

**DAVA**

PLANNING  
ENGINEERING  
SURVEYING

**& ASSOCIATES, INC.**

310 East Union Street  
Prescott, AZ 86303

(928) 778-7587

FAX: (928) 778-1047  
www.davacivil.com

October 6, 2016

374VPCEW/PRO

Ron Pine, P.E., CFM  
Engineering Manager  
7501 E. Civic Circle  
Prescott Valley, AZ 86314

Dear Mr. Pine:

RE: PROPOSAL - Construction Period Engineering Services  
Viewpoint Drive Connector Earthwork Project, CIP #168.5b

Dava & Associates, Inc. is pleased to provide this proposal for construction period engineering services for the placement of earth materials generated from adjacent projects to designated areas along the Viewpoint Connector corridor north of Manley Drive. Our proposed work scope is enclosed with the following estimated maximum fees summarized below:

D&A Construction Period Services	\$19,910.00
ETC Quality Control	<u>\$5,090.00</u>
Design Period Total	\$25,000.00

The above scope of services will be provided on a fixed fee basis in accordance with our Town Engineer Services Agreement. If this proposed scope of services meets with your approval, we are ready to proceed at your direction.

Should you have any questions, please contact me.

Sincerely,

DAVA & ASSOCIATES, INC.



Gordon Bowers, P.E.  
Civil Engineer  
Encl.

SCOPE OF SERVICES AND FEES

**Viewpoint Channel Earthwork Project, CIP #S168.5b**

This scope, in general, consists of:

Providing professional survey services to provide construction staking along the Viewpoint Drive Connector alignment through the State Land Section 2; and coordinate construction activities with Town and Town consultants. The basic service tasks the CONSULTANT will accomplish for this scope are listed herein.

**Task 2 – Final Design Services (100% Plans):.....Fixed Fee of \$8,770**

The CONSULTANT will provide Final Design Services, as follows:

1. Meetings: Meet with Town staff & Lyon Engineering to refine the scope and identify special conditions.
2. Final Plans: Update and modify preliminary plans to 100% level of completeness to include Phase One earthwork construction and removal of Viewpoint/Spouse spoil pile. The final plans will include the Phase 1 sheets from the preliminary plans and adjustments necessary to accommodate Viewpoint Drive Channel, Phase 2 excavation plans prepared by Lyon Engineering.
3. Cross Sections: Prepare and provide cross sections at 50-foot interval of embankment and removal work. Survey spoil pile at northeast corner of Viewpoint Drive and Spouse for quantity, and prepare cross sections provided for contractor information.
4. Quantities and Final Cost Estimate: Determine final construction quantities for Engineer's Estimate; Adjust unit prices to coordinate with Lyon Engineering work.
5. Technical Specifications: Prepare Technical Specifications for earthwork placement.
6. Submittals: Submit the preliminary plans to the Town of Prescott Valley. Address Town review comments; make corrections as required; and resubmit as necessary.

**Task 3 – Construction Surveying:.....Fixed Fee of \$9,760**

The CONSULTANT will provide the following survey services, including construction stakes, lines and grades in conformance with MAG Section 105.8, and the project specifications, as follows:

1. Locate, check, and confirm control. Provide project control. Collect and calculate survey data, as needed.
2. Provide limits for clearing and grubbing.
3. Provide vertical and horizontal control for staking of roadway embankment.
4. Provide vertical and horizontal control for staking subgrade grade control.

**Task 4 – Observation & Coordination:.....Fixed Fee of \$1,250**

The CONSULTANT will coordinate with Town and Town consultants; and perform Construction Observation as follows:

1. Observation & Coordination: Coordinate with the Contractor and Town consultants regarding schedule for embankment staking.
2. Construction Progress Meetings: Attend regularly scheduled construction progress meetings as required with interested parties to coordinate and verify Contractor's understanding of each aspect of the work.

---

---

**Task 5 – Quality Assurance:.....Fixed Fee of \$5,220**

The CONSULTANT will provide Quality Assurance monitoring as follows:

1. Quality Control (QC) Testing Review: Collect and review test results from the Contractor's Quality Control firm and the Town's Quality Assurance firm.
2. Quality Acceptance Testing (QA): Engineering Testing Consultants (ETC) will provide verification testing of contractor activities. Such testing will include: recording of compaction densities of placed embankment and trench fill; proctors; and laboratory analysis. ETC will monitor excavated materials for opinion on suitability for roadway embankment.

<b>TOTAL D&amp;A Services:</b> .....	<b>\$19,910</b>
<b>Quality Assurance (ETC):</b> .....	<b>\$ 5,090</b>
<b>TOTAL:</b> .....	<b>\$25,000</b>

Services provided shall be in conformance with:

1. this agreement, and all amendments thereof,
2. Dava & Associates, Inc. Town Engineer Services Agreement and
3. Town Code, specifically, but not limited to, Chapter 16 Engineering (<http://www.pvaz.net/Index.aspx?page=274>); and
4. hence, the Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction, latest edition, including latest revisions and supplements (<http://www.mag.maricopa.gov/publications.cms>); and
5. the Town of Prescott Valley, Public Works Department, Engineering Division Design and Construction Standards and Specifications (<http://www.pvaz.net/Index.aspx?page=261>)
6. All applicable local, state, and federal laws and regulations.



**Engineering & Testing Consultants, Inc**

**Quality Control Cost Estimate**

Date - August 4, 2016

**TOPV Viewpoint Channel Ph.2 Earthwork QA Prescott Valley, AZ**

**PROPOSED SERVICES:**

Structural Fills Compaction Testing & Observation

**Quality Control Testing, Earthwork**

Quality Control Technician	45	Hrs.	\$70	Per hr.	\$3,150
Senior Level Technician	5	Hrs.	\$80	Per hr.	\$400
Senior Project Engineer	2	Hrs.	\$150	Per hr.	\$300

**Quality Control Testing, Concrete**

Quality Control Technician	0	Hrs.	\$70	Per hr.	\$0
----------------------------	---	------	------	---------	-----

**Quality Control Testing, Asphalt**

Quality Control Technician On-site & Sampling	0	Hrs.	\$70	Per hr.	\$0
---	---	------	------	---------	-----

**Laboratory Testing**

ASTM D-698 Proctor	4	Each	\$120	Per test	\$480
Marshall Density	0	Each	\$110	Per test	\$0
Furnace Oven Calibration Burn (if needed)	0	Each	\$400	Per test	\$0
AC Content/Gradation by Ignition Oven	0	Each	\$150	Per test	\$0
Maximum Theoretical Density (Rice Test)	0	Each	\$150	Per test	\$0
Stability/Flow	0	Each	\$50	Per test	\$0
Expansion Index	0	Each	\$225	Per test	\$0
Fractured Face	0	Each	\$85	Per test	\$0
Plasticity Index (wet prep)	0	Each	\$100	Per test	\$0
Plasticity Index (dry prep)	2	Each	\$70	Per test	\$140
Particle Size Analysis/Gradation	2	Each	\$80	Per test	\$160
Concrete Compression Tests (4 per set)	0	Each	\$18	Per test	\$0

**NOT TO EXCEED COST**      \$4,630

Notes: Does not included Lime Stabilization testing if selected.

Any night or weekend work will be billed at 1.5 times normal rates. (Not included in this proposal)  
 This proposal does not include A/C or Concrete plant control.  
 Rates are portal to portal from our Prescott office with no mileage charges or minimum hourly trip charges.  
 This estimate is based on our review of the project documents.  
 We do not intend to say that the project can be constructed within the time frame we listed.  
 For estimating purposes you should use our unit rates.  
 ETC will only invoice for actual time and costs for the project.  
 This estimate is based on an on-call basis only and it is the responsibility of the client for scheduling.