

CITY COUNCIL PRESENTATION
MOUNT VERNON FIRE DEPARTMENT

**SITE AND FACILITY
ASSESSMENT**

February 5, 2020

PRESENTATION CONTENT

- Base Cost Escalation Update
- Task 2: Station 1 Administration Removal and Station 2 Impacts
- Task 3: Station 1 Value Engineering
- Overall Cost Comparisons
- Questions

BASE COST ESCALATION UPDATE

STATION 1 AERIAL VIEW



STATION 1 ENTRY PERSPECTIVE



SUMMARY	
STATION 1	24,000 SF
STATION 2	14,000 SF (12,697 SF EXISTING, 1,303 SF ADDITIONS)
STATION 3	10,160 SF (5,973 SF EXISTING, 4,187 SF ADDITIONS)

2018 COST SUMMARY

	STATION 1	STATION 2	STATION 3
PROJECT HARD COSTS	\$16,548,045	\$1,982,086	\$3,220,165
PROJECT SOFT COSTS	\$5,619,851	\$1,043,393	\$1,400,517
INDIVIDUAL TOTAL PROJECT COST	\$22,167,896	\$3,025,479	\$4,620,682
COMBINED TOTAL PROJECT COST	\$29,814,057.62		

2020 COST SUMMARY

	STATION 1	STATION 2	STATION 3
PROJECT HARD COSTS	\$18,112,514	\$2,232,020	\$3,626,216
PROJECT SOFT COSTS	\$6,061,560	\$1,127,895	\$1,536,005
INDIVIDUAL TOTAL PROJECT COST	\$24,174,074	\$3,359,915	\$5,162,221
COMBINED TOTAL PROJECT COST	\$32,696,210.19		

TASK 2: STATION 1 ADMINISTRATION REMOVAL

STATION 1 UPDATES

- ADMINISTRATION PROGRAM REMOVED
- STATION RE-DESIGNED AS SINGLE STORY
 - STAIRS, ELEVATOR, AND ASSOCIATED FUNCTIONS REMOVED
- MUSEUM / HISTORIC TRUCK REMOVED
- EXTERIOR PATIO REMOVED
- SIX ADMINISTRATIVE STAFF PARKING SPACES REMOVED

2018 CONCEPT PROGRAM

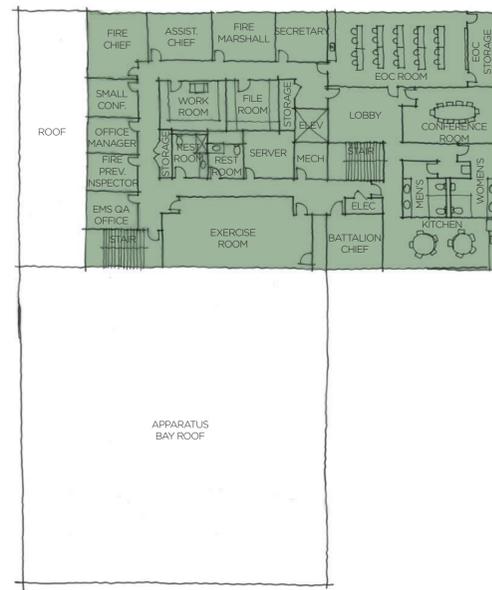
SUMMARY	
STATION 1	24,000 SF
STATION 2	14,000 SF (12,697 SF EXISTING, 1,303 SF ADDITIONS)
STATION 3	10,160 SF (5,973 SF EXISTING, 4,187 SF ADDITIONS)

2020 TASK 2 PROGRAM

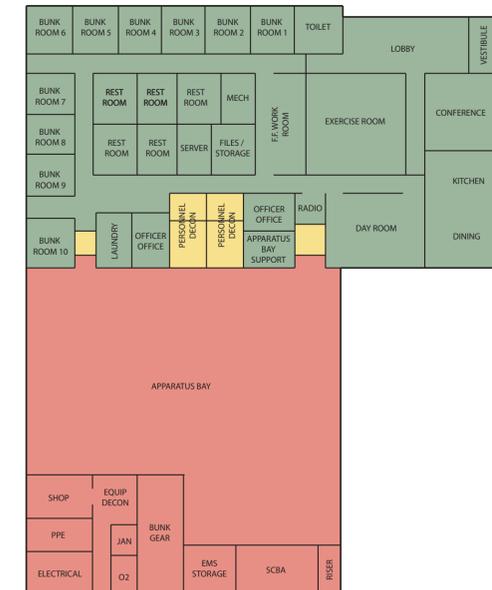
SUMMARY	
STATION 1	16,399 SF
STATION 2	15,898 SF (12,697 SF EXISTING, 3,201 SF ADDITIONS)
STATION 3	10,160 SF (5,973 SF EXISTING, 4,187 SF ADDITIONS)



STATION 1 FIRST FLOOR PLAN: DECEMBER 2018



STATION 1 SECOND FLOOR PLAN: DECEMBER 2018

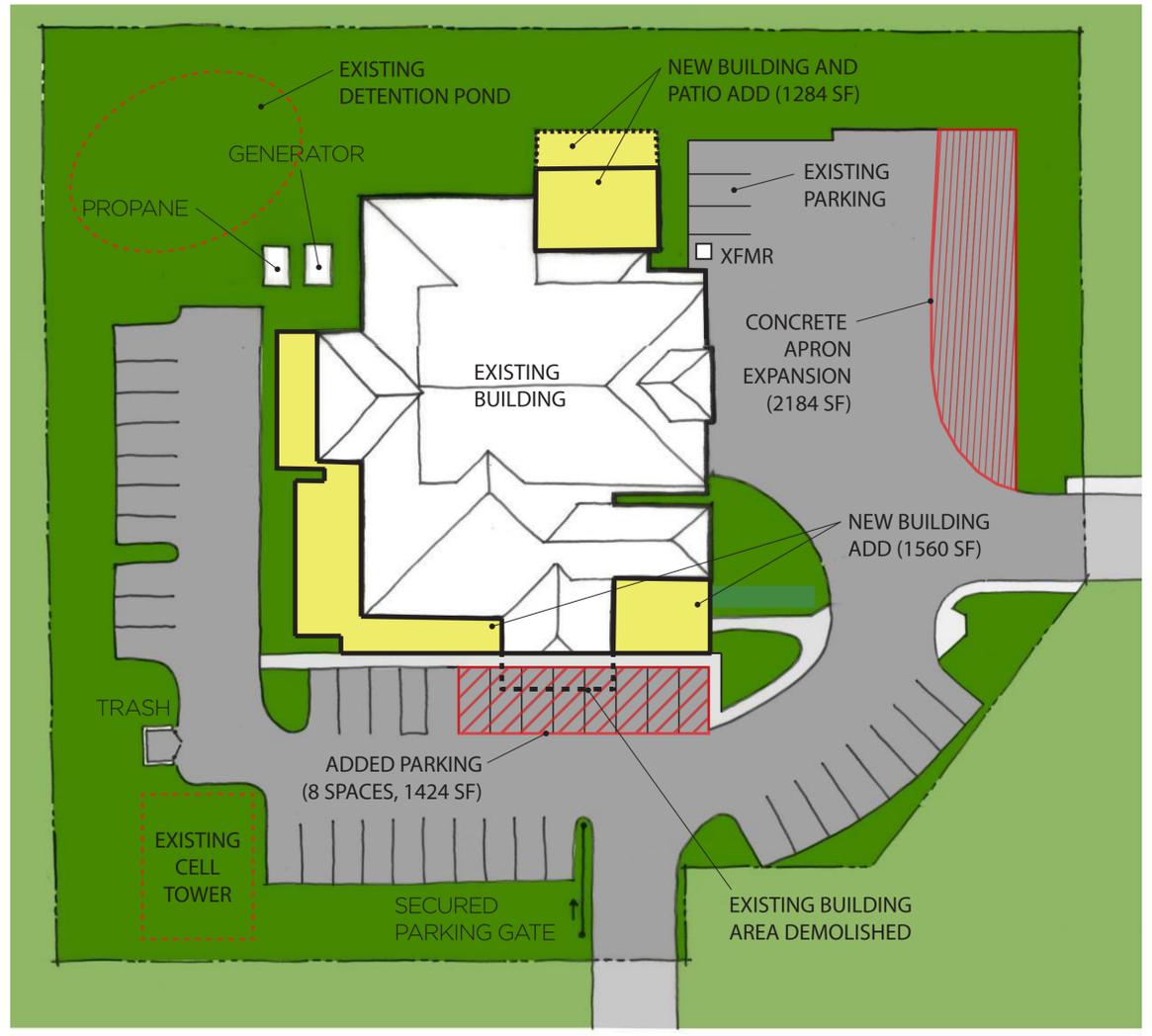


PROPOSED STATION 1 FLOOR PLAN: TASK 2 JANUARY 2020

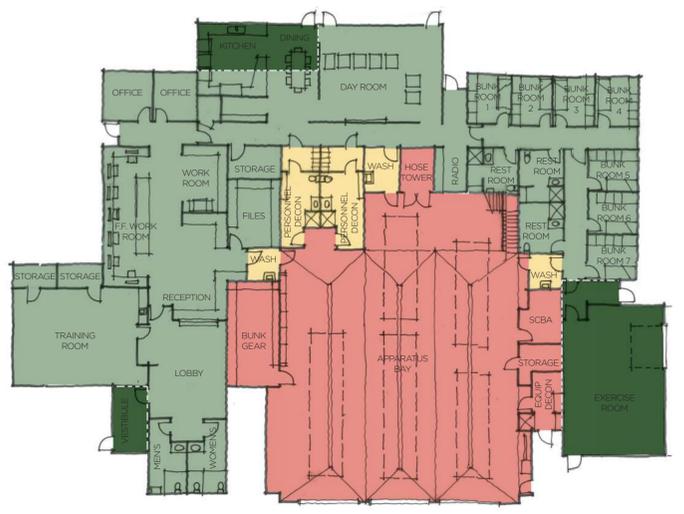
TASK 2: STATION 2 IMPACTS

STATION 2 UPDATES

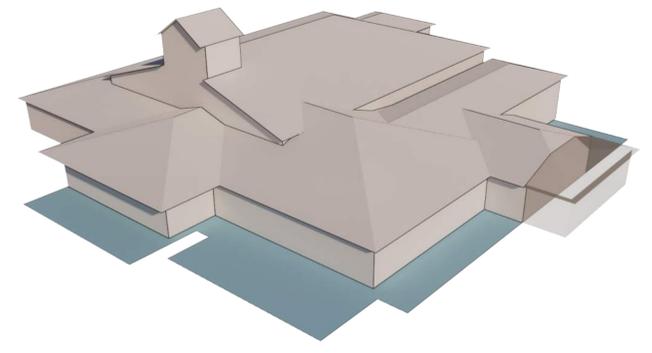
- ADMINISTRATION PROGRAM FROM STATION 1 INTEGRATED
- MUSEUM / HISTORIC TRUCK RE-INCORPORATED
- CONCRETE APRON EXPANDED BY 2,184 SF
- EIGHT PARKING SPACES ADDED ON SITE



STATION 2 UPDATED SITE PLAN



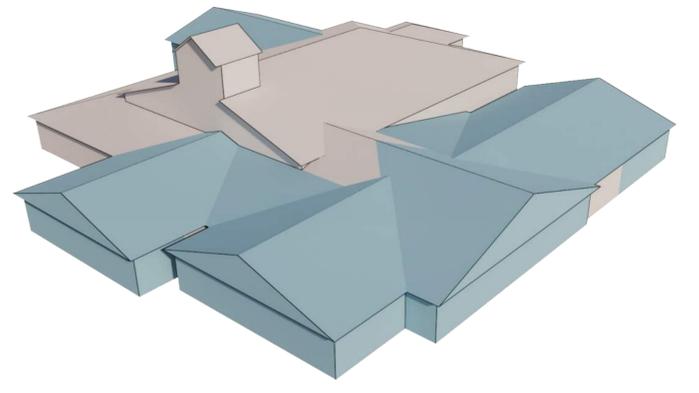
STATION 2 FLOOR PLAN: DECEMBER 2018



STATION 2 EXISTING MASSING



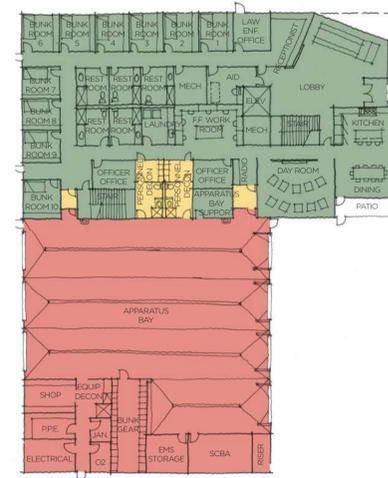
STATION 2 FLOOR PLAN: TASK 2 VE JANUARY 2020



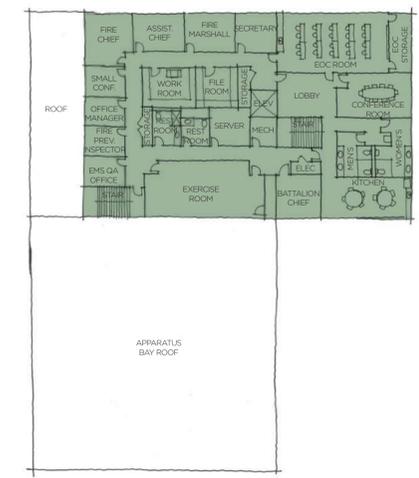
STATION 2 PROPOSED MASSING

TASK 3: STATION 1 VALUE ENGINEERING

- PROGRAM REMOVED:
 - MUSEUM / HISTORIC TRUCK
 - COMMUNITY PARAMEDIC OFFICE / AID
 - LAW ENFORCEMENT OFFICE
 - CONFERENCE ROOM - SMALL
 - LUNCH ROOM / KITCHEN
 - EXTERIOR PATIO



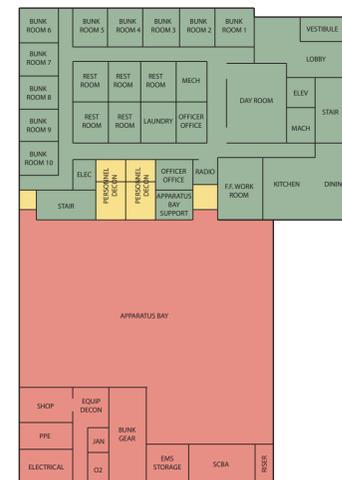
STATION 1 FIRST FLOOR PLAN:
DECEMBER 2018



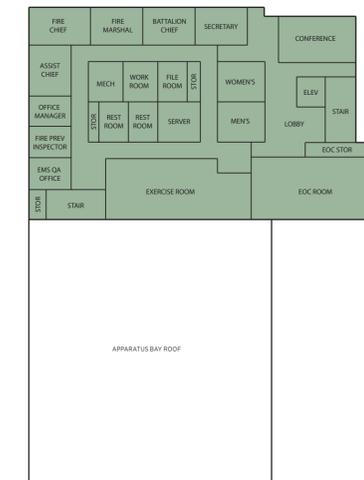
STATION 1 SECOND FLOOR PLAN:
DECEMBER 2018

2018 CONCEPT PROGRAM

SUMMARY	
STATION 1	24,000 SF
STATION 2	14,000 SF (12,697 SF EXISTING, 1,303 SF ADDITIONS)
STATION 3	10,160 SF (5,973 SF EXISTING, 4,187 SF ADDITIONS)



STATION 1 FIRST FLOOR PLAN:
TASK 3 VE JANUARY 2020



STATION 1 SECOND FLOOR PLAN:
TASK 3 VE JANUARY 2020

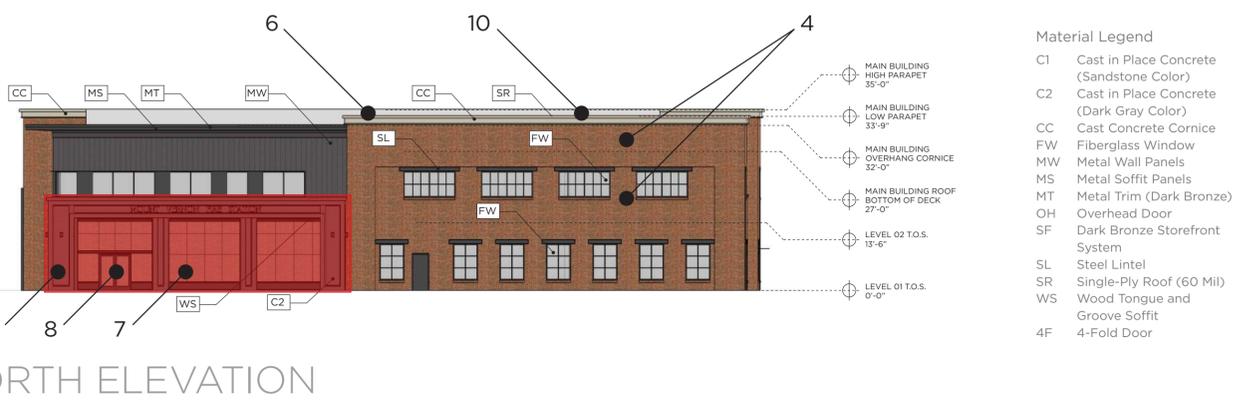
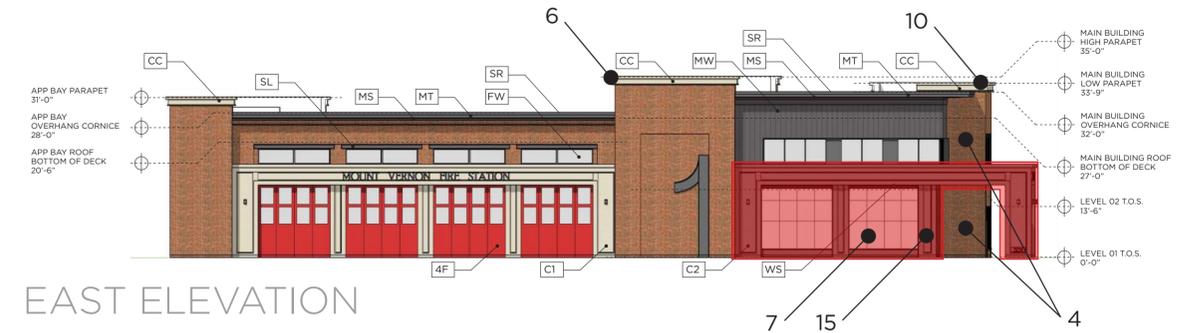
2020 TASK 3 PROGRAM

SUMMARY	
STATION 1	21,766 SF
STATION 2	13,708 SF (12,697 SF EXISTING, 1,303 SF ADDITIONS)
STATION 3	10,160 SF (5,973 SF EXISTING, 4,187 SF ADDITIONS)

TASK 3: STATION 1 VALUE ENGINEERING (CONT.)

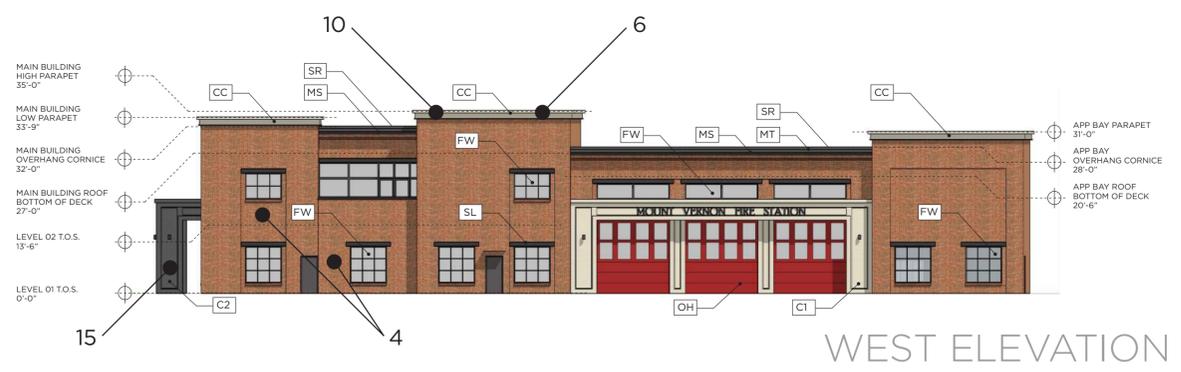
VALUE ENGINEERING OPTIONS

PROPOSED OPTION	
1.	REVISE TO WOOD CONSTRUCTION (WALLS, STRUCTURE, FLOOR, ROOF, AND STAIRS)
2.	REDUCE BRICK SQUARE FOOTAGE FROM SITE FENCE
3.	REVISE STRUCTURAL BRICK WALL SYSTEM TO BRICK VENEER
4.	REDUCE BRICK SQUARE FOOTAGE
5.	REPLACE ALL BRICK WALLS WITH FIBER CEMENT OR METAL PANEL WALLS. THIS OPTION WOULD BE AN ALTERNATE VE STRATEGY TO ITEM #3 FOR THE PROJECT.
6.	REVISE CAST CONCRETE CORNICES TO MANUFACTURED METAL COPING
7.	REVISE BUTT-GLAZED ENTRY STOREFRONT TO TYPICAL MULLION TYPE
8.	REVISE ENTRY DOORS FROM DOUBLE-SWING TO SINGLE-SWING STOREFRONT DOORS
9.	REVISE WOOD ENTRY SOFFIT TO FIBER CEMENT SOFFIT
10.	REDUCE PARAPET HEIGHTS THROUGHOUT AND CENTER RTU'S TO EASE SCREENING
11.	REDUCE SIDELITE COUNT THROUGHOUT INTERIOR
12.	REVISE POLISHED CONCRETE FLOORS AT APP BAY AND UTILITY FUNCTIONS TO SEALED CONCRETE
13.	REMOVE PHOTOVOLTAIC PANELS AND BACKBONE FROM ROOF
14.	REDUCE CASEWORK SCOPE
15.	REDUCE / RE-DESIGN CONCRETE ENTRY ELEMENT
16.	REDUCE / REMOVE CONCRETE SEATWALLS
TOTAL VALUE ENGINEERING COST REDUCTION	
HARD COST	-\$1,768,679
SOFT COSTS	-\$495,914
TOTAL COST REDUCTION	-\$2,264,593



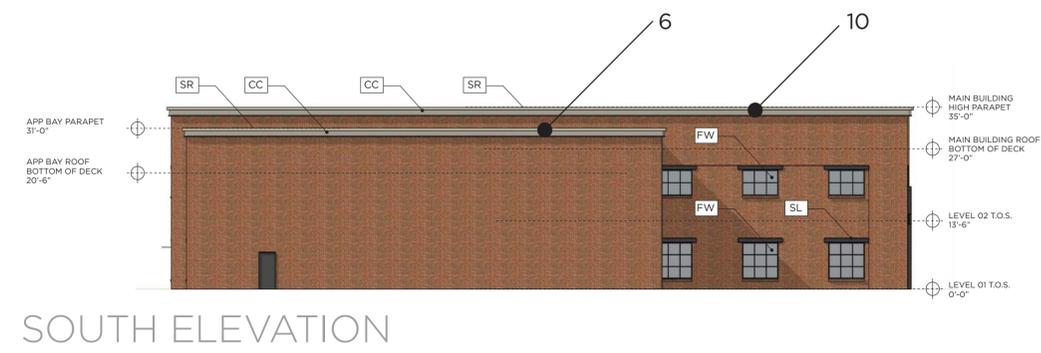
Material Legend

C1	Cast in Place Concrete (Sandstone Color)
C2	Cast in Place Concrete (Dark Gray Color)
CC	Cast Concrete Cornice
FW	Fiberglass Window
MW	Metal Wall Panels
MS	Metal Soffit Panels
MT	Metal Trim (Dark Bronze)
OH	Overhead Door
SF	Dark Bronze Storefront System
SL	Steel Lintel
SR	Single-Ply Roof (60 Mil)
WS	Wood Tongue and Groove Soffit
4F	4-Fold Door



Material Legend

C1	Cast in Place Concrete (Sandstone Color)
C2	Cast in Place Concrete (Dark Gray Color)
CC	Cast Concrete Cornice
FW	Fiberglass Window
MW	Metal Wall Panels
MS	Metal Soffit Panels
MT	Metal Trim (Dark Bronze)
OH	Overhead Door
SF	Dark Bronze Storefront System
SL	Steel Lintel
SR	Single-Ply Roof (60 Mil)
WS	Wood Tongue and Groove Soffit
4F	4-Fold Door



OVERALL COST COMPARISONS

BASE COSTS, DECEMBER 2018

	STATION 1	STATION 2	STATION 3
PROJECT HARD COSTS	\$16,548,045	\$1,982,086	\$3,220,165
PROJECT SOFT COSTS	\$5,619,851	\$1,043,393	\$1,400,517
INDIVIDUAL TOTAL PROJECT COST	\$22,167,896	\$3,025,479	\$4,620,682
COMBINED TOTAL PROJECT COST	\$29,814,057.62		

BASE COSTS WITH ESCALATIONS, JANUARY 2020

	STATION 1	STATION 2	STATION 3
PROJECT HARD COSTS	\$18,112,514	\$2,232,020	\$3,626,216
PROJECT SOFT COSTS	\$6,061,560	\$1,127,895	\$1,536,005
INDIVIDUAL TOTAL PROJECT COST	\$24,174,074	\$3,359,915	\$5,162,221
COMBINED TOTAL PROJECT COST	\$32,696,210.19		

TASK 2, JANUARY 2020

	STATION 1	STATION 2	STATION 3
PROJECT HARD COSTS	\$14,821,699	\$3,724,659	\$3,626,216
PROJECT SOFT COSTS	\$5,038,061	\$1,732,476	\$1,536,005
INDIVIDUAL TOTAL PROJECT COST	\$19,859,760	\$5,457,135	\$5,162,221
COMBINED TOTAL PROJECT COST	\$30,479,116.53		

TASK SUMMARY

- ADMINISTRATION PROGRAM REMOVED FROM STATION 1, INTEGRATED INTO STATION 2
- MUSEUM / HISTORIC TRUCK REMOVED FROM STATION 1, INTEGRATED INTO STATION 2
- STATION 2 CONCRETE APRON EXPANDED BY 2,184 SF, EIGHT PARKING SPACES ADDED
- STATION 1 RE-DESIGNED AS SINGLE STORY
- STATION 1 EXTERIOR PATIO, SIX ADMINISTRATIVE STAFF PARKING SPACES REMOVED

TASK 3, JANUARY 2020

	STATION 1	STATION 2	STATION 3
PROJECT HARD COSTS	\$15,258,796	\$2,232,020	\$3,626,216
PROJECT SOFT COSTS	\$5,256,805	\$1,127,895	\$1,536,005
INDIVIDUAL TOTAL PROJECT COST	\$20,515,601	\$3,359,915	\$5,162,221
COMBINED TOTAL PROJECT COST	\$29,037,736.99		

TASK SUMMARY

- 2,234 SF OF PROGRAM NON-ESSENTIAL TO STATION FUNCTION REMOVED FROM STATION 1
- VALUE ENGINEERING OPTIONS GENERATED AND ANALYZED FOR COST SAVINGS, INCLUDING:
 - REVISE TO WOOD CONSTRUCTION
 - REVISE STRUCTURAL BRICK WALL SYSTEM TO BRICK VENEER
 - REMOVE PHOTOVOLTAIC PANELS AND BACKBONE FROM ROOF

QUESTIONS?