Prince George County Fire Station 1 Feasibility Study Proposal

February 23, 2021



Scope of Work:

DJG shall assist Prince George County with a feasibility study for the renovations and expansion of the existing Fire Station 1 located within the government center complex at 6500 Courthouse Road. The current station is estimated at approximately 8000 square feet consisting of original construction dating back to 1968 with an addition constructed around 1989.

The project goals for the study currently include:

- Three (3) apparatus bay addition approximately 60' x 88'
- Renovation / Conversion of the 1989 apparatus bays to support spaces to possibly include:
 - Sleeping quarters
 - o Fitness Room
 - o Toilet Rooms with showers
 - o IT Room
 - o Dayroom
 - o Offices / Administrative
 - Laundry
 - o Decontamination / Disinfection

Facility needs to be considered with the above feasibility for expansion include:

- Roof replacement
- HVAC system replacement
- Parking expansion
- Walkway / connection to the existing Police Headquarters
- Exterior lighting
- Building Envelope improvements to include door and window replacement

The DJG Team has included Timmons Group Engineers to support the proposed feasibility study and supporting site investigation services.

Project Approach

Phase 1 – Programming and Concept Development – "Define the needs" \$18,074.50

- Distribution of programming questionnaire for review and completion by project stakeholders prior to programming meeting
- On-site building programming meeting to include County Representatives and Fire Department Stakeholders
 - Estimated 4-hours
 - o Location: Existing fire station or County Government Center



- Site Assessment to include:
 - Walk through of project scope area
 - Base mapping of site using readily available existing GIS, old survey, and utility mapping
 - Planning Code research to include current zoning setback requirements, limitations, and restrictions
 - Preparation of existing conditions exhibit for use in conceptual project planning
- Building Assessment to include floor plan preparation and photographic documentation of existing conditions and construction
- Preparation of space needs program for review and input by the project stakeholders
- Following validation of the program needs by the County, DJG shall develop a conceptual floor and site plan for the start of planning charette discussions
- Completion of a design charrette to include County and Fire Department Stakeholders
 - o Charette estimated to be a maximum of 4 hours
 - Charette to be completed in person at the government complex or existing station (space permitting)
- Preparation of Refined Conceptual Design to include:
 - o Conceptual Floor Plan
 - Conceptual Site Plan
 - o Charette Meeting minutes
- Virtual review meeting and presentation of refined conceptual design to project stakeholders

Phase 2 – Feasibility of Concept Investigation \$17,679.50

Following the initial phase of the work to define the desired needs and outcomes for a renovated and expanded Station 1 at the government complex, and direction to proceed provided by Prince George County, the DJG Team shall expand our study to assess:

- Utility adequacy for expanded Fire Station operations to include:
 - o Water
 - o Electrical
 - Sanitary
- Conceptual stormwater management approach
- Preliminary Geotechnical Investigation
 - Five (5) 20' borings broadly spaced through the proposed area of development
 - o Sampling and laboratory analysis of soils collected
 - o Preliminary geotechnical engineering report to include:
 - Water level within borings



- Laboratory test results
- Location of any unsuitable soils encountered
- Foundation recommendations
- General Site preparation recommendations
- Seismic site classification
- Refined "test fit" site concept to demonstrate suitability of site to accommodate desired expansion
- Preliminary Construction Budget development
- Presentation of final refined design package to County stakeholders incorporating the above expanded project data
- Presentation of final feasibility and design recommendations to the Board of Supervisors (one meeting)

Exclusions:

- Destructive testing and investigation to uncover hidden or concealed conditions that may adversely affect the proposed work
- Civil / Site Design and Permitting
- Site Survey / Topography and Boundary
- Underground subsurface utility location
- Environmental or Health Department Permitting
- Hydrant flow test (by the County)
- Preparation of construction / bid documents and specifications
- Hazardous materials testing
- Sustainable design consulting services (LEED)
- Environmental Survey or permitting
- Off-site investigations for utility or stormwater adequacy documentation
- Traffic engineering study or design including Traffic signal warrant analysis

Meetings / Charettes / Presentations

- Phase 1: Five (5) coordination / collaboration meetings
 - One (1) programming / kick off meeting with project stakeholders –
 Architect and Civil
 - One (1) site visit to document existing floor plan and building conditions – Architect and Structural
 - o One (1) site walk through of proposed project area Civil
 - o One (1) design charette attendance by Architect, Civil, and Administrative
 - o One (1) Virtual meeting to present refined conceptual design
- Phase 2:
 - o One (1) presentation and review of refined conceptual design and Phase 2 findings (in person or virtual)
 - One (1) meeting to present project feasibility to the County's Board of Supervisors (in person)

Principal Project Manager Sr. Architect Architect Certified Interior Designer Sr. Civil Engineer Civil Engineer Civil Engineer Sr. Structural Engineer Sr. Mech / Plumb Engineer Sr. Mech / Plumb Engineer Sr. Electrical Engineer Sr. Electrical Engineer Sr. Electrical Engineer Sr. Fire Profection Engineer		Phase 1 Design	Phase 2 Meetings /	Phase					
Designer tect gineer er ineer ineer er		esign	hase 2 Meetings /						
Designer tect gineer er Engineer ineer ineer			Charettes	Phase 2 Design				_	Cost
Designer lect gineer er ineer lineer er							€	_	
Designer Heat Jineer Inneer Engineer Inneer		8	9	4			€9		2,945,00
Designer inect inet inect ine		9	∞	00			€9	_	6,160.00
Designer Lect jineer ineer ineer ineer er		32		16			↔	120.00 \$	5,760.00
tect gineer er Engineer ineer ineer er							↔	115.00 \$	
tect gineer Engineer ineer ineer er						_	↔	140.00	•
chitect Engineer jineer imb Engineer Engineer Engineer ineer							↔	120.00	
							မှာ	120.00	•
		2		2			₩	150.00	1,200,00
St. Mech / Plumb Engineer St. Mech / Plumb Engineer St. Electrical Engineer Electrical Engineer St. Fire Protection Engineer		ı					€9	_	
Oc. Wear 7 Trains Engineer MechyPlumb Engineer St. Electrical Engineer Electrical Engineer Sr. Fire Protection Engineer				4			69	_	560.00
med in tangened Electrical Engineer Sr. Fire Protection Engineer							€		a
St. Erectrical Engineer Electrical Engineer St. Fire Protection Engineer				4			69		560,00
Sr. Fire Protection Engineer				-			69		¥
							69		SI
Eiro Drotoction Engineer (PE)	_						€9		**
Fire Protection Designer							€	130.00	W.
BIM Services							€9		71
CAD Servies	_						€		10
Cost Estimation							69		×
Clerical 14	_	9	7	4			69	_	1,430.00
I A/E Services	42	53	16	42	0	0	0	153 \$	18,615.00
s	4,820.00 \$	6,335.00	\$ 2,160.00	\$ 5,300.00	€9 •	€>	â		
SUBTOTAL								₩ (18,615.00
Reimbursibles:							₩	9	
Printing	\$150		\$150						300.00
Civil / Site Engineeri 1		\$6,000		\$2,500					8,500.00
Geo-technical 1				\$6,500				\$6,500 \$	6,500.00
Mark-up on Consultants (10%)		\$600		006\$					1,500.00
Mileage (RT) 150	2		2					\$170 \$	169.50
Reimb Subtotal \$	320 \$	$\overline{}$		006'6 \$				es.	16,969.50
SUBTOTAL \$ 5,	5,139.50 \$	12,935.00	\$ 2,479.50	\$ 15,200.00	9	**			
TOTAL FEE								₩	35,584.50