular design for ease of changes and future additions such as changing out brands of radio, types of sirens or adding accessory space

The console shall offer an available eight (8) zones configured with mounting plates for optional components as shown below:

04-04-1126

## BLACK MOUNTING PLATE FOR RADIO

One (1) black mounting plate(s) containing radio mounting shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

04-04-1134

#### **BLACK MOUNTING PLATE FOR POWER POINTS**

Two (2) black mounting plate(s) containing two (2) 12 volt power points and one (1) dual USB power point shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

04-04-1176

#### **CONSOLE MOUNTED SIREN**

One (1) black mounting plate(s) containing mounting for a siren shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

04-04-1181

## CONSOLE MOUNTED TRAFFIC LIGHTBAR CONTROLLER

One (1) black mounting plate(s) containing a plate to mount the traffic advisor lightbar controller shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

04-04-1201

### CONSOLE MOUNTED AM/FM RADIO

One (1) black mounting plate(s) containing a mount for an AM/FM radio shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

04-04-1116

#### BLACK MOUNTING PLATE

One (1) black mounting plate(s) containing blank plates shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

04-04-1146

# CONSOLE MOUNTED LOCKING ACCESSORY BOX

One (1) black locking accessory box shall be provided and incorporated in the modular dash console. The lock shall be a key type lock.

The location(s) shall be as follows:

04-04-1151

# **CONSOLE MOUNTED ACCESSORY BOX**

One (1) black mounting plate(s) containing an open accessory box shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

04-04-1161

### **CONSOLE MOUNTED CUP HOLDER**

Two (2) black mounting plate(s) containing two cup holders shall be provided and incorporated in the modular dash console.

The location(s) shall be as follows:

08-01-0146

#### **INSTRUMENTATION PANEL**

The instrumentation panel inlay shall be painted silver metallic, PPG FDG 302360, and shall have a matte finish.

05-02-0010

#### **CAB HEADER**

The cab header shall offer heavy duty, durable construction using resin transfer molding (RTM) technology formed composite material. The composite material shall be .28" thick for improved resistance and military type strength.

RTM is a low pressure, closed molding process which offers a dimensionally accurate and high quality surface finish composite molding, using liquid thermoset polymers reinforced with various forms of fiber reinforcements. The matrix selection of polymer and reinforcement dictates molding mechanical and surface finish performance.

ABS polymer construction shall not be acceptable. No Exceptions.

The cab header shall offer a finish of a polyurethane coating for a rugged design and finish. No Exceptions.

The polyurethane finish shall provide a tough, flexible, impact-absorbing, chemical & abrasion-resistant, even-textured and skid-resistant surface. The polyurethane finish shall offer durability and scratch resistance even against today's advanced firefighting turnout materials with consistent, even coverage and a uniform texture. The polyurethane coating finish shall resist fading from UV light.

The cab header shall also be purpose built for integration of Fire/EMS components and ease of maintenance with panels above both the driver and officer positions measuring 8" wide x 15"long for mounting radios, aerial controls and switches.

# **HVAC HEATING AND COOLING SYSTEMS**

The interior cab climate control shall be comprised of a triple system that shall include a defroster, a cab and crew heater and air conditioner for a complete HVAC system. The air conditioning system shall be comprised of compressor, condenser, and a minimum of three (3) evaporators to provide consistent temperature control throughout the entire cab.

The system shall be rated as an Emergency Vehicle grade for the use in Fire and Rescue style vehicles and shall provide environmental air treatment in accordance with published SAE standards.

The HVAC system shall be tested and certified by the component manufacturer and a third party independent certified testing laboratory, including all three systems. Documentation of test results shall be provided with the bid. No Exceptions.

The HVAC system shall be a total and complete system, and shall provide sufficient defrosting, heating and cooling to the entire cab. The HVAC system shall meet or exceed all specified items without the use of auxiliary heating and cooling systems.

## **DEFROSTING SYSTEM**

The defrosting system shall feature:

- To provide maximum defrost and heating performance, a 30,000 BTU heater-defroster unit with 780 CFM of air flow will be provided inside the cab.
- The defroster unit will be strategically located under the center forward portion of the instrument panel. For easy access, a removable cover will be installed over the defroster unit.
- Mounting under the dash with fresh air intake providing excellent defrost and demist capabilities.
   No Exceptions.
- Six (6) vents shall be located in the top forward portion of the dash for superior defrosting properties across the entire windshield.
- The system shall be capable of clearing 90 percent or more of the windshield in fifteen (15) minutes or less after a three (3) hour cold soak at 0 degrees Fahrenheit (-17.78 degrees Celsius).
- The system shall exceed Flash Fogging standards that are set forth in the SAE Heavy Duty Cab with Sleeper specifications. Documentation from a third party testing facility shall be available upon request. No Exception.

• The defroster will include an integral aluminum frame air filter, high performance dual scroll blowers, and ducts designed to provide maximum defrosting capabilities for the one (1) piece windshield.

### **HEATING SYSTEM**

The heating system shall feature:

- Delivery of a minimum of 82,000 BTU/hour of heat to the entire cab.
- Heat and air circulation shall be provided to the driver and officer foot area of the cab as standard through ducting in the foot well area of both positions. No Exception.
- Substantial air movement and heating provided to the driver and officer's position, with six (6) adjustable louvers, located in the dash, three (3) adjustable louvers directed at the driver and three (3) adjustable louvers directed at the officer
- Dual overhead units, with five (5) adjustable louvers shall be mounted above the rear facing seat positions on the driver and officer side of the cab
- A minimum of 880 CFM of air flow measured at the front seated positions and 1580 CFM of air flow per side in the rear seated positions for a combined total of 4040 CFM of air flow in the cab. No Exceptions.
- The heater shall be plumbed with a shut off valve at the engine, so that the coolant bypasses the heaters.

# AIR CONDITIONING

The air conditioning system shall feature:

- A minimum of 96,000 BTU/hour of cooling capacity to the entire cab.
- One (1) evaporator shall be located under the center dash and Two (2) crew overhead evaporators located near the B-pillar on each side of the cab allowing for greater frontal visibility for the forward facing crew seating and allowing for more interior mounting of accessories.
- A gravity condensation drain system shall be utilized. These drains shall remove all
  condensation from the evaporator units and direct it to the exterior of the chassis cab for optimal
  performance. Systems utilizing pumps to remove condensation, or gravity systems with poles or

other obstructions located within the cab to route drains through shall not be acceptable. No Exceptions.

- Substantial air movement for optimum cooling shall be provided to the driver and officer positions, with six (6) adjustable louvers, located in the dash, three (3) adjustable louvers shall be directed at the driver and three (3) adjustable louvers shall be directed at the officer
- The air condition system shall be capable of cooling the cab from 110 degrees Fahrenheit (43.33 degrees Celsius) to 70 degrees Fahrenheit (21.11 degrees Celsius) at 60% humidity in less than 30 minutes with an engine RPM of 1400; and cool the cab from 100 degrees Fahrenheit to 73 degrees Fahrenheit at 80% humidity, after a three (3) hour heat soak. A certification document from the testing facility shall be available upon request. No Exception.

Proposals offering ceiling mounted evaporator units in the center of the cab above or on the engine tunnel shall not be accepted as this is a safety consideration due to the lack of visibility and communication within the cab.

05-01-6010

# **CAB PAINT AIR CONDITIONING CONDENSER COVER**

The air conditioning condenser cover shall be made out of aluminum and shall be painted to match the roof color. Plastic condenser covers will not be acceptable. No Exception.

SHOP NOTES

SAME COLOR AS ROOF

05-02-0047

#### **HEATER HOSE**

The heater hose inside the cab for the HVAC system shall be premium silicone hose.

05-02-0200

#### **CONDENSER**

The cab air conditioning system shall include one (1) low profile HE-condenser which shall be centered forward on the roof of the cab.

08-02-0121

### **HEATING AND COOLING CONTROLS**

The HVAC system shall be controlled through all available vistas, and the HVAC system for the crew area shall be controlled through a manual panel located in the crew area.

08-02-0100

# REAR CREW AREA CONTROLS -CENTERED OVERHEAD

The controls for the crew area heat shall be mounted overhead, centered between the rear facing seating position.

03-09-00X4

#### 4-FRONT AIRBAGS AND ROLLTEK

### 4-FRONT AIRBAGS

The Apparatus shall be equipped with a safety system designed to protect occupants in the event of a rollover or frontal impact and shall include IMMI's RollTek and 4-Front.

The 4-Front system shall provide protection during a frontal or oblique impact event. The system shall activate when the vehicle decelerates at a predetermined G force known to cause injury to the occupants. The frontal sensor that will make this determination has been calibrated through extensive testing to optimize the timing for firing the 4-Front system.

The 4-Front system shall deploy the following components in the event of a frontal or oblique impact event:

- Driver side front air bag
- Officer side knee air bag
- Seat Belt Buckle pre-tensioners

### **ROLLTEK**

The Apparatus shall be equipped with the IMMI RollTek system which will provide protection during a slow or fast 90 degree rollover. The system shall analyze the vehicle's angle and rate of roll to determine the exact time for optimal protection.

This system shall include the following:

- Driver and Officer Inflatable Tubular Structure (ITS)
- Crew seats shall be equipped with an (SRA) Side Rollover Airbag on all outboard seating positions which are located within 6" of the outer wall.
- All seat belts shall also have a buckle pre-tensioner to tighten the belts down to maximize protection of the occupant (no exception)

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

Officer, 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 shall deploy the front driver and officer air bags, and activate the seat belt pre-tensioners on suspension seats to restrain the seat in the lowest travel position. Seat belts will firmly hold both occupants in place.

The cab and chassis design shall have been subjected to a 21 MPH crash impact during frontal and oblique impact testing. Testing shall include all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspension components, fame rail cross members, engine and transmission and their mounts, frame extensions and body mounts. The testing shall provide configuration specific information used to optimize the timing for firing the air bags.

03-09-0100

## **SEAT AND SEAT BELT COLOR**

This seat in the cab shall be gray in color with a red seat belt.

03-09-060C

# **DRIVER SEAT-RollTek**

The driver's seat shall be a 911 Seats XL, wide series for Rolltek. The seat shall be designed with Fire Fighters' needs in mind; the XL Series encompasses Originality, Safety, Functionality, and Versatility.

Standard features of this 10way Non SCBA 3pt ABTS (all belts to seats) include 108 degree recline, adjustable headrest, wide contoured back with 2 way adjustable lumbar.. Electronic adjustments include fore/aft, up/down, front/rear tilt.

The seat shall feature an XL 22-inch-wide comfort cushion including Seats Incorporated exclusive EVC (elastomeric vibration control); easing tailbone pressure, enhancing comfort and reducing vibration by up to 50%. Also part of this system our D2 (dual density) foam combining a soft topper foam pad further enhancing comfort, and a high density bottom foam base to promote longevity. No Exception.

The seat(s) shall have a 7-year manufactures warranty no exception.

Cushion reinforced with French seaming and is NFPA compliant with an occupancy sensor.

03-09-000A

### SEAT BELT SINGLE RETRACTOR

The seat shall feature 3pt ABTS (all belts to seats). The seat belt shall feature Ready Reach to ensure that the seat belt is easy to see and grab while in full turnout gear.

03-09-0121

#### SEAT BACK

The seat back shall incorporate a standard style headrest.

03-09-02X3

# **SEAT MOUNTING DRIVER**

The driver's electric seat shall be installed in an ergonomic position in relation to the cab dash.

The power seat or seats installed in the cab shall be wired directly to battery power.

03-09-0902

#### **SEAT MATERIAL**

The seats shall include Turnout Tuff material; this urethane-coated denier nylon is water repellent to 75 PSI of water Pressure. Suitable for Heavy Duty applications, this cloth has a bursting strength of 300+ pounds per foot and surface abrasion of 1000+ cycles-Heavy Grit Wheel. Modeled after Turnout Gear, this material contains a rip-stop weave stopping unraveling if punctured standing up to hard working environments. Turnout Tuff is manufactured to meet flammability requirements including FMVSS 302, UFAC class 1, and California Fire Code Technical Bulletin No. 117 Section E.

03-09-0920

#### **SEAT BACK LOGO**

The seat back shall include the "Rosenbauer" logo. The logo shall be centered on the standard headrest of the seat back.

03-09-3010

### DRIVER SEAT BOX STORAGE COMPARTMENT

There shall be a storage area under the driver's seat. The compartment shall be 21.25 inches wide, 22.50 inches long, and 6.25 inches high. The access opening shall be 12.00 inches wide and 4.50 inches high.

03-09-3236

#### ALUMINUM ACCESS DOOR

There shall be an aluminum door cover provided for the driver and officer seat compartment. The door shall be coated to match the interior of the cab, and it shall be equipped with a piano style hinge and a manual latch.

03-09-063E

# **OFFICER SEAT**

The Officer's seat shall be a 911 Seats Incorporated XL, wide series seat for Rolltek. The seats shall be designed with Fire Fighters' needs in mind; the XL Series encompasses Originality, Safety, Functionality, and Versatility.

Standard features of this 10way Non SCBA 3pt ABTS (all belts to seats) include 108 degree recline, adjustable headrest, wide contoured back with 2 way adjustable lumbar. Electronic adjustments include fore/aft, up/down, front/rear tilt.

The seat shall feature an XL 22-inch-wide comfort cushion including Seats Incorporated exclusive EVC (elastomeric vibration control); easing tailbone pressure, enhancing comfort and reducing vibration by up to 50%. Also part of this system our D2 (dual density) foam combining a soft topper foam pad further enhancing comfort, and a high density bottom foam base to promote longevity.

The seat(s) shall have a 7-year manufactures warranty no exception.

Cushion reinforced with French seaming and is NFPA compliant with an occupancy sensor.

03-09-000A

#### SEAT BELT SINGLE RETRACTOR

The seat shall feature 3pt ABTS (all belts to seats). The seat belt shall feature Ready Reach to ensure that the seat belt is easy to see and grab while in full turnout gear.

03-09-0902

# SEAT MATERIAL

The seats shall include Turnout Tuff material; this urethane-coated denier nylon is water repellent to 75 PSI of water Pressure. Suitable for Heavy Duty applications, this cloth has a bursting strength of 300+ pounds per foot and surface abrasion of 1000+ cycles-Heavy Grit Wheel. Modeled after Turnout Gear, this material contains a rip-stop weave stopping unraveling if punctured standing up to hard working environments. Turnout Tuff is manufactured to meet flammability requirements including FMVSS 302, UFAC class 1, and California Fire Code Technical Bulletin No. 117 Section E.

03-09-0920

#### **SEAT BACK LOGO**

The seat back shall include the "Rosenbauer" logo. The logo shall be centered on the standard headrest of the seat back.

03-09-3020

# OFFICER'S SEAT BOX STORAGE COMPARTMENT

There shall be a storage area under the officer's seat. The compartment shall be 19.75 inches wide, 17.50 inches long, and 6.25 inches high. The access opening shall be 9.00 inches wide and 4.50 inches high.

03-09-065A

## REAR FACING OUTER SEAT(S)-RollTek

Two (2) rear facing outer crew area seat(s) shall be 911 Seats Incorporated XL, wide series fixed bottom seat(s) for RollTek. The seats shall be designed with Fire Fighters' needs in mind; the Battalion Series encompasses Originality, Safety, Functionality, and Versatility.

The seat(s) shall also feature a 21-inch-wide XL comfort cushion including Seats Incorporated exclusive EVC (elastomeric vibration control); easing tailbone pressure, enhancing comfort and reducing vibration by up to 50%. Also part of this system our D2 (dual density) foam combining a soft topper foam pad further enhancing comfort, and a high density bottom foam base to promote longevity. Seat to include wide comfort back with contoured foam. No Exception.

The seat(s) shall have a 7-year manufactures warranty no exception.

Cushion reinforced with French seaming and is NFPA compliant with an occupancy sensor.

SHOP NOTES

Belt Orientation- LH & RH to Door

03-09-000A

## SEAT BELT SINGLE RETRACTOR

The seat shall feature 3pt ABTS (all belts to seats). The seat belt shall feature Ready Reach to ensure that the seat belt is easy to see and grab while in full turnout gear.

03-09-0126

#### SEAT BACK SMARTDOCK SCBA BRACKET

The seat shall include a SmartDock Gen 2 hands free SCBA bracket that utilizes a locking mechanism that engages during deceleration. The bracket shall hold the cylinder in place while in transit and release using no straps, levers, buttons or switches. This bracket shall be NFPA 1901 compliant.

03-09-0311

### **PARADE PANEL**

The seat shall come with a parade panel.

03-09-038A

# REAR FACING OUTER SEAT MOUNTING

Each rear facing outer seat shall be mounted facing the rear of the cab.

03-09-0902

#### **SEAT MATERIAL**

The seats shall include Turnout Tuff material; this urethane-coated denier nylon is water repellent to 75 PSI of water Pressure. Suitable for Heavy Duty applications, this cloth has a bursting strength of 300+ pounds per foot and surface abrasion of 1000+ cycles-Heavy Grit Wheel. Modeled after Turnout Gear, this material contains a rip-stop weave stopping unraveling if punctured standing up to hard working environments. Turnout Tuff is manufactured to meet flammability requirements including FMVSS 302, UFAC class 1, and California Fire Code Technical Bulletin No. 117 Section E.

03-09-0920

#### **SEAT BACK LOGO**

The seat back shall include the "Rosenbauer" logo. The logo shall be centered on the standard headrest of the seat back.

03-09-080A

# FORWARD FACING CENTER SEAT(S)-RollTek

Two (2) forward facing center crew area seat(s) shall be 911 Seats Incorporated XL, wide series fixed bottom seat(s) for RollTek. The seats shall be designed with Fire Fighters' needs in mind; the Battalion Series encompasses Originality, Safety, Functionality, and Versatility.

The seat(s) shall also feature a 21-inch-wide XL comfort cushion including Seats Incorporated exclusive EVC (elastomeric vibration control); easing tailbone pressure, enhancing comfort and reducing vibration by up to 50%. Also part of this system our D2 (dual density) foam combining a soft topper foam pad further enhancing comfort, and a high density bottom foam base to promote longevity. Seat to include wide comfort back with contoured foam. No Exception.

The seat(s) shall have a 7-year manufactures warranty no exception.

Cushion reinforced with French seaming and is NFPA compliant with an occupancy sensor.

SHOP NOTES

Belt Orientation- LH & RH to Door

Seats to be spaced a minimum of 8" apart

03-09-000A

#### SEAT BELT SINGLE RETRACTOR

The seat shall feature 3pt ABTS (all belts to seats). The seat belt shall feature Ready Reach to ensure that the seat belt is easy to see and grab while in full turnout gear.

03-09-0121

### **SEAT BACK**

The seat back shall incorporate a standard style headrest.

03-09-057A

## **SEAT MOUNTING FORWARD FACING CENTER**

The forward facing center seats shall be installed facing the front of the cab.

03-09-0902

#### **SEAT MATERIAL**

The seats shall include Turnout Tuff material; this urethane-coated denier nylon is water repellent to 75 PSI of water Pressure. Suitable for Heavy Duty applications, this cloth has a bursting strength of 300+ pounds per foot and surface abrasion of 1000+ cycles-Heavy Grit Wheel. Modeled after Turnout Gear, this material contains a rip-stop weave stopping unraveling if punctured standing up to hard working environments. Turnout Tuff is manufactured to meet flammability requirements including FMVSS 302, UFAC class 1, and California Fire Code Technical Bulletin No. 117 Section E.

03-09-0920

#### **SEAT BACK LOGO**

The seat back shall include the "Rosenbauer" logo. The logo shall be centered on the standard headrest of the seat back.

03-09-3102

### SEAT FRAME FORWARD FACING ENCLOSED

The forward facing center seats shall include an enclosed seat box which is located and installed on the rear wall.

The seat frame shall be constructed of no less than 5052-H32 .19" thick aluminum plate.

03-09-3212

#### SEAT FRAME FORWARD FACING ACCESS

The seat frame shall include three (3) cutouts. There shall be one on each side facing the rear crew doors, and one in the center facing the engine tunnel for access.

03-09-3216

### SEAT FRAME FORWARD FACING ACCESS

The seat frame shall include three (3) diamond plate doors, one (1) on the driver side and one (1) on the officer side, facing the rear crew doors, and one in the center of the wall facing the tunnel for access.

03-09-4005

# **SEAT COMPARTMENT FINISH**

The seat frame shall be finished in a high performance polyurethane coating. The color shall be gray.

04-05-2005

#### **EXTERIOR GRAB HANDLES**

One (1) 18" exterior assist handle shall be mounted behind each of the cab doors. The grab handle shall be mounted on stanchions and made of 1.25" diameter aluminum to enable non-slip assistance with a gloved hand and mounted on stanchions. The handle shall feature white LED lights which shall illuminate when the respective door is opened. The handles shall be mounted to the cab with nutserts. No Exception.

08-01-0800

# **GRAB HANDLE LIGHT ACTIVATION**

The grab handle lights shall activate when the park brake is engaged.

04-08-0010

#### **CAB FASCIA**

The cab fascia shall offer a traditional, yet aggressive appearance, in its design and shall be constructed of work-hardened 5052-H32 aluminum. This design shall feature:

- A super structure which is fully welded to the cab, for a seamless and robust integration
- Thermoformed headlamp bezels, constructed of impact resistant, polycarbonate composite which
  is vacuum metalized to eliminate pealing and bubbling of a chrome type film or plating
- Traditional style headlight bezels with 4 x 6 high intensity headlights which shall add a classic look to the fascia while improving visibility

04-08-0140

### **FRONT GRILLE**

A prominent front grille shall punctuate the aggressive design of the cab with its outboard wing style warning light bezels and heavy framework. The front grille shall feature:

- Fabricated construction for superior strength and durability
- Stainless Steel mirror finish for a distinctive appearance

• Up to six (6) warning light locations along the mid bar for a variety of warning light combinations

04-08-0022

## **LIGHT BEZEL**

The front grille shall include wing light bezels. The bezels shall be constructed of a stainless material and shall be capable of holding two (2) 4" x 6" warning lights.

04-08-0052

### DEPARTMENT NAME IN CENTER GRILLE BAR

The fire department's name shall be laser cut into the center bar of the stainless steel grille. There shall be rooom for up to ten (10) characters that are three-inch (3") tall.

04-08-0053

## **GRILLE BACK LIGHTING**

The fire department's name shall be back lit in red. The grille light shall come on with the E-Master switch or when the park brake is set.

08-01-1502

Backlit Grille Bar Activation - VMux

04-08-0072

## FRONT GRILLE - UNITED STATES OF AMERICA FLAG INLAY

An American Flag shall be painted over the front grille honeycomb inlay, with a minimum of two (2) coats of clear coat to help protect the painted surface.

06-03-2022

#### **FLUID FILLS & CHECK**

For ease of maintenance and access, the following fluid checks shall be located behind the tiltable and/or removable mesh panel:

- Engine Oil dipstick
- Engine Coolant Sight Glass
- Power Steering Fluid dipstick
- Windshield Washer Fluid

The following fluid fill shall be located behind the tiltable and/or removable mesh panel:

- Power Steering
- Windshield Washer

Proposals including access to fluid checks through the tunnel or by raising the cab shall not be considered.

08-00-0504

### **LED HEADLIGHTS**

A quadruple headlight assembly shall be provided in the fascia to enhance the look. The shall be JW Speaker model 8800 Evolution 2 LED high and low head lamps. The headlights will exceed the proposed FMVSS 108 standard in at least three criteria, meeting 5-star compliance. The head shall meet DOT, Transport Canada ECE and Military standards and requirements.

08-00-0540

### **HEADLIGHT LOCATION**

The headlights shall be located on the front fascia in the upper buckets, on each side of the cab grille.

SHOP NOTES

104 OS, 105 OS, and 104 DS, 105 DS

08-00-0606

## SIDE MARKER LIGHTS

Two (2) Weldon amber LED round, side marker light assemblies shall be mounted on the side of the cab ahead of the driver door, adjacent to the front head lamp bezel.

08-00-0608

### FRONT MARKER LAMPS

The cab front shall include five (5) LED amber marker lamps above the windshield in accordance with the Department of Transportation requirements.

08-00-060F

#### FRONT TURN SIGNALS

Two (2) Whelen SurfaceMax LED square front turn signal assemblies shall be supplied. Each turn signal shall be mounted in an attractive façade style bezel which is an integral part of the fascia.

SHOP NOTES

NOT AVAILABLE IN THE WING

08-00-0630

#### TURN SIGNAL LOCATION

The turn signals shall be located on the front fascia directly below the headlights, one each side of the cab grille.

SHOP NOTES

106 OS & DS

08-01-0303

## **HEADLIGHT AND MARKER LIGHT ACTIVATION**

The head light and marker lights shall be activated through a switch on the driver's panel.

08-00-0608

04-08-0151

#### **CAB FENDERS**

The cab wheel wells shall include full width, 14-gauge 304 polished, stainless-steel cab fenders to resist corrosion and enable easier cleaning maintenance. The inner liner, measuring 18" wide shall be constructed of plastic with an outer fenderette measuring 2.5" wide. The inner liner shall be installed with 410 stainless-steel hardware that has been coated with black zinc oxide.

04-09-0300

## **COMMANDER LOGO**

A COMMANDER logo shall be installed on each side of the chassis cab.

04-10-0351

# FRONT MUD FLAPS

The cab and chassis shall be provided with rubber front mud flaps.

05-00-0227

#### AIR RIDE CAB AND CAB TILT SYSTEM

The cab shall be a full tilt style. A hydraulic cab lift system shall be provided consisting of an electric powered hydraulic pump, dual lift cylinders, and necessary hoses and valves.

The dual lift cylinders shall lift the cab 45 degrees from a horizontal plane facilitating easy engine maintenance. The chassis engine shall be able to be removed if required without tilting the cab beyond 45-degrees.

The center line of the chassis cab tilt shall be a minimum of 76" from the center line of the front axle, providing a large corridor between the cab and front tire for maximum work space and accessibility to fan, fan belt, fan drive, air compressor, power steering pump, alternator and air filter.

The tilt angle shall allow access to the engine and area under the cab without contacting any components mounted to the gravel shield.

The cab shall include a four (4)-point cab pivot and mounting system; two of the points shall be rubber isolators, and the two rear mounts shall be air bag mounting system. The set of air bags will be installed and incorporated into each rear cab lock down mechanism. The air bags shall be connected to the chassis air system and include an air leveling valve that adds and releases air to

maintain a level cab. The rear air bags shall be isolated from the chassis frame to reduce the transfer of road vibrations and frame torque into the cab, while providing superior handling characteristics.

The front cab pivot assemblies shall be a 1/2" A36 steel plate with a .31" thick 2-1/2" diameter tube cross member mechanically attached to the cab and frame. There shall be two (2) greaseable rubber isolated engineered bushings to reduce the transfer of road vibrations into the cab.

The cab shall be locked down by a two (2)-point automatic spring-loaded hook mechanism that actuates after the cab has been lowered.

The cylinders shall include blocking valves (velocity fuses) which prevent motion when no control buttons are pushed. In the event of a hydraulic system failure, the valves shall retain the fluid in the cylinders.

A redundant mechanical stay arm shall automatically be engaged once the cab has been fully raised. Before lowering the cab, this device must be disengaged using the stay arm control located on the driver's side rear of the cab, providing the operator protection from high engine exhaust temperatures. The stay arm shall be safety yellow for high visibility so that it is easy to see whether the arm is in place or not. No Exception

All mounting points shall be bolted directly to the frame rail.

The cab lift safety system shall be interlocked with the parking brake. The cab tilt mechanism shall be active only when the parking brake is set and the battery master switch is in the on position. If the parking brake is release, the cab tilt mechanism shall be disabled.

There shall be a manual pump incorporated in the event of a system failure to the cab tilt system.

A warning light shall illuminate in the cab instrument panel to indicate whenever the cab is not fully latched in the locked down position, and the parking break is release.

05-00-0021

### **CAB TILT LIMIT SWITCH**

An adjustable cab tilt limit switch shall be included with the cab tilt system. The switch shall effectively limit cab's travel to avoid impact with bumper mounted items, or station ceiling clearance, when being tilted.

There shall be a safety bar to hold the cab at the new adjusted height for additional safety.

05-00-0045

## CAB TILT LOCK DOWN INDICATOR

The cab dash shall include a message located within the dual air pressure gauge which shall alert the driver when the cab is unlocked and ajar. The alert message shall cease to be displayed when the cab is in the fully lowered position and the hold down hooks are secured and locked to the cab mounts.

In addition to the alert message an audible alarm shall sound when the cab is unlocked and ajar and the parking brake is released.

05-00-7002

# **REARVIEW MIRROR**

Ramco model CRM-310-1352-PHCHR bus style mirrors shall be provided. The mirror heads shall be injection molded chrome plated ABS plastic and shall measure 9.5" wide x 13.5" high. The mirrors shall be mounted one (1) on each front cab corner radius below the windshield with 18" long polished cast aluminum arms.

The mirrors shall feature a lower heated remote controlled convex glass with an upper heated remote controlled flat glass. The mirror control switches shall be located within easy reach of the driver. The mirrors shall be manufactured using the finest quality non-glare glass and shall feature a rigid mounting thereby reducing vibration. The mirrors shall be corrosion free under all weather conditions.

08-01-0821

#### REARVIEW MIRROR REMOTE ACTIVATION

The driver's panel shall include activation for the rearview mirrors remote function. The driver panel shall also include a switch activating the mirrors to be heated.

05-01-5015

# **CAB TWO TONE PAINT**

The cab surface shall be thoroughly washed with grease cutting solvent (PPG DX330) prior to any sanding. The cab surface shall then be sanded and minor imperfections filled and sanded. The prepared surface shall then be washed again with (PPG DX330) to remove any contaminants from all surfaces to be painted.

The first coating to be applied shall be a pre-treat epoxy primer (.5 to 1.0 dry film build) for maximum adhesion to the body material. The next two to four coats shall be a polyurethane primer resurfacing agent (PPG F4936). The film build shall be 4-6 mils when dry. The primer coat, after appropriate dry time, shall be sanded with 320-600 grit sandpaper to ensure a maximum gloss finish. The last step shall be an application of at least three coats of PPG FDG polyurethane two-component color (single stage). The film build shall be 2-3 mils when dry. The single stage polyurethane shall provide a UV barrier to prevent fading and chalking.

The cab shall then be painted with the specific colors designated by the customer with a minimum thickness of 2.00 mils of finished paint, followed by a clear top coat not to exceed 2.00 mils.

05-01-5020

### **CAB PAINT UPPER**

The upper cab color shall be PPG white.

SHOP NOTES

Paint Brand (if other than PPG); Paint Color; Paint Number;

Paint Process:

05-01-5021

# CAB PAINT LOWER

The lower or primary cab color shall be PPG red.

SHOP NOTES

Paint Brand (if other than PPG); Paint Color; Paint Number:

Paint Process:

05-01-6051

# CAB UNDERCOAT

The cab shall have an undercoat applied prior to the cab being set on the running gear. The under coat shall be a waterborne, one-component, air dry undercoat formulated to prevent chipping, cracking and marring of painted or unpainted surfaces after exposure to high impact sand, gravel or other abrasive materials. It shall also have high corrosion resistance.

05-01-7000

### **PAINT SPRAY OUT**

The customer shall be supplied with a paint spray out for customer approval prior to the cab being painted.

07-05-010D

### **FRONT AXLE**

The front axle beam shall be rated to carry 24,000 lbs. and consist of a fabricated box cross section construction with 100ksi plate and a continuous beam architecture to minimize stress points for added durability. The box shaped cross section resists horizontal, vertical, and twisting forces more effectively than traditional I-beam axles while helping to reduce dynamic camber and toe changes therefore a traditional I-beam axle shall not be considered. The axle shall incorporate a removable kingpin feature for ease of kingpin serviceability. The knuckles shall allow for compatibility with disc brakes mounted at the 12 o'clock position and with drum brakes, and allow for wheel cut up to 45 degrees. They shall also utilize premium kingpin bushings and seals to provide enhanced protection from the elements to improve bushing life.

The axle shall be warrantied for five (5) years or five hundred thousand (500,000) miles whichever comes first. No Exception.

07-05-0120

# FRONT WHEEL BEARING LUBRICATION

The front axle wheel bearings shall be lubricated with oil. The oil level can be visually checked via clear inspection windows in the front axle hubs.

07-05-0276

### **FRONT SUSPENSION**

The suspension shall consist of multi-leaf parabolic springs with double wrapped front eye that are packaged within an integrated clamp group that allows for ease of OEM assembly on to the axle beam and reduced part count. The clamp group bolts are tightened on the top of the clamp group opposed to the traditional U-bolt on the bottom making it easier to access with a torque wrench for servicing. The spring shall also include a lower shock attachment with an upturned eye. The springs will contain threaded pin bushings to allow simplification of spring alignment as well as long service life and improved ride quality. The suspension and spring geometry will be optimized to provide improved bump steer and Ackermann. Two ZF Sachs twin-tube shocks shall be provided with the front suspension assembly. The shocks shall be specially developed for parabolic leaf springs with a digressive characteristic curve using a patented piston system. The shocks shall feature multi-stage piston and base valves. The combination of valves shall achieve the desired damping characteristics that are ideal for the application. The suspension shall be rated for a minimum of 24,000 lbs. No Exception.

07-05-0341

### POWER STEERING GEAR WITH ASSIST

The power steering gear shall be a TRW model TAS 85 and shall include the following:

- A balanced, hydraulic, positive displacement, sliding vane power steering pump which is gear driven from the engine
- One-piece, 2" diameter drag link for maintaining consistent wheel alignment resulting in less maintenance.
- The steering gear shall be mounted on a plane that is at a 9-degree angle in relationship to the
  center plane of the chassis. This mounting technique is designed to reduce the operating angle of
  input steering shafts. A more direct, responsive, and smoother handling vehicle will result from
  these unique design characteristics.

A certified torque and geometry study by TRW shall be available upon request.

07-06-0420

# **CHASSIS ALIGNMENT**

The chassis frame rails shall be measured to insure the length is correct and cross checked to make sure they run parallel and are square to each other. The front and rear axles shall be laser aligned. The front tires and wheels shall be aligned and toe-in set on the front tires by the apparatus manufacturer.

Alignment documentation shall be available upon request.

07-07-0001

425 Front Tires

07-06-0522

## FRONT AXLE CRAMP ANGLE

The chassis shall have a front axle cramp angle of 45 degrees to the left and right.

07-07-0201

# **FRONT TIRES**

The front tires shall be Michelin 425 65R 22.5 "L" tubeless radial XFE regional tread.

The front tires shall feature:

• A stamped load capacity of 22,800 pounds per axle with a speed capacity of 65 miles per hour when properly inflated to 120 pounds per square inch, and a 24,396 pound per axle intermittent service rating.

07-06-0436

### **TIRE BALANCING**

There shall be counter acting balancing beads used in all of the tires.

07-07-0720

#### FRONT WHEEL

The front wheels shall be Alcoa hub piloted, 22.50 inch X 12.25 inch polished aluminum wheels. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts. The wheels shall feature one-piece forged strength and a polished finish that lasts.

07-08-0203

#### FRONT BRAKES

The front brakes shall be Meritor EX225 Disc Plus disc brakes with 17" vented rotors. The disc brakes shall be provided with visual wear indicators.

The front brakes shall include brake chambers supplied by Meritor and shall be approved per application.

07-05-0303

## STEERING WHEEL AND COLUMN

The cab shall include a Douglas Autotech steering column. The steering column shall feature an 18", four (4) spoke steering wheel located at the driver's position; a five (5) position tilt and 2.25" telescopic adjustment. The steering wheel shall be provided with a black vinyl cover with foam padding and a horn button, self-canceling turn signal switch, four-way hazard switch and headlamp dimmer switch.

The chassis shall include dual electric 12-volt horn with a minimum 110 decibels.

07-06-0112

### **REAR AXLE**

A Meritor RT-58-185 tandem driving axle shall be incorporated as the rear axle for the chassis. The axle shall feature:

- Rated capacity of 63,000 pounds
- Heavy duty Hypoid gearing for longer life, increased strength and quieter operation
- Industry-standard wheel ends for compatibility with both disc and drum brakes, and unitized oil seal technology to keep lubricant in and help prevent contaminant damage
- Rigid differential case for high axle strength and reduced maintenance
- Rugged Dependability
- Rectangular shaped, hot formed housing with a standard wall thickness at spring seat of .56" for extra strength and rigidity
- 2-year warranty

## **REAR AXLE DIFFERENTIAL LUBRICATION**

The rear axle differential shall be lubricated with oil.

## **REAR WHEEL BEARING LUBRICATION**

The rear axle wheel bearings shall be lubricated with oil.

07-06-0282

## **REAR SUSPENSION**

The tandem rear axle shall feature a Hendrickson ULTMAAX<sup>TM</sup> severe duty rubber ride suspension. The suspension shall be designed to balance outstanding durability, load stability, and mobility. The system shall offer increased stability as the load increases.

The suspension shall feature

- Progressive rate springs.
- Inccreased stiffness as the load increases
- Long service life and easy replacement for reduced downtime
- High-roll stability characteristics

The rear suspension capacity shall be rated at 63,000 pounds.

07-08-0110

### **BRAKE SYSTEM**

A rapid build-up air brake system shall be provided. The air brakes shall include a three (3) air tank, four (4) reservoir system with a minimum of 5852 cubic inch of air capacity. A floor mounted treadle valve shall be mounted inside the cab for graduated control of applying and releasing the brakes. The system shall include an anti-compounding feature. All air reservoirs provided on the chassis shall be labeled for identification.

The rear axle spring brakes shall automatically apply in any situation when the air pressure falls below 25 PSI and shall include a mechanical means for releasing the spring brakes when necessary. An audible alarm shall designate when the system air pressure is below 60 PSI.

A six (6) sensor, six (6) modulator Anti-lock Braking System (ABS) shall be installed on the front and tandem rear axles in order to prevent the brakes from locking or skidding while braking during hard stops or on icy or wet surfaces. This in turn shall allow the driver to maintain steering control under heavy braking and in most instances, shorten the braking distance. The electronic monitoring system shall incorporate diagonal circuitry which shall monitor wheel speed during braking through a sensor and tone ring on each wheel. A dash mounted ABS lamp shall be provided to notify the driver of a system malfunction. The ABS system shall automatically disengage the auxiliary braking system device when required. The speedometer screen shall be capable of reporting all active defaults using PID/SID and FMI standards.

Additional safety shall be accommodated through Automatic Traction Control (ATC) which shall be installed on the tandem rear axle. The ATC system shall apply the ABS when the drive wheels loose traction. The system shall scale the electronic engine throttle back to prevent wheel spin while accelerating on ice or wet surfaces.

The Electronic Stability Control (ESC) unit is a functional extension of the electronic braking system. It is able to detect any skidding of the vehicle about its vertical axis as well as any rollover tendency. The control unit comprises an angular-speed sensor that measures the vehicle's motion about the vertical axis, caused, for instance, by cornering or by skidding on a slippery road surface. An acceleration sensor measures the vehicle's lateral acceleration. The Controller Area Network (CAN) bus provides information on the steering angle. On the basis of lateral acceleration and steering angle, an integrated microcontroller calculates a theoretical angular speed for the stable vehicle condition.

The Meritor Wabco ABS and ESC system shall come with a three (3) year/300,000 mile parts and labor warranty.

SHOP NOTES

w/ air manifold

07-08-0252

## **REAR BRAKES**

The rear brakes shall be Meritor 16.50 inch X 8.63 inch S-cam drum type.

The rear brakes shall include brake chambers supplied by Meritor and shall be approved per application.

# REAR BRAKE SLACK ADJUSTERS

The rear brakes shall include Meritor automatic slack adjusters installed on the axle which features a simple, durable design offering reduced weight. The automatic slack adjusters shall feature a manual adjusting nut which cannot inadvertently be backed off and threaded grease fittings for easy serviceability.

07-06-0300

#### REAR SHOCK ABSORBERS

Shock absorbers shall be supplied by the suspension manufacturer and installed on the rear axle suspension.

07-06-0351

## **REAR AXLE DIFFERENTIAL CONTROL**

The tandem axles shall include an inter-axle differential lock which shall allow both axles to be engaged as drive axles.

08-01-0916

# INTERAXLE DIFFERENTIAL LOCK CONTROL ACTIVATION

The inter-axle differential lock control shall be activated through a switch on the driver's panel.

07-07-0450

## **REAR TIRES**

The rear tires shall be Michelin 315/80R 22.5 20PR "L" tubeless radial XZA2 ENERGY highway tread.

The rear tires shall feature:

• A stamped load capacity of 33,080 pounds per axle with a speed capacity of 75 miles per hour when properly inflated to 130 pounds per square inch

07-06-0436

## **TIRE BALANCING**

There shall be counter acting balancing beads used in all of the tires.

07-07-0833

## **REAR WHEEL**

The rear wheels shall be Alcoa hub piloted, heavy duty, 22.50 inch X 9.00 inch aluminum wheels. Each outer wheel shall have a polished aluminum finish on the exterior surface and each inner wheel shall have a machine finish. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts.

07-07-0620

# **VALVE STEM EXTENSION - TANDEM AXLE**

To allow for easy checking and inflation of the rear inner tires shall be equipped with a multilayer valve stem extension, the layers shall be as follows: starting from the inner to out layer, stainless steel metal core, air tube, stainless steel jacket, protective color.

07-07-0993

### **VEHICLE TOP SPEED**

The top speed of the vehicle shall be programmed at approximately 60 MPH +/-2 MPH at governed engine RPM.

07-08-0189

## AIR TANK BRACKETS & STRAPS

The air tank(s) shall be mounted to the frame rail with brackets that are hot dipped galvanized thereby creating a barrier and cathodic protection from corrosion, and eliminating the requirement for finish paint and the subsequent requirements for touch up paint and/or total repaint after a period of time due to nicks, chips and corrosion. Powder coated or painted air tank brackets shall not be accepted. No exception.

All of the air tank straps shall be plastic coated stainless-steel cable. No Exception.

07-08-0301

## PARK BRAKE

Upon application of the push-pull valve in the cab, the rear brakes will engage via mechanical spring force. This is accomplished by dual chamber rear brakes, satisfying the FMVSS parking brake requirements.

Park brake system shall include an anti-compounding feature.

08-02-0130

### PARK BRAKE CONTROL

A Meritor-Wabco manual hand control push-pull style valve shall operate the parking brake system. The control shall be yellow in color.

The parking brake actuation valve shall be mounted on the driver's side dash to the right of the steering column within easy reach of the driver.

07-08-0410

### AIR DRYER

The brake system shall include a Wabco System Saver 1200 Plus air dryer with an integral 100-watt heater with a Metri-Pack sealed connector. The system shall have an integrated purge volume and integrated governor.

The system shall have the following features:

- Premium desiccant provides greater water adsorption
- Replaceable spin on cartridge for simple maintenance
- Compact light weight design
- Pressure relief safety valve
- Turbo cut-off valve for boosted compressor applications
- Service components are external for easy replacement
- Common service components proven for reliability and quality
- Integrated with the air governor.

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07-08-0551

# **MOISTURE EJECTORS**

Manual pet-cock type drain valves shall be installed on all reservoirs of the air supply system.

07-08-0572

### **AIR SUPPLY LINES**

A dual air system plumbed with color coded reinforced nylon tubing air lines shall be installed on the chassis. The primary (rear) brake line shall be green, the secondary (front) brake line orange, the parking brake line yellow and the auxiliary (outlet) will be black; in accordance with SAE standards. No Exception.

Compression type fittings shall be used on the nylon tubing. All drop hoses shall include fiber reinforced neoprene covered hoses.

07-08-0725

## **AIR HORN RESERVOIR**

One (1) air tank, with a 1200 cubic inch reservoir, shall be installed on the chassis to act as a supply tank for operating air horns. The reservoir shall be isolated with a 90 PSI pressure protection valve on the reservoir supply side to prevent depletion of the air to the air brake system.

07-09-001C

### **FRAME**

To avoid frame cracking and failure over time, the top flange of the frame adjacent to the engine installation shall have a tapered design. Notches for engine components shall not be accepted due to fatigue and the potential for cracking.

The chassis frame shall consist of three (3) "C" style parallel rails, constructed of high strength low alloy and shall feature the following:

- A Stenx **MODEL 110XF** 10.19" high by 3.63" deep cold rolled steel frame or equivalent.
- Inner channel measuring 9.31" high x 3.25" deep x .25" thick
- Third channel measuring 8.69" high x 3.00" deep x .25" thick
- The 10.19" frame height shall be maintained throughout the entire length of the frame to allow for maximum storage capacity for the entire apparatus.
- If frame rails that are larger than those specified are to be utilized, the maximum height of each frame rail shall not exceed 10.25" at any point on the frame rail. This will ensure the lowest possible vehicle center of gravity allowing maximum stability as well as providing the lowest body height possible.
- Frame rail shall have a consistent frame web throughout the entire length.

- The entire frame rail design shall be manufactured in the United States of America and readily available on the aftermarket.
- Grade 8 Structural fasteners, Huck bolts shall not be acceptable. No Exception.
- The hardware used for the chassis shall be are to be corrosion resistant. The process shall be dipspin-bake coated with two coats of zinc/aluminum metal flake coating in an inorganic binder. Coating one is to be zinc flake and coating two is to be aluminum flake. The zinc flakes sacrificially corrode to protect the base metal. The aluminum flakes prolong the life of the zinc. Salt fog test life, based on ASTM B117 on unassembled fasteners, is 1000 hours to red rust. The same test on assembled fasteners is 750 hours to red rust. The two step coating is RoHS compliant as it eliminates the hexavalent chromium used in the passivation of electroplated zinc coatings to create yellow zinc (zinc dichromate). The elimination of the zinc plating also greatly reduces the likelihood that hydrogen embrittlement will occur. Hydrogen embrittlement is a side effect of electroplating that reduces toughness and can lead to fracture. No Exception
- Manufacturer's lifetime warranty

The frame ratings shall be as follows:

- 110,000 PSI minimum yield strength high strength low alloy steel
- Minimum Resisting Bending Moment (RBM) of 3,572,000-inch pounds per rail

To avoid frame cracking and failure over time, the top flange of the frame adjacent to the engine installation shall have a tapered design. Notches for engine components shall not be accepted due to fatigue and the potential for cracking. No Exceptions.

## **UNDER-FRAME REINFORCEMENT**

An under slung frame reinforcement shall be installed below the frame rails in the transmission area to increase the vertical rigidity of the frame.

The under-frame reinforcement provides:

- Enhanced handling
- Improved ride quality
- Increase resistance to frame and cross member fatigue
- Enhanced vehicle stability providing improved safety to occupants

## **CROSS MEMBERS**

There shall be a minimum of seven (7) steel plate cross members installed on the apparatus.

- 50,000 psi minimum yield strength steel plate cross members
- Manufacturer's lifetime warranty to match frame warranty. No Exceptions
- Installed with one-piece cross member gusset to maximize vertical strength and minimize cross member flex
- Crossmembers can be inverted when required to allow for PTO drive line installation without the need for notching or modifying the cross members in anyway. No Exceptions.

# **FRONT FRAME EXTENSION**

A single piece 80,000 PSI steel extension shall be installed on the front of the frame rails.

- Reduces frame flex which translates into improved vehicle handling and ride quality
- Designs using multiple piece, bolted together extensions will not be acceptable since they are prone to more flexing, possible frame failure and cab cracking
- Allows radiator to be removed through the bottom of the frame extension without tilting the chassis cab
- Minimizes damage to the chassis cab in the event of frontal impact accident
- Maintains structural integrity of the chassis frame rails while attaching bumper extensions of varying lengths
- Splayed or notched frame rails and/or extensions shall not be accepted
- Provides foundational strength and stability of the cab tilt system which provides superior access to engine and cooling components

07-09-0130

### **FRAME FINISH**

The frame shall be powder coated to resist weather, dirt and other corrosive material.

07-13-0302

## **TOW HOOKS**

Two (2) tow hooks shall be shipped loose. The tow hooks shall be steel and shall be powder coated black.

06-00-1590

### **ENGINE**

A Cummins X 15 liter diesel fueled, turbo charged engine shall feature the following:

- One of the highest power to weight ratios in its class
- Heavy-duty replaceable wet liners, roller followers, by-pass oil filtration with replaceable spin on cartridge and targeted piston cooling for longer service in tough work environments
- Improved cooled EGR system
- 912 cubic inches of displacement
- High pressure common rail fuel system producing a precise quantity of fuel at ultra high pressures
- Fully integrated, robust electronic engine controls
- Electric fuel lift pump. No Exceptions.

The engine shall be coupled with a Holset VGT<sup>TM</sup> (Variable Geometry Turbocharger).

The engine shall be filled with Citgo brand Citgard 500 (or equivalent) SAE 15W40 CJ4 low ash engine oil for proper engine lubrication.

The engine shall be EPA certified to meet the 2017 emissions standards without compromising performance, reliability or durability using cooled exhaust gas recirculation and selective catalytic reduction technology.

The engine shall include an original equipment manufacturer installed oil drain plug.

The engine shall include programming which will govern the top speed of the vehicle.

## **ENGINE PLACEMENT**

The engine shall be a maximum of 36" from the center line of the front axle to the front face of the engine block. The engine valve cover shall be a maximum of 23" from the top of the frame.

The engine placement shall provide optimal weight distribution to the front axle to enhance vehicle handling. More weight out in front of the front axle can cause a "fulcrum effect" and cause unsafe "bump steer" conditions.

The engine shall be mounted in a position that provides for the lowest possible height of the interior engine tunnel. An engine tunnel height from the floor of the chassis cab shall be no more than 21" high inside the cab.

## **AIR COMPRESSOR**

The air compressor provided for the engine shall be a Wabco<sup>®</sup> SS318 single cylinder pass-through drive type compressor which shall be capable of producing 18.7 CFM at 1200 engine RPMs. The air compressor shall feature a higher delivery efficiency translating to more air delivery per horsepower absorbed. The compressor shall include an aluminum cylinder head which shall improve cooling, reduce weight and decrease carbon formation. Superior piston and bore finishing technology shall reduce oil consumption and significantly increasing the system component life.

## AIR GOVERNOR

An air governor shall be provided to control the cut-in and cut-out pressures of the engine mounted air compressor. The governor shall be calibrated to meet FMVSS requirements. The air governor shall be integrated in the air dryer assembly.

06-00-1594

## **HORSEPOWER**

The engine shall have 600 horsepower at 1800 RPM, with a governed speed of 2100 RPM.

The engine shall have 1850-foot pounds of torque.

06-02-1130

### **ENGINE FAN DRIVE**

The engine cooling system fan shall incorporate a thermostatically controlled, one (1) piece eleven (11) blade Horton clutched type fan drive, and shroud.

When the clutched fan is disengaged it shall facilitate improved vehicle performance, cab heating in cold climates, and fuel economy. The fan clutch design shall be fail safe so that if the clutch drive fails, the fan shall engage to prevent engine overheating due to the fan clutch failure.

06-04-3000

The clutch fan shall automatically engage in pump mode (when applicable).

06-02-1526

### **AUXILIARY ENGINE BRAKE**

A Cummins engine compression brake, for the six (6) cylinder engine, shall be provided. The engine compression brake shall:

• Activate upon 0% accelerator when in operation mode and activate the vehicle's brake lights.

## TRANSMISSION PRE-SELECT

When the auxiliary brake is engaged, the transmission shall automatically shift to second gear to decrease the rate of speed. The transmission shall assist the secondary braking system, thereby slowing the vehicle.

08-01-0206

# AUXILIARY ENGINE BRAKE CONTROL

An auxiliary engine brake control device shall be included. The electronic control device shall monitor various conditions and shall activate the engine brake only if all of the following conditions are simultaneously detected:

- A valid gear ratio is detected.
- The driver has requested or enabled engine compression brake operation.
- The throttle is at a minimum engine speed position.
- The electronic controller is not presently attempting to execute an electronically controlled final drive gear shift.

The auxiliary brake shall be controlled through an on/off switch and individual low/medium/high selector switches on the Driver's panel.

06-03-1010

### ENGINE PROGRAMMING HIGH IDLE SPEED

The Engine high idle will be set at 1250 RPM. The high idle will be operational only when the parking brake is set and the truck transmission is in neutral.

06-03-1023

## **ENGINE HIGH IDLE CONTROL**

The vehicle shall be equipped with an automatic high-idle speed control. The high idle shall be pre-set so when activated, it will operate the engine at the appropriate RPM to increase alternator output and optimize output of the HVAC system.

This device shall operate only when the master switch is activated and the transmission is in neutral with the parking brake set. The device shall disengage when the operator depresses the brake pedal, or the transmission is placed in gear, and shall be available to manually through an virtual switch in the Vista, or automatically re-engage when the brake is set, or when the transmission is placed in neutral. A light on the Vista screen shall indicate the high idle speed control.

06-05-3030

### **ENGINE AIR INTAKE**

The engine air intake system shall include an ember separator air intake filter which shall be located behind the fascia.

The filter shall protect the downstream air filter from embers using a combination of unique flat and crimped metal screens constructed into a corrosion resistant steel frame.

This multilayered screen shall be designed to trap embers or allow them to burn out before passing through the pack, while creating only minimal air flow restriction through the system. Periodic cleaning or replacement of the screen shall be all that is required after installation.

The intake shall also feature a cyclone style water separator to remove unwanted moisture from incoming air.

The engine shall include an air intake filter which shall be bolted to the frame and located under the front of the cab. This dry type filter shall ensure dust and debris is safely contained inside the disposable housing, eliminating the chance of contaminating the air intake system during air filter service via a leak-tight seal.

The filter must have a capacity of no less than 1350 cubic feet of air per minute. The filter paper media must be of a flame retardant treated material. An electric air filter restriction indicator shall also be included with the system.

06-06-3738

## ENGINE EXHAUST SYSTEM

The exhaust system shall include a one-piece diesel particulate filter (DPF), a diesel oxidation catalyst, and a selective catalytic reduction catalyst (SCR) to meet current EPA standards.

The selective catalytic reduction catalyst shall utilize a diesel exhaust fluid solution consisting of urea and purified water to convert nitrogen oxide into nitrogen, water, and trace amounts of carbon dioxide. The solution shall be injected into the system between the DPF and SCR chambers.

The system shall utilize 0.065-inch-thick stainless steel exhaust tubing between the engine turbo and the DPF.

The after-treatment canister through the end of the tailpipe shall all be connected with zero leak gasketed clamps. The discharge shall terminate horizontally on the right side of the vehicle ahead of the rear tires with an exhaust gas diffuser.

The diffuser shall lower exhaust gas temperatures during the regeneration cycle.

06-06-4006

# **DIESEL EXHAUST FLUID TANK**

There shall be a molded cross linked polyethylene tank for the Diesel Exhaust Fluid (DEF). The tank shall have a capacity of not less than five (5) usable gallons (18.92 Liters) and shall be mounted on the left hand side of the chassis frame in front of the batteries below the frame.

The DEF tank shall be designed with capacity for expansion in case of fluid freezing. Engine coolant, which shall be thermostatically controlled, shall be run through lines in the tank to help prevent the DEF from freezing and to provide a means of thawing the fluid if it should become frozen.

06-06-4100

### DIESEL EXHAUST FLUID TANK

There shall be an access door provided in the top rear step of left side crew area for access to the DEF tank.

06-08-0100

## ENGINE EXHAUST ACCESSORIES

An exhaust temperature mitigation device shall be shipped loose for installation by the body manufacturer on the vehicle. The temperature mitigation device shall lower the temperature of the exhaust by combining ambient air with the exhaust gasses at the exhaust outlet.

06-08-0200

## **ENGINE EXHAUST WRAP**

The exhaust tubing between the engine turbo and the diesel particulate filter (DPF) shall be wrapped with a thermal cover in order to retain the necessary heat for DPF regeneration. The exhaust wrap shall also help protect surrounding components from radiant heat which can be transferred from the exhaust.

08-02-0140

# **DIESEL PARTICULATE FILTER CONTROLS**

Provide DPF system status annunciation indicator lights, lights shall be installed on driver dash to alert driver when regeneration is needed and when DPF is in an active re-generation cycle.

Warning systems shall provide DEF low level warning.

Driver's dash shall be provided with two (2) controls for the Diesel particulate filter; one (1) manual regeneration switch to activate a regeneration cycle manually when passive burn is unobtainable due to driving conditions; and one (1) Regen "Inhibit Switch".

The switches shall be located in a covered location.

06-04-2006

# **ENGINE COOLING SYSTEM**

The radiator and the complete cooling system shall meet or exceed NFPA and engine manufacturer cooling system requirements.

The system shall include and feature the following:

- A vertically stacked charge air cooler providing the maximum cooling capacity for the engine.
   Proposals offering horizontally stacked charge air cooler shall not be acceptable. No Exceptions
- The charge air cooler and radiator shall measure not less than 1382 square inches
- A surge tank with a low coolant probe and capable of removing entrained air from the cooling system, with built in sight glass
- Radiator re-circulation shields to prevent heated air from re-entering the cooling system and affecting performance
- Mounts allowing the entire radiator to drop through the frame for service when needed No Exceptions
- Engine placement shall provide a minimum of 8" between the engine fan and radiator to maximize the airflow and cooling of the engine.
- A Spin on Element water filter with corrosion inhibitor shall be provided for the cooling system.
   No Exception.
- The coolant filter shall be provided with two (2) shut off valves, one (1) one inlet and one (1) outlet. No Exception.

Cooling system shall be tested and certified by the engine manufacturer

## **COOLANT HOSES**

The cooling systems hose shall be formed silicone hose and formed aluminized steel tubing and include constant tension spring clamps.

## **ENGINE COOLANT**

The cooling package shall include Extended Life Coolant (ELC). The use of ELC provides longer intervals between coolant changes over standard coolants providing improved performance. The coolant shall contain a 50/50 mix of ethylene glycol and de-ionized water to keep the coolant from freezing to a temperature of -34 degrees F.

Supplemental coolant additives (SCA) are not required as this is part of the extended life coolant makeup.

06-05-1005

# ENGINE PUMP HEAT EXCHANGER

A single bundle type coolant to water heat exchanger shall be installed between the engine and the radiator. This pump heat exchanger shall circulate water from the fire pump to the heat exchanger thereby reducing the temperature of the coolant for the engine. The heat exchanger shall be designed to prohibit water from the pump from coming in contact with the engine coolant.

07-01-0102

### **TRANSMISSION**

The drive train shall include an Allison model EVS 4000 torque converting, automatic transmission which shall include electronic controls. The transmission shall feature two (2) 10-bolt PTO pads located on the converter housing; one (1) in the 8:00 o'clock position and one (1) in the 1:00 o'clock position.

The transmission shall include two (2) internal oil filters and Allison approved transmission fluid which shall be utilized in the lubrication of the EVS transmission. An electronic oil level sensor shall be included with the readout located in the shift selector.

The Gen transmission shall include prognostic diagnostic capabilities. These capabilities shall include the monitoring of the fluid life, filter change indication, and transmission clutch maintenance.

The transmission gear ratios shall be:

1st 3.51:1 2nd 1.91:1 3rd 1.43:1 4th 1.00:1 5th 0.74:1 6th 0.64:1 (if applicable) Rev 4.80:1

## TRANSMISSION COOLING SYSTEM

The transmission shall include a water to oil cooler system located in the cooling loop between the radiator and the engine. The transmission cooling system shall meet all transmission manufacturer requirements. The transmission cooling system shall feature continuous flow of engine bypass water to maintain uninterrupted transmission cooling.

## TRANSMISSION DRAIN PLUG

The transmission shall include an original equipment manufacturer installed magnetic oil drain plug.

# **AUTOMATIC NEUTRAL**

The transmission shall be provided with an automatic neutral. When the parking brake is applied the transmission automatically returns to neutral.

07-01-0502

### TRANSMISSION FLUID

The transmission shall include two (2) internal oil filters and Allison approved synthetic transmission fluid which shall be utilized in the lubrication of the EVS transmission. An electronic oil level sensor shall be included with the readout located in the shift selector.

07-02-0008

#### TRANSMISSION SHIFT SELECTOR

An Allison GEN V pressure sensitive range selector touch pad shall be provided and located on the tunnel to the right of the driver.

The shift selector shall provide an indicator on the digital display and shall alert the driver/operator when a specific maintenance function is required.

07-02-0013

## **PTO LOCATION**

The transmission driven power take off (PTO) shall be mounted in the 1:00 o'clock position.

07-02-0052

### TRANSMISSION MODE PROGRAMMING

The transmission, upon start-up, will select the fifth speed operation without the need to press the mode button.

07-02-0066

### TRANSMISSION PROGRAMMING

The EVS group package number 127 shall contain the 198 vocational package for the fire service for this apparatus as a Pumper. This package shall incorporate an automatic neutral with selector override. This feature commands the transmission to neutral when the park brake is applied, regardless of drive range requested on the shift selector which requires re-selecting the drive range to shift out of neutral for the override.

This package shall be coupled with the use of a split shaft PTO and incorporate pumping circuits. The transmission will detect the pump engaged signal and automatically select or deselect fourth gear lock-up. These circuits shall be used allowing the vehicle to operate in the fourth range lockup while operating the pump mode due to the 1 to 1 ratio through the transmission, therefore the output speed of the engine is the input speed to the pump. The pump output can be easily calculated by using this input speed and the drive ratio of the pump itself to rate the gallons of water the pump can provide.

A nine (9) pin diagnostic connector will be provided next to the steering column.

The trans module shall contain the following circuits:

Function ID	Description	Wire assignment
C	PTO Request	142
J	Fire Truck Pump Mode (4th Lockup)	122 / 123
C	Range Indicator	145 (4th)
G	PTO Enable Output	130
	Signal Return	103

07-02-0253

### **DRIVELINE**

All drivelines shall be heavy duty metal tube and equipped with Spicer 1810 series universal joints.

The shafts shall be dynamically balanced prior to installation to alleviate future vibration. In areas of the driveline where a slip shaft is required, the splined slip joint shall be coated with Glide Coat®.

07-04-0108

# FUEL FILTER/WATER SEPARATOR

The fuel system shall have a Fleetguard FS1065 fuel filter/water separator as a primary filter. The fuel filter shall have a drain valve.

A water in fuel sensor shall be provided and wired to an instrument panel lamp and audible alarm to indicate when water is present in the fuel/water separator.

A secondary fuel filter shall be included as approved by the engine manufacturer.

07-04-0320

### **FUEL SYSTEM**

The fuel tank shall have a capacity of sixty-eight (68) gallons/two hundred fifty-seven (257) liters.

The tank shall offer:

- Beveled Rear Corner to allow for better angle of departure.
- A vent port which will facilitate venting to the top of the fill neck for rapid filling without any "blow-back"
- Two (2) 2" NPT fill ports for left and right hand fill with a .5" NPT drain plug centered side to side, 9" from the front of the tank
- A roll over ball check vent for temperature related fuel expansion and draw
- A design including dual draw tubes and sender flanges
- A baffled design which shall be constructed of steel
- A black Powder Coated exterior to ensure corrosion resistance

The fuel tank shall be mounted below the frame, behind the rear axle. There shall be two (2) three-piece strap hanger assemblies with "U" straps bolted midway on the fuel tank, allowing the tank to be easily lowered and removed for service purposes.

The strap hanger material shall be stainless steel. No Exceptions.

For isolation of vibration and movement, rubber isolating pads shall be provided between the tank and the hanger strap assemblies. The tank straps shall be attached to rubber coated cross members which help isolate the tank from frame flex.

Strap mounting studs through the rail, hidden behind the body shall not be acceptable.

All fuel lines shall be connected with steel fittings with all fittings pointed towards the right side (curbside) of the chassis.

The chassis fuel lines shall feature an additional 4' of length provided so the tank can be easily lowered and removed for service purposes which shall be coiled and secured at the top of the tank.

07-04-0216

# **FUEL LINES**

The fuel system supply and return lines installed from the fuel tank to the engine shall be black aramid braided lines with a fiber outer braid. The fuel lines shall be connected with reusable steel fittings. Fuel line is compatible with bio-fuel blends.

07-04-0225

### **FUEL SHUTOFF VALVE**

Two (2) fuel shutoff valves shall be installed at the fuel filter to allow the fuel filter to be changed without loss of fuel to the fuel pump.

07-04-0230

#### FUEL COOLER

The cross flow air to fuel cooler shall be all aluminum and shall be provided to lower fuel temperature allowing the vehicle to operate at higher ambient temperatures. The fuel cooler shall be located behind the battery box, under the frame.

The fuel cooler shall incorporate a fan for improved heat transfer.

The fuel cooler shall be mounted to the frame using hot dipped galvanized brackets. Powder coated or painted brackets shall not be acceptable. No exception.

08-00-0420

### **ALTERNATOR**

The charging system shall include a 320-Amp Delco Remy 40SI 12-volt alternator. The alternator shall feature:

- Premium brushless design providing added durability and life
- Provide the highest efficiency resulting in less horsepower requirements
- Remote sense technology in extending the life of the battery
- 70% efficiency

3 Year warranty

08-00-0100

## V-MUX ELECTRICAL SYSTEM

There shall be a 12-volt direct current single starting electrical system providing power to all components for the cab and chassis. The system shall feature:

- A Weldon Multiplexed system
- 300-degree Fahrenheit high temperature, flame retardant loom
- All SAE wiring color coded and labeled as to its function
- Wiring which is cross link with 311-degree Fahrenheit insulation
- A suppressed system in accordance with SAE J551

The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible.

Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload.

General protection circuit breakers will be a combination of automatic and manual reset breakers. This will provide a durability and capacity maximization of the electrical system. When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA.

## **EMI/RFI PROTECTION**

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter requirements. Component and partial (incomplete) vehicle testing is not adequate as overall vehicle design can impact test results and thus is not acceptable by itself.

EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

## **ELECTRICAL HARNESSING INSTALLATION**

To ensure rugged dependability, all wiring harnesses installed by the apparatus manufacturer will conform to the following specifications:

SAE J1128 - Low tension primary cable

SAE J1292 - Automobile, truck, truck-tractor, trailer and motor coach wiring

SAE J163 - Low tension wiring and cable terminals and splice clips

SAE J2202 - 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 J1939 - Serial communications protocol

SAE J2030 - Heavy-duty electrical connector performance standard

SAE J2223 - Connections for on board vehicle electrical wiring harnesses NEC - National Electrical Code

SAE J561 - Electrical terminals - Eyelet and spade type SAE J928 - 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 will not be allowed.

Wiring will be run in loom or conduit where exposed, and have grommets or other edge protection where wires pass through metal. Wiring will be color, function and number coded. 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 an expandable rubber boot 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 wire ends not placed into connectors will be sealed with a heat shrink end cap. Wires without a terminating connector or sealed end cap will not be allowed.
- 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 braided wire harnesses will have a permanent label attached for easy identification of the harness part number and fabrication date.
- 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 J1127 - Battery Cable

SAE J561 - Electrical terminals, eyelets and spade type

SAE J562 - Nonmetallic loom

SAE J836A - Automotive metallurgical joining

SAE J1292 - 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:

- All battery cables and battery harnesses will have a permanent label attached for easy identification of the harness part number.
- 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 red in color or wrapped in red loom the entire length of the cable. All negative battery cables will be black 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.

### ELECTRICAL COMPONENT INSTALLATION

All lighting used on the apparatus will be, at a minimum, a two (2) wire light grounded through a wired connection to the battery system. Lights using an apparatus metal structure for grounding will not be allowed.

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. The results of the tests will be recorded and provided to the purchaser at time of delivery.

## **SUMMARY OF LOAD MANAGEMENT SYSTEM**

In the V-MUX electrical system there will be eight pre-defined Load Manager Trigger points spaced apart in 0.4 Volt increments. Each Output channel can be set for Load Management that will be turned OFF if node voltage falls below a certain level. The trigger points will be configured as shown below.

### **Load Manager Trigger Points:**

1: 12.5-V	Load Shed Region 1 (12.5 - 12.1 V)
2: 12.1-V	Load Shed Region 2 (12.1 - 11.7 V)
3: 11.7-V	Load Shed Region 3 (11.7 - 11.3 V)
4: 11.3-V	Load Shed Region 4 (11.3 - 10.9 V)
5: 10.9-V	Load Shed Region 5 (10.9 - 10.5 V)
6: 10.5-V	Load Shed Region 6 (10.5 - 10.1 V)
7: 10.1-V	Load Shed Region 7 (10.1 - 9.7 V)
8: 9.7-V	

When the voltage of a Load Managed device recovers back above the trigger point, there will be an additional 30 seconds before the Output channel is turned back ON. This buffering time is to ensure that the added load doesn't immediately pull the voltage back below the trigger point.

Below are the standard voltage managed outputs that will be triggered off at 12.1 V.

HVAC FAN MED HVAC FAN HIGH HVAC FAN LOW AUX DEFROST FANS A/C CONDENSER FANS RLY A/C COMPRESSOR CLUTCH

### **AUTO THROTTLE (AUTO HIGH IDLE)**

There will be an Automatic High Idle (Auto Throttle) logic that will run in conjunction with the Load Management. The Auto Throttle logic will be ran on the Hercules node under the passenger side kick panel compartment. The standard system design will be triggered on at 12.3 V and triggered off at 12.6 V with a 30 second delay before disengagement. The Auto Throttle function will act to turn the V-MUX High Idle Output ON and OFF. In turn the High Idle sends a signal to the engine ECU. The Auto Throttle Command will be interlocked with **Park Brake** and **Park/Neutral** for safety. A **Service** 

**Brake** override interlock will also be configured to immediately return the engine to Low Idle if the vehicle has to move.

08-01-0051

## MULTIPLEX DISPLAYS

Two (2) Weldon Vista IV displays shall be located one (1) on the driver's side dash and one (1) on the officer's side of the dash.

The Vista IV displays shall feature:

- A full color LCD display screens
- A message bar displaying the time of day, and important messages requiring acknowledgement by the user
- Four (4) push button style controls on either side of the screen for the on-board diagnostics
- Seven (7) push button style controls located below the screen for the on-board diagnostics
- Video ready display screens for back- up cameras, thermal cameras, and DVD
- A DIN type input connector ready for GPS interfacing shall be incorporated into the back of the display
- There shall be a display which indicates any open cab door with a visual display.

The Vista IV displays shall measure approximately 10.36" wide x 7.63" in height. Each shall offer varying fonts and background colors, shall be fully programmable to the needs of the customer and shall offer virtually infinite flexibility for screen configuration options.

08-01-0054

### **DRIVER SWITCHES**

The driver switch panel to the right of the Driver's position shall include one (1) row with six (6) backlit rocker switches with laser etched labels located under the Weldon Vista screen.

Standard switches shall include:

- Windshield Wiper/Washer Control (except when Smart Wheel is specified)
- Dash panel dimmer switch

08-09-0249

### V-MUX WARRANTY – 4 YEAR

A four (4) year limited (V-MUX) multiplex system warranty, of Weldon Technologies, Incorporated; shall be provided by the apparatus manufacturer for parts and labor, while under normal use and service; against mechanical, electrical and physical defects from the date of manufacture.

The warranty shall exclude; sensors, shunt interface modules, serial or USB kits, transceivers, cameras, GPS, and electrical display screens, which shall be limited to a period of one a (1) year repair parts and labor from the date of installation. A copy of the warranty shall be provided with each Bidders proposal for the review and evaluation of the Purchaser.

08-03-0110

## **COMMUNICATION ANTENNA BASE**

A communications antenna base shall be provided and mounted on the cab roof on the Officer's side.

08-03-0231

# COMMUNICATION ANTENNA CABLE ROUTING

The cable routing for the communication antenna shall terminate under the dash panel.

08-04-1300

### AM/FM/CD RADIO WITH WEATHERBAND

A radio receiver shall be located in the headliner. The receiver shall handle vibrations, temperature fluctuations, and humidity with ease. The front panel's protective covering shall keep out any dust and debris.

The receiver's AM and FM tuner shall feature presets for radio stations, and the Weather Band tuner shall include automatic NOAA weather for alerts to any severe weather. The receiver shall be SiriusXM ready, PA system ready, and feature a compact disc player. A portable player jack shall be available on the front and rear of the receiver.

The receiver shall be Bluetooth-enabled for phone use and stereo control and be iPod/iPhone ready via a front USB port.

The buttons and LCD display shall feature backlighting for easy reading in all lighting conditions.

08-04-1141

### OVERHEAD RADIO MOUNT

The overhead radio shall be mounted on the officer's side.

08-04-2100

# **SPEAKERS**

Four (4) overhead speakers shall be provided in the cab for the radio.

08-02-0610

#### DATA RECORDING SYSTEM

The chassis shall have a Weldon Vehicle Data Recorder system installed. The system shall be designed to meet NFPA 1901. The following information shall be recorded:

- Vehicle Speed
- Acceleration
- Deceleration
- Engine Speed
- Engine Throttle Position
- ABS Event
- Seat Occupied Status
- Seat Belt Status
- Master Optical Warning Device Switch Position
- Service Brake
- Engine Hours
- Time
- Date

Each portion of the data shall be recorded at the specified intervals and stored for the specified length of time to meet NFPA 1901 guidelines and shall be retrievable by connecting a laptop computer to the VDR system. The laptop connection shall be a panel mounted female type A or B USB connection point, remotely mounted in the left side foot well of the cab. The latest software shall be available for download from the Weldon website.

### SEAT BELT WARNING

A Weldon seat belt warning system, integrated with the Vehicle Data Recorder system, shall be installed for each seat within the cab. The system shall activate an indicator light in the instrument panel, a digital seat position indicator with a seat position legend in the switch panel, and an audible alarm.

The warning system shall activate when any seat is occupied with a minimum of 60 pounds, the corresponding seat belt remains unfastened, and the park brake is released. The warning system shall also activate when any seat is occupied, the corresponding seat belt was fastened in an incorrect sequence, and the park brake is released. Once activated, the visual indicators and audible alarm shall remain active until all occupied seats have the seat belts fastened.

08-01-0010

## **CAB INSTRUMENTATION**

The instrumentation panel within the cab shall feature a Pacific Insight gauge panel which shall include three (3) 5"diameter information centers, telltale indicator lamps, control switches, alarms, and a LCD diagnostic panel.

The gauges shall be easy to read including red backlighting.

The instrument panel shall contain the following gauges and indictors:

The middle information center shall include:

- A programmable speedometer to read either 0 to 140 MPH or 0 to 140 KM/H
- An amber telltale lamp indicating the Check Engine
- An amber telltale lamp indicating MIL Engine Emissions System Malfunction
- A red telltale lamp indicating Stop Engine
- A tachometer gauge with 0-3,000 RPM

The right hand side information center shall include:

- A gauge to display the engine oil pressure with high and low-level indicators and stop engine alarm
- A fuel level gauge with a low fuel indicator and alarm
- An LED bar displaying 4 stages of the level for the Diesel Exhaust Fluid (DEF) with a refill indicator
- A voltage gauge with low voltage indicator
- A water temperature gauge with high water temp indicator and alarm

The left hand side information center shall include:

- A primary air PSI gauge including low air and high air warning displays
- A secondary air PSI gauge with low and high air warning indication

An LCD diagnostic display, located in the left hand side information center shall include digital readouts for the following:

- Odometer
- Transmission oil temp
- Engine oil temp
- Speedometer
- Engine hours
- Engine and transmission code

- Exhaust temp
- Engine coolant temp
- Engine oil PSI
- Turbo boost PSI
- Primary air pressure
- Secondary air pressure
- Engine load %
- Engine torque
- Battery volts
- Fuel level %
- Vehicle speed
- RPM
- DEF level
- Instant fuel economy
- Average fuel economy
- Engine hours
- Capable to record three trips, each shall be include:
  - · Trip distance
  - · Fuel economy
  - · Fuel used
  - · Idle fuel used
- The LCD screen shall also provide diagnostic capability

To promote safety, the following telltale indicator lamps will be integral to the gauge assembly and are located below the middle information center. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols. The following indicator lamps shall be located on the Telltale panel:

**BLUE Indicator Lights** 

• High Beam Headlight

**GREEN Indicator Lights** 

- Right Turn Indicator
- Left Turn Indicator
- Battery On (Always On)

YELLOW Indicator Lights

- Particle Filter Regeneration (DPF)
- Regeneration Inhibit (Switch Engaged)
- Air Intake Restriction
- High Exhaust System Temperature (HEST)
- Wait to Start (when applicable)
- ATC (Automatic Traction Control) (when applicable)
- Water in Fuel

**RED Indicator Lights** 

- Low Engine Coolant Level
- Air Bag Warning (when applicable)
- Check Transmission
- High Transmission Temperature
- ABS
- Parking Brake

### **ALARMS**

Audible steady tone warning alarm: A steady audible tone alarm will be provided whenever a warning message is present.

Alarm silence: Any active audible alarm will be able to be silenced with a button on the right side of the LCD screen.

## **INDICATOR LAMP AND ALARM PROVE-OUT**

Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

### **DIAGNOSTIC PANEL**

A diagnostic panel shall allow diagnostic tools such as computers to connect to various vehicle systems for improved trouble shooting providing a lower cost of ownership. The panel shall be accessible while standing on the ground and located inside the driver's door to the left of the

steering column. Diagnostic switches shall allow engine and ABS systems to provide blink codes should a problem exist.

The diagnostic panel shall include:

- Engine diagnostic port
- V-Mux USB diagnostic port (when applicable)
- Engine diagnostic switch (blink codes flashed on check engine telltale indicator)
- Diesel particulate filter regeneration switch (when applicable)
- Diesel particulate filter regeneration inhibit switch (when applicable)

The enclosed diagnostic panel, accessible through the HVAC access panel shall include:

- Transmission diagnostic port
- ABS diagnostic port
- SRS diagnostic port (when applicable)

08-01-0125

# BACKLIGHTING COLOR

The instrumentation gauges and the switch panel legends shall be backlit using red LED backlighting.

08-00-0340

6 Battery System

08-00-0322

## **BATTERIES**

The single start electrical system shall include six (6) group 31 1000 CCA batteries.

The batteries shall feature:

- A 200 minute reserve capacity
- 4/0 dual path starter cables per SAE J541
- Heat shrink and sealant encapsulated ends on the cables
- Maintenance free

08-00-0224

## **BATTERY COMPARTMENTS**

A well ventilated, hot dipped galvanized battery storage compartment shall house the batteries on the officer and driver side of the chassis and shall be located so as to offer easy access to the batteries when the cab is tilted.

The each battery compartment shall feature:

• Hot dipped galvanized 3/16" steel construction.

- A complete floor of heavy duty, industrial grade, recycled Turtle Tile brand interlocking matting
- A double hinged hot dipped galvanized steel cover with two (2) rubber latches shall be utilized providing easy access to the batteries. No tools shall be required to gain access to the batteries.
- When in the open position, the double hinged door shall be flush with the bottom of the battery compartment, allowing for a sweep out style floor and removal of the batteries when necessary, without the inference of a lower lip. No Exceptions.

08-00-0248

## **BATTERY CABLES**

The starting system shall include cables which shall be protected by a 275 degree F, minimum high temperature flame retardant loom.

The cables shall be in a loom to help keep out dirt, dust and debris.

08-00-0251

# **BATTERY JUMPER STUD**

The starting system shall include battery jumper studs.

These studs shall be located in the forward most portion of the driver's side lower step.

The studs shall allow the vehicle to be jump started, charged, or the cab to be raised in an emergency in the event of battery failure.

08-01-0034

## **IGNITION**

A master battery system with a keyless start ignition system shall be provided. Each system shall be controlled by a marine grade two position switch, of which shall be mounted on the left side of the steering wheel adjacent to the driver's knee.

A push button type starter button shall be provided on the driver dash to the left of the steering wheel.

The starter button shall only operate when both the master battery and ignition switches are in the "ON" position.

08-01-0040

## POWER & GROUND STUD

An electrical distribution panel shall include two (2) power studs. The studs shall be a minimum of 1/4" and each of the power studs shall be circuit protected with a fuse of the specified amperage. One (1) power stud shall be capable of carrying up to a 40-amp battery direct load. One (1) power stud shall be capable of carrying up to a 15-amp ignition switched load. The two (2) power studs shall share one (1) 1/4" ground stud.

08-02-0512

# **ADDITIONAL POWER & GROUND STUDS**

One (1) additional 40A power and 1/4" ground studs shall be provided. These shall be powered directly from the battery.

08-00-0721

### **GROUND LIGHTS**

Each door shall include a Whelen 3SC0CDCR LED NFPA compliant ground light mounted to the underside of the cab step below each door.

Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

08-01-0751

## **GROUND LIGHT ACTIVATION**

The ground lights shall activate when the park brake is engaged.

08-00-0732

# **CAB STEP LIGHTING**

One (1) LED light shall be mounted to the riser of the middle cab step, a total of eight (8) step lights for the cab, in accordance with NFPA.

Each light shall include a polycarbonate lens and shall be contained in a housing which is vibration welded with a bulb which shall be shock mounted. Each step light shall not be any larger than 3" in diameter.

08-01-0753

## **STEP LIGHT ACTIVATION**

The step lighting shall be activated by opening any of the cab doors on the respective side.

08-00-0770

DOOR JAMB WARNING LIGHTS

08-00-0783

## **ENGINE COMPARTMENT LIGHTING**

Two (2) LED lights shall be mounted to the engine compartment in such a fashion as to provide as much light as possible to the engine compartment area. The engine compartment lighting shall activate with the tilting of the cab.

08-00-0791

## INTERIOR OVERHEAD CAB LED LIGHTING

Each cab door shall include a dual red and white LED lamp. There shall be one (1) light centered over each of the Driver and Officer's seat and one centered over each crew door.

The clear lamp shall illuminate with the opening of each respective door with both the red and clear portions of the lamp activated by individual lighted switches on each lamp.

08-00-3522

## **ROOF TOP SPOT LIGHT**

One (1) GoLight Model 20204 (white) LED spotlight with wired dash-mount remote shall be installed on the officer's side cab roof.

08-94-0351

Go-Light Mount Officer Side - 8-11"

08-00-3520

# **ROOF TOP SPOT LIGHT**

One (1) GoLight Model 20204 (white) LED spotlight with wired dash-mount remote shall be installed on the driver's side cab roof.

08-94-0341

Go-Light Mount Driver Side - 8-11"

08-00-4090

### DO NOT MOVE APPARATUS LIGHT

The front headliner of the cab shall include a flashing red Whelen round LED light with a red lens clearly labeled "Do Not Move Apparatus".

The flashing red light shall be 3.00 inches in diameter and shall be located centered left to right for greatest visibility.

The light shall be interlocked for activation when either a cab door is not firmly closed or an apparatus compartment door is not closed, and the parking brake is released.

08-01-2010

## **BACK-UP ALARM**

An ECCO model 575 backup alarm shall be installed at the rear of the chassis with an output level of 107 dB. The alarm shall automatically activate when the transmission is placed in reverse.

08-06-0170

# REAR & SIDE FACING CAMERA

A rear facing box style rearview camera shall be installed on the rear of the vehicle. There shall also be two (2) teardrop style rearview cameras; one mounted to the Officer side of the vehicle, and one to the Driver side of the vehicle. The rear camera shall be activated when the vehicle transmission is shifted to reverse, and the side tear drop cameras shall be activated with the corresponding blinker. The image viewed on the Driver and Officer's Vista. The side camera housing shall be chrome in color.

The rear facing camera shall feature stainless steel construction, automatic heating when the temperature is below 10 degrees Fahrenheit, and 150-degree lens. No Exception.

08-06-0305

### SOUND FOR BACKUP CAMERA

There shall be a speaker mounted in the forward overhead position that is dedicated to the backup microphone. It shall be activated when the transmission is shifted into reverse; and it shall enable the driver to hear what is happening behind the apparatus.

08-08-KMPP

# **BATTERY CHARGER AND AIR COMPRESSOR**

One (1) Kussmaul Pump Plus 1200 model #091-9-12V-1200 battery charger and air compressor system shall be installed. The 12 volt compressor system shall be designed to maintain the air pressure in the chassis brake system whenever the pressure drops below a predetermined level.

The battery charger shall be supplied from the 120 volt shore power receptacle and be a fully automatic high output charging system. The unit shall be mounted in a clean dry area and will be accessible for service and/or maintenance.

08-08-0001

## **CHARGER LOCATION**

The battery Charger shall be located behind the driver's seat.

08-08-0021

## **AUX. AIR COMPRESSOR LOCATION**

The auxiliary air compressor shall be located behind the driver's seat.

08-08-0199

## **EJECTION UNIT**

A Kussmaul Super Auto Eject 20 amp 120 volt shore power assembly, cover, solenoid input wire, power cord, and plug shall be installed. The 12 volt solenoid shall eject the shore power cord away from vehicle path upon sensing engine start; after ejection, the weatherproof cover snaps into position over inlet. The unit shall sequence energizing of an Auto Eject, eliminating terminal arching when connecting and disconnecting power cord.

The unit shall have a waterproof back enclosure with watertight cable fittings, which protect mechanism from road contamination. A pre-wired 3 foot AC electrical cord and starting sense wire (side wired) shall be installed.

The assembly shall have the following dimensions: 6.17" high x 4.08" wide x 2.8" deep with 4 lb. weight.

08-08-20AR

There shall be a Kussmaul 20-amp super auto eject with red cover supplied.

08-08-06BT

# **SHORELINE LOCATION**

The shoreline shall be located in the Driver's side bumper tail.

08-08-41CS

The Battery Charger indicator shall be located in the canopy window.

00-01-1910

# 88' FIVE-SECTION MID-MOUNT PLATFORM SPECIFICATIONS

#### Platform Design and Construction

The 88 foot five-section, steel aerial platform has a maximum height of 88' 5.9" at the top of the platform handrail at 75 degrees elevation. The horizontal reach from the outside edge of the platform to the center of the turntable is 83' 5.0".

#### Operation on grades

The aerial shall be capable of being operated with full rated capabilities in any plane up to 5-degrees out of level with the turntable leveled as much as possible by placement of the outriggers. Operation beyond this limit shall be at the operator's discretion.

#### Extension And Retraction System

The extension and retraction system has eight pairs of cables and two 5" inside diameter cylinders with 2.5" outside diameter rods and a 100" stroke. The specified extension cylinders shall not exceed the specified length. The required length cylinders shall place the cylinder weight closer to the base of the aerial device. Smaller size cylinders are required since they are easier to handle for removal for service reasons. In addition, the specified shorter stroke cylinders provide less potential for damage to the rod by hitting an obstacle when extended.

The lowest-mid section cables shall have a .75" diameter to pull the ladder out with a .625" diameter to pull the ladder in. The center-mid-section cables shall have a .625" diameter to pull the ladder in. The upper most mid section cables shall have a .625" diameter to pull the ladder out with a .50" diameter to pull the ladder in, and fly section cables have a .50" diameter to pull the ladder out and a .375" diameter to pull the ladder in.

The platform sections shall travel 200" each at full extension. The lowest-mid section shall overlap the base section by 84". The center-mid section shall overlap the lowest-mid section by 85". The uppermost-mid-section overlaps the center-mid-section by 86". The fly section shall overlap the upper most mid-section by 87."

The extension cylinders have counter balance valves mounted directly to them. The extension cylinders extend and retract the platform with a 2:1 cable cylinder arrangement from totally retracted to 100' at 75 degrees totally extended.

There are no restrictions on the waterway as the ladder is extended and retracted

#### State-of-the Art Technology

The aerial device materials, parts, technology or procedures used in construction of the apparatus are subject to change at the manufacturer's discretion to provide "equal or better" products and must be in compliance to applicable NFPA #1901 standards and industry standard practice.

00-01-1920

# PLATFORM BASE SECTION

The platform base section length shall be 23 feet 8 inches, with inside dimension of 46.25"; distance between the top of the handrail and the centerline of the rungs shall be 35.875". The base rails shall be 100,000 PSI material and the handrails shall be 100,000 PSI material.

00-01-1930

### PLATFORM LOWER-MID SECTION

The platform lower-mid section length shall be 23 feet 9 inches, with inside dimension of 39.25"; distance between the top of the handrail and the centeline of the rungs shall be 28". The base rails shall be 100,000 PSI material and the handrails shall be 100,000 PSI material.

00-01-1940

#### PLATFORM MID SECTION

The platform mid-section length shall be 23 feet 10 inches, with inside dimension of 32.25"; distance between the top of the handrail and the centerline of the rungs shall be 22.875". The base rails shall be 100,000 PSI material and the handrails shall be 100,000 PSI material.

00-01-1950

# PLATFORM UPPER-MID SECTION

The platform upper-mid-section length shall be 23 feet 11 inches, with inside dimension of 27.375"; the distance between the top of the handrail and the centerline of the rungs shall be 18.875". The base rails shall be 100,000 PSI material and the handrails shall be 70,000 PSI steel material.

00-01-1960

# PLATFORM FLY SECTION

The platform fly section length shall be 25 feet 10 inches, with inside dimension of 21.625"; the distance between the top of the handrail and the centerline of the rungs shall be 15.375". The base rails shall be 70,000 PSI material and the handrails shall be 70,000 PSI steel material.

00-01-1970

# PLATFORM BASKET CONSTRUCTION

The platform basket shall be constructed of a steel frame with two (2) aluminum doors at the front of the basket. One (1) additional door shall be installed on the driver's side of the rear of the platform basket for easy access into the platform bucket.

The floor or the platform basket of nineteen square feet (38" x 72") with a continuous 42" high guard railing. The floor shall be built of aluminum bar grating for a skid resistant surface and to provide for drainage.

The gates on the left and right front corners shall swing inward and a gate for entry from the ladder to the platform shall swing upward.

#### **Heat Shield**

A heat reflective shield is provided on the front, sides, and bottom of the platform. The heat shield is to be covered line-x.

# Water Curtain Spray System

A water curtain system provides a cooling spray under the entire floor of the platform with a minimum of 75 gallons per minute. A single quarter turn valve with an actuator accessible from the platform shall control the spray system.

### Safety Belt Attachment

The platform shall have provisions for personnel working on the platform to attach fall protection harnesses. Four (4) attachment points for connection of a safety harness shall be provided in the platform. Three attachment points shall be bolted to the rear and sides of the platform and one shall be welded diagonally to the rear and side wall at the rear of the platform.

#### Rope Eyelets

Two (2) rope rescue eyelets, with a combined lifting capacity of 1000 pounds, shall be welded to the bottom of the platform. The eyelets shall be able to carry 500 lbs. per eyelet with no other in or attached to the platform.

# Repelling Arms

One (1) set of repelling arms shall be mounted to the front of the platform one (1) on each side of the platform above the monitor(s) and shall be held in place with two (2) pins. The repelling arms shall be capable of being stored by removing the adjusting arms in the slotted coupling and folding them in against the front of the platform. Each repelling arm shall have a capacity of 250lbs. The repelling arms shall be able to support a rescue basket. The rescue basket shall be able to clip onto the repelling arms to help with rescue operations.

### Parapet Arms

One (1) set of parapet arms shall be supplied with the aerial. The parapet arms shall fit into the coupler at the top and bottom of the platform. The brackets can hold up to a 20' roof ladder. The ladder shall be secured through its beams and one (1) rung, by a bar capable of being latched in place and able to withstand 500lbs load while maintaining a two to one (2:1) safety factor.

00-03-1110

#### TECHNICAL DRAWINGS

Technical and engineering drawings shall be provided for the aerial platform as follows: left side view, top view and rear view.

00-03-3000

#### ELECTRICAL DRAWINGS

Technical and engineering drawings shall be provided for the 12 volt electrical system for the model of apparatus specified.

00-03-3200

#### HYDRAULIC DRAWINGS

Technical and engineering drawings shall be provided for the aerial device hydraulic system.

00-07-1300

### **AERIAL OPERATION INSTRUCTIONS**

As required by applicable sections of NFPA #1901, operating instructions and demonstration of the aerial apparatus shall be provided at the purchaser's location. The aerial manufacturer shall provide these instructions and demonstration of the aerial apparatus.

Personnel providing the instructions shall be professionally trained by the aerial manufacturer prior to the delivery process. All costs of these instructions shall be borne by the bidder. The bidder shall notify the purchaser a minimum of 14 days prior to the instruction period. The bidder shall provide classroom instructions, operational instruction. The instructor shall provide the all necessary material to assure proper operation of the aerial device.

This instruction period shall be for a minimum and maximum of three (3) days at the purchaser's location.

00-08-1100

# **AERIAL OPERATION MANUALS**

At time of delivery, an aerial manual shall be supplied which shall include aerial operation overview, service documentation, wiring schematics and technical high-level bill of material drawings. The documentation shall address at a minimum the inspection, service, and operations of the fire apparatus and all major components thereof. This documentation and manuals shall be provided in the English language.

00-09-1210

# MATERIAL AND WORKMANSHIP WARRANTY ONE (1) YEAR TERMS AND CONDITIONS

Rosenbauer hereby warrants each new Rosenbauer Aerial to be free from defects in material and workmanship for a warranty period of one (1) year starting on the date the vehicle is delivered to original purchaser. Under this warranty, Rosenbauer agrees to furnish any item or items to replace those that have been found to be defective in material or workmanship where there is no indication of abuse, neglect or other than normal service. Such an item or items, at the option of Rosenbauer must be made available for our inspection at our request and returned to our factory or another location designated by Rosenbauer. Transportation of such an item or items will be arranged and covered by buyer within thirty (30) days after the date of failure and within one (1) year from the date of delivery of the apparatus to the original purchaser, whichever occurs first. The inspection must indicate that the failure was attributed to defective material or workmanship. Authorization for repair or item replacement must be sought from Rosenbauer customer service department prior to repair or item replacement occurring.

This warranty is applicable only if the aerial device is serviced annually by an authorized Rosenbauer service facility. The cost of the annual service is the responsibility of the purchaser.

# THIS WARRANTY SHALL NOT APPLY TO OR COVER THE FOLLOWING:

 Normal maintenance services or adjustments, including but not limited to, lubricants, cable adjustment, hoses, and other incidentals.

- Any item that has been repaired, replaced or altered by a facility not approved in advance by Rosenbauer, or in a manner which, at Rosenbauer's discretion, may adversely affect the safe operation or durability of the vehicle or item.
- Special, incidental or consequential damages including, but not limited to, loss of time, inconvenience, loss of use, lost profits or transportation fees or charges to or from any facility.
- Any malfunction resulting from misuse, negligence, alteration, accident or lack of operational knowledge, lack of normal or required maintenance or adjustments, exposure to corrosive agents, fire, severe environmental conditions or acts of God.

# EXCLUSIONS OF DAMAGES BOTH INCIDENTAL AND CONSEQUENTIAL.

At no time shall Rosenbauer be held liable for any incidental, consequential, indirect, special and/or punitive damages whatsoever, whether coming from breach of contract, warranty, tort or equity. Such items shall include the chassis or other items sold by Rosenbauer, or their operation or their failure to operate, or defects herein, or any undertakings, acts or omissions related to, regardless whether Rosenbauer's knowledge of the possibility of any such damage.

Without limitation of the generality of the preceding statements, Rosenbauer categorically disclaims any and all liability for property and personal injury, damages, penalties for lost revenue and/or profit, loss of aerial or products and associated pieces of equipment, the expense of substituting chassis and/or products, or the out of service expenses, resulting from damages and/or delays, that creates down time expenses and/or create economic losses, or any third party claims for damages.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability or make any alteration to this warranty in connection with the sale of our apparatus unless expressly given in writing by Rosenbauer.

**NOTE:** Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

00-09-3030

# WATERWAY WARRANTY THREE (3) YEAR TERMS AND CONDITIONS

Rosenbauer hereby warrants each new Rosenbauer Aerial waterway to be free from defects in material and workmanship for a warranty period of three (3) years starting on the date the vehicle is delivered to original purchaser. Under this warranty, Rosenbauer agrees to furnish any item or items to replace those that have been found to be defective in material or workmanship where there is no indication of abuse, neglect or other than normal service. Such an item or items, at the option of Rosenbauer must be made available for our inspection at our request and returned to our factory or another location designated by Rosenbauer. Transportation of such an item or items will be arranged and covered by buyer within thirty (30) days after the date of failure and within three (3) years from the date of delivery of the apparatus to the original purchaser,

whichever occurs first. The inspection must indicate that the failure was attributed to defective material or workmanship. Authorization for repair or item replacement must be sought from Rosenbauer customer service department prior to repair or item replacement occurring. Waterway seals shall be covered for a period of three (3) years.

This warranty is applicable only if the aerial device is serviced annually by an authorized Rosenbauer service facility. The cost of the annual service is the responsibility of the purchaser.

#### THIS WARRANTY SHALL NOT APPLY TO OR COVER THE FOLLOWING:

- Normal maintenance services or adjustments, including but not limited to, lubrication, greasing, cleaning, and other incidentals.
- Any item that has been repaired, replaced or altered by a facility not approved in advance by Rosenbauer, or in a manner which, at Rosenbauer's discretion, may adversely affect the safe operation or durability of the vehicle or item.
- Special, incidental or consequential damages including, but not limited to, loss of time, inconvenience, loss of use, lost profits or transportation fees or charges to or from any facility.
- Any malfunction resulting from misuse, negligence, alteration, accident or lack of operational knowledge, lack of normal or required maintenance or adjustments, exposure to corrosive agents, fire, severe environmental conditions or acts of God.

# EXCLUSIONS OF DAMAGES BOTH INCIDENTAL AND CONSEQUENTIAL.

At no time shall Rosenbauer be held liable for any incidental, consequential, indirect, special and/or punitive damages whatsoever, whether coming from breach of contract, warranty, tort or equity. Such items shall include the chassis or other items sold by Rosenbauer, or their operation or their failure to operate, or defects herein, or any undertakings, acts or omissions related to, regardless whether Rosenbauer's knowledge of the possibility of any such damage.

Without limitation of the generality of the preceding statements, Rosenbauer categorically disclaims any and all liability for property and personal injury, damages, penalties for lost revenue and/or profit, loss of aerial or products and associated pieces of equipment, the expense of substituting chassis and/or products, or the out of service expenses, resulting from damages and/or delays, that creates down time expenses and/or create economic losses, or any third party claims for damages.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability or make any alteration to this warranty in connection with the sale of our apparatus unless expressly given in writing by Rosenbauer.

**NOTE:** Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

00-10-1100

# THIRD PARTY TESTING

The aerial ladder shall be inspected and tested by a third party. A non-destructive test shall be performed on each unit at a rate of 100% inspection by the Underwriters Laboratories inspector, exceeding the requirements applicable section of NFPA #1901 for new apparatus. All non-destructive procedures shall be fully documented and meet or exceed the requirements of applicable sections of NFPA #1901.

00-10-2100

### PERFORMANCE WATER FLOW TESTING

The waterway flow test shall be conducted by an accredited third party testing organization with certified results provided on delivery of the apparatus. If the aerial device is equipped with a permanent water system and has a rated vertical height of 110 ft (34 m) or less, standard model flow test data shall be provided to the purchaser.

If the water system has been modified from the standard model configuration, a new flow test shall be conducted to determine that the friction loss in the water system between the base of the swivel and the monitor outlet does not exceed 100 psi (700 kPa) with 1000 gpm (3748 L/min) flowing and with the water system at full extension.

A flow test shall be conducted on each vehicle to determine that the water system is capable of flowing 1000 gpm (3748 L/min) (or rating as specified in these specifications) at 100 psi (700 kPa) nozzle pressure with the aerial device at full elevation and extension.

Where the apparatus is equipped with a fire pump designed to supply the water system, the test shall be conducted using the onboard fire pump.

The intake pressure to the fire pump shall not exceed 20 psi (140 kPa).

01-00-1410 26

#### GALVANIZED OUTRIGGERS

The aerial outriggers assemblies, beam, outer jack tube, inner jack tube, jack cover plate, and jack pad shall be galvanized.

The outriggers shall be galvanized inside and out. The process shall eliminate the rusting, scratching or paint chips on the outriggers. The galvanizing process shall permeate the metal and shall not be an "over-coating only" on outside surfaces. The galvanized components shall lessen the potential for corrosion and eliminates the requirement for finish paint. The process shall negate any later requirement for touch-up paint or total repaint of the outrigger/stabilizer assemblies.

The galvanizing shall provide the steel outriggers with both barrier and cathodic protection from corrosion. The galvanizing process shall immerse the complete outrigger components in molten zinc. The galvanizing diffusion process shall allow the zinc to bond to the steel, at the molecular

level. The galvanized zinc coating shall provide a barrier that shields the steel from the environment.

00-09-8625

#### **CORROSION RESISTANT WARRANTY**

A galvanized steel corrosion protection warranty shall be provided for the aerial outriggers and stabilizers for a period of twenty-five (25) years. The conditions of the corrosion protection warranty shall be as follows.

- 1. This warranty shall cover parts and labor to correct the affected area or parts only and shall not be deemed to include entire outrigger or stabilizer assemblies. This warranty does not include the turntable, aerial ladder sections, or torque box.
- 2. Should any warranty claim occur, the affected area shall be inspected, reviewed and approved by the aerial manufacturer prior to any work being completed.
- 3. Any authorized warranty work shall be only performed by the aerial manufacturer or its designated repair personnel or facility. Any repairs completed by un-authorized repair shops or personnel shall cause this warranty to be invalid.
- 4. Transportation costs associated with this corrosion protection warranty shall be the responsibility of the purchaser.
- 5. Warranty shall not cover damage due to lack of specified normal maintenance and service as outlined and required in the service and operating manuals provided with the apparatus..
- 6. Warranty shall not cover damage from accidents, abuse, physical and mechanical damage, and all other conditions not considered as "normal" operating conditions.
- 7. The obligations of the aerial manufacturer pursuant to the foregoing warranty with respect to the outriggers and stabilizers shall be limited to the cost of bringing the affected area into compliance with the specifications or of removing any defects in materials or workmanship.

01-00-1700 26

# **GALVANIZED TORQUE BOX**

The torque box shall be hot dip galvanized inside and out. The galvanizing shall include the top and bottom and sides of the torque box, outrigger electrical compartment, and outrigger valve control compartment.

The torque box shall be totally hot dip galvanized. The galvanizing process shall not be an over-coating only to outside surfaces but shall permeate the metal. The galvanizing process shall prevent or greatly lessen rust and corrosion on the torque box and in areas between the torque box and chassis frame rails, as well as areas which cannot be reached when washing the unit and which cannot be visually inspected, and shall eliminate the need to finish paint the torque box.

The galvanizing process shall provide the steel torque box assembly with both barrier and cathodic protection from corrosion. The galvanizing process shall immerse the complete torque box component in molten zinc. The galvanizing diffusion process shall allow the zinc to bond to the steel, at the molecular level. The galvanized zinc coating shall provide a barrier that shields the steel from the environment.

00-09-8425

### **CORROSION RESISTANT WARRANTY**

A galvanized steel corrosion protection warranty shall be provided for the aerial torque box for a period of twenty-five (25) years. The conditions of the corrosion protection warranty shall be as follows.

- 1. This warranty shall cover parts and labor to correct the affected area or parts only and shall not be deemed to include the entire torque box assembly. This warranty does not include the turntable, aerial ladder sections, or outrigger/stabilizers.
- 2. Should any warranty claim occur, it shall be inspected, reviewed and approved by the aerial manufacturer prior to any work being completed.
- 3. Any authorized warranty work shall be only performed by the aerial manufacturer or its designated repair personnel or facility. Any repairs completed by un-authorized repair shops or personnel shall cause this warranty to be invalid.
- 4. Transportation costs associated with this corrosion protection warranty shall be the responsibility of the purchaser.
- 5. Warranty shall not cover damage due to lack of specified normal maintenance and service as outlined and required in the service and operating manuals provided with the apparatus..
- 6. Warranty shall not cover damage from accidents, abuse, physical and mechanical damage, and all other conditions not considered as "normal" operating conditions.
- 7. The obligations of the aerial manufacturer pursuant to the foregoing warranty with respect to the torque box shall be limited to the cost of bringing the affected area into compliance with the specifications or of removing any defects in materials or workmanship.

01-00-2120 46

#### AERIAL SECTIONS GALVANIZED & PAINTED

Prior to assembly, each aerial ladder section shall be hot dip galvanized. The galvanizing process will permeate each ladder section to prevent rust and corrosion and not be merely an over-coating The galvanized aerial ladder sections shall be provided in the natural finish eliminating the requirement for finish paint and the subsequent requirements for touch up paint and/or total repaint after a period of time due to nicks, chips and corrosion resulting from hitting the ladder many times in use. The galvanized ladder shall reduce the maintenance requirement for grease once or twice a year, based on duty cycle.

The aerial ladder sections are galvanized inside and out, including base rails, hand rails, diagonals, rungs and K-Braces. This process eliminates the rusting, scratching or paint chips on the aerial sections. Galvanizing has been recognized as an effective way to protect steel from corrosion.

Galvanizing shall provide a barrier and cathodic protection from corrosion. During the galvanizing process, the complete aerial ladder sections shall be immersed in molten zinc. Through diffusion, the zinc shall bond to the steel at the molecular level. The resulting zinc coating shall provide a barrier that shields the steel from the environment

After the ladder sections are galvanized they shall be properly cleaned and prepared for paint. The galvanized ladder sections shall be painted to match the upper color of the cab.

00-09-2230

# STRUCTURAL DESIGN WARRANTY TWENTY-FIVE (25) YEAR TERMS AND CONDITIONS

Rosenbauer hereby shall warranty each new Rosenbauer aerial device to be free from structural failure caused by defective design and workmanship for a warranty period of twenty-five (25) years or 100,000 miles starting on the date the vehicle is delivered to original purchaser. Under this warranty, Rosenbauer agrees to furnish any item or items to replace those that have been found to be defective in material or workmanship where there is no indication of abuse, neglect or other than normal service. Such an item or items, at the option of Rosenbauer must be made available for our inspection at our request and returned to our factory or another location designated by Rosenbauer. Transportation of such an item or items will be arranged and covered by buyer within thirty (30) days after the date of failure and within two (2) years from the date of delivery of the apparatus to the original purchaser, whichever occurs first. The inspection must indicate that the failure was attributed to defective material or workmanship. Authorization for repair or item replacement must be sought from Rosenbauer customer service department prior to repair or item replacement occurring.

This warranty is applicable only if the aerial device is serviced annually by an authorized Rosenbauer service facility. The cost of the annual service is the responsibility of the purchaser.

## THIS WARRANTY SHALL NOT APPLY TO OR COVER THE FOLLOWING:

- Normal maintenance services or adjustments, including but not limited to, filters, lubricants, cable adjustment, hoses, and other incidentals.
- Any item that has been repaired, replaced or altered by a facility not approved in advance by Rosenbauer, or in a manner which, at Rosenbauer's discretion, may adversely affect the safe operation or durability of the vehicle or item.
- Special, incidental or consequential damages including, but not limited to, loss of time, inconvenience, loss of use, lost profits or transportation fees or charges to or from any facility.

 Any malfunction resulting from misuse, negligence, alteration, accident or lack of operational knowledge, lack of normal or required maintenance or adjustments, exposure to corrosive agents, fire, severe environmental conditions or acts of God.

#### EXCLUSIONS OF DAMAGES BOTH INCIDENTAL AND CONSEQUENTIAL.

At no time shall Rosenbauer be held liable for any incidental, consequential, indirect, special and/or punitive damages whatsoever, whether coming from breach of contract, warranty, tort or equity. Such items shall include the chassis or other items sold by Rosenbauer, or their operation or their failure to operate, or defects herein, or any undertakings, acts or omissions related to, regardless whether Rosenbauer's knowledge of the possibility of any such damage.

Without limitation of the generality of the preceding statements, Rosenbauer categorically disclaims any and all liability for property and personal injury, damages, penalties for lost revenue and/or profit, loss of chassis or products and associated pieces of equipment, the expense of substituting chassis and/or products, or the out of service expenses, resulting from damages and/or delays, that creates down time expenses and/or create economic losses, or any third party claims for damages.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability or make any alteration to this warranty in connection with the sale of our apparatus unless expressly given in writing by Rosenbauer.

**NOTE:** Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

00-09-7075

# PAINT WARRANTY ONE (1) YEAR TERMS AND CONDITIONS

Rosenbauer hereby warrants the paint on the Rosenbauer aerial of each new fire & rescue vehicle to be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection for a warranty period of one (1) year starting on the date the vehicle is delivered to original purchaser. Under this warranty, Rosenbauer agrees to furnish any item or items to replace those that have been found to be defective in material or workmanship where there is no indication of abuse, neglect or other than normal service. Such an item or items, at the option of Rosenbauer must be made available for our inspection at our request and returned to our factory or another location designated by Rosenbauer. Transportation of such an item or items will be arranged and covered by buyer within thirty (30) days after the date of failure and within one (1) year from the date of delivery of the apparatus to the original purchaser. The inspection must indicate that the failure was attributed to an adhesion defect caused by defective manufacturing methods or paint material selection. Authorization for repair or item replacement must be sought from Rosenbauer customer service department prior to repair or item replacement occurring.

This warranty is applicable only if the aerial device is serviced annually by an authorized Rosenbauer service facility. The cost of the annual service is the responsibility of the purchaser.

### THIS WARRANTY SHALL NOT APPLY TO OR COVER THE FOLLOWING:

- Any item that has been repaired, repainted or altered by a facility not approved in advance by Rosenbauer.
- Special, incidental or consequential damages including, but not limited to, loss of time, inconvenience, loss of use, lost profits or transportation fees or charges to or from any facility.
- Any defect resulting from misuse, negligence, alteration, accident or lack of normal or required
  maintenance or adjustments, exposure to corrosive agents, fire, severe environmental conditions
  or acts of God.
- Painted items which are manufactured by a party other than Rosenbauer and which are separately warranted by that party.

### EXCLUSIONS OF DAMAGES BOTH INCIDENTAL AND CONSEQUENTIAL.

At no time shall Rosenbauer be held liable for any incidental, consequential, indirect, special and/or punitive damages whatsoever, whether coming from breach of contract, warranty, tort or equity. Such items shall include the chassis or other items sold by Rosenbauer, or their operation or their failure to operate, or defects herein, or any undertakings, acts or omissions related to, regardless whether Rosenbauer's knowledge of the possibility of any such damage.

Without limitation of the generality of the preceding statements, Rosenbauer categorically disclaims any and all liability for property and personal injury, damages, penalties for lost revenue and/or profit, loss of chassis or products and associated pieces of equipment, the expense of substituting chassis and/or products, or the out of service expenses, resulting from damages and/or delays, that creates down time expenses and/or create economic losses, or any third party claims for damages.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability or make any alteration to this warranty in connection with the sale of our apparatus unless expressly given in writing by Rosenbauer.

**NOTE:** Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

00-09-8200

# CORROSION RESISTANT WARRANTY

A galvanized steel corrosion protection warranty shall be provided for the aerial ladder sections for a period of twenty-five (25) years. The conditions of the corrosion protection warranty shall be as follows.

- 1. Aerial manufacturer will not be held responsible for any damage due to high temperatures from fire conditions, chemicals, or any material that could attack the galvanized surface.
- 2. The galvanized coating warranty shall cover re-coating of affected areas only.
- 3. Should any warranty claim occur, it shall be inspected, reviewed and approved by the aerial manufacturer prior to any work being completed.
- 4. Any authorized warranty work shall be only performed by the aerial manufacturer or its designated repair personnel or facility. Any repairs completed by un-authorized repair shops or personnel shall cause this warranty to be invalid.
- 5. Transportation costs associated with this corrosion protection warranty shall be the responsibility of the purchaser.
- 6. This warranty shall cover parts and labor to the affected area or parts only and shall not be deemed to include entire ladder sections or the entire aerial device. This warranty does not include aerial rung coverings.
- 7. Warranty shall not cover damage due to lack of specified normal maintenance and service as outlined and required in the service and operating manuals provided with the apparatus..
- 8. Warranty shall not cover damage from accidents, abuse, physical and mechanical damage, and all other conditions not considered as "normal" operating conditions.
- 9. The obligations of the aerial manufacturer pursuant to the foregoing warranty with respect to any such aerial ladder sections shall be limited to the cost of bringing the affected area into compliance with the specifications or of removing any defects in materials or workmanship.

01-00-1330 10

#### PLATFORM BASEKET GALVANIZED & PAINTED

The outside support structure of the aerial platform basket shall be galvanized. This shall not include walking surfaces, aluminum tread plate areas, stainless steel hand rails, waterway, or other basket accessories.

The aerial platform basket framework shall be entirely coated. The process shall eliminate the rusting, scratching or paint chips on the basket. The galvanizing process shall permeate the metal and shall not be an "over-coating only" on outside surfaces. The galvanized components shall lessen the potential for corrosion and eliminates the requirement for finish paint. The process shall negate any later requirement for touch-up paint or total repaint of the platform basket framework.

The galvanizing shall provide the steel platform basket with both barrier and cathodic protection from corrosion. The galvanizing process shall immerse the complete platform basket components

in molten zinc. The galvanizing diffusion process shall allow the zinc to bond to the steel, at the molecular level. The galvanized zinc coating shall provide a barrier that shields the steel from the environment.

The aluminum covering of the platform basket will be painted the same color as the aerial sections if the galvanized aerial sections are painted. If the ladder sections are just galvanized then the platform shall be painted Ascot Gray to match to galvanizing.

01-00-2010

# **HANDRAIL STAINLESS STEEL**

The handrails shall be knurled stainless steel.

10-05-1200

#### LADDER BED

A heavy duty hydraulic tank built into the ladder bed shall provide support of the aerial in the travel position.

On the base section of the aerial device, a stainless steel scuff plate shall be installed where the aerial comes in contact with the travel support.

10-03-1000 28

# **RUNG COVERS**

For ease of climbing the ladder rungs shall be equally spaced on a maximum 14" centers and minimum 11.75" centers and shall have a skid-resistant surface or covering.

For added safety, skid-resistant rung covering shall be provided. The rung covering shall not twist and shall cover at least 60 percent of the climbing area of each rung.

Round rungs shall be provided and shall have a minimum outside diameter of 1-1/4", including the skid-resistant surface or covering.

For maximum strength, the minimum design load for each rung shall be 500lb distributed over a 3-1/2" wide area at the center of the length of the rung with the rung oriented in its weakest position.

Each aerial rung shall be covered with one (1) continuous piece of a protective, High-Traction safety walk non- skid material.

10-05-1100

#### **WEAR PADS**

The aerial wear pads shall be "PET" type and shall incorporate semi-crystalline hardness, rigidity, mechanical strength with exceptional sliding properties and very low sliding wear. The pads shall be used between the telescoping sections for maximum weight distribution, strength, and smooth operation. Side wear pads shall be nylatron GSM, stainless steel adjustment screws shall be provided on the side wear pads to permit proper side clearance.

10-06-1400

# AERIAL SIGN PANELS

The base section of the aerial device shall include sign panels, 12" high x 120" long, one on each side of the aerial. The sign panels shall be painted white to match the upper chassis color.

10-06-2010 23

#### **EXTENSION MARKINGS**

To improve safety and to provide the operator with vital information, extension markings shall be provided. For best visibility the base section of the ladder shall include markings on the outside of the left handrail and the inside of the right handrail to indicate extension position of the ladder in operation. The markings shall be BLACK reflective numbers that will mark every 10 feet with a hash mark between the numbers.

10-07-6140

#### **RESCUE BASKET**

A Junkins rescue basket, model #JSA-200 or approved equal plastic rescue basket, and mounting shall be installed on the outside of the base section. Rescue basket shall be modified to attach to the repelling arms at the front of the platform. The mounting will be an aluminum box mounted on the outside of the base section of the aerial ladder for storage of a rescue basket. The box shall have a hinged cover with latches to secure the cover.

The box shall be approximately 23'-3/4" high x 10" wide x 86" long. It shall be constructed of 1/8" smooth aluminum and painted white to match upper chassis colors.

10-08-3120 26

#### **BREATHING AIR**

A breathing air system shall be provided from the base section of the platform to the tip of the platform basket. The system shall be installed to comply with all applicable sections of NFPA #1901 standards. The cylinders shall be shipped fully pressurized with breathing air. The breathing air system service and operation shall be covered in the manuals provided with the apparatus on delivery.

The installation shall include the following equipment:

- 1. Two (2) 4500 PSI 444 Cubic Foot DOT air cylinders
- 2. Two (2) pressure gauges
- 3. One (1) air pressure regulator with downstream pressure gauge
- 4. One (1) Grade D air filter
- 5. Two (2) air outlets in platform basket

#### Piping System

All components of the piping system shall be designed for a pressure rating of three times the working pressure that they are expected to carry. The piping system shall be arranged with a high-pressure regulator at the air supply that shall limit the air pressure in the piping up the aerial device to the pressure required to supply 125 psi at the outlet point.

All piping, valves, and components shall be fabricated of corrosion-resistant materials and shall be sized for the number of outlets provided at the secondary aerial ladder operator's position. A

pressure relief valve set to relieve the pressure at 1½ times the working pressure of the piping system in the event of regulator failure shall be provided on the downstream side of the high-pressure regulator.

All valves, pressure regulators, and gauges shall be protected from accidental damage. The piping or hose system between the air cylinder(s) and the secondary aerial operator's position shall be installed so as to prevent damage due to abrasion, bending, pinching, or exposure to excessive heat.

A low air warning system shall be provided that will monitor the air volume and provide an audible and visual warning at the lower control station when the air volume is at or below 20 percent.

The quality of the breathing air shall meet the requirements of NFPA #1989, Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection.

All components of the system that the breathing air will be in contact with shall be cleaned of oil, grease, contaminants, and foreign material.

10-08-5300

# BREATHING AIR QUICK DISCONNECT

A breathing air quarter-turn refill valve shall be mounted between the breathing air regulator and the air cylinder and shall be used for refilling the base section air cylinder(s).

In addition, 50 feet of high pressure breathing air hose shall be provided with appropriate quick disconnect fittings.

10-08-7560

### BREATHING AIR MONITORING SYSTEM

The Smart Aerial breathing air system indicator shall be displayed on the smart screen at the turntable control stand and platform control stand. The indicator will change from green to amber to red to red flashing to alert the operator that the air is getting low.

45-02-1010 26

# ROOF LADDER BRACKETS FLY

There shall be welded plates and bolt on roof ladder mounting brackets installed on the inside of the fly section.

45-02-4026

#### **ROOF LADDER**

A Duo Safety Model 875-A, 18 foot aluminum roof ladder with folding steel roof hooks on one end and feet on the other end shall be provided on the inside of the fly section. The ladder width shall be 14" and not exceed the height of the handrails.

45-03-1020

### AXE WELD PLATES

Mounting plates shall be installed for an axe mounting in rear corner on the inside of the platform basket.

45-03-1210

### **AXE BRACKETS PLATFORM**

Bolt on mounting brackets for axe head and handle shall be installed on the mounting plates located in the rear comer of the inside of the platform basket.

45-03-1030

#### PIKE POLE WELD PLATES

Welded-in mounting plates shall be installed for a pike pole mounting on the left side of the fly section.

45-03-3200

#### PICK POLE BRACKETS: FLY

Bolt on mounting brackets for a pike pole shall be installed mounting plates on the located on the left side of the tip of the fly section.

SHOP NOTES

RSD to supply trash hook

49-05-0100

### PLATFORM FLOOR LIGHTING

White LED lighting will be provided to illuminate the platform. The platform floor lighting shall be activated by the aerial master switch.

49-05-1000

#### PLATFORM SELF LEVELING

The platform leveling system shall be provided and designed so that the platform can be supported and maintained level relative to the turntable, regardless of elevation.

The platform leveling system shall consist of electric controls powering hydraulic cylinders, with manual override. Leveling of the platform shall be maintained with two (2) hydraulic cylinders located at the platform. The system shall not require a slave cylinder and shall provide a simpler, more reliable system.

The system shall provide the capability to manually tilt the basket and hold this position for better access to the work area.

49-05-2100

### PLATFORM EXTENDING ARMS

Extending arms shall be provided to permit connection of a roof ladder or rescue basket to the platform basket. They are secured to the platform using a retainer pin. These arms rotate and will lock into place in the travel position and rescue position. Each arm is rated at 250lbs. Together the arms are rated at 500lbs.

49-05-3000

# PLATFORM MAN-SAVER BAR

One (1) Fire Research 24" ManSaver aerial safety bar with 10" loop shall be installed. The safety bar shall open either upward or inward, and be spring loaded to automatically return to the horizontal closed position. The safety bar assembly shall be made of aluminum and stainless steel.

The length of bar shall be: 24". Location of safety bar shall be installed at the platform basket opening from the aerial fly section to the platform basket.

49-05-4030

#### PLATFORM STORAGE BOX

Two (2) aluminum storage boxes shall be installed. Each box holds 100' of 1-3/4" hose and/or platform extending arms and breathing air masks.

49-05-4100

# PLATFORM STORAGE BOX: SIDES

Two (2) storage boxes shall be installed on each side at the center of the platform basket.

49-05-4710

# PLATFORM STORAGE BOX PAINTED

The platform storage box (s) shall be painted the same color as the platform basket.

49-05-5110

# PLATFORM ULTRA SONIC SENSORS

Ultra Sonic Sensor shall be fastened on the outside of the platform for extra protection. The sensor shall be able to indicate when any side of the platform is within 28 inches from the front and 48 inches from the side of coming into contact with an object. A momentary override switch will be located on the turntable and platform control console to move the platform away from the contacted area.

50-00-1400

### PLATFORM ROTATION SYSTEM

Two (2) hydraulic motors to operate two (2) planetary gearboxes, capable of field adjustment, to rotate the aerial platform activating the rotation system.

A 48" diameter external tooth bearing shall be provided for 360 degree continuous rotation in either direction. As turntable bearing bolts are required to be checked and re-torqued at regular intervals, to make this task relatively simple, the ability to re-torque all bolts from the top of the turntable is mandatory.

The bearing is bolted to the bearing base plate using thirty (30) 1.00" SAE Grade 8 bolts. The bearing is bolted to the turntable using thirty (30) 1.00" SAE Grade 8 bolts.

Two hydraulic release/spring brakes provide a positive lock for the rotation.

Two (2) pressure reducing valves control the force of the rotation to protect the side load of the aerial platform.

50-00-2010

# **CONTROL PANEL LANGUAGE**

All panels including main operations stations, outrigger stations, warning labels and load charts shall be written in English.

50-01-1525 26

#### **COMMAND PEDESTAL**

The Command Pedestal and platform control system is monitored by programmable logic control. The programmable logic control operating system shall use absolut encoders for elevation and roation to be able to monitor the following functions continuously to offer maximum safety. The monitored aerial control functions are as follows:

The turntable shall have a stand up Command Pedestal. The following items shall appear on the panel at the main control station:

- One (1) aerial Smart Screen
- One (1) system pressure gauge, 0-5,000 psi minimum
- One (1) emergency stop button
- One (1) joystick controller
- Monitor switches

The following items shall appear on the panel at the platform control station:

- One (1) aerial Smart Screen
- One (1) emergency stop button
- One (1) joystick controller
- Monitor switches

The system shall be capable of performing simultaneous aerial functions.

#### **Smart Screen**

One (1) aerial smart screen shall be installed at the main control station and one (1) at the platform control station. The screen shall consist of multiple pages. All screen shall have the same information.

The first page on the screen shall be the main aerial information. It shall give the following information:

- <u>Aerial rotation:</u> as the aerial is rotated 180 degrees left and right of the ladder bed, positive and negative numbers shall indicate how far right or left the aerial is rotated.
- <u>Aerial height:</u> as the aerial extends and elevates the distance from of the top of the platform handrail to the ground shall be indicated on the screen.
- <u>Aerial reach:</u> as the aerial extends the reach shall be indicated on the screen from the front of the platform to the center of the turntable.
- <u>Aerial extension remaining:</u> as the aerial extends the amount of feet remaining to extend shall be indicated.

- Rungs aligned indicator: as the aerial extends the rungs aligned indicator shall illuminate on the smart screen, indicating safety for climbing. The indicator shall not illuminate when the rungs are not aligned.
- Operational envelop indicators: prior to the aerial coming upon an unsafe operating position, while operating over the short jacked side of the truck or to close to the cab and body, the collision protection shall ramp to a stop. The right disable, down disable and/or left disable indicators shall appear on the screen indicating to the operator the function that is inoperable based on the position of the aerial.

The aerial shall be programed so it shall not make contact with the cab or body or any equipment as identified during the build process. Programmable cab and body collision protection shall alert the operator with indicators on the screen stating Right Rotation Disabled, Down Disabled and Left Rotation Disabled. Each individual indicator shall illuminate when the corresponding aerial function(s) (right rotation, left rotation or lowering) are disabled. All three indicators shall illuminate when the E-STOP is pushed or the outrigger interlock is active.

- <u>Emergency stop engaged indicator:</u> when the emergency stop button is engaged an indicator shall appear on the screen. An emergency stop button on the control panel shall be used for immidate emergency stopping of all aerial functions at all operating locations.
- Aerial load gauge: a load indicator shall appear on the screen to visually allow the operator to know they are within the safe operating parameters. The indicator shall change colors, green (safe), amber (caution) and red (overloaded) to alert the operator of the load on the aerial. The red load indicator shall flash and begin to sound a warning alarm at 100 pounds over the rated load.
- Outrigger warning indicator: when any outrigger is not fully extended and the jack is not supporting some of the truck weight a pie chart shall flash to indicate the outrigger has not been set for aerial operations. The outrigger diagram shall show the percent the outriggers have been extended. The outrigger diagram shall not change color until the jack has been set. Once the outrigger has been set the outrigger diagram shall change colors to match the pie charts diplay of color and safe operational envelop.

The aerial shall be able to be rotate 360 degees over the short jacked side of the truck. A programmable logic control system allows the aerial to rotate over the short jacked outriggers while maintaining safe operating parameters. An indicator shall appear on all the smart screens to warn the operator that one or more outriggers have been short set. An operational pie chart shall also be on the smart screen to indicate the safe operating parameters depending on the short set outrigger. In the event the vehicle has been set up with one or more of the outriggers short set, any attempted operation outside the predetermined parameters shall automatically ramp the operation to a feather-soft stop. A corresponding disable light shall appear on the screen to alert

the operator of the disabled function. The operator shall be able to return the aerial back to the safe operating parameters without the use of overrides.

- <u>Auto bedding indicator and switch:</u> an indicator shall appear when the aerial is in the 20/20/20 zone (within 20 degrees left or right of the ladder bed, below 20 degrees elevation and 20 percent retraction remaining) indicating the ladder can now be automatically stowed. By pushing a momentary button on the side of the screen the aerial shall rotate, retract and lower into the bed while avoiding cab and body collision.
- <u>Tip lights switch:</u> a button on the side of the screen shall turn all of the tip lights and the rung lights on and off.
- <u>Tracking lights switch:</u> a button on the side of the screen shall turn all of the tracking lights and the panel lights on and off.
- <u>Flow and Pressure gauge:</u> an indicator on the screen shall give a continuous reading of the monitors flow and presser. By pressing the momentary switch the icon shall switch to total gallons flowed. Total gallons shall be saved until the truck master switch has been turned off.
- <u>Hydraulic tank level:</u> an icon will indicate the amount of oil left in the tank.
- <u>Hydraulic tank temperature:</u> an icon will indicate the temperature of the oil in the hydrulic tank.

### The second page shall display the following information:

- <u>Side to side leveling</u>: a picture and number (positive or negative) indicating how level the truck is left to right.
- Front to back leveling: a picture and number (positive or negative) indicating how level the truck is front to back.
- Aerial hour meter: continual reading of the operational hours on the aerial.
- Outrigger extension: an outrigger with percentage shall appear indicating how far the outrigger is extended: red (25%-49% extension), orange (50%-74% extension), yellow (75%-95% extension), or green (96%-100% extension). The percentage shall co-inside with the operational pie chart on the next page to show the operator the parameters in which the aerial shall be able to operate.
- Dirty fliter: a picture will illuminate when the aerial filters are dirty and need to be replaced.

### The third page shall display the following engine diagnostics information:

- Engine RPM: shows live readings of the engines RPM's
- Engine coolant temperature: shows live readings of the engines coolant temperature
- Engine oil pressure: shows live readings of the engines oil pressure.
- <u>Battery charging condition:</u> shows live readings of the engine's battery condition
- <u>Transmission fluid temperature:</u> shows live readings of the transmission fluid temperature.

• Fuel level: shows live readings in percentage of the amount of fuel remaining.

# The fourth page shall display the following information:

• <u>Aerial operations pie chart:</u> an operational pie chart shall show in the corresponding color (red, orange, yellow or green) how far each outrigger out is extended and aerial's operational parameters based on each outrigger set up.

# The fifth page shall display the following information:

• <u>Load and reach chart:</u> an aerial load and reach chart shall be displayed to inform the operator of the operational capabilities of the aerial wet and dry.

# Aerial Speed

The aerials speed functions are proportionally regulated by the elevation and extension of the aerial. The aerial shall have proportional slow down on full extension and full retraction. The elevation system shall proportionally reduce the speed at sixty (60) degrees and ramp to off at full elevation. Lowering shall proportionally reduce the speed at three (3) degrees and ramp to off at minus twelve (-12) degrees. When the aerial is fully retracted the aerial speed shall be 20 percent faster than when fully extended.

The controls are also proportionally regulated during rotation, extension and elevation operations. The aerial shall smoothly ramp up to full operation speed to prevent jerking of the aerial. Should the operator release the controller during any of the three operations, the aerial shall ramp to a smooth soft stop.

#### Joystick Controller

A single joystick controller shall control aerial left/right, extend/retract and raise/lower functions. The joystick shall operate with the natural movement of the operator's hand for rotation and elevation. There shall be a thumb lever on the joystick to operate extension and retraction. The joystick shall have built in ramp up and ramp down capabilities.

The safety interlock trigger on the back side of the joystick must be engaged to opearate all aerial functions. With the trigger activated the RPM's shall increase to 1,250 RPM and maintain there for two (2) seconds after returning to the neutral position.

#### Lighting

LED Lights shall illuminate the main control station and turntable work area for added operator visibility and safety.

50-01-1800

#### PEDESTAL LOCATION

The operators control pedestal shall be installed on the driver's side of the turntable.

50-01-1900

# **GAUGES & VISUAL DISPLAY UNITS**

All gauges and visual display on the aerial apparatuses at the operating positions shall readout in the following measurements:

- Distances shall be displayed in feet and inches
- Loads shall be displayed in pounds
- Flows shall be displayed in gallons/psi
- Engine information shall be displayed in F/PSI

50-02-1010

#### **CONTROL STAND LID**

There shall be a lid installed on the command pedestal to give extra protection to the screen and joystick.

50-06-1200 26

### **TURNTABLE**

The turntable shall be two sided (left and rear) with the corners cut to allow for personnel to enter and exit the turntable. The turntable walking area shall be covered with NFPA #1901 compliant skid resistant black Line-X material, with a 2-1/2" lip. Two (2) 42" high, slip resistant covered handrails capable of withstanding a 225 pound force applied from any direction shall be installed on the turntable.

50-08-1230

# **TURNTABLE MAN SAVER BARS**

Two (2) Fire Research ManSaver bars shall be installed on the left and right side of the turntable. The safety bars shall lift either upward or inward to open, and be spring loaded to automatically return to the horizontal closed position. The safety bar assembly shall be made of aluminum and stainless steel.

50-11-1200

#### TURNTABLE FINISH

The aerial control console will be constructed from smooth aluminum and painted white to match upper chassis color. The back of the control panel will have one (1) full hinged door. The front of the control panel will have one (1) 8" x 8" hinged door. These doors are provided for maintenance and emergency operation of the aerial.

65-04-1115

### **OUTRIGGER CONTROL PANEL**

The outrigger control panel shall have a switch to energize the hydraulic system for outrigger functions.

#### Control Panel

The control panel shall include a Smart Screen that will display the same information as the other Smart Screens on the aerial, no buttons shall be active that will allow for aerial operation (i.e. auto bedding). There shall be three (3) swiches not located on the screen at the rear of the truck.

- 6. Manual override system to override the outrigger/aerial interlock system
- 7. One (1) switch for the emergency power unit.
- 8. Outrigger on/off switch

90-01-2200

# HYDRAULIC HIGH PRESSURE FILTER

The hydraulic system shall be equipped with a 'high pressure' hydraulic oil filter between the pump and the control valve designed to meet the flow requirements of the system. There shall be a filter replacement light on the outrigger control panel for the convenience of the mechanic. The return filter and pressure filter shall be connected together to the same light on the outrigger control panel to indicate replacement of filters.

90-01-3210

# **HYDRAULIC RETURN FILTER**

A 10 micron low pressure return line filter element shall be connected to the hydraulic reservoir. The 10 micron return line replaceable filter. There shall be a filter replacement light on the outrigger control panel for the convenience of the mechanic. The return filter and pressure filter shall be connected together to the same light on the outrigger control panel to indicate replacement of filters.

60-00-1120

# **TORQUE BOX**

The torque box connecting the turntable to the outriggers shall provide the rigidity needed for the aerial to be operated at -12 degrees to a +75 degrees elevation and full extension. The dimensions of the torque box will be unique to the truck and based upon customer requested specifications and engineering stability requirements. The back of the torque box shall be open for the option of ladder storage.

65-02-1230 26

#### **OUTRIGGERS**

Two (2) front and two (2) rear out and down outriggers shall be provided on the apparatus. The rear outriggers shall be located directly behind the rear axle and the front outriggers shall be located directly behind the cab and attached to the super structure.

### **Front Outriggers**

The front outrigger assemblies shall consist of the following components:

- 1. A 2.5" inside diameter cylinder with a 1.375" outside diameter rod shall extend and retract the outrigger 60".
- 2. A 5" inside diameter cylinder with a 3" outside diameter rod shall raise and lower each jack tube a distance of 28".

#### Front Outrigger Spread

The total width from the center of pivot pin to center of pivot pin when the outriggers are fully extended shall be: 17'6".

# Rear Outriggers

The rear outrigger assemblies shall consist of the following components:

- 1. A 2" inside diameter cylinder with a 1.125" outside diameter rod shall extend and retract the outrigger 48".
- 2. A 5" inside diameter cylinder with a 3" outside diameter rod shall raise and lower each jack tube a distance of 22".

# Rear Outrigger Spread

The total width from the center of pivot pin to center of pivot pin when the outriggers are fully extended shall be: 15'6".

65-02-2175 10

### **OUTRIGGERS DIRECTLY BEHIND CAB**

Outriggers will be moved from original placement at the front of the torque box to directly behind the cab.

65-03-1300

#### SHORT JACKING

The aerial device shall be able to be operated a full 360 degrees while any outrigger is short set. As the outriggers are set further out the operating parameters are adjusted to allow for more aerial operations. The outriggers shall be monitored and operations shall be displayed when the outriggers are in the following quadrants 25% - 49%, 50% - 74%, 75% - 95% and 96% - 100%. An operational graph shall be displayed outlaying the operational capabilities of the aerial within each quadrant. The outrigger along with the load on the aerial will continually be monitored so that the aerial is always within safe operating parameters. Devices that do not allow the aerial to operate 360 degrees while the truck is short jacked shall not be accepted, no exception.

65-04-1110

#### **OUTRIGGER CONTROL PANEL**

The outrigger control panel shall have a switch to energize the hydraulic system for outrigger functions. The switch shall increase the engine speed to 1,200 RPM when in the "ON" position. In the "OFF" position, the engine speed shall return to normal idle speed and the hydraulic system shall be de-energized.

#### Control Panel

The control panel shall include the following:

- 9. Manual override system to override the outrigger-aerial interlock system
- 10. One (1) switch to start and stop all aerial and outrigger operations.
- 11. One (1) switch for the emergency power unit.
- 12. Amber indicating lights shall signal when the outriggers are extended or supporting sufficient load.
- 13. A pulsing beeper shall be activated when the outrigger system is in use.
- 14. One (1) red flashing light shall be provided to indicate if outriggers have been short set.
- 15. One (1) aerial hour meter connected to the PTO shall be installed at the outrigger control station.
- 16. One (1) hydraulic pressure filter indicator light.

### AMBER INDICATING LIGHTS

If an outrigger is extended and not lowered an amber indicator light shall flash rapidly, indicating the jack cylinder is not supporting any load. If the outrigger is fully extended and the jack cylinder is supporting sufficient load the amber indicator light shall be solidly lit. If an outrigger is short-jacked the amber indicator light shall flash slowly.

All Smart Aerials can operate all functions over a short-jacked outrigger. If the aerial were to become overloaded or unsafe the ladder would slow to a smooth stop and the right disable, left disable or down disable light shall illuminate indicating the direction the operator is no longer able to rotate. The aerial can operate away from the unsafe position with one operator.

65-07-1100 10

#### **OUTRIGGER PLATES**

An auxiliary outrigger plate shall be provided for each outrigger. The units shall be 2' x 2' in size, one for each outrigger made from 1/2" aluminum with a handle for easy movement.

65-09-1200

# **OUTRIGGER STOWED INDICATOR LIGHT**

An outrigger stowed indicator light will be provided in the cab to show that one or more outriggers are not in the stowed position. The light will be connected to the door ajar / outrigger extend light in the cab.

70-00-1220 26

### PERFORMANCE CAPABILITIES

The following are aerial ladder and water capabilities for the operation of this unit in the unsupported configuration with the truck level, the outriggers fully extended and lowered to relieve the chassis weight from the axles. The capabilities are based upon 360-degree continuous rotation and up to full extension.

The following capabilities are based upon continuous 360-degree rotation and up to full extension. The aerial ladder and water system shall be designed to permit the following flows:

1,500 GPM: 90-degrees to the side of the ladder centerline

1,500 GPM: 45-degrees up and down from a line parallel to the centerline

<b>Elevation</b>	<b>Capabilities DRY</b>		<b>Capabilities WET</b>	
	Tip	<b>Evenly</b>	Tip	<b>Evenly</b>
	Load	Distributed	Load	Distributed
-10 degrees to 30 degrees	1,000 lbs	1,000 lbs	500 lbs	750 lbs
30 degrees to 45 degrees	1,000 lbs	1,500 lbs	500 lbs	750 lbs
45 degrees to 60 degrees	1,000 lbs	2,000 lbs	500 lbs	1,500 lbs
60 degrees to 75 degrees	1,000 lbs	2,500 lbs	500 lbs	2,000 lbs

The above ratings shall be based on average weight of personnel on the ladder at 250 pounds each.

The ladder must meet the 2:1 safety factor requirement for material based on the weight of the ladder plus a 1,000 pound live load at the platform, flowing 1,500 GPM of water at 90 degrees to the side of the platform at zero degrees elevation.

70-00-1420

#### **SWIVEL**

There shall be a 4" waterway swivel with 360 degrees continuous rotation. It shall be installed through the turntable and torque box to connect the aerial waterway plumbing from the water pump to the aerial. The hydraulic oil for the aerial shall be directed through a three-port hydraulic swivel with 360 degrees continuous rotation.

The swivel will be a modular three component swivel. It shall have a separate electrical swivel, hydraulic swivel and waterway swivel that when connected shall form one component. The three individual swivels shall not affection the operations of any other part of the swivel. Individual replacement of each individual portion of the swivel shall be capable.

70-01-1320 26

#### WATERWAY

A aerial waterway shall be provided from the base of the aerial device to the tip of the fly section. The aerial telescoping aluminum waterway shall be fabricated of aluminum and shall have four (4) tubes as follows:

- 1. 5-1/2" outside diameter at the base section
- 2. 5" outside diameter at the lower mid-section
- 3. 4.5" outside diameter at the mid-section
- 4. 4" outside diameter at the upper mid-section
- 5. 3.5" outside diameter at the fly section

#### **Butterfly Valve**

One (1) handwheel controlled 4" butterfly valve shall be installed before the monitor at the end of the waterway.

70-13-1120

# WIRELESS RADIO REMOTE

There shall be a radio receiver for the aerial and monitor controls supplied at the aerial control panel and powered by the chassis 12-volt electrical system. The radio receiver shall have proportional outputs to drive the 12-volt electric proportional aerial control hydraulic valves, as well as the on/off output for monitor control.

The radio remote control transmitter/receiver shall be powered by two AA batteries and shall operate approximately 300 feet from the truck, no tether shall be required. The transmitter / receiver shall have a belt strap for comfortable operations. The remote shall control following:

<u>Aerial</u>	<b>Monitor</b>		
Controls	<b>Controls</b>		
Raise &	Stream &		
Lower	Shape		
Extend &	Up & Down		
Retract			
Left &	Left &		
Right	Right		
Rotation	Rotation		

The following items shall be included on the remote:

<u>Enable Switch:</u> shall allow the remote to talk to the transmitter located at the main control station. Hitting the momentary enable switch shall allow the operator to begin operations of any function on the remote. If the operator does not choose a function after engaging the enable switch the remote will cease communication with the transmitter after 5 seconds. This switch serves as a dead man switch to the controls on the remote.

<u>Full / Half Speed Switch:</u> there shall be a turtle and rabbit indicator on the remote to allow the operator to run the aerial operations at full (rabbit) or half (turtle) speed.

Air Horn Switch: shall allow the operator to engage the air horn on the truck (if there is one).

<u>Emergency Stop Button:</u> if enabled, shall lock out all operations of all controls from every operator station. This serves as a safety back up incase the operator gets the aerial into an unsafe situation. The operator will have to disengage this switch before being able to operate the aerial from any control station.

<u>Auto Bed Switch:</u> is a momentary switch that when engaged will rotate, retract and lower the aerial into the bedded position while avoiding cab and body collision. Once the aerial is in the 20/20/20 zone (within 20 degrees left or right of the ladder bed, below 20 degrees elevation and 20 percent retraction remaining) the ladder can now be automatically stowed.

- <u>LCD Display:</u> shall give the operator continuous readings of the aerial information. This information shall include:
- <u>Aerial rotation:</u> as the aerial is rotated 180 degrees left and right of the ladder bed, positive and negative numbers shall indicate how far right or left the aerial is rotated.
- <u>Aerial height:</u> as the aerial extends and elevates the distance from of the top of the handrail to the ground shall be indicated on the screen.
- <u>Aerial reach:</u> as the aerial extends the reach shall be indicated on the screen from the tip of the aerial to the center of the turntable.
- Aerial elevation: as the aerial is elevated the elevation angle is indicated.
- <u>Aerial extension remaining:</u> as the aerial extends the amount of feet remaining to extend shall be indicated.
- Operational Envelop Disabled: shall be indicated on the screen if the left, right or down function is disabled.
- Overload Condition: shall display on the screen to alert the operator.
- Outrigger Not Set: is displayed if the outriggers still need to be set.
- Outrigger Not Extended: when any outrigger is not fully extended and the jack is not supporting some of the truck weight the operator shall be notified of the exact outrigger that needs to be adjusted.
- Breathing Air (optional): shall be reported if the breathing air is low or off.

65-04-1330

#### ELECTRIC OUTRIGGER CONTROLS

The aerial shall be equipped with four (4) out and down outriggers. These units shall be equipped with electric outrigger control valves activated by momentary rocker switches. The controls shall be located at the rear and to the outside of the chassis. This location shall give the operator full view and control of each outrigger.

70-15-1315 20

#### **MONITOR**

An Elkhart Cobra EXM monitor model 7250 shall be provided on the platform. The monitor shall be constructed from durable, hard anodized, lightweight Elk-O-Lite® material with a variable cross-sectional and vaned waterway for flows up to 1500 GPM. It shall be constructed with thrust rods and thrust bearings on both horizontal and vertical rotational joints for improved product longevity. The monitor shall have two (2) gear motors that allow for simultaneous vertical and horizontal adjustment, one motor shall control the horizontal rotation of no more

than 180 degree while the other motor shall control the -45 degree to +120 degree vertical rotation from horizontal position.

The monitor shall provide an input for a sensor/switch to enable/disable the +90 degree to +120 degree vertical travel; horizontal and vertical motors shall have a manual override device for use in the event of power failure.

The monitor shall be controlled at the turntable aerial control stand and in the platform. The monitor controls shall allow for operation of the monitor raise/lower, stream/fog, and left/right functions. The controls at the aerial control stand will over-ride the controls at the tip of the aerial.

70-15-1630

#### **NOZZLE**

Elkhart Select-O-Matic, model #SM-1500E, removable nozzle with a 3-1/2" inlet shall be included with the deck gun. This "X-treme" nozzle shall accommodate flows fluctuating from 300 to 1500 GPM while operating at a lower pressure of 75 PSI. The stream pattern shall be controlled by a 12 volt electric motor for an infinite pattern selection from straight stream to a wide full fog.

The motor shall be completely encased in the durable, lightweight Elk-O-Lite construction. There shall be a manual override in case of power failure. The nozzle shall have a 3-1/2" NH swivel base and highly visible yellow protective urethane bumper.

70-20-1150

#### **PRECONNECT**

One (1) TFT manual Valve Under Monitor (VUM) shall be installed between the end of the waterway and the monitor. There shall be less than 7 psi loss at 2000 GPM and the VUM incorporates TFT's stainless quarter ball design. One 2-1/2" port shall be opened for use of the discharge.

70-03-1210

#### 2.5" RELIEF VALVE

A 2.5" relief valve shall be installed above the turntable.

80-01-2130

### **INTERCOM**

The two station intercom communication system shall have the master station at the platform aerial turntable and secondary intercom and speaker at the platform basket area.

The master station shall have a volume control and a push-to-talk button. The remote station shall operate "hands free" and constantly transmit to the master station and speaker, unless the master station push-to-talk button is pressed.

The intercom shall be designed for exterior aerial application. Each station shall have a weather resistant and protective housing and water resistant speakers.

#### **Atkinson Intercom**

The Atkinson Dynamics Intercom AD26C master intercom and the AD26D slave intercom are designed for use in rugged, physical conditions and challenging acoustic environments. The durable construction is ideal for use on fire apparatus, emergency vehicles or any other mobile command equipment. The Atkinson Intercom provides high volume, clear audio communication.

The system is designed to provide clear communication for all personnel with minimum connections.

The remote unit, installed at the ladder tip, continuously transmits to the base stations. Base station units include a Push-to-Talk (PTT) button to transmit to other intercom positions.

80-10-1230

# TRACKING LIGHTS

Two (2) Whelen Micro Pioneer<sup>TM</sup> Model # MPPWCS shall be installed at the lower end of the base section ahead of the lift cylinders of the ladder. The 45 watt +12 DC, 3.25 Amp, Micro Pioneer lighthead configuration shall incorporate 12 white Super-LED® with a TIR reflector installed in a white die-cast powder coated aluminum housing and a polycarbonate cover with a chrome finish. The MPPWCS lights shall be activated from the tracking lights switch on the main control station and have an On/Off switch covered by a rubber boot and a black fiberglass enforced polycarbonate handle. The MPPWCS shall have a standard 8° spot light lens. The MPPWCS light shall have 4,100 usable lumens.

82-48-1040

#### **TIP LIGHTS**

Two (2) Whelen Micro Pioneer™ Model # MPPWCS shall be installed at the front of the platform. The 45 watt +12 DC, 3.25 Amp, Micro Pioneer lighthead configuration shall incorporate 12 white Super-LED® with a TIR reflector installed in a white die-cast powder coated aluminum housing and a polycarbonate cover with a chrome finish. The MPPWCS lights shall be activated from the tip light switch on the main control station and have an On/Off switch covered by a rubber boot and a black fiberglass enforced polycarbonate handle. The MPPWCS shall have a standard 8° spot light lens. The MPPWCS light shall have 4,100 usable lumens.

82-48-1220

#### **DOT LIGHTS**

Five (5) red LED DOT travel lights shall be installed three (3) on the front of the platform basket and one (1) on each side. The lights shall turn on with all other chassis DOT lights.

82-49-1140

### WARNING LIGHTS

The platform basket warning lights shall be the Whelen TION T-Series. Light assembly will be installed in a die cast black powder coated aluminum housing. The warning light shall include an internal flasher with 25 Scan-Lock<sup>TM</sup> flash patterns including steady burn with seven Modes of Operation with optional white override.

82-49-1210 30

# PLATFORM WARNING LIGHTS QUANITY

Four (4) Whelen LED lights shall be mounted on the platform basket, two on the front and one on each side of the basket.

82-49-1310

#### PLATFORM WARNING LIGHTS ACTIVATION

The platform baskets front warning lights shall be controlled from a switch in the cab when the aerial master is not activated. With the aerial master engaged *ALL* warning lights on the platform shall be controlled from a switch on the turntable control stand.

82-49-1710

### PLATFORM WARNING LIGHTS COLOR

The Whelen ION T-Series super-LED platform basket warning lights are to be red in color, part #TIONR

82-49-3130

#### **SCENE LIGHTS**

Two (2) Fire Research Spectra SPA260-Q20 recessed light shall be installed under the platform. Each lighthead shall have an output of 20,000 lumens.

87-10-2510 26

# **RUNG LIGHTING**

The ladder rungs of each aerial section shall be equipped with 12-volt LED luma-bar lighting. The luma-bar shall run the full length of the climbing portion of each section on each side of the aerial. These lights shall be activated from the turntable tracking light switch. The ladder rung lights shall be "red" in color.

90-00-1200

#### HYDRAULIC SYSTEM

The hydraulic system shall have a load sensing, variable gallonage, hydraulic piston pump with a 12-volt pressure reducing system. To reduce the normal time for aerial set up, the hydraulic pump shall be of the load sensing design. The hydraulic system shall have sufficient oil flow to provide the capability of performing multiple functions simultaneously without reducing operating speeds of the selected functions.

The hydraulic oil for the aerial shall be directed through a hydraulic swivel with 360 degrees continuous rotation. Enclosed in the hydraulic swivel shall be a minimum of twenty (20) electrical collector rings and a maximum of thirty-six (36) electrical collector rings with 360-degrees continuous rotation.

The hydraulic pump shall be large enough to provide oil to meet all of the requirements needed for aerial and outrigger operation standards.

A pressure reducing valve set at 500 PSI above the system pressure shall be connected to the hydraulic pump. This pressure reducing valve shall be a safety device for hydraulic pump failure. The hydraulic oil shall be directed through high pressure hydraulic hose and tubing.

The hydraulic system shall be designed to direct oil to the outriggers only while the ladder is in the bedded position. The oil can be directed to the aerial operation only when all of the outriggers are supporting sufficient load. This operation is made available through the use of electrical diverter valves with a manual override system for safety backup.

# **Hydraulic System Installation**

The non-sealing moving parts of all hydraulic components, whose failure results in motion of the aerial device, shall have a minimum bursting strength of four times the maximum operating pressure to which the component is subjected.

Dynamic sealing parts of all hydraulic components, whose failure results in motion of the aerial device, shall not begin to extrude or otherwise fail at pressures at or below two times the maximum operating pressure to which the component is subjected.

Static sealing parts of all hydraulic components, whose failure results in motion of the aerial device, shall have a minimum bursting strength of four (4) times the maximum operating pressure to which the component is subjected.

All hydraulic hose, tubing, and fittings shall have a minimum bursting strength of at least three times the maximum operating pressure to which the components are subjected. All hydraulic hoses shall have a stamped embedded on one end of the metal fitting to include the date, technicians creating the hose identification number, PSI of hose and the company the hose was made by. This shall assist a mechanic in determining the age of the hydraulic hose.

All other hydraulic components shall have a minimum bursting strength of at least two times the maximum operating pressure to which the components are subjected.

The hydraulic system shall be provided with an oil pressure gauge at the control station position.

#### Hydraulic Reservoir

The hydraulic system shall be supplied by a 40 gallon oil tank with a 10 micron filter on the return line and a 100 mesh filter on the pump inlet side.

A means for checking and filling the hydraulic reservoir shall be readily accessible.

The fill location shall be conspicuously marked with a label that reads "Hydraulic Oil Only."

Instructions for checking and filling the hydraulic reservoir shall be provided.

The hydraulic system components shall be capable of maintaining, under all operating conditions, oil cleanliness and temperature that comply with the component manufacturer's recommendations.

90-01-1400

# **HYDRAULIC GATED DRAIN LINE**

One (1) quarter turn shut-off valve shall be connected in the drain line of the hydraulic oil tank...

90-01-1450

### HYDRAULIC GATED DRAIN LINE

One (1) quarter turn shut-off valve shall be supplied between the suction line of the hydraulic oil tank and the inlet of the hydraulic pump.

90-00-1510

### **HYDRAULIC OIL ISO 32**

The hydraulic oil in this truck shall be ISO 32. Industrial hydraulic oils are made from selected base oils combined with new low-zinc universal anti-wear hydraulic oil additive. it provides premium anti-wear, rust, and oxidation inhibited oil. this additive system is balanced with high quality base oils to ensure that the final product provides the best combination of anti-wear, admissibility, filterability, rust protection, oxidation resistance and foam resistance properties.

90-01-1400

#### HYDRAULIC GATED DRAIN LINE

One (1) quarter turn shut-off valve shall be connected in the drain line of the hydraulic oil tank...

90-04-1600

### **ELEVATION SYSTEM**

The hydraulic elevation system shall have two (2) 7" inside diameter cylinders that have 4.50" diameter rods and a 42" stroke. The elevation system shall elevate the aerial from -12 degrees to +75 degrees. Each cylinder shall have lock valves connected directly to the barrel of the cylinder. The cylinders shall be equipped with spherical bushings to minimize cylinder rod wear.

A pressure-reducing valve shall limit the force of the aerial when lowering and the system pressure limits the force when elevating the aerial.

All hydraulic cylinders utilized in the aerial elevation and extension system shall be commercially available and shall be of standard sizes and lengths rather than special sizes or of proprietary manufacture. This requirement is important since it assures quicker parts availability, shorter down time, and less costly replacement parts for cylinders.

90-06-1100

#### **PTO**

An electrical start-stop "hot shift" PTO shall be mounted to the transmission. The PTO shall be connected to the hydraulic pump and shall supply power for all aerial and outrigger operations.

Electrical safety wiring shall require that the vehicle be in neutral and the parking brake set before the PTO will operate. A "PTO Engaged" indicator light is installed in the cab of the apparatus.

90-07-1100

### **EMERGENCY BACK UP PUMP**

An emergency hydraulic system shall be provided for capability for limited ladder functions and to stow the ladder and outriggers in case of prime motor failure.

The emergency system shall be powered from the 12-volt electrical system from the apparatus battery system and shall not be load managed.

# Queen Creek 88' Mid-Mount Platform - Body Specifications 7.30.18

00-00-1540

# **MINIMUM ANGLE OF APPROACH**

The minimum angle of approach for the apparatus shall not be less than: 10-degrees

SHOP NOTES

Minimum of 10-degrees

00-00-1550

# **MINIMUM ANGLE OF DEPARTURE**

The minimum angle of departure for the apparatus shall not be less than: 10-degrees

SHOP NOTES

Minimum of 10-degrees

00-12-1100

#### FINANCIAL STABILITY SPECIFICATIONS

With high-profile instances of fire apparatus manufacturers encountering financial difficulties, it is imperative that fire departments be diligent in evaluating the financial position of the companies they solicit to build on their emergency response vehicles. A contract entered into with a company on shaky ground is a dangerous prospect, since conducting business with a manufacturer in such condition could open the department to monumental problems.

Take, for instance, the growing theme of manufacturers *requiring* as opposed to *offering* prepayment and progressive payment options with a corresponding discount off the price of a vehicle. Such offers are made with an ulterior motive in mind, as it can be generally inferred that manufacturers requiring pre-payments and progressive payments do so because they need your cash *today* to fund production of other vehicles already in the backlog.

Should problems arise, as has been the case in situations too numerous to mention, your department risks losing any down payments already made or even the entire cost of a piece of equipment should certain pre-pay discount situations go awry.

While pre-payment discounts may be enticing, it is important to know just how stable the manufacturer seeking your funds is before you make that commitment. If you enter into one of these agreements and the manufacturer hits a rough patch, it is you that will be hurting, because your funds may not be recoverable. However, if you enter into a contract with a financially sound manufacturer, you will reap all of the benefits of a well-built truck at a lower cost. You may equally, by taking advantage of the time-value of money, be able to afford more truck than initially thought, because funds saved by leveraging pre-payment options could allow you get some added features that you might not necessarily have been able to afford.

With this in mind, it must be noted that Rosenbauer is a company with rock-solid financial stability. This is a statement not made lightly, as we can prove it to you. We can provide

language that you can insert into your bid specifications that stipulates that in order for bids to be accepted by a fire department, the company bidding must meet several fiscal criteria.

The first criteria call for the successful bidder to meet a debt-to-equity ratio not exceeding a 2.0 rating. Rosenbauer presently stands at a 1.51 rating, which is well-below the accepted rating. This low number results from Rosenbauer owning more assets with a marginal debt service. This means we are not using lenders to fund our operations, nor our growth.

The second requirement is that the debt coverage ratio of the successful body builder exceeds a 100 rating. The higher the number, the better able a company is to meet its payment obligations with banks and creditors. Rosenbauer's number is at 279.6, which is nearly three times the required amount. The higher the debt coverage ratio, the easily and more fluidly a company is positioned to pay its monthly obligations and operating costs.

The third criteria require that the equity ratio of the successful bidder must exceed .30 rating. A higher equity ratio indicates that the body builder has increased flexibility to meet its financial obligations which translates into greater financial stability. Rosenbauer currently has an equity ratio of .387 which is well above the accepted rating and an excellent indicator of financial strength.

When exploring and evaluating various manufacturers to consider for building your apparatus, there is little doubt you will find one that stands on as firmly a financial ground as Rosenbauer. While others are experiencing stressful issues that raise doubts as to the company's long-term viability, Rosenbauer continues to demonstrate a strengthening of its financial position in the apparatus manufacturing industry. Because Rosenbauer meets and exceeds all the above-stated financial bid requirements, we are best positioned to ensure customers of a strong relationship with the company, which cannot be claimed by most of our competitors in this volatile market.

The Rosenbauer America Dun and Bradstreet number is 02-447-3584. To acquire a Dun and Bradstreet report, telephone them at 1-800-234-3867 (in Canada 800-463-6362) or visit their web site address at www.dnb.com. Dun and Bradstreet is nationally-recognized, independent financial analysis company.

01-07-0064

#### **ENGINEERING BLUEPRINTS**

**ROSENBAUER** has submitted "proposal" blueprints which are "representative" of the vehicle being proposed and these have been generated on computer-aided-design (CAD) equipment. The blueprints submitted shall be on "B" size paper, 11" x 17" in size and views are on 1/16" to 1" scale.

The blueprints are provided as follows:

Sheet No. 1: Left side exterior view

Right side exterior view

Rear exterior view

Front view Top View

**ROSENBAUER** shall be provide construction drawings for approval prior to actual construction of the vehicle.

The design of the equipment is in accordance with the best engineering practices. The equipment design and accessory installation shall permit accessibility for use, maintenance and service. All components and assemblies shall be free of hazardous protrusions, sharp edges, cracks or other elements, which might cause injury to personnel or equipment.

All oil, hydraulic, and air tubing lines and electrical wiring shall be located in protective positions properly attached to the frame or body structure and shall have protective loom or grommets at each point where they pass through structural members, except where a throughframe connector is necessary.

Parts and components will be located or positioned for rapid and simple inspection and recognition of excessive wear or potential failure. Whenever functional layout of operating components determines that physical or visual interference between items cannot be avoided, the item predicted to require the most maintenance shall be located for best accessibility.

02-02-0300

#### **INSPECTION TRIPS**

Two (2) inspection trips for three (3) Fire Department personnel shall be made to the facility during the course of construction of the apparatus. Successful bidder shall consult with Fire Department committee chairperson as to the proper timing of the inspection trip(s). Air travel (for distances over 250 miles), meals, and lodging expenses shall be included. BIDDER SHALL INDICATE INTENTION TO PROVIDE THE REQUIRED INSPECTION TRIP(S) IN THE PROPOSAL PACKET.

02-03-0500

#### **ISO COMPLIANCE**

The manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that shall be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid.

02-03-0208

### **SINGLE SOURCE MANUFACTURER**

Rosenbauer is a "single source" manufacturer meeting the requirements of your bid specification. Rosenbauer maintains an integrated approach to all aspects of manufacturing including the chassis, body and aerial engineering, assembly and testing to meet the exact needs of our customers. All chassis, body and aerial design and assembly are completed within our own facilities. We also provide a sole source aftermarket support for all our products through an extensive dealer network and factory support. Each apparatus we manufacture is delivered with detailed service and parts manuals and we can support your aftermarket needs 24 hours a day, seven days a week. Rosenbauer's single source integrated approach provides an added value you expect and deserve with your fire apparatus purchase.

02-10-5010

#### **DELIVERY**

Final delivery of the completed apparatus shall be made F.O.B. Fire Department Headquarters.

The apparatus shall be delivered complete and ready for operation. The apparatus, to insure proper break-in of all components, shall be delivered under its own power - rail or truck freight is not acceptable.

01-16-0150

#### **BUMPER TO BUMPER WARRANTY**

We warrant each new motorized fire apparatus manufactured by ROSENBAUER AMERICA, LLC for a period of ONE YEAR from the date of delivery, except for chassis and other components noted herein.

Under this warranty we agree to furnish any parts to replace those that have failed due to defective material or workmanship where there is no indication of abuse, neglect, unusual or other than normal service providing that such parts are, at the option of ROSENBAUER AMERICA, LLC, made available for our inspection at our request, returned to our factory or other location designated by us with transportation prepaid within thirty days after the date of failure or within one year from the date of delivery of the apparatus to the original purchaser, whichever occurs first, and inspection indicates the failure was attributed to defective material or workmanship.

The warranty on the chassis and chassis supplied components, storage batteries, generators, electrical lamps and other devices subject to deterioration is limited to the warranty of the manufacturer thereof and adjustments for the same are to be made directly with the manufacturer by the customer.

This warranty will not apply to any fire apparatus that has been repaired or altered outside our factory in any way, which in our opinion might affect its stability or reliability.

This warranty shall not apply to those items that are usually considered normal maintenance and upkeep services: including, but not limited to, normal lubrication or proper adjustment of minor auxiliary pumps or reels.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability in connection with the sales of our apparatus unless made in writing by ROSENBAUER AMERICA, LLC.

01-19-0350

## <u>ALUMINUM BODY WARRANTY - TEN YEAR</u>

Rosenbauer America, LLC warrants to the original purchaser only, that the all aluminum body, fabricated by Rosenbauer America, LLC, under normal use and with reasonable maintenance, be structurally sound and will remain free from corrosion perforation for a period of TEN (10) years.

This warranty does not apply to the following items that are covered by a separate warranty: paint finish, hardware, moldings, and other accessories attached to this body. In addition, this warranty does not apply to any part or accessory manufactured by others and attached to this body.

ROSENBAUER AMERICA, LLC MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE ALUMINUM BODY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND HEREBY DISCLAIMED.

Rosenbauer America, LLC will replace without charge, repair or make a fair allowance for any defect in material or workmanship demonstrated to its satisfaction to have existed at the time of delivery or not due to misuse, negligence, or accident. If Rosenbauer America, LLC elects to repair this body, the extent of such repair shall be determined solely by Rosenbauer America, LLC, and shall be performed solely at the Rosenbauer America, LLC factory, or at an approved facility. The expense of any transportation to or from such repair facility shall be borne by the purchaser and is not an item covered under this warranty.

Rosenbauer America, LLC will not be liable for damages and under no circumstances will its liability exceed the price for a defective body. The remedies set forth herein are exclusive and in substitution for all other remedies to which the purchaser would otherwise be entitled.

Rosenbauer America, LLC will be given a reasonable opportunity to investigate all claims. The purchaser must commence any action arising out of, based upon or relating to agreement or the breach hereof, within twelve months from the date the cause of the action occurred.

Note: Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

01-19-2800

### **GALVANIZED SUBFRAME WARRANTY**

Subject to the provisions, limitations and conditions set forth in this warranty, Rosenbauer America, LLC (hereby referred to as "seller"), hereby warrants to each original purchaser only that each new hot dip galvanized body subframe (exclusive of paint finish and hardware) is structurally sound and free of all structural defects of both material and workmanship and further warrants that it will maintain such structural integrity for the duration of ownership by the original purchaser. This warranty terminates upon transfer of possession or ownership by original purchaser.

This warranty is conditioned upon normal use and reasonable maintenance of such subframe; prompt written notice of all defects to seller or one of the seller's then authorized dealers in the area; no repair or additions there to except by seller or authorized by it; said defect not resulting from misuse, negligence, accident, remount, overloading beyond applicable weight rating by customer or third parties. If any such conditions are not complied with, this warranty shall become void and unenforceable.

Should repairs become necessary under the terms or the warranty, the extent of that repair shall be determined solely by the seller and shall be performed solely at Rosenbauer America, LLC or a repair facility designated by the seller. The expense of any transportation to or from such repair facility shall be that of the purchaser and is not an item covered by this warranty.

Seller reserves the unrestricted right at any time from time to time to make changes in the design of and/or improvements on its products without thereby imposing any obligation on itself to make corresponding changes or improvements in or on its products theretofore manufactured.

EXCLUSIONS AND LIMITATIONS: THIS MANUFACTURER'S WARRANTY IS PROVIDED IN PLACE OF ANY AND ALL OTHER REPRESENTATIONS OR IMPLIED WARRANTIES. NO PERSON IS AUTHORIZED TO MAKE ANY REPRESENTATIONS OR WARRANTY ON BEHALF OF ROSENBAUER AMERICA, LLC OR ANY OF ITS DISTRIBUTORS OTHER THAN SET FORTH IN THIS MANUFACTURER'S WARRANTY. YOUR RIGHT TO SERVICE AND REPLACEMENT OF PARTS ON THE TERMS EXPRESSLY SET FORTH HERIN ARE YOUR EXCLUSIVE REMEDIES AND NEITHER THE MANUFACTURER NOR ANY OF ITS DISTRIBUTORS SHALL BE LIABLE FOR DAMAGES, WHETHER ORDINARY, INCIDENTAL OR CONSEQUENTIAL.

Note: Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

01-20-0500

#### PRO RATED PAINT WARRANTY TEN YEAR

# **TERMS AND CONDITIONS**

Rosenbauer hereby warrants the paint on the body of each new fire & rescue vehicle to be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection for a period of ten (10) years, starting on the date the vehicle is delivered to the original purchaser. Under this warranty, Rosenbauer agrees to furnish any item or items to replace those that have been found to be defective in material or workmanship where there is no indication of abuse, neglect or other than normal service. Such an item or items, at the option of Rosenbauer must be made available for our inspection at our request and returned to our factory or another location designated by Rosenbauer. Transportation of such an item or items will be arranged and covered by buyer within thirty (30) days after the date of failure and with ten (10) years from the date of delivery of the apparatus to the original purchaser. The inspection must indicate that the failure was attributed to an adhesion defect caused by defective manufacturing methods or paint material selection. Authorization for repair must be sought from Rosenbauer customer service department prior to repair occurring.

### PRO-RATED WARRANTY COVERAGE

Color Retention & Cracking	Adhesion, Blistering & Bubbling	Corrosion, Dissimilar Metal
0-72  Months = 100%	0-36  Months = 100%	0-36  Months = 100%
73-96  Months = 50%	37-84  Months = 50%	37-48  Months = 50%
97-120  Months = 25%	85-120  Months = 25%	73-120  Months = 25%

#### THIS WARRANTY SHALL NOT APPLY TO OR COVER THE FOLLOWING:

- Any item that has been repaired, repainted or altered by a facility not approved in advance by Rosenbauer.
- Special, incidental or consequential damages including, but not limited to, loss of time, inconvenience, loss of use, lost profits or transportation fees or charges to or from any facility.
- Any defect resulting from misuse, negligence, alteration, accident or lack of normal or required maintenance or adjustments, exposure to corrosive agents, fire, severe environmental conditions or acts of God.
- Painted items which are manufactured by a party other that Rosenbauer and which are separately warranted by that party including cabs not manufactured or painted by Rosenbauer.

#### EXCLUSIONS OF DAMAGES BOTH INCIDENTAL AND CONSEQUENTIAL

At no time shall Rosenbauer be held liable for any incidental, consequential, indirect, special and/or punitive damages whatsoever, whether coming from breach of contract, warranty, tort or

equity. Such items shall include the chassis or other items sold by Rosenbauer, or their operation or their failure to operate, or defects herein or any undertakings, acts or omissions related to, regardless whether Rosenbauer's knowledge of the possibility of any such damage.

Without limitation of the generality of the preceding statements, Rosenbauer categorically disclaims any and all liability for property and personal injury, damage, penalties for lost revenue and/or profit, loss of chassis or products and associated pieces of equipment, the expense of substituting chassis and/or products or the out of service expenses, resulting from damages and/or delays that creates down time expense and/or create economic losses, or any third party claims for damages.

This warranty in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability or make any alteration to this warranty in connection with the sale of our apparatus unless expressly given in writing by Rosenbauer.

NOTE: Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

01-21-0350

#### LETTERING WARRANTY

Rosenbauer America, LLC warrants to the original purchaser only, that the lettering and striping, installed by Rosenbauer America, LLC, will remain free from defects for a period of three (3) years under normal use.

Rosenbauer America, LLC will replace without charge, repair or make a fair allowance for any defect in material or workmanship demonstrated to its satisfaction to have existed at the time of delivery or not due to misuse, negligence, or accident. If Rosenbauer America, LLC elects to repair this item, the extent of such repair shall be determined solely by Rosenbauer America, LLC, and shall be performed solely at the Rosenbauer America, LLC factory, or at an approved facility. The expense of any transportation to or from such repair facility shall be borne by the purchaser and is not an item covered under this warranty.

Note: Surety bond, if required, will cover standard one year warranty period only and will not cover any extended warranties allowed by seller or other component manufacturers.

01-17-0750

### **PUMP WARRANTY**

Waterous warrants, to the original buyer only, that products and parts manufactured by Waterous will be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date the product is first placed in service, or five and one half 5-1/2 years from the date of shipment by Waterous, whichever period will be the first to expire;

provided the buyer notifies Waterous in writing, of the defect in said product within the warranty period, and said product is found by Waterous to be conforming with the aforesaid warranty.

When required in writing by Waterous, defective products must be promptly returned by the buyer to the Waterous Company at Waterous' plant at South St. Paul, Minnesota, or at such other place as may be specified by Waterous with transportation and other charges prepaid. A returned materials authorization (RMA) is required for all products and parts and may be requested by phone, fax or mail. The previously mentioned warranty excludes any responsibility or liability of Waterous for:

- A. Damages or defects due to accident, abuse, misuse, abnormal operating conditions, negligence, accidental causes or improper maintenance, or attributable to written specifications or instructions furnished by buyer;
- B. Defects in products manufactured by others and furnished by Waterous hereunder, it being understood and agreed by the parties that the only warranty provided for such products shall be the warranty provided by the manufacturer thereof which, if assignable, Waterous will assign to the buyer, if requested by Buyer;
- C. Any product or part, altered, modified, serviced or repaired other than by Waterous, without its prior written consent.
- D. The cost of dismantling, removing, transporting, storing, or insuring the defective product or part and the cost of reinstallation.
- E. Normal wear items (packing, strainers, filters, light bulbs, anodes, intake screens, etc.)

This warranty is subject to Waterous' conditions of sale (Waterous Company form number F-2190 as currently in effect all of which are herein incorporated and by this reference made a part hereof.

All other warranties are excluded, whether expressed or implied by operation of law or otherwise, including all implied warranties of merchantability or fitness for purpose. Waterous shall not be liable for consequential or incidental damages directly or indirectly arising or resulting from breach of any of the terms of this limited warranty or from the sale, handling, or use of any other product or part. Waterous' liability hereunder, either for breach of warranty or for negligence, is expressly limited at Waterous' option:

- A. To the replacement at the agreed point of delivery of any product or part, which upon inspection by Waterous or its duly authorized representative, is found not to conform to the limited warranty set forth above, or
- B. To the repair of such product or part, or
- C. To the refund or crediting to buyer of the net sales price of the defective product or part.

Buyer's remedies contained herein are exclusive of any other remedy otherwise available to the buyer.

01-17-1050

### STAINLESS STEEL PLUMBING WARRANTY

The manufacturer shall provide a ten (10) year warranty on the stainless steel plumbing components and installation. The manufacturer shall supply details of their warranty information with their bid submission.

01-33-3100

#### **COMPLETE PRINTED MANUAL**

**ROSENBAUER** shall provide with the vehicle upon delivery, <u>one (1) complete delivery manual</u>. This manual shall be in a notebook type binder, with reference tabs for each section of the vehicle. A companion compact disk (CD) with all of the printed material in an electronic format (Adobe Acrobat PDF) shall be provided.

Within each section shall be:

- Individual component manufacturer instruction and parts manuals
- Warranty forms for the body
- Warranty forms for all major components
- Warranty instructions and format to be used in compliance with warranty obligations
- Wiring diagrams
- Installation instruction and drawings for major parts
- Visual graphics and electronic photos for the installation of major parts
- Necessary normal routine service forms, publications and components of the body portion of the apparatus
- Technical publications for training and instruction on major body components
- Warning and safety related notices for personnel protection
- Cab and chassis manuals on parts, service and maintenance shall be provided

01-33-3400

#### "ON-LINE" SERVICE MANUAL SUPPORT

As part of the standard delivery manual, **ROSENBAUER** shall give a password-protected link to the end user, allowing access to the manufacturers' database on service parts. The internet-based system shall allow the end user to access the major component supplier's service parts listing such as Hale, Waterous, Akron, etc. This shall be accomplished with simplistic point and click features on the manufacturer line item within the "stripper" or "line item sheet". This will include, automatic updates, printable schematics and manufacturer's web links and is available in the commercially available format of Adobe Acrobat Reader to access these documents. Rosenbauer America, LLC shall submit with the bid proposal, a sample set of on line Adobe formatted material that has been printed from the manufacturer's website.

### Parts Listings within Manuals

The manuals will include cross-reference part numbers from the **ROSENBAUER** part number to the vendor parts. Example: <a href="ROSENBAUER Hydraulic Ladder Rack">ROSENBAUER Hydraulic Ladder Rack</a>, Part #LR-MN-0002 <a href="Rosenbetween">Cross-referenced to Ziamatic Corporation Part 098-MN2345</a>. This will allow for reference between individual parts and complete installation assemblies as completed by the body builder. The manuals will list all components of the vehicle that includes a vendor part utilized in a complete installation via the manufacturer's "line item sheet" or "stripper" utilized to manufacture the completed vehicle. These are "As Built" and proposals with "typical" or "generic" manuals will be rejected.

#### Illustrative Schematics within Manuals

**ROSENBAUER** shall include installation diagrams and drawings of all major sub assemblies. This will include components such as hydraulic ladder rack assemblies, pump panels, tanks, fire pumps, etc. The drawings shall be linked via an Internet based service program, in an electronic format from the manufacturers "stripper" (line item listing) of the manufacturing document. **ROSENBAUER** shall submit, upon request, a sample schematic.

#### Digital Images within Manuals

In addition to two and three-dimensional installation drawings, **ROSENBAUER** shall make accessible, via an internet based link, the actual photos of the installed components listed within the "stripper" or line sheet. This will include, but not limited to wiring terminals, main body distribution strips, fire pump shifting, auxiliary components, etc. **ROSENBAUER** shall submit a sample of these upon request.

#### **Installation Instructions within Manuals**

**ROSENBAUER** "work instructions" or "installation instructions" shall be included with the service manuals. These documents shall be accessible via a web-based link to the individual vehicle manufactured. The work instructions shall give systematic instructions of the component installation process. **ROSENBAUER** shall submit, upon request, a sample set of instructions.

#### Automatic Updates of Manuals and Parts Listings

The online manuals will include automatic updates that are accessible via the web link. When clicking on the part within the manufacturer's stripper or line sheet, it will allow the end user to access the component manufacturer website for updated information. This will allow for latest parts and service components from the individual part manufacturer or vendor.

#### **Electrical Schematics**

To maintain the vehicles electrical systems, the manufacturer shall provide to the purchaser the instructional manuals, complete electrical information and schematics on the vehicle. The electrical information shall be provided as follows:

### Wiring Systems 12 and 120 Volt:

- Graphic symbols for electrical diagrams.
- Wire labeling, imprinting codes and index.
- Computer generated electrical schematics indicating the circuit number, wire size, switches, circuit breaker and terminals on the vehicle.

**ROSENBAUER** shall submit, upon request, a sample set of diagrams.

01-33-3710

# **IN PROCESS PHOTOS**

The vehicle manufacturer shall provide a series of photos of the apparatus as it progresses through the production process. There will be a minimum of four (4) photos per interval and a total of six intervals, one (1) upon chassis arrival, four (4) during construction and one (1) upon completion.

01-33-5150

#### PRINTED ELECTRICAL SYSTEM MANUAL (OPTION)

The manufacturer shall provide with the vehicle upon delivery, one (1) electrical system manual. This manual shall be in a notebook type binder, with reference tabs for each section of the vehicle. A companion compact disk (CD) with all of the printed material in an electronic format (Adobe Acrobat PDF) hall be provided.

Within each section shall be:

- Individual component manufacturer instruction and parts manuals
- Warranty forms for the components
- Warranty instructions and format to be used in compliance with warranty obligations
- Wiring diagrams
- Installation instruction and drawings for major parts
- Visual graphics and electronic photos for the installation of major parts
- Necessary normal routine service forms, publications and components for the installed electrical components
- Technical publications for training and instruction on major components
- Warning and safety related notices for personnel protection
- Cab and chassis manuals on parts, service and maintenance shall be provided

The manufacturer shall supply details of their manual information with their bid submission.

02-90-0500

#### **ROSENBAUER CUSTOM CHASSIS**

A Rosenbauer Commander custom fire truck chassis shall be furnished with the following apparatus body and equipment. See attached specifications for exact chassis configuration.

56-01-1300

## **ELECTRIC SIREN**

One (1) Code 3 Model #3692 V-Con electronic siren shall be mounted in the cab. The unit shall feature an electronic air horn, wail, yelp, hi-lo siren and shall have a hard wired microphone.

56-02-1600

#### **SPEAKER**

One (1) Federal Signal DynaMax 100-watt speaker, Model #ES100, shall be installed. The speaker shall feature a Neodymium driver and a high strength composite housing that is chemical resistant and maintains rigidity at high temperatures.

56-02-1650

#### **SPEAKER**

One (1) stainless steel grille shall be installed on the speaker.

56-03-1100

# **SPEAKER LOCATION**

The siren speaker shall be installed in the center of the apparatus bumper.

56-06-1000

### FEDERAL ELECTRONIC SIREN

One (1) Federal Signal EQ2B electronic siren speakers shall be recess mounted into the left side of the front bumper. The Federal Signal EQ2B electronic siren shall be mounted in the cab. This unit shall feature the Q-siren wail (manual and automatic) horn, yelp and Q-brake. The amplifier shall produce 200 watts of power for siren, PA or rebroadcast. The system will be capable of driving (1) 200-watt speaker, recess mounted into the bumper on the LH side. The siren shall provide inputs for optional external switches to operate manual wail, brake or air horn features.

56-02-1410

#### **SPEAKER**

One (1) Federal Signal Model #BP200-EF speaker shall be installed. The design of the BP200 speaker incorporates two (2) 100-watt Neodymium drivers, to produce a full 200-watt output. The unique design of this speaker projects sound evenly to the front as well as to the side of the

vehicle. The 200 watt speaker shall include a stainless steel "Electric F" grille and mounting hardware.

56-03-1800

#### **SPEAKER LOCATION**

The siren speaker shall be installed on the apparatus bumper extension, as determined by the body manufacturer.

56-07-1300

#### **SIREN CONTROL**

One (1) foot switch shall be provided on the driver's side of the cab floor to activate the Federal Signal Q2B siren.

56-07-1500

# **SIREN CONTROL**

One (1) push button switch shall be installed on the officer's side of the cab dash to activate the Federal Signal Q2B siren.

56-07-1100

# <u>SIREN BRAKE</u>

One (1) push button siren brake to silence the Federal Signal Q2B siren shall be provided on the driver's side dash.

57-02-1250

#### **LIGHTBAR**

One (1) Whelen Ultra Freedom IV light bar shall be included with the apparatus cab. The light bar shall be a model F4N7QLED and shall be mounted on the roof of the cab, towards the front, above the windshield.

The light bar shall feature:

- A 72" light bar designed for high performance
- Two (2) Linear Super LED corner modules (red/driver side, blue/passenger side)
- Five (5) red Linear Super LED lights
- Five (5) blue Linear Super LED lights
- One (1) strobe tube in center section. Strobe tube to wired into a Tomar 780-1225-PRE traffic preemption power supply
- Clear hard coated lenses to provide extended life/luster protection against UV & chemical stresses
- Designed in accordance with NFPA Zone A requirements

57-10-0600

#### LIGHTBAR ACTIVATION

The front upper light bar shall be activated through the master warning switch.

58-71-1820	UPPER REAR WARNING LIGHTS	
	One (1) pair of Whelen Super LED, rotating beacons, P/N L31H*F, shall be installed, one each side on the upper rear of the apparatus body. The unit shall have dimensions of 4" high x 7-9/16" deep.	
57-20-8106	The driver side warning light shall be a Whelen red LED rotator, model L31H5F with a clear lens.	
57-20-8111	The officer side warning light shall be a Whelen blue LED rotator, model L31H2F with a clear lens.	
58-74-5100	REAR WARNING LIGHT MOUNTING	
F0. 40. 2000	The upper rear lights shall be mounted on cast aluminum stanchions attached to the apparatus body, one on each side.	
58-46-2000	<u>UPPER SIDE FRONT WARNING LIGHTS</u>	
57-20-1210	One (1) pair of Whelen model M6 LED warning lights shall be installed, on the upper portion of the body side, towards the front. The dimensions of the lights shall be $4-5/16$ " x $6-3/4$ ".	
	The driver side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.	
57-20-1213	The officer side warning light shall be a Whelen Model M6BC blue Super-LED™ with clear lens.	
58-01-2140	Each light shall be mounted with a Whelen Model M6FC chrome flange.	
58-61-2000	UPPER SIDE REAR WARNING LIGHTS	
	One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side on the upper portion of the body side, towards the rear of the body. The dimensions of the lights shall be $4-5/16$ " x $6-3/4$ ".	
57-20-1212	The driver side warning light shall be a Whelen Model M6BC blue Super-LED™ with clear lens.	
57-20-1211	The officer side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.	
58-01-2140	Each light shall be mounted with a Whelen Model M6FC chrome flange.	

58-03-6300	UPPER WING FRONT WARNING LIGHTS
57-20-1210	One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side one the front of the chassis cab upper wing area. The dimensions of the lights shall be $4-5/16$ " x $6-3/4$ ".
	The driver side warning light shall be a Whelen Model M6RC red Super-LED <sup>TM</sup> with clear lens.
57-20-1213	The officer side warning light shall be a Whelen Model M6BC blue Super-LED™ with clear lens.
58-01-2140 58-03-7300	Each light shall be mounted with a Whelen Model M6FC chrome flange.
36-03-7300	INBOARD WARNING LIGHTS
F7 00 4040	One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side one the front of the chassis cab, in the inboard warning light position. The dimensions of the lights shall be $4-5/16$ " x $6-3/4$ ".
57-20-1212	The driver side warning light shall be a Whelen Model M6BC blue Super-LED <sup>TM</sup> with clear lens.
57-20-1211	The officer side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.
58-01-2140	Each light shall be mounted with a Whelen Model M6FC chrome flange.
58-09-1520	INTERSECTION WARNING LIGHTS
57-20-4002	One (1) pair of Whelen model #600 red Super LED warning lights shall be installed one each side of the chassis cab. The dimensions of the lights shall be 4" x 6".
	The driver side warning light shall be a Whelen Model 60B02FCR blue-LED with clear lens.
57-20-4001	The officer side warning light shall be a Whelen Model 60R02FCR red-LED with clear lens.
58-16-2100	LOWER MID CHASSIS WARNING LIGHTS
57-20-1210	One (1) pair of Whelen model M6 LED warning lights shall be installed one each side of the chassis cab, above the chassis wheels. The dimensions of the lights shall be $4-5/16$ " x $6-3/4$ ".
	The driver side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.

57-20-1213	The officer side warning light shall be a Whelen Model M6BC blue Super-LED™ with clear lens.	
58-01-2140 58-21-1100	Each light shall be mounted with a Whelen Model M6FC chrome flange.	
30-21-1100	<u>UPPER REAR CHASSIS WARNING LIGHTS</u>	
	One (1) pair of Whelen model M6 LED warning lights shall be installed one each side of the chassis cab, towards the upper rear of the cab. The dimensions of the lights shall be 4-5/16" x 6-3/4".	
57-20-1210	The driver side warning light shall be a Whelen Model M6RC red Super-LED <sup>TM</sup> with clear lens.	
57-20-1211	The officer side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.	
58-01-2140 58-26-2000	Each light shall be mounted with a Whelen Model M6FC chrome flange.	
56-26-2000	LOWER MID-BODY WARNING LIGHTS	
F7 00 4040	One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side of the apparatus, mid-body. The dimensions of the lights shall be 4-5/16" x 6-3/4".	
57-20-1212	The driver side warning light shall be a Whelen Model M6BC blue Super-LED™ with clear lens.	
57-20-1211	The officer side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.	
58-01-2140	Each light shall be mounted with a Whelen Model M6FC chrome flange.	
58-36-2000	LOWER REAR SIDE WARNING LIGHTS	
	One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side of the apparatus body, towards the rear of the body. The dimensions of the lights shall be $4-5/16$ " x $6-3/4$ ".	
57-20-1212	The driver side warning light shall be a Whelen Model M6BC blue Super-LED™ with clear lens.	
57-20-1211	The officer side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.	
58-01-2140	Each light shall be mounted with a Whelen Model M6FC chrome flange.	

58-81-2000

# **LOWER REAR WARNING LIGHTS**

One (1) pair of Whelen model M6 LED warning lights shall be installed, one each side on the lower rear of the apparatus body. The dimensions of the lights shall be 4-5/16" x 6-3/4".

57-20-1210

The driver side warning light shall be a Whelen Model M6RC red Super-LED™ with clear lens.

57-20-1213

The officer side warning light shall be a Whelen Model M6BC blue Super-LED™ with clear lens.

58-01-2140

Each light shall be mounted with a Whelen Model M6FC chrome flange.

50-04-1000

### LOW VOLTAGE ELECTRICAL SYSTEM SPECIFICATIONS

The following specifications describe the low voltage electrical system on the specified rescue fire apparatus. The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The electrical equipment installed by the apparatus manufacturer shall conform to current automotive electrical system standards, the latest Federal DOT standards, and the requirements of the applicable NFPA 1901 standards.

The apparatus shall have a Weldon V-MUX multiplexing system, to provide diagnostic capability. The system shall have the capability of delivering multiple signals via a CAN bus, utilizing specifications set forth by SAE J1939. The electrical system shall be pre-wired for computer modem accessibility to allow service personnel to easily plug in a modem to allow remote diagnostics, troubleshooting, or program additions. There shall be a diagnostic display provided in the cab. The multiplexed system shall use twisted-pair shielded wire within the electrical system for noise reduction. The diagnostic display shall allow for fault and condition messages to be displayed. For superior system integrity, the networked system shall meet the following minimum requirement components:

- Power management center
- Load shedding power management
- Solid-state circuitry
- Switch input capability
- Responsible for lighting device activation
- Self-contained diagnostic indicators
- Power distribution module
- Diagnostic display for warning message indication

All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the protected circuit. Voltage drops in all wiring from the power source to the device shall not exceed 10 percent. The wiring, wiring harness and insulation shall be in conformance to applicable SAE J-1128 with GXL temperature properties and NFPA standards. All exposed wiring shall be protected in a loom with a minimum temperature rating of 289 degrees Fahrenheit. All wiring looms shall be properly supported and attached to body members. The electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

The wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection and shall be installed in accordance with the device manufacturer's instructions. Electrical connections shall be with mechanical type fasteners and large rubber grommets where wiring passes through metal panels.

The wiring between the cab and body shall be joined using Deutsche type connectors or in an enclosed terminal junction panel. This system will permit body removal with minimal impact on the apparatus electrical system. All connections shall be crimp-type with insulated shanks to resist moisture and foreign debris such as grease and road grime. Weather-resistant connectors shall be provided throughout to ensure the integrity of the electrical system.

Any electrical junction or terminal boxes shall be weather resistant and located away from direct water spray. In addition, the main body junction panel shall house the automatically reset breakers and relays as required.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless they are enclosed in an electrical junction box or covered with a removable electrical panel. The wiring shall be secured in place and protected against heat, liquid contaminants and damage. Wiring shall be uniquely identified at least every two feet (2') by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of the applicable NFPA 1901 standards.

The electrical circuits shall be provided with low voltage over current protective devices. Such devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. The over current protection shall be suitable for electrical equipment and shall be the automatic reset type and meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of the maximum current for which the protected circuit. The system shall have electro-magnetic interference suppression provided as required in applicable SAE standards.

The electrical system shall include the following:

- a) Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. A corrosion preventative compound shall be applicable to all terminal plugs located outside of the cab or body.
- b) The electrical wiring shall be harnessed or be placed in a protective loom.
- c) Holes made in the roof shall be caulked with silicone. Large fender washers shall be used when fastening equipment to the underside of the cab roof.
- d) Any electrical component that is installed in an exposed area shall be mounted in a manner that will not allow moisture to accumulate.
- e) A coil of wire must be provided behind each electrical appliance to allow them to be pulled away from the mounting area for inspection and service work.
- f) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.

The warning lights shall be switched in the chassis cab with labeled switches in an accessible location. Individual rocker switches shall be provided only for warning lights added over the minimum requirement level of warning lights in either the stationary or moving modes. All electrical equipment switches shall be mounted on a switch panel mounted in the cab convenient to the operator. Rocker type warning light switches shall be utilized. For ease of nighttime operation, an integral indicator light shall be provided to indicate when the circuit is energized. All switches shall be appropriately identified as to their function.

A single warning light switch shall activate all required warning lights. This switch will allow the vehicle to respond to an emergency and "call for the right of way". When the parking brake is applied, a "blocking right of way" system shall be automatically activated per requirements of the NFPA 1901 standard. All "clear" warning lights shall be automatically turned off upon application of the parking brake.

#### NFPA REQUIRED TESTING OF ELECTRICAL SYSTEM

The apparatus shall be electrically tested upon completion of the vehicle and prior to delivery. The electrical testing, certifications, and test results shall be submitted with the delivery documentation per requirements of the NFPA 1901 standard. The following minimum testing shall be completed by the apparatus manufacturer:

#### 1. Reserve capacity test:

The engine shall 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 shall be shut off and the minimum continuous electrical load shall be activated for ten (10) minutes. All electrical loads shall be turned off prior to attempting to restart

the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a failed test.

#### 2. Alternator performance test at idle:

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

### 3. Alternator performance test at full load:

The total continuous electrical load shall be activated with the engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system shall be permitted during this test. However, if an alarm sounds due to excessive battery discharge, as detected by the system requirements in the NFPA 1901 standard, or a system voltage of less than 11.7 volts dc for a 12 volt system is present for more than 120 seconds, the test shall be considered a failure.

#### 4. Low voltage alarm test:

Following the completion of the above tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm activates. The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts dc for a 12 volt system shall be considered a test failure. The battery system shall then be able to restart the engine. Failure to restart the engine shall be considered a test failure.

#### NFPA REQUIRED DOCUMENTATION

The following documentation shall be provided on delivery of the apparatus:

- a. Documentation of the electrical system performance tests required above.
- b. A written load analysis, including:
- 1. The nameplate rating of the alternator.
- 2. The alternator rating under the conditions.
- 3. Each specified component load.
- 4. Individual intermittent loads.

55-11-1200

### **DOOR OPEN/HAZARD WARNING LIGHT**

One (1) red flashing, warning light shall be provided and installed in the driver's compartment to indicate an open passenger or apparatus compartment door. The warning light shall also be attached to folding equipment racks and light towers as specified. The light shall be a flashing rectangular incandescent marker light with a red lens and shall be properly marked and identified.

55-13-1060

#### DOOR OPEN SYSTEM ON VISTA SCREEN

The cab and body main compartment doors shall be wired to illuminate an open door indicator on the Weldon V-MUX Vista screen located in the cab when the parking brake is released. The indicator shall individually specify the door(s) that is(are) open.

55-14-1100

# DOOR OPEN/HAZARD WARNING ALARM

A door open/hazard warning alarm shall be installed. The audible alarm shall activate when an open door is detected upon release of the parking brake. The alarm shall have a distinct noise to avoid conflict with other cab mounted alarms.

50-41-3000

#### **AIR HORNS**

Two (2) 24.5" Stuttertone chrome plated air horns shall be recess mounted into the front bumper with one positioned on each side. An air protection valve shall be provided in the air horn piping that will not allow the chassis air brake system to drop below 90 PSI.

50-43-2000

#### ELECTRIC TRAFFIC HORN AND AIR HORN SELECTOR SWITCH

One (1) selector switch shall be provided on the cab's dash that will allow the chassis steering wheel horn button to activate either the electric traffic horn or air horn system.

50-43-2300

#### AIR HORN SWITCH

One (1) switch shall be installed to activate the air horn system on the officer's side of the cab dash.

51-00-1400

# 12 VOLT POWER SOURCE

Five (5) 12 volt power and ground connection rated at 20 amps shall be provided in an interior desk of the apparatus body.

SHOP NOTES

install one behind the driver, (2) behind officer and each side of rear cab wall at floor level for flashlight installation.

51-00-4010

The power source shall be "constant hot" and remain active regardless of the position of the master battery switch.

51-00-2410

### 12 VOLT USB POWER SOURCE

Two (2) 12 volt dual USB power outlet with 5 volt 2.1 amp output shall be provided in the rear cabinet of the chassis cab.

SHOP NOTES

install one each side at rear edge of engine tunnel for access by crew cab passengers

51-00-4010

The power source shall be "constant hot" and remain active regardless of the position of the master battery switch.

51-05-6400

### **PUMP ENCLOSURE LIGHTS**

One (1) LED work light shall be provided in the pump enclosure.

51-05-9000

The control switch shall be mounted on the light head.

51-20-3100

### **LIGHT MOUNTING LOCATION**

The mounting location for the specified light shall be on the front edge of the chassis cab roof.

51-15-3132

# **BROW SCENE LIGHT**

One (1) Whelen Pioneer Plus Super LED model PFP2 dual lamp brow light shall be center mounted, facing forward. The light shall draw 13 amps and generate 10,000 lumens. The bulb shall be accessible through the front. The lamphead shall be approximately more than 3" deep by 4-5/8" high by 14" wide. Lamphead and brackets shall be powder coated white.

54-15-6002

#### SCENE LIGHT SWITCHING

One (1) scene light switch with indicator shall be installed on the cab main switch panel to control the front scene light(s). The switch shall be labeled "FRONT SCENE".

52-02-1100

#### BACKUP CAMERA

One (1) chassis supplied rear camera system shall be mounted on the rear of the vehicle. All system components shall be installed by the apparatus body manufacturer.

52-08-1009

### **HAND LIGHTS**

All NFPA required portable hand lights supplied by the Customer must be installed before the apparatus is placed into service.

53-01-1200

#### MARKER LIGHTS

LED marker lights shall be installed on the vehicle in conformance to the Department of Transportation requirements.

53-02-1200

#### LICENSE PLATE BRACKET

One (1) stainless steel license plate bracket shall be provided at the rear bumper. The bracket shall have a LED light.

53-03-2750

### **TAIL LIGHTS**

One (1) pair of Whelen M6 LED tail/brake lights shall be provided. The rectangular 4"x6" lights shall be red.

53-04-2750

### **TURN SIGNALS**

One (1) pair of Whelen M6 LED turn signals with populated sequential chevron arrow shall be provided.

53-06-3550

#### **BACKUP LIGHTS**

One (1) pair of Whelen Series M6 LED backup lights shall be installed on the rear of the apparatus body. The dimensions shall be 4" x 6" and the lens color shall be clear.

53-07-1210

## FOUR LIGHT HOUSING

One (1) pair of chrome plated tail light housings shall be supplied. Each housing shall be designed to hold four (4) Whelen M6 rear lights located at the lower rear corners of the body.

53-05-1800

#### MID BODY LED TURN SIGNALS

One (1) pair of mid body LED turn signals shall be provided. The location of the turn lights shall be at mid-body near the rear wheel axle.

54-03-1200

#### **PUMP PANEL GROUND LIGHTS**

Two (2) LED ground lights shall be installed under the pump panel running boards. One (1) light shall be located on the driver's side and one (1) light located on the officer's side of the apparatus.

54-03-1400

#### MID BODY GROUND LIGHTS

Two (2) LED ground lights shall be installed under the mid-body of the apparatus. One (1) light shall be located on the driver's side and one (1) light located on the officer's side of the apparatus.

54-03-1600

### **REAR STEP GROUND LIGHTS**

Two (2) LED ground lights shall be installed under rear step of the apparatus.

54-03-1800

### **REAR BODY GROUND LIGHTS**

Two (2) LED ground lights shall be installed under the compartments located behind the rear wheels. One (1) light shall be located on the driver's side and one (1) light located on the officer's side of the apparatus.

54-04-1999

The ground lights shall automatically activate when the parking brake is applied.

54-10-1450

#### **REAR TAILBOARD LIGHTS**

Two (2) LED step lights with clear lens shall be installed to illuminate the step surfaces at the rear of the apparatus body.

54-11-2100

The step/walkway light switch shall be installed and wired to the parking brake.

54-15-1280

#### **SCENE LIGHT**

Eight (8) Whelen M6ZC Series Super-LED 6-3/4" x 4-5/15" gradient scene light(s) shall be provided. The steady burn scene light shall incorporate Linear Super-LED and Smart LED technology.

The M6ZC shall be furnished with a chrome trim ring, a rubber gasket, screws, and screw grommets for installation. The M6ZC shall have the ability to be installed as a surface mount scene light.

Lens Color: Clear

54-15-5100	SCENE LIGHT LOCATION
54-15-5200	One (1) scene light shall be located on the left side of the cab.
	SCENE LIGHT LOCATION
54-15-5500	One (1) scene light shall be located on the right side of the cab.
	SCENE LIGHT LOCATION
54-15-1470 54-15-5600	Two (2) scene light shall be located on the left side of the apparatus body.
	The scene light shall be installed on an aluminum mounting plate, painted to match the body.
	SCENE LIGHT LOCATION
54-15-1470	Two (2) scene light shall be located on the right side of the apparatus body.
54-15-1470	The scene light shall be installed on an aluminum mounting plate, painted to match the body.
	SCENE LIGHT LOCATION
54-15-6320	Two (2) scene light shall be located on the rear of the apparatus body.
	SCENE LIGHT SWITCHING
54-15-6330	All scene light(s) shall activate via a single virtual scene light switch located on the driver's Vista screen.
	SCENE LIGHT SWITCHING
54-15-6700	All scene light(s) shall activate via a single virtual scene light switch located on the officer's Vista screen.
	SCENE LIGHT SWITCHING
58-93-1150	The rear scene lights shall activate automatically upon placing the transmission into reverse.
	TRAFFIC ARROW LIGHT
	Two (2) Federal Cional VDV Cional Master, Madel 220042, 20" form (4) and a Winer EVT 1-

Two (2) Federal Signal VPX SignalMaster, Model 320842, 20" four (4) amber Viper EXT lamp units shall be installed at rear of the apparatus body, one each side as space permits. This application is ideal for aerials, rescues with rear walk in doors, full height compartment doors, and EMS doors, where a full width unit is not possible.

A model #331105 controller shall be located in the cab accessible to the driver and officer. The controller shall include four tactile membrane switches and a slide selector for the direction of traffic flow. This model is the full featured controller with fourteen selectable flash patterns, fast or slow setting, and capable of driving (2) four lamp units, a six lamp unit, or an eight lamp unit. The 331105 has the optional capabilities for Auto-On with the Emergency Master, and/or controlling the outer lamp modules to flash with the respective signal light.

58-95-1300

The traffic arrow light shall be surface mounted at the rear of the apparatus body.

10-02-1100

#### **FLUID DATA PLAQUE**

One (1) fluid data plaque containing required information shall be provided based on the applicable components for this apparatus, compliant with NFPA Standards:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Drive axle lubricant
- Power steering fluid
- Pump transmission lubrication fluid
- Other NFPA applicable fluid levels or data as required

Location shall be in the driver's compartment or on driver's door.

10-02-1200

#### **DATA & WARNING LABELS**

#### HEIGHT LENGTH & WEIGHT

A highly visible label indicating the overall height, length, and weight of the vehicle shall be installed in the cab dash area.

#### CAB SEATING POSITION LIMITS

The label shall also include the seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.

10-02-1300

#### NO RIDE LABEL

One (1) "NO RIDERS" label shall be applied on the vehicle at the rear step area or other applicable areas. The label shall warn personnel that riding in or on these areas, while the vehicle is in motion is prohibited.

10-02-2100

#### **CAB SEATING POSITION LIMITS**

One (1) label shall be installed in the cab to indicate seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.

10-02-2500

#### HELMET WARNING TAG

One (1) label shall be installed in the cab, visible from each seating position. The label shall read "CAUTION: DO NOT WEAR HELMET WHILE SEATED." Helmets must be properly stowed while the vehicle is in motion according to the current edition of NFPA 1901.

10-03-1100

# **COUNTERWEIGHT**

Four thousand (4000) lbs of counterweight shall be installed on the rear of the apparatus to improve the ratio of the front to rear weight balance.

10-03-6100

### REAR TOWING PROVISIONS

There shall be two (2) tow eyes furnished at the rear of the body and attached directly to each chassis frame rail. The tow eyes shall be accessible above the rear tailboard. The tow eyes shall be constructed of 5/8" plate steel with a 4" I.D. hole, large enough for passing through a tow chain end hook.

80-43-2400

The tow plates shall be painted black.

10-05-4322

### **BUMPER**

The chassis shall feature a heavy duty bumper constructed from ASTM A36, 1/4" thick steel and painted primary job color. The bumper shall be 12" high by 102" wide with two inch (2") flanges and chamfered corners.

Integral heavy duty steel bumper "wings" shall extend from the bumper to the cab.

The bumper shall be mounted to a twenty-two inch (22") long chassis frame extension.

A contoured apron / gravel shield fabricated from NFPA compliant, slip-resistant polished aluminum shall enclose the area between the bumper and the cab.

Front corners to cut at 45-degree angle with step pocket recessed into each corner.

SHOP NOTES

Front corners to cut at 45-degree angle with step pocket recessed into each corner.

10-04-2720

#### FRONT BUMPER COMPARTMENT

One (1) recessed fire hose compartment constructed from smooth aluminum shall be installed in the center of the front bumper extension. Water drain holes shall be drilled in the bottom.

10-04-3160

#### **BUMPER COMPARTMENT DOOR**

One (1) raised aluminum tread plate door for the front bumper compartment shall be supplied. The door shall have a minimum 1" lips on all sides surrounding the entire compartment opening, a stainless steel hinge at the rear and a latch to secure the compartment.

10-04-3460

### **BUMPER COMPARTMENT DOOR SHOCK**

A gas shock shall be supplied to hold the front bumper compartment door in the open position.

10-04-2920

#### FRONT BUMPER COMPARTMENT

One (1) recessed fire hose compartment constructed from smooth aluminum shall be installed in the right side of the front bumper extension. Water drain holes shall be drilled in the bottom.

SHOP NOTES

Sized to fit 150' of 1.75 DJ hose with nozzle

10-04-3150

### BUMPER COMPARTMENT DOOR

One (1) aluminum tread plate door for the front bumper compartment shall be supplied. The flat door shall have a stainless steel hinge at the rear and a latch to secure the compartment.

10-04-3460

#### BUMPER COMPARTMENT DOOR SHOCK

A gas shock shall be supplied to hold the front bumper compartment door in the open position.

10-04-3190

#### **HOSEWELL FLOOR**

The hosewell shall be provided with a hinged, drop down door.

10-04-2942

#### **COMPARTMENT MATTING**

The bumper compartment floors shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking units, 12 x 12 square by 3/4" thick. This material shall be resistant to temperature, ultra-violet radiation, mechanical impacts, chemical actions and corrosion free.

10-06-1120

### **HUB AND LUG NUT COVERS**

The apparatus shall have chrome or stainless steel hub and lug nut covers on the front and tandem rear axles.

10-06-1652

### TIRE PRESSURE INDICATOR

There shall be a tire pressure indicator at each tire's valve stem on the vehicle that shall indicate if there is insufficient pressure in the specific tire.

10-08-2100

### **REAR MUD FLAPS**

One (1) pair of black mud flaps shall be installed behind the rear wheels.

== Midship Aerial Pump & Plumbing - 822.160 01/12/17 ==

20-23-2200

### WATEROUS CXVC20 SINGLE STAGE PUMP

A Waterous model CXVC20, single stage centrifugal pump shall be designed to mount on the chassis frame rails and shall be split-drive shaft driven. The pump casing shall be of high-tensile, close-grained ductile iron. Pump body shall be a single piece housing, for easy removal of impeller assembly including wear rings and bearings from beneath the pump without disturbing the mounting or piping.

#### **IMPELLER**

A matched bronze impeller specifically designed for the fire service will be provided. It will be accurately balanced both mechanically and hydraulically, for vibration-free operation. Stainless steel heat-treated and precisely ground to size. It shall be supported on both ends by oil or grease lubricated ball bearings.

Replaceable wear rings, bronze, reverse-flow, labyrinth-type shall be provided. Deep groove ball bearings shall be located outside the pump to give rugged support and proper alignment to the impeller shaft. The bearings shall be oil or grease lubricated. All bearings shall be completely separated from the water being pumped.

#### **PUMP TRANSMISSION**

The housing shall be constructed of high tensile aluminum and be of three (3) piece, horizontally split design. The transmission driveline shafts shall be made from alloy steel forging, hardened and ground to size. The drive and driven sprockets shall be made of steel and shall be carbonized and hardened.

The drive chain shall be Morse HV involute form chain. The lubrication system shall be an impeller shaft driven oil pump to deliver oil to an integral spray header, to completely pressure lubricate the drive chain.

#### **PUMP MOUNTING**

The pump shall be bolted to steel angles in pump module, using grade 8 bolts.

#### **DRIVELINE**

Hollow-tube drivelines and universals shall be properly matched to the engine and transmission output torque ratings.

20-23-2130

#### 1500 GPM FIRE PUMP SPECIFICATIONS

The centrifugal type fire pump shall be a Waterous model CXC20 midship mounted with a rated capacity of 1500 GPM. The pump shall meet NFPA 1901 requirements.

The pump shall be certified to meet the following deliveries:

1500 GPM @ 150 PSI 1500 GPM @ 165 PSI 1050 GPM @ 200 PSI 750 GPM @ 250 PSI

22-24-1200

#### GATED 6" INTAKE -- LEFT SIDE PUMP PANEL

One (1) 6" gated suction intake shall be installed behind the left side pump panel. Intake shall be gated with an air operated 6" butterfly valve and shall have control switch at the pump operator's panel. The power valve operating mechanism shall prevent movement of the valve from the fully closed position to the fully open position or vice versa, in less than three seconds. The control switch shall have a colored identification label.

A pressure dump/relief valve shall be included that is factory preset at 125 PSI and field adjustable from 75 to 250 PSI. The pressure dump/relief valve shall provide over-pressure protection for the suction hose even when the intake valve is closed. The outlet of the dump/relief valve shall be 2.5" in diameter to allow directing the discharge flow away from the pump operator's position.

An inlet fitting with 6" NST thread shall be provided, complete with a removable strainer screen.

21-01-2500

An Innovative Controls <sup>3</sup>/<sub>4</sub>" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve

complete with a recessed ID label provision. The handle shall lift, to open and push down, to close.

22-24-3200

#### GATED 6" INTAKE -- RIGHT SIDE PUMP PANEL

One (1) 6" gated suction intake shall be installed behind the right side pump panel. Intake shall be gated with an air operated 6" butterfly valve and shall have control switch at the pump operator's panel. The power valve operating mechanism shall prevent movement of the valve from the fully closed position to the fully open position or vice versa, in less than three seconds. The control switch shall have a colored identification label.

A pressure dump/relief valve shall be included that is factory preset at 125 PSI and field adjustable from 75 to 250 PSI. The pressure dump/relief valve shall provide over-pressure protection for the suction hose even when the intake valve is closed. The outlet of the dump/relief valve shall be 2.5" in diameter to allow directing the discharge flow away from the pump operator's position.

An inlet fitting with 6" NST thread shall be provided, complete with a removable strainer screen.

21-01-2500

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift, to open and push down, to close.

20-26-2200

## FIRE PUMP MECHANICAL SHAFT SEAL

The Waterous fire pump shall be equipped with self-adjusting, maintenance free, 'mechanical shaft seal' which is designed to be functional in the unlikely event of a seal failure.

20-26-2300

#### **IMPELLER HUBS**

The Waterous fire pump impeller hubs shall be standard bronze type.

20-26-2600

# FIRE PUMP ANODE SYSTEM

One (1) Waterous Fire Pump Anode(s) shall be installed to reduce corrosion. The anode shall be a bolt-in or screw-in type and easily replaceable. The anode is designed to sacrifice the zinc element to galvanic corrosion. Without this protection, galvanic corrosion may damage the iron pump body and fittings.

20-26-3050

### PNEUMATIC PUMP SHIFT

The pump shift shall be air operated and shall incorporate an air cylinder with an actuating switch to shift from road to pump and back. The pump shift air valve shall be supplied with the pump by the pump manufacturer.

The pump shift switch shall be mounted in the cab and identified as "Pump Shift" and include instructions permanently inscribed on the pump shift switch plate. The In-Cab operating switch uses a spring loaded lock to prevent it from accidentally being moved.

- \*A "Pump Engaged" indicator shall be provided in the driving compartment to indicate that the pump shift has been successfully completed.
- \*An "Ok to Pump" indicator shall be provided in the driving compartment to indicate that the pump is engaged, the chassis transmission is in pump gear, and the parking brake is engaged.
- \*A "Throttle Ready" indicator shall be provided at the pump operator's panel that indicates that the apparatus is in "OK to Pump" mode or that the chassis transmission is in neutral and the parking brake is engaged.
- \*An interlock system shall be provided to prevent advancement of the engine speed at the pump operators panel unless the chassis transmission is in neutral and the parking brake is engaged, or the apparatus is in "OK to Pump" mode.
- \*Controls for the pump shift are to be in the cab, and easily accessible.

20-26-3500

#### MANUAL OVERRIDE FIRE PUMP SHIFT

The Waterous fire pump shall be equipped with a manual pull type shift on the pump panel location, with will be in addition to the air operated pump shift system.

20-29-1200

#### PRIMER – AUTOMATIC

An automatic fire pump priming system shall be provided and installed. The system shall be oilless type and environmentally safe. Once engaged, the system shall be fully automatic and not require any action from the pump operator/engineer when pump draft is lost. This feature provides an additional safety margin by maintaining pump flow from the available water source automatically during drafting operations. When air is introduced during a drafting operation from conditions such as whirlpools or turbulence from porta-tank refill operations, the priming system shall automatically engage to remove the air and stabilize water flow and pump pressure. For additional safety, the entire system shall operate at less than 70dBA of ambient noise.

The priming system shall engage automatically whenever the pump discharge falls below five (5) psi and shall remain engaged until a pump prime has been achieved. The priming system shall automatically disengage when a positive pump discharge pressure has been established. The electrical current draw from the chassis batteries shall not exceed four (4) amps at any given time of operation and allow for unlimited run time without causing an overheat condition for of any of the system components.

A single engagement switch shall be provided on the pump control panel that will allow the operator to engage the automatic pump priming system. There shall be a light provided on the pump control panel to indicate when the system is engaged. The pump shall be capable of taking suction and discharging water with a lift of 10 feet in not more than 30 seconds with the pump dry, through 20 feet of suction hose of appropriate size. The priming system shall comply with applicable sections of NFPA standards.

20-29-1250

### **PRIMER CONTROL**

A rocker switch control shall be provided on the pump operator's panel, for the main pump primer control.

27-10-3500

# PRESSURE GOVERNOR AND ENGINE-PUMP MONITORING

One (1) Fire Research InControl series TGA400 pressure governor and monitoring display kit shall be installed. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 5 1/2" high by 10 1/2" wide by 2" deep. The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 1 3/4" from the front of the control module. Inputs for monitored information shall be from a J1939 databus or independent sensors. Outputs for engine control shall be on the J1939 databus or engine specific wiring.

The following continuous displays shall be provided:

- Pump discharge; shown with four daylight bright LED digits more than 1/2" high
- Pump Intake; shown with four daylight bright LED digits more than 1/2" high
- Pressure / RPM setting; shown on a dot matrix message display
- Pressure and RPM operating mode LEDs
- Throttle ready LED
- Engine RPM; shown with four daylight bright LED digits more than 1/2" high
- Check engine and stop engine warning LEDs
- Oil pressure; shown on a dual color (green/red) LED bar graph display
- Engine coolant temperature; shown on a dual color (green/red) LED bar graph display
- Transmission Temperature: shown on a dual color (green/red) LED bar graph display

• Battery voltage; shown on a dual color (green/red) LED bar graph display.

The dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and night time operation.

The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

- High Battery Voltage
- Low Battery Voltage (Engine Off)
- Low Battery Voltage (Engine Running)
- High Transmission Temperature
- Low Engine Oil Pressure
- High Engine Coolant Temperature
- Out of Water (visual alarm only)
- No Engine Response (visual alarm only).

The program features shall be accessed via push buttons and a control knob located on the front of the control panel. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.

Inputs to the control panel from the pump discharge and intake pressure sensors shall be electrical. The discharge pressure display shall show pressures from 0 to 600 psi. The intake pressure display shall show pressures from -30 in. Hg to 600 psi.

The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 psi. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor, monitoring and master pressure display shall be programmed to interface with a specific engine.

21-00-2000

#### PUMP ANODES

There shall be sacrificial, zinc anodes in the pump steamer ports which shall protect the pump and piping from electrolysis. These anodes shall also act as screens.

21-00-3300

### **PUMP PLUMBING SYSTEM**

The fire pump plumbing system shall be of rigid stainless steel pipe or flexible piping with stainless steel fittings. Mechanical grooved couplings shall be installed to permit flexing of the plumbing system and allow for quick removal of piping or valves for service. Flexible hose couplings shall be threaded stainless steel or mechanical grooved coupling connections.

The fire pump and plumbing shall be hydrostatically tested in compliance to applicable sections of NFPA standards. The test results shall be included in the delivery documentation.

21-01-0200

#### FIRE PUMP MASTER DRAIN

The fire pump plumbing system and fire pump shall be piped to a single push-pull type master pump drain assembly.

### ADDITIONAL LOW POINT DRAINS

The plumbing system shall be equipped with additional low point manually operated drain valves to allow total draining of the fire pump plumbing system. These valves shall be accessible from the side of the vehicle and labeled.

21-01-5500

# STAINLESS STEEL INTAKE MANIFOLD

The suction manifold assembly shall be fabricated with Schedule #10 type 304 stainless steel. All threaded fittings shall be a minimum of Schedule 10 stainless steel. The suction manifold assembly shall have radiused sweep elbows to minimize water turbulence into the suction volute. The suction manifold shall be welded and pressure tested prior to installation. The stainless steel manifold assembly shall be attached to the pump intake volute with a heavy-duty, flexible Victaulic coupling.

The stainless steel manifold assembly shall have a ten (10) year warranty.

21-01-6500

#### STAINLESS STEEL DISCHARGE MANIFOLD

The discharge manifold assembly shall be fabricated with minimum of Schedule #10 Type 304 stainless steel. All threaded fittings shall be a minimum of Schedule #40 stainless steel. The discharge manifold assembly shall have radiused sweep elbows to minimize water turbulence. The manifold shall be welded and pressure tested prior to installation. The stainless steel manifold inlet shall be attached to the pump discharge and have additional brackets as required to support the discharge manifold, valves and related components.

The stainless steel manifold assembly shall have a ten (10) year warranty.

21-01-7100

### FIRE PUMP & PLUMBING SYSTEM PAINTING

The fire pump and plumbing system shall be painted by the fire apparatus manufacturer. The fire pump and the plumbing shall be painted metallic silver.

21-01-8100

#### **HOSE THREADS**

The hose threads shall be National Standard Thread (NST) on all base threads on the apparatus intakes and discharges.

22-51-5210

#### WATER TANK TO PUMP LINE

One (1) 3" water tank to the rear mounted fire pump line shall be provided with a full flow quarter turn ball valve, 4" piping, and with flex hose and stainless steel hose clamps. The tank to pump line shall be equipped with a check valve to prevent pressurization of the water tank.

The line shall be flow tested during the fire pump testing and shall meet applicable requirements of NFPA standards.

22-50-0100

The tank to pump valve shall be controlled at the pump operator's panel.

24-62-1300

The valve shall be an Akron 8000 Series three-inch (3") valve with a stainless ball.

22-55-4012

One (1) Akron valve equipped with a manually operated pull rod, with quarter-turn locking feature shall be provided on the intake. The handle shall be equipped with a color-coded name plate.

23-02-1300

#### FIRE PUMP TO WATER TANK FILL LINE

One (1) 2" fire pump to water tank refill and pump bypass cooler line shall be provided. The valve shall be a full flow quarter turn ball valve with 2" piping and flex hose to tank. The valve control handle shall have a nameplate located near the valve control.

24-62-1200

The valve shall be an Akron 8000 Series two-inch (2") valve with a stainless ball.

22-55-4012

One (1) Akron valve equipped with a manually operated pull rod, with quarter-turn locking feature shall be provided on the intake. The handle shall be equipped with a color-coded name plate.

20-30-3100

# FIRE PUMP SPLIT SHAFT DRIVESHAFTS AND INSTALLATION

The mid-ship split shaft fire pump shall be installed and shall include installation of the fire pump, modification and/or fabrication of new drivelines and all pump-mounting brackets. The drive shaft(s) shall be spin balanced prior to final installation.

20-31-3600

# **INTAKE RELIEF/DUMP VALVE**

One (1) TFT A18 series, 2-1/2" intake relief/dump valve preset at 125 psi shall be permanently installed on the suction side of the fire pump. The valve shall have an adjustment range of 75 psi to 250 psi, and shall be designed to automatically self-restore to a non-relieving position when excessive pressure is no longer present.

Discharge side of the intake relief valve shall be plumbed away from the pump operator.

20-31-4100

### FIRE PUMP COOLING

The fire pump shall be equipped with 3/8" cooling line from the pump to the water tank. This re-circulation line shall be controlled by a pump panel control valve with nameplate label noting it as the "fire pump bypass cooler". There shall be a check valve installed in the pump cooler line to prevent tank water from back flowing into the pump when it is not in use.

20-31-5200

# CHASSIS ENGINE HEAT EXCHANGER COOLING SYSTEM

The apparatus shall be equipped with a heat exchanger for supplementary chassis engine cooling during fire pump operations. A manually opened valve, mounted at the operator's panel, shall direct water from the fire pump to the heat exchanger that is mounted in the engine radiator cooling hose. The system shall provide cooling water from the fire pump to circulate around the engine radiator coolant without mixing or coming in direct contact with the engine coolant. The complete installation shall be done by the fire apparatus manufacturer.

A nameplate label shall be installed on the pump panel noting "engine cooling system" with "on-off" opening directions noted.

20-31-1250

#### UNDERWRITERS LABORATORIES CERTIFICATION

The pump shall undergo an Underwriters Laboratories Incorporated test per applicable sections of NFPA standards, prior to delivery of the completed apparatus.

The UL acceptance certificate shall be furnished with the apparatus on delivery.

20-31-1500

#### **FIRE PUMP TEST LABEL**

A fire pump performance and rating label shall be installed on the fire apparatus pump panel. The label shall denote levels of pump performance and testing completed at factory. These shall include GPM at net pump pressure, RPM at such level, and other pertinent data as required by applicable NFPA standards. In addition, the pressure control device, tank to pump flow tests, and other required testing shall be completed.

In addition, the entire pump, suction and discharge passages shall be hydrostatically tested to a pressure as required by applicable NFPA standards. The pump shall be fully tested at the pump manufacturer's factory to the performance specifications as outlined by applicable NFPA standards. Pump shall be free from objectionable pulsation and vibration.

If applicable, the fire pump shall be tested and rated as follows:

100% of rated capacity at 150 pounds net pressure. 70% of rated capacity at 200 pounds net pressure. 50% of rated capacity at 250 pounds net pressure. 100% or rated capacity at 165 pounds net pressure.

22-23-1200

### GATED 6" INTAKE -- FRONT RIGHT BUMPER

One (1) front right side bumper gated suction intake with 5" piping shall be provided. Intake pipe shall be provided with drain valves mounted at all low points of plumbing.

Intake shall be gated with an air operated 5" butterfly valve, with control at the pump operator's panel. The valve operating mechanism shall prevent movement of the valve from the fully closed position to the fully open position or vice versa, in less than three seconds. The valve control shall have a colored identification label.

A pressure dump/relief valve shall be included that is factory preset at 125 PSI and field adjustable from 75 to 250 PSI. The pressure dump/relief valve shall provide over-pressure protection for the suction hose even when the intake valve is closed. The outlet of the dump/relief valve shall be 2.5" in diameter to allow directing the discharge flow away from the pump operator's position.

An inlet fitting with 5" IPT x 6" NST thread shall be provided, complete with a removable strainer screen. The front intake plumbing shall be bolted to the pump and be assembled with Victaulic type couplings.

SHOP NOTES

Plumbing should protrude into hose well just far enough to make hose connection.

21-01-2500

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift, to open and push down, to close.

22-23-2100

# FRONT RIGHT SIDE INTAKE -- HORIZONTAL THROUGH BUMPER

The front suction 5" piping shall extend straight-forward ahead of the cab at bumper level for the chassis. The piping shall be Schedule 40 steel with Victaulic couplings installed.

22-40-5900

One (1) aluminum adapter shall be provided. Threads shall be 5" Storz with lugs with manual locks x 6" swivel female NST.

22-41-7200

One (1) lightweight aluminum locking 5" Storz cap shall be provided. A chain or cable attachment shall be also supplied.

22-12-1100

### LEFT SIDE -- 2-1/2" GATED INTAKE

One (1) 2-1/2" gated suction intake shall be installed on left side pump panel to supply the fire pump from an external water supply. The control valve shall be a quarter turn ball valve and shall have 2-1/2" NST female thread of chrome plated brass.

The intake shall be equipped with a ¾" drain and bleeder valve. A nameplate label and removable screen shall be installed.

21-01-2502

An Innovative Controls <sup>3</sup>/<sub>4</sub>" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close.

22-41-1100

One (1) 2-1/2" chrome plated plug shall be provided. The threads shall be NST and the plug shall be equipped rocker lugs and chain or cable securement.

24-62-1250

The valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

22-55-4050

The valve shall be equipped with one (1) manually operated, swing-type manual control located adjacent the intake. The valve shall be equipped with a color-coded name plate.

23-05-3200

### <u>2" DISCHARGE FRONT CENTER BUMPER</u>

One (1) 2" discharge shall be installed at front center bumper area with brass swivel outlet with 1-1/2" NST male threads. The valve control shall be on pump panel and a nameplate label provided at valve control area.

The plumbing shall be flexible hose with abrasion resistant support mountings. Auxiliary low point drains shall be provided on the discharge line.

SHOP NOTES

foam capable

21-01-2200

A Class 1 automatic type 3/4" bleeder valve shall be installed.

23-05-9200

The hose connection for the front discharge shall be swivel type located above the front bumper deck level.

24-61-1200

The specified valve shall be an Akron 8000 Series two-inch (2") valve with a stainless ball.

24-53-0020

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

27-02-1500

One (1) 2-1/2" IC discharge pressure gauges (0-400 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

23-06-2200

#### TWO (2) 1-1/2" CROSSLAY DISCHARGES

Two (2) pre-connect 1-3/4" hose crosslays shall be installed over pump enclosure, with quarter turn 2" diameter ball valves. The outlets shall be a 2" NPT female swivel x 1-1/2" male NST hose threads.

The crosslay hosebeds shall have smooth aluminum sides. The hosebed decking shall be constructed with slots integrated into the hosebed floor.

Each hosebed shall provide for a minimum capacity of 200 feet of 1-3/4" diameter double jacket hose with nozzle, for hose provided by the fire department.

SHOP NOTES

foam capable

21-01-2502

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve

complete with a recessed ID label provision. The handle shall lift to open and push down to close.

24-61-1200

The specified valve shall be an Akron 8000 Series two-inch (2") valve with a stainless ball.

24-53-0020

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

27-02-1500

Two (2) 2-1/2" IC discharge pressure gauges (0-400 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

23-08-3300

### CROSSLAY HINGED COVER WITH END FLAPS

The crosslay hosebed shall be equipped with a single aluminum diamond plate hinged cover with vinyl end flaps with hook & loop fasteners. The cover shall have rubber bumpers, latching devices, and lift up handle on each end of the cover.

The hosebed cover shall be labeled, "Not a Standing or Walking Surface", per NFPA.

29-20-5600

The vinyl cover shall be red in color.

23-08-4130

#### CROSSLAY HOSE BED TRIM

The crosslay hosebed shall be equipped anodized aluminum angle overlays, one on each end of the hosebed.

23-08-5020

# **CROSSLAY HOSEBEDS**

Crosslay discharges shall be "LOW MOUNTED" above the lower pump panel. The body manufacturer shall denote in the specifications and proposal drawings.

23-09-4100

### LEFT SIDE PUMP PANEL -- 2-1/2" DISCHARGE

Two (2) 2-1/2" discharge shall be installed on the left side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle.

21-01-2502

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close.

24-02-1200

Two (2) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female  $\times 2-1/2$ " NST male hose threads.

24-03-1400

Two (2) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

24-61-1250

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

24-53-0020

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

27-02-1500

Two (2) 2-1/2" IC discharge pressure gauges (0-400 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

23-10-4100

### RIGHT SIDE PUMP PANEL -- 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be installed on the right side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle.

SHOP NOTES

foam capable

21-01-2502

An Innovative Controls 3/4" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close.

24-02-1200

One (1) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

24-03-1400

One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

24-61-1250

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

24-53-0020

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

27-02-1500

One (1) 2-1/2" IC discharge pressure gauges (0-400 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

23-10-5200

#### RIGHT SIDE PUMP PANEL -- 3" x 4" DISCHARGE

One (1) 3" discharge shall be installed on the right side pump panel area and shall be controlled by a full flow 3" slow-close quarter turn ball valve. The discharge shall have 4" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle.

21-01-2502

An Innovative Controls <sup>3</sup>/<sub>4</sub>" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close.

24-02-2600

One (1) lightweight aluminum elbow with 30 degree slant shall be provided. Threads shall be 5" Storz with lugs and manual locks x 4" female swivel NST with rocker lugs.

24-03-2200

One (1) 5" lightweight aluminum Storz cap with cable or chain securement shall be provided.

24-61-1300

The specified valve shall be an Akron 8000 Series three-inch (3") valve with a stainless ball.

24-53-0300

One (1) Akron valve equipped with a manually operated pull rod, with quarter-turn locking feature and a manual slow-close device shall be provided on the specified discharge. The handle shall be equipped with color-coded name plate.

27-02-1500

One (1) 2-1/2" IC discharge pressure gauges (0-400 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

23-12-2200

### RIGHT SIDE FRONT OF HOSEBED -- 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be to the right side front of hosebed area and controlled by a quarter turn ball valve on the pump panel. The discharge shall have 2-1/2" NPT x 2-1/2" NST male hose threads. An engraved nameplate label shall be provided adjacent the control handle.

SHOP NOTES

foam capable

21-01-2202

A Class 1 automatic type 3/4" bleeder valve shall be installed.

24-61-1250

The specified valve shall be an Akron 8000 Series two and one half-inch (2-1/2") valve with a stainless ball.

24-53-0020

For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label.

27-02-1500

One (1) 2-1/2" IC discharge pressure gauges (0-400 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

24-10-1300

#### **REAR AERIAL INLET AND DISCHARGE**

One (1) 4" fire pump discharge shall be piped to the rear of the apparatus with 4" pipe and controlled with a slow close valve on the pump panel. The 4" rear inlet connection shall provide a dual supply to the aerial device. The rear inlet shall have 4" NST male threads and a 4" NST rocker lug cap with cable or chain securement shall be provided.

There shall be a 1-1/2" drain installed in the rear aerial supply line with control on the rear of the apparatus body.

A color coded nameplate labels shall be provided at rear and on the pump panel control handle.

21-01-2500

An Innovative Controls <sup>3</sup>/<sub>4</sub>" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift, to open and push down, to close.

24-03-1700

One (1) 4" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

24-61-1400

The specified valve shall be an Akron 8000 Series four-inch (4") valve.

24-53-1300

One (1) Akron valve equipped with an Akron manually operated hand wheel control with dial type position indicator shall be provided on the specified 4" discharge. A color-coded name plate installed over the valve control.

27-02-1500

One (1) 2-1/2" IC discharge pressure gauges (0-400 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

24-10-5000

#### **RELIEF VALVE**

A pre-set relief valve capable of protecting the waterway system by relieving pressure through the dumping of water to the environment. The relief valve shall be plumbed to dump the excess water below the chassis frame rails.

24-10-5100

#### **DRAIN VALVE**

A 1-1/2 inch minimum drain valve shall be installed at the low point of the waterway inlet system. The handle to operate the drain valve shall be extended to the rear of the body.

25-06-4200

### FOAM PRO FOAM SYSTEM

One (1) FoamPro part number S105-2002 electronic foam proportioning system shall be provided. The system shall be capable of using Class A and most Class B foam concentrates. The foam proportioning operation shall be designed for direct measurement of water flows, and shall remain consistent within the specified flows and pressures. The system shall be capable of accurately delivering foam solution as required by applicable sections of the NFPA standards.

The system shall be equipped with a digital electronic control display suitable for installation on the pump panel. There shall be a microprocessor incorporated within the electronic controls that shall receive input from the system's flowmeter, while also monitoring the foam concentrate pump output. The microprocessor shall compare the values to ensure that the desired amount of foam concentrate is injected onto the discharge side of the fire pump.

Paddlewheel-type flowmeter(s) shall be installed in the discharges specified to be "foam capable". When the use of more than one (1) flowmeter is required, an electronic interface module will be provided to total these flows and send the flow total to the microprocessor in the computer control module.

The digital computer control display shall enable the pump operator to perform the following control and operation functions for the foam proportioning system:

- Provide push-button control of foam proportioning rates from 0.1% to 3%, in 0.1% increments
- Show current flow-per-minute of water
- Show total volume of water discharged during and after foam operations are completed
- Show total amount of foam concentrate consumed
- Simulate flow rates for manual operation
- Perform setup and diagnostic functions for the computer control microprocessor
- Flash a "low concentrate" warning when the foam concentrate tank (s) become low
- Flash a "no concentrate" warning and shut the foam concentrate pump off, preventing damage to the pump, should the foam tank(s) become empty

A 12-volt electric motor driven positive displacement foam concentrate pump shall be provided and installed in an accessible location. The pump capacity range shall be 0.1 to 5 GPM (9.5L/min) at 150 PSI with a maximum operating pressure up to 400 PSI (27.6 BAR). The system shall draw a maximum of 40 amps at 12 volts. An electronic driver for the pump motor shall be mounted to the base of the pump and shall receive signals from the computer control display, and regulate the 3/4 horsepower (.56 Kw) electric motor directly coupled to the concentrate pump in a variable speed duty cycle to ensure that the correct proportion of concentrate, preset by the pump operator is injected into the water stream.

A full flow check valve shall be provided to prevent foam contamination of the fire pump and water tank or water contamination of the foam tank.

Components of the complete proportioning system as described above shall include:

- Operator control and display
- Paddlewheel flowmeter(s)
- Pump and electric motor/motor driver
- Wiring harnesses
- Low level tank switch

- Foam injection check valve
- Main waterway check valve

The foam system shall be installed and calibrated to manufacturer's requirements. In addition the system shall be tested and certified by the apparatus manufacturer to meet applicable NFPA standards.

The foam system design shall be tested and pass environmental testing in accordance to SAE standards. The system shall be third party tested to certify compliance with RFI/EMI emissions per MIL-STD-416E.

An installation and operation manual shall be provided for the unit. The system shall have a one (1) year limited warranty by the foam system manufacturer.

### **CONTROL CONNECTION CABLE FOR FOAM SYSTEM**

The FoamPro 2002 Series foam system shall be provided with a twelve (12) foot control cable from the controller to the foam pump assembly.

### PUMP PANEL CONTROL FOR FOAM SYSTEM

The FoamPro 2002 Series foam system shall be provided with pump panel mounted control assembly.

#### INSTRUCTION AND RATING LABEL -- FOAM SYSTEM

A FoamPro part number 6032-0021 instruction and system rating label shall be provided. The label shall display information for a FoamPro 2002 Series foam system and shall meet applicable sections of NFPA standards.

#### SCHEMATIC LABEL -- FOAM SYSTEM

A FoamPro foam system schematic label shall be installed on the pump panel near foam controls. The label shall be a diagram of the FoamPro 2002 foam system layout and shall meet applicable sections of the NFPA standards.

SHOP NOTES

System to be plumbed to front bumper, 2-crosslays, right side 2.5" discharge and rear hose bed 2.5"

25-20-1200

#### 1" FOAM TANK CONTROL -- CLASS A

One (1) Class A foam tank shall be plumbed with 1" valve and corrosion resistant hose from the foam tank to the foam inlet of the foam system. The manually opened valve shall be provided behind the pump panel with a label.

25-21-1500

### **INTEGRAL CLASS A FOAM TANK -- 30 GALLON**

One (1) thirty (30) gallon Class A foam tank shall be installed within the water tank. The non-corrosive foam tank shall meet applicable sections of NFPA standards. The foam concentrate tank shall be provided with sufficient wash partitions so that the maximum dimension perpendicular to the plane of any partition shall not exceed 36 inches. The swash partition(s) shall extend from wall to wall and cover at least 75 percent of the area of the plane of the partition.

The foam concentrate tank shall be provided with a fill tower or expansion compartment having a minimum area of 12 square inches and having a volume of not less than 2 percent of the total tank volume. The fill tower opening shall be protected by a completely sealed air-tight cover. The cover shall be attached to the fill tower by mechanical means. The fill opening shall be designed to incorporate a 1/4 inch removable screen and shall be located so that foam concentrate from a five (5) gallon container can be dumped directly to the bottom of the tank to minimize aeration without the use of funnels or other special devices.

The foam tank fill tower shall be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank. The pressure/vacuum vent shall not allow atmospheric air to enter the foam tank except during operation or to compensate for thermal fluctuations. The vent shall be protected to prevent foam concentrate from escaping or directly contacting the vent at any time. The vent shall be of sufficient size to prevent tank damage during filling or foam withdrawal.

A color coded label or visible permanent marking that reads "FOAM TANK FILL" shall be placed at or near any foam concentrate tank fills opening. A label shall be placed at or near any foam concentrate tank fill opening that specifies the type of foam concentrate the system is designed to use. Any restrictions on the types of foam concentrate that can be used with the system shall also be stated, and a warning message that reads "WARNING: DO NOT MIX BRANDS AND TYPES OF FOAM."

The foam concentrate tank outlet connection shall be designed and located to prevent aeration of the foam concentrate and shall allow withdrawal of 80 percent of the foam concentrate tank storage capacity under all operating conditions with the vehicle level.

25-22-9300

The foam tank(s) shall be fabricated by United Plastic Fabricating.

25-23-1000

### **FOAM TANK DRAIN -- UNDER TANK**

The foam tank shall have one (1) 1" gate valve drain provision installed.

27-36-1100

# **CLASS A FOAM TANK GAUGE**

One (1) Fire Research TankVision Pro model WLA360-A00 foam tank indicator kit shall be installed at the operator's panel. The kit shall include an electronic indicator module, a pressure sensor, a 10-ft sensor cable and a tank vent. The indicator shall show the volume of Class A foam concentrate in the tank on nine (9) easy to see super bright RGB LEDs. A wide view lens over the LEDs shall provide for a viewing angle of 180 degrees. The indicator case shall be waterproof, manufactured of Polycarbonate/Nylon, and have a distinctive green label.

The program features shall be accessed from the front of the indicator module. The program shall support self-diagnostics capabilities, self-calibration, six (6) programmable colored light patterns to display tank volume, adjustable brightness control levels and a datalink to connect remote indicators. Low foam warnings shall include flashing LEDs at 1/4 tank, down chasing LEDs when the tank is almost empty, and an output for an audio alarm.

The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted from the outside of the foam tank near the bottom. No probe shall be placed on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors. The foam tank vent shall be installed on the foam fill tower.

25-19-9000

#### FOAM SYSTEM DESIGN AND PERFORMANCE REQUIREMENTS

The proportioning system shall be capable of proportioning foam concentrate in accordance with the foam concentrate manufacturer's recommendations for the type of foam concentrate used in the system over the system's design range of flow and pressures. The foam proportioning system water flow characteristics and the range of proportioning ratio shall be specified as noted herein. The latest foam system shall be in compliance with applicable NFPA standards as it relates to this specified system

#### Plumbing and Strainer

The foam concentrate supply line shall be non-collapsible. A means shall be provided to prevent water back flow into the foam proportioning system and the foam concentrate storage tank.

A strainer or filter shall be provided on the foam concentrate supply side of the foam proportioner to prevent any debris that might affect the operation of the foam proportioning system from entering the system. The strainer assembly shall consist of a removable straining

element, housing, and retainer. The strainer assembly shall allow full flow capacity of the foam supply line.

### Flushing

A foam concentrate system flush line shall be provided as required by the foam system manufacturer. A means shall be provided in the flush line to prevent water backflow into the foam concentrate tank or water tank during the flushing operation.

#### Foam System Controls

The foam proportioning system operating controls shall be located at or near the pump operator's position and shall be clearly identified. Foam proportioning system shall be provided with accessible controls to completely flush the system with water according to the manufacturer's instructions.

### **Labels and Instructions**

An instruction plate shall be provided for the foam proportioning system that include, at a minimum, piping schematic of the system and basic operating instructions. Labels that are marked clearly with the identification and function shall be provided for each control, gauge, and indicator related to the foam proportioning system.

A label shall be provided on the pump operator's panel that identifies the type of foam concentrate that the foam proportioning system is designed to use. It shall also state the minimum/maximum foam proportioning rate at the minimum/maximum foam proportioning rated system flow and pressure.

Two (2) copies of an operations and maintenance manual shall be provided. They shall include a complete diagram of the system together with operating instructions and details outlining all recommended maintenance procedures.

#### Foam System Testing

The accuracy of the foam proportioning system shall be certified by the foam equipment manufacturer and also tested by the installer prior to delivery of the apparatus in compliance to NFPA standards.

26-02-1700

#### SIDE MOUNT PUMP ENCLOSURE

The side mount pump enclosure shall be removable and supported from the chassis frame rails. This enclosure will allow independent flexing of the pump enclosure from the body and allow

for quick removal. The support structure shall be constructed of extruded aluminum tubing and angle.

All pump suction and discharge controls are to be mounted on the driver side pump operator's panel so as to permit operation of the pump from a central location. The fire pump, valves and controls shall be accessible for service and maintenance as required by applicable sections of NFPA standards.

The "master" gauges shall be suitably enclosed and mounted on a full pump compartment width "hinged" gauge panel constructed of the same material as the pump operators control panel, allowing access to the backside of all gauges and gauge lines. The individual gauges shall be mounted inline with the control handle or adjacent to the control handle. Panel is to include a stainless steel piano hinge, flush mounted chrome plated trigger latch, and stainless steel cable end stops. Electrical wiring and all gauge lines shall be properly tie wrapped to prevent kinking or cutting of the lines when the panel is opened.

The following controls and equipment as specified in the specifications, shall be provided on the pump panel or within the pump enclosure:

- Primer.
- Pump and plumbing area service lights.
- Pressure control device and throttle control.
- Fire pump and engine instruments.
- Pump intakes and discharge controls.
- Master intake and discharge gauges.
- Tank fill control.
- Tank suction control.
- Water tank level gauge.
- Pump panel lights.

The pump enclosure shall also include egress steps on each side to reach the turntable.

26-02-1710

#### **LEFT COMPARTMENT**

There shall be one (1) low compartment located below the mid mount turntable. The compartment shall be equipped with a natural finish roll-up door.

The compartment shall be equipped with the following:

44-40-1100

One (1) louver with filter shall be installed in the compartment.

45-16-1100

#### ROLL-OUT ALUMINUM TOOL BOARD

One (1) roll-out tool board panel shall be mounted vertically within compartment. The panel and tracks shall be rated to a maximum load of 500 lb. Panel to be formed of .188" smooth aluminum with an opening to accommodate a gloved-hand to slide tool board.

The tool board shall slide out to full extension of the compartment, with a device to hold tool board in both fully-extended and stored positions.

55-01-3370

#### **COMPARTMENT LIGHTS**

Two (2) 30" long OnScene Solutions Access LED lights shall be installed, one on each side of the door opening. The lights shall contain 18 LEDs per light producing approximately 90 lumens (six LEDs and 30 lumens every 9"). The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN<sup>TM</sup> polycarbonate tube enclosure for severe duty applications.

The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.

55-06-1100

The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

26-02-1720

#### RIGHT COMPARTMENT

There shall be one (1) low compartment located below the mid mount turntable. The compartment shall be equipped with a natural finish roll-up door.

The compartment shall be equipped with the following:

44-40-1100

One (1) louver with filter shall be installed in the compartment.

45-05-3100

#### 250# ROLLOUT TRAY

One (1) roll-out equipment tray shall be installed in the compartment. The tray with telescoping slides and cam follower bearings shall be rated to a maximum load of 250 lbs. The tray shall have a gas shock to hold the tray extended or closed. There shall be a lock to prevent movement, when the tray is in the closed position.

The tray shall be formed of .188" smooth aluminum plate, fabricated with two (2) inch sides. Reflective material measuring 1" x 6" shall be installed on each front corner both on the face and side of tray for firefighter safety.

55-01-3370

#### **COMPARTMENT LIGHTS**

Two (2) 30" long OnScene Solutions Access LED lights shall be installed, one on each side of the door opening. The lights shall contain 18 LEDs per light producing approximately 90 lumens (six LEDs and 30 lumens every 9"). The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN<sup>TM</sup> polycarbonate tube enclosure for severe duty applications.

The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.

55-06-1100

The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

26-30-4400

### INTEGRAL SLIDE OUT STEP AND HOSEWELL -- LEFT SIDE

A slide out step and hosewell assembly shall be constructed as an integral part of the side running board on the left side pump panel. The step and running board shall be integral with 1part of the step sliding in and under the pump enclosure. The hosewell shall be accessible through a hinged aluminum tread plate door.

The sliding step assembly shall use roller bearing slide tracks and with a step surface of slip resistant NFPA compliant grating. The step shall extend out approximately 20" and lock in both the in and out positions.

26-30-6100

#### **HOSE WELL COVER**

One (1) hinged aluminum cover, with latches, constructed of .125" aluminum diamond plate shall be provided for the running board hose well.

26-30-1150

# RIGHT SIDE RUNNING BOARD -- SIDE MOUNT PANEL

The right side mount pump panel shall be equipped with side running board. The running board will extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab.

The running board shall be constructed of aluminum tread plate, bolted in place with stainless steel fasteners. The step surfaces shall be in compliance with applicable sections of NFPA requirements.

26-30-5200

# **HOSEWELL COMPARTMENT -- RIGHTSIDE RUNNING BOARD**

One (1) hosewell shall be recessed in the right side running board of the apparatus pump panel. The hosewell shall be constructed of aluminum treadplate material and shall be provided with drain holes drilled in each bottom corner with plastic grating on the floor.

The hose and couplings shall be secured in compliance to applicable NFPA standards.

Capacity for the following purchaser supplied hose:

26-30-6200

### HOSE WELL SECUREMENT

There shall be two (2) Velcro straps provided for the securement of the hose in the running board hose well.

26-35-3500

#### **PUMP PANELS -- SIDE MOUNT**

The pump operator's panel, along with the lower left hand and right hand pump panels shall be constructed of 14 gauge #304 brushed stainless steel.

The pump operator's instrument panel shall have a stainless steel continuous hinge that shall swing for easy access to gauges. The panel shall be located to the left of the pump panel.

26-35-1100

#### LEFT SIDE PUMP PANEL -- BOLTED

The pump panel installed on the left hand side of the pump enclosure shall be fastened to the pump enclosure with 1/4" stainless steel bolts.

26-35-1400

#### HINGED PUMP PANEL -- RIGHT SIDE

The pump panel installed on the on the right hand side of the pump enclosure shall be hinged with push-button latches.

26-55-1100

#### **LABELS**

Safety, information, data, and instruction labels for apparatus shall be provided and installed at the operator's instrument panel.

The labels shall include rated capacities, pressure ratings, and engine speeds as determined by the certification tests. The no-load governed speed of the engine, as stated by the engine manufacturer, shall also be included.

The labels shall be provided with all information and be attached to the apparatus prior to delivery.

26-55-2400

#### **COLOR CODED PUMP PANEL LABELING AND NAMEPLATES**

Discharge and intake valve controls shall be color coded in compliance to guidelines of applicable sections of NFPA standards.

Innovative Controls permanent type nameplates and instruction panels shall be installed on the pump panel for safe operation of the pumping equipment and controls.

26-56-1120

# MIDSHIP PUMP PANEL LIGHTS -- LEFT SIDE

Three (3) Weldon #2631 or equal LED lights with clear lenses shall be installed under an instrument panel light hood on the left side pump panel. The lights shall be controlled by a switch located on the operator's instrument panel.

26-56-1220

### MIDSHIP PUMP PANEL LIGHTS -- RIGHT SIDE

Two (2) Weldon #2631 or equal LED lights with clear lenses shall be installed under an instrument panel light hood on the right side pump panel. The lights shall be controlled by a switch located on the operator's instrument panel.

26-56-2000

#### PUMP ENGAGED LIGHT

One (1) pump panel light shall be illuminated at the time the fire pump is engaged into operation. The remaining lights shall be controlled by a switch located on the operator's instrument panel.

27-01-1500

### MASTER DISCHARGE AND INTAKE GAUGES

Two (2) 4" diameter IC discharge pressure and intake gauges (30"-0-600 PSI) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel.

The master gauges shall have clear scratch resistant molded crystals with captive O-ring seals shall be used to ensure distortion free viewing and to seal the gauge. The gauges shall be filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from  $-40^{\circ}F$  to  $+160^{\circ}F$ . Each gauge shall 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 brass bezel shall be provided to prevent corrosion and protect the lens and gauge case.

27-01-4100

### **TEST TAPS**

Test taps for pump intake and pump pressure shall be provided on the pump instrument panel and be properly labeled.

27-35-1100

#### WATER TANK GAUGE

One (1) Fire Research TankVision Pro model WLA300-A00 tank indicator kit shall be installed on the pump panel. The kit shall include an electronic indicator module, a pressure sensor, and a 10' sensor cable. The indicator shall show the volume of water in the tank on nine (9) easy to see super bright RGB LEDs. A wide view lens over the LEDs shall provide for a viewing angle of 180 degrees. The indicator case shall be waterproof, manufactured of Polycarbonate/Nylon material, and have a distinctive blue label.

The program features shall be accessed from the front of the indicator module. The program shall support self-diagnostics capabilities, self-calibration, six (6) programmable colored light patterns to display tank volume, adjustable brightness control levels and a datalink to connect remote indicators. Low water warnings shall include flashing LEDs at 1/4 tank, down chasing LEDs when the tank is almost empty, and an output for an audio alarm.

The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted from the outside of the water tank near the bottom. No probe shall place on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.

25-25-0062

#### **WATER TANK**

The apparatus shall be equipped with a rectangular tank.

25-38-1100

#### WATER TANK - 300 GALLON

The apparatus shall be equipped with a three-hundred (300) gallon polypropylene water tank. The tank shall be equipped with a three-inch (3") overflow pipe. The tank body and end bulkheads shall be constructed of .5" thick, polypropylene, nitrogen-welded and tested inside and out. Tank construction shall conform to applicable NFPA standards. The tank shall carry a lifetime warranty.

The transverse and longitudinal .375" thick swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments.

The .5" thick cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing

rigidity during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the booster tank.

The water fill tower shall be provided at front of the tank. The 0.5" thick polypropylene fill and overflow tower shall be equipped with a hinged lid and a removable polypropylene screen. The overflow tube shall be installed in fill tower and piped with schedule 40 PVC pipe through the tank.

The water tank sump shall be located in the forward area of the tank. There will be a schedule 40 polypropylene tank suction pipe from the front of the tank to the tank sump. The tank drain and clean out shall be a 3.0" IPT schedule 80 female flange with plug, located in the bottom of the tank sump.

The pump to tank refill connection shall be a sized to mate with tank fill discharge line. A deflector shield inside the tank will also be provided.

The water tank manufacturer shall certify the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturer's record of construction and the certification shall be provided to the purchaser when the apparatus is delivered.

25-44-1200

### WATER TANK FILL TOWER

A fill tower measuring approximately 10" x 10" square shall be provided on the water tank up to and including 500 gallons total capacity.

25-42-1100

The apparatus shall be equipped with a polypropylene water tank. The tank body and end bulkheads shall be constructed of .75" thick, polypropylene, nitrogen-welded and tested inside and out. Tank construction shall conform to applicable NFPA standards. The tank shall carry a lifetime warranty.

The transverse and longitudinal .375" thick swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments.

The .5" thick cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the booster tank.

A combination vent/water fill tower shall be provided at front of the tank. The 0.5" thick polypropylene fill and overflow tower shall be equipped with a hinged lid and a removable polypropylene screen. The overflow tube shall be installed in fill tower and piped with a minimum schedule 40 PVC pipe through the tank.

The water tank sump shall be located in the forward area of the tank. There will be a schedule 40 polypropylene tank suction pipe from the front of the tank to the tank sump. The tank drain and clean out shall be located in the bottom of the tank sump. The sump shall have a minimum 3" threaded outlet on the bottom to be used for a combination clean out and drain.

The pump to tank refill connection shall be a sized to mate with tank fill discharge line. A deflector shield inside the tank will also be provided.

The tank shall rest on the body cross members in conjunction with such additional cross members, spaced at a distance that would not allow for more than 530 square inches of unsupported area under the tank floor. In cases where overall height of the tank exceeds 40 inches, cross member spacing must be decreased to allow for not more than 400 square inches of unsupported area.

The tank must be isolated from the cross members through the use of hard rubber strips with a minimum thickness and width dimension of 1/4" x 1" and a hardness of approximately 60 durometer. The rubber must be installed so it will not become dislodged during normal operation of the vehicle. Additionally, the tank must be supported around the entire bottom outside perimeter and captured both in the front and rear as well as side to side to prevent tank from shifting during vehicle operation.

A picture frame type cradle mount with a minimum of 2" x 2" x 1/4" mild steel, stainless steel, or aluminum angle shall be provided or the use of corner angles having a minimum dimension of 4" x 4" x 1/4" by 6" high are permitted for the purpose of capturing the tank.

Although the tank is designed on a free floating suspension principle, it is required that the tank have adequate vertical hold down restraints to minimize movement during vehicle operation. If proper retention has not been incorporated into the apparatus hose floor structure, an optional mounting restraint system shall be located on top of the tank, half way between the front and the rear on each side of the tank. These stops can be constructed of steel, stainless steel or aluminum angle having minimum dimensions of 3" x 3" x 1/4" and shall be approximately 6" to 12" long. These brackets must incorporate rubber isolating pads with a minimum thickness of 1/4" inch and a hardness of 60 durometer affixed on the underside of the angle. The angle should then be bolted to the body side walls of the vehicle while extending down to rest on the top outside edge of the upper side wall of the tank.

Hose beds floors must be so designed that the floor slat supports extend full width from side wall to side wall and are not permitted to drop off the edge of the tank or in any way come in contact with the individual covers where a puncture could occur. Tank top must be capable of supporting loads up to 200 lbs per sq. foot when evenly distributed. Other equipment such as generators, portable pumps, etc. must not be mounted directly to the tank top unless provisions have been

designed into the tank for that purpose. The tank shall be completely removable without disturbing or dismantling the apparatus structure.

25-42-1200

The tank construction shall include PolyProSeal<sup>™</sup> technology wherein a sealant shall be installed between the plastic components prior to being fusion welded. This sealing method shall provide a liquid barrier, offering leak protection in the event of a weld compromise.

The tank shall be equipped with Polychromatic fill towers. The water fill tower shall be blue in color. The foam tank fill towers, if applicable, shall be yellow for foam A and green for foam B and black for any additional foam fill towers.

The water tank shall be certified for the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturer's record of construction and the certification shall be provided to the purchaser when the apparatus is delivered.

The tank shall be manufactured by United Plastic Fabricating (UPF).

01-18-0450

#### WATER TANK WARRANTY

UNITED PLASTIC FABRICATION INC. Warrants each UPF POLY-TANK IIE Booster/Foam tank to be free from manufacturing defects in material and workmanship for the service life of the vehicle (vehicle must be actively used in fire suppression). The UPF POLY-TANK IIE must be installed in accordance with the United Plastic Fabricating installation manual. Every UPF POLY-TANK IIE is thoroughly inspected and tested for leaks before leaving our facility. Should any problems develop with your UPF POLY-TANK IIE booster/foam tank and will not meet performance criteria during the service life of the vehicle, notify UPF in writing or call our TOLL FREE SERVICE HOT LINE 1-800-USA-POLY. Provide UPF with the serial number and a description of the problem. If the tank problem would render the truck out of service, UPF will dispatch a service technician WITHIN 48 HOURS (2 DAYS) to repair the tank. (This time period is for North America only). If the vehicle can remain in service, UPF will dispatch a service technician within a mutually agreed upon time period.

We will repair, or at our option, replace the tank with a new UPF POLY-Tank IIE. UPF will cover customary and reasonable costs to remove and install the UPF POLY-TANK IIE. This warranty will not cover tanks that have been improperly installed, misused or abused, and the serial number must not have, been altered, defaced or removed. UPF will not cover any unauthorized third party repairs or alterations. Any of these actions may void the warranty.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU

# OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF UNITED PLASTIC FABRICATION, INC.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly cancelled. UNITED PLASTIC FABRICATION, INC. Neither assumes, nor authorizes any person supposing to act on its behalf, to change, nor assume for it, any warranty or liability concerning its product.

IN NO EVENT WILL UNITED PLASTIC FABRICATION, INC BE LIABLE FOR AN AMOUNT IN EXCESS OF THE PRESENT RETAIL, PURCHASE PRICE PLUS INSTALLATION AND REMOVAL COST OF THE BOOSTER TANK, FOR ANY LOSS OR DAMAGE, WHETHER DIRECT OR INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR OTHERWISE ARISING OUT OF FAILURE OF ITS PRODUCT.

This warranty gives you specific legal rights, and you may have other rights, which vary from state to state. Some states do not allow exclusion or limitation of incidental or consequential damage, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

40-00-1100

### TANDEM AXLE MID MOUNT AERIAL/PLATFORM BODY

A tandem axle mid mount aerial/platform body shall be provided and constructed as follows:

00-01-5100

#### CHASSIS REQUIREMENTS FOR AERIAL APPARATUS

The following items shall be included with the chassis to operate the aerial device:

- Truck chassis with a selectable high idle system. High idle to be set at 1,200 rpm
- A red warning light installed in the driving compartment and visible to the driver to indicate if any outrigger is not in the stowed position.
- There shall be a (hot shift) PTO system mounted to the chassis transmission. The PTO assembly shall supply power to the hydraulic pump for all aerial operations. Electrical safety wiring shall be installed that requires the transmission be in neutral, or the fire pump engaged and the parking brake set before the PTO will operate.

A PTO engaged indicator light shall be installed in the cab of the apparatus.

00-01-5200

#### **BODY BUILDER REQUIREMENTS FOR AERIAL APPARATUS**

The following items shall be installed by the body builder for the aerial device:

- Auxiliary outrigger plates, 2 ft. X 2 ft. for each outrigger. Outrigger plates to be installed on heavy aluminum brackets and installed adjacent to each outrigger.
- A preset relief valve capable of protecting the waterway system by relieving pressure through the dumping of water to the environment. Relief valve shall be plumbed to dump excess water below chassis frame.
- A 1-1/2 inch minimum drain valve shall be installed at the low point of the waterway inlet system. Handle to operate drain valve shall be extended to rear of body.
- Reflective striping shall be installed on all stabilizers that protrude beyond the body of the apparatus.
- Warning signs for the aerial and outriggers shall be installed to meet the aerial manufacturer recommendations.
- A leveling bubble shall be installed on the rear of the truck, for side to side leveling.
- A leveling bubble shall be installed at the pump operator's panel, for front to rear leveling.
- There shall be a ladder alignment indicator provided on the turntable to indicate when the ladder is aligned with the travel support and may be lowered into it.

A Load Chart with indicator arrow shall be mounted, visible to aerial operator.

00-01-5192

### **OUTRIGGER PAD STORAGE**

Four (4) aluminum outrigger pad storage brackets capable of holding one (1) outrigger pad each shall be installed. There shall be one storage bracket located adjacent to each outrigger in an easily accessible location.

00-01-5202

#### **SAFETY HARNESS**

All NFPA required life safety harnesses shall be provided and mounted by the Customer before the apparatus is placed into service.

30-01-1960

#### 3/16" ALUMINUM BODY

The body shall be fabricated of aluminum extrusions, smooth aluminum sheet and aluminum treadplate.

The aluminum extrusion alloy shall be 6061 with a temper rating of T6, and have a tensile strength of 45,000 PSI and yield strength of 40,000 pounds. The aluminum extrusions shall 3" x 3" aluminum tubing, 1-3/4" x 3" aluminum tubing and 3" x 3" aluminum angle and specially designed extrusions, up to .250" wall thickness where applicable.

The smooth aluminum sheet material alloy shall be 5052 with a temper rating of H32, and have a tensile strength of 33,000 PSI and yield strength of 28,000 pounds.

The aluminum treadplate alloy shall be 3003 with a temper rating of H22, and have a tensile strength of 30,000 PSI and yield strength of 28,000 pounds.

The extrusions shall be designed as structural-framing members with the smooth aluminum and treadplate fabricated to form compartments, hosebeds, and floors. All aluminum material shall be welded together using the latest mig spray pulse arc welding system.

The header panel above to compartment doors to be smooth PAINTED aluminum and NOT diamondplate

Compartment floors shall be of the sweep out design with the floor higher than the compartment door lip and to be water and dust proof. All compartments shall be made to the maximum practical dimensions to provide maximum storage capacity. To ensure maximum storage space, the apparatus shall be constructed without any void spaces between the body and the compartment walls. Double wall construction does not meet this requirement.

All exterior compartments shall have polished aluminum drip moldings installed above the doors where necessary to prevent water from entering the compartments.

Wheel well panels shall be formed aluminum that is welded in place. There shall be no visible bolt heads, retention nuts or fasteners on the exterior surface of the panel. To fully protect the wheel well area from road debris and to aid in cleaning, a full depth radius wheel well liner shall be provided. The frame side of the wheel well area on each side of the opening shall be attached to the frame side of the front and rear compartments. All seams on the frame side of the body shall be welded and caulked to prevent moisture from entering the compartments.

The rear wheel wells shall be radius cut for a streamlined appearance. A fenderette shall be furnished at each rear wheel well opening, held in place with stainless steel fasteners.

#### **FASTENERS**

All aluminum and stainless steel components shall be attached using stainless steel fasteners.

Compartment door hinges, handrails and running boards shall be attached using minimum 1/4" diameter machine bolt fasteners.

3/16" diameter fasteners shall only be used in nonstructural areas such as; door handles, trim moldings, gauge mounting, etc.

#### SHOP NOTES

The header panel above to compartment doors to be smooth PAINTED aluminum and NOT diamondplate

30-01-3100

### **OUTRIGGER COVERS**

Polished 3/16" aluminum treadplate covers shall be attached to the extending outrigger assemblies.

30-01-3152

#### **OUTRIGGER PLATES**

Auxiliary outrigger plates, 2-ft x 2-ft for each outrigger shall be provided. The outrigger plates shall be installed on heavy brackets and installed adjacent to each outrigger.

30-02-2200

### COMPARTMENT FLOORS

The compartment floors shall be constructed of smooth aluminum material, to match the compartment interior walls.

44-06-3100

### TANDEM AXLE WHEEL AREA

For ease of accessibility and maintenance, wheel well panels shall be double break formed painted smooth plate that is welded in place.

To fully protect the wheel well area from road debris and to aid in cleaning, a full depth (minimum of 25") radius wheel well liner shall be provided. Wheel well liner shall be smooth aluminum to prevent corrosion.

44-06-4100

### **FENDERETTES**

The rear wheel wells shall be radius cut for a streamlined appearance. A polished aluminum fenderette shall be furnished at each rear wheel well opening, held in place with concealed stainless steel fasteners.

41-39-1200

#### AERIAL HOSEBED

The apparatus hosebody is to be properly reinforced without the use of angles or structural shapes, and free from all projections which might injure the fire hose.

The main apparatus hosebed shall run from the forward body bulkhead to the rear of the body and around the pedestal of the aerial.

41-39-2100

#### **ALUMINUM HOSEBED GRATING**

The hose bed compartment deck shall be constructed entirely from maintenance-free, extruded aluminum slats. The slats shall have an anodized, radiused ribbed top surface. The slats shall be

41-39-3100	of widths approximately 3/4" high x 7.5" wide and shall be welded into a one-piece grid system to prevent the accumulation of water and allow ventilation to assist in drying hose.
	The hose bed shall be designed to have storage capacity for 2.5" Double Jacket fire hose.
41-39-4100	Hose lengths shall be coupled in fifty foot lengths.
41-39-3500	The hose bed shall be designed to have storage capacity for 5" LDH Single Jacket rubber fire.
41-39-4200	Hose lengths shall be coupled in one hundred foot lengths.
41-39-5100	ALUMINUM HOSEBED DIVIDER
41-40-1300	One (1) adjustable hosebed divider constructed of .250" aluminum shall be installed on the apparatus.
	HOSEBED COVER
20 20 5000	The hosebed cover shall be secured utilizing ¼ turn fasteners as the fastening system at the front and sides of the hosebed body.
29-20-5600 40-00-5200	The vinyl cover shall be red in color.
	TANDEM AXLE SUBFRAME AERIAL BODY
	The apparatus body subframe shall be constructed entirely of heavy steel structural channel material.
	The front subframe shall be attached to the chassis frame rails using heavy "U" bolt fasteners to allow removal of the subframe and body assembly from the chassis. There shall be a barrier provided between the subframe and body to prevent electrolysis.
	The rear subframe and lower body platform support members shall be fabricated of 3.4 lb. Per foot heavy channel and bolted to the frame rails.
	This steel subframe shall carry the weight of the apparatus body, tank, water and equipment.

40-01-3400

### **BODY WIDTH**

The overall width of the platform body shall not exceed 102".

40-01-7300

# **COMPARTMENT DEPTH**

The side compartments on the aerial body shall be 26" deep the full height of the compartments.

10146-0044 07/30/18

This method of apparatus construction gives an excellent strength/weight ratio.

40-01-9720

### **COMPARTMENT DEPTH**

The side compartments on the aerial body shall have the maximum available height and depth dimensions. These dimensions shall remain consistent for the full height and depth of the compartment.

30-02-1150

#### **ROLL UP DOOR CONSTRUCTION**

The roll up door(s) shall be fabricated from aluminum extrusions and be manufactured and assembled in the United States.

The door slats shall be double-wall extrusions with dimensions of 1.366" high x .315" thick. The exterior surface shall be flat and the interior surface concave to deflect loose equipment to prevent the door from jamming. Each slat shall have interlocking end shoes to prevent the slat from moving side to side resulting in binding of the door. Each slat shall be separated by a co-extruded PVC and rubber inner seal to prevent metal to metal contact and minimize dirt and moisture from entering the compartment. The inner seal shall not be visible from the exterior to maintain a clean appearance of door. The slats shall have interlocking joints with a folding locking flange to provide security and prevent penetration by sharp objects.

The track shall be a one (1) piece aluminum assembly that has an attaching flange and finishing flange incorporated into the design that facilitates installation and provides a finished look to the door without additional trim or caulking. A low profile side seal shall be utilized to maximize usable compartment space.

A drip rail designed to prevent water from dripping into the compartment shall be provided. The drip rail shall have a built in replaceable non-contacting seal to eliminate scratching of the surface of the door.

Bottom rail extrusion must have smooth back to prevent loose equipment from jamming the door and have "V" shaped double seal to prevent water and debris from entering the compartment. The door latch system shall be a full width one (1) piece lift bar that enables the user to operate with one hand.

The roll mechanism shall have a clip system that connects the curtain slats to the operator drum to allow for easy tension adjustment without tools. A four (4) inch diameter counterbalanced operator drum to shall be incorporated to assist in lifting the door.

40-14-0900

### **LEFT SIDE BODY COMPARTMENTS**

The left side body compartmentation shall be as follows:

40-14-4030

# **LEFT HIGH SIDE COMPARTMENTS**

There shall be two (2) compartments located above the rear wheels. Each compartment shall be equipped with a single painted roll up door.

The compartment shall be equipped with the following:

44-40-1100

One (1) louver with filter shall be installed in the compartment.

45-01-1100

#### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

45-02-3100

#### ADJUSTABLE SHELF

Two (2) adjustable shelf shall be constructed of .188" smooth aluminum plate with 1.5" formed vertical lip front & back. Shelf supports on each side to be constructed of .188" aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8" bolts and spring-loaded cam locks. If shelf is longer than 40" a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf.

45-30-1300

The shelf/tray shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

45-10-1100

### PULL-OUT AND DROP-DOWN

Two (2) roll-out and tilt-down equipment tray shall be installed in the customer-specified compartment. The tray with roller bearing tracks shall be rated to a maximum load of 250 lb. Construction shall consist of four (4) inch tall extruded aluminum sides. Reflective material measuring 1" x 6" shall be installed on the each front corner both on the face and side of tray for firefighter safety.

Track assembly shall allow tray to roll out and tilt down at approximately a 30-degree angle.

45-30-5100

The shelf/tray shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

45-30-1400

The floor area of the compartment shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material

shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

55-01-3360

#### **COMPARTMENT LIGHTS**

Two (2) 18" long OnScene Solutions Access LED lights shall be installed, one on each side of the door opening. The lights shall contain 12 LEDs per light producing approximately 60 lumens (six LEDs and 30 lumens every 9"). The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN<sup>TM</sup> polycarbonate tube enclosure for severe duty applications.

The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.

55-06-1100

The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

40-14-6020

# LEFT REAR COMPARTMENT

There shall be one (1) full height compartment located behind the rear wheels. The compartment shall be equipped with a single full height painted roll up door.

The compartment shall be equipped with the following:

SHOP NOTES

Rear compartment floor to be raised to allow for better angle of departure

44-40-1100

One (1) louver with filter shall be installed in the compartment.

45-01-1100

#### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

45-02-3100

#### ADJUSTABLE SHELF

One (1) adjustable shelf shall be constructed of .188" smooth aluminum plate with 1.5" formed vertical lip front & back. Shelf supports on each side to be constructed of .188" aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8" bolts and spring-loaded cam locks. If shelf is longer than 40" a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf.

45-30-1300

The shelf/tray shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

45-06-1100

#### 500# ROLLOUT TRAY

One (1) roll-out equipment tray shall be installed in the compartment. The tray with telescoping slides and cam follower bearings shall be rated to a maximum load of 500 lbs. The tray shall have a gas shock to hold the tray extended or closed. There shall be a lock to prevent movement, when the tray is in the closed position.

The tray shall be formed of .188" smooth aluminum plate, fabricated with two (2) inch sides. Reflective material measuring 1" x 6" shall be installed on each front corner both on the face and side of tray for firefighter safety.

45-30-1300

The shelf/tray shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

55-01-3390

#### **COMPARTMENT LIGHTS**

Two (2) 54" long OnScene Solutions Access LED lights shall be installed, one on each side of the door opening. The lights shall contain 36 LEDs per light producing approximately 180 lumens (six LEDs and 30 lumens every 9"). The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN<sup>TM</sup> polycarbonate tube enclosure for severe duty applications.

The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.

55-06-1100

The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

40-14-7120

### ACCESS LADDER

There shall be a swing out and down access ladder supplied and installed on the left side apparatus, for accessing the aerial turntable. It shall be of an all aluminum design and shall incorporate treads six (6") inches deep and no more than eighteen (18") inches apart. The ground to the first step dimension, on level ground, shall be no more than eighteen (18") inches. When in the deployed position the ladder shall have an angle of approximately 75-degrees to facilitate ascending and descending the ladder. The ladder shall be retained in the stowed and deployed position by two (2) gas cylinders and shall not require the use of lathes to hold it in position.

40-16-0900

#### RIGHT SIDE BODY COMPARTMENTS

The right side body compartmentation shall be as follows:

40-16-4030

### RIGHT HIGH SIDE COMPARTMENTS

There shall be two (2) compartments located above the rear wheels. Each compartment shall be equipped with a single painted roll up door.

The compartment shall be equipped with the following:

44-40-1100

One (1) louver with filter shall be installed in the compartment.

45-01-1100

#### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

45-10-1100

#### PULL-OUT AND DROP-DOWN

Two (2) roll-out and tilt-down equipment tray shall be installed in the customer-specified compartment. The tray with roller bearing tracks shall be rated to a maximum load of 250 lb. Construction shall consist of four (4) inch tall extruded aluminum sides. Reflective material measuring 1" x 6" shall be installed on the each front corner both on the face and side of tray for firefighter safety.

Track assembly shall allow tray to roll out and tilt down at approximately a 30-degree angle.

45-30-5100

The shelf/tray shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

45-30-1400

The floor area of the compartment shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

55-01-3360

#### **COMPARTMENT LIGHTS**

Two (2) 18" long OnScene Solutions Access LED lights shall be installed, one on each side of the door opening. The lights shall contain 12 LEDs per light producing approximately 60 lumens (six LEDs and 30 lumens every 9"). The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN<sup>TM</sup> polycarbonate tube enclosure for severe duty applications.

The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.

55-06-1100

The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

40-16-6020

### RIGHT REAR COMPARTMENT

There shall be two (2) full height compartments located behind the rear wheels. Each compartment shall be equipped with a single full height painted roll up door.

The compartment shall be equipped with the following:

SHOP NOTES

Rear compartment floor to be raised to allow for better angle of departure

44-40-1100

One (1) louver with filter shall be installed in the compartment.

45-01-1050

#### ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.

45-02-3100

#### ADJUSTABLE SHELF

Two (2) adjustable shelf shall be constructed of .188" smooth aluminum plate with 1.5" formed vertical lip front & back. Shelf supports on each side to be constructed of .188" aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8" bolts and spring-loaded cam locks. If shelf is longer than 40" a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf.

45-30-1300

The shelf/tray shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

45-06-1100

#### 500# ROLLOUT TRAY

Two (2) roll-out equipment tray shall be installed in the compartment. The tray with telescoping slides and cam follower bearings shall be rated to a maximum load of 500 lbs. The tray shall have a gas shock to hold the tray extended or closed. There shall be a lock to prevent movement, when the tray is in the closed position.

The tray shall be formed of .188" smooth aluminum plate, fabricated with two (2) inch sides. Reflective material measuring 1" x 6" shall be installed on each front corner both on the face and side of tray for firefighter safety.

45-30-1300

The shelf/tray shall be fitted with removable vinyl Turtle Tile matting. The matting shall be interlocking modules approximately 12" square by 9/16" thick. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

55-01-3390

#### **COMPARTMENT LIGHTS**

Two (2) 54" long OnScene Solutions Access LED lights shall be installed, one on each side of the door opening. The lights shall contain 36 LEDs per light producing approximately 180 lumens (six LEDs and 30 lumens every 9"). The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN<sup>TM</sup> polycarbonate tube enclosure for severe duty applications.

The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.

55-06-1100

The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

40-95-2000

### **REAR COMPARTMENT**

There shall be one (1) compartment located at the rear of the apparatus. The compartment, located within the aerial torque box, shall have provisions to accommodate the following ladders and pike poles.

The compartment shall be equipped with hinged aluminum treadplate double doors.

55-01-3360

#### **COMPARTMENT LIGHTS**

Two (2) 18" long OnScene Solutions Access LED lights shall be installed, one on each side of the door opening. The lights shall contain 12 LEDs per light producing approximately 60 lumens (six LEDs and 30 lumens every 9"). The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN<sup>TM</sup> polycarbonate tube enclosure for severe duty applications.

The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.

55-06-1100

The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

90-02-3600

# SLIDE OUT REAR LADDER AERIAL TORQUE BOX

Ground ladders and pike poles shall be accessed from the rear of the apparatus. All ladders shall mounted individual brackets and slide on composite material so as not to damage the main beams of the ladders. Pike poles and the folding ladder shall be stored in individual storage area. Ladders shall have stops provided on the front of all slides so ladders will not slide forward during emergency braking conditions.

90-03-0225

#### LADDER SOURCE

New ground ladders shall be provided by the body builder.

90-16-5200

### PIKE POLE MOUNTING BRACKET

Ten (10) tube shall be provided for pike pole mounting. The tube shall have a 2" interior diameter and shall be mounted inside of the apparatus body.

90-16-6115

#### PIKE POLE SOURCE

The pike poles shall be provided by the body builder.

41-41-1100

#### AERIAL REAR BUMPER

A 4" rear bumper shall be provided at the rear of the apparatus body, and be easily removable for replacement or repair. The rear bumper shall be constructed of .188" aluminum diamond plate or equal non-slip surface in compliance with NFPA #1901 standards.

45-25-1100

#### CLIMATE CONTROLLED CABINET

An OTE brand climate controlled cabinet shall be supplied and installed in the right side rearmost compartment (R5). The system shall consist of 19502E cabinet, temperature control module, HD auxiliary fan with thermostat and CompX regulator latch/lock system. The unit shall be wired battery HOT.

44-01-1450

#### FRONT BODY PROTECTION PANELS

Aluminum tread plate overlays and panels shall be installed on the front of the body compartment from the lower edge to the top of the compartment doors.

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44-01-4000

### **REAR BODY PROTECTION PANELS**

The rear body panels of the body shall be a smooth material, to allow for the proper application and installation of a "Chevron" stripe on the rear.

41-44-4100

### FOLDING STEP LEFT SIDE FRONT

A folding step of die cast high-strength zinc/aluminum alloy, plated with a superior automotive grade chrome finish shall be provided. The greater than 42 sq. in. serrated non-skid step traction area also offers an oversized non-slip grasp hand-hold. A heavy duty stainless steel spring design firmly holds the step in the open or closed positions. A rubber stop prevents any transit noise and rattles in the closed position. Step lighting shall be from a Truck Lite light mounted below the step.

The step has been third part tested to assure conformation of NFPA 1901 and FHA, 49CFR specifications for stepping surfaces and handhold.

The step shall be installed on the left side front compartment face.

41-44-4200

### FOLDING STEP RIGHT SIDE FRONT

A folding step of die cast high-strength zinc/aluminum alloy, plated with a superior automotive grade chrome finish shall be provided. The greater than 42 sq. in. serrated non-skid step traction area also offers an oversized non-slip grasp hand-hold. A heavy duty stainless steel spring design firmly holds the step in the open or closed positions. A rubber stop prevents any transit noise and rattles in the closed position. Step lighting shall be from a Truck Lite light mounted below the step.

The step has been third part tested to assure conformation of NFPA 1901 and FHA, 49CFR specifications for stepping surfaces and handhold.

The step shall be installed on the right side front compartment face.

44-02-1100

### EXTRUDED ALUMINUM RUB RAILS

Full body length polished aluminum rub rails shall be bolted in place on the lower right and left body sides. The side rub rails shall be a heavy extruded aluminum "C" channel.

44-02-2000

### NYLON SPACERS FOR RUB RAILS

There shall be nylon spacers provided between the rubrail and the body. This shall allow wash out and replacement in the event of damage.

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44-07-4300

### **FUEL TANK ACCESS PANEL**

There shall be a removable panel in the bottom of the torque tube, used to gain access to the fuel tank and fuel gauge-sending unit.

44-07-5310

### **FUEL FILL DOOR**

A brushed aluminum fuel fill enclosure door shall be installed in the left side aerial outrigger panel. A label indicating DIESEL FUEL ONLY shall be applied.

A brushed aluminum fuel fill enclosure door shall be installed in the right side aerial outrigger panel. A label indicating DIESEL FUEL ONLY shall be applied.

44-11-5100

### WHEEL WELL PROVISION LOCATION

The wheel well provisions shall be located on the left side of the apparatus, ahead of the rear wheels.

44-10-1600

One (1) Fire Shopp Inc. breathing air cylinder storage compartment shall be provided and located in the rear wheel well of the apparatus body.

The cylinder storage compartment shall be constructed entirely of black polymer. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement.

Compartment shall be provided with SCBA cylinder scuff protection. A brushed stainless steel door shall be provided.

44-10-6000

One (1) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

44-11-5200

### WHEEL WELL PROVISIONS LOCATION

The wheel well provisions shall be located on the left side of the apparatus, between the rear tandem wheels.

44-10-2200

One (1) storage compartment for one (1) SCBA cylinder (not supplied), (1) pressurize water extinguisher (not supplied) and (1) 20# dry-chem extinguisher (not supplied) shall be provided and located in the rear wheel well of the apparatus body.

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The cylinder storage compartment shall be constructed entirely of aluminum. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement.

The compartment shall be provided with SCBA cylinder scuff protection. A brushed stainless steel door shall be provided.

SHOP NOTES

Pressurized Water Can- Amerex Model 240 (24.5"H x 9"W) 2 1/2 gallon

Dry Chem 20 lb.- Amerex Model A411 (24"H x 10 1/4 "W)

44-10-6000

Three (3) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

44-11-5305

### WHEEL WELL PROVISION LOCATION

The wheel well provisions shall be located on the left side of the apparatus, behind of the rear wheels.

44-10-1600

One (1) Fire Shopp Inc. breathing air cylinder storage compartment shall be provided and located in the rear wheel well of the apparatus body.

The cylinder storage compartment shall be constructed entirely of black polymer. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement.

Compartment shall be provided with SCBA cylinder scuff protection. A brushed stainless steel door shall be provided.

44-10-6000

One (1) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

44-11-5500

### WHEEL WELL PROVISION LOCATION

The wheel well provisions shall be located on the right side of the apparatus, ahead of the rear wheels.

### Queen Creek 88' Mid-Mount Platform – Body Specifications 7.30.18

44-10-1600

One (1) Fire Shopp Inc. breathing air cylinder storage compartment shall be provided and located in the rear wheel well of the apparatus body.

The cylinder storage compartment shall be constructed entirely of black polymer. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement.

Compartment shall be provided with SCBA cylinder scuff protection. A brushed stainless steel door shall be provided.

44-10-6000

One (1) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

44-11-5600

### WHEEL WELL PROVISIONS LOCATION

The wheel well provisions shall be located on the right side of the apparatus, between the rear tandem wheels.

SHOP NOTES

Pressurized Water Can- Amerex Model 240 (24.5"H x 9"W) 2 1/2 gallon

Dry Chem 20 lb.- Amerex Model A411 (24"H x 10 1/4 "W)

44-10-2200

One (1) storage compartment for one (1) SCBA cylinder (not supplied), (1) pressurize water extinguisher (not supplied) and (1) 20# dry-chem extinguisher (not supplied) shall be provided and located in the rear wheel well of the apparatus body.

The cylinder storage compartment shall be constructed entirely of aluminum. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement.

The compartment shall be provided with SCBA cylinder scuff protection. A brushed stainless steel door shall be provided.

44-10-6000

Three (3) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

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44-11-5700

### WHEEL WELL PROVISION LOCATION

The wheel well provisions shall be located on the right side of the apparatus, behind of the rear wheels.

44-10-1600

One (1) Fire Shopp Inc. breathing air cylinder storage compartment shall be provided and located in the rear wheel well of the apparatus body.

The cylinder storage compartment shall be constructed entirely of black polymer. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement.

Compartment shall be provided with SCBA cylinder scuff protection. A brushed stainless steel door shall be provided.

44-10-6000

One (1) one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.

80-05-2100

### **BODY PAINT PROCESS**

All bright metal fittings, if unavailable in stainless steel shall be heavily chrome plated. Iron fittings shall be copper plated prior to chrome plating. If applicable, any and all accessory times shall be removed from the body prior to cleaning and painting. Any accessory items that are to be painted, shall be painted separately and installed after the body is painted and cured.

All seams shall be caulked, both inside and along the exterior edges, with a urethane automotive sealant to prevent moisture from entering between any body panels.

The body and all parts shall be thoroughly washed with a grease cutting solvent (PPG DX330) prior to any sanding. After the body has been sanded and the weld marks and minor imperfections are filled and sanded, the body shall be washed again with (PPG DX330) to remove any contaminants on the surface.

The next two to four coats (depending on need) shall be a PPG DelFleet F4936 High Solids Epoxy Gray Primer. The film build shall be 4-6 mils when dry. The primer surfacer coat, after appropriate dry time, shall be sanded with 320-600 grit sandpaper to ensure maximum gloss of the paint. The last step is the application of at least three coats of PPG DelFleet polyurethane two-component color (single stage). The film build being 2-3 mils dry. The single stage acrylic

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urethane, when mixed with component (PPG F 3270) catalyst shall provide a UV barrier to prevent fading and chalking.

All products and technicians are certified by PPG every two (2) years.

80-06-1100

### **APPARATUS COLOR**

SHOP NOTES

The apparatus shall be red in color.

PPG#

80-30-1300

### INTERIOR COMPARTMENT FINISH

Ten (10) apparatus side compartment interiors are to be painted with a spatter finish material. The compartments shall be cleaned with a grease remover, and then the surface sanded and prepared for painting. The compartment shall be provided with two (2) coats of white epoxy. The compartments are then coated with a splatter paint top coat.

80-42-1500

### **TOUCH-UP PAINT**

One (1) two (2) ounce bottle of touch-up paint shall be furnished with the completed truck at final delivery.

80-50-2000

### SCOTCHLITE REFLECTIVE LETTERING

The lettering shall be applied with Scotchlite reflective material, shaded in black.

A quantity of seventy-five (75), four (4) inch letters are to be placed on the cab and on the body as directed by fire department.

80-50-3700

### SCOTCHLITE REFLECTIVE LETTERING

The lettering shall be applied with Scotchlite reflective material, shaded in black.

A quantity of fifty (50) letters are to be placed on the cab and on the body as directed by fire department. The letters shall be between eight and twelve inches in height.

80-50-5100

### AERIAL LIFT CYLINDER PROTECTIVE COVERS

There shall be aluminum protective covers provided, one over each of the two (2) aerial lift cylinder assemblies. The covers shall be constructed from .125 thick, smooth aluminum material and be designed to prevent damage to the lift cylinders due to impact from environmental factors. The protective covers shall be bolted in place using stainless steel fasteners and easily

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removable for service to the aerial lift cylinders. Lubrication points shall be accessible without the need to remove the protective covers. In addition to the added component protection, the lift cylinder covers shall provide added fire fighter safety from lift cylinder pinch point areas and a superior aesthetic appearance to the aerial device.

The exterior of the protective covers shall be painted to match the aerial body color using PPG automotive quality product. The application process shall conform to all PPG guidelines.

SHOP NOTES

painted red to match body

80-55-2200

### **STRIPING**

Black vinyl striping shall be applied at the paint break line on the apparatus cab.

80-71-1600

### **REFLECTIVE STRIPING**

A 10" wide 3M brand Scotchlite reflective multi-stripe shall be affixed to the perimeter of the vehicle. There shall be a 1" gap between each of the stripes. Striping shall conform to applicable NFPA requirements. At least 50% of the perimeter length of each side and width of the rear, and at least 25% of the perimeter width of the front of the vehicle shall have reflective striping.

The striping shall be applied in a large "Z" pattern.

80-75-1600

### **COLOR OF STRIPING MATERIAL**

The color of the 3M brand striping material shall be white.

### APPARATUS DOOR GRAPHICS

Two (2) custom door graphics designed primarily with artistic features shall be proposed for installation on the apparatus.

80-72-1105

### **CHEVRON STRIPING**

The entire rear portion of the body shall have 3M Diamond Grade reflective red and yellow striping installed. The chevron style striping shall be applied at a 45-degree upward angle pointing towards the center upper portion of the rear panel.

80-72-1400

### REFLECTIVE TAPE ON OUTRIGGERS

The outriggers that extend beyond the side of the body shall have white reflective tape applied to both the front and rear facing sides.

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80-80-1200

### **AERIAL INSTRUCTION LABELS**

Safety and instructional labels shall be applied at all necessary areas on the aerial device to identify points critical to the safe operation and maintenance of the aerial.

80-81-0100

### LEVELING GAUGE

A leveling gauge shall be installed on the rear to show when the apparatus is level from side to side. A second gauge shall be provided on the rear to show when the apparatus is level from front to back. The approximate size of the leveling gauges shall be 3" x 1-1/2".

90-01-5900

### WHEEL CHOCKS WITH MOUNTS

A pair of Zico Model SAC-44 Quic-Chok folding wheel chocks shall be provided and mounted under the apparatus body with model SQCH-44H horizontal mounting brackets.

90-03-3400

### **ROOF LADDER**

Two (2) Duo Safety Model 875-A, 16 foot aluminum roof ladder with folding steel roof hooks on one end and steel spikes on the other end shall be provided on the apparatus. The ladder shall meet or exceed all latest NFPA Standards.

90-06-4600

### **EXTENSION LADDER**

One (1) Duo-Safety Model 900-A, 24 foot two (2) section aluminum extension ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA standards.

90-07-4300

### **EXTENSION LADDER**

One (1) Duo-Safety Model 1225-A, 35 foot three (3) section aluminum extension ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA standards.

90-08-2600

### **FOLDING LADDER**

One (1) Duo Safety Model 585-A, 10 foot folding aluminum ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA Standards.

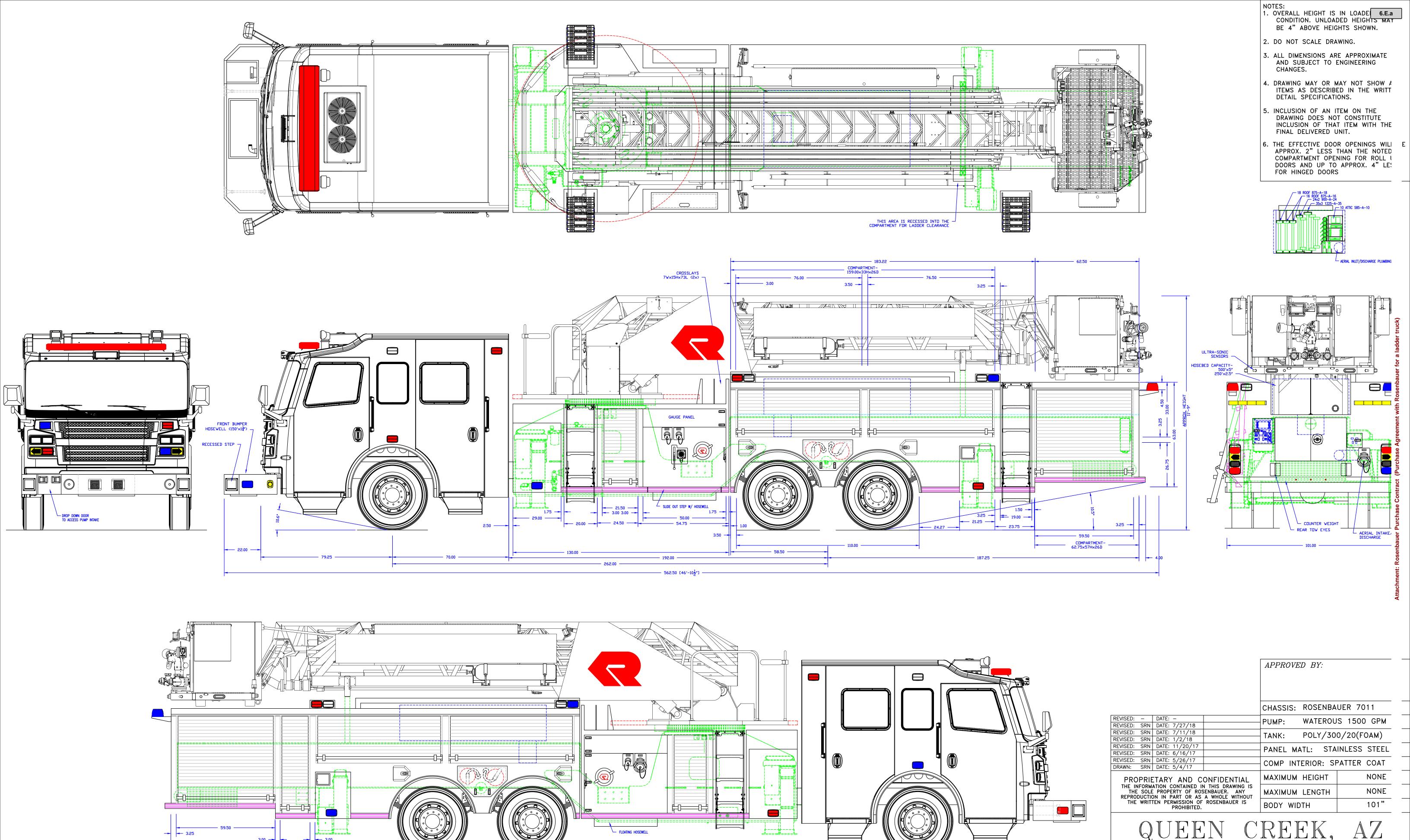
90-03-3500

### **ROOF LADDER**

One (1) Duo Safety Model 875-A, 18 foot aluminum roof ladder with folding steel roof hooks on one end and steel spikes on the other end shall be provided on the apparatus. The ladder shall meet or exceed all latest NFPA Standards.

# Queen Creek 88' Mid-Mount Platform – Body Specifications 7.30.18

90-23-1100	ROOF HOOK
90-23-1300	Two (2) 4-ft Fire Hooks Unlimited NY style Roof Hook with D-handle shall be provided.
30 20 1000	ROOF HOOK
90-23-1400	Two (2) 6-ft Fire Hooks Unlimited NY style Roof Hook with grips shall be provided.
00 20 1 100	ROOF HOOK
90-23-1500	Two (2) 8-ft Fire Hooks Unlimited NY style Roof Hook with grips shall be provided.
	ROOF HOOK
90-23-2300	Two (2) 10-ft Fire Hooks Unlimited NY style Roof Hook with grips shall be provided.
	TRASH HOOK
90-23-2400	One (1) 6-ft Fire Hooks Unlimited arson/trash hook with fiberglass "D" handle shall be provided.
	TRASH HOOK
	One (1) 8-ft Fire Hooks Unlimited arson/trash hook with fiberglass "D" handle shall be provided.



ROSENBAUER FX 3/1."

TOSENDAUET

QUEEN CREEK, AZ Packet Pg. 262

### **Rosenbauer-South Dakota**

DEPARTMENT: QUEEN CREEK, AZ 88 MM COBRA

Wheel Base	262
C A	192
Cab to Pump Compartment	2.5
Pump Compartment	130
Tank Length Lower	88.5
Tank Length Upper	88.5
Body Length	246
Total Tank Capacity	320
Apriol Cito	001 Mid Marin



**READY TO SERVE™** 

Aerial Size 88' Mid Mount Cobra- 5 Section

Percent of Weight to Front Axle				
Water (& Foam) Lower	Body	Pump		
-2.19%	-24.62%	47.52%		
Water (& Foam) Upper	Aerial	Hose		
-2.19%	20.42%	-4.77%		

	TOTAL WT	FRONT WT	REAR WT
Water (& Foam) Lower	1,768	-39	1,806
Water (& Foam) Upper	1,144	-25	1,170
Body	6,396	-1,575	7,971
Pump	2,115	1,005	1,110
Aerial	34,500	7,045	27,455
SUB TOTAL	45,923	6,411	39,512
Chassis	28,138	17,245	10,893
SUB TOTAL	74,061	23,657	50,404
Miscellaneous Equipment	1,875	681	1,194
NFPA 1901 Equipment Allowance	2,500	-304	2,804
NFPA Personnel Load (Included in Chassis if 0)	1,500	1,443	57
Hose Load	715	-34	749
Ground Ladders	407	-100	507
Counter Balance (Rear)	3,800	-2,357	6,157
TOTAL	84,858	22,985	61,873
		27.09%	72.91%

NOTE: Weights shown are approximate and do not include stability ballast on aerials

Proposed chassis information:	Brand:	ROSENBAUER	Crew Doors:	4	
		2 Wheel Drive			GVWR
Axle Capacities:	Front:	24,000	Rear:	63,000	87,000
Estimated Chassis Weight: (includes +5% variance)	Front:	17245	Rear:	10893	

**NOTE:** Chassis weights <u>MUST BE VERIFIED by the DEALER</u>. Dealer will be responsible for confirming the axles are adequate for the proposed apparatus. 1000# extra capacity per axle is recommended.



### Requesting Department

**Finance** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: SCOTT MCCARTY, FINANCE DIRECTOR

RE: Consideration and possible approval of a contract for financial

advisor services with Wedbush Securities Inc.

DATE: September 5, 2018

### **Staff Recommendation:**

Staff recommends approval of a contract for financial advisor services with Wedbush Securities Inc.

### Relevant Council Goal(s):

Effective Government: KRA Financial Management, Internal Services & Sustainability



Superior Infrastructure - Capital Improvement Program

### **Discussion:**

In anticipation of the Town issuing debt for transportation projects within the next six months, and possibly water rights thereafter, this contract for financial advisor services is being recommended at this time.

The Town's Financial Advisor is critical in the process of issuing debt. The Financial Advisor has a fiduciary responsibility solely to the Town. Their responsibility is to advise the Town on all matters related to issuing debt including type of debt, timing, structure, term, market conditions, and managing the bond underwriters. They also assist in maintaining with our relationship with the bond rating agencies and providing outstanding debt information for our annual budget and financial report.

The process to make all of the decisions associated with a debt issue takes several months and with the transportation debt issue upcoming, approval of this contract will allow us to get started on that process now.

Wedbush Securities Inc. is an approved vendor from the State of Arizona's bid list with established contract prices. Wedbush is the largest investment banking firm

headquartered on the West Coast, with 100 offices and 1,000 employees. They currently are the Financial Advisor to various Arizona cities and towns including the Town of Gilbert and the City of Surprise.

### **Fiscal Impact**

The Financial Advisor is compensated at the time of the debt issuance. The fee structure is included in the contract and is based on the amount of the bond issue. Assuming a \$22 million transportation bond issue, the estimated fee paid to Wedbush would be \$45,000.

### **Alternatives:**

The Town has used RBC Capital Markets LLC (RBC) in the past for these services. However, Town staff is recommending a change to Wedbush Securities Inc. at this time. The Town staff feels RBC is better suited to potentially be an underwriter on the bond issues. A firm cannot serve as both Financial Advisor and underwriter.

### Attachment(s):

1. Professional Service Agreement for Financial Advisor Services with Wedbush Securities Inc.

### COOPERATIVE PURCHASE AGREEMENT

THIS AGREEMENT (The "Agreement") is made and entered into effective as of September \_\_\_\_\_\_, 2018 (the "Effective Date"), by and between the Town of Queen Creek, Arizona, an Arizona municipal corporation ("Town"), and Wedbush Securities Inc., an Arizona corporation ("Vendor"). The Town and the Vendor are sometimes referred to in this Agreement collectively as the "Parties" and each individually as a "Party."

### **RECITALS:**

WHEREAS, the Town requires Financial Advisor Services; and

WHEREAS, Financial Advisor Services are available through a cooperative contract with State of Arizona, State Procurement Office; and

WHEREAS, The Parties wish to enter into an Agreement pursuant to the terms and conditions of that outside contract number ADSPO14-080042 and all subsequent revisions, between State of Arizona and the Vendor (the "Original Contract") Such action is authorized under A.R.S. §41-2632 and is pursuant to the terms of the Maricopa County multi-agency purchasing cooperative. All capitalized terms used without definition in this Agreement shall have the definitions ascribed to them in the Original Contract.

### **AGREEMENTS:**

NOW, THEREFORE, for and in consideration of the foregoing Recitals and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree to the terms of the Original Contract as follows:

- 1. <u>Reaffirmation of Original Contract</u>. The Original Contract shall remain in full force and effect, and all terms and conditions of the Original Contract are hereby incorporated by reference into this Agreement, creating an agreement identical in terms between the Town and the Vendor. In the event of any conflict between this Agreement and the Original Contract, the terms of this Agreement shall prevail. In the Original Contract, the terms "State of Arizona, State Procurement Office" or "State" shall be deemed to be and refer to the Town, and the term "Vendor" shall be deemed to be and refer to the Vendor under this Agreement.
- 2. <u>Counterparts.</u> This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, binding on all of the Parties. The Parties agree that this Agreement may be transmitted between them via facsimile. The Parties intend that the faxed signatures constitute original signatures and that a faxed agreement containing the signatures (original or faxed) of all the Parties is binding upon the Parties.

- 3. <u>Scope of Services.</u> Vendor shall provide the Services described in Exhibit A attached hereto and incorporated herein. Unless expressly excluded, in writing, in the Agreement, the Services shall include any and all services reasonably contemplated, normally included, and necessary to complete the Services set forth in the Scope of Services described in Exhibit A in a good and workmanlike manner with due diligence and, at a minimum, in conformance with generally accepted industry standards and standard of care for like professionals in the same geographic area.
- 4. <u>Fees.</u> Vendor shall be paid according to the schedule set forth in Exhibit B attached hereto and incorporated herein.
  - 5. Compliance with Federal and State Laws.
- 5.1 The Contractor understands and acknowledges the applicability to it of the American with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989.
- 5.2 Pursuant to the provisions of A.R.S. §41-4401, the Contractor warrants to the Town that the Contractor and all its subcontractors are in compliance with all Federal Immigration laws and regulations that relate to their employees and with the E-Verify Program under A.R.S. §23-214(A).

A breach of this warranty by the Contractor or any of its subcontractors will be deemed a material breach of this Contract and may subject the Contractor or subcontractor to penalties up to and including termination of this Contract or any subcontract.

The Town retains the legal right to inspect the papers of any employee of the Contractor or any subcontractor who works on this Contract to ensure that the Contractor or any subcontractor is complying with the warranty given above.

The Town may conduct random verification of the employment records of the Contractor and any of its subcontractors to ensure compliance with this warranty.

The Town will not consider the Contractor or any of its subcontractors in material breach of this Contract if the Contractor and its subcontractors establish that they have complied with the employment verification provisions prescribed by 8 USCA §1324(a) and (b) of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. §23-214(A). The "E-Verify Program" means the employment verification pilot program as jointly administered by the United States Department of Homeland Security and the Social Security Administration or any of its successor programs.

The provisions of this Article must be included in any contract the Contractor enters into with any and all of its subcontractors who provide services under this Contract or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor of subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

- 5.3  $\,$  This Agreement is subject to cancellation for conflicts of interest pursuant to A.R.S.  $\S$  38-511.
- 5.4 Israel Boycott Provision. Vendor certifies to Town that it is not currently engaged in and agrees for the duration of the contract not to engage in a boycott of Israel as defined in A.R.S. § 35-393
- 6. All warranties, representations and indemnifications by Vendor shall survive the completion or termination of this Agreement.

### THE REST OF THIS PAGE INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the Effective Date set forth above.

Town of Queen Creek, an Arizona municipal corporation

Date:	By:	
	Mayor Gail Barney	
	By:	
	Town Manager John Kross	
	Attest	
	Attest: Town Clerk Jennifer Robinson	_
	Approved as to form:	
	By:	
	Dickinson Wright PLLC	
	Town Attorneys	
	Wedbush Securities Inc.	
Date:	By:	-
	Its:	_

### **EXHIBIT A**



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August 3, 2018

Town of Queen Creek, Arizona Attn: Scott McCarty 22358 S. Ellsworth Road Queen Creek, AZ 85142

Re: Excise Tax and State Shared Revenue Obligations

Dear Mr. McCarty,

Wedbush Securities Inc. ("Wedbush") appreciates the opportunity to serve as municipal advisor to the Town of Queen Creek, Arizona (the "Town"). Upon your acceptance, this MSRB G-42 engagement letter (the "Agreement") will serve as our mutual agreement with respect to the terms and conditions of our engagement as your municipal advisor, effective on the date this Agreement is executed by the Town (the "Effective Date").

### 1. Scope of Services.

- (a) *Services to be provided*. Wedbush is engaged by the Town as its municipal advisor to provide the services with respect to the issuance of municipal securities set forth in Appendix A (the "Scope of Services").
  - (b) Limitations on Scope of Services. The Scope of Services is subject to the following limitations:
  - (i) The Scope of Services is limited solely to the services described therein and is subject to any limitations set forth within the description of the Scope of Services.
  - (ii) Unless otherwise provided in the Scope of Services described herein, Wedbush is not responsible for preparing any preliminary or final official statement, or for certifying as to the accuracy or completeness of any preliminary or final official statement, other than with respect to any information about Municipal Advisor provided by Municipal Advisor for inclusion in such documents.
  - (iii) The Scope of Services does not include tax, legal, accounting or engineering advice with respect to the Obligations or in connection with any opinion or certificate rendered by counsel or any other person at closing.
  - (iv) If the Town has designated Wedbush as its independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption") with respect to the activities and aspects described in the Scope of Services, the Scope of Services as they relate to such designation as IRMA shall be subject to any limitations with respect to Wedbush's activities as IRMA as may be provided in the Scope of Services described herein. Wedbush is not responsible for verifying that it is independent (within the meaning of the IRMA exemption as interpreted by the SEC) from another party wishing to rely on the exemption from the definition of municipal advisor afforded under the IRMA exemption.
- (c) Amendment to Scope of Services. The Scope of Services may be changed only by written amendment or supplement to the Scope of Services described herein. The parties agree to amend or supplement the Scope of Services described herein promptly to reflect any material changes or additions to the Scope of Services.
- 2. <u>Wedbush's Regulatory Duties When Servicing the Town</u>. MSRB Rule G-42 requires that Wedbush make a reasonable inquiry as to the facts that are relevant to the Town's determination whether to proceed with a course of

action with a course of action or that form the basis for and advice provided by Wedbush to the Town. The rule also requires that Wedbush undertake a reasonable investigation to determine that it is not basing any recommendation on materially inaccurate or incomplete information. Wedbush is also required under the rule to use reasonable diligence to know the essential facts about the Town and the authority of each person acting on the Town's behalf.

The Town agrees to cooperate, and to cause its agents to cooperate, with Wedbush in carrying out these regulatory duties, including providing to Wedbush accurate and complete information and reasonable access to relevant documents, other information and personnel needed to fulfill such duties. In addition, the Town agrees that, to the extent the Town seeks to have Wedbush provide advice with regard to any recommendation made by a third party, the Town will provide to Wedbush written direction to do so as well as any information it has received from such third party relating to its recommendation.

3. <u>Term of this Engagement</u>. The term of this Agreement begins on the Effective Date and ends, unless earlier terminated as provided below, at the close of business on the settlement date for the Obligations. This Agreement may be terminated with or without cause by either party upon the giving of at least thirty (30) days' prior written notice to the other party of its intention to terminate, specifying in such notice the effective date of such termination.

### 4. <u>Compensation</u>.

- (a) *Fees and expenses*. The fees due to Wedbush hereunder are in accordance with the Arizona Department of Administration State Contract ADSPO14-0800042.
- (b) Limitation of liability. In the absence of willful misconduct, bad faith, gross negligence or reckless disregard of Obligations or duties hereunder on the part of Wedbush or any of its associated persons, Wedbush and its associated persons shall have no liability to the Town for any act or omission in the course of, or connected with, rendering services hereunder, or for any error of judgment or mistake of law, or for any loss arising out of any issuance of municipal securities, any municipal financial product or any other investment, or for any financial or other damages resulting from the Town's election to act or not to act, as the case may be, contrary to any advice or recommendation provided by Wedbush to the Town. No recourse shall be had against Wedbush for loss, damage, liability, cost or expense (whether direct, indirect or consequential) of the Town arising out of or in defending, prosecuting, negotiating or responding to any inquiry, questionnaire, audit, suit, action, or other proceeding brought or received from the Internal Revenue Service in connection with the Obligations or otherwise relating to the tax treatment or validity of the Obligations, or in connection with any opinion or certificate rendered by counsel or any other party. Notwithstanding the foregoing, nothing contained in this paragraph or elsewhere in this Agreement shall constitute a waiver by the Town of any of its legal rights under applicable U.S. federal securities laws or any other laws whose applicability is not permitted to be contractually waived, nor shall it constitute a waiver or diminution of Wedbush's fiduciary duty to the Town under Section 15B(c)(1) of the Securities Exchange Act of 1934, as amended, and the rules thereunder.
- 5. <u>Required Disclosures</u>. MSRB Rule G-42 requires that Wedbush provide you with disclosures of material conflicts of interest and of information regarding certain legal events and disciplinary history. Such disclosures are provided in Wedbush's Disclosure Statement delivered to the Town together with this Agreement.
- 6. <u>Waiver of Jury Trial</u>. EACH PARTY AGREES TO WAIVE ANY RIGHT TO A TRIAL BY JURY WITH RESPECT TO ANY CLAIM, COUNTERCLAIM OR ACTION ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THE RELATIONSHIP BETWEEN THE PARTIES. PARTIES AGREE TO WAIVE CONSEQUENTIAL AND PUNATIVE DAMAGES.

- 7. <u>Choice of Law.</u> This Agreement shall be construed and given effect in accordance with the laws of the State of Arizona.
- 8. <u>Binding Effect; Assignment</u>. This Agreement shall be binding upon and inure to the benefit of the Town and Wedbush, their respective successors and permitted assigns; provided however, neither party may assign or transfer any of its rights or Obligations hereunder without the prior written consent of the other party.
- 9. <u>Entire Agreement</u>. This instrument, including all appendices hereto, contains the entire agreement between the parties relating to the rights herein granted and Obligations herein assumed. This Agreement may not be amended, supplemented or modified except by means of a written instrument executed by both parties.
- 10. <u>Severability</u>. If any provision of this Agreement is, or is held or deemed to be, invalid, inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions because it conflicts with any provisions of any constitution, statute, rule or public policy, or for any other reason, such circumstances shall not make the provision in question invalid, inoperative or unenforceable in any other case or circumstance, or make any other provision or provisions of this Agreement invalid, inoperative or unenforceable to any extent whatever.
- 11. <u>No Third Party Beneficiary</u>. This Agreement is made solely for the benefit of the parties and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, is intended to confer on any person, other than the parties and their respective successors and permitted assigns, any rights, remedies, Obligations or liabilities under or by reason of this Agreement.
- 12. <u>Authority</u>. The undersigned represents and warrants that she has full legal authority to execute this Agreement on behalf of the Town. The following individuals have the authority to direct Wedbush's performance of its activities under this Agreement:

### Scott McCarty, Finance Director

13. <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall be an original, but which taken together, shall constitute one and the same instrument.

Wedbush Securities Inc.

By: \_\_\_\_\_\_\_\_
James L. Stricklin,

Managing Director, Public Finance

Jame L. Thet

Date: August 3, 2017

### ACCEPTED AND AGREED:

Town of Queen Creek, Arizona

# APPENDIX A SCOPE OF SERVICES

The Scope of Services to be provided under this Agreement shall consist of the activities described below with respect to the Town of Queen Creek, Arizona (the "Town") Excise Tax and State Shared Revenue Direct Loan Obligations (the "Obligations"). In addition, Wedbush is designated as the Town's independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption") with respect to the aspects of the Obligations described in this Appendix A.

### **Activities**

Wedbush shall or may undertake some or all of the following activities for or on behalf of the Town with respect to the Obligations in carrying out this engagement, as directed by the Town:

- 1. Evaluate options or alternatives with respect to the proposed Obligations issuance;
- 2. Review recommendations made by other parties to the Town with respect to the Obligations, if any;
- **3.** Review financial and other information regarding the Town, the proposed Obligations and any source of repayment of or security for the Obligations;
- **4.** Consult with and/or advise the Town on actual or potential changes in market place practices, market conditions, regulatory requirements or other matters that may have an impact on the Town and its financing plan;
- 5. Assist the Town in establishing a plan of financing;
- **6.** Assist the Town in establishing the structure, timing, terms and other similar matters concerning the Obligations;
- 7. Prepare the financing schedule;
- **8.** Advise the Town on the manner of sale of the Obligations (public vs. private);
- **9.** In a public sale, assist in the gathering of information with respect to financial, statistical and factual information relating to the Town in connection with the preparation of the preliminary and final official statement;
- 10. In a private sale, assist with the assembly and word processing of the Request for Funding;
- **11.** Make arrangements for publication, printing, advertising and other vendor services necessary or appropriate in connection with the Obligations, if applicable;
- **12.** Advise the Town regarding any continuing disclosure undertaking required to be entered into in connection with the Obligations;
- **13.** Assist the Town with the assembly of a list of potential purchasers for a private sale, or in the selection of underwriters for a public sale;
- **14.** Advise the Town with respect to recommendations made by the purchaser/underwriters and other interactions between Town and the purchaser/underwriters;
- **15.** Review required underwriter disclosures to the Town;
- **16.** Assist the Town in selecting legal and other professionals (such as trustee, escrow agent, accountant, feasibility consultant, etc.) to work on the Obligations;
- 17. Respond to questions from potential purchasers, underwriters or investors;
- **18.** In a public sale, assist in the preparation of materials for, and make recommendations to the Town in connection with credit ratings agencies, insurers and other credit or liquidity providers;
- 19. Assist with the preparation of an investor roadshow, if requested;
- **20.** Work with bond counsel and other transaction participants to prepare and/or review necessary authorizing documentation of the Town and other documents necessary to finalize and close the Obligations;
- 21. In a private sale, review proposals and advise the Town on selection of a winning purchaser;

- **22.** In a negotiated sale, review the data provided by the underwriter to the Town with respect to the pricing of comparable debt issuance recently or currently being sold in Arizona or nationally;
- **23.** In a negotiated sale, coordinate pre-pricing discussions, supervise the sale process, advise Town on matters relating to retail or other order periods and syndicate priorities, review the order book, advise on the acceptability of the underwriter's pricing and offer to purchase;
- **24.** Coordinate working group sessions, closing, delivery of the Obligations and transfer of funds; and
- **25.** Prepare a closing memorandum or transaction summary.



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# DISCLOSURE STATEMENT OF WEDBUSH SECURITIES INC.

This Disclosure Statement is provided Wedbush Securities Inc. ("Wedbush") to the **Town of Queen Creek, Arizona** (the "Town") in connection with the Municipal Advisor Engagement Letter dated **August 3, 2018** (the "Agreement") and is dated as of the same date as the Agreement. This Disclosure Statement provides information regarding conflicts of interest and legal or disciplinary events of Municipal Advisor required to be disclosed to Client pursuant to MSRB Rule G-42(b) and (c)(ii).

### PART A – Disclosures of Conflicts of Interest

MSRB Rule G-42 requires that municipal advisors provide to their clients disclosures relating to any actual or potential material conflicts of interest, including certain categories of potential conflicts of interest identified in Rule G-42, if applicable. If no such material conflicts of interest are known to exist based on the exercise of reasonable diligence by the municipal advisor, municipal advisors are required to provide a written statement to that effect.

General Mitigations. As general mitigations of Wedbush's conflicts, with respect to all of the conflicts disclosed below, Wedbush mitigates such conflicts through its adherence to its fiduciary duty to the Town, which includes a duty of loyalty to the Town in performing all municipal advisory activities for the Town. This duty of loyalty obligates Wedbush to deal honestly and with the utmost good faith with the Town and to act in the Town's best interests without regard to Wedbush's financial or other interests. In addition, because Wedbush is a broker-dealer with significant capital due to the nature of its overall business, the success and profitability of Wedbush is not dependent on maximizing short-term revenue generated from individualized recommendations to its clients but instead is dependent on long-term profitably built on a foundation of integrity, quality of service and strict adherence to its fiduciary duty. Furthermore, Wedbush's municipal advisory supervisory structure, leveraging our long-standing and comprehensive broker-dealer supervisory processes and practices, provides strong safeguards against individual representatives of Wedbush potentially departing from their regulatory duties due to personal interests. The disclosures below describe, as applicable, any additional mitigations that may be relevant with respect to any specific conflict disclosed below.

<u>Compensation-Based Conflicts</u>. The fees due under this Agreement may be based on the size of the Issue. While this form of compensation is customary in the municipal securities market, this may present a conflict because it could create an incentive for Wedbush to recommend unnecessary financings or financings that are disadvantageous to the Town, or to advise the Town to increase the size of the issue. This conflict of interest is mitigated by the general mitigations described above.

The fees due under this Agreement may be in a fixed amount. The amount is based upon an analysis by the Client and Wedbush of, among other things, the expected duration and complexity of the transaction and the Scope of Services to be performed by Wedbush. This form of compensation presents a potential conflict of interest because, if the transaction requires more work than originally contemplated, Wedbush may suffer a loss. Thus Wedbush may recommend less time-consuming alternatives, or fail to do a thorough analysis of alternatives. This conflict of interest is mitigated by the general mitigations described above.

The payment of fees due under this Agreement shall be contingent upon the delivery of the Issue. While this form of compensation is customary in the municipal securities market, this may present a conflict because it could create an incentive for Municipal Advisor to recommend unnecessary financings or financings that are disadvantageous to the Town.

Other Municipal Advisor or Underwriting Relationships. Wedbush serves a wide variety of other clients that may from time to time have interests that could have a direct or indirect impact on the interests of the Town. For example, Wedbush serves as municipal advisor to other municipal advisory clients and, in such cases, owes a regulatory duty to such other clients just as it does to the Town under this Agreement. These other clients may, from time to time and depending on the specific circumstances, have competing interests, such as accessing the new issue market with the most advantageous timing and with limited competition at the time of the offering. In acting in the interests of its various clients, Wedbush could potentially face a conflict of interest arising from these competing client interests. In other cases, as a broker-dealer that engages in underwritings of new issuances of municipal securities by other municipal entities, the interests of Wedbush

to achieve a successful and profitable underwriting for its municipal entity underwriting clients could potentially constitute a conflict of interest if, as in the example above, the municipal entities that Wedbush serves as underwriter or municipal advisor have competing interests in seeking to access the new issue market with the most advantageous timing and with limited competition at the time of the offering. None of these other engagements or relationships would impair Wedbush's ability to fulfill its regulatory duties to the Town.

Secondary Market Transactions in the Town's Securities. Wedbush, in connection with its sales and trading activities, may take a principal position in securities, including securities of the Town, and therefore Wedbush could have interests in conflict with those of the Town with respect to the value of the Town's securities while held in inventory and the levels of mark-up or mark-down that may be available in connection with purchases and sales thereof. In particular, Wedbush or its affiliates may submit orders for and acquire the Town's securities issued under the Agreement from members of the underwriting syndicate, either for its own account or for the accounts of its customers. This activity may result in a conflict of interest with the Town in that it could create the incentive for Wedbush to make recommendations to the Town that could result in more advantageous pricing of the Town's bond in the marketplace. Any such conflict is mitigated by means of such activities being engaged in on customary terms through units of the Wedbush that operate independently from Wedbush's municipal advisory business, thereby reducing the likelihood that such investment activities would have an impact on the services provided by Wedbush to the Town under this Agreement.

<u>Potential Conflict.</u> While we do not believe that the following creates a conflict of interest on the part of Wedbush, we note that James Stricklin's son Andrew Stricklin works for Oppenheimer & Co. Inc. in Dallas, Texas. The Town may wish to consider any impact such circumstances may have on how it conducts its activities with Wedbush under this Agreement

### PART B – Disclosures of Information Regarding Legal Events and Disciplinary History

MSRB Rule G-42 requires that municipal advisors provide to their clients certain disclosures of legal or disciplinary events material to its client's evaluation of the municipal advisor or the integrity of the municipal advisor's management or advisory personnel.

Accordingly, Wedbush sets out below required disclosures and related information in connection with such disclosures.

- I. <u>Material Legal or Disciplinary Event</u>. There are no legal or disciplinary events that are material to Client's evaluation of Wedbush or the integrity of Wedbush's management or advisory personnel disclosed, or that should be disclosed, on any Form MA or Form MA-I filed with the SEC.
- II. How to Access Form MA and Form MA-I Filings. Wedbush's most recent Form MA and each most recent Form MA-I filed with the SEC are available on the SEC's EDGAR system at http://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0001142495. The SEC permits certain items of information required on Form MA or MA-I to be provided by reference to such required information already filed by Wedbush in its capacity as a broker-dealer on Form BD or Form U4 or as an investment adviser on Form ADV, as applicable. Information provided by Wedbush on Form BD or Form U4 is publicly accessible through reports generated by BrokerCheck at http://brokercheck.finra.org, and Wedbush's most recent Form ADV is publicly accessible at the Investment Adviser Public Disclosure website at http://www.adviserinfo.sec.gov. For purposes of accessing such BrokerCheck reports or Form ADV, Wedbush's CRD number is 877.
- III. <u>Most Recent Change in Legal or Disciplinary Event Disclosure</u>. Wedbush has not made any material legal or disciplinary event disclosures on Form MA or any Form MA-I filed with the SEC.

### PART C - Future Supplemental Disclosures

As required by MSRB Rule G-42, this Disclosure Statement may be supplemented or amended, from time to time as needed, to reflect changed circumstances resulting in new conflicts of interest or changes in the conflicts of interest described above, or to provide updated information with regard to any legal or disciplinary events of Wedbush. Wedbush will provide Client with any such supplement or amendment as it becomes available throughout the term of the Agreement.

Dated: August 3, 2018

# **EXHIBIT B**



## **Attachment I**

PΑ ADSPO14-00008140 Solicitation No.: GE 1 OF **Description: Financial Advisor Services** 

State of Arizona **State Procurement Office** 

100 N.15th Ave., Suite 201 Phoenix, AZ 85007

### PRICING SCHEDULE: Wedbush Securities Inc.

(Dated: August 6, 2018)

6

### **PRICING SCHEDULE NUMBER ONE:**

### **COLLATERALIZED STRUCTURE PER \$1,000:**

Principal Amount of Issue	<u>Fee</u>
State Agency Issues	
Up to \$200,000,000	\$0.90 per \$1,000
O	Min. \$25,000 per issue
Over \$200,000,000	\$180,000 flat fee per issue
General Obligation New Money Issues:	
Up to \$200,000,000	\$1.00 per \$1,000
	Min. \$27,000 per issue
Over \$200,000,000	\$200,000 flat fee per issue
Community Facilities District New Manay Conord Obligation les	NUCC.
Community Facilities District New Money General Obligation Iss Up to \$200,000,000	\$1.25 per \$1,000
Ορ το ψ200,000,000	Min. \$31,500 per issue
Over \$200,000,000	\$250,000 flat fee per issue
Community Facilities District and Improvement District New Mor	
Up to \$185,000,000	\$1.35 per \$1,000
Over \$185,000,000	Min. \$36,000 per issue \$250,000 flat fee per issue
	ψ200,000 hat fee per issue
Utility Revenue Backed New Money Bonds or Obligations	
Up to \$165,000,000	\$1.50 per \$1,000
• • • • • • • • • • • • • • • • • • • •	Min. \$45,000 per issue,
Over \$165,000,000	\$250,000 flat fee per issue
Installment Purchase Agreements, Lease Purchase Agreements	s Cartificates of Participation
Excise Tax Backed MPC/Obligations, and 501(c)(3) New Money	
Up to \$165,000,000	\$1.50 per \$1,000
	Min. \$45,000 per issue,
Over \$165,000,000	\$250,000 flat fee per issue
All Defunding leaves	
All Refunding Issues: Up to \$165,000,000	\$1.50 per \$1,000
ορ το φτου,ουο,ουο	Min. \$45,000 per issue
Over \$165,000,000	\$250,000 flat fee per issue
	-



Solicitation No.: ADSPO14-00008140

Description: Financial Advisor Services

OF
6

State of Arizona State Procurement Office

100 N.15th Ave., Suite 201 Phoenix, AZ 85007

### B. NON-COLLATERALIZED STRUCTURE PER \$1,000:

Principal Amount of Issue	<u>Fee</u>
State Agency	
Up to \$200,000,000	\$0.90 per \$1,000
1 , , ,	Min. \$25,000 per issue
Over \$200,000,000	\$180,000 flat fee per issue
General Obligation New Money Issues:	
Up to \$200,000,000	\$1.00 per \$1,000
, , ,	Min. \$27,000 per issue
Over \$200,000,000	\$200,000 flat fee per issue
Community Facilities District New Money General Obligat	tion Issues:
Up to \$200,000,000	\$1.25 per \$1,000
ορ το φ <u>τ</u> ου, σου, σου	Min. \$31,500 per issue
Over \$200,000,000	\$250,000 flat fee per issue
	, ,
Community Facilities District and Improvement District Ne	ew Money Assessment Issues:
Up to \$185,000,000	\$1.35 per \$1,000
1 , , ,	Min. \$36,000 per issue
Over \$185,000,000	\$250,000 flat fee per issue
Utility Revenue Backed New Money Bonds or Obligations	
Up to \$165,000,000	\$1.50 per \$1,000
	Min. \$45,000 per issue,
Over \$165,000,000	\$250,000 flat fee per issue
Installment Purchase Agreements, Lease Purchase Agree	ements. Certificates of Participation.
Excise Tax Backed MPC/Obligations, and 501(c)(3) New	
Up to \$165,000,000	\$1.50 per \$1,000
	Min. \$45,000 per issue,
Over \$165,000,000	\$250,000 flat fee per issue
All Refunding Issues:	
Up to \$165,000,000	\$1.50 per \$1,000
	Min. \$45,000 per issue
Over \$165,000,000	\$250,000 flat fee per issue



Solicitation No.: ADSPO14-00008140

Description: Financial Advisor Services

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3
OF
6

# State of Arizona State Procurement Office

100 N.15th Ave., Suite 201 Phoenix, AZ 85007

### C. POOLED STRUCTURE PER \$1,000:

Principal Amount of Issue	<u>Fee</u>
State Agency	
Up to \$200,000,000	\$0.90 per \$1,000
, , ,	Min. \$25,000 per issue
Over \$200,000,000	\$180,000 flat fee per issue
General Obligation New Money Issues:	
Up to \$200,000,000	\$1.00 per \$1,000
	Min. \$27,000 per issue
Over \$200,000,000	\$200,000 flat fee per issue
Community Facilities District New Money General Obligation I	echoe.
Up to \$200,000,000	\$1.25 per \$1,000
Ορ το ψ200,000,000	Min. \$31,500 per issue
Over \$200,000,000	\$250,000 flat fee per issue
	· , , , , , , , , , , , , , , , , , , ,
Community Facilities District and Improvement District New M	loney Assessment Issues:
Up to \$185,000,000	\$1.35 per \$1,000
	Min. \$36,000 per issue
Over \$185,000,000	\$250,000 flat fee per issue
Utility Revenue Backed New Money Bonds or Obligations	
Up to \$165,000,000	\$1.50 per \$1,000
ορ to \$100,000,000	Min. \$45,000 per issue,
Over \$165,000,000	\$250,000 flat fee per issue
	φ200,000 παι του βοι τουμο
Installment Purchase Agreements, Lease Purchase Agreement	nts, Certificates of Participation,
Excise Tax Backed MPC/Obligations, and 501(c)(3) New Mon	
Up to \$165,000,000	\$1.50 per \$1,000
·	Min. \$45,000 per issue,
Over \$165,000,000	\$250,000 flat fee per issue
All Defunding leaves	
All Refunding Issues: Up to \$165,000,000	\$1.50 per \$1.000
υρ το φτου,υυυ,υυυ	\$1.50 per \$1,000 Min. \$45,000 per issue
Over \$165,000,000	\$250,000 flat fee per issue
	\$200,000 hat 100 per 100de



Solicitation No.:	ADSPO14-00008140	GE 4
Description: Finan	cial Advisor Services	OF 6

State of Arizona State Procurement Office 100 N.15th Ave., Suite 201 Phoenix, AZ 85007

# PRICING SCHEDULE NUMBER TWO (COLLATERALIZED, NON-COLLATERALIZED, AND POOLED):

<u>Hourly Rates</u>: The Offeror shall provide a schedule of hourly rates for each Key <u>Person who</u> <u>may provide services described in the Scope of Work</u>. The Offeror shall indicate any minimum or maximum fees for such services or per financing transaction (use a separate sheet if necessary):

### A. COLLATERALIZED STRUCTURE:

Name of Key Person & Title	<b>Hourly Rate</b>	Min/Max Fee per Transaction
James Stricklin, Managing Director	\$ 350	See Pricing Schedule "A" above
Other Senior Level	\$ 350	See Pricing Schedule "A" above
Senior Associate/Vice President Level	\$ 225	See Pricing Schedule "A" above
Associate/Admin. Level	\$ 100	See Pricing Schedule "A" above

### B. NON-COLLATERALIZED STRUCTURE:

Name of Key Person & Title Hourly R	
James Stricklin, Managing Director \$ 350 Other Senior Level \$ 350 Senior Associate/Vice President Level \$ 225 Associate/Admin. Level \$ 100	See Pricing Schedule "B" above See Pricing Schedule "B" above See Pricing Schedule "B" above See Pricing Schedule "B" above

### C. POOLED STRUCTURE:

Name of Key Person & Title	<b>Hourly Rate</b>	Min/Max Fees per Transaction
James Stricklin, Managing Director	\$ 350	See Pricing Schedule "C" above
Other Senior Level	\$ 350	See Pricing Schedule "C" above
Vice President Level	\$ 225	See Pricing Schedule "C" above
Associate/Admin. Level	\$ 100	See Pricing Schedule "C" above

# PRICING SCHEDULE NUMBER THREE (COLLATERALIZED, NON-COLLATERALIZED AND POOLED:

### **Annual Retainer Fees:**

The retainer fee is unacceptable as we do not track our hours when acting as Financial Advisor on a project-by-project basis.

### Limitations:

All pricing methodologies are acceptable except for number "3" - Annual Retainer Fees.



Solicitation No.: ADSPO14-00008140

PA GE 5

Description: Financial Advisor Services

State of Arizona
State Procurement Office

100 N.15th Ave., Suite 201 Phoenix, AZ 85007

A. Collateralized: See Pricing Schedule "A" above

**B. Non-Collateralized:** See Pricing Schedule "B" above

C. Pooled: See Pricing Schedule "C" above

### PRICING SCHEDULE NUMBER FOUR (KEY PERSON WITH HOURLY RATE):

The Offeror shall indicate hourly rates for other financial advisory activities described in the Scope of Work (associated with a bond issue transaction).

Name of Key Person	<u>l itle</u>	Hourly Rate
James Stricklin Other Senior Level Senior Associate/Vice President Level	Managing Director Managing Director Vice President	Included in fee Schedule #1&2 Included in fee Schedule #1&2 Included in fee Schedule #1&2
Associate/Admin. Level	Associate	Included in fee Schedule #1&2

### PRICING SCHEDULE NUMBER FIVE (KEY PERSON WITH HOURLY RATE):

The Offered shall indicate hourly rates for other financial advisory activities described in the Scope of Work (not associated with a bond transaction).

Name of Key Person	<u>Title</u>	<u>Hourly Rate</u>
James Stricklin	Managing Director	Included in fee Schedule #1&2
Other Senior Level	Managing Director	Included in fee Schedule #1&2
Senior Associate/Vice President Level	Vice President	Included in fee Schedule #1&2
Associate/Admin. Level	Associate	Included in fee Schedule #1&2

### PRICING SCHEDULE NUMBER SIX:

**Optional Pricing:** The Offeror shall provide a firm, fixed, all-inclusive maximum fee per Financing Transaction involving the sale of certificates regardless of the number of buildings acquired and equipment and the size of the issue:

\$225,000 (flat fee, not calculated hourly) Maximum Fee (dollar amount) per Financing Transaction. Does not include other expenses which may be incurred (see Addendum to Pricing Schedule Dated August 6, 2018).



PΑ Solicitation No.: ADSPO14-00008140 GE **Description: Financial Advisor Services** 

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State of Arizona **State Procurement Office** 100 N.15th Ave., Suite 201 Phoenix, AZ 85007

### ADDENDUM TO PRICING SCHEDULE: Wedbush Securities Inc. (Dated: August 6, 2018)

Advisor fees include the review of financing and legal documents associated with the transaction. Due to the additional time and effort required for a newly created revenue pledge or subordinate revenue pledge, on the initial issuance, an additional fee of \$25,000 will be added. Advisor fees are calculated on each series or type of issue and are based on the greater of the par amount or the proceeds of the issue.

Advisor fees do not include other expenses incurred by the firm including but not limited to travel expenses and conference call hosting. If requested, the Advisor will assemble requests for funding or official statements for publication and distribution for an additional fee not to exceed \$25,000.

Wedbush also offers the following services not otherwise covered in the pricing schedule:

- Current Defeasance/early redemption \$7,500;
- Advance Defeasance/early redemption \$10,000 minimum plus \$1,000 per additional
- Direct Loan Placement Fee up to 1.5% of loan amount (minimum \$25,000);
- Debt Structuring 0.2% of the greater of the par or proceeds (minimum \$25,000 per series or issue):
- Escrow Restructuring Lesser of 0.25% of escrow value and 10% of net cost savings (minimum \$25,000); and
- Tax Anticipation Notes Greater of \$25,000 or \$10,000 per participant for pooled note financing.

Wedbush will negotiate additional compensation for complex financings outside of those outlined in the Scope of Work section, including but not limited to the following:

- Pension Related financings;
- Real Estate issues:
- Utility Company acquisitions;
- Water Rights acquisitions;
- Tax Increment or Land Based financings:
- **Special Districts:**
- Public/Private Partnerships;
- Conduit issuers; and
- Other transactions involving unique/complex circumstances.



### Requesting Department

**Public Works** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: TROY WHITE, PUBLIC WORKS DIRECTOR

**RE:** Consideration and possible approval of Work Order #16 with AJP

Electric, Inc., in an amount not to exceed \$84,100 for the installation of ITS conduit and pull boxes along Gary Road (CIP Project A0510).

(FY19 budgeted item)

DATE: September 5, 2018

### **Staff Recommendation:**

Staff recommends the approval of Work Order #16 with AJP Electric, Inc., in an amount not to exceed \$84,100 for the installation of ITS conduit and pull boxes along Gary Road (CIP project A0510) including necessary budget adjustments.

### **Relevant Council Goal(s):**



### **Superior Infrastructure - Capital Improvement Program**

### **Proposed Motion:**

Motion to approve Work Order #16 with AJP Electric, Inc., in an amount not to exceed \$84,100 for the installation of ITS conduit and pull boxes along Gary Road (CIP project A0510) including necessary budget adjustments.

### **Discussion**:

Construction of Riggs Road, from Crismon Road to Meridian Road and Gary Road from Riggs Road south is underway. This is the second phase of the overall Riggs Road improvements partnered between Maricopa County Department of Transportation and the Town of Queen Creek, which includes some work in adjacent Pinal County.

In light of anticipated development and imminent cost savings, it was advantageous for the Town to install the Intelligent Transportation System (ITS) conduit and pull boxes for the proposed intersections along Gary Road within the Riggs Road project limits. These facilities will ultimately connect to the improvements currently under design by Pinal County. With limited Right-of-Way on the west side of Gary Road, the Salt River Project (SRP) agreed to allow the new ITS conduit to be placed joint trench while the

electrical underground conversion was commencing to avoid rework and future pavement cuts through new improvements.

The requested authorization amount not to exceed \$84,100 includes a 10% contingency for any unanticipated conditions or additional services that may arise. Town staff has previously used the AJP Electric contract for similar work, wishes to continue to use the contract for this project and like projects in the future.

### Fiscal Impact:

The total not to exceed amount of \$84,100 includes the contract amount of \$76,450 and \$7,645 (10%) in contingency for possible unanticipated, additional services. Available budget within project A0510 totals \$327,500 prior to the award of this project, and will require no budget adjustment in order to award this contract.

### **Alternatives:**

In keeping with the Town's current standard of installing ITS conduit at signaled intersection to aid traffic control and traffic flow, moving forward with AJP forces was a critical timing assessment and necessary expenditure to absorb. The alternative to this decision would have incurred full costs that includes mobilization, removals, rework, materials, installation and other fees, rather than economy scale pricing for just material and installation costs.

### Attachment(s):

- a. AJP Work Order #16
- b. Project Site Map



### WORK ORDER

MCDOT CONTRACT NUMBER:

2015-027

**WORK ORDER NUMBER** 

16

July 23, 2018

TO: AJP Electric, Inc.
Contractor

FROM: Charlene Montgomery
CIP Project Manager

Town of Queen Creek

RE: Installation of ITS Conduit on Combs/Riggs Rd & Rittenhouse/Gary Rd Realignment

This Job Order is issued pursuant to the Agreement between Maricopa County Department of Transportation and Contractor dated March 9, 2016 and the other documents that were made part of and referenced in the Agreement. This Job Order is the Notice to Proceed with the subject Job Order Project on the below Job Order Beginning Date. The terms of this Job Order are as follows:

### Part I - Scope of Job Order Work

**Purchase Order Number** 

1. Description of the Scope of Job Order Work:

Installation of ITS Conduit on Combs/Riggs Rd & Rittenhouse/Gary Rd Realignment

This work order includes labor, material, equipment, sales tax, insurance, and fee necessary to complete the work as outlined in proposal "Attachment 1".

Pricing, terms and conditions in accordance with Maricopa County Department of Transportation Contract No. 2015-027.

 A list of each task, quantities for each task, total price for each task and total price for all tasks is attached as "Attachment 1".

<ol> <li>Job Order P</li> </ol>		\$76,450.00
2. Schedule	Job Order Beginning Date: (*Date project must start - SEE PART IV)	Upon completion of fully executed work order
	Job Order Final Completion Date: i.e. Date project is complete, including, without limitation, all deficiency, incomplete or correction items (Job Order Punch List)	Per project schedule
If there are mor Town of Queen attached as "At	re than sixty (60) calendar days between the Beginning Date and Creek has requested a Job Order Progress Schedule, a Job Ordetschment 2".	the Final Completion Date, or if the der Progress Schedule should be

Part III - Approvals		
Gail Barney	Mayor	Date
John Kross	Town Manager	Date
Troy White	Public Works Director	Date 2/14/2013
Charlene Montgome	Project Manager	Date 7/23/2018
AJP Electric, Inc.	Project Manager	Date
Greg Cliffords Part IV - *Purchase		

\*Per Town Purchasing Policy, a purchase order MUST be in place PRIOR to the authorization of notice to proceed

Date

Total

# ATTACHMENT 1

5	CONTRACT #2015-027-028 INSTALLATION OF ITS CONDUIT ON COMBS/RIGGS RD & RITTENHOUSE/ GARY RD REALIGNMENT PROJECT	GGS RD & RITTE	NHOUSE/ GAR	Y RD REALIGNA	MENT PROJECT
ITEM No.	DESCRIPTION	TINO	QUANTITY	UNIT COST	EXTENDED AMOUNT
109.40000	MISCELLANEOUS WORK SLURRRY /CONCRETE	ALLOW	1,00	\$15,000.00	\$15,000.00
471.60057		EACH	2.00	\$650.00	
481.61300	3 INCH PVC FIBER OPTIS CONDUIT [TRENCH]	LT	1,600.00	\$15.00	\$24,000.00
481.61300	3 INCH PVC FIBER OPTIS CONDUIT [TRENCH] MODIFIED	LT	3,800.00	\$9.00	
8					
			7.		
OTAL PRO	TOTAL PROPOSAL AMOUNT:				\$76,450.00
NILLIMIN	SUBMITTING FIRM (Please print):	AJP Electric	ic		
GIGNATURE	SIGNATURE and DATE of AUTHORIZED AGENT:	Arey	Huy Cliffords		7/17/2018
A TO TABLE					A

1 of 1

Attachment: a. AJP Work Order #16 (AJP Electric - Gary Rd)

Fee Proposal Master

# Town of Queen Creek Riggs Road Improvements – Phase 2 Crismon Road to Meridian Road





#### Requesting Department

**Public Works** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: TROY WHITE, PUBLIC WORKS DIRECTOR

**RE:** Consideration and possible approval of the granting of an easement

to the United States Bureau of Reclamation to replace an abandoned easement due to the Riggs Road from Ellsworth Road to Meridian

Road project.

DATE: September 5, 2018

#### Staff Recommendation:

Staff recommends approval of the granting of an easement to the United States Bureau of Reclamation to replace an abandoned easement due to the Riggs Road from Ellsworth Road to Meridian Road project.

#### Relevant Council Goal(s):



Superior Infrastructure - Capital Improvement Program

#### **Proposed Motion:**

Move to approve the granting of an easement to the United States Bureau of Reclamation to replace an abandoned easement due to the Riggs Road from Ellsworth Road to Meridian Road project.

#### **Discussion:**

The Town is working with the United States Bureau of Reclamation (BOR) to relocate an existing irrigation easement. The Town acquired from Cloud Ranches enough property to construct Riggs Road and relocate the BOR easement. This replacement easement will go on the newly acquired Cloud Ranches property. This is necessary to maintain BOR's rights while constructing Riggs Road as designed. This easement

transfer was contemplated in the road design. The size of the easement is approximately 40 feet wide by 165 feet or approximately 0.15 acres.

The Right of Way Notice attached has been signed by BOR and the Town will have it recorded upon Town Council approval.

#### **Fiscal Impact:**

There is no fiscal impact to granting the easement. .

#### **Alternatives:**

The Town Council could choose not to grant the easement, however the Riggs Road project could not go forward without relocating the BOR easement.

#### Attachment(s):

- a. BOR Notice of ROW
- b. Site Map



PXAO-4000 2.2.3.19

### United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Region
Phoenix Area Office
6150 West Thunderbird Road
Glendale, AZ 85306-4001
AUG 2 2 2018

Mr. George Cairo President George Cairo Engineering, Inc. Attention: Ms. Cherie Walters 1630 South Stapley Drive, Suite 117 Mesa, AZ 85204

1VICSa, AL 05204

Subject: Right-of-Way Use and Notice of Exercise of Reserved Right-of-Way (Notice) –
Maricopa County Department of Transportation (MCDOT) – Riggs Road/Crimson
Road to Meridian Road Improvements Project No. TT0538 – NMI-69 – Township Two
(2) South, Range Seven (7) East, Section Twenty-Five (25), Gila and Salt River
Meridian – New Magma Irrigation and Drainage District (NMIDD) – Case No. 17-018
(Case)

Dear Mr. Cairo:

NMIDD requested the United States exercise its 1890 Act patent reservation right to use lands for the NMIDD relocation of the facility of 0.15 acres, more or less, for the subject project with MCDOT. In addition, NMIDD requested the United States partially abandon portions of Tract No. NMA-031 and a full abandonment of Tract No. NMA-030 along the NMIDD no longer needed for project purposes to the underlying fee title owners and without payment to the Government. We concur the use of lands that the NMIDD is requesting be abandoned of 0.29 acres, more or less, are no longer needed for project purposes, upon the relocation of the facility.

By letter dated December 20, 2017, the Town of Queen Creek confirmed it is the landowner of the 0.15 parcel, and acknowledges it will donate the land with no compensation for the value of the use of the land to the United States, and it will make no use of the land that will be incompatible with the intended use of the land by the United States as determined by the United States, upon Town Council approval. Enclosed is a Notice from the United States for the use of a 0.15 acres, more or less, right-of-way needed for the NMIDD, to be presented to the Town Council.

Please record the Notice and deliver a copy of the recorded Notice to the current landowners and return the recorded original Notice to us for our files.

As soon as we receive confirmation that the relocation has been completed and accepted into the NMIDD system, we will execute an Affirmation of Abandonment to return use of the lands that are no longer needed for project purposes back to the current fee title owners.

If you have any questions, please contact Ms. Nicole Quamen at 623-773-6233.

Sincerely,

Peter O. Castañeda

Manager, Water and Lands Division

#### Enclosures - 2

cc: Mr. Bill Van Allen
District Manager
New Magma Irrigation
and Drainage District
34630 North Schnepf Road
Queen Creek, AZ 85242

Ms. Nasreen Hasan Project Manager Maricopa County Department of Transportation 2901 West Durango Street Phoenix, AZ 85009-6357 (w/o encls to each)

Contract No. 18LM324218

Case No. 17-018

Exempt per A.R.S. § 11-1134 A.3.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION CENTRAL ARIZONA PROJECT

New Magma Irrigation and Drainage District

RIGHT-OF-WAY NOTICE
UNDER THE ACT OF AUGUST 30, 1890
LANDOWNER: TOWN OF QUEEN CREEK

In accordance with the Act of August 30, 1890 (26 Stat. 371, 391); the Act of June 17, 1902 (32 Stat. 388), and all acts amendatory thereof or supplementary thereto, the **UNITED STATES OF AMERICA**, hereinafter referred to as "United States," retains a statutory reservation of a right-of-way for ditches or canals constructed or to be constructed by the authority of the United States, this reservation being that created with respect to certain public lands prior to their patent by the Act of August 30, 1890 (26 Stat. 371, 391) (Act), as it has been or may hereafter be amended.

Town of Queen Creek, an Arizona municipal corporation hereinafter referred to as "Landowner," is hereby notified that through this Right-of-Way Notice, hereinafter referred to as "Notice," a right-of-way was reserved in the original patent to land described below. The

United States is now exercising this reserved right to construct, operate, and maintain a portion of the Queen Creek Irrigation District. The land subject to this Notice is generally described as within the SE¼ of Section Twenty-five (25), Township Two (2) South, Range Seven (7) East, Gila and Salt River Meridian, Maricopa County, Arizona, containing an area of 0.15 acre, more or less, and being more particularly described in **Exhibit "A"** attached hereto and by reference made a part hereof.

Pursuant to the Act and other laws, the Landowner may be qualified to receive compensation for use of the land by the United States under this Notice. The Landowner has waived appraisal of the value of the use, and has agreed to donate the use of the land for utilization by the United States for this purpose without compensation from the United States. The Landowner will make no use of the land described herein that is incompatible with the use by the United States, as determined by the United States. The term of the use under this Notice is perpetual, unless earlier abandoned by the United States.

Use under this Notice does not diminish the continuing presence of the reservation under the Act for this or other future uses by the United States with respect to the subject land.

IN WITNESS WHEREOF, the United States has caused this Right of Way Notice to be

executed this 22nd day of alligust, 2018

UNITED STATES OF AMERICA

Leslie A. Meyers

Area Manager

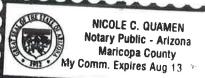
Phoenix Area Office

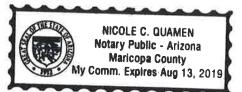
Bureau of Reclamation

#### **ACKNOWLEDGMENT**

State of Arizona )
) ss. County of Maricopa
On this 22nd day of August, 2018, before me,
Nicole C. Quymen, a Notary Public in and for said County and State
personally appeared <u>Alexander Smith</u> Acting Area Manager, Phoenix Area
Office, Bureau of Reclamation, Department of the Interior, UNITED STATES of AMERICA,
known to me to be the person described in the foregoing instrument, and acknowledged to me
that he/she executed the same on behalf of the United States in the capacity therein stated and fo
the purpose therein contained.

Notary Public in and for said County and State





### EXHIBIT 'A' DESCRIPTION OF REAL ESTATE IN MARICOPA COUNTY, ARIZONA

A PARCEL OF LAND IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 25; THENCE UPON THE SOUTH LINE OF SECTION 25, NORTH 89°31'28" EAST, A DISTANCE OF 2057.58 FEET, TO THE POINT OF BEGINNING (POB);

THENCE NORTH 45°07'12" WEST, A DISTANCE OF 160.72 FEET, TO THE NORTH LINE OF RIGGS ROAD RIGHT OF WAY AS RECORDED IN DOCUMENT 20170659084 AND TO THE BEGINNING OF A 9900.00 FOOT RADIUS NON-TANGENT CURVE, WHOSE CENTER BEARS NORTH 03°33'31" WEST;

THENCE UPON SAID NORTH RIGHT OF WAY LINE, NORTHEASTERLY UPON SAID CURVE, THROUGH A CENTRAL ANGLE OF 00°16'13", AN ARC DISTANCE OF 53.33 FEET; THENCE LEAVING SAID RIGHT OF WAY LINE, SOUTH 45°07'12" EAST A DISTANCE OF 164.95 FEET, TO THE SOUTH LINE OF SAID SECTION 25;

THENCE UPON SAID SOUTH LINE, SOUTH 89°31'28" WEST, A DISTANCE OF 56.22 FEET TO THE POINT OF BEGINNING (POB).

SAID PARCEL CONTAINS AN AREA OF 0.15 ACRES, MORE OR LESS.



EXPIRES: 3/31/2019

GEORGE CAIRO ENGINEERING, INC.

1630 S. STAPLEY DR., SUITE 117

MESA ARIZONA 85204

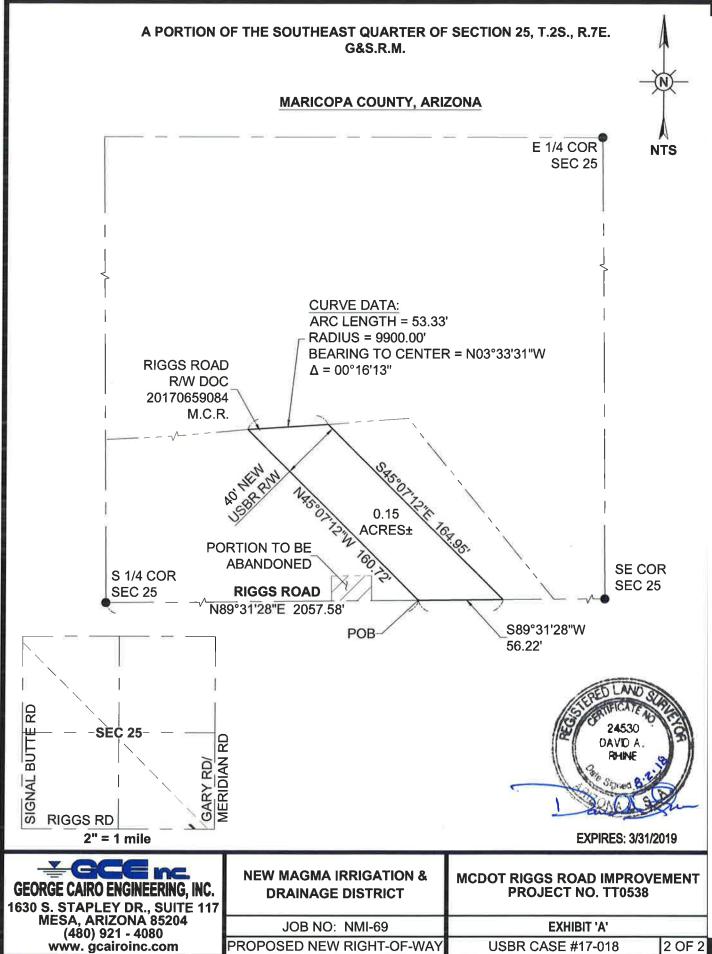
0 S. STAPLEY DR., SUITE 117 MESA, ARIZONA 85204 (480) 921 - 4080 www. gcairoinc.com NEW MAGMA IRRIGATION & DRAINAGE DISTRICT

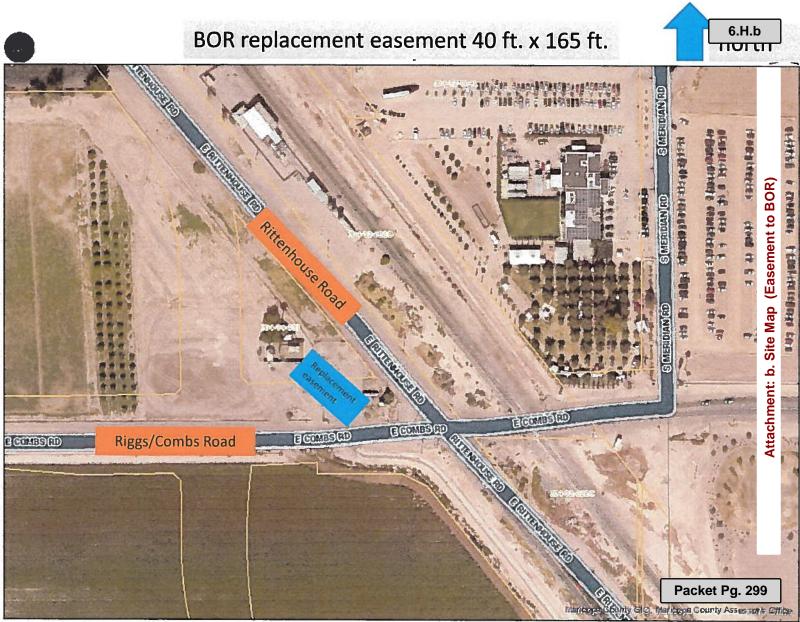
MCDOT RIGGS ROAD IMPROVEMENT PROJECT NO. TT0538

JOB NO: NMI-69 PROPOSED NEW RIGHT-OF-WAY EXHIBIT 'A'

USBR CASE #17-018

1 OF 2 Packet Pg. 297







#### Requesting Department

**Public Works** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: TROY WHITE, PUBLIC WORKS DIRECTOR

**RE:** Consideration and possible approval of Project Order #6 with Stanley

Consultants, Inc. in an amount not to exceed \$31,842 for architectural and engineering services for the covered arena improvements for Horseshoe Park & Equestrian Centre. (FY18/19

budgeted item)

DATE: September 5, 2018

#### **Staff Recommendation:**

Staff recommends approval of Project Order #6 with Stanley Consultants, Inc. in an amount not to exceed \$31,842 for architectural and engineering design services toward covered arena improvements for Horseshoe Park & Equestrian Centre.

#### Relevant Council Goal(s):



#### **Superior Infrastructure - Capital Improvement Program**

#### **Proposed Motion:**

Motion to approve Project Order #6 with Stanley Consultants, Inc. in an amount not to exceed \$31,842 for architectural and engineering design services toward covered arena improvements for Horseshoe Park & Equestrian Centre.

#### **Discussion**:

Stanley consultants will develop a site plan and develop structural specifications needed in order to bid out a new structural cover for the arena #3 at HPEC.

Council approved \$500,000 for design and construction of a covered structure for arena #3 at Horseshoe Park & Equestrian Centre in FY 18/19. Staff has considered the

available on-call architectural and engineering consultants and selected Stanley Consultants, Inc. (SCI) for this project based on the firm's capabilities and the scope of this project.

SCI has in-house architects as well as structural, mechanical and electrical engineers experienced in specifying and cost estimating pre-manufactured buildings like the one envisioned at HPEC. Improvements proposed include a pre-engineered and pre-manufactured steel structure to cover Arena 3 and related drainage improvements as required.

Stanley Consulting will perform the following tasks under this contract:

#### Prepare Scoping Documents for a New Covered Arena Structure and Footings

Stanley will prepare scoping documents for a new covered arena structure and footings at the TOQC HPEC. The new covered arena structure and footings necessary to support the structure will be considered the Base Bid for the scoping documents. The scoping documents will be submitted as a draft and final with one review. The scoping documents will be used to issue a Request for Proposal for the arena.

#### Prepare Final Site Plans

Final Sealed and Signed Site Plans will be developed as part of the scope of services. There will be a draft and final submittal with one review meeting/conference call. The work associated with this task includes; Survey, Geotechnical Investigation, Sealed Conditions Site Plan.

#### Develop a final sealed drainage memorandum

The drainage memorandum will include; runoff volume for the structure, hydrologic and hydraulic analysis, that will be used to determine the drainage needs for the facility.

Staff submitted a budget supplemental for this project as part of the FY18-19 budget process. The estimated project budget of \$500,000 included in the supplemental request was based on estimates provided by licensed contractors in early 2018. Since then staff has received written as well as verbal quotes ranging from \$476,000 to \$931,000 for the design and construction of the steel cover. Those proposals did not include necessary drainage improvements that will be required as part of the project. Therefore, a low bid is necessary to determine if the project is feasible.

Over the past several months staff has also witnessed increased costs in materials and labor related to construction projects. CIP staff will work with HPEC staff and the consultant to determine if and how a structure can be accomplished for the budgeted amount. In addition, staff is working to address the drainage issues associated with this project if constructed.

The Friends of Horseshoe Park (FOHP) have offered to pay \$10,000 towards the contract with Stanley Engineering for the architectural and engineering design services. The FOHP have been diligently fundraising for this and other CIP projects to boost the positive economic impact HPEC has on the Town by attracting more high value, longer duration events to HPEC. The FOHP began the capital campaign in March 2017.

#### **Fiscal Impact:**

The Project Order #6 with Stanley Consultants is set not to exceed \$31,842.

The Horseshoe Park FY18-19 budget includes expenditure authority of \$500,000 specific to the covered arena project. If the Stanley Consultant contract is awarded, and estimated \$468,000 will be remaining available budget to be used for construction services.

The Friends of Horseshoe Park will contribute \$10,000 towards the contract amount.

#### **Alternatives:**

The Council could direct staff to select another consultant but no others on call have inhouse architectural and MEP design staff so design cost would likely increase.

#### Attachment(s):

- a. TOQC Project No. 006
- b. Site Map

## MASTER ENGINEERING AGREEMENT PROJECT ORDER: Horseshoe Park & Equestrian Centre Covered Arena TOQC Proj. No. 006

**DATE: August 21, 2018** 

Issued by: Public Works

Issued to: Stanley Consultants, Inc.

1616 E. Camelback Rd., #400

Phoenix, AZ 85016

Project:

Horseshoe Park & Equestrian Centre Covered Arena

TOQC Proj. No. 006

Consultant shall perform the work and services set forth herein, in accordance with the terms and conditions of the Master On-Call Professional Services Contract 2016-118, dated December 21, 2016 between the Consultant and Town.

#### GENERAL PROJECT DESCRIPTION AND SCOPE OF CONSULTANT'S WORK:

#### BACKGROUND:

Horseshoe Park and Equestrian Center (HPEC) is in need of a covered arena on Arena 3. This will help promote more events at HPEC.

#### SCOPE OF WORK:

To provide services as outlined in the attached Scope of Work dated August 10, 2018.

#### PROJECT SCHEDULE:

Services to begin upon Notice to Proceed.

#### BASIS FOR PAYMENT:

Project cost is \$31,842.00 as outlined in the attached Scope of Work dated August 10, 2018.

#### SPECIAL CONDITIONS (if any):

1. Any items not specifically included within the scope of this proposal are excluded. If additional items are added to the contract they will be performed in accordance with rates & fees shown on the "Master On-Call Professional Services Contract".

### ADDITIONAL CONTRACT DOCUMENTS (if any):

N/A

Town of Queen Creek, An Arizona Municip	al Corporation
Approval of Town Council,	Approval of Contract Administrator,
Ву:	Ву:
Gail Barney, Mayor	John Kross, Town Manager
ATTEST:	
ennifer Robinson, Town Clerk	
	H W
tanley Consultants, Inc.	
Signature Signature	
Jay A. Horak, PE	
Client Service Manager	
Tile	



A Starley Group Company Engineering, Environmental and Construction Services - Worldwide

August 10, 2018

Bradley Novacek, PE CIP Engineer Town of Queen Creek 22358 S. Ellsworth Road Queen Creek, Arizona 85142

Re: Town of Queen Creek

On-Call Professional Services Project Order No. 06 For the Horseshoe Park and Equestrian Centre Covered Arena

#### Dear Brad:

The Town of Queen Creek (TOQC) has contacted Stanley Consultants (Stanley) to deliver a Scope of Work and fee to prepare Scoping Documents for a new covered arena 3 at the Horseshoe Park & Equestrian Centre (HPEC) located at 20464 E. Riggs Road, Queen Creek, AZ 85142 (On Riggs Road between Hawes and Ellsworth Roads)

The purpose of this letter is to request the amount of \$31,842.00 to complete the On-Call Professional Services Project Order No. 06 as requested regarding the HPEC Covered Arena Scoping Documents.

The Scope of Services associated with Project Order No. 06 is as follows;

- Prepare Scoping Documents for a New Covered Arena Structure and Footings
   Stanley will prepare scoping documents for a new covered arena structure and footings at the TOQC HPEC. The new covered arena structure and footings necessary to support the structure will be considered the Base Bid for the scoping documents. The scoping documents will be submitted as a draft and final with one review meeting/conference call. The scoping documents are to include the following
  - A. Preliminary Building Specifications for the Covered Arena Structure and Foundations
  - B. Conceptual Floor Plan and Elevation Drawings of the Covered Arena Structure
  - C. Preliminary Cost Estimate for the Covered Arena Structure and Footings Base Bid The assumptions regarding the development of the scoping documents is as follows;
    - The structure will be a performance-specified as a pre-engineered metal building measuring 300 feet in length and 150 feet in width totaling 45,000 square feet.
    - The structure will have a clearance requirement of 15 feet.
    - The structure will be supported on separate footings for each column. Performance specifications will be developed that require the awarded contractor to have a licensed structural engineer develop the final foundation design.
    - The structure will not be specified or planned to be fully enclosed.
    - The structure will consider loading from ceiling mounted lighting, ceiling mounted fans, closed gable ends, 3 feet of roof skirting and column mounted PA speakers.
    - The structure will not have skylights.
    - The structure will have a roof ridge vent.
    - The structure floor will remain unpayed.
    - A connecting structure between the proposed and existing covered arenas will not be considered part of this scope.
    - The structure will follow local and International Building Code, 2012 edition

### On-Call Professional Services Project Order No. 06 for the Horseshoe Park and Equestrian Centre Covered Arena

Date: August 10, 2018

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#### 2. Prepare Final Site Plans

Final Sealed and Signed Site Plans will be developed as part of the scope of services. There will be a draft and final submittal with one review meeting/conference call. The work associated with this task is as follows

#### A. Topographical Survey

• A topographical survey will be performed, observing local horizontal and vertical control, establishing a project benchmark in NAVD88 and observe features within a 300 foot x 150 foot area at a 50 foot grid interval of the existing uncovered arena. The four existing light poles will also be located as part of the survey as well.

#### B. Geotechnical Investigation

- A subconsultant to Stanley will drill and sample sufficient test borings to adequately determine subsoil conditions and provide samples for laboratory testing. Sufficient laboratory tests will be conducted to properly classify the soils encountered and provide data for engineering design. It is anticipated drilling four (4) structural borings to depths of 10 to 20 feet below existing ground surface or auger refusal, whichever comes first. Access to the site will be by conventional truck-mounted drilling equipment and is assumed to be free and unencumbered. Due to the existing facilities, a private utility locator may be subcontracted to locate privately owned traceable underground utilities. It is recommended that TOQC facilities personnel review boring locations prior to drilling to ensure Town owned underground utilities are not damaged by drilling operations.
- Data obtained from field and laboratory testing will be analyzed and a report will be prepared presenting all data obtained, together with conclusions and recommendations regarding:
  - 1. Design data, allowable bearing pressure and depth, for shallow spread footings.
  - 2. Alternate foundation systems and design data, if indicated by soil conditions.
  - 3. Settlement estimate for the foundation system.
  - 4. Lateral pressures on temporary and permanent retaining and foundation walls.
  - 5. Seismic Site Classification based on borings and published ground motion data.
  - 6. Groundwater conditions, if any, to the depths which will influence design and/or construction of the proposed development.
  - 7. Suitability of site soils for use as compacted fill and preferred earthwork methods, including clearing, stripping, excavation and construction of engineered fill.
  - 8. Local excavation and trenching conditions and stability considerations

#### C. Final sealed existing conditions site plan

- Stanley will include the project control observed and set, geotechnical boring location, existing site features observed from the topographical survey and computer-generated contour mapping.
- Stanley will include the four light poles observed in the field.
- Stanley will include general notes stating that TOQC is responsible for all required removals prior to construction.



### On-Call Professional Services Project Order No. 06 for the Horseshoe Park and Equestrian Centre Covered Arena

Date: August 10, 2018

Page No. 3

#### D. Final sealed proposed site plan

• Stanley will provide a proposed site plan to include the proposed horizontal location of the specified covered arena structure, and a proposed top of footing/foundation finished grade.

#### E. Final sealed drainage memorandum

- Stanley will provide a drainage memorandum analyzing the increased differential runoff volume for the covered structure only over arena 3, located in the northwestern portion of the HPEC.
- Per the TOQC, the covered structure roof/site will drain to two existing basins at the
  northwest and southeast corners of the site. The structure is likely to need gutters and
  downspouts. Basins volume is likely to be increased to handle the additional runoff
  volume.
- Hydrologic and hydraulic analysis will be completed in accordance to the last edition of the Design Standards and Procedures Manual, (updated January 2016), for the Town of Queen Creek.
- Data to be collected and reviewed will include: existing topographic maps and "asbuilt" plans.
- Stanley will prepare a hydrologic analysis of the existing and proposed conditions for the arena 3 site only. Hydrologic analysis will use the Rational Method and the 100-year, 2-hour storm will be the basis for design. The assumption that proposed flows will be split equally between the two basins will be used to calculate the increased differential runoff volume to each basin.
- The fee is based upon preparing final drainage memorandum in accordance to the requirements of the Design Standards and Procedures Manual, Page CL/PA-2. The memorandum will provide the analysis for the increased runoff for the covered structure over arena 3. The final memorandum will incorporate one set of comments made by the TOQC. The analysis and results will be sealed by an Arizona P.E.

Deliverables will include electronic plans and specifications in a pdf or doc format. AutoCAD 2018 or AutoCAD Civil 3D 2018 will be submitted upon request. Following is a summary of the deliverables;

- Preliminary building specifications for the covered arena structure and foundations.
- Conceptual floor plan and elevation drawings of the covered arena structure.
- Preliminary cost estimate for the covered arena structure and footings base bid.
- Topographical survey.
- Geotechnical investigation and report.
- Final sealed existing conditions site plan.
- Final sealed proposed site plan.
- Final sealed drainage memorandum.



#### On-Call Professional Services Project Order No. 06 for the Horseshoe Park and Equestrian Centre Covered Arena

Date: August 10, 2018

Page No. 4

The following additional services are <u>not</u> included in the Scope of Services and are at the TOQC's option. These services, if exercised by the TOQC and agreed to by Stanley Consultants shall be paid for in addition to compensation for the Scope of Services. Stanley Consultants is not authorized to proceed with performance of any Additional Services unless they are duly authorized, in writing, by the TOQC. The fee does not include the following;

- Site visit and field reconnaissance.
- Boundary survey or right-of-way clearance.
- Topographical survey beyond the described 300 foot x 150 foot area of the existing uncovered arena.
- Surface and Subsurface utility location.
- Environmental clearance.
- Capacity analysis for the existing dry wells for both existing and proposed conditions.
- Offsite hydrologic and hydraulic analysis.
- Grading and drainage design plan.
- Storm water pollution prevention plan (SWPPP).
- Wet and dry utility design.
- Plan review with local code officials.
- Obtaining permits.
- Electrical and mechanical design.
- Communication and security design.
- Sound evaluation study for placing the speakers inside the arena.
- Coordination with the fire marshal.
- 3D renderings.
- Landscaping plan.
- Final sealed construction documents including plans, specifications and engineer's estimate of construction costs.
- Preliminary and final drainage reports
- Meeting LEED requirements.
- Construction administration.

The fees associated with the Scope of Services for Project Order No. 06 can be found in Exhibit A Project Order No. 06 Cost Proposal Summary. The value of Project Order No. 06 is \$31,842.00. Should you have any questions or comments, please do not hesitate to call Isaac McCullough at (602) 333-2339.

Sincerely,

Stanley Consultants, Inc.

Jay Horak, PE

Client Service Manager



### **EXHIBIT A**

8/10/2018

COMPENSATION ON-CALL PROFESSIONAL SERVICES PROJECT ORDER NO. 06

THE HORSESHOE PARK AND EQUESTRIAN CENTRE COVERED ARENA

**DERIVATION OF FEE PROPOSAL SUMMARY** 

**ESTIMATED LABOR** 

CLASSIFICATION	ESTIMATED WORK	шс	URLY RATE		ADOD COCTS
CENSITION	HOURS	пс	ONLIKATE	L	ABOR COSTS
PROJECT PRINCIPAL	3	\$	270.00	\$	810.00
PROJECT MANAGER	12	\$	246.00	\$	2,952.00
SENIOR ENGINEER	25	\$	215.00	\$	5,375.00
PROJECT ENGINEER	17	\$	200.00	\$	3,400.00
ENGINEER-IN-TRAINING	28	\$	91.00	\$	2,548.00
PROJECT ARCHITECT	11	\$	185.00	\$	2,035.00
DESIGN ARCHITECT	14	\$	127.00	\$	1,778.00
SENIOR DESIGNER	0	\$	155.00	\$	-
CAD DESIGNER	24	\$	127.00	\$	3,048.00
COST ESTIMATOR	20	\$	124.00	\$	2,480.00
TECHNICAL/DRAFTER	0	\$	97.00	\$	-
REGISTERED LAND SURVEYOR	4	\$	164.00	\$	656.00
SURVEY CHIEF/TECH	24	\$	115.00	\$	2,760.00
ADMINISTRATIVE ASSISTNANT	0	\$	73.00	\$	-
	182			\$	27,842.00

**ESTIMATED LABOR SUBTOTAL \$** 27,842.00

**ESTIMATED REIMBURSABLE EXPENSES** 

	COSIS
MISCELLANEOUS EXPENSES	\$ 500.00
	\$ 500.00

REIMBURSABLE EXPENSES SUBTOTAL \$ 500.00

**ESTIMATED SUBCONSULTANT EXPENSES** 

	COSIS
SUBCONSULTANT EXPENSES (GEOTECHNICAL)	\$ 3,500.00
	\$ 3,500.00

SUBCONSULTANT EXPENSES SUBTOTAL \$ 3,500.00

TOTAL PROPOSED CONTRACT AMOUNT \$ 31,842.00

Signature Date

Attachment: a. TOQC Project No. 006 (Stanley Consultants - HPEC)

**EXHIBIT A** 

Town of Queen Creek
On-Call Professional Services Project Order No. 06 Cost Proposal Summary
For The Horseshoe Park and Equestrian Centre Covered Arena

On-Call Professional Services Project Order No. 06 For the Horseshoe Park and Equestrian Centure Covered Arena	Project	Project	Senior	Project	Ш	Project De	_	_	_	Tage	ĕ	Survey	Admin	Total
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8. Geoterinical investigation	1	7	7				100	-	-			24		4
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D. Professed attention			2	9	60			H	2			9		
E. Final sealed Drainate Memorandum			7	9	80				2		-			1
		7	3	S	17									
a a second	Depth 3	121	52	17	280	11	71	n n	34	,			1	

Exhibit B – Site Map 6.l.b 304-91-0890 \$89°59'43"E 861.87 Attachment: b. Site Map (Stanley Consultants - HPEC) **Proposed Arena** Cover Site 28 Packet Pg. 311



#### Requesting Department

**Public Works** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: TROY WHITE, PUBLIC WORKS DIRECTOR

RE: Consideration and possible approval of the FY19 Transportation

**Advisory Committee Work Plan.** 

DATE: September 5, 2018

#### **Staff Recommendation:**

Staff recommends approval of the Fiscal Year 2019Transportation Advisory Committee Work Plan

#### Relevant Council Goal(s):



Community Involvement

#### **Proposed Motion:**

Move to approve Fiscal Year 2019Transportation Advisory Committee Work Plan

#### Discussion:

The proposed Transportation Advisory Committee (TAC) Fiscal Year 2019 Work Plan is shown below. The plan was developed in coordination with Council goals as identified in the Corporate Strategic Plan, and includes collaboration with current (and future) Town projects. The TAC members recommended approval of this Work Plan at their August 9, 2018 meeting.

Members reviewed six priority areas and projects / programs to be focused on for FY2019

#### 1. Emerging Safety Projects and Traffic Control Issues

- Provide information and feedback related to public safety including:
- Emergency response, vehicle weight limits, sound control, speed control, construction access, barricading, and other traffic control issues.

#### 2. CIP Transportation Projects

 Provide project/budget updates; involve TAC members on current/upcoming/future CIP projects (including gateway streets).

#### 3. Transportation Element Defined Corridors & Studies

 Provide information and receive input from the TAC Committee in relation to future transportation corridors and planning/prioritizing for the future development of the Town and region.

#### 4. Regional Partners

 Staff to update members on projects adjacent to QC boundaries, and regional studies affecting transportation in Queen Creek.

#### 5. Community Outreach

- Advise TAC of upcoming meetings
- Provide routine correspondence and notification on local and regional transportation issues (press releases; open houses; stakeholder meetings)

#### 6. Bike Lanes and Routes

- Work with staff to develop a bike lane plan that includes:
- Retrofitting existing roadways
- Developing a prioritized implementation plan for adding bike lanes to our existing roadways

#### Fiscal Impact:

There is no fiscal impact associated with the annual TAC Work Plan.

#### Attachment(s):

a. TAC 2019 Work Plan



#### **Transportation Advisory Committee (TAC) FY2019 Work Plan**

The proposed Transportation Advisory Committee (TAC) FY2019 Work Plan is shown below. The plan was developed in coordination with Council goals as identified in the Corporate Strategic Plan, and includes collaboration with current (and future) Town projects.

Six priority areas and projects / programs to be focused on for FY 2019

#### 1. Emerging Safety Projects and Traffic Control Issues

- Provide information and feedback related to public safety including:
- Emergency response, vehicle weight limits, sound control, speed control, construction access, barricading, and other traffic control issues.

#### 2. CIP Transportation Projects

 Provide project/budget updates; involve TAC members on current/upcoming/future CIP projects (including gateway streets).

#### 3. Transportation Element Defined Corridors & Studies

 Provide information and receive input from the TAC Committee in relation to future transportation corridors and planning/prioritizing for the future development of the Town and region.

#### 4. Regional Partners

• Staff to update members on projects adjacent to QC boundaries, and regional studies affecting transportation in Queen Creek.

#### 5. Community Outreach

- Advise TAC of upcoming meetings
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#### 6. Bike Lanes and Routes

- Work with staff to develop a bike lane plan that includes:
- Retrofitting existing roadways
- Developing a prioritized implementation plan for adding bike lanes to our existing roadways



#### Requesting Department

Town Manager

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: TRACY CORMAN, ASSISTANT TO THE TOWN MANAGER

RE: Discussion on possible amendments to the Town Council

Policies and Procedures on Town committees and the Standard

Form Bylaws for Designated Town Committees.

DATE: September 5, 2018

#### **Goals:**



#### **Discussion:**

This item is on the agenda as a follow up to the Council Strategic Planning Session in February 2018. At the Strategic Planning session, the Council expressed an interest to consider options on strategies to better inform and articulate the Council's goals to committees and increase resident participation. Staff is seeking direction from Council on options for possible changes to the Town Council Policies and Procedures regarding Town committees. If Council directs staff to make changes, revised versions of the Town Council Policies and Procedures and Standard Form Bylaws for Designated Town Committees will be brought back to a future meeting for final approval.

Boards, commissions, and committees were established within municipal government to assist the Mayor and Council in an advisory capacity. Many are comprised of citizens at large with no professional experience, who have an interest in the committee's purpose and a desire to serve the community. Some, such as the Planning Commission and the Economic Development Commission, include a mix of professionals and citizens at large to represent diverse perspectives or expertise.

The adopted Town Council Policies and Procedures sets forth the guidelines for establishing committees, and defines their roles and responsibilities. The Council may form committees on an as needed basis with a clearly defined purpose. The Town Council may appoint up to two members from the Council to serve as non-voting liaison members, and the Committee may select a chair and vice chair from among its members. At the beginning of each new fiscal year, committees receive annual approval of their work programs by the Town Council.

As outlined in the Town Council Policies and Procedures, Town committees have the following powers and duties: receive annual approval of its 12-month work program by the Town Council, keep meeting summaries and report them to the Town Council following an official meeting, advise the Town Council on matters pertaining to the designated committee and approved work program, advise the Council on the status of its annual work program and achievement of various initiatives set forth by the Town Council, advise the Town Council on matters of public policy affecting the community atlarge as it relates to the function and mission of the designated committee, and to advise the Town Manager on issues pertaining to operations and administration of the Town organization.

The Council also adopted Standard Form Bylaws for Designated Town Committees and Task Forces, with the latest revision adopted on December 4, 2013. The bylaws address the membership, roster, council liaison, residency requirements, terms of office, meeting quorum, voting procedures, powers and duties, and the membership appointment process. With the adoption of the last revision to the Bylaws, a Committees, Boards and Commissions Handbook was created to cover the topics addressed in the bylaws as well as Arizona Open Meeting Law, conflicts of interest, and parliamentary procedure. Training on this handbook was provided for all members of Town committees at the time, and was recorded and posted on the Town's website. New committee members are given this handbook, and provided the link to the training video when they are appointed by the Town Council.

#### **Options for Amending Committee Procedures**

In developing options for Council to consider, a survey of other Arizona cities was conducted on whether they had term limits for committee members, and whether their council members sat on committees. Responses were received from Buckeye, Chandler, Goodyear, Mesa, Oro Valley, Peoria, Scottsdale, and Tempe. A copy of the responses is attached to the staff report. Some options the Council may wish to consider for amending the policies and procedures regarding committees are listed below. As mentioned above, if Council provides direction on any of these options, changes to the Town Council Policies and Procedures and the Standard Form Bylaws for Designated Town Committee will be brought back for final approval at a future meeting.

- Hold more in depth discussions on annual committee Administrative Work Plans. Currently, these work plans are approved annually on the consent calendar. Instead, the work plans could be placed on the Council agenda under Final Action for more in depth discussion and specific direction by Council.
- 2. Hold joint meetings annually with all Town committees. Currently the Council holds two annual meetings with the Planning Commission. The Council could hold an annual meeting with each committee to provide direction directly to committee members, and further foster the relationship between the Council and committee members. The committees' workplans could also be discussed and

approved at these joint meetings.

- 3. Provide more detailed summaries of committee meetings. Currently committee reports are kept very brief, and are verbally read at Council meetings. In order to provide additional detail regarding discussions and actions by the committees, staff could email meeting summaries to the Council after a meeting. This is similar to what is currently done for the Planning and Zoning Commission meetings. This may or may not replace reading the brief report at the Council meeting.
- 4. Formalize the Council's role as liaison committee members. Of the eight cities responding to the survey, two of them have council members sitting on every board as non-voting liaisons. The remaining cities have one or two committees with council members that have a very specific purpose. Many of them have Council sub committees made up of three council members.
  - To address Council's interest in providing clear direction to Town committees, council liaison committee members could be given the responsibility for directly communicating the Council's direction to the committees, rather than staff. This would provide a way to identify ambiguity in the work program early on, may alleviate the perception by some that staff is driving the committee work, and help provide a clear framework for the committees to operate under.
- 5. Consider establishing term limits for committees. According to the survey, cities vary on whether they have term limits for their committees. If Council chooses to establish term limits, the Planning Commission model could be used. Planning Commissioners may serve for a total of three consecutive terms. In order keep committee membership active, the Council may choose to follow the Oro Valley example from the survey of allowing committee members to apply for committee membership again after stepping down for one year.

The Citizen Leadership Institute is a key source for potential committee members. Town committees are introduced to the Citizen Leadership participants, and they are reminded about their meetings throughout the program. When there is a committee vacancy, current and past Citizen Leadership participants are the first group who are contacted to solicit interest. Information on vacancies is also distributed through press releases, the Town website, and the Town's social media. Interested residents complete an application for committee or commission appointment that is kept on file with the Town Clerk for 12 months. Historically, the Town has not received a large response to these requests. Some committees tend to be more popular than others, and it can be challenging to find new members for the less popular committees.

The Economic Development Commission has its own bylaws, as its membership is slightly different than other Town Committees. This Commission includes members that are designated seats for important Town partners such as SRP,

Queen Creek Unified School District, Arizona State University, Phoenix-Mesa Gateway Airport, Queen Creek Chamber of Commerce, a Town Center business owner or manager, and an area community college. These designated seats are tied to the organization and not the individual. In the case of this Commission, the term limits may be applied to the citizen at-large members.

6. Lastly, the Council may choose to make no changes and maintain the current policies and procedures for Town committees.

#### **Fiscal Impact:**

There is no fiscal impact for changing the Town Council Policies and Procedures regarding Town committees.

#### Attachment(s):

- \* Survey responses from Arizona cities and towns on committee membership
- \* Committee Workplans for FY18/19
- \* Standard Form Bylaws for Designated Town Committees, Task Forces, Rev. 12 2013
- \* Council Policies and Procedures Rev. 11-2015

### 2018 Committee Membership Survey

	In what capacity do Council Members serve on committees; are they voting members?	Does your community have term limits for committee members?
Buckeye	<ul> <li>One councilmember per board acting as non-voting liaison members.</li> <li>Each new board member must be approved by the councilmember liaison to that Board and by the Mayor.</li> </ul>	Only for P&Z, which enforces a limit of two 4-year terms
Chandler	<ul> <li>Councilmembers do not serve directly on boards and commissions.</li> <li>The Airport Commission is the only committee that has one councilmember who serves, but has no vote.</li> </ul>	Depends on the Board or Commisions - most do not, but some have term limits in their by-laws (Economic Development is 4-year terms with potential for reappointment)
Goodyear	Council serve on four Council Subcommittees as voting members:  1) Boards and Commissions Selection Committee: 3 Council Members review applications and interview candidates for board and commission vacancies (i.e., Water Conservation Committee, Planning and Zoning, Youth Commission)  2) Audit Committee: 3 Council Members work with City Auditors and staff on the annual audit process  3) Community Funding Committee: 3 Council Members review grant applications and award community funding to nonprofits  4) Goodyear Public Safety Retirement Board: 1 Councilmember and staff approve new hires for police and fire, DROP applications, retirement applications, disability applications	Limits are enforced; each Board and Commission has their own varied limits.
Mesa	<ul> <li>Two committees have councilmembers as sitting members.</li> <li>Boards and Committees minutes are voted upon for approval at Council meetings.</li> </ul>	Each Board and Commission has their own varied limits.
Oro Valley Peoria	<ul> <li>One or more councilmembers are designated by the Mayor as Council Liaison to each commission on a yearly basis.</li> <li>Councilmembers are non-voting members, but may provide updates to the boards or commissions from Council.</li> <li>Councilmembers do not serve as members of boards and commissions.</li> <li>Councilmembers doserve on several Council subcommittees.</li> </ul>	<ul> <li>Two term limits for each Board and Commission, then members must step down for a year before running for appointment again.</li> <li>Council has the ability to give someone a third consecutive term if they so choose.</li> <li>A person may only serve on 1 committee at any given time</li> <li>A person may only serve for 2 consecutive terms on a given committee</li> </ul>
Scottsdale	<ul> <li>Councilmembers serve on the Development Review Board (1 CM, 2/3 month rotation); they can vote on this board.</li> <li>Councilmembers also serve on subcommittees; 3 Councilmembers for each subcommittee, determined by the Mayor.</li> </ul>	<ul> <li>with a 12 year maximum.</li> <li>The majority of the Baords and Commissions have a term limit of two 3 year terms.</li> <li>A person can only apply to one at a time, but they can be appointed to a different committee once they term out of others</li> </ul>
Tempe	Only 1 board, commission or committee has a sitting councilmember: Risk Management Trust Board. This councilmember serves as a voting member of the Board.	The majority of the Boards, Commissions, and Committees have various set term limits.



### Economic Development Commission Work Plan for FY18-19

- 1. Work with staff to implement recommendations outlined in the Town Center Plan Update.
- 2. Assist staff with the planning of an Economic Development Summit in early 2019, promoting development opportunities, community success stories and the Town's probusiness climate.
- 3. Review Façade Improvement Program applications and make recommendations to staff.
- 4. Provide input and recommendations on new economic development programs/projects that may benefit Queen Creek.
- 5. Review Major General Plan Amendments as appropriate.
- 6. Continue to work with staff on the implementation of the new Economic Development Strategic Plan.
- 7. Provide input on educational updates to be shared at the monthly meetings to keep Commission informed on different issues, programs and development.
- 8. Work to establish a consistent plan with the new Arts Commission.



#### **Transportation Advisory Committee (TAC) FY2018 Work Plan**

The proposed Transportation Advisory Committee (TAC) FY2018 Work Plan is shown below. The plan was developed in coordination with Council goals as identified in the Corporate Strategic Plan, and includes collaboration with current (and future) Town projects.

Six priority areas and projects / programs to be focused on for FY 2018

#### 1. Emerging Safety Projects and Traffic Control Issues

- Provide information and feedback related to public safety including:
- Emergency response, vehicle weight limits, sound control, speed control, construction access, barricading, and other traffic control issues.

#### 2. CIP Transportation Projects

 Provide project/budget updates; involve TAC members on current/upcoming/future CIP projects (including gateway streets).

#### 3. Transportation Element Defined Corridors & Studies

 Provide information and receive input from the TAC Committee in relation to future transportation corridors and planning/prioritizing for the future development of the Town and region.

#### 4. Regional Partners

• Staff to update members on projects adjacent to QC boundaries, and regional studies affecting transportation in Queen Creek.

#### 5. Community Outreach

- Advise TAC of upcoming meetings
- Provide routine correspondence and notification on local and regional transportation issues (press releases; open houses; stakeholder meetings)

#### 6. Bike Lanes and Routes

- Work with staff to develop a bike lane plan that includes:
- Retrofitting existing roadways
- Developing a prioritized implementation plan for adding bike lanes to our existing roadways

### Parks and Recreation Advisory Committee Work Plan FY18/19

Priority #1 - Assist in the design of the Queen Creek Sports Complex (east park site) project
Staff is scheduled to begin working on the design for Queen Creek Sports Complex (east park site) project in July.

- A. PRAC will help with the public process input.
- B. PRAC will review options for recommendation to Council.

#### Priority #2 - Concession stand and food vendor use policy

Currently there are many different uses for the concession stands, including partnership use overlapping, partner non-use, and non-partner/renter use. PRAC is to provide guidance in the development and finalization of policies for the use of the following:

- A. Concession stands in the town parks, both for Youth Sports Partnership seasons and general rentals.
- B. Food vendors and outside concessions in town parks for partnership fundraising efforts and general scheduling, to provide park attendees with an added convenience.

#### Priority #3 - Special event policy and application

Currently the Town has a mix of special events from Town sponsored, public events on Town land, and private events. PRAC is to review current policies and provide guidance for an updated special event policy and application.

#### Priority #4 - Policy & Procedure Manuals

PRAC is to review the Recreation Division policies and procedures for recommendations towards updates, corrections, changes, etc., to meet the current operational and usage needs.

#### Priority #5 - Ongoing Participation Opportunities

With the understanding that PRAC members will be better able to positively review, recommend and finalize policies, fees, rules, park plans, and more, staff will create a quarterly schedule of programs/activities that provide committee members an opportunity to volunteer, evaluate, and gain citizen input on the Town's Recreation Services' programs and those of its partners.

### Gtandard Form Bylaws for Designated Town Committees, and Task

#### Revised December 4, 2013

#### Section I: Purpose and Applicability

The purpose of establishing bylaws for citizen advisory committees is to maximize public involvement in the public policy-making process at all levels possible. The Queen Creek Town Council desires to include as many people as possible on Town committees and has adopted annual goals establishing citizen involvement and general public outreach as a priority for Queen Creek.

#### a) Definitions

Committee: A committee is a standing work group appointed or selected to perform a specific service or function on behalf of a larger group (Town Council).

Task Force: A Task Force is a temporary work group assigned for a certain purpose for a specific amount of time to accomplish a defined objective with the expectation that the group will disband when the objective has been completed.

These bylaws for governance of Town Committees are applicable to all Town Committees and all future committees and Task Forces so designated by the Town Council. For the Planning and Zoning Commission, Economic Development Commission, Town Center Committee and Board of Adjustments, which have their own bylaws, these bylaws will govern in all areas where their bylaws are silent, or where there is a conflict between these bylaws and their bylaws. Where their bylaws are silent, or where there is a conflict, these bylaws will apply. (For example, their bylaws do not limit the number of committees on which a person may serve. In that case, Section II (F) of these bylaws will apply.) These bylaws do not preclude the applicability of any provision by state statue.

### Section II: Membership, Roster, Council Liaison, Residency Requirement and Terms of Office

- a) Member terms are staggered so that the entire committee will not need to be appointed or reappointed at the same time. At the time a committee is first established, six members of an eleven-member committee shall be appointed for one-year terms and the remainder of the committee shall be appointed to two-year terms. Successive appointments shall be for two-year terms. (in the event that a committee, at the time it is first appointed, has fewer than eleven members, members shall be divided evenly between one-year and two-year terms to the greatest extent possible). When a seat becomes vacant in the middle of a term, the Council shall appoint a member to serve the remaining term.
- b) The Town Council may appoint up to two members from the Town Council to serve as non-voting liaison members of a committee. The committee shall select a chair

- and vice chair from the voting members of the committee. The committee's selection for chair and vice chair shall be ratified by the Town Council.
- c) All Committee members serve at the pleasure of the Town Council and may be removed without cause at any time by a majority vote of the Council. Any committee created or appointed by the Town Council may, by appropriate rules and regulations, provide additional grounds for the removal of members, but in any event, the Town Council shall have the complete authority to remove members from the committee.
- d) Every town committee shall have a minimum of seven (7) members and up to a maximum of eleven (11) members. Town committees must maintain a minimum of seven (7) voting members. Council Members serving as non-voting liaison members and any other non-voting members shall not be counted towards the minimum or maximum committee membership.
- e) A maximum of two (2) non-residents may be appointed to a committee. An odd number of voting members must be maintained on committees.
- f) Committee members may not serve as voting members on more than one internal or external committee at a time. For example: A citizen may not serve as a Town Council appointed member of a Town created internal committee and a Town Council appointed member/representative on a non-Town created external committee at the same time. The term External Committees "refers" to such groups as the East Valley Partnership Coalition and the Greater Phoenix Economic Council. Committee members serving on multiple committees at the time this amendment to the Bylaws is adopted may continue to serve on those committees until their earliest term expiration date. At that time, the member must choose one internal or external committee on which to serve and resign as a voting member from all other committees.
- g) Members of internal or external committees may from time to time be appointed by the Town Council to serve on a Task Force based on their knowledge of the Task Force's specific objective.
- h) Employment with the town disqualifies a citizen from sitting on a committee.

#### Section III. Staff Assistance.

The Town Manager shall have the responsibility to appoint the necessary staff to serve in a support role to the advisory committee. The staff role is advisory and shall not have voting privileges.

Staff assigned to a committee shall be referred to as support staff. The staff person taking the lead role in supporting the committee shall be the committee manager.

#### Section IV. Meeting Quorum, Voting Procedures and Privileges

- a) The committee shall not conduct any business without the presence of a quorum consisting of a simple majority of the total number of voting members appointed by the Town Council. For example, if there is an eleven member committee, at least six must be present in order to conduct a meeting.
- b) Only town resident members shall have voting privileges for each action item on each agenda; may make a motion on any posted agenda item; and may second the motion for discussion and full committee voting.

#### Section V: Powers and Duties.

Town Committees shall have the following powers and duties:

- At the start of each new fiscal year, receive Town Council approval of its 12-month work program.
- b) Keep and submit meeting summaries or minutes to the Council for information following an official meeting of the committee.
- c) Advise the Council on matters pertaining to the designated committees and work program approved by the Town Council.
- d) Advise the Council on the status of its annual work program and achievement of various initiatives set forth by the Council for implementation.
- e) Advise the Council on matters of public policy affecting the community at-large as it relates to the function and mission of the designated committee and its work program.
- f) Advise the Town Manager on issues pertaining to operations and administration of the town organization.
- g) Representation of recommendations of the committee/expression of personal opinions; communicating personal opinion in conjunction with majority position of a committee, commission or board:

When speaking or writing regarding a matter within the jurisdiction of a committee, members of the committee shall represent the official policies or positions of the board, commission or committee on which they serve to the best of their ability. When presenting their individual opinions and positions, members shall explicitly state that the opinions they are expressing are their own, do not represent the views or opinions of the Town of Queen Creek or a committee, board or commission of the Town, and will not infer or suggest that the opinion they are expressing is the opinion of the Town.

#### Section VI. Committees – General Qualifications of Members.

Attendance Required. Any member of a committee created and appointed by the Town Council may be replaced by the Council if s/he:

a) Is absent for twenty-five (25) percent or more of the regular meetings within any consecutive 12-month period. The Town Council shall consider removal of the individual from the committee at the next available council meeting. Replacement of an individual who has been removed from a committee shall be considered as soon as reasonably possible.

#### Section VII. MEMBER APPOINTMENT PROCESS

Any citizen interested in joining a town committee must complete a Notice of Interest Form and submit it to the Town Clerk's office.

- a) Citizens completing the Interest Form must rank order (prioritize) their preference for a specific committee (only active committees shall be listed, with an option to check 'other' as well)
- Upon receipt of a notice of interest form, the Town Clerk's office shall generate a letter notice of acknowledgement.
- c) The Town Clerk's office shall keep, maintain, and update all master lists. Master lists include: 1. Committee members; and 2. Interested residents. Notice of Interest Forms shall be kept on file at the clerk's office for a period of twelve (12) months. At the end of twelve (12) months notice of interest forms will expire. Once a notice of interest form has expired, it will be removed from the master list and shredded. In order to be eligible for consideration for committee appointments, applicants must fill out an updated notice of interest form and submit it to the Town Clerk's office every twelve (12) months.

When there is a vacancy on a Town committee, the following appointment process will be followed to fill that vacancy:

- D) The committee manager shall notify their department director of any committee vacancies immediately. The department director shall in turn notify the Town Manager and Town Clerk of the vacancies, and request Notice of Interest Forms from the Town Clerk.
- E) Upon notice of the vacancy, the Town Clerk shall forward Notice of Interest Forms to the committee manager. If no Notice of Interest Forms are on file, advertisements for committee vacancies shall be posted on sites that include, but are not limited to, the town web site, *About Town Newsletter*, and the weekly update. News releases shall also be issued. Depending on the time needed to fill a committee vacancy, alternatives to the master lists may be considered by the department director. Advertising will be done until the vacancy is filled. Please note: other forms of advertisement may be used to adequately reach the intended audience.

- F) The committee manager shall review Notice of Interest Forms to determine whether the residency requirement has been met for that committee. The committee manager shall forward eligible Notice of Interest Forms to the Mayor or designee, and committee chair, for review.
- G) The Mayor or designee shall make contact with applicants to discuss the committee meeting schedule and commitments in order to determine the interest and availability of the applicants.
- H) Interviews shall be conducted by the Mayor or if delegated by the Mayor, the committee chair (please note: the department director shall be used as the backup, if necessary). The purpose of the interview will be to determine the applicant's background, the individual's availability to serve, and their knowledge and areas of interest in relation to the committee's work program.
- The department director and committee chair shall decide which applicant(s) to recommend to the Mayor for membership. The department director shall meet with the Mayor to discuss the recommendation. If the Mayor approves, the committee chair shall contact the applicant(s) to confirm their acceptance of the recommendation. Upon confirmation, the committee chair shall notify the committee manager of the recommendation.

J)	The committee manager shall s	ubmit the recor	mmendation as an iter	m for an
	upcoming Council agenda throu	gh their depart	ment director. The ag	jenda language
	should be formatted as follows:	"consideration	and possible approva	al of the
	appointment of	to the	committee."	

- K) The committee manager shall develop and submit a staff report through their department director requesting the official committee appointment. Included with the staff report will be a copy of all the Notice of Interest Forms received.
- L) If the Mayor and Council approve the recommended appointment, the department director shall prepare a congratulatory letter of appointment with the Mayor's signature to the new committee member within one week of the official appointment. The department director shall also send notices to those applicants who were interviewed but not appointed.
- M) If the recommended applicant is not appointed by Mayor and Council, the Mayor, or if delegated by the Mayor the committee chair, must make a new recommendation based on the remaining Notice of Interest Forms. If there are no remaining Notice of Interest Forms, the committee vacancy shall be advertised as specified in (b) above.
- N) Upon the appointment of a new committee member, the committee manager shall conduct an orientation. The orientation may vary depending on the committee's work plan, but must include at a minimum the following:
  - a. An overview of the role and authority of committees in the council-manager

form of government.

- b. An introduction to the purpose and mission of the committee, including a summary of the committee's bylaws, work plan and actions over the last six (6) months.
- c. Hard copies of the Committee Bylaws, Work Plan, and any additional support materials including budgets and approved plans and maps.
- d. A written schedule of meetings and other commitments.
- e. Contact information for the committee manager and support staff.
- O) When the orientation has been completed, the committee manager shall notify their department director and provide the date of the first meeting the new member will be attending.

#### Section VIII. INACTIVE COMMITTEES

Town committees which have not met for more than twelve (12) consecutive months are automatically disbanded. In order to re-establish a committee that has been disbanded, members must be appointed to the committee through the appointment process detailed in section VII.



# Town Council Policies and Procedures

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# I. COUNCIL MEETINGS – Dates, Times, Locations

# A. Regular Meetings

Consistent with Town Code Chapter 2, Article 2-4, Section 2-4-1, the Council will hold one regular meeting each month on the first Wednesday at 5:30 p.m. at the Town Hall Council Chambers, 22350 S. Ellsworth Road, Queen Creek. A Second meeting may be scheduled for the third Wednesday of the month at the same time and location.

#### **B.** Other Locations

The Council may, from time to time, elect to meet at other locations and upon such election, shall give public notice of the date, time and location of such meeting in accordance with all provisions of the Queen Creek Town Code and Arizona Revised Statutes.

# C. Location During Local Emergency

If, by reason of fire, flood or other emergency, it shall be unsafe to meet in the Town Hall, the meetings may be held for the duration of the emergency at such other place that may be designated by the Mayor, Vice Mayor or Town Manager.

# D. Cancelled Meetings

When the day for any regular meeting falls on a legal holiday, the regularly scheduled meeting shall be held at the same hour on a day other than the legal holiday as determined by the Mayor, Vice Mayor or Town Manager. Council meetings may, from time to time, with adequate notice pursuant to state statutes, be cancelled due to conflicts with other scheduled meetings, events or circumstances. An example of this circumstance is the annual conference of the Arizona League of Cities and Towns. Notice of cancelled meetings will be posted at least 24 hours in advance in the following locations: Queen Creek Town Hall, Community Center bulletin board, Queen Creek Library and on the Town's website.

# E. Special Meetings and Emergency Meetings

Special meetings and emergency meetings of the Town Council may be called and held from time to time consistent with Town Code Chapter 2, Article 2-4, Section 2-4-2 and the Arizona Revised Statutes.

#### F. Executive Sessions

Consistent with the Town Code Chapter 2, Article 2-4, Section 2-4-2 and the Arizona Revised Statutes §§ 38-431.02 & 38-431.03, upon a majority vote of the Town Council, the Council may meet in a closed executive session. The subject of the executive session must be noticed on the agenda.

#### II. NOTICES OF MEETINGS

At least 24 hours in advance of any Council meeting an Agenda or Notice of Meeting will be posted in the following locations: Queen Creek Town Hall, Community Center Bulletin Board and the Queen Creek Library and on the Town's website.

# III. QUORUM

Consistent with Town Code Chapter 2, Article 2-4, Section 2-4-4, a majority of the Council shall constitute a quorum for transacting business, but a lesser number may adjourn from time to time and compel the attendance of absent Town Council members. In a body of seven members, four members constitute a quorum.

#### IV. DUTIES OF MAYOR

#### A. Chair

Consistent with Town Code Chapter 2, Article 2-2, Section 2-2-4, the Mayor shall be the chairman of the Council and preside over its meetings. The Mayor may make and second motions and shall have a voice and vote in all its proceedings. The Mayor shall also have the authority to preserve order at all Council meetings, to remove any person from any meeting for disorderly conduct, to enforce the rules of the Council and to determine the order of business. The Mayor shall have the power to administer oaths and affirmations.

#### B. Absence of Mayor

The Vice Mayor shall act as Mayor in absence or disability of the Mayor.

#### C. Absence of Mayor and Vice Mayor

In the absence or disability of both the Mayor and Vice Mayor, the Council may designate another of its members to serve as acting Mayor who shall have all the powers, duties and responsibilities of the Mayor during such absence or disability.

# D. Attendance by the Public

Consistent with Town Code Chapter 2, Article 2-4, Section 2-4-3, and except as specifically provided by A.R.S. §38-431.01 for executive sessions, all meetings of the Council shall be open to the public.

#### V. MINUTES

# A. Summary Minutes

Minutes of Council meetings will be summary minutes, including a brief summary of discussion, motions made and the vote. The minutes will also include the names of public speakers (A.R.S. §38-431.01 (B)).

# **B.** Council Minutes Approval

Minutes of meetings are generally submitted to the Council for approval at the next scheduled meeting.

# C. Recordings of Meetings

Work study and regular session meetings are video-taped. These videos remain on the Town's website for a minimum of three months after the date of the meeting and/or in accordance with Arizona Revised Statutes.

#### VI. RULES OF CONDUCT

#### A. Addressing Members of the Public and Staff

In general, when addressing members of the public or Town staff, Council members will direct questions or comments through the Mayor (Chair) and will generally refer to persons as Mr., Mrs., or Ms., followed by their surname.

#### B. Council Deliberation and Order of Speakers

The Mayor has been delegated the responsibility to control the debate and order of speakers. Speakers are generally called upon in the order the Request to Speak cards are received.

- With the concurrence of the Mayor, a Council member holding the floor may address a question to another Council member and that Council member may respond.
- 2. Council members will limit their comments to the subject matter, item or motion being currently considered by the Council.
- 3. Council members will govern themselves as to the length of their comments.
- 4. Any member of the Council wishing to speak must first obtain the floor by being recognized by the Mayor (Chair). The Council member who seeks the floor when appropriately entitled to do so must be recognized.

#### VII. MOTIONS

Motions may be made by any member of the Council, including the Mayor. Any member of the Council, other than the person offering the motion, may second a motion.

#### A. Procedures for Motion

The following is the general procedure for making motions:

- 1. Before a motion can be considered or debated it must be seconded.
- 2. Once the motion has been properly made and seconded, the Mayor shall open the motion for discussion by any Council member.
- 3. Once the motion has been fully discussed and the Mayor calls for a vote, no further discussion will be allowed, except that Council members may be allowed to explain their vote.

# **B. Motion Amendments**

When a motion is on the floor and an amendment is offered, the amendment shall be acted upon prior to acting on the main motion.

#### C. Motion of Direction

A Motion of Direction generally provides staff direction as to the Town Council's request for additional information, corrections/amendments to an Ordinance/Resolution or other such matters, to be presented at a future Council meeting.

#### D. Ordinances

Motions offering approval of ordinances are deemed to include waiver of full reading and title of the ordinance unless the Council, by a majority vote, requires reading in full (Town Code Chapter 2-5-2).

# E. Voting

Any Council member at a meeting when a motion comes up for a vote shall vote for or against the measure unless he/she is disqualified from voting and abstains because of disqualification. If the vote is a voice vote, the Mayor shall declare the result. Any member of the Council or the Town Clerk may request a roll call vote either before or after a non-roll call vote is taken. All votes will be recorded in the minutes of the meeting.

#### F. Abstention

- If a Council member abstains because of a legal conflict, he/she is not counted as
  present for quorum purposes and is not deemed to be "voting" for purposes of
  determining whether there has been a "majority" vote of those members present
  and voting.
- 2. When a Council member abstains or excuses themselves from a portion of a Council meeting because of a legal conflict of interest, the Council member must briefly state the nature of the conflict to be included in the public record.

#### G. Tie Votes

A tie vote results in the motion failing. Under this circumstance, any member of the Council may offer a motion for further action, pursuant to (H) below.

#### H. Motions for Reconsideration

- 1. Motions for reconsideration of a matter may be made at the next regular or special meeting following the Council action.
- 2. For tie votes, in order to allow for reconsideration of the matter at a future Council meeting, two Council members shall contact the Town Manager (one member who voted on each side of the issue).
- 3. A proposed motion for reconsideration at the next succeeding meeting must comply with all noticing requirements in the Arizona Revised Statutes.
- 4. Motions for reconsideration may only be made by a Council member that voted with the majority of the Town Council on the action proposed to be reconsidered by the Council.

#### I. Suspension of the Rules

Any rules may be waived by a majority vote of the Council members present when it is deemed that there is good cause to do so.

#### VIII. OPEN MEETING LAW VIOLATIONS

Meetings that at any one time involve only a portion of a legislative body, but eventually involve a quorum are in violation of the Arizona Revised Statutes. These meetings deprive the public the opportunity for meaningful contribution to the decision making process. These meetings happen when member A contacts member B, B contacts C, C contacts D and so on until a quorum of the Council is involved and shares the comments of other Council members in an attempt to reach consensus or determine the direction on an item that may appear before the Council. An elected official has the right to confer with another elected official about public business, but if and when a "collective concurrence as to action to be taken" is reached, the Open Meeting Law and Arizona Revised Statutes are violated. Council members are encouraged to consider this possibility when discussing a matter within the Town's jurisdiction with another elected official. If the Council member needs any clarification on a possible violation, he/she should contact the Town Attorney.

#### IX. CONFLICT OF INTEREST

Per A.R.S. §38-503 (A) and (B):

- Any public officer or employee of a public agency who has, or whose relative has, a substantial interest in any contract, sale, purchase or service to such public agency shall make known that interest in the official records of such public agency and shall refrain from voting upon or otherwise participating in any manner as an officer or employee in such contract, sale or purchase.
- 2. Any public officer or employee who has, or whose relative has, a substantial interest in any decision of a public agency shall make known such interest in the official records of such public agency and shall refrain from participating in any manner as an officer or employee in such decision.

Per A.R.S. §38-502(9):

- 1. "Relative" means the spouse, child, child's child, parent, grandparent, brother or sister of the whole or half blood and their spouses and the parent, brother, sister or child of a spouse.
- 2. The Town Attorney should be contacted prior to any meeting where a potential conflict of interest may occur.

#### X. PUBLIC HEARINGS

Matters noticed for Public Hearing will be held in the order as posted and will continue until the Council has made a decision. Members of the public have a right to speak on all matters where a Public Hearing is required by state or federal law. These include, but are not limited to, zoning and rezoning of real property, budget approval and annexation hearings. Public Hearing items are marked as such on all Council agendas. The Council procedure for the conduct of a Public Hearing is generally as follows:

- 1. Staff presents its report.
- 2. Council members may ask questions of staff.
- 3. The Mayor opens the Public Hearing.
- 4. The applicant has the opportunity to present comments, testimony or arguments to the Council.
- 5. The Mayor asks for public comment. Anyone wishing to speak must complete and present to staff a Request to Speak card.
- 6. The applicant is given an opportunity for rebuttal or concluding comments.
- 7. The Public Hearing is closed. No other public comment may be taken.
- 8. The Council deliberates on the issue and takes action.
- 9. The Mayor announces the final decision of the Council.

# A. Continuance of Public Hearings

Any hearing being held or noticed to be held at a Council meeting, may be by motion or notice of continuance, be continued to a subsequent meeting.

# **B. Public Discussion at Public Hearings**

When a matter for Public Hearing comes before the Council, the Mayor will open the Public Hearing. Before any motion is considered, the Mayor shall ask the public in attendance if there are any persons who wish to speak on the matter.

- Any person desiring to speak shall make his/her presence known to the Mayor by completing a Request to Speak card. The Mayor will call each person to speak in the order that the requests were received. No person may speak without first being recognized by the Mayor. All comments must be relevant to the issue being considered.
- 2. In order to avoid repetitious remarks from a large group, a designation of a spokesperson is encouraged. Additional time may be permitted for the spokesperson to address the Council.
- Members of the Council may ask questions of the speakers or of each other, but only after being recognized by the Mayor. Discussion or comments with the speaker shall be limited to a question or questions, rather than ongoing dialogue.

#### XI. FINAL ACTION

Members of the public may address the Council on all items where the Council is taking action by approval of an ordinance or resolution, or by a motion made and seconded, and voted upon by the Council.

#### XII. DISCUSSION OR DIRECTION

Public comment generally will not be taken on items that are placed on the agenda solely for Council discussion or for the purpose of obtaining direction to the staff, and which are not scheduled for Final Action. These items will be so noted on the agenda. No decisions or actions can be taken on these items until such time as they are posted for Public Hearing and/or Final Action.

Individuals or groups wishing to speak on an agenda item where public comment is not otherwise allowed are requested to fill out a Request to Speak card and to specify on the card the matter they wish to discuss. The Mayor may in his/her discretion ask the Council if it wishes to suspend the rules and allow the individual or group to speak. If a motion is made, seconded and approved by a majority of the Council present at the meeting to suspend the rules, the speaker will be allowed to address the Council.

#### A. Written Materials for Public Record

All persons interested in a matter noticed for Public Hearing shall be entitled to submit written comments. The Town Clerk as part of the record will retain all written comments submitted to the Town. Written comments or petitions will be noted, read aloud or summarized by the Mayor. A reading in full shall take place if requested by a Council member.

# B. Addressing the Town Council

All remarks should be addressed to the Council as a whole. Questions should be directed to the presiding officer who will determine whether or in what manner an answer will be provided.

#### XIII. PUBLIC COMMENT

In compliance with the Arizona Revised Statutes, the Town Council may not discuss, deliberate or vote on any matter raised during the Public Comment. The Council may, however, request that an item be put on a future agenda for discussion and consideration. A Town Council member may respond to a remark of criticism directed to that Town Council member.

- Comments in writing are accepted and will be kept as part of the record. A copy of the written comment will be provided to each Town Council member if received prior to the meeting.
- 2. In order to avoid repetitious remarks for a large group, a designation of a spokesperson is encouraged. Additional time may be permitted for the spokesperson to address the Town Council.

The rules set forth are not exclusive and do not limit the inherent power and legal authority of the Town Council, or its presiding officer to govern the Town Council meetings.

#### XIV. COUNCIL MEETING AGENDA

#### A. Order of Agenda

The business of the Town Council at its meetings will generally be conducted in the following order:

- 1. Call to Order
- 2. Roll Call
- 3. Motion to Adjourn to Executive Session
- 4. Consent Agenda
- 5. Items for Discussion
- 6. Recess
- 7. Pledge of Allegiance and Invocation
- 8. Ceremonial Matters
- 9. Public Comment
- 10. Committee Reports
- 11. Carryover Consent Agenda Items
- 12. Public Hearings Consent Agenda
- 13. Public Hearings
- 14. Final Action
- 15. Items for Discussion
- 16. Motion to Adjourn to Executive Session (if necessary)
- 17. Adjournment

#### **B.** Ceremonial Matters

Special Awards, introductions and presentations are given at this time by the Town Council. Citizens may also make formal ceremonial presentations to the Town Council at this time.

# C. Committee Reports

This is the time that a Town Council member or Committee Chair will make reports on conferences, committee meetings, events or other items that the Town Council may submit.

#### **D. Public Comment**

Members of the public may address the Town Council on items not on the printed agenda during this time; however, these items must be within the Town Council's jurisdiction. There is a three-minute time limit.

# E. Consent Agenda and Public Hearing Consent Agenda

Items on the Consent Agenda are considered routine and are enacted by one motion and one vote. If Town Council or staff removes an item from the Consent Agenda, discussion on that item will take place after the vote on the remaining items on the Consent Agenda.

A member of the public may ask that a Public Hearing item listed on the Public Hearing Consent Agenda be removed for comment. A motion and vote will be required on any item pulled from the Public Hearing Consent Agenda.

#### F. Items for Public Hearing, Final Action or Discussion

In accordance with the Arizona Revised Statutes, the Town Council may not discuss or take action on any item not posted on the agenda 24 hours prior to the meeting.

# G. Adjournment

After all items on the agenda are discussed and acted upon, the Mayor (Chair) will adjourn the meeting.

# XV. AGENDA SETTING PROCESS

- 1. The Mayor and two Town Council members may through the Town Manager request specific items/issues be placed on the agenda for discussion/action.
- 2. On the Tuesday prior to the week of the Town Council meeting, an agenda setting meeting is held for the purpose of placing items on the agenda. The Town Manager, Department Heads and Town Clerk attend this meeting. If possible, the Mayor may participate via the telephone or in person. The Town Attorney attends this meeting and reviews the agenda prior to the printing.

#### XVI. COMMITTEES

Committees are formed on an as-needed basis with a clearly defined purpose. The Town Council may appoint up to two members from the Town Council to serve as non-voting liaison members. The committee shall select a chair and vice chair from the voting members on the committee. The Committee's selection for Chair and Vice Chair shall be ratified by the Town Council.

Town committees shall have the following powers and duties:

- 1. At the start of each new fiscal year, every Town committee shall receive annual approval of its 12-month work program by the Town Council.
- 2. Keep and submit meeting summaries or minutes to the Town Council for information following an official meeting of the committee.
- 3. Advise the Town Council on matters pertaining to the designated committee and work program approved by the Town Council.
- 4. Advise the Town Council on the status of its annual work program and achievement of various initiatives set forth by the Town Council for implementation.
- 5. Advise the Town Council on matters of public policy affecting the community atlarge as it relates to the function and mission of the designated committee and its work program.

- 6. Advise the Town Manager on issues pertaining to operations and administration of the Town organization.
- 7. Committee members may not serve as voting members on more than one internal or external committee at a time. For example: a citizen may not serve as a Town Council appointed member of a Town created internal committee and a Town Council appointed member/representative on a non-Town created external committee at the same time. The term External Committees refers to such groups as the East Valley Partnership Coalition and the Greater Phoenix Economic Town Council. Committee members serving on multiple committees at the time this amendment to the bylaws is adopted may continue to serve on those committees until their earliest term expiration date. At that time, the member must choose one internal or external committee on which to serve and resign as a voting member from all other committees.
- 8. Member of internal or external committees may from time to time be appointed by the Town Council to serve on a task force based on their knowledge of the task force's specific objective.
- Representation of recommendations of the committee/expression of personal opinions; communicating personal opinion in conjunction with majority position of a committee, commission or board.

When speaking or writing regarding a matter within the jurisdiction of a committee, members of the committee shall represent the official policies or positions of the board, commission or committee on which they serve to the best of their ability. When presenting their individual opinions and positions, members shall explicitly state that the opinions they are expressing are their own, do not represent the views or opinions of the Town of Queen Creek or a committee, board or commission of the Town, and will not infer or suggest that the opinion they are expressing is the opinion of the Town.

# A. Council Member Appointments and Assignments

The Mayor appoints and the Town Council confirms Council member assignments to outside agencies, committees, task forces and liaison roles.

# **B.** Council Member Participation in Community Activities

From time to time, Town Council members may choose to participate in community activities, committees, events and task forces. When a Town Council member participates in these types of activities, the Town Council member is acting as an interested party rather than acting on behalf of the Town Council. Acting or participating on behalf of the Town Council is limited to those instances when the Town Council has formally designated that Town Council member as its representative for the matter.

#### XVII. CEREMONIAL REPRESENTATIVE

Mayor to act as Council ceremonial representative: The Mayor has been delegated the responsibility to act as the Council's ceremonial representative at public events and functions. In the Mayor's absence, the Vice Mayor will assume this responsibility. In both the Mayor and Vice Mayor's absence, the Mayor will appoint another Town Council member to assume the responsibility.

#### XVIII. ADMINISTRATIVE SUPPORT FOR COUNCIL

#### A. Mail

All mail addressed to Town Council members, whether business related or personal, is delivered to the Management Specialist in the Town Manager's Office and distributed to their mailbox.

# B. Mail Addressed to the Mayor

All mail addressed to the Mayor, whether business related or personal, is delivered to the Management Specialist in the Town Manager's Office. All mail addressed to the Mayor will be distributed to the Mayor's mailbox.

# C. Council Correspondence

All correspondence to other government agencies or political subdivisions from Town Council members written with Town resources (letterhead, staff support, postage, etc.) should reflect the position of the majority of the Town Council and not the individual Town Council member's position. All correspondence using Town resources will be copied to the full Town Council and a copy will be made to the Town Clerk for records. Personal recommendations or thank you notes do not need to be copied.

# D. Clerical Support

The Town Manager's Office will coordinate any support requested by a Town Council member, including typing of correspondence or mailings. All correspondence prepared for Town Council members will be on Town letterhead and will reflect the majority of the Town Council, and will be copied to the full Town Council.

# E. Personal Correspondence

Reflecting personal positions will be prepared on personal stationary and sent at the Town Council member's personal expense.

# F. Council Notification of Significant Incidents

The Town Manager will coordinate the notification to Town Council of major crime, fire, or other incidents in the Town. This may be accomplished by telephone, pager, fax or any other electronic means.

# XIX. COUNCIL/STAFF RELATIONS

#### A. General

- 1. There shall be mutual respect from both staff and Town Council members of their respective roles and responsibilities.
- 2. The Town Council acknowledges and supports the Town Council/Manager form of government. Town staff shall acknowledge the Town Council's role as policy makers and the Town Council shall acknowledge the Town Manager's role as responsible for administering the Town Council's policies.
- 3. If a Town Council member requests staff research on any issue requiring over eight hours of staff work without first seeking approval of the entire Town Council at a public meeting, then the Town Council member shall be notified by the Town Manager.
- 4. No Town Council member shall request a written legal opinion from the Town Attorney without first seeking direction from the Town Council at a public meeting, which may include an executive session except requests for conflict of interest.
- 5. Information requested by a Town Council member generally will be shared with the entire Town Council.

# **B.** Litigation

When a claim is made or a lawsuit is filed against the Town and/or an officer, official or employee, it is critically important that communications be conducted in a manner that protects the Town's interest and privileges and guards against inadvertent violation of conflict of interest and/or open meeting law.

To that end, when a claim is made or a lawsuit has been filed against the Town, individual Town Council members should not communicate directly with any Town staff member regarding the litigation.

- A Town Council member who wishes to obtain information concerning the status of the litigation is authorized to discuss the inquiry with the Town Attorney. The Town Attorney may request that the question or concern be submitted in writing. In regard to case status, the Town Attorney will obtain current information, either from defense counsel or from Town records and/or staff. The information will be provided, generally by e-mail, to all members of the Town Council.
- 2. A Town Council member who has questions about the handling or a claim or lawsuit, or the involvement of one or more staff members in the litigation, is similarly authorized to discuss the inquiry with the Town Attorney, who may request that the question or concern be submitted in writing. The Town Attorney will review the question or concern, and will recommend one of the following options to the Town Council:

- a. The Town Attorney undertakes an investigation of the matter. Such an investigation might include, but not be limited to:
  - i. Review of documents relating to the matter;
  - ii. Conference with the attorney(s) representing the Town in the matter;
  - iii. Interview(s) of employees who were involved in the matter that gave rise to the lawsuit, or who may be called upon to participate in the lawsuit, whether by deposition, direct testimony, or otherwise; and
  - iv. Such other steps as the Town Attorney deems reasonably necessary to carry out the investigation.
- b. The Town Attorney refer the matter to an independent third party for investigation; or
- c. The Town Attorney may respond directly to the inquiry.
- 3. After determining which option is most appropriate to the specific circumstances, the Town Attorney will recommend that option to the Town Council in writing. Upon receiving direction from the Town Council, the Town Attorney will take the steps necessary to investigate or otherwise respond to the matter, and provide the Town Council with an approximate date by which the Town Council will be informed of the outcome of the investigation, if any.
- 4. If any Town Council member is not satisfied with the action taken by the Town Attorney, the Town Council member may request that the Mayor schedule the matter for discussion by the Town Council (in executive session, if appropriate).
- 5. When the investigation, if any, has been concluded, a summary will be provided to the Town Council.

# C. Personnel Investigations by the Town Attorney

From time to time questions may arise concerning whether certain procedural matters have been handled appropriately by Town staff. Because of the potential seriousness of such questions, the following process shall be followed when such questions or concerns arise:

 In the event of a concern (or suspicion) that a Town employee may have committed an act of misfeasance, malfeasance or nonfeasance (as further defined in this policy), or committed an illegal act, the concern or suspicion should be reported to the Town Attorney, who may request that the report be made in writing. All other personnel matters are subject to investigation and disciplinary action, where warranted, as provided in the Town's Employee Handbook.

- 2. After reviewing the allegation, suspicion or concern, the Town Attorney will recommend one of the following options to the Town Council:
  - a. That the Town Attorney undertake an investigation of the allegation, suspicion or concern. Such an investigation might include, but not be limited to:
    - Interviews of the staff member suspected of mishandling a matter, as well as other staff members who are aware of the matter;
    - ii. Review of any documents relating to the allegation; and
    - iii. Such other steps as the Town Attorney deems reasonably necessary to carry out such an investigation.
  - b. That the matter be referred to the Town Manager's Office for investigation by that office (for example, when the allegation concerns a non-managerial employee, it may be appropriate for the employee's director to undertake the investigation, at least in the first instance);
  - c. That the matter be referred to an independent third party for investigation; or
  - d. That the Town Attorney responds directly to the allegation (where investigation is required).
- 3. After determining which option is most appropriate to the specific circumstances, the Town Attorney will recommend that option to the Town Council in writing. Upon receiving direction from the Town Council, the Town Attorney will take the steps necessary to investigate or otherwise respond to the matter, and provide Town Council with an approximate date by which the Town Council will be informed of the outcome of the investigation, if any.
- 4. If any Town Council member is not satisfied with the action taken by the Town Attorney, the Town Council member may request that the Mayor schedule the matter for discussion by the Town Council (in executive session, if appropriate).
- 5. When the investigation, if any, has been concluded, a summary will be provided to the Town Council.

As used in this policy:

"Malfeasance" means wrongful conduct that the person has no legal right to do, and which affects, interrupts or interferes with performance of official duty.

"Misfeasance" means the improper performance of some act which the person may do, or obligated to do, lawfully.

"Nonfeasance" means the knowing failure to perform an act which ought to be performed, omission to perform a required duty at all, or total neglect of duty which is required by law.

# XX. COUNCIL RELATIONS WITH OTHER COMMITTEES/GROUPS

- 1. Individual Town Council members shall have the right to attend commission or board meetings but shall not speak or become involved in the meeting discussion unless the Town Council member is the appointed liaison to that commission or board (meaning the Town Council member may not participate in the ongoing dialogue of the commission or board). Town Council members are allowed to address the commission or board as a citizen during public comment. If a Town Council member appears before a commission or board as a citizen, comments made must be relative to the issue being discussed and may not use their position as a Town Council member in making comments.
- 2. If a member of the Town Council appears before another government agency or organization to give a statement on an issue affecting the Town, the Town Council member should first include the majority position and opinion of the Town Council. Personal opinions and comments may be expressed only if the Town Council member clarifies that the statements do not represent the position of the Town Council.

# **Revision History**

Resolution 270-02	January 16, 2002	Adoption
Resolution 734-08	May 7, 2008	Public Comment Committee Appointments
Resolution 816-09	December 16, 2009	Various Amendments
Resolution 860-10	November 3, 2010	Tie Votes
Resolution 938-13	April 17, 2013	Committee Appointments
Resolution 971-13	December 4, 2013	Committee Appointments
Resolution 1052-15	May 20, 2015	Meeting Start Time Agenda Format
Resolution 1067-15	August 5, 2015	Litigation
Resolution 1066-15	September 2, 2015	Personnel Investigations



Requesting Department

**Development Services** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: BRETT BURNINGHAM, PLANNING ADMINISTRATOR, STEVEN

**ESTER, PLANNER I** 

**RE:** Public Hearing and possible action on Ordinance 676-18, "Queen

Creek Station Phase I: Rezone (Case P18-0027), Site Plan (Case P18-0029), and Conditional Use Permit (Case P18-0026)", a request

by Kelly Hayes (Kaidence Group) to rezone from R1-43 to C-2

(General Commercial) with Site Plan and Conditional Use Permit for a new multi-tenant shops building with a drive-thru restaurant on a 2.03 acre site located at the northeast corner of Ellsworth Loop Road

& Walnut Road.

DATE: September 5, 2018

#### PLANNING AND ZONING COMMISSION RECOMMENDATION:

The Planning & Zoning Commission recommended approval of "Queen Creek Station Phase I: Rezone (Case P18-0027), Site Plan (Case P18-0029), and Conditional Use Permit (Case P18-0026)" with a unanimous vote of 6-0 at the regularly scheduled meeting on August 8, 2018. Commissioner Sossaman was absent.

#### PROPOSED MOTION:

Move to approve Ordinance 676-18, "Queen Creek Station Phase I: Rezone (Case P18-0027), Site Plan (Case P18-0029), and Conditional Use Permit (Case P18-0026)", subject to the Conditions of Approval outlined in this report.

# **RELEVANT COUNCIL GOAL:**



#### **SUMMARY:**

This proposal consists of a request to rezone approximately 2 acres from R1-43 to C-2 (General Commercial) with approval of a Site Plan and Conditional Use Permit application for a new 7,337 square foot multi-tenant shops building with a drive-thru restaurant. The project site is located at the northeast corner of Ellsworth Loop Road and Walnut Road.

#### **HISTORY:**

May 31, 1990: The project site is incorporated into the Town of Queen

Creek with R1-43 zoning applied.

August 8, 2018: The Planning and Zoning Commission recommended

approval of Queen Creek Station Phase I: Rezone (Case P18-0027), Site Plan (Case P18-0029), and Conditional Use Permit (Case P18-0026) with a unanimous vote of 6-0.

#### **PROJECT INFORMATION:**

Project Name	Queen Creek Station Phase I
Site Location	NEC of Ellsworth Loop Road & Walnut Road
Current Zoning	R1-43 (Rural Estate District)
Proposed Zoning	C-2 (General Commercial)
General Plan Designation	Neighborhood
Surrounding Zoning Designations:	
North	C-1 (Shops at Terravella), C-2/PAD (Queen Creek Crossing)
South	R1-43 (Vacant Land)
East	R1-43 (Queen Creek Middle School)
West	R1-43 (Vacant Land)
Site Area	2.03 Acres
Parking Required	72

Parking Provided	72
Landscaping Required	15% (13,246 square feet)
Landscaping Provided	47.4% (41,869 square feet)
Building Square Footage	7,337
Building Height	26'-8" (allowed 48')
Lot Coverage (Allowed)	60%
Lot Coverage (Provided)	8.3%

#### **DISCUSSION:**

This proposal consists of a request to rezone 2.03 acres from R1-43 to C-2 (General Commercial) with approval of a Site Plan and Conditional Use Permit application for a new 7,337 square foot multi-tenant shop building with a drive-thru restaurant. The project site is located at the northeast corner of Ellsworth Loop Road & Walnut Road.

The current General Plan designation for this property is Neighborhood. The purpose of the Neighborhood district is to provide areas for commercial retail uses designed in scale with surrounding residential uses. To the northeast, the Shops at Terravella are developing under the Neighborhood designation. To the northwest, Queen Creek Crossing is designated as Commercial. The property to the west across Ellsworth Loop Road is shown as Urban on the General Plan Map. The remaining properties to the south and east of the project are shown Neighborhood. These proposed applications are in conformance with the existing General Plan designation of Neighborhood.

The subject property is zoned R1-43 (Rural Estate District). The vacant parcels to the south and west are also zoned R1-43. To the northeast, the Shops at Terravella are zoned C-1 (Light Commercial). To the northwest, Queen Creek Crossing is designated as C-2/PAD (General Commercial/Planned Area Development). The property to the east (Queen Creek Middle School) is zoned R1-43. The applicant is proposing to rezone the property to C-2 (General Commercial).

Queen Creek Station Phase I provides 47.4% (41,869 s.f.) of landscape coverage compared to the 15% required (13,246 s.f.) by the Town. The proposed landscape materials consist of a blend of drought tolerant plants and trees including Red Push Pistache, Fan Tex Ash, and Desert Willows. Screen walls provide buffering from vehicular traffic along Ellsworth Road and Walnut Road.

The applicant is also requesting Conditional Use Permit approval for one (1) in-vehicle service facility designed to be part of the multi-tenant shop building. The drive-thru is located along the project's western frontage on Ellsworth Loop Road. To reduce the visual impact, a four (4) foot tall screen wall spans the length of the drive-thru lane, and Red Push Pistache trees further buffer the frontage between the road and screen wall. All speaker boxes and menu boards are oriented to face away from any residential properties. A specific user has not been identified at this time.

With the proposed development's proximity to the Queenland Manor subdivision, there has been a specific emphasis on the site's design to accommodate the nearby neighborhood. The landscaping provided aims to create a buffer that efficiently and aesthetically shields activity from residents to the south east. A 3' parking screen wall on the east side along Ellsworth Road reduces the visual impact of the proposed parking. Further, the drive-thru is located on the west side of the building along Ellsworth Loop Road to completely separate the sight and noise associated with drive-thru type establishments from the Queenland Manor subdivision.

A total of 72 parking spaces are provided. 72 parking spaces are required by the Zoning Ordinance.

#### **DESIGN STANDARDS:**

Queen Creek Station Phase I demonstrates compliance with the following site design concepts within the Town's Design Standards Manual:

#### Site Design Concepts:

- Pedestrian Connectivity. The development is fully accessible by walking, bicycle, and vehicular travel through appropriate scaled sidewalks, streets, and driveways.
- Screen Walls. Along the Ellsworth Loop Road frontage, a four (4) foot screen wall sufficiently reduces the visual impact of the proposed drive-thru. All parking along Walnut Road and Ellsworth Road will be screened by a three (3) foot screen wall.

 Center Identification. A center identification feature is provided at the southwest corner of the site, and will feature the same building materials as the screen walls to create a sense of character for the overall development.

<u>Building Design</u>: The applicant has proposed a commercial development that meets the Town's Design standards by providing quality materials and architecturally pleasing building facades.

- Site Layout. The multi-tenant shop building is oriented to keep the drive-thru
  facing away from any neighboring residents. Tenants will have store frontage
  internal to the site, bolstering a sense of entry when in the development.
- Streetscape. Ellsworth Loop Road (west) frontage features Red Push Pistache street trees and a variety of shrubs planted in a 30' landscaping setback, while the Ellsworth Road (east) frontage incorporates Desert Willows, Palo Verdes, Chilean Mesquites, and shrubs in a 30' landscaping setback as well. The southern boundary of the site along Walnut Road uses a similar variety of plant materials in a 20' landscaping setback. Decorative pavers at the southern access point are arranged in an aesthetic circular design to delineate the entrance into the development and create character.
- Building Facades. The architecture uses elements from farm styles and contemporary agrarian design aesthetics. Building materials will consist of stucco, metal siding, brick, and timber canopies to shade the patio. The color palette includes rich earth tones that complement the landscape and surrounding Queen Creek environment.
- Access & Circulation. There is one access point off of Walnut Road and another
  access point off of Ellsworth Road. The drive-thru and parking lot layout are
  designed to promote efficient circulation, while also ensuring safety and overall
  functionality.

#### **ANALYSIS:**

#### **Conditional Use Permit Review:**

The subject property is zoned R1-43 (Rural Estate District), but the applicant is requesting a rezone to C-2 (General Commercial) to allow the proposed multi-tenant shop building and drive-thru. The proposed restaurant with a drive-thru is considered an "In-Vehicle Service Facility" according to Article 6.5 of the Town Zoning Ordinance. All "In-Vehicle Service Facilities" are subject to a Conditional Use Permit review procedure.

Conditional Uses are those land uses that may be desirable in a community, but may by their nature, require special site and design considerations in order to ensure that they are compatible with adjacent uses and community standards. The Planning Commission and ultimately the Town Council are charged with determining whether or not a proposed location is suitable for such uses. The purpose of the Conditional Use Permit is to have an additional tool to maintain development standards.

Conditional Use review in the Zoning Ordinance sets forth the following approval criteria for evaluating a proposed Conditional Use (as outlined in Article 3.5 of the Zoning Ordinance) Below is the criteria along with a response from the applicant:

. The proposed Conditional Use shall be in compliance with all regulations of the applicable zoning district, the provisions of Article 5 of this Ordinance, and any applicable performance standards as set forth in Article 6 of this Ordinance.

<u>Applicant Response</u>: The proposed development is in compliance with all regulations and standards of Article 5 and 6.

The proposed Conditional Use shall conform to the character of the neighborhood, within the same zoning district, in which it is located. In making such a determination, consideration shall be given to the location, type and height of buildings or structures and the type and extent of landscaping and screening on the site.

Applicant Response: The proposed development introduces convenience based services to the immediate surrounding neighborhood. Special considerations have been taken in developing the site plan and elevations in order to have minimal impact on the neighborhood. Considerations include: 1) Singles-story building; 2) Building located adjacent to Ellsworth Loop and furthest away from residences; 3) Large landscape setbacks along all street frontages; 4) Ample landscaping along all frontages; 5) Screenwall located along street frontages for additional screening; 6) Increased screenwall along the drive-thru (4') to screen the drive-thru from public view.

Adequate utilities, access roads, drainage, fire protection, and other necessary facilities shall be provided.

Applicant Response: As shown on our proposed site plan, grading & drainage plan and utility plans, the site will have adequate utilities, access roads, drainage, fire protection and other necessary facilities. Water and sewer will be provided from existing taps on Ellsworth Road. Dry utility providers have responded to our inquiries with available utilities and no conflicts. Public roads (Ellsworth Road, Ellsworth Loop Road and Walnut Road) have been constructed and curb cuts into the property have been constructed. Drainage will be handled on site via basins and dry wells. A new fire hydrant will be installed in front of the building in a parking lot landscape planter.

Adequate measures shall be taken to provide ingress and egress so designed as to minimize traffic hazards and to minimize traffic congestion on the public roads.

Applicant Response: Ingress and Egress to the site will be via two curb cuts - one on Ellsworth Road and one on Walnut Road. These curb cuts were constructed along with the extension of Ellsworth Road and the construction of Walnut Road. Special consideration was taken between the property owner and the Town of Queen Creek Traffic Engineer to ensure that the location of these curb cuts would minimize traffic congestion on public roads. In addition, the future of expansion Signal Butte Road and Meridian Road will further relieve congestion in the area.

The proposed use shall not be noxious or offensive by reason of vibration, noise, odor, dust, smoke or gas.

<u>Applicant Response</u>: No planned uses would be noxious or offensive by reason of vibration, noise, odor, dust, smoke or gas. The drive-thru ordering board will be placed on the west side of the site and far enough away from residences to create a noise nuisance.

The proposed use shall not be injurious to the use and enjoyment of the property in the immediate vicinity for the purposes already permitted nor substantially diminish or impair the property values within the neighborhood.

<u>Applicant Response</u>: The proposed use will enhance the neighborhood by providing convenient access to neighborhood oriented uses.

The establishment of the proposed use shall not impede the orderly development and improvement of surrounding property for uses permitted within the zoning district.

Applicant Response: The subject property is its own established parcel with fully improved roadways on three sides. Much of the infrastructure improvements in the immediately surrounding area are complete and therefor, the proposed use will not impede orderly development and improvement of surrounding property.

The establishment, maintenance, or operation of the proposed use shall not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

<u>Applicant Response</u>: The proposed use will be maintained and operated as a first-class neighborhood shopping center similar to others in the immediate surrounding area and will not be detrimental or endanger the public health, safety, morals, comfort, or general welfare.

The public interest and welfare supporting the proposed conditional use shall be sufficient to outweigh the individual interests which are adversely affected by the establishment of the proposed use.

<u>Applicant Response</u>: The proposed conditional use will provide convenient access to daily services for many in the surrounding area. Through preliminary neighborhood outreach, we have found that there is general support for the project.

The proposed uses appear to meet the above-listed approval criteria for evaluating a proposed conditional use, as outlined in Article 3.5 of the Zoning Ordinance.

In-Vehicle ("drive-through") service facilities, including are also subject to the following Performance Standards (as outlined in Article 6.5 of the Zoning Ordinance). Below is the criteria along with a response from the applicant:

. Pedestrian walkways should not intersect the drive-through drive aisles, but where they do, they shall have clear visibility, and they must be emphasized by enriched paving, such as products to similar to boomanite, stone, etc.

<u>Applicant Response</u>: As demonstrated on the site plan, pedestrian walkways do not intersect the drive-through drive aisle.

Drive-through aisles shall have a minimum twelve foot (12') width on curves and a minimum eleven foot (11') width on straight sections.

<u>Applicant Response</u>: As demonstrated on the site plan, the drive-through aisle is 12' wide. There are no curves on the drive-through.

All service areas, rest rooms, and ground mounted and roof mounted mechanical equipment shall be screened from view.

<u>Applicant Response</u>: As demonstrated on the site plan, all ground and roof mounted mechanical equipment is screened from view.

. Drive-through lanes for all restaurants shall provide at least 160 total feet of stacking distance (80 feet of stacking distance between pick-up windows and order-placing speakers, and at least 80 feet of stacking distance between orderplacing speakers and the entry to the drive-through lane). Distances shall be measured along the centerline of the drive-through lane.

Applicant Response: It is anticipated that this drive-through will serve a restaurant. The current queue length is 210'. The menu board will be placed so that there is at least 80' between the drive-through entrance and the menu board and a minimum of 80' between the menu board and the pick-up window.

Landscaping shall screen drive through or drive-in aisles from the public right-ofway and shall be used to minimize the visual impact or reader board signs and directional signs. Applicant Response: Trees have been placed 30' on center along the drive-thru and a 4' screenwall (increased from 3') has been placed along the drive-thru lane to screen the aisle and menu board from the public right-of-way.

The building shall be the main element of the overall site plan and parking shall be oriented on the side or rear of the site.

<u>Applicant Response</u>: The building is the main element of the overall site plan, placed adjacent to Ellsworth Loop Road.

Menu boards shall be a maximum of twenty-four (24) square feet, with a maximum height of five (5) feet, and shall not be placed adjacent to the public street.

<u>Applicant Response</u>: The menu board design will be no more than 24 square feet and no more than 5' in height. The menu board will be screened from public view by a 4' screen wall and strategically placed landscaping.

Drive-through uses within an integrated shopping center shall have an architectural style consistent with the theme established in the center. The architecture of any drive-through use must provide compatibility with surrounding uses in form, materials, colors, scale, etc. Structure plans shall have variation in depth and angle to create a variety and interest in its basic form and silhouette.

Applicant Response: Although this development is a single building, the intent is to continue the architectural theme through other properties under the same ownership at the intersection. The architecture of the building is intended to compliment the surrounding area by using a mixture of brick, stucco and metal to produce a modern farmhouse look.

Articulation of structure surface shall be encouraged through the use of opening and recesses, which create texture and shadow patterns. Structure entrances shall be well articulated and project a formal entrance through variation of architectural plane, pavement surface treatment and landscaping plaza. No drive-through aisles shall exit directly onto a public right-of-way. <u>Applicant Response</u>: The building architecture incorporates articulation on all four-sides to shadow patterns while the use of different materials - brick, stucco, and metal - create texture. The main entrance to the site is featured by using enhanced paving. Landscaping has been used to create a sense of arrival, the theming of which will be carried through to the other properties owned at the intersection. The drive-through aisle does not exit directly onto the public right-of-way.

Additionally, the proposed uses appear to meet the above-listed Performance Standards, as outlined in Article 6.5 of the Zoning Ordinance.

**General Plan Review:** The General Plan Designation for this project is Neighborhood. The proposed project is in compliance with the General Plan.

**Zoning Review:** The current zoning designation of the property is R1-43 (Rural Estate District). The applicant is proposing to change the zoning to C-2 (General Commercial) to allow for the proposed multi-tenant shop building with a drive-thru. Under the C-2 zoning district, a drive-thru restaurant is permitted with approval of a Conditional Use Permit.

**Engineering Review:** The project has been reviewed by the Engineering and Traffic Engineering Divisions.

**Site Plan Review:** The Site Plan meets the Zoning Ordinance requirements for site planning and design. Adequate parking is provided with sufficient points of ingress and egress for vehicular traffic. Patrons will able to access the site via 2 entrances, with one off Walnut Road and another off Ellsworth Road. Efficient internal circulation and pedestrian safety are maintained through the overall site orientation.

**Building Elevation Review:** The proposed building elevations are in compliance with the Zoning Ordinance and Design Standards. Elements from farm styles and contemporary agrarian design aesthetics are incorporated into the building's appearance. Building materials will consist of stucco, metal siding, brick, and timber canopies to shade the patio. The color palette includes rich earth tones that complement the landscape and surrounding Queen Creek environment.

**Landscape / Open Space / Fence Plan Review:** With 47.4% open space provided, the proposed landscaping and open space meet the standards set forth in the Zoning Ordinance. The selected plant materials complement the character of the development and similar commercial centers nearby.

**Planning Commission Recommendation:** These cases were presented to the Planning Commission at their August 8, 2018 meeting. No comments were received from the public. The Planning Commission recommended approval of these cases with a unanimous vote of 6-0. Commissioner Sossaman was absent.

# **PUBLIC COMMENTS:**

A Neighborhood Meeting was held on May 24, 2018 at the Queen Creek Community Chambers with 1 attendee. The resident expressed concern over the possibility of increased traffic near the Queenland Manor neighborhood, and how the area experiences congestion currently.

Aside from the one resident at the neighborhood meeting, staff has received no other public input on the project.

#### **CONDITIONS OF APPROVAL:**

- 1. This project shall be developed in accordance with the plans attached to this case and all the provisions of the Zoning Ordinance applicable to this case.
- 2. Monument signage and building signage will be reviewed and approved under a separate permit.
- Mechanical equipment, electrical meter and service components, and similar utility devices whether ground level, wall mounted, or roof mounted, shall be screened from view.

#### **ATTACHMENTS:**

- 1. Aerial Photo Exhibit
- 2. General Plan Exhibit

- 3. Zoning Map Exhibit
- 4. Site Plan
- 5. Landscape Plan
- 6. Building Elevations
- 7. Neighborhood Meeting Minutes 5.24.18
- 8. Ordinance 676-18

# Attachment(s):

- 1. Aerial Exhibit
- 2. General Plan Exhibit
- 3. Zoning Map Exhibit
- 4. QC Station Phase I Site Plan
- 5. QC Station Phase I Landscape Plan
- 6. QC Station Phase I Building Elevations
- 7. Neighborhood Meeting Minutes 5.24.18
- 8. Ordinance 676-18

12.A.a

Case Numbers: P18-0026, P18-0027, P18-0029

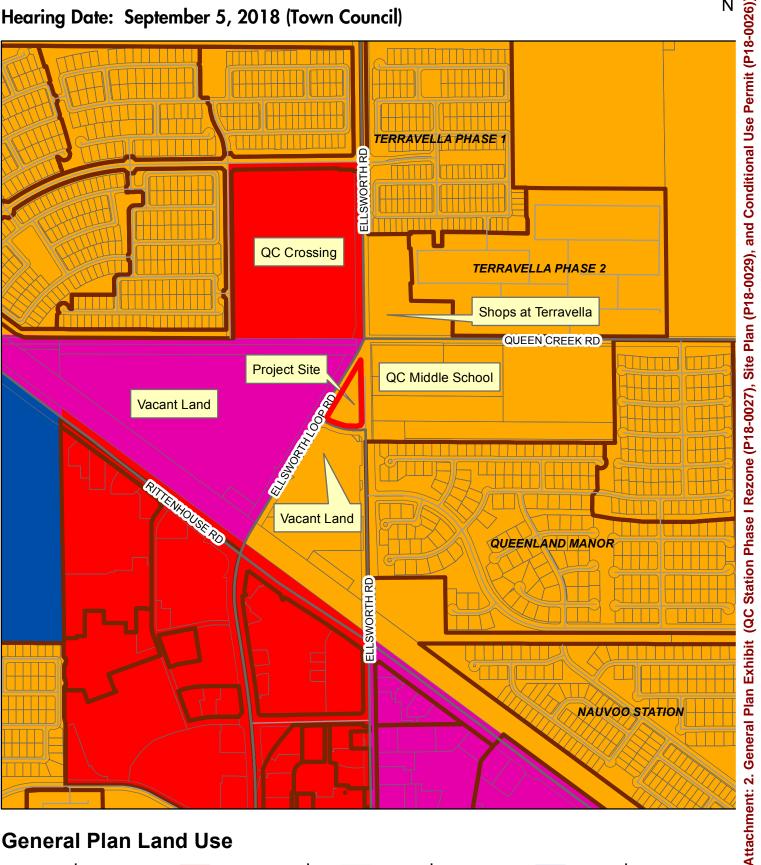
Hearing Date: September 5, 2018 (Town Council)





Case Numbers: P18-0026, P18-0027, P18-0029

Hearing Date: September 5, 2018 (Town Council)



# **General Plan Land Use**

Special District 1 Rural Commercial Industrial Neighborhood Special District 2 Urban Special District 3 Open Space

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Special District 4

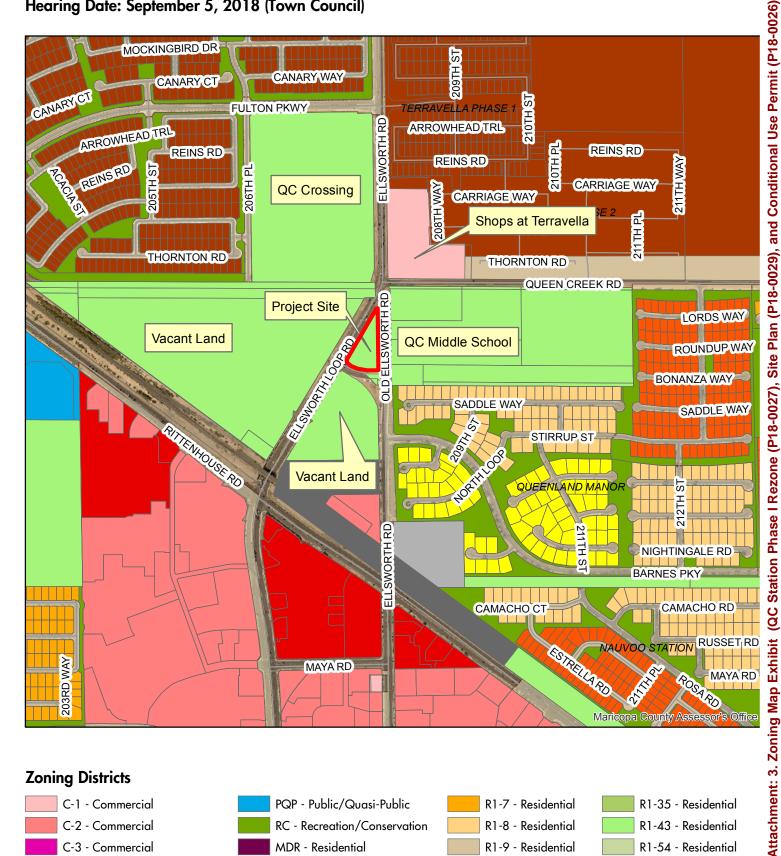
Project Name: Queen Creek Station Phase I Zoning Exhibit

Case Numbers: P18-0026, P18-0027, P18-0029

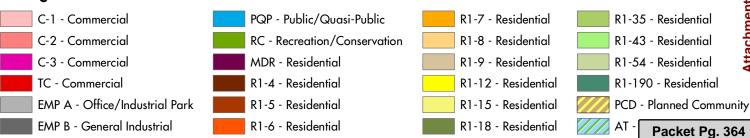
Hearing Date: September 5, 2018 (Town Council)

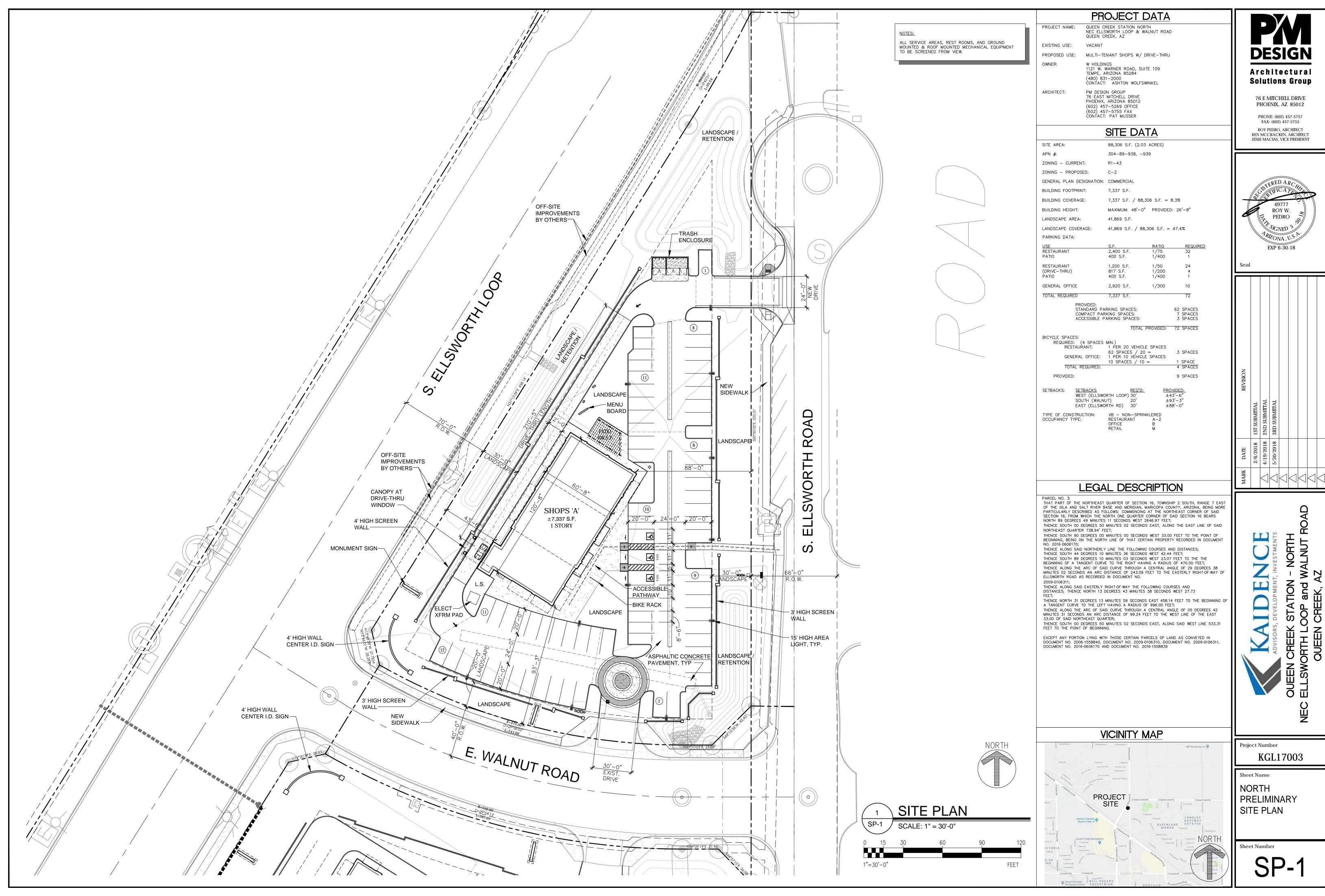


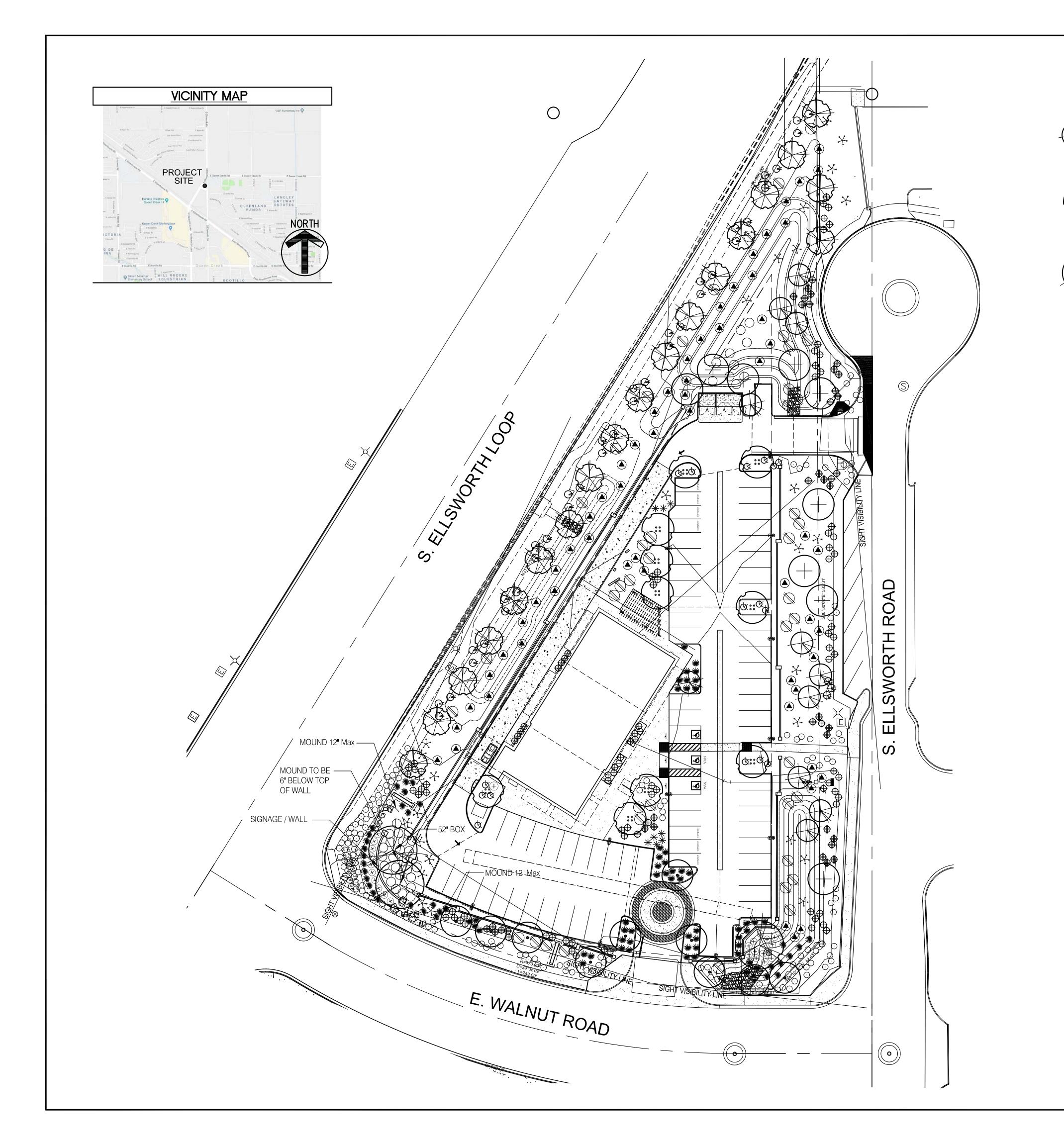












# LANDSCAPE LEGEND

PISTACHE 'RED-PUSH' - RED-PUSH PISTACHE 24" BOX (19)

CHILOPSIS LINEARIS 'LOIS ADAMS' SEEDLESS DESERT WILLOW 15 GALLON (18)

PROSOPIS CHILENSIS CHILEAN MESQUITE (THORNLESS) 15 GALLON (9)

FAN TEX ASH 24" BOX (10) CERCIDIUM PRAECOX SONORAN PALO VERDE

FRAXINUS VELUNTINA

36" BOX (MATCHING) (9) SPECIMEN TREE

IRONWOOD

5 GALLON (87)

MUHLENBERGIA SP. 'NASHVILLE' ★ NASHVILLE MUHLEY

52" BOX (MATCHING) (3)

LANTANA MONTEVIDENSIS ○ 'GOLD MOUND' 1 GALLON (151)

CALLIDENDRA CALIFORNICA RED BAJA FAIRY DUSTER 5 GALLON (36)

SENNA LINDHELMERIANA
LINDEIMERS SENNA 5 GALLON (41)

4'x4'x4' SURFACE SELECT GRANITE BOULDER MINIMUM 2500lbs EACH

AGAVE GEMINIFLORA \* TWIN FLOWER AGAVE 5 GALLON (8)

HESPERALOE PARVIFLORA RED YUCCA 5 GALLON (91)

LEUCOPHYLLUM 'RIO BRAVO' RIO BRAVO SAGE 5 GALLON (3)

LEUCOPHYLLUM LAEVIGATUM CHIHUHUAN SAGE 5 GALLON (16)

CAESALPINA PULCHERRIMA RED BIRD OF PARADISE 5 GALLON (28)

BOUGAINVILLEA TORCH GLOW

**MUHLENBERGIA RIGENS** DEER GRASS 5 GALLON (36)

EUPHORBIA RIGIDA **GOPHER PLANT** 5 GALLON (26)

CAESALPINA MEXICANA MEXICAN BIRD OF PARADISE 5 GALLON (45)

1/2" SCREENED EXPRESS ARMOR DECOMPOSED GRANITE 2" DEPTH IN ALL LANDSCAPE AREAS

> 1/2" SCREENED EXPRESS ARMOR DECOMPOSED GRANITE 2" DEPTH IN ALL LANDSCAPE AREAS

LANDSCAPE DATA: NET SITE AREA: 88,306 SQ.FT. LANDSCAPE AREA: 41,869 SQ.FT. (47%) BUILDING SQ.FT.: 7,337 SQ.FT.

ELLSWORTH LOOP TREES W/IN L/S SET BACK TREES REQUIRED: 18 TREES TREES PROVIDED: 18 TREES SHRUBS REQUIRED: 54 SHRUBS SHRUBS PROVIDED: 65 SHRUBS

WALNET LANE W/IN L/S SET BACK TREES REQUIRED: 8 TREES TREES PROVIDED: 8 TREES SHRUBS REQUIRED: 24 SHRUBS SHRUBS PROVIDED: 28 SHRUBS

ELLSWORTH ROAD TREES W/IN L/S SET BACK TREES REQUIRED: 16 TREES TREES PROVIDED: 16 TREES

SHRUBS PROVIDED: 56 SHRUBS

SHRUBS REQUIRED: 48 SHRUBS

# PROJECT DATA

QUEEN CREEK STATION NORTH NEC ELLSWORTH LOOP & WALNUT ROAD QUEEN CREEK, AZ PROJECT NAME:

EXISTING USE:

PROPOSED USE: MULTI-TENANT SHOPS W/ DRIVE-THRU W HOLDINGS 1121 W. WARNER ROAD, SUITE 109 OWNER: TEMPE, ARIZONA 85284

(480) 831-2000 CONTACT: ASHTON WOLFSWINKEL PM DESIGN GROUP 76 EAST MITCHELL DRIVE PHOENIX, ARIZONA 85012 ARCHITECT: (602) 457-5269 OFFICE (602) 457-5755 FAX CONTACT: PAT MUSSER

# SITE DATA

SITE AREA:	88,306 S.F. (2.03 A	CRES)	
APN #:	304-89-938, -939	)	
ZONING - CURRENT:	R1-43		
ZONING - PROPOSED:	C-2		
GENERAL PLAN DESIGNATION:	COMMERCIAL		
BUILDING FOOTPRINT:	7,337 S.F.		
BUILDING COVERAGE:	7,337 S.F. / 88,300	6 S.F. = 8.3%	
BUILDING HEIGHT:	MAXIMUM: 48'-0"	PROVIDED: 26'	-8"
LANDSCAPE AREA:	41,869 S.F.		
LANDSCAPE COVERAGE:	41,869 S.F. / 88,306 S.F. = 47.4%		
PARKING DATA:			
USE	S.F.	RATIO	REQUIRED
RESTAURANT	2,400 S.F.	1/75	32
PATIO	400 S.F.	1/400	1
RESTAURANT	1,200 S.F.	1/50	24

(DRIVE-THRU) 1/200 400 S.F. 1/400 GENERAL OFFICE 2,920 S.F. 1/300 TOTAL REQUIRED 7,337 S.F. PROVIDED: STANDARD PARKING SPACES: 62 SPACES

7 SPACES 3 SPACES COMPACT PARKING SPACES: ACCESSIBLE PARKING SPACES: TOTAL PROVIDED: 72 SPACES

BICYCLE SPACES: REQUIRED: (4 SPACES MIN.)
RESTAURANT: 1 PER 20 VEHICLE SPACES 62 SPACES / 20 =
GENERAL OFFICE: 1 PER 10 VEHICLE SPACES 3 SPACES 10 SPACES / 10 = TOTAL REQUIRED: 4 SPACES PROVIDED: 4 SPACES

SETBACKS: <u>SETBACKS</u> <u>REQ'D:</u> WEST (ELLSWORTH LOOP) 30' PROVIDED: ±43'-6" SOUTH (WALNUT) ±93'-3" EAST (ELLSWORTH RD) 30' ±88'-0" TYPE OF CONSTRUCTION: VB - NON-SPRINKLERED OCCUPANCY TYPE: RESTAURANT

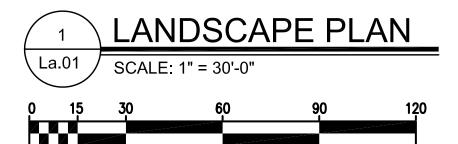
# LEGAL DESCRIPTION

PARCEL NO. 3:
THAT PART OF THE NORTHEAST QUARTER OF SECTION 16, TOWNSHIP 2 SOUTH, RANGE 7 EAST
OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE
PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID
SECTION 16, FROM WHICH THE NORTH ONE QUARTER CORNER OF SAID SECTION 16 BEARS
NORTH 89 DEGREES 49 MINUTES 11 SECONDS WEST 2646.97 FEET;
THENCE SOUTH 00 DEGREES 50 MINUTES 02 SECONDS EAST, ALONG THE EAST LINE OF SAID
NORTHEAST QUARTER 738.94' FEET;
THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST 33.00 FEET TO THE POINT OF
BEGINNING, BEING ON THE NORTH LINE OF THAT CERTAIN PROPERTY RECORDED IN DOCUMENT
NO. 2016-0606170; BEGINNING, BEING ON THE NORTH LINE OF THAT CERTAIN PROPERTY RECORDED IN DOCUMENT NO. 2016-0606170;
THENCE ALONG SAID NORTHERLY LINE THE FOLLOWING COURSES AND DISTANCES;
THENCE SOUTH 44 DEGREES 10 MINUTES 36 SECONDS WEST 42.44 FEET;
THENCE SOUTH 89 DEGREES 10 MINUTES 03 SECONDS WEST 23.07 FEET TO THE THE BEGINNING OF A TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 470.00 FEET;
THENCE ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 29 DEGREES 38 MINUTES 02 SECONDS AN ARC DISTANCE OF 243.09 FEET TO THE EASTERLY RIGHT-OF-WAY OF ELLSWORTH ROAD AS RECORDED IN DOCUMENT NO. 2009-0106311.

2009-0106311;
THENCE ALONG SAID EASTERLY RIGHT-OF-WAY THE FOLLOWING COURSES AND DISTANCES; THENCE NORTH 13 DEGREES 43 MINUTES 38 SECONDS WEST 27.73 THENCE NORTH 31 DEGREES 13 MINUTES 59 SECONDS EAST 458.14 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 996.00 FEET;
THENCE ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 05 DEGREES 42 MINUTES 31 SECONDS AN ARC DISTANCE OF 99.24 FEET TO THE WEST LINE OF THE EAST 33.00 OF SAID NORTHEAST QUARTER;
THENCE SOUTH 00 DEGREES 50 MINUTES 02 SECONDS EAST, ALONG SAID WEST LINE 533.31 FEET TO THE POINT OF BEGINNING.

EXCEPT ANY PORTION LYING WITH THOSE CERTAIN PARCELS OF LAND AS CONVEYED IN DOCUMENT NO. 2006-1558840, DOCUMENT NO. 2009-0106310, DOCUMENT NO. 2016-0606170 AND DOCUMENT NO. 2016-1558839





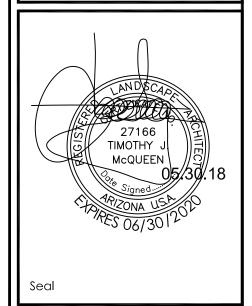
T.J. McQUEEN & ASSOCIATES, INC.

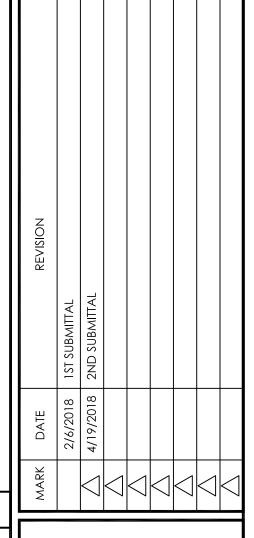
1"=30'-0"

LANDSCAPE ARCHITECTURE **URBAN DESIGN** SITE PLANNING 10450 N. 74th Street , Suite 120 ASSOCIATES Scottsdale, Arizona 85258 P. (602) 265-0320

EMAIL: timmcqueen@tjmla.net T.J. McQUEEN & ASSOC., INC. LANDSCAPE ARCHITECTURE (TJMLA) EXPRESSLY RESERVES ITS COMMON LAW COPYRIG & OTHER PROPERTY RIGHTS IN THESE PLANS, THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIE COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FI OBTAINING THE EXPRESSED WRITTEN PERMISSION & CONSENT FROM TJMLA.









Project Number

KGL17003 Sheet Name

NORTH PRELIMINARY LANDSCAPE PLAN

La.

Sheet Number

Packet Pg. 366















# Neighborhood Meeting Minutes: Queen Creek Station Phase I, May 24, 2018 @ 6:00 PM in the QC Community Chambers

Rezone (P18-0027)

Site Plan (P18-0029)

Conditional Use Permit (P18-0026)

A neighborhood meeting was conducted on May 24, 2018 at Community Chambers. There were no attendees at the meeting until approximately 6:20 pm when one neighbor, Chris Clark, joined the meeting. He expressed concerns over a potential increase in traffic in the area. He noted that traffic is already heavy in the mornings in this area due to the proximity to the school. He also expressed concerns over the fact that many drivers think that Ellsworth Rd. is a through street and often have to turn around. Chris was also hopeful that at some point a right on red (or a green arrow allowing for right turns) would be allowed at the intersection of Ellsworth Loop and Walnut to alleviate the back up of cars waiting to turn right at this intersection. Chris liked the elevations of the building. No other feedback via phone or email was provided by neighbors. The meeting adjourned at 6:35 pm.

#### **ORDINANCE 676-18**

AN ORDINANCE OF THE MAYOR AND TOWN COUNCIL OF THE TOWN OF QUEEN CREEK, ARIZONA, DECLARING AS PUBLIC RECORD THAT CERTAIN DOCUMENTS TITLED "QUEEN CREEK STATION PHASE I", LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBIT "A", AND ADOPTING EXHIBIT "A", IN ADDITION TO THE DOCUMENT TITLED "CONDITIONS OF APPROVAL" AND ATTACHED HERETO AS EXHIBIT "B", AND ADOPTING EXHIBIT B", THEREBY AMENDING THE OFFICIAL ZONING DISTRICT MAP FOR THE TOWN OF QUEEN CREEK, ARIZONA, PURSUANT TO ARTICLE 3, SECTION 3.4 OF THE ZONING ORDINANCE FOR THE TOWN OF QUEEN CREEK BY CHANGING THE ZONING DISTRICT CLASSIFICATION FROM RURAL ESTATE DISTRICT (R1-43) TO GENERAL COMMERCIAL (C-2) FOR APPROXIMATELY 2 ACRES. THIS PROPERTY IS GENERALY LOCATED AT THE NORTHEAST CORNER OF ELLSWORTH LOOP AND WALNUT ROADS. THE ASSOCIATED ZONING CASES FOR THE PROPERTY ARE P18-0027 (REZONE), P18-0029 (SITE PLAN) AND P18-0026 (CONDITIONAL USE PERMIT).

WHEREAS, Arizona Revised Statutes § 9-802 provides a procedure whereby a municipality may enact the provisions of a code or public record by reference, without setting forth such provisions, providing that the adopting ordinance is published in full; and

**WHEREAS,** Article 3, ZONING PROCEDURES, Section 3.4 ZONING AMENDMENT, establishes the authority and procedures for amending the Zoning Ordinance; and

WHEREAS, Article 4, ZONING, Section 4.2 Zoning District Maps, establishes the Zoning District Maps and states that the Zoning District Maps, along with all the notations, references, and other information shown thereon, are a part of this Ordinance and have the same force and effect as if said maps and all the notations, references, and other information shown thereon were all fully set forth or described in the zoning ordinance text; and,

**WHEREAS**, a Public Hearing on this ordinance was heard before the Planning and Zoning Commission on August 8, 2018; and

**WHEREAS**, the Planning and Zoning Commission voted 6-0 in favor of this zone change; and

**WHEREAS**, a Public Hearing on this ordinance was heard before the Town of Queen Creek Town Council on September 5, 2018;

# NOW THEREFORE BE IT ORDAINED BY THE MAYOR AND TOWN COUNCIL OF THE TOWN OF QUEEN CREEK, ARIZONA, AS FOLLOWS:

- Section 1. The documents attached hereto as Exhibits "A and B," titled Legal Description and Conditions of Approval are hereby declared to be public records;
- Section 2. One (1) paper copy and one (1) electronic copy of Exhibit "A" are ordered to remain on file with the Town Clerk;
- Section 3. If any section, subsection, clause, phrase or portion of this ordinance or any part of these amendments to the Queen Creek Zoning Map is for any reason held invalid or unconstitutional by the decision of any court or competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

**PASSED AND ADOPTED BY** the Mayor and Town Council of the Town of Queen Creek, Maricopa County, this 5<sup>th</sup> day of September, 2018.

FOR THE TOWN OF QUEEN CREEK:	ATTESTED TO:		
Gail Barney, Mayor	Jennifer F. Robinson, Town Clerk		
REVIEWED BY:	APPROVED AS TO FORM:		
John Kross, Town Manager	Dickinson Wright, PLLC		

#### **EXHIBIT A**

#### **LEGAL DESCRIPTION**

#### PARCEL NO. 3:

That part of the Northeast quarter of Section 16, Township 2 South, Range 7 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, being more particularly described as follows:

COMMENCING at the Northeast corner of said Section 16, from which the North one quarter corner of said Section 16 bears North 89 degrees 49 minutes 11 seconds West 2646.97 feet;

THÉNCE South 00 degrees 50 minutes 02 seconds East, along the East line of said Northeast quarter 738.94' feet;

THENCE South 90 degrees 00 minutes 00 seconds West 33.00 feet to the POINT OF BEGINNING;

THENCE along said Northerly line the following courses and distances;
THENCE South 44 degrees 10 minutes 36 seconds West 42.43 feet;
THENCE South 89 degrees 10 minutes 03 seconds West 23.07 feet to the
the beginning of a tangent curve to the right having a radius of 470.00 feet;
THENCE along the arc of said curve through a central angle of 29 degrees
38 minutes 02 seconds an arc distance of 243.09 feet to the Easterly
right—of—way of Ellsworth Road as recorded in Document No. 2009—0106311;
THENCE along said Easterly right—of—way the following courses and distances;
THENCE North 13 degrees 43 minutes 38 seconds West 27.73 feet;
THENCE North 31 degrees 13 minutes 59 seconds East 458.14 feet to the
beginning of a tangent curve to the left having a radius of 996.00 feet;
THENCE along the arc of said curve through a central angle of 05 degrees
42 minutes 31 seconds an arc distance of 99.24 feet to the West line of the
East 33.00 of said Northeast quarter;

THENCE South 00 degrees 50 minutes 02 seconds East, along said West line 533.31 feet to the Point of Beginning.

EXCEPT any portion lying with those certain parcels of land as conveyed in Document No. 2006—1558840, Document No. 2009—0106310, Document No. 2016—0606170 and Document No. 2006—1558839

# **EXHIBIT B**

# **Conditions of Approval**

- 1. This project shall be developed in accordance with the plans attached to this case and all the provisions of the Zoning Ordinance applicable to this case.
- 2. Monument signage and building signage will be reviewed and approved under a separate permit.
- 3. Mechanical equipment, electrical meter and service components, and similar utility devices whether ground level, wall mounted, or roof mounted, shall be screened from view.



#### Requesting Department

**Public Works** 

TO: HONORABLE MAYOR AND TOWN COUNCIL

THROUGH: JOHN KROSS, TOWN MANAGER, ICMA-CM

FROM: TROY WHITE, PUBLIC WORKS DIRECTOR

**RE:** Discussion and possible approval of Ordinance 675-18, Section 10-

10; a staff initiated amendment to Chapter 10 Health and Sanitation, of the Town Code to include Stormwater Management required by

federal and state law.

DATE: September 5, 2018

### **Staff Recommendation:**

Staff recommends approval of Ordinance 675-18, Section 10-10; an amendment to Chapter 10: Health and Sanitation, of the Town Code, to include Stormwater Management.

## Relevant Council Goal(s):



**Effective Government** 

### **Proposed Motion:**

Move to approve Ordinance 675-18, Section 10-10; an amendment to Chapter 10: Health and Sanitation, of the Town Code, to include Stormwater Management.

#### **Discussion**:

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Town by prohibiting the introduction of non-Stormwater drainages to the storm drainage system to the maximum extent practicable **as required by federal and state law**. This ordinance will also protect Waters of the U.S. (Sonoqui and Queen Creek Washes, which are considered tributaries to Waters of the U.S.) within the Town,

by improving the quality of the Stormwater runoff from urbanized areas to the Townowned municipal separate storm sewer system (MS4) through the implementation of best management practices (BMPs) by the Town and its citizens.

This ordinance ensures that the Town is compliant with its Arizona Pollutant Discharge and Elimination System (AZPDES) General Permit for Stormwater Discharges from the Town's MS4 System (Stormwater Permit) requirements by establishing methods for controlling the introduction of pollutants into the Town's MS4, as mandated by the Arizona Department of Environmental Quality (ADEQ) and the U.S. Environmental Protection Agency (EPA).

#### History:

On July 1, 2013, the Town received a letter from ADEQ identifying the Town as being located within an urbanized area according to the 2010 Census. Based on this notification, the Town was required to develop a Stormwater Management Plan (SWMP) describing how it will implement the six minimum control measures (40 CFR § 122.34).

On September 30, 2016, ADEQ released their AZPDES General Permit for Stormwater Discharges for Small MS4's, requiring permits to submit a Notice of Intent (NOI) to develop a SWMP and submit the NOI by March 31, 2017. In addition, the Town was required to submit their SWMP by September 30, 2017.

On March 27, 2017, the Town submitted to ADEQ the NOI and received permit coverage for the AZPDES requirements.

On September 30, 2017, the Town submitted the SWMP to ADEQ.

#### **Enforcement Requirements**

By September 30, 2018, the Town is required by ADEQ to adopt and implement ordinance(s) or other regulatory mechanism(s) that provide adequate enforcement

procedures that satisfy the requirements of the AZPDES permit to control pollutant discharges into our MS4.

In order to prohibit and eliminate illicit connections and discharges to the MS4, the Town must also have developed an Enforcement Response Plan that prioritizes and escalated enforcement for non-compliance and repeated non-compliance.

#### Ordinance Overview

The following is an overview of the pertinent sections of the Ordinance under review:

- Statutory Authorization
  - o Gives the Town authority to implement and enforce the program
- Violations, Notices and Penalties
  - o Gives the Town authority to impose fines if necessary
  - o Prior to fines, the Town will provide an informal verbal notice, then a formal written notice, then if no corrective action is taken, the issue will be turned over to Code Enforcement, which will follow the Town Code Enforcement process of further notices and finally a civil hearing officer, with applicable penalties.
- Illicit Non-Stormwater Drainage and Connections
  - o Prohibits Non-Stormwater Drainage (Only Rain in the Drain!)
  - o Allows some exemptions, such as water line flushing, irrigation water, landscape water, firefighting, and swimming pool drainage.
- Construction
  - o Gives the Town authority to inspect and regulate construction site runoff pollution controls and compliance.
- Post-construction
  - Gives the Town authority to inspect and regulate post-construction sites to require maintenance of the stormwater infrastructure, reduce erosion, and protect water quality.
- Industrial Activity

o Gives the Town authority to require industrial activity to prevent, control and reduce stormwater pollutants.

# · Spills

o Gives the Town authority to take necessary steps to ensure the discovery, containment and cleanup of hazardous and non-hazardous material spills that could impact the Town's MS4.

## **Fiscal Impact:**

There is no fiscal impact associated with the approval of Ordinance 675-18 Section 10-10; and the amendment to Chapter 10: Health and Sanitation, of the Town Code, to include Stormwater Management.

### **Alternatives**:

This ordinance is mandated by ADEQ pursuant to U.S. Environmental Protection Agency (EPA) 40 CFR § 122.34. The Town is only implementing the minimal requirements allowed per the AZPDES permit and the U.S. EPA regulations.

# Attachment(s):

a. Exhibit A - Ch.10 Health and Sanitation, Section 10-10

ARTICLE 10-10	Stormwater Quality Management and Discharge Control Ordinance
10-10-1	Introduction
10-10-2	Purpose
10-10-3	Definitions
10-10-4	Enforcement, Violations, Notices and Penalties
10-10-5	Applicability
10-10-6	Illicit Non-Stormwater Drainage and Connections
10-10-7	Illicit Non-Stormwater Drainage and Connections
10-10-8	Post-construction Stormwater Management
10-10-9	Industrial Activity Discharges
10-10-10	Requirement to Prevent, Control, and Reduce Stormwater Pollutants
	by the Use of Best Management Practices
10-10-11	Notification of Spills
10-10-12	Notification of Spills
10-10-13	Violations Deemed A Public Nuisance
10-10-14	Remedies Not Exclusive
10-10-15	Compatibility with Other Regulations
10-10-16	Severability
10-10-17	Disclaimer
10-10-18	Other Regulatory Requirements
10-10-19	Town Permits and Approvals

#### Section 10-10-1 Introduction

The Town of Queen Creek (Town) meets the minimum federal requirements for designation by the United States Environmental Protection Agency (EPA) as a small Municipal Separate Storm Sewer operator or MS4. As a small MS4, the Town is required by the Federal Water Pollution Control Act of 1972, 33 U.S.C. Sec. 1251 et seq. commonly known as the "Clean Water Act" (as amended), to implement and enforce a program to improve to the maximum extent practicable the quality of Stormwater in the Town's Stormwater conveyance system.

#### A. Statutory Authorization

The Town may enact a Stormwater ordinance pursuant to A.R.S. §§ 11-251.66 and 49-371. The Town, as an MS4 under Phase II of the National Pollutant Discharge Elimination System (NPDES) Stormwater program of the EPA, is empowered to regulate Stormwater by the authority of the Clean Water Act.

#### B. Title

This ordinance shall be known as the "Town of Queen Creek Stormwater Quality Management and Discharge Control Ordinance."

### C. Required Permit for Town

This ordinance ensures that the Town is compliant with its Arizona Pollutant Discharge and Elimination System (AZPDES) General Permit for Stormwater Discharges from Small Separate Storm Sewer Systems (Stormwater Permit) requirements by establishing methods for controlling the introduction of pollutants into the Town's MS4.

The Town's Stormwater Permit and federal regulations (40 CFR 122.34) require the Town to implement and maintain six minimum control measures (MCMs). They are:

- 1. Public education and outreach on Stormwater impacts;
- 2. Public involvement and participation;
- 3. Illicit drainage detection and elimination;
- 4. Construction site Stormwater runoff control;
- 5. Post-construction Stormwater management in new development and redevelopment;
- 6. Pollution prevention/good housekeeping for municipal operations.

This ordinance addresses the Stormwater Permit requirements for MCMs three, four and five. MCMs one, two, and six are related to the Town's Stormwater Management Plan and addressed therein.

#### Section 10-10-2 Purpose

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Town by prohibiting the introduction of non-Stormwater drainages to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance will also protect Waters of the U.S. (as defined herein) within the Town by improving the quality of the Stormwater runoff from urbanized areas to the Town-owned MS4 system by implementing best management practices (BMPs) by the Town and its citizens.

The objectives of this ordinance are:

- A. To regulate the contribution of pollutants to the Town MS4 by Stormwater drainage in urbanized areas by any user.
- B. To prohibit illicit connections and drainages to the Town MS4.
- C. To establish legal authority to carry out all inspection, surveillance, monitoring, and enforcement procedures necessary to ensure compliance with the Stormwater Permit.

#### Section 10-10-3 Definitions

For the purposes of this ordinance, the following shall mean:

- A. "ADEQ" means the Arizona Department of Environmental Quality.
- B. **"Administrator"** means the Town Manager of the Town, or his designee or designees, who shall represent the Town in the administration of this Article.

- C. "AZPDES" means the Arizona Pollutant Discharge Elimination System program as adopted under section 402(b) of the Clean Water Act.
- D. "AZPDES Permit" means a permit issued by the Arizona Department of Environmental Quality pursuant to 33 U.S.C. § 1342(b) that authorizes the discharge of pollutants to Waters of the U.S.
- E. "Best Management Practices" or "BMPs" means schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, other management practices to prevent or reduce the introduction of pollutants directly or indirectly to the Town MS4 or Storm Drainage Systems connected to the MS4 and the prohibition of specific activities, practices, and procedures and such other provisions as the Enforcement Officer determines appropriate for the control of pollutants. BMPs also include treatment practices, operating procedures, and practices to control the following; site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.
- F. "Civil Hearing Officer" a Civil Hearing Officer shall be appointed by the Town Manager and may hear all civil code infractions and make such orders as may be proper and necessary to dispose of such cases. Such cases shall be heard without a jury. The Civil Hearing Officer shall adopt such local rules of procedure as may be necessary to implement the hearing of civil code infraction cases. The Civil Hearing Officer shall be the person with authority to hear complaints related to violations and to issue penalties for violations of Chapter 10, Health and Sanitation and for violations of the Zoning Ordinance."
- G. "Clean Water Act" means the Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.
- H. "CFR" means Code of Federal Regulations.
- "Construction Activity" means activities subject to NPDES and/or AZPDES
  Construction Permits. These include construction projects resulting in land disturbance
  of one acre or more. Such activities include but are not limited to clearing and grubbing,
  grading, excavating, and demolition.
- J. "Discharge" means any addition of any pollutant to navigable waters from any point source.
- K. "Disturbance" means the result of altering soil from its native or stabilized condition thereby rendering it subject to movement or erosion by water to potentially become, or becoming a pollutant in site Stormwater runoff; also means soil disturbance.
- L. "Drainage System" means all facilities and natural features used for the movement of Stormwater through and from a drainage area, including, but not limited to, any and all of the following: conduits; pipes and appurtenant features; channels; ditches; flumes; culverts; streets; swales; gutters as well as all watercourses, water bodies, and wetlands.
- M. **"EPA"** means the United States Environmental Protection Agency.

- N. **"Erosion"** means the wearing away of land surface by water or wind that occurs from weather or runoff, but is often intensified by human activity.
- O. "Enforcement Officer" means any person, who is either an employee, agent or independent contractor, authorized by the Town Manager to administer, implement and enforce the provisions of this ordinance and who has authority to enforce the Town of Queen Creek rules, regulations, resolutions and ordinances. The "Enforcement Officer" may include more than one person including a civil hearing officer acting in compliance with A.R.S. § 9-500.21.
- P. **"Facility"** means any land, building, installation, structure, equipment, device, conveyance, area, source, activity or practice from which there is, or with reasonable probability may be, the introduction of Stormwater to the Town MS4 or Storm Drainage Systems connected to the MS4.
- Q. "Hazardous Materials" means any material, including any substance, waste, or combination thereof, that because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- R. "Illegal Drainage" means any direct or indirect non-Stormwater drainage to the County MS4 or a Storm Drainage System connected to the MS4, except as exempted in Section 10.9.6 this ordinance.
- S. "Illicit Connection" means either of the following:
  - 1. Any drain or conveyance, whether on the surface or subsurface that allows illegal drainage to enter any Storm Drainage System including but not limited to any conveyances that allow any non-Stormwater drainage including sewage, process wastewater, and wash water to enter the Town MS4 or any Storm Drainage System and any connections to the Town MS4 or any Storm Drainage System from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency, or
  - Any drain or conveyance connected from a commercial or industrial land use to the Town MS4 or any Storm Drainage System that has not been documented in plans, maps, or equivalent records and approved by an authorized regulatory or enforcement agency.
- T. "Illicit Discharge" means any discharge to an MS4 that is not composed entirely of Stormwater, except discharges pursuant to an NPDES permit (other than the NPDES Stormwater Permit) and discharges resulting from fire fighting activities.
- U. "Impervious Surface" means a surface that has been compacted or covered with a layer of material so that it is resistant to infiltration by water. It includes semi-pervious surfaces such as compacted clayey soils, as well as most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar surfaces. "Net Increase of

- Impervious Surface" refers to the difference between the existing impervious coverage and the total impervious surface proposed.
- V. "Industrial Activity" means activities subject to NPDES Industrial Stormwater Permits as defined in 40 CFR, Section 122.26 (b) (14).
- W. "Urbanized Area" means the area depicted by the most recent U.S. Census published "urbanized" area (UA) map and as may be identified by future Decennial Census.
- X. "Land Disturbance" means soil disturbance or any site disturbance.
- Y. "Land Surveyor" means a land surveyor licensed to practice land surveying in the State of Arizona.
- Z. **"Maintenance"** means the action taken to restore or preserve the as-built functional design of any facility or system.
- AA. "Municipal Separate Storm Sewer System" or "MS4" means the system of conveyances (including sidewalks, roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, natural conveyances or storm drains) owned or operated by the Town and designed or used for collecting or conveying Stormwater, and that is not used for collecting or conveying sewage. Also the Town MS4.
- BB. "National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit" means a permit issued by the EPA, or by a State under authority delegated pursuant to 33 U.S.C. § 1342(b), that authorizes the discharge of pollutants to Waters of the U.S., whether the permit is applicable on an individual, group, or general area-wide basis.
- CC. "Non-Stormwater Drainage" means any drainage to the County MS4 or a Storm Drainage System that is not composed entirely of Stormwater.
- DD. **"Nuisance"** means the unreasonable or unlawful use of real or personal property that may obstruct or injure the right of another or the public and producing such material annoyance, inconvenience, discomfort, or hurt, that the Enforcement Officer presumes such use will result in damage. This definition includes the conditions listed in A.R.S. 36-601 as public nuisances dangerous to public health.
- EE. "Operator" means an operator of a construction site, such as the developer, is one who maintains overall operational control over construction plans and specifications, including the ability to change these plans and specifications. An operator can also be one who maintains day-to-day operational control over activities that will ensure compliance with the Stormwater Pollution Prevention Plan (SWPPP), such as the general contractor or subcontractor.
- FF. "Outfall" means a point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two MS4s or pipes, tunnels or other conveyances

- that connect segments of the same stream of other waters of the United States and are used to convey waters of the United States.
- GG. "Owner" - means the person, persons, or entity whose name appears on the title or deed to the subject property or properties.
- HH. "Permit" – means a written permit to operate or discharge, issued by the Town of Queen Creek or other regulatory authority.
- "Permittee" means the person, agency or entity authorized to conduct the work II. specified in accordance with the conditions of the Stormwater permit(s) and as described in the application, approved drawings, plans, and other documents on file with the Town.
- JJ. "Person" - means any individual, organization, public or private corporation or other entity recognized by law, company, partnership, firm, association or society of persons, the Federal Government and any of its departments or agencies, or the State and any of its departments or agencies, or political subdivisions.
- KK. "Pollutant" - means any agent introduced to Stormwater or non-Stormwater through human activity that may cause, potentially cause, or contribute to the degradation of water quality. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordnances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; dredged spoil, rock, sand or silt; and noxious or offensive matter of any kind.
- LL. "Post-construction" - means, for purposes of this ordinance, that regulated category of construction for new developments and redevelopments that results in the establishment of permanent Stormwater pollution prevention devices, or structural BMPs, built in compliance to the Town's design standards and also includes long-term operations and maintenance (O&M) programs, or non-structural BMPs, to be permanently associated with the Stormwater pollution devices or controls at the new development upon completion of the land disturbing activity.
- MM. "Premises" - means any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips.
- NN. "Redevelopment" - Projects that alter the "footprint" of an existing site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. Redevelopment projects do not include such activities as exterior remodeling, which would not be expected to cause adverse Stormwater quality impacts and offer no new opportunity for Stormwater controls.
- 00. "Sewage" - means wastes from toilets, baths, sinks, lavatories, laundries, and other plumbing fixtures in residences, institutions, public and business buildings, mobile homes, watercraft, and other places of human habitation, employment, or recreation.

- PP. "Storm Drainage System" means public and private drainage facilities other than sanitary sewers within the urbanized area of the Town by which Stormwater is collected and/or conveyed to the Town MS4, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.
- QQ. **"Stormwater"** means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.
- RR. "Stormwater Management Plan" or "SWMP" means a document that describes the BMPs and activities and measures to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions and measures to eliminate or reduce the introduction of pollutants to Stormwater, the Town MS4, or Storm Drainage Systems connected to the MS4 to the maximum extent practicable (MEP).
- SS. "Stormwater Pollution Prevention Plan" or "SWPPP" means the Stormwater Pollution Prevention Plan associated with the permit for a site.
- TT. "Town" means the Town of Queen Creek, Arizona.
- UU. "Urbanized Area" means a portion of the Town that has a population density of at least 1,000 people per square mile and/or meets other criteria set by the U.S. Bureau of Census in the latest Decennial Census.
- VV. "Wastewater" means liquid and water-carried industrial waste and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are conveyed to the Town collector system and publicly owned treatment works.
- WW. "Waters of the U.S." As defined in 33 CFR 328.3(a) and 40 CFR 230.3(s).

#### Section 10-10-4 Enforcement, Violations, Notices and Penalties

- A. Responsibility for Administration
  - The Enforcement Officer, acting through and designated by the Town Manager, shall administer, implement and enforce the provisions of this ordinance involving Stormwater. The Enforcement Officer may enforce the provisions of this ordinance when reasonable cause exists to believe that any person has violated or is in violation of any provision of this ordinance.
  - 2. The Administrator or his designee or designees represent the Town in the administration of this ordinance.
- B. Violations, Notices and Penalties of General Applicability
  - 1. Except as otherwise specifically provided, civil offenses shall be punished by imposition of a civil penalty in the amount of \$250.00 for the first offense; \$500.00 for a second offense within a 12-month period, and \$2,000.00 for a third offense

- within said 12-month period. For purposes of calculating the 12-month period, such period shall begin on the date of the first offense.
- Civil matters shall be tried before the civil hearing officer in accordance with the provisions of Chapter 5, Section 7 of the Town code. When appropriate, civil matters may also be tried before a justice of the peace or a county hearing officer.
- C. This ordinance shall not apply during a period of public emergency as declared by the Town, state authorities or federal authorities, or if the operation is directed by a peace officer or other public authority.

### Section 10-10-5 Applicability

This ordinance applies to all urbanized areas of the Town, as defined herein and depicted by the most recent U.S. Census published "urbanized" area (UA) map and as may be identified by future Decennial Census.

This ordinance applies to all water entering the Town MS4 or Storm Drainage System connected to the MS4 in the urbanized areas of the Town and generated on any developed and undeveloped lands unless explicitly exempted in this ordinance.

#### Section 10-10-6 Illicit Non-Stormwater Drainage and Connections

- A. <u>Prohibition of Non-Stormwater Drainage</u>
  - 1. No person shall throw, drain, or otherwise introduce, cause, or allow others under its or their control to throw, drain, or otherwise introduce into the Town MS4 or into the Storm Drainage System connected to the Town MS4 any pollutants or waters containing any pollutants, other than Stormwater.
  - 2. The commencement, conduct or continuance of any illegal drainage to the Town MS4 or any Storm Drainage System is prohibited except as described as follows:
    - a. The following types of drainage are exempt from prohibitions established by this ordinance:
      - i. Water line flushing, irrigation water, landscape irrigation, lawn watering, return flow from irrigated agriculture, diverted stream flows, rising groundwater, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, drainages from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, individual residential car washing, flows from riparian habitats and wetlands, de-chlorinated swimming pool drainages, and street wash water.
      - ii. Drainage or flow from firefighting (including fire fighting training).
      - iii. Drainage associated with dye testing (e.g., for leak detection).

- iv. Other drainages specified in writing by the Enforcement Officer as being necessary to protect public health and safety.
- b. This drainage prohibition shall not apply to any non-Stormwater drainage permitted under an NPDES permit, waiver, or waste drainage order issued to the discharger and administered under the authority of the EPA, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any drainage to a Storm Drainage System.
- c. The Administrator may evaluate and remove any of the above exemptions if it is determined that they are significant sources of pollutants pursuant to 40 CFR 122.34.b.3.ii.

#### B. Prohibition of Illicit Connections

- 1. The construction, use, maintenance or continued existence of illicit connections to the Town MS4 or any Storm Drainage System is prohibited.
- 2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- 3. A person is in violation of this ordinance if the person connects a line conveying non-Stormwater to the Town MS4, or allows such a connection to continue.
- 4. Illicit connections must be disconnected and redirected to an appropriate approved waste disposal system.
- 5. Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the Storm Sewer System, shall be located by the owner or occupant of that property upon receipt of written Notice of Violation from the Enforcement Officer requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be determined, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other drainage point be identified. Results of these investigations are to be documented and provided to the Enforcement Officer.

#### Section 10-10-7 Construction Site Stormwater Runoff Pollution Control

#### A. Introduction

1. Runoff from construction sites may be a major source of pollution and is subject to federal, state and local requirements to improve Stormwater quality. With few exceptions, these requirements include the development and implementation of a

SWPPP for every construction activity as defined herein within the urbanized areas of the Town. That SWPPP may be reviewed by the State. SWPPPs may be reviewed at the construction site by the Enforcement Officer. Stormwater treatment measures (BMPs) may be required along with inspections by the Town or State to determine compliance with the SWPPP and the installation and management of the BMPs.

2. In accordance with its own Stormwater Permit requiring it to reduce construction site Stormwater pollution in its urbanized area, the Town has established a Subdivision Ordinance and a companion Design Standards and Procedures Manual, which document the procedures and review process for construction site stormwater runoff control.

### B. <u>Construction Site Regulation</u>

- 1. An owner or operator who intends to disturb an area of land that is equal to or greater than one acre, or that is less than one acre but is part of a larger plan of development shall obtain permit coverage from the ADEQ. A copy of the Notice of Intent (NOI) to be bound by the State's general construction permit, including the number and date of application, or evidence of the State's construction permit obtained by the owner or operator, must be filed with the Enforcement Officer prior to the start of the land disturbance as required by ADEQ.
- 2. The SWPPP for the construction site is to remain at the site and is to be made available to the Enforcement Officer. At the start of and during construction the Enforcement Officer may inspect any site to determine that the SWPPP for the site is being followed and that the indicated BMPs have been properly installed and satisfactorily maintained. If the SWPPP has not been implemented and/or if the BMPs onsite have not been satisfactorily installed or maintained, the Department will notify the owner or operator of the deficiencies. If the owner or operator fails to satisfactorily address these issues within 7 days of notification of the deficiencies, a compliance order will be issued by the Enforcement Officer and a complaint shall be referred to the County Attorney as provided herein and in A.R.S.§ 49-261. The Enforcement Officer has the authority to issue a stop work order, seek an injunction to stop the work as provided herein, and pursue civil or criminal penalties.

### C. Exemptions

Coverage under a Town Stormwater approval for construction is not required for sites over one acre for:

- 1. Regular maintenance activities performed within the original line, grade or capacity of a facility.
- 2. Construction projects where the operator can prove that there is no reasonable probability that Stormwater can leave the site.
- 3. A site that qualifies for an erosivity waiver for activities in low-risk soil conditions.

- 4. A site already covered by an individual NPDES permit with Stormwater provisions.
- 5. Emergency construction activities required to protect public health and safety.

### D. Transfers of Approvals

An approval may be transferred by the submittal of a Town transfer of coverage form that includes assurances by the new owner that the approved SWPPP and BMP requirements will be met.

#### E. Termination of Coverage

Coverage under the construction approval will end when a Notice of Termination (NOT) is filed with the Town and an inspection by the Enforcement Officer has confirmed that the entire site has been stabilized and landscaping and paving complete (as described in the Design Standards and Procedures Manual).

#### F. Compliance Monitoring

- 1. Right of Entry for Inspections and Observations
  - a. Inspections shall be conducted in accordance with the rules and regulations provided in A.R.S. § 41-1009. An Enforcement Officer conducting an inspection shall, unless otherwise provided by law, present photo identification on entry of the premises, state the purpose of the inspection and the legal authority for conducting the inspection, disclose any applicable inspection fees, and allow the Owner, Operator, or an authorized representative to accompany the Enforcement Officer, except during confidential interviews.
  - b. If an Owner or Operator holding an approval has security measures in force that require proper identification and clearance before entry into its premises, the Owner or Operator shall make the necessary arrangements to allow the Enforcement Officer access to the premises.
  - c. Owners or Operators holding an approval or their designated representatives shall allow the Enforcement Officer ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES and/or AZPDES permit to discharge Stormwater, and to determine performance of any additional duties required by the approved plans or by applicable state and federal Stormwater regulations.
  - d. Any temporary or permanent obstruction to safe and easy access to the site or facility to be inspected and/or sampled shall be promptly removed by the owner or operator at the written or oral request of the Enforcement Officer and shall not be replaced. The costs of clearing such access shall be borne by the operator.

e. Unreasonable delay in allowing the Enforcement Officer access to an approved facility is a violation of this ordinance. A person who is the owner or operator of a facility with an NPDES or AZPDES permit to discharge Stormwater associated with industrial activity violates the permit terms if the person denies the Enforcement Officer reasonable access to the permitted facility for conducting any activity authorized or required by this ordinance.

#### 2. Search Warrants

a. If the Enforcement Officer has been refused access to the premises, then the Enforcement Officer may seek issuance of a search warrant from any court of competent jurisdiction in addition to issuing a compliance order, seeking an injunction, and assessing appropriate civil or criminal penalties under Title 49, Arizona Revised Statutes.

# Section 10-10-8 Post-construction Stormwater Management

#### A. Introduction

The goal of this post-construction Stormwater management program is to protect public safety and public infrastructure, reduce erosion on private properties and stream channels, and protect the quality of Waters of the U.S. to the maximum extent practicable. The goals are achieved by maintaining and/or restoring natural drainage patterns, minimizing grading and disturbance, and minimizing the extent of impervious cover, as well as encouraging the use of a variety of BMPs for reducing the pollutant loadings from newly developed and redeveloped sites. These goals will be accomplished by requirements to, among other things, reduce the magnitude and extent of impervious cover and site disturbance, remove pollutants from runoff prior to the introduction of Stormwater to the Town MS4, and promote effective operation and maintenance of all Stormwater facilities.

#### 1. Applicability

The Town will develop, implement, and enforce a program to address post-construction Stormwater runoff from new development and redevelopment projects that disturb one (1) or more acres of land (or less than one (1) acre if part of a common plan of development) that discharge into the Town's MS4. The post-construction requirements in this Section apply to permanent Stormwater management facilities, systems and/ or devices. Stormwater management during construction activities is regulated separately pursuant to Section 10-10-6 of this ordinance.

#### B. Objectives

In order to protect the health, safety and general welfare of the residents of the Town, as well as to protect, sustain and enhance the quality of the Waters of the U.S. in and adjacent to the Town, drainage and Stormwater management practices shall be utilized as directed herein to achieve the following objectives:

- Accommodate site development and redevelopment in a manner that protects public safety and that is consistent with federal and state water quality requirements and the requirements of the Phase II Stormwater permit for the Town.
- 2. Protect water quality to the maximum extent practicable by removing and/or treating pollutants prior to the introduction of Stormwater to the Town MS4 or any Storm Drainage System connected to the MS4 throughout the Town.
- 3. Promote effective long-term operation and maintenance of all permanent Stormwater management facilities.
- 4. Treat and release Stormwater as close to the source of runoff as possible using a minimum of structures and maximizing reliance on natural processes.
- 5. Address certain requirements of the Phase II Stormwater Permit regulations.
- 6. Reduce the environmental impacts of Stormwater pollution from existing developed sites undergoing redevelopment while encouraging development and redevelopment in urban areas and areas designated for growth.

### C. General Requirements

The management of Stormwater onsite, both during and upon completion of the land disturbances described above shall be accomplished in accordance with the standards and criteria of this ordinance and the requirements of the Town of Queen Creek Design Standards and Procedures Manual, the Queen Creek Subdivision Ordinance, and any applicable county floodplain regulations. The design of any temporary or permanent facilities and structures and the utilization of any natural drainage systems shall be in full compliance with this ordinance and any other applicable regulation.

#### D. Construction and Operation Responsibilities

1. "As Built" Plans. When construction is complete the applicant shall submit to the Department an actual "as built" plan for all Stormwater management facilities required per the approved Stormwater permit. The "as built" plan shall show all final design specifications for all permanent Stormwater facilities and if necessary shall be prepared and certified by a licensed professional engineer or land surveyor registered in the State of Arizona. The "as built" plan shall be based on an actual field survey. The "as built" plan shall be submitted to the Department for review and final inspection by the Department. Any performance and/or financial securities established for the project by the Department shall include requirements for submittal of "as built" plans.

#### E. Ownership and Maintenance

- 1. All Stormwater management facilities, systems and/or devices identified within an approved Stormwater permit shall be owned and maintained by one, or a combination of, the following entities:
  - a. An individual for his or her own on-lot Stormwater management facilities not constructed as part of a subdivision and/or land development plan.
  - b. Where individual on-lot Stormwater management facilities, systems and/ or devices are proposed in a subdivision or other development greater than one acre, the subdivision and/or land development plan and plat shall contain a note in a form satisfactory to the Department designating the entity responsible for operation and maintenance of the on-lot facilities consistent with an approved operation and maintenance plan.
  - c. An entity that owns or has a perpetual right to access the land on which the Stormwater management facilities, system and/ or devices are located. The operation and maintenance obligation runs with the land and is binding upon the initial grantees of each lot and his, her, or their heirs, administrators, successors or assigns. Stormwater management facilities, systems and/ or devices or the ownership of the land on which they are located may not be deeded or dedicated to the County or the Flood Control District.

## Section 10-10-10 Industrial Activity Discharges

- A. Submission of NOI or Other Proof of Compliance to the Town
  - 1. Any person subject to an industrial activity individual or general NPDES or AZPDES discharge permit, upon request, may be required to provide a copy in a form acceptable to the Administrator, prior to the allowing of discharges to the Town MS4.
  - 2. The owner or operator of a facility required to have an individual NPDES or AZPDES permit to discharge Stormwater associated with industrial activity shall obtain proof of the permit, or if under a general permit, a copy of the NOI.
  - Any person found owning or operating a facility or owning a site that is not exempt, that does not have an NPDES or AZPDES permit, and is discharging Stormwater associated with industrial activity within the Town MS4 may be reported to the EPA and/or the ADEQ.

# Section 10-10-10 Requirement to Prevent, Control, and Reduce Stormwater Pollutants by the Use of Best Management Practices

A. Any activity, operation, or facility that may cause or contribute to pollution or contamination of Stormwater that discharges to any Storm Drainage System connected to the Town MS4 must implement BMPs for managing Stormwater. The owner or operator of such activity, operation, site or facility shall provide, at their own expense, reasonable protection from accidental introduction of prohibited materials or other

- wastes into any Storm Drainage System using BMPs. These BMPs shall be part of SWPPP as necessary for compliance with requirements of the AZPDES permit.
- B. Any person responsible for a property or premise that is, or may be, the source of illegal non-Stormwater drainage as described in Section 10-10-6(A), may be required to implement, at said person's expense, additional BMPs to prevent the further drainage of pollutants.

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#### Section 10-10-11 **Notification of Spills**

- Α. Notwithstanding other requirements of law, as soon as any person responsible for a facility, site or operation, including construction sites, or responsible for emergency response for a facility, site or operation has information of any known or suspected release of materials that are resulting or may result in the illegal introduction of pollutants into a Storm Drainage System connected to the MS4 or the Town MS4 shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the Administrator in person, by phone, or by e-mail no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the Town within ten calendar days of the phone notice. If prohibited materials emanate from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the release and the actions taken to prevent its recurrence. Such records shall be retained for at least one year or as may otherwise be required by applicable state or federal law.
- B. Failure to provide notification of a release as provided above is a violation of this ordinance.

#### Section 10-10-12 **Compliance Monitoring**

The Town shall be permitted to enter and inspect property subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance.

- A. Inspections shall be conducted in accordance with the rules and regulations provided in A.R.S. 41-1009.
- B. If the owner or operator of a facility has security measures in force, which require proper identification and clearance before entry into its premises, the property owner shall make the necessary arrangements to allow access to representatives of the Town, including the Enforcement Officer.
- C. Any temporary or permanent obstruction to safe and easy access to the property to be inspected shall be promptly removed by the property owner at the written or oral request of the Town, including the Enforcement Officer, and shall not be replaced. The costs of such access shall be borne by the property owner.

#### Section 10-10-13 **Violations Deemed A Public Nuisance**

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In addition to the enforcement process and penalties provided herein, any condition caused or permitted to exist in violation of any of the provisions of this ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

#### Section 10-10-14 Remedies Not Exclusive

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the Town to seek cumulative remedies.

The Town may recover all attorneys' fees, court costs, and other expenses associated with enforcement of this ordinance, including monitoring expenses.

#### Section 10-10-15 Compatibility with Other Regulations

This ordinance is not intended to modify or repeal any other ordinance, rule, regulation, or other provision of law. The requirements of this ordinance are in addition to the requirements of any other ordinance, rule, regulation, or other provision of law, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation, or other provision of law, whichever provision is more restrictive or imposes higher protective standards of human health or the environment shall control.

# Section 10-10-16 Severability

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provision or application of this ordinance.

#### Section 10-10-17 Disclaimer

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore this ordinance does not intend or imply that compliance by any person will ensure that there will be no contamination, pollution, or unauthorized drainage of pollutants.

Neither submission of a plan or permit under the provisions herein, nor compliance with the provisions of this ordinance, shall relieve any person from responsibility for damage to any person or property otherwise imposed by law.

#### Section 10-10-18 Other Regulatory Requirements

Permits and approvals issued pursuant to this ordinance shall not relieve the applicant of the responsibility to comply with or to secure other required permits or approvals for activities regulated by any other applicable code, rule, regulation, act, statute or ordinance. This ordinance shall not preclude the inclusion in such other permit of more stringent requirements concerning regulation of Stormwater and erosion.

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# Section 10-10-19 Town Permits and Approvals

An application for any discretionary permits or approvals issued by the Town shall be accompanied by plans demonstrating how the development project will comply with the requirements of this ordinance. The permit or approval shall not be granted unless the decision maker determines that the development project complies with the applicable requirements of this ordinance. If a person applies for any one permit from the Town, that person is not relieved from the obligation to obtain any other applicable Town permit or permits.

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