JAMES BURGESS
Mayor
RITA BISHOP
Mayor Pro Tem/
Councilmember Place 1
TONY BOVINICH
Councilmember Place 2

JESSICA KUYKENDALL
Councilmember Place 3
GERONIMO HERNANDEZ
Councilmember Place 4
DREW WILSON
Councilmember Place 5

VENUS REGULAR COUNCIL MEETING

Venus Civic Center
210 S. Walnut Street
Venus, Texas 76084
Monday, April 10, 2023 at 7:00 PM

Page

1. Call to Order, Roll Call, Invocation, Pledge of Allegiance:

2. Announcements from Mayor:

Cell phones are to be turned off or placed on vibrate/silent only. No conversation or comment from the audience is permitted unless specifically called upon by the Mayor. Please remain respectfully quiet.

3. Citizen Public Comment Period:

Citizens may sign up before the meeting begins and will be allowed up to 3 minutes to address the Mayor and Council. The Mayor, Council members and staff members may not respond or converse with speakers during this time. The comments from the speaker must be in the form of a statement. By State law, no questions may be asked or answered for items not appearing on the agenda.

4. Consent Agenda:

All matters listed under consent agenda have been previously discussed, require little or no deliberation, or are routine by the council. If discussion is desired, then an item will be removed from the consent agenda and considered separately. Otherwise, approval of the consent agenda authorizes the City Administrator to implement each item in accordance with staff's recommendation.

4.1. Approval of meeting minutes for City Council regular meeting on March 13, 2023

4.2. Approval of meeting minutes for City Council Special called meeting on March 20, 2023.

4.3. Ratifying the payment of bills for the month of March 2023. 6 - 65

RG REVENUE & EXPENSE REPORT - 9108.pdf

FEBRUARY 2023 CC PAY REQUESTS.pdf

I make a motion to approve/deny the consent agenda as presented.

5. Proclamations:

5.1. Proclamation: Fentanyl Awareness Month. 66

National Fentanyl Prevention Awareness Day.pdf

6. Discussion and Consideration Items:

6.1. Discuss and consider un-tabling agenda item from March 13, 2023 directing staff to prepare a Resolution declaring the Mayor incompetent as that term is defined by Local Government Code Section 21.022 for Executive Session.

I make a motion to approve/deny un-tabling item and have in Executive Session.

6.2. Discuss, consider, receive updates regarding drainage issues at Bluestem Hills Subdivision including but not limited to citizens and councils request for information.

I make a motion to approve/deny _____.

6.3. Discuss and consider hiring an engineer to assess the drainage issues in Bluestem Hills subdivision and to outline a plan to fix the drainage issues.

I make a motion to approve/deny _____.

6.4. Discuss and consider the creation of a Parks and Recreation Board.

I make a motion to approve/deny directing staff to create an Ordinance creating the Parks and Recreation Board.

6.5. Discuss and consider creating a Road Repair List for the City of Venus that identifies the top five (5) problem roads within the City of Venus that require repair or maintenance.

I make a motion to approve/deny the creation of a Road Repair List for the City of Venus that identifies the top five (5) problem roads within the City of Venus that require repair or maintenance.

6.6. Discuss and consider directing staff to develop a Plan of Action in addressing repairs or maintenance concerning roads that are identified as problem roads.

I make a motion to direct staff to develop a Plan of Action in addressing repairs or maintenance concerning roads that are identified as problem roads.

6.7. Discuss and consider appointing qualified individual's to the Venus Community Service Development Corporation.

There is currently four (4) vacancies on the Board. Several applicants have submitted an application for the Board.

I make a motion to appoint _____ to the Venus Community Service Development Corporation pending outcome of background check.

I make a motion to appoint _____ to the Venus Community Service Development Corporation pending outcome of background check.

I make a motion to appoint _____ to the Venus Community Service Development Corporation pending outcome of background check.

I make a motion to appoint _____ to the Venus Community Service Development Corporation pending outcome of background check.

6.8. Discuss and consider Resolution electing to participate in the proposed Opioid settlements brought by the State of Texas and other Jurisdictions against Pharmaceutical Manufacturer, Allergan ("Manufacturers"), and three pharmacies, CVS, Walgreens and Walmart ("Pharmacies") for their roles in the National Opioid Crisis. 67 - 111

12-2023-04- Opioid Resolution.pdf

Settlement Allocation Term Sheet.pdf

I make a motion to approve/deny Resolution No. 12-2023-04.

6.9. Discuss and consider approval to proceed with the contract from Birkhoff, Hendricks & Carter, L.L.P. for the design of the new city water tower. 112 - 115

Venus Elevated Storage Tank Amendment No. 2.Executed.pdf

I make a motion to approve/deny entering into the contract

with Birkhoff, Hendricks & Carter, L.L.P. for the design of the new city water tower and authorizing the City Administrator to execute contract.

6.10. Discuss and consider the purchase of a 110' NXT Aerial Apparatus for the City of Venus Fire Department. 116 - 277

L221143 110' NXT RM Quint Specifications (1).pdf

NXT-110-Aerial.pdf

I make a motion to approve/deny the purchase of a 110' NXT Aerial Apparatus in an amount not to exceed $_____.

6.11. Discuss and consider Ordinance No. 773-2023-04 repealing and replacing in its entirety Chapter 26 "Subdivision and Development" Ordinance. 278 - 372

ORDINANCE SUBDIVISION CITY COUNCIL No. 773-2023-04.pdf

Summary of amendment sections.pdf

I make a motion to approve/deny Ordinance No. 773-2023-04.

7. Executive Session:

The City Council reserves the right to meet in Executive Session closed to the public at any time in the course of this meeting to discuss matters listed on the agenda, pursuant to authorization by the Texas Open Meetings Act.

IN ACCORDANCE WITH TEXAS GOVERNMENT CODE, SECTION 551.001, ET SEQ. THE CITY COUNCIL WILL RECESS INTO EXECUTIVE SESSION (CLOSED MEETING) TO DISCUSS THE FOLLOWING: 551.071(2)- Private consultation with Attorney, 551.074 (Personnel Matters) & 551.072 (Deliberations about real property).

1. City Secretary annual review.
2. City Administrator annual review.
3. City Attorney annual review.
4. Discuss the drafting of employment contracts pertaining to the employment of the City Administrator and City Secretary, based on guidelines provided by Council.
5. Discuss directing staff to prepare a Resolution declaring the Mayor incompetent as that term is defined by Local Government Code Section 21.022.
6. Discuss land acquisition for a Public Safety Building.

7.1. Recess into Executive Session:

7.2. Reconvene into Open Session:

8. Adjournment:

The City Council reserves the right to meet in Executive Session closed to the public at any time in the course of this meeting to discuss matters listed on the agenda, pursuant to authorization by the Texas Open Meetings Act TEXAS GOVERNMENT CODE, Chapter 551.071 (Private consultation with attorney for the city), 551.072 (deliberations about real property), 551.073 (deliberations about gifts and donations), 551.074 (personnel matters), 551.076 (deliberations about security devices), 551.087 (economic development), 418.183 (homeland security).

This is to certify that a copy of this Notice of Meeting was posted on the bulletin board at City Hall, 700 W. Hwy 67 Venus, Texas and at a place readily accessible to the general public at all times and to the City's website www.cityofvenus.org**, 04/05/2023 by 5:00 pm..**

_____

Callie Green,

City Secretary

For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011. This building is wheelchair accessible. Any requests for Interpretive Services must be made 48 hours in advance of the scheduled meeting. To make arrangements please call 972-366-3348 .

Removed:_____

Time:_____

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
FINANCIAL SUMMARY

	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
REVENUE SUMMARY					
FEES & SERVICES	13,050.00	1,317.40	9,982.40	76.49	3,067.60
FINES & FORFEITURES	109,700.00	14,507.29	51,083.07	46.57	58,616.93
FRANCHISE TAXES	145,000.00	0.00	45,614.39	31.46	99,385.61
PROPERTY TAXES	2,404,288.00	160,875.05	2,438,560.80	101.43	(34,272.80)
SALES TAXES	888,950.00	70,756.61	462,959.78	52.08	425,990.22
CONTRIBUTIONS	232,327.00	131,055.60	172,853.60	74.40	59,473.40
INTEREST	21,000.00	0.00	38,086.56	181.36	(17,086.56)
LICENSES & PERMITS	665,280.00	122,519.33	272,142.85	40.91	393,137.15
MISCELLANEOUS	5,000.00	25,069.55	30,293.18	605.86	(25,293.18)
INTERGOVERNMENTAL	462,079.00	36,030.64	205,644.92	44.50	256,434.08
OTHER FIN SOURCE (USE)	0.00	0.00	0.00	0.00	0.00
TOTAL REVENUES	4,946,674.00	562,131.47	3,727,221.55	75.35	1,219,452.45
EXPENDITURE SUMMARY					
NON-DEPARTMENTAL	110,899.00	26,327.98	125,730.46	113.37	(14,831.46)
CITY ADMINISTRATOR OFFICE	192,797.00	16,961.70	84,222.76	43.68	108,574.24
CITY SECRETARY	155,870.00	18,371.36	74,150.05	47.57	81,719.95
PERMITS & INSPECTIONS	317,807.00	20,496.91	103,976.53	32.72	213,830.47
FINANCE DEPARTMENT	160,222.00	12,058.02	63,344.89	39.54	96,877.11
HUMAN RESOURCES	134,627.00	13,181.16	66,223.31	49.19	68,403.69
ECONOMIC DEVELOPMENT	91,928.00	959.81	12,842.79	13.97	79,085.21
PLANNING	166,515.00	14,275.86	67,331.62	40.44	99,183.38
POLICE DEPARTMENT	2,030,421.00	196,527.69	965,260.91	47.54	1,065,160.09
CODE ENFORCE/ANIMAL CONTR	100,198.00	6,214.51	38,572.65	38.50	61,625.35
MUNICIPAL COURT	97,392.00	8,307.85	46,801.61	48.05	50,590.39
FIRE DEPARTMENT	840,493.00	76,313.69	310,393.97	36.93	530,099.03
STREETS	297,931.00	20,319.26	97,133.10	32.60	200,797.90
PARKS & RECREATION	330,397.00	24,007.57	105,641.31	31.97	224,755.69
CITY-WIDE (NONDEPARTMENTA	218,820.00	11,831.99	84,986.53	38.84	133,833.47
TOTAL EXPENDITURES	5,246,317.00	466,155.36	2,246,612.49	42.82	2,999,704.51
REVENUES OVER/(UNDER) EXPENDITURES	(299,643.00)	95,976.11	1,480,609.06		(1,780,252.06)

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND

REVENUES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
FEES & SERVICES					
10-4-0000-0321 ACCIDENT REPORT	450.00	12.00	196.00	43.56	254.00
10-4-0000-0322 COMMUNITY CENTER RENTAL	6,500.00	1,115.00	8,085.00	124.38	(1,585.00)
10-4-0000-0323 PARK RENTALS	5,000.00	150.00	1,050.00	21.00	3,950.00
10-4-0000-0324 COPY MACHINE	100.00	40.40	46.40	46.40	53.60
10-4-0000-0327 SPECIAL EVENT APPLICATIO	1,000.00	0.00	605.00	60.50	395.00
TOTAL FEES & SERVICES	13,050.00	1,317.40	9,982.40	76.49	3,067.60
FINES & FORFEITURES					
10-4-0000-0329 RESTITUTIONS	0.00	45.00	285.00	0.00	(285.00)
10-4-0000-0330 ESCROW ACCOUNT REVENUES	0.00	0.00	0.00	0.00	0.00
10-4-0000-0331 ADMINISTRATIVE/OTHER FEE	42,000.00	2,153.80	6,445.66	15.35	35,554.34
10-4-0000-0334 FINES	66,000.00	12,094.78	43,710.91	66.23	22,289.09
10-4-0000-0335 TIME PAYMENT	900.00	213.71	641.50	71.28	258.50
10-4-0000-0336 NSF FEES	0.00	0.00	0.00	0.00	0.00
10-4-0000-0337 ALARM FINES	800.00	0.00	0.00	0.00	800.00
10-4-0000-0338 STATE FEES	0.00	0.00	0.00	0.00	0.00
10-4-0000-0339 TRUANCY PREVENTION FEES	0.00	0.00	0.00	0.00	0.00
TOTAL FINES & FORFEITURES	109,700.00	14,507.29	51,083.07	46.57	58,616.93
FRANCHISE TAXES					
10-4-0000-0340 FRANCHISE TAX	145,000.00	0.00	45,614.39	31.46	99,385.61
TOTAL FRANCHISE TAXES	145,000.00	0.00	45,614.39	31.46	99,385.61
PROPERTY TAXES					
10-4-0000-0342 PENALTY & INTEREST	20,000.00	11,233.64	14,414.61	72.07	5,585.39
10-4-0000-0343 DELINQUENT PROPERTY TAXE	0.00	949.40	8,476.48	0.00	(8,476.48)
10-4-0000-0344 CURRENT PROPERTY TAX	2,384,288.00	148,692.01	2,415,669.71	101.32	(31,381.71)
10-4-0000-0345 PID ASSESSMENTS	0.00	0.00	0.00	0.00	0.00
TOTAL PROPERTY TAXES	2,404,288.00	160,875.05	2,438,560.80	101.43	(34,272.80)
SALES TAXES					
10-4-0000-0346 SALES TAX	713,000.00	56,605.29	370,367.84	51.94	342,632.16
10-4-0000-0347 SALES TAX (PT RELIEF)	175,950.00	14,151.32	92,591.94	52.62	83,358.06
10-4-0000-0349 CREDIT CARD FEES	0.00	0.00	0.00	0.00	0.00
TOTAL SALES TAXES	888,950.00	70,756.61	462,959.78	52.08	425,990.22
CONTRIBUTIONS					
10-4-0000-0351 PAYMENT IN LIEU OF TAXES	122,696.00	122,696.00	122,696.00	100.00	0.00
10-4-0000-0352 DONATIONS	0.00	0.00	0.00	0.00	0.00
10-4-0000-0355 VCSDC CONTRIBUTIONS	109,631.00	8,359.60	50,157.60	45.75	59,473.40
TOTAL CONTRIBUTIONS	232,327.00	131,055.60	172,853.60	74.40	59,473.40

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND

REVENUES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
INTEREST					
10-4-0000-0360 TEXPOOL INTEREST	21,000.00	0.00	38,086.56	181.36	(17,086.56)
TOTAL INTEREST	21,000.00	0.00	38,086.56	181.36	(17,086.56)
LICENSES & PERMITS					
10-4-0000-0361 ALCOHOL PERMITS	860.00	0.00	150.00	17.44	710.00
10-4-0000-0362 BUILDING INSPECTION FEES	250,000.00	0.00	0.00	0.00	250,000.00
10-4-0000-0363 ZONING FEES	15,020.00	900.00	900.00	5.99	14,120.00
10-4-0000-0364 ANIMAL REGISTRATION	500.00	10.00	160.00	32.00	340.00
10-4-0000-0365 DEVELOPMENT FEES	75,900.00	0.00	0.00	0.00	75,900.00
10-4-0000-0366 LICENSE & PERMITS	100,000.00	121,609.33	270,732.85	270.73	(170,732.85)
10-4-0000-0367 PLAN REVIEWS	200,000.00	0.00	0.00	0.00	200,000.00
10-4-0000-0368 PARK FEES	18,000.00	0.00	0.00	0.00	18,000.00
10-4-0000-0369 RESIDENTIAL RENTAL PROPE	5,000.00	0.00	200.00	4.00	4,800.00
TOTAL LICENSES & PERMITS	665,280.00	122,519.33	272,142.85	40.91	393,137.15
MISCELLANEOUS					
10-4-0000-0370 VVFD CONTRIBUTIONS	0.00	0.00	0.00	0.00	0.00
10-4-0000-0371 POLICE EXPLORER	0.00	0.00	0.00	0.00	0.00
10-4-0000-0372 INSURANCE PROCEEDS	0.00	0.00	4,324.85	0.00	(4,324.85)
10-4-0000-0373 MISCELLANEOUS	5,000.00	69.55	968.33	19.37	4,031.67
10-4-0000-0374 VFD-REIMBURSE FOR TRUCKS	0.00	0.00	0.00	0.00	0.00
10-4-0000-0375 TML WC INS PROCEEDS	0.00	0.00	0.00	0.00	0.00
10-4-0000-0376 CASH OVER (SHORT)	0.00	0.00	0.00	0.00	0.00
10-4-0000-0377 DONATIONS	0.00	0.00	0.00	0.00	0.00
10-4-0000-0378 AUDIT ADJUSTMENTS	0.00	0.00	0.00	0.00	0.00
10-4-0000-0379 PROCEEDS FROM SALE OF AS	0.00	25,000.00	25,000.00	0.00	(25,000.00)
TOTAL MISCELLANEOUS	5,000.00	25,069.55	30,293.18	605.86	(25,293.18)
INTERGOVERNMENTAL					
10-4-0000-0380 DRUG INTERDICTION GRANTS	0.00	3,073.92	3,073.92	0.00	(3,073.92)
10-4-0000-0381 GRANT REVENUE	25,000.00	0.00	1,113.51	4.45	23,886.49
10-4-0000-0382 JOHNSON CO ESD CONTRACT	385,079.00	32,956.72	201,457.49	52.32	183,621.51
10-4-0000-0383 JOHNSON CO EMP INCENTIVE	0.00	0.00	0.00	0.00	0.00
10-4-0000-0384 ESD - ELLIS COUNTY	47,000.00	0.00	0.00	0.00	47,000.00
10-4-0000-0386 VENUSISD-ELECTIONSREIMBU	5,000.00	0.00	0.00	0.00	5,000.00
10-4-0000-0388 W & S TRANSFERS IN	0.00	0.00	0.00	0.00	0.00
10-4-0000-0389 TRANSFERS OUT	0.00	0.00	0.00	0.00	0.00
10-4-0000-0390 FUND BALANCE FORWARD	0.00	0.00	0.00	0.00	0.00
TOTAL INTERGOVERNMENTAL	462,079.00	36,030.64	205,644.92	44.50	256,434.08
OTHER FIN SOURCE (USE)					
10-4-0000-0400 NEW RES PERMIT FEE (10%)	0.00	0.00	0.00	0.00	0.00
10-4-0000-0402 RESIDENTIAL PLAN REVIEW	0.00	0.00	0.00	0.00	0.00
10-4-0000-0403 PARK FEES	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND

REVENUES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
10-4-0000-0404 COMMERICAL INSPECTION FE	0.00	0.00	0.00	0.00	0.00
10-4-0000-0405 MECHANICAL PERMIT FEES	0.00	0.00	0.00	0.00	0.00
10-4-0000-0406 PLUMBING PERMIT FEES	0.00	0.00	0.00	0.00	0.00
10-4-0000-0407 ELECTIRAL PERMIT FEES	0.00	0.00	0.00	0.00	0.00
10-4-0000-0408 MISC PERMIT FEES	0.00	0.00	0.00	0.00	0.00
10-4-0000-0409 RESIDENTIAL INSPECTION F	0.00	0.00	0.00	0.00	0.00
10-4-0000-0410 TEMP FOOD PERMIT	0.00	0.00	0.00	0.00	0.00
10-4-0000-0411 MOBILE FOOD PERMIT	0.00	0.00	0.00	0.00	0.00
10-4-0000-0412 FOOD ESTABLISHMENT PERMI	0.00	0.00	0.00	0.00	0.00
10-4-0000-0413 HEALTH PLAN REVIEW	0.00	0.00	0.00	0.00	0.00
10-4-0000-0414 HEALTH INSPECTION	0.00	0.00	0.00	0.00	0.00
10-4-0000-0415 COMPLAINT INVESTIGATION	0.00	0.00	0.00	0.00	0.00
10-4-0000-0416 RENTAL RESTIRATION FEE	0.00	0.00	0.00	0.00	0.00
10-4-0000-0417 GARGAGE SALE/ESTATE SALE	0.00	0.00	0.00	0.00	0.00
10-4-0000-0418 GENEAL CONTRACTOR LICENS	0.00	0.00	0.00	0.00	0.00
10-4-0000-0419 BACKFLOW/IRRIGATOR LICEN	0.00	0.00	0.00	0.00	0.00
10-4-0000-0420 BURN PERMIT FEE	0.00	0.00	0.00	0.00	0.00
10-4-0000-0421 BURN PERMIT INSPECTION F	0.00	0.00	0.00	0.00	0.00
10-4-0000-0422 FIRE SPRINKLER PERMIT	0.00	0.00	0.00	0.00	0.00
10-4-0000-0423 FIRE ALARM PERMIT FEE	0.00	0.00	0.00	0.00	0.00
10-4-0000-0424 FIRE PLAN REVIEW	0.00	0.00	0.00	0.00	0.00
10-4-0000-0425 VENT HOOD PERMIT	0.00	0.00	0.00	0.00	0.00
10-4-0000-0426 FIRE INSPECTION FEE	0.00	0.00	0.00	0.00	0.00
TOTAL OTHER FIN SOURCE (USE)	0.00	0.00	0.00	0.00	0.00
TOTAL REVENUES	4,946,674.00	562,131.47	3,727,221.55	75.35	1,219,452.45

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
NON-DEPARTMENTAL

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
SPECIAL PROJECTS					
10-5-0000-0499 LEASE PRINCIPAL EXPENSE	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
DEBT PAYMENTS					
10-5-0000-0500 LEASE INTEREST EXPENSE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0501 NOTE PRINCIPAL EXPENSE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0502 NOTE INTEREST EXPENSE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0505 NOTES PAYABLE-ADMIN	0.00	0.00	0.00	0.00	0.00
10-5-0000-0506 CAPITAL LEASE - PRINCIPA	79,908.00	0.00	79,943.67	100.04	(35.67)
10-5-0000-0507 CAPITAL LEASE-INTEREST	4,423.00	0.00	4,387.15	99.19	35.85
10-5-0000-0510 LEASE PAYMENT - FIRE	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT PAYMENTS	84,331.00	0.00	84,330.82	100.00	0.18
CAPITAL OUTLAY					
10-5-0000-0661 AC UNIT - CITY HALL	0.00	0.00	0.00	0.00	0.00
10-5-0000-0662 CAP OUT-VEHICLE PURCHASE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0663 CAP OUT-FLAG POLE LANDSC	0.00	0.00	0.00	0.00	0.00
10-5-0000-0664 CAP OUT-IT SWITCHES	0.00	0.00	0.00	0.00	0.00
10-5-0000-0665 CAP OUT-LANDSCAPE TRAILE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0666 PATCH TRAILER	0.00	0.00	0.00	0.00	0.00
10-5-0000-0667 POLICE VEHICLES	0.00	0.00	0.00	0.00	0.00
10-5-0000-0668 ANIMAL CONTROL TRUCK	0.00	0.00	0.00	0.00	0.00
10-5-0000-0669 CAP OUT - MOW TRIM	0.00	0.00	0.00	0.00	0.00
10-5-0000-0670 STORAGE ROOM ADMIN AREA	0.00	0.00	0.00	0.00	0.00
10-5-0000-0671 AUDIO SYSTEM-CIVIC CENTE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0672 POLICE SIMULATOR	0.00	0.00	0.00	0.00	0.00
10-5-0000-0673 MYGOV SOFTWARE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0674 HR OFFICE RENOVATION	0.00	0.00	0.00	0.00	0.00
10-5-0000-0675 FUEL STATION & SOFTWARE	0.00	0.00	0.00	0.00	0.00
10-5-0000-0676 WEATHER SIREN UPGRADES	0.00	26,327.98	26,327.98	0.00	(26,327.98)
10-5-0000-0677 DRAINAGE TRACTOR	0.00	0.00	0.00	0.00	0.00
10-5-0000-0678 MOWER	0.00	0.00	0.00	0.00	0.00
10-5-0000-0679 CITY HALL SEPTIC SYSTEM	0.00	0.00	0.00	0.00	0.00
10-5-0000-0680 CAPITAL EXPENDITURES - F	0.00	0.00	0.00	0.00	0.00
10-5-0000-0681 EXTRACTOR & DRYING CABIN	0.00	0.00	0.00	0.00	0.00
10-5-0000-0682 LAND PURCHASE	0.00	0.00	1.66	0.00	(1.66)
10-5-0000-0683 SERVER	15,000.00	0.00	15,070.00	100.47	(70.00)
10-5-0000-0684 FLEET CAMERA REPLACEMENT	1,700.00	0.00	0.00	0.00	1,700.00
10-5-0000-0685 LIDAR REPLACEMENT	4,500.00	0.00	0.00	0.00	4,500.00
10-5-0000-0686 2-CAMERA SYSTEM INTERVIE	5,368.00	0.00	0.00	0.00	5,368.00
TOTAL CAPITAL OUTLAY	26,568.00	26,327.98	41,399.64	155.83	(14,831.64)

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
NON-DEPARTMENTAL

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
TRANSFERS					
10-5-0000-0751 TRANSFER TO (FROM) OTHER	0.00	0.00	0.00	0.00	0.00
TOTAL TRANSFERS	0.00	0.00	0.00	0.00	0.00
TOTAL NON-DEPARTMENTAL	110,899.00	26,327.98	125,730.46	113.37	(14,831.46)

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CITY ADMINISTRATOR OFFICE

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0010-0400 SALARIES & WAGES	76,745.00	8,589.03	37,260.12	48.55	39,484.88
10-5-0010-0401 SOCIAL SECURITY TAXES	4,758.00	530.40	2,301.65	48.37	2,456.35
10-5-0010-0402 STATE UNEMPLOYMENT TAXES	126.00	0.00	0.00	0.00	126.00
10-5-0010-0403 MEDICARE TAXES	1,113.00	124.05	538.32	48.37	574.68
10-5-0010-0404 RETIREMENT (TMRS)	8,191.00	931.53	4,013.23	49.00	4,177.77
10-5-0010-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
10-5-0010-0406 WORKERS COMPENSATION	171.00	0.00	128.50	75.15	42.50
10-5-0010-0410 HEALTH INSURANCE	5,459.00	449.72	2,533.80	46.42	2,925.20
10-5-0010-0412 HRA	250.00	0.00	0.00	0.00	250.00
TOTAL PERSONNEL	96,813.00	10,624.73	46,775.62	48.32	50,037.38
TRAVEL & TRAINING					
10-5-0010-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0010-0416 TRAVEL & TRAINING	1,500.00	116.67	116.67	7.78	1,383.33
10-5-0010-0418 DUES & MEMBERSHIPS	2,500.00	0.00	0.00	0.00	2,500.00
TOTAL TRAVEL & TRAINING	4,000.00	116.67	116.67	2.92	3,883.33
SUPPLIES					
10-5-0010-0420 UNIFORMS	0.00	0.00	0.00	0.00	0.00
10-5-0010-0421 OFFICE SUPPLIES	500.00	0.00	0.00	0.00	500.00
10-5-0010-0423 POSTAGE	0.00	0.00	19.20	0.00	(19.20)
10-5-0010-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0010-0426 GAS & OIL	2,000.00	0.00	0.00	0.00	2,000.00
10-5-0010-0429 DEPARTMENT SUPPLIES	1,000.00	0.00	0.00	0.00	1,000.00
TOTAL SUPPLIES	3,500.00	0.00	19.20	0.55	3,480.80
UTILITIES					
10-5-0010-0430 CELL PHONES & MIFI	684.00	50.53	278.55	40.72	405.45
10-5-0010-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	684.00	50.53	278.55	40.72	405.45
SMALL EQUIPMENT					
10-5-0010-0433 SMALL EQUIPMENT<$5,000	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
MAINTENANCE & REPAIRS					
10-5-0010-0442 BUILDING R&M	0.00	0.00	0.00	0.00	0.00
10-5-0010-0445 VEHICLE R&M	500.00	17.25	392.24	78.45	107.76
10-5-0010-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	500.00	17.25	392.24	78.45	107.76

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CITY ADMINISTRATOR OFFICE

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0010-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
10-5-0010-0462 LEGAL SERVICES	53,400.00	5,200.00	31,200.00	58.43	22,200.00
10-5-0010-0468 INFORMATION TECHNOLOGY	0.00	0.00	0.00	0.00	0.00
10-5-0010-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	53,400.00	5,200.00	31,200.00	58.43	22,200.00
DEPARTMENTAL					
10-5-0010-0477 ADMIN DONATIONS	5,100.00	0.00	0.00	0.00	5,100.00
10-5-0010-0485 MAYOR'S PROJECTS	10,000.00	0.00	174.54	1.75	9,825.46
TOTAL DEPARTMENTAL	15,100.00	0.00	174.54	1.16	14,925.46
SPECIAL PROJECTS					
10-5-0010-0495 CITY ADMIN SPECIAL PROJE	7,000.00	0.00	1,191.46	17.02	5,808.54
TOTAL SPECIAL PROJECTS	7,000.00	0.00	1,191.46	17.02	5,808.54
VEHICLE LEASES					
10-5-0010-0560 VEHICLE LEASE PAYMENTS	10,800.00	892.03	3,805.99	35.24	6,994.01
10-5-0010-0561 VEHICLE MAKE-READY	0.00	0.00	0.00	0.00	0.00
10-5-0010-0562 VEHICLE MAINT PLAN	1,000.00	60.49	268.49	26.85	731.51
TOTAL VEHICLE LEASES	11,800.00	952.52	4,074.48	34.53	7,725.52
TOTAL CITY ADMINISTRATOR OFFICE	192,797.00	16,961.70	84,222.76	43.68	108,574.24

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CITY SECRETARY

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0015-0400 SALARIES & WAGES	88,887.00	10,238.40	44,522.40	50.09	44,364.60
10-5-0015-0401 SOCIAL SECURITY TAXES	5,511.00	634.62	2,759.74	50.08	2,751.26
10-5-0015-0402 STATE UNEMPLOYMENT TAXES	252.00	0.00	0.00	0.00	252.00
10-5-0015-0403 MEDICARE TAXES	1,289.00	148.41	645.39	50.07	643.61
10-5-0015-0404 RETIREMENT (TMRS)	9,486.00	1,112.67	4,792.80	50.52	4,693.20
10-5-0015-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
10-5-0015-0406 WORKERS COMPENSATION	198.00	0.00	93.00	46.97	105.00
10-5-0015-0410 HEALTH INSURANCE	10,517.00	883.14	5,298.84	50.38	5,218.16
10-5-0015-0412 HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	116,640.00	13,017.24	58,112.17	49.82	58,527.83
TRAVEL & TRAINING					
10-5-0015-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0015-0416 EMPLOYEE TRAINING	2,000.00	290.00	409.00	20.45	1,591.00
10-5-0015-0417 CITY COUNCIL TRAINING	5,000.00	0.00	463.75	9.28	4,536.25
10-5-0015-0418 DUES & MEMBERSHIPS	400.00	0.00	150.00	37.50	250.00
TOTAL TRAVEL & TRAINING	7,400.00	290.00	1,022.75	13.82	6,377.25
SUPPLIES					
10-5-0015-0421 OFFICE SUPPLIES	120.00	0.00	57.98	48.32	62.02
10-5-0015-0423 POSTAGE	100.00	0.00	0.00	0.00	100.00
10-5-0015-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0015-0426 GAS & OIL	0.00	0.00	0.00	0.00	0.00
10-5-0015-0429 DEPARTMENT SUPPLIES	0.00	0.00	0.00	0.00	0.00
TOTAL SUPPLIES	220.00	0.00	57.98	26.35	162.02
UTILITIES					
10-5-0015-0430 CELL PHONES & MIFI	1,368.00	90.81	544.65	39.81	823.35
10-5-0015-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	1,368.00	90.81	544.65	39.81	823.35
SMALL EQUIPMENT					
10-5-0015-0433 SMALL EQUIPMENT<$5,000	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
MAINTENANCE & REPAIRS					
10-5-0015-0442 BUILDING R&M	0.00	0.00	0.00	0.00	0.00
10-5-0015-0445 VEHICLE R&M	0.00	0.00	0.00	0.00	0.00
10-5-0015-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CITY SECRETARY

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0015-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
10-5-0015-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
10-5-0015-0468 INFORMATION TECHNOLOGY	5,000.00	0.00	4,774.05	95.48	225.95
10-5-0015-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	5,000.00	0.00	4,774.05	95.48	225.95
DEPARTMENTAL					
10-5-0015-0476 BOARD MEMBER SCREENING	0.00	0.00	31.00	0.00	(31.00)
10-5-0015-0490 ELECTION EXPENSES	12,342.00	4,909.05	4,909.05	39.78	7,432.95
10-5-0015-0491 LEGAL NOTICES	3,500.00	0.00	153.25	4.38	3,346.75
10-5-0015-0492 RECORDING/FILING FEES	3,000.00	0.00	60.90	2.03	2,939.10
10-5-0015-0493 COUNCIL MISCELLANEOUS	1,400.00	64.26	109.25	7.80	1,290.75
10-5-0015-0494 CODIFICATION	5,000.00	0.00	4,375.00	87.50	625.00
TOTAL DEPARTMENTAL	25,242.00	4,973.31	9,638.45	38.18	15,603.55
SPECIAL PROJECTS					
10-5-0015-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL CITY SECRETARY	155,870.00	18,371.36	74,150.05	47.57	81,719.95

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
PERMITS & INSPECTIONS

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0020-0400 SALARIES & WAGES	169,932.00	14,743.20	59,161.20	34.81	110,770.80
10-5-0020-0401 SOCIAL SECURITY TAXES	10,536.00	881.92	3,539.87	33.60	6,996.13
10-5-0020-0402 STATE UNEMPLOYMENT TAXES	756.00	0.00	4.77	0.63	751.23
10-5-0020-0403 MEDICARE TAXES	2,464.00	206.26	827.90	33.60	1,636.10
10-5-0020-0404 RETIREMENT (TMRS)	18,136.00	1,601.54	6,376.60	35.16	11,759.40
10-5-0020-0405 OVERTIME	0.00	23.47	66.51	0.00	(66.51)
10-5-0020-0406 WORKERS COMP	379.00	0.00	189.00	49.87	190.00
10-5-0020-0410 HEALTH INSURANCE	35,800.00	1,287.07	7,748.55	21.64	28,051.45
10-5-0020-0412 HRA	1,500.00	0.00	0.00	0.00	1,500.00
TOTAL PERSONNEL	239,503.00	18,743.46	77,914.40	32.53	161,588.60
TRAVEL & TRAINING					
10-5-0020-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0020-0416 EMPLOYEE TRAINING	4,000.00	0.00	336.88	8.42	3,663.12
10-5-0020-0418 DUES & MEMBERSHIPS	600.00	0.00	250.00	41.67	350.00
TOTAL TRAVEL & TRAINING	4,600.00	0.00	586.88	12.76	4,013.12
SUPPLIES					
10-5-0020-0421 OFFICE SUPPLIES	5,500.00	210.47	392.70	7.14	5,107.30
10-5-0020-0423 POSTAGE	1,250.00	0.00	37.85	3.03	1,212.15
10-5-0020-0426 GAS & OIL	2,080.00	69.87	260.09	12.50	1,819.91
10-5-0020-0429 DEPARTMENT SUPPLIES	1,000.00	163.93	412.80	41.28	587.20
TOTAL SUPPLIES	9,830.00	444.27	1,103.44	11.23	8,726.56
UTILITIES					
10-5-0020-0430 CELL PHONES & MIFI	1,368.00	71.95	431.58	31.55	936.42
TOTAL UTILITIES	1,368.00	71.95	431.58	31.55	936.42
SMALL EQUIPMENT					
10-5-0020-0433 SMALL EQUIPMENT<$5,000	750.00	0.00	0.00	0.00	750.00
TOTAL SMALL EQUIPMENT	750.00	0.00	0.00	0.00	750.00
MAINTENANCE & REPAIRS					
10-5-0020-0445 VEHICLE R&M	0.00	0.00	24.71	0.00	(24.71)
TOTAL MAINTENANCE & REPAIRS	0.00	0.00	24.71	0.00	(24.71)
CONTRACTED SERVICES					
10-5-0020-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
10-5-0020-0462 LEGAL SERVICES	2,000.00	500.00	500.00	25.00	1,500.00
10-5-0020-0464 ENGINEERING SERVICES	0.00	0.00	0.00	0.00	0.00
10-5-0020-0465 NON-CIVIL INSPECTIONS	20,000.00	0.00	16,595.00	82.98	3,405.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
PERMITS & INSPECTIONS

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
10-5-0020-0466 CIVIL INSPECTIONS	0.00	0.00	0.00	0.00	0.00
10-5-0020-0467 HEALTH INSPECTIONS	12,000.00	0.00	0.00	0.00	12,000.00
10-5-0020-0468 INFORMATION TECHNOLOGY	16,988.00	9.99	1,443.75	8.50	15,544.25
10-5-0020-0469 LIABILITY & PROPERTY	0.00	0.00	310.00	0.00	(310.00)
TOTAL CONTRACTED SERVICES	50,988.00	509.99	18,848.75	36.97	32,139.25
DEPARTMENTAL					
10-5-0020-0488 MERCHANT SERVICE FEES	0.00	0.00	703.33	0.00	(703.33)
10-5-0020-0491 LEGAL NOTICES	1,000.00	0.00	0.00	0.00	1,000.00
10-5-0020-0492 RECORDING/FILING FEES	0.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENTAL	1,000.00	0.00	703.33	70.33	296.67
SPECIAL PROJECTS					
10-5-0020-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
VEHICLE LEASES					
10-5-0020-0560 VEHICLE LEASE PAYMENTS	8,768.00	697.57	4,185.42	47.74	4,582.58
10-5-0020-0561 VEHICLE MAKE READY	0.00	0.00	0.00	0.00	0.00
10-5-0020-0562 VEHICLE MAINT PLAN	1,000.00	29.67	178.02	17.80	821.98
TOTAL VEHICLE LEASES	9,768.00	727.24	4,363.44	44.67	5,404.56
TOTAL PERMITS & INSPECTIONS	317,807.00	20,496.91	103,976.53	32.72	213,830.47

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
FINANCE DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0025-0400 SALARIES & WAGES	76,528.00	2,274.72	21,223.50	27.73	55,304.50
10-5-0025-0401 SOCIAL SECURITY TAXES	4,745.00	142.10	1,321.58	27.85	3,423.42
10-5-0025-0402 STATE UNEMPLOYMENT TAXES	252.00	0.00	0.00	0.00	252.00
10-5-0025-0403 MEDICARE TAXES	1,110.00	33.23	309.08	27.85	800.92
10-5-0025-0404 RETIREMENT (TMRS)	8,167.00	247.53	2,281.13	27.93	5,885.87
10-5-0025-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
10-5-0025-0406 WORKERS COMPENSATION	171.00	0.00	190.00	111.11	(19.00)
10-5-0025-0410 HEALTH INSURANCE	12,864.00	429.29	3,300.25	25.65	9,563.75
10-5-0025-0412 HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	104,337.00	3,126.87	28,625.54	27.44	75,711.46
TRAVEL & TRAINING					
10-5-0025-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0025-0416 EMPLOYEE TRAINING	1,500.00	16.67	16.67	1.11	1,483.33
10-5-0025-0418 DUES & MEMBERSHIPS	1,120.00	0.00	406.35	36.28	713.65
TOTAL TRAVEL & TRAINING	2,620.00	16.67	423.02	16.15	2,196.98
SUPPLIES					
10-5-0025-0421 OFFICE SUPPLIES	150.00	34.49	86.40	57.60	63.60
10-5-0025-0423 POSTAGE	1,500.00	19.30	207.87	13.86	1,292.13
10-5-0025-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0025-0426 GAS & OIL	0.00	0.00	0.00	0.00	0.00
10-5-0025-0429 DEPARTMENT SUPPLIES	1,000.00	17.99	374.79	37.48	625.21
TOTAL SUPPLIES	2,650.00	71.78	669.06	25.25	1,980.94
UTILITIES					
10-5-0025-0430 CELL PHONES & MIFI	0.00	0.00	0.00	0.00	0.00
10-5-0025-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	0.00	0.00	0.00	0.00	0.00
SMALL EQUIPMENT					
10-5-0025-0433 SMALL EQUIPMENT<$5,000	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
MAINTENANCE & REPAIRS					
10-5-0025-0442 BUILDING R&M	0.00	0.00	0.00	0.00	0.00
10-5-0025-0445 VEHICLE R&M	0.00	0.00	0.00	0.00	0.00
10-5-0025-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
FINANCE DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0025-0459 AUDIT SERVICES	16,250.00	0.00	0.00	0.00	16,250.00
10-5-0025-0460 OTHER CONTRACTED SERVICE	0.00	0.00	12,016.00	0.00	(12,016.00)
10-5-0025-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
10-5-0025-0463 APPRAISAL/COLLECTION FEE	31,365.00	8,842.70	17,685.40	56.39	13,679.60
10-5-0025-0468 INFORMATION TECHNOLOGY	3,000.00	0.00	3,000.00	100.00	0.00
10-5-0025-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	50,615.00	8,842.70	32,701.40	64.61	17,913.60
DEPARTMENTAL					
10-5-0025-0470 TO BE ALLOCATED	0.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENTAL	0.00	0.00	0.00	0.00	0.00
SPECIAL PROJECTS					
10-5-0025-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
10-5-0025-0499 LATE FEES	0.00	0.00	925.87	0.00	(925.87)
TOTAL SPECIAL PROJECTS	0.00	0.00	925.87	0.00	(925.87)
TOTAL FINANCE DEPARTMENT	160,222.00	12,058.02	63,344.89	39.54	96,877.11

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
HUMAN RESOURCES

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0030-0400 SALARIES & WAGES	81,341.00	10,787.49	45,633.79	56.10	35,707.21
10-5-0030-0401 SOCIAL SECURITY TAXES	5,043.00	670.38	2,835.52	56.23	2,207.48
10-5-0030-0402 STATE UNEMPLOYMENT TAXES	252.00	0.00	0.00	0.00	252.00
10-5-0030-0403 MEDICARE TAXES	1,179.00	156.78	663.14	56.25	515.86
10-5-0030-0404 RETIREMENT (TMRS)	8,681.00	1,171.47	4,918.16	56.65	3,762.84
10-5-0030-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
10-5-0030-0406 WORKERS COMPENSATION	181.00	0.00	58.50	32.32	122.50
10-5-0030-0410 HEALTH INSURANCE	10,470.00	92.38	554.28	5.29	9,915.72
10-5-0030-0412 HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	107,647.00	12,878.50	54,663.39	50.78	52,983.61
TRAVEL & TRAINING					
10-5-0030-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0030-0416 EMPLOYEE TRAINING	3,240.00	0.00	79.95	2.47	3,160.05
10-5-0030-0418 DUES & MEMBERSHIPS	850.00	0.00	229.00	26.94	621.00
TOTAL TRAVEL & TRAINING	4,090.00	0.00	308.95	7.55	3,781.05
SUPPLIES					
10-5-0030-0421 OFFICE SUPPLIES	1,000.00	0.00	58.00	5.80	942.00
10-5-0030-0423 POSTAGE	250.00	0.00	0.00	0.00	250.00
10-5-0030-0425 COPIERS	3,800.00	0.00	625.71	16.47	3,174.29
10-5-0030-0426 GAS & OIL	0.00	0.00	0.00	0.00	0.00
10-5-0030-0429 DEPARTMENT SUPPLIES	200.00	0.00	81.37	40.69	118.63
TOTAL SUPPLIES	5,250.00	0.00	765.08	14.57	4,484.92
UTILITIES					
10-5-0030-0430 CELL PHONES & MIFI	540.00	50.71	304.17	56.33	235.83
10-5-0030-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	540.00	50.71	304.17	56.33	235.83
SMALL EQUIPMENT					
10-5-0030-0433 SMALL EQUIPMENT<$5,000	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
MAINTENANCE & REPAIRS					
10-5-0030-0442 BUILDING R&M	0.00	0.00	0.00	0.00	0.00
10-5-0030-0445 VEHICLE R&M	0.00	0.00	0.00	0.00	0.00
10-5-0030-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
HUMAN RESOURCES

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0030-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
10-5-0030-0462 LEGAL SERVICES	1,000.00	0.00	0.00	0.00	1,000.00
10-5-0030-0468 INFORMATION TECHNOLOGY	0.00	30.50	682.50	0.00	(682.50)
10-5-0030-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	1,000.00	30.50	682.50	68.25	317.50
DEPARTMENTAL					
10-5-0030-0475 EMPLOYEE RELATIONS	13,240.00	221.45	7,718.72	58.30	5,521.28
10-5-0030-0476 NEW HIRE SCREENING	2,860.00	0.00	1,780.50	62.26	1,079.50
TOTAL DEPARTMENTAL	16,100.00	221.45	9,499.22	59.00	6,600.78
SPECIAL PROJECTS					
10-5-0030-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL HUMAN RESOURCES	134,627.00	13,181.16	66,223.31	49.19	68,403.69

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
ECONOMIC DEVELOPMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0035-0400 SALARIES & WAGES	68,149.00	810.31	10,849.39	15.92	57,299.61
10-5-0035-0401 SOCIAL SECURITY TAXES	4,225.00	50.24	672.66	15.92	3,552.34
10-5-0035-0402 STATE UNEMPLOYMENT TAXES	252.00	0.00	0.00	0.00	252.00
10-5-0035-0403 MEDICARE TAXES	988.00	11.75	280.08	28.35	707.92
10-5-0035-0404 RETIREMENT (TMRS)	7,273.00	87.51	1,040.66	14.31	6,232.34
10-5-0035-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
10-5-0035-0406 WORKERS COMPENSATION	152.00	0.00	0.00	0.00	152.00
10-5-0035-0410 HEALTH INSURANCE	10,389.00	0.00	0.00	0.00	10,389.00
10-5-0035-0412 HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	91,928.00	959.81	12,842.79	13.97	79,085.21
TRAVEL & TRAINING					
10-5-0035-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0035-0416 EMPLOYEE TRAINING	0.00	0.00	0.00	0.00	0.00
10-5-0035-0418 DUES & MEMBERSHIPS	0.00	0.00	0.00	0.00	0.00
TOTAL TRAVEL & TRAINING	0.00	0.00	0.00	0.00	0.00
SUPPLIES					
10-5-0035-0421 OFFICE SUPPLIES	0.00	0.00	0.00	0.00	0.00
10-5-0035-0423 POSTAGE	0.00	0.00	0.00	0.00	0.00
10-5-0035-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0035-0426 GAS & OIL	0.00	0.00	0.00	0.00	0.00
10-5-0035-0429 DEPARTMENT SUPPLIES	0.00	0.00	0.00	0.00	0.00
TOTAL SUPPLIES	0.00	0.00	0.00	0.00	0.00
UTILITIES					
10-5-0035-0430 CELL PHONES & MIFI	0.00	0.00	0.00	0.00	0.00
10-5-0035-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	0.00	0.00	0.00	0.00	0.00
SMALL EQUIPMENT					
10-5-0035-0433 SMALL EQUIPMENT (<$5,000	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
MAINTENANCE & REPAIRS					
10-5-0035-0442 BUILDING R&M	0.00	0.00	0.00	0.00	0.00
10-5-0035-0445 VEHICLE R&M	0.00	0.00	0.00	0.00	0.00
10-5-0035-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
ECONOMIC DEVELOPMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0035-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
10-5-0035-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
10-5-0035-0468 INFORMATION TECHNOLOGY	0.00	0.00	0.00	0.00	0.00
10-5-0035-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	0.00	0.00	0.00	0.00	0.00
SPECIAL PROJECTS					
10-5-0035-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL ECONOMIC DEVELOPMENT	91,928.00	959.81	12,842.79	13.97	79,085.21

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
PLANNING

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0045-0400 SALARIES & WAGES	80,546.00	9,567.09	40,767.56	50.61	39,778.44
10-5-0045-0401 SOCIAL SECURITY TAXES	4,994.00	526.01	2,254.37	45.14	2,739.63
10-5-0045-0402 STATE UNEMPLOYMENT TAXES	252.00	0.00	0.00	0.00	252.00
10-5-0045-0403 MEDICARE TAXES	1,168.00	123.03	527.29	45.14	640.71
10-5-0045-0404 RETIREMENT (TMRS)	8,596.00	1,039.62	4,398.97	51.17	4,197.03
10-5-0045-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
10-5-0045-0406 WORKERS COMPENSATION	180.00	0.00	0.00	0.00	180.00
10-5-0045-0410 HEALTH INSURANCE	19,889.00	1,650.82	9,904.92	49.80	9,984.08
10-5-0045-0412 HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	116,125.00	12,906.57	57,853.11	49.82	58,271.89
TRAVEL & TRAINING					
10-5-0045-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0045-0416 EMPLOYEE TRAINING	6,000.00	0.00	299.00	4.98	5,701.00
10-5-0045-0418 DUES & MEMBERSHIPS	750.00	255.00	255.00	34.00	495.00
TOTAL TRAVEL & TRAINING	6,750.00	255.00	554.00	8.21	6,196.00
SUPPLIES					
10-5-0045-0421 OFFICE SUPPLIES	1,000.00	0.00	304.66	30.47	695.34
10-5-0045-0423 POSTAGE	1,250.00	0.00	8.00	0.64	1,242.00
10-5-0045-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0045-0426 GAS & OIL	0.00	0.00	0.00	0.00	0.00
10-5-0045-0429 DEPARTMENT SUPPLIES	500.00	0.00	0.00	0.00	500.00
TOTAL SUPPLIES	2,750.00	0.00	312.66	11.37	2,437.34
UTILITIES					
10-5-0045-0430 CELL PHONES & MIFI	720.00	40.70	244.08	33.90	475.92
10-5-0045-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	720.00	40.70	244.08	33.90	475.92
SMALL EQUIPMENT					
10-5-0045-0433 SMALL EQUIPMENT (<$5,000	1,770.00	1,051.92	1,051.92	59.43	718.08
TOTAL SMALL EQUIPMENT	1,770.00	1,051.92	1,051.92	59.43	718.08
MAINTENANCE & REPAIRS					
10-5-0045-0442 BUILDING R&M	0.00	21.67	43.34	0.00	(43.34)
10-5-0045-0445 VEHICLE R&M	0.00	0.00	0.00	0.00	0.00
10-5-0045-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	0.00	21.67	43.34	0.00	(43.34)

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
PLANNING

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0045-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
10-5-0045-0462 LEGAL SERVICES	6,000.00	0.00	5,802.00	96.70	198.00
10-5-0045-0464 ENGINEERING SERVICES	25,000.00	0.00	1,019.36	4.08	23,980.64
10-5-0045-0468 INFORMATION TECHNOLOGY	1,400.00	0.00	0.00	0.00	1,400.00
10-5-0045-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	32,400.00	0.00	6,821.36	21.05	25,578.64
DEPARTMENTAL					
10-5-0045-0491 LEGAL NOTICES	6,000.00	0.00	122.50	2.04	5,877.50
10-5-0045-0492 RECORDING/FILING FEES	0.00	0.00	328.65	0.00	(328.65)
TOTAL DEPARTMENTAL	6,000.00	0.00	451.15	7.52	5,548.85
SPECIAL PROJECTS					
10-5-0045-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL PLANNING	166,515.00	14,275.86	67,331.62	40.44	99,183.38

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
POLICE DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0050-0400 SALARIES & WAGES	1,209,666.00	140,254.12	554,267.49	45.82	655,398.51
10-5-0050-0401 SOCIAL SECURITY TAXES	76,064.00	8,531.33	33,821.60	44.46	42,242.40
10-5-0050-0402 STATE UNEMPLOYMENT TAXES	4,536.00	0.00	7.97	0.18	4,528.03
10-5-0050-0403 MEDICARE TAXES	17,789.00	1,995.18	7,909.72	44.46	9,879.28
10-5-0050-0404 RETIREMENT (TMRS)	130,934.00	15,374.80	60,134.16	45.93	70,799.84
10-5-0050-0405 OVERTIME	24,408.00	1,233.51	5,287.65	21.66	19,120.35
10-5-0050-0406 WORKERS COMPENSATION	23,118.00	0.00	13,232.50	57.24	9,885.50
10-5-0050-0410 HEALTH INSURANCE	213,849.00	18,481.29	94,622.62	44.25	119,226.38
10-5-0050-0412 HRA	9,000.00	0.00	0.00	0.00	9,000.00
TOTAL PERSONNEL	1,709,364.00	185,870.23	769,283.71	45.00	940,080.29
TRAVEL & TRAINING					
10-5-0050-0414 TRAVEL REIMBURSEMENT	0.00	0.00	64.50	0.00	(64.50)
10-5-0050-0415 POLICE TRAINING	8,500.00	310.00	4,036.45	47.49	4,463.55
10-5-0050-0416 POLICE LEOSE TRAINING	1,300.00	0.00	0.00	0.00	1,300.00
10-5-0050-0418 DUES & MEMBERSHIPS	775.00	0.00	567.00	73.16	208.00
TOTAL TRAVEL & TRAINING	10,575.00	310.00	4,667.95	44.14	5,907.05
SUPPLIES					
10-5-0050-0420 UNIFORMS	19,500.00	460.43	14,722.06	75.50	4,777.94
10-5-0050-0421 OFFICE SUPPLIES	3,700.00	647.86	2,370.69	64.07	1,329.31
10-5-0050-0423 POSTAGE	300.00	0.00	0.00	0.00	300.00
10-5-0050-0425 COPIERS	1,600.00	0.00	500.20	31.26	1,099.80
10-5-0050-0426 GAS & OIL	44,000.00	3,408.37	16,274.26	36.99	27,725.74
10-5-0050-0429 DEPARTMENT SUPPLIES	33,300.00	51.78	15,522.15	46.61	17,777.85
TOTAL SUPPLIES	102,400.00	4,568.44	49,389.36	48.23	53,010.64
UTILITIES					
10-5-0050-0430 CELL PHONES/MIFI	10,000.00	697.73	3,958.57	39.59	6,041.43
10-5-0050-0431 TELEPHONES	1,100.00	89.02	509.39	46.31	590.61
10-5-0050-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	11,100.00	786.75	4,467.96	40.25	6,632.04
SMALL EQUIPMENT					
10-5-0050-0433 SMALL EQUIPMENT<$5,000	0.00	0.00	354.00	0.00	(354.00)
TOTAL SMALL EQUIPMENT	0.00	0.00	354.00	0.00	(354.00)
MAINTENANCE & REPAIRS					
10-5-0050-0442 BUILDING R&M	1,500.00	55.00	371.98	24.80	1,128.02
10-5-0050-0445 VEHICLE R&M	15,000.00	73.96	5,965.15	39.77	9,034.85
10-5-0050-0446 EQUIPMENT R&M	500.00	0.00	0.00	0.00	500.00
TOTAL MAINTENANCE & REPAIRS	17,000.00	128.96	6,337.13	37.28	10,662.87

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
POLICE DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0050-0460 CONTRACTED SERVICES	21,000.00	10.21	13,586.67	64.70	7,413.33
10-5-0050-0465 DISPATCH SERVICES	93,358.00	0.00	93,358.37	100.00	(0.37)
10-5-0050-0468 INFORMATION TECHNOLOGY	30,643.00	4,787.10	20,461.27	66.77	10,181.73
10-5-0050-0469 LIABILITY & PROPERTY	13,441.00	0.00	8,994.49	66.92	4,446.51
TOTAL CONTRACTED SERVICES	158,442.00	4,797.31	136,400.80	86.09	22,041.20
DEPARTMENTAL					
10-5-0050-0472 POLICE EXPLORERS	0.00	0.00	0.00	0.00	0.00
10-5-0050-0475 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
10-5-0050-0486 POLICE MISCELLANEOUS	0.00	0.00	0.00	0.00	0.00
10-5-0050-0489 POLICE DSF TRANSFER IN/O	0.00	0.00	0.00	0.00	0.00
10-5-0050-0490 POLICE JAIL FEES	0.00	0.00	0.00	0.00	0.00
10-5-0050-0491 TRANSFER IN/OUT	0.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENTAL	0.00	0.00	0.00	0.00	0.00
SPECIAL PROJECTS					
10-5-0050-0495 NATIONAL NIGHT OUT EVENT	0.00	0.00	0.00	0.00	0.00
10-5-0050-0499 POLICE GRANT EXPENDITURE	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
DEBT PAYMENTS					
10-5-0050-0505 CAPITAL LEASE-PRINCIPAL	0.00	0.00	0.00	0.00	0.00
10-5-0050-0506 CAPITAL LEASE-INTEREST	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT PAYMENTS	0.00	0.00	0.00	0.00	0.00
VEHICLE LEASES					
10-5-0050-0560 VEHICLE LEASE PAYMENTS	19,540.00	0.00	(6,060.00)	31.01-	25,600.00
10-5-0050-0561 VEHICLE MAKE READY	0.00	0.00	0.00	0.00	0.00
10-5-0050-0562 VEHICLE MAINT PLAN	2,000.00	66.00	420.00	21.00	1,580.00
TOTAL VEHICLE LEASES	21,540.00	66.00	(5,640.00)	26.18-	27,180.00
CAPITAL OUTLAY					
10-5-0050-0667 CAP OUT - POLICE VEHICLE	0.00	0.00	0.00	0.00	0.00
10-5-0050-0669 CAP OUT - IT SWITCHES	0.00	0.00	0.00	0.00	0.00
TOTAL CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00
TOTAL POLICE DEPARTMENT	2,030,421.00	196,527.69	965,260.91	47.54	1,065,160.09

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CODE ENFORCE/ANIMAL CONTR

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0055-0400 SALARIES & WAGES	46,196.00	3,972.10	22,213.72	48.09	23,982.28
10-5-0055-0401 SOCIAL SECURITY TAXES	2,864.00	222.28	1,247.42	43.56	1,616.58
10-5-0055-0402 STATE UNEMPLOYMENT TAXES	252.00	0.00	0.00	0.00	252.00
10-5-0055-0403 MEDICARE TAXES	670.00	51.98	291.70	43.54	378.30
10-5-0055-0404 RETIREMENT (TMRS)	4,930.00	431.39	2,380.02	48.28	2,549.98
10-5-0055-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
10-5-0055-0406 WORKERS COMPENSATION	1,116.00	0.00	817.50	73.25	298.50
10-5-0055-0410 HEALTH INSURANCE	15,100.00	1,261.28	7,567.68	50.12	7,532.32
10-5-0055-0412 HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	71,628.00	5,939.03	34,518.04	48.19	37,109.96
TRAVEL & TRAINING					
10-5-0055-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0055-0416 EMPLOYEE TRAINING	500.00	0.00	225.00	45.00	275.00
10-5-0055-0418 DUES & MEMBERSHIPS	360.00	0.00	250.00	69.44	110.00
TOTAL TRAVEL & TRAINING	860.00	0.00	475.00	55.23	385.00
SUPPLIES					
10-5-0055-0420 UNIFORMS	400.00	0.00	186.37	46.59	213.63
10-5-0055-0421 OFFICE SUPPLIES	200.00	3.97	8.18	4.09	191.82
10-5-0055-0423 POSTAGE	1,000.00	0.00	365.12	36.51	634.88
10-5-0055-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0055-0426 GAS & OIL	1,000.00	133.93	749.64	74.96	250.36
10-5-0055-0429 DEPARTMENT SUPPLIES	650.00	0.00	43.58	6.70	606.42
TOTAL SUPPLIES	3,250.00	137.90	1,352.89	41.63	1,897.11
UTILITIES					
10-5-0055-0430 CELL PHONES & MIFI	1,020.00	49.83	298.92	29.31	721.08
TOTAL UTILITIES	1,020.00	49.83	298.92	29.31	721.08
SMALL EQUIPMENT					
10-5-0055-0433 SMALL EQUIPMENT<$5,000	0.00	0.00	0.00	0.00	0.00
10-5-0055-0438 LEGAL NOTICES	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
MAINTENANCE & REPAIRS					
10-5-0055-0445 VEHICLE R&M	2,040.00	81.75	362.17	17.75	1,677.83
10-5-0055-0446 EQUIPMENT R&M	500.00	0.00	0.00	0.00	500.00
TOTAL MAINTENANCE & REPAIRS	2,540.00	81.75	362.17	14.26	2,177.83

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CODE ENFORCE/ANIMAL CONTR

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0055-0460 CONTRACTED SERVICES	4,000.00	0.00	1,260.00	31.50	2,740.00
10-5-0055-0468 INFORMATION TECHNOLOGY	3,600.00	0.00	35.13	0.98	3,564.87
10-5-0055-0469 LIABILITY & PROPERTY	300.00	0.00	234.50	78.17	65.50
TOTAL CONTRACTED SERVICES	7,900.00	0.00	1,529.63	19.36	6,370.37
DEPARTMENTAL					
10-5-0055-0491 LEGAL NOTICES	1,000.00	0.00	0.00	0.00	1,000.00
TOTAL DEPARTMENTAL	1,000.00	0.00	0.00	0.00	1,000.00
SPECIAL PROJECTS					
10-5-0055-0495 SPECIAL PROJECTS	12,000.00	0.00	0.00	0.00	12,000.00
TOTAL SPECIAL PROJECTS	12,000.00	0.00	0.00	0.00	12,000.00
VEHICLE LEASES					
10-5-0055-0560 VEHICLE LEASE PAYMENTS	0.00	0.00	0.00	0.00	0.00
10-5-0055-0561 VEHICLE MAKE READY	0.00	0.00	0.00	0.00	0.00
10-5-0055-0562 VEHICLE MAINT PLAN	0.00	6.00	36.00	0.00	(36.00)
TOTAL VEHICLE LEASES	0.00	6.00	36.00	0.00	(36.00)
CAPITAL OUTLAY					
10-5-0055-0668 CAP OUT-ANIMAL CONTROL T	0.00	0.00	0.00	0.00	0.00
TOTAL CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00
TOTAL CODE ENFORCE/ANIMAL CONTR	100,198.00	6,214.51	38,572.65	38.50	61,625.35

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
MUNICIPAL COURT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0060-0400 COURT SALARIES	50,272.00	4,455.84	26,496.05	52.71	23,775.95
10-5-0060-0401 COURT SOCIAL SECURITY	3,117.00	278.21	1,699.42	54.52	1,417.58
10-5-0060-0402 COURT UNEMPLOYMENT TAXES	252.00	0.00	2.21	0.88	249.79
10-5-0060-0403 COURT MEDICARE	729.00	65.06	397.45	54.52	331.55
10-5-0060-0404 COURT TMRS	5,365.00	484.61	2,928.83	54.59	2,436.17
10-5-0060-0405 COURT OVERTIME	0.00	0.00	780.10	0.00	(780.10)
10-5-0060-0406 COURT WORKERS COMPENSATI	112.00	0.00	117.50	104.91	(5.50)
10-5-0060-0410 COURT INSURANCE	10,278.00	895.61	3,453.99	33.61	6,824.01
10-5-0060-0412 COURT HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	70,625.00	6,179.33	35,875.55	50.80	34,749.45
TRAVEL & TRAINING					
10-5-0060-0413 COURT MEDICAL EXPENSE RE	0.00	0.00	0.00	0.00	0.00
10-5-0060-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0060-0416 COURT TRAINING	750.00	0.00	0.00	0.00	750.00
10-5-0060-0418 COURT DUES & MEMBERSHIPS	75.00	0.00	110.00	146.67	(35.00)
TOTAL TRAVEL & TRAINING	825.00	0.00	110.00	13.33	715.00
SUPPLIES					
10-5-0060-0421 COURT OFFICE SUPPLIES	500.00	0.00	50.47	10.09	449.53
10-5-0060-0423 COURT POSTAGE	1,000.00	0.00	11.96	1.20	988.04
TOTAL SUPPLIES	1,500.00	0.00	62.43	4.16	1,437.57
UTILITIES					
10-5-0060-0430 CELL PHONES & MIFI	0.00	31.25	187.50	0.00	(187.50)
TOTAL UTILITIES	0.00	31.25	187.50	0.00	(187.50)
SMALL EQUIPMENT					
10-5-0060-0433 SMALL EQUIPMENT<$5,000	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
CONTRACTED SERVICES					
10-5-0060-0461 OTHER CONTRACTED SERVICE	13,800.00	0.00	3,200.00	23.19	10,600.00
10-5-0060-0468 INFORMATION TECHNOLOGY	10,642.00	2,097.27	6,600.91	62.03	4,041.09
TOTAL CONTRACTED SERVICES	24,442.00	2,097.27	9,800.91	40.10	14,641.09
DEPARTMENTAL					
10-5-0060-0480 COURT CASH RESERVE	0.00	0.00	0.00	0.00	0.00
10-5-0060-0481 COURT STATE FEES	0.00	0.00	0.00	0.00	0.00
10-5-0060-0486 COURT MISCELLANEOUS	0.00	0.00	0.00	0.00	0.00
10-5-0060-0488 MERCHANT SERVICE FEES	0.00	0.00	765.22	0.00	(765.22)
TOTAL DEPARTMENTAL	0.00	0.00	765.22	0.00	(765.22)

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
MUNICIPAL COURT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
SPECIAL PROJECTS					
10-5-0060-0499 COURT JURY DUTY	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
VEHICLE LEASES					
10-5-0060-0560 VEHICLE LEASES	0.00	0.00	0.00	0.00	0.00
TOTAL VEHICLE LEASES	0.00	0.00	0.00	0.00	0.00
TOTAL MUNICIPAL COURT	97,392.00	8,307.85	46,801.61	48.05	50,590.39

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
FIRE DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0070-0400 SALARIES & WAGES	471,364.00	51,546.17	185,072.98	39.26	286,291.02
10-5-0070-0401 SOCIAL SECURITY TAXES	29,225.00	3,465.66	12,083.67	41.35	17,141.33
10-5-0070-0402 STATE UNEMPLOYMENT TAXES	1,764.00	0.00	42.49	2.41	1,721.51
10-5-0070-0403 MEDICARE TAXES	6,835.00	810.46	2,825.92	41.34	4,009.08
10-5-0070-0404 RETIREMENT (TMRS)	35,972.00	4,495.59	14,249.59	39.61	21,722.41
10-5-0070-0405 OVERTIME	0.00	4,596.89	10,183.69	0.00	(10,183.69)
10-5-0070-0406 WORKERS COMPENSATION	12,871.00	0.00	5,019.00	38.99	7,852.00
10-5-0070-0410 HEALTH INSURANCE	51,852.00	3,791.57	11,555.01	22.28	40,296.99
10-5-0070-0412 HRA	2,500.00	0.00	0.00	0.00	2,500.00
TOTAL PERSONNEL	612,383.00	68,706.34	241,032.35	39.36	371,350.65
TRAVEL & TRAINING					
10-5-0070-0414 TRAVEL REIMBURSEMENT	0.00	0.00	10.00	0.00	(10.00)
10-5-0070-0416 EMPLOYEE TRAINING	17,473.00	3,115.23	5,026.78	28.77	12,446.22
10-5-0070-0418 DUES & MEMBERSHIPS	4,525.00	0.00	871.51	19.26	3,653.49
TOTAL TRAVEL & TRAINING	21,998.00	3,115.23	5,908.29	26.86	16,089.71
SUPPLIES					
10-5-0070-0420 UNIFORMS	14,300.00	135.00	6,887.44	48.16	7,412.56
10-5-0070-0421 OFFICE SUPPLIES	1,000.00	81.69	244.91	24.49	755.09
10-5-0070-0423 POSTAGE	50.00	0.00	55.86	111.72	(5.86)
10-5-0070-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0070-0426 GAS & OIL	14,000.00	1,214.22	6,031.88	43.08	7,968.12
10-5-0070-0429 DEPARTMENT SUPPLIES	4,000.00	163.06	1,790.84	44.77	2,209.16
TOTAL SUPPLIES	33,350.00	1,593.97	15,010.93	45.01	18,339.07
UTILITIES					
10-5-0070-0430 CELL PHONES & MIFI	1,500.00	259.45	1,556.58	103.77	(56.58)
10-5-0070-0432 UTILITIES	5,200.00	1,401.24	2,637.41	50.72	2,562.59
TOTAL UTILITIES	6,700.00	1,660.69	4,193.99	62.60	2,506.01
SMALL EQUIPMENT					
10-5-0070-0433 SMALL EQUIPMENT<$5,000	6,000.00	0.00	4,763.12	79.39	1,236.88
TOTAL SMALL EQUIPMENT	6,000.00	0.00	4,763.12	79.39	1,236.88
MAINTENANCE & REPAIRS					
10-5-0070-0442 BUILDING MAINTENANCE	2,000.00	65.00	8,523.08	426.15	(6,523.08)
10-5-0070-0445 VEHICLE R&M	30,900.00	0.00	11,123.67	36.00	19,776.33
10-5-0070-0446 EQUIPMENT R&M	10,000.00	0.00	3,798.80	37.99	6,201.20
TOTAL MAINTENANCE & REPAIRS	42,900.00	65.00	23,445.55	54.65	19,454.45

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
FIRE DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0070-0460 OTHER CONTRACTED SERVICE	4,144.00	0.00	2,903.60	70.07	1,240.40
10-5-0070-0468 INFORMATION TECHNOLOGY	3,050.00	146.96	801.55	26.28	2,248.45
10-5-0070-0469 LIABILITY & PROPERTY	10,000.00	0.00	3,780.00	37.80	6,220.00
TOTAL CONTRACTED SERVICES	17,194.00	146.96	7,485.15	43.53	9,708.85
DEPARTMENTAL					
10-5-0070-0475 COMMUNITY OUTREACH	2,500.00	0.00	389.91	15.60	2,110.09
10-5-0070-0478 FIRE MARSHALL	8,800.00	0.00	2,011.68	22.86	6,788.32
10-5-0070-0486 MISCELLANEOUS	0.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENTAL	11,300.00	0.00	2,401.59	21.25	8,898.41
SPECIAL PROJECTS					
10-5-0070-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
DEBT PAYMENTS					
10-5-0070-0505 LEASE PAYMENTS	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT PAYMENTS	0.00	0.00	0.00	0.00	0.00
VEHICLE LEASES					
10-5-0070-0560 VEHICLE LEASE PAYMENTS	39,503.00	975.73	5,854.38	14.82	33,648.62
10-5-0070-0561 VEHICLE MAKE READY	48,000.00	0.00	0.00	0.00	48,000.00
10-5-0070-0562 VEHICLE MAINT PLAN	1,165.00	49.77	298.62	25.63	866.38
TOTAL VEHICLE LEASES	88,668.00	1,025.50	6,153.00	6.94	82,515.00
CAPITAL OUTLAY					
10-5-0070-0660 SCBA PACKS	0.00	0.00	0.00	0.00	0.00
10-5-0070-0661 LIFEPAK DEFIB/MONITOR	0.00	0.00	0.00	0.00	0.00
10-5-0070-0665 EXTRACTOR WASHER & DRYER	0.00	0.00	0.00	0.00	0.00
TOTAL CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00
TOTAL FIRE DEPARTMENT	840,493.00	76,313.69	310,393.97	36.93	530,099.03

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
STREETS

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0080-0400 SALARIES & WAGES	122,410.00	12,088.61	38,831.80	31.72	83,578.20
10-5-0080-0401 SOCIAL SECURITY	7,841.00	816.10	2,624.89	33.48	5,216.11
10-5-0080-0402 STATE UNEMPLOYMENT TAX	630.00	0.00	0.00	0.00	630.00
10-5-0080-0403 MEDICARE TAXES	1,834.00	190.86	613.89	33.47	1,220.11
10-5-0080-0404 RETIREMENT (TMRS)	13,497.00	1,433.20	4,580.71	33.94	8,916.29
10-5-0080-0405 OVERTIME	4,057.00	1,120.41	5,017.24	123.67	(960.24)
10-5-0080-0406 WORKERS COMPENSATION	3,096.00	0.00	2,571.50	83.06	524.50
10-5-0080-0410 HEALTH INSURANCE	30,497.00	831.16	5,619.05	18.42	24,877.95
10-5-0080-0412 HRA	1,250.00	0.00	0.00	0.00	1,250.00
TOTAL PERSONNEL	185,112.00	16,480.34	59,859.08	32.34	125,252.92
TRAVEL & TRAINING					
10-5-0080-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0080-0416 TRAINING	2,500.00	0.00	0.00	0.00	2,500.00
10-5-0080-0418 DUES & MEMBERSHIPS	0.00	0.00	0.00	0.00	0.00
TOTAL TRAVEL & TRAINING	2,500.00	0.00	0.00	0.00	2,500.00
SUPPLIES					
10-5-0080-0420 UNIFORMS	2,000.00	35.22	1,005.17	50.26	994.83
10-5-0080-0421 OFFICE SUPPLIES	200.00	62.60	272.83	136.42	(72.83)
10-5-0080-0426 GAS & OIL	6,500.00	592.62	4,455.78	68.55	2,044.22
10-5-0080-0429 DEPARTMENT SUPPLIES	3,000.00	634.64	1,198.91	39.96	1,801.09
TOTAL SUPPLIES	11,700.00	1,325.08	6,932.69	59.25	4,767.31
UTILITIES					
10-5-0080-0430 CELL PHONES & MIFI	1,400.00	128.43	791.90	56.56	608.10
10-5-0080-0431 TELEPHONE SYSTEM	0.00	0.00	0.00	0.00	0.00
10-5-0080-0432 UTILITIES	45,000.00	3,484.35	19,813.01	44.03	25,186.99
TOTAL UTILITIES	46,400.00	3,612.78	20,604.91	44.41	25,795.09
SMALL EQUIPMENT					
10-5-0080-0433 SMALL EQUIPMENT<$5,000	5,000.00	329.76	528.66	10.57	4,471.34
10-5-0080-0434 RENTAL EQUIPMENT	2,000.00	0.00	0.00	0.00	2,000.00
TOTAL SMALL EQUIPMENT	7,000.00	329.76	528.66	7.55	6,471.34
MAINTENANCE & REPAIRS					
10-5-0080-0442 BUILDING R&M	1,000.00	21.67	105.84	10.58	894.16
10-5-0080-0445 VEHICLE R&M	5,000.00	(155.45)	3,786.45	75.73	1,213.55
10-5-0080-0446 EQUIPMENT R&M	7,500.00	32.56	470.59	6.27	7,029.41
10-5-0080-0447 STREET REPAIRS	0.00	0.00	0.00	0.00	0.00
10-5-0080-0449 P.W. DRAINAGE	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	13,500.00	(101.22)	4,362.88	32.32	9,137.12

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
STREETS

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0080-0460 OTHER CONTRACTED SERVICE	10,000.00	0.00	0.00	0.00	10,000.00
10-5-0080-0464 ENGINEERING	0.00	0.00	0.00	0.00	0.00
10-5-0080-0466 RENTAL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
10-5-0080-0469 LIABILITY & PROPERTY INS	1,469.00	0.00	628.37	42.78	840.63
TOTAL CONTRACTED SERVICES	11,469.00	0.00	628.37	5.48	10,840.63
DEPARTMENTAL					
10-5-0080-0470 STREET SIGNS	10,000.00	152.97	4,047.51	40.48	5,952.49
10-5-0080-0472 DRAINAGE MATERIAL	10,000.00	0.00	0.00	0.00	10,000.00
10-5-0080-0475 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
10-5-0080-0480 P.W. CASH RESERVES	0.00	0.00	0.00	0.00	0.00
10-5-0080-0486 MISCELLANEOUS	0.00	0.00	0.00	0.00	0.00
10-5-0080-0488 P.W. ANIMAL IMPOUND	0.00	0.00	0.00	0.00	0.00
10-5-0080-0489 PRISON WORKER MEALS	250.00	0.00	0.00	0.00	250.00
10-5-0080-0490 P.W. DSF TRANSFER IN/OUT	0.00	0.00	0.00	0.00	0.00
10-5-0080-0491 LEGAL SERVICES	0.00	0.00	169.00	0.00	(169.00)
TOTAL DEPARTMENTAL	20,250.00	152.97	4,216.51	20.82	16,033.49
VEHICLE LEASES					
10-5-0080-0560 VEHICLE LEASE PAYMENTS	0.00	(1,380.14)	0.00	0.00	0.00
10-5-0080-0561 VEHICLE MAKE READY	0.00	0.00	0.00	0.00	0.00
10-5-0080-0562 VEHICLE MAINT PLAN	0.00	(100.31)	0.00	0.00	0.00
TOTAL VEHICLE LEASES	0.00	(1,480.45)	0.00	0.00	0.00
TOTAL STREETS	297,931.00	20,319.26	97,133.10	32.60	200,797.90

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
PARKS & RECREATION

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0090-0400 SALARIES & WAGES	161,255.00	16,600.17	58,806.35	36.47	102,448.65
10-5-0090-0401 SOCIAL SECURITY TAXES	10,353.00	1,029.73	3,580.33	34.58	6,772.67
10-5-0090-0402 STATE UNEMPLOYMENT TAXES	882.00	0.00	0.00	0.00	882.00
10-5-0090-0403 MEDICARE TAXES	2,421.00	240.85	837.37	34.59	1,583.63
10-5-0090-0404 RETIREMENT (TMRS)	17,821.00	1,805.35	6,182.77	34.69	11,638.23
10-5-0090-0405 OVERTIME	5,721.00	19.53	348.22	6.09	5,372.78
10-5-0090-0406 WORKERS COMPENSATION	4,088.00	0.00	1,349.50	33.01	2,738.50
10-5-0090-0410 HEALTH INSURANCE	39,315.00	2,562.03	12,596.29	32.04	26,718.71
10-5-0090-0412 HRA	1,791.00	0.00	0.00	0.00	1,791.00
TOTAL PERSONNEL	243,647.00	22,257.66	83,700.83	34.35	159,946.17
TRAVEL & TRAINING					
10-5-0090-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0090-0416 EMPLOYEE TRAINING	850.00	0.00	0.00	0.00	850.00
10-5-0090-0418 DUES & MEMBERSHIPS	0.00	0.00	0.00	0.00	0.00
TOTAL TRAVEL & TRAINING	850.00	0.00	0.00	0.00	850.00
SUPPLIES					
10-5-0090-0420 UNIFORMS	1,500.00	53.79	1,236.46	82.43	263.54
10-5-0090-0421 OFFICE SUPPLIES	0.00	23.26	108.75	0.00	(108.75)
10-5-0090-0423 POSTAGE	0.00	0.00	0.00	0.00	0.00
10-5-0090-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
10-5-0090-0426 GAS & OIL	5,500.00	225.01	1,791.11	32.57	3,708.89
10-5-0090-0429 DEPARTMENT SUPPLIES	2,500.00	181.94	2,103.79	84.15	396.21
TOTAL SUPPLIES	9,500.00	484.00	5,240.11	55.16	4,259.89
UTILITIES					
10-5-0090-0430 CELL PHONES & MIFI	1,400.00	142.19	787.21	56.23	612.79
10-5-0090-0432 UTILITIES	20,000.00	629.84	3,942.22	19.71	16,057.78
TOTAL UTILITIES	21,400.00	772.03	4,729.43	22.10	16,670.57
SMALL EQUIPMENT					
10-5-0090-0433 SMALL EQUIPMENT<$5,000	5,000.00	796.13	1,276.19	25.52	3,723.81
TOTAL SMALL EQUIPMENT	5,000.00	796.13	1,276.19	25.52	3,723.81
MAINTENANCE & REPAIRS					
10-5-0090-0442 BUILDING R&M	2,500.00	0.00	72.49	2.90	2,427.51
10-5-0090-0445 VEHICLE R&M	5,000.00	0.00	1,578.15	31.56	3,421.85
10-5-0090-0446 EQUIPMENT R&M	2,500.00	31.96	1,302.39	52.10	1,197.61
10-5-0090-0448 PARK MAINTENANCE	15,000.00	846.71	5,714.93	38.10	9,285.07
TOTAL MAINTENANCE & REPAIRS	25,000.00	878.67	8,667.96	34.67	16,332.04

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
PARKS & RECREATION

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0090-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
10-5-0090-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
10-5-0090-0464 ENGINEERING SERVICES	0.00	0.00	0.00	0.00	0.00
10-5-0090-0468 INFORMATION TECHNOLOGY	0.00	0.00	0.00	0.00	0.00
10-5-0090-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	1,799.10	0.00	(1,799.10)
TOTAL CONTRACTED SERVICES	0.00	0.00	1,799.10	0.00	(1,799.10)
DEPARTMENTAL					
10-5-0090-0488 MERCHANT SERVICE FEES	0.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENTAL	0.00	0.00	0.00	0.00	0.00
SPECIAL PROJECTS					
10-5-0090-0495 SPECIAL PROJECTS	25,000.00	114.67	227.69	0.91	24,772.31
TOTAL SPECIAL PROJECTS	25,000.00	114.67	227.69	0.91	24,772.31
VEHICLE LEASES					
10-5-0090-0560 VEHICLE LEASE PAYMENTS	0.00	(1,216.92)	0.00	0.00	0.00
10-5-0090-0561 VEHICLE VEHICLE MAKE REA	0.00	0.00	0.00	0.00	0.00
10-5-0090-0562 VEHICLE MAINT PLAN	0.00	(78.67)	0.00	0.00	0.00
TOTAL VEHICLE LEASES	0.00	(1,295.59)	0.00	0.00	0.00
TOTAL PARKS & RECREATION	330,397.00	24,007.57	105,641.31	31.97	224,755.69

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CITY-WIDE (NONDEPARTMENTA

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
10-5-0095-0400 SALARIES & WAGES	33,788.00	3,780.00	14,849.33	43.95	18,938.67
10-5-0095-0401 SOCIAL SECURITY	2,095.00	235.86	924.81	44.14	1,170.19
10-5-0095-0402 STATE UNEMPLOYMENT TAX	252.00	0.00	1.84	0.73	250.16
10-5-0095-0403 MEDICARE TAXES	490.00	55.17	216.30	44.14	273.70
10-5-0095-0404 RETIREMENT (TMRS)	3,606.00	410.82	1,597.51	44.30	2,008.49
10-5-0095-0405 OVERTIME	0.00	0.00	5.91	0.00	(5.91)
10-5-0095-0406 WORKERS COMPENSATION	75.00	0.00	0.00	0.00	75.00
10-5-0095-0410 HEALTH INSURANCE	10,175.00	849.96	4,233.63	41.61	5,941.37
10-5-0095-0412 HRA	500.00	0.00	0.00	0.00	500.00
TOTAL PERSONNEL	50,981.00	5,331.81	21,829.33	42.82	29,151.67
TRAVEL & TRAINING					
10-5-0095-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
10-5-0095-0416 EMPLOYEE TRAINING	0.00	16.66	16.66	0.00	(16.66)
10-5-0095-0418 DUES & MEMBERSHIPS	2,760.00	100.00	875.80	31.73	1,884.20
TOTAL TRAVEL & TRAINING	2,760.00	116.66	892.46	32.34	1,867.54
SUPPLIES					
10-5-0095-0420 UNIFORMS	850.00	0.00	404.30	47.56	445.70
10-5-0095-0421 OFFICE SUPPLIES	5,500.00	0.00	2,252.12	40.95	3,247.88
10-5-0095-0423 POSTAGE	2,000.00	2,131.54	2,695.23	134.76	(695.23)
10-5-0095-0425 COPIERS	4,144.00	0.00	1,314.70	31.73	2,829.30
10-5-0095-0426 GAS & OIL	0.00	64.01	626.94	0.00	(626.94)
10-5-0095-0429 DEPARTMENT SUPPLIES	8,400.00	1,326.48	4,347.32	51.75	4,052.68
TOTAL SUPPLIES	20,894.00	3,522.03	11,640.61	55.71	9,253.39
UTILITIES					
10-5-0095-0430 CELL PHONES & MIFI	936.00	62.50	375.00	40.06	561.00
10-5-0095-0431 TELEPHONE SYSTEM	10,812.00	864.55	4,209.90	38.94	6,602.10
10-5-0095-0432 UTILITIES	12,396.00	1,360.21	8,915.56	71.92	3,480.44
TOTAL UTILITIES	24,144.00	2,287.26	13,500.46	55.92	10,643.54
SMALL EQUIPMENT					
10-5-0095-0433 SMALL EQUIPMENT<$5,000	5,000.00	0.00	0.00	0.00	5,000.00
10-5-0095-0434 RENTAL EQUIPMENT	1,000.00	0.00	0.00	0.00	1,000.00
TOTAL SMALL EQUIPMENT	6,000.00	0.00	0.00	0.00	6,000.00
MAINTENANCE & REPAIRS					
10-5-0095-0442 BUILDING R&M	41,500.00	154.33	3,426.20	8.26	38,073.80
10-5-0095-0445 VEHICLE R&M	0.00	0.00	98.50	0.00	(98.50)
10-5-0095-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	41,500.00	154.33	3,524.70	8.49	37,975.30

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

10 -GENERAL FUND
CITY-WIDE (NONDEPARTMENTA

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
10-5-0095-0460 OTHER CONTRACTED SERVICE	0.00	0.00	103.55	0.00	(103.55)
10-5-0095-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
10-5-0095-0468 INFORMATION TECHNOLOGY	65,868.00	419.90	26,492.30	40.22	39,375.70
10-5-0095-0469 GEN LIAB & PROPERTY INSU	6,673.00	0.00	7,003.12	104.95	(330.12)
TOTAL CONTRACTED SERVICES	72,541.00	419.90	33,598.97	46.32	38,942.03
DEPARTMENTAL					
10-5-0095-0488 MERCHANT SERVICE FEES	0.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENTAL	0.00	0.00	0.00	0.00	0.00
SPECIAL PROJECTS					
10-5-0095-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL CITY-WIDE (NONDEPARTMENTA	218,820.00	11,831.99	84,986.53	38.84	133,833.47
TOTAL EXPENDITURES	5,246,317.00	466,155.36	2,246,612.49	42.82	2,999,704.51
REVENUES OVER/(UNDER) EXPENDITURES	(299,643.00)	95,976.11	1,480,609.06		(1,780,252.06)

*** END OF REPORT ***

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
FINANCIAL SUMMARY

	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
REVENUE SUMMARY					
WATER	1,429,041.00	114,260.52	715,614.57	50.08	713,426.43
SEWER	2,442,954.00	188,353.77	1,147,019.58	46.95	1,295,934.42
SANITATION	731,434.00	50,689.76	281,154.13	38.44	450,279.87
ADMINISTRATIVE FEES	1,538,500.00	7,141.65	208,366.41	13.54	1,330,133.59
TOTAL REVENUES	6,141,929.00	360,445.70	2,352,154.69	38.30	3,789,774.31
EXPENDITURE SUMMARY					
NON-DEPARTMENTAL	413,104.00	0.00	613,419.44	148.49	(200,315.44)
ADMINISTRATION	510,746.00	31,645.00	205,645.79	40.26	305,100.21
WATER DEPARTMENT	1,187,572.00	25,328.76	445,994.99	37.56	741,577.01
SANITATION DEPARTMENT	676,252.00	0.00	234,504.31	34.68	441,747.69
SEWER DEPARTMENT	2,321,334.00	159,933.56	1,144,242.49	49.29	1,177,091.51
TOTAL EXPENDITURES	5,109,008.00	216,907.32	2,643,807.02	51.75	2,465,200.98
REVENUES OVER/(UNDER) EXPENDITURES	1,032,921.00	143,538.38	(291,652.33)		1,324,573.33

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND

REVENUES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
WATER					
60-4-0000-0300 WATER SALES	1,423,141.00	114,260.52	714,114.57	50.18	709,026.43
60-4-0000-0302 WATER TAPS	4,000.00	0.00	1,000.00	25.00	3,000.00
60-4-0000-0303 WATER METERS	1,900.00	0.00	0.00	0.00	1,900.00
60-4-0000-0304 BULK WATER SALES	0.00	0.00	0.00	0.00	0.00
60-4-0000-0305 4' SEWER CONNECTION	0.00	0.00	500.00	0.00	(500.00)
60-4-0000-0306 GARBAGE	0.00	0.00	0.00	0.00	0.00
TOTAL WATER	1,429,041.00	114,260.52	715,614.57	50.08	713,426.43
SEWER					
60-4-0000-0310 SEWER SALES	2,432,954.00	188,353.77	1,147,019.58	47.15	1,285,934.42
60-4-0000-0312 SEWER TAPS	5,000.00	0.00	0.00	0.00	5,000.00
60-4-0000-0315 SEWER CONNECTIONS	5,000.00	0.00	0.00	0.00	5,000.00
TOTAL SEWER	2,442,954.00	188,353.77	1,147,019.58	46.95	1,295,934.42
SANITATION					
60-4-0000-0320 RECONNECT FEES	0.00	0.00	0.00	0.00	0.00
60-4-0000-0325 IRRIGATION BACKFLOW TEST	0.00	0.00	0.00	0.00	0.00
60-4-0000-0326 COMMERCIAL GARBAGE	381,826.00	20,749.83	116,565.14	30.53	265,260.86
60-4-0000-0328 RESIDENTIAL GARBAGE	349,608.00	29,957.00	164,560.12	47.07	185,047.88
60-4-0000-0329 GARBAGE MISCELLANEOUS	0.00	(17.07)	28.87	0.00	(28.87)
TOTAL SANITATION	731,434.00	50,689.76	281,154.13	38.44	450,279.87
ADMINISTRATIVE FEES					
60-4-0000-0330 LATE CHARGES	20,000.00	3,290.65	27,161.53	135.81	(7,161.53)
60-4-0000-0332 NSF CHARGES	0.00	50.00	175.00	0.00	(175.00)
60-4-0000-0335 RECONNECT FEES	10,000.00	3,800.00	14,595.00	145.95	(4,595.00)
60-4-0000-0349 CREDIT CARD FEES	0.00	0.00	0.00	0.00	0.00
60-4-0000-0360 INTEREST EARNINGS	5,000.00	0.00	8,076.43	161.53	(3,076.43)
60-4-0000-0361 GRANT FUND WATER LOOPING	0.00	0.00	0.00	0.00	0.00
60-4-0000-0362 MISCELLANEOUS	3,500.00	1.00	2,314.40	66.13	1,185.60
60-4-0000-0363 MOUNTAIN PEAK SUD CLEARI	0.00	0.00	0.00	0.00	0.00
60-4-0000-0364 W. & S. WATER DEPOSITS	0.00	0.00	0.00	0.00	0.00
60-4-0000-0365 W. & S. SEWER DEPOSITS	0.00	0.00	0.00	0.00	0.00
60-4-0000-0366 W. & S. SUBDIVISION FEES	0.00	0.00	0.00	0.00	0.00
60-4-0000-0367 INFRASTRUCTURE REHAB REI	0.00	0.00	0.00	0.00	0.00
60-4-0000-0368 CASH OVER (SHORT)	0.00	0.00	(1,565.47)	0.00	1,565.47
60-4-0000-0378 AUDIT ADJUSTMENTS	0.00	0.00	0.00	0.00	0.00
60-4-0000-0379 PROCEEDS FROM SALE OF AS	0.00	0.00	0.00	0.00	0.00
60-4-0000-0380 DEVELOPER CONTRIBUTIONS	0.00	0.00	0.00	0.00	0.00
60-4-0000-0381 4% CIVIL INSPECTION FEES	1,500,000.00	0.00	157,609.52	10.51	1,342,390.48
60-4-0000-0387 W. & S. INTEREST/SINKING	0.00	0.00	0.00	0.00	0.00
60-4-0000-0388 W. & S. G/F TRANSFERS IN	0.00	0.00	0.00	0.00	0.00
60-4-0000-0390 W. & S. FUND BALANCE FOR	0.00	0.00	0.00	0.00	0.00
60-4-0000-0391 2018 CO PROCEEDS	0.00	0.00	0.00	0.00	0.00
TOTAL ADMINISTRATIVE FEES	1,538,500.00	7,141.65	208,366.41	13.54	1,330,133.59

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND

REVENUES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
TOTAL REVENUES	6,141,929.00	360,445.70	2,352,154.69	38.30	3,789,774.31

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
NON-DEPARTMENTAL

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
60-5-0000-0400 SALARIES & WAGES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0401 SOCIAL SECURITY TAXES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0402 STATE UNEMPLOYMENT TAXES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0403 MEDICARE TAXES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0404 RETIREMENT (TMRS)	0.00	0.00	0.00	0.00	0.00
60-5-0000-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
60-5-0000-0406 WORKERS COMPENSATION	0.00	0.00	0.00	0.00	0.00
60-5-0000-0407 PENSION EXPENSE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0408 ACCRUED COMP EXPENSES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0409 RETIREMENT-CONTRIBUTIO	0.00	0.00	0.00	0.00	0.00
60-5-0000-0410 HEALTH INSURANCE	0.00	0.00	0.00	0.00	0.00
TOTAL PERSONNEL	0.00	0.00	0.00	0.00	0.00
TRAVEL & TRAINING					
60-5-0000-0413 HRA	0.00	0.00	0.00	0.00	0.00
60-5-0000-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
60-5-0000-0415 CONTRACT LABOR	0.00	0.00	0.00	0.00	0.00
60-5-0000-0416 TRAINING	0.00	0.00	0.00	0.00	0.00
60-5-0000-0418 DUES & SUBSCRIPTIONS	0.00	0.00	0.00	0.00	0.00
TOTAL TRAVEL & TRAINING	0.00	0.00	0.00	0.00	0.00
SUPPLIES					
60-5-0000-0420 UNIFORMS	0.00	0.00	0.00	0.00	0.00
60-5-0000-0421 OFFICE SUPPLIES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0422 CHEMICALS	0.00	0.00	0.00	0.00	0.00
60-5-0000-0423 POSTAGE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0426 GAS & OIL	0.00	0.00	0.00	0.00	0.00
60-5-0000-0429 DEPARTMENT SUPPLIES	0.00	0.00	0.00	0.00	0.00
TOTAL SUPPLIES	0.00	0.00	0.00	0.00	0.00
UTILITIES					
60-5-0000-0430 TELEPHONE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	0.00	0.00	0.00	0.00	0.00
SMALL EQUIPMENT					
60-5-0000-0433 SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
60-5-0000-0438 LEGAL NOTICES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0439 SYSTEM PARTS & SUPPLIES	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
NON-DEPARTMENTAL

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
MAINTENANCE & REPAIRS					
60-5-0000-0441 PRISON WORKER MEALS	0.00	0.00	0.00	0.00	0.00
60-5-0000-0442 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
60-5-0000-0445 VEHICLE R&M	0.00	0.00	0.00	0.00	0.00
60-5-0000-0448 SYSTEM REPAIRS & MAINTEN	0.00	0.00	0.00	0.00	0.00
60-5-0000-0449 CONTRACTED SERVICES	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	0.00	0.00	0.00	0.00	0.00
CONTRACTED SERVICES					
60-5-0000-0458 LEGAL FEES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0459 ANNUAL AUDITS	0.00	0.00	0.00	0.00	0.00
60-5-0000-0460 COMMERCIAL GARBAGE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0461 PRAIRIELANDS GCD	0.00	0.00	0.00	0.00	0.00
60-5-0000-0462 RESIDENTIAL GARBAGE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0463 MIDLOTHIAN WATER PURCHAS	0.00	0.00	0.00	0.00	0.00
60-5-0000-0464 ENGINEERING SERVICES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0465 TRA FEES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0466 RENTAL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
60-5-0000-0467 MT PEAK BILLING FEES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0468 INFORMATION TECHNOLOGY	0.00	0.00	0.00	0.00	0.00
60-5-0000-0469 LIABILITY & PROPERTY	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	0.00	0.00	0.00	0.00	0.00
DEPARTMENTAL					
60-5-0000-0472 W. & S. TRANSFER OUT	0.00	0.00	0.00	0.00	0.00
60-5-0000-0474 W. & S. GRANT OBLIGATION	0.00	0.00	0.00	0.00	0.00
60-5-0000-0475 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
60-5-0000-0476 ADMINISTRATIVE EXPENSE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0477 WATER SAMPLES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0478 SEWER TESTS	0.00	0.00	0.00	0.00	0.00
60-5-0000-0480 WASTE REMOVAL	0.00	0.00	0.00	0.00	0.00
60-5-0000-0482 W. & S. DEPOSITS RETURNE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0484 W. & S. SALES TAX	0.00	0.00	0.00	0.00	0.00
60-5-0000-0485 DEPRECIATION EXPENSE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0486 MISCELLANEOUS	0.00	0.00	1,650.04	0.00	(1,650.04)
60-5-0000-0487 BNSF RAILROAD LEASES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0488 MERCHANT SERVICE FEES	0.00	0.00	0.00	0.00	0.00
60-5-0000-0493 TRANSFERS IN/OUT	0.00	0.00	0.00	0.00	0.00
60-5-0000-0494 BAD DEBT EXPENSE	0.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENTAL	0.00	0.00	1,650.04	0.00	(1,650.04)
DEBT PAYMENTS					
60-5-0000-0501 NOTE PRINCIPAL	0.00	0.00	0.00	0.00	0.00
60-5-0000-0502 NOTE INTEREST	0.00	0.00	0.00	0.00	0.00
60-5-0000-0503 2018 CO ISSUE COST	0.00	0.00	0.00	0.00	0.00
60-5-0000-0504 BOND INDEBTEDNESS	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
NON-DEPARTMENTAL

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
60-5-0000-0505 INTEREST/SINKING PAYM	0.00	0.00	0.00	0.00	0.00
60-5-0000-0506 BOND PRINCIPAL	232,000.00	0.00	234,000.00	100.86	(2,000.00)
60-5-0000-0507 BOND INTEREST	73,766.00	0.00	33,086.40	44.85	40,679.60
60-5-0000-0508 CAPITAL LEASE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0509 TRA BUY-IN	77,500.00	0.00	77,500.00	100.00	0.00
60-5-0000-0510 CAPITAL LEASE INTEREST	0.00	0.00	0.00	0.00	0.00
60-5-0000-0511 NOTE PAYABLE INTEREST	29,838.00	0.00	29,838.00	100.00	0.00
60-5-0000-0512 AMORTIZATION EXPENSE	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT PAYMENTS	413,104.00	0.00	374,424.40	90.64	38,679.60
VEHICLE LEASES					
60-5-0000-0598 GASB 34 PRINCIPAL ADJUST	0.00	0.00	0.00	0.00	0.00
60-5-0000-0599 GASB 34 INTEREST ACCRUAL	0.00	0.00	0.00	0.00	0.00
TOTAL VEHICLE LEASES	0.00	0.00	0.00	0.00	0.00
CAPITAL OUTLAY					
60-5-0000-0605 12" WATER LINE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0610 12" SEWER LINE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0611 SEWER LINE-8TH ST@RETIRE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0612 SEWER PIPE BORING HWY 67	0.00	0.00	237,345.00	0.00	(237,345.00)
60-5-0000-0615 GENERATOR & ATS-MAIN LIF	0.00	0.00	0.00	0.00	0.00
60-5-0000-0620 W&S MASTER PLAN	0.00	0.00	0.00	0.00	0.00
60-5-0000-0660 GAIN/LOSS ON DISPOSAL OF	0.00	0.00	0.00	0.00	0.00
60-5-0000-0662 CAP IMPR PLAN - WATER	0.00	0.00	0.00	0.00	0.00
60-5-0000-0663 CAP IMPR PLAN - WASTEWAT	0.00	0.00	0.00	0.00	0.00
60-5-0000-0665 CAP OUT-LANDSCAPE TRAILE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0667 CAPITAL OUTLAY	0.00	0.00	0.00	0.00	0.00
60-5-0000-0668 CAP OUT-WATER TANK	0.00	0.00	0.00	0.00	0.00
60-5-0000-0669 CAP OUT-PRISON LIFT ST P	0.00	0.00	0.00	0.00	0.00
60-5-0000-0670 CAMERA SURVEILLANCE SYST	0.00	0.00	0.00	0.00	0.00
60-5-0000-0671 SECURITY GATE-PUBLIC WOR	0.00	0.00	0.00	0.00	0.00
60-5-0000-0672 AMI SYSTEM	0.00	0.00	0.00	0.00	0.00
60-5-0000-0673 CITY HALL GENERATOR	0.00	0.00	0.00	0.00	0.00
60-5-0000-0674 VAC PURCHASE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0675 CAPITAL OUTLAY-FUND 56	0.00	0.00	0.00	0.00	0.00
60-5-0000-0676 PASSENGER TRUCKS (2)	0.00	0.00	0.00	0.00	0.00
60-5-0000-0677 PE LIFT STATION UPGRADE	0.00	0.00	0.00	0.00	0.00
60-5-0000-0699 CAP OUT-CAP PROJ FUND 64	0.00	0.00	0.00	0.00	0.00
TOTAL CAPITAL OUTLAY	0.00	0.00	237,345.00	0.00	(237,345.00)
TRANSFERS					
60-5-0000-0720 TRANSFER (IN) OUT - DSF	0.00	0.00	0.00	0.00	0.00
TOTAL TRANSFERS	0.00	0.00	0.00	0.00	0.00
TOTAL NON-DEPARTMENTAL	413,104.00	0.00	613,419.44	148.49	(200,315.44)

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
ADMINISTRATION

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
60-5-0045-0400 SALARIES & WAGES	282,259.00	19,659.77	121,442.21	43.03	160,816.79
60-5-0045-0401 SOCIAL SECURITY TAXES	17,547.00	1,249.28	7,916.22	45.11	9,630.78
60-5-0045-0402 STATE UNEMPLOYMENT TAXES	1,134.00	0.00	7.29	0.64	1,126.71
60-5-0045-0403 MEDICARE TAXES	4,104.00	292.18	1,851.39	45.11	2,252.61
60-5-0045-0404 RETIREMENT (TMRS)	30,206.00	2,183.74	13,846.11	45.84	16,359.89
60-5-0045-0405 OVERTIME	764.00	451.19	1,613.37	211.17	(849.37)
60-5-0045-0406 WORKERS COMPENSATION	631.00	0.00	58.00	9.19	573.00
60-5-0045-0410 HEALTH INSURANCE	52,526.00	3,734.74	22,968.42	43.73	29,557.58
60-5-0045-0412 HRA	2,250.00	0.00	0.00	0.00	2,250.00
TOTAL PERSONNEL	391,421.00	27,570.90	169,703.01	43.36	221,717.99
TRAVEL & TRAINING					
60-5-0045-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
60-5-0045-0416 EMPLOYEE TRAINING	2,500.00	0.00	0.00	0.00	2,500.00
60-5-0045-0418 DUES & MEMBERSHIPS	0.00	0.00	0.00	0.00	0.00
TOTAL TRAVEL & TRAINING	2,500.00	0.00	0.00	0.00	2,500.00
SUPPLIES					
60-5-0045-0420 UNIFORMS	1,000.00	0.00	0.00	0.00	1,000.00
60-5-0045-0421 OFFICE SUPPLIES	2,500.00	0.00	72.91	2.92	2,427.09
60-5-0045-0423 POSTAGE	7,500.00	9.65	3,367.60	44.90	4,132.40
60-5-0045-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
60-5-0045-0426 GAS & OIL	7,500.00	0.00	111.16	1.48	7,388.84
60-5-0045-0429 DEPARTMENT SUPPLIES	0.00	0.00	199.23	0.00	(199.23)
TOTAL SUPPLIES	18,500.00	9.65	3,750.90	20.28	14,749.10
UTILITIES					
60-5-0045-0430 CELL PHONES & MIFI	2,000.00	21.60	358.11	17.91	1,641.89
60-5-0045-0431 TELEPHONE SYSTEM	1,500.00	0.00	0.00	0.00	1,500.00
60-5-0045-0432 UTILITIES	0.00	0.00	66.01	0.00	(66.01)
TOTAL UTILITIES	3,500.00	21.60	424.12	12.12	3,075.88
SMALL EQUIPMENT					
60-5-0045-0433 SMALL EQUIPMENT (<$5,000	10,000.00	0.00	0.00	0.00	10,000.00
TOTAL SMALL EQUIPMENT	10,000.00	0.00	0.00	0.00	10,000.00
MAINTENANCE & REPAIRS					
60-5-0045-0442 BUILDING R&M	1,500.00	101.04	586.12	39.07	913.88
60-5-0045-0445 VEHICLE R&M	4,500.00	0.00	25.50	0.57	4,474.50
60-5-0045-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	6,000.00	101.04	611.62	10.19	5,388.38

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
ADMINISTRATION

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
60-5-0045-0451 MT PEAK BILLING FEES	0.00	0.00	0.00	0.00	0.00
60-5-0045-0458 DATA PROSE SERVICES	4,200.00	0.00	2,050.93	48.83	2,149.07
60-5-0045-0459 AUDIT SERVICES	25,250.00	0.00	0.00	0.00	25,250.00
60-5-0045-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
60-5-0045-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
60-5-0045-0465 CIVIL INSPECTIONS	0.00	0.00	950.00	0.00	(950.00)
60-5-0045-0468 INFORMATION TECHNOLOGY	28,525.00	0.00	16,042.21	56.24	12,482.79
60-5-0045-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	57,975.00	0.00	19,043.14	32.85	38,931.86
DEPARTMENTAL					
60-5-0045-0486 MISCELLANEOUS	500.00	0.00	100.00	20.00	400.00
60-5-0045-0488 MERCHANT SERVICE FEES	4,200.00	0.00	8,059.19	191.89	(3,859.19)
TOTAL DEPARTMENTAL	4,700.00	0.00	8,159.19	173.60	(3,459.19)
SPECIAL PROJECTS					
60-5-0045-0495 SPECIAL PROJECTS	5,000.00	0.00	0.00	0.00	5,000.00
TOTAL SPECIAL PROJECTS	5,000.00	0.00	0.00	0.00	5,000.00
VEHICLE LEASES					
60-5-0045-0560 VEHICLE LEASE PAYMENTS	11,000.00	3,706.77	3,706.77	33.70	7,293.23
60-5-0045-0561 VEHICLE MAKE READY	0.00	0.00	0.00	0.00	0.00
60-5-0045-0562 VEHICLE MAINT PLAN	150.00	235.04	247.04	164.69	(97.04)
TOTAL VEHICLE LEASES	11,150.00	3,941.81	3,953.81	35.46	7,196.19
TOTAL ADMINISTRATION	510,746.00	31,645.00	205,645.79	40.26	305,100.21

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
WATER DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
60-5-0065-0400 SALARIES & WAGES	150,669.00	9,708.70	38,674.08	25.67	111,994.92
60-5-0065-0401 SOCIAL SECURITY TAXES	9,669.00	638.03	2,439.61	25.23	7,229.39
60-5-0065-0402 STATE UNEMPLOYMENT TAXES	756.00	0.00	4.62	0.61	751.38
60-5-0065-0403 MEDICARE TAXES	2,261.00	149.23	570.64	25.24	1,690.36
60-5-0065-0404 RETIREMENT (TMRS)	16,644.00	1,095.20	4,452.66	26.75	12,191.34
60-5-0065-0405 OVERTIME	5,286.00	1,059.71	4,056.34	76.74	1,229.66
60-5-0065-0406 WORKERS COMPENSATION	3,830.00	0.00	1,638.50	42.78	2,191.50
60-5-0065-0410 HEALTH INSURANCE	36,171.00	2,415.69	12,304.07	34.02	23,866.93
60-5-0065-0412 HRA	1,542.00	0.00	0.00	0.00	1,542.00
TOTAL PERSONNEL	226,828.00	15,066.56	64,140.52	28.28	162,687.48
TRAVEL & TRAINING					
60-5-0065-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
60-5-0065-0416 EMPLOYEE TRAINING	3,000.00	791.88	1,247.38	41.58	1,752.62
60-5-0065-0418 DUES & MEMBERSHIPS	750.00	0.00	823.01	109.73	(73.01)
TOTAL TRAVEL & TRAINING	3,750.00	791.88	2,070.39	55.21	1,679.61
SUPPLIES					
60-5-0065-0420 UNIFORMS	1,500.00	30.34	894.01	59.60	605.99
60-5-0065-0421 OFFICE SUPPLIES	750.00	76.78	300.26	40.03	449.74
60-5-0065-0423 POSTAGE	0.00	0.00	46.05	0.00	(46.05)
60-5-0065-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
60-5-0065-0426 GAS & OIL	7,000.00	619.81	1,924.50	27.49	5,075.50
60-5-0065-0429 DEPARTMENT SUPPLIES	2,000.00	409.11	1,183.15	59.16	816.85
TOTAL SUPPLIES	11,250.00	1,136.04	4,347.97	38.65	6,902.03
UTILITIES					
60-5-0065-0430 CELL PHONES & MIFI	1,400.00	182.01	1,005.22	71.80	394.78
60-5-0065-0432 UTILITIES	6,000.00	451.86	2,562.61	42.71	3,437.39
TOTAL UTILITIES	7,400.00	633.87	3,567.83	48.21	3,832.17
SMALL EQUIPMENT					
60-5-0065-0433 SMALL EQUIPMENT (<$5,000	4,000.00	0.00	191.90	4.80	3,808.10
60-5-0065-0434 RENTAL EQUIPMENT	1,600.00	0.00	0.00	0.00	1,600.00
TOTAL SMALL EQUIPMENT	5,600.00	0.00	191.90	3.43	5,408.10
MAINTENANCE & REPAIRS					
60-5-0065-0442 BUILDING R&M	500.00	0.00	62.50	12.50	437.50
60-5-0065-0445 VEHICLE R&M	2,600.00	27.75	1,112.30	42.78	1,487.70
60-5-0065-0446 EQUIPMENT R&M	5,000.00	0.00	561.01	11.22	4,438.99
60-5-0065-0448 CONTRACTED SYSTEM R&M	20,000.00	0.00	0.00	0.00	20,000.00
60-5-0065-0449 SYSTEM PARTS & SUPP (INV	25,000.00	2,138.46	11,245.64	44.98	13,754.36
TOTAL MAINTENANCE & REPAIRS	53,100.00	2,166.21	12,981.45	24.45	40,118.55

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
WATER DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
60-5-0065-0450 MIDLOTHIAN WATER PURCHAS	825,000.00	0.00	341,093.90	41.34	483,906.10
60-5-0065-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
60-5-0065-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
60-5-0065-0464 ENGINEERING SERVICES	15,000.00	0.00	0.00	0.00	15,000.00
60-5-0065-0468 INFORMATION TECHNOLOGY	0.00	0.00	0.00	0.00	0.00
60-5-0065-0469 GEN LIAB & PROPERTY INSU	7,494.00	0.00	4,087.40	54.54	3,406.60
TOTAL CONTRACTED SERVICES	847,494.00	0.00	345,181.30	40.73	502,312.70
DEPARTMENTAL					
60-5-0065-0477 WATER SAMPLES	3,000.00	100.00	945.32	31.51	2,054.68
60-5-0065-0482 CHEMICALS	1,000.00	0.00	0.00	0.00	1,000.00
60-5-0065-0484 TCEQ PERMITS	5,000.00	0.00	3,655.55	73.11	1,344.45
60-5-0065-0486 MISCELLANEOUS	500.00	81.36	121.36	24.27	378.64
60-5-0065-0487 BNSF RAILROAD LEASES	2,650.00	0.00	0.00	0.00	2,650.00
TOTAL DEPARTMENTAL	12,150.00	181.36	4,722.23	38.87	7,427.77
SPECIAL PROJECTS					
60-5-0065-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
VEHICLE LEASES					
60-5-0065-0560 VEHICLE LEASE PAYMENTS	20,000.00	5,038.31	8,267.18	41.34	11,732.82
60-5-0065-0561 VEHICLE MAKE READY	0.00	0.00	0.00	0.00	0.00
60-5-0065-0562 VEHICLE MAINT PLAN	0.00	314.53	524.22	0.00	(524.22)
TOTAL VEHICLE LEASES	20,000.00	5,352.84	8,791.40	43.96	11,208.60
TOTAL WATER DEPARTMENT	1,187,572.00	25,328.76	445,994.99	37.56	741,577.01

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
SANITATION DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
60-5-0075-0400 SALARIES & WAGES	0.00	0.00	0.00	0.00	0.00
60-5-0075-0401 SOCIAL SECURITY TAXES	0.00	0.00	0.00	0.00	0.00
60-5-0075-0402 STATE UNEMPLOYMENT TAXES	0.00	0.00	0.00	0.00	0.00
60-5-0075-0403 MEDICARE TAXES	0.00	0.00	0.00	0.00	0.00
60-5-0075-0404 RETIREMENT (TMRS)	0.00	0.00	0.00	0.00	0.00
60-5-0075-0405 OVERTIME	0.00	0.00	0.00	0.00	0.00
60-5-0075-0406 WORKERS COMPENSATION	0.00	0.00	0.00	0.00	0.00
60-5-0075-0410 HEALTH INSURANCE	0.00	0.00	0.00	0.00	0.00
60-5-0075-0412 HRA	0.00	0.00	0.00	0.00	0.00
TOTAL PERSONNEL	0.00	0.00	0.00	0.00	0.00
TRAVEL & TRAINING					
60-5-0075-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
60-5-0075-0416 EMPLOYEE TRAINING	0.00	0.00	0.00	0.00	0.00
60-5-0075-0418 DUES & MEMBERSHIPS	0.00	0.00	0.00	0.00	0.00
TOTAL TRAVEL & TRAINING	0.00	0.00	0.00	0.00	0.00
SUPPLIES					
60-5-0075-0420 UNIFORMS	0.00	0.00	0.00	0.00	0.00
60-5-0075-0421 OFFICE SUPPLIES	0.00	0.00	0.00	0.00	0.00
60-5-0075-0423 POSTAGE	0.00	0.00	0.00	0.00	0.00
60-5-0075-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
60-5-0075-0426 GAS & OIL	0.00	0.00	0.00	0.00	0.00
60-5-0075-0429 DEPARTMENT SUPPLIES	0.00	0.00	0.00	0.00	0.00
TOTAL SUPPLIES	0.00	0.00	0.00	0.00	0.00
UTILITIES					
60-5-0075-0430 CELL PHONES & MIFI	0.00	0.00	0.00	0.00	0.00
60-5-0075-0432 UTILITIES	0.00	0.00	0.00	0.00	0.00
TOTAL UTILITIES	0.00	0.00	0.00	0.00	0.00
SMALL EQUIPMENT					
60-5-0075-0433 SMALL EQUIPMENT (<$5,000	0.00	0.00	0.00	0.00	0.00
TOTAL SMALL EQUIPMENT	0.00	0.00	0.00	0.00	0.00
MAINTENANCE & REPAIRS					
60-5-0075-0442 BUILDING R&M	0.00	0.00	0.00	0.00	0.00
60-5-0075-0445 VEHICLE R&M	0.00	0.00	0.00	0.00	0.00
60-5-0075-0446 EQUIPMENT R&M	0.00	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE & REPAIRS	0.00	0.00	0.00	0.00	0.00

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
SANITATION DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
60-5-0075-0456 COMMERCIAL GARBAGE	353,020.00	0.00	95,079.55	26.93	257,940.45
60-5-0075-0457 RESIDENTIAL GARBAGE	323,232.00	0.00	139,424.76	43.13	183,807.24
60-5-0075-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
60-5-0075-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
60-5-0075-0468 INFORMATION TECHNOLOGY	0.00	0.00	0.00	0.00	0.00
60-5-0075-0469 GEN LIAB & PROPERTY INSU	0.00	0.00	0.00	0.00	0.00
TOTAL CONTRACTED SERVICES	676,252.00	0.00	234,504.31	34.68	441,747.69
SPECIAL PROJECTS					
60-5-0075-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SANITATION DEPARTMENT	676,252.00	0.00	234,504.31	34.68	441,747.69

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
SEWER DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
PERSONNEL					
60-5-0085-0400 SALARIES & WAGES	150,669.00	9,708.72	38,614.24	25.63	112,054.76
60-5-0085-0401 SOCIAL SECURITY TAXES	9,669.00	638.02	2,436.22	25.20	7,232.78
60-5-0085-0402 STATE UNEMPLOYMENT TAXES	756.00	0.00	4.62	0.61	751.38
60-5-0085-0403 MEDICARE TAXES	2,261.00	149.20	569.69	25.20	1,691.31
60-5-0085-0404 RETIREMENT (TMRS)	16,644.00	1,095.16	4,446.08	26.71	12,197.92
60-5-0085-0405 OVERTIME	5,286.00	1,059.75	4,056.47	76.74	1,229.53
60-5-0085-0406 WORKERS COMPENSATION	3,818.00	0.00	1,020.50	26.73	2,797.50
60-5-0085-0410 HEALTH INSURANCE	36,170.00	1,598.58	8,279.04	22.89	27,890.96
60-5-0085-0412 HRA	1,542.00	0.00	0.00	0.00	1,542.00
TOTAL PERSONNEL	226,815.00	14,249.43	59,426.86	26.20	167,388.14
TRAVEL & TRAINING					
60-5-0085-0414 TRAVEL REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00
60-5-0085-0416 EMPLOYEE TRAINING	3,000.00	336.87	336.87	11.23	2,663.13
60-5-0085-0418 DUES & MEMBERSHIPS	750.00	0.00	0.00	0.00	750.00
TOTAL TRAVEL & TRAINING	3,750.00	336.87	336.87	8.98	3,413.13
SUPPLIES					
60-5-0085-0420 UNIFORMS	1,500.00	30.33	624.02	41.60	875.98
60-5-0085-0421 OFFICE SUPPLIES	750.00	74.68	225.75	30.10	524.25
60-5-0085-0423 POSTAGE	0.00	0.00	0.00	0.00	0.00
60-5-0085-0425 COPIERS	0.00	0.00	0.00	0.00	0.00
60-5-0085-0426 GAS & OIL	7,000.00	619.81	1,924.50	27.49	5,075.50
60-5-0085-0429 DEPARTMENT SUPPLIES	9,000.00	154.14	5,353.98	59.49	3,646.02
TOTAL SUPPLIES	18,250.00	878.96	8,128.25	44.54	10,121.75
UTILITIES					
60-5-0085-0430 CELL PHONES & MIFI	1,400.00	150.00	813.40	58.10	586.60
60-5-0085-0432 UTILITIES	29,000.00	3,667.12	21,502.59	74.15	7,497.41
TOTAL UTILITIES	30,400.00	3,817.12	22,315.99	73.41	8,084.01
SMALL EQUIPMENT					
60-5-0085-0433 SMALL EQUIPMENT (<$5,000	5,000.00	0.00	191.90	3.84	4,808.10
60-5-0085-0434 RENTAL EQUIPMENT	1,000.00	0.00	0.00	0.00	1,000.00
TOTAL SMALL EQUIPMENT	6,000.00	0.00	191.90	3.20	5,808.10
MAINTENANCE & REPAIRS					
60-5-0085-0442 BUILDING R&M	500.00	0.00	62.50	12.50	437.50
60-5-0085-0445 VEHICLE R&M	2,600.00	27.75	991.82	38.15	1,608.18
60-5-0085-0446 EQUIPMENT R&M	5,000.00	0.00	468.02	9.36	4,531.98
60-5-0085-0448 CONTRACTED SYSTEM R&M	50,000.00	0.00	8,702.50	17.41	41,297.50
60-5-0085-0449 SYSTEM PARTS & SUPP (INV	15,000.00	0.00	1,382.57	9.22	13,617.43
TOTAL MAINTENANCE & REPAIRS	73,100.00	27.75	11,607.41	15.88	61,492.59

REVENUE & EXPENSE REPORT (UNAUDITED)
AS OF: MARCH 31ST, 2023

60 -WATER & SEWER FUND
SEWER DEPARTMENT

DEPARTMENTAL EXPENDITURES	CURRENT BUDGET	CURRENT PERIOD	YEAR TO DATE ACTUAL	% OF BUDGET	BUDGET BALANCE
CONTRACTED SERVICES					
60-5-0085-0453 TRA FEES	1,925,375.00	144,050.00	1,037,796.00	53.90	887,579.00
60-5-0085-0460 OTHER CONTRACTED SERVICE	0.00	0.00	0.00	0.00	0.00
60-5-0085-0462 LEGAL SERVICES	0.00	0.00	0.00	0.00	0.00
60-5-0085-0464 ENGINEERING SERVICES	25,000.00	0.00	0.00	0.00	25,000.00
60-5-0085-0468 INFORMATION TECHNOLOGY	0.00	0.00	0.00	0.00	0.00
60-5-0085-0469 GEN LIAB & PROPERTY INSU	7,494.00	0.00	1,716.54	22.91	5,777.46
TOTAL CONTRACTED SERVICES	1,957,869.00	144,050.00	1,039,512.54	53.09	918,356.46
DEPARTMENTAL					
60-5-0085-0482 CHEMICALS	2,000.00	0.00	0.00	0.00	2,000.00
60-5-0085-0484 TCEQ PERMIT FEES	0.00	0.00	0.00	0.00	0.00
60-5-0085-0486 MISCELLANEOUS	500.00	0.00	0.00	0.00	500.00
60-5-0085-0487 BNSF RAILROAD LEASES	2,650.00	0.00	2,722.67	102.74	(72.67)
TOTAL DEPARTMENTAL	5,150.00	0.00	2,722.67	52.87	2,427.33
SPECIAL PROJECTS					
60-5-0085-0495 SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
TOTAL SPECIAL PROJECTS	0.00	0.00	0.00	0.00	0.00
VEHICLE LEASES					
60-5-0085-0560 VEHICLE LEASE PAYMENTS	0.00	(3,228.88)	0.00	0.00	0.00
60-5-0085-0561 VEHICLE MAKE READY	0.00	0.00	0.00	0.00	0.00
60-5-0085-0562 VEHICLE MAINT PLAN	0.00	(197.69)	0.00	0.00	0.00
TOTAL VEHICLE LEASES	0.00	(3,426.57)	0.00	0.00	0.00
TOTAL SEWER DEPARTMENT	2,321,334.00	159,933.56	1,144,242.49	49.29	1,177,091.51
TOTAL EXPENDITURES	5,109,008.00	216,907.32	2,643,807.02	51.75	2,465,200.98
REVENUES OVER/(UNDER) EXPENDITURES	1,032,921.00	143,538.38	(291,652.33)		1,324,573.33

*** END OF REPORT ***

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Tonya Roberts

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
MISSING RECEIPTS MUST BE REPLACED WITH A COMPLETED "LOST RECEIPT TEMPLATE" FORM SIGNED BY THE CITY ADMINISTRATOR.

Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/10/2023	GoTo.Com	phones	TR	10-5-0095-0431	tele system	864.55		864.55
2/18/2023	Adobe	adobe/cloud licenses	TR	10-5-0095-0468	info technology	244.90		244.90
2/22/2022	Manny's	lunch for PID meeting Tonya	TR	10-5-0010-0416	employee training	16.67	1.11	17.78
2/22/2022	Manny's	lunch for PID meeting Stacey	TR	10-5-0025-0416	employee training	16.67	1.10	17.77
2/22/2022	Manny's	lunch for PID meeting Brandon	TR	10-5-0095-0416	employee training	16.66	1.10	17.76
02/22/2022	EB Ethics	Code Enforcement training	TR	10-5-0010-0416	employee training	100.00		100.00
3/1/2023	Beef O'Brady's	Development Lunch	TR	30-5-0000-0493	misc	58.64	4.06	62.70
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								-
Total Monthly Charges						1,318.09	7.37	1,325.46

Total must agree with credit card statement

Cardholder Signature Tonya Roberts Date 3/16/23

Finance Director's Signature S Wynn Date 3/9/23

City Administrator Signature Tonya Roberts Date 3/16/23

James T Bourgeois 3/9/23

ENTERED
BB-03.07.23

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Andrew Simmons (Feb 2023)

Payee: Citi Bank Master Card-8369

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
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Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/8/2023	Amazon	tow hitch for mower/airrator	AS	30-5-0000-0429	Dept Supplies	17.99		35.98
2/8/2023	Amazon	reflective tape for airrator	BG	30-5-0000-0429	Dept Supplies	11.99		11.99
2/10/2023	Amazon	2 hole pipe straps shanna park	BG	30-5-0000-0429	Dept Supplies	11.99		11.99
2/8/2023	Amazon	Aerator	AS	30-5-0000-0429	Dept Supplies	459.00		459.00
2/21/2023	Amazon	park (swing) labels	BG	30-5-0000-0448	Park Maint	104.70		104.70
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Total Monthly Charges						605.67	-	623.66

Total must agree with credit card statement

Cardholder Signature _____ Date _____

Finance Director's Signature Stacey Wyman Date 3/7/23

City Administrator's Signature Jeremy L Brunzell Date 3/9/23
Tonya Roberts 3/10/23

ENTERED
BB-03.08.23

City of Venus
Credit Card Charges -Pay Request

Cardholder N Jason Gordon

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
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Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/20/2023	City 6 Mark	New Cars Gas	Yates	5-0050-0445	Vehicle R & M	30.00	-	30.00
2/20/2023	City 6 Mark	New Cars Gas	Yates	? 5-0055-0445	Vehicle R & M	30.00	-	30.00
2/20/2023	QT 1883	New Cars Gas	Yates	5-0050-0445	Vehicle R & M	35.02	-	35.02
2/20/2023	QT 1883	New Cars Gas	Yates	? 5-0055-0445	Vehicle R & M	51.75	-	51.75
2/27/2023	Tigermart	Sgt. Cars Gas	Yates	5-0050-0445	Vehicle R & M	40.00	-	40.00
2/28/2023	Amazon	Training Stars	Gordon	5-0050-0429	Supplies	6.94	-	6.94
2/28/2023	~~Amazon~~ Leeda 56.	FBI Leeda	Gordon	5-0050-0415	Training	50.00	-	50.00
3/3/2023	Amazon	Key Chain seprators	Gordon	5-0050-0429	Supplies	12.99	-	12.99
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							-	-
							-	-
Total Monthly Charges						256.70	-	256.70

agree with

Cardholder Signature _____ Date 3-6-23

Finance Director Signature _____ Date 3/9/23

City Administrator's Signature _____ Date 3/9/23 3/10/23

ENTERED
BB-03.07.23

City of Venus
Credit Card Charges -Pay Request

Cardholder Melissa Westen

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
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Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/6/2023	Hobby Lobby	Picture Frames - Life Saving Awards	MW	5-0050-0421	Office Supplies	59.97	-	59.97
2/8/2023	EB Open Records AMP	Open Records Training	MW	5-0050-0415	Training	150.00	-	150.00
2/8/2023	Amazon	Epoxy	JC	5-0055-0421	Office Supplies	3.97	-	3.97
	Amazon	2 1TB Flash Drives (CID)	HS	5-0050-0421	Office Supplies	49.96	-	49.96
2/13/2023	Hobby Lobby	Life Saving Award Matte (x3)	MW	5-0050-0421	Office Supplies	35.96	-	35.96
2/16/2023	On The Cutting Edge Engraver	5 yr service plaques	MW	5-0050-0421	Office Supplies	90.00	-	90.00
2/16/2023	The UPS Store	shipping cost to equip to upfitter	JY	5-0050-0421	Office Supplies	13.72	-	13.72
2/16/2023	CG Wholesale	Service Pins	MW	5-0050-0420	Uniforms	143.82	-	143.82
2/16/2023	Amazon	Custom logo embosser seal stamp	MW	5-0050-0421	Office Supplies	34.50	-	34.50
2/27/2023	Amazon	copy paper	MW	5-0050-0421	Office Supplies	205.03	-	205.03
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Total Monthly Charges						786.93	-	786.93

agree with

Cardholder Signature Melissa Westen Date 3/7/23

Finance Director Signature Surprenant Date 3/9/23

City Administrator's Signature James F Burgess Jr Date 3/9/23
Tonya Roberts 3/10/23

ENTERED
BB-03.09.23

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Richard Allen

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
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Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/4/2023	TEEX	FSCEO Training	R.Allen	10-5-0070-0416	EMPLOYEE TRAINING	2,500.00		2,500.00
2/8/2023	American Heart Association	CPR Instructor Training Books	R.Allen	10-5-0070-0416	EMPLOYEE TRAINING	239.25		239.25
2/9/2023	Sling	PT FF scheduling software	R.Allen	10-5-0070-0468	INFORMATION TECHNOLOGY	20.41		20.41
2/13/2023	Amazon	Books for Fire Inspector	R.Allen	10-5-0070-0416	EMPLOYEE TRAINING	197.98		197.98
2/14/2023	Petra's Naehstuebe	Uniform Embrodery	R.Allen	10-5-0070-0420	UNIFORMS	135.00		135.00
2/22/2023	Amazon	Books for Fire Inspector	R.Allen	10-5-0070-0416	EMPLOYEE TRAINING	178.00		178.00
2/23/2023	AT&T	Direct TV for station	R.Allen	10-5-0070-0468	INFORMATION TECHNOLOGY	126.55	8.49	135.04
2/23/2023	Amazon	Badge Holders	R.Allen	10-5-0070-0421	OFFICE SUPPLIES	23.89		23.89
3/3/2023	Amazon	Aluminum Duster	R.Allen	10-5-0070-0421	OFFICE SUPPLIES	15.99		15.99
Total Monthly Charges						3,437.07	8.49	3,445.56

Total must agree with credit card statement

Cardholder Signature _____ Date 3/7/23

Finance Director's Signature _____ Date 3/9/23

City Administrator Signature _____ Date 3/9/23
3/10/2023

ENTERED
BB-03.07.23

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Oscar Ortiz

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
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Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/14/2023	Sam's Club	TV Wall Mount with articulating dual swivel arms	OO	10-5-0045-0468	Information Technology	99.98		99.98
2/14/2023	Sam's Club	TV	OO	10-5-0045-0468	Information Technology	497.99		497.99
2/14/2023	Sam's Club	Surge Protector	OO	10-5-0045-0468	Information Technology	24.98		24.98
2/14/2023	Buine Environment	Aurora shelving	OO	10-5-0045-0433	Small equipment	375.00		375.00
2/25/2023	Sam's Club	Web Cam Logitech	OO	10-5-0045-0468	Information Technology	44.98		44.98
2/27/2023	Amazon	USB Extension cable for data transfer	OO	10-5-0045-0468	Information Technology	8.99		8.99
2/28/2023	American Planning Associa	APA Membership renewal	OO	10-5-0045-0418	Dues and memberships	255.00		255.00
								-
								-
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						1,306.92	-	1,306.92

Total must agree with credit card statement

Cardholder Signature Oscar Ortiz Date 3/6/2023

City Administrator's Signature [signature] Date 3/10/23 3/9/23

ENTERED
BB-03.09.23

example of cc statement [signature] 3/9/23

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Brandon Gazaway (Feb 2023)

Payee: Citi Bank Master Card-2089

ENTERED
BB-03.09.23

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
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Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge	
2/7/2023	Moore Supply Company	Male Adpt's	BG	60-5-0065-0449	System Supplies	28.02		28.02	
2/8/2023	Amazon	Ink jet replacements	BG	10-5-0080-0421	Office Supplies	12.63		12.63	
	Amazon	Ink jet replacements	BG	60-5-0065--0421	Office Supplies	12.63		12.63	62.88
	Amazon	Ink jet replacements	BG	60-5-0085-0421	Office Supplies	12.63		12.63	
	Amazon	toilet bowl gel stamps city wide	BG	10-5-0095-0429	Dept supplies	24.99		24.99	
2/9/2023	Amazon	pipe straps for park picnic table	BG	10-5-0090-0429	Dept supplies	11.49		11.49	
2/9/2023	Amazon	Anchor screws for park install	BG	10-5-0090-0429	Dept supplies	19.94		19.94	
2/10/2023	Dry Clean Super Centrer	CC table clothes cleaning	BG	30-5-0000-0429	Dept supplies	256.80		256.80	
2/10/2023	TEEX	Trey 2 water collections classes	BG	60-5-0065-0416	Employee Training	455.00		455.00	
2/13/2023	Amazon	pipe straps for park picnic table	BG	10-5-0090-0429	Dept supplies	(11.49)		(11.49)	
2/13/2023	Moore Supply Company	body pvc, siphon king hand pump	BG	60-5-0065-0429	Dept supplies	168.20	13.88	182.08	
2/15/2023	Amazon	ball bearings for paint sprayer	BG	10-5-0080-0433	Small Equipment	11.88		11.88	
2/16/2023	Casa J	EOM lunch (Gracie)	BG	30-5-0000-0493 ?	Misc Dept	19.72	1.63	21.35	
2/20/2023	Amazon	Box of Rags city wide cleaning	BG	10-5-0095-0429	Dept supplies	40.62		40.62	
2/20/2023	Amazon	Striping paint for crosswalks	BG	10-5-0080-0429	Dept supplies	39.98		39.98	
2/20/2023	Amazon	Urnial mats city hall/civic ctr	BG	10-5-0095-0429	Dept supplies	55.99		55.99	
	Amazon	First Aid kit civic ctr	BG	10-5-0095-0429	Dept supplies	26.28		26.28	
	Amazon	urnial screen deodorizer city wide	BG	10-5-0095-0429	Dept supplies	39.90		39.90	
	Amazon	moving bags for retired city shirts	BG	10-5-0090-0429	Dept supplies	11.25		11.25	167.16
	Amazon	moving bags for retired city shirts	BG	10-5-0080-0429	Dept supplies	11.25		11.25	
	Amazon	moving bags for retired city shirts	BG	60-5-0065-0429	Dept supplies	11.25		11.25	
	Amazon	moving bags for retired city shirts	BG	60-5-0065-0429	Dept supplies	11.24		11.24	
2/21/2023	Amazon	breakroom needs refund	BG	60-5-0085-0429	Dept supplies	(84.46)		(84.46)	
2/21/2023	Amazon	striper paint and machine	BG	10-5-0080-0433	Small Equipment	158.94		158.94	
2/21/2023	Amazon	paint for striper	BG	10-5-0080-0429	Dept supplies	45.04		45.04	
2/21/2023	Amazon	city wide trash bags	BG	10-5-0095-0429	Dept supplies	251.84		251.84	
	Amazon	hanging folders for parks	BG	10-5-0090-0421	Office Supplies	23.26		23.26	275.10
2/23/2023	Amazon	scrubby, toilet wands	BG	60-5-0065-0429	Dept supplies	20.18		20.18	
	Amazon	scrubby, toilet wands	BG	60-5-0085-0429	Dept supplies	20.18		20.18	40.36
2/23/2023	Amazon	cleaning supplies/toilet paper etc	SW	10-5-0095-0429	Dept Supplies	826.86		826.86	
	Amazon	phone belt clip water	BG	60-5-0065-0429	Dept supplies	23.28		23.28	850.14
2/27/2023	Gurneys	flower seeds for parks	BG	10-5-0090-0495	Special Projects	114.67		114.67	
2/27/2023	Amazon	Ink jet replacements	BG	60-5-0065-0421	Office Supplies	49.96		49.96	
	Amazon	Ink jet replacements	BG	60-5-0085-0421	Office Supplies	49.96		49.96	149.89
	Amazon	Ink jet replacements	BG	10-5-0080-0421	Office Supplies	49.96		49.97	

3/1/2023	Dollar Tree	soil/pot/watercan	BG	10-5-0090-0429	Dept supplies	8.75	.72	9.47
3/1/2023	Amazon	parking paint stencils	BG	10-5-0080-0429	Dept supplies	79.84		79.84
	Amazon	paint striping machine	BG	10-5-0080-0433	Small Equipment	158.94		158.94
3/1/2023	Amazon	locks for park & pump for airrater	BG	10-5-0090-0433	Small Equipment	236.79		236.79
3/2/2023	TCEQ	Trey fee to take test	BG	60-5-0065-0416	Employee Training	56.50		56.88
	TCEQ	Trey fee to take test	BG	60-5-0085-0416	Employee Training	56.50		56.87
3/2/2023	Amazon	soap for fielder park	BG	10-5-0090-0429	Dept supplies	67.55		67.55
3/3/2023	Amazon	paint stencil for streets	BG	10-5-0080-0429	Dept supplies	14.47		14.47
3/3/2023	SunCoast Learning	Johnny classes	BG	60-5-0085-0416	Employee Training	280.00		280.00
	SunCoast Learning	Johnny classes	BG	60-5-0065-0416	Employee Training	280.00		280.00
3/3/2023	McCoys	Parks Gazebo Project	BG	10-5-0090-0448	Park Maint	103.97		103.97
Total Monthly Charges						4,163.94	16.23	4,180.17

238

113

560.00

Total must agree with credit card statement

Cardholder Signature _____ Date _____

Finance Director's Signature Stacey Norman Date 3/7/2023

City Administrator's Signature Leonard Berger Date 3/9/23

Tonya Robert 3/10/24

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Michael Gleason CBO MCP

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
MISSING RECEIPTS MUST BE REPLACED WITH A COMPLETED "LOST RECEIPT TEMPLATE" FORM SIGNED BY THE CITY ADMINISTRATOR.

Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/28/2023	NFPA	NEC 2020 Monthly Subscription	M. Gleason	5-0020-0468	Info Technology	9.99	-	9.99
2/15/2023	Walmart	Computer Parts	M. Gleason	5-0020-0421	Office Supplies	177.97	14.68	192.65
2/17/2023	Home Depot	Inspection Tools	M. Gleason	5-0020-0429	Department Equipment	53.94	4.45	58.39
2/28/2023	Academy Spots	New Work Boots	M. Gleason	5-0020-0429	Department Equipment	109.99	9.07	119.06
3/2/2023	ICC	New Edition Legals Aspects Permit C	M. Gleason	5-0020-0421	Office Supplies	32.50	2.68	35.18
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Total Monthly Charges						384.39	30.88	415.27

Total must agree with credit card statement

Cardholder Signature M. Gleason Date 3/9/23

Finance Director's Signature _____ Date _____

City Administrator Signature Stephanie L Bramwell Date 3/9/23
Johnny Robertson 3/10/23

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Stacey Wyman

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
MISSING RECEIPTS MUST BE REPLACED WITH A COMPLETED "LOST RECEIPT TEMPLATE" FORM SIGNED BY THE CITY ADMINISTRATOR.

Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/15/2023	Full Identity	Badge for Samantha Hildago	sw	10-5-0030-0468	info technology	30.50		30.50
2/23/2023	Uattend	Time Clock	sw	10-5-0095-0468	info technology	175.00		175.00
2/27/2023	Mr. Jims	employee lunch worked trough lunch	sw	10-5-0025-0429	dept supplies	17.99	1.48	19.47
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Total Monthly Charges						223.49	1.48	224.97

Total must agree with credit card statement

Cardholder Signature Stacey Wyman Date 3/4/2023

Finance Signature Stacey Wyman 3/9/2023

City Administrator Signature Doug Roberts Date 3/6/23

ENTERED
BB-03.07.23

City of Venus
Credit Card Charges -Pay Request

Cardholder Name: Callie Green

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
MISSING RECEIPTS MUST BE REPLACED WITH A COMPLETED "LOST RECEIPT TEMPLATE" FORM SIGNED BY THE CITY ADMINISTRATOR.

Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/8/2023	Amazon	qtips & election magnet(election supplies)	Cgreen	10-5-0015-0490	Election expenses	35.98		35.98
2/10/2023	Amazon	Council place 2 tablet cover	Cgreen	10-5-0015-0493	council misc.	24.29		24.29
2/15/2023	Texas Municipal clerks	Municipal Budget cycle seminar	Cgreen	10-5-0015-0416	Employee Training	290.00		290.00
2/27/2023	Amazon	Board's name plates	Cgreen	10-5-0015-0493	council misc.	21.99		21.99
3/1/2023	amazon	Marble Stationery paper-name plates	Cgreen	10-5-0015-0493	council misc.	17.98		17.98
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Total Monthly Charges						390.24	-	390.24

Total must agree with credit card statement

Cardholder Signature Callie Green Date 3/6/2023

~~City Administrator's~~ Finance Signature Suzzman Date 3/9/23

city Admin x ~~[illegible]~~ Tonya Roberts 3/9/23 3/10/23

ENTERED
BB-03.07.23

City of Venus
Credit Card Charges -Pay Request

Cardholder N James Groom

Payee: Citi Bank Master Card

ORIGINAL RECEIPTS MUST BE ATTACHED TO THIS FORM. PLEASE TAPE RECEIPTS TO 8.5 X 11 SHEET OF PAPER.
MISSING RECEIPTS MUST BE REPLACED WITH A COMPLETED "LOST RECEIPT TEMPLATE" FORM SIGNED BY THE CITY ADMINISTRATOR.

Date	Vendor Name	Description/Purpose of Charge	Employee Initiating Purchase	GL Code # 5-XXXX-XXXX	GL Acct Description	Charge Amount	Sales Taxes Paid	Total Charge
2/9/2023	Vista Print	Patrol Business Cards	MW	5-0050-0429	Supplies	41.89	7.58	99.47
2/20/2023	Amazon	Replacement Remote for Chief Ofc TV	JG	5-0050-0421	Office Supplies	14.90	-	14.90
3/1/2023	Amazon	Heavy Duty Storage Shelves	JG	5-0050-0429	Supplies	138.89	-	138.89
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Total Monthly Charges						~~253.26~~ 245.68	7.58	253.26 agree with

Cardholder Signature _____ Date 03/07/23

Finance Director Signature _____ Date 3/9/23

City Administrator's Signature _____ Date 3/9/23 3/10/23

ENTERED
BB-03.07.23



FENTANYL AWARENESS MONTH

Whereas, as the Mayor and City Council of the City of Venus, it is our privilege and responsibility to recognize causes and events that warrant our attention; and

Whereas, National Fentanyl Prevention Awareness Month is recognized in May each year in the City of Venus, Texas; and

Whereas, National Fentanyl Prevention Awareness Month is a day in remembrance of our loved ones that died from fentanyl poisoning and acknowledge the devastation this drug has brought to thousands of affected family members, and raise public awareness about the people that are dying at alarming rates due to illegally made fentanyl, a dangerous synthetic opioid; and

Whereas, fentanyl is involved in more deaths of Americans under fifty years than other causes, including heart disease, cancer, and other accidents; and

Whereas, raising awareness of this illegally made drug is necessary to remove the stigma and to educate the public on this day and beyond; and

Whereas, the City of Venus recognizes all residents of the Venus community suffering from illegally made fentanyl and offers the utmost consideration and support; and

NOW, THEREFORE, I, James L. Burgess, Mayor of the City of Venus, do hereby proclaim May as **NATIONAL FENTANYL PREVENTION AWARENESS MONTH** in the City of Venus and call upon all residents to join in this special observance.

Special remembrance for our very own City of Venus resident, Zackery Isaiah Mehlman July 19, 2004 – March 22, 2021.

Dated this 10th day of April, 2023

_____

James L. Burgess, Mayor

RESOLUTION NO. 12-2023-04

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VENUS, TEXAS, ELECTING TO PARTICIPATE IN THE PROPOSED OPIOID SETTLEMENTS BROUGHT BY THE STATE OF TEXAS AND OTHER JURISDICTIONS AGAINST PHARMACEUTICAL MANUFACTURER, ALLERGAN ("MANUFACTURERS"), AND THREE PHARMACIES, CVS, WALGREENS, AND WALMART ("PHARMACIES") FOR THEIR ROLES IN THE NATIONAL OPIOID CRISIS; MAKING FINDINGS; AUTHORIZING THE CITY ADMINISTRATOR TO EXECUTE APPROPRIATE DOCUMENTATION RELATED THERETO; AFFIRMING THE SUBDIVISON AND SPECIAL DISTRICT SETTLMENT PARTICIPATION FORM ; PROVIDING FOR REPEALING CLAUSE; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the State of Texas, along with a broad coalition of states and political subdivisions from across the country has sued opioid distributors–and opioid manufacturers for their role in the national opioid crisis; and

WHEREAS, opioid use in the United States has resulted in an increase of opioid drug overdose deaths to a record high 69,000 in 2020, and in Texas at the same time drug overdose deaths increased 31.9%, driven primarily by opioid overdose deaths; and

WHEREAS, the opioid overdose death increase was driven primarily by fentanyl and other synthetic opioids; and

WHEREAS, Allergan ("Manufacturer"), and CVS, Walgreens, and Walmart ("Pharmacies"); have reached a proposed final settlement with The State of Texas; and

WHEREAS, on May 13, 2020, the State of Texas, through the Office of the Attorney General, and a negotiation group for Texas political subdivisions entered into an Agreement entitled Texas Opioid Abatement Fund Council and Settlement Allocation Term Sheet (hereafter, the Texas Term Sheet) approving the allocation of any and all opioid settlement funds within the State of Texas; and

WHEREAS, under Government Code § 403.506(c)(1), 15% of opioid funds received by the state will be distributed to the Subdivisions (consisting of counties and cities) to address opioid-related harms and in accordance with the guidance provided by the 87th Legislature General Appropriations Act and Exhibit B of the Global Settlement Allocation Term Sheet dated May 13, 2020 attached as Exhibit "5" hereto, "Texas Opioid Abatement Fund Council and Settlement Allocation Term Sheet," to take any and all other steps requested or authorized by the Texas Attorney General's Office relative to the settlements referenced in this Resolution; and

WHEREAS, a proposed Texas settlement agreement ("Settlement") has been reached that would resolve all opioid claims for Texas and its political subdivisions against pharmaceutical manufacturer Allergan ("Manufacturer"), and CVS, Walgreens, and Walmart ("Pharmacies") and the City Council finds it advisable to accept the terms of the proposed agreements.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF VENUS, TEXAS:

SECTION 1. The findings set forth above are incorporated into the body of this Resolution as if fully set forth herein.

SECTION 2. The City Administrator shall be authorized to execute all necessary documentation reflecting the City to participate in "Allergan", and "CVS, Walgreens, and Walmart" settlements referenced in this Resolution, as reflected in Exhibits 1-4 hereto, "Subdivision and Special District Participation Form (Walgreens)", "Subdivision and Special District Participation Form (CVS)" , Subdivision and Special District Participation Form (Walmart)", Subdivision and Special District Participation Form (Allergan)".

SECTION 3. Any and all resolutions, rules, regulations, policies, or provisions in conflict with the provisions of this Resolution are hereby repealed and rescinded to the extent of any conflict herewith.

SECTION 4. This resolution shall take effect immediately from and after the date of passage and as provided by law.

DULY PASSED and approved by the City Council of the City of Venus, Texas, on this the 10th day of April, 2023.

ATTEST:

Callie Green, City Secretary

APPROVED:

James L. Burgess, Mayor

TEXAS OPIOID ABATEMENT FUND COUNCIL AND SETTLEMENT ALLOCATION TERM SHEET

WHEREAS, the people of the State of Texas and its communities have been harmed through the National and Statewide epidemic caused by licit and illicit opioid use and distribution within the State of Texas; and now,

WHEREAS, the State of Texas, though its elected representatives and counsel, including the Honorable Ken Paxton, Attorney General of the State of Texas, and certain Political Subdivisions, through their elected representatives and counsel, are separately engaged in litigation seeking to hold those entities in the supply chain accountable for the damage caused; and now,

WHEREAS, the State of Texas, through its Attorney General and its Political Subdivisions, share a common desire to abate and alleviate the impacts of the epidemic throughout the State of Texas; and now,

THEREFORE, the State of Texas and its Political Subdivisions, subject to completing formal documents effectuating the Parties' agreements, enter into this State of Texas and Texas Political Subdivisions' Opioid Abatement Fund Council and Settlement Allocation Term Sheet (Texas Term Sheet) relating to the allocation and use of the proceeds of any Settlements as described.

A. Definitions

As used in this Texas Term Sheet:

1. "The State" shall mean the State of Texas acting through its Attorney General.
2. "Political Subdivision(s)" shall mean any Texas municipality and county.
3. "The Parties" shall mean the State of Texas, the Political Subdivisions, and the Plaintiffs' Steering Committee and Liaison Counsel (PSC) in the Texas Opioid MDL, *In Re: Texas Opioid Litigation*, MDL No. 2018-63587, in the 152d District Court of Harris County, Texas.
4. "Litigating Political Subdivision" means a Political Subdivision that filed suit in the state courts of the State of Texas prior to the Execution Date of this Agreement, whether or not such case was transferred to Texas Opioid MDL, or removed to federal court.
5. "National Fund" shall mean any national fund established for the benefit of the Texas Political Subdivisions. In no event shall any National Fund be used to create federal jurisdiction, equitable or otherwise, over the Texas Political Subdivisions or those similarly situated state-court litigants who are included in the state coalition, nor shall the National Fund require participating in a class action or signing a participation agreement as part of the criteria for participating in the National Fund.
6. "Negotiating Committee" shall mean a three-member group comprising four representatives for each of (1) the State; (2) the PSC; and (3) Texas'

Political Subdivisions (collectively, "Members"). The State shall be represented by the Texas Attorney General or his designees. The PSC shall be represented by attorneys Mikal Watts, Jeffrey Simon, Dara Hegar, Dan Downey, or their designees. Texas' Political Subdivisions shall be represented by Clay Jenkins (Dallas County Judge), Terrence O'Rourke (Special Assistant County Attorney, Harris County), Nelson Wolff (Bexar County Judge), and Nathaniel Moran (Smith County Judge) or their designees.

7. "Settlement" shall mean the negotiated resolution of legal or equitable claims against a Pharmaceutical Supply Chain Participant that includes the State and Political Subdivisions.
8. "Opioid Funds" shall mean monetary amounts obtained through a Settlement as defined in this Texas Term Sheet.
8. "Approved Purpose(s)" shall mean those uses identified in Exhibit A hereto.
9. "Pharmaceutical Supply Chain" shall mean the process and channels through which opioids or opioids products are manufactured, marketed, promoted, distributed, or dispensed.

10. "Pharmaceutical Supply Chain Participant" shall mean any entity that engages in or has engaged in the manufacture, marketing, promotion, distribution, or dispensing of an opioid analgesic.

11. "Texas Opioid Council" shall mean the Council described in Exhibit A hereto, which has the purpose of ensuring the funds recovered by Texas (through the joint actions of the Attorney General and the Texas Political Subdivisions) are allocated fairly and spent to remediate the opioid crisis in Texas, using efficient and cost-effective methods that are directed to the hardest hit regions in Texas while also ensuring that all Texans benefit from prevention and recovery efforts.

B. Allocation of Settlement Proceeds

1. All Opioid Funds distributed in Texas shall be divided with 15% going to Political Subdivisions ("Subdivision Share"), 70% to the Texas Opioid Abatement Fund through the Texas Opioid Council (Texas Abatement Fund Share) identified and described on Exhibits A and C hereto, and 15% to the Office of the Texas Attorney General as Counsel for the State of Texas ("State Share"). Out of the Texas Opioid Abatement Fund, reasonable expenses up to 1% shall be paid to the Texas Comptroller for the administration of the Texas Opioid Council pursuant to the Opioid

Abatement Fund (Texas Settlement) Opioid Council Agreement, Exhibit A hereto.

2. The Subdivisions Share shall be allocated in accordance with the division of proceeds on Exhibit B hereto.
3. The Texas Abatement Fund Share shall be allocated to the Opioid Council to be apportioned in accordance with the guidelines of Exhibit A, and Exhibit C hereto.
4. In the event a Subdivision merges, dissolves, or ceases to exist, the allocation percentage for that Subdivision shall be redistributed as directed by the settlement document, and if not specified, equitably based on the composition of the successor Subdivision. If a Subdivision for any reason is excluded from a specific settlement, the allocation percentage for that Subdivision shall be redistributed as directed by the settlement document, and if not specified, equitably among the participating Subdivisions.
5. Funds obtained from parties unrelated to the Litigation, via grant, bequest, gift or the like, separate and distinct from the Litigation, may be directed to the Texas Opioid Council and disbursed as set forth below.
6. The Subdivision share shall be initially deposited and paid in cash directly to the Subdivision under the authority and guidance of the Texas MDL Court, who shall direct any Settlement funds to be held in trust in a

segregated account to benefit the Subdivisions and to be promptly distributed as set forth herein and in accordance with Exhibit B.

7. Nothing in this Texas Term Sheet should alter or change any Subdivision's rights to pursue its own claim. Rather, the intent of this Texas Term Sheet is to join all parties to disburse settlement proceeds from one or more defendants to all parties participating in that settlement within Texas.
8. Opioid Funds from the Texas Abatement Fund Share shall be directed to the Texas Opioid Council and used in accordance with the guidelines as set out on Exhibit A hereto, and the Texas Abatement Fund Share shall be distributed to the Texas Opioid Council under the authority and guidance of the Texas MDL Court, consistent with Exhibits A and C, and the by-laws of the Texas Opioid Council documents and disbursed as set forth therein, including without limitation all abatement funds and the 1% holdback for expenses.
9. The State of Texas and the Political Subdivisions understand and acknowledge that additional steps may need to be undertaken to assist the Texas Opioid Council in its mission, at a predictable level of funding, regardless of external factors.

C. Payment of Counsel and Litigation Expenses

1. Any Master Settlement Agreement settlement will govern the payment of fees and litigation expenses to the Parties. The Parties agree to direct control of any Texas Political Subdivision fees and expenses to the "Texas Opioid Fee and Expense Fund," which shall be allocated and distributed by the Texas MDL Court, *In re: Texas Opioid Litigation*, MDL No. 2018-63587, in the 152nd District Court of Harris County, Texas, and with the intent to compensate all counsel for Texas Political Subdivisions who have not chosen to otherwise seek compensation for fees and expenses from any federal MDL common benefit fund.

2. The Parties agree that no portion of the State of Texas 15% allocation share from any settlement shall be administered through the National Fund, the Texas MDL Court, or Texas Opioid Fee and Expense Fund, but shall be directed for payment to the State of Texas by the State of Texas.

3. The State of Texas and the Texas Political Subdivisions, and their respective attorneys, agree that all fees – whether contingent, hourly, fixed or otherwise – owed by the Texas Political Subdivisions shall be paid out of the National Fund or as otherwise provided for herein to the Texas Opioid Fee and Expense Fund to be distributed by the 152nd

District Court of Harris County, Texas pursuant to its past and future orders.

4. From any opioid-related settlements with McKesson, Cardinal Health, ABDC, and Johnson & Johnson, and for any future opioid-related settlements negotiated, in whole or in part, by the Negotiating Committee with any other Pharmaceutical Supply Chain Participant, the funds to be deposited in the Texas Opioid Fee and Expense Fund shall be 9.3925% of the combined Texas Political Subdivision and Texas Abatement Fund portions of each payment (annual or otherwise) to the State of Texas for that settlement, plus expenses from the National Fund, and shall be sought by Texas Political Subdivision Counsel initially through the National Fund. The Texas Political Subdivisions' percentage share of fees and expenses from the National Fund shall be directed to the Texas Opioid Fee and Expense Fund in the Texas MDL, as soon as is practical, for allocation and distribution in accordance with the guidelines herein.

5. If the National Fund share to the Texas Political Subdivisions is insufficient to cover the guaranteed 9.3925%, plus expenses from the National Fund, per subsection 4, immediately *supra*, or if payment from the National Fund is not received within 12 months after the date the

first payment is made by the Defendants pursuant to the settlement, then the Texas Political Subdivisions shall recover up to 12.5% of the Texas Political Subdivision Share to make up any difference.

6. If the National Fund and the Texas Political Subdivision share are insufficient to cover the guaranteed 9.3925%, plus expenses from the National Fund, or if payment from the National Fund is not received within 12 months after the date the first payment is made by the Defendants pursuant to the settlement, then the Texas Political Subdivisions shall recover up to 8.75% of the Abatement Fund Share to make up any difference. In no event shall the Texas Political Subdivision share exceed 9.3925% of the combined Texas Political Subdivision and Texas Abatement Fund portions of any settlement, plus expenses from the National Fund. In the event that any payment is received from the National Fund such that the total amount in fees and expenses exceeds 9.3925%, the Texas Political Subdivisions shall return any amounts received greater than 9.3925% of the combined Texas Political Subdivision and Texas Abatement Fund portions to those respective Funds.

7. For each settlement utilizing a National Fund, the Texas Political Subdivisions need only make one attempt at seeking fees and expenses there.
8. The total amount of the Texas Opioid Fee and Expense Fund shall be reduced proportionally, according to the agreed upon allocation of the Texas Subdivision Fund, for any Texas litigating Political Subdivision that (1) fails to enter the settlement; and (2) was filed in Texas state court, and was transferred to the Texas MDL (or removed before or during transfer to the Texas MDL) as of the execution date of this Agreement.

D. The Texas Opioid Council and Texas Abatement Fund

The Texas Opioid Council and Texas Abatement Fund is described in detail at Exhibit A, incorporated herein by reference.

E. Settlement Negotiations

1. The State and Negotiating Committee agree to inform each other in advance of any negotiations relating to a Texas-only settlement with a Pharmaceutical Supply Chain Participant that includes both the State and its Political Subdivisions and shall provide each other the opportunity to participate in all such negotiations. Any Texas-only Settlement agreed to with the State and Negotiating Committee shall be subject to the approval

of a majority of litigating Political Subdivisions. The Parties further agree to keep each other reasonably informed of all other global settlement negotiations with Pharmaceutical Supply Chain Participants and to include the Negotiating Committee or designees. Neither this provision, nor any other, shall be construed to state or imply that either the State or the Negotiating Committee is unauthorized to engage in settlement negotiations with Pharmaceutical Supply Chain Participants without prior consent or contemporaneous participation of the other, or that either party is entitled to participate as an active or direct participant in settlement negotiations with the other. Rather, while the State's and Negotiation Committee's efforts to achieve worthwhile settlements are to be collaborative, incremental stages need not be so.

2. Any Master Settlement Agreement (MSA) shall be subject to the approval and jurisdiction of the Texas MDL Court.
3. As this is a Texas-specific effort, the Committee shall be Chaired by the Attorney General. However, the Attorney General, or his designees, shall endeavor to coordinate any publicity or other efforts to speak publicly with the other Committee Members.
4. The State of Texas, the Texas MDL Plaintiff's Steering Committee representatives, or the Political Subdivision representatives may withdraw

from coordinated Settlement discussions detailed in this Section upon 10 business days' written notice to the remaining Committee Members and counsel for any affected Pharmaceutical Supply Chain Participant. The withdrawal of any Member releases the remaining Committee Members from the restrictions and obligations in this Section.

5. The obligations in this Section shall not affect any Party's right to proceed with trial or, within 30 days of the date upon which a trial involving that Party's claims against a specific Pharmaceutical Supply Chain Participant is scheduled to begin, reach a case specific resolution with that particular Pharmaceutical Supply Chain Participant.

F. Amendments

The Parties agree to make such amendments as necessary to implement the intent of this agreement.

Acknowledgment of Agreement

We, the undersigned, have participated in the drafting of the above Texas Term Sheet, including consideration based on comments solicited from Political Subdivisions. This document has been collaboratively drafted to maintain all individual claims while allowing the State and its Political Subdivisions to cooperate in exploring all possible means of resolution. Nothing in this agreement binds any party to any specific outcome. Any resolution under this document will require

acceptance by the State of Texas and a majority of the Litigating Political Subdivisions.

We, the undersigned, hereby accept the STATE OF TEXAS AND TEXAS POLITICAL SUBDIVISIONS' OPIOID ABATEMENT FUND COUNCIL AND SETTLEMENT ALLOCATION TERM SHEET. We understand that the purpose of this Texas Term Sheet is to permit collaboration between the State of Texas and Political Subdivisions to explore and potentially effectuate earlier resolution of the Opioid Litigation against Pharmaceutical Supply Chain Participants. We also understand that an additional purpose is to create an effective means of distributing any potential settlement funds obtained under this Texas Term Sheet between the State of Texas and Political Subdivisions in a manner and means that would promote an effective and meaningful use of the funds in abating the opioid epidemic throughout Texas.

Executed this 13 day of May, 2020.

FOR THE STATE OF TEXAS:

KENNETH PAXTON, JR.
ATTORNEY GENERAL

FOR THE SUBDIVISIONS
AND TEXAS MDL PSC:

MIKAL WATTS
WATTS GUERRA LLP

JEFFREY SIMON
SIMON GREENSTONE PANATIER, PC

DARA HEGAR
LANIER LAW FIRM, PC

DAN DOWNEY
DAN DOWNEY, PC

:sas

EXHIBIT A

Opioid Abatement Fund (Texas) Settlement

Opioid Council

As part of the settlement agreement and upon its execution, the parties will form the Texas Opioid Council (Council) to establish the framework that ensures the funds recovered by Texas (through the joint actions of the Attorney General and the state's political subdivisions) are allocated fairly and spent to remediate the opioid crisis in Texas, using efficient and cost-effective methods that are directed to the hardest hit regions in Texas while also ensuring that all Texans benefit from prevention and recovery efforts.

I. Structure

The Council will be responsible for the processes and procedures governing the spending of the funds held in the Texas Abatement Fund, which will be approximately 70% of all funds obtained through settlement and/or litigation of the claims asserted by the State and its subdivisions in the investigations and litigation related to the manufacturing, marketing, distribution, and sale of opioids and related pharmaceuticals.

Money paid into the abatement fund will be held by an independent administrator, who shall be responsible for the ministerial task of releasing funds solely as authorized below by the Council, and accounting for all payments to and from the fund.

The Council will be formed when a court of competent jurisdiction enters an order settling the matter, including any order of a bankruptcy court. The Council's members must be appointed within sixty (60) days of the date the order is entered.

A. Membership

The Council shall be comprised of the following thirteen (13) members:

1. *Statewide Members*.

Six members appointed by the Governor and Attorney General to represent the State's interest in opioid abatement. The statewide members are appointed as follows:

a. The Governor shall appoint three (3) members who are licensed health professionals with significant experience in opioid interventions;
b. The Attorney General shall appoint three (3) members who are licensed professionals with significant experience in opioid incidences; and
c. The Governor will appoint the Chair of the Council as a non-voting member. The Chair may only cast a vote in the event there is a tie of the membership.

2. *Regional Members*.

Six (6) members appointed by the State's political subdivisions to represent their designated Texas Health and Human Services Commission "HHSC" Regional Healthcare

Partnership (Regions) to ensure dedicated regional, urban, and rural representation on the Council. The regional appointees must be from either academia or the medical profession with significant experience in opioid interventions. The regional members are appointed as follows:

a. One member representing Regions 9 and 10 (Dallas Ft-Worth);
b. One member representing Region 3 (Houston);
c. One member representing Regions 11, 12, 13, 14, 15, 19 (West Texas);
d. One member representing Regions 6, 7, 8, 16 (Austin-San Antonio);
e. One member representing Regions 1, 2, 17, 18 (East Texas); and
f. One member representing Regions 4, 5, 20 (South Texas).

B. Terms

All members of the Council are appointed to serve staggered two-year terms, with the terms of members expiring February 1 of each year. A member may serve no more than two consecutive terms, for a total of four consecutive years. For the first term, four (4) members (two (2) statewide and two (2) for the subdivisions) will serve a three-year term. A vacancy on the Council shall be filled for the unexpired term in the same manner as the original appointment. The Governor will appoint the Chair of the Council who will not vote on Council business unless there is a tie vote, and the subdivisions will appoint a Vice-Chair voting member from one of the regional members.

C. Governance

1. Administration

The Council is attached administratively to the Comptroller. The Council is an independent, quasi-governmental agency because it is responsible for the statewide distribution of the abatement settlement funds. The Council is exempt from the following statutes:

a. Chapter 316 of the Government Code (Appropriations);
b. Chapter 322 of the Government Code (Legislative Budget Board);
c. Chapter 325 of the Government Code (Sunset);
d. Chapter 783 of the Government Code (Uniform Grants and Contract Management);
e. Chapter 2001 of the Government Code (Administrative Procedure);
f. Chapter 2052 of the Government Code (State Agency Reports and Publications);
g. Chapter 2261 of the Government Code (State Contracting Standards and Oversight);
h. Chapter 2262 of the Government Code (Statewide Contract Management);

i. Chapter 262 of the Local Government Code (Purchasing and Contracting Authority of Counties); and
j. Chapter 271 of the Local Government Code (Purchasing and Contracting Authority of Municipalities, Counties, and Certain Other Local Governments).

2. Transparency

The Council will abide by state laws relating to open meetings and public information, including Chapters 551 and 552 of the Texas Government Code.

i. The Council shall hold at least four regular meetings each year. The Council may hold additional meetings on the request of the Chair or on the written request of three members of the council. All meetings shall be open to the public, and public notice of meetings shall be given as required by state law.
ii. The Council may convene in a closed, non-public meeting:
    a. If the Commission must discuss:
        1. Negotiation of contract awards; and
        2. Matters specifically exempted from disclosure by federal and state statutes.
    b. All minutes and documents of a closed meeting shall remain under seal, subject to release only order of a court of competent jurisdiction.

3. Authority

The Council does not have rulemaking authority. The terms of each Judgment, Master Settlement Agreement, or any Bankruptcy Settlement for Texas control the authority of the Council and the Council may not stray outside the bounds of the authority and power vested by such settlements. Should the Council require legal assistance in determining their authority, the Council may direct the executive director to seek legal advice from the Attorney General to clarify the issue.

D. Operation and Expenses

The independent administrator will set aside up to one (1) percent of the settlement funds for the administration of the Council for reasonable costs and expenses of operating the foregoing duties, including educational activities.

1. Executive Director

The Comptroller will employ the executive director of the Council and other personnel as necessary to administer the duties of the Council and carry out the functions of the Council. The executive director must have at least 10 years of experience in government or public administration and is classified as a Director V/B30 under the State Auditor's State Classification. The Comptroller will pay the salaries of the Council employees from the

one (1) percent of the settlement funds set aside for the administration of the Council. The Comptroller will request funds from the Texas Abatement Fund Point of Contact.

2. Travel Reimbursement

A person appointed to the Council is entitled to reimbursement for the travel expenses incurred in attending Council duties. A member of the Council may be reimbursed for actual expenses for meals, lodging, transportation, and incidental expenses in accordance with travel rates set by the federal General Services Administration.

II. Duties/Roles

It is the duty of the Council to determine and approve the opioid abatement strategies and funding awards.

A. Approved Abatement Strategies

The Council will develop the approved Texas list of abatement strategies based on but not limited to the existing national list of opioid abatement strategies (see attached Appendix A) for implementing the Texas Abatement Fund.

1. The Council shall only approve strategies which are evidence-informed strategies.
2. The Texas list of abatement strategies must be approved by majority vote. The majority vote must include a majority from both sides of the statewide members and regional members in order to be approved, e.g., at least four (4) of six (6) members on each side.

B. Texas Abatement Fund Point of Contact

The Council will determine a single point of contact called the Abatement Fund Point of Contact (POC) to be established as the sole entity authorized to receive requests for funds and approve expenditures in Texas and order the release of funds from the Texas Abatement Fund by the independent administrator. The POC may be an independent third party selected by the Council with expertise in banking or financial management. The POC will manage the Opioid Council Bank Account (Account). Upon a vote, the Council will direct the POC to contact the independent administrator to release funds to the Account. The Account is outside the State Treasury and not managed by any state or local officials. The POC is responsible for payments to the qualified entities selected by the Council for abatement fund awards. The POC will submit a monthly financial statement on the Account to the Council.

C. Auditor

An independent auditor appointed by the Council will perform an audit on the Account on an annual basis and report its findings, if any, to the Council.

D. Funding Allocation

The Council is the sole decision-maker on the funding allocation process of the abatement funds. The Council will develop the application and award process based on the parameters outlined below. An entity seeking funds from the Council must apply for funds; no funds will be awarded without an application. The executive director and personnel may assist the Council in gathering and compiling the applications for consideration; however, the Council members are the sole decision-makers of awards and funding determination. The Council will use the following processes to award funds:

1. *Statewide Funds.* The Council will consider, adopt and approve the allocation methodology attached as Exhibit C, based upon population health data and prevalence of opioid incidences, at the Council's initial meeting. Adoption of such methodology will allow each Region to customize the approved abatement strategies to fit its communities' needs. The statewide regional funds will account for seventy-five (75) percent of the total overall funds, less the one (1) percent administrative expense described herein.

2. *Targeted Funds.* Each Region shall reserve twenty-five (25) percent of the overall funds, for targeted interventions in the specific Region as identified by opioid incidence data. The Council must approve on an annual basis the uses for the targeted abatement strategies and applications available to every Region, including education and outreach programs. Each Region without approved uses for the targeted funds from the Council, based upon a greater percentage of opioid incidents compared to its population, is subject to transfer of all or a portion of the targeted funds for that Region for uses based upon all Regions' targeted funding needs as approved by the Council on an annual basis.

3. *Annual Allocation*. Statewide regional funds and targeted funds will be allocated on an annual basis. If a Region lapses its funds, the funds will be reallocated based on all Regions' funding needs.

E. Appeal Process

The Council will establish an appeal process to permit the applicants for funding (state or subdivisions) to challenge decisions by the Council-designated point of contact on requests for funds or expenditures.

1. To challenge a decision by the designated point of contact, the State or a subdivision must file an appeal with the Council within thirty (30) days of the decision. The Council then has thirty (30) days to consider and rule on the appeal.
2. If the Council denies the appeal, the party may file an appeal with the state district court of record where the final opioid judgment or Master Settlement Agreement is filed. The Texas Rules of Civil Procedure and Rules of Evidence will govern these proceedings. The Council may request representation from the Attorney General in these proceedings.

In making its determination, the state district court shall apply the same clear error standards contained herein that the Council must follow when rendering its decision.

3. The state district court will make the final decision and the decision is not appealable.
4. Challenges will be limited and subject to penalty if abused.
5. Attorneys' fees and costs are not recoverable in these appeals.

F. Education

The Council may determine that a percentage of the funds in the Abatement Fund from the targeted funds be used to develop an education and outreach program to provide materials on the consequences of opioid drug use, prevention and interventions. Any material developed will include online resources and toolkits for communities.

EXHIBIT B

Exhibit B: Municipal Area Allocations: 15% of Total ($150 million)

(County numbers refer to distribution to the county governments after payment to cities within county borders has been made. Minimum distribution to each county is $1000.)

Municipal Area	Allocation	Municipal Area	Allocation
Abbott	$688	Lakeport	$463
Abernathy	$110	Lakeside	$4,474
Abilene	$563,818	Lakeside City	$222
Ackerly	$21	Lakeview	$427
Addison	$58,094	Lakeway	$31,657
Adrian	$181	Lakewood Village	$557
Agua Dulce	$43	Lamar County	$141,598
Alamo	$22,121	Lamb County	$50,681
Alamo Heights	$28,198	Lamesa	$29,656
Alba	$3,196	Lampasas	$28,211
Albany	$180	Lampasas County	$42,818
Aledo	$331	Lancaster	$90,653
Alice	$71,291	Laredo	$763,174
Allen	$315,081	Latexo	$124
Alma	$1,107	Lavaca County	$45,973
Alpine	$29,686	Lavon	$7,435
Alto	$3,767	Lawn	$58
Alton	$11,540	League City	$302,418
Alvarado	$29,029	Leakey	$256
Alvin	$113,962	Leander	$88,641
Alvord	$358	Leary	$797
Amarillo	$987,661	Lee County	$30,457
Ames	$5,571	Lefors	$159
Amherst	$22	Leon County	$67,393
Anahuac	$542	Leon Valley	$23,258
Anderson	$19	Leona	$883
Anderson County	$268,763	Leonard	$8,505
Andrews	$18,983	Leroy	$176
Andrews County	$37,606	Levelland	$46,848
Angelina County	$229,956	Lewisville	$382,094
Angleton	$62,791	Lexington	$2,318
Angus	$331	Liberty	$72,343
Anna	$9,075	Liberty County	$531,212
Annetta	$5,956	Liberty Hill	$2,780
Annetta North	$34	Limestone County	$135,684

(Table continues on multiple pages below)

Annetta South	$602
Annona	$738
Anson	$5,134
Anthony	$4,514
Anton	$444
Appleby	$1,551
Aquilla	$208
Aransas County	$266,512
Aransas Pass	$57,813
Archer City	$10,554
Archer County	$45,534
Arcola	$7,290
Argyle	$11,406
Arlington	$735,803
Armstrong County	$974
Arp	$2,009
Asherton	$112
Aspermont	$9
Atascosa County	$176,903
Athens	$105,942
Atlanta	$30,995
Aubrey	$15,141
Aurora	$1,849
Austin County	$76,030
Austin	$4,877,716
Austwell	$109
Avery	$138
Avinger	$1,115
Azle	$32,213
Bailey	$950
Bailey County	$15,377
Bailey's Prairie	$5,604
Baird	$2,802
Balch Springs	$27,358
Balcones Heights	$23,811
Ballinger	$9,172
Balmorhea	$63
Bandera	$2,893
Bandera County	$86,815
Bangs	$3,050
Lincoln Park	$677
Lindale	$24,202
Linden	$3,661
Lindsay	$1,228
Lipan	$44
Lipscomb County	$10,132
Little Elm	$69,326
Little River-Academy	$798
Littlefield	$7,678
Live Oak	$32,740
Live Oak County	$39,716
Liverpool	$1,435
Livingston	$73,165
Llano	$23,121
Llano County	$115,647
Lockhart	$49,050
Lockney	$3,301
Log Cabin	$1,960
Lometa	$1,176
Lone Oak	$1,705
Lone Star	$8,283
Longview	$482,254
Loraine	$188
Lorena	$3,390
Lorenzo	$11,358
Los Fresnos	$11,185
Los Indios	$159
Los Ybanez	$0
Lott	$1,516
Lovelady	$249
Loving County	$1,000
Lowry Crossing	$783
Lubbock	$319,867
Lubbock County	$1,379,719
Lucas	$5,266
Lueders	$508
Lufkin	$281,592
Luling	$29,421
Lumberton	$36,609
Lyford	$3,071

Bardwell	$362
Barry	$200
Barstow	$61
Bartlett	$3,374
Bartonville	$8,887
Bastrop	$46,320
Bastrop County	$343,960
Bay City	$57,912
Baylor County	$29,832
Bayou Vista	$6,240
Bayside	$242
Baytown	$216,066
Bayview	$41
Beach City	$12,505
Bear Creek	$906
Beasley	$130
Beaumont	$683,010
Beckville	$1,247
Bedford	$94,314
Bedias	$3,475
Bee Cave	$12,863
Bee County	$97,844
Beeville	$24,027
Bell County	$650,748
Bellaire	$41,264
Bellevue	$56
Bellmead	$14,487
Bells	$1,891
Bellville	$7,488
Belton	$72,680
Benavides	$152
Benbrook	$43,919
Benjamin	$951
Berryville	$14,379
Bertram	$182
Beverly Hills	$4,336
Bevil Oaks	$549
Bexar County	$7,007,152
Big Lake	$547
Big Sandy	$4,579
Lynn County	$6,275
Lytle	$7,223
Mabank	$19,443
Madison County	$49,492
Madisonville	$11,458
Magnolia	$26,031
Malakoff	$12,614
Malone	$439
Manor	$12,499
Mansfield	$150,788
Manvel	$12,305
Marble Falls	$37,039
Marfa	$65
Marietta	$338
Marion	$275
Marion County	$54,728
Marlin	$21,634
Marquez	$1,322
Marshall	$108,371
Mart	$928
Martin County	$10,862
Martindale	$2,437
Mason	$777
Mason County	$3,134
Matador	$1,203
Matagorda County	$135,239
Mathis	$15,720
Maud	$423
Maverick County	$115,919
Maypearl	$986
McAllen	$364,424
McCamey	$542
McGregor	$9,155
McKinney	$450,383
McLean	$14
McLendon-Chisholm	$411
Mcculloch County	$20,021
Mclennan County	$529,641
Mcmullen County	$1,000
Meadow	$1,121

Big Spring	$189,928
Big Wells	$236
Bishop	$8,213
Bishop Hills	$323
Blackwell	$31
Blanco	$6,191
Blanco County	$49,223
Blanket	$147
Bloomburg	$1,010
Blooming Grove	$352
Blossom	$198
Blue Mound	$2,888
Blue Ridge	$1,345
Blum	$1,622
Boerne	$45,576
Bogata	$3,649
Bonham	$100,909
Bonney	$2,510
Booker	$1,036
Borden County	$1,000
Borger	$69,680
Bosque County	$71,073
Bovina	$173
Bowie	$83,620
Bowie County	$233,190
Boyd	$6,953
Brackettville	$8
Brady	$27,480
Brazoria	$11,537
Brazoria County	$1,021,090
Brazos Bend	$462
Brazos Country	$902
Brazos County	$342,087
Breckenridge	$23,976
Bremond	$5,554
Brenham	$54,750
Brewster County	$60,087
Briarcliff	$572
Briaroaks	$57
Bridge City	$80,756
Meadowlakes	$905
Meadows Place	$18,148
Medina County	$48,355
Megargel	$611
Melissa	$15,381
Melvin	$345
Memphis	$7,203
Menard	$991
Menard County	$14,717
Mercedes	$21,441
Meridian	$3,546
Merkel	$10,117
Mertens	$239
Mertzon	$29
Mesquite	$310,709
Mexia	$21,096
Miami	$455
Midland County	$279,927
Midland	$521,849
Midlothian	$95,799
Midway	$78
Milam County	$97,386
Milano	$904
Mildred	$286
Miles	$93
Milford	$6,177
Miller's Cove	$97
Millican	$417
Mills County	$19,931
Millsap	$34
Mineola	$48,719
Mineral Wells	$92,061
Mingus	$189
Mission	$124,768
Missouri City	$209,633
Mitchell County	$20,850
Mobeetie	$52
Mobile City	$2,034
Monahans	$5,849
Mont Belvieu	$19,669

Bridgeport	$33,301	Montague County	$94,796
Briscoe County	$977	Montgomery	$1,884
Broaddus	$31	Montgomery County	$2,700,911
Bronte	$99	Moody	$828
Brooks County	$20,710	Moore County	$40,627
Brookshire	$6,406	Moore Station	$772
Brookside Village	$1,110	Moran	$50
Brown County	$193,417	Morgan	$605
Browndell	$152	Morgan's Point	$3,105
Brownfield	$14,452	Morgan's Point Resort	$8,024
Brownsboro	$3,176	Morris County	$53,328
Brownsville	$425,057	Morton	$167
Brownwood	$166,572	Motley County	$3,344
Bruceville-Eddy	$1,692	Moulton	$999
Bryan	$246,897	Mount Calm	$605
Bryson	$1,228	Mount Enterprise	$1,832
Buckholts	$1,113	Mount Pleasant	$65,684
Buda	$10,784	Mount Vernon	$6,049
Buffalo	$11,866	Mountain City	$1,548
Buffalo Gap	$88	Muenster	$4,656
Buffalo Springs	$188	Muleshoe	$4,910
Bullard	$7,487	Mullin	$384
Bulverde	$14,436	Munday	$2,047
Bunker Hill Village	$472	Murchison	$2,302
Burkburnett	$37,844	Murphy	$51,893
Burke	$1,114	Mustang	$7
Burleson County	$70,244	Mustang Ridge	$2,462
Burleson	$151,779	Nacogdoches	$205,992
Burnet	$33,345	Nacogdoches County	$198,583
Burnet County	$189,829	Naples	$4,224
Burton	$937	Nash	$7,999
Byers	$77	Nassau Bay	$11,247
Bynum	$380	Natalia	$625
Cactus	$4,779	Navarro	$334
Caddo Mills	$43	Navarro County	$103,513
Caldwell	$18,245	Navasota	$37,676
Caldwell County	$86,413	Nazareth	$124
Calhoun County	$127,926	Nederland	$44,585
Callahan County	$12,894	Needville	$10,341
Callisburg	$101	Nevada	$237

Calvert	$772
Cameron	$11,091
Cameron County	$537,026
Camp County	$28,851
Camp Wood	$422
Campbell	$1,116
Canadian	$1,090
Caney City	$2,005
Canton	$56,734
Canyon	$26,251
Carbon	$620
Carl's Corner	$48
Carmine	$385
Carrizo Springs	$1,671
Carrollton	$310,255
Carson County	$29,493
Carthage	$18,927
Cashion Community	$322
Cass County	$93,155
Castle Hills	$12,780
Castro County	$4,420
Castroville	$4,525
Cedar Hill	$70,127
Cedar Park	$185,567
Celeste	$1,280
Celina	$18,283
Center	$58,838
Centerville	$385
Chambers County	$153,188
Chandler	$17,364
Channing	$2
Charlotte	$4,257
Cherokee County	$156,612
Chester	$1,174
Chico	$2,928
Childress	$37,916
Childress County	$50,582
Chillicothe	$172
China	$522
China Grove	$598
New Berlin	$4
New Boston	$6,953
New Braunfels	$307,313
New Chapel Hill	$288
New Deal	$338
New Fairview	$2,334
New Home	$9
New Hope	$1,024
New London	$4,129
New Summerfield	$442
New Waverly	$2,562
Newark	$520
Newcastle	$914
Newton	$6,102
Newton County	$158,006
Neylandville	$163
Niederwald	$16
Nixon	$2,283
Nocona	$16,536
Nolan County	$50,262
Nolanville	$4,247
Nome	$391
Noonday	$226
Nordheim	$697
Normangee	$6,192
North Cleveland	$105
North Richland Hills	$146,419
Northlake	$8,905
Novice	$76
Nueces County	$1,367,932
O'Brien	$76
O'Donnell	$27
Oak Grove	$2,769
Oak Leaf	$612
Oak Point	$9,011
Oak Ridge	$358
Oak Ridge North	$33,512
Oak Valley	$7
Oakwood	$148
Ochiltree County	$15,476

Chireno	$1,568
Christine	$354
Cibolo	$13,690
Cisco	$7,218
Clarendon	$114
Clarksville	$20,891
Clarksville City	$54
Claude	$26
Clay County	$72,050
Clear Lake Shores	$6,682
Cleburne	$228,184
Cleveland	$96,897
Clifton	$9,939
Clint	$375
Clute	$51,350
Clyde	$17,287
Coahoma	$2,291
Cochran County	$3,389
Cockrell Hill	$512
Coffee City	$1,087
Coke County	$5,522
Coldspring	$447
Coleman	$5,442
Coleman County	$4,164
College Station	$258,147
Colleyville	$46,049
Collin County	$1,266,721
Collingsworth County	$19,234
Collinsville	$1,831
Colmesneil	$2,211
Colorado City	$8,405
Colorado County	$49,084
Columbus	$6,867
Comal County	$396,142
Comanche	$16,503
Comanche County	$50,964
Combes	$1,710
Combine	$1,892
Commerce	$33,869
Como	$415
Odem	$7,420
Odessa	$559,163
Oglesby	$29
Old River-Winfree	$21,653
Oldham County	$10,318
Olmos Park	$9,801
Olney	$6,088
Olton	$1,197
Omaha	$4,185
Onalaska	$31,654
Opdyke West	$479
Orange	$311,339
Orange County	$689,818
Orange Grove	$1,677
Orchard	$867
Ore City	$6,806
Overton	$7,900
Ovilla	$13,391
Oyster Creek	$9,633
Paducah	$125
Paint Rock	$141
Palacios	$14,036
Palestine	$178,009
Palisades	$240
Palm Valley	$1,918
Palmer	$12,666
Palmhurst	$4,660
Palmview	$7,577
Palo Pinto County	$124,621
Pampa	$67,227
Panhandle	$9,536
Panola County	$80,699
Panorama Village	$1,292
Pantego	$12,898
Paradise	$52
Paris	$201,180
Parker	$10,307
Parker County	$476,254
Parmer County	$15,866
Pasadena	$356,536

Concho County	$3,859
Conroe	$466,671
Converse	$27,693
Cooke County	$200,451
Cool	$731
Coolidge	$243
Cooper	$362
Coppell	$86,593
Copper Canyon	$489
Copperas Cove	$133,492
Corinth	$75,298
Corpus Christi	$1,812,707
Corral City	$143
Corrigan	$21,318
Corsicana	$87,310
Coryell County	$123,659
Cottle County	$875
Cottonwood	$289
Cottonwood Shores	$1,203
Cotulla	$1,251
Coupland	$266
Cove	$387
Covington	$519
Coyote Flats	$1,472
Crandall	$12,094
Crane	$10,599
Crane County	$26,146
Cranfills Gap	$128
Crawford	$383
Creedmoor	$16
Cresson	$1,086
Crockett	$23,403
Crockett County	$18,210
Crosby County	$18,388
Crosbyton	$1,498
Cross Plains	$4,877
Cross Roads	$244
Cross Timber	$542
Crowell	$6,335
Crowley	$22,345
Pattison	$1,148
Patton Village	$9,268
Payne Springs	$1,770
Pearland	$333,752
Pearsall	$11,570
Pecan Gap	$719
Pecan Hill	$229
Pecos	$7,622
Pecos County	$46,997
Pelican Bay	$1,199
Penelope	$415
Penitas	$312
Perryton	$23,364
Petersburg	$1,691
Petrolia	$17
Petronila	$5
Pflugerville	$86,408
Pharr	$144,721
Pilot Point	$11,613
Pine Forest	$3,894
Pine Island	$3,141
Pinehurst	$32,671
Pineland	$4,138
Piney Point Village	$15,738
Pittsburg	$20,526
Plains	$129
Plainview	$60,298
Plano	$1,151,608
Pleak	$270
Pleasant Valley	$308
Pleasanton	$29,011
Plum Grove	$258
Point	$1,519
Point Blank	$355
Point Comfort	$447
Point Venture	$588
Polk County	$370,831
Ponder	$1,282
Port Aransas	$31,022
Port Arthur	$367,945

Crystal City	$19,412
Cuero	$24,689
Culberson County	$789
Cumby	$5,320
Cuney	$606
Cushing	$1,120
Cut and Shoot	$2,141
DISH	$19
Daingerfield	$12,476
Daisetta	$5,370
Dalhart	$11,609
Dallam County	$21,686
Dallas County	$8,538,291
Dallas	$2,999,902
Dalworthington Gardens	$6,060
Danbury	$4,231
Darrouzett	$101
Dawson	$600
Dawson County	$46,911
Dayton	$47,122
Dayton Lakes	$38
De Kalb	$1,035
De Leon	$8,218
De Witt County	$68,895
DeCordova	$13,778
DeSoto	$72,400
Deaf Smith County	$34,532
Dean	$141
Decatur	$56,669
Deer Park	$49,388
Del Rio	$59,056
Dell City	$15
Delta County	$30,584
Denison	$210,426
Denton	$458,334
Denton County	$1,132,298
Denver City	$2,104
Deport	$42
Detroit	$965
Devers	$191
Port Isabel	$9,802
Port Lavaca	$11,752
Port Neches	$38,849
Portland	$76,517
Post	$2,332
Post Oak Bend City	$1,034
Poteet	$6,767
Poth	$3,974
Potter County	$371,701
Pottsboro	$12,302
Powell	$110
Poynor	$1,180
Prairie View	$7,600
Premont	$3,321
Presidio	$148
Presidio County	$787
Primera	$2,958
Princeton	$19,245
Progreso	$8,072
Progreso Lakes	$39
Prosper	$22,770
Providence Village	$508
Putnam	$14
Pyote	$22
Quanah	$207
Queen City	$4,837
Quinlan	$7,304
Quintana	$492
Quitaque	$8
Quitman	$15,619
Rains County	$53,190
Ralls	$3,967
Rancho Viejo	$3,836
Randall County	$278,126
Ranger	$12,186
Rankin	$1,613
Ransom Canyon	$930
Ravenna	$685
Raymondville	$7,466
Reagan County	$25,215

Devine	$4,354
Diboll	$25,533
Dickens	$71
Dickens County	$1,873
Dickinson	$83,683
Dilley	$2,633
Dimmit County	$33,294
Dimmitt	$1,012
Dodd City	$1,211
Dodson	$447
Domino	$196
Donley County	$22,370
Donna	$13,798
Dorchester	$231
Double Oak	$4,765
Douglassville	$574
Dripping Springs	$811
Driscoll	$39
Dublin	$14,478
Dumas	$26,229
Duncanville	$58,328
Duval County	$49,109
Eagle Lake	$4,882
Eagle Pass	$56,005
Early	$14,838
Earth	$242
East Bernard	$5,554
East Mountain	$2,494
East Tawakoni	$2,723
Eastland	$15,896
Eastland County	$52,275
Easton	$329
Ector	$1,108
Ector County	$480,000
Edcouch	$4,101
Eden	$497
Edgecliff Village	$2,232
Edgewood	$13,154
Edinburg	$120,884
Edmonson	$136
Real County	$5,073
Red Lick	$23
Red Oak	$26,843
Red River County	$29,306
Redwater	$1,058
Reeves County	$103,350
Refugio	$8,839
Refugio County	$46,216
Reklaw	$1,136
Reno	$3,791
Reno	$11,164
Retreat	$52
Rhome	$12,285
Rice	$1,972
Richardson	$260,315
Richland	$210
Richland Hills	$24,438
Richland Springs	$2,234
Richmond	$77,606
Richwood	$12,112
Riesel	$1,118
Rio Bravo	$8,548
Rio Grande City	$25,947
Rio Hondo	$3,550
Rio Vista	$4,419
Rising Star	$1,933
River Oaks	$11,917
Riverside	$858
Roanoke	$275
Roaring Springs	$461
Robert Lee	$85
Roberts County	$547
Robertson County	$44,642
Robinson	$18,002
Robstown	$40,154
Roby	$428
Rochester	$674
Rockdale	$20,973
Rockport	$54,253
Rocksprings	$25

Edna	$18,194
Edom	$2,149
Edwards County	$975
El Campo	$31,700
El Cenizo	$621
El Lago	$5,604
El Paso	$1,224,371
El Paso County	$2,592,121
Eldorado	$50
Electra	$15,716
Elgin	$26,284
Elkhart	$301
Ellis County	$315,372
Elmendorf	$746
Elsa	$7,720
Emhouse	$83
Emory	$3,878
Enchanted Oaks	$1,299
Encinal	$1,515
Ennis	$81,839
Erath County	$102,616
Escobares	$40
Estelline	$909
Euless	$92,824
Eureka	$334
Eustace	$2,089
Evant	$2,068
Everman	$7,692
Fair Oaks Ranch	$8,077
Fairchilds	$81
Fairfield	$1,245
Fairview	$32,245
Falfurrias	$2,221
Falls City	$41
Falls County	$34,522
Fannin County	$131,653
Farmers Branch	$94,532
Farmersville	$10,532
Farwell	$343
Fate	$3,473
Rockwall	$114,308
Rockwall County	$168,820
Rocky Mound	$280
Rogers	$3,818
Rollingwood	$4,754
Roma	$16,629
Roman Forest	$8,610
Ropesville	$2,122
Roscoe	$778
Rose City	$4,012
Rose Hill Acres	$2,311
Rosebud	$1,489
Rosenberg	$126,593
Ross	$147
Rosser	$549
Rotan	$1,493
Round Mountain	$454
Round Rock	$475,992
Round Top	$140
Rowlett	$99,963
Roxton	$47
Royse City	$23,494
Rule	$800
Runaway Bay	$6,931
Runge	$255
Runnels County	$33,831
Rusk	$17,991
Rusk County	$151,390
Sabinal	$1,811
Sabine County	$46,479
Sachse	$23,400
Sadler	$925
Saginaw	$31,973
Salado	$3,210
San Angelo	$536,509
San Antonio	$4,365,416
San Augustine	$25,182
San Augustine County	$37,854
San Benito	$40,015
San Diego	$11,771

Fayette County	$92,440
Fayetteville	$391
Ferris	$13,873
Fisher County	$5,518
Flatonia	$5,661
Florence	$3,949
Floresville	$21,699
Flower Mound	$215,256
Floyd County	$9,049
Floydada	$6,357
Foard County	$5,764
Follett	$212
Forest Hill	$26,132
Forney	$80,112
Forsan	$576
Fort Bend County	$1,506,719
Fort Stockton	$4,411
Fort Worth	$2,120,790
Franklin	$3,931
Franklin County	$25,783
Frankston	$274
Fredericksburg	$56,486
Freeport	$72,973
Freer	$3,271
Freestone County	$50,495
Friendswood	$140,330
Frio County	$19,954
Friona	$2,848
Frisco	$405,309
Fritch	$4,548
Frost	$321
Fruitvale	$2,344
Fulshear	$5,272
Fulton	$1,602
Gaines County	$54,347
Gainesville	$153,980
Galena Park	$13,093
Gallatin	$1,253
Galveston	$488,187
Galveston County	$1,124,093
San Elizario	$7,831
San Felipe	$1,498
San Jacinto County	$197,398
San Juan	$28,845
San Leanna	$36
San Marcos	$325,688
San Patricio	$4,213
San Patricio County	$271,916
San Perlita	$2,219
San Saba	$10,057
San Saba County	$17,562
Sanctuary	$17
Sandy Oaks	$9,863
Sandy Point	$1,637
Sanford	$308
Sanger	$22,237
Sansom Park	$223
Santa Anna	$329
Santa Clara	$87
Santa Fe	$33,272
Santa Rosa	$2,138
Savoy	$2,349
Schertz	$60,110
Schleicher County	$5,695
Schulenburg	$2,560
Scotland	$148
Scottsville	$708
Scurry	$1,110
Scurry County	$73,116
Seabrook	$30,270
Seadrift	$991
Seagoville	$17,106
Seagraves	$7,531
Sealy	$20,637
Seguin	$376,538
Selma	$22,429
Seminole	$16,092
Seven Oaks	$3,917
Seven Points	$7,452
Seymour	$14,218

Ganado	$5,510
Garden Ridge	$11,351
Garland	$420,244
Garrett	$2,510
Garrison	$3,555
Gary City	$450
Garza County	$8,944
Gatesville	$26,994
George West	$6,207
Georgetown	$225,896
Gholson	$1,505
Giddings	$12,674
Gillespie County	$63,191
Gilmer	$33,951
Gladewater	$24,638
Glasscock County	$1,000
Glen Rose	$540
Glenn Heights	$16,593
Godley	$3,115
Goldsmith	$677
Goldthwaite	$1,225
Goliad	$3,563
Goliad County	$34,660
Golinda	$100
Gonzales	$14,882
Gonzales County	$33,230
Goodlow	$221
Goodrich	$9,643
Gordon	$365
Goree	$749
Gorman	$3,107
Graford	$23
Graham	$235,428
Granbury	$71,735
Grand Prairie	$445,439
Grand Saline	$36,413
Grandfalls	$65
Grandview	$6,600
Granger	$2,741
Granite Shoals	$11,834
Shackelford County	$1,288
Shady Shores	$594
Shallowater	$1,907
Shamrock	$4,328
Shavano Park	$3,178
Shelby County	$109,925
Shenandoah	$47,122
Shepherd	$147
Sherman	$330,585
Sherman County	$7,930
Shiner	$4,042
Shoreacres	$958
Silsbee	$66,442
Silverton	$14
Simonton	$1,906
Sinton	$23,658
Skellytown	$400
Slaton	$154
Smiley	$655
Smith County	$758,961
Smithville	$17,009
Smyer	$300
Snook	$1,422
Snyder	$9,018
Socorro	$11,125
Somerset	$1,527
Somervell County	$57,076
Somerville	$3,806
Sonora	$7,337
Sour Lake	$17,856
South Houston	$25,620
South Mountain	$154
South Padre Island	$30,629
Southlake	$70,846
Southmayd	$7,096
Southside Place	$885
Spearman	$14,000
Splendora	$7,756
Spofford	$7
Spring Valley Village	$16,404

Granjeno	$43
Grapeland	$7,287
Grapevine	$129,195
Gray County	$65,884
Grays Prairie	$17
Grayson County	$539,083
Greenville	$203,112
Gregg County	$243,744
Gregory	$4,697
Grey Forest	$474
Grimes County	$94,878
Groesbeck	$5,745
Groom	$965
Groves	$40,752
Groveton	$8,827
Gruver	$1,166
Guadalupe County	$146,824
Gun Barrel City	$36,302
Gunter	$4,609
Gustine	$34
Hackberry	$94
Hale Center	$6,042
Hale County	$79,150
Hall County	$8,933
Hallettsville	$6,895
Hallsburg	$272
Hallsville	$10,239
Haltom City	$71,800
Hamilton	$3,581
Hamilton County	$66,357
Hamlin	$4,656
Hansford County	$16,416
Happy	$327
Hardeman County	$15,219
Hardin	$100
Hardin County	$379,800
Harker Heights	$113,681
Harlingen	$165,429
Harris County	$14,966,202
Harrison County	$185,910
Springlake	$3
Springtown	$14,244
Spur	$427
St. Hedwig	$111
St. Jo	$7,360
St. Paul	$21
Stafford	$75,145
Stagecoach	$3,036
Stamford	$398
Stanton	$3,838
Staples	$19
Star Harbor	$151
Starr County	$99,896
Stephens County	$35,244
Stephenville	$83,472
Sterling City	$62
Sterling County	$939
Stinnett	$4,097
Stockdale	$741
Stonewall County	$1,822
Stratford	$8,378
Strawn	$987
Streetman	$5
Sudan	$32
Sugar Land	$321,561
Sullivan City	$6,121
Sulphur Springs	$124,603
Sun Valley	$4
Sundown	$2,592
Sunnyvale	$3,248
Sunray	$2,571
Sunrise Beach Village	$2,083
Sunset Valley	$9,425
Surfside Beach	$6,530
Sutton County	$6,541
Sweeny	$4,503
Sweetwater	$68,248
Swisher County	$7,251
Taft	$5,861
Tahoka	$430

Hart	$86
Hartley County	$786
Haskell	$10,829
Haskell County	$22,011
Haslet	$1,908
Hawk Cove	$674
Hawkins	$7,932
Hawley	$931
Hays	$506
Hays County	$529,489
Hearne	$16,824
Heath	$28,751
Hebron	$687
Hedley	$70
Hedwig Village	$13,067
Helotes	$15,790
Hemphill	$8,035
Hemphill County	$14,394
Hempstead	$21,240
Henderson	$59,966
Henderson County	$327,965
Henrietta	$2,720
Hereford	$20,423
Hewitt	$19,776
Hickory Creek	$16,510
Hico	$5,534
Hidalgo	$26,621
Hidalgo County	$1,253,103
Hideaway	$922
Higgins	$43
Highland Haven	$320
Highland Park	$43,383
Highland Village	$50,315
Hill Country Village	$6,485
Hill County	$127,477
Hillcrest	$5,345
Hillsboro	$46,609
Hilshire Village	$859
Hitchcock	$28,796
Hockley County	$46,407
Talco	$372
Talty	$9,124
Tarrant County	$6,171,159
Tatum	$972
Taylor	$57,945
Taylor County	$351,078
Taylor Lake Village	$412
Taylor Landing	$153
Teague	$1,714
Tehuacana	$12
Temple	$280,747
Tenaha	$4,718
Terrell	$148,706
Terrell County	$5,737
Terrell Hills	$9,858
Terry County	$25,423
Texarkana	$192,094
Texas City	$298,702
Texhoma	$156
Texline	$865
The Colony	$114,297
The Hills	$1,004
Thompsons	$1,897
Thorndale	$1,595
Thornton	$270
Thorntonville	$87
Thrall	$825
Three Rivers	$4,669
Throckmorton	$29
Throckmorton County	$5,695
Tiki Island	$2,178
Timbercreek Canyon	$369
Timpson	$12,642
Tioga	$2,390
Tira	$185
Titus County	$70,611
Toco	$4
Todd Mission	$1,680
Tolar	$2,369
Tom Bean	$2,293

Holiday Lakes	$1,795
Holland	$77
Holliday	$5,910
Hollywood Park	$9,424
Hondo	$115,288
Honey Grove	$7,196
Hood County	$292,105
Hooks	$2,702
Hopkins County	$149,518
Horizon City	$7,520
Horseshoe Bay	$48,173
Houston County	$78,648
Houston	$7,021,793
Howard County	$89,330
Howardwick	$84
Howe	$9,177
Hubbard	$3,635
Hudson	$6,840
Hudson Oaks	$15,637
Hudspeth County	$985
Hughes Springs	$4,442
Humble	$73,952
Hunt County	$309,851
Hunters Creek Village	$14,708
Huntington	$8,792
Huntsville	$80,373
Hurst	$99,187
Hutchins	$9,551
Hutchinson County	$74,630
Hutto	$38,346
Huxley	$738
Idalou	$1,999
Impact	$8
Indian Lake	$473
Industry	$604
Ingleside on the Bay	$142
Ingleside	$40,487
Ingram	$5,243
Iola	$3,164
Iowa Colony	$4,090
Tom Green County	$282,427
Tomball	$34,620
Tool	$14,787
Toyah	$40
Travis County	$4,703,473
Trent	$63
Trenton	$3,089
Trinidad	$5,859
Trinity	$23,652
Trinity County	$105,766
Trophy Club	$29,370
Troup	$7,918
Troy	$5,320
Tulia	$8,911
Turkey	$737
Tuscola	$138
Tye	$1,766
Tyler	$723,829
Tyler County	$131,743
Uhland	$1,545
Uncertain	$185
Union Grove	$994
Union Valley	$666
Universal City	$28,428
University Park	$50,833
Upshur County	$128,300
Upton County	$8,499
Uvalde	$18,439
Uvalde County	$36,244
Val Verde County	$117,815
Valentine	$207
Valley Mills	$2,228
Valley View	$1,824
Van	$6,206
Van Alstyne	$43,749
Van Horn	$211
Van Zandt County	$248,747
Vega	$974
Venus	$9,792
Vernon	$81,337

Iowa Park	$23,487
Iraan	$56
Iredell	$216
Irion County	$9,105
Irving	$427,818
Italy	$5,349
Itasca	$8,694
Ivanhoe	$26
Jacinto City	$14,141
Jack County	$14,799
Jacksboro	$23,254
Jackson County	$37,984
Jacksonville	$80,179
Jamaica Beach	$4,913
Jarrell	$2,423
Jasper	$78,422
Jasper County	$248,855
Jayton	$63
Jeff Davis County	$8,500
Jefferson	$11,194
Jefferson County	$756,614
Jersey Village	$36,347
Jewett	$9,338
Jim Hogg County	$12,718
Jim Wells County	$166,539
Joaquin	$810
Johnson City	$3,581
Johnson County	$408,692
Jolly	$26
Jones County	$22,001
Jones Creek	$5,078
Jonestown	$6,419
Josephine	$881
Joshua	$20,619
Jourdanton	$9,600
Junction	$4,825
Justin	$8,575
Karnes City	$11,632
Karnes County	$35,249
Katy	$52,467
Victoria	$84,598
Victoria County	$520,886
Vidor	$95,620
Vinton	$622
Volente	$333
Von Ormy	$513
Waco	$512,007
Waelder	$3,427
Wake Village	$174
Walker County	$184,624
Waller County	$126,206
Waller	$11,295
Wallis	$2,698
Walnut Springs	$183
Ward County	$67,920
Warren City	$66
Washington County	$83,727
Waskom	$5,346
Watauga	$33,216
Waxahachie	$152,094
Weatherford	$207,872
Webb County	$505,304
Webberville	$1,280
Webster	$53,202
Weimar	$5,830
Weinert	$234
Weir	$443
Wellington	$9,111
Wellman	$383
Wells	$1,357
Weslaco	$73,949
West	$3,522
West Columbia	$17,958
West Lake Hills	$17,056
West Orange	$42,452
West Tawakoni	$6,995
West University Place	$34,672
Westbrook	$43
Westlake	$41,540
Weston	$266

Kaufman	$27,607
Kaufman County	$353,047
Keene	$38,296
Keller	$79,189
Kemah	$28,325
Kemp	$6,419
Kempner	$330
Kendall County	$100,643
Kendleton	$13
Kenedy	$676
Kenedy County	$1,000
Kenefick	$416
Kennard	$132
Kennedale	$21,024
Kent County	$939
Kerens	$1,924
Kermit	$5,652
Kerr County	$218,452
Kerrville	$190,357
Kilgore	$105,583
Killeen	$535,650
Kimble County	$20,480
King County	$1,000
Kingsville	$20,083
Kinney County	$2,142
Kirby	$8,752
Kirbyville	$10,690
Kirvin	$2
Kleberg County	$124,109
Knollwood	$1,160
Knox City	$1,962
Knox County	$11,730
Kosse	$2,468
Kountze	$19,716
Kress	$186
Krugerville	$1,508
Krum	$9,661
Kurten	$686
Kyle	$51,835
La Feria	$10,381
Weston Lakes	$189
Westover Hills	$4,509
Westworth Village	$7,842
Wharton	$31,700
Wharton County	$72,887
Wheeler	$447
Wheeler County	$26,273
White Deer	$1,273
White Oak	$15,305
White Settlement	$23,304
Whiteface	$155
Whitehouse	$29,017
Whitesboro	$18,932
Whitewright	$7,098
Whitney	$73
Wichita County	$552,371
Wichita Falls	$832,574
Wickett	$87
Wilbarger County	$55,124
Willacy County	$24,581
Williamson County	$1,195,987
Willis	$24,384
Willow Park	$26,737
Wills Point	$43,765
Wilmer	$426
Wilson	$12
Wilson County	$121,034
Wimberley	$724
Windcrest	$12,908
Windom	$1,087
Windthorst	$3,385
Winfield	$290
Wink	$120
Winkler County	$61,163
Winnsboro	$28,791
Winona	$319
Winters	$6,229
Wise County	$289,074
Wixon Valley	$441
Wolfe City	$5,466

La Grange	$9,623	Wolfforth	$4,022
La Grulla	$1,708	Wood County	$267,048
La Joya	$8,457	Woodbranch	$9,617
La Marque	$98,930	Woodcreek	$358
La Porte	$91,532	Woodloch	$1,012
La Salle County	$14,975	Woodsboro	$1,130
La Vernia	$3,217	Woodson	$122
La Villa	$572	Woodville	$20,340
La Ward	$321	Woodway	$25,713
LaCoste	$159	Wortham	$376
Lacy-Lakeview	$11,599	Wylie	$114,708
Ladonia	$2,011	Yantis	$2,072
Lago Vista	$13,768	Yoakum County	$34,924
Laguna Vista	$3,689	Yoakum	$20,210
Lake Bridgeport	$232	Yorktown	$5,447
Lake City	$2,918	Young County	$44,120
Lake Dallas	$25,314	Zapata County	$56,480
Lake Jackson	$75,781	Zavala County	$38,147
Lake Tanglewood	$613	Zavalla	$1,088
Lake Worth	$20,051		

EXHIBIT C

Exhibit C: TX Opioid Council & Health Care Region Allocations plus Administrative Costs
70% of Total ($700 million)

Health Care Region Allocation*: $693 million; Administrative Costs: $7 million		
Region	Counties in Health Care Region	Allocation
1	Anderson, Bowie, Camp, Cass, Cherokee, Delta, Fannin, Franklin, Freestone, Gregg, Harrison, Henderson, Hopkins, Houston, Hunt, Lamar, Marion, Morris, Panola, Rains, Red, River, Rusk, Smith, Titus, Trinity, Upshur, Van, Zandt, Wood	$38,223,336
2	Angelina, Brazoria, Galveston, Hardin, Jasper, Jefferson, Liberty, Nacogdoches, Newton, Orange, Polk, Sabine, San Augustine, San Jacinto, Shelby, Tyler	$54,149,215
3	Austin, Calhoun, Chambers, Colorado, Fort Bend, Harris, Matagorda, Waller, Wharton	$120,965,680
4	Aransas, Bee, Brooks, De Witt, Duval, Goliad, Gonzales, Jackson, Jim Wells, Karnes, Kenedy, Kleberg, Lavaca, Live Oak, Nueces, Refugio, San Patricio, Victoria	$27,047,477
5	Cameron, Hidalgo, Starr, Willacy	$17,619,875
6	Atascosa, Bandera, Bexar, Comal, Dimmit, Edwards, Frio, Gillespie, Guadalupe, Kendall, Kerr, Kinney, La Salle, McMullen, Medina, Real, Uvalde, Val Verde, Wilson, Zavala	$68,228,047
7	Bastrop, Caldwell, Fayette, Hays, Lee, Travis	$50,489,691
8	Bell, Blanco, Burnet, Lampasas, Llano, Milam, Mills, San Saba, Williamson	$24,220,521
9	Dallas, Kaufman	$66,492,094
10	Ellis, Erath, Hood, Johnson, Navarro, Parker, Somervell, Tarrant, Wise	$65,538,414
11	Brown, Callahan, Comanche, Eastland, Fisher, Haskell, Jones, Knox, Mitchell, Nolan, Palo Pinto, Shackelford, Stephens, Stonewall, Taylor	$9,509,818
12	Armstrong, Bailey, Borden, Briscoe, Carson, Castro, Childress, Cochran, Collingsworth, Cottle, Crosby, Dallam, Dawson, Deaf Smith, Dickens, Donley, Floyd, Gaines, Garza, Gray, Hale, Hall, Hansford, Hartley, Hemphill, Hockley, Hutchinson, Kent, King, Lamb, Lipscomb, Lubbock, Lynn, Moore, Motley, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Scurry, Sherman, Swisher, Terry, Wheeler, Yoakum	$23,498,027
13	Coke, Coleman, Concho, Crockett, Irion, Kimble, Mason, McCulloch, Menard, Pecos, Reagan, Runnels, Schleicher, Sterling, Sutton, Terrell, Tom Green	$5,195,605
14	Andrews, Brewster, Crane, Culberson, Ector, Glasscock, Howard, Jeff Davis, Loving, Martin, Midland, Presidio, Reeves, Upton, Ward, Winkler	$12,124,354
15	El Paso, Hudspeth	$17,994,285
16	Bosque, Coryell, Falls, Hamilton, Hill, Limestone, McLennan	$9,452,018
17	Brazos, Burleson, Grimes, Leon, Madison, Montgomery, Robertson, Walker, Washington	$23,042,947
18	Collin, Denton, Grayson, Rockwall	$39,787,684
19	Archer, Baylor, Clay, Cooke, Foard, Hardeman, Jack, Montague, Throckmorton, Wichita, Wilbarger, Young	$12,665,268
20	Jim Hogg, Maverick, Webb, Zapata	$6,755,656
	Administrative Costs	$7,000,000

* Each Region shall reserve 25% of its allocation for Targeted Funds under the guidelines of Exhibit A.

BIRKHOFF, HENDRICKS & CARTER, L.L.P.
PROFESSIONAL ENGINEERS

11910 Greenville Ave., Suite 600 Dallas, Texas 75243 Fax (214) 461-8390 Phone (214) 361-7900

JOHN W. BIRKHOFF, P.E.
GARY C. HENDRICKS, P.E.
JOE R. CARTER, P.E.
ANDREW MATA, JR., P.E.
DEREK B. CHANEY, P.E.
CRAIG M. KERKHOFF, P.E.
JUSTIN IVY, P.E.
COOPER REINBOLD, P.E.

March 17, 2023

Ms. Tonya Roberts
City Administrator
City of Venus
700 West US 67
Venus, Texas 76084

Re: 750,000 Gallon Elevated Storage Tank
Engineering Services Agreement – **Amendment No. 2**

Dear Ms. Roberts:

As you requested, we are pleased to submit this Amendment No. 2 to our Engineering Services Task Order for the 750,000 Gallon Elevated Storage Tank project, signed and dated May 13, 2021. This Amendment No. 2 includes the additional field survey and revisions to the plan set for the revised location of the elevated tank, redesign of the elevated tank to a capacity of 1,000,000 gallons and additional geotechnical investigations with the revised location.

Also included in this amendment is 33,625 linear feet of 12-inch water line to be designed as directed by the City. The water lines will connect the proposed EST to the City's existing system and allow for future connections. It is assumed that water line easements outside the ROW will be required for the construction of the water line. Plat and field notes, as well as a Land Rights Agent, have been included in the budget. A coordination task has been included (as an additional service) to accommodate coordination with BNSF (crossing), TxDOT (crossing twice) and Johnson County. In the event all or a portion of the easement acquisition service and/or coordination is not required, the expenses not incurred will not be billed to the City.

With this amendment, it is intended to bid the EST and water lines as two separate projects.

The following scope will be added to the contract scope of services under Part I of the contract for the design water lines:

Part I: <u>Design Phase</u>

1. Prepare Plan-Profile Sheets at a scale of not less than 1"=20'
2. Prepare standard construction details.
3. Prepare Cover Sheet, Location Map and Sheet Index.
4. Attend two design review meeting with City Staff.
5. Complete quanitity take-off and formulate Opinion of Probable Construction Cost.
6. Prepare technical specifications and Contract Documents.
7. Submit Preliminary Plans to City for review.
8. Prepare Signed and Sealed Construction Plans and Specifications.

The table below summarizes the contract terms and the effect of this Amendment No. 2.

Venus EST – Engineering Services Agreement
Amendment No. 2

		Original Contract Amount w/ Amendment No. 1	Amount, This Amendment No. 2	Revised Contract Amount
	Part I - Design Phase (EST)	$179,310	$42,300	$221,610
	Part I B – Water Line Design	$0	$380,560	$380,560
	Part II - Bidding Phase	$7,068	$4,062	11,130
	Part III - Construction Administration	$57,722	$42,973	$100,695
	Subtotal, Basic Services	**$235,600**	**$469,896**	**$713,995**
Additional Services	A. – Field Survey	$5,120	$88,094	$93,214
	B. - Geotechnical Investigations	$12,500	$0	$12,500
	C. – Printing of Plans and Specs	$500	$0	$500
	D - Construction Inspections (for EST)	$37,553	$0	$37,533
	E – Coordination	$0	$7,500	$7,500
	F – Land Rights Agent (45 parcels)	$0	$150,500	$150,500
	G – Plat and Field Notes (45 parcels)	$0	$150,500	$150,500
	Subtotal, Additional Services	**$40,505**	**$396,594**	**$452,247**
	Totals	**$284,043**	**$866,490**	**$1,084,256**

If you are in agreement with this Amendment No. 2 to our original engineering services agreement for the 750,000 gallon elevated storage tank project dated May 13, 2021, please sign and return one set to our office.

We are available to discuss this project further at your convenience.

Sincerely,

Craig M. Kerkhoff, P.E., C.F.M.

Digitally signed by Craig M. Kerkhoff, P.E., C.F.M.
DN: C=US, E=ckerkhoff@bhcllp.com, O="Birkhoff, Hendricks and Carter, L.L.P.", CN="Craig M. Kerkhoff, P.E., C.F.M."
Date: 2023.03.17 09:00:25-05'00'

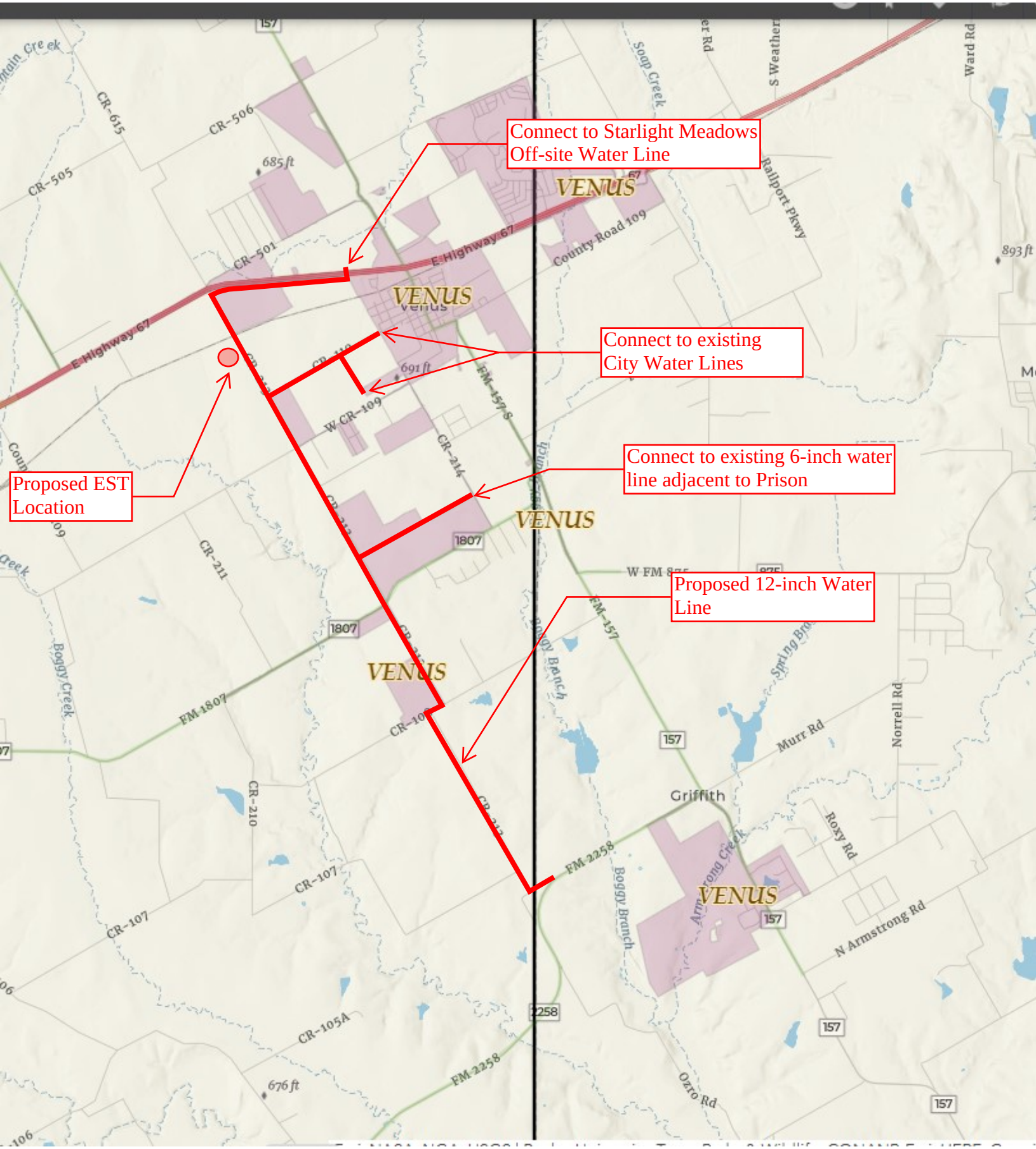
Craig M. Kerkhoff, P.E., C.F.M.

APPROVED FOR THE CITY OF VENUS, TEXAS

_____

Ms. Tonya Roberts, City Administrator **Date**

Exhibit B


Connect to Starlight Meadows Off-site Water Line
Connect to existing City Water Lines
Connect to existing 6-inch water line adjacent to Prison
Proposed EST Location
Proposed 12-inch Water Line
VENUS
E Highway 67
W CR-109
FM-1598
CR-214
CR-211
CR-210
CR-107
CR-105A
FM 1807
FM 2258
FM-157
Griffith
Murr Rd
Norrell Rd
Roxy Rd
N Armstrong Rd
Ozro Rd
Railport Pkwy
County Road 109
Boggy Creek
Boggy Branch
Soap Creek
Ward Rd
685 ft
691 ft
676 ft
893 ft
1807
157
2258

BIRKHOFF, HENDRICKS & CARTER, L.L.P. **Project No.** Busdev-Venus

PROFESSIONAL ENGINEERS

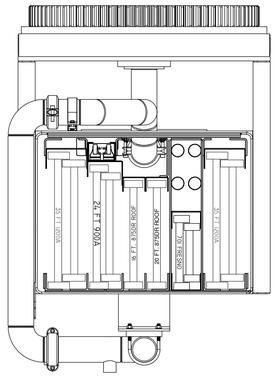
Texas Firm F526

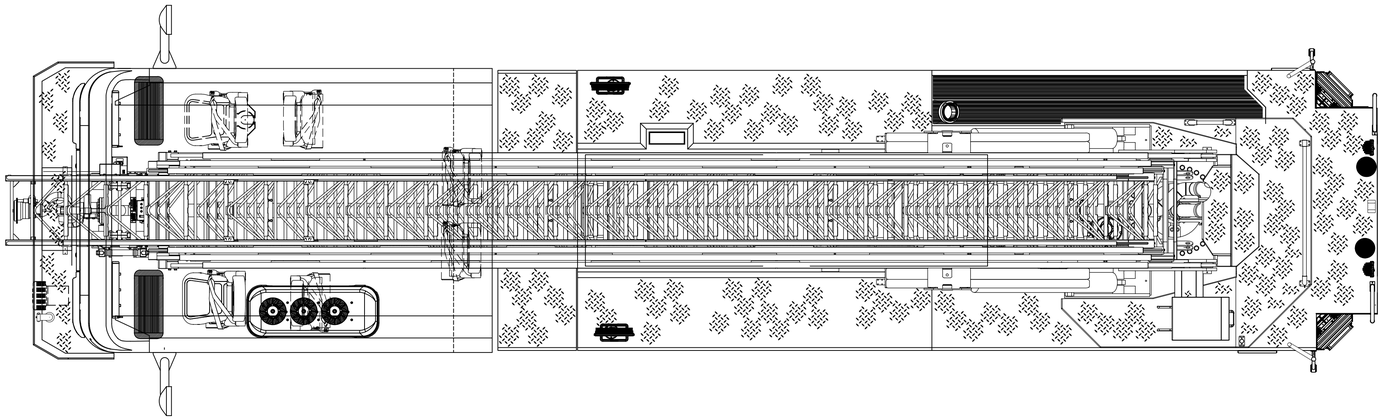
Client: City of Venus **Date:** 17-Mar-23

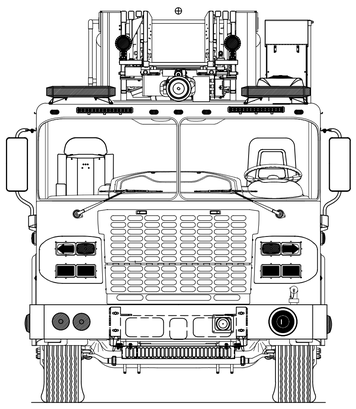
Project: 33,625 LF of 12-inch Water Line **By:** CMK

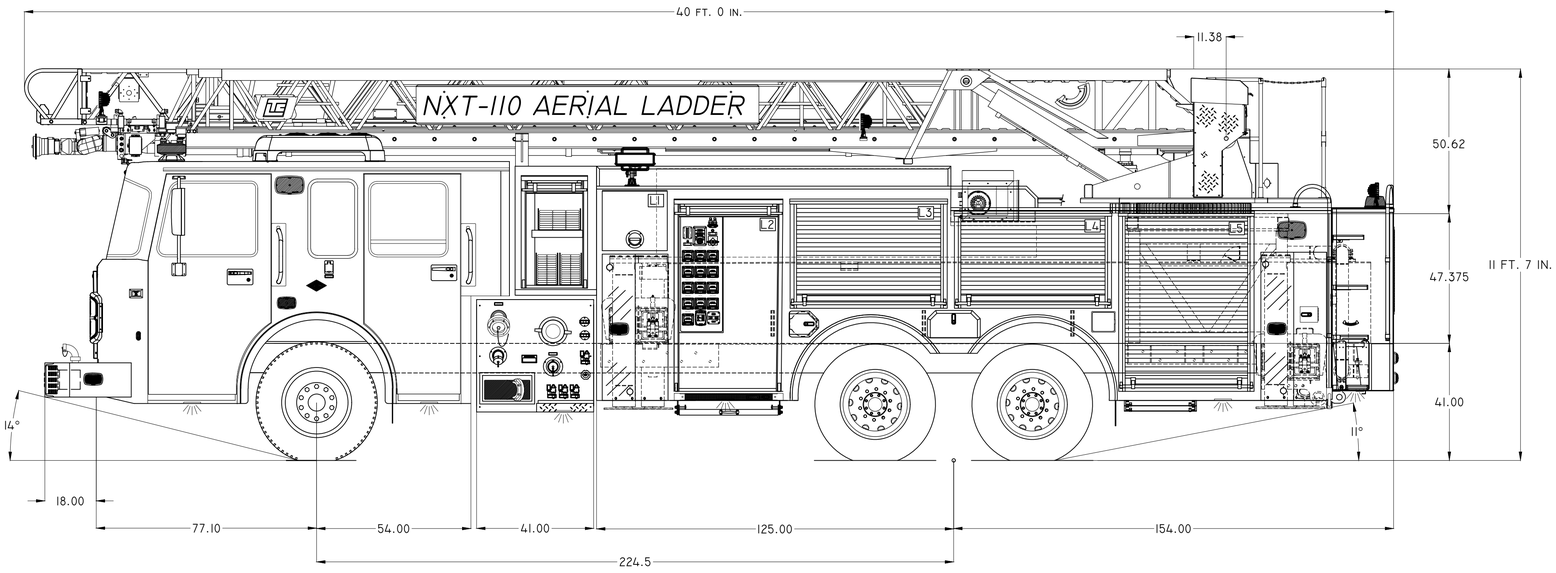
ENGINEER'S OPINION OF CONSTRUCTION COST

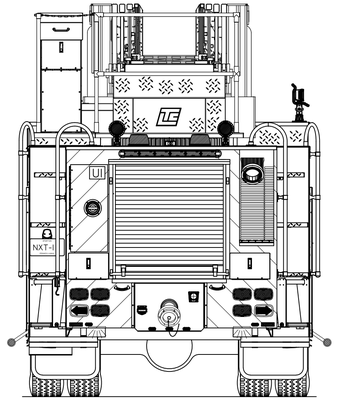
Item No.	Description	Quantity	Unit	Price	Amount
1	Furnish & Install AWWA C900 12-inch Water Line w/ Class "B" embedment by Open Cut	32,885	L.F.	$ 120.00	$ 3,946,200.00
2	Furnish & Install AWWA C900 12-inch Water Line w/ 18-inch Steel Encasement Pipe (1/4" thick) by Other Than Open Cut	740	L.F.	$ 625.00	$ 462,500.00
3	Furnish & Install Fire Hydrant Assembly	68	Ea	$ 8,000.00	$ 542,160.00
4	Furnish & Install 12" R.S. Gate Valves	37	Ea	$ 6,000.00	$ 221,310.00
5	Furnish & Install 6-inch Blow-off Valve	3	Ea	$ 7,500.00	$ 22,500.00
6	Furnish and Install 2-inch Air Release/Vacuum Valve	4	Ea	$ 10,000.00	$ 40,000.00
7	Connect to Existing 12" Water Line	1	Ea	$ 5,000.00	$ 5,000.00
8	Connect to Existing 8" Water Line	2	Ea	$ 4,000.00	$ 8,000.00
9	Connect to Existing 6" Water Line	1	Ea	$ 3,500.00	$ 3,500.00
10	Remove and Replace Existing Asphalt Pavment	33	SY	$ 100.00	$ 3,333.33
11	Remove and Replae Concrete Pavement	1,500	SY	$ 150.00	$ 225,000.00
12	Remove and Replae Gravel Driveway	533	SY	$ 40.00	$ 21,333.33
13	Remove and Replace Barb Wire Fence	300	LF	$ 25.00	$ 7,500.00
14	Storm Water Pollution Prevention Plan	1	EA	$ 2,500.00	$ 2,500.00
15	Implementation of Storm Water Pollution Prevention Plan	1	LS	$ 5,000.00	$ 5,000.00
16	Design Trench Safety Plan	1	EA	$ 2,500.00	$ 2,500.00
17	Implement Trench Safety Plan	1	LS	$ 10,000.00	$ 10,000.00
18	Furnish, Install, Maintain & Remove Traffic Control Devices	1	LS	$ 5,000.00	$ 5,000.00
19	Furnish Traffic Control Plan	1	EA	$ 2,500.00	$ 2,500.00
20	Furnish, Install and Maintain Hydromulch Seeding	493,275	SF	$ 0.30	$ 147,982.50
	Construction Subtotal:				**$ 5,515,836.67**
	Contingencies and Miscellaneous Items	15%			$ 827,376.00
	Total:				**$ 6,343,212.67**
	Easement Acquisition	493,275	S.F.	$ 0.50	$ 246,637.50
	Engineering, Surveying, Construction Admin.***				$824,189
	Quality Control & Material Testing***	5.0%			$ 317,160.63
	Project Total:				$ 7,731,199.80
				USE:	**$ 7,732,000.00**

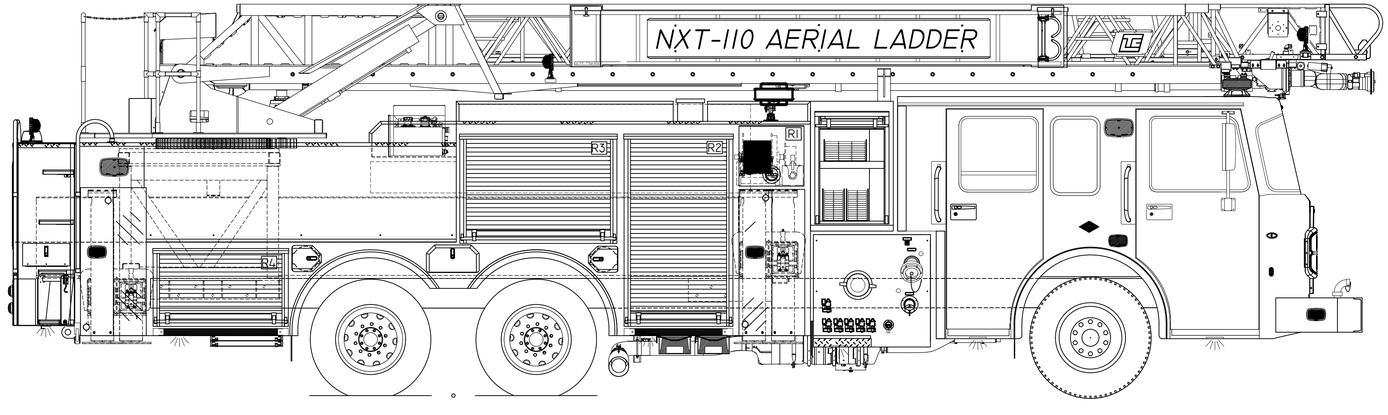












LADDER TOWER
REV GROUP

SPARTAN FIRE, LLC.
EPHRATA, PA 17522

CHASSIS:	SPARTAN GLADIATOR
ENGINE:	CUMMINS X15 565 HP
TRANSMISSION:	ALLISON 4000 EVS
AXLES:	23,000 LB. FRONT/54,000 LB. REAR
MODEL:	C34R-110 AERIAL LADDER
WATER/FOAM:	500 / 0 GALLONS
PUMP:	WATEROUS CSU 2250 GPM
GENERATOR:	10 KW HARRISON HYDRAULIC

COMPARTMENT DIMENSIONS

I.D.	DOOR OPENING	INTERIOR DIMENSIONS
L1	23.50W x 19.50H	23.63W x 21.25H x 25.25D
L2	36.50W x 67.25H	36.75W x 70.75H x 24.75D
L3	55.25W x 37.25H	55.37W x 40.50H x 24.75D
L4	55.25W x 29.00H	55.50W x 32.50H x 24.00D
L5	44.00W x 59.00H	44.25W x 59.25H x 24.00D
R1	23.50W x 19.50H	23.63W x 21.25H x 25.25D
R2	36.50W x 67.25H	36.75W x 70.75H x 24.75D
R3	55.25W x 37.25H	55.37W x 40.50H x 24.75D
R4	44.00W x 25.50H	44.25W x 30.00H x 24.00D
U1	12.25W x 28.63H	12.25W x 28.63H x 12.50D

GROUND LADDERS:
TWO DUO-SAFETY 35 FT. 1200A 2-SECTION
ONE DUO-SAFETY 24 FT. 900A 2-SECTION
ONE DUO-SAFETY 16 FT. 875DR ROOF
ONE DUO-SAFETY 20 FT 875DR ROOF
ONE DUO-SAFETY 14 FT. 70I "FRESNO"
ONE DUO-SAFETY 10 FT. 585A FOLDER
ONE DUO-SAFETY 14 FT. 775DR ROOF ON AERIAL
HOOKS:
(1) FIRE HOOKS UNLIMITED NH-12 NATIONAL HOOK
(1) FIRE HOOKS UNLIMITED NH-8 NATIONAL HOOK
(2) FIRE HOOKS UNLIMITED NH-6 NATIONAL HOOK

CUSTOMER

THIS DRAWING IS A CLOSE APPROXIMATION OF YOUR FIRE APPARATUS. IN ALL CASES WHERE THE DRAWING AND THE WRITTEN SPECIFICATION DIFFER, THE SPECIFICATION SHALL PREVAIL. PLEASE WORK WITH YOUR DEALER TO ASSURE THAT THE WRITTEN SPECIFICATION REPRESENTS WHAT YOU WANT IN YOUR FINISHED PRODUCT. SPARTAN EMERGENCY RESPONSE BUILDS TO THE WRITTEN SPECIFICATION, NOT THE DRAWING TO ASSURE THAT YOUR NEEDS ARE MET.

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SPARTAN FIRE, LLC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SPARTAN EMERGENCY RESPONSE IS PROHIBITED. SPARTAN MOTORS USA, INC. D/B/A SPARTAN FIRE, LLC.

REV	DATE	DESCRIPTION	NAME
1	11/4/21	INITIAL DRAWING	WB

SCALE: NOT TO SCALE

2022 NXT AERIAL DEMO
C34R-110 750 LB. TIP LOAD AERIAL

TRUCK NUMBER:	
L221143-01	3-012-0125

METRO FIRE
Apparatus Specialists, Inc.
514 Michigan / Houston, Texas 77587 / (713) 692-0911 / (713) 692-1591 fax

L221143 Spartan Stock 110' NXT RM Quint Specifications

INTENT OF SPECIFICATIONS

It shall be the intent of these specifications to provide a complete apparatus equipped as hereinafter and as specified. With a view to obtaining the best results and the most acceptable apparatus for service in the Department, these specifications cover only the general requirements as to the type of construction and tests to which the apparatus must conform, together with certain details as to finish, equipment and appliances with which the successful bidder shall conform. Minor details of construction and materials where not otherwise specified are left to the discretion of the contractor, who shall be solely responsible for the design and construction for all features. The manufacturer shall provide loose equipment only when specified by the customer. The (NFPA) 1901, Standard for Automotive Fire Apparatus, unless otherwise specified as requested by the customer in these specifications, shall prevail.

The apparatus must meet all NFPA, DOT, ICC, AE, TRA, FMVSS and local state Motor Vehicle Requirements.

It is required that the apparatus be manufactured to current NFPA edition standards, all NFPA equipment (LOOSE EQUIPMENT) not specified in the specifications will not be provided by the contractor.

Bids shall only be considered from companies that have an established reputation in the field of fire apparatus construction and aerial device construction that have been in business and construction for a minimum of twenty-five (25) years.

The bidder of the apparatus herein specified; shall be wholly owned (100%) and managed by a Company, Corporation, and/or Parent Company that is wholly based, and permanently resides in the United States of America.

The Company, Corporation, and/or Parent Company and all assets belonging to such; shall be wholly owned and managed (100%) by the entities specified above.

The bidder shall state the location of the manufacturing facility where the apparatus is to be built and the location of the parent company if a subsidiary of a manufacturer.

The bidder shall provide satisfactory evidence of their ability to construct the apparatus and aerial structures specified in the bidders manufacturing facilities.

The bidder's representation shall state the length of time representing the manufacturer of specified apparatus.

Due to the severe service requirements the department will impose on the apparatus as specified; each bidder shall provide a list of at least six (6) departments in which similar apparatus utilizing the brand of chassis proposed have been in service for over one year. This list shall include contact names and phone numbers.

The bid shall be accompanied by a set of "Contractor's Specifications" consisting of a detailed

description of the apparatus being furnished under this contract which conform. Computer runoff sheets are not acceptable as “Contractor’s Specifications”. Item compliance shall be indicated in the “Yes/No” column of each item by all Bidders. Note: Each bidder shall submit their bid in the same sequence as these specifications to allow the department to easily compare. {No Exceptions}

These specifications shall indicate size, type, model and make of all component parts and equipment. {No Exceptions}

QUALITY AND WORKMANSHIP

The design of the Apparatus shall embody the latest approved automotive engineering practices.

The workmanship must be of the highest quality in its respective field. Special consideration will be given to the following points Accessibility of the various units, which require periodic maintenance, ease of operation (including both pumping and driving) and symmetrical proportions.

Construction shall be rugged and ample safety factors shall be provided to carry loads as specified and to meet both on and off road requirements and to speed conditions as set forth under “Performance tests and requirements”.

Welding shall be employed in the assembly of the apparatus in a manner that will not prevent the ready removal of any component part for service or repair, with apparatus bodies of bolt together design not being acceptable.

All steel welding shall follow American Welding Society requirements for AWS D1.1:2012 Structural Welding Code for welding steel structural assemblies. All aluminum welding shall follow American Welding Society requirements for AWS D1.2/D1.2M:2003 Structural Welding Code for any type structure made from aluminum structural alloys. All sheet metal welding shall follow American Welding Society AWS D9.1M/D9.1:2006 Structural Welding code for Arc/Braze requirements of non-structural materials. All pressure pipe welding shall follow American Society of Mechanical Engineers ASME IX/ ASME B31:2010 requirements to the qualification of procedures in welding and brazing, in accordance with the ASME Boiler and Pressure Vessel Code and the ASME B31 Code for Pressure Piping. Flux core arc welding to use alloy rods, type 7000, American Welding Society AWS standards A5.20-E70T1. The manufacturer shall be required to have an American Welding Society certified welding inspector in plant during testing operations within working hours to monitor weld quality.

Employees classified as welders shall be tested and certified to meet American Welding Society and American Society of Mechanical Engineers welding codes.

DELIVERY

The bidder shall provide the number of calendar days from the date the bid is awarded to the delivery of the completed unit.

A qualified delivery engineer representing the contractor shall deliver the apparatus and instruct the Fire Department personnel in the proper operation, care and maintenance of the equipment delivered.

PERFORMANCE TESTS AND REQUIREMENTS

A road test shall be conducted with the apparatus fully loaded to its estimated in-service weight and shall be capable of the following performance while on dry paved roads that are in good condition and for a continuous run of ten (10) miles or more, during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus. The successful bidder shall furnish a Weight Certificate showing weights on front axle, rear axles and total weight for the completed apparatus at time of delivery.

A. The apparatus shall be capable of accelerating to 35 MPH (55 km/hr.) from a standing start within 25 seconds on a level concrete highway without exceeding the maximum governed RPM of the engine.

B. The apparatus, fully loaded, shall be capable of obtaining a minimum top speed of 50 MPH (80 km/hr.) on a level dry concrete highway with the engine not exceeding its governed RPM (fully loaded).

C. The service brakes shall be capable of stopping a fully loaded vehicle in 35ft (10.7 m) at 20 mph (32.2 km/hr.) on a level concrete highway. The air brake system shall conform to Federal Motor Vehicle Safety Standards (FMVSS) 121.

D. The apparatus, when fully loaded, shall have not less than 25 percent or more than 50 percent of the weight on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle.

E. The contractor shall have the Underwriter's Laboratories, LLC conduct the tests of the apparatus as in accordance with standard practices required by the Underwriter Laboratories, LLC (Guide for the Certification of Fire Department Pumper latest edition). A copy of all tests shall accompany the Apparatus. (For apparatus sold within Canadian ULC S515 latest revision shall prevail).

F. The contractor shall furnish copies of the Manufacturer's record construction details when delivered.

INFORMATION REQUIRED

The manufacturer shall supply at time of delivery, a complete operation and maintenance manual covering the completed apparatus as delivered.

A Fire Apparatus Safety Guide published by Fire Apparatus Manufacturer's Association shall be provided with the apparatus upon delivery. This manual includes essential safety information for fire fighters, fire chiefs, apparatus mechanics, and fire department safety officers. The guide is applicable to municipal, wildland, and airport firefighting apparatus manufactured on either custom or commercial chassis.

A permanent plate shall be mounted in the driver's compartment to specify the quantity and type of the following fluids used in the vehicle: Engine oil, engine coolant, and chassis transmission fluid, pump transmission lubrication fluid, aerial device fluid,

generator fluid (if applicable), pump primer fluid (if used) and drive axle lubrication fluid and any other fluids not mentioned.

The manufacture shall supply the final certification of GVWR and GAWR on a nameplate affixed to the vehicle.

A permanent plate in the driver's compartment shall be installed, specifying the seating capacity of the enclosed cab.

Signs that state "OCCUPANTS MUST BE SEATED AND BELTED WHEN APPARATUS IS IN MOTION" shall be provided and will be visible from each seated position. An accident prevention sign shall be located at the rear step area of the apparatus. It shall warn all personnel that standing on the step while apparatus is in motion shall be prohibited.

When equipped with a fire pump, a nameplate indicating the chassis transmission shift selector position to be used when pumping shall be provided in the driving compartment and located so that it can be easily read from the driver's position.

LIABILITY

The bidder, if their bid is accepted, shall defend any and all suits and assume all liability for the use of any patented device or article forming part of the apparatus or any appliance provided under the contract.

GENERAL CONSTRUCTION

The apparatus shall be designed with due consideration to distribution of load between the front and rear axles, so that all specified equipment, including filled water tank, a full complement of personnel and fire hose will be carried without injury to the apparatus. Weight balance and distribution shall be in accordance with the recommendations of the (NFPA) 1901, Standard for Automotive Fire Apparatus, documentation.

The apparatus shall be designed so that all recommended daily maintenance checks can be performed easily by the operator without the need for hand tools. Apparatus components that interfere with repair or removal of other major components must be attached with fasteners (cap, screws, nuts, etc.) so that the components can be removed and installed with normal hand tools. These components must not be welded or otherwise permanently secured into place.

The GAWR and GVWR of the chassis shall be adequate to carry the fully equipped apparatus including all tanks filled, the specified hose load, unequipped personnel weight, ground ladders and a miscellaneous equipment allowance of 2,500 lbs. per NFPA 1901, Standard for Automotive Fire Apparatus criteria It shall be the responsibility of the purchaser to provide the contractor with the weight of any additional equipment and personnel to be carried and the location on the apparatus if it is in excess of the allowance as set forth by NFPA.

The unequipped personnel weight shall be calculated at 250 lbs. per person times the maximum number of persons to ride on the apparatus.

The height of the fully loaded vehicle's center of gravity shall not exceed the chassis manufacturer's maximum limit.

The front to rear weight distribution of the fully loaded vehicle shall be within the limits set by the chassis manufacturer. The front axle loads shall not be less than the minimum axle loads specified by the chassis manufacturer, under full loads and all other loading conditions.

The difference in weight on the end of each axle, from side to side, when the vehicle is fully loaded and equipped shall not exceed 7 percent.

The apparatus shall be so designed that the various parts are readily accessible for lubrication, inspection, adjustment and repair.

Where special tools manufactured or designed by the contractor and are required to provide routine service on any component of the apparatus built or supplied by the contractor, such tools shall be provided with the apparatus.

EXCEPTIONS TO SPECIFICATIONS

The following specifications shall be strictly adhered to. Exceptions shall be allowed if they are equal to or superior to that as specified and providing, they are listed and entirely explained on a separate page entitled "Exceptions to Specifications". The exceptions list to refer to specification page number and paragraph.

Proposals taking total exception to specifications or total exception to certain parts of the specifications such as Electrical Systems, Chassis, Body, Aerial or Pump (if applicable), will not be accepted.

Prototype units will not be acceptable. Apparatus shall be inspected upon completion for compliance with specifications.

Deviations will not be tolerated and will be cause for rejection of Apparatus unless they were originally listed in bidder’s proposal and accepted in writing by the department.

If the bidder takes an exception, on the exception page, the bidder must state an option price to bring their specifications into full compliance with the Department specifications.

Failure to provide this information shall be cause to reject the proposal as being non-responsive. {No Exceptions}

Copied or run off sheets of these specifications shall be unacceptable, and the bid will be rejected no exceptions.

PURCHASER'S RIGHTS

The Purchaser reserves the right to accept or reject any or all bids as it deemed in their best interests.

BID/PROPOSAL DRAWINGS

For purposes of evaluation, the bidder shall provide a drawing illustrating, but not limited to, the overall dimensions, wheelbase, and overall length of the proposed apparatus and other specified equipment, shall be required to be included with the bidder's proposal package.

The drawings shall be large "D" size (minimum 24.00 inches x 36.00 inches).

Smaller size drawings, "similar to" drawings or general sales drawings, shall not be acceptable.

Failure to provide a bid evaluation drawing in accordance with these specifications shall be cause for rejection of the bid proposal.

PRE-CONSTRUCTION DRAWINGS

After the award of the bid, the contractor shall provide detailed colored engineering drawings including, but not limited to, the overall dimensions, wheelbase, and overall length of the proposed apparatus for use during the pre-construction conference.

The drawings shall include, but shall not be limited to the right, left, top, front and rear views of the apparatus**.**

In addition, a detailed engineering drawing of the pump operator's panel shall be provided prior to manufacturing for fire department approval.

SINGLE SOURCE MANUFACTURER

Bids shall only be accepted from a single source apparatus manufacturer.

The definition of single source manufacturer is company that designs and manufactures their products utilizing an approach that includes complete product integration, including the apparatus chassis, cab, and body modules being constructed, assembled, and tested on company premises only.

Warranties qualified to the chassis and body design construction (excluding vender component warranties such as engine, axles, transmission, and pumps, etc.) will be from a single source manufacturer and not separated between manufacturers (i.e., body and chassis). The bidder shall provide evidence of maintaining compliance to this requirement.

TAG-ON ORDERS-COOPERATIVE PURCHASING

Other fire departments, metropolitan regions, or municipalities may purchase apparatus and equipment similar to the Apparatus and Equipment that is the subject of this Contract. The following terms shall apply to any such tag-on orders:

(a) Changes - Spartan Emergency Response's intention is to make available to others, tag-on orders utilizing the same specification as the Apparatus and Equipment that is the subject of this Contract in order to provide favorable pricing and lead-times to other buyers due to having such specification fully engineered. Spartan Emergency Response recognizes however that each additional buyer may have unique requirements that must be accommodated; and in this regard, limited changes will be permitted.

Such changes will be captured in the pre-construction meeting and the price of any tag-on unit adjusted accordingly.

(b) Term – Tag-on orders may be placed for a term of one year after the Effective Date of this Contract.

(c) Escalation - Spartan Emergency Response reserves the right to adjust the price of any tag-on order if material costs escalate during the term of this Contract, changes in regulations become effective (for example EPA, NFPA or other), or the tag-on order would cross a model year.

(d) Acceptance – Spartan Emergency Response reserves the right to accept or reject any tag-on orders under this Contract.

SUPPLIED INFORMATION & EXTRAS

The apparatus manufacturer shall supply two (2) copies of apparatus manuals with all manufactured apparatus.

The manuals shall include, but not be limited to: all component warranties, users' manuals and information for supplied products, apparatus engineering information including drawings and build prints, and whatever other pertinent information the manufacturer can supply to its customer regarding the said apparatus.

The following manuals pertaining to the aerial device shall also be included:

- Two (2): Operators' manuals.
- Two (2): Parts manuals in a CD format.
- Two (2): Electrical and Hydraulic Diagrams in a CD format.

Included in the delivery of the unit, the manufacturer shall also include spare hardware and extra fasteners, paint for touch-up, information regarding washing and care procedures, as well as other recommendations for care and upkeep of the general apparatus.

The manufacturer shall also supply a manufacturer's record of apparatus construction details, including the following information:

- Owner name and address
- Apparatus manufacturer, model, and serial number
- Chassis make, model, and serial number
- GAWR of front and rear axles
- Front tire size and total rated capacity in pounds
- Rear tire size and total rated capacity in pounds
- Chassis weight distribution in kilograms with water (if applicable) and manufacturer mounted equipment (front and rear)
- Engine make, model, serial number, rated horsepower, related speed and no load governed speed
- Type of fuel and fuel tank capacity
- Electrical system voltage and alternator output in amps
- Battery make and model, capacity in CCA
- Paint numbers
- Weight documents from a certified scale showing actual loading on the front axle, rear axle(s), and overall vehicle (with the water tank full (if applicable) but without personnel, equipment, and hose)
- Written load analysis and results of the electrical system performance tests

- Transmission make, model, and type
- Pump to drive through the transmission (yes or no)
- Engine to pump gear ratio and transmission gear ratio used
- Pump make and model, rated capacity in gallons per minute, serial number, and number of stages
- Pump manufacturer's certification of suction capability
- Pump manufacturer's certification of hydrostatic test
- Pump manufacturer's certification of inspection and test for the fire pump
- Copy of the apparatus manufacturer's approval for stationary pumping applications
- Pump transmission make, model and serial number
- Priming device type
- Type of pump pressure control system
- The engine manufacturer's certified brake horsepower curve for the engine furnished, showing the maximum no load governed speed
- Certification of water tank capacity
- The certification of inspection and test for the aerial device
- All the technical information required for inspections to comply with (NFPA) 1911, Standard for Automotive Fire Apparatus and Standard for Testing Fire Department Aerial Devices.

ELECTRICAL SCHEMATICS

The apparatus manufacturer shall supply one (1) set(s) of "Generic" wiring schematics with each apparatus.

WARNING AND INFORMATION LABELS

All warning and informational labels (non-vendor specific) shall be provided in compliance with (NFPA) 1901, Standard for Automotive Fire Apparatus, and installed in the appropriate locations to alert the operator of potential hazards and operating instructions.

ON-LINE CUSTOMER INTERACTION

The manufacture shall provide the capability for online access through the manufacture’s website. The customer shall be able to view digital photos of their apparatus in the specified phases of construction. The following phases will be captured and displayed on the manufacture’s website:

- Chassis when available at manufacturing facility
- Body – Prior to Paint
- Body – Painted
- Pump and Plumbing
- Assembly – 80% Complete

Due to the complex nature of fire apparatus and the importance of communication between the manufacture and customer, this line item is considered a critical requirement.

LIABILITY INSURANCE COVERAGE

In order to protect the department and its personnel, the bidder shall show proof that it has no less than $10 million in liability insurance in force. A certificate of coverage shall be included in the bid package. Failure to carry liability insurance of at least this amount or failure to include proof of coverage shall be cause to reject the bidder's proposal.

GENERAL WARRANTY

The manufacturer shall provide a two (2) year warranty from the date of delivery.

STRUCTURAL BODY WARRANTY

A structural Aluminum body warranty shall be provided by the apparatus manufacturer for products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of ten (10) years.

PAINT WARRANTY

A Prorated Paint Warranty shall be provided by the apparatus manufacturer for products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of ten (10) years.

PUMP WARRANTY

Waterous Co shall provide a limited manufacturer's pump warranty to be free from defects, under normal use and service, for a period of seven (7) years from the date placed into service.

PLUMBING WARRANTY

A Stainless Steel Plumbing/Piping warranty shall be provided by the apparatus manufacturer for products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of ten (10) years from the date of delivery.

TANK WARRANTY

A lifetime tank warranty will be provided by the tank manufacturer, UPF.

MULTI-PLEXED ELECTRICAL WARRANTY

A four (4) year limited (V-MUX) multiplex system warranty, of Weldon Technologies, Inc.; shall be provided by the apparatus manufacture for parts and labor, while under normal use and service; against mechanical, electrical and physical defects from the date of installation.

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.

WARRANTY - AERIAL DEVICE

The aerial device manufacturer shall guarantee to the original purchaser to repair or replace any

defective structural component resulting from faulty material or workmanship for a period of twenty (20) years after delivery of the aerial device to the purchaser. The warranty shall cover the aerial device weldments, open base, torque box and outrigger weldments.

To ensure sole source responsibility of the aerial device, the bidder shall clearly state its intention to warrant the aerial device, open base, torque box and outrigger weldments as these integral parts and components of the aerial device.

WARRANTY - TELESCOPIC WATERWAY ASSEMBLY

The manufacturer of the aerial device shall guarantee to the purchaser to repair or replace any defective or prematurely failed Telescopic Waterway Assembly, resulting from structural defects or failures, for a period of ten (10) years after delivery of the aerial device to the purchaser.

APPARATUS TEST BY UNDERWRITERS LABORATORIES, LLC

The following Apparatus shall comply with all (NFPA) 1901, Standard for Automotive Fire Apparatus, applicable regulations in effect as of the contract signing date. There shall be multiple tests performed by the contractor and Underwriter's Laboratories, LLC when the apparatus has been completed. The manufacturer shall furnish the completed Test Certificate(s) to the purchaser at time of delivery. Since the inspection services of Underwriters Laboratories, LLC are available to all bidders on an equal basis, no other third party testing service shall be acceptable. The tests conducted on the apparatus shall include, but not be limited to:

PUMP & PLUMBING PERFORMANCE TEST

The apparatus pump and plumbing system shall be tested and certified.

12 VOLT ELECTRICAL TEST

The apparatus low voltage electrical system shall be tested and certified.

AERIAL TESTING & CERTIFICATION

General

The following Apparatus shall comply with all (NFPA) 1901, Standard for Automotive Fire Apparatus, applicable regulations in effect as of the contract signing date. There shall be multiple tests performed by the contractor and Underwriter's Laboratories, LLC when the apparatus has been completed. The manufacturer shall furnish the completed Test Certificate(s) to the purchaser at time of delivery.

The apparatus upon completion will be tested and certified by Underwriters Laboratories, LLC. The certification tests will follow the guidelines outlined in (NFPA) 1901, Standard for Automotive Fire Apparatus, "Standard for Fire Apparatus".

There shall be multiple tests performed by the contractor and Underwriter's Laboratories, LLC when the apparatus has been completed. The manufacturer shall provide the completed Test Certificate(s) to the purchaser at time of delivery. The inspection services of Underwriters Laboratories, LLC are available to all bidders on an equal basis; therefore, no third party testing service shall be acceptable.

Performance Testing

All work outlined in (NFPA) 1901, Standard for Automotive Fire Apparatus, including nondestructive testing, shall be conducted at the manufacturer's facility. In addition, the following test work, Certification Test sections of (NFPA) 1901, Standard for Automotive Fire Apparatus, shall be conducted.

1. 1-1/2:1 DYNAMIC STABILITY AND LIFT TEST - A test of the apparatus shall be performed that the aerial device sections are so designed and powered to support a load representing 150% of the manufacturer's rated tip load capacity at maximum horizontal reach on level ground. Since this is a dynamic test, the load must be raised, lowered and rotated without evidence of instability.

2. 1-1/3:1 DYNAMIC STABILITY AND LIFT TEST - A test of the apparatus shall be performed that the tip and aerial device sections are so designed and powered to support a load representing 133% of the manufacturer's rated tip load capacity at maximum horizontal reach on a five (5) degree slope. Since this is a dynamic test, the load must be raised, lowered and rotated without evidence of instability.

3. TIME TEST - A test of the apparatus shall be performed to raise the aerial device from a bedded position extended to full height and rotated through a 90 degree turn smoothly and without undue vibration in not over 120 seconds.

4. WATER TOWER TEST #1 - A test of the apparatus shall be performed to test its ability to discharge 1000 gallons per minute parallel to the aerial device with the unit at full extension and zero degree elevation. The unit shall be capable of performing this test while loaded to its rated tip load capacity.

5. WATER TOWER TEST #2 - A test of the apparatus shall be performed to test the ability to discharge 1000 gallons per minute, 90 to the aerial device while at full extension, zero degree elevation. The unit shall be capable of performing this test while loaded to its rated tip load capacity.

Bidders must state their ability to comply with all of the above tests. Failure to do so shall be grounds for rejection of their bid.

Written Examination and Test Report

A complete written Examination and Test Report for each aerial device inspection performed at the manufacturer's facility. The test report, as required by (NFPA) 1901, Standard for Automotive Fire Apparatus, shall include the following test results.

a). Torque verification of all mounting bolts including bolt size, grade, and torque specification.

b). The following NDT methods and results shall be recorded. All ferrous welds shall be magnetic particle inspected for defects. All nonferrous welds shall be visually inspected, and if questionable defects are identified, a penetrating dye shall be used to further evaluate the quality of the weld. All bolts and pins shall be ultrasonically inspected for internal flaws. A waterway pressure test shall be performed, and a hydraulic oil sample taken.

c). The following measurements shall be taken and recorded in the examination and test record: bearing clearance and backlash, elevation cylinder drift, engine speed operating rpm, relief

pressure, stabilizer extension cylinder drift, aerial device section twist, hardness readings, base rail thickness, winch drift, extension brake drift, and extension cylinder drift.

Personnel

The inspectors performing the test work on the units are certified to Level II in the required NDT methods, under the requirements outlined in ASNT document CP-189.

Aerial Apparatus Certification
When the unit successfully meets all the requirements outlined in (NFPA) 1901, Standard for Automotive Fire Apparatus, UL, LLC shall issue a Certificate of Automotive Fire Apparatus Examination and Test stating the unit's compliance with (NFPA) 1901, Standard for Automotive Fire Apparatus.

FACTORY PRE-CONSTRUCTION CONFERENCE

The factory authorized Distributor shall be required, prior to manufacturing, to have a pre-construction conference at the manufacturing facility with a factory representative present and with One (1) individual from the Spartan ER to finalize all construction details.

The factories authorized distributor shall, at his expense, provide transportation, lodging, and meals. Any distance greater than 200 miles shall be by commercial air travel.

FINAL INSPECTION CONFERENCE

The factory authorized Distributor shall be required, during manufacturing, to have a final completion inspection conference at the site of the manufacturing facility with One (1) individual from the Spartan ER to inspect the apparatus after construction.

The factories authorized distributor shall, at his expense, provide transportation, lodging, and meals. Any distance greater than 200 miles shall be by commercial air travel.

AERIAL LADDER DEVICE DEMONSTRATION - (3) CONSECUTIVE DAYS

A factory trained and authorized instructor shall provide three (3) consecutive days of on-site classes after apparatus acceptance. Topics covered in the class shall include:

- General familiarization and demonstration of aerial device
- Aerial apparatus safety including a review of all safety devices, interlocks, and operational hazards
- Positioning and locating the vehicle for safe operations
- Chassis parking brakes and engagement of hydraulic system
- Deployment of stabilization devices and use of ground pads
- Operation of elevation, extension, and rotation of the aerial device

- Operation of waterway, nozzle, and other firefighting devices of aerial device
- Operation and use of breathing air system
- Specific aerial device maintenance and service areas for operators
- Shutdown and return to service operations
- Operation of tip controls and platform controls if equipped

Classes shall consist of presentations as well as hands-on demonstration.

PUMP & APPARATUS FAMILIARIZATION

The familiarization course shall cover the operation and preventative maintenance of all components of the apparatus called for in the specifications, specifically covering nomenclature of components, proper operation of the apparatus, daily operational maintenance checks, and other information necessary for a firefighter/driver/engineer to properly operate and maintain the apparatus.

It is intended that this familiarization is organized in such a manner that both the mechanics and fire personnel receive the full benefit of the structured training. The firefighter/operator familiarization shall be conducted within one week after the vehicle is fully accepted and readied for service by the "Purchaser" or at a time mutually agreed upon by the "Purchaser" and "Supplier".

MAXIMUM OVERALL LENGTH REQUIREMENT

The apparatus specified shall be constructed as detailed and shall NOT exceed a maximum overall length of 40' 0".

MAXIMUM OVERALL HEIGHT REQUIREMENT

The apparatus specified shall be constructed as detailed and shall NOT exceed a maximum overall height of 11' 7".

MAXIMUM OVERALL WIDTH

The apparatus specified shall be constructed as detailed and shall NOT exceed a Maximum Overall Width of One Hundred (100") inches.

This dimension shall include the primary construction of the apparatus body and chassis cab. Any peripheral items shall not be incorporated into this measurement.

The items included, but not limited to, are: Rub Rails, Fenderettes, Mirrors, Lights, Handrails, Front Bumpers, Cab Steps, Overlays, Etc.

MAXIMUM WHEELBASE REQUIREMENT

The apparatus specified shall be constructed as detailed and shall NOT exceed a maximum

wheelbase of 224.5 inches.

CHASSIS REQUIRED LABELING

Signs that state "Occupants must be seated and belted when apparatus is in motion" shall be provided. They shall be visible from each seating position.

There shall be a lubrication plate mounted inside the cab listing the type and grade of lubrication used in the following areas on the apparatus and chassis:

- Engine oil
- Engine Coolant
- Transmission Fluid
- Tire Pressures
- Pump Transmission Lubrication Fluid
- Drive Axle Lubrication Fluid
- Generator Lubrication Fluid (where applicable)

MODEL

The chassis shall be a Gladiator model. The cab and chassis shall include design considerations for multiple emergency vehicle applications, rapid transit and maneuverability. The chassis shall be manufactured for heavy duty service with the strength and capacity to support a fully laden apparatus, one hundred (100) percent of the time.

MODEL YEAR

The chassis shall have a vehicle identification number that reflects a 2023 model year.

COUNTRY OF SERVICE

The chassis shall be put in service in the country of United States of America (USA).

The chassis will meet applicable U.S.A. federal motor vehicle safety standards per CFR Title 49 Chapter V Part 571 as clarified in the incomplete vehicle book per CFR Title 49 Chapter V Part 568 Section 4 which accompanies each chassis. The chassis manufacturer is not responsible for compliance to state, regional, or local regulations. Dealers should identify those regulations and order any necessary optional equipment from the chassis manufacturer, or their OEM needed to be in compliance with those regulations.

CAB AND CHASSIS LABELING LANGUAGE

The cab and chassis shall include the applicable caution, warning, and safety notice labels with text to be written in English. All applicable caution, warning, and safety notice labels shall be Innovative Controls brand. Where applicable to the location within the specific layout and label package of the cab and chassis, the labels shall include decorative chrome bezels. Designs shall include bezels that fit individual labels or packaged configurations of labels in certain common locations.

The following labels shall be Innovative Controls brand, each including a decorative chrome bezel (where applicable):

- Shoreline

- Aerial Stowed
- Aerial Breakers 2
- Air Conditioner
- Cab Tilt Plate
- Air Compressor Breaker
- Battery Conditioner Breaker
- Helmet Caution
- Horn Tag
- Q2B Tag
- Load Center Plate
- Not a Step Label
- Occupancy Tag
- Do Not Move
- Occupants Must Be Seated
- Do Not Stand
- Danger Do Not Weld
- Danger--Untrained Operator
- DEF Fill Access (Including Additional 2907 Optional Labels)
- Battery Direct
- Kneeling
- IFS Air Fault
- Engine Brake
- Retarder
- LR 100 Amp Node
- 300 Amp EPU
- 100 Amp Front O/R Node
- 100 Amp T/T Node
- 100 Amp RR O/R Node
- 10 Amp EPU
- Master Power

- 12 Volt Power
- Aerial Hours
- Pump In Drive
- Windshield Washer Fluid

APPARATUS TYPE

The apparatus shall be a Quint vehicle designed for emergency service use. The apparatus shall include a permanently mounted fire pump which has a minimum rated capacity of 750 gallons per minute (3000 L/min), a water tank, a hose storage area, a compliment of ground ladders, and an aerial ladder or elevating platform with a permanently mounted waterway that shall be rear mounted thus providing the following vehicle benefits:

- Improved mobility vs. mid-ship mounted units, due to shorter overall travel length and wheelbase.

- Increased compartment space, hose load, and water capacity in the body, resulting from ladder being raised to clear the cab.

- Shorter vehicle wheelbase.

- Shorter overall length of vehicle.

REAR MOUNT AERIAL DEVICE TYPE

Chassis provisions shall be provided for a 110.00 feet high vertical reach rear mount ladder to the integration parameters of Ladder Tower Company.

AERIAL HYDRAULIC GENERATOR

Chassis shall include aerial provisions for a chassis PTO driven hydraulic pump piggy-backed for aerial device hydraulics and 120VAC hydraulic generator.

VEHICLE TYPE

The chassis shall be manufactured for use as a straight truck type vehicle and designed for the installation of a permanently mounted apparatus behind the cab. The apparatus of the vehicle shall be supplied and installed by the apparatus manufacturer.

VEHICLE ANGLE OF APPROACH PACKAGE

The angle of approach of the apparatus shall be a minimum of 8.00 degrees.

NFPA1901 Angle of Approach definition:
"To determine the angle of approach, place a thin steel strip against the front of the tires where they touch the ground or stretch a tight string from one front tire to the other at the front where they touch the ground. Determine the lowest point (component or equipment) on the vehicle forward of the front tire that would make the smallest angle of approach. Hang a plumb bob from the lowest point and mark the point on the ground where the point of the plumb bob touches. Measure the vertical distance from the ground to the point where the plumb bob was hung (distance *V*). Measure the horizontal distance from the plumb bob point to the steel strip or string running from front tire to front tire (distance *H*). Divide the vertical distance by the horizontal distance. The ratio of *V/H* is the tangent of the angle of approach. If the ratio is known, the angle of approach can be determined from a table of trigonometric functions of angles or from a math calculator. The standard requires a minimum angle of approach of 8.00 degrees: since the tangent of 8.00 degrees is 0.1405, if *V* divided by *H* is 0.1405 or larger, the angle of approach is 8.00 degrees or greater."

AXLE CONFIGURATION

The chassis shall feature a 6 x 4 axle configuration consisting of a tandem rear drive axle set with a single front steer axle.

GROSS AXLE WEIGHT RATINGS FRONT

The front gross axle weight rating (GAWR) of the chassis shall be 23,000 pounds.

This front gross axle weight rating shall be adequate to carry the weight of the completed apparatus including all equipment and personnel.

GROSS AXLE WEIGHT RATINGS REAR

The rear gross axle weight rating (GAWR) of the chassis shall be 54,000 pounds.

This rear gross axle weight rating shall be adequate to carry the weight of the completed apparatus including all equipment and personnel.

PUMP PROVISION

The chassis shall include provisions to mount a drive line pump in the middle of the chassis, behind the cab, more commonly known as the midship location. Chassis driveline pump provisions shall include an interlock feature for automatic setting of the park brake when the vehicle is shifted into pump mode while the transmission is in neutral, and the transmission output speed translates to less than 1 mph. When the conditions are met the driver side parking brake valve shall activate. Once shifted to road mode the condition for electric automatic brake engagement is no longer present and the driver's parking brake control valve shall function normally.

WATER & FOAM TANK CAPACITY

The chassis shall include a carrying capacity of up to 750 gallons (2839 liters). The water and/or foam tank(s) shall be supplied and installed by the apparatus manufacturer.

CAB STYLE

The cab shall be a custom, fully enclosed, MFD model with a flat roof over the driver, officer, and crew area, designed and built specifically for use as an emergency response vehicle by a company specializing in cab and chassis design for all emergency response applications. The cab shall be designed for heavy-duty service utilizing superior strength and capacity for the application of protecting the occupants of the vehicle. This style of cab shall offer up to eight (8) seating positions.

The cab shall incorporate a fully enclosed design with side wall roof supports, allowing for a spacious cab area with no partition between the front and rear sections of the cab. To provide a superior finish by reducing welds that fatigue cab metal; the roof, the rear wall and side wall panels shall be assembled using a combination of welds and proven industrial adhesives designed specifically for aluminum fabrication for construction.

The cab shall be constructed using multiple aluminum extrusions in conjunction with aluminum plate, which shall provide proven strength and the truest, flattest body surfaces ensuring less expensive paint repairs if needed. All aluminum welding shall be completed to the American Welding Society and ANSI D1.2-96 requirements for structural welding of aluminum.

All interior and exterior seams shall be sealed for optimum noise reduction and to provide the most favorable efficiency for heating and cooling retention.

The cab shall be constructed of 5052-H32 corrosion resistant aluminum plate. The cab shall incorporate tongue and groove fitted 6061-T6 0.13 & 0.19 inch thick aluminum extrusions for extreme duty situations. A single formed, one (1) piece extrusion shall be used for the “A” pillar, adding strength and rigidity to the cab as well as additional roll-over protection. The cab side walls and roof skin shall be 0.13 inch thick; the rear wall skin shall be 0.09 inch thick; the front cab structure shall be 0.19 inch thick.

The exterior width of the cab shall be 99.40 inches wide with a minimum interior width of 91.00 inches. The overall cab length shall be 131.10 inches with 54.00 inches from the centerline of the front of the axle to the back of the cab.

The cab interior shall be designed to afford the maximum usable interior space and attention to ergonomics with hip and legroom while seated which exceeds industry standards. The crew cab floor shall be flat across the entire walking area for ease of movement inside the cab.

The cab shall offer an interior height of 57.50 inches from the front floor to the headliner in the non-raised roof area and a rear floor to headliner height of 55.00 inches at a minimum. The cab shall offer an interior measurement at the floor level from the rear of the engine tunnel to the rear wall of the cab of 49.88 inches. All interior measurements shall include the area within the interior trimmed surfaces and not to any unfinished surface.

The cab shall include a driver and officer area with two (2) cab doors large enough for personnel in full firefighting gear. The front doors shall offer a clear opening of 40.25 inches wide X 53.50 inches high, from the cab floor to the top of the door opening. The cab shall also include a crew area with up to two (2) cab doors, also large enough for personnel in full firefighting gear. The rear doors shall offer a clear opening of 32.25 inches wide X 51.00 inches high, from the cab floor to the top of the door opening.

The cab shall incorporate a progressive two (2) step configuration from the ground to the cab floor at each door opening. The progressive steps are vertically staggered and extend the full width of each step well allowing personnel in full firefighting gear to enter and exit the cab easily and safely.

The first step for the driver and officer area shall measure approximately 11.50 inches deep X 31.13 inches wide. The intermediate step shall measure approximately 8.50 inches deep X 32.50 inches wide. The height from the first step to the intermediate step and the intermediate step to the cab floor shall not exceed 11.00 inches.

The first step for the crew area shall measure approximately 11.50 inches deep X 20.44 inches wide. The intermediate step shall measure approximately 10.25 inches deep X 22.75 inches wide. The height from the first step to the intermediate step and the intermediate step to the cab floor shall not exceed 12.80 inches.

CAB FRONT FASCIA

The front cab fascia shall be constructed of 5052-H32 Marine Grade, 0.13 of an inch thick aluminum plate which shall be an integral part of the cab.

The cab fascia will encompass the entire front of the aluminum cab structure from the bottom of the windshield to the bottom of the cab and shall be the “Classic” design.

The front cab fascia shall include two (2) molded plastic modules on each side accommodating a total of up to four (4) Hi/Low beam headlights and two (2) turn signal lights or up to four (4) warning lights. A chrome plated molded plastic bezel shall be provided on each side around each set of four lamps.

FRONT GRILLE

The front cab fascia shall include a classic box style, 304 stainless steel front grille. The grille shall measure 55.45 wide X 33.50 inches high X 1.50 inches deep. The upper portion of the grille shall be hinged to provide service access behind the grille. The grille shall include a minimum free air intake of 750.00 square inches.

CAB UNDERCOAT

There shall be a rubberized undercoating applied to the underside of the cab that provides abrasion protection, sound deadening and corrosion protection.

CAB SIDE DRIP RAIL

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

CAB PAINT EXTERIOR

The cab shall be painted prior to the installation of glass accessories and all other cab trim to ensure complete paint coverage and the maximum in corrosion protection of all metal surfaces.

All metal surfaces on the entire cab shall be ground by disc to remove any surface oxidation or surface debris which may hinder the paint adhesion. Once the surface is machine ground a high

quality acid etching of base primer shall be applied. Upon the application of body fillers and their preparation, the cab shall be primed with a coating designed for corrosion resistance and surface paint adhesion. The maximum thickness of the primer coat shall be 2.00 mils.

The entire cab shall then be coated with an intermediate solid or epoxy surfacing agent that is designed to fill any minor surface defects, provide an adhesive bond between the primer and the paint and improve the color and gloss retention of the color.

The finish to this procedure shall be a sanding of the cab with 360 grit paper followed by sealing the seams with SEM brand seam sealer.

The cab shall then be painted the specific color designated by the customer with an acrylic urethane type system designed to retain color and resist acid rain and most atmospheric chemicals found on the fire ground or emergency scene. The paint shall have a minimum thickness of 2.00 mils, followed by a clear top coat not to exceed 2.00 mils. The entire cab shall then be baked at 180 degrees for one (1) hour to speed the curing process of the coatings.

CAB PAINT MANUFACTURER

The cab shall be painted with Sikkens paint.

CAB PAINT PRIMARY/LOWER COLOR

The lower paint color shall be Sikkens FLNA 32525 Red.

CAB PAINT SECONDARY/UPPER COLOR

The secondary/upper paint color shall be Sikkens FLNA 96920 Metallic Gray.

CAB PAINT EXTERIOR BREAKLINE

The upper and lower paint shall meet at a breakline on the cab which shall be located approximately 1.00 inch below the door windows on each side of the cab. The breakline shall curve down at the front cab corners to approximately 5.00 inches below the windshields on the front of the cab.

CAB PAINT PINSTRIPE

Where the upper and lower paint colors meet a temporary 0.50 inch wide black pinstripe shall be applied over this break line to offer a more finished look prior to the final pinstripe being installed by the OEM.

CAB PAINT WARRANTY

Purchaser shall receive a Paint and Finish (Exterior Clear coated) Ten (10) Years limited warranty in accordance with, and subject to, warranty certificate RFW0710.

The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

CAB PAINT INTERIOR

The visible interior cab structure surfaces shall be painted with a multi-tone onyx black texture finish.

CAB ENTRY DOORS

The cab shall include four (4) entry doors, two (2) front doors and two (2) crew doors designed for ease of entering and egress when outfitted with an SCBA. The doors shall be constructed of extruded aluminum with a nominal thickness of 0.13 inch. The exterior skins shall be constructed of 0.13 inch aluminum plate.

The doors shall include a double rolled style automotive rubber seal around the perimeter of each door frame and door edge which ensures a weather tight fit.

All door hinges shall be hidden within flush mounted cab doors for a pleasing smooth appearance and perfect fit along each side of the cab. Each door hinge shall be piano style with a 0.38 inch pin and shall be constructed of stainless steel.

CAB ENTRY DOOR TYPE

All cab entry doors shall be full length in design to fully enclose the lower cab steps. Entry doors shall include Pollak mechanical plunger style switches for electrical component activation.

CAB INSULATION

The cab ceiling and walls shall include a nonwoven polyester fiber insulation. The insulation shall act as a barrier absorbing noise as well as assisting in sustaining the desired climate within the cab interior.

REAR CAB ROOF MODIFICATION

The cab shall include a rear wall extension. The cab extension shall extend 13.50 inches out from the back wall of the cab.

The cab extension shall measure 47.25 inches down from the raised cab roof. The lower interior flat surface of the entire cab extension shall be 12.00 inches above the cab floor.

The rear wall extension weight limit shall be 1500 pounds.

CAB STRUCTURAL WARRANTY

Purchaser shall receive a Cab Structure (Aluminum) Ten (10) Years or 100,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0602. The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

CAB TEST INFORMATION

The cab shall have successfully completed the preload 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 have been witnessed by and attested to by an independent third party. The test results were recorded using cameras, high speed imagers, accelerometers and strain gauges. Documentation of the testing shall be provided upon request.

ELECTRICAL SYSTEM

The chassis shall include a single starting electrical system which shall include a 12 volt direct current multiplexing system, suppressed per SAE J551. The wiring shall be appropriate gauge cross link with 311 degree Fahrenheit insulation. All SAE wires in the chassis shall be color coded and shall include the circuit number and function where possible. The wiring shall be protected by 275 degree Fahrenheit minimum high temperature flame retardant loom. All nodes and sealed Deutsch connectors shall be waterproof.

OEM WIRING

A custom wiring interface and harness shall be provided and designed to meet the requirements provided by the apparatus manufacturer. This shall include the following circuits/features:

- Remote engine start circuit shall be provided to activate the engine starter solenoid from the aerial apparatus and shall utilize existing cab starter interlocks. The input for starter activation shall be provided and programmed by the apparatus manufacturer through the Weldon V-mux system.

- Remote engine stop circuit shall be provided to shut down the chassis engine from the aerial apparatus. The input for chassis engine shutdown shall be provided and programmed by the apparatus manufacturer through the Weldon V-mux system.

- Additional master power circuit located at apparatus manufacturer chassis interface connector at least 12 gauge in size and capable of supplying 20 amps.

- Additional communication connection for Weldon V-Mux multiplex system shall be provided and located near the apparatus manufacturer chassis interface connector.

- Aerial PTO override SPST guarded toggle switch located in the driver's diagnostic panel and labeled "Aerial PTO Override". When activated, the switch will override standard PTO interlocks and supply direct power to the aerial PTO solenoid for emergency activation.

The custom chassis harness shall also include additional inputs/outputs for Pump Engaged, Marker Lights, Neutral, Park Brake, Aerial Warning Lights, PTO Request, PTO Enable (input), PTO Enable (output), Open Door Beacon, and High Idle.

APPARATUS WIRING PROVISION

An apparatus wiring panel shall be installed in the center dash area behind the rocker switch panel which shall include eight (8) open circuits consisting of three (3) 20 amp, one (1) 30 amp,

three (3) 10 amp, and one (1) 15 amp circuit, with relays and breakers with trigger wires which shall be routed to the rocker switch panel.

MULTIPLEX DISPLAY

The multiplex electrical system shall include (2) Weldon Vista IV displays which shall be located one (1) on the right side of the dash in the switch panel and one (1) on the left side of the dash in the switch panel. The Vista IV displays shall feature full color LCD display screens which include a message bar displaying the time of day and important messages requiring acknowledgement by the user which shall all be displayed on the top of the screen in the order they are received. There shall be eight (8) push button virtual controls, four (4) on each side of the display for the on-board diagnostics. The display screens shall be video ready for back-up cameras, thermal cameras, and DVD.

The Vista IV displays shall offer varying fonts and background colors. The displays shall be fully programmable to the needs of the customer and shall offer virtually infinite flexibility for screen configuration options.

MULTIPLEX DISPLAY SPECIAL LAYOUT

The Vista display and control screen shall be configured specifically for a virtual button on the control screen to override the park brake interlocked deactivation of the wiper system. This will reset when the park brake is cycled.

LOAD MANAGEMENT SYSTEM

The apparatus load management shall be performed by the included multiplex system. The multiplex system shall also feature the priority of sequences and shall shed electrical loads based on the priority list specifically programmed.

DATA RECORDING SYSTEM

The chassis shall have a Weldon Vehicle Data Recorder (VDR) system installed. The system shall be designed to meet NFPA 1901 and shall be integrated with the Weldon Multiplex electrical system. 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

- 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 B USB connection point, remotely mounted in the left side foot well.

ACCESSORY POWER

The electrical distribution panel shall include two (2) power studs. The studs shall be size #10 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) #10 ground stud. A 225 amp battery direct power and ground stud shall be provided and installed on the chassis near the left hand battery box for OEM body connections.

AUXILIARY ACCESSORY POWER

An auxiliary set of power and ground studs with supporting battery cables shall be provided at the apparatus interface location on the chassis transmission cross member location and labeled “Aerial EPU”. The studs and battery cables shall be capable of supplying 600 amps and be wired battery direct.

ADDITIONAL ACCESSORY POWER

An additional six (6) position Blue Sea Systems 5025 blade type fuse panel shall be installed on the side wall of the engine tunnel behind the officer's seat. The fuse panel shall be protected by a 40 amp fuse. The panel shall be capable of carrying up to a maximum 40 amp battery direct load.

EXTRA ACCESSORY POWER

An extra six (6) position Blue Sea Systems 5025 blade type fuse panel shall be installed behind the switch panel. The fuse panel shall be protected by a 40 amp fuse located behind the switch panel. The panel shall be capable of carrying up to a maximum 40 amp battery direct load.

EXTERIOR ELECTRICAL TERMINAL COATING

All terminals exposed to the elements will be sprayed with a high visibility protective rubberized coating to prevent corrosion.

ELECTRICAL SYSTEM WARRANTY

Purchaser shall receive an Electrical System Two (2) Years or 36,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0202. The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

ENGINE

The chassis engine shall be a Cummins X15 engine. The X15 engine shall be an in-line six (6) cylinder, four cycle diesel powered engine. The engine shall offer a rating of 565 horsepower at 1800 RPM and shall be governed at 2100 RPM.

The torque rating shall feature 1850 foot pounds of torque at 1000 RPM with 912 cubic inches (14.9 liter) of displacement.

The X15 engine shall feature a VGT™ Turbocharger, a high pressure common rail fuel system, fully integrated electronic controls with an electronic governor, and shall be EPA certified to meet the 2021 emissions standards using cooled exhaust gas recirculation and selective catalytic reduction technology.

The engine shall include an engine mounted combination full flow/by-pass oil filter with replaceable spin on cartridge for use with the engine lubrication system. The engine shall include Citgo brand Citgard 500, or equivalent 15W40 CK-4 low ash engine oil which shall be utilized for proper engine lubrication.

A wiring harness shall be supplied ending at the back of the cab. The harness shall include a connector which shall allow an optional harness for the pump panel. The included circuits shall be provided for a tachometer, oil pressure, engine temperature, hand throttle, high idle and a PSG system. A circuit for J1939 data link shall also be provided at the back of the cab.

CAB ENGINE TUNNEL

The cab interior shall include an integrated engine tunnel constructed of 5052-H32 Marine Grade 0.19 of an inch thick aluminum alloy plate. The tunnel shall be a maximum of 46.50 inches wide X 29.00 inches high.

DIESEL PARTICULATE FILTER CONTROLS

There shall be two (2) controls for the diesel particulate filter. One (1) control shall be for regeneration and one (1) control shall be for regeneration inhibit. The controls shall be located on the digital dash display.

ENGINE PROGRAMMING HIGH IDLE SPEED

The engine high idle control shall maintain the engine idle at approximately 1250 RPM when engaged.

ENGINE HIGH IDLE CONTROL

The vehicle shall be equipped with a virtual Vista button and an automatic high-idle speed control. It shall be pre-set so when activated, it will operate the engine at the appropriate RPM to increase alternator output. This device shall operate only when the engine is running, 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 or automatically re-engage when the brake is released, or when the transmission is placed in neutral. There shall be an indicator on the Vista display and control screen for the high idle speed control.

ENGINE PROGRAMMING ROAD SPEED GOVERNOR

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

AUXILIARY ENGINE BRAKE

A compression brake, for the six (6) cylinder engine shall be provided. A cutout relay shall be installed to disable the compression brake when in pump mode or when an ABS event occurs. The engine compression brake shall activate upon 0% accelerator when in operation mode and actuate the vehicle's brake lights.

The engine shall utilize a variable geometry turbo (VGT) as an integrated auxiliary engine brake to offer a variable rate of exhaust flow, which when activated in conjunction with the compression brake shall enhance the engine's compression braking capabilities.

AUXILIARY ENGINE BRAKE CONTROL

An engine compression 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 system shall be activated by an on/off switch and a low/high selector switch.

ELECTRONIC ENGINE OIL LEVEL INDICATOR

The engine oil shall be monitored electronically and shall send a signal to activate a warning in the instrument panel when levels fall below normal. The warning shall activate in a low oil situation upon turning on the master battery and ignition switches without the engine running.

FLUID FILLS

The front of the chassis shall accommodate fluid fill for the engine oil through the grille. This area shall also accommodate a check for the engine oil. The transmission, power steering, and coolant fluid fills and checks shall be under the cab. The windshield washer fill shall be accessible through the front left side mid step.

ENGINE DRAIN PLUG

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

ENGINE WARRANTY

The Cummins engine shall be warranted for a period of five (5) years or 100,000 miles, whichever occurs first.

REMOTE THROTTLE CONTROL

A Fire Research Pump Boss 400 governor with dual pressure sensors shall be provided for the electronic engine. It shall include a remote mountable control head.

The Pump Boss 400 shall regulate the pump pressure and monitor all essential engine parameters.

LED readouts shall display RPM, PSI, pump discharge and intake pressure, engine oil pressure, engine temperature, transmission temperature, and battery voltage. An audible alarm shall also be part of the system.

REMOTE THROTTLE HARNESS

An apparatus interface wiring harness for the engine shall be supplied with the chassis. The harness shall include a connector for connection to the chassis harness which shall terminate in the left frame rail behind the cab for reconnection by the apparatus builder. The harness shall contain connectors for a FRC Pump Boss pressure governor and a multiplexed gauge. Separate circuits shall be included for pump controls, “Pump Engaged” and “OK to Pump” indicator lights, open compartment ground, start signal, park brake ground, ignition signal, master power, customer ignition, air horn solenoid switch, high idle switch and high idle indication light. The harness shall contain interlocks that will prevent shifting to road or pump mode unless the transmission output speed translates to less than 1 mph and the transmission is in neutral. The shift to pump mode shall also require the park brake be set. The harness shall be designed for a side mount pump panel.

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

ENGINE PROGRAMMING REMOTE THROTTLE

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

ENGINE PROGRAMMING IDLE SPEED

The engine low idle speed will be programmed at 700 rpm.

ENGINE AIR INTAKE

The engine air intake system shall include an ember separator. This ember separator shall be designed to protect the downstream air filter from embers using a combination of unique flat and

crimped metal screens packaged in a heavy duty galvanized steel frame. This multilayered screen shall trap embers and allow them to burn out before passing through the pack.

The engine air intake system shall also include an air cleaner mounted above the radiator. This air cleaner shall utilize a replaceable dry type filter element designed to prevent dust and debris from being ingested into the engine. A service cover shall be provided on the housing, reducing the chance of contaminating the air intake system during air filter service.

The air intake system shall include a restriction indicator light in the warning light cluster on the instrument panel, which shall activate when the air cleaner element requires replacement.

ENGINE FAN DRIVE

The engine cooling system fan shall incorporate a thermostatically controlled, Horton fully variable type fan drive with SmartClutch J-1939 CAN controller. The clutch fan shall override the thermostatic variable speed and function as full on automatically in pump mode.

The variable speed fan clutch only engages at the amount needed for proper cooling to 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. The fan speed shall include a J-1939 CAN clutch controller to receive signal from the engine control module to activate at variable rates of speed. Variable speeds shall be set through thermostatic and engine speed signals to run as efficiently and quietly as required to maintain temperature.

ENGINE COOLING SYSTEM

There shall be a heavy-duty aluminum cooling system designed to meet the demands of the emergency response industry. The cooling system shall have the capacity to keep the engine properly cooled under all conditions of road and pumping operations. The cooling system shall be designed and tested to meet or exceed the requirements specified by the engine and transmission manufacturer and all EPA requirements. The complete cooling system shall be mounted to isolate the entire system from vibration or stress. The individual cores of the cooling system shall be mounted in a manner to allow expansion and contraction at various rates without inducing stress into the adjoining cores.

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

The radiator shall be a down-flow design constructed with aluminum cores, plastic end tanks, and a steel frame. The radiator shall be equipped with a drain cock to drain the coolant for serviceability.

The cooling system shall include a one piece injected molded polymer fan with a three (3) piece fiberglass fan shroud.

The cooling system shall be equipped with a surge tank that is capable of removing entrained air from the system. The surge tank shall be equipped with a low coolant probe and rearward oriented sight glass to observe coolant in the system. A cold fill and observation line shall be included

within the frame mounted translucent recovery bottle to monitor the level of the coolant. The surge tank shall have a dual seal cap that meets the engine manufacturer's pressure requirements and allows for expansion and recovery of coolant into a separate integral expansion chamber.

All radiator tubes shall be formed from aluminized steel tubing. Recirculation shields shall be installed where required to prevent heated air from reentering the cooling package and affecting performance.

The charge air cooler shall be a crossflow design constructed completely of aluminum with cast tanks. All charge air cooler tubes shall be formed from aluminized steel tubing and installed with silicone hump hoses and stainless steel “constant torque” style clamps meeting the engine manufacturer's requirements.

The radiator and charge air cooler shall be removable through the bottom of the chassis.

ENGINE COOLING SYSTEM PROTECTION

The engine cooling system shall include a recirculation shield designed to act as a light duty skid plate below the radiator to provide additional protection for the engine cooling system from light impacts, stones, and road debris. The skid plate shall be painted to match the frame components.

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 Fahrenheit.

Proposals offering supplemental coolant additives (SCA) shall not be considered, as this is part of the extended life coolant makeup.

ENGINE COOLANT FILTER

An engine coolant filter with a shut-off valve for the inlet and outlet shall be installed on the chassis. The location of the filter shall allow for easy maintenance.

Proposals offering engines equipped with coolant filters shall be supplied with standard non-chemical type particulate filters.

ELECTRONIC COOLANT LEVEL INDICATOR

The instrument panel shall feature a low engine coolant indicator light which shall be located in the center of the instrument panel. An audible tone alarm shall also be provided to warn of a low coolant incident.

ENGINE PUMP HEAT EXCHANGER

A single bundle type coolant to water heat exchanger shall be installed between the engine and the radiator. The heat exchanger shall be designed to prohibit water from the pump from

coming in contact with the engine coolant. This shall allow the use of water from the discharge side of the pump to assist in cooling the engine.

COOLANT HOSES

The cooling systems hose shall be formed silicone hose and formed aluminized steel tubing and include stainless steel constant torque band clamps.

ENGINE COOLANT OVERFLOW BOTTLE

A remote engine coolant overflow expansion bottle shall be provided in the case of over filling the coolant system. The overflow bottle shall capture the expansion fluid or overfill rather than allow the fluid to drain on the ground.

ENGINE EXHAUST SYSTEM

The exhaust system shall include an end-in end-out horizontally mounted single module after treatment device, and downpipe from the charge air cooled turbo. The single module shall include four temperature sensors, diesel particulate filter (DPF), urea dosing module (UL2), and a selective catalytic reduction (SCR) catalyst to meet current EPA standards. The selective catalytic reduction catalyst utilizes a diesel exhaust fluid solution consisting of urea and purified water to convert NOx into nitrogen, water, and trace amounts of carbon dioxide. The solution shall be mixed and injected into the system through the DPF and SCR.

The system shall utilize 0.07 inch thick stainless steel exhaust tubing between the engine turbo and the DPF. Zero leak clamps seal all system joints between the turbo and DPF.

The single module after treatment through the end of the tailpipe shall be connected with zero leak clamps. The discharge shall terminate horizontally on the right side of the vehicle ahead of the rear tires.

The exhaust system after treatment module shall be mounted below the frame in the outboard position.

DIESEL EXHAUST FLUID TANK

The exhaust system shall include a molded cross linked polyethylene tank for Diesel Exhaust Fluid (DEF). The tank shall have a capacity of six (6) usable gallons and shall be mounted on the left hand side of the chassis frame behind 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.

The tank fill tube shall be routed under the rear of the cab with the fill neck and splash guard accessible in the top rear step.

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.

The tail pipe shall have a 7.00 inch offset shifting the exhaust pipe inboard of the exhaust canister to provide additional clearance from the body and frame mounted brackets.

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.

The exhaust flex joint shall not include the thermal exhaust wrap.

EMISSIONS SYSTEMS WARRANTY

Purchaser shall receive a Regulated Emissions Systems Five (5) Years or 100,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0140.

The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

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.

The transmission shall include two (2) internal oil filters which shall offer Castrol TranSynd™ synthetic TES 295 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 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 MODE PROGRAMMING

The transmission, upon start-up, will select five (5) speeds of operation. The sixth speed over drive shall be available with the activation of the mode button on the shifting pad.

TRANSMISSION FEATURE PROGRAMMING

The Allison Gen V/VI-E transmission EVS group package number 127 shall contain the 198 vocational package in consideration of the duty of 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. This requires re-selecting 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. 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 transmission interface connector shall be provided in the cab. This package shall contain the following input/output circuits to the transmission control module. The Gen V/VI-E transmission shall include prognostic diagnostic capabilities. These capabilities shall include the monitoring of the fluid life, filter change indication, and transmission clutch maintenance.

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

ELECTRONIC TRANSMISSION OIL LEVEL INDICATOR

The transmission fluid shall be monitored electronically and shall send a signal to activate a warning in the instrument panel when levels fall below normal.

TRANSMISSION SHIFT SELECTOR

An Allison pressure sensitive range selector touch pad shall be provided and located to the right of the driver within clear view and easy reach. The shift selector shall have a graphical Vacuum Florescent Display (VFD) capable of displaying two lines of text. The shift selector shall provide mode indication and a prognostic indicator (wrench symbol) on the digital display. The prognostics monitor various operating parameters and shall alert you when a specific maintenance function is required.

TRANSMISSION PRE-SELECT WITH AUXILIARY BRAKE

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

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 transmission fluid drain plug.

TRANSMISSION WARRANTY

The Allison EVS series transmission shall be warranted for a period of five (5) years with unlimited mileage. Parts and labor shall be included in the warranty.

LH PTO

A ten (10) bolt standard duty clutched drive PTO shall be provided by the chassis manufacturer and installed on the transmission. Installation shall include mounting of the PTO and wiring the unit with a control switch.

LH PTO MODEL

A ten (10) bolt Chelsea model 280-GGFJP-B5XD heavy duty transmission driven PTO shall be installed. The clutched shifted PTO is designed specifically for the Allison world transmission and provides an intermittent and continuous torque rating of 360 lb. ft.

PTO LOCATION

The transmission shall have two (2) power take off (PTO) mounting locations, one (1) in the 8:00 o'clock position and one (1) in the 1:00 o'clock position.

LH PTO CONTROL

The left hand power take off shall be controlled by the transmission. The power take off shall be activated by a locking on/off rocker switch which contains an integral light which shall illuminate upon a positive engagement of the power take off. This switch shall be located on dash.

Required operating conditions for enabling this function are:

- Throttle position is low
- Engine speed is within customer specified constant limits
- Transmission output speed is within customer specified constant limits

Park brake set

PTO PROGRAMMING

The power take off shall be programmed for operator control such that it shall only engage at or below 900 engine RPM and a transmission output speed of 250 RPM. The PTO shall operate in a range up to 4000 engine RPM or a transmission output speed of 5000 RPM. The PTO programming shall provide for automatic disengagement set at a specified engine speed of 4000 RPM, or transmission output speed of 5000 RPM. The range shall be programmed to protect equipment driven from the power take off.

DRIVELINE

All drivelines shall be heavy duty metal tube and equipped with MSI 1810 series universal joints for the main drivelines, and 1710 series for the inter-axle shaft. 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®. The drivelines shall include Meritor brand u-joints with thrust washers.

MIDSHIP PUMP / GEARBOX

A temporary jackshaft driveline and pump mounting brackets shall be installed by the chassis manufacturer to accommodate the midship split shaft pump as specified by the apparatus manufacturer.

MIDSHIP PUMP / GEARBOX MODEL

The midship pump/gearbox provisions shall be for a Waterous CSUC20 pump.

MIDSHIP PUMP GEARBOX DROP

The Waterous pump gearbox shall have a “B” (short) drop length.

MIDSHIP PUMP RATIO

The ratio for the midship pump shall be 2.27:1.

MIDSHIP PUMP LOCATION C/L SUCTION TO C/L REAR AXLE

The midship pump shall be located so the dimension from the centerline of the suction to the centerline of the rear axle is 141.00 inches.

PUMP SHIFT CONTROLS

One (1) air pump shift control panel shall be located on the left hand side of the engine tunnel, integrated with the shifter pod. The following shall be provided on the panel: a three (3) position control lever; an engraved PUMP ENGAGED identification light; and an engraved OK TO PUMP identification light. The pump shift control panel shall be black with a yellow border outline and shall include pump instructions. An instruction plate describing the transmission shift selector position used for pumping shall be provided and located so it can be read from the driver’s position per NFPA **16.10.1.3**. The road mode shall be selected when the control lever is in the forward position and pump mode shall be selected when the control lever is in the rearward position.

The control lever center position shall exhaust air from both pump and roadsides of the pump gear box shift cylinder.

PUMP SHIFT CONTROL PLUMBING

Air connections shall be provided from the air supply tank to the pump shift control valve and from the pump shift control valve to the frame mounted bracket. The frame mounted bracket shall include labeling identifying the pump and road connection points with threaded 0.25 inch NPT fittings on the solenoid for attaching the customer installed pump. The air supply shall be pressure protected from service brake system.

FUEL FILTER/WATER SEPARATOR

The fuel system shall have a Racor GreenMAX 6600R fuel filter/water separator as a primary filter. The fuel filter shall have a drain valve and a see-through cover to allow visual inspection of fuel and filter condition. The Racor 6600R shall meet engine requirements for particulate size, collection capacity, removal efficiency, and water removal efficiency. The filter shall be capable of handling a maximum flow rate of 150 gallons per hour.

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

An instrument panel lamp and audible alarm which indicates when water is present in the fuel-water separator shall also be included.

FUEL LINES

The fuel system supply and return lines installed from the fuel tank to the engine shall be black textile braided lines which are reinforced with braided high tensile steel wire. The fuel lines shall be connected with reusable steel fittings.

FUEL SHUTOFF VALVE

A fuel shutoff valve shall be installed in the fuel draw line at the primary fuel filter to allow the fuel filter to be changed without loss of fuel to the fuel pump.

ELECTRIC FUEL PRIMER

Integral to the engine assembly is an electric lift pump that serves the purpose of pre-filter fuel priming.

FUEL COOLER

An aluminum cross flow air to fuel cooler shall be provided to lower fuel temperature allowing the vehicle to operate at higher ambient temperatures. The fuel cooler shall be located behind the rear axle.

FUEL TANK

The fuel tank shall have a capacity of sixty-eight (68) gallons and shall measure 35.00 inches in width X 17.00 inches in height X 29.00 inches in length.

The baffled tank shall have a vent port to facilitate venting to the top of the fill neck for rapid filling without "blow-back" and a roll over ball check vent for temperature related fuel expansion and draw.

The tank is designed with dual draw tubes and sender flanges. The tank shall have 2.00 inch NPT fill ports for right or left hand fill. A 0.50 inch NPT drain plug shall be centered in the bottom of the tank.

The fuel tank shall be mounted below the frame, behind the rear axle. Two (2) three-piece strap hanger assemblies with “U” straps bolted midway on the fuel tank front and rear shall be utilized to allow the tank to be easily lowered and removed for service purposes. Rubber isolating pads shall be provided between the tank and the upper tank mounting brackets. Strap mounting studs through the rail, hidden behind the body shall not be acceptable.

FUEL TANK MATERIAL AND FINISH

The fuel tank shall be constructed of 12 gauge aluminized steel. The exterior of the tank shall be powder coated black and then painted to match the frame components.

All powder coatings, primers and paint shall be compatible with all metals, pretreatments and primers used. The cross hatch adhesion test per ASTM D3359 Method B, results to be 5B minimum. The pencil hardness test per ASTM D3363 shall have a final post-curved pencil hardness of H-2H. The direct impact resistance test per ASTM D2794, results to be 5B minimum.

Any proposals offering painted fuel tanks with variations from the above process shall not be accepted. The film thickness of vendor supplied parts shall also be sufficient to meet the performance standards as stated above.

FUEL TANK STRAP MATERIAL

The fuel tank straps shall be constructed of ASTM A-36 steel. The fuel tank straps shall be powder coated black and then painted to match the frame components if possible.

FUEL TANK FILL PORT

The fuel tank fill ports shall be provided with two (2) left fill ports located one (1) in the forward position and one (1) in the middle position and the right fill port located in the middle position of the fuel tank.

FUEL TANK SERVICEABILTY PROVISIONS

The chassis fuel lines, and sender wiring shall have additional length provided so the tank can be easily lowered and removed for service purposes. The additional 12.00 feet of length shall be located above the fuel tank and shall be coiled and secured. The fuel line fittings shall be pointed towards the right side (curbside) of the chassis.

FUEL TANK DRAIN PLUG

A 0.5 inch NPT magnetic drain plug shall be centered in the bottom of the fuel tank.

FRONT AXLE

The front axle shall be a Hendrickson STEERTEK Non-drive front axle, NXT Fire/Rescue model. The axle shall include a 3.74 inch drop and a 70.87 inch king pin intersection (KPI). The axle shall be a box-shaped fabricated beam with integrated suspension. The axle shall include a conventional style hub with a standard knuckle. The weight capacity for the axle shall be rated to 24,000 pounds.

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.

FRONT SHOCK ABSORBERS

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

FRONT SUSPENSION

The front suspension shall include a parabolic leaf spring pack integrated into the Hendrickson STEERTEK NXT axle consisting of 58.40 inches long and 4.00 inches wide tapered leaf springs and shall feature a military double wrapped front eye. Spring eyes shall have Hendrickson's proprietary threaded pin bushings to increase roll stiffness. The spring capacity shall be rated specifically to the axle configuration from 18,000 and up to 24,000 pounds.

STEERING COLUMN/ WHEEL

The cab shall include a Douglas Autotech steering column which shall include a seven (7) position tilt, a 2.25 inch telescopic adjustment, and an 18.00 inch, four (4) spoke steering wheel located at the driver's position. The steering wheel shall be covered with black polyurethane foam padding.

The steering column shall contain a horn button, self-canceling turn signal switch, four-way hazard switch and headlamp dimmer switch.

ELECTRONIC POWER STEERING FLUID LEVEL INDICATOR

The power steering fluid shall be monitored electronically and shall send a signal to activate an audible alarm and visual warning in the instrument panel when fluid level falls below normal.

POWER STEERING PUMP

The hydraulic power steering pump shall be a TRW PS and shall be gear driven from the engine. The pump shall be a balanced, positive displacement, sliding vane type. The power steering system shall include an oil to air passive cooler.

FRONT AXLE CRAMP ANGLE

The chassis shall have a front axle cramp angle of 45-degrees to the left and 43-degrees to the right.

POWER STEERING GEAR

The power steering gear shall be a TRW model TAS 85 with an assist cylinder.

CHASSIS ALIGNMENT

The chassis frame rails shall be measured to ensure 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 chassis manufacturer.

REAR AXLE

The rear axle shall be a Meritor model RT-52-185 tandem drive axle. The axle shall include precision forged, single reduction differential gearing, and shall have a fire service rated capacity of 54,000 pounds.

The axle shall be built of superior construction and quality components to provide the rugged dependability needed to stand up to the fire industry's demands. The axle shall include rectangular shaped, hot-formed housing with a standard wall thickness of 0.56 of an inch for extra strength and rigidity and a rigid differential case for high axle strength and reduced maintenance.

The axle shall have heavy-duty Hypoid gearing for longer life, greater 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 will be used.

REAR AXLE DIFFERENTIAL LUBRICATION

The rear axle differential shall be lubricated with oil.

REAR AXLE WARRANTY

The rear axle shall be warranted by Meritor for five (5) years with unlimited miles under the general service application. Details of the Meritor warranty are provided on the PDF document attached to this option.

REAR WHEEL BEARING LUBRICATION

The rear axle wheel bearings shall be lubricated with oil.

REAR AXLE DIFFERENTIAL CONTROL

The tandem axle chassis shall include an inter-axle differential lock, which shall allow both axles to be engaged as drive axles. The inter-axle differential lock shall be controlled by a locking rocker switch on the switch panel. The light on the switch shall illuminate with positive engagement of the inter-axle differential lock.

VEHICLE TOP SPEED

The top speed of the vehicle shall be approximately 65 MPH +/-2 MPH at governed engine RPM.

REAR SUSPENSION

The tandem rear axle shall feature a Neway AD-254 air suspension. Each axle shall be independently suspended for optimum performance. The suspension shall include optimized air springs which shall be mounted to the equalizing beams and integral transverse beams. Adjustable torque rods and adjustable track bars shall also be included. The rear tandem suspension shall include 54.00 inch axle centers.

Dual air height control valves shall be installed to ensure equal frame height on both sides of the vehicle regardless of the load.

The rear suspension shall be run flat compatible at reduced speeds.

The rear suspension capacity shall be rated at 48,000 to 54,000 pounds.

REAR SHOCK ABSORBERS

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

TIRE INTERMITTENT SERVICE RATING

The chassis shall be rated using Intermittent Service ratings provided to the emergency vehicle market by the tire manufacturers as the basis for determining the maximum vehicle load and speed.

FRONT TIRE

The front tires shall be Michelin 425/65R-22.5 20PR "L" tubeless radial XZY3 mixed service tread.

The front tire stamped load capacity shall be 22,800 pounds per axle with a nominal speed rating of 65 miles per hour when properly inflated to 120 pounds per square inch.

The Michelin Intermittent Service Rating maximum load capacity shall be 24,396 pounds per axle with a maximum speed of 65 miles per hour when properly inflated to 120 pounds per square inch.

The Michelin Intermittent Service Rating maximum speed capacity shall be 22,800 pounds per axle with a speed rating of 75 miles per hour when properly inflated to 120 pounds per square inch.

The Michelin Intermittent Service Rating limits the operation of the emergency vehicle to no more than fifty (50) miles of continuous operation under maximum recommended payload, or without stopping for at least twenty (20) minutes. The emergency vehicle must reduce its speed to no more than 50 MPH after the first fifty (50) miles of travel.

REAR TIRE

The rear tires shall be Michelin 12R-22.5 16PR "H" tubeless radial XZE regional tread.

The rear tire stamped load capacity shall be 27,120 pounds per axle with a speed rating of 75 miles per hour when properly inflated to 120 pounds per square inch.

The Michelin Tire Intermittent Service Rating load capacity shall be 28,880 pounds per axle with a speed rating of 75 miles per hour when properly inflated to 120 pounds per square inch. The Michelin Intermittent Service Rating limits the operation of the emergency vehicle to one (1) hour of loaded travel with a one (1) hour cool down prior to another loaded run.

REAR AXLE RATIO

The rear axle ratio shall be 5.38:1.

TIRE PRESSURE INDICATOR

There shall be electronic chrome LED valve caps shipped loose for installation by the OEM which shall illuminate with a red LED when tire pressure drops 8psi provided. The valve caps are self-calibrating and set to the pressure of the tire upon installation.

FRONT WHEEL

The front wheels shall be Alcoa hub piloted, 22.50 inch X 12.25 inch aluminum wheels. The outer face of the wheels shall feature Alcoa's Dura-Bright® finish as an integral part of the wheel surface. Alcoa Dura-Bright® wheels keep their shine without polishing. Brake dust, grime and road debris are easily removed by simply cleaning the wheels with soap and water. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts.

REAR WHEEL

The rear wheels shall be Alcoa hub piloted, 22.50 inch X 8.25 inch LvL One™ aluminum wheels with a polished outer surface and Alcoa Dura-Bright® wheel treatment as an integral part of the wheel. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts.

WHEEL TRIM

The front wheels shall include stainless steel lug nut covers and stainless steel baby moons shipped loose with the chassis for installation by the apparatus builder. The baby moons shall have cutouts for oil seal viewing when applicable.

The rear wheels shall include stainless steel lug nut covers and band mounted spring clip stainless steel high hats shipped loose with the chassis for installation by the apparatus builder.

The lug nut covers, baby moons, and high hats shall be RealWheels® brand constructed of 304L grade, non-corrosive stainless steel with a mirror finish. Each wheel trim component shall meet D.O.T. certification.

BRAKE SYSTEM

A rapid build-up air brake system shall be provided. The air brake system shall include, at a minimum, a three (3) air tank, four (4) reservoir system with a total of 6236 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. An inversion valve shall be installed to provide a service brake application in the unlikely event of primary air supply loss. All air reservoirs provided on the chassis shall be labeled for identification.

The tandem 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.

A momentary rocker style switch shall be provided and properly labeled “mud/snow”. When the switch is pressed once, the system shall allow a momentary wheel slip to obtain traction under extreme mud and snow conditions. During this condition the ATC light and the light on the rocker switch shall blink continuously notifying the driver of activation. Pressing the switch again shall deactivate the mud/snow feature.

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.

FRONT BRAKES

The front brakes shall be Meritor EX225 Disc Plus disc brakes with 17.00 inch vented rotors.

REAR BRAKES

The rear brakes shall be Meritor EX225 Disc Plus disc brakes with 17.00 inch vented rotors.

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.

SUPPLEMENTAL BRAKE

A supplemental brake engagement shall be supplied that can only be engaged while the rear spring brakes are engaged. In addition to the mechanical rear brake engagement, the front service brakes shall also be engaged via air pressure, providing additional braking capability. Front service brake activation shall be accomplished with activation of the rear mechanical park brake valve.

PARK BRAKE CONTROL

A Meritor-Wabco manual hand control push-pull style valve shall operate the parking brake.

The parking brake actuation valve shall be mounted to the left side of the engine tunnel integrated into the transmission shift pod console within easy access of the driver.

The control shall include a protective guard which shall prevent accidental activation of the parking brake and still allow proper actuation of the control.

AIR DRYER

The brake system shall include a Wabco System Saver 1200 air dryer with an integral heater with a Metri-Pack sealed connector. The air dryer incorporates an internal turbo cutoff valve that closes the path between the air compressor and air dryer purge valve during the compressor "unload" cycle. The turbo cutoff valve allows purging of moisture and contaminants without the loss of turbo boost pressure. The air dryer shall be mounted to the frame behind the battery box on the left hand side outboard on an aerial apparatus bracket.

FRONT BRAKE CHAMBERS

The front brakes shall be provided with type 24 brake chambers as supplied with the Hendrickson STEERTEK NXT axle.

REAR BRAKE CHAMBERS

The rear axle shall include MGM 24/30 brake chambers shall convert the energy of compressed air into mechanical force and motion. This shall actuate the brake camshaft, which in turn shall operate the foundational brake mechanism forcing the brake pads against the brake rotor.

AIR COMPRESSOR

The air compressor provided for the engine shall be a Wabco® 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 located on the air dryer bracket.

AUXILIARY AIR RESERVOIR

One (1) auxiliary air reservoir with a 2084 cubic inch capacity shall be installed on the chassis to act as an additional reserve supply to the air system for air horn, air tool, or other non-service brake use. 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.

MOISTURE EJECTORS

An automatic moisture ejector with a manual drain provision shall be installed on the wet tank of the air supply system. Manual pet-cock type drain valves shall be installed on all remaining reservoirs of the air supply system.

AIR SUPPLY LINES

The air system on the chassis shall be plumbed with color coded reinforced nylon tubing air lines. The primary (rear) brake line shall be green, the secondary (front) brake line red, the parking brake line orange and the auxiliary (outlet) will be blue.

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

AIR TANK SPACERS

There shall be spacers included with the air tank mounting. The spacers shall move the air tanks 1.50 inches inward towards the center of the chassis. This shall provide clearance between the air tanks and the frame for body U-bolt clearance.

REAR AIR TANK MOUNTING

If a combination of wheelbase, air tank quantity, or other requirements necessitate the location of one or more air tanks to be mounted rear of the fuel tank, these tank(s) will be mounted perpendicular to frame.

WHEELBASE

The chassis wheelbase shall be 224.5 inches.

REAR OVERHANG

The chassis rear overhang shall be 106.00 inches.

FRAME

The frame shall consist of triple side rails and cross members forming a ladder style frame. The side rails shall be formed in the shape of a "C" channel, with the outer rail measuring 10.25 inches high X 3.50 inches deep X 0.38 inches thick, with an inner channel 9.44 inches high X 3.13 inches deep X 0.38 inches thick, and a second inner channel, 8.55 inches high X 2.75 inches deep X 0.25 inches thick which shall be provided extending from the rear of the cab to the forward rear suspension cross member. Each rail shall be constructed of 110,000 psi minimum yield high strength low alloy steel. The triple rail section shall be rated by a Resistance Bending Moment (RBM) minimum of 3,921,500 inch pounds and have a minimum section modulus of 35.65 cubic inches. The frame shall measure 35.00 inches in width.

Proposals calculating the frame strength using the “box method” shall not be considered.

Proposals including heat treated rails shall not be considered. Heat treating frame rails produces rails that are not uniform in their mechanical properties throughout the length of the rail. Rails made of high strength, low alloy steel are already at the required yield strength prior to forming the rail.

A minimum of seven (7) fully gusseted 0.25 inch thick cross members shall be installed. The inclusion of the body mounting, or bumper mounting shall not be considered as a cross member. The cross members shall be attached using zinc coated grade 8 fasteners.

The bolt heads shall be flanged type, held in place by distorted thread flanged lock nuts. Each cross member shall be mounted to the frame rails utilizing a minimum of 0.25 inch thick gusset reinforcement plates at all corners balancing the area of force throughout the entire frame.

Any proposals not including additional reinforcement for each cross member shall not be considered.

All relief areas shall be cut in with a minimum 2.00 inch radius at intersection points with the edges ground to a smooth finish to prevent a stress concentration point.

FRAME CLEAR AREA

The chassis frame shall be left clear of chassis mounted components inside or outside the frame rails within the first 30.00 inches behind the cab to allow space for OEM installed components. Cross members may be installed in the clear area if required for proper frame or driveline configuration.

FRAME PAINT

The frame shall be hot dip galvanized prior to assembly and attachment of any components. The components that shall be galvanized shall include:

- Main frame “C” channel or channels
- Front splayed rails and fish plates
- Cross members (excluding suspension cross members)
- Cross member gussets
- Fuel tank mounting brackets
- Fuel tank straps (unless material/finish is specified in 3130 subcat)
- Air tank mounting brackets (unless material/finish is specified in 3205, 3305, or 2232 subcat)
- Exhaust mounting brackets
- Air cleaner skid plate
    - Radiator skid plate
- Battery supports
- Battery trays (unless material/finish is specified in 5106 subcat)
- Battery covers (unless material/finish is specified in 5107 subcat)

The frame parts which are not galvanized shall be powder coated prior to any attachment of components. Parts which shall be powder coated shall include but are not limited to:

- Bumper extensions
- Steering gear bracket
- Air tanks (unless color coded tanks are specified in 3205 subcat)

Other non-galvanized under carriage components which are received from the suppliers with coatings already applied shall include but are not limited to:

- Suspension components
- Front and rear axles

All powder coatings, primers and paint used on the non-galvanized components shall be compatible with all metals, pretreatments and primers used. The cross hatch adhesion test per ASTM D3359 shall not have a failure of more than ten (10) squares. The pencil hardness test per ASTM D3363 shall have a final post-curved pencil hardness of H-2H. The direct impact resistance test per ASTM D2794 shall have an impact resistance of 120.00 inches per pound at 2 mils.

FRAME PAINT - MISCELLANEOUS

There shall be an RTV type sealant applied to the seams between the frame rail and the frame liner(s) to help prevent water intrusion between the frame rails. The sealant shall be applied to all seams along the length of the frame and at the top, front, and rear ends of the liner(s). The sealant shall be applied after the frame rails have been assembled and painted.

FRAME ASSEMBLY STRUCTURAL

Purchaser shall receive a Frame Assembly Structural Twenty (20) Years or 100,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0304. The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

FRAME RAIL CORROSION

Purchaser shall receive a Frame Rail Corrosion (Zinc Plate and Powder Coat) Twenty Five (25) Years or 150,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0316. The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

FRAME COMPONENTS CORROSION

Purchaser shall receive a Frame Components Corrosion (Zinc Plate) Twenty (20) Years or 132,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0314. The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

REAR MUD FLAP

The unit shall be equipped with a temporary wooden fender and mud flap assembly for transport to the body manufacturer.

FRONT BUMPER

The chassis shall be equipped with a severe duty front bumper constructed from structural steel channel. The bumper material shall be 0.38 thick ASTM A36 steel which shall measure 12.00 inches high with a 3.05 inch flange and shall be 104.50 inches wide with angled front corners.

The bumper shall be primed and painted as specified.

FRONT BUMPER EXTENSION LENGTH

The front bumper shall be extended approximately 18.00 inches ahead of the cab.

FRONT BUMPER PAINT

The front bumper shall be painted the same as the lower cab color.

FRONT BUMPER APRON

The 18.00 inch extended front bumper shall include an apron constructed of 0.19 inch thick embossed aluminum tread plate.

The apron shall be installed between the bumper and the front face of the cab affixed using stainless steel bolts attaching the apron to the top bumper flange.

FRONT BUMPER DISCHARGE

The chassis shall include frame mounted 2.00 inch diameter plumbed pipe intended for use as a discharge trash line. The discharge pipe shall be routed from the left hand front splay rail area behind the bumper to the area rear of the front axle, ahead of the battery box.

The discharge shall pipe shall be a 2.00 inch stainless steel schedule 10 tube. The discharge shall include a Victaulic groove for connecting to the pump and discharge hose plumbing on each end of the tube.

The apparatus manufacturer shall plumb the discharge pipe to the pump and shall provide all valves as required.

FRONT BUMPER COMPARTMENT CENTER

The front bumper shall include a compartment in the bumper apron located in the center between the frame rails which may be used as a hose well. The compartment shall be constructed of 0.13 inch 5052-H32 grade aluminum and shall include drain holes in the bottom corners to allow excess moisture to escape. The compartment shall include a notched cover constructed of 0.19 inch thick bright embossed aluminum tread plate. The notch shall be located in the left front portion of the cover and shall be 4.00 inches in length with a 2.00 inches wide radius.

FRONT BUMPER COMPARTMENT COVER HARDWARE

The front bumper compartment cover(s) shall include gas cylinder stays which shall hold the cover open. Each cover shall be held in the closed position via a flush push button style latch.

MECHANICAL SIREN

The front bumper shall include an electromechanical Federal Q2B™ siren, which shall be streamlined, chrome-plated and shall produce 123 decibels of sound at 10.00 feet. The Q2B™ siren produces a distinctive warning sound that is recognizable at long distances. A unique clutch design provides a longer coast down sound while reducing the amp draw to 100 amps. The siren shall measure 10.50 inches wide X 10.00 inches high X 14.00 inches deep. The siren shall include mounting hardware designed to recess or flush mount.

MECHANICAL SIREN LOCATION

The siren shall be recess mounted on the left side of the front fascia of the bumper approximately in the center of the flat surface between the bumper radius and the frame rail. The siren shall be mounted completely behind the face of the bumper to protect the siren from damage.

AIR HORN

The front bumper shall include two (2) Hadley brand E-Tone air horns which shall measure 21.00 inches long with a 6.00 inch round flare. The air horns shall be trumpet style with a chrome finish on the exterior and a painted finish deep inside the trumpet.

AIR HORN LOCATION

The air horns shall be recess mounted in the front bumper face on the right side of the bumper in the inboard and outboard positions relative to the right hand frame rail.

AIR HORN RESERVOIR

One (1) air reservoir, with a 2084 cubic inch capacity, 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.

ELECTRONIC SIREN SPEAKER

There shall be one (1) Cast Products Inc. model SA4301, 100 watt speaker provided. The speaker shall measure 6.20 inches tall X 7.36 inches wide X 3.06 inches deep. The speaker shall include a flat mounting flange which shall be polished aluminum.

ELECTRONIC SIREN SPEAKER LOCATION

The electronic siren speaker shall be located on the front bumper face between the frame rails in the left side outboard position.

FRONT BUMPER TOW HOOKS

Two (2) heavy duty tow hooks, painted to match the frame components, shall be installed in the rearward position out of the approach angle area, bolted directly to the side of each chassis frame rail with grade 8 bolts.

CAB TILT SYSTEM

The entire cab shall be capable of tilting approximately 45-degrees to allow for easy maintenance of the engine and transmission. The cab tilt pump assembly shall be located on the right side of the chassis above the battery box.

The electric-over-hydraulic lift system shall include an ignition interlock and red cab lock down indicator lamp on the tilt control which shall illuminate when holding the “Down” button to indicate safe road operation.

It shall be necessary to activate the master battery switch and set the parking brake in order to tilt the cab. As a third precaution the ignition switch must be turned off to complete the cab tilt interlock safety circuit.

Two (2) spring-loaded hydraulic hold down hooks located outboard of the frame shall be installed to hold the cab securely to the frame. Once the hold-down hooks are set in place, it shall take the application of pressure from the hydraulic cab tilt lift pump to release the hooks.

Two (2) cab tilt cylinders shall be provided with velocity fuses in each cylinder port. The cab tilt pivots shall be 1.90 inch ball and be anchored to frame brackets with 1.25 inch diameter studs.

A steel safety channel assembly painted safety yellow shall be installed on the right side cab lift cylinder to prevent accidental cab lowering. The safety channel assembly shall fall over the lift cylinder when the cab is in the fully tilted position. A cable release system shall also be provided to retract the safety channel assembly from the lift cylinder to allow the lowering of the cab.

CAB TILT AUXILIARY PUMP

A manual cab tilt pump module shall be attached to the cab tilt pump housing.

CAB TILT LIMIT SWITCH

A cab tilt limit switch shall be installed. The switch will effectively limit the travel of the cab when being tilted. The limit adjustment of the switch shall be preset by the chassis manufacturer to prevent damage to the cab, or any bumper mounted option mounted in the cab tilt arc. Further adjustment to the limit by the apparatus manufacturer shall be available to accommodate additional equipment.

CAB TILT CONTROL RECEPTACLE

The cab tilt control cable shall include a receptacle which shall be temporarily located on the right hand chassis rail rear of the cab to provide a place to plug in the cab tilt remote control pendant. The tilt pump shall include 8.00 feet of cable with a six (6) pin Deutsch receptacle with a cap.

The remote control pendant shall include 20.00 feet of cable with a mating Deutsch connector. The remote control pendant shall be shipped loose with the chassis.

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.

CAB WINDSHIELD

The cab windshield shall have a surface area of 2969.88 square inches and be of a two (2) piece wraparound design for maximum visibility.

The glass utilized for the windshield shall include standard automotive tint. The left and right windshield shall be fully interchangeable thereby minimizing stocking and replacement costs.

Each windshield shall be installed using black self-locking window rubber.

GLASS FRONT DOOR

The front cab doors shall include a window which is 27.00 inches in width X 26.00 inches in height. These windows shall have the capability to roll down completely into the door housing. This shall be accomplished using electric actuation. The left and right front door windows shall be controlled using a switch on each respective side inner door panel. The driver's door shall include a switch for each powered door window in the cab.

There shall be an irregular shaped fixed window which shall measure 2.50 inches wide at the top, 8.00 inches wide at the bottom X 26.00 inches in height, more commonly known as "cozy glass" ahead of the front door roll down windows.

The windows shall be mounted within the frame of the front doors trimmed with a black anodized ring on the exterior.

GLASS TINT FRONT DOOR

The windows located in the left and right front doors shall include a dark gray automotive tint which shall allow forty-five percent (45%) light transmittance. The dark tint shall aid in cab cooling and help protect passengers from radiant solar energy.

GLASS REAR DOOR RH

The rear right hand side crew door shall include a window which is 27.00 inches in width X 26.00 inches in height. The window shall be a powered type and shall be controlled by a switch on the door panel ledge and on the driver's control panel.

GLASS TINT REAR DOOR RIGHT HAND

The window located in the right hand side rear window shall include a dark gray automotive tint which shall allow forty-five percent (45%) light transmittance. The dark tint shall aid in cab cooling and help protect passengers from radiant solar energy.

GLASS REAR DOOR LH

The rear left hand side crew door shall include a window which is 27.00 inches in width X 26.00 inches in height. The window shall be a powered type and shall be controlled by a switch on the door panel ledge and on the driver's control panel.

GLASS TINT REAR DOOR LEFT HAND

The window located in the left hand side rear door shall include a dark gray automotive tint which shall allow forty-five percent (45%) light transmittance. The dark tint shall aid in cab cooling and help protect passengers from radiant solar energy.

GLASS SIDE MID RH

The cab shall include a window on the right side behind the front and ahead of the crew door which shall measure 16.00 inches wide X 26.00 inches high. This window shall be fixed within this space and shall be rectangular in shape. The window shall be mounted using self-locking window rubber. The glass utilized for this window shall include a green automotive tint unless otherwise noted.

GLASS TINT SIDE MID RIGHT HAND

The window located on the right hand side of the cab between the front and rear doors shall include a dark gray automotive tint which shall allow forty-five percent (45%) light transmittance. The dark tint shall aid in cab cooling and help protect passengers from radiant solar energy.

GLASS SIDE MID LH

The cab shall include a window on the left side behind the front door and ahead of the crew door and above the wheel well which shall measure 16.00 inches wide X 26.00 inches high. This window shall be fixed within this space and shall be rectangular in shape. The window shall be mounted using self-locking window rubber. The glass utilized for this window shall include a green automotive tint unless otherwise noted.

GLASS TINT SIDE MID LEFT HAND

The window located on the left hand side of the cab between the front and rear doors shall include a dark gray automotive tint which shall allow forty-five percent (45%) light transmittance. The dark tint shall aid in cab cooling and help protect passengers from radiant solar energy.

CLIMATE CONTROL

A ceiling mounted combination defroster and cabin heating and air conditioning system shall be located above the engine tunnel area. The system covers and plenums shall be of severe duty design made of aluminum which shall be coated with a customer specified interior paint. The design of the system's covers shall provide quick access to washable air intake filters as well as easy access to other serviceable items.

The air delivery plenums provide targeted airflow directly to the vehicle occupants. Six (6) adjustable louvers will provide comfort for the front seat occupants and ten (10) adjustable louvers will provide comfort for the rear crew occupants.

The system shall be capable of producing up to 12 FPM of air velocity at all occupant seating positions. Separate front and rear blower motors shall be of brushless design and shall be controlled independently. It shall be capable of reducing the interior cabin air temperature from 122˚ F (+/- 3˚ F) to 80˚ F in thirty minutes with 50% relative humidity and full solar load as described in SAE J2646.

The system shall also provide heater pull up performance which meets or exceeds the performance requirements of SAE J1612 as well as defrost performance that meets or exceeds the performance requirements of SAE J381.

A gravity drain system shall be provided that is capable of evacuating condensate from the vehicle while on a slope of up to a 13% grade in any direction.

The air conditioning system plumbing shall be a mixture of custom bent zinc coated steel fittings and Aeroquip flexible hose with Aeroquip EZ-Clip fittings.

The overhead heater/defroster plumbing shall include an electronic flow control valve that re-directs hot coolant away from the evaporator, via a bypass loop, as the temperature control is moved toward the cold position.

Any component which needs to be accessed to perform system troubleshooting shall be accessible by one person using basic hand tools. Regularly serviced items shall be replaceable by one person using basic hand tools.

The chassis manufacturer recommends that the overall climate system performance be based off third-party testing in accordance with the Society of Automotive Engineering standards as a complete system.

Individual component level BTU ratings is not an accurate indicator of the performance capability of the completed system. System individual component BTU ratings:

- Air conditioning evaporator total BTU/HR: 82,000
- Air conditioning condenser total BTU/HR: 59,000
- Heater coil total BTU/HR: 98,000

Performance data specified is based on testing performed by an independent third-party test facility using a medium four-door 10" raised roof cab equipped with an ISL engine.

CLIMATE CONTROL DRAIN

The climate control system shall include a gravity drain for water management. The gravity drain shall remove condensation from the air conditioning system without additional mechanical assistance. Drain tubes located on the left and right side of the air conditioning system shall run outward towards the cab wall and down thru the cab floor near the "B" pillar area to assist with the removal of condensation.

CLIMATE CONTROL ACTIVATION

The heating, defrosting and air conditioning controls shall be in the center dash center switch panel, in a position which is easily accessible to the driver. The climate control shall be activated by a rotary switch.

HVAC OVERHEAD COVER PAINT

The overhead HVAC cover shall be painted with a multi-tone onyx black texture finish.

A/C CONDENSER LOCATION

A roof mounted A/C condenser shall be installed on the left side of the cab, mid-roof.

A/C COMPRESSOR

The air-conditioning compressor shall be a belt driven, engine mounted compressor. The compressor shall be compatible with R134-a refrigerant.

The chassis manufacturer recommends that the overall climate system performance be based off third-party testing in accordance with the Society of Automotive Engineering standards as a complete system.

Individual component level ratings are not an accurate indicator of the performance capability of the completed system.

Refrigerant Compressor displacement: 19.1 cubic inches per revolution.

UNDER CAB INSULATION

The underside of the cab tunnel surrounding the engine shall be lined with multi-layer insulation, engineered for application inside diesel engine compartments.

The insulation shall act as a noise barrier, absorbing noise thus keeping the decibel level in the cab well within NFPA recommendations. As an additional benefit, the insulation shall assist in sustaining the desired temperature within the cab interior.

The engine tunnel insulation shall measure approximately 0.30 inch thick including a multi-layer foil faced glass cloth and polyester fiber layer.

The foil surface acts as protection against heat, moisture and other contaminants. The insulation shall meet or exceed FMVSS 302 flammability test.

The cab floor insulation shall measure 0.56 inch thick including a 1.0#/sf PVC barrier and a moisture and heat reflective foil facing, reinforced with fiberglass strands. The foil surface acts as protection against moisture and other contaminants. The insulation shall meet or exceed MVSS 302 flammability test.

The insulation shall be cut precisely to fit each section and sealed for additional heat and sound deflection. The insulation shall be held in place by acrylic pressure sensitive adhesive. In addition, the insulation shall have an expanded aluminum overlay installed to assist in retaining the insulation tight against the engine tunnel surfaces and the underside of the cab floor. The cab floor overlay shall use aluminum pins with hard hat, hold in place fastening heads.

INTERIOR TRIM FLOOR MAT

The floor of the cab shall be covered with a multi-layer mat consisting of 0.25 inch thick sound absorbing closed cell foam with a 0.06 inch thick non-slip vinyl surface with a pebble grain finish. The covering shall be held in place by a pressure sensitive adhesive.

The floor shall have an overlay of 3003-H22 aluminum tread plate which shall feature a bedliner spray on bedliner coating. The aluminum plate shall be held down with screws and shall feature a flange wrapping downward into each stepwell, eliminating the need for any additional trim

where the cab floor and the step wells meet. All exposed seams shall be sealed with silicone caulk matching the color of the floor mat to reduce the chance of moisture and debris retention.

INTERIOR TRIM

The cab interior shall include trim on the front ceiling, rear crew ceiling, and the cab walls. It shall be easily removable to assist in maintenance. The trim shall be constructed of insulated vinyl over a hard board backing.

REAR WALL INTERIOR TRIM

The rear wall of the cab shall be trimmed with vinyl.

HEADER TRIM

The cab interior shall feature header trim over the driver and officer dash constructed of 5052-H32 Marine Grade, 0.13 inch thick aluminum.

TRIM CENTER DASH

The main center dash area shall be constructed of 5052-H32 Marine Grade, 0.13 inch thick aluminum plate. There shall be four (4) holes located on the top of the dash near each outer edge of the electrical access cover for ventilation. The center dash electrical access cover shall include a gas cylinder stay which shall hold the cover open during maintenance.

TRIM LH DASH

The left hand dash shall be constructed of 5052-H32 Marine Grade, 0.13 inch thick aluminum plate for a perfect fit around the instrument panel. For increased occupant protection the extreme duty left hand dash utilizes patent pending break away technology to reduce rigidity in the event of a frontal crash. The left hand dash shall offer lower vertical surface area to the left and right of the steering column to accommodate control panels.

TRIM RH DASH

The right hand dash shall be constructed of 5052-H32 Marine Grade, 0.13 of an inch thick aluminum plate and shall include a glove compartment with a hinged door and a Mobile Data Terminal (MDT) provision. The glove compartment size will measure 14.00 inches wide X 6.38 inches high X 5.88 inches deep. The MDT provision shall be provided above the glove compartment.

ENGINE TUNNEL TRIM

The cab engine tunnel shall be covered with a multi-layer mat consisting of 0.25 inch closed cell foam with a 0.06 inch thick non-slip vinyl surface with a pebble grain finish. The mat shall be held in place by pressure sensitive adhesive. The engine tunnel mat shall be trimmed with anodized aluminum stair nosing trim for an aesthetically pleasing appearance.

POWER POINT DASH MOUNT

The cab shall include two (2) dual universal serial bus (USB) charging receptacles in the cab dash switch panel to provide a power source for USB chargeable electrical equipment. Each dual USB receptacle shall include two ports and shall be capable of up to a 5 Volt 2.1 amp output. Port 1 is optimized for fast charging at 1 amp. Port 2 is optimized for fast charging up to 2.1 amps, when used individually. The receptacles shall be wired battery direct.

STEP TRIM

Each cab entry door shall include a three step entry. The first step closest to the ground shall be constructed of SAE 304 stainless steel with embossed perforations and diamond shaped cutout. The perforations and cutouts shall allow water and other debris to flow through rather than becoming trapped within the stepping surface. The step shall feature a splash guard to reduce water and debris from splashing in to the step. The splash guard shall have drainage holes beneath the back of the step to allow debris and water to flow through rather than becoming trapped within the stepping surface. The stainless steel material shall have a number 8 mirror finish. The lower step shall be mounted to a frame which is integral with the construction of the cab for rigidity and strength. The middle step shall be integral with the cab construction and shall be trimmed in 0.08 inch thick 3003-H22 embossed aluminum tread plate.

UNDER CAB ACCESS DOOR

The cab shall include an aluminum access door in the left crew step riser painted to match the cab interior paint with a push and turn latch. The under cab access door shall provide access to the diesel exhaust fluid fill.

INTERIOR DOOR TRIM

The interior trim on the doors of the cab shall consist of an aluminum panel constructed of Marine Grade 5052-H32 0.13 of an inch thick aluminum plate. The door panels shall include a painted finish.

DOOR TRIM CUSTOMER NAMEPLATE

The interior door trim on the front doors shall include a customer nameplate which states the vehicle was custom built for their Department.

CAB DOOR TRIM REFLECTIVE

The interior of each door shall include high visibility reflective tape. A white reflective tape shall be provided vertically along the rear outer edge of the door. The lowest portion of each door skin shall include a reflective tape chevron with red and white stripes and a Spartan logo. The chevron tape shall measure 6.00 inches in height.

INTERIOR GRAB HANDLE "A" PILLAR

There shall be two (2) rubber covered 11.00 inch grab handles installed inside the cab, one on each “A” post at the left and right door openings. The left handle shall be located 7.88 inches above the bottom of the door window opening and the right handle shall be located 2.88 inches

above the bottom of the door window opening. The handles shall assist personnel in entering and exiting the cab.

INTERIOR GRAB HANDLE FRONT DOOR

Each front door shall include one (1) ergonomically contoured 9.00 inch cast aluminum handle mounted horizontally on the interior door panels. The handles shall feature a DA sand finish to assist personnel entering and exiting the cab.

INTERIOR GRAB HANDLE REAR DOOR

A DA sanded cast aluminum assist handle shall be provided on the inside of each rear crew door. A 30.00 inch long handle shall extend horizontally the width of the window just above the window sill. The handle shall assist personnel in exiting and entering the cab.

INTERIOR SOFT TRIM COLOR

The cab interior soft trim surfaces shall be black in color.

INTERIOR TRIM SUNVISOR

The header shall include two (2) sun visors, one each side forward of the driver and officer seating positions above the windshield. Each sun visor shall be constructed of Masonite and covered with padded vinyl trim.

INTERIOR FLOOR MAT COLOR

The cab interior floor mat shall be black in color.

CAB PAINT INTERIOR DOOR TRIM

The inner door panel surfaces shall be painted with multi-tone onyx black texture finish.

HEADER TRIM INTERIOR PAINT

The metal surfaces in the header area shall be coated with multi-tone onyx black texture finish.

TRIM CENTER DASH INTERIOR PAINT

The entire center dash shall be coated with multi-tone onyx black texture finish. Any accessory pods attached to the dash shall also be painted this color.

TRIM LH DASH INTERIOR PAINT

The left hand dash shall be painted with a multi-tone onyx black texture finish.

TRIM RIGHT HAND DASH INTERIOR PAINT

The right hand dash shall be painted with multi-tone onyx black texture finish.

FLOOR INTERIOR PAINT

The metal surfaces on the floor of the cab shall feature a black spray on bedliner coating.

DASH PANEL GROUP

The main center dash area shall include three (3) removable panels located one (1) to the right of the driver position, one (1) in the center of the dash and one (1) to the left of the officer position. The center panel shall be within comfortable reach of both the driver and officer.

SWITCHES CENTER PANEL

The center dash panel shall include five (5) rocker switch positions in a single row configuration in the center panel and one (1) switch in the panel in customer specified location.

A rocker switch with a blank legend installed directly above shall be provided for any position without a switch and legend designated by a specific option. The non-specified switches shall be two-position, black switches with a green indicator light. Each blank switch legend can be custom engraved by the body manufacturer. All switch legends shall have backlighting provided.

SWITCHES LEFT PANEL

The left dash panel shall include five (5) switches. There shall be three (3) across the top of the panel with two (2) below. Two (2) of the top row of switches shall be rocker type and the left one (1) shall be the windshield wiper/washer control switch. The lower switches shall be a rocker type switch.

A rocker switch with a blank legend installed directly above shall be provided for any position not designated by a specific option. The non-designated switches shall be two-position, black switches with a green indicator light. Each blank switch legend can be custom engraved by the body manufacturer. All switch legends shall have backlighting provided.

SWITCHES RIGHT PANEL

The right dash panel shall include no rocker switches or legends.

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 provide a visual warning indicator in the Vista display and control screen(s).

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 applicable audible alarm shall remain active until all occupied seats have the seat belts fastened.

SEAT MATERIAL

The Bostrom Firefighter seats shall include a covering of extra high strength, tear resistant, and waterproof fabric made of durable Durawear Plus™ 1800 denier ballistic polyester. A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids. Durawear Plus shall include low seam stitching to eliminate seam wear. Durawear Plus™ meets or exceeds specification of the common trade name Imperial 1800. The material meets FMVSS 302 flammability requirements.

Seats shall be Foam Block™ encapsulated foam with Zip Clean covers. The encapsulated Foam Block™ feature shall resist gas and liquid absorption in the cushion. Seat cushions, head rest and side bolsters shall zip off using a heavy duty skirted zipper to allow for quick removal and easy cleaning. All Zip off covers are designed for machine washing and air drying.

One (1) extra seat cushion and applicable back cover(s) shall be provided per seating position.

If applicable, Theatre style seats located in the cab shall be high strength, wear resistant fabric made of durable ballistic polyester. A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids. Common trade names for this material are Imperial 1200 and Durawear.

SEAT COLOR

All seats supplied with the chassis shall be black in color. All seats shall include red seat belts.

SEAT BACK LOGO

The seat back shall include the “Spartan” logo. The logo shall be centered on the standard headrest of the seat back and on the left side of a split headrest.

SEAT DRIVER

The driver's seat shall be an H.O. Bostrom 500 Series Firefighter Sierra model seat. The seat shall feature eight-way electric positioning. The eight positions shall include up and down, fore and aft with 8.00 inches of travel, back angle adjustment and seat rake adjustment. The seat shall feature integral springs to isolate shock.

The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt, automatic retractor and buckle as an integral part of the seat assembly. The ABTS feature shall also include the RiteHite™ shoulder adjustment feature to provide enhanced comfort and safety by allowing customized seat belt fit.

The minimum vertical dimension from the seat H-point to the ceiling for this belted seating position shall be 35.00 inches measured with the seat height adjusted to the lowest position of travel.

This model of seat shall have successfully completed the static load tests set forth by FMVSS 207, 209, and 210 in effect at the time of manufacture. 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.

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.

SEAT BACK DRIVER

The driver's seat shall include a standard seat back incorporating the all belts to seat feature (ABTS). The seat back shall feature a contoured head rest.

SEAT MOUNTING DRIVER

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

ADDITIONAL SEAT COVER DRIVER

One (1) set of additional seat cushion and seat back covers shall be provided for the driver's position. The seat back cover shall either be a single piece for non-SCBA backs or a set of covers for bolsters and head cushions around the SCBA backs, dependent on seat back style.

SEAT OFFICER

The officer's seat shall be a H.O. Bostrom 500 Series Sierra seat model. The seat shall feature a tapered and padded seat, and cushion. The seat shall be mounted in a fixed position.

The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt and automatic retractor as an integral part of the seat assembly. The buckle portion of the seat belt shall extend from the seat base towards the driver position within easy reach of the occupant. The ABTS feature shall also include the RiteHite™ shoulder adjustment feature to provide enhanced comfort and safety by allowing customized seat belt fit.

The minimum vertical dimension from the seat H-point to the ceiling for this belted seating position shall be 35.00 inches.

This model of seat shall have successfully completed the static load tests 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 model of seats shall also have successfully completed the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which decides the burning rate of materials in the occupant compartments of motor vehicles.

SEAT BACK OFFICER

The officer's seat back shall include an IMMI brand SmartDock® Gen 2 hands-free self-contained breathing apparatus (SCBA) holder. The hands-free holder shall meet NFPA 1901-03 9G

dynamic requirements for cylinder restraint systems for use in crew compartments of emergency response vehicles. The bracket shall accommodate and secure most types of self-contained breathing apparatus cylinders.

The hands-free holder shall consist of a back plate, bottom cradle, non-marring top claws, and claw height adjustment knob. The height adjustment knob shall allow for easy adjustment of the claws to the SCBA. The hands-free holder's claws shall lock from inertial forces to prevent the SCBA from becoming a projectile in the event of a crash to meet the NFPA 1901-03 standard for SCBA retention. The SCBA holder shall offer single-motion insertion into the claws and hands-free release when the SCBA fitted seat occupant rises.

The seat back shall include a removable padded cover which shall be provided over the SCBA cavity.

SEAT MOUNTING OFFICER

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

ADDITIONAL SEAT COVER OFFICER

One (1) set of additional seat cushion and seat back covers shall be provided for the officer's position. The seat back cover shall either be a single piece for non-SCBA backs or a set of covers for bolsters and head cushions around the SCBA backs, dependent on seat back style.

POWER SEAT WIRING

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

SEAT BELT ORIENTATION CREW

The crew position seat belts shall follow the standard orientation which extends from the outboard shoulder extending to the inboard hip.

SEAT REAR FACING OUTER LOCATION

The crew area shall include two (2) rear facing crew seats, which include one (1) located directly behind the left side front seat and one (1) located directly behind the right side front seat.

SEAT CREW REAR FACING OUTER

The crew area shall include a seat in the rear facing outboard position which shall be a H.O. Bostrom 500 Series Firefighter model seat. The seat shall feature a tapered and padded seat, and cushion. The seat and cushion shall be spring load hinged and compact in design for additional room. The seat shall include a "Fold and Hold" feature so that the cushion shall remain in the seated position and simply touched to flip up.

The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt and automatic retractor as an integral part of the seat assembly. The buckle portion of the seat belt shall extend from the seat base towards the driver position within easy reach of the occupant. The ABTS feature shall also include the

RiteHite™ shoulder adjustment feature to provide enhanced comfort and safety by allowing customized seat belt fit.

The minimum vertical dimension from the seat H-point to the ceiling for each belted seating position shall be 35.00 inches.

This model of seat shall have successfully completed the static load tests 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 model of seats shall also have successfully completed the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which decides the burning rate of materials in the occupant compartments of motor vehicles.

SEAT BACK REAR FACING OUTER

The crew area seat backs shall include an IMMI brand SmartDock® Gen 2 hands-free self-contained breathing apparatus (SCBA) holder. The hands-free holder shall meet NFPA 1901-03 9G dynamic requirements for cylinder restraint systems for use in crew compartments of emergency response vehicles. The bracket shall accommodate and secure most types of self-contained breathing apparatus cylinders.

The hands-free holder shall consist of a back plate, bottom cradle, non-marring top claws, and claw height adjustment knob. The height adjustment knob shall allow for easy adjustment of the claws to the SCBA. The hands-free holder's claws shall lock from inertial forces to prevent the SCBA from becoming a projectile in the event of a crash to meet the NFPA 1901-03 standard for SCBA retention. The SCBA holder shall offer single-motion insertion into the claws and hands-free release when the SCBA fitted seat occupant rises.

The seat back shall include a removable padded cover which shall be provided over the SCBA cavity.

SEAT MOUNTING REAR FACING OUTER

The rear facing outer seats shall offer special mounting positions which shall be 2.00 inches towards the rear wall offering additional space between the front seats and the outer rear facing seats.

ADDITIONAL SEAT COVER RFO

One (1) set of additional seat cushion and seat back covers shall be provided for each rear facing outer position. The seat back cover shall either be a single piece for non-SCBA backs or a set of covers for bolsters and head cushions around the SCBA backs, dependent on seat back style in each position.

SEAT FORWARD FACING CENTER LOCATION

The crew area shall include two (2) forward facing center crew seats with both located at the center of the rear wall.

SEAT CREW FORWARD FACING CENTER

The forward facing center seat shall be a H.O. Bostrom 500 Series Firefighter model seat. The seat shall feature a tapered and padded seat, and cushion. The seat shall be mounted in a fixed position. The seat and cushion shall be hinged and compact in design for additional room. The seat shall include a “Fold and Hold” feature so that the cushion shall remain in the seated position and simply touched to flip up.

The seat shall feature an all belts to seat (ABTS) style of safety restraint. The ABTS feature shall include a three-point shoulder harness with the lap belt and automatic retractor as an integral part of the seat assembly. The buckle portion of the seat belt shall extend from the seat base towards the driver position within easy reach of the occupant. The ABTS feature shall also include the RiteHite™ shoulder adjustment feature to provide enhanced comfort and safety by allowing customized seat belt fit.

The minimum vertical dimension from the seat H-point to the ceiling for each belted seating position shall be 35.00 inches.

This model of seat shall have successfully completed the static load tests 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 model of seats shall also have successfully completed the flammability of materials used in the occupant compartments of motor vehicles as outlined in FMVSS 302, of which decides the burning rate of materials in the occupant compartments of motor vehicles.

SEAT BACK FORWARD FACING CENTER

The crew area seat backs shall include an IMMI brand SmartDock® Gen 2 hands-free self-contained breathing apparatus (SCBA) holder. The hands-free holder shall meet NFPA 1901-03 9G dynamic requirements for cylinder restraint systems for use in crew compartments of emergency response vehicles. The bracket shall accommodate and secure most types of self-contained breathing apparatus cylinders.

The hands-free holder shall consist of a back plate, bottom cradle, non-marring top claws, and claw height adjustment knob. The height adjustment knob shall allow for easy adjustment of the claws to the SCBA. The hands-free holder's claws shall lock from inertial forces to prevent the SCBA from becoming a projectile in the event of a crash to meet the NFPA 1901-03 standard for SCBA retention. The SCBA holder shall offer single-motion insertion into the claws and hands-free release when the SCBA fitted seat occupant rises.

The seat back shall include a removable padded cover which shall be provided over the SCBA cavity.

ADDITIONAL SEAT COVER FFC

One (1) set of additional seat cushion and seat back covers shall be provided for each forward-facing center position. The seat back cover shall either be a single piece for non-SCBA backs or a set of covers for bolsters and head cushions around the SCBA backs, dependent on seat back style in each position.

SEAT FRAME FORWARD FACING

The forward facing crew area seating positions shall include a full width, integrated seat mounting surface which shall be the lower interior surface of the rear cab roof modification extension. The seat mounting area shall span the full width of the cab and the full depth of the cab roof modification extension. The seat mounting area shall be painted with the same color as the remaining interior of the cab.

SEAT MOUNTING FORWARD FACING CENTER

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

CAB FRONT UNDERSEAT STORAGE ACCESS

The left and right under seat storage areas shall have a solid aluminum hinged door with non-locking latch.

SEAT COMPARTMENT DOOR FINISH

All underseat storage compartment access doors shall have a multi-tone onyx black texture finish.

WINDSHIELD WIPER SYSTEM

The cab shall include a triple arm linkage wiper system which shall clear the windshield of water, ice and debris. There shall be two (2) windshield wipers; each shall be affixed to a radial arm. The wiper motor shall be activated by an intermittent wiper control located within easy reach of the driver's position. The windshield wipers shall be interlocked with the park brake allowing activation only when the park brake is released.

There shall be virtual button on the Vista display and control screen to override the park brake deactivation. This will reset when the park brake is cycled.

ELECTRONIC WINDSHIELD FLUID LEVEL INDICATOR

The windshield washer fluid level shall be monitored electronically. When the washer fluid level becomes low the yellow "Check Message Center" indicator light on the instrument panel shall illuminate and the message center in the dual air pressure gauge shall display a "Check Washer Fluid Level" message.

CAB DOOR HARDWARE

The cab entry doors shall be equipped with exterior pull handles, suitable for use while wearing firefighter gloves. The handles shall be made of aluminum with a chrome plated finish.

The interior exit door handles shall be flush paddle type with a black finish, which are incorporated into the upper door panel.

All cab entry doors shall include locks which are keyed alike. The door locks shall be designed to prevent accidental lockout.

The exterior pull handles shall include a scuff plate behind the handle constructed of polished stainless steel to help protect the cab finish.

DOOR LOCKS

Each cab entry door shall include a manually operated door lock. Each door lock may be actuated from the inside of the cab by means of a red knob located on the paddle handle of the respective door or by using a TriMark key from the exterior. The door locks are designed to prevent accidental lock out.

GRAB HANDLES

The cab shall include one (1) 18.00 inch three-piece knurled aluminum anti-slip exterior grab handle behind each cab door. The Hansen Anti-Slip Rails shall be mounted in bright anodized aluminum 4000 Series II stanchions, complete with weep holes to prevent the buildup of moisture.

The grab rails shall include red reflective tape.

LIGHTED GRAB HANDLES

The grab rails shall include a 12 volt, 17.00 inch long clear LED light to provide an increased margin of safety for nighttime cab entry and egress.

AUXILIARY GRAB HANDLE

There shall be a 7.00 inch molded stainless steel grab handle with a bright finish attached to the front fascia of the cab in the center below the windshield.

REARVIEW MIRRORS

Retrac Aerodynamic West Coast style dual vision mirror heads model 613315 shall be provided and installed each of the front cab doors.

The mirrors shall be mounted via 1.00 inch diameter tubular stainless steel arms to provide a rigid mounting to reduce vibration.

The mirrors shall measure 8.00 inches wide X 19.00 inches high and shall include an integral convex mirror in the mirror head below the flat glass to provide wider field of vision. The flat and convex mirrors shall be motorized with remote horizontal and vertical adjustment. The control

switches shall be mounted within easy reach of the driver. The flat and convex mirrors shall be heated for defrosting in severe cold weather conditions.

The mirror backs shall be constructed of vacuum formed chrome plated ABS plastic housings that are corrosion resistant and shall include an amber marker light. The mirrors shall be manufactured with the finest quality non-glare glass.

REARVIEW MIRROR HEAT SWITCH

The heat for the rearview mirrors shall be controlled through a virtual button on the Vista display and control screen.

EXTERIOR TRIM REAR CORNER

There shall be mirror finish stainless steel scuff plates on the outside corners at the back of the cab. The stainless steel plate shall be affixed to the cab using two sided adhesive tape.

CAB FENDER

Full width wheel well liners shall be installed on the extruded cab to limit road splash and enable easier cleaning. Each two-piece liner shall consist of an inner liner 16.00 inches wide made of vacuum formed ABS composite and an outer fenderette 3.50 inches wide made of SAE 304 polished stainless steel.

MUD FLAPS FRONT

The front wheel wells shall have mud flaps installed on them.

CAB EXTERIOR FRONT & SIDE EMBLEMS

The cab shall include three (3) Spartan emblems. There shall be one (1) installed on the front air intake grille and one (1) emblem on each of the cab sides. The cab shall also include one (1) Advanced Protection System shield emblem on each front door.

IGNITION

A master battery system with a keyless start ignition system shall be provided. Each system shall be controlled by a one-quarter turn Cole Hersee switch, both of which shall be mounted to the left of the steering wheel on the dash. A chrome push type starter button shall be provided adjacent to the master battery and ignition switches.

Each switch shall illuminate a green LED indicator light on the dash when the respective switch is placed in the “ON” position.

The starter button shall only operate when both the master battery and ignition switches are in the “ON” position.

BATTERY

The single start electrical system shall include six (6) Harris BCI 31 925 CCA batteries with a 210 minute reserve capacity and 4/0 welding type dual path starter cables per SAE J541.

BATTERY TRAY

The batteries shall be installed within two (2) steel battery trays located on the left side and right side of the chassis, securely bolted to the frame rails. The battery trays shall be coated with the same material as the frame.

The battery trays shall include drain holes in the bottom for sufficient drainage of water. A durable, non-conducting, interlocking mat made by Dri-Dek shall be installed in the bottom of the trays to allow for air flow and help prevent moisture build up. The batteries shall be held in place by non-conducting phenolic resin hold down boards.

BATTERY BOX COVER

Each battery box shall include a steel cover which protects the top of the batteries. Each cover shall include flush latches which shall keep the cover secure as well as a black powder coated handle for convenience when opening.

BATTERY CABLE

The starting system shall include cables which shall be protected by 275 degree F. minimum high temperature flame retardant loom, sealed at the ends with heat shrink and sealant.

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, 8.00 inches apart. 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.

ALTERNATOR

The charging system shall include a 320 amp Leece-Neville 12 volt alternator. The alternator shall include a self-exciting integral regulator.

STARTER MOTOR

The single start electrical system shall include a Delco brand starter motor.

BATTERY CONDITIONER

A Kussmaul Auto Charge 40 LPC battery conditioner shall be supplied. The battery conditioner shall provide a 40 amp output for the chassis batteries and a 15 amp output circuit for accessory loads. The battery conditioner shall be mounted in the cab in the LH rear facing outer seating position.

BATTERY CONDITIONER DISPLAY

A Kussmaul battery conditioner display shall be supplied. The battery conditioner display shall be mounted in the cab, viewable through the cab mid side window behind the left front door.

AUXILIARY AIR COMPRESSOR

A Kussmaul Pump 12V air compressor shall be supplied. The air compressor shall be installed behind the driver's seat. The air compressor shall be plumbed to the air brake system to maintain air pressure.

ELECTRICAL INLET LOCATION

An electrical inlet shall be installed on the left hand side of cab over the wheel well.

ELECTRICAL INLET

A Kussmaul 20 amp super auto-eject electrical receptacle shall be supplied. It shall automatically eject the plug when the starter button is depressed.

A single item or an addition of multiple items must not exceed the rating of the electric inlet that it's connected to.

Amp Draw Reference List:
Kussmaul 40 LPC Charger - 5 Amps
Kussmaul 40/20 Charger - 8.5 Amps
Kussmaul 80 LPC Charger - 13 Amps
Kussmaul EV-40 - 6.2 Amps
Blue Sea P12 7532 - 7.5 Amps
Iota DLS-45/IQ4 - 11 Amps
1000W Engine Heater - 8.33 Amps
1500W Engine Heater - 12.5 Amps
120V Air Compressor - 4.2 Amps
120V Dometic HVAC - 15 Amps

ELECTRICAL INLET CONNECTION

The electrical inlet shall be connected to the battery conditioner.

ELECTRICAL INLET COLOR

The electrical inlet connection shall include a red cover.

HEADLIGHTS

The cab front shall include two (2) FireTech rectangular LED headlamps with high/low beam in the same housing and two (2) separate FireTech LED high beam only headlamps mounted in bright chrome bezels.

HEADLIGHT LOCATION

The headlights shall be located on the front fascia of the cab directly below the front warning lights.

FRONT TURN SIGNALS

The front fascia shall include two (2) Whelen model M6 4.00 inch X 6.00 inch amber LED turn signals which shall be installed in a chrome radius mount housing above and outboard of the front warning and head lamps.

SIDE TURN/MARKER LIGHTS

The sides of the cab shall include two (2) Tecniq S170 LED side marker lights which shall be provided just behind the front cab radius corners. The lights shall be amber with chrome bezels.

MARKER AND ICC LIGHTS

In accordance with FMVSS, there shall be five (5) Tecniq S170 LED cab marker lamps designating identification, center and clearance provided. These lights shall be installed on the face of the cab within full view of other vehicles from ground level. The lights shall be amber with chrome bezels.

HEADLIGHT AND MARKER LIGHT ACTIVATION

The headlights and marker lights shall be controlled via a virtual button on the Vista display. The rotary/joystick control of the Graphical Instrument Cluster shall function as a dimmer to adjust the brightness of the dash lights. The headlamps shall be equipped with the "Daytime Running" light feature, which shall illuminate the headlights when the ignition switch is in the "On" position and the parking brake is released.

LIGHTBAR SWITCH

The light bar shall be controlled through a virtual button on the Vista display and control screen. There shall be an additional button located on the Vista display and control screen to control the clear lights.

INTERIOR OVERHEAD LIGHTS

The cab shall include a LED dome lamp located over each door. The lights shall include push switches on each lamp to activate both the clear and red portions of the light individually.

INTERIOR OVERHEAD LIGHTS ACTIVATION

The clear portion of each lamp shall be activated by opening the respective door and via the multiplex display.

LIGHTBAR PROVISION

There shall be two (2) light bars installed on the cab roof. The light bars shall be provided and installed by the chassis manufacturer. The light bar installation shall include mounting and wiring to a control switch on the cab dash.

CAB FRONT LIGHTBAR MODEL

The cab shall be provided with two (2) Whelen model F4NMINI light bars. Each light bar shall be 21.50 inches in length and feature eight (8) customizable pods.

See the light bar layout for specific details.

FRONT SCENE LIGHTS

The front of the cab shall include two (2) HiViz model Firetech FT-MB-12-FT-W scene lights installed on the brow of the cab.

Each lamp head shall operate on 12 volt DC and incorporate a 12 LED optic that combines both spot and flood lighting. Each lamp head shall draw 5.0 amps, generate 6,336 total lumens, and measure approximately 2.00 inches in height X 16.00 inches in width. The lamp heads and brackets shall be powder coated white.

FRONT SCENE LIGHT LOCATION

There shall be two (2) scene lights mounted to the front brow of the cab in the outboard position centered over the outer front marker lights.

FRONT SCENE LIGHTS ACTIVATION

The front scene lighting shall be activated by a virtual button on the Vista display and control screen.

SIDE SCENE LIGHTS

The cab shall include two (2) Whelen M9 LED scene lights, one (1) each side which shall be surface mounted. The Whelen lights shall provide directional lighting from twenty four (24) Super-LEDs and a clear gradient lens. The scene light shall have specialized TIR optics for ideal scene illumination.

SIDE SCENE LIGHT LOCATION

The scene lighting located on the left and right sides of the cab shall be mounted in the upper forward portion of the cab between the front and rear crew doors.

SIDE SCENE ACTIVATION

The scene lights shall be activated by two (2) rocker switches located in the switch panel, one (1) for each light.

GROUND LIGHTS

Each door shall include a Tecniq T44 LED ground light mounted to the underside of the cab step below each door. The lights shall include a polycarbonate lens, a housing which is vibration welded and LEDs which shall be shock mounted for extended life.

GROUND LIGHTS

The ground lighting shall be activated when the parking brake is set, by the opening of the door on the respective cab side, and through a virtual button on the Vista display and control screen.

UNDER BUMPER LIGHTS

There shall be two (2) 4.00 inch round LED NFPA compliant light heads mounted under the bumper. The lights shall include a polycarbonate lens, a housing which is vibration welded, and LED's which shall be shock mounted for extended life. The under bumper ground lighting shall be activated with the park brake, when any cab door opens, or when the vehicle is placed in reverse.

LOWER CAB STEP LIGHTS

The middle step located at each door shall include a Tecniq T44 LED light which shall activate with the opening of the respective door. The lights shall include a polycarbonate lens, a housing which is vibration welded and LEDs which shall be shock mounted for extended life.

INTERMEDIATE STEP LIGHTS

The intermediate step well area at each door shall include a TecNiq D06 LED light within a chrome housing. The egress step lights shall provide visibility to the step well area for the first step exiting the vehicle. The egress step lights shall activate with entry step lighting.

MAP LIGHTS

A Roxter gooseneck style map light shall be provided. The light shall have a clear bulb and a control switch on the base. The light shall be located on the right hand side of the dash.

ENGINE COMPARTMENT LIGHT

There shall be a LED NFPA compliant light mounted under the engine tunnel for area work lighting on the engine. The light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life. The light shall activate automatically when the cab is tilted.

DO NOT MOVE APPARATUS LIGHT

The front headliner of the cab shall include a flashing red TecNiq K50 LED light clearly labeled "Do Not Move Apparatus". In addition to the flashing red light, an audible alarm shall be included which shall sound while the light is activated.

The flashing red light shall be located centered left to right for greatest visibility.

The light and alarm 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.

MASTER WARNING SWITCH

A master switch shall be included, as a virtual button on the Vista display and control screen which shall be labeled “E Master” for identification. The button shall feature control over all devices wired through it. Any warning device switches left in the “ON” position when the master switch is activated shall automatically power up.

HEADLIGHT FLASHER

An alternating high beam headlight flashing system shall be installed into the high beam headlight circuit which shall allow the high beams to flash alternately from left to right.

Deliberate operator selection of high beams will override the flashing function until low beams are again selected. Per NFPA, these clear flashing lights will also be disabled “On Scene” when the park brake is applied.

HEADLIGHT FLASHER SWITCH

The flashing headlights shall be activated through a virtual button on the Vista display and control screen.

INBOARD FRONT WARNING LIGHTS

The cab front fascia shall include two (2) Whelen M6 Super LED front warning lights in the left and right inboard positions. The lights shall feature multiple flash patterns including steady burn. The lights shall be mounted to the front fascia of the cab within a chrome bezel. The lights shall be programmed to emit the "PinWheel Variable" non-flashing pattern.

INBOARD FRONT WARNING LIGHTS COLOR

The warning lights mounted on the cab front fascia in the inboard positions shall be red with a clear lens.

OUTBOARD FRONT WARNING LIGHTS

The cab front fascia shall include two (2) Whelen M6 Super LED front warning lights in the left and right outboard positions. The lights shall feature multiple flash patterns including steady burn. The lights shall be mounted to the front fascia of the cab within a chrome bezel. The lights shall be programmed to emit the "PinWheel Variable" non-flashing pattern.

OUTBOARD FRONT WARNING LIGHTS COLOR

The warning lights mounted on the cab front fascia in the outboard position shall be red.

FRONT WARNING SWITCH

The front warning lights shall be controlled through a virtual control on the Vista display and control screen. This switch shall be clearly labeled for identification.

INTERSECTION WARNING LIGHTS

The chassis shall include two (2) Whelen M6 V-Series LED intersection warning lights with a chrome bezel, one (1) each side. The lights shall feature multiple flash patterns including steady burn.

INTERSECTION WARNING LIGHTS COLOR

The intersection lights shall be red with a clear lens.

INTERSECTION WARNING LIGHTS LOCATION

The intersection lights shall be mounted centered front to rear on the flat portion of the side of the bumper tail.

SIDE WARNING LIGHTS

The cab sides shall include two (2) Whelen M6 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the sides of the cab within a chrome bezel.

SIDE WARNING LIGHTS COLOR

The warning lights located on the side of the cab shall be red with clear lens.

SIDE WARNING LIGHTS LOCATION

The warning lights on the side of the cab shall be mounted over the front wheel well directly over the center of the front axle.

SIDE AND INTERSECTION WARNING SWITCH

The side warning lights shall be controlled through a virtual button on the Vista display and control screen. This button shall be clearly labeled for identification.

REAR WARNING LIGHTS

The cab shall be prewired and contain a cutout for a Whelen TACTL5 Traffic Advisor control head to be installed by the body builder. The prewire shall be coiled under the center dash panel.

Wiring provisions shall be provided routed to the rear of the frame for OEM installation of up to eight (8) individual traffic advisor warning lights rated at no more than one (1) amp each.

The power to the control head shall be ignition switched and activation dependent upon the state of the controllers switched position upon ignition.

AUXILIARY GROUND/PERIMETER LIGHTS

There shall be two (2) ground/perimeter lights integrated with the V-Series intersection warning lights. The ground/perimeter function of the V-series lights shall be activated with the vehicle ground lighting activation circuit and with respective turn signal.

INTERIOR DOOR OPEN WARNING LIGHTS

The interior of each door shall include one (1) 15.87 inch long X 0.73 inch tall amber Weldon LED warning light. The light shall be located on the upper portion of the door frame to be visible when a person is standing in front of the door while entering or exiting the cab. Each light shall activate with a scrolling directional flash pattern which moves from inside to outside when the door is in the open position. This shall serve as a warning to oncoming traffic.

SIREN CONTROL HEAD

A Whelen 295HFS2 electronic siren control head with remote amplifier shall be provided and flush mounted in the switch panel with a location specific to the customer's needs. The siren shall feature 200-watt output, hands free mode and shall be in "standby" mode awaiting instruction.

The siren shall offer radio broadcast, public address, wail, yelp, or piercer tones and hands free operation which shall allow the operator to turn the siren on and off from the horn ring if a horn/siren selector switch option is also selected.

STEERING WHEEL HORN BUTTON SELECTOR SWITCH

A virtual button on the Vista display and control screen shall be provided to allow control of either the electric horn or the air horn from the steering wheel horn button. The electric horn shall sound by default when the selector switch is in either position to meet FMCSA requirements.

AUDIBLE WARNING RH FOOT SWITCH

A foot switch wired to actuate the mechanical siren(s) shall be supplied for installation in the front section of the cab for officer actuation.

MECHANICAL SIREN FOOT SWITCH RH

The mechanical siren foot switch shall be a Linemaster model 491-S.

MECHANICAL SIREN FOOT SWITCH RH LOCATION

The mechanical siren foot switch shall be temporarily tied up with a coiled wire drop at the firewall inboard for installation by the customer on the right hand side accessible to the officer.

AUDIBLE WARNING RH FOOT SWITCH BRACKET

An individual 30.00 degree angled bracket shall be shipped loose with the chassis for installation of each officer accessible foot switch by the customer.

AIR HORN AUXILIARY ACTIVATION

The air horn activation shall be accomplished by a single right hand side lanyard cable accessible to the officer. An air horn activation circuit shall be provided to the chassis harness pump panel harness connector.

MECHANICAL SIREN BRAKE/AUXILIARY ACTIVATION

A red momentary siren brake rocker switch shall be provided in the switch panel on the dash.

MECHANICAL SIREN INTERLOCK

The siren shall only be active when master warning switch is on to prevent accidental engagement.

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.

INSTRUMENTATION

An ergonomically designed Graphical Instrument Cluster (GIC) shall be provided that combines gauges, telltales, warning messages, and advanced diagnostic capabilities into a single 12.3 inch digital display. The display screen shall have an anti-reflective coating and include a rotary/joystick control for user interaction with the display.

The GIC shall include a vehicle odometer which displays total vehicle distance traveled. The GIC shall also include two vehicle trip odometers (TRIP A and TRIP B) which indicate the distance traveled and average fuel economy for each respective trip. The operator may select which odometer is displayed and may reset either trip odometer through the on-screen display. The GIC shall include an engine hour meter which displays the total engine hours of operation.

The gauges shall have high-contrast white scales with orange pointers. The following gauges shall be included on the display:

- Speedometer that indicates vehicle speed. The scale on the speedometer shall read from 0 to 100 MPH. A numerical display of vehicle speed shall also be shown on the gauge.
- Tachometer that indicates engine speed. The scale of the tachometer shall read from 0 to 3000 RPM.
- Primary and secondary air pressure gauges that indicate the pressure in the primary and secondary air systems. The scale of the air pressure gauges shall read from 0 to 160 pounds per square inch (PSI). The gauge icon and scale shall turn amber when the system pressure drops below 70 PSI. The icon and scale shall turn red when the system pressure drops below 62 PSI. An audible alarm shall also sound when air pressure is low.
- Fuel gauge. The fuel gauge shall read from empty to full as a fraction of full tank capacity. The gauge icon and scale shall turn amber when the fuel level is below 1/8th tank capacity (1/4th tank in pump mode). An audible alarm shall also sound with low fuel level.

- Diesel exhaust fluid (DEF) gauge. The DEF gauge shall read from empty to full as a fraction of full tank capacity. The gauge icon and scale shall turn amber, and an audible alarm shall sound to indicate low DEF level.

- Engine oil pressure gauge. The scale of the engine oil pressure gauge shall read from 0 to 100 PSI. The gauge icon and scale shall turn red, and an audible alarm shall sound to indicate low oil pressure.

- Engine coolant temperature gauge. The scale of the coolant temperature shall read from 100 to 250 degrees Fahrenheit (°F). The gauge icon and scale shall turn red, and an audible alarm shall sound to indicate high coolant temperature.

- Voltmeter indicating chassis system voltage. The scale of the voltmeter shall be from 10 to 18 volts. The gauge icon and scale shall turn red, and an audible alarm shall sound when the system voltage drops below 11.8 volts for more than 120 seconds in accordance with the requirements of NFPA 1901. The gauge icon and scale shall turn red, and an audible alarm shall sound when the system voltage rises above 15.5 volts for more than 5 seconds.

- Transmission temperature gauge. The scale of the transmission temperature shall read from 100 to 300 degrees Fahrenheit (°F). The gauge icon and scale shall turn amber, and an audible alarm shall sound to indicate high transmission temperature.

The GIC shall include thirty-six (36) colored telltales to indicate vehicle operating conditions. The GIC shall provide text-based warning messages to accompany all telltales. The GIC shall contain an audible alarm capable of providing different alert sounds based on the type of warning. The audible alarm shall be capable of being heard from all seating positions in the cab.

The operator shall be able to silence active alarms that are permitted to be silenced by applicable regulations. The GIC shall contain the following indicators and produce the following audible alarms when supplied in conjunction with applicable configurations:

RED TELLTALES

- Air Filter Restriction - indicates restriction of the engine air intake filter
- Air Pressure (Primary) – indicates critically low primary system air pressure
- Air Pressure (Secondary) – indicates critically low secondary system air pressure
- Cab Tilt Warning - indicates the cab tilt system locks are not engaged
- Coolant Temperature – indicates high engine coolant temperature
- Low Coolant - indicates critically low engine coolant
- Oil Pressure – indicates critically low engine oil pressure
- Park Brake - indicates parking brake is set
- Seat Belt - indicates a seat belt violation
- Stop Engine - indicates critical engine fault
- Voltage – indicates critically low or high system voltage

AMBER TELLTALES

- Anti-Lock Brake System (ABS) - indicates anti-lock brake system fault
- Check Engine - indicates engine fault
- Check Transmission - indicates transmission fault
- Diesel Exhaust Fluid (DEF) level – indicates low DEF level
- Diesel Particulate Filter (DPF) - indicates restriction of the diesel particulate filter
- Electronic Stability Control (ESC) – indicates active electronic stability control system
- Fuel Level – indicates low fuel
- High Exhaust System Temperature (HEST) – indicates elevated exhaust temperature
- Malfunction Indicator Lamp (MIL) - indicates an engine emissions system fault
- Regen Inhibit - indicates regeneration of the DPF has been inhibited by the operator
- Transmission Temperature – indicates high transmission or transmission retarder temperature
- Transmission Range Inhibit - indicates a transmission operation is prevented and requested shift into gear may not occur
- Wait to Start - indicates active engine air preheat cycle
- Water in Fuel - indicates presence of water in fuel filter
- Windshield Washer Fluid – indicates low washer fluid

GREEN TELLTALES

- Automatic Traction Control (ATC) - indicates low wheel traction for automatic traction control equipped vehicles. Also indicates mud/snow mode is active for ATC system
- Auxiliary Brake - indicates secondary braking device is active
- Cruise Control - indicates cruise control is enabled
- High Idle - indicates engine high idle is active
- OK to Pump - indicates that conditions have been met for pump operations
- Left and Right Turn Signal – indicates active turn signal
- Pump Engaged - indicates the pump transmission is currently in pump gear

BLUE TELLTALES

- High Beam indicator

AUDIBLE ALARMS

- ABS System Fault
- Air Filter Restriction
- Cab Tilt Warning
- Check Engine
- Check Transmission
- Do Not Move Apparatus (open door/compartment)
- DPF Restriction
- High Coolant Temperature
- High or Low System Voltage
- High Transmission Temperature
- Idle Shutdown
- Low Air Pressure
- Low Coolant Level
- Low DEF Level
- Low Engine Oil Pressure
- Low Fuel
- Seatbelt Warning
- Stop Engine
- Turn Signal On
- Water in Fuel

The GIC shall allow the user to configure settings through an on-screen menu. The following settings shall be adjustable by the user:

- Distance/Speed Units – English (miles/MPH) or metric (kilometers/KPH)
- Temperature Units – degrees Fahrenheit (°F) or degrees Celsius (°C)
- Pressure Units – pounds per square inch (PSI) or kilopascals (kPA)
- Odometer/Trip odometer–chose which odometer is displayed and reset trip odometers
- Display Brightness – adjust brightness levels for both day and night settings
- Volume – adjust volume of display speaker

- Auxiliary Gauges – configure location of auxiliary gauges

The GIC shall include on-screen control of the diesel particulate filter (DPF). The GIC shall be capable of initiating and halting a manual DPF regeneration cycle. Also, the GIC shall be capable of inhibiting DPF regeneration when not desired by the operator.

The GIC shall be capable of displaying detailed diagnostic information. Diagnostic information screens shall only be accessible when the park brake is set to prevent unsafe operation of the vehicle. The following information shall be available through the on-screen menu:

- On-Board Diagnostics (OBD) faults – display of all active OBD faults, including the system reporting the fault, the suspect parameter number (SPN), and the failure mode identifier (FMI)
- Messages– display a list of all active warning messages and the status of alarms
- Vehicle Info – display of broadcast chassis information, including Vehicle Identification Number (VIN)
- Pump Interlocks – display pump interlocks status, engine speed, and transmission output speed
- Input/Output Diagnostics – display the state of all wired inputs and outputs to the GIC, as well as rotary/joystick control diagnostics
- Symbol Legend – display a glossary of all symbols and icons used on the GIC
- J1939 Databus Info – display a list of all electronic control units (ECUs) communicating on the vehicle J1939 databus and display a list of all current message data on J1939

BACKLIGHTING COLOR

The digital dash instrumentation gauges shall display in white, and the switch panel legends shall be backlit using red LED backlighting.

HOUR METER

An hour meter shall be included within the digital dash display which shall measure the amount of hours the PTO has been operated. The hour meter shall be wired to the left hand PTO.

RADIO

A Jensen radio with weather band, AM/FM stereo receiver, and four (4) speakers shall be installed in the cab. The radio shall include rear RCA input pigtail connector, satellite radio capability, and a covered front auxiliary mini stereo input with iPod ready USB jack. The radio shall be installed in the left hand overhead position. The speakers shall be installed inside the cab with two (2) speakers recessed overhead in the front portion of the cab rearward of the windshields and two (2) speakers on the upper rear wall of the cab.

AM/FM ANTENNA

A small antenna shall be located on the left hand side of the cab roof for AM/FM and weather band reception.

CAMERA RIGHT HAND

One (1) Audiovox Voyager heavy duty rearview HD box shaped camera shall be mounted on the officer side of the cab above the front door. The camera display shall activate when the right side turn signal is activated.

CAMERA REAR

One (1) Audiovox Voyager heavy duty box shaped HD camera shall be shipped loose for OEM installation in the body to afford the driver a clear view to the rear of the vehicle.

The rear camera display shall activate when the vehicle's transmission is placed in reverse.

CAMERA DISPLAY

The camera system shall display on the digital dash and a Weldon Vista display located on the officer's side dash. The camera system display can be activated through the digital dash control knob or through the Vista display panel.

COMMUNICATION ANTENNA

An antenna base, for use with an NMO type antenna, shall be mounted on the right hand front corner of the cab roof so not to interfere with light bars or other roof mounted equipment installed by chassis builder. The antenna base shall be an Antenex model MABVT8 made for either a 0.38 inch or 0.75 inch receiving hole in the antenna and shall include 17.00 foot of RG58 A/U cable with no connector at the radio end of the cable. The antenna base design provides the most corrosion resistance and best power transfer available from a high temper all brass construction and gold plated contact design. The antenna base shall be chassis builder supplied.

COMMUNICATION ANTENNA CABLE ROUTING

The antenna cable shall be routed from the antenna base mounted on the roof to the area inside the center rocker switch console.

CAB EXTERIOR PROTECTION

The cab face shall have a removable plastic film installed over the painted surfaces to protect the paint finish during transport to the body manufacturer.

FIRE EXTINGUISHER

A 2.50 pound D.O.T approved fire extinguisher with BC rating shall be shipped loose with the cab.

ROAD SAFETY KIT

The cab and chassis shall include one (1) emergency road safety triangle kit.

DOOR KEYS

The cab and chassis shall include a total of four (4) door keys for the manual door locks.

DIAGNOSTIC SOFTWARE OCCUPANT PROTECTION

Diagnostic software for the Spartan Advanced Protection System shall be available for free download from the Spartan Chassis website to Spartan authorized OEMs, dealers and service centers, as well as the vehicle owner.

The software has been validated to be compatible with the following RP1210 interface adapters:

- Dearborn Group DPA4 Plus
- Noregon Systems JPRO® DLA+
- Cummins INLINE5
- Cummins INLINE6
- NexIQ™ USB-Link™

The software and adapter utilize the SAE J1939-13 heavy duty nine (9) pin connector which is located below the driver's side dash to the left of the steering column.

WARRANTY

Purchaser shall receive a Custom Chassis Two (2) Years or 36,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0102. The warranty certificate is incorporated by reference into this proposal and included with this proposal or available upon request.

CHASSIS OPERATION MANUAL

There shall be two (2) digital copies of the chassis operation manual provided with the chassis. The digital data shall include a parts list specific to the chassis model.

ENGINE AND TRANSMISSION OPERATION MANUALS

The following manuals specific to the engine and transmission models ordered will be included with the chassis in the ship loose items:

(1) Hard copy of the Engine Operation and Maintenance manual with digital copy

(1) Digital copy of the Transmission Operator's manual

(1) Digital copy of the Engine Owner's manual

CAB/CHASSIS AS BUILT WIRING DIAGRAMS

The cab and chassis shall include two (2) digital copies of wiring schematics and option wiring diagrams.

APPARATUS INFORMATION LABEL

There shall be a high-visibility label installed in a location clearly detectable to the driver while in the seated position.

The label shall indicate the following specified information.

Overall Height (feet and inches)
Overall Length (feet and inches)
Overall GVWR (tons or metric tons)

CAB TILT CONTROL

There shall be a cab tilt pendant control quick-connect coupler provided and installed on the right side of the apparatus. The pendant shall be located directly on the lower portion of the officer's side discharge panel

There shall also be a cab tilt instruction plate located as close as possible to the control pendant for ease of operation.

HEAT EXCHANGER

The supplementary heat exchanger cooling system shall be provided and installed to the discharge side of the fire pump through to the engine compartment without intermixing, for absorption of excess heat.

The heat exchanger shall be adequate in size to maintain safe operating temperature of the coolant in the pump drive engine and not in excess of the engine manufacturer's temperature rating, under all pumping conditions. Appropriate drains shall be provided to allow draining the heat exchanger to prevent damage from freezing.

HELMET RESTRAINTS

Six (6) Ziamatic UHH-1 Universal Helmet Holders shall be provided and shipped loose with the apparatus.

MUD FLAPS

Heavy-duty black rubber mud flaps with manufactures logo shall be provided behind the rear wheels. The mud flaps shall be bolted in place.

PUMP LOCATION

The pump shall be installed in a midship location behind the chassis cab, below the rear cab and speedlay overhang, forward of the body. When the cab is tilted, the pump is completely accessible. The side discharge panels, as described later, surrounding the pump discharge and intake ports shall be located ahead of the body compartments. The pump shall be accessed for rebuilding by either removal from the bottom of the frame or from the top of the frame to allow fast and simple service in various conditions.

PUMP MOUNTING

The pump assembly shall be mounted on angle brackets attached to the outside of the chassis frame rails. There shall be no structural framework surrounding the pump. The pump brackets shall use a three (3)-point mounting technique using a minimum of grade 5 hardware per the pump manufacturer's installation guidelines to allow chassis frame rails to flex independently without damage to the fire pump.

PUMP/PLUMBING WORK LIGHT

Two (2) 4" round LED work lights shall be installed on the underside of the speedlay compartment module to illuminate the internal piping and plumbing components.

The lights shall be activated by a switch on the control panel.

OPERATOR CONTROLS

The pump operators control station shall be completely enclosed and located in the forward area of the L-2 body compartment, to protect against road debris and weather elements.

The pump operator’s module shall be constructed of the same materials as the apparatus body and finish painted to match the compartment interior.

The controls shall be positioned at a height easily accessible from ground level and ergonomically efficient to provide user-friendly operation. The display shall accommodate all operational controls for maintaining and monitoring pump and engine system operations and foam controls (if applicable), for additional ease of operation and visibility. An access panel, equipped with mechanical fasteners, shall be provided for ease of removal and service.

VALVE CONTROL - ELECTRIC

Unless specified otherwise, all discharge valves shall be electrically controlled from the operators control panel. The valve operating mechanism will indicate the position of the valve at all times.

DISCHARGE PANEL LIGHTS

There shall be adequate illumination provided at the side discharge panels with the installation of two (2) 4" round LED lights recessed in the underside of the Speedlay compartment on each side of the apparatus.

The lights shall be activated by the setting of the park brake.

PUMP SERVICE ACCESS

Ease of access to the pump and plumbing shall be provided at the front of the pump by raising the cab to allow service and maintenance. The pump shall be positioned such that maintenance and overhaul work can be performed above the frame, and under the tilted cab.

DISCHARGE PANEL WIDTH

The width of the pump discharge panel (front to back) shall be 41.00 inches (1.04 m).

SIDE DISCHARGE PUMP PANEL FINISH SSTL

The left and right side discharge panels shall be fabricated from 14 gauge “Brushed Stainless Steel” capable of withstanding the conditions and effects of extreme weather and temperature changes. The panels shall be easily removable with mechanical fasteners to provide a large access area to the pump for service.

The side discharge panels shall have items that include but are not limited to:

- Test Ports
- Warning Labels
- Data Plates

SOFT SUCTION HOSE STORAGE

There shall be a recessed cavity on the left side of the apparatus, integrated into the side discharge panel to store a roll of 25 feet of 5.00 inch suction hose. The cavity shall be located below the frame rail and be approximately 10.00 inches (254 mm) wide. The floor area shall have a light taper downward so assist in restraining the hose. Drain holes shall be provided in the rear corners.

There shall be two (2) Velcro strap type hold downs installed to secure the stored equipment in place during transit.

STORAGE CAVITY INTERIOR FINISH

The interior of the storage compartment shall feature a painted black Line-X finish.

LEFT SIDE SLIDE OUT PUMP OPERATOR'S PLATFORM

There shall be a pull-out Pump Operator's platform installed under the L2 body compartment. The platform shall be as wide as possible to fit the compartment and shall be approximately 16.00 inches (406.40 mm) deep when extended.

The platform shall lock into place while in the extended and stowed positions. The platform surface shall be constructed of "Aluminum Diamond Grip Strut" material covering the framework.

There shall be a reinforcement channel on the back of the step.

If the slide out step is not properly stowed and the transmission is placed into drive or reverse mode with the parking brake released, the hazard light in the cab shall be activated to alert the crew.

APPARATUS PLUMBING LABELING

Innovative Controls verbiage tag bezels shall be installed where applicable for components specified. The bezel assemblies will be used to identify apparatus components. These tags shall be designed and manufactured to withstand the specified apparatus service environment and shall be backed by a warranty equal to that of the exterior paint and finish. The verbiage tag bezel assemblies shall include a chrome-plated panel-mount bezel with durable easy-to-read UV

resistant polycarbonate inserts featuring the specified verbiage and color coding (if selected). These UV resistant polycarbonate verbiage and color inserts shall be subsurface screen printed to eliminate the possibility of wear and protect the inks from fading. Both the insert labels and bezel shall be backed with 3M permanent adhesive, which meets UL969 and NFPA standards.

BEZELS FOR DISCHARGES AND INLETS

Innovative Controls chrome finish die cast metal bezels shall be supplied around the openings in the pump panels for all discharge & auxiliary suction inlet fittings.

Chrome finish polycarbonate bezels shall be supplied around the openings for the main steamer inlets.

PRESSURE GOVERNOR

The Pressure Governing System provided with the chassis shall be installed on the pump operator's panel.

PRESSURE RELIEF VALVE

A Task Force Tips model #A18XX pressure relief valve shall be provided. The valve shall have an easy to read adjustment range from 90 to 300 PSI with 90, 125, 150, 200, 250 and 300 PSI adjustment settings and an "OFF" position. Pressure adjustments shall be made utilizing a 1/4" hex key, 9/16" socket or 14mm socket.

For corrosion resistance the cast aluminum valve shall be a hardcoat anodized with a powder coat interior and exterior finish. The valve shall meet (NFPA) 1901, Standard for Automotive Fire Apparatus, requirements for pump inlet relief valves. The unit shall be covered by a five year warranty. The valve shall be preset at 125 PSI (860 kPa) suction inlet pressure. The valve shall be installed inside the pump compartment where it will be easily accessible for future adjustment. The excess water shall be plumbed to the atmosphere via the unloader pipe and shall dump on the opposite side of the pump operator.

For normal pumping operations, the relief valve shall not be capped and there shall be a placard stating "DO NOT CAP" installed.

The relief valve shall have no stainless steel plumbing extension installed.

TESTING PORTS

Test port connections for pressure and vacuum shall be provided at the pump discharge panel. One shall be connected to the intake side of the pump, and the other to the discharge manifold side of the pump. They shall have 0.25 in. standard pipe thread connections and be manufactured of non-corrosive polished stainless steel or brass plugs.

TANK LEVEL GAUGE

Fire Research TankVision Pro model WLA400-A00 tank indicator kit shall be installed. The kit shall include an electronic indicator module, a pressure sensor, and a 20.00 foot 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. The indicator shall have an output for an audio alarm, warning indicator signal, valve/actuator control signal and an input for a silence button.

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 be placed on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.

AIR HORN SWITCH

There shall be a red rocker switch provided for air horn activation installed on the pump operator's gauge panel. The air horn switch shall be of weather resistance type and labeled “AIR HORN”.

MIDSHIP PUMP

The pump shall have a capacity of 2250 gallons per minute, measured in U.S. Gallons. The pump shall be a Waterous model CSU, single stage midship pump.

The pumps impellers shall be bronze with double suction inlets, accurately balanced (mechanically and hydraulically), of mixed flow design with reverse-flow, labyrinth-type, wear rings that resist water bypass and loss of efficiency due to wear. The impeller shall have flame plated hub to assure maximum pump life and efficiency despite the presence of abrasive particles, such as fine sand, in the water being pumped. The wear rings shall be bronze and easily replaceable to restore original pump efficiency and eliminate the need for replacing the entire pump casing due to wear.

Pump casing shall be close grained gray iron, bronze fitted and horizontally split in two sections for easy removal of entire impeller assembly, including wear rings, without disturbing setting of pump in chassis or pump piping. The pump, for ease and rapid servicing in the future, shall have the separable impeller shaft which allows true separation of transmission or pump without disassembly or disturbing the other component. This shall be accomplished by using a two piece shaft. This feature will allow field service to accomplish in much less time since each component (pump or transmission) can be repaired independently. The impeller shaft shall be stainless steel, accurately ground to size and polished. Shaft shall be supported at each end by ball type oil grease lubricated bearings. Sleeve bearings or bushings will not be acceptable. The bearings shall be protected from water at each end of the impeller shaft.

The discharge manifold shall be cast as an integral part of the pump body assembly and shall provide at least three full 3.50 inch openings for ultimate flexibility in providing various discharge outlets for maximum efficiency, and shall be located as follows:

one outlet on the right side of the pump body, one outlet on the left side of the pump body, and one outlet directly on top of the pump discharge manifold.

The entire pump shall be cast, manufactured and tested at the pump manufacturer's factory. The

pump transmission housing shall be high strength aluminum, three pieces and horizontally split. Power transfer to the pump shall be through a Morse Hy-Vo drive chain. Chain shall be pressure lubricated through oil pump. Chain sprockets shall be cut from carbonized, hardened alloy steel. Spur gears will not be acceptable.

The drive shafts shall be 2.35 inches in diameter, made of hardened and ground alloy steel. All shafts shall be ball bearing supported. Case shall be designed to eliminate the need of water cooling.

The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 600 PSI. A certificate documenting this test shall be provided with the completed apparatus. The pump shall be fully tested at the pump manufacturer's factory to the performance requirements as outlined by the latest (NFPA) 1901, Standard for Automotive Fire Apparatus. Pump shall be free from objectionable pulsation and vibration.

The pump shall be the Class "A" type and shall deliver the percentage of rated discharge at pressures indicated below.

100% of rated capacity at 150 PSI net pump pressure.
100% of rated capacity at 165 PSI net pump pressure.
70% or rated capacity at 200 PSI net pump pressure.
50% of rated capacity at 250 PSI net pump pressure.

PUMP SEALS

The pump shall be equipped with self-adjusting, maintenance free mechanical shaft seals that shall not require manual adjustment. These seals shall be designed in a manner that they will remain functional enough to permit continued use of the pump in the unlikely event of a seal failure.

AIR PRIMER SYSTEM

The priming system shall be a Trident Emergency Products compressed air powered high efficiency, multi-stage, venturi based Air Prime System.

All wetted metallic parts of the priming system are to be of brass and stainless steel construction. A single panel mounted control will activate the priming pump and open the priming valve to the pump.

The primer shall be mounted above the pump impeller so that the priming line will automatically drain back to the pump. The primer shall also automatically drain when the panel control actuator is not in operation. The inlet side of the primer shall include a brass ‘wye’ type strainer with removable stainless steel fine mesh strainer to prevent entry of debris into the primer body.

The system shall employ an 80 PSI (5.5 bar) pressure protection valve, located on the chassis auxiliary air tank.

The primer shall be covered by a five (5) year parts warranty.

PRIMER CONTROL

There shall be one (1) push button control to actuate the primer control valve at the operator's panel.

MAIN PUMP INLET-LEFT SIDE

A 6.00 inch (150 mm) pump manifold inlet shall be provided on the left side of the pump. The shorter style inlet shall protrude less than 2.00 inches (50 mm) away from the side panel, allowing an external valve to be connected and not protrude past the apparatus body sides while maintaining a low connection height.

The main pump inlet shall have National Standard Threads and includes a removable screen designed to provide cathodic protection for reducing deterioration in the pump.

EXTERNAL INTAKE VALVE

There shall be one (1) external valve with cap provided and installed on the steamer inlet by the Dealership.

MAIN PUMP INLET-RIGHT SIDE

A 6.00 inch (150 mm) pump manifold inlet shall be provided on the right side of the pump. The shorter style inlet shall protrude less than 2.00 inches (50 mm) away from the side panel, allowing an external valve to be connected and not protrude past the apparatus body sides while maintaining a low connection height.

The main pump inlet shall have National Standard Threads and includes a removable screen designed to provide cathodic protection for reducing deterioration in the pump.

EXTERNAL INTAKE VALVE

There shall be one (1) external valve with cap provided and installed on the steamer inlet by the Dealership.

MASTER DRAIN VALVE

A Trident manifold type drain valve shall be installed in the pump compartment. All pump drains shall be connected to the master drain valve. The drain valve shall be controlled from the left side lower pump house sill. The control shall be a hand wheel knob marked “open” and “closed”.

The drain shall be located such that it shall not interfere with pumping operations or function such as soft suction hoses, etc. nor shall it protrude past the outer edge of the apparatus, to prevent damage to the valve.

In some cases, it is necessary to locate the master drain in a secondary location to ensure proper draining. If no lower or vertical sill exists, the drain shall be located below the bottom outside edge of the hose body near the forward most corner on the driver’s side hose body. The drain shall not protrude past the outer edge of the body, thus preventing damage to the valve.

PUMP COOLING LINE

There shall be a 3/8 inch (9.5 mm) line running from the pump to the water tank to assist in keeping the pump water from overheating. A valve shall be installed on the left side discharge panel.

PUMP ANODES

Two (2) pump anodes shall be installed in the plumbing system, one (1) on the discharge side and one (1) on the suction side, to prevent damage from galvanic corrosion within the pump system.

FIRE PUMP PAINTED

The fire pump shall be painted as specified:

PLUMBING COLOR

The color shall be the same as the lower body color.

STAINLESS STEEL PLUMBING

All auxiliary suction and discharge plumbing related fittings, and manifolds shall be fabricated with schedule 40 stainless steel pipe; brass or high pressure flexible piping with stainless steel couplings. Galvanized components and/or iron pipe shall NOT be accepted to ensure long life of the plumbing system without corrosion or deterioration of the waterway system. Where waterway transitions are critical (elbows, tees, etc.), no threaded fittings shall be allowed to promote the smooth transition of water flow to minimize friction loss and turbulence. All piping components and valves shall be non-painted, unless otherwise specified. All piping welds shall be wire brushed and cleaned for inspection and appearance.

The high pressure flexible piping shall be black SBR synthetic rubber hose with 300 PSI working pressure and 1200 PSI burst pressure for flexible piping sizes 1.50 inch through 4.00 inch. Sizes .75 inch, 1.00 inch and 5.00 inch are rated at 250 PSI working pressure and 1000 PSI burst pressure. All sizes are rated at 30 in HG vacuum. Reinforcement consists of two plies of high tensile strength tire cord for all sizes and helix wire installed in sizes 1.00 inch through 5.00 inch for maximum performance in tight bend applications. The material has a temperature rating of -40 degrees Fahrenheit to +210 degrees Fahrenheit.

The stainless steel full flow couplings are precision machined from high tensile strength stainless steel. All female couplings are brass. Mechanical grooved and male 3/4 inch and 1 inch couplings are brass. A high tensile strength stainless steel ferrule with serrations on the I. D. is utilized to assure maximum holding power when fastening couplings to hose.

PUMP HOUSE LINE PROTECTION

All drain lines for the discharges, suctions, ABS discharge gauge lines and any other appropriate connections in the pump house area shall have a protective cover provided on the lines in the required areas of the lines to prevent the lines from rubbing on any other components in the pump house area.

All drain lines, ABS lines, high pressure discharge lines and electrical wiring in the pump house area shall be properly and neatly routed, wire tied and rubber coated “P” clamped, to keep the items secured.

DRAIN VALVES

An Innovative Controls 3/4" quarter turn drain valve shall be included on each discharge, gated intake, and steamer valve (if applicable). A side stem, long stroke chrome plated lift handle shall be provided on the drain valve to facilitate use with a gloved hand. The drain valve shall have an ergonomically designed handle with a recessed verbiage tag area easily read by the operator before opening.

The drain valve shall be connected to the valve with a flexible hose that is routed in such a manner as to assure complete drainage to below the apparatus.

LEFT SIDE INLET

There shall be one (1) gated suction inlet with .75 inch (19mm) bleeder installed on the left side of the apparatus with the following specified components.

INTAKE VALVE

A 2.50 inch (65 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9333 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9333 Navigator Pro™ 2.0 Valve Controller. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Two additional buttons shall be available to be used for preset selection, preset activation and menu navigation.

The controller must have up to three preset locations that can be user set and easily recalled upon each use. The unit must be capable of being used in conjunction with at least two additional displays to control one valve. The unit must provide position indication through a full color backlit LCD display. The display shall be a full color LCD display with a backlight. It shall have manual adjustment of the brightness as well as an auto-dimming option. The unit must carry a five year warranty.

INTAKE PLUMBING

The plumbing shall consist of 2.50 inch (65 mm) piping and shall incorporate a manual drain control installed below the pump area for ease of access.

SUCTION/INTAKE TERMINATION

The termination shall include the following components:

One (1) 2.50 inch (65 mm) NST swivel female straight adapter with screen

One (1) 2.50 inch (65 mm) self-venting plug, secured by a chain

INLET LOCATION

The inlet shall be located on the pump panel in the rearward position.

LEFT SIDE DISCHARGE

There shall be one (1) gated discharge installed on the left side of the apparatus with the following specified components.

DISCHARGE VALVE

A 2.50 inch (65 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9333 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9333 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting.

The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Two additional buttons shall be available to be used for preset selection, preset activation and menu navigation. The controller must have up to three preset locations that can be user set and easily recalled upon each use. The unit must be capable of being used in conjunction with at least two additional displays to control one valve. The unit must provide position indication through a full color backlit LCD display. The display shall be a full color LCD display with a backlight. It shall have manual adjustment of the brightness as well as an auto-dimming option. The unit must carry a five year warranty.

DISCHARGE PLUMBING

The plumbing shall consist of 2.50 inch (65 mm) piping and shall incorporate a manual drain control installed below the pump area for ease of access.

DISCHARGE TERMINATION

Each discharge termination shall include the following components:

One (1) 2.50 inch (65 mm) Male NST adapter

One (1) 2.50 inch (65 mm) NST female swivel by male with 45 degree polished elbow

One (1) 2.50 inch (65 mm) female self-venting cap, secured by a chain

LEFT SIDE DISCHARGE

There shall be one (1) gated discharge installed on the left side of the apparatus with the following specified components.

DISCHARGE VALVE

A 3.00 inch (77 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9335 NAVIGATOR PRO 2.0 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9335 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location.

The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Three additional buttons shall be available to be used for preset selection, preset activation, CAFS activation (if provided), and menu activation.

The unit must be capable of being connected to a pressure sensor and provide an LCD display showing pressure as well as valve position indication. Valve position indication must be determined from true position feedback and indicate the exact position of the valve.

The unit must be able to be programmed to PSI, kPa, or Bar for pressure. The unit must be capable of turning on and off a solenoid used in a CAFS system (if provided). The only calibration required is to set the unit to the valve during the initial set up. No other calibration shall be required.

The display shall be a full color LCD display with a backlight. It shall have a manual adjustment of the brightness as well as an auto-dimming option.

DISCHARGE PLUMBING

The plumbing shall consist of 3.00 inch (77 mm) piping and shall incorporate a manual drain control installed below the pump area for ease of access.

DISCHARGE TERMINATION

The discharge termination shall include the following components:

One (1) 3.00 inch (77 mm) NST Straight adapter

One (1) 3.00 inch (77 mm) NST female by 4.00 inch (100 mm) Storz with 30 degree elbow

One (1) 4.00 inch (100 mm) Storz cap, secured by a chain

RIGHT SIDE DISCHARGE

There shall be one (1) gated discharge installed on the right side of the apparatus with the following specified components.

DISCHARGE VALVE

A 2.50 inch (65 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9335 NAVIGATOR PRO 2.0 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9335 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be

completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Three additional buttons shall be available to be used for preset selection, preset activation, CAFS activation (if provided), and menu activation.

The unit must be capable of being connected to a pressure sensor and provide an LCD display showing pressure as well as valve position indication. Valve position indication must be determined from true position feedback and indicate the exact position of the valve.

The unit must be able to be programmed to PSI, kPa, or Bar for pressure. The unit must be capable of turning on and off a solenoid used in a CAFS system (if provided). The only calibration required is to set the unit to the valve during the initial set up. No other calibration shall be required.

The display shall be a full color LCD display with a backlight. It shall have a manual adjustment of the brightness as well as an auto-dimming option.

DISCHARGE PLUMBING

The plumbing shall consist of 2.50 inch (65 mm) piping and shall incorporate a manual drain control installed below the pump area for ease of access.

DISCHARGE TERMINATION

Each discharge termination shall include the following components:
One (1) 2.50 inch (65 mm) Male NST adapter
One (1) 2.50 inch (65 mm) NST female swivel by male with 45 degree polished elbow
One (1) 2.50 inch (65 mm) female self-venting cap, secured by a chain

RIGHT SIDE MASTER DISCHARGE

There shall be one (1) master discharge installed on the right side of the apparatus provided with the following specified components.

DISCHARGE VALVE

A 3.00 inch (77 mm) Akron Brass 8000 series 'electric valve' with a bronze flat ball and 4.00 inch (100 mm) discharge threads.

STYLE 9335 NAVIGATOR PRO 2.0 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9335 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Three additional buttons shall be available to be used for preset selection, preset activation, CAFS activation (if provided), and menu activation.

The unit must be capable of being connected to a pressure sensor and provide an LCD display showing pressure as well as valve position indication. Valve position indication must be determined from true position feedback and indicate the exact position of the valve.

The unit must be able to be programmed to PSI, kPa, or Bar for pressure. The unit must be capable of turning on and off a solenoid used in a CAFS system (if provided). The only calibration required is to set the unit to the valve during the initial set up. No other calibration shall be required.

The display shall be a full color LCD display with a backlight. It shall have a manual adjustment of the brightness as well as an auto-dimming option.

DISCHARGE PLUMBING

The plumbing shall consist of 3.00 inch (77 mm) piping and shall incorporate a manual drain control installed below the pump area for ease of access.

DISCHARGE TERMINATION

The discharge termination shall include the following components:

One (1) 4.00 inch (100 mm) NST adapter

One (1) 4.00 inch (100 mm) NST female by 5.00 inch (125 mm) Storz with 30 degree elbow

One (1) 5.00 inch (125 mm) Storz cap, secured by a chain

INTERNAL BODY SPEEDLAY MODULE

The apparatus body shall include the addition of a horizontal transverse speedlay compartment assembly approximately twenty-eight 28.00 inch (711.2 mm) front to back. This assembly shall be forward of the apparatus body, above the rearward portion of the water pump and the side discharge panels.

The speedlay compartment shall be constructed utilizing a combination of the same structural tubing and formed sheet metal as used on the structural body module. The structure shall be welded conforming to the same A.W.S. Certified welding procedure as used on the structural body module. These processes shall ensure the quality of structural stability of the speedlay compartment module. This assembly shall be and shall span the body transversely side to side.

The forward area of this compartment shall be recessed to accommodate the aerial travel rest with the speedlays (described elsewhere within these specifications) located to the rear.

The speedlay module shall be attached to the upper portion of the forward most body compartment using a minimum of grade 5 hardware and shall be separated from the apparatus cab with a gap. This gap is necessary to accommodate the flexing of the chassis frame rails that is encountered while the vehicle is in transit so that harmful torsional forces are not transmitted into the structural framework.

The floors of the speedlay bays shall be removable to allow simple access to the plumbing manifolds for complete plumbing service and valve maintenance. Access to valves shall not require removal of operator panels or pump panels.

Chicksan swivels shall be installed above each speedlay hose bed to allow removal of the speedlay trays and accessible enough for hose couplings to be tightened on to chicksans. Chicksan swivels shall swing from left to right to allow attached hose to be deployed from either

side.

Any exposed area of the assembly shall be finished to match the body configuration matching body job color paint and diamond plate surfaces where applicable.

A removable speedlay hose bed tray shall be provided for each bay specified.

ALUMINUM SPEEDLAY TRAYS

The three (3) removable speedlay trays shall be made of .188-inch aluminum material with a DA finish.

Each tray shall have vertical and horizontal hand holds for ease of handling. Slots shall be provided in the floor of the tray for hose drainage.

1 3/4" SPEEDLAY

A speedlay with the following specified components shall be provided for up to 200 feet (60 m) of 1.75 inch (44.4 mm) hose.

There shall be a total of two (2) provided.

DISCHARGE VALVE

A 2.00 inch (50 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9335 NAVIGATOR PRO 2.0 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9335 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Three additional buttons shall be available to be used for preset selection, preset activation, CAFS activation (if provided), and menu activation.

The unit must be capable of being connected to a pressure sensor and provide an LCD display showing pressure as well as valve position indication. Valve position indication must be determined from true position feedback and indicate the exact position of the valve.

The unit must be able to be programmed to PSI, kPa, or Bar for pressure. The unit must be capable of turning on and off a solenoid used in a CAFS system (if provided). The only calibration required is to set the unit to the valve during the initial set up. No other calibration shall be required.

The display shall be a full color LCD display with a backlight. It shall have a manual adjustment of the brightness as well as an auto-dimming option.

DISCHARGE PLUMBING

The plumbing shall consist of 2.00 inch (50 mm) piping and shall incorporate a manual drain control installed below the pump area for ease of access.

DISCHARGE TERMINATION

Each discharge termination shall include the following components:

One (1) 2.00 inch (50 mm) NPT x 1.50 inch (38 mm) NST brass chicksan swivel

2 1/2" SPEEDLAY

A speedlay with the following specified components shall be provided for up to 200 feet (60 m) of 2.50 inch (63.5 mm) hose.

There shall be a total of one (1) provided.

DISCHARGE VALVE

A 2.50 inch (65 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9335 NAVIGATOR PRO 2.0 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9335 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location.

The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Three additional buttons shall be available to be used for preset selection, preset activation, CAFS activation (if provided), and menu activation.

The unit must be capable of being connected to a pressure sensor and provide an LCD display showing pressure as well as valve position indication. Valve position indication must be determined from true position feedback and indicate the exact position of the valve.

The unit must be able to be programmed to PSI, kPa, or Bar for pressure. The unit must be capable of turning on and off a solenoid used in a CAFS system (if provided). The only calibration required is to set the unit to the valve during the initial set up. No other calibration shall be required.

The display shall be a full color LCD display with a backlight. It shall have a manual adjustment of the brightness as well as an auto-dimming option.

DISCHARGE PLUMBING

The plumbing shall consist of 2.50 inch (65 mm) piping and shall incorporate a manual drain control installed below the pump area for ease of access.

DISCHARGE TERMINATION

Each discharge termination shall include the following components:

One (1) 2.50 inch (65 mm) NPT x 2.50 inch (65 mm) NST brass chicksan swivel

SPEEDLAY DOORS

The speedlay compartment doors shall be roll-up style doors.

R·O·M ROLL-UP DOOR

A R•O•M Corporation Series IV roll-up shutter door shall be installed. Each shutter slat, track, bottom rail, and drip rail shall be constructed from anodized 6063 T6 aluminum.

Shutter slats shall feature a double wall extrusion 0.315 inches thick with a concave interior surface to minimize loose equipment jamming the shutter door closed. Shutter slats shall feature an interlocking end shoe to prevent side to side binding of the shutter door during operation. Slats must have interlocking joints with an inverted locking flange. Slat inner seal shall be a one piece PVC extrusion; seal design shall be such to prevent metal to metal contact while minimizing dirt and water from entering the compartment.

Shutter door track shall be one piece design with integral overlapping flange to provide a clean finished look without the need of caulk. Door track shall feature an extruded Santoprene rubber double lip low profile side seal with a silicone co-extruded back to reduce friction during shutter operation.

Shutter bottom rail shall be a one piece double wall extrusion with integrated finger pull. Finger pull shall be curved upward with a linear striated surface to improve operator grip while operating the shutter door. Bottom rail shall have a smooth contoured interior surface to prevent loose equipment from jamming the shutter door. Bottom rail seal shall be made from Santoprene; it will be a double “V” seal to prevent water and debris from entering compartment. Bottom rail lift bar shall be a one piece “D” shaped aluminum extrusion with linear striations to improve operator grip during operation. Lift bar shall have a wall thickness of 0.125 inches. Lift bar shall be supported by no less than two pivot blocks; pivot blocks shall be constructed from Type 66 Glass filled reinforced nylon for superior strength. Bottom rail end blocks shall have incorporated drain holes which will allow any moisture that collects inside the extrusion to drain out.

Shutter door shall have an enclosed counterbalance system. Counterbalance system shall be 4.00 inches in diameter and held in place by 2 heavy duty 18 gauge zinc plated plates. Counterbalance system shall have 2 over-molded rubber guide wheels to provide a smooth transition from vertical track to counterbalance system.

SIDE COMPARTMENT DOORS/TRACK/TRIM/WET PAINTED

The side compartment roll up doors, track and trim shall be wet finish painted to color match the apparatus body.

ROLL-UP DOOR PROTECTORS

There shall be a protective cover installed under two (2) speedlay compartment door rolls to protect the door in the rolled up position.

ROLL-UP DOOR PROTECTOR FINISH

The roll-up door protector shall be left Natural finish.

DOOR ASSIST STRAPS

There shall be nylon straps installed on both the left and right side 'Speedlay' compartment doors to assist in closing the door.

DOOR OPEN INDICATOR

Each roll up door shall have an integral door open indicator magnet in the lift bar.

If the door is not properly closed and the parking brake is released, it shall activate the “hazard light” in the cab to alert the crew.

SPEEDLAY COMPARTMENT LIGHTING

Interior lighting shall be provided as specified below in each of the Speedlay compartments.

Two (2) ROM LED strip lights shall be installed in two (2) mid height compartment(s).

FRONT BUMPER DISCHARGE OUTLET

One (1) front bumper discharge outlet shall be provided and installed in the location specified.

DISCHARGE VALVE

A 2.50 inch (65 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9335 NAVIGATOR PRO 2.0 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9335 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Three additional buttons shall be available to be used for preset selection, preset activation, CAFS activation (if provided), and menu activation.

The unit must be capable of being connected to a pressure sensor and provide an LCD display showing pressure as well as valve position indication. Valve position indication must be determined from true position feedback and indicate the exact position of the valve.

The unit must be able to be programmed to PSI, kPa, or Bar for pressure. The unit must be capable of turning on and off a solenoid used in a CAFS system (if provided). The only calibration required is to set the unit to the valve during the initial set up. No other calibration shall be required.

The display shall be a full color LCD display with a backlight. It shall have a manual adjustment of the brightness as well as an auto-dimming option.

DISCHARGE PLUMBING

The plumbing shall consist of 2.00 inch (50 mm) piping and incorporate a manual drain control installed below the pump area for ease of access. Auto-drain(s) shall be installed in the discharge piping at lowest point of the plumbed system.

DISCHARGE TERMINATION

Each discharge termination shall include the following components:

One (1) 2.00 inch (50 mm) NPT x 1.50 inch (38 mm) NST, polished stainless steel chicksan swivel

FRONT BUMPER DISCHARGE LOCATION

The front bumper discharge shall be mounted on top of the gravel shield of the front bumper extension. The discharge shall be placed outboard of the frame rail extensions on the left side.

The discharge shall terminate with a chicksan swivel to accommodate deployment of hose in different directions.

AERIAL FEED /PUMP - REAR INLET

There shall be an aerial feed waterway provided and installed on the apparatus.

The aerial waterway feed shall be supplied from the discharge valve on the water pump and by the auxiliary rear inlet. The rear inlet shall be installed in a recessed stainless steel inlet box located on the lower rear of the apparatus, centered.

One (1) Tecniq model #E03-W000 series hooded light shall be installed to illuminate the inlet.

The following specified components shall be provided:

DISCHARGE VALVE

A 4.00 inch (100 mm) Akron Brass 8000 series 'electric valve' with a bronze flat ball.

STYLE 9335 NAVIGATOR PRO 2.0 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9335 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controller must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Three additional buttons shall be available to be used for preset selection, preset activation, CAFS activation (if provided), and menu activation.

The unit must be capable of being connected to a Flow Sensor or Pressure Sensor and provide an LCD display showing pressure and flow as well as valve position indication.

Valve position indication must be determined from true position feedback and indicate the exact position of the valve.

The unit must be able to be programmed to GPM or LPM for flow as well as PSI, kPa, or Bar for pressure. The unit must be capable of turning on and off a solenoid used in a CAFS system (if provided). The only calibration required is to set the unit to the valve during the initial set up. No other calibration shall be required.

The display shall be a full color LCD display with a backlight. It shall have a manual adjustment of the brightness as well as an auto-dimming option.

AERIAL PLUMBING

The aerial feed shall be plumbed from the discharge valve on the pump, located on the center 8-bolt flange, to the base of the aerial turntable. A 'tee' connection shall be provided below the turntable to extend the piping to the rear of the apparatus so that it may serve as a rear discharge or an aerial feed port at the rear of the apparatus. The plumbing shall be drained with a 1.50 inch (38 mm) drain valve system.

AERIAL INLET TERMINATION

The aerial waterway inlet shall include the following components:

One (1) 4.00 inch (100 mm) NST female swivel by 5.00 inch (125 mm) Storz with 30 degree elbow

One (1) 5.00 inch (125 mm) Storz cap, secured by a chain

AERIAL FEED GAUGE

One (1) gauge shall be installed at the aerial inlet for reading inlet pressure.

The gauge(s) shall be Innovative Controls Inc., 2.50 inch (65 mm), unless otherwise specified.

GAUGE SCALE

Each gauge shall be marked for reading a pressure range of 0-400 PSI.

GAUGE FACE COLOR

Each gauge shall have black markings on a white face.

LED BACKLIT GAUGE(S)

One (1) gauge(s) shall be LED backlit, Red.

BEZEL FOR 2.5" PRESSURE GAUGE

There shall be a chrome finish, die cast metal bezel around the 2.50 inch (65 mm) Aerial Inlet and/or aerial discharge pressure gauge(s) as specified. The bezel shall be equipped with an easily identifiable recessed label for color-coding for the gauge and color-coding and verbiage on the handle.

There shall be a total of one (1).

TANK TO PUMP LINE

The connection between the tank and the pump shall be capable of the flow recommendations as set forth in (NFPA) 1901, Standard for Automotive Fire Apparatus, latest revision and shall be tested to those standards when the pump is being certified.

One (1) non-collapsible flexible hose and valve shall be incorporated into the tank to pump plumbing to allow movement in the line as the chassis flexes to avoid damage during normal road operation. Three (3) inch SSTL piping shall be used to complete the connection from the tank to pump valve to the water tank.

TANK TO PUMP CHECK VALVE

There shall be a tank to pump check valve, conforming to NFPA standard requirements to prevent water from back flowing at an excessive rate if the pump is being supplied from a pressurized source. The check valve shall be mounted as an integral part of the pump suction extension. A hole up to .25 inch (6.00 mm) is allowable in the check valve to release steam or other pressure buildup so that the void between the valve and check valve may drain of water that could be subject to freezing.

TANK TO PUMP VALVE

A 3.00 inch (77 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9333 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9333 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Two additional buttons shall be available to be used for preset selection, preset activation and menu navigation. The controller must have up to three preset locations that can be user set and easily recalled upon each use. The unit must be capable of being used in conjunction with at least two additional displays to control one valve. The unit must provide position indication through a full color backlit LCD display. The display shall be a full color LCD display with a backlight. It shall have manual adjustment of the brightness as well as an auto-dimming option. The unit must carry a five year warranty.

TANK FILL LINE

One (1) 2.00 inch (50.80 mm) tank fill/recirculating line shall be installed from the pump directly to the booster tank.

TANK FILL VALVE

A 2.00 inch (50 mm) Akron Brass 8000 series 'electric valve' with stainless steel ball.

STYLE 9333 VALVE CONTROLLER

The controller shall be an Akron Brass Style 9333 Navigator Pro™ 2.0 Valve Controller and shall be installed at the pump operator's panel location. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator. Two additional buttons shall be available to be used for preset selection, preset activation and menu navigation. The controller must have up to three preset locations that can be user set and easily recalled upon each use. The unit must be capable of being used in conjunction with at least two additional displays to control one valve.

The unit must provide position indication through a full color backlit LCD display. The display shall be a full color LCD display with a backlight. It shall have manual adjustment of the brightness as well as an auto-dimming option. The unit must carry a five year warranty.

FORMED ALUMINUM BODY

The apparatus body shall be a formed aluminum design, which serves as the structural skeleton to support the body and its contents. The entire formed structure shall be welded together utilizing an A.W.S. Certified welding procedure.

BODY STRUCTURE MEMBERS

The body shall have structural members in certain areas of the body. The body shall be designed for maximum strength to weight ratio, therefore the gauge of sheet metal and structural members varies from .125 inches (3.18 mm) to .250 inches (6.35 mm) throughout, dependent on the design requirement.

BODY MATERIAL TYPE

All body structural members shall be Aluminum 6061-T6 alloy material. All .125 inch (3.18 mm) sheet material and .188 inch (4.78 mm) sheet materials shall be Aluminum Alloy 5052-H32. These alloys are required because it provides optimum all-around performance for strength, manufacturing properties, and corrosion resistance.

ECK® ANTI-CORROSION PROCESS

Absolutely no dissimilar metals shall be used in the body and its supporting substructure without being separated by Eck®, which prevents corrosion by providing a barrier between dissimilar metals, sealing out moisture and absorbing energy created by a dissimilar metal reaction.

FRONT BODY COMPARTMENT WALLS

The front compartment walls of both forward most compartments shall be sheet finished. No overlay material shall be visible from the interior of the compartments.

REAR BODY COMPARTMENT WALLS

The rear compartment walls of both rearward most compartments shall be sheet finished. No overlay material shall be visible from the interior of the compartments. Access panels from the rear walls shall be strategically placed to ensure access to the rear taillight clusters for any servicing that may be completed.

BODY COMPARTMENT ACCESS PANELS

Removable panels shall be provided in the apparatus body, where needed, to access shut off valves and connection points within the hydraulic system.

COMPARTMENT TOP

The top of the compartments shall be an integral portion of the body. No overlay material shall be visible from the interior of the compartments.

COMPARTMENT FLOORS

The body compartments shall be enclosed with aluminum sheet metal as specified above. The compartment floors shall have a 1.00 inch (25.40 mm) lip downward at the door opening side of the compartment. This lip shall integrate with a structural member on the bottom edge and form a “sweep-out” compartment. This design shall also allow for a structural flush fitting door frame and a complete door/weather seal or a roll up type door as specified.

COMPARTMENT LOAD CAPACITY

Each compartment shall have a minimum of one additional structural compartment floor support centered on the underside of the compartment floor. This additional member shall be integral with the body. Each compartment must be designed to carry a working load of:

Full depth side compartment: 1,000 lbs. (453.59 kg) per compartment
Half depth side compartment: 750 lbs. (340.19 kg) per compartment

NOTE: These values are for design purposes only for individual compartment construction and are not meant to be used as an actual overall weight rating for equipment load per compartment for the specified apparatus. The apparatus shall be engineered such that the completed unit, when loaded to its estimated in-service weight, shall comply with the gross axle weight ratings {GAWR}, the overall gross vehicle weight rating {GVWR}, and the chassis manufacturer's load balance guidelines per NFPA.

FASTENERS

All bolts and nuts used in the finish construction of the apparatus shall be stainless steel. Any bolt extending into a compartment or into the hose bed area shall have an acorn nut attached or be protected in such manner where sharp edges are avoided.

PAINT SPECIFICATIONS

All bright metal fittings, if unavailable in stainless steel, shall be heavily chrome plated.

Critical body and sub-frame area which cannot be primed after assembly shall be pre-painted.

All welded metal surfaces shall be ground to a smooth surface prior to a degreasing and high pressure, high temperature phosphatizing process. The entire surface shall be sprayed with a non-chromate sealing compound to prevent formulation of stains or flash rust on previously phosphatized parts.

The paint applied to the apparatus shall be AkzoNobel, Sikkens brand, LVBT650 basecoat, applied throughout a multi-step process including at least two coats of each color and clear coat finish.

The coating shall be an infra-red, baked air dried. The coatings shall provide full gloss finished suitable for application by high-pressure airless or conventional low pressure air atomizing spray.

The coatings shall not contain lead, cadmium or arsenic. The polyisocyanate component shall consist of only aliphatic isocyanates, with no portion being aromatic isocyanates in character. The solvents used in all components and products shall not contain ethylene glycol mono-ethyl ethers

or their acetates (commercially recognized as cello solves), nor shall they contain any chlorinated hydrocarbons.

The products shall have no adverse effects on the health or nor present any unusual hazard to personnel when used according to manufacturer's recommendations for handling and proper protective safety equipment, and for its intended use.

The coating system, as supplied and recommended for application, shall meet all applicable federal, state and local laws and regulations now in force or at any time during the courses of the bid.

The manufacturer shall supply (upon request) for each product and component of the system, a properly complete OSHA "Safety Data Sheet".

The following documents of the issue in effect on the date of the invitation to quote form a part of this document to the extent specified herein:

Federal Standards: Number 141A and 141B paint, varnish, lacquer and related material: methods of inspection, sampling, and testing.

Military Standard: MIL-C 83486B Coating, Urethane, Aliphatic Isocyanates, for Aerospace applications.

Industry Methods and Standards: ASTM Method of Analysis (American Society for testing and Materials). BMS 10-72A (Boeing Material Specifications).

The entire exterior body structure (excluding roll-up doors) shall receive the primer coats and the finish coats. The apparatus body will be painted in a down draft type paint booth to reduce dust, dirt or impurities in the finish paint. The painted surfaces shall have a finish with no runs, sags, craters, pinholes or other defects. The coating will meet the following test performance properties as a minimum standard.

BODY PAINT COLOR

The apparatus body shall be painted FLNA 32525 Red to match PPG 910853.

LINE-X COMPARTMENT FINISH

The compartment interiors shall be coated with Line-X.

COMPARTMENT FINISH COLOR

The Line-X Color shall be Medium Gray.

UNDERCOATING

The underside of the apparatus body shall be cleaned and prepared for the application of a sprayed on automotive type undercoating for added corrosion resistance.

The undercoating is to be of a quick dry rubberized, solvent based coating that is (black) in color. Resists rust and abrasion as it seals out dust and moisture.

The application does not include any additional underbody components.

FRONT AND REAR OVERLAYS

The lower front face of the apparatus body shall have overlay panels installed to match those provided on the adjacent pump discharge panels.

The entire rear face of the apparatus body shall have raw aluminum overlays installed for the installation of chevron striping.

All overlay materials shall be coated with 3M adhesive sealant on the back portion to provide an insulating barrier between dissimilar metals.

CATWALKS

The catwalks shall be constructed with materials of a non-slip .125 inch embossed aluminum diamond plate.

BODY ROOF COVER

The roof of the body shall be overlaid with materials of an embossed aluminum diamond plate.

AERIAL BODY MOUNTING SYSTEM

The complete apparatus body shall be modular in construction and built separately from the chassis. The apparatus body shall be mounted to the chassis framework. The body shall be combination bolted and welded to hangers to reduce fatigue of the body material in mounting locations.

Rubber isolators, of a specific durometer to carry the necessary loads of the apparatus body, shall be provided at various points where needed to help reduce vibration and minimize the stress absorbed by the body caused from chassis frame rail flexing.

BODY STRUCTURE WIDTH

The width of the apparatus body from the outside of the left compartments to the outside of the right compartments shall be 98" excluding any attached peripherals such as rub rails, fenderettes, grab handles, etc.

COMPARTMENT DRAINS

Two (2) .50" diameter drain holes shall be provided in all exterior apparatus compartments. Drains shall be protected from dust, dirt, and moisture by the stiffener channel on the underside of the compartment.

COMPARTMENT VENTILATION

To allow for proper air circulation & flow, each compartment shall have a venting route. The venting locations shall be determined by best fit for each body configuration. Louvered plate vents shall be installed appropriately on the compartment interior walls.

COMPARTMENTATION

The following compartments shall be supplied on the apparatus:

Compartment "L1"

There shall be one (1) compartment located above the forward outriggers on the left side of the apparatus.

The approximate interior dimensions of this compartment shall be 23.50" wide x 21.25" high with a depth of 24.75".

The framed opening shall measure approximately 23.50" wide x 19.50" high.

This compartment shall have a painted lift up hinged door with a D ring handle latch and gas shock hold open device. A single TecNiq LED light shall be installed in the ceiling of this compartment.

Compartment "L2"

There shall be one (1) full height compartment ahead of the rear wheels on the left side of the apparatus.

The approximate interior dimensions of this compartment shall be 36.75" wide by 70.75" high with a depth of 24.75".

The framed opening shall measure approximately 36.50" wide by 67.25" high.

Compartment "L3"

There shall be one (1) compartment located above the rear wheels on the left side of the apparatus.

The approximate interior dimensions of this compartment shall be 55.00" wide by 40.50" high with a depth of 24.75”.

The framed opening shall measure approximately 55.25" wide by 37.25" high.

Compartment "L4"

There shall be one (1) compartment located above the rear wheels on the left side of the apparatus.

The approximate interior dimensions of this compartment shall be 55.50" wide by 32.25" high with a depth of 24.00”.

The framed opening shall measure approximately 55.25" wide by 29.00" high.

Compartment "L5"

There shall be one (1) compartment behind the rear wheels on the left side of the apparatus.

The approximate interior dimensions of this compartment shall be 44.25" wide by 59.25" high with a depth of 24.00".

The framed opening shall measure approximately 44.00" wide by 59.00" high.

Compartment "R1"

There shall be one (1) compartment located above the forward outriggers on the right side of the apparatus.

The approximate interior dimensions of this compartment shall be 23.50" wide x 21.25" high with a depth of 24.75".

The framed opening shall measure approximately 23.50" wide x 19.50" high.

This compartment shall have a painted lift up hinged door with a D ring handle latch and gas shock hold open device. A single TecNiq LED light shall be installed in the ceiling of this compartment.

Compartment "R2"

There shall be one (1) full height compartment ahead of the rear wheels on the right side of the apparatus.

The approximate interior dimensions of this compartment shall be 36.75" wide by 70.75" high with a depth of 24.75".

The framed opening shall measure approximately 36.50" wide by 67.25" high.

Compartment "R3"

There shall be one (1) compartment located above the rear wheels on the right side of the apparatus.

The approximate interior dimensions of this compartment shall be 55.00" wide by 40.50" high with a depth of 24.75".

The framed opening shall measure approximately 55.25" wide by 37.25" high.

Compartment "R4"

There shall be one (1) compartment located behind the rear wheels on the right side of the apparatus.

The approximate interior dimensions of this compartment shall be 44.25" wide by 30.00" high with a depth of 24.00".

The framed opening shall measure approximately 44.00" wide by 25.50" high.

ROLL-UP DOOR CONSTRUCTION

All horizontal and vertical side compartment doors shall be roll-up style doors unless otherwise specified.

R·O·M ROLL-UP DOOR

A R•O•M Corporation Series IV roll-up shutter door shall be installed. Each shutter slat, track, bottom rail, and drip rail shall be constructed from anodized 6063 T6 aluminum.

Shutter slats shall feature a double wall extrusion 0.315 inches thick with a concave interior surface to minimize loose equipment jamming the shutter door closed. Shutter slats shall feature an interlocking end shoe to prevent side to side binding of the shutter door during operation. Slats must have interlocking joints with an inverted locking flange. Slat inner seal shall be a one piece PVC extrusion; seal design shall be such to prevent metal to metal contact while minimizing dirt and water from entering the compartment.

Shutter door track shall be one piece design with integral overlapping flange to provide a clean finished look without the need of caulk. Door track shall feature an extruded Santoprene rubber double lip low profile side seal with a silicone co-extruded back to reduce friction during shutter operation.

Shutter bottom rail shall be a one piece double wall extrusion with integrated finger pull. Finger pull shall be curved upward with a linear striated surface to improve operator grip while operating the shutter door. Bottom rail shall have a smooth contoured interior surface to prevent loose equipment from jamming the shutter door. Bottom rail seal shall be made from Santoprene; it will be a double “V” seal to prevent water and debris from entering compartment. Bottom rail lift bar shall be a one piece “D” shaped aluminum extrusion with linear striations to improve operator grip during operation. Lift bar shall have a wall thickness of 0.125 inches. Lift bar shall be supported by no less than two pivot blocks; pivot blocks shall be constructed from Type 66 Glass filled reinforced nylon for superior strength. Bottom rail end blocks shall have incorporated drain holes which will allow any moisture that collects inside the extrusion to drain out.

Shutter door shall have an enclosed counterbalance system. Counterbalance system shall be 4.00 inches in diameter and held in place by 2 heavy duty 18 gauge zinc plated plates. Counterbalance system shall have 2 over-molded rubber guide wheels to provide a smooth transition from vertical track to counterbalance system.

SIDE COMPARTMENT DOORS/TRACK/TRIM/WET PAINTED

The side compartment roll up doors, track and trim shall be wet finish painted to color match the apparatus body.

ROLL-UP DOOR PROTECTORS

There shall be a protective cover installed under Seven (7) body side compartment door roll(s) to protect the door in the rolled up position.

ROLL-UP DOOR PROTECTOR FINISH

The roll-up door protector shall be left Natural finish.

DOOR OPEN INDICATOR

Each roll up door shall have an integral door open indicator magnet in the lift bar.

If the door is not properly closed and the transmission is placed into drive or reverse mode with the parking brake released, it shall activate the “hazard light” in the cab to alert the crew.

HINGED DOOR CONSTRUCTION

The compartment doors above the front outriggers shall be flat overlap, double seal style with double panel construction. Outer door panel shall be 3/16" aluminum with an inner door panel of 1/8" aluminum. Compartment door seals shall be closed cell rubber, attached to the perimeter of the door to seal to the surface of the body and attached to the inner door flange to seal the inner pan of the door.

Compartment door latches shall be Eberhard #206 with Hansen stainless steel bent "D" ring outer latch assembly. The compartment door latches shall be dual catch slam action type. The second door of a double door compartment shall have an internal slam-action latch.

Automatic, gas-filled cylinder type, door stay arms shall be provided - two (2) per horizontally hinged door. The stay arms shall cushion door movement.

Compartment door hinges shall be full-length polished stainless steel piano type with 1/4" stainless steel pin. Hinges shall be bolted to the body and to the doors.

DOOR ASSIST STRAPS

There shall be nylon straps installed on Two (2) compartment doors to assist in closing the door.

DOOR OPEN INDICATOR

Two (2) body compartment hinged doors shall be provided with an auto door switch. The switch shall be installed on the primary compartment door and activate the open door indicator when the door is opened.

The switch shall be of a magnetic style reed indicator type. Each switch shall be hermetically sealed rated to 10,000,000 cycles. The contact and magnetic housing shall snap-lock in the body material, one on the body and one in the door.

If the door is not properly closed and the transmission is placed into drive or reverse mode with the parking brake released, it shall activate the “hazard light” in the cab to alert the driver.

REAR SUPPLEMENTAL STORAGE COMPARTMENT

A supplemental storage compartment shall be provided on the rear vertical face of the apparatus on the driver's side. The compartment shall be as large as is practical within the space available.

The compartment shall be provided with a vertically hinged door constructed from the same material as the rear body overlay. The door shall be provided with a Hansen stainless steel bent "D" ring outer latch assembly with single quarter turn latch assembly. The door shall be connected to the "Door Open" circuit in the cab.

A single TecNiq LED light shall be installed in the ceiling of this compartment.

SILL PLATES

Mirrored stainless steel sill plates shall be installed at the bottom of Nine (9) body compartment door openings as specified.

ROM COMPARTMENT STRIP LIGHTING

ROM LED strip lighting shall be installed in the compartments as specified. Each light strip shall be of maximum length available to fit the opening.

The lighting in each compartment shall be on a separate circuit, and only illuminate when the compartment doors are open.

Two (2) ROM LED strip lights shall be installed in three (3) over wheel compartment(s).
Two (2) ROM LED strip lights shall be installed in one (1) low side compartment(s).
Two (2) ROM LED strip lights shall be installed in two (2) full height compartment(s).
Two (2) ROM LED strip lights shall be installed in the rear ladder compartment.

FLUSH FLAT BACK

The rear of the apparatus shall be equipped with a flush back construction with no tailboard extension.

The rear body shall be constructed such that the angle of departure shall be no less than 8 degrees at the rear of the apparatus when fully loaded, per (NFPA) 1901, Standard for Automotive Fire Apparatus.

WHEEL WELLS

Wheel wells shall have semicircular black polymer composite inner liners that are bolted to the wheel well panel and supported inboard by brackets that are connected to the body framework. Each wheel well shall be a continuous piece with no breaks or ledges where road grime or debris may accumulate. This liner shall be removable for access to suspension assembly for repairs. There shall be no exception to the bolted wheel well inner liner requirement.

WHEEL WELL PANELS

The body panel in the wheel well area on each side of the body shall be fabricated of same material type as the body and finish painted.

SCBA BOTTLE COMPARTMENTS

Cylindrical SCBA storage compartments shall be installed in the wheel well area above the wheel well liner, protected from dirt, rocks, and other debris.

The storage compartments shall be made of a tube that interfaces with a door and housing - fastened to the wheel well panel for a secure installation. The inside of each compartment shall be lined with material (if required) to protect the air bottles from being damaged.

The storage compartments shall be installed in the apparatus at an inclined angle and incorporate a 1" nylon safety loop to be attached to the top of the bottle, to prevent the bottles from sliding forward when stored. There shall be holes drilled in the tubes for drainage in the event that water enters the compartment. Each SCBA compartment shall be a minimum internal diameter of 7.5" and be at least 25" deep.

There shall be storage provided for three (3) bottles on the driver's side of the apparatus with one forward and two (2) between the tandem axle wheel wells. There shall be storage provided for four (4) bottles on the officer's side of the apparatus with one forward and one rearward and two (2) between the tandem axle wheel wells.

A polished finish stainless steel door with a push button latch shall be provided for each location.

FUEL FILL ASSEMBLY

There shall be a fuel fill assembly located on the driver's side rear wheel well panel accessing the chassis supplied fuel tank. The assembly shall be located in the area rearward of the axle that best suits efficient fuel filling with the space appropriated on the left side of the apparatus.

The fuel fill assembly will have a drain to allow overflow to drain on the back side of the apparatus body. The fuel fill cap shall be removable, manufactured of plastic materials, green in color.

The fuel fill cap shall be labeled "DIESEL FUEL". The fuel fill neck shall have a .375 inch inside diameter vent line installed from the top of the fuel tank to the fill tube.

Each fuel fill compartment shall be provided with a polished finish stainless steel door with a magnetic latch.

FENDERETTES

Four (4) polished stainless steel fenderettes shall be provided on body rear wheel well openings, two (2) each side. A rubber welting shall be provided between the body and the crown to seal the seam and restrict moisture from entering. A dielectric barrier shall be provided between the fender crown fasteners (screws) and the fender sheet metal to resist deterioration.

RIGHT SIDE EZ HOSE LOAD

There shall be one (1) hose bed area provided on the apparatus on the right side of the aerial turntable area. The hose bed shall be capable of holding 1000 feet of 5 inch hose in a flat lay. Access shall be from the rear of the apparatus for ease of deployment.

VINYL COATED NYLON HOSE BED COVER

A hose bed cover constructed of vinyl coated nylon material shall be provided and installed on the apparatus.

The cover shall be held in place by extruded aluminum channel on the front and an elastic shock cord sewn into the tarp with brass grommets where the shock cord passes through the hose bed cover on the sides. Hooks shall be provided on the sides to provide a means of attaching the cover to the apparatus. The hooks shall be made of cast aluminum.

HOSE BED COVER COLOR

The hose bed cover shall be red in color.

REAR HOSEBED RESTRAINT

There shall be a vinyl flap that extends down over the rear of the hose bed provided and installed with the apparatus. The cover shall be fastened by an elastic shock cord sewn into the tarp with brass grommets where the shock cord passes through the hose bed cover. Hooks shall be provided on the lower corners to provide a means of attaching the cover to the apparatus. The hooks shall be made of cast aluminum.

THE COVER WILL BE HELD IN PLACE BY AN EXTRUDED ALUMINUM CHANNEL AT THE TOP.

REAR FLAP COLOR

The rear flap shall be red.

HOSE BED LIGHT

There shall be one (1) 4.00 inch round LED light provided to illuminate the hose bed.

The light shall be recess mounted in the upper forward wall of the hose bed area.

HOSE BED LIGHT ACTIVATION

The hose bed light shall be activated when the park brake is set.

TANK CAPACITY

The tank shall be 500 gallons (1893 liters) in capacity.

UPF POLY TANK III

The booster tank shall be constructed of PT3™ polypropylene material. This material shall be a non-corrosive stress relieved thermoplastic and UV stabilized for maximum protection. The booster and/or foam tank shall be of a specific configuration and is so designed to be completely independent of the body and compartments.

All joints and seams shall be fused using nitrogen gas as required and tested for maximum strength and integrity. The tank construction shall include PolyProSeal™ technology wherein a sealant shall be installed between the plastic components prior to being fusion welded. This sealing method will provide a liquid barrier offering leak protection in the event of a weld compromise. The top of the booster tank is fitted with removable lifting assembly designed to facilitate tank removal. The transverse and longitudinal swash partitions shall be manufactured of a minimum of 3/8" PT3™ polypropylene. All partitions shall be equipped with vent and air holes to permit movement of air and water between compartments. The partitions shall be designed to provide maximum water flow. All swash partitions interlock with one another and are completely fused to each other as well as to the walls of the tank. All partitions and spacing shall comply with (NFPA) 1901, Standard for Automotive Fire Apparatus. The walls shall be welded to the floor of

the tank providing maximum strength as part of the tank's unique Full Floor Design™. Tolerances in design allow for a maximum variation of .125 on all dimensions.

WATER FILL TOWER AND COVER

The tank shall have a combination vent and manual fill tower. The fill tower shall be constructed of .50 inch (12.7 mm) PT3™ polypropylene. The fill tower shall be blue in color indicating that it is a water-only fill tower. The tower shall be located in the best suitable location. This is usually in the right front corner of the tank unless an alternate location is required. The tower shall have a .25 inch (6.4 mm) thick removable polypropylene screen and a PT3™

Polypropylene hinged cover. The capacity of the tank shall be engraved on the top of the fill tower lid. Inside the fill tower there shall be a combination vent/overflow pipe. The vent overflow shall be a minimum of schedule 40 polypropylene pipe with a minimum

I. D. of 4.00 inch (100 mm) that is designed to run through the tank and shall be piped to discharge water behind the rear wheels as required in (NFPA) 1901, Standard for Automotive Fire Apparatus, so as to not interfere with rear tire traction.

The tank cover shall be constructed of .50 inch (12.7 mm) thick PT3™ polypropylene and UV stabilized, to incorporate a multi-piece locking design, which allows for individual removal and inspection if necessary. The tank cover(s) shall be flush or recessed 3/8" from the top of the tank and shall be fused to the tank walls and longitudinal partitions for maximum integrity. Each one of the covers shall have hold downs consisting of 2.00 inch (50 mm) minimum polypropylene dowels spaced a maximum of 40.00 inch (1016 mm) apart. These dowels shall extend through the covers and will assist in keeping the covers rigid under fast filling conditions. A minimum of two lifting dowels shall accommodate the necessary lifting hardware.

MOUNTING

The UPF Poly-Tank® III 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 40.00 inch (1016 mm), 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 .25 inch (6.4 mm) x 1.00 inch (25 mm) and a "Shore A" scale 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 2.00 inch (50 mm) x 2.00 inch (50 mm) x .25 inch (6.4 mm) mild steel, stainless steel, or aluminum angle shall be provided or the use of corner angles having a minimum dimension of 4.00 inch (100 mm) x 4.00 inch (100 mm) x 4.00 inch (100 mm) by 6.00 inch (150 mm) 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, halfway 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 3.00 inch (77 mm) x 3.00 inch (77 mm) x .25 inch (6.4 mm) and shall be approximately 6.00 inch (150 mm) to 12.00 inch (304.80 mm) long. These brackets must incorporate rubber isolating pads with a minimum thickness of .25 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 Poly-Tank® III for that purpose. The tank shall be completely removable without disturbing or dismantling the apparatus structure. The tank must be designed and fabricated by a tank manufacturer that is ISO 9001:2008 certified. The ISO certification must be to the current standard in effect at the time of the design and fabrication of the tank.

TANKNOLOGY™ TAG

A tag shall be installed on the apparatus in a convenient location and contain pertinent information including a QR code readable by commercially available smart phones. The information contained on the tag shall include the capacity of the water and foam(s), the maximum fill and pressure rates, the serial number of the tank, the date of manufacture, the tank manufacturer, and contact information. The QR code will allow the user to connect with the tank manufacturer for additional information and assistance.

FILL TOWER

The fill opening shall be approximately 10.00 inches (254.00 mm) x 10.00 inches (254.00 mm). The tower will have a .25 inch (6.40 mm) thick removable polyprene screen and a polyprene hinged type cover that will open if the tank is filled at an excess rate.

There shall be a removable .25 inch (6.40 mm) thick polyprene screen to prevent debris from falling into the tank.

The fill tower shall have a 3.00 inch (75.00 mm) overflow that will discharge from the rear of the tank to the ground behind the rear wheels. The overflow shall terminate above the tank water level when filled to the rated capacity.

TANK CLEANOUT

There shall be a 3.00 inch (77 mm) plug located at the front of the tank for use in draining and cleaning out the tank.

OUTLETS

In addition to the tank suction valve outlet located at the front of the tank, there shall be an outlet provided for the tank fill valve. If there are any additional options selected (such as direct tank inlets), there shall be additional outlets provided to accommodate these items.

REAR CENTER LADDER STORAGE AREA

There shall be a rear center storage area constructed for ladder storage. The ladder storage area shall utilize the area enclosed by the torque box of the aerial device. The ladder storage area shall be constructed as large as possible within the confines of the torque box area.

The ladder storage area shall be used to store ground ladders on edge. The area shall be divided to allow removal of any such ladder without disturbing the storage of any other. The ladders shall be stored on slides to separate the ladders from each other. The lower slides shall be fabricated of extruded polyester structural angles for low friction and prevention of damage to ground ladder rails. The upper slides shall be fabricated of formed aluminum laminated with polypropylene wear pads to hold the ladders in alignment and prevent metal to metal contact between the ladders and slides. The ladder slides shall be bolted in place for easy removal.

Ladder stops shall be provided at the front of the ladder slides to prevent the ladders from sliding forward. A hinged ladder stop shall be provided at the rear to prevent the ladders from sliding rearward and fouling the roll-up door.

Storage for up to six (6) standard hook type pike poles shall be provided in the rear ground ladder storage area, unless otherwise noted. Each pike pole shall be stored in an individual, properly labeled, 2.25" diameter aluminum tube.

The ladder storage area shall also be utilized for storage of any other miscellaneous equipment as available space allows.

A roll-up door shall be provided over the rear ladder storage area to provide access to the storage area and prevent dirt and road grime from drafting into the area.

REAR LADDER DOOR FINISH

The rear ladder compartment door shall be satin aluminum finish.

GROUND LADDERS

The following ground ladders shall be provided:

One (1) Duo-Safety 24 foot (7.0 m) two (2) section aluminum extension ladder(s), model 900A.

Two (2) Duo-Safety 35 foot (10.0 m) two (2) section aluminum extension ladder(s), model 1200.

One (1) Duo-Safety 14 foot (4.0 m) aluminum roof ladder(s) with folding hooks and pronged feet on both ends, model 775DR.

One (1) Duo-Safety 16 foot (5.0 m) aluminum roof ladder(s) with folding hooks and pronged feet on both ends, model 875DR.

One (1) Duo-Safety 20 foot (6.0 m) aluminum roof ladder(s) with folding hooks and pronged feet on both ends, model 875DR.

One (1) Duo-Safety 10 foot (3.0 m) aluminum attic ladder(s), model 585A.

One (1) Duo-Safety 14 foot (4.0 m) aluminum 2-section Fresno ladder(s), model 701-A.

FIRE HOOKS UNLIMITED PIKE POLES

- one (1) Fire Hooks Unlimited 12 foot (3.6 m) solid white ash National Hook(s), model NH-12.

- one (1) Fire Hooks Unlimited 8 foot (2.4 m) solid white ash National Hook(s), model NH-8.

- two (2) Fire Hooks Unlimited 6 foot (1.8 m) solid white ash National Hook(s), model NH-6.

OUTRIGGER ACCESSORIES

The outriggers shall be controlled from the rear of the apparatus. A control box with a hinged door shall be provided and installed, one (1) each side, installed per NFPA, lighted for night operations. There will be a side to side indicator provided and installed at the rear of the apparatus to aid in leveling the unit.

The outrigger control doors shall be fabricated from Mirror finish stainless steel.

AUXILLARY GROUND PAD STORAGE HOLDERS

Two (2) drop-in type auxiliary ground pad storage holders shall be provided. Each holder assembly shall be designed to hold a two (2) auxiliary ground pads. The storage holders shall be located under the apparatus, as close to the rear outrigger/stabilizer as design allows.

The holders shall be fabricated of aluminum.

OUTRIGGER COVERS

Mirrored stainless steel covers shall be installed over the outrigger areas on each side of the apparatus, front and rear. Each active cover shall mount directly to the outrigger stabilizer arm and extend with the outrigger.

TURNTABLE ACCESS CORNER STEPS

A "Corner Step" access step arrangement shall be provided and installed at each rear corner of the apparatus for access to the turntable.

The access steps shall be located rearward of the side body compartments. The step treads shall be constructed of 3/16" aluminum diamond plate with a slip resistant aluminum open grating type stepping material insert.

The steps shall be permanently secured to the body with mechanical fasteners. Five (5) stationary steps with a single fold down step at the bottom shall be provided on each side of the apparatus. When deployed, the fold-down step shall create a safe and comfortable climbing angle.

The steps shall utilize as much of the available space in the rear body corner recessed areas and be as large as is practical. The steps shall be arranged with equal height between and shall be sized to provide an inclined climbing angle.

A mechanical locking mechanism shall be provided to retain each fold down step in a stowed and secured position when in transit or when not in use. Access step illumination shall be provided during low light conditions.

If the step is not properly stowed and the transmission is placed into drive or reverse mode with the parking brake released, it shall activate the hazard light in the cab to alert the crew.

HANDRAILS KNURLED SST

All handrails shall be 1.25 inches in diameter, constructed of knurled #3 polished stainless steel tubing. There shall be a 2.00 inch minimum clearance between the bracket and the body. The handrails shall be spaced away from the body using chrome plated ends.

The following handrails shall be installed at the approximate gripping lengths as noted:

REAR HANDRAIL LOCATION

Two (2) sets of handrails shall be provided and installed at the rear of the apparatus, one (1) handrail on each side of the access steps. Each handrail shall be of an adequate length, as available usable space allows, to provide a suitable gripping area for personnel.

STEP LIGHTING

Eight (8) Tecniq model #E03-W000 series hooded step light(s) shall be installed to illuminate the stepping surfaces.

The light(s) shall be directed towards and positioned above the stepping surfaces.

UNDER ACCESS STEP LIGHTING

One (1) light shall be installed to illuminate the ground beneath each of the access step areas specified. The light shall be a TecNiq model T44 series, 4" round, 8 diode LED light.

The light shall be directed beneath and positioned below the access step area.

LIGHTING ACTIVATION

Step lighting shall be activated when the park brake is set.

SIDE COMPARTMENT UNISTRUT

Vertically mounted Unistrut shall be installed in all apparatus body compartments not located above the outriggers, in the upper and lower sections, to accommodate the installation of shelves, trays, and or other miscellaneous equipment.

COMPARTMENT FLOOR MATTING

Turtle Tile floor tiles shall be installed on the floor of all exterior compartments. The tile shall be custom fitted to the interior compartment floor construction to protect the entire floor surface from equipment damage.

FLOOR MATTING COLOR

The floor matting shall be black in color.

FLOOR EDGING

Tapered floor tile shall be installed along the compartment floor edges with floor matting. The beveled tile shall be custom fitted to the matting installed and the interior compartment construction. The tapered tile shall aid in the removal and installation of equipment while protecting the compartment floor edge from equipment damage.

FLOOR EDGING COLOR

The tapered edges shall be black.

SIDE RUB RAILS (ALUMINUM CHANNEL)

The lowest edge of the apparatus body side compartments shall be trimmed with brightly anodized aluminum channel rub rail material.

The rub rails shall be approximately 2.50 inches high with flanges turned outwards for increased rigidity, with each end chamfered to a 45 degree angle. The rub rails shall not be constructed as an integral part of the apparatus body structure, allowing each rub rail to be easily removed in the event of damage.

The rub rails shall be secured with stainless steel fasteners and spaced away from the apparatus body with .50 inch nylon spacers, to help absorb moderate side impacts and prevent the collection of water and debris for easier cleaning.

RUB RAIL RETRO-FLECTIVE STRIPING

One inch retro-reflective striping shall be applied to the length of each side rub rail section making the perimeter of the apparatus more readily visible.

The reflective striping shall be "Ruby Red" in color.

TOW EYES

There shall be two (2) tow eyes installed on the rear of the apparatus, one (1) each side. The tow eyes shall be connected directly to the torque box and extend down below the apparatus body. The tow eyes are to have an inside diameter of approximately 3.00 inches and shall be painted to match the torque box.

LOW-VOLTAGE ELECTRICAL SYSTEM (MULTIPLEX)

Common power distribution areas shall be located at various points on the body and pump area (if applicable). These power distribution areas shall include the multiplexing input/output modules. Additional electrical components in these areas may include, but not be limited to, common power and ground studs, ground busses, solenoids, terminal strips, relays, and circuit breakers. All circuits shall have some form of circuit overcurrent protection either internal to the multiplexing device or external in the form of fuses or circuit breakers.

Wiring shall conform to section 13.2 of NFPA 2016, including wire type, identification, and rating; sizing for voltage drop and current load; and connections and terminations. Wiring protection shall include loom and braid and also meet section 13.2 of NFPA 2016, including temperature and moisture protection. Connections shall be made using Deutsch connectors, Packard connectors, ring terminals, and terminal lugs, as well as other accepted practices. The body and pump compartment (if applicable) shall be bonded to the vehicle frame.

VISTA SCREEN LAYOUT APPROVAL

Vista screen layouts shall be provided prior to manufacturing for fire department approval.

PERIMETER LIGHTS LOCATION

There shall be six (6) underbody perimeter lights installed on the apparatus positioned to provide illumination to the immediate ground area around the unit.

One (1) each side under the front body compartments, one (1) each side under the rear body compartments, and two (2) under the rear of the apparatus.

PERIMETER LIGHTS

The underbody perimeter lights provided will be TecNiq model T44 series, 4" round, 8 diode LED lights.

PERIMETER LIGHTS ACTIVATION

The perimeter lights under the body shall be activated with activation of the chassis ground lights.

UPPER LIGHTING PACKAGE

The following NFPA lighting package, manufactured by Whelen, shall be supplied and installed in the upper areas of the vehicle.

UPPER ZONE C:

There shall be two (2) Whelen model L31HRFN series red beacons with 360 degree LED lights, provided and installed on the apparatus, one (1) each side on the rear upper outboard corners.

The upper ZONE C specified lights shall be mounted directly to the horizontal body surface as far rearward as possible.

UPPER REAR WARNING LIGHT SWITCH E-MASTER/VISTA

The upper rear warning lights shall be controlled through the master warning switch and a secondary rear warning switch located on the Vista display control screen. The switches shall be clearly labeled for ease of identification.

LOWER LED WARNING LIGHTING

The following NFPA lighting package, manufactured by Whelen, shall be supplied and installed in the lower areas of the vehicle.

LOWER ZONE B&D:

There shall be four (4) Whelen model M6V2 series LED lights with chrome bezels provided and installed on the apparatus. The lights shall be configured with an M6 V series LED warning light in the upper section and an LED "Perimeter" light in the lower section. Perimeter light shall be activated with the application of the parking brake.

SIDE WARNING LIGHTS FLASH

The side warning lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors.

SIDE WARNING LIGHTS COLOR

The lower side warning lights mounted on the side positions shall be red with clear lenses in both the upper warning light and in the lower perimeter light section.

SIDE WARNING LIGHTS LOCATION

The warning lights on the side of the apparatus shall be mounted, one (1) on each active outrigger panel.

LOWER SIDE WARNING LIGHT SWITCH E-MASTER/VISTA

The lower side warning lights shall be controlled through the master warning switch and a secondary side warning switch located on the Vista display control screen. The switches shall be clearly labeled for ease of identification.

LOWER ZONE C:

There shall be two (2) Whelen model M6 series Super-LED lights provided and installed on the rear of the body.

REAR WARNING LIGHTS FLASH

The rear warning lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors.

REAR WARNING LIGHTS COLOR

The lower rear warning lights mounted at the rear shall be red with clear lenses.

MOUNTING FLANGES

There shall be individual mounting flanges provided for "Lower Level Zone C" warning lights mounted above the taillight assembly. The light bezel(s) shall be provided with a chrome finish.

LOWER REAR WARNING LIGHT SWITCH E-MASTER/VISTA

The lower rear warning lights shall be controlled through the master warning switch and a secondary rear warning switch located on the Vista display control screen. The switches shall be

clearly labeled for ease of identification.

LED REAR TAILLIGHT ASSEMBLY

There shall be Whelen M6-Series Super LED rear taillight assemblies provided and installed with the apparatus, one (1) each side at the rear.

The following shall be installed:

One (1) #M6BTT LED red brake light
One (1) #M6T LED series amber turn signal light
One (1) #M6 BUW LED clear backup light

REAR DOT LIGHTS COLOR

The rear DOT lights (Stop, Tail, Turn) shall be provided with colored lenses appropriate to their function.

MOUNTING FLANGES

There shall be individual mounting flanges provided for each light of the taillight assembly.

The light bezel(s) shall be provided with a chrome finish.

BACKUP LIGHTS

The backup lights shall illuminate when the apparatus is placed in reverse.

LED DOT LIGHTING

There shall be seven (7) lights located on the rear of the apparatus. Three (3) of the lights shall be mounted on the rear of the apparatus center location of the tailboard, for use as identification lamps. Two (2) lights and red reflectors shall be located on the lower rear of the apparatus in the outboard locations.

Two (2) additional lights shall be located on the rear outboard locations, one (1) each side as high as possible.

Two (2) lights and red reflectors shall also be mounted on the sides facing the side at the rear corners, for use as clearance lamps.

The lights shall be Weldon brand 9186-1500 series LED red markers.

LED INTERMEDIATE TURN SIGNAL LIGHTING

There shall be two (2) amber intermediate turn signal/marker lights and amber reflectors on the sides of the apparatus (one (1) each per side) between the front and rear axles.

The lights shall be Weldon brand 9186 series LED amber markers.

INTERMEDIATE TURN SIGNALS

The intermediate turn signals will flash with the turn indicators.

BRITAX LIGHTING

There shall be two (2) LED Britax lights, model number 63-4610, with rubber stalk mounts installed on the body, one (1) each side, as far to the rear as possible.

REAR DIRECTIONAL LIGHTBAR

There shall be a Whelen model #TAM65 36.00 inch long directional lightbar with six (6) amber TIR-Super LED light heads provided and installed on the apparatus. The traffic advisor shall include model TACTL5 control head that includes remote flash control.

DIRECTIONAL LIGHTBAR LOCATION & PROTECTION

The rear directional light bar shall be installed directly above the rear ground ladder storage door.

A .125 inch embossed aluminum diamond plate light shield shall be installed directly above the rear directional light bar to protect the light bar from accidental damaged during hose loading and unloading operations. This light shield shall not be used as a stepping surface.

RDL CONTROL HEAD MOUNTING LOCATION

Rear Directional Lightbar control head shall be recess mounted in the center rocker panel at the center location.

REAR VIEW CAMERA LOCATION

A camera shipped loose with the chassis shall be surface mounted at the center location on the rear of the apparatus body for maximum viewing capability. A protective shroud shall be installed over the system to protect against damage.

SIDE SCENE LIGHT LOCATION

There shall be two (2) scene lights installed on the body, one (1) each side, on the side facing vertical body panel above the rear outrigger.

SCENE LIGHT MODEL

Whelen model #M9LZC LED gradient scene lighting shall be surface mounted on the apparatus with a chrome bezel.

Each light shall offer LED directional lighting from 2 to 40-degrees with internal and external optics. The lamp shall draw 6 amps and generate 6,500 lumens.

BODY SIDE SCENE LIGHT ACTIVATION

The scene lighting shall be activated by a virtual button on the Vista display control screen.

The switch shall be labeled as follows:

Side Scene

REAR SCENE LIGHTING

Rear scene lighting shall be located on the top of the body, at the rearmost location possible.

Two (2) FRC "So Brite" model SRA-07A series, 12VDC, LED scene lights, on appropriate mounting bases as required, shall be provided.

Light(s) shall include a white finish housing.

REAR SCENE LIGHT ACTIVATION

The rear scene lighting shall be activated when the apparatus transmission is shifted into reverse and by a weather resistant push button switch at the rear of the body on the vertical panel.

The switch shall be labeled as follows: Rear Scene

HARRISON HYDRAULIC 10,000 WATT GENERATOR

The generator shall be one (1) Harrison Hydraulic Driven Generator rated at 10,000 watts, 84/42 amps, 120/240VAC, 60Hz, 1-phase.

LINE VOLTAGE ELECTRICAL SYSTEM REQUIREMENTS

The specified line voltage power unit shall be installed with strict compliance with NFPA 1901 guidelines, and all associated components and equipment to be installed shall comply with NFPA 70 and applicable standards of the National Electrical Codes. Line voltage electrical system equipment and materials used with the system shall all be listed, properly installed in accordance with the manufacturer's instructions, and only in the manner for which they have been listed.

SYSTEM INSTALLATION AND WIRING

The generator system shall include proper grounding and bonding as required in NEC "Portable and Vehicle Mounted Generators". Non-grounded systems shall not be used. Only stranded or copper conductors shall be used for grounding and bonding purposes. An operator instruction plate, and generator rated performance specification plate, shall be permanently installed at the circuit breaker control panel.

Wiring shall be properly installed from the circuit breaker panel to all specified 120/240 volt accessories, including permanent circuit identification and rating specifications as applicable.

Wiring materials used for the specified accessories shall be either THHN type in non-metallic liquid tight flexible conduit, or heavy duty SO copper cable. Either type shall be rated for 600 volts at not less than 194 degrees Fahrenheit.

UL TESTING 110/220-VOLT & GENERATOR

The apparatus electrical and generator system shall be tested and UL, LLC certified in accordance with the requirements of NFPA 1901.

UL TESTING 110/220-VOLT & GENERATOR

The apparatus electrical and generator system shall be tested and UL, LLC certified.

HARRISON HYDRAULICALLY DRIVEN GENERATOR (MAS FALCON)

The generator shall be designed and assembled by a company with no less than 20 years' experience in the manufacture of hydraulic driven generators. The generator components shall be housed in a structural steel frame, which affords protection to the components and provides a unitized mounting module.

The generator shall have top access to the oil filter, oil fill tube and electrical interface box. The hydraulic oil reservoir shall include an oil level sight gauge visible from three sides; an oil temperature gauge; an oil fill cap; an oil filter and an internal venturi boost unit to provide positive pressure to the pump suction port.

The hydraulic oil reservoir shall be shipped attached to the structural steel frame. The hydraulic oil reservoir shall have an option to be remote mounted if required. The generator shall have a cover consisting of embossed aluminum diamond plate. A meter package that provides the frequency, voltage and amperage of each leg shall be provided.

The generator shall not utilize electronic controls or a multiplex system to control the frequency. The generator shall include a bypass solenoid to remotely turn the generator on/off with a 12 VDC signal. The generator shall be a commercial type with a heavy-duty bearing and of brushless design to ensure low maintenance. No brushes or slip rings shall be allowed.

The generator and motor shall be close coupled and aligned using a Morse taper with a through bolt to secure the motor to the generator.

No two (2) bearing generators shall be permitted. The system shall be capable of producing the full nameplate power when driven from the vehicle PTO from idle to maximum engine speed. The generator shall be able to be used while vehicle is either stationary or in motion. The generator shall provide an option for a self-sealing air intake to prevent re circulation of exhaust air.

The generator shall provide an option for a vertical exhaust fan in addition to the air intake fan. Single fan systems shall not be allowed.

The generator shall provide a dedicated air intake duct for the alternator and a dedicated air intake duct for the heat exchanger. Both air intake ducts shall be located on the same side of the generator. The hydraulic motor and pump shall be of axial piston design to provide low internal leakage and a high degree of frequency stability. Gear motors shall not be allowed. The hydraulic pump shall match the system with the proper orifice, pressure compensator, and load sense settings to provide stable output regardless of engine rpm or electrical load demands. Use of electronics to control the flow shall not be allowed.

The system shall be capable of normal operations using a commonly available premium hydraulic oil; Mobile DTE series or equivalent. All fluid service points shall be in close proximity to the reservoir for ease of scheduled maintenance.

When properly installed, the system shall be warranted for a period of not less than two (2) years or 2000 hours, whichever should come first.

The generator shall be tested at the full nameplate rated load prior to shipping and the test report shall be included. The test report will document the generator's performance at various loads from no load to full load to ensure reliable power delivery at those loads.

GENERATOR DISPLAY

A FROG (Frequency Regulation of Generator) generator display kit shall be installed to monitor a 60 Hz, generator.

The kit shall include:

- Display module.
- Voltage transformer.
- Current transformers and cables.

The display module shall consolidate five (5) generator monitoring instruments into one device. The display case shall be waterproof and have dimensions not to exceed 4.25 inches high by 4.25 inches wide by 3.25 inches deep.

The following continuous displays shall be provided with super bright LED digits more than .50 inches high:

- Generator frequency in hertz
- Line 1 current in ampere
- Line 2 current in amperes
- Generator voltage in volts

The program shall support the accumulation of elapsed generator hours and the monitoring of hydraulic oil temperature. Generator hours and oil temperature shall be displayed at the push of a button. Audible warning alarm outputs are provided for generator overload, over/under voltage fluctuations, and high oil temperature.

GENERATOR DISPLAY LOCATION

The display shall be installed on the pump operator's gauge panel.

GENERATOR LOCATION

The unit shall be located on top of the body, in the area forward of the turntable, between the left and right side body compartments.

HOT SHIFT PTO

The generator hydraulic pump shall be attached directly to the rear of the aerial "Thru Drive" hydraulic pump which is driven by the "hot shift" PTO installed on the chassis transmission as

described elsewhere within these specifications. The PTO shall be ‘engaged’ by a switch in the cab.

A second switch with an indicator light shall be provided to excite the generator. The switch shall be labeled “GENERATOR EXCITE”.

GENERATOR EXCITE

The generator excite application shall be activated by a rocker switch located on the cab dash or other operator accessible area in the cab and by a weather resistant toggle switch located at the pump operator’s panel.

LOAD CENTER

An electrical load center shall be provided and installed in a protected environment on the apparatus. The load center shall have provisions for up to twelve (12) single pole, manual reset type circuit breakers, two (2) of which will be utilized for the "Main" circuit.

LOAD CENTER L-2

The load center shall be recess mounted in the rearward wall of the L-2 compartment and shall be located as “best fit” to avoid interference and maintain functionality.

SIDE SCENE LIGHT LOCATION

There shall be two (2) scene lights installed on top of the body, one (1) each side, at the front body corners.

SCENE LIGHT MODEL

Whelen Pioneer model #PFP1AP pedestal mounted scene light shall be provided on the apparatus.

The 75 watt, 120v AC Pioneer lighthead shall measure 9.75 inches high by 10.81 inches wide by 6.06 inches deep. The lighthead shall produce 10,000 lumens and have an amp draw of 0.6 amps.

BODY SIDE SCENE LIGHT ACTIVATION

The scene lighting shall be activated by two (2) virtual buttons on the Vista display control screen and two (2) weather resistant toggle switches at the pump operator's panel, one (1) for each light.

The switch shall be labeled as follows:

Left Scene

Right Scene

CORD REEL

One (1) Hannay model #ECR series cord reel shall be installed on the apparatus as specified.

ELECTRICAL CORD

The reel shall come equipped with 200 feet of yellow 10-3 electrical cord. There shall also be a cord stop supplied with the reel.

DISTRIBUTION BOX

The cord shall be hardwired to a Circle D remote power distribution box with four (4) NEMA L5-20 single receptacles. The distribution box shall be stored in a mounting bracket when not in use. The box shall be equipped with a light to indicate when distribution box is energized.

The distribution box shall be equipped with the following receptacles:

Position 1: NEMA L5-20 R
Position 2: NEMA L5-20 R
Position 3: NEMA L5-20 R
Position 4: NEMA L5-20 R

The power distribution box shall be provided with a high visibility yellow exterior finish.

REWIND ACTIVATION

A weather resistant push button switch to activate the reel rewind shall be located next to the reel specified.

The switch shall be labeled “CORD REEL”.

REEL LOCATION

One (1) reel is to be located in the R-1 Compartment.

The reel shall be placed in the forward position of the above stated compartment.

ROLLER ASSEMBLY

There shall be a four (4) way roller assembly provided and fastened to the reel frame to guide the cord on and off the spool to prevent chafing on the body or compartment opening.

110 FOOT 750# TIP LOAD REAR MOUNT AERIAL LADDER SPECIFICATIONS

GENERAL INFORMATION

The aerial ladder assembly shall be a four (4) section telescoping steel ladder, with a pre-piped waterway, steel turntable, torque box and outriggers.

INTENT OF AERIAL SPECIFICATIONS

The intent of these specifications is to describe a telescoping elevating ladder of the true ladder type. It shall consist of four (4) steel ladder sections, a steel turntable, a tube torque box and four outriggers. The rated vertical height of the unit shall be **110'** and the rated horizontal reach shall be **99**'.

It is the intent of the purchaser that the device must meet all the requirements of the National Fire Protection Association's (NFPA) 1901, Standard for Automotive Fire Apparatus. It is also the intent of the purchaser to secure a fire service proven piece of apparatus that shall be manufactured in the U.S.A.

It is not the intent of the purchaser to deviate from this requirement; therefore, ladders attached to booms, whether solid or lattice, or articulating arms shall not be considered as meeting these specifications or the intent of these specifications.

DESIGN STANDARDS

The design criteria of the unit shall be to create a structure and system that emphasizes safety, product reliability, and ease of operation. These criteria are:

1. All structural load supporting elements of the aerial ladder that are made of a ductile material, shall have a design stress of not more than 50 % of the minimum yield strength of the material based on the combination of the rated capacity and the dead load. This 2:1 structural safety factor meets the American National Standards Institute (ANSI) and the current National Fire Protection Association (NFPA) 1901, Standard for Automotive Fire Apparatus, standard.

2. The aerial device shall be capable of sustaining a static load one and one-half times it's rated tip load capacity (live load), in every position in which the aerial device can be placed when the vehicle is on a firm and level surface.

3. The aerial device shall be capable of sustaining a static load one and one-third times it's rated capacity (live load) in every position in which the aerial devices can be placed when the vehicle is on a slope of five degrees downward in the direction most likely to cause overturning.

4. The hydraulic system shall be designed so that if a failure of any component or assembly within the system occurs, a single point failure of the entire system will not occur.

5. The aerial shall be capable of operating with a rated tip load of either of the two of the following conditions:

A. Conditions of high wind of up to 50 mph.
B. Conditions of icing, up to a coating of .25” over the entire aerial structure.

The manufacture shall state what wind and ice conditions their aerial device is capable of operating without reducing the rated tip load. NO EXCEPTION!

All of the design criteria must be supported by the following test data:

1. Strain gauge testing of the complete aerial device certified by a **Registered Professional Engineer**.

2. Analysis of deflection data taken while the aerial device was under test load.

3. Hydraulic component operating and burst strength testing.

MATERIAL STANDARD

All structural materials used in the aerial shall be certified by the mill of the manufactured material. Materials that are not certified shall not be acceptable.

GENERAL APPARATUS DESCRIPTION

The unit shall be designed to conform fully to the **"Aerial or Quint Fire Apparatus"**

requirements as stated in the (NFPA) 1901, Standard for Automotive Fire Apparatus, shall include the general requirements as stated in Chapter 4 for Aerial or Quint Apparatus.

AERIAL DEVICE MOUNTING

The elevating aerial device turntable shall be rear mounted thus providing the following vehicle benefits:

1. Improved mobility vs. mid-ship mounted units, due to shorter overall travel length and wheelbase.

2. Increased compartmentation, hose load and water capacity in body, resulting from the aerial being raised to clear the cab.

3. Shorter vehicle wheelbase.

4. Shorter overall length of vehicle.

HEIGHT AND REACH

The height of the unit shall be a minimum of **110'** as measured by (NFPA) 1901, Standard for Automotive Fire Apparatus, requirements, which requires the rated vertical height of an aerial ladder shall be measured in a vertical plane with the ladder at maximum elevation and extension from the outermost rung of the outermost fly section to the ground. The bidder will state the height of the unit as measured by (NFPA) 1901, Standard for Automotive Fire Apparatus, standards.

The horizontal reach of the unit shall be a minimum of **99'** as measured by (NFPA) 1901, Standard for Automotive Fire Apparatus, requirements, which states, “The rated horizontal reach of an aerial ladder shall be measured in a horizontal plane from the centerline of the turntable rotation to the outermost rung on the outermost fly section with the aerial ladder extended to its maximum horizontal reach." The bidder shall state the reach of the unit as measured by (NFPA) 1901, Standard for Automotive Fire Apparatus, standards.

WELDMENT FIXTURES

To ensure exact tolerances between parts and part interchangeability, all weldments shall be manufactured in fixtures. To further ensure weld integrity in all weldments, all aerial device fixtures must be able to position the weldments in the number 1 flat welding position resulting in maximum weld penetration in the welded material for both the tack and final weld process of the aerial device.

AERIAL PAINTING

Prior to any painting, all weldments such as the outrigger beams, torque box, turntable, and aerial ladder sections shall be shot blasted, cleaned and inspected to ensure the removal of any surface imperfections and to insure superior paint adhesion to the metal.

The entire painting system shall utilize a single manufacturer's paint for compatibility between primers and finished coats. The paint shall be AkzoNobel, Sikkens brand, “Top Coat”, applied throughout a multi-step process. All painting shall be done in atmosphere controlled spray booths. The weldments will be primed with a zinc corrosive inhibitor and an Epoxy Primer. All seams between adjoining pieces that are not continuously welded shall be caulked to inhibit corrosion.

Before assembly, in preparation for final painting, the aerial unit shall be thoroughly cleaned, conforming to good painting practices.

AERIAL DEVICE PAINT

The aerial ladder sections, Turntable base, side plates and deck structure shall be painted the same color unless specified otherwise.

The finished paint color shall be FLNA 96920 Metallic Gray to match FBCH 948387.

AERIAL APPARATUS CERTIFICATIONS (TYPE 1)

The aerial device shall be tested in compliance with the National Fire Protection Association's (NFPA) 1901, Standard for Automotive Fire Apparatus.

The following tests shall be conducted by personnel holding a Level II certification to detect defects and improperly secured components:

1. Magnetic particle inspection shall be conducted on all ferrous welds to assure the integrity of the weldments and also detect any flaws or weaknesses. These tests shall be performed prior to paint or assembly.

2. Ultrasonic inspection shall be used to detect any flaws in pins, bolts and other critical mounting components. The bolts shall be tested after they have been torqued to ensure the bolt was not damaged.

3. All extension/retraction cables shall be tested and certified by the cable vendor.

4. Functional tests, load tests, stability tests and visual structural examination shall be performed. These tests will determine any unusual deflection, vibration, or instability characteristic of the unit.

5. Hydraulic oil shall be sample tested prior to delivery.

6. A waterway system flow/pressure test shall be performed.

Upon completion of the preceding inspections, the independent testing company shall issue a Certificate of Inspection indicating that all specified standards have been satisfied. The Type I certification shall be provided by **Underwriters Laboratories, LLC (UL, LLC)**. Aerial

manufacturers not utilizing third party, independent testing companies shall not be acceptable.

TESTS

The following test shall be conducted to the aerial device prior to delivery; all listed tests shall be witnessed and certified by Underwriters Laboratories, LLC (UL, LLC) to ensure the device meets all current requirements of (NFPA) 1901, Standard for Automotive Fire Apparatus.

1. 1-1/2:1 DYNAMIC STABILITY AND LIFT TEST - A test of the apparatus shall be performed that the aerial device sections are so designed and powered to support a load representing 150% of the manufacturer's rated tip load capacity at maximum horizontal reach on level ground. Since this is a dynamic test, the load must be raised, lowered and rotated without evidence of instability.

2. 1-1/3:1 DYNAMIC STABILITY AND LIFT TEST - A test of the apparatus shall be performed that the tip and aerial device sections are so designed and powered to support a load representing 133% of the manufacturer's rated tip load capacity at maximum horizontal reach on a five (5) degree slope. Since this is a dynamic test, the load must be raised, lowered and rotated without evidence of instability.

3. TIME TEST - A test of the apparatus shall be performed to raise the ladder from a bedded position extended to full height and rotated through a 90 degree turn smoothly and without undue vibration in not over 120 seconds.

4. WATER TOWER TEST #1 - A test of the apparatus shall be performed to test its ability to discharge 1000 gallons per minute parallel to the aerial device with the unit at full extension and zero degree elevation. The unit shall be capable of performing this test while loaded to its rated tip load capacity.

5. WATER TOWER TEST #2 - A test of the apparatus shall be performed to test the ability to discharge 1000 gallons per minute, 90 degrees to the side of the aerial device with the unit at full extension, zero degree elevation. The unit shall be capable of performing this test while loaded to its rated tip load capacity.

Bidders must state their ability to comply with all of the above tests. Failure to do so shall be grounds for rejection of their bid.

AERIAL ELECTRICAL SYSTEM

12VDC electrical power for the aerial device shall be drawn from the chassis electrical system and routed through major segregated circuits and into an electric collector ring assembly. The circuits shall provide power for the aerial device controls, indicators, and interlocks; other circuits shall power auxiliary equipment such as lights, intercom, etc.

The electric collector ring assembly shall provide power for electrical ground, aerial device control functions, 12 and 120 volt systems. The collector rings shall be enclosed in a sealed, weatherproof housing to prevent corrosion.

All aerial device wiring shall be multi-conductor, copper 18 gauge (minimum), color-coded, with thermosetting cross-linked polyethylene insulation. All aerial device wiring shall be in pre-engineered harnesses with each circuit identified by number and color code. Harness connections shall be through locking, weatherproof, guided pin connectors.

HYDRAULIC SYSTEM

The hydraulic system shall provide power in as efficient a manner as possible. The system shall use a piston type load sensing pump and shall be capable of operating under any rated load condition and aerial position at normal engine idle (slow idle) or governor controlled fast idle. The piston pump shall be capable of generating sufficient flows to allow multiple function operation without significant loss of speed.

The system shall not be dependent upon an auxiliary cooler to control system temperature.

POWER TAKE OFF (PTO)

The apparatus shall be equipped with a "Hot-Shift" power take-off (PTO) driven by the chassis transmission as described elsewhere within these specifications. The PTO shall be actuated by an electric switch located inside the cab. An indicator light shall be located in the cab to show when the PTO is engaged.

A master "Aerial Power" switch shall be provided for engagement of all aerial device hydraulic functions and 12-volt power. The "Aerial Power" circuit shall only engage with the parking brake applied and the transmission in neutral or drive if the fire pump (if equipped) is engaged.

An indicator light shall be located in the cab to show when the "Aerial Power" circuit is energized. The emergency pump circuit shall be controlled separately.

AERIAL PTO HOURMETER

An hourmeter shall be installed in the chassis cab as described elsewhere within these specifications. The hourmeter shall be wired to the PTO circuit to record hours of PTO operation for the aerial device. The hourmeter shall aid in scheduling preventative maintenance as outlined in the operator's manual.

ENGINE HIGH IDLE ACTUATOR

The high idle actuator shall be used to raise the engine RPM to a preset level for proper aerial operation. The high idle switches shall be located in the chassis cab, at the stabilizer control station and the aerial control station.

For the safety of personnel and equipment, the high idle system shall not activate unless the interlock systems have been applied, the chassis spring brake is set, and the transmission is in neutral.

AERIAL HYD, PUMP

The aerial hydraulic pump shall be drive shaft driven directly from the chassis provided PTO.

The pump shall be "Thru Drive" in design to allow the generator hydraulic pump to be directly attached and powered by a single PTO output.

HYDRAULIC OIL RESERVOIR

A hydraulic oil reservoir shall be provided to supply the needs of the hydraulic system. The tank

shall be constructed from 7 gauge steel with welded interior and exterior seams. The tank shall be properly sized to provide optimal cooling and operational efficiency for the entire aerial hydraulic system.

Gated suction and drain lines shall be provided between the oil reservoir and the primary hydraulic pump. The tank fill shall be provided with a strainer screen, vent cap and magnetic drain plug. There shall be a sight level gauge for checking fluid levels.

The tank shall be cleaned and free from all contaminants before adding any fluid.

HYDRAULIC SYSTEM FILTRATION

Outgoing and return line filtration shall be provided. The pressure and return filters shall be easily accessible for maintenance.

Outgoing filtration shall be in the form of a pressure line filter installed between the hydraulic pump and entrance to any system components. The filter shall have an absolute rating of ten (10) microns. The pressure filter shall have a bypass circuit protected by a 50-psi check valve, which shall be installed around the pressure filter. The pressure line filter shall be required even if a suction line filter is provided in the reservoir due to the suction line filter's inability to trap contaminates entering the system.

A filter condition indicator shall be provided.

The return line flow shall be filtered by means of a return line filter. This filter shall have an absolute rating of ten (10) microns.

EMERGENCY HYDRAULIC PUMP SYSTEM

In the event of failure of the main hydraulic pump or vehicle engine, the unit shall be equipped with an emergency hydraulic pump.

The pump shall be plumbed into the hydraulic system and shall be electrically driven from the chassis batteries. The emergency pump shall be capable of limited functions of the ladder and outriggers to stow the unit. The pump shall be controlled from the right and left outrigger control stations with spring loaded momentary contact switches.

The emergency pump shall have a separate hydraulic oil supply line, attached directly to the hydraulic oil reservoir. A shutoff valve shall be provided, and a check valve shall be incorporated on the pressure side of the pump.

HYDRAULIC HOSE, TUBING AND FITTINGS

All hydraulic steel tubing, hydraulic rubber covered wire-braided hoses, and hydraulic fittings/adapters shall have a minimum burst pressure rating of four times the operating pressure. Hoses and tubing shall be properly sized to minimize heat buildup during extended periods of operation. Hoses and tubing shall be properly sized to minimize flow restrictions.

All hydraulic hose shall have a tube and cover constructed of Nitrile elastomers and shall have braided/spiral wire reinforcement capable of maintaining a 4:1 safety factor in all areas of the hydraulic system. The hose shall meet the appropriate SAE performance specifications: 100 R2

or 100R12.

SUPPLEMENTAL AERIAL HOURMETER

An additional aerial hourmeter shall be installed inside the turntable control console pedestal to record the actual hours that the aerial device is in motion. The hourmeter shall aid in scheduling preventative maintenance as outlined in the operator's manual.
The hourmeter shall be analog and require no switching to be turned "On" in order to read the display.

OUTRIGGER/AERIAL INTERLOCK

The aerial hydraulic system shall include an interlock feature that will prevent the accidental operation of the outriggers during aerial operation. This interlock shall also prevent accidental operation of the aerial device prior to the outriggers being properly deployed.

In the event of electrical failure, the operator shall be able to override the hydraulic system to operate the aerial device or outriggers for continuous, uninterrupted operation. A 5,000 psi hydraulic oil pressure gauge shall be provided and installed at the override location to monitor the overall pressure of the hydraulic system.

LIFT, EXTENSION AND ROTATION HYDRAULIC CONTROL VALVE

A three-function hydraulic proportional valve bank shall control ladder functions. The valve shall be located at the turntable with direct linkage controls.

TORQUE BOX

A tube torque box sub-frame shall be provided to transfer all aerial loads and torque into the four (4) outriggers, thus preventing the loads from being transferred through the chassis.

The torque box shall include two (2) "H-Box" (outrigger housing) weldments, forming a single structural weldment for aerial load distribution among the outriggers.

The torque box shall be bolted to the chassis frame with .75” SAE grade 8 bolts.

TORQUE BOX PAINT

The finished paint color shall be FLNA 41878 (to match 9000) black.

OUTRIGGERS

The apparatus shall be equipped with four (4) "H" style "out and down" outriggers. The extension of the horizontal outrigger beams shall provide a 14’ outrigger stance.

Five (5) slide pads shall be provided for each outrigger beam assembly to provide smooth operation and to extend the life of the outrigger.

The front outriggers shall be mounted at the front of the body. This design shall provide proper stability and minimize front axle and suspension loads while the aerial device is in operation over

the front of the apparatus. The rear outriggers shall be mounted underneath the chassis frame to allow more ground ladder storage above the frame.

For ease of maintenance, the outrigger extension cylinders shall be equipped with end connections, which do not require removal of body panels to remove pins or the extension cylinders. The outrigger jack cylinders shall be removable by unbolting the jack tower cap and lifting the cylinder out vertically.

OUTRIGGER SYSTEM HYDRAULIC CONTROL VALVES

A directional control valve that is designed for parallel hydraulic circuit operations shall control the outrigger cylinder system. This valve shall be modular in design so that individual sections can be replaced in the field, rather than complete valve assemblies, thus reducing maintenance costs. Each valve shall be equipped with a heavy-duty electric solenoid for electric control of the outrigger from the remote operator's station.

OUTRIGGER CONTROLS

Two (2) illuminated outrigger control stations shall be provided, one (1) on each side of the rear of the vehicle. For safety, ease of deployment and operational speed, the outrigger controls shall be of the electric over hydraulic proportional type with manual overrides immediately accessible.

The outrigger controls shall be enclosed in a recessed compartment to protect each control from damage or accidental movement. The controls shall be located such that the operator can see the outrigger he is operating. Body designs that block the view of the outriggers from the control station shall not be acceptable.

Each outrigger control function shall be operated independently, so that the vehicle may be set up in restricted areas or on uneven terrain.

Each outrigger control station shall incorporate the following:
-Outrigger beam and jack actuator controller
-Outrigger/Jack deployed indicator light
-Fast idle switch
-Emergency pump control switch
-Warning decals

OBSTRUCTION DETECTION & DISPLAY SYSTEM

The O.D.D.S (Obstruction Detection & Display System) shall incorporate a sonic emitter and sensor on each outrigger to detect obstacles in the potential path of each outrigger as the apparatus approaches the fire scene for deployment.

O.D.D.S DISPLAYED ON VISTA

When activated, a representation of each outrigger shall be provided on the Vista Display in the cab. If no obstructions are detected, the outriggers shall be shown in the extended position. If an obstruction is detected in the potential path of any outrigger, that outrigger will not be displayed.

An O.D.D.S enable switch shall be provided on the Vista Display.

EXTENSION CYLINDERS

Each extension cylinder shall have a 3.00" internal bore with a minimum 2.00" chrome plated cylinder rod.

The extension cylinders shall be fully enclosed within the outrigger beam, preventing them from being nicked or scored during operations on the fire ground.

JACK CYLINDERS

Each jack cylinder shall have a 5.00" internal bore with a 3.50" chrome plated cylinder rod. The jack cylinders shall be equipped with integral (on the cylinder) holding valves, which shall hold the jack cylinder in either the stowed position or the deployed position should a hydraulic line be severed at any point within the hydraulic system.

To minimize side loading and subsequent seal failure of the vertical jack cylinder, a 1.62" wide load bearing UHMW wear band shall encircle the jack cylinder barrel, providing load distribution over a 360 degree plane. Designs which could allow load concentration on one side of the vertical jack cylinder shall not be acceptable.

In order to provide faster setup time for the aerial on the fire ground, and to eliminate the possibility of damage to the housing should the outriggers be retracted with the jack pins left in, designs that require the use of jack pins shall not be acceptable.

For ease of maintenance, the outer jack tube shall be designed so that the cylinder can be removed from the top. Designs that require the outrigger beams to be removed or the jack cylinder positioned over a pit for jack cylinder removal, shall not be acceptable.

OUTRIGGER BEAM PAINT

The finished paint color shall be FLNA 96920 METALLIC GRAY.

OUTRIGGER PADS

A permanently attached self-centering floating type 1/2" thick, 154 sq. inch steel pad shall be provided on each outrigger. The pad shall swivel and require no adjustment during outrigger set-up.

The outrigger pad shall be attached without the use of a bearing type swivel due to maintenance required on this design. Outrigger pads that pivot in only one plane shall not be acceptable due to their inability to distribute loading over the total pad surface on uneven terrain.

AUXILIARY OUTRIGGER PADS

Four (4) auxiliary outrigger ground pads shall be provided for additional load distribution. Each ground pad shall be fabricated of 6061-T6 high strength aluminum alloy and shall measure 3/8" x 24" x 24". Each ground pad shall be equipped with a handle for easy use.

AERIAL/OUTRIGGER INTERLOCK SYSTEM

An interlock system shall be provided between the outriggers and aerial device that prevents the

operation of the aerial until the operator places all jacks in the load-supporting configuration. All jacks shall be equipped with a ground force sensitive switch that closes only when the jack is firmly in contact with the ground.

Until all the switches close, electrical and hydraulic power shall not be transmitted to the turntable, hence preventing aerial operation. Green indicator lights shall be provided on the outrigger control panel to indicate that the outrigger foot is in firm contact with the ground and in a load supporting position.

OUTRIGGER/STABILIZER DEPLOYMENT WARNING ALARM

An audible warning device shall be provided to warn personnel in the vicinity of the apparatus that the outriggers/stabilizers are in motion.

Whenever an outrigger/stabilizer control handle is utilized, the device shall produce a pulsing tone, separate and distinctive from that of other audible warning systems provided on the apparatus. When the control handle is released to its neutral position, the signal shall cease.

The warning device shall automatically enable the dB level to be raised or lowered by measurements of the ambient noise level.

OUTRIGGER LIGHTING AND REFLECTIVE STRIPING

Each outrigger shall be equipped with the following light and reflective striping package:

OUTRIGGER REFLECTIVE STRIPING

Retro-reflective material shall be provided and installed on both sides of the horizontal and vertical beams of the outriggers.

OUTRIGGER LIGHTING

There shall be an LED ground illumination light located at each outrigger or downrigger location to illuminate the footpad area.

The lights provided shall be TecNiq model T44 series, 4" round, 8 diode LED lights.

Truck Lite 7” round LED red flashing lights shall be provided as warning lights when the outrigger beams are extended.

Each stabilizer beam shall be equipped with a total of two (2) lights, one (1) facing forward and one (1) facing rearward. The lights shall be mounted inboard of vertical jack tubes.

Both the foot pad illumination lights and the flashing outrigger warning lights shall be activated by the aerial power switch.

TURNTABLE/TURNTABLE DECK

The turntable shall be a fabricated steel weldment designed for the rotation and elevation of the ladder sections. It shall consist of the following:

A steel bearing plate and matching top plate shall be machined to ensure proper fit to the rotation bearing. Manufactures that do not mill both bearing surfaces shall not be acceptable.

Embossed aluminum diamond plate deck shall cover the entire turntable frame, providing a walking surface.

An embossed aluminum diamond plate access step shall be mounted at heel of the ladder.

All handrails shall be a minimum of 42” high. For ease of grip, the handrail shall be manufactured from 1-1/4" O.D. knurled stainless steel material.

Turntables with the drive motor or breathing air bottles mounted in any walking areas (front or rear) of the turntable shall not be acceptable.

The right side of the turntable deck shall be designed to allow access to the side hose bed.

TURNTABLE ACCESS SAFETY CHAINS

The two (2) turntable handrail openings shall be equipped with safety chains at the rear of the turntable.

CRADLE ALIGNMENT INDICATOR ARROWS

Aluminum arrows with red Scotch-Lite coating shall be provided on the turntable surface, and on the apparatus body to indicate the alignment of the aerial device with the travel cradle. The indicators shall be suitably illuminated for nighttime operation.

Mechanical fasteners shall be used for installation.

AERIAL CONTROL STATION

There shall be an aerial control station located at the turntable. All elevation, extension and rotation operational controls shall operate from this position. These controls shall be arranged to permit the operator to regulate the speed of these operations within the safe limits as determined by the manufacturer. Load instruction plates shall be located at the control station to show the recommended safe load of the ladder. The control devices shall be clearly marked and suitably lighted.

TURN TABLE CONTROL STATION

The control station shall be located on the left side of the turntable, as the operator is facing the tip of the nested aerial ladder (Driver's side of the apparatus), in order to provide increased visibility of the ladder tip while operating the controls. The pedestal shall be set forward, away from the operator, to provide additional foot room.

The pedestal shall be constructed from an aluminum framework with an aluminum diamond plate wrapper. Access to the electrical and hydraulic components mounted inside the console shall be provided by either hinged doors or removable access panels. A hinged cover shall be provided over the console to protect the panel and controls. The top of the console shall be angled to face the operator for ease of ladder operation.

The console and turntable working areas shall be illuminated for night operations and shall have all controls and indicators clearly marked.

Controls and indicators provided shall include, but shall not be limited to;

Three (3) ladder function control levers.

A recessed, foot operated **"Operator Presence"** switch, which shall protect against accidental movement of the control handles.

Rung alignment indicator light for ladder climbing operations.

Cradle alignment indicator light on console.

Engine high idle control switch.

Outriggers Not Deployed Indicator Lights.

Intercom controls in console lid.

Bubble type angle indicator on base section near console.

Illuminated load chart.

Tracking Light Switch.

Tip Light Switch.

Monitor/Nozzle Control Switches.

Monitor Stowed Indicator.

Flowminder Display (If Selected).

Hydraulic Oil Pressure Gauge

Any additional switches and/or displays required by other options described elsewhere within these specifications, as available space permits.

The control console lid shall be provided with a black Line X finish.

AIR HORN BUTTON

An air horn button shall be provided at the turntable control console.

HYDRAULIC, ELECTRIC AND WATER SWIVEL

Hydraulic power to the turntable hydraulic circuits shall be provided through a three-port, high pressure hydraulic swivel permitting 360 degrees continuous rotation of the turntable.

Water shall be transferred to the aerial waterway by means of a 4" internal diameter water swivel, permitting 360 degree continuous rotation.

Electric power to the turntable electric circuits shall be comprised of a minimum of twenty two (22) ring collector assembly, permitting 360 degree continuous rotation of the turntable.

ELEVATION SYSTEM

Two (2) double-acting lift cylinders shall provide smooth, precise elevation from 7 degrees below horizontal to 78 degrees above horizontal. Units that do not operate below minus 6 degrees shall not be acceptable.

The lift cylinders shall have a 6" internal diameter, 3-1/2" diameter cylinder rod and a 36-1/8" stroke. Integral cylinder holding valves shall be provided to prevent the unit from lowering should the charge lines be severed at any point within the hydraulic system. Units that do not use holding valves on the cylinders shall not be acceptable. A hydraulic holding valve shall be provided in the elevation circuit to retain the aerial ladder in its bed when the vehicle is in motion.

The elevation cylinders shall be provided with both rod and piston "hydraulic cushions". The cushions shall serve to decelerate the cylinder near the end of its stroke resulting in a smooth stop at full cylinder stroke.

AERIAL INTERLOCK SYSTEM

A limit switch at the aerial travel support shall be provided to prevent operation of the outriggers/stabilizers once the aerial device has been elevated from the nested position.

EXTENSION/RETRACTION SYSTEM

A full hydraulic powered extension and retraction system of the ladder shall be provided through dual hydraulic cylinders and cables, each capable of operating the ladder in the event of failure of one of the systems.

The extension/retraction cylinders shall be equipped with integral (on the cylinder) holding valves to prevent the unit from falling should the charge lines be severed any point within the hydraulic system.

The extension cylinders shall be provided with both rod and piston "hydraulic cushions." The cushions shall serve to decelerate the cylinder near the end of its stroke resulting in a smooth stop at full cylinder stroke.

Cylinders in excess of 25 feet with the rod extended, or that require the attachment of the rod to the mid-section, shall not be desirable for two (2) reasons that are not consistent with the level of quality desired by the purchaser:

- Rod attachment to the mid-section requires that the lower rung rail cannot be sealed from the atmosphere and therefore long-term corrosion cannot be adequately controlled.
- The cylinder shall be subjected to the buckling forces caused by normal ladder deflection.

Cables attached to the base and mid ladder sections shall be routed over sheave wheels on the base section and cylinder barrel. This cabling arrangement shall act as a stroke multiplier to provide full-power ladder extension and retraction. Extension of the ladder sections shall be accomplished by the movement of the cylinder barrel toward the turntable end of the base section, thus providing better weight distribution when the ladder is extended.

Retraction of the ladder sections shall be accomplished by movement of the barrel toward the outboard end of the base section, thus providing better weight distribution between front and rear axles of the apparatus when stowed in the travel position.

The extension/retraction cables shall have a minimum safety factor of 5:1 and shall be of the following diameters:

- Inner Mid-Section: 9/16"
- Outer Mid-Section: 3/8"
- Fly Section: 1/4".

EXTENSION INDICATORS

Reflective numerals shall be affixed to the inside of the handrail of the base section opposite the turntable control console. The numerals shall be at appropriate intervals indicating total aerial extension in 10-foot increments. A band on the first fly section shall align with these marks at the appropriate extension distance. An additional stripe shall be provided between the numbered stripes to indicate each 5 feet of aerial extension.

The extension indicator color shall provide a high contrast with the color of the ladder section to which it is applied.

This shall make the length of aerial extension easily readable by the operator by merely glancing at the indicators.

The extension markers shall be provided in red reflective material.

LADDER SLIDE MECHANISM

UHMW slide pads shall be provided on each ladder section for load transfer between sections. Slide pads shall be used on both upper and lower bearing surfaces and to control side sway of the sections.

The pads shall utilize low coefficient of friction materials to reduce the resistance between the pads and ladder sections. The ladder rails shall be sprayed with a rust prohibitive paint designed to ride on a set of pads which require no greasing of the rails.

In order to maintain a high “in service” level of operation, the ladder shall be designed to require minimum amounts of lubrication.

AIR/ELECTRIC LADDER TRACK

All air and electric line routing from the turntable to the tip of the aerial device shall be accomplished using a flexible conduit system. Routing shall be such that cables shall be fully enclosed except at points of transition between sections.

The conduit shall run along the handrail uprights, between the ladder sections, so the conduit does not decrease the interior width of the ladder.

ROTATION SYSTEM

An external tooth monorace bearing shall be provided for 360 degree continuous rotation in either direction. To ensure proper bearing installation and long service life, surfaces of both the open base bearing plate and the turntable bearing plate shall be milled. Units that do not have milled bearing surfaces shall not be acceptable.

The bearing shall be bolted to the turntable and bolted to the open base support plate, using 7/8" diameter Grade 8 bolts. A planetary drive, powered by a hydraulic motor, shall provide precision rotation control throughout 360 degrees of rotation.

A spring-applied, hydraulically released disc type brake shall be furnished to provide positive braking of the turntable assembly against reactionary forces such as water flow and gravity.

The turntable rotation bearing shall be easily accessible for lubrication and retorquing of bolts from the turntable side, for ease of access.

Access to the turntable bearing bolts which requires the removal of the ground ladders and/or the ground ladder slide assemblies, during bolt retorquing process, shall not be acceptable.

ROTATION SAFETY SYSTEM

The Rotation Safety System shall be designed to prevent the operator who has primary operational responsibility from rotating the aerial device into an overturning mode. This system senses outrigger and outrigger jack positioning in conjunction with the aerial device movement. Indicator lights shall be provided on the turntable control console to indicate outrigger not fully deployed status.

If the aerial device operator attempts to rotate the aerial device (in excess of approximately 5 degrees beyond vehicle center) towards the side of the vehicle in which the outriggers are not fully deployed, the Rotation Safety System shall sense this fault and prevent the aerial from rotating further in said direction. At this point, only rotation to the fully deployed outrigger side shall be allowed.

AL-11 AERIAL INFORMATION SYSTEM

Aerial Logic Display

The aerial shall be equipped with a 7” color transmissive TFT LCD display located at the turntable control console. The display shall be viewable in direct sunlight, with a resolution of WVGA, 800 x 480 pixels, 16-bit color and an aspect ratio of 16:9.

The display shall feature LED backlighting, 1000 nit typical brightness (40,000 h lifetime). The display shall include an internal microprocessor Freescale IMX. 375 32bit, 532 MHz utilizing a QNX operating system. The display shall have a minimum 2 GB RAM flash memory and 128 Mbytes SDRAM. The display shall support J1939 and NMEA 2000 protocols.

For protection against extreme environmental conditions, connections shall utilize 2 Ampseal 23 pin connectors AMP770680-1 and AMP770680-4. User inputs shall be accomplished utilizing 14 tactile buttons located directly on the display. The display shall be capable of operating -40º C to +85º C and a minimum IP67 rating front and back. For maximum protection, the display case shall be constructed of Polycarbonate capable of random vibration, 7.86 Grms (5.2000 Hz), 3 axis and a shock of +/- 50G in 3 axis.

The display will gather ladder positional data from an array of sensors. This data will not only be displayed for the device operator, but the rotation and elevation sensors will also be used to protect the body, cab, and installed components from collision damage caused by the aerial device. The system shall be designed to warn the aerial device operator when the ladder is in a position where contact could occur while rotating the ladder at low angles and while lowering the ladder when it is positioned over the cab/body. The system shall prevent the aerial device from contacting the cab/body of the apparatus.

A visual and audible alarm shall be provided at the turntable control console. The system shall remain in the warning mode while the ladder is in a position where contact could occur. It shall deactivate only when the ladder is rotated away or elevated above the contact zone area.

A manual override shall be provided.

Indication for the load sensing system shall also be programmed into the AL-11 system at each of the control consoles.

Soft Keys

Columns of vertical keys shall be located to the left and/or right of the display. The soft keys correspond to the soft key commands and allow selections with a gloved hand. Icons shall be displayed on the screen adjacent to the soft key and will change according to the options available for the screen being displayed.

Screens

The display shall provide the operator with critical aerial information and switching of aerial electrical components in an easy to read format as follows:
•Extension Retraction Percentage – Digital readout shown 0% - 100%
•Ladder Angle -15 to 90 Degrees (Operational range of Aerial -8 to +72 Degrees)

•Rotation Position – 0 - 360 Degrees
•Ladder Load Percentage - Display live loads acting on the aerial structure shown as 0 - 100%
•Breathing Air – 0-6000 Psi (This is available only if optional breathing air has been specified)
•Bed Zone Alignment Light – When the aerial is aligned and within the bed zone the indicator shall change to a bright color to indicate it is safe to bed the aerial.

•Rung alignment light – When the aerial rungs of each section are aligned the indicator shall change to a bright color to indicate the rungs are aligned to provide safer climbing of the aerial.

Soft keys located on each side of the display shall be programmed to allow the operator to quickly change screens to view the following:

•High Idle – Label shall read “High Idle”. Pressing this soft key shall increase engine RPM to the

chassis pre-set high idle, pressing the button again shall return engine RPM to the chassis pre-set idle. The indicator shall change to a bright color to indicate the high idle has been activated.

•Emergency Power Unit - Label shall read “EPU”. Pressing this soft key shall activate the electric over hydraulic emergency power unit.
Engine Information Screen – An icon depicting an engine shall be displayed next to the soft key. Pressing this button shall allow the operator to switch to the screen displaying chassis engine information.
Day/Night Display Mode - An icon depicting the sun or the moon shall be displayed next to the soft key, pressing this button shall switch the display to from a bright format for daytime use or a subdued format for nighttime use to maintain greater vision of the operator.

Lighting /Customer Information Screen - An icon depicting a light bulb shall be displayed next to the soft key, pressing this button shall switch the screen from its current screen to the screen to control lighting on the aerial.

The following information shall be displayed on the aerial logic display:
•Customer name
•Production number
•Aerial device type
•Aerial device model number

•Aerial device serial number
•Rated vertical height
•Rated horizontal reach
•Rated capacity
•Contact information for the fire apparatus manufacturer. Information shall include name, address, phone number and website

Chassis Engine Information Screen

•Engine coolant temperature
•Oil pressure
•Transmission temperature
•Fuel level
•Battery voltage
•Engine RPM
•Engine Warnings – To include: Check Engine, Stop Engine, DPF Regeneration Required, Regeneration Status and High Exhaust Temperature.

HEAVY DUTY LADDER TRAVEL SUPPORT

A heavy duty ladder rest shall be provided for support of the ladder in the travel position. The ladder rest shall be attached to the chassis frame rails immediately rearward of the cab. The travel support shall be fabricated from heavy duty steel tubing and shall be designed to be easily removable to allow for ease of maintenance and repair if necessary.

The base section of the ladder shall contain stainless steel scuff plates where the ladder comes into contact with the ladder support. The travel rest shall be painted to match the torque box.

An indicator light shall be provided on the turntable to indicate when the ladder is aligned with the travel support and may be lowered into it.

AERIAL LADDER SECTION CONSTRUCTION

The aerial ladder shall be comprised of four (4) sections. The ladder section design objective shall complement the support of heavy or uneven aerial loads at low angles of elevation, or at full extension.

Each ladder section shall be fabricated in fixtures assuring uniformity, replace ability, or changeability, and shall be welded in accordance with American Welding Standards (AWS) criteria by certified welders.

The ladder sections shall be constructed of welded high-strength steel throughout. Each section shall be trussed diagonally, vertically, and horizontally, using steel rectangular tubing, reinforced at critical points for extra rigidity, thus giving a high strength-to-weight ratio. Each section shall be equipped with 1-1/4" diameter rungs, placed at no greater than 14-inch centers for ease of climbing.

To assure the level of quality desired, each ladder section shall include the following:

1. Base Section - All rails, including the lower rail, shall be sealed from the atmosphere. The base ladder section shall include a triangulated lifting configuration. This arrangement shall consist of front and rear cross tubes, forward triangle tube, rear triangle tube, lift cylinder outboard support tube and steel plating welded into place where the lifting cylinders attach to the aerial ladder base section.

2. Mid-Section, Outer Mid-Section and Fly Section - All rails, including the lower rung rail, shall be sealed as described for the base section.

All ladder rungs shall be welded to each rung rail section in two (2) places. K-bracing shall be provided between the rungs and the ladder rung rails to provide the ability to discharge water at 90 degrees to the side of the ladder.

All rungs shall be round and covered with deeply serrated, replaceable, heavy duty rubber sheaths, which shall be both glued and clamped securely to the rungs with metal clips. Due to high maintenance cost and difficulty in replacement of anti-slip rung surface and the inability to provide a safe surface during icing conditions, ladder designs that do not utilize rubber rung covers shall not be acceptable.

LADDER SECTION DIMENSIONS

All bidders shall state in the space provided below their dimensions on the unit proposed. Dimensions proposed must equal or exceed these specified. All Dimensions are from top of rung to top of handrail. All width dimensions are inside to inside of handrails.

Handrail	Height	Width
Base Section	24.00"	36.25”
Inner Mid	21.75"	31.00"
Outer Mid	20.00"	25.75"
Fly	18.125"	21.75”

OVERLAP SURFACES BETWEEN SECTIONS

Base to Inner Mid Fly Section	90.00"
Inner Mid Fly to Outer Mid-Section	90.00"
Outer Mid Fly to Fly Section	90.00"

LADDER EGRESS

A removable bolt on stainless steel egress shall be installed on the tip of the fly section. Only certified structural fasteners shall be utilized to attach the egress to the tip of the fly section. Additionally, the fasteners shall be stainless steel. This design shall allow for easy replacement should the egress become damaged during rescue operations. This shall prevent the department from experiencing serious downtime, as is common with welded on egresses. For this reason, a design that allows the egress to be welded to the fly section shall not be acceptable.

The egress shall have knurled handrails with an extended radius design at the tip to eliminate corner joints and increase strength. The straight design of the egress will allow the aerial waterway monitor/nozzle to be placed up to 30 degrees above horizontal centerline for additional range of water stream operation.

The rungs on the egress shall be held to the same design load criteria as the rungs of the aerial ladder sections. This mean that each egress rung shall be able to support the tip load rating of the aerial device, distributed across the rung as specified in NFPA 1901. This shall be in excess of that required by the aforementioned standard. The egress shall be left in a "Natural" Stainless Steel finish.

FLY SECTION FOLDING STEPS

Two (2) spring-loaded aluminum folding steps with non-slip aluminum grating inserts shall be installed in the fly section of the aerial to provide footing for an operator stationed at the tip of the fly section. Springs shall hold the steps in place during use and secure the steps in the stowed position when not in use. Each step shall have a surface area of 72 square inches and a minimum design load of 500 lbs. A folding Toe "Kick Plate" shall be provided at the forward edge of each step surface.

AERIAL WATER SYSTEM

The aerial waterway system shall be capable of being supplied by both the pump and an external water source with the inlet on the rear of the apparatus.

All piping from the pump and the inlet at the rear of the apparatus to the riser pipe below the turntable swivel shall be 4" Schedule 40 aluminum 6061 T6 pipe. A 4" tee shall join the pump discharge line and the rear inlet line.

A 4" water swivel shall be located in the riser pipe from the tee permitting 360-degree continuous rotation of the aerial device.

A 4" heel pin swivel connection between the aerial device waterway and the turntable swivel permitting water tower operations thru full aerial elevation range shall be provided.

A 2-1/2" automatic relief/dump valve shall be installed in the 4.00" lower water piping.

A 1-1/2" drain with valve control at the rear shall be provided to drain the aerial device water system.

TELESCOPIC WATERWAY

An anodized aluminum telescopic waterway shall be mounted beneath the center of the aerial ladder. The waterway shall have a 5" base section tube, 4-1/2" lower mid-section tube, 4" upper mid-section tube and a 3-1/2" fly section tube.

WATER SYSTEM FRICTION LOSS

As per NFPA, the friction loss (total system loss less head loss) shall not exceed 100 psi at 1000 GPM flow with the aerial device at full horizontal extension. The pressure reading for friction loss measurement shall be taken at the base of the monitor and at a point below the waterway swivel.

AERIAL WATERWAY FLOWMETER

The apparatus shall be equipped with a Class 1 Flowminder, model #FMS at the aerial discharge waterway to give the aerial operator an indication of actual volume of water (in gallons per minute) being discharged through the line. Display shall be located at the aerial operator's control console.

Flowminder system shall consist of:

1. A digital display shall be wired to the flow transmitter to show waterway discharge flow.
2. A flow transmitter mounted in the discharge line piping between the pump/inlet and the discharge outlet. The transmitter shall consist of a weather resistant black composite housing with a stainless steel, durable paddle wheel. The only part inserted into the water flow path shall be the paddle wheel.

The flowmeter shall be checked and calibrated prior to delivery of the apparatus.

MOVABLE MONITOR FEATURE

The aerial ladder waterway monitor shall be capable of being positioned at either the fly section for water tower operation or at the next lower ladder section for rescue. The aerial ladder shall be capable of full extension and operation when the waterway is connected to either section of the ladder.

The waterway and monitor shall have a positive lever type latching system to secure them either to the tip of the fly section or next lower section of the aerial ladder. A latching system requiring a pin to be removed from one location and repositioned into another location shall not be acceptable due to the possibility of dropping the latching pin.

The monitor shall be remotely operable from either position and shall transfer the electrical power and controls automatically. When operated from the rescue position (mid-section), the vertical range of motion of the monitor shall be limited to 0 degrees (horizontal center line of the aerial ladder).

Due to problems associated with aligning electrical connectors used to transfer power between rescue and water tower positions, the power transfer shall be achieved by a cable carrier system.

AERIAL WATER SYSTEM

A minimum 4" water swivel shall connect from the aerial waterway supply piping to the telescopic aerial waterway. The water swivel shall permit full operation at any elevation of the aerial device. The aerial waterway pipes shall be designed to reduce friction loss in the waterway.

All aerial waterway piping shall be completely removable for service or replacement. Aerial designs in which the waterway is welded or utilized for structural integrity of the aerial shall not be acceptable.

ELECTRICALLY CONTROLLED MONITOR

An Akron Brass, model 3480 StreamMaster II, 2000 gpm electric monitor, constructed of lightweight Pyrolite, shall be installed on the outer end of the telescoping aerial waterway. The monitor relay box shall be located on at the tip of the aerial device, adjacent to the monitor, and will be easily accessible for service.

The monitor and nozzle functions shall be controlled from the tip of the fly section through hard wired connections and wirelessly from each of the aerial control station(s) specified. The monitor and nozzle controls at the tip and optional control stations shall consist of three (3) individual spring loaded, self-centering, and weather resistant toggle switches.

The monitor shall be capable of a vertical sweep of 165 degrees, and a horizontal sweep of 180 degrees (90 degrees to each side of the aerial center line).

NOTE: Monitor operation above 0 degrees (horizontal center line of the aerial ladder) reduces payload capacity by 250 lbs.

A guarded, momentary "Monitor Stow" switch shall be provided and installed on the turntable control console.

NOZZLE

An Akron Brass, model 5178, Akromatic 2000 electric combination fog and straight stream nozzle with automatic flow mechanism that provides a flow range of 500 to 2000 gpm at 80 psi shall be provided. The nozzle shall be constructed of durable, lightweight Pyrolite and shall have electric pattern selection from straight stream to wide fog controlled by a 12V motor and linear ball screw, a manual override pattern control knob, and a built-in stream shaper.

LADDER CAPACITIES

The following ladder tip load capacities shall be established with the truck level; the outriggers fully extended and lowered to relieve the chassis weight from the axles. All capacities are based upon full extension and 360 degree rotation.

AERIAL CRITERIA AND STANDARDS

The following aerial ladder and water capabilities shall be established in the unsupported configuration with the truck level, the outriggers fully extended and lowered to relieve the chassis weight from the suspension. The capacities shall be based upon 360 degree continuous rotation and up to full extension. The ratings shall be based on average weight of personnel on ladder 250 lbs. each.

LADDER OPERATIONS

The ladder shall be designed to permit a 750 pound tip load, up to full ladder extension from -7 to 78 degree elevation.

WATER TOWER OPERATION

The ladder and water system shall be designed to permit 1500 GPM flow with water stream parallel to ladder or 90 degrees to either side of the ladder. The stream elevation shall be from 0 degrees above horizontal to 135 degrees below horizontal.

With the above flow rating, the ladder shall be capable of -7 to 78 degree elevation at full extension with a 500 pound tip load.

Note: Monitor operation above 0 degrees (horizontal center line of the aerial ladder) reduces payload capacity by 250 lbs.

OPERATIONS ON GRADES

The aerial unit shall be capable of operating with 100% of rated capacity on a slope of up to 10.5 degrees. Operating capacity shall be reduced to 50 % capacity for operating on a slope of 10.6 degrees to 15 degrees. Operation beyond a 10.5 degree slope shall be at operator's discretion. Devices that cannot provide this leveling capability are not acceptable.

COMMUNICATION SYSTEM

A Fire Research ICA900 Series (ACT) communication system shall be provided and installed between the aerial device tip and the aerial operator's position. The communication speaker at the tip shall require no operator attention to transmit or receive. The transmitting receiving volume controls shall be located at the aerial operator's position. These control modules shall have an LED volume display and push-button volume control.

AERIAL TIP LOCATOR LIGHTS

Two (2) lights shall be installed at the tip of the aerial device, one (1) each side, to help locate the tip of the aerial during fire ground operations.

Whelen L51AP series, LED beacons shall be provided and installed as specified.

The light(s) shall be amber in color.

AERIAL SPOTLIGHTS

All 12VDC aerial spotlights lights shall be mounted below handrail height, so as not to increase the overall height of the vehicle.

TRACKING LIGHTS

Two lights shall be mounted at the lower front portion of the base ladder section, forward of the lift cylinders, one (1) each side.

Two (2) FRC "So Brite" model SRA-07A series, 12VDC, LED scene light(s) shall be provided. The light(s) shall be mounted on appropriate mounting base(s) as required.

Light(s) shall include a white finish housing.

12VDC TIP LIGHT(S)

Two (2) 12VDC lights shall be mounted at the tip of the fly ladder section, one (1) each side. The lights shall be capable of swiveling 180 degrees and shall be mounted below handrail height, so as not to increase overall height of the vehicle.

Two (2) FRC "So Brite" model SRA-07A series, 12VDC, LED scene light(s) shall be provided. The light(s) shall be mounted on appropriate mounting base(s) as required.

Light(s) shall include a white finish housing.

TURNTABLE WORK LIGHTS

Five (5) TecNiq, model #E03-W000-1, LED turntable work lights shall be installed in the turntable step cover to illuminate the turntable area.

WALKWAY ILLUMINATION

The climbing area of the ladder shall be continuously illuminated utilizing a series of light emitting diodes (LED’s). The LEDs shall be located on both sides of each ladder section and shall be positioned near the ladder rails to maintain a clear walking area. A switch shall be provided on the turntable control console to activate the rung illumination lighting.

The LED lighting shall be Blue.

AERIAL 110 VAC WIRING

The AC wiring up the ladder shall be Thermoplastic Elastomer (TPE) control cables and shall be highly flexible with very fine copper stranding. The cables shall have a center core strain relief for high tensile strength. The conductors shall be braided in bundles around the high tensile strength core.

The outer jacket shall be gusset-filled, pressure-extruded, oil-resistant, bio-oil-resistant, PVC-free, halogen-free, and UV-resistant with low temperature flexibility. The cables shall have a minimum-bending radius of not greater than 5x the outer total diameter of the cable while moving.

One (1) 110 volt 20 amp electrical circuit utilizing a single 12 gauge 3 conductor electric cable shall be provided to the tip of the ladder. The circuit shall be wired from an enclosure below the turntable through the collector ring assembly.

OUTLET AT THE AERIAL TIP

A single 110 VAC outlet shall be provided at the tip of the aerial fly section, officer's side, as specified.

One (1) NEMA L5-20R, 120-volt, 3-wire, twist lock receptacle shall be installed. The receptacle shall have a 20-ampere rating and include a spring-loaded weather resistant cover if mounted in an exterior location. The receptacle shall be wired to the aerial 110VAC circuit.

AERIAL SPECIAL LABELS

Legible, permanent signs shall be installed in positions readily visible to the operator to provide operational directions, warnings, and cautions. The signs shall describe the function of each control and provide operating instructions.

Warning and caution signs shall indicate hazards inherent in the operation of the aerial device. These hazards shall include, but shall not be limited to:

Electrical hazards involved where the aerial device does not provide protection to the personnel from contact with, or near proximity to, an electrically charged conductor.

Electrical hazards involved where the aerial device does not provide protection to ground personnel who might contact the vehicle when in contact with energized electrically charged conductors.

Hazards from stabilizer motion.

Hazards that can result from failure to follow the manufacturer's operating instructions.

AERIAL DEVICE SPECIFICATION PLACARD

A permanent label shall disclose the following information relative to the aerial device:

Make

Model

Serial number

Date of manufacture

Rated capacity (s)

Rated vertical height

Rated horizontal reach

Maximum hydraulic system pressure

Hydraulic oil type and capacity

All other appropriate labels to ensure safe operation of the aerial device shall be permanently affixed in conspicuous locations.

APPARATUS LEVEL INDICATOR

Two (2) bubble type level indicator(s) shall be provided at the rear of the apparatus, visible to the operator setting the outriggers, to assist in the aerial device setup. The leveling indicator(s) shall be backlit, and color coded indicating the following conditions:

"Green" Safe Operating Zone.
"Yellow" Caution Operating Zone.
"Red" Do Not Operate Zone – Reposition Apparatus.

FORE/AFT LEVEL
An additional backlit leveling indicator shall be provided and installed to measure fore and aft level of the vehicle. The indicator shall be mounted near the left main outrigger control panel.

AERIAL SIGN PANELS

There shall be a total of two (2) Aerial sign panels provided and installed on the outside of the aerial base section, one (1) each side, for fire department lettering. Each sign panel shall have a lettering surface of approximately 13" wide x 120" long.

SIGN PANEL PAINT

The finished paint color shall be FLNA 32525 Red to match PPG 910853.

SPECIAL TOOLS

A toolbox shall be provided with the following special tools for checking the torque of specified bolts as recommended by the aerial manufacturer:

One (1) 1/2" drive, torque wrench
One (1) torque multiplier
One (1) ABR Backlash Adapter
One (1) Crimp Tool HDT-50-00
One (1) 1-1/8" x 6" torque wrench Weld
One (1) 3/4" drive 8" extension
One (1) 3/4" drive 13" extension
One (1) 3/4" drive 3/4" hex bit driver
One (1) 3/4" drive 1-1/8" standard depth socket
One (1) 3/4" drive 1-1/8" deepwell socket

One (1) 3/4" drive, 1-5/16" standard socket
One (1) toolbox TB11

AERIAL FILTER & LUBE SET

The following Filters and Lube shall be shipped loose to assist in maintenance of the aerial device as described by the manufacturer:

· One (1) Pressure Filter element
· One (1) Return Filter element
· Four (4) Tubes, Amsoil GPTR2CR grease
· One (1) Can, "Ultra Green" Wire Rope grease.

AXE MOUNTING

There shall be a mount provided and installed for a pick head axe in the fly section of the aerial. The axe mount shall include a receptacle that will cover the entire axe head and a PAC bracket to secure the axe handle.

The mounting location shall be on the same side of the aerial ladder as the control console.

PIKE POLE MOUNTING

There shall be one (1) mount(s) provided and installed in the fly section of the aerial for a pike pole. The mount shall include restraints for both ends of the pike pole.

The mounting location shall be on the same side of the aerial ladder as the control console.

ROOF LADDER MOUNT

Mounting brackets shall be installed on the outside of the aerial base section to store a single roof ladder. The mounting brackets shall be constructed from aluminum with a dual action sanded finish. The brackets shall be easily accessible from the inside of the ladder section or from the top of the body. The aerial sign plate (if specified) shall be mounted to the outside of the brackets.

The mounting location shall be on the opposite side of the aerial ladder as the control console.

ROOF LADDER MOUNT

The mounting brackets shall be designed and located to accommodate a 14' roof ladder.

FLY SECTION LOAD LIFTING/RAPPELLING EYES

The aerial device shall be equipped with two (2) load lifting/rappelling eyes at the tip of the fly section. The load lifting/rappelling eyes, as a pair, shall be rated not to exceed the tip load of the aerial device.

RESCUE ROPE ROLLER ASSEMBLY

The last rung of the aerial ladder shall be equipped with a removable rescue rope roller assembly. The assembly shall have a stainless steel shaft, dual tapered roller guide and two (2) pivoting lifting lugs. The assembly shall be rated at 500 lb. lift capacity.

REFLECTIVE STRIPING

There shall be a 4.00 inch (101.60 mm) inch reflective stripe with two (2) 1.00 inch (25.40 mm) accent stripes applied to the chassis and apparatus body as specified:

STRIPE PATTERN

The reflective striping shall be applied around the perimeter of the front of the apparatus in a straight line. In addition, when the stripe reaches the front area of the body, the stripe shall jog in a 'Z' shape pattern, then continuing around the rear of the apparatus at a slightly higher level.

STRIPE COLOR

The reflective striping shall be black in color.

REAR RETRO-REFLECTIVE CHEVRON STRIPING

A minimum of 50 percent of the rear-facing vertical surface, visible from the rear of the apparatus, shall be equipped with Diamond Grade, retro-reflective striping in a chevron pattern, sloping downward and away from the centerline of the vehicle at an angle of 45-degrees.

The stripe shall be 6.00 inches (152.40 mm) wide alternating in colors in compliance with (NFPA) 1901, Standard for Automotive Fire Apparatus.

CHEVRON COLOR

The retro-reflective chevron striping shall be red and fluorescent yellow green in color.

REFLECTIVE BODY/CAB LETTERING

Reflective letters shall be provided and installed on the apparatus as directed by the Fire Department. A maximum total of sixty (60) letters up to 3.00 inches (76.2 mm) high shall be provided.

AERIAL LETTERING

Reflective letters shall be provided and installed on each side of the aerial device base section. A maximum total of sixty (60) letters approximately 10.00 inches (254 mm) high shall be provided.

FIRE DEPARTMENT SUPPLIED DECALS

The apparatus decals shall be provided and installed by the Fire Department after final delivery of the completed apparatus.

LICENSE PLATE MOUNTING

A Cast Products, model LP0004-1-B, cast aluminum fully enclosed license plate bracket shall be installed. The bracket shall incorporate a clear LED light (WL0501) to illuminate the license plate and meet DOT requirements.

MISCELLANEOUS EQUIPMENT

The following equipment list shall be provided with the completed apparatus.

WHEEL CHOCKS

One (1) set of NFPA compliant Ziamatic folding wheel chocks model # SAC-44-E shall be supplied with the apparatus.

ZICO WHEEL CHOCK MOUNTING BRACKETS

One (1) set of Ziamatic folding wheel chock underbody horizontal mounts, model # SQCH-44-H, shall be installed on the apparatus under the body in front of the rear wheels on the right side.

RECHARGEABLE FLASHLIGHTS

All NFPA required portable hand lights will be supplied and installed by the Fire Department before the truck is placed into service.

LADDER BELTS

Gemtor Pompier Ladder/Escape life belt(s) model #531-540 with 18.00 inch extension shall be provided with the apparatus.

Each belt shall be made of nylon specially woven to meet the rigorous, texture and strength, intended for use as a positioning and emergency self-rescue device. Each belt shall be fitted with a double tongue buckle and Pompier hook enabling fast engagement and release.

The webbing shall have a minimum breaking strength of 9,000 pounds and an assembled capacity withstanding up to 2,000 pounds. There shall be a 3.00 inch wide buckle strap sewn with high tenacity nylon threads and a 5.00 inch wide riveted body strap.

The following shall be supplied:

One (1) #531-1 (Small) belt(s) with #540 extension.

One (1) #531-2 (Medium) belt(s) with #540 extension.

One (1) #531-3 (Large) belt(s) with #540 extension.

One (1) #531-4 (X-Large) belt(s) with #540 extension.

All remaining NFPA required equipment shall be supplied and installed by the Dealership before the truck is placed into service.

SPARTAN
REV GROUP
EMERGENCY RESPONSE

NXT 110' AERIAL



UNRESTRICTED AERIAL PERFORMANCE, AT ANY ANGLE AND EXTENSION.

No matter the conditions, no matter the demands, we've found a way to take firefighters to new heights in performance and safety.

For decades, Ladder Tower has risen to the occasion and established a heritage of building the best in the business, representing aerial strength and cutting edge performance day in and day out. That has never been more true with the next generation of the 110' Rear Mount Aerial - the NXT 110.

The NXT 110 yields maximum and unrestricted performance with up to 750-pound tip load, at any angle and extension. This performance combined with a low profile pump and short overall length deliver unprecedented maneuverability without sacrificing compartment space or performance.



PERFORMANCE SPECIFICATIONS

The NXT 110 eliminates the traditional pump house through unique packaging and delivers cutting edge aerial performance and apparatus versatility. Designed with firefighters in mind, the NXT 110 is built on a best in class chassis with 500 to 600 horsepower ratings and the #1 safety system in the industry.

More Compact and Maneuverable.

- Under 40' overall travel length
- Overall travel height as low as 11'
- 223" wheelbase
- 53° cramp angle

High Flow.

- 2,250 gpm fire pump
- Low profile NXT pump configuration
- Up to 500 gallon water tank

Maximized Space Usage.

- 245 cu. ft. of compartment storage
- Full depth rescue style compartments
- Up to 170 ft. of internal ground ladder storage
- Fully enclosed ground ladders 40" from the ground
- 1,000' of 5" LDH hose storage with officer side payout
- (2) 1-3/4" removable speedlays
- (1) 2-1/2" removable speedlay

High Performance Aerial Ladder.

- 110' vertical reach
- 99' horizontal reach
- 500 lb. tip load with 12' outrigger spread
- 750 lb. tip load with 14' outrigger spread
- 1,500 gpm aerial water flow capacity
- H-Style outriggers with 36.75" jack extension
- Operation on 20% fore/aft grades
- Operation on 24% side slope

Maximum Flow Capabilities.

A more compact, yet powerful NXT pump with up to 2,250 GPM and a 500 gallon tank provide the power needed to manage any situation. The pump is positioned at the rear of the cab under the seat extension allowing for a full body pump, without taking up space inside the cab. Low pump inlet and discharges provide a safe and ergonomic work environment.



MAXIMUM PUMP CAPABILITIES: *The non-proprietary NXT pump offers up to 2,250 GPM along with added room and storage in the cab and body.*



PUMP OPERATORS PANEL: *The pump operators panel can be found inside the L2 compartment. Choose from standard controls or the optional Omni Pump System shown above.*



LOW CROSSLAYS: *The low profile pump creates a safe and more ergonomic access to crosslays.*



MAXIMUM STORAGE SPACE : *The unique packaging of the NXT110 offers maximum storage space inside the cab and body compartments.*



Industry Best Safety.

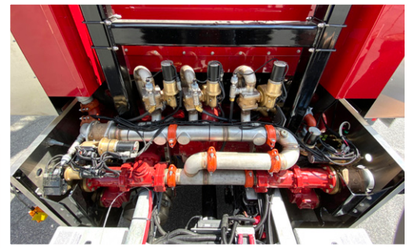
Like every truck we build, our focus is to keep first responders safe. The NXT 110 is engineered to be the safest in its class with the most extensive safety system in the industry, ergonomic controls, Advanced Filtration System, and safe access to ground ladders, hose beds and equipment.

The Spartan Advanced Protection System® (APS) is the #1 safety system in the industry and the only to offer front and side impact protection, providing unparalleled occupant safety. Designed and purpose-built for firefighters, it combines forward-thinking apparatus safety, developed around the needs of the first responder.

Ease of Service and Low Cost of Ownership.

The NXT 110 features non-proprietary chassis, pump, and aerial components and standard parts, making reordering easy and efficient. Simplified service access for the pump and aerial device make for easy maintenance.





THE IDEAL COMBINATION OF AERIAL POWER AND URBAN AGILITY

Safe. Strong. Stable.

Square and rectangular tubing provide a large ladder cross section for superior rigidity, with longer weld joints for increased ladder strength. Tubular Welded Steel Torque Box Mainframe stiffens the backbone of the apparatus to provide a rigid and durable mounting base for the aerial and body. This helps absorb the overturning loads generated by the aerial and distributes them evenly to the outriggers.



Control Technology

The Omni Pump System can be integrated into the aerial turn table controls, giving the operator the ability to control both the aerial and pump operations from a single location.

Cab Features

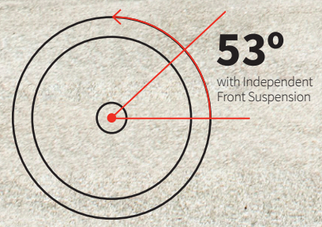
- Flat Floor Design
- Entry & Egress
- Advanced Climate Control
- Advanced Protection System
- Superior Interior Head Room Height

Superior Tip Loads

With tip loads up to 750 lbs. and minimal deflection, the NXT 110 can carry a heavier load and will remain stable and true even when fully extended with a 1/4" ice rating and 50 mph wind rating.

Under 40' Overall Length

223" Wheelbase



53º
with Independent Front Suspension

More Maneuverable

Spartan's Independent Front Suspension (IFS) boasts an industry leading 53 degree cramp angle resulting in a turn radius that is up to 15% better than our 100' single axle competitors.

Greater Control and Stability

The tandem axle design delivers better suspension and braking capabilities with additional carrying capacities resulting in a safer apparatus with greater control and stability.

Unrestricted technology to make your crew unstoppable.

Technology is our strongest tool to give firefighters the performance and safety they demand and deserve. Battling fires is challenging enough; doing it from over 100 feet in the air adds a level of difficulty that we're dedicated to making as safe and effective as possible. No matter the conditions. No matter the height.

TRAVEL HEIGHT AS LOW AS 11': *The ladder sections are designed to provide a low travel height, making it easy to fit into historic firehouses and under bridges.*

12' & 14' NARROW OUTRIGGER SPREAD: *Our H-style outrigger system provides strength and stability under all road and terrain conditions. LT's effective "out and down" design automatically locks into supporting position with no locking pins to place or remove.*

SUPERIOR GRADE OPERATIONS: *Set-up and operate on grades of up to 20% with unrestricted performance. The footplate swivels in all directions, providing superior holding on uneven terrain, and the 24" X 24" auxiliary ground plates provide additional load distribution on soft ground.*





NXT 110 ADVANTAGE

You make enough sacrifices, don't limit yourself when it comes to your equipment. The NXT 110 delivers more power, more maneuverability, with unrestricted ladder performance.

	PERFORMANCE	ADVANTAGE
Front & Side Impact Protection	Yes	Unparalleled Occupant Safety
Wheelbase	223"	Up to 11" Shorter
Cramp Angle	53°	Industry Leading
Turn Radius (curb-to-curb)	352"	Up to 15% Shorter
Vertical Reach	110'	Unrestricted Performance
Horizontal Reach	99'	Unrestricted Performance
Stabilizer Width	12' or 14'	Narrow Outrigger Spread
Fly Section Dimensions	Height 18.5" Width 22.5"	Higher and Wider Fly Section Design
Compartment Storage	245 cu. ft.	Full Depth Rescue Style Compartments
Ground Ladder Storage	170'	Located 40" from the Ground
Pump Capacity	2,250 GPM	Maximum Flow Capacities
Water Tank	Up to 500 Gallon	Haul More
Operating Grade	Up to 20%	Superior Grade Operations

DETAILS MAKE THE DIFFERENCE



EXCELLENT HORIZONTAL & VERTICAL REACH: *Built with up to 100,000 psi yield strength steel that can be depressed as low as 7º below horizontal or as high as 78º above horizontal. This allows firefighters to reach taller structures and have easy access to the ladder when lowered to ground level.*



AL-11 AERIAL LOGIC: *A totally integrated system that provides instant feedback on a ladder's extension, location, retraction, angle, load and breathing air system status, as well as J1939 engine information.*



NARROW OUTRIGGER SPREAD: *It's simple, if you can open your door you can set the jacks. A 12' outrigger spread with quick and simple deployment delivers industry leading performance.*



WATER MONITOR: *When positioned at the tip, the water monitor can be elevated 30º higher than the elevation of the ladder.*



SAFE & EASY ACCESS: *Wide egress steps and walkways provide easy access to and from the ladder.*



REPLACEABLE EGRESS: *Designed with an unobstructed opening for easy access, the bolt-on removable egress can be easily replaced. Available in various lengths.*



LOW GROUND LADDER STORAGE: *Fully enclosed ground ladders are located just 40" from the ground, providing safe and ergonomic access to up to 170 ft. of storage.*


SPARTAN
REV GROUP
EMERGENCY RESPONSE

ORDINANCE NO. 773-2023-04

AN ORDINANCE OF THE CITY OF VENUS, JOHNSON AND ELLIS COUNTIES, TEXAS, REPEALING AND REPLACING IN ITS ENTIRETY CHAPTER 26 "SUBDIVISION AND DEVELOPMENT," AND ENACTING A NEW CHAPTER 26 "SUBDIVISIONS AND DEVELOPMENT" ORDINANCE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR INCLUSION IN THE CODE OF ORDINANCES; PROVIDING THAT THE ORDINANCE IS APPLICABLE TO ALL PRELIMINARY PLAT, FINAL PLATS, AND REPLATS REQUIRED TO BE ACTED ON BY THE PLANNING AND ZONING COMMISSION AND THE CITY COUNCIL; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, it is necessary to repeal and replace in its entirety Chapter 26 "Subdivisions and Development" Ordinance of the City of Venus, Texas, for the purpose of defining processes and procedures for the review of a variety of land use cases and providing regulations for plats; and

WHEREAS, City staff has proposed amendments to the Subdivisions and Development Ordinance that would modernize the Ordinance and create more certainty in the development review process; and

WHEREAS, it has become necessary to update the rules and regulations in relation to Chapter 26 "Subdivisions and Development Ordinance" and has found repealing and replacing the entire ordinance, as provided herein, are in the best interest of the public health, safety, and welfare of the citizens.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VENUS, TEXAS AS FOLLOWS:

SECTION 1. The City Code Ordinance is hereby enacted to read as follows:

Chapter 26 SUBDIVISIONS AND DEVELOPMENT[1]

[1]State law reference(s)—Municipal regulation of subdivisions and property development, V.T.C.A., Local Government Code § 212.001 et seq.; minimum requirements for subdivisions, 31 Tex. Admin. Code § 364.91.

ARTICLE I. IN GENERAL

Sec. 26-1. - Purpose.

The subdivision ordinance of the City of Venus promotes the health, safety, and general welfare of the city and its extra territorial jurisdiction (ETJ) through orderly and beneficial development. The purpose of these regulations is to secure the safety from fire, flood, and other dangers; to provide orderly growth in the city and extra territorial jurisdiction (ETJ); provide equitable access to air, water, and light; to guard these resources against misuse and pollution; to protect the beauty, value, and stability of the land located in the city and ETJ, to foster a beneficial relationship between the land and traffic circulation; to facilitate safe, convenient, efficient movement of pedestrian and vehicular traffic by means of proper dimensioning and location of streets and buildings; to insure the adequate provision of water, sewerage, drainage, streets, parks, and open space to all citizens; and to safeguard the character and stability of all parts of the city and ETJ.

Sec. 26.2. - Compliance with the subdivision ordinance.

It shall hereafter be unlawful for any person or agent of any person to lay out, subdivide, or plat any land within the city of Venus and/or its extra territorial jurisdiction into lots, blocks, or other parcels, or to sell or otherwise transfer therein which has not been laid out, subdivided, and platted according to these regulations.

Sec. 26.3. - Street standards.

All streets constructed in new subdivisions in the city shall be constructed to the standards set out in Attachment A to Ordinance No. 271-2003, on file in the office of the city secretary, which is hereby adopted and incorporated herein for all purposes.

(Ord. No. 271-2003, § 1, 2-11-2003)

Sec. 26.4. –Penalty.

Any persons or their agents, servants, or employees violating or failing to comply with any of the provisions of this chapter shall be fined upon conviction not less than $1.00 nor more than $2,000.00, and each day any violation of noncompliance continues shall constitute a separate and distinct offense.

(Ord. No. 271-2003, § 4, 2-11-2003)

Sec. 26.5. - Stormwater and drainage standards.

(a) The city hereby adopts the North Central Texas Council of Governments (NCTCOG) iSWM™ Criteria Manual for Site Development and Construction, dated December 2009 and revised January 2015, and adopting any amendments thereafter. The city hereby agrees to participate in the iSWM™ program as prepared by the NCTCOG. The city understands that the program is a living program that is updated as appropriate based on new information, technology and practices.
(b) The iSWM™ criteria manual, as adopted shall be known as the City of Venus Drainage Design Manual. A full copy shall be made available on the city web site and available to developers by email or mail by request.
(c) The City of Venus Drainage Design Manual shall be the governing document for all drainage projects under this chapter and for all development and redevelopment projects.
(d) Any all drainage design plans submitted to the city for review and approval under this chapter shall bear the seal and signature of a licensed professional engineer carrying a valid, current license with the Texas Board of Professional Engineers.

(Ord. No. 412-2015 , § A, 11-9-2015)

Sec. 26.6. – Platting required.

a. Every owner of every tract of land located within the corporate limits or extraterritorial jurisdiction of the city of Venus who divides the tract into two or more parts as provided in Chapter 212, Subchapters

A and B, of the Local Government Code shall cause a plat to be made by a registered public surveyor which shall accurately describe all of the said tracts by previously platted lot and block number, or by metes and bounds if necessary and locate same as required by this chapter.

b. All platted lots shall meet the minimum frontage required by the zoning ordinance onto a paved street meeting the right-of-way and pavement requirements of the thoroughfare plan and this chapter.

c. No lot may be sold and no transfer of title to any part of such tract shall be made until a plat meeting the requirements of this chapter is approved by the city and filed in the plat records of Johnson or Ellis County, Texas.

d. No building permit shall be issued on any tract of land until a plat of the tract meeting the requirements of this chapter is approved by the city and filed in the plat records of Johnson or Ellis County, Texas.

Sec. 26.7.26-20 Reserved.

ARTICLE II. - RESIDENTIAL SUBDIVISIONS

DIVISION 1. - GENERALLY

Sec. 26-21. Intent, purpose, authority, and interpretation.

(a) *Intent.* In the interpretation and application of the provisions of this article, it is the intention of the city council that the principles, standards, and requirements provided for herein shall be minimum requirements for the platting and developing of subdivisions in the city and in its extraterritorial jurisdiction; and, where other ordinances of the city are more restrictive in their requirements, such ordinances shall control.

(b) *Authority.*

(1) The ordinance from which this article is derived was prepared under the authority of chapter 212, subchapter A, Texas Local Government Code, to promote health, safety, and morals, and for the protection and preservation of places and areas of historical and cultural importance and significance, and the general welfare of the community.

(2) The procedures and standards for the development, layout, and design of subdivisions of land within the corporate limits and within the extraterritorial jurisdiction of the city are authorized by the Local Government Code.

(c) *Extraterritorial jurisdiction.* The extraterritorial jurisdiction of the city is now one-half mile from the corporate limits. As the city grows, the extraterritorial jurisdiction will be extended in accordance with the Local Government Code, and the requirements of this article shall be extended into any and all new areas of extraterritorial jurisdiction.

(d) *Purpose.* The purpose of this article is to provide for the orderly, safe, and healthful development of the area within the city and within the area of extraterritorial jurisdiction surrounding the city, and to promote the health, safety, morals, and general welfare of the community. Such purpose is to be promoted by provisions designed to:

(1) Restrict or prohibit the subdivision of lands for uses which are dangerous to public health, safety or welfare; or which would jeopardize property in times of flood, fire or other menace or which, with reasonably anticipated improvements, would cause excessive increases in flood heights or velocities until proper provision has been made for drainage,water, sewage, schools, transportation facilities, and other public improvements

(2) Protect individuals from buying lands which are unsuitable for intended purposes because of flood hazards by prohibiting the subdivision of unprotected flood hazard lands, requiring that flood hazard areas be delineated on the final plat, and areas not suitable for development be subject to deed restrictions.

(3) Guide and assist subdivider/developers in correct, expeditious procedures to be followed and to inform them of the general standards which shall be required.

(4) Protect the public interest by controlling the location, design, class and type of streets, sidewalks, utilities and other essential services required in the public interest and/or necessity.
(5) Provide for the public welfare in those essential services required for living, educational, recreational, industrial and commercial purposes.
(6) Implement the Comprehensive plan, and other plans and programs authorize under the guidance of the Comprehensive Plan.
(7) Provide parks, trails, and civic spaces that help organize development around systems of connected open spaces, emphasize significant natural landscapes, and contribute to a valuable public realm.
(8) Secure adequate provisions for water, drainage, sanitary sewer facilities and other public improvements based upon city, state, and federal requirements.
(9) Provide for coordinated development of Venus with established policies of the City.
(10) Insure that public facilities are available and ill have sufficient capacity to serve the proposed subdivision.
(11) Prevent the pollution of air, streams, ravines, and ponds to assure the adequacy of drainage facilities, to safeguard the water table, and to encourage the wise use and management of natural resources throughout the city in order to preserve the integrity, stability and beauty of the community and the value of the land.
(12) Provide facilities which can be maintained without imposing a burden on the taxpayers.

(e) Conformance to the most current comprehensive plan. Not plat or subdivision of land with the city and its extraterritorial jurisdiction, as determined by Chapter 42, Subchapter A, Texas Local Government Code, shall be approved unless it conforms to the most current comprehensive plan of said city and its streets, alleys, easements, parks, playgrounds, and public utility facilities, including those which have been or may be laid out, and to the most current comprehensive plan for the extension of said city and of its roads, streets, alleys, easements, and public highways, regard being had for access to public utilities.

(f) In their interpretation and application, the provisions of this article shall be held to be minimum requirements and shall be liberally construed in favor of the city and shall not be deemed a limitation or repeal of any other powers granted by state statutes.

(g) Planned Unit Development. Upon application by a developer/subdivider, upon review and comment by the city staff, as hereafter provided for, and upon review by the planning and zoning commission, the city council may modify or waive design standards set forth when such developer/subdivider intends and formally applies to utilize the “planned unit (or clustered) development” concept for the development of a parcel of land.

(Ord. No. 243-2001, § 1, 2-19-2001)

Sec. 26-22. Definition of terms.

The following words, terms and phrases, when used in this article, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning:

Building Setbacks means the minimum required distance between any property line and the building. When front building setbacks are expressed as a range (i.e. 10’ to 25’), it shall be interpreted as a “front-building line” range, within which distance the front building line of the principal structure shall be established.

Building Transparency means when referring to the design of building facades, transparency is the percentage of windows and doors on the façade, intended for two purposes: (1) to break up the scale and massing of the façade and relate the building to the streetscape and public spaces; and (2) to provide connections – visual and perceived – between the activities on the site and the public streetscape or spaces. Therefore, transparency has two measurements: the extent of transparency, which is the percentage of the overall façade, measured at each story but which includes non-transparent components

associated with the opening such as molding, casing or frames; and the degree of transparency, which is typically the clarity of the glass used for the opening. The clarity of the glass in the opening is met by a minimum Visible Light Transmission of 60% (VLT=the percentage of total visible light that is transmitted through a glazing system) and a maximum Visible Light Reflectance of 15% (VLR= the percent of total visible light that is reflected by a glazing system). For upper story windows, these measures may be 40% VLT and 20% VLR.

Chief administrative officer means the person designated by the city to administer the provisions of this article.

City engineer means the person designated by the city to perform the duties of the city engineer. The city may require that the developer pay for all or part of the city's expenses incurred by this person, including preparing reviews.

Easement means a right granted or acquired for the purpose of limited public or semi-public use across, under, or over private land.

Engineer means a person duly authorized under the provisions of the Texas Engineering Registration Act, as heretofore or hereafter amended, to practice the profession of engineering.

Filing means the state-mandated 30-day period for action on any document submitted in accordance with this article under section 212.009, Texas Local Government Code, shall begin when:

(1) The preliminary plat is deemed filed when all fees, documents, drawings and approvals required hereunder are filed with the city secretary;

(2) The final plat is deemed filed when the approved preliminary plat, along with any stipulations and/or conditions required by the commission, has been filed with the city secretary as a final plat and all necessary fee, documents, certifications and drawings required in this article are in the possession of the city secretary; and

If at any time the city secretary deems that required information has not been provided for whatever reason, the filing shall be deemed canceled and begin again upon the filing of the required information.

Front Building line means when established as a requirement for location of the principal building, the distance or a range from the front lot line; at or within which distance the front building line of the principal structure shall be established.

Height means building height, when expressed as a dimension, is measured from the average grade to the highest point of a roof. Average grade is determined by calculating the average of the highest and lowest elevation of finished grade along the front building line parallel to the street. Building heights expressed in both dimension and stories shall use the additional story limits to impact the scale, form, and mass of the building within the permitted overall height.

Lot and *lot of record, and pre-existing lot of record*

(1) *Lot* means any land occupied by a building and its accessory buildings, including such open space as is required by ordinances of the city, and having its principle frontage upon a public street or officially approved place.

(2) *Lot of record* means any lot that is part of a subdivision, the plat of which has been recorded in the office of the county clerk of Johnson County or Ellis County, Texas.

(3) *Pre-existing lot of record* means any tract of land in existence prior to the adoption of the Subdivision Regulations or under the jurisdiction of the City (within the city limits or within the extraterritorial jurisdiction) and whose boundaries have not been altered since the City's jurisdiction applied.

Lot Measurements means the following shall be used in interpreting measurements and dimensional standards for lots. In the case of parcels, tracts or other property lines clearly intended to bound buildable areas, these lines may be interpreted as lot lines for the purposes of this code:

1. *Lot Area* means the area bounded by the front, rear and side lot lines, or when expressed as a range, it shall be interpreted as a minimum and a maximum.

2. *Lot Depth* means the horizontal distance between the front and rear lot lines measured at right angles to the front right-of-way lines. Where the front and rear lines are not approximately parallel, the lot depth shall be the average when measured from at least three different points along the front lot line, including the two corners at the front lot line.

3. *Lot Frontage* means the portion of the lot that establishes the relationship between the building or site and the public realm or street upon which the lot fronts.

4. *Lot width* means the horizontal distance between the side lot lines, typically measured at the front lot line, but for irregular lots it may be measured at the front building line.

Corner Lots means applying building; lot and frontage standards to corner lots, lots can be arranged in one of three patterns based on the context of the block and abutting lots:

a. *Standard Corner* means the building orients to the same front as all other buildings on the same street, and an expanded side setback may apply on the other street side of the lot. Side and rear setbacks apply to the remaining sides.

b. *Reverse Corner* means the building orients to the end-grain of the block (not the same as other buildings on the interior of the block), and the front setback and frontage design applies to that street. The other street-side setback can be the greater of (1) the stated street-side setback for that building type or (2) 10 feet in front of the forward-most point of the front building line of the abutting lot. Side and rear setbacks apply to the remaining sides.

c. *Corner Orientating* means the building orients to both streets, with the front setback and frontage design applying on both street sides. The two remaining lot lines are treated as side setbacks and there is no rear setback.

Most current comprehensive plan means the statement of official public policy containing the goals and objectives of the community, the capital improvements program, the plan for public utilities systems, the land use plan, the major thoroughfare plan, the community facilities plan, the flood management program, the subdivision and zoning regulations, and other development codes, ordinances, policies, and plans promulgated by the city council for the quality and orderly growth of the community.

a. Plat. A map or chart of the subdivision, lot or tract of land. It shall include the term plan, plat or re-plat, in either singular or plural.

b. Minor Plat. A plat dividing land into no more than four (4) lots that meets the submission and approval requirements. Such plat is also considered a Final Plat.

c. Preliminary Plat. The graphic expression of the proposed overall plan for subdividing, improving

and developing a tract shown by superimposing a scale drawing of the proposed land division on a topographic map showing in plan view existing and proposed drainage features and facilities, street layout and direction of curb flow, and other pertinent features with notations sufficient to substantially identify the general scope and detail of the proposed development. The preliminary Plat shall serve as a means for the City to review and study the proposed division of land or improvements.

d. Final Plat. The one official and authentic map of any given subdivision of land prepared from actual field measurement and staking of all identifiable points by a Surveyor or Engineer with the subdivision location referenced to a survey corner and all boundaries, corners and curves of the land division sufficient described so that they can be reproduced without additional references. The Final Plat of any lot, tract, or parcel of land shall be recorded in the Deed Records of Johnson County or Ellis County, Texas. A Final Plat may also be referenced as a Record Plat or Filing Plat.

Plat and approved plat.

(1) Approved plat means a plat of subdivision which has been approved in accordance with the requirements of this article and which has been filed for record with the county clerk of Johnson County or Ellis County.

(2) Plat means a complete and exact subdivision plan submitted to the council for final approval and which, if approved, shall be submitted to the county clerk of Johnson County or Ellis County for recording.

NCTCOG Standards means the most recent edition of the Public Works Construction Standards North Central Texas Council of Governments (currently Fifth Edition published November 2017)

Setback (or building) line means a line on a plat parallel, or nearly so, to the street right-of-way, indicating the limit beyond which buildings, structures or fences may not be erected.

Standard refers to the official city maps, master plan, ordinances, and other specifications of the city.

Story means the part of a building included between the surface of one floor and the surface of the floor next above, or if there is no floor above the ceiling above. Story heights shall be:

a. 9 feet to 12 feet, generally;

b. The first story for a residential buildings should be 10 feet to 12 feet;

c. The first story in non-residential buildings should be 12 feet to 20 feet;

d. Building types or parts of buildings that require high floor-to-ceiling heights, such as gymnasium, atrium or warehouse, shall have the number of stories calculated as the finished floor-to-ceiling height divided by 15.

e. Any ground story that has more than 4 feet of its height exposed above the finished grade along more than 50% of the foundation perimeter shall count as a story, except that the Director may determine that it is not a story (i.e. “walk out basement”) provided:

(1) The lot has a grade change of more than 4 feet within the buildable area established by setbacks; and

(2) The building foundation is no more than 2 feet above grade at the highest grade point along the front elevation; and

(3) The grading for the site was not significantly altered to benefit the height of the proposed building in a manner that is incompatible with the scale, massing and relationship to adjacent buildings.

Street, alley and *block.*

(1) *Alley* means any minor way which is used primarily for vehicular service access to the back or the side of properties otherwise abutting on the street.

(2) *Block* means a piece or parcel of land composed of two or more lots, or a single tract platted for the owner's convenience, with each lot having access to a public street, road, railroad right-of-way, or a combination thereof.

(3) *Street* means a way for vehicular traffic, whether designated a street, highway, thoroughfare, parkway, throughway, road, avenue, boulevard, lane, place, or however otherwise designated.

a. *Arterial streets* and *highways* are those which are used primarily for fast or heavy traffic and which are designated in the comprehensive plan as a primary street, expressway, or freeway.
b. *Collector streets* are those which carry traffic from minor streets to a major system of arterial streets and highways, including the principle entrance streets of a residential development and streets for circulation within such development and which are designated in the comprehensive plan as secondary streets.
c. *Minor streets* are those that are used primarily for access to abutting property.
d. *Marginal access streets* are minor streets which are parallel and adjacent to arterial streets and highways, and which provide access to abutting property and protection from through traffic.
e. *Cul-de-sac* is a short, minor street having but one vehicular access to another street and terminated by a vehicular turnaround. Cul-de-sacs shall not be longer than 600 feet and shall have a turnaround provided at the closed end. They shall have an outside roadway diameter of at least 80 feet and shall have a street-property line diameter of at least 100 feet.
f. *Dead-end street* is a street with only one opening, other than a cul-de-sac.

Subdivision and related terms. The term, "subdivision," shall be interpreted to mean the division of a parcel of land into two or more lots or tracts for the purpose of transfer of ownership, the dedication of streets, alleys, or easements, or for use for building development; provided that a division of land for agricultural purposes into lots or tracts of five acres or more, and not involving a new street or alley, shall not be deemed to be a subdivision. The term "subdivision" includes re-subdivision and, when appropriate to the context, shall relate either to the process of subdividing or to the land subdivided. The terms, "subdivider" and "developer," are synonymous and are used interchangeably and shall include any person and/or any officer, agent, employee, servant, and trustee thereof who does, or participates in the doing of, any act towards the subdivision of land within the intent, scope, and purview of this article.

(Ord. No. 243-2001, § 2, 2-19-2001)

Sec. 26-23. Penalty.

a) Any person violating provisions of this article shall be deemed to be guilty of a misdemeanor and upon conviction shall be fined in an amount not in excess of $2,000.00. Each violation of this article shall be deemed a separate offense and each day that the violation continues shall be deemed a separate offense. Nothing herein shall prevent the enforcement of this article by another means authorized by law, and this article may be enforced by any or all means. The choice of one remedy is not to the exclusion of any other remedy.

b) Any person who shall violate any of the provisions of this article, or who shall fail to comply with any of the provisions hereof, within the extraterritorial jurisdiction of the city, shall be filed on in district court, as provided for in the Local Government Code, with the purpose of restraining and enjoining the violation of this article. In addition, utilities will not be extended into the subdivision until the provisions of this article are complied with.

(Ord. No. 243-2001, § 25, 2-19-2001)

Sec. 26-24. Policies and special provisions.

a) No permit shall be issued by the city for the installation of septic tanks upon any lot in a subdivision unless such septic tank system meets requirements applicable to state law applied to local conditions.

b) No building, repair, plumbing, electric or similar permit shall be issued by the city for any structure on lot in a subdivision for which a final plat has not been approved and filed for record, nor for any structure on a lot within a subdivision in which the standards contained herein have not been complied with in full.

c) The city shall not repair, maintain, install or provide any streets or public utility services in any subdivision for which a final plat has not been approved and filed for record, nor in which the standards contained herein or referred to herein have not been approved in full.

d) The city shall not permit the sale of, or supply of, any electricity, water or sewerage service within a subdivision for which a final plat has not been approved or filed for record, nor in which the standards contained herein or referred to herein have not been complied with in full.

e) On behalf of the city, the city attorney shall, when directed by the city council, institute appropriate action in a court of competent jurisdiction to enforce the provisions of this article or the standards referred to herein with respect to any violation thereof which occurs within the extraterritorial jurisdiction of the city as such jurisdiction is determined under the Municipal Annexation Act, or within any area subject to all or a part of the provisions of this article.

f) If any subdivision exists for which a final plat has not been approved or in which the standards contained herein or referred to herein have not been complied with in full, the city council of the city shall pass a resolution reciting the fact of such noncompliance or failure to secure final plat approval. Said resolution shall recite the fact that the provisions of subsections (a)—(d) of this section apply to the subdivision and the lots therein. The city secretary shall, when directed by the city council, cause a certified copy of such resolution, under the corporate seal of the city, to be filed in the deed records of the county or counties in which such subdivision or part thereof lies. If full compliance and final plat approval are secured after the filing of such resolution, the city secretary shall forthwith file an instrument in the deed records of such county or counties stating that said resolution no longer apply.

g) It is provided, however, that the provisions of this section shall not be construed to:

(1) Prohibit the issuance of building, repair, plumbing, or electrical permits with respect to any lots or building tract;

(2) Prohibit the repair, maintenance, or installation of any street or building;

(3) Prohibit the repair, maintenance, or installation of any street or public utility service for, to, or abutting any lot, in these instances:

a. Where the last recorded conveyance of such lot or tract prior to passage of this article was by metes and bounds;

b. Where a building is in existence on said lot prior to passage of the ordinance from which this article is derived; or

c. Where such subdivision, whether by recorded plat or by actual occupancy and use, was in existence prior to the passage of the ordinance from which this article is derived.

(Ord. No. 243-2001, § 3(1)—(7), 2-19-2001)

Sec. 26-25. Land suitability.

a) No land shall be subdivided which is held unsuitable for its intended use by the city for reason of flooding, inadequate drainage, soil and rock formations with severe limitations for development, susceptibility to mudslides or earth slides, severe erosion potential, unfavorable topography, inadequate water supply or sewage disposal capabilities, or any other feature harmful to the health, safety or welfare of the future residents of the proposed subdivision or community.

b) However, the city council may approve the preliminary and final plats if the subdivider improves the land consistent with the standards of this chapter and other applicable ordinances to make the area, in the opinion of the city council, suitable for its intended use. The city council may also approve the preliminary and final plats if the subdivider agrees, in writing, to make suitable improvements and places a sum in escrow pursuant to this article to guarantee performance.

c) In determining the appropriateness of land subdivision at the site, the city council shall consider the stated purpose and objectives of this article, and:

(1) The danger to life and property due to the increased flood heights or velocities caused by subdivision fill, roads, and intended uses;

(2) The danger that intended uses may be swept onto other lands or downstream to the injury of others;

(3) The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions, including flood conditions;

(4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(5) The importance of the services provided by the proposed facility to the community;

(6) The availability of alternative locations not subject to flooding for the proposed subdivision and land use;

(7) The compatibility of the proposed uses with existing development and development

anticipated in the foreseeable future;

(8) The relationship of the proposed subdivision to the most current comprehensive plan and floodplain management program for the area;

(9) The safety of access to the property in times of flood and other natural disasters and emergencies for emergency vehicles; and

(10) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.

(Ord. No. 243-2001, § 3(8), 2-19-2001)

Sec. 26-25. Procedures Summary.

	Eligible Applicants			Pre-application Conference	*Neighborhood meeting*	Notice			Review Body			
	Owner	PC	CC			Post	Publish	Mail	Staff	PC	CC	BoA
Administrative Plat	■			☑					D	A		
Subdivision Plan	■			☑	☑	☑	☑	☑	R	D/PH	Ac/PH	
Final Plat	■			☑					D	A		
Zoning Map Amendment	■	■	■	☑	☑	☑	☑	☑	R	R/PH	D/PH	
Planned Development - Regulating Plan	■	■	■	☑	☑	☑	☑	☑	R	R/PH	D/PH	
Conditional Use Permit	■			☑	☑	☑	☑	☑	R	D/PH	A	
Site Plan				☑					D	A		
Variance	■			☑		☑	☑	☑				D/PH
Appeal of Administrative Decision	■	■	■			—	—	—				D/PH
Text Amendment		■	■				☑		R	R/PH	D/PH	
Annexation	■		■	☑		☑	☑	☑	R		D/PH	
	☑ = Required							R = Review and Recommending Authority				
	■ = Authorized							D = Decision Making Authority				
	PC = Planning Commission							Ac = Acceptance of Decision				
	CC = City Council							A = Appeal of Decision				

	BoA = Board of Adjustment			PH = Public Hearing Required				

Sec. 26-26. All Applications

a. Applications and Fees

1. *Forms*. Applications required under this ordinance shall be submitted to the Planning Department on forms supplied by the Department.
2. *Fees.* Applications shall be accompanied by a non-refundable fee established by the City Council's Annual Fee Resolution. Any application that does not include the required fee shall be returned to the applicant as incomplete. Fees shall not be required with applications initiated by the staff on behalf of the Planning Commission or City Council.
3. *Eligible Applicants*. The Procedures Summary Table indicates applicants eligible for each particular application under this ordinance, which include the following:
    a. Owner. The record owner of property that is the subject of the application or that owner's agent authorized by written permission of the owner.
    b. Planning Commission. The Planning Commission, acting on its own initiative according to its bylaws and rules of procedure or through recommendations brought to it by city staff.
    c. City Council. The City Council acting on its own initiative according to its bylaws and rules of procedure or through recommendations brought to it by city staff.

b. ***Concurrent Applications***. When a project requires approvals under more than one type of application, the Planning Department may determine that each application may run concurrently based on the following:
    1. The similarity of information required for each type of application, or where they require different information, the ability to coordinate information, review criteria and decisions under each application.
    2. The similarity of notice, timing, procedures, meetings and review bodies required for each application.
    3. The ability of the staff and review bodies to make effective decisions when reviewing the applications concurrently.

In cases where the Planning Department determines applications may run concurrently, the application shall be processed through the highest review level of any of the associated application, and no decision shall be considered final until the last of the related decisions has been made.

c. ***Pre-application Meeting***. Pre-application meetings may be requested for any application and shall be required as indicated in the Procedures Summary Table. The applicant shall confer with the Planning Department and other city staff to discuss the general nature of the proposal, including:
    1. Proposed uses, general site layout, and conceptual designs of buildings and open spaces.
    2. Impacts of development to existing conditions on the site and the vicinity.
    3. Procedural and submittal requirements.

4. Development review processes and review criteria, and in particular whether any special public information and outreach or specific agency or department reviews are necessary.
5. Planning and infrastructure impacts, including the need for any technical studies or outside agency coordination and review.
6. Specific plans or policies affecting the application.
7. Standards and requirements of the City Ordinances applicable to the project.
8. Opportunities to improve or coordinate the preliminary concepts with other private or public investments in the area.

d. ***Neighborhood Meeting***. A neighborhood meeting shall be required as indicated in the Procedures Summary Table. Neighborhood meetings shall meet the following:

1. Be held prior to a formal application to the City.
2. The applicant is responsible for coordinating the meeting location, and the meeting shall be held at a public meeting facility within the City, such as a school, community recreation center, or other convenient and accessible meeting center. The Planning Department may approve the virtual facilitation of the neighborhood meeting in lieu of or in addition to the meeting held at a public meeting facility.
3. The applicant is responsible for all content of the meeting, which at a minimum shall include:
    a. The general nature and scope of the proposed project;
    b. A summary of the proposed land use, including planned or all potential future uses under the request;
    c. The most recent plans and submittals available for the project, depicting the scale, location and design of any buildings and the relation of all site improvements to the streets and adjacent property; and
    d. Identify and explain in the subsequent formal review steps with the City, and note that official and formal review by the City may result in changes from the initial concepts.
4. The applicant is responsible for notification of the neighborhood in the manner and format prescribed by the City on the application forms. The applicant shall receive confirmation of the time and location of the meeting from the Planning Department Staff prior to schedule and notice.
5. The applicant shall prepare minutes of the meeting including evidence of the notice, attendance, content and presentation, issues and discussion summary, and outcomes of the meeting. These minutes shall be included as part of the formal application.

e. ***Staff Review***. Upon receipt of an application, Planning Department Staff shall take the following steps:

1. *Notification of Incomplete Application*.

a. If an application is determined incomplete, Planning Department Staff shall notify the applicant of the specific ways in which the application is deficient. No further processing of the application shall occur until the deficiencies are corrected. If a deficient application is not corrected within 30 days of the notice, the incomplete application may be considered withdrawn.

b. If an application is complete it shall be processed for formal review.

2. Development Review Committee.

1. Specific applications may require review by the Development Review Committee, and Planning Department Staff may determine that any application can be reviewed by the Development Review Committee when it affects issues or facilities significant to other

departments and outside agencies.

2. Planning Department Staff may determine if other referral agencies are appropriate based on the application and has discretion to add any other relevant or applicable agency to the list. However, in general the applicant shall assume that the following agencies are required to review and comment:

    (1) Gas and electric utilities;

    (2) Telecommunications and cable providers;

    (3) Public safety agencies (police, fire, EMS, health);

    (4) Respective school district(s) in which the subject property is located;

    (5) Water and sewer utilities;

    (6) Irrigation companies;

    (7) Special districts; and

    (8) Other local, state, or federal government agencies.

c. Failure to receive comments from referral agencies may allow Planning Department Staff to delay the application. However, if the applicant demonstrates sufficient due diligence in receiving comments, Planning Department Staff may interpret the failure to comment as consent to the application by the agency.

d. The applicant shall be responsible for coordinating all subsequent requirements or comments of the City or agencies, and notifying agencies of any changes that may affect their comments on initial plans prior to final review.

3. *Staff Comments*. Planning Department Staff shall coordinate a staff review after receipt of a complete application and provide the applicant the following information in writing:

    a. Recommended changes based on the results of any referral agency comments, neighborhood meetings, or staff review on the merits of the application requirements and criteria of this ordinance.

    b. Any supplemental information necessary to support the application or address any comments or recommended changes.

    c. If the applicant chooses not to address any particular comment or recommended change, a written statement shall be included with the resubmittal that demonstrates a good faith effort to address the issue and justify why the comment was not addressed. The applicant may request to schedule the application for official review based on this justification.

    d. If the applicant fails to submit revisions or otherwise address any comments from the Planning Department in writing for more than 120 days, Planning Department Staff may determine the application withdrawn and the review terminated. Any further action will require a new application and fees

4. *Scheduling*. Applications that have completed Development Review Committee (DRC) and staff review, and addressed any comments, shall be scheduled for further review according to these regulations.

5. *Staff Report*. Planning Staff shall prepare a staff report for applications that require review and decisions by other review bodies that identify the appropriate policies, plans, regulations and review criteria. Planning Staff shall provide a copy of the report to the reviewing body and to the applicant in association with the public meeting agendas and packets.

f. ***Notice.*** Notice shall be provided for each application as indicated in the Procedures Summary Table, which shall provide the date, time, place, type and general nature of the application, the general location of the subject property, a description of the proposal, and the location and contact where additional details may be found. Prior to the hearing or review meeting, the applicant shall verify to Planning Department Staff that all required notice has been posted, and the City shall be responsible for mailed and published notice. Required notice shall include the following requirements:

1. *Published*. Where published notice is required, at least 15 days prior to the public hearing or meeting, Planning Staff shall publish the notice on the Midlothian Mirror Newspaper in a manner that best advises the public of the application**.**
2. *Posted*. Where posted notice is required, notice shall be posted on the property or near the proposed site, visible to surrounding properties and the general public from adjacent public ways, according to the following:
    a. Planning Staff shall determine the number, type and specific location of signs based on the context of the property and supply the signs
    b. The applicant shall ensure that all signs are posted at least 15 days prior to the public hearing or meeting.
    c. The notice shall state that the land use proposal is under review and contain the contact information for the Planning Department for specific information about the type of application or nature of the project.
    d. The applicant shall make a reasonable good faith effort to maintain posted notice throughout the proceedings. When the public hearing is delayed more than 30 days from the date on the posted notice, the applicant may remove the posted notice and post new signs with the new public hearing date at least 15 days prior to the new public hearing date. Any failure to maintain posted notice beyond reasonable good faith efforts shall not invalidate any subsequent action.
3. *Mailed*. Where mailed notice is required, the City shall mail notice of the date, time, place, type and general nature of the application, general location of the subject property, and a description of the proposal and where additional details may be found. When mailed notice has been properly addressed and deposited in the mail, failure of a party to receive notice shall not invalidate any subsequent action. Notice shall be sent by regular mail to the following, at least 15 days prior to the hearing or review meeting:
    a. All property owners within 200 feet shown by the records of the county assessor no more than seven days prior to the date of application;
    b. Where notice is not required, or where notice beyond these requirements is determined necessary at the discretion of Planning Staff, mailed notice to all property owners within 1,000 feet may be required in the following situations:
        1. Where large parcel sizes on the perimeter of the project result in notification to only immediately adjacent owners;
        2. Where a large project is more than 1,000 feet in any dimension; or
        3. Other situations where Planning Department Staff determines that additional notice may be necessary due to the context or nature of the project causing potential impacts beyond the required notice distance.
4. Additional Hearing or Meeting Dates. For any application where mailed or published notice is required by this ordinance or Texas law, and the reviewing authority adjourns or continues to the review to a certain date, time and location, no new notice shall be

required.

g. ***Public Hearings.*** Where public hearings are required by the Procedures Summary Table, the following procedures apply:

1. The hearing shall be conducted and a record of the proceeding shall be preserved.
2. Any interested person or party may appear and be heard in person or by agent.
3. The review body may request testimony or a report on the application from any government official or agency, or any other person with information pertinent to the application.
4. A public hearing for which proper notice was given may be continued to a later date without again requiring notice provided in this section if the specific date, time and place of the continued hearing is announced at the original hearing.
5. If the review body is a recommending body, a written summary of the meeting and the recommendation shall be forwarded to the decision-making body.
6. A review body is authorized to establish meeting procedures and bylaws regarding specific conduct and management of public hearings, within the parameters of these regulations.

h. *Action by Review Bodies*. Review bodies shall take the actions indicated in the Procedures Summary Table. A review body may take any action on the application consistent with notice given or criteria in this ordinance, or recommend the same when the review body is a recommending body, including the following:

1. *Approve the application*.
2. Approve the application, with conditions or modifications that make it more consistent with the standards and approval criteria.
3. Deny the application, with specific reasons for the denial.
4. Continue the application to allow further analysis. The continuation period shall not be more than 60 days from the original review without consent of the applicant. No application shall be continued more than once by each review body without consent of the applicant.

i. *Appeals*. The decision shall be final and only appealed as authorized by law. The following appeal procedures apply:

1. Appeals shall be filed with the Planning Department Staff within 15 days of the decision by the decision-making review body.
2. *Appeals* shall identify the exact provisions in dispute and whether it is incorrect due to one or more of the following:
    a. It was against the express standards of this ordinance;
    b. It was not authorized by the discretion and review criteria of this ordinance;
    c. It was an unreasonable interpretation or application of the standards;
    d. It was erroneous, based on the record and facts review of the decision-making body; or
    e. It was otherwise clearly contrary to law.
3. The following persons and entities shall have standing to appeal the action of the review body:

a. The applicant;

b. Planning Department Staff, on behalf of any public official, department or public body; and

c. Any other person given the right of appeal by law.

4. The review body designated as the appellate body shall consider the application based on the established record, and within 60 days of the date that the appeal was filed, may take any action authorized by the decision-making review body if it determines that a clear error was made. The procedure and required notice shall be the same as required of the original application

j. ***Technical Studies.*** Planning Department Staff, on behalf of any public official, department, or agency, the Planning Commission or the City Council, may require applicants to submit technical studies necessary to evaluate the application. Technical review by outside entities with expertise or jurisdiction over some aspects of the application may be required in place of, in addition to, or in association with any studies. Examples of technical studies that may be required include traffic impact analyses, engineering studies, geologic or hydrologic studies, environmental impact assessments, noise studies, market studies or economic impacts. The persons or firms preparing the studies shall be subject to the approval of the Planning Department Staff. The costs of all studies shall be borne by the applicant. Any application that is determined to require technical studies or review from entities outside of the City may require special schedules based on the reasonable time frames to conduct those studies or additional reviews.

k. Permits. Upon final approval as specified for each application in this section, applicants may apply for all permits necessary to construct buildings, infrastructure and site improvements. Permits necessary to show full compliance with the standards of this code, or other applicable City ordinances, may be required.

l. ***Successive Applications.*** When the review body takes final action to deny an application, the same or a similar application shall not be refiled for one year from date of denial. Planning Department Staff may permit a refiling of the application no sooner than 1 year when it is determined that significant physical, economic or land use changes have taken place within the immediate vicinity, or where a significant text amendment to this code has been adopted that may affect the outcome of the action on the application. There shall be no time limitation on an application that the Planning Department Staff determines is substantially different from a previously denied application, when considering the proposed use, scale or intensity of development, and potential impacts on adjacent property.

m. ***Administrative Plats (minor plats).*** These are routine applications such as lot line adjustments, lot splits, lot consolidations, or land divisions, that do not alter the development patterns or impact public services. Administrative plats shall be processed according to the following criteria and procedures.

1. *Eligibility*. The following situations are specifically eligible for administrative plat processes:

a. Lot line adjustment – The alteration of legal boundaries for up to 4 previously platted lots.

b. Lot splits or lot merger- The consolidation of 4 previously platted lots into 3 or fewer lots, or the splitting of 1 previously platted lot to no more than 3 lots.

c. Affidavit of correction – A survey to correct an error in the legal description of a lot or parcel

d. Minor subdivision – The division of previously unplatted land into 3 or fewer

lots.

2. *Review Criteria*. An application may be approved by the City administrator if he/she determines that all of the following are met.
    a. No new right-of-way or other public dedication is needed.
    b. No significant increase in service requirements (utilities, schools, traffic control, streets, etc.) or impact on the ability to maintain existing service levels will result.
    c. The application does not alter any zoning district boundaries due to adjustments to any lots.
    d. All lots meet the legal standards of the subdivision regulations and applicable zoning districts.
    e. The lot patterns are compatible with the surrounding area and any previously approved final plat for the subject property. In determining compatibility, the size and dimension of lots, the layout and design of existing subdivisions and rights of way, and the degree of deviation from previous development and the potential impact of this deviation on surrounding property shall be considered.
    f. No other significant issues exist with potential development enabled by the plat that could impact planning policies, development regulations or adjacent property owners.
3. Application and procedures
    a. Responsible officer. The City Administrator shall be the responsible official for an Administrative Plat and the Development Review Committee shall be the reviewing body for an Administrative Plat.
    b. Fees. The Developer shall pay a non-refundable application according to current adopted Master Fee Schedule.
    c. Application deadline. Administrative Plat applications shall be submitted in accordance with submittal deadlines approved by the City of Venus Planning and Zoning Commission.
    d. Pre-Application Conference. Prior to filing an administrative plat, the developer(s) may request a Pre-Application Conference with the Planning Director and other pertinent City staff.
    e. Application contents. All applications shall be submitted on forms supplied by the City of Venus' Planning and Zoning Department with the required information as stated on the application form.
    f. Development Review Committee. The Development Review Committee shall recommend for the next Planning and Zoning Commission meeting either:
        1. Approval of the Final Plat;
        2. Denial of the Final Plat; or
        3. Approval of the Final Plat subject to corrections or alterations required prior to consideration.

The Development Review Committee shall make specific findings for the reasons for denial or the imposition of conditions and shall cite the standards not met.

Sec. 26-27. Approval required.

a) The following shall be submitted to the Commission and City Council for its consideration with relation to the most current comprehensive plan:
    1. All plans, plats or re-plats of land laid out in building lots and for streets, alleys, or other portions of the same intended to be dedicated for public use, or for the use of purchasers or owners of the lots fronting thereon or adjacent thereto;
    2. Plans and descriptions of all streets, alleys, or public ways intended to be deeded or dedicated for public use, or for the use of purchasers or owners of the land fronting thereon or adjacent thereto, which is not intended to be platted into lots or other designated tracts; and
    3. Any addition or plan of streets or public ways, located outside the city limits, within Johnson and Ellis Counties and entirely or in part within the statutory extraterritorial jurisdiction.
b) Said commission shall submit its recommendation on the items in subsection (a)(1)—(3) of this section to the city council for its official consideration and action.
c) No such plat or re-plat or dedication or deed of street or public way shall be filed with the county clerk, as provided by law, until such plat or re-plat or dedication or deed shall have been duly approved by the City Council.
d) A preliminary plat of any proposed subdivision shall be submitted to the commission and city council for approval before the subdivider proceeds with the preparation of the final plat for record.
e) All construction work, such as street paving, storm sewers, curb and/or gutter work, sanitary sewers, water mains, and electrical construction performed by the owner, developer or contractor, shall be subject to inspection, during construction, by the proper authority of the city and shall be constructed in accordance with appropriate provisions of this chapter and other applicable ordinances and public engineering standards, including NCTCOG standards.

(Ord. No. 243-2001, § 3(9)—(11), 2-19-2001)

Sec. 26-28. Single-family rural estates.

Large lots with wide frontage result in less drainage and traffic demands than single-family residential developments consisting of small lots with narrow frontages and widths. Therefore, the facility requirements and public impacts of the larger, "estate-type," single-family residential developments are less intensive. Residential developments undertaken pursuant to this section shall conform to the following provisions and are considered exempt from conflicting provisions in this article:

1) Definition. A large lot subdivision is defined as a subdivision in which the minimum lot size is three acres and minimum street frontage for any lot is 60 feet with a minimum lot width of 120 feet at the building setback line.
2) Lot standards. See chapter 34, pertaining to zoning

(Ord. No. 243-2001, § 3(12), 2-19-2001)

Sec. 26-29.Guarantee of performance.

a) Security in lieu of completion. Prior to the issuance of a building permit, if the subdivider chooses to file security in lieu of completing construction prior to final plat approval for recordation, he may utilize one of the following methods of posting security. If the subdivider chooses to file security, the plat shall not be approved for recordation unless the subdivider has done one of the following:

    1) Performance bond. Has filed with the city a bond executed by a surety company holding a license to do business in the state and acceptable to the city and in a form approved by the city in an amount equal to the cost of the improvements required by this article. The construction of the improvements shall be within the time as estimated and approved by the administrator. The performance bond shall be approved as to form and legality by the city attorney.

    2) Trust agreement. Has placed on deposit in a bank or trust company in the name of the city and approved by the city, in a trust account a sum of money equal to the estimated cost of all site improvements required by this article, the cost and time of completion as approved by the administrator. Selection of the trustee shall be executed on the form approved by the city and approved as to form and legality by the city attorney. Periodic withdrawal may be made from the trust account for a progressive payment of installation cost. The amounts of such withdrawals shall be based upon progress work estimates and approved by the city engineering department. Such withdrawals shall be approved by the trustee.

    3) Unconditional guarantee from a federally insured financial institution as approved by the city. Has filed with the city council a letter, on a form approved by the city, signed by the principal officer of a federally insured financial institution, acceptable to the city, agreeing to pay the city on demand, a stipulated sum of money to apply to the estimated cost of installation of all improvements for which the subdivider or developer is responsible under this article. The guaranteed payment sum shall be the estimated costs and scheduling as approved by the administrator. The letter shall state the name of the subdivision and shall list the improvements for which the subdivider or developer is required to provide.

b) *Guarantee of materials and workmanship*. The subdivider or developer, shall guarantee all materials and workmanship of his construction contractors, with whom he contracts for furnishing materials and installing the improvements required under this article. The subdivider or developer shall himself be responsible for guaranteeing that all materials and workmanship in connection with such improvements are free of defects for a period of two years after acceptance of the improvements by the city.

c) Acceptance or rejection of construction. If one of the above three types of security is filed by the subdivider under subsection (a) of this section, the city engineer shall inspect the construction of the improvement while in progress and he shall inspect such improvements upon completion of construction. After final inspection he shall notify the subdivider, the administrator and the city attorney in writing as to his acceptance or rejection of the construction. He shall reject such construction only if it fails to comply with the standards and specifications contained or referred to herein. If he rejects such construction, the city attorney shall, on direction of the city council, proceed to enforce the guarantees provided in this article.

d) (d) Extension of time. Where good cause exists, the administrator may recommend to the city council to extend the period of time for completion under this section. Such extension of time shall be reported to the commission and the city council and recorded in the minutes of each

body. No such extension shall be granted unless security as provided in this section has been provided by the subdivider covering the extended period of time, including additional costs of review and inspection.

(Ord. No. 243-2001, § 8, 2-19-2001)

Sec. 26-30. Inspections and approval of public improvements.

1) The city council shall establish fees for the inspection of public improvements as part of the fee schedule. No person shall be granted notice to proceed to construct, reconstruct, cut or repair any street, drainage or sanitary sewer facility without paying the fees for the inspection of such work.
2) The developer's contractor shall give at least twenty-four-hour notice in writing to the city of intent to commence actual construction of the facilities in order for inspection personnel to be made available.
3) It shall be the duty of the subdivider to notify all contractors and subcontractors working for him that all of their work is subject to inspection by the city inspector at any time. Certification of materials being used may be required by the city inspector.
4) Laboratory tests required by the city inspector shall be performed by approved independent testing laboratories and will be at the discretion of the city inspector. Approved laboratories are laboratories that are members of the American Council of Independent Laboratories and shall comply with standard recommended practice for inspection and testing agencies for concrete, steel, and bituminous materials as used in construction, ASTM Designation E 329. All costs for laboratory tests shall be borne by the subdivider or his contractor.
5) Should any point not be covered in the plans, or developer's agreement, the subdivider shall be required to contact the city engineer for a determination as to the city's requirements.
6) Any work, which in the opinion of the city inspector does not meet the city requirements or has not had proper city inspection, shall be corrected. The inspector shall notify the contractor and subdivider in writing, of the reasons for requiring the contractor to cease all operations until the defect has been corrected to comply with city requirements and receive proper inspection.

a) *Public construction contracts*. For projects where the city of Venus will act as developer, plans and specifications shall be prepared for approval by the city engineer and projects bid according to requirements of the Texas Local Government Code. Contractors will be required to provide performance bonds, payment bonds, insurance and a two-year maintenance bond in accordance with city requirements. The developer shall be required to pay cash deposit to cover the work in accordance with the terms of the developer's agreement.

b) *Private developer construction contract requirements*. For private development projects, the developer may enter a private contract to complete the required public improvements. The developer/contractor will be required to provide the city the following sureties:

    1) *Since the developer is providing a financial assurance surety* to cover performance, a separate performance and payment bond is not required from the contractor. However, it may be in the developer's best interests to require those from his or her contractors since the city will not release the financial assurance until work is complete and a release of lien is provided by subcontractors.
    2) *Maintenance Bond*. The contractor will be required to make a maintenance bond of not less than one hundred percent of the contract price conditioned upon the maintenance of and the repairs to the construction under the developer's agreement for a period of two

years from the date of city acceptance of the project. All contractors employed by the subdivider shall furnish the city a good and sufficient two-year maintenance bond, in an amount equal to one hundred percent of the costs of the improvements, executed by a reputable and solvent corporate surety, holding a license to do business in the state of Texas, in favor of the city to indemnify the city against any repairs which may become necessary to any part of the construction work performed in connection with the subdivision, arising from defective workmanship or materials used therein, for a full period of two years from the date of final acceptance of the entire project. Final acceptance will be withheld until the maintenance bond is furnished to the city. Such bond to be approved as to form and legality by the city attorney.

3) *State Sales Tax*. The developer's agreement is usually for the improvement of streets, storm sewers, or utilities in right-of-way which will be dedicated to the public and the city of Venus, an organization which qualifies for exemption pursuant to the provisions of Article 20.04(F) of the Texas Limited Sales, Excise and Use Tax Act. The contractor performing this construction can probably purchase, rent or lease all material, supplies, and equipment used or consumed in the performance of the developer's agreement by issuing to his supplier an exemption certificate in lieu of the tax, such exemption certificate complying with state comptroller's ruling #95-0.07. Any such exemption certificate issued by the contractor in lieu of the tax shall be subject to the provisions of the state comptroller's ruling #95-0.09 as amended to be effective October 2, 1976.

4) *Insurance*. *Prior to commencing the work*, the contractor shall furnish to the city of Venus and/or owner proof of satisfactory carriage of insurance in accordance with the standard requirements of contractors doing work of the nature herein proposed. The amount of insurance shall conform to the requirements in the standard specifications.

5) *Indemnification*. The contractor must agree to fully indemnify and save whole and harmless, the city from all costs or damages arising out of any real or asserted claim or cause of action against it of whatsoever kind of character and in addition from any and all costs or damages arising out of any wrongs, injuries, demands or suits for damages, either real or asserted, claimed against it that may be occasioned by any act, omission, neglect or misconduct of the said contractor, his agents, servants, and employees. The contractor must further agree to comply with all applicable laws, regulations, ordinances, buildings and construction codes of the city of Venus and the state of Texas, and with any regulations for the protection of workers which may be promulgated by the government, and shall protect such work with all necessary lights, barriers, safeguards, and warnings as are provided for in the specifications and in the ordinances and regulations of the city

c) Approval of work. All work performed in construction, reconstruction, cutting and repairing of streets, storm sewer and other public improvements shall be subject to the approval of the city engineer, whose decision shall be final. Approval by the city inspector, city engineer or other designated representative shall not relieve the developer or his or her contractor or design engineer from their responsibilities regarding the design and construction of the improvements. The city shall not release the obligations of any financial assurance, including performance bonds, until the improvements have been approved and accepted by the city. The developer is strongly urged to withhold final payment to the contractor until such acceptance occurs, since the city shall hold the developer responsible for completion of the project. The city shall not approve or arbitrate quantities for which payment is to be based.

d) *Ownership and maintenance of private and common area facilities*. Except as may be otherwise provided by city ordinance or city policy, it shall be the responsibility of the applicable homeowners association, property owners association or individual property owner to maintain any facilities or infrastructure located on private property or within privately-held common areas.

e) *General design principles*. The quality of design of the city is dependent on the design quality of the individual subdivisions that compose it. Good community design requires the coordination of the efforts of each subdivider and developer of land within the community. Therefore, the design of each subdivision shall be prepared in accordance with the design principles, concepts and standards in the comprehensive plan, and in accordance with the following provisions:

1) Physical Conditions. The arrangement of lots and blocks and the street system should be designed to make the most advantageous use of topography and natural physical features. Trees and native vegetation should be preserved wherever possible. The system of streets and sidewalks, and the layout and arrangement of blocks and lots should be designed to take advantage of the natural and scenic qualities of the area. Land which the city finds to be unsuitable for subdivision or development due to flooding, improper drainage, adverse earth formation, utility or pipeline easements or other features which will reasonably be harmful to the safety, health, and general welfare of the present or future inhabitants of the subdivision or its surroundings, shall not be developed unless adequate methods are formulated by the developer and approved by the planning and zoning commission and city council that will solve the problems created by the unsuitable land conditions.

2) The following general design requirements are intended to facilitate that the proposed subdivision is coordinated with its immediate neighbors with respect to land use, street connections, utilities, drainage facilities, and the possible dedication of parks and open spaces:

i. Access to Lots. Each lot shall abut on a dedicated public street or an approved private street; Public access easement in lieu of public street frontage shall generally only be used for commercial shopping centers.

ii. Public Improvements. All public improvements shall be designed and constructed in a manner to meet or exceed the Standard Specifications for Public Works Construction and criteria for streets, drainage and other public improvements as promulgated by the city council;

iii. The subdivision plat shall provide for the logical extension of abutting and proposed streets, utilities and drainage easements and improvements to provide for system continuity and to promote future development of adjacent areas;

iv. Access to Subdivision. Each subdivision having more than twenty lots shall be designed to have at least two points of access.

Sec. 26-31. Responsibility for payment of off-site/on-site utility installation and other improvement costs.

a) Upon completion of a utility system and formal acceptance by the city, the installation becomes the property of the city to operate and maintain.

b) Responsibility for payment for installation cost of other improvements are as follows:

c) Streets. The City may pay, providing funds are available, for street rights-of-way in excess of 60-foot width and for street paving in excess of 28-foot width, except where such extra widths are in commercial developments or where they are not required by the city.

1) Bridges. The city may participate, providing funds are available, in the extra cost of large drainage structures on principal streets shown on the circulation plan.

2) Street signs. Street signs and markers, in accordance with standards adopted by the city, are required at each intersection within the subdivision and at street entrances into the subdivision. The city may provide and install all street signs at developer's expense. All

signs shall be in place by the time the subdivision is open for use.

(Ord. No. 243-2001, § 9(1), (2), 2-19-2001)

Sec. 26-32. Open and civic spaces.

a) *Intent*. The intent of this section is to:

1. Emphasize open space design as a key determinant of Venus' community image and unique identity.
2. Plan and integrate open and civic space systems into the patterns and structure of streets, blocks and lots to create a coordinated public realm.
3. Promote good civic design and create focal points for the community, district, neighborhood or development site to which development and site plans should relate.
4. Integrate natural systems into the design of common or public open spaces to improve stormwater management, and protect water resources.
5. Property that lies within the FEMA-designated floodway shall not count toward the parkland dedication requirement and property within the FEMA designated floodway fringe shall count only one-half value of the dedication requirement. No area of facility shall be dedicated for such public purposes unless approved and accepted by the City Council and the City reserves the right to limit the amount of FEMA-designated floodplain that it accepts.

b) *Open and civic space system*. Open and civic spaces platted as part of a development shall generally be laid out according to street networks, block and lot layouts, and the landscape and site amenities of individual lots

Venus Park Land Dedication, Development Fee Schedule & Fee Calculation Methodology

Park Land Level of Service for Venus Parks Master Plan

- Neighborhood Parks - 1.5 Acres per 1000 population
- Community Parks - 5.0 Acres per 1000 population
- Linear Parks - 2.0 Acres minimum per 1000 population

Land Requirements

- Neighborhood Parks and Linear Parks - 3.5 Acres per 1000 population
- 1000 / 3.5 acres = 1 acre of neighborhood/linear park per every 285 residents of Venus
- Average household size in Venus per 2020 Census – 3.07 residents per household
- 285 residents per acre of neighborhood park and linear park /3.07 persons per household = 93.1 dwelling units per acre of parkland required.

Round up to 100 dwelling units per acre of parkland required

** In cases where floodplain land or property is proposed to be conveyed to satisfy the parkland requirements, a credit may be given based upon the following formula or ratio: two acres of floodplain shall equal one acre of non-floodplain land. Round up to 100 dwelling units per acre of parkland required

Park Acquisition Cost (to determine fee in lieu of land)

Assumption that 1 acre of land costs $100,000 to purchase (in area that is being developed, not large agricultural tracts)

Residential Type	Fee Calculation	Fee per Dwelling Unit
Single Family	$100,000 / 100 dwelling units	$1,000
Multi-Family	$100,000 / 80 dwelling units	$1,250

Park Development Cost (to determine fee for development)

- Recommended size of neighborhood parks in Venus - 5 acres minimum
- Development cost per neighborhood park (5 to 10 acre size) - $1,270,750
- Cost per acre of development - $127,075 to $254,150
- Average per acre cost is $190,000 per acre

Residential Type	Fee Calculation	Fee per Dwelling Unit
Single Family	$190,000 / 100 dwelling units	$1,900
Multi-Family	$190,000 / 80 dwelling units	$2,375

Summary	Fee in Lieu of Land	Park Development Fee	Total
Single Family Residential	$1,000 per du	$1,900 per du	$2,900 per du
Multi-Family Residential	$1,250 per du	$2,375 per du	$3,625 per du

Sec. 26-33. Variances

a) The City Council may authorize a variance from these regulations when, in its opinion, undue hardship will result from requiring strict compliance. In granting a variance, the council shall prescribe only conditions that it deems necessary or desirable to the public interest in making the findings in this section required. The council shall take into account the nature of the proposed usage of land involved, the existing usage of the land in the vicinity, the number of persons who will reside or work in the proposed subdivision, and the probable effect of such variances upon traffic conditions and upon the public health, safety, convenience, and welfare of individuals in the vicinity. No variances will be granted unless the council finds the following:

1. Special circumstances or conditions. That there are special circumstances or conditions affecting the land involved such that the strict application of the provisions of this article

would deprive the applicant of the reasonable use of his land.

2. Preservation of property right. That the variances are necessary for the preservation and enjoyment of a substantial property right of the applicant, and that the granting of the variance will not be detrimental to the public health, safety, or welfare of individuals, or injurious to other properties in the area.
3. Effect on other lands in the area. That the granting of the variance will not have the effect of preventing the orderly subdivision of other lands in the area in accordance with the provisions of this article.
4. Observance of other ordinances. The council may not authorize a variance that would constitute a violation of any other valid ordinance of the city.

b) Such findings of the council, together with the specific facts upon which such findings are based shall be incorporated in the official minutes of the council meeting at which such variance is granted. Variances may be granted only when in harmony with the general purpose and intent of this article so that the general health, safety and welfare of citizens may be secured, and substantial justice is done. Pecuniary hardship to the subdivider, standing alone, shall not be deemed to constitute undue hardship.

(Ord. No. 243-2001, § 22, 2-19-2001)

Sec. 26-34. Repealer; conflicting regulations.

a) All ordinances, or parts of ordinances, with the exception of the building codes and/or comprehensive zoning regulations of the city, which are inconsistent or in conflict with any of the provisions of this article are repealed.
b) Where the building codes and/or zoning regulations of the city contain regulations that are more restrictive than the regulations contained herein, the ordinances which are most restrictive shall control.

(Ord. No. 243-2001, § 23, 2-19-2001)

Sec. 26-35. Exceptions to provisions of article.

Plats or subdivisions which have received preliminary approval by the council within one year prior to the effective date of the ordinance from which this article is derived shall be excepted from the requirements of this article, provided that the final plat of such subdivision is approved and filed for record within 180 days after the effective date of the ordinance from which this article is derived, or within one year after the approval date of the preliminary plat, whichever is greater.

(Ord. No. 243-2001, § 24, 2-19-2001)

Sec. 26-36. Plat fees; filing requirement; inspections; compliance; bond.

Fees for subdivision and development-related applications are codified in the Master Fee Schedule (please check for most up to date adopted) Appropriate fees shall be paid upon submission of plats for consideration to the city. All fees shall be paid prior to application deadlines and shall not be refundable

regardless of action taken by city approving authorities. The City Council shall determine and revise the Master Fee Schedule as the need arises. Note(s)—For the orderly process of plat approval, both the preliminary and final plat, including any and all documentation required, must be submitted to the city administrator at least 21 days prior to the date the plat will be presented to the city council for action.

a) Commencement of any construction work, such as streets construction, storm sewers, curb and/or gutter work, sanitary sewers, meter mains, and electrical utilities shall not take place until the final approved plat has been filed with the appropriate county clerk and a performance bond, issued by a company licensed to do business in the state, has been presented to the city administrator, in an amount equal to the estimated cost of all infrastructure planned in the subdivision.
b) All work in the subdivision will be subject to inspection during construction and upon completion of construction by the proper authority of the city.
c) All construction will comply with appropriate provisions of this chapter and other applicable ordinances and public engineering standards.
d) Upon completion of the subdivision and the acceptance by the city, a two-year maintenance bond in an amount equal to 100 percent of the total cost of construction shall be presented to the city administrator, at which time the improvements will be accepted.

(Res. of 2-11-2003; Ord. No. 402-2015, § A, 3-9-2015)

Sec. 26-37. Administrative fee.

For any element of the project requiring engineering review, plan review, and similar reviews, the actual costs of these reviews plus a $50.00 administrative fee will be passed on to the developer.

(Ord. No. 297-2005, 2-14-2005; Ord. No. 402-2015, § B, 3-9-2015)

Sec. 26-38- 26-60. Reserved.

DIVISION 2. PRELIMINARY AND FINAL PLATS AND REPLATS

Sec. 26--61. Filing procedures.

Any owner or developer of any lot, tract, or parcel of land located within the corporate limits of the city or within its extraterritorial jurisdiction who may wish to affect a subdivision of such land shall conform to the general procedure described as follows:

A. Application Procedures.

1. Written Request Required. Every proposal submitted for commission action shall be made in writing on application forms provided by the city, and shall be accompanied by all prescribed fees, and shall be complete in all respects before being accepted for filing. All fees are due and payable at time of service. Personal checks are not accepted. Business checks are accepted with company information on the check. Credit cards are accepted with a small processing fee.

2. Filing Deadline. Every proposal shall be filed with the city planner not later than noon the Tuesday approximately thirty-seven (37) days prior to the regular meeting date of the commission. When the filing

deadline falls on a city holiday, the following workday shall be observed as the filing deadline. Failure to submit a complete application on time will result in the rejection of the application unless undue hardship can be demonstrated.

3. Administrative Completeness Check. The City staff shall review each application and notify the applicant of any administrative deficiencies within seven days of the filing deadline.

4. Submission of Supporting Information. Information supporting a recommendation to approve or disapprove any proposal before the commission shall be submitted only through the city planner or to the commission in a public meeting.

5. Withdrawal of Proposal. When any applicant desires to withdraw any proposal, they may do so by filing a written request to that effect with the city planner. Such request shall not be effective unless and until approval of the withdrawal by the commission at the public meeting.

B. Preliminary Application Conference (PAC.)

Prior to the official filing of a preliminary plat, the subdivider should consult with and present a proposed plan (or sketch plat) of the subdivision to the city planner for comments and advice of the procedures, specifications, and standards required by the city for the subdivision of land. The city planner will provide comments identifying compliance or noncompliance with applicable ordinances and standards, elements of the comprehensive plan, and suggestions for improvement in design to either comply with the applicable ordinances and standards or to improve circulation, drainage, or compatibility with adjacent neighborhoods. The City Planner will designate the type of platting process to be used. The applicant should make every effort to comply with the suggested changes.

a) The original or corrected preliminary plat or replat shall be received for filing by the city once this prefiling review is completed. Any preliminary plat or replat that is filed without a PAC shall be deemed denied for any violation of required form under this article or state law; and must be refiled with new filing fees. The PAC process is for the benefit of both the subdivider and the city, and refusal of the subdivider to make use of this assistance will result in a strict interpretation of this article and of state law and a resulting denial for all violations as to required form.
b) A preliminary plat is not deemed filed until it has been reviewed and a letter of approval returned to the city from:
    1) All utility companies that might provide service to the development or have easements in the area of the development;
    2) Water suppliers both public and private; the school district in which the development is to be located; and
    3) Any other agency or department of this state or federal government.

These approvals are a prerequisite to deeming the preliminary plat filed.

c) During the platting process, any final plat, preliminary plat or replat that is discovered, by city staff or the engineer named by the city to review the instrument, to be in violation of the mandatory requirements of this article and/or a controlling state statute shall be deemed to be in technical denial. This denial can be cured by:

1) The subdivider requesting in writing a return to an unfiled status while the defect is corrected (the corrected instrument may be refiled and no new fees shall be required for this refilling); or

2) An appeal to the reviewing entity (planning commission or city council) at its next meeting, agenda requirements permitting, or a special called meeting for this purpose within ten working days of the staff denial, for a determination if the defect is a required form or concept. Rejected documents, during the appeal, are deemed unfiled and time limits are tolled. The appeal will be heard at the next meeting of the commission or council or 30 days, whichever is shortest.

   a. If the reviewing entity agrees with the subdivider, the plat, preliminary plat or replat shall be deemed refiled as of the day of the affirmative vote and no new fee shall be required for this refiling.

   b. If denied, then the technical denial is affirmed and plat, preliminary plat or replat is deemed to be formally denied.

d) A plat, preliminary plat or replat shall be submitted to the reviewing entity only if it is in the final form requested by staff or prior review and nothing shall be set for review prior to a corrected document being filed with the city at least 15 days prior to the public hearing or meeting at which it is to be voted upon.

(Ord. No. 243-2001, § 3(13), 2-19-2001)

Sec. 26--62. Preliminary plat - Preliminary planning.

The subdividers shall avail themselves of the advice and assistance of the city officials and consult early and informally with the chief administrative officer, or other person designated, before preparing the preliminary plat and before formal application for its approval, in order to save time and money and make the most of available opportunities.

(Ord. No. 243-2001, § 3(14)(A), 2-19-2001)

Sec. 26--63. Preliminary plat – Form and Content

a) Upon reaching conclusions informally, as recommended above, regarding the general proposed program and objective, the subdivider shall prepare a preliminary plat (according to this division of this article), together with improvement plans and other supplemental material as applicable in other sections of this article.

b) The applicant shall file an application for preliminary plat approval on a form provided by the City Planner or designee, along with the required number of plats and supporting documents, an application fee, on the designated application submission date approximately thirty-seven (37) days prior to the commission meeting at which the plat shall be considered. The preliminary plat shall be prepared by a registered surveyor or engineer in accordance with thus chapter and accompanied by necessary engineering information prepared by a registered engineer in the state of Texas. The submission of a preliminary plat is necessary to: eliminate the duplication of subdivision names and street names; assure proper alignment of streets and drainage facilities; assure that adequately public utility services will be provided; assure that all necessary permits and plan approvals have or will be applied for; and assure conformance with the Comprehensive Plan and other development regulations.

c) A completed preliminary plat checklist shall be part of the application. The application shall be

accompanied by:

1. The required review fee for preliminary plats as established by the Master Fee Schedule adopted**.**
2. Three (3) blackline copies and one (1) electronic (pdf) copy of the preliminary plat; a .dwg file compatible with any version of Auto CAD or a .shp file compatible with ArcGIS Pro is recommended. The electronic version must be submitted on a USB drive or an acceptable file transfer program (e.g. FTP, dropbox, etc.)
3. Two (2) blacklined and one electronic (pdf) copy of the preliminary iSWMTM site plan, preliminary water and sewer plan, preliminary street plan and preliminary lot grading plan.
4. A letter of approval returned to the city from:
    i. All utility companies that might provide service to the development or have easements in the area of the development;
    ii. Water suppliers both public and private; the school district in which the development is to be located; and
    iii. Any other agency or department of this state of federal government that has interest in the project.

The above approvals are a prerequisite to deeming the preliminary plat filed.

Administrative Completeness Check. The city planner shall review the application for administrative completeness and shall notify the applicant of any administrative deficiencies within seven (7) days of the plat application submittal deadline.

After the preliminary plat ore replat has been reviewed as to form and content by staff, the subdivider shall be notified of any defects that must be corrected prior to filing. The original or corrected preliminary plat or replat shall be received for filing by the city once this prefiling review is completed.

During the platting process any preliminary or final plat or replat that is discovered, by city staff or the engineer named iby the city to review the instrument to be in violation of the mandatory requirements of this chapter shall be deemed to be in technical denial.

This denial can be cured by:

1) The subdivider requesting in writing a return to an unfiled status while the defect is corrected (the corrected instrument may be refilled and no new fees shall be required for this refilling); or
2) An appeal to the reviewing entity (Planning and Zoning Commission or City Council) at its next meeting, agenda requirements permitting, or a special called meeting for this purpose within ten (10) working days of the staff denial for a determination if the defect is a required form or concept. Rejected documents during the appeal, are deemed unfiled and time limits are tolled. The appeal will be heard at the next meeting of the Planning and Zoning Commission or City Council or 30 days, whichever is shortest.
    a. If the reviewing entity agrees with the subdivider, the plat, preliminary plat or replat shall be deemed refilled as of the day of the affirmative vote and no new fee shall be required for this refiling.
    b. If denied, then the technical denial is affirmed and plat, preliminary plat or replat is deemed to be formally denied.

A plat, preliminary plat or replat shall be submitted to the reviewing entity only if it is in the final form requested by staff or prior review and nothing shall be set for review prior to a corrected document being filed with the city in accordance with the schedule published by the City for the public hearing or meeting at which it is to be voted upon.

Copies or prints of the proposed subdivision drawn on sheets printed on good-grade, processed paper in black and white a maximum size of 18 inches by 24 inches (18" by 24") and drawn to a scale of either one inch equals 100 feet (1"=100') or one inch equals 50 feet (1"=50') shall be submitted in the numbers specified in this subsection. When more than one (1) sheet is necessary to accommodate the entire area, an index sheet showing the entire subdivision at an appropriate scale shall be shown on the face of the plat.

1. Boundary lines (indicated by heavy lines), with bearings, and distances sufficient to locate the exact area proposed for the subdivision. The record lot lines, survey abstract lines, city limit lines, and the location of existing utility easements, streets, highways, county roads that traverse, abut, or are within a reasonable distance (200 feet) of the subdivision; the other border of the city's extraterritorial jurisdiction, and zoning district boundaries, if they traverse the subdivision, form part of the boundary of the subdivision or are contiguous to such boundary.
2. The name(s) of all record owners, subdivider, engineer, and the name of the registered professional surveyor preparing the plat; the telephone number and email address of the developer, or his designated representative, surveyor and engineer shall also be provided;
3. The name and location of all adjoining subdivisions adjacent to the tract proposed for subdivision, drawn to the same scale and shown in dotted lines and in sufficient detail to show accurately the existing streets and alleys and other features that may influence the layout or development of the proposed subdivision. Adjacent unplatted lands shall show property lines and owners of record. The names and areas of large tracts and/or lot dimensions and addition names of all property abutting or adjoining the subdivision or located across any adjoining streets;
4. Location of existing property lines, buildings, storm drainage facilities, water and sanitary sewer mains, gas mains, electrical power lines, telephone lines, or other underground structures, easements of records, survey lines, or any other features within and other existing features within the area proposed for subdivision; the location, dimensions, description and name of all existing or recorded lots, parks, public areas, permanent structures and other sites within contiguous with the subdivision;
5. Legal description (metes and bounds) of property to be subdivided; primary control points, or descriptions and ties to such control points, to which all dimensions, angles, bearings, block numbers, similar data are referred;
6. The plat must be tied to two Global Positioning System (GPS) reference points. The GPS points must be in grid coordinates, North American Datum (NAD) 83, Texas State Plane, North Central FIPS Zone 4202, Information on the two GPS reference points is required at the time of the preliminary plat is submitted;
7. The plat must hold grid bearings. Bearings may not be from an assumed North direction. Distances on the plat will be surface distances. Grid coordinate values for at least one boundary corner must be shown on the plat. North must be referenced to Grid North;
8. Scale (both graphic and written), north arrow, date of preparation, and other pertinent data;
9. The computed acreage of the subdivision.

10. A number or letter identifying each lot or site and each block;
11. Proposed front building lines based on the appropriate zoning district regulations;
12. The location and width of all streets, alleys, and ways, existing or proposed, within the subdivision limits. In the case of easements, a written statement as to the easement use shall be included with the plat.
13. The location of all existing property lines, buildings, sewer or water mains, gas mains, or other underground structures, easements of record, and other existing features within the area proposed for subdivision.
14. Proposed arrangement of lots and proposed use of same. However, approval of a preliminary plat or final plat with uses so indicated does not constitute approval of such usage.
15. The name under which the proposed subdivision is to be recorded, the name and address of the owner with the name of the licensed land surveyor or registered professional engineer platting the tract. The proposed name should not have the same spelling as, or be pronounced similar to, the name of any other subdivision located within the city or its extraterritorial jurisdiction unless it is adjacent to and part of the previous subdivision,
16. The Title block shall be located in the lower right-hand corner of each sheet and shall state "Preliminary Plat", contain the name of the subdivision, the total acreage, reference to the Survey Name and Abstract Number, and whether the property is within the city limits or extraterritorial jurisdiction.
17. Sites, if any, to be reserved or dedicated for parks, playgrounds, schools or other public uses.
18. Contours with intervals of five feet or less shown for the area. All elevations on the contour map shall be referenced to the latest USGS data. Topography. The plat for each subdivision shall be prepared on a topographic base map showing contours at intervals of not greater than five (5) feet. A small subdivision consisting of one (1) acre shall show contours at two (2) feet intervals. All topographical maps shall be based on mean sea-level data and shall be tied to vertical controlled benchmarks to be noted on the plat.
19. All physical features of the property to be subdivided, including the location and size of all water courses, ravines, bridges, culverts, existing structures, drainage area in subdivision acreage, area draining into subdivision, and other features pertinent to subdivisions. A drainage study shall accompany the preliminary unless waived by the administrative officer. The outline of wooded area or the location of important individual trees greater than ten (10") inches in diameter at breast height is required. The location, dimensions, descriptions, and flowline of existing water courses and drainage structures within the subdivision or on contiguous tracts.
20. The location of the FEMA-designated floodway, the one-hundred-year floodplain and all lots, or any part of a lot that lies within the floodway or one hundred-year floodplain as shown on the current flood insurance rate map; if the property is within the or adjacent to the 100-year flood plain, the preliminary plat must show accurate flood plain and floodway boundaries and any proposed filling of the flood plain fringe.
21. A vicinity map showing the location and relationship of the proposed subdivision with other developments in the area, existing subdivisions, streets, parks and public facilities in the general locality of the proposed subdivision. The vicinity map shall have a scale and north arrow. If there is no adjacent subdivision in all directions, and how the streets, alleys, or highways in the subdivision submitted may connect with those in the nearest subdivision;
22. A table summarizing the number of proposed lots by use (including common areas), and their lot area;

23. Orientation. All plats shall be drawn with north direction to the top or left side of the plat;
24. The following notice shall be placed on the face of each preliminary plat by the developer: "Preliminary Plat-For Review Purposes Only"

The following additional plans are required:

a) Preliminary Drainage Study. The Preliminary Plat submittal shall be accompanied by the required number of copies of a preliminary iSWMTM site plan prepared in accordance with Chapter 1-Storm Water Management System Planning and Design of the iSWMTM Design Manual for Site Development;

b) A preliminary water and sewer plan layout showing the location and size of existing and proposed water and sanitary sewer lines and proposed fire hydrant locations in accordance with the Venus Construction Standards and Specifications.

c) A preliminary street plan and preliminary lot grading plan prepared in accordance with the Venus Construction Standards and Specifications.

d) The City Planner reviews the plat application and provides a review of administrative completeness within ten (10) days of the application deadline. The City Planner shall make a study of the plat and give a written report to the Planning and Zoning Commission and City Council before its final action on the preliminary plat.

e) The City Council shall, within 30 days after receiving the Planning and Zoning Commission's recommendation on the preliminary plat, act thereon as submitted or modified, and, if approved, the council shall express its approval as conditional or state its disapproval, if any, and its reasons therefore following:

    1. Review of the preliminary plat and other materials submitted for conformity thereof to the regulations; and
    2. Negotiations with the subdivider on changes deemed necessary, and the kind and extent of improvements to be made by the subdivider.

f) If a preliminary plat is approved by the city council subject to certain conditions, two (2) copies of a revised preliminary plat and one copy in electronic format (including revised grading, drainage, utility, and any other element of the preliminary plat that requires revision) reflecting those conditions shall be submitted to the city planner within sixty (60) days after approval or the approval lapses unless the applicant demonstrates good cause for delay in submitting the revised preliminary plat. The revised preliminary plat submittal shall be reviewed by the city planner for compliance with conditions of commission approval. The action of the council shall be noted on two copies of the preliminary plat, referenced, and attached to any conditions required by the council. The Mayor official shall certify action of the council. One such copy of the plat shall be returned to the subdivider and the other retained in the files of the city. Submission of a final plat of the total area of a preliminary plat within sixty days reflecting the conditions approved shall meet the requirements of this provision. If the required submission is not made within sixty days, the preliminary plat shall be considered void.

g) Conditional approval of a preliminary plat by the council shall be deemed an expression of approval as to the layout submitted on the preliminary plat and as a guide to the installation of streets, water and sewer, and other required improvements and utilities, and as to the preparation of the final or record plat. Except as provided for in this article, approval of the preliminary plat shall constitute conditional approval of the final plat

when all conditions of approval noted (as provided in subsection (e) of this section) have been met.

h) Conditional approval of a preliminary plat shall be effective for one year unless reviewed by the council in the light of new or significant information that would necessitate the revision of the preliminary plat. If no development or change in requirement has occurred which would affect the proposed plat at the end of the year of an effective approval, the council may extend its approval another year without the submission of a new preliminary plat by again approving the original preliminary plat. No filing fee is required for such approval. If a final plat is not submitted within one (1) year following commission approval of a preliminary plat, then approval of the preliminary plat must be resubmitted and processed according to the terms and provisions of this chapter. The one-year period for final plat submission may be extended up to one additional year upon a majority vote of the city council if a developer demonstrates good cause why the authorization should continue. The submission of a final plat application for a portion of a phased development extends authorization of the remaining portion of the preliminary plat by an additional one (1) year from filing of the latest final plat.

(Ord. No. 243-2001, § 3(14)(B), 2-19-2001)

Sec. 26-64. Same—Required specifications.

a) Physical size. The preliminary plats shall be prepared on sheets a maximum size of 18 inches by 24 inches, regardless of the size of the subdivision.

b) Scale. The scale should be either one inch equals 100 feet or one inch equals 50 feet, but it may be one inch equals 200 feet in cases of large developments that would exceed the dimensions of a sheet when using a 100-foot scale.

c) Contour. The plat for each subdivision consisting of three acres of more shall be prepared on a topographic base map showing contours at intervals of not more than five feet. Any subdivision smaller than three acres, which, in the opinion of the chief administrative officer would be affected by the topographical features of the terrain, shall also show contours at two-foot intervals. All topographical maps shall be based on sea-level data.

d) Other data. The following data will be shown on the preliminary plat:

1. The record lot lines, survey abstract lines, corporation lines, and the location of existing utility easements, streets, highways, expressways and freeways that traverse, abut, or are within a reasonable distance of the subdivision;
2. The proposed locations, widths, and names of streets and the proposed locations and width of alleys, easements, walkways, open channels, and lots;
3. The title of the proposed subdivision or addition, the name of the subdivider and engineer, and the name of the surveyor or planner platting the tract;
4. The names and areas of large tracts and/or lot dimensions and addition names of all property abutting or adjoining the subdivision or located across any adjoining streets;
5. The north point, scale, and data;
6. The lot or tract numbers, and/or city block numbers, addition names, and dates when recorded;
7. Plat paper. All preliminary and final plats shall be printed on high-grade, processed paper in blue-line or directed black and white;

8. Orientation. All plats shall be drawn with north direction to the top or left side of the plat;
9. Building lines. The proposed building lines shall be shown in conformance with the zoning regulations, building codes or provisions herein.

(Ord. No. 243-2001, § 4, 2-19-2001)

Sec. 26-65. Final plat—Approval procedures.

a) The final plat shall conform to the preliminary plat as approved and shall incorporate all changes, directions, and additions imposed by the council. The final plat shall not be released for filing until the council has approved detailed engineering plans.

b) If so desired by the developer, the final plat may constitute only that portion of the approved preliminary plat which is proposed to the recorded and then developed; provided, however, that such portion conforms to all the provisions of this article.

c) Engineering plans showing details of streets, alleys, culverts, bridges, storm sewers, water mains, sanitary sewers, and other engineering details of the proposed subdivision shall be submitted to the chief administrative officer along with the final plat of the subdivision.

d) Upon receipt of the final plat, accompanied by a final filing fee as prescribed in section 26-34, the chief administrative officer shall check the plat to ascertain its compliance with these provisions and the action of the council. When the copy of the final plat has been checked and found to meet all the general requirements and design standards, the developer or his engineers shall submit 12 copies of the final plat to the chief administrative officer. The chief administrative officer shall stamp on each of the 12 copies the certificate of approval of the council when such final plat has been approved. The developer or his authorized agent shall secure the required number of plats and record them with the county clerks, Johnson and Ellis Counties, within 30 days of the date of the final approval; otherwise the final approval of the council becomes invalid. Six copies of the recorded final plat shall be returned immediately to the chief administrative officer.

e) Subdivision plats for housing projects, apartment areas, shopping centers, and industrial districts will not be required, except in cases where dedication for streets, street-widening, alleys, or easements are required. Site plans shall be filed with the city for approval by the city council as required by zoning ordinances.

(Ord. No. 243-2001, § 3(14)(C), 2-19-2001)

Sec. 26-66. Final Plat—Required specifications, Form and Content.

Form and Content. The Final Plat and accompanying data shall conform to the preliminary plat as approved by City Council incorporating any and all changes, modifications, alterations,, corrections and conditions imposed by the City Council. The Final Plat shall comply in all respects with the approved preliminary plat. The applicant shall submit the Final Plat drawn by a licensed surveyor and shall include the following:

a) Physical size. All final plats shall be submitted on sheets of paper 18 inches by 24 inches (18” by 24”) and drawn to a scale of not less than one (1) inch equals 100 feet (1”=100’) in accordance with Johnson County or Ellis County Clerk specifications for recording. Where more than one sheet is required to encompass the subdivision, an index map, shall be provided showing the entire subdivision on one sheet, together with the complete dedication, attests, dates, titles, and seals.

b) Exterior boundary and corner markers. The exterior boundary of the subdivision shall be indicated by a distinct heavy dash line and corner markers by individual symbols. Subdivision boundary lines of the total area proposed for subdivision and the computed acreage of the total area in the subdivision;

c) Measurements. The length and bearing of all straight lines, radii, arc lengths, tangent lengths, and central angles of all curves shall be indicated along the boundary line of the subdivision and along each block. All dimensions along the lines of each lot shall be shown. The curve data pertaining to block or lot boundary may be placed in a curve table on the face of the plat and prepared in table form. The source of all bearings shall be the Texas State Plane Coordinate System (North Central Zone, 1983 NAD) and shall be noted on the plat. All distances shown on the final plat shall be horizontal ground lengths. The plat shall state the Texas State Plane Coordinate System combined scale factor that is to be used to convert ground lengths to grid lengths.

d) Texas State Plane Coordinates shall be provided for at least two corners of the plat must be shown on the face of the plat. The reference monuments and method of determining the coordinates (such as triangulation of city monuments or global positioning system techniques) shall be provided;

e) A north point arrow and graphic scale;

f) Identification of adjacent plats. The names of all adjoining subdivisions, the dimensions of all abutting lots, lot and block numbers, and accurate reference ties to courses and distances of at least two recognized land corners should be shown. Name and recording information of contiguous subdivisions, location and identification of contiguous lots, and indication of whether contiguous properties are platted and filed of record and names of owners and deed references of all unplatted adjoining properties;

g) Identification of streets. The names and accurate locations of all streets adjoining, abutting, or within 200 feet of the subdivision shall be shown.

h) Identification of utility easement. The location and dimension of any utility easement adjoining or abutting the subdivision, or proposed within the subdivision, shall be shown. The location, dimensions and identification of all existing pipeline easements; and the location of any oil or gas well.

i) Identification of survey monuments. The description and location of all survey monuments placed in the addition or subdivision shall be shown. The location of all permanent monuments and control points described as to size and material. Primary control points or descriptions, and ties to such control points to which all dimensions, angles, and bearings shall be referred. Such primary control points shall be either a city recorded monument or a USGS monument, if such monument is within two thousand feet of the proposed subdivision;

j) Title. The final plat shall show a title in the lower right-hand corner stating “Final Plat”, including, proposed name under which the subdivision is to be recorded. All subdivisions shall be named and the name approved by the city before the final plat is submitted. No subdivision or street name shall be a duplication, either in part or in whole or be similar in spelling or pronunciation to the name of any other subdivision within the city or within a one-mile distance outside the city, which might result in confusion to operators of emergency vehicles; The tract designation and other description according to the real estate records of the county;

k) Ownership and Surveyor Information. The names of the owner and engineer and/or surveyor, scale and location of the subdivision with reference to original land grant or survey, an abstract number, and a north point with true or magnetic north. Final plats shall contain the firm name, registration number, address, and phone number of the surveyor responsible for preparing the plat, and the name, address, and phone number of the owner/dedicator. The final plat shall

contain the following caption to be located near the lower right-hand corner of the plat below the title block and in accordance with Johnson or Ellis County Clerk requirements, "This plat filed in Instrument No. ___ Date _____". Final plats shall contain all necessary information and be in prescribed format required for recording with the Johnson or Ellis County Clerk.

i. The date of preparation, and date of latest revision;

ii. "FINAL PLAT" Designation listed on face of all copies;

iii. A location/vicinity map of the proposed subdivision showing existing and proposed streets and thoroughfares covering an area of at least one-half mile outside the proposed subdivision to adequately indicate the location of the subdivision;

iv. The location, dimensions, description and name of all proposed streets, alleys, drainage structures, parks, other public areas, reservations, easements or other rights-of-way; block, lots, and other sites within the subdivision with accurate dimensions, bearing or deflection angles and radii, arcs, tangents, and central angles of all curves where appropriate;

v. Each proposed street, within the subdivision area, shall be named and shall conform with names of any existing street of which they may be or become extensions. Extensions of existing streets or roads shall use the name already established. All streets shall be named and the name approved by the city before the final plat is submitted. Names of new streets shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of, or in alignment with existing streets, in which case names of existing streets shall be used. Streets shall be named to provide continuity with existing streets;

vi. The location and dimensions of existing and proposed storm drainage easements. The limits of the one-hundred-year floodplain shall be shown and encompassed in a dedicated floodplain easement. Minimum finished floor elevations at least two feet above the one-hundred-year water surface elevations shall be shown on any lot adjacent to the floodplain, channel, sump inlets or drainage facilities;

vii. The location of proposed blocks, lots, and other sites within the proposed subdivision; A number shall be used to identify each lot, site or block;

viii. The area of each lot, in square feet, and outside dimensions, in feet. The lot area may be shown in a table on the face of the plat where necessary because of space constraints;

ix. Front building lines shall be shown on the final plat on all lots intended for business and residential use and shall provide the minimum setback as required by the zoning regulations and building codes. Second front yard building setback lines are required at street intersection. For lots facing on curved streets the chord width of the lot at the front building setback line shall be shown;

x. Location of city limits line and the outer border of the city's extraterritorial jurisdiction, if they traverse the subdivision, form part of the boundary of the subdivision, or are contiguous to such boundary;

xi. Data specifying the gross area of the subdivision, the proposed number of residential lots and area thereof, and the area in parks and in other nonresidential uses;

xii. All land intended to be dedicated for public use or reserved in the deeds for the use of purchasers or owners of lots in the proposed subdivision, together with the purpose of conditions or limitations of such dedications, if any;

l) Certificate of ownership. A certificate of ownership on the face of the plat giving a metes and bounds description of the property, signed and acknowledged by the owner dedicating all streets,

alley, parkways, parks and other open spaces to the public and dedication of all easements and drainage ways to the public use (signed and acknowledged before a notary public by the owner of the land) shall appear on the face of the plat and the developer's certification that all parties with any interest in the title to the subject property have joined in such dedication, duly executed, acknowledged and sworn to by said developer before a notary public. When applicable, an agreement showing the subdivider has made provision for perpetual maintenance thereof to the inhabitants of the subdivision should be shown or referenced on the face of the plat. For a phased development the dedication shall be only for the section approved. An example of such a dedication instrument would read as follows:

STATE OF TEXAS §

OWNER'S ACKNOWLEDMENT AND DEDICATION §

COUNTY OF (JOHNSON or ELLIS) §

I (we), (Owners name or corporation name), the undersigned, owner(s) of the land shown on this plat within the area described as follows:

(Metes and Bounds Description of Boundary or description of previously platted lots, including total acreage according to surveyor. The point of beginning for land in a subdivision described by metes and bounds should be clearly defined on the plat, and any plat shall be clearly related to the survey, tract, or subdivision of which it is a part ;)

Do hereby adopt this plat designating the herein-described property as , an addition to the City of Venus, Texas, and do hereby dedicate to the public use forever the streets and alleys shown thereon. The easements shown thereon are hereby reserved for the purposes as indicated and shall be open to fire, police and all public and private utilities for each use.

All utility easements shall also include additional area of working space for construction and maintenance of the public water and sanitary sewer systems. Additional easement area is also conveyed for installation and maintenance of manholes, cleanouts, fire hydrants, water services from the main to and including the meters and boxes, sewer laterals from the main to the curb or pavement line, and the descriptions of such additional easements herein granted shall be determined by their locations as installed.

[INCLUDE THE FOLLOWING PARAGRAPH IF THE PLAT CONTAINS ACCESS EASEMENTS]

The undersigned does covenant and agree that the access easement(s) dedicated on this plat may be utilized by any person, including the public, for ingress and egress to other real property, for both vehicular and pedestrian use and access, in, along, upon and across the premises containing the access easement(s).

This plat approved subject to all platting ordinances, rules, and regulations of the City of Venus, Texas.

WITNESS OUR HAND at , Texas, this the

, 20 .

STATE OF TEXAS §

COUNTY OF JOHNSON OR ELLIS §

BEFORE ME, the undersigned authority, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations and in the capacity therein stated.

Given under my hand and seal of office this _____ day of _____, 20___

Notary Public _____

_____County

m) Certificate of engineer or surveyor. The certificate of the licensed professional or licensed public surveyor who surveyed, mapped, and monumented the land (which certificates shall be attested before a notary public) shall be placed on the face of the plat or index sheet of the plats together with the seals of the engineer or surveyor and notary public. Printed seals and signatures are prohibited except for extra prints that the owner or developer may need certified for other purposes. The certificate of the engineer or surveyor to be placed on the plat shall be worded as shown below:

KNOW ALL MEN BY THESE PRESENTS:

That I,___ , do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed, under my personal supervision, in accordance with the subdivision regulations of the City of Venus, Texas.

Signed____. (Name and title)

Registered Professional Land Surveyor, Number _____

A certificate of approval to be signed by the Mayor and the city secretary shall be shown on the plat. The following certificate shall be placed on the final plat by the subdivider:

CITY OF VENUS

Approved by City of Venus:

Mayor: _____

Attested by City Secretary: _____

Date of Approval: _____

A notation on the face of the plat indicating that "Any franchised public utility, including the city of Venus shall have the right to move and keep moved all or part of any building, fences, trees, shrubs, other growths or improvements which in any way endanger or interfere with the construction, maintenance or efficiency of its respective system on any of the easements shown on the plat. Any franchised public utility including the city of Venus, shall have the right at all times of ingress and egress to and from and upon such easements for the purposes of constructing, reconstructing, inspection, patrol, maintaining, and adding to or removing all or part of its respective systems without the necessity at any time of procuring the permission of anyone"; The maintenance of paving on all easements is the responsibility of the property owner. No buildings, fences, trees, shrubs or other improvements shall be constructed, reconstructed or placed upon, over or across the easements as shown. Said easements being hereby reserved for the mutual use and accommodation of all public utilities using, or desiring to use same. All and any public utility shall have the full right to remove and keep removed all or parts of any buildings, fences, trees, shrubs or other improvements or growths which in any way may endanger or interfere with the construction, maintenance and efficiency of its respective system on the easements and all public utilities shall at all times have the full right of ingress and egress to or from and upon said easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining an addition to or removing all or parts of its respective system without the necessity at any time of procuring the permission of anyone.

Floodplain Easement Notation: The following full statement of restrictions shall be placed in the dedication instrument of any subdivision plat that contains land designated as part of a one hundred-year floodplain by FEMA:

“Floodplain Restriction

No construction shall be allowed within a floodplain easement unless specifically approved by the City of Venus. Where construction is permitted, all finished floor elevations shall be a minimum of two (2) foot above the base flood elevation (100-year flood or one percent probability flood elevation.)

Any existing creeks, lakes, reservoirs, or drainage channels traversing along or across portions of this addition, will remain as an open channel at all times and will be maintained by the individual owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across said lots. The City of Venus will not be responsible for the maintenance and operation of said drainage ways or for the control of erosion. Each property owner shall keep the natural drainage channels traversing adjacent to his property clean and free of debris, silt, or any substance which would result in unsanitary conditions and the City shall have the right of ingress and egress for the purpose of inspection and supervision of maintenance work by the property owner to alleviate any undesirable conditions which may occur. The natural drainage channel, as in the case of all natural drainage channels, is subject to storm water overflow and natural bank erosion to an extent that cannot be definitely defined. The City of Venus shall not be liable for damages of any nature resulting from the occurrence of these natural phenomena, nor

resulting from a failure of any structures within the natural drainage channels. The natural drainage channel crossing each lot is shown by the floodplain easement line as shown on the plat."

n) Tax statement. At the time the developer files the final plat with the City Planner, such developer shall also provide a certificate from the County showing that the taxes have been paid on the tract to be subdivided and that no delinquent taxes exist against the property. An original tax certificate from each taxing unit with jurisdiction of the real property indicating that no delinquent ad valorem taxes are owed on the real property. If the plat, replat, or amended plat is filed after September 1 of a year, it must also have attached to it a tax receipt issued by the collector for each taxing unit with jurisdiction of the property indicating that the taxes imposed by the taxing unit for the current year have been paid.

o) Upon acceptance and approval of such plat and public properties by the city council, the city planner or designee shall cause such plat to be recorded in the Plat Records of Johnson or Ellis County, Texas.

(Ord. No. 243-2001, § 5, 2-19-2001)

Sec. 26-67. Development permit.

A development permit shall be required prior to the clearing, grading, filling, dredging, construction of public streets, utilities or drainage or other improvements which may affect adjacent or surrounding properties. Such permit shall describe the property and the nature of the development, and shall be accompanied by construction plans and specifications adequate to describe the improvements. All plans accompanying permits for any work within a floodplain shall be certified by a professional engineer competent to make such determination. The city administrator shall issue such development permit when all conditions of this article have been satisfied.

(Ord. No. 243-2001, § 3(15), 2-19-2001)

Sec. 26-68. Replatting.

A resubdivision plat of a subdivision or a part of subdivision shall be recorded and is controlling over the preceding subdivision without vacation of that plat if:

a. The resubdivision plat is signed and acknowledged by only the owner(s) of the property being replatted; and

b. The resubdivision is approved by the city plan commission and the city council;

c. The resubdivision plat does not attempt to remove any covenants or restrictions;

d. Restrictions. Property shall not be replatted that has been previously platted by a common dedication except with the consent of all directly affected property owners.

e. Requirements. The replat of the subdivision shall meet all the requirements for a new subdivision that may be pertinent, as provided for herein. It shall show the existing property being re-subdivided. Preliminary plats may be required on replats.

(Ord. No. 243-2001, § 6, 2-19-2001

Sec. 26-69. Vested Property Rights.

a) Applicability. The following applications are "site-specific development plans" which established a vested property right upon any approval or conditional approval according to the procedures and criteria of this code:
    1. Site Plan
    2. Final Plat

b) Review Criteria. The review criteria for a vested property right shall be the same criteria as the applications associated with the proposed development. In addition, when the City Council is considering a request to vest any other property right or development approval, it shall consider the following:
    1. The level of planning, urban design, or engineering investment that was necessary for the applicant to reach this point in the application.
    2. The extent of details included in the proposal, the certainty associated with future development, and the extent of future reviews that may be necessary to advance the project to construction.
    3. The context of the property and the likelihood of future changes in the surrounding area that could impact the project.
    4. The potential for policy or regulatory changes at any level of government and to what extent vesting could unreasonably bind future decision makers.
    5. Any other aspect of the public health, safety, and welfare

c) Effect of Decision
    1. Notice. Within 14 days from approval of a vested property right application, the City shall publish notice according to Section 26-25 f.1. The notice shall generally describe the nature and extent of the approval and advise the general public of the site-specific development plan approval and creation of a vested property right pursuant to Chapter 245 of the Texas Local Government Code.
    2. Extent of Vesting. Vesting shall only occur to the extent of the standards of this ordinance that are reflected in an approved application, and specifically the land use, density, lot sizes and site or building designs in the approved application. Vesting does not include other regulations that are general in nature or that apply equally to all property subject to these regulations. Vesting does not exempt applications from any subsequent review and approvals prior to construction. Vesting does not insulate a project from other public health and safety codes, including subsequent changes or updates these codes associated with subsequent reviews, including construction drawings and specifications, drainage plans and permits, and building permits.
    3. Time Period. A property right that has been vested shall remain vested for two years from the date of approval. However, the City Council may agree to a shorter or longer time period for any elective vested property right according to this section. If no building permit or other final permit is issued, or if the applicant does not request an extension within this period, the vested property right shall be terminated. The City shall send notice of the termination to the applicant at least 30 days prior to the termination, or the termination shall otherwise become effective after 30 days notice from the City.
    4. Extensions. Prior to termination, the applicant may request extension of a vested property right. Planning Staff may grant an extension up to two years. However, any extension of an elective vested property right shall only be approved through the same procedure of

the original approval. In approving any extension, Planning Staff or City Council shall find:

a) There are no changes or alterations that would produce conflicts with this ordinance, or any changes proposed bring the project more in compliance with the current standards.

b) The application remains consistent with any official plans or policies affecting the area, including any plans or policies adopted since the original approval.

c) The application is consistent with any conditions of the original approval or the original decision on vesting.

5. Changes/Adjustments. A site-specific development approval may be modified or adjusted as provided by this ordinance without affecting the vested property right. However, any change in the plans that would require a new application or a different process than the original approval shall terminate any vested property right under previous approvals to the extent the change impacts that right.

Secs. 26-69—26-95. Reserved.

DIVISION 3. STANDARDS AND SPECIFICATIONS

Sec. 26-96. Conformance; provisions for future; prohibitions; standards.

No preliminary or final plat shall be approved by the city council, and no completed improvements shall be acceptable by the city, unless they conform to the following standards and specifications in this division:

1. Conformity with most current comprehensive plan. The subdivision shall conform to the most current comprehensive plan of the city and parts thereof.
2. Provision for future subdivision. If a tract is subdivided into parcels larger than ordinary building lots, such parcels shall be arranged to allow for the opening of future streets.
3. Reserve strips prohibited. There shall be no reserve strips controlling access to land dedicated or intended to be dedicated to public use.
4. Standards for construction. The street and drainage with all appurtenances pertaining to them, and facilities of other agencies as may be required, shall be constructed and installed in each new subdivision in accordance with the existing standards of the city and the North Central Texas Council of Governments (NCTCOG) Standard Specifications for Public Works Construction as amended. When in conflict, the city standards shall prevail over the NCTCOG standards.

(Ord. No. 243-2001, § 7(intro.), (1), 2-19-2001)

Sec. 26-97. Building site improvements.

a) No subdivision or part thereof shall be approved if a proposed subdivision development is to occur in an established flood hazard area and thereby, individually or collectively, significantly increase flood flows, heights, or damages.

b) Building sites, residences, motels, resorts, and similar uses for human occupation in established

flood hazard areas shall meet the requirements of the federal flood insurance program as adopted by the city.

c) Building sites for structures other than residences outside of established flood hazard areas shall ordinarily be filled as provided in the city's codes and ordinances controlling such activities.

d) When the city engineer so determines that only part of a proposed plat can be safely developed, it shall limit development to that part and shall require that the method of development be consistent with its determination.

e) When the subdivider does not intend to develop the plat himself, and the city engineer determines that limitations are required to ensure safe development, the city council may require the subdivider to impose appropriate deed restrictions on the land. Such deed restrictions shall be inserted in every deed and noted on the face of the final recorded plat.

f) Floor levels of the buildings are to be a minimum of 12 inches above the top of the center line of the street it faces or 18 inches above natural ground at the site, the grade of which is to be approved by the city. This minimum may be reasonably increased upon specific findings by the city engineer that site drainage characteristics require such increase.

(Ord. No. 243-2001, § 7(2), 2-19-2001)

Sec. 26-98. Streets.

a) Street construction. Materials and workmanship shall conform with city standards for street construction as passed by ordinance of the city council.

b) Street names. Names of new streets shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of or in alignment with existing streets, in which case names of existing streets shall be used. The city shall provide and install uniform street signs at developer's expense. Should the subdivider choose to provide street signs other than those provided by the city, they shall conform to city standards and shall have approval by the city.

(Ord. No. 243-2001, § 7(3), 2-19-2001)

Sec. 26-99. Sidewalks.

Sidewalks.

1. Generally. Development sites shall include direct sidewalk connections and circulation at the same or greater frequency as provided for vehicles. Sidewalks shall be installed at the time of subdivision construction for all commercial, industrial, and multi-family subdivisions. In single-family residential subdivisions, sidewalks that do not front a residential lot must be built by the developer at the time of initial construction. Sidewalks for each residential lot may be installed by the home builder at the time of home construction. At the time of final plat submittal, the developer shall submit a cash or performance bond (or other approved financial assurance instrument) to construct twenty percent of the required sidewalks. At the end of the four-year period, the developer shall construct the remaining sidewalks in the subdivision, or the city shall exercise the bond and construct them. The city shall refund any funds not required for sidewalk construction at the end of the four-year period. Sidewalks shall connect public entrances of buildings and sites to the following, in the most direct manner possible:

    a. Sidewalks shall be constructed in the public streetscape or along through access drives.

b. Parking areas and any perimeter sidewalks, internal walkways or crosswalks associated with the parking areas.

c. Civic or open space or other common areas designed for active use.

d. Transit stops, station or park and ride location - existing or anticipated.

e. Where connections from sidewalks in the public streetscapes or through access drives is not practical or is too remote, sites shall provide pedestrian connections to any of the above areas or amenities on adjacent sites. Connections directly to adjacent sites shall be made in any case where the connections by sidewalks on public streets or through access ways results in pedestrian routes greater than 300 feet.

2. Sidewalk width. Internal sidewalks shall meet the requirements of table below: Internal Sidewalk Widths.

Internal Sidewalk Widths		
Location		**Minimum Width**
■	Generally; OR	4'
■	Any residential property	
■	Along the facade of a commercial building of 5,000 s.f. or less abutting a parking area; OR	6'
■	Along any through access drive	
■	Along the facade of a commercial building of 5,001 s.f. to 19,999 s.f. abutting a parking area; OR	8'
■	A primary route between the street or parking area and the building entrance.	
■	Along the facade of any commercial building of less than 20,000 square feet with a primary entrance, or similar building with significant public and pedestrian access.	10'
■	Along the facade of a commercial building of 20,000 s.f. or more abutting a parking area or with a primary entrance.	15'
■	Any access designed for both pedestrians and bicycles.	12'
■	Along any parking area with vehicle overhangs;	+ 2' to other required width

3. Pedestrian Amenities. Sidewalks and internal pedestrian circulation shall be separated from moving vehicles with curbs, landscape buffers, curbside parking, or similar elements of the circulation and open space system; except crosswalks or other similar limited segments, which may be distinguished paint, brick, or colored or scored concrete and similar design features that signify pedestrian priority.

Sec. 26-100. Utilities lines and easements

a) Intent. The intent of the blocks and lot standards is to:

1. Ensure the proper arrangement of blocks and lots to complement the street network.

2. Arrange blocks, lots and development in a manner that is least disruptive to existing topography and capitalizes on inherent natural characteristics of the land as defining features.

3. Coordinate access and utilities for each lot in association with larger systems of streets and infrastructure.
4. Promote appropriate site, and buildings in relation to the public realm.
5. Ensure that all lots are buildable according to this ordinance and that all non-developed tracts or other parcels serve an urban design or planning function in relation to the overall development pattern.

b) Block and Lot arrangement.

1. General layout. All blocks shall be laid out to have two tiers of lots unless dictated by existing development patterns outside of the control of the project or by access management on major arterial streets.
2. Block Size and Patterns. All lots shall front on a public street, or on an alternative access or common open space where specifically allowed by these regulations. All side lot lines shall generally be perpendicular to front lines, or radial to any curves along the front lines.
3. Addressing. All lots, tracks, and other parcels shall require an address, including streets and street names.
4. Easements. All blocks shall include easements for all utilities, required improvements, access and open space necessary to serve each lot. Easements shall be granted by the owner to the appropriate entity. All easements shall be accessible from the public right-of-way and graded to within six inches of final grade before utilities are installed

c) All utility lines that pass under a street or alley shall be installed before the street or alley is paved. Where it is necessary that utility lines pass under the street or alley pavement, they shall be extended to a point at least three feet beyond the edge of the pavement.

d) Overhead utility lines crossing alleys shall be a minimum of 18 feet

e) Except where alleys of not less than 20 feet in width are required, easements not less than ten feet in width shall be retained five feet on each side of rear lot lines. Where necessary, easements not less than ten feet in width on each side of side lot lines shall be retained for poles, wires, conduits, storm sewers, sanitary sewers, water lines, open drains, gas lines, or other utilities. Such easements may be required across parts of lots other than as described above upon recommendation of the city engineer. Where the proposed platted area adjoins an unplatted area, the full alley or easement width may be required along the rear of lots adjoining the unplatted areas.

f) At the option of the subdivider all single phase electric lines and communication lines may be installed underground at the subdivider's cost.

(Ord. No. 243-2001, § 7(5), 2-19-2001)

Sec. 26-101. Monuments and corner markers.

a) All block corners, angle points and points of curves, and all corners of boundary lines of subdivisions shall be marked with a one-half-inch steel rod, two feet in length.

b) Where, due to topographic conditions, permanent structures, or other conditions, the view is obstructed between any two adjacent markers, intermediate markers shall be so set as to assure a clear view between adjacent markers. Intermediate property corner markers, consisting of a one-half-inch steel rod or three- quarter-inch pipe, three feet in length, shall be driven flush with the

finished ground surface to mark the corners of all lots.

(Ord. No. 243-2001, § 7(6), 2-19-2001)

Sec. 26-102. Drainage.

a) Easement. Where a subdivision is traversed by a watercourse, drainageway, natural channel or stream, there shall be provided an easement or right-of-way conforming substantially to the limit of such watercourse, plus additional width to accommodate maintenance and future needs.

b) Drainage facilities.

    1. Drainage facilities shall be provided and construction as specified by the city. Storm drainage facilities shall be designed to convey the flow of surface waters without damage to persons or property. The system shall insure drainage at all points along streets and provide positive drainage away from buildings and onsite waste disposal sites.
    2. Plans shall be subject to the approval of the city council. The city engineer may require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods.
    3. The facilities shall be designed to prevent the discharge of excess runoff onto adjacent properties.
    4. Storm sewers shall be constructed with reinforced concrete pipe, high density polyethylene (HDPE), or other material, if approved by the city engineer.

c) Drainage and costs sharing.

    1. Plans and specifications for the above improvements shall be reviewed by the city engineer for consistency with general development and city engineering standards.
    2. If it is determined that additional drainage facilities in the form of storm sewers within the subdivisions are necessary, the developer shall prepare, with the approval of the city engineer, plans and specifications to be used by said developer in correcting the drainage. All such work necessary to be done under such plans and specifications shall be done at the sole expense of the developer.
    3. Storm sewers required to provide drainage from the point where storm water emanates from the subdivision to an adequate drainage point along existing streets, may be provided by the city at its discretion. In the event that the storm drain construction is so great as to be prohibitive for either the subdivider or the city, all areas affected by such drainage shall be omitted from the development. The developers, may, at their option, either provide the necessary storm drainage outside of the subdivision, in the event that the city is unable to do so, or, by specific agreement, provide the same upon a basis for refund over a period of time agreeable to the city council.

(Ord. No. 243-2001, § 7(7), 2-19-2001; Ord. No. 412-2015 , § B, 11-9-2015)

Sec. 26-103. Lots, residential.

All lots shall abut an approved street for a distance of at least 50 feet and shall provide safe and convenient pedestrian and vehicular access from the lot onto the street. Lots on culs-de-sac shall also have a 50-foot minimum frontage at the property line. On cul-de-sacs, the 50 feet of frontage will be measured at the minimum setback line; such setback line shall be no less than 20 feet from the front property line to

the face of the building and shall be required on all lots. Minimum lot area shall be 5,000 (50 by 100) square feet (see table in zoning ordinance).

(Ord. No. 243-2001, § 7(8), 2-19-2001; Ord. No. 711-2020-10 , § 3, 10-12-2020)

Sec. 26-104. Blocks.

The length of a block shall be considered to be the distance from property corner to property corner measured along the property line of the block face of greatest dimension, or on which the greatest number of lots face. The width of a block shall be considered to be the distance from property corner to property corner measured along the property line of the block face of least dimension, or on which the fewest number of lots face. The length, width and shapes of blocks shall be determined with due regard to provision of adequate building sites suitable to the special needs of the type of use contemplates, zoning requirements as to lot sizes and dimensions, and needs for convenient access, circulation, control and safety of street traffic.

Block lengths shall not exceed 600 feet. Single tract blocks, platted for the owner's convenience, are not subject to these restrictions.

(Ord. No. 243-2001, § 7(9), 2-19-2001)

Sec. 26-105. Crosswalk ways.

Walkways. Where blocks in the vicinity of a school, park, or shopping center are platted 1,000 feet or longer, the council may require a walkway near the middle of the block, or at a street that terminates between the streets at the end of the block. The walkway right-of-way shall not be less than ten feet in width and the paved walkway not less than five feet or more than eight feet in width, and shall have a five-foot concrete walk through the block from sidewalk to sidewalk, or to the rear of the property line, if no street exists.

Crosswalk rights-of-way ten (10') feet in width shall be dedicated where deemed necessary by the city council to provide pedestrian circulation or access in schools, playgrounds, shopping centers, and transportation other than community facilities, or to provide pedestrian circulation within the subdivision.

Lots

All lots shall abut an approved street for a distance equal to the minimum width required in the zoning district within the City and at least 50 feet for areas in the ETJ and shall provide safe and convenient pedestrian and vehicular access from the lot onto the street. On cul-de-sacs, the 50 feet of frontage will be measured at the minimum setback line; such setback line shall be no less than 20 feet from the front property line to the face of the building and shall be required on all lots.

1. The lot arrangement and design shall be such that all lots will provide satisfactory and desirable building sites, properly related to topography and the character of surrounding development.
2. All side lines of lots shall be at approximately right angles to straight street lines and radial to curved street lines except where a variation to this rule will provide a better street and lot layout. Rear lot lines should be straight and avoid acute angles with side yard lines. Odd-shaped lots should be avoided. Where utility easements are to be located along rear lot lines, these lines

should be as straight as possible for long lengths.

3. No lot shall have less width at the building line than is required by the zoning regulations that apply to the area in which it is located.
4. Lots shall be consistent with zoning regulations. When the specific proposed use of a lot or tract depends upon future action by the city council or other properly designated authority, lot lines shall also be shown on the preliminary plat appropriate to a use that does not require such action. Proposed uses shall be shown on the preliminary plat.
5. Generally lots should be deeper than they are wide. It is recommended to have the depth twice the width. The important consideration is to assure that the lots are neither too deep nor too shallow to allow for good placement of a principal building on a lot.
6. Corner lots shall be wider than interior lots so that dwellings can be placed further from the street. Corner lots shall be ten to twenty percent (10-20%) wider than interior lots. Lots facing onto heavy traffic streets shall be avoided. This can be accomplished by providing deeper lots with the houses backing onto the heavy traffic street. Other methods include:
    a. Providing an access parallel to the major street;
    b. Cul-de-sac if the property has sufficient depth; or
    c. Provide a loop street, if the property has sufficient depth and width.
7. Surface drainage must be diverted away from house sites to a public right-of-way or dedicated drainage easement. Sufficient slope must exist on the lot to enable drainage to runoff from the building site across sidewalks, and onto the street. Swales may be needed to provide drainage from backyards.
8. Building Lines. Front and second front building lines shall be shown on all lots in the subdivision. The building lines shall be shown in accordance with the minimum applicable to the zoning district. Building lines on plats may exceed the minimum required by the zoning ordinance if necessary or prudent.
9. Orientation to Public Parks. No more than fifty percent of the boundary of a public park may be contiguous to the rear lot line of residential lots. All other residential lots must face the public park across a public street.

(Ord. No. 243-2001, § 7(10), 2-19-2001)

Sec. 26-106. Conditions attached to plat approval.

The city engineer may attach conditions to the approval of plats for areas subject to development problems in flood hazard areas, including, but not limited to, the following:

1. Requirements for construction or channel modifications, dikes, levees and other protective measures;
2. Imposition of operations controls, sureties, and deed restrictions may include floodproofing of intended uses, subject to the individual approval of the city engineer and city, as follows:
    a. Anchorage to resist flotation and lateral movement:
    b. Reinforcement of walls to resist water pressures;
    c. Use of paints, membranes, or mortars to reduce seepage of water through walls;

d. Addition of mass or weight to structures to resist flotation;

e. Installation of pumps to lower water levels in structures;

f. Construction of water supply and waste treatment systems so as to prevent the entrance of floodwaters;

g. Construction to resist rupture or collapse caused by water pressure or floating debris;

h. Construction to resist rupture or collapse caused by water pressure or floating debris;

i. Installation of valves or controls on sanitary and storm drains which will permit the drains to be closed to prevent back-up of sewage and stormwaters into the buildings or structures (gravity draining of basements may be eliminated by mechanical devices);

j. Location of all electrical equipment, circuits and installed electrical appliances in a manner which will assure they are not subject to flooding and to provide protection from inundation by the regulatory flooding; and

k. Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials which could be hazardous to public health, safety, and welfare in a manner which will ensure that the facilities are situated at elevations above the height associated with the regulatory protection elevation or are adequately floodproofed to prevent flotation of storage containers which could result in the escape of toxic materials into floodwaters.

(Ord. No. 243-2001, § 7(11), 2-19-2001)

Sec. 26-107. Building setback lines and minimum lot sizes.

Setbacks for various zoning districts can be found in the zoning ordinance, codified at article II of chapter 34 of this Code.

(Ord. No. 243-2001, § 7(12)(A), 2-19-2001; Ord. No. 711-2020-10 , § 4, 10-12-2020)

Sec. 26-108. Parking requirements.

a) Parking space requirements and standards. Parking space requirements and standards for various subdivision and land use types can be found in article IV of chapter 34, pertaining to zoning.

b) Other uses. As determined by review of the commission:

1. Parking spaces shall be a minimum of nine feet wide and 18 feet long.

2. Required parking spaces shall not occur, wholly or partially, within public rights-of-way.

3. Parking areas for townhouse, apartments, or commercial areas shall be screened from adjacent duplex or single-family areas (including mobile homes) by an opaque fence or hedge six feet in height or higher.

4. Parking patterns and arrangements shall conform to city engineering specifications and standards.

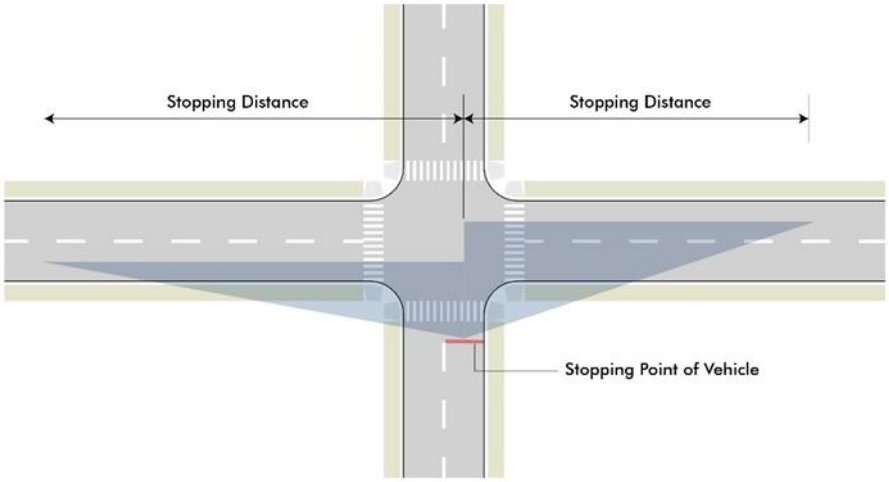
(Ord. No. 243-2001, § 7(12)(B), (C), 2-19-2001)

Sec. 26-109. Sight lines at street intersections.

Sight Distances. Proper lines of sight shall be maintained at all intersections. The proper line of sight shall be an unobstructed view from the stopping point on the approaching street to all points three feet above the roadway along the centerline of the intersecting street. The distance of the unobstructed view shall be based upon the design speed of the intersecting street specified in the following table, Clear Sight Distance.

Clear Sight Distance	
Design Speed of Intersecting Street	**Intersection Sight Distance (measured along centerline of intersecting street)**
15 mph	105'
20 mph	115'
25 mph	155'
30 mph	200'
35 mph	250'
40 mph	305'
45 mph	360'
50 mph	425'

Source: American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets.*



The sight distance for intersecting streets or access points shall be clear of obstructions from on-coming traffic. The distance shall be measured from the stopping point of entering vehicles and be based on the type of control of the intersection and the speeds of oncoming vehicles.

a) No building or other type of visual obstruction shall be placed or maintained within the triangle created by the centerline of the street intersection, the stopping point on the approaching street, and the sight distance specified in Table 3-6 to the centerline of the intersecting street.

b) Street trees, light poles or other limited narrow obstructions are allowed within the sight triangle provided they do not have any foliage, limbs, or other obstructions between 2.5 and 8 feet and are no closer than 30 feet to the intersecting right-of-way line.

c) Fully controlled intersections where signalization establishes and prioritizes safe turning

movements may deviate from the above sight triangle standards if site conditions warrant and based upon a recommendation of the Public Works Department.

Sec. 26-110. Where subdivision is unit of a larger tract.

Where the proposed subdivision constitutes a unit of a larger tract owned by the subdivider, which is intended to be subsequently subdivided in whole or part as additional units, the preliminary and final plats shall be accompanied by a layout of the entire area, showing the tentative, proposed layout of streets, blocks, drainage, water, sewerage, and other improvements for such area. The overall layout, if approved by the city council, shall be attached to the file with a copy of the approved subdivision plat in the permanent files of the city. Thereafter, plats of subsequent units of such subdivision shall conform to such approved overall layout unless changed by the city council, which may change such approved overall layout only when it finds:

1. That adherence to the previously approved overall layout will hinder the orderly subdivision of other land in the area in accordance with the provisions of this article; or
2. That adherence to the previously approved overall layout either will be detrimental to the public health, safety, or welfare, or will be injurious to other property in the area.

(Ord. No. 243-2001, § 10, 2-19-2001)

Sec. 26-111 Required Improvements prior to acceptance

a) Intent. The intent of this section is to:
    1. Ensure that all improvements necessary to serve lots within a subdivision are constructed, inspected or otherwise assured of completion prior to the issuance of building permits.
    2. Prevent the location or design of a subdivision from placing an undue burden on public utility systems and community facilities serving other areas.
    3. Provide appropriate apportionment of costs and offset higher net costs or premature costs to the public necessitated by the subdivision.
    4. Protect against subdivisions where soil, subsoil or flooding conditions would create potential dangers to public health or safety.
    5. Coordinate subdivisions and construction of required improvements with other anticipated improvements or with future growth.

b) General Requirements.
    1. All required improvements shall be outlined in the subdivision plan, and be incorporated into the final design at the time of final plat.
    2. The applicant shall post a performance bond, letter of credit or similar security instrument drawn in favor of the City in an amount equal to 115% of the estimated cost of the construction of improvements, determined by the City Engineer.
    3. The schedule for construction of improvements may be divided into phases according to an approved preliminary or final plat.
    4. Required improvements shall be constructed in accordance with the Public Works Standards and Specifications and in accordance with approved plans and profiles and the

construction requirements and specifications of the City.

5. Finished plans of all public improvements as built shall be required before the City shall accept improvements. The approved design plans are acceptable if they remain true after construction and if attested to by a registered engineer.
6. The performance guarantee shall be released upon written request by the applicant to the City Administrator or his or her designee, only after all improvements for the subdivision, or any particular phases noted on a phasing plan, are completed, inspected and finally accepted by the City.
7. The applicant shall be responsible for the repair, replacement and maintenance of any required improvement, which fails to function or meet the standards of the City due to defects in material or workmanship, within 2 years from the date of final acceptance.

c) Improvements. The following improvements are required to be constructed with the subdivision, except where facilities sufficient to serve the subdivision exist and have been approved by the City. The size, type and general location of each improvement, and estimated cost shall be included as part of the final plat submittal and review**.**

1. Easements and utility services, including water lines, sanitary sewer, and other public utilities
2. Easements and drainage systems including storm sewer lines, natural and constructed conveyances, retention/detention ponds, and similar facilities
3. Retaining walls associated with an approved grading plan.
4. Wells.
5. Fire Hydrants.
6. Rights-of-ways and streets
7. Access and alleys and other required vehicle circulation and parking components, and easements where shared or cross-access is proposed.
8. Curb, gutter, sidewalks, landscape and amenity areas, street lights, and street signs.
9. Traffic signal lights and signs, and any other safety measures in the rights-of-way.
10. Open and civic spaces, whether public, common, or shared.
11. Survey monuments, including range points and lot pins as required by the City Engineer. In general, this shall be at all beginning and end points, all angle points, or any change in radii of a curved line, and no more than 1,400 feet apart on any straight boundary line. In addition, minimum half-inch steel pins shall be set at all lot corners with a Texas registration number of the surveyor responsible for the monument.
12. Communication and electric distribution services and lines, which shall be underground with the exception of meters, terming boxes and other facilities. All facilities shall be in easements or the right- of-way subject to the design specifications and approval of the City through the plat review process. Every effort shall be made to place pedestals in accessible locations close to corner lot lines but to minimize their appearance through streetscape design, landscape materials, or other site planning and urban design strategies that minimize their impact on the public realm.

d) Street and alley improvements

1. Before approval and acceptance of any final plat, the developer shall prepare (or have prepared) and submit three copies of the complete engineering plans of streets, alleys, curbs and gutters, storm sewers and drainage structures, and water and sanitary sewer

improvements for the area covered by the final plat. The developer shall have these plans prepared by qualified engineers, subject to the approval of the plans by the council.

2. The chief administrative officer shall review the plans and specifications and, if approved, shall mark them "Approved" and return one set to the developer. If not approved, two sets shall be marked, with the objections noted, and returned to the developer for correction.

3. After approval of the plat and of the plans and specifications, the developer shall cause a contractor to install the facilities in accordance with the approved plans and specifications and the regulations of this article. The developer shall cause the engineer to design, stake, and supervise the construction of such improvements, and shall cause the contractor to construct the said improvements in accordance with these regulations.

4. The city will inspect the installation of the improvements after:

    i. The improvements have been completed and have been found to be installed in accordance with the approved plans and specifications;

    ii. Upon receipt by the city of a one-year maintenance bond in the amount of 100 percent of the contract price from each separate contractor, along with three sets of "as-built" plans and one set of "as-built" sepias (the plans and sepias to be "as-built"); and

    iii. Upon receipt of a letter of the contractor's compliance with these regulations, then the chief administrative officer shall receive and approve for the city the title, use, and maintenance of the improvements.

e) Storm drainage

1. An adequate storm sewer system consisting of inlets, pipes, and other underground drainage structures with approved outlets shall be constructed where drainage of stormwater and the prevention of erosion cannot be accomplished satisfactorily by surface drainage facilities. Areas subject to flood conditions, as established by the city, will not be considered for development until adequate drainage has been provided.

2. Areas subject to flood conditions as established by the federal insurance administrator will not be considered for development until adequate drainage and elevation of lots, streets, and alleys have been accomplished to meet the requirements of the floodplain map.

f) Water supply.

1. All subdivisions shall be provided with an approved water system designed and constructed in accordance with the comprehensive plan and standard specifications of the city. In the corporate limits of the city, all subdivisions will be connected with the city water supply distribution system or an approved private system.

2. The developer shall furnish and install the complete sewer system, including the mains, manholes, cleanouts, Y-branches, and service laterals for all lots, lift stations, and appurtenances. The sewage system shall be designed and constructed in accordance with the comprehensive plan and standard specifications of the city.

g) Sewer improvements

1. All subdivisions shall be provided with an approved sewage disposal system and, where the subdivision is inside the city limits, shall be connected to the city sanitary sewer system.

2. The developer shall furnish and install the complete sewer system, including the mains,

manholes, cleanouts, Y-branches, and service laterals for all lots, lift stations, and appurtenances. The sewage system shall be designed and constructed in accordance with the comprehensive plan and standard specifications of the city.

h) Underground utilities. All public or privately-owned underground utilities shall stub out all services from mains in all directions to the property lines in streets and in alleys, where the services shall be stubbed out 18 inches inside the rear property line of platted lots and to the property line of unplatted property prior to commencing paving operations.

i) As-built plans. The developer, or a qualified engineer, shall present the city with a reproducible (sepia) and complete "as-built" set of plans and three sets of blue-line or black-line prints on paper of "as-built" plans for all paving, drainage, structures, water mains, and sewer mains within 60 days after completion of each contract.

(Ord. No. 243-2001, § 11, 2-19-2001)

Sec. 26-112. Withholding of city improvements.

a) Pending approval of plat. The city hereby defines its policy to be such that the city will withhold all city improvements, of whatsoever nature, including the maintenance of streets and the furnishing of sewer facilities and water service, from all additions, the plattings of which have not been approved by the council.

b) Pending compliance with regulations. The city may withhold the issuing of a street number or building permit for the erection of any building in the city on a newly-subdivided parcel of land until all the requirements of the subdivision regulations have been complied with, including the installation of and acceptance by the city of all waterworks, sewer and paving improvements for the area designated.

c) Pending filing of final plat. No construction work shall begin on the proposed improvements in any proposed subdivision prior to the approval of the final plat by the city and the filing of such final plat with the county clerks of Johnson or Ellis Counties, as appropriate.

(Ord. No. 243-2001, § 12, 2-19-2001)

Sec. 26-113. Building lines.

Building lines shall be shown on the final plat on all lots intended for business and residential use and shall provide the minimum setback as required by the zoning regulations and building codes.

(Ord. No. 243-2001, § 13, 2-19-2001)

Sec. 26-114. Public sites and open spaces.

a) Public use property. The subdivider shall give consideration to suitable sites for schools, parks, and other areas for public use, so as to conform to the recommendations of the city council. Any provision for schools, parks, etc., shall be indicated on the preliminary plat.

b) Existing topography. No individual, partnership, firm, or corporation shall deepen, widen, fill, re-route, or change the course or location of any existing ditch, channel, stream, or drainage way, without first obtaining written permission of the city or other agency having jurisdiction.

c) Abutting public sites. In cases where a subdivision contains or abuts a school, park, or

playground, the subdivider shall dedicate one-half a normal residential street, 30 feet, and provide for one-half the cost of paving and the full cost of all the utilities necessary. The interested agency shall provide the necessary right- of-way, which is 30 feet, to make the street 60 feet in width, and provide one-half the cost of paving.

(Ord. No. 243-2001, § 14, 2-19-2001)

Sec. 26-115. Requirements and design standards for streets.

a) Conformity to master thoroughfare plan. The arrangement, character, extent, width, grade, and location of all streets shall conform to the master thoroughfare plan of the city, and these factors shall be considered in their relation to existing and planned streets, to topographical conditions, to public safety, and to their appropriate relation to the proposed uses of land to be served by such streets. The arrangement, classification, character, extent, width, grade and location of all streets shall conform to the thoroughfare plan and the official street construction standards and shall be designed in accordance with the following provisions: adequate streets shall be provided by the subdivider and the arrangement, character, extent, width, grade and location of each shall conform to the comprehensive plan of the city and shall be considered in their relation to existing and planned streets, to topographical conditions, to public safety and convenience, and in their appropriate relationship to the proposed uses of land to be served by such streets. The street layout shall be devised for the most advantageous development of the entire neighborhood.

b) Exceptions. When such streets are not on the master thoroughfare plan, the arrangement of streets in a subdivision shall either:

    1. Provide for the continuation or appropriate projection of existing streets in surrounding areas; or
    2. Conform to a plan for the neighborhood approved or adopted by the council to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical.

c) Minor streets. Minor streets shall be laid out so that their use by through traffic will be discouraged.

d) Marginal access streets. Where a subdivision abuts or contains an existing or proposed arterial street, the council may require marginal access streets, reverse frontages, deep lots with rear-service alleys, or such other treatment as may be necessary for adequate protection to residents or property and to afford separation of through and local traffic.

e) Reverse strip controlling access. Reverse strip controlling access to streets shall be prohibited except where its control is definitely placed under the jurisdiction of the city under conditions approved by the council.

f) Street jogs. Street jogs with centerline offsets of less than 150 feet for local streets shall be avoided. No street jogs or offsets are permitted for collector or arterial streets.

g) Arterial street intersections. Arterial street intersections shall be at 90 degree angles. Other street intersections shall be laid out so as to intersect at less than 60 degrees.

h) Street right-of-way widths. Street right-of-way widths shall be as shown on the Master Thoroughfare Plan and, where not shown therein, shall not be less than the following:

Description	Minimum width (in feet)
Major thoroughfare	100*
Secondary thoroughfare	60
Minor residential street	60
Access or service road	60
Minor street—multifamily, restricted business, and industrial areas	60*

*Maximum width, 100 feet, depending upon the location and the city street plan with which the major thoroughfare is to be connected.

i) Half-streets. Half-streets shall be prohibited except when essential to the reasonable development of the subdivision in conformity with other requirements of this article, and where the council finds it shall be practical to require the dedication of the other one-half when the adjoining property is subdivided. Whenever a partial street exists along a common property line, the other portion of the street shall be dedicated. Where part of a street is being dedicated along a common property line and the ultimate planned width is 60 feet, the first dedication will be 30 feet.

j) Cul-de-sacs. Cul-de-sacs shall not be longer than 600 feet and shall have a turnaround provided at the closed end. They shall have an outside roadway diameter of at least 80 feet and shall have a street-property line diameter of at least 100 feet.

k) Connections with existing streets. New streets of like alignment shall bear the names of existing streets and shall be dedicated at equal or greater widths than the existing streets. No street name shall be used which will duplicate or be confused with the names of existing streets. Street names shall be subject to the approval of the city council. Where necessary to the neighborhood pattern, existing streets in adjoining areas shall be continued, and shall generally be as wide as such existing streets in alignment therewith.

l) Street improvements. All new streets dedicated within a subdivision shall be improved in accordance with the specifications of the city.

m) Projection of Streets. Where adjoining areas are not subdivided, the arrangement of streets in the subdivision shall make provision for the proper projection of streets into such unsubdivided areas.

n) Boundary Streets. When land proposed to be subdivided is partially or totally bounded on one or more sides by a street or thoroughfare having a right-of-way width of less than that specified in this section, additional right-of-way shall be dedicated to provide one-half of the ultimate right-of-way width. A half-street along adjoining property that has not been subdivided may be shown on the general development plan of an entire subdivision, but no lots fronting upon such half-street shall be included in the subdivisions that are approved. Half-streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations, and where the commission finds it will be practicable to require the dedication of the other half when the adjoining land is subdivided. The other half of the street shall be platted within the adjacent tract at the time it is platted. When land proposed to be subdivided is partially or totally bounded on one or more sides by a street way or thoroughfare having a width of less than that specified in this section, such land shall be laid out so as to provide street widths specified in this chapter.

o) Adequate Access. To insure adequate access, there should be at least two planned points of ingress and egress to each subdivision with more than twenty lots.

p) Access to collectors and arterials.

1. Residential Access. Individual lot access to arterials and collectors for subdivisions zoned R-1, R-1S, or R-2 shall be prohibited. Lot access to minor collectors shall be prohibited unless specifically approved by the city. The design should provide a minimum number of access points to collector streets.
2. Where a residential subdivision borders on or contains an existing or proposed arterial, the planning and zoning commission shall require that access to such streets be limited where possible by:
    i. The subdivision of lots so as to back onto the arterial and front onto a parallel local street with no access from the arterial;
    ii. Providing a series of cul-de-sac, U-shaped local streets, or short loops entered from and designed generally at right angles to a parallel street, with the rear lot lines of their terminal lots backing into the arterial;
    iii. Lots to side onto the arterial with a non-access restriction on the arterial side;
    iv. Reverse frontage with screening and containing a non-access restriction along the rear property line; or
    v. Other treatment as may be necessary or required for adequate protection of adjoining properties, and as approved, by the commission after taking into consideration the proposed method of off-street parking and maneuvering which will prevent the necessity of backing into the arterial.
    vi. Subdivisions serving areas in a single-family residential zoning district that abuts on or contains an existing or proposed arterial or collector street should be designed so that direct vehicular access from any lot to such street is prohibited. The design should provide a minimum number of access points to collector streets.
    vii. Impact Analysis Required. A traffic impact analysis (TIA) shall be required for any development that will generate more than 100 trips per peak hour using data from the most recent edition of Trip Generation published by the Institute of Transportation Engineers. In general, this includes any development with more than 100 dwelling units or shopping area with more than 20,000 square feet of floor area. Traffic Impact Analysis studies shall be prepared by a qualified traffic engineer using generally accepted techniques. The study shall include, as a minimum:
        a. Analysis of existing traffic levels (some data is available from the city);
        b. Trip generation and distribution of proposed development;
        c. Capacity analysis and level of service on affected roadways;
        d. Identification of traffic impacts, needs and deficiencies; and
        e. Recommendations for site access and off-site improvements.

(Ord. No. 243-2001, § 15, 2-19-2001)

Sec. 26-116. Requirements and design standards for alleys.

a) Industrial and restricted business districts. Alleys shall be provided in industrial and restricted business districts, except that the council may waive this requirement where other definite and assured provision is made for service access; such as, off-street loading, unloading, and parking consistent with, and adequate for, the use proposed. Service alleys in restricted business and industrial districts shall be a minimum of 25 feet in width.

b) New developments and replatting of old additions. Alleys shall be required in all new developments and replatting of old additions, unless expressly waived by the council because of drainage or topographical features or because of existing conditions which may preclude the use of an alley in a particular location.

c) Paving. Alleys may be paved in accordance with the city specifications. If any alley is paved, it shall be paved according to paving specifications provided for in this article and adopted by the city council.

d) Cutting and grading.

    1. Alleys shall be cut and graded.
    2. Where the deflection of alley alignment exceeds 30 degrees, a cutback of a minimum of 15 feet, or of such greater distance to provide safe vehicular movement, shall be established on the inside property line, and the paving of the alley shall be cut back in the same manner.

e) Dead-end alleys. Dead-end alleys shall be avoided where possible, but, if unavoidable, shall be provided with adequate turnaround facilities at the dead end as is determined by the city council.

f) Access from the alley. Access to residential property shall be permitted from any alley; however, access from the alley shall not exclude another means of access from the front or side. No side lot access to residential property shall be allowed from any arterial street.

(Ord. No. 243-2001, § 16, 2-19-2001)

Sec. 26-117. Requirements and design standards for blocks.

a) Determination of length, width, and shape. The length, width, and shape of blocks shall be determined with due regard to:

    1. Provision of adequate building sites suitable to the special needs of the type of use contemplated;
    2. Zoning requirements as to lot sizes and dimensions;
    3. Need for convenient access, circulation, control, and safety of street traffic.

b) Specifications for length. In general, intersecting streets, which determine the block lengths and widths, shall be provided at such intervals as to best serve cross traffic adequately and to meet existing streets, or to comply with customary subdivision practices. Where there is no existing subdivision to control, the block lengths shall not exceed 1,600 feet and shall generally be 1,000 feet—1,200 feet in length; nor shall any block be less than 500 feet in length. However, in conditions where it is appropriate that these standards be varied, the length may be increased or decreased to meet the existing conditions, having due regard for connecting streets, circulation of traffic, and public safety.

c) Specifications for width. Where no existing subdivision controls, the block width or depth shall be platted to give lots with a depth-to-width ratio of generally not more than 2½:1, and in no case more than 4:1, and the platting shall be such that the block width or depth generally shall not exceed 350 feet nor be less than 215 feet. When possible, the block width and length shall be such as to allow two tiers of lots back-to-back to an alley.

d) Walkways. Where blocks in the vicinity of a school, park, or shopping center are platted 1,000 feet or longer, the council may require a walkway near the middle of the block, or at a street that terminates between the streets at the end of the block. The walkway shall not be less than four feet or more than eight feet in width, and shall have a four-foot concrete walk through the block

from sidewalk to sidewalk, or to the rear of the property line, if no street exists.

e) (e) Sidewalks. Pedestrian walks not less than four feet wide shall be provided around the perimeter of all blocks.

Ord. No. 243-2001, § 17, 2-19-2001)

Sec. 26-118. Requirements and design standards for lots.

a) Conformity to minimum requirements. Lot dimensions shall conform to the minimum zoning requirements for the established district.

b) Fronting. Each lot shall face on a public street.

c) Key lots.

1. Where corner lots are key lots, that is, where some lots face the frontage street and other lots face the side street, the corner lot shall have a front building line on both streets.
2. Key lots or irregular-shaped lots shall have sufficient width at the building line to meet frontage requirements of the appropriate zoning district. Also, the rear width shall be sufficient to provide access for all utilities, including garbage collection, and shall not be less than ten feet.

d) Depth. No lot shall be platted less than 100 feet in depth; however, in cases where an irregularly-shaped tract is platted into lots and remnant piece of property is of sufficient area to plat one or more lots, the council may waive the depth requirement to prevent a hardship on the developer. All lots shall abut an approved street for a distance equal to the minimum width required in the zoning district within the City and at least 50 feet for areas in the ETJ and shall provide safe and convenient pedestrian and vehicular access from the lot onto the street. On cul-de-sacs, the 50 feet of frontage will be measured at the minimum setback line; such setback line shall be no less than 20 feet from the front property line to the face of the building and shall be required on all lots.

e) Side lot lines. Side lot lines shall be substantially at right angles or radial to the street line. Rear lot lines should be straight and avoid acute angles with side yard lines. Odd-shaped lots should be avoided. Where utility easements are to be located along rear lot lines, these lines should be as straight as possible for long lengths.

f) No lot shall have less width at the building line than is required by the zoning regulations that apply to the area in which it is located.

g) Lots shall be consistent with zoning regulations. When the specific proposed use of a lot or tract depends upon future action by the city council or other properly designated authority, lot lines shall also be shown on the preliminary plat appropriate to a use that does not require such action. Proposed uses shall be shown on the preliminary plat.

h) Generally lots should be deeper than they are wide. It is recommended to have the depth twice the width. The important consideration is to assure that the lots are neither too deep nor too shallow to allow for good placement of a principal building on a lot.

i) Corner lots shall be wider than interior lots so that dwellings can be placed further from the street. Corner lots shall be ten to twenty percent (10-20%) wider than interior lots. Lots facing onto heavy traffic streets shall be avoided. This can be accomplished by providing deeper lots with the houses backing onto the heavy traffic street. Other methods include:

1. Providing an access street parallel to the major street;
2. Cul-de-sac if the property has sufficient depth; or

3. Provide a loop street, if the property has sufficient depth and width.

j) Surface drainage must be diverted away from house sites to a public right-of-way or dedicated drainage easement. Sufficient slope must exist on the lot to enable drainage to runoff from the building site across sidewalks, and onto the street. Swales may be needed to provide drainage from backyards.

k) (k) Building Lines. Front and second front building lines shall be shown on all lots in the subdivision. The building lines shall be shown in accordance with the minimum applicable to the zoning district. Building lines on plats may exceed the minimum required by the zoning ordinance if necessary or prudent.

l) Orientation to Public Parks. No more than fifty percent of the boundary of a public park may be contiguous to the rear lot line of residential lots. All other residential lots must face the public park across a public street.

m) Double frontage and reverse frontage lots. Double frontage and reverse frontage lots shall be avoided except where essential to provide separation of residential development from traffic arteries or where necessary to overcome specific disadvantages of topography and orientation. Where lots have double frontage, a front building line shall be established for each street.

n) Alteration of lot size.

1. It shall be lawful to increase the size of lots from that originally platted; provided, however, that there is no remaining portion of a lot or a lot smaller than the original lot; and also provided, that the final plat is submitted in accordance with the requirements of a final plat as contained herein above; also, provided that such change is in compliance with the Local Government Code.
2. No lot shall be replated to reduce the size of the lot originally platted by a common dedicator, unless the consent of all property owners in the same addition has been obtained. Such required consent may be implied where another lot or lots in the addition, as recorded, have already been subdivided and built upon in the manner prescribed above. No lot will be reduced in width below 50-foot frontage with an area of 5,000 square feet, except for property having a retail business, restricted business, or industrial zone classification and not for residential use, or granted a variance by the board of adjustment.

o) Building permits. When an applicant exhibits a duly executed and recorded deed covering a lot having a minimum dimensions of 50 feet by 100 feet, and such lot is being assessed for city taxes as conforming to the established lot pattern and zoning classification in the block where located, then a building permit may be issued, provided the requested use of such property conforms to the permanent zoning of the property covered by the application.

(Ord. No. 243-2001, § 18, 2-19-2001; Ord. No. 711-2020-10 , §§ 5, 6, 10-12-2020)

Sec. 26-119. Requirements for easements.

a) Utility easements. Easements across lots, or centered on rear or side lot lines, shall be provided for utilities where necessary, and shall be of such width as may be reasonably necessary for the utility or utilities using the same.

b) Storm or drainage easement. Where a subdivision is traversed by a watercourse, drainage

way, channel, or street there shall be provided a storm easement or drainage right-of-way conforming substantially with such course and of such additional width as may be designated by the chief administrative officer and which will be reasonably adequate for the purpose. Parallel streets or parkways may be required in connection with this easement.

c) Exclusion of easement in computing lot area. The lot area shall be computed exclusive of all easements, except anchor easement for public utilities, alleys, and streets.

(Ord. No. 243-2001, § 19, 2-19-2001)

Sec. 26-120. Utilities required.

Sanitary sewers, storm sewers, water mains, and street improvements, along with all appurtenances pertaining to the same and facilities of other agencies as may be required, shall be constructed and installed in each new subdivision in accordance with the current official standards of the city.

1. Proposed development inside corporate limits. All proposed developments located inside the corporate limits of the city shall connect to the water and sewer utilities at the developer's expense. Where the sewage collection system or the water distribution system does not abut the proposed development, the developer shall be required to pay for and extend such services as required to serve the proposed development.
2. Utility Service. The owner shall submit along the plat approval application , a statement as to his plan for providing electric, gas, telephone, and trash pickup within the proposed subdivision. The owner shall submit a letter from the company providing electric service that states the company has the ability and will provide electric service to the proposed subdivision. If water is to be provided by a water utility company, the owner shall also submit a letter from the water utility company that states the water utility company has the ability and will provide water to the proposed subdivision. All utilities shall be contained in the prescribed utility easements along the property lines.

Additional Requirements:

a. If a person submits a plat for the subdivision of a tract for which the source of the water supply intended for the subdivision is groundwater under that land, the plat application shall have attached to it a statement that:
    1. Is prepared by an engineer licensed to practice in this state og a geoscientist licensed to practice in this state; and
    2. Certifies that adequate groundwater is available for the subdivision.
b. The appropriate form and content of the certification to be attached to the plat application shall be the form established by the Texas Commission on Environmental Quality (TCEQ).
c. The owner who submits a plat under subsection (a) shall transmit to the Texas Water Development Board and the Prairielands Groundwater Conservation District any part of the subdivision information that would be useful in:
    1. Performing groundwater conservation district activities;
    2. Conducting regional water planning;
    3. Maintaining the state's groundwater database; or

4. Conducting studies for the state related to groundwater.

Utilities shall be located as follows:

Electrical	Back easement (when possible)
Telephone	Back easement
Gas	Front easement
Water	Front easement
Sewer (where available)	In street (middle)

Fire Hydrants shall be installed on water mains of 6" or larger within the subdivision. Fire hydrant spacing shall not exceed five hundred (500) linear feet. Fire hydrants shall be Texas Style Standard. Water lines on cul-de-sacs off a main road must have 6" water lines to provide for fure hydrants in increments of 500' and where possible a 4" water line will be used to finish off the remainder of the length.

The plan for sanitary sewage treatment and/or disposal shall be indicated, e.g.; municipal sewer services, privately owned sewage disposal system or individual on-site sewage facilities on the plat approval application. A water system and/or sanitary sewer system that is to be installed by the developer of property must be approved by the TCEQ, Texas Department of Health and other governmental agencies when their regulations require it.

If it is the owner or developer's intent that each lot purchaser should provide individual on-site sewage facilities, then a site analysis shall be performed by a Registered Professional Engineer, Registered Sanitarian or Site Evaluator. A report on the locations and results of these site analyses shall be submitted to the City's Public Works Department as part of the application for a permit to construct and operate a private on-site sewage facility.

Utilities extension not feasible. Where the sewage collection system or the water distribution system does not abut the proposed development and the extension of such service is not feasible our would pose an economic hardship, the developer shall be required to furnish with his site plan satisfactory evidence, including (but without limitation) the results of soils tests and borings and statements from local and state health authorities, sanitarian, engineers and other proper officials, that water satisfactory for human consumption may be obtained from the surface or subsurface water sources on the land and that soil conditions are such that satisfactory sewage disposal can be provided through the use of approved sewage treatment systems.

3. Services beyond the limits of city systems. If a proposed subdivision is located beyond the service area of the sewage collection system or beyond the area of the water distribution system, the subdivider shall be required to furnish with his final plat satisfactory evidence, including, but without limitation, the results of soil tests and borings and statements from local and state health authorities, water engineers, and other proper officials, that water satisfactory for human

consumption may be obtained from surface or sub-surface water sources on the land and that soil conditions are such that satisfactory sewage disposal can be provided through the use of approved septic tanks or similar devices.

4. Restrictions for permit. No building permit, nor any water, sewer, plumbing, or electrical permit shall be issued by the city to the owners or any other person with respect to any property in any subdivision covered by this article until:
    a. Such time as the developer and/or owner has complied with the requirements of this article and the approved final plat regarding improvements with respect to the block facing the street and/or streets on which the property abuts, including the installation of streets with proper base and paving, curbs and sewers and alleys, all according to the specifications of the city; or
    b. An escrow deposit has been made with the city secretary; such deposit being sufficient to pay for the cost of such improvements and being accompanied by an agreement signed by the developer and/or owner authorizing the city to make such improvements at prevailing city costs, or to have the same made by a private contractor and pay for the same out of the escrow deposit. Cost of such improvements is to be determined by the chief administrative officer and computed on the city costs basis. Should the developer and/or owner fail or refuse to install the required improvements within the time stated in such written agreement, the city shall in such case be obligated to make such improvements itself, except that such deposit may be used by the owner and/or developer as a progress payment as the work progresses by making certified requisition to the city secretary when supported by evidence of work done; or
    c. The developer and/or owner files a corporate surety bond with the city secretary in a sum equal to the cost of such improvements for the designated area, guaranteeing the installation thereof within the time stated in the bond, which time shall be fixed by the chief administrative officer.
5. Extension to extraterritorial jurisdiction. In the extraterritorial jurisdiction, where a permit is not required, no city water or sewer utilities shall be extended to the development until all sections of this article, applicable to subdivisions in extraterritorial jurisdiction have been complied with. Where no water or sewer utilities are required to be extended to the subdivision in the extraterritorial jurisdiction of the city and where the developer/owner refuses to comply with the applicable regulations of this article, the chief administrative officer of the city shall file action in district court seeking to restrain the developer/owner from violating the applicable provisions of this article, as permitted by the Local Government Code.

(Ord. No. 243-2001, § 20, 2-19-2001)

Sec. 26-121. Street sign requirements.

Within the corporate limits of the city, street signs will be furnished and installed at each intersection by the city at the expense of the subdivider. The subdivider shall pay the city the current standard charge for the cost of materials and installation of each street sign. In subdivisions lying beyond the corporate limits of the city, street- name signs shall be placed by the subdivider at all intersections within or abutting the subdivision. Such signs shall be of the type approved by the city and shall be installed in accordance with the standards of the city. The developer shall pay such sum as is computed by the chief administrative

officer for street signs, as set out herein, at the time at which the developer submits the final plat for approval, and this sum shall be in addition to the filing fee set forth herein above.

(Ord. No. 243-2001, § 21, 2-19-2001)

Sec. 26-122. Outdoor warning sirens.

Sirens required. Subdividers shall install outdoor warning sirens if:

1. *Outdoor warning siren* commonly known as a "tornado siren" or a "weather siren" shall mean a siren designed to alert people who are outdoors of approaching or existing hazardous conditions, during dangerous emergency weather conditions, which require immediate protective actions in order to save lives and property.
2. *Outdoor warning* system shall mean the combination of devices and methods, including but not limited to the outdoor warning sirens located in the area, text message, phone and electronic mail emergency notification applications, signage, etc. employed by the City of Venus to warn of dangerous and hazardous conditions.
3. *Sirens required*. Subdividers shall install outdoor warning sirens if:
    a. The subdivision development consists of 30 or more platted lots; and
    b. Any of the platted lots are over one mile in distance from any other operational outdoor warning siren approved for use and/or operated by the City of Venus; or
    c. The platted subdivision development includes a community park, swimming pool, outdoor fitness area, playground, recreational park, sports playing fields/courts, walking trails, or other community area where people would congregate outdoors.
4. Time for installation. If an outdoor warning siren is required by this section, the city must approve of the location and specifications of the outdoor warning siren and the installation must be completed prior to any acceptance of a final plat by the city and/or city council.
    a. Siren specifications. If an outdoor warning siren is required by this section, it shall meet the specifications of the current outdoor warning system and policies of the city and be approved by the public works director, city building inspector, and/or city engineer before installation and construction. Minimum specifications shall include, but are not limited to, remote control activation, oscillating functionality, battery power back-up, compatibility with other city outdoor warning sirens, site easement for maintenance and repair access, and height and amplitude ability to meet state and federal standards.
    b. Location. If an outdoor warning siren is required by this section, the subdivider shall submit in their preliminary plat, the location of and the maintenance access easement locations for any and all planned outdoor warning siren for approval by the public works director, city building inspector, and/or city engineer.
    c. Outdoor warning siren fee. If required by this section to install outdoor warning siren(s), a subdivider may opt not to install any required sirens and instead pay the outdoor warning siren fee per lot subdivided in the plat to the city according to the currently adopted Master Fee Schedule. Payment shall be made prior to the acceptance of a final plat by the city and/or the city council. The city shall only use fees collected under this subsection to improve and maintain its outdoor warning system, including the installation of new outdoor warning sirens, if practicable. If invoking this subsection, the maintenance access easement requirements of subsection (e) still apply if outdoor warning sirens are installed by the city anywhere in the subdivision development.

d. Appeal. If a subdivider wishes to challenge or request an exception to the provisions of this section, they may do so in writing and by submitting their appeal request to the city secretary. The city secretary shall then submit the appeal to the city council and include an agenda item for consideration and action for the next scheduled city council meeting.

(Ord. No. 405-2015, § A, 7-13-2015)

Secs. 26-123—26-139. Reserved.

ARTICLE III. NONRESIDENTIAL DEVELOPMENTS

Sec. 26-140. Interpretation and purpose.

a) In the interpretation and application of the provisions of this article, it is the intention of the city council that the principles, standards, and requirements provided for herein shall be minimum requirements for the development of a nonresidential tract of land in the city (hereinafter referred to as "the city") and in its extraterritorial jurisdiction; and, where other ordinances of the city are more restrictive in their requirements, such ordinances shall control.

b) The extraterritorial jurisdiction of the city is now one-half mile from the corporate limits. As the city grows, the extraterritorial jurisdiction will be extended in accordance with chapter 43 of the Texas Local Government Code and the requirements of this article shall be extended into any and all new areas of extraterritorial jurisdiction.

(Ord. No. 261-2002, § 1, 5-14-2002)

Sec. 26-141. Definition of terms.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

City engineer means the city's on-staff engineer or consulting engineer.

Council means the City Council of Venus, Texas.

Developer means and includes any person, partnership, firm, association, corporation, and/or any officer, agent, employee, servant, and trustee thereof who does, or participates in the doing of, any act towards the nonresidential development of land within the intent, scope, and purview of this article.

Easement means a right granted for the purpose of limited public or semi-public use across, under, or over private land.

Nonresidential development. The terms "nonresidential," "development," and "commercial" are synonymous for the purposes of this article and refer to the development of a tract of land for nonresidential purposes.

Public works director means the person designated by the mayor to administer the provisions of this article.

Standard refers to the official city maps, master plan, ordinances, and other specifications of the city.

(Ord. No. 261-2002, § 2, 5-14-2002)

Sec. 26-142. Penalty.

a) Any person violating any of the provisions of this article shall be deemed guilty of a misdemeanor, and, upon conviction, shall be subject to a fine of not more than $500.00 per offense. Each transaction in violation of any of the provisions hereof shall be deemed a separate offense.

b) Any person who shall violate any of the provisions of this article, or who shall fail to comply with any of the provisions hereof, within the extraterritorial jurisdiction of the city, shall be filed on in district court, as provided for in the Texas Local Government Code, with the purpose of restraining and enjoining the violation of this article. In addition, city-owned utilities will not be extended into the development until the provisions of this article are complied with.

(Ord. No. 261-2002, § 17, 5-14-2002)

Sec. 26-143. Preliminary planning.

The developer shall avail themselves of the advice and assistance of the city officials and consult early and informally with the public works director, city planner or other person designated, before preparing the site plan of the proposed development in order to save time and money and make the most of available opportunities.

(Ord. No. 261-2002, § 3, 5-14-2002)

Sec. 26-144. Site plans.

a) Purpose. The site plan is intended to show all the planning factors necessary to enable the proper approving authorities to determine whether the proposed plan for land development is satisfactory from the standpoint of public interest and complies with city ordinances.

b) Physical size. The site plans shall be prepared on sheets a maximum size of 18 inches by 24 inches, regardless of the size of the development/

c) Scale. The site plan shall be drawn to a scale of one inch equals 100 feet or one inch equals 50 feet; provided that under special conditions, a smaller or larger scale may be accepted when prior approval of the public works director has been obtained.

d) Contents.

1. Ownership and identification.

    a) Name of the developer, record owner and volume and page of record ownership in the Johnson County and Ellis County deed records, and land planner, engineer or surveyor.

    b) Proposed name of the development.

    c) Key map showing location of tract by reference to existing streets or highways.

d) Date of preparation, scale of plan and north arrow.

e) Development boundary lines with dimensions, indicated by heavy lines, and the computed acreage of the development.

2. Existing conditions.

a) The location, dimensions, name and description of all existing or recorded public and private rights-of-way, including easements within the development as well as those intersecting or contiguous with its boundaries or forming such boundaries.

b) The location, dimensions, identification or name of all existing or recorded residential lots, parks and public areas within the development.

c) Permanent structures and uses within the development, including location of houses, barns, walls, wells, tanks and other significant features.

d) The location, dimensions, description and flow lines of existing drainage structures and the location of flow lines and floodplains. Areas which will be inundated by a 100-year flow as defined by the latest revision of the applicable Federal Emergency Management Agency's flood insurance rate maps (FIRM) and flood boundary and floodway maps must be clearly shown.

e) Utilities on the tract or contiguous thereto, specifying size of lines.

f) Topography shown by contour lines on a basis of two-foot vertical intervals. All elevations on the contour map shall be referenced to the latest U.S.C. and G.S. data.

3. Proposed Layout.

a) The location, dimensions, description and purpose of all proposed drainage ways, open spaces, easements, streets, and rights-of-way within the development;

b) All building setback lines;

c) The location of all proposed buildings and their use;

d) Limits of proposed paving;

e) Means of ingress and egress;

f) Areas to be landscaped;

g) Proposed parking layout;

h) Refuse and waste container location;

i) Provisions for drainage;

j) Proposed water utilities, including fire protection; and

k) Proposed sewer utilities;

4. Preliminary drainage study. A preliminary drainage study submitted for approval concurrent with the submittal of any site plan to the city.

(Ord. No. 261-2002, § 4, 5-14-2002)

Sec. 26-145. Improvements prior to acceptance of site plan.

a) *Procedure; time requirements*.

1. Before approval and acceptance of the site plan, the developer shall prepare (or have prepared) and submit three copies of the complete engineering plans of storm drainage structures and water and sanitary sewer improvements for the area covered by the plan. The developer shall have these plans prepared by qualified engineers, subject to the approval of the plans by the city. The public works director shall review the plans and specifications and, if approved, shall mark them "Approved" and return one set to the developer. If not approved, comments shall be addressed to the developer's engineer for remedy.
2. After approval of the site plan and the engineering plans and specifications, the developer shall cause a contractor to install the facilities in accordance with the approved plans and specifications and the regulations of this article. All improvements will be accomplished at the expense of the developer.
3. Construction must begin within six months from the date of approval of the construction plans. Should construction not have commenced in that time frame, then the approval of the plans shall be rescinded. The plans will be resubmitted for approval to ensure compliance with the city's latest rules and requirements.
4. The city will inspect the installation of all off-site improvements. The city shall accept the off-site improvements after the following:
    a) The improvements have been completed and have been found to be installed substantially in accordance with the approved plans and specifications;
    b) Upon receipt by the city of a two-year maintenance bond for all off-site improvements in the amount of 100 percent of the contract price from each separate contractor; and
    c) The location of all proposed buildings and their use;
    d) Upon receipt of one set of “as-built” plans and one set of “as-built” sepias.

b) *Storm drainage*. All developments shall be provided with:

1. An adequate storm drainage system consisting of inlets, pipes, and other underground drainage structures with approved outlets shall be constructed where drainage of storm water and the prevention of erosion cannot be accomplished satisfactorily by surface drainage facilities.
2. Areas subject to flood conditions as established by the city and/or the federal insurance administrator will not be considered for development until both adequate drainage and elevation of the site have been provided.

c) *Water supply*. All developments shall be provided with an approved water system designed and constructed in accordance with city rules and regulations. In the corporate limits of the city, all developments will be connected with the city water supply distribution system or an approved private system. Water lines shall be looped where possible.

d) *Sewer improvements*.

1. All developments shall be provided with an approved sewage disposal system and, where the development is inside the city limits, shall be connected to the city sanitary sewer system.
2. The developer shall furnish and install the complete sewer system, including the mains,

manholes, cleanouts, Y-branches, and service laterals for all lots, lift stations, and appurtenances. The sewage system shall be designed and constructed in accordance with city rules and regulations.

3. In locations where sanitary sewers are not available and where there are no immediate prospects for installation of sanitary sewers, private sewerage systems of an approved type may be installed in conformity with the rules, regulations, and ordinances of the city and county pertaining to public health; provided, however, that in no case shall private sewerage systems be installed without express approval and inspection by the city and county.

e) *Sidewalks.* Where pedestrian walks are required by the city they shall not be less than four feet wide and shall be provided around the perimeter of the development.

f) *As-built plans*. The developer shall present the city with one reproducible (sepia) complete "as-built" set of plans and one set of blue-line or black-line prints on paper of "as-built" plans for all off-site paving, drainage, structures, water mains, and sewer mains prior to the city's final acceptance of the improvements.

(Ord. No. 261-2002, § 5, 5-14-2002)

Sec. 26-146. Withholding of permits.

a) Pending approval of site plan. The city may withhold the issuing of a building permit for the erection of any nonresidential building in the city if the site plan has not been approved by the council.

b) Pending compliance with regulations. The city may withhold the issuing of a building permit for the erection of any nonresidential building in the city until all the requirements of these development regulations have been complied with, including the installation of an acceptance by the city of all off-site waterworks, sewer, drainage and paving improvements for the area designated.

(Ord. No. 261-2002, § 6, 5-14-2002)

Sec. 26-147. Requirements for easements.

General Policy

1. Easements should normally be provided along the front, rear or side lot lines.
2. Utility easements shall be a minimum of twenty (20) feet in width, unless otherwise specified in this chapter or approved by the city planner.
3. Fifteen (15) -foot utility easements shall be required adjacent to street rights-of-way to accommodate the location of underground and overhead utilities.
4. Easements can be required by the city to be highly restrictive. In such cases the city will draw the easement instrument to be executed by the subdivider prior to approval of the plat.
5. When the city finds that easements in areas adjoining a proposed subdivision are necessary to provide adequate drainage or to provide utilities, the subdivider shall obtain such easement.
6. Drainage easements shall generally be located along the existing drainage way and should be of sufficient width for the designed improvements to be installed and enough extra width for maintenance equipment to be able to work.

7. All drainage easements shall be so designed to allow maintenance equipment to enter the easement and be able to perform the necessary work.
8. Employees of the city of Venus and its agents shall have the authority to enter premises at any time for the purpose of inspecting, repairing or constructing within any easement.

a) Utility easements. Utility easements shall be provided for utilities where necessary, and shall be a minimum of 20 feet in width for the front and back lot lines. Utility easements adjacent to public streets shall be a minimum of fifteen (15) feet in width.

    1. Any franchised or authorized public utility, including the city of Venus, shall have the right to move and keep moved all or part of any building, fences, trees, shrubs, other growths or improvements which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective systems in any of the easements shown on the plat; and any public utility, including the city of Venus, shall have the right at all times of ingress and egress to and from and upon such easements for the purpose of construction, reconstruction, inspection, patrolling, maintaining and adding to or removing all or part of its respective systems without the necessity at any time, of procuring the permission of anyone.

b) Storm or drainage easement. Where a development is traversed by a watercourse, drainageway, or channel, there shall be provided a drainage easement or drainage right-of-way conforming substantially with such course. The easement shall contain the 100-year flood and be of such additional width as may be designated by the Comprehensive Plan and the public works director, and will be reasonably adequate for the purpose. Parallel streets or parkways may be required in connection with this easement.

    Natural waterways and channels should be used wherever practical to carry runoff. Any modification to an existing waterway and channel requires approval by the city engineer and city administrator.

    1. Storm drainage easements of fifteen feet minimum width shall be provided for existing and proposed enclosed drainage systems. Easements shall be centered on the systems. Larger easements, where necessary, shall be provided as directed by the city engineer.
    2. Storm drainage easements along existing or proposed open channels shall provide sufficient width for the required channel and such additional width as may be required for ingress and egress of maintenance equipment; to provide clearance from fences and space for utility poles; to allow maintenance of the channel bank; and, to provide necessary slopes along the bank.
    3. Where topography or other conditions are such as to make impractical the inclusion of drainage facilities within road rights-of-way, perpetual unobstructed easements for such drainage facilities shall be provided across property outside the road right-of-way lines and with satisfactory access to the road. Easements shall be indicated on the plat. Drainage easements shall be carried from the road to a natural watercourse or to other drainage facilities.
    4. When a proposed drainage system will carry water across private land outside the subdivision, appropriate drainage rights must be secured and indicated on the plat or other instrument as approved by the city attorney. In the case of clear public interest, the city may participate in easement acquisition by power of condemnation.
    5. The applicant shall dedicate an appropriate drainage easement either in fee or by drainage easement or by conservation easement of land on both sides of existing watercourses to a

distance to be determined by the city engineer.

6. Easements for storm drainage facilities shall be provided at locations containing proposed or existing drainage ways.
7. Storm drainage easements shall be provided for emergency overflow drainage ways of sufficient width to contain within the easement stormwater resulting from a one hundred-year frequency storm less the amount of stormwater carried in an enclosed system of a capacity required by the city of Venus.
8. The width of the easements shall be substantiated by a drainage study and drainage calculations or other criteria submitted to and approved by the city engineer.
9. Floodplain Easements. Floodplain easements shall be provided along natural drainage ways and lakes or reservoirs. Floodplain easements shall encompass all areas beneath the water surface elevation resulting from a storm whose design frequency is one hundred years (or a one-percent annual probability), plus such additional width as may be required to provide ingress and egress to allow maintenance of the banks and for the protection of adjacent property, as determined and required by the city engineer.
10. Detention area easements shall be provided that completely encompass the pond and associated improvements. Detention ponds on nonresidential property shall be maintained by the property owner's association, unless otherwise approved by the city.

c) Access Easements.

1. Emergency access easements and fire lanes will be provided where required by the fire marshal or the planning and zoning commission and shall be a minimum of twenty feet in width, have a minimum height clearance of fourteen feet, and have a minimum inside turning radius of twenty-five feet. Any emergency access and fire lane easement more than one hundred feet in length shall either connect at each end to a dedicated public street or be provided with a cul-de-sac having a minimum diameter of eighty feet with an additional distance of ten feet on all sides clear of permanent structures. These easements shall be paved to design standards and specifications recommended by the city engineer.
2. Cross access easements shall be required from one commercial lot to the adjacent commercial lot to allow circulation without entering the public street.

(Ord. No. 261-2002, § 7, 5-14-2002)

Sec. 26-148. Utilities required.

Sanitary sewers, storm drainage, water mains, and street improvements, along with all appurtenances pertaining to the same and facilities of other agencies as may be required, shall be constructed and installed by the developer in each new development in accordance with the current official standards of the city.

1. Proposed development inside corporate limits. All proposed developments located inside the corporate limits of the city shall connect to the water and sewer utilities at the developer's expense. Where the sewage collection system or the water distribution system does not abut the proposed development, the developer shall be required to pay for and extend such services as required to serve the proposed development.
2. Utilities extension not feasible. Where the sewage collection system or the water distribution system does not abut the proposed development and the extension of such service is not feasible or would pose an economic hardship, the developer shall be required to furnish with his site plan

satisfactory evidence, including (but without limitation) the results of soil tests and borings and statements from local and state health authorities, sanitarians, engineers and other proper officials, that water satisfactory for human consumption may be obtained from surface or subsurface water sources on the land and that soil conditions are such that satisfactory sewage disposal can be provided through the use of approved sewage treatment systems.

3. Restrictions for permit. No building permit, nor any water, sewer, plumbing, or electrical permit shall be issued by the city to the owners or any other person with respect to any property in any development covered by this article until:
    a. Such time as the developer and/or owner has complied with the requirements of this article and the site plan regarding improvements with respect to the installation of streets, drainage, and water and sewer utilities, all according to the requirements of the city; or
    b. The developer and/or owner files a corporate surety bond with the city secretary in a sum equal to the cost of such improvements for the designated area, guaranteeing the installation thereof within the time stated in the bond, which time shall be fixed by the public works director.
4. Extraterritorial jurisdiction.
    a. In the extraterritorial jurisdiction, no city water or sewer utilities shall be extended to the development until all sections of this article, applicable to developments, have been complied with.
    b. Where the developer/owner refuses to comply with the applicable regulations of this article, the public works director of the city shall file action in district court seeking to restrain the developer/owner from violating the applicable provisions of this article, as permitted by the Texas Local Government Code.

(Ord. No. 261-2002, § 8, 5-14-2002)

Sec. 26-149. Standard specifications.

The Standard Specifications for Public Works Construction as published by the North Central Texas Council of Governments in their latest amended form are adopted as the standard specifications for the city. In addition, local amendments adopted by the City of Venus, for use in public works or facilities construction within the City of Venus and its extraterritorial jurisdiction. These specifications are adopted in their entirety except as may be amended in the local amendments that are included in the Venus Design Standards and Criteria. All builders, developers, and contractors are to utilize said specifications in the construction of any public facilities or projects which are anticipated to be dedicated to, accepted by, or utilized by the public within the City of Venus and its extraterritorial jurisdiction. To the extent that any of the provisions of these standard specifications are in conflict with any other City ordinances, the most restrictive or exacting standard shall apply.

(Ord. No. 261-2002, § 9, 5-14-2002)

Preliminary Engineering Plans to be submitted with Preliminary Plat

The developer shall provide engineering information along with the preliminary plat submittal. At the developer’s option, the developer may submit the preliminary engineering plans described below. If preliminary engineering plans are submitted, then final engineering plans will be required to be submitted

following approval of the preliminary plat for approval and prior to construction and the submittals of a final plat for approval.

In lieu of submitting the preliminary engineering plans, the developer may opt to submit final construction plans with the preliminary plat application. If significant engineering revisions are required, then the preliminary plat will be considered administratively incomplete until the final engineering plans are approved.

1. Preliminary Street Plan. This sheet shall be submitted with the preliminary plat for standard plats and shall be prepared from the preliminary plat, showing topographical contours as applicable, and showing the following:
    a. Type of street to be constructed (i.e., concrete);
    b. Classification (i.e. arterial, collector, local);
    c. Additional easement or right-of-way requirements;
    d. Design standards used;
    e. Relationship of existing and planned streets to topographical conditions, if applicable.
2. Preliminary iSWM drainage site plan. For a standard plat, this sheet shall be submitted with the preliminary plat and shall be at the same scale as the preliminary plat. The preliminary iSWM ™ site plan should consist of maps, narrative, and supporting design calculations (hydrologic and hydraulic) for the proposed stormwater management system, and shall include the following sections:
    a. Existing Conditions Hydrologic Analysis. Provide an existing condition hydrologic analysis for stormwater runoff rates, volumes, and velocities which includes:
        i. Existing conditions data developed in the conceptual iSWM ™ site plan;
        ii. All existing stormwater conveyances and structural control facilities;
        iii. Direction of flow and exits from the site;
        iv. Analysis of runoff provided by off-site areas upstream of the project site;
        v. Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology.
    b. Project Description and Design Considerations. Provide an updated description of the project and the considerations and factors affecting the design approach that have changed between the conceptual and preliminary plans, including:
        i. A description of the overall project and the site plan showing facility locations, roadways, etc.;
        ii. A discussion of the applicable local criteria and how it will be integrated into the design of the project;
        iii. Evaluate the integrated site design practices ad their applicability to this site;
        iv. A discussion of water quality treatment techniques (pollution prevention practices) that are to be utilized on this site, if applicable;
        v. A determination of groundwater recharge considerations, if applicable for this site;
        vi. Identify hotspot land uses, if applicable, and how runoff will be addressed.

c. Post development Hydrologic Analysis. Provide a post-development hydrologic analysis for stormwater runoff rates, volumes, and velocities, which includes:

   i. A topographic map of developed site conditions (minimum two-foot contour interval recommended) with post development basin boundaries indicated;

   ii. Total area of post development impervious surfaces and other land cover area for each sub basin affected by the project;

   iii. Runoff calculation for flood control and streambank protection for each sub basin, as well as applicable water quality calculations;

   iv. Location and boundaries of proposed natural feature protection and conservation areas;

   v. Documentation and calculations for any water quality volume reduction methods being used;

   vi. Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the post-development conditions site hydrology;

   vii. Supporting documentation that there is existing streambank protection/reinforcement or that the subdivision or planned development will provide streambank protection downstream;

   viii. Supporting calculations for a downstream peak flow analysis to show safe passage of post-development design flows downstream. Document point downstream at which analysis ends and how it was determined. In calculating runoff volumes and discharge rates, consideration may need to be given to any planned future upstream land use changes. Depending on the site characteristics and given local design criteria, upstream lands may need to be modeled an "existing conditions" of projected "buildout/future condition" when sizing and designing on-site conveyances and stormwater controls.

d. Stormwater Management System Design. Provide drawings and design calculations for the proposed stormwater management system, including:

   i. A drawing or sketch of the stormwater management system including the location of nonstructural site design features and the placement of existing and proposed structural stormwater control. This drawing should show design water surface elevations, storage volumes available from zero to maximum head, location of inlets and outlets, location of bypass and discharge systems, and all orifice/restrictor sizes;

   ii. Narrative describing that appropriate and effective structural stormwater controls have been selected;

   iii. Cross-section and profile drawings and design details for each of the structural stormwater controls in the system. This should include supporting calculations to show that the facility is designed to the applicable design criteria;

   iv. Hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms (should include stage-storage or outlet rating curves, and inflow and outflow hydrographs);

   v. Documentation and supporting calculations to show that the storm water management system adequately meets the integrated design approach (see iSWM™ Technical Manual);

   vi. Drawings, design calculations and elevations for all existing and proposed

stormwater conveyance elements including stormwater drains, pipes, culverts, catch basins, channels, swales and areas of overland flow.

3. Preliminary water and sewer plan. This sheet shall be submitted with the preliminary plat for standard plats in a form acceptable to the City Engineer. It shall be prepared from the preliminary plat, but shall also include topographical contours at the intervals specified for preliminary drainage plan, and show the following:
    a. Existing sewers, water mains, gas mains, electric and telephone lines, culverts, or other underground structures or utilities within the tract and immediately adjacent thereto with pipe sizes, grades, and locations indicated;
    b. Indicate the direction and distance to, and size of the nearest water mains and sewers in the event they are not on or adjacent to the tract, showing invert elevation of sewers, if any;
    c. The size and location of all proposed sewer mains and proposed easements, if required, including manholes. Preliminary sewer plans are required to determine location of easements;
    d. The size and location of all proposed water distribution mains including valves and fire hydrants;
    e. The size of water mains according to requirements of the City of Venus or CCN holder.

In the event water mains and sewers are not on or adjacent to the tract, indicate the direction and distance to, and size of the nearest ones, showing invert elevation of sewers.

4. Preliminary lot grading plan. This sheet shall be submitted with the preliminary plat for standard plats and shall be prepared from the preliminary plat, showing topographical contours as applicable, and showing the planned grading contours, elevations, earth works, slopes, retaining walls, or other grading information if required by the city engineer.
5. Construction plans for public improvements. These plans shall be submitted concurrently or immediately following a preliminary plat for standard plats, and for short form plats with infrastructure when required:
    a. General Requirements. Prior to the commencement of any construction of public works improvements, the developer or person who intends to construct such projects shall present plans, specifications, and projections of probable cost setting forth in detail all elements of construction to the city for approval. In the case of public improvements associated with subdivision development, the engineering plans (including descriptions of all necessary off-site easements) must be approved in accordance with all requirements of the subdivision ordinance prior to approval of the final plat.
    b. Pre-Submittal Requirements: The City of Venus must review and approve all new constructions and reconstruction projects within the City limits, as well as the City's ETJ, prior to commencement of construction. The City will assist developers and design engineers to ensure that all public improvements for construction are designed to meet current City standards. Before Engineering plans are submitted to the City for review, the following steps should be taken.
        i. Schedule a Pre-Development Application (PAC) Meeting – A pre-development meeting is highly encouraged for all projects, particularly for developers who have not worked in the City of Venus before or who are working on a complex development. A pre-development meeting will be schedule with representative

from all City departments and the design review team.

ii. Obtain Record Drawings – The design engineer is responsible for obtaining and reviewing record drawings of all existing infrastructure. The design engineer shall verify information related to paving and underground utilities within or adjacent to the project.

iii. Obtain and Review Standard Design Documents – The design engineer is responsible for obtaining and reviewing all City of Venus specifications, as well as federal, state, regional and local project specific associated documents.

6. Engineering Plan Contents. All civil engineering plans and related reports submitted for review and approval must be prepared under the direct supervision of a licensed Professional Engineer registered to practice in the State of Texas as shall bear the seal of the Engineer of Record. All plans shall include minimum of the following sheets (in addition to the mandatory plan sheets):
    a. Cover Sheet
    b. Plat (recorded or pending version)
    c. Site Plan (commercial only)
    d. General Notes
    e. City of Venus Construction Details
    f.

Should a construction project require the interruption of traffic on any existing roadway, a detailed traffic control plan shall be included in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD).

Every attempt by the design engineer shall be made to ensure that all civil engineering plans are complete and comprehensive.

Plans Submittals

1. Plans Submittals: Two (2) full-size paper copies of complete plans, specifications, engineering calculations, and detailed estimates or probable cost for streets, drainage, sanitary sewers, water distribution, and any other improvements to be performed, with the engineer's seal affixed, are required for submission prior to final plat approval. One electronic pdf set of the civil engineering plans shall be submitted to the City for review and approval. The submittal shall contain all items listed in the Civil Engineering Plan Review Development Checklist. If the item is not included, an explanation must be included in a cover letter accompanying the plans. Subsequent submittals will be required until all comments have been addressed.
2. These plans shall be submitted on standard eighteen by twenty-four (18” X 24”) sheets for full-size sheets and eleven by seventeen inch (11” X 17”) for half-size sheets, and shall include the information required in this chapter. Plan and profile sheets shall be oriented with the plan view at the top portion of the sheet.
3. Each plan shall show the seal and signature of the registered professional engineer who prepared the plan. The subdivider shall retain a registered civil engineer, licensed to practice in the state of Texas, for all design in new subdivisions or developments, including streets, storm drains, water and sanitary sewers.
4. Additional Submittal Requirements

a. Submit an electronic copy of any study and/or report completed in support of the project. These include, but are not limited to: Traffic Impact Analyses, Flood Studies, Geotechnical Reports, Utility Studies, etc.

b. If flood routing software is used to design any detention basin (e.g. HEC-RAS), provide the original files with the civil plan submittal

c. Note that if civil plans are submitted for review prior to site plan/plat approval, changes to the plans may be required as a result of site plan/plat approval conditions. If a site plan/plat has not been conditionally approved by the City, the City reserves the right to stop the review of the civil plans until that has occurred.

d. Easements by Separate Instruments (offsite easements) – All easements by separate instrument as necessary for the completion of all improvements shown in the construction drawings must be submitted to the City for review prior to filing with the County. All offsite easements must be executed prior to the release of a construction permit.

5. Drafting standards and design practices.

6. Drafting standards and design practices shall be equal to those standards and practices representative of the profession in the preparation of plans for construction requiring a high degree of reliability. The developer's engineer shall furnish to the city any working notes, calculations, and supplemental drawings used in the preparation of these plans for the proposed work in the development upon request. These plans shall be sufficiently detailed to enable the facilities to be constructed according to the engineer's intent with limited assistance from the engineer during the construction phase. The responsibility of the developer's engineer to the city shall end when all plans for which he is responsible have been approved by the city, all construction has been completed and accepted by the city, and a set of reproducible "as built" plans of all required construction has been furnished to the city by the engineer.

7. The plans shall contain a statement of "Released for Construction" for signature of the city Public Works Director;

8. Two copies of detailed estimate of probable costs. Cost projections shall be prepared using quantities shown on the construction plans and recent unit prices from bids on similar projects. Reasonable contingencies should be included to cover uncertainty in the projection. Actual bids supported by bid and performance bonds may be used in lieu of projections of probable cost.

Content of Plans, Specifications and Estimates of Probable Costs

1. Final Street Paving Plans. Final street paving plans shall include:

a. Before approval and acceptance of any final plat, the developer shall prepare (or have prepared) and submit three copies of the complete engineering plans of streets, alleys, curbs and gutters, storm sewers and drainage structures, and water and sanitary sewer improvements for the area covered by the final plat. The developer shall have these plans prepared by qualified engineers, subject to the approval of the plans by the council.

i. The plans shall include plan view, profile and section views of the proposed improvements. Construction details of all structures and appurtenances including dimensions, reinforcing, and components such as grate and manhole covers shall be shown. The proposed curb and gutter type and location in relation to the center line and right-of-way, the proposed sidewalk dimension and the proposed parkway grading shall be shown on street plans. This information shall be given for each of the different types of streets and alleys in the subdivision. Soils test

by an approved soil testing laboratory shall be submitted with the plans to determine the limits and amount of lime or cement stabilization required. A plan and profile of each street with centerline and top curb grades, existing and proposed ground line shown. Each sheet shall include north point, scale, date, and a minimum of two benchmark descriptions to sea level datum. The plans shall include:

1. Type of street to be constructed (i.e., Portland cement),
2. Classification (i.e., arterial, collector, residential),
3. Additional easement or right-of-way requirements,
4. Design standards used. The applicant shall include on the plans all calculations and assumptions used in the design of the proposed improvements. Calculations shown on the plans will not have to be repeated in a report.
5. Relationship of existing and planned streets, to topographical conditions, if applicable,
6. Planned grading contours, elevations, earth works, slopes, retaining walls, flow arrows or other grading information required by the city engineer.

b. Street Plan and Profiles shall be at a scale of one inch equals 40 feet (1" = 40') horizontal and one inch equals four feet (1" = 4') vertical, or one inch equals 50 feet 1" = 50') horizontal and one inch equals five feet (1" = 5') vertical. on sheets no larger than twenty-four inches by thirty-six inches in size. North arrow and date of preparation must be shown on each sheet. All public work improvement plans shall bear the seal and signature of a professional engineer registered in the state of Texas.

c. The typical cross-section of proposed streets showing the width of right-of-way, roadways and type of surface, reinforcing, subgrade, sidewalks, curb height, crown height and cut/fill slopes shall be shown;

d. The plans shall include the alignment of each street, alley, crosswalk and drainage and any other easement, and a beginning and end station of the point of intersection of each curve. The station and angle of each intersection with another street, alley, or drainage easement, the station and radius of each curb return, the location of all monuments and the length, width, thickness of base, subgrade and surface material of each street.

e. Street Plans shall include the following minimum information:

i. All widths, stations of P.C. and P.T. for horizontal curves.
ii. All horizontal curve data.
iii. Distances and bearing.
iv. The location of adjacent property corners and lot lines.
v. Lot and block designations.
vi. All utilities crossing or adjacent.
vii. The size and location of all storm sewer construction and intersecting streets.

1. The profile shall include the following minimum information:
    a. Top of curb grades at 50-foot interval slopes.
    b. Vertical curve data.

c. Beginning and ending stations of vertical curves.
d. Location of utility crossings
e. Storm drain pipe and elevations may be shown on the same sheet or may be on a separate sheet for clarity, benchmark station and elevations as may be needed for information.

Street Light and Signage Plan (Arterial Streets and Residential Subdivisions)

Show all proposed street light locations, consideration should be given to electrical layout from utility company

- ☐ Show all stop signs and traffic related signage locations
- ☐ Street lights located on opposite side of street from Stop Sign
- ☐ Verification of fire hydrant placement relative to street lights and stop signs (3' clear zone)
- ☐ If symbol used in plan, include appropriate legend for clarification

Traffic Control Plan (Site specific)

Design site specific traffic control plan, TxDOT standard alone is inadequate

- ☐ Indicate posted speed limit or design speed
- ☐ Show all sign designation, sign graphic, and sign size
- ☐ Show channelization device type, locations, and spacing
- ☐ Show all traffic barricades and indicate type
- ☐ Show all detour routes and detour signage
- ☐ Show flagger locations where applicable
- ☐ Show message boards with text for two phases
- ☐ Show flashing arrow boards where applicable
- ☐ If symbols used in plan, include appropriate legend for clarification

Grading Plan

- ☐ Both onsite and offsite existing /proposed contours shown clearly labeled
- ☐ Date and name of firm who prepared geotechnical report with corresponding note stating:

  "Work shall be done in accordance with the Geotechnical Report by _____, dated_____."
- ☐ Drainage clarified by flow arrows, high points, sags, ridges, and valley gutters

- ☐ Show driveway locations for all lots adjacent to storm inlets
- ☐ Show drop grade beams and elevations as needed
- ☐ Positive overflow provided at all low points, easements dedicated as needed
- ☐ Finished pad and/or floor elevations shown
- ☐ Minimum finished floor elevations shown adjacent to floodplains, ponds, creeks/channels, etc
- ☐ Clearly show all walls and label top/bottom elevations of wall at key locations
- ☐ FEMA 100 year floodplain and Fully Developed 100 year floodplain delineated easements (show both pre project floodplain and post project floodplain)
- ☐ Cross-sections and flow data and all swales and open channels provided
- ☐ Spot shots, including northings, eastings and elevations shown to ensure proper drainage and adequate ADA/TAS routing where applicable

2. Final Drainage Plans. Upon approval of the preliminary drainage study, the developer shall submit detailed plans, specifications and cost projections prepared by a registered professional engineer registered in the State of Texas and experienced in municipal drainage work. Existing and proposed flow lines of all improvements shall be shown. Unless otherwise specified herein, drainage requirements shall be based on the ISWM™ Criteria Manual for Site Development and Construction. The Hydraulic Manual prepared and compiled by the Texas Department of Transportation Bridge Division, with current revisions, may be used in cases not covered by the iSWM™ Design Manual for Site Development. The following shall be included in the Plans:

a. Final iSWM TM site plan, which includes all of the revised elements included in the preliminary iSWM TM site plan, plus a construction stormwater pollution prevention plan (SWPPP), a landscaping plan, operations and maintenance plan, evidence of acquisition of applicable federal and state permits, and any waiver requests.

b. Final grading and drainage construction plans, indicating two-foot (2') contours. All street width and grades shall be indicated on the plan, and runoff figures shall be indicated on the outlet and inlet side of all drainage ditches and storm sewers, and at all points in the street at changes of grade or where the water enters another street or storm sewer or drainage ditch. Drainage easements shall be indicated.

c. When a drainage channel or storm sewer is proposed, complete plans, profiles and specifications shall be submitted showing complete construction details. Scales shall be one inch equals to forty or fifty feet (1" = 40', 1" = 5-0') horizontally and one inch equal four or five feet (1" = 4', 1" = 5') vertically.

d. A plan of the development shall be submitted depicting the final grading contours and elevations, earthwork, slopes, retaining walls, minimum finished floor elevations of all affected structures, and any other information considered necessary by the city engineer at a scale of one inch is equal to one hundred feet minimum.

e. Complete detention pond plans and calculations meeting the requirements of Section _____.

Hydraulic Calculations

- ☐ Street Flow Computation Table provided for all public streets for 10 year and 100 year events
- ☐ Inlet Interception Computation Table provided for all public inlets for 10 year and 100 year events
- ☐ Pipe Hydraulics Computation Table provided for all public lines for 10 year and 100 year events

Drainage Area Map

- ☐ Existing contours clearly shown for entire drainage basin, both onsite and offsite. Aerial topography or similar is acceptable for offsite areas with major contour labels shown
- ☐ Drainage areas and sub areas delineated and labeled
- ☐ Flow arrows for surface drainage shown
- ☐ Existing and proposed storm lines and open channels shown
- ☐ Inlet designation labels shown
- ☐ Detention pond shown and labeled
- ☐ Drainage easements shown and labeled
- ☐ Zoning indicated for all offsite areas and/or land use assumptions specified
- ☐ Rational Method Peak Runoff Rate Computation Table shown (Q=KCIA)
- ☐ Time of concentration and weighted runoff coefficient calculations shown as needed
- ☐ List the total site impervious area (ft2 of all paving, roof areas, etc.) – Commercial Projects
- ☐ FEMA 100 year floodplain and Fully Developed 100 year floodplain delineated

Detention Pond Design and Hydraulic Calculations

- ☐ Detention pond design calculations shown, method used specified, include 2, 5, 25, & 100 years events
- ☐ Provide detention pond volume sizing calculations and/or computation table
- ☐ Provide stage-discharge table and/or curve information

- Provide weir and/or orifice sizing calculations for outfall structure
- Provide electronic copies of all hydraulic computations or data files (HMS, RAS, StormCAD, PondPack, etc.) on CD or digital media
- Existing and proposed contours shown and labeled
- Cross-section of pond including side slopes, normal pool elevation (if applicable), show 100 year WSE, 10 year WSE, and 1 year, 24 hour WSE
- Detail of pond outfall structure showing all elevations as necessary
- Trash rack (and detail) provided for smaller orifice openings
- Overflow spillway location and design information provided
- 100 year floodplain(s) shown where applicable
- Show and label all existing/proposed utilities and easements
- Access/maintenance ramp provided (max slope 6:1)

Storm Drain Plan

Plan View

- Show and label all existing and proposed utilities
- Dimension location/spacing of utilities
- Label inlet type, inlet block-outs, size, paving station, and top of curb elevation at a minimum
- Label type and size of existing/proposed structures (i.e. headwalls, manholes/junction boxes)
- Label type, size, and dimensions of all permanent outfall erosion protection
- Show centerline stationing for pipe with PC & PT stations and curve data
- Label centerline stations for lateral connections, manhole & junction box locations, pipe size changes, headwalls, and future stub out connections
- 100 year gutter flows and bypass shown at each inlet along public streets and fire lanes
- FEMA 100 year floodplain and Fully Developed 100 year floodplain shown
- Provide applicable construction details for all drainage structures

Profile View

- Existing and proposed ground line at centerline of pipe shown and labeled correctly
- Show all hydraulic data including design flow, full flow capacity, friction slope, velocity, and velocity head. For partial flow conditions show design flow, full flow capacity, normal depth, normal velocity, and velocity head
- Label station and flowline elevation information for all structures, crossing laterals, etc
- Label flowlines at every 50 foot station
- Indicate length, type/class, slope and size of all storm pipes
- Show and label 100 year and/or 10 year HGL, label HGL elevations at all junctions
- All utility crossing and parallel sewer lines shown in profile
- 100 year WSE shown at outfall for ponds, creeks and channels
- Open channels shall also include a typical cross section with all hydraulic data

3. The plans shall also include the location, description and elevation of all benchmarks, the direction of storm drainage flow at each intersection, the flowline elevation of each drainage structure, the flowline elevation of each storm sewer at each point of change of grade and each end and the intervening gradient, the profiles of streets, alleys, and drainage structures shall show the natural ground at adjacent property lines and the proposed center line.

4. Final Water and Sewer Plans. The final water and sewer plans shall be submitted to the City of Venus, as well as the designated CCN holder or provider of service. These plans shall be submitted with the final plat for standard plats and shall be prepared from the preliminary plat, but shall also include topographical contours and shall show the following:
    a. Existing sewers, water mains, gas mains, electric and telephone lines, culverts, or other underground structures or utilities within the tract and immediately adjacent thereto with pipe sizes, grades, locations and depths indicated;
    b. A plan and profile of proposed sanitary sewers, with grades and pipe sizes indicated and showing locations of manholes, cleanouts, etc., and a plan of the proposed water distribution system showing pipe sizes and location of valves, fire hydrants, and fittings, etc.. Each plan shall show the seal and signature of the registered professional civil engineer who prepared the plans. Each sheet shall include north arrow, scale, date, and benchmark description to sea level datum. If the applicant does not propose to install a sewage collection system, a preliminary sewage collection plan may be required, suitable for determination of easement requirements;
    c. Indicate the direction and distance to, and size of the nearest water mains and sewers in the event they are not on or adjacent to the tract, showing invert elevation of

sewers, if any;

d. A plan and profile of the proposed water distribution system showing pipe sizes and location of valves, fire hydrants, and fittings and other facilities. A profile is required for all water lines twelve inches in diameter and larger. Each sheet shall include north point, scale, date, and benchmark description to sea level datum;

e. The size and location of all proposed water distribution mains including valves and fire hydrants;

f. The size of water mains according to requirements of the City of Venus or CCN holder;

g. Scales shall be one inch equal to forty or fifty feet horizontally and one inch equals four, five, or ten feet vertically.

Sec. 26-150. Engineering and construction standards

a. All work and materials shall be in accordance with the City of Venus's Construction Standards and Specifications and the North Central Texas Council of Governments (NCTCOG) Public Works Constructions Standards. Should a conflict be found between the publications, the City of Venus standards and specifications shall take precedence. In the event that the item is not covered by the City of Venus's standards, the most current version of the NCTCOG Public Works Construction Standards shall apply with concurring notification by the contractor to the City and Consulting Engineer for review and approval. Reference to any other standards in the project specifications shall be made to the latest version of that publication. Drafting standards and design practices. Drafting standards and design practices shall be equal to those standards and practices representative of the profession in the preparation of plans for construction requiring a high degree of reliability. The developer's engineer shall furnish to the city any working notes, calculations, and supplemental drawings used in the preparation of these plans for the proposed work in the development on request. The developer shall require his engineer to furnish three copies of all plans to be reviewed by the city. These plans shall be sufficiently detailed to enable the facilities to be constructed according to the engineer's intent with limited assistance from the engineer during the construction phase. The responsibility of the developer's engineer to the city shall end when all plans for which he is responsible have been approved by the city, all construction has been completed and accepted by the city, and a set of reproducible "as built" plans of all required construction has been furnished to the city by the engineer.

b. Compaction densities. At his expense the developer shall employ an independent testing lab to test all compaction densities where specific compaction requirements are stated. These results shall be submitted to the city prior to commencing the next phase of work. The cost of all testing shall be borne by the developer.

    a. Onsite during Construction – Each contractor or subcontractor must always possess a copy of the approved Civil Engineering plans at the project site. At least one copy of the SWPPP, the NOI, Trench Safety plan and TxDOT permits (if required) shall also be always onsite.

    b. Revisions during Construction – All changes to the plans and specifications must be routed through the City of Venus. The design engineer shall provide a sealed drawing of the requested change for review. Work shall not commence on the revision until the revision has been approved by the City.

Requirements for Final Acceptance. When the project nears 95% completion, a Pre-Final walk-through shall be scheduled by the applicant with the City inspector to review the project and discuss final acceptance requirements. Upon project completion, the applicant shall schedule a Final walk through for the public improvements with the City. Applicant must give the City 72 hour notice and is responsible for contacting all relevant non-City personnel.

Record Drawing – In order to receive final acceptance, the design engineer must submit final record drawings including revisions per comments made during the final walk through to the City of Venus Inspector for review and approval. (g) As-built plans. The developer, or a qualified engineer, shall present the city with a complete "as-built" set of plans in pdf format and two sets of blue-line or black-line prints on paper of "as-built" plans for all paving, drainage, structures, water mains, and sewer mains within 60 days after completion of each contract.

After approval of the plat and of the plans and specifications, the developer shall cause a contractor to install the facilities in accordance with the approved plans and specifications and the regulations of this article. The developer shall cause the engineer to design, stake, and supervise the construction of such improvements, and shall cause the contractor to construct the said improvements in accordance with these regulations.

The city will inspect the installation of the improvements after:

a. The improvements have been completed and have been found to be installed in accordance with the approved plans and specifications;
b. Upon receipt by the city of a one-year maintenance bond in the amount of 100 percent of the contract price from each separate contractor, along with three sets of "as-built" plans and one set of "as-built" sepias (the plans and sepias to be "as-built"); and
c. Upon receipt of a letter of the contractor's compliance with these regulations, then the chief administrative officer shall receive and approve for the city the title, use, and maintenance of the improvements.

Storm drainage

1. An adequate storm sewer system consisting of inlets, pipes, and other underground drainage structures with approved outlets shall be constructed where drainage of stormwater and the prevention of erosion cannot be accomplished satisfactorily by surface drainage facilities. Areas subject to flood conditions, as established by the city, will not be considered for development until adequate drainage has been provided.
2. Areas subject to flood conditions as established by the federal insurance administrator will not be considered for development until adequate drainage and elevation of lots, streets, and alleys have been accomplished to meet the requirements of the floodplain map.

Water supply. All subdivisions shall be provided with an approved water system designed and constructed in accordance with the comprehensive plan and standard specifications of the city. In the corporate limits of the city, all subdivisions will be connected with the city water supply distribution system or an approved private system.

Sewer improvements.

1. All subdivisions shall be provided with an approved sewage disposal system and, where the subdivision is inside the city limits, shall be connected to the city sanitary sewer system.
2. The developer shall furnish and install the complete sewer system, including the mains, manholes, cleanouts, Y-branches, and service laterals for all lots, lift stations, and appurtenances. The sewage system shall be designed and constructed in accordance with the comprehensive plan and standard specifications of the city.

Developer's Agreement, and Financial Assurance

It is normal practice in Venus for developers to construct public infrastructure prior to the filing of a final plat. In that case, a developer's agreement and financial assurance (performance bond, payment bond) are not required. A maintenance bond must be provided prior to acceptance. In most cases, the developer shall construct all necessary public improvements following approval of the preliminary plat, approval of engineering plans and notice to proceed from the City to begin construction. Upon completion of construction, and acceptance of the facilities following final inspection, the City shall approve the Final Plat.

1. Drawings. Street plan and profile sheets shall be submitted for all proposed streets.
    a. Profiles shall be at a scale of one inch equals 40 feet horizontal and one inch equals four feet vertical, or one inch equals 50 feet horizontal and one inch equals five feet vertical. The profile shall include the following minimum information:
        i. Top of curb grades at 50-foot interval slopes.
        ii. Vertical curve data.
        iii. Beginning and ending stations of vertical curves.
        iv. Location of utility crossings.
        v. Storm drain pipe and elevations may be shown on the same sheet or may be on a separate sheet for clarity, benchmark station and elevations as may be needed for information.
2. Plans shall include the following minimum information:
    a. All widths, stations of P.C. and P.T. for horizontal curves.
    b. All horizontal curve data.
    c. Distances and bearing.
    d. The location of adjacent property corners and lot lines.
    e. Lot and block designations.
    f. All utilities crossing or adjacent.
    g. The size and location of all storm sewer construction and intersecting streets.
3. Streets. Should street, sidewalk or alley construction be required, refer to the city's subdivision ordinance for the requirements.
4. Drainage. Drainage design and requirements shall be in accordance with the city of Fort Worth, Texas, requirements.

5. Water system plan sheets

Plan View

Show and label all existing and proposed utilities and water line leading to fire sprinkler systems as “fire line” where applicable. Label size, type and pressure class for all proposed water mains. All mains must extend to the borders of the development to facilitate future extensions of the system. Show location for all water services and meters and all easements. Show and label all fire hydrants, valves, fittings, FDC locations, and back-flow prevention.

Profile View

Profile all water mains 12” and larger, or throughfare, creek or where a potential conflict may arise. Show existing and proposed ground line at centerline of pipe shown and labeled correctly. Label station and flowline elevations at 100’ intervals, and for all fittings, laterals, and crossings. Indicate length, type/class, slope and size of all lines. All utility crossings and parallel sewer/storm lines shown in profile. Indicate length, type and size of encasement as needed

6. Sewer system.

Plan View

- Show and label all existing and proposed utilities
- Dimension location of all mains from other utilities
- Label line name, size, thickness, and type of all proposed sanitary sewer lines
- Stub-outs labeled with size, slope, length, and flowline elevations (if not profiled)
- Show and label all easements
- Show centerline stationing for sanitary sewer
- Show and label all manholes with rim elevations, as well as cleanouts
- Indicate type and size of encasement where needed
- Show flow direction arrows for sewer main
- Topographic contours shown to delineate sewer basins

Profile View

- Existing and proposed ground line at centerline of pipe shown and labeled
- Label station and flowline elevation information for all manholes, cleanouts, crossings, laterals
- Label flowlines at every 50 foot station

- Manhole inflow and outflow elevations to be designed with a minimum of 0.1’ drop
- Indicate the type and diameter for all manholes
- Label station and flowline elevation information for all manholes, cleanouts, crossings, laterals
- All utility crossings and parallel storm lines shown in profile
- Indicate length, type and size of encasement as needed

Screening & Buffering Plans (Residential Subdivisions)

Included with all residential subdivision projects:

- Location of proposed and existing berms, fencing wall or landscaping
- Sidewalks
- Location of streets and property lines
- Location of the screening and buffering area within the open space common area
- Location of existing and proposed utilities and easements
- Construction details of the fencing or walls
- Show and label all manholes with rim elevations, as well as cleanouts
- Structural stamp for wall and fencing details
- Planting details
- Berm details
- Irrigation Plan

Design summary.

The city engineer may require a separate document or report entitled "Engineering Report" that shall be submitted with final plans and specifications. This report shall summarize calculations and other engineering information pertaining to the major items of design significance as may be necessary in the city's review of the plans and specifications to determine whether the facilities proposed for construction have been designed in accordance with the intent of the design standards contained or referenced in this chapter. Calculations should include drainage facilities, water demand, sewage flows, and any others that are considered necessary by the city.

Erosion and sedimentation control.

All construction projects shall include temporary erosion and sedimentation controls in accordance with Item 201 of the Standard Specifications and the Integrated Storm Water Management TM Design Manual for Construction (2003, as amended) published by the North Central Texas Council of Governments.

Stormwater pollution prevention plans shall be submitted for review by the city engineer prior to release of construction projects. The developer and his engineer shall be responsible for preparation of a stormwater pollution prevention plan (SWPPP) in accordance with the Texas Commission on Environmental Quality (TCEQ) and U.S. Environmental Protection Agency (EPA) requirements. TCEQ and EPA permitting shall also be the responsibility of the developer and his engineer.

The Erosion Control Plan should show Existing and proposed contours, Existing and proposed storm lines and inlets, Flow arrows for surface drainage, and the FEMA 100-year floodplain and fully-developed 100-year floodplain. Delineate the limits of construction and List the total disturbed acreage. Sedimentation basin should be provided for disturbed basins 10 acres or greater. Identify and label the Appropriate BMP's used and describe any Phasing of BMP's with construction activities. BMP details should be provided, using current NCTCOG/iSWM standards. Stockpile area and batch plant areas must be shown.

Areas to be sodded or seeded with permanent perennial vegetation must be shown and any Areas of permanent erosion control (other than vegetation) must be clearly shown.

Other utilities.

The subdivider must furnish a written statement to the city designating how the subdivision will be served by electrical, natural gas, telephone and cable television. Utility construction shall be coordinated with street construction to avoid unnecessary pavement cuts.

Construction Plan Review and Approval Process

Civil Engineering Plan Review & Resubmittals – The City of Venus will review plans in the order they were received. If the project is particularly complex or if the City has received an unusually large case load, additional review time may be needed. Applicant will be notified electronically via email when review is complete, with review comments attached.

Subsequent submittals shall include a complete set of drawings. Applicant shall provide written responses and/or explanations to any comments that need further clarification or are unable to be addressed. This can be done directly on a copy of the plans containing the City's comments, or via a formal letter.

Civil Engineering Plan Approval – Once all the City's comments have been addressed and approved, the applicant will be asked to submit a signature set to the City (two full size hard copies and one electronic copy). Applicant will be also responsible for making a sufficient number of copies of the plans for all necessary contractors, sub-contractors, construction staking surveyors and private consultants.

The chief administrative officer shall review the plans and specifications and, if approved, shall mark them "Approved" and return one set to the developer. If not approved, two sets shall be marked, with the objections noted, and returned to the developer for correction.

Upon approval of the construction plans, specifications and estimates of probable cost by the city engineer; approval of the contract documents, bonds and financial assurance (if required); acquisition of all necessary off-site easements, and upon receipt of the inspection fees, notice of intent (NOI),

stormwater pollution prevention plan and erosion control deposit, the city shall schedule a pre-construction conference and issue a permit for the construction of public works improvements.

An estimate of probable cost for all public infrastructures is required prior to approval of the final construction plans. Payment of the City's Inspection Fee is required prior to a Notice to Proceed with Construction.

General construction requirements.

Prior to Construction – A Pre-Construction meeting with the City is required before the construction commences. Once a date has been set, the applicant is responsible for contacting all subcontractors, franchised utilities, other agencies and consultants to inform them of the meeting time and location. All required inspection fees will be due at the time of the pre-construction meeting. Applicant is encouraged to provide the City with a detailed breakdown of the public infrastructure construction costs prior to the meeting so that the City can determine the fees owed prior to the meeting.

All erosion control and tree preservation fencing shall be installed and approved prior to any site work commencing. Contractor shall notify the City 48 hours prior to any weekend work and 72 hours for work on a City holiday. Weekend and holiday work is not guaranteed and contingent of inspector's availability.

Prior to the preconstruction conference, the contractor shall provide a proposed construction sequence and schedule and a traffic safety plan, if required, for review and approval by the city engineer. As a general rule, the following construction sequence shall be employed:

Step 1. Install temporary erosion/sedimentation controls;

Step 2. Excavate detention ponds;

Step 3. Rough grading of streets, lots, building pads, etc;

Step 4. Install utilities and storm drain facilities;

Step 5. Final grading;

Step 6. Paving;

Step 7. Finish detention ponds;

Step 8. Hydro mulch, final clean-up.

Sec. 26-151. Building permits.

a. When an applicant has an approved site plan and no off-site extension of public utilities is required, and such lot is being assessed for city taxes as conforming to the established zoning classification in the block where located, then a building permit may be issued, provided the requested use of such property conforms to the permanent zoning of the property covered by the application.
b. When an applicant has an approved site plan and the extension of off-site public utilities is

required, and such lot is being assessed for city taxes as conforming to the established zoning classification in the block where located, then a building permit may be issued upon completion of the construction of the off-site utilities, provided the requested use of such property conforms to the permanent zoning of the property covered by the application.

(Ord. No. 261-2002, § 11, 5-14-2002)

Sec. 26-152. Fees.

a. Filling fee. A filing fee in the amount of $500.00 shall be collected by the city secretary, or a designated representative, when any site plan is tendered to the city for consideration. The fee shall be paid in advance and no action of the city shall be valid until the fees, herein provided, shall have been paid.

b. Plan review and inspection fee. A fee of five percent of the estimated costs of the public improvements for the proposed development as approved by the public works director shall be paid to the city before the city approves the commencement of the construction of the improvements. Actual cost shall not exceed the actual cost to the city for review and inspection.

c. Pre-payment required. No development will be approved or building permit issued by the city until all fees have been paid to the city.

(Ord. No. 261-2002, § 12, 5-14-2002)

Sec. 26-153. Variances.

a. The city council may authorize a variance from these regulations when, in its opinion, undue hardship will result from requiring strict compliance. In granting a variance, the council shall prescribe only conditions that it deems necessary or desirable to the public interest in making the findings in this section required. The council shall take into account the nature of the proposed usage of land involved, the existing usage of the land in the vicinity, the number of persons who will reside or work in the proposed development, and the probable effect of such variances upon traffic conditions and upon the public health, safety, convenience, and welfare of individuals in the vicinity. No variance will be granted unless the council finds the following:

    1. That there are special circumstances or conditions affecting the land involved such that the strict application of the provisions of this article would deprive the applicant of the reasonable use of his land;
    2. That the variances are necessary for the preservation and enjoyment of a substantial property right of the applicant, and that the granting of the variance will not be detrimental to the public health, safety, or welfare of individuals, or injurious to other properties in the area;
    3. That the granting of the variance will not have the effect of preventing the orderly development of other lands in the area in accordance with the provisions of this article.

The council may not authorize a variance that would constitute a violation of any other valid ordinance of the city.

b. Such findings of the council, together with the specific facts upon which such findings are based, shall be incorporated in the official minutes of the council meeting at which such variance is

granted. Variances may be granted only when in harmony with the general purpose and intent of this article so that the general health, safety and welfare of citizens may be secured, and substantial justice be done. Pecuniary hardship to the developer, standing alone, shall not be deemed to constitute undue hardship.

(Ord. No. 261-2002, § 13, 5-14-2002)

Sec. 26-154. Conflict with other ordinances.

All ordinances, or parts of ordinances with the exception of the building code and comprehensive zoning regulations of the city, which are inconsistent or in conflict with any of the provisions of this article shall be, and the same are, hereby repealed. Where the building code or zoning regulations of the city contain regulations which are more restrictive than the regulations contained herein, the ordinances which are most restrictive shall control.

(Ord. No. 261-2002, § 14, 5-14-2002)

Sec. 26-155. Exceptions to provisions of article.

Site plans which have received preliminary approval by the council within one year prior to the effective date of the ordinance from which this article is derived shall be excepted from the requirements of this article; provided that the site plan of such development is approved and filed for record within 180 days after the effective date of the ordinance from which this article is derived, or within one year after the approval date of the site plan, whichever is greater.

(Ord. No. 261-2002, § 15, 5-14-2002)

h) Prohibit the issuance of building, repair, plumbing, or electrical permits with respect to any lots or building tract;

i) Prohibit the repair, maintenance, or installation of any street or building;

j) Prohibit the repair, maintenance, or installation of any street or public utility service for, to, or abutting any lot, in these instances:

k) Where the last recorded conveyance of such lot or tract prior to passage of this article was by metes and bounds;

l) Where a building is in existence on said lot prior to passage of the ordinance from which this article is derived; or

m) Where such subdivision, whether by recorded plat or by actual occupancy and use, was in existence prior to the passage of the ordinance from which this article is derived.

n) (Ord. No. 243-2001, § 3(1)—(7), 2-19-2001)

SECTION 2. That all Ordinances of the City of Venus, Texas in conflict with the provisions of this Ordinance are repealed and all other Ordinances of the City of Venus, Texas not in conflict with the provisions of this Ordinance shall remain in full force and effect.

SECTION 3. If any section, article, paragraph, sentence, clause phrase or word in this Ordinance or application thereof to any person or circumstance is held invalid or unconstitutional by a Court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this Ordinance despite such invalidity, which remaining portions shall remain in full force and effect.

SECTION 4. That this Ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provide.

SECTION 5. Upon publication of this Ordinance the City Secretary, any person, firm or corporation who violates, disobeys, omits, neglects, or refuses to comply with or resists the enforcement of any the provisions of this Ordinance shall be fined not more than Five Hundred Dollars ($500.00) for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

SECTION 6. That all recitals contained in this Ordinance are fully incorporated herein as if fully written.

CITY OF VENUS, TEXAS

_____

JAMES BURGESS, Mayor

ATTEST:

_____

CALLIE GREEN, City Secretary

APPROVED AS TO FORM:

_____

MICHAEL HALLA, City Attorney

Summary of amendment sections

26-1 Purpose. - An explanation of why the subdivision ordinance is important for the City of Venus and what it promotes.

26-2 Compliance with the subdivision ordinance. - It explains that subdividing a property is required to get a building permit within city limits and ETJ.

26-6 Platting required.- It explains that property owners who divide a tract into two or more parts are subject to platting requirements

26-22 Definition of terms.- More definitions have been added to this list.

26-25 Procedures Summary.- Table with all the applications and

26-26 All Applications.- An explanation of all requirements and fees for applications

26-30 Inspections and approval of public improvements.- Process to inspect and approve work performed.

26-32 Open and civic spaces.- How the City of Venus calculates park land dedication

26-63 Preliminary plat.- Form and Content.- Requirements for preliminary plats

26-64 Same-Required specifications.- Preliminary plat specifications and requirements

26-65 Final Plat- Approval procedures.- What needs to be included in a Final Plat

26-66 Final Plat.-Required specifications, Form and Content.- Final plat specifications and requirements

26-69 Vested Property Rights.- Time period once a project has received approval before "expiration."

26-99 Sidewalks.- Sidewalk requirements, and widths.

26-100 Utilities lines and easements.- Requirements for utility line and easements.

26-105 Crosswalk ways.- Crosswalk requirements in vicinity of school, park or shopping center.

26-109 Sight lines at street intersections.- Distance for a property line to avoid obstruction

26-111 Required Improvements prior to acceptance.- Requirements needed before acceptance

26-115 Requirements and design standards for streets.- Street standards

26-118 Requirements and designs standards for lots.- Standard for lots

26-120 Utilities required.- Utility requirements

26-147 Requirements for easements.- Easement requirements

26-149 Standard specifications.- Specifications for Public Works Construction.