

**MOORPARK CITY COUNCIL
AGENDA REPORT**

TO: Honorable City Council

FROM: Dave Klotzle, Interim City Engineer/Public Works Director 

DATE: October 22, 2010 (CC Meeting of 11/03/10)

SUBJECT: Consider Second Amendment to Agreement with Penfield & Smith for Additional Services for the Princeton Avenue Widening Project (Project 8012)

BACKGROUND

On March 19, 2008, the City Council awarded an Agreement to Penfield & Smith to prepare conceptual design, construction plans, specifications and a cost estimate for Project 8012: the widening and realignment of Princeton Avenue west of Condor Drive. The scope of services set forth in the Agreement with Penfield & Smith, directed them to proceed with initial re-design efforts using the information developed by a prior design effort, and to evaluate what additional efforts, such as hydrology, geotechnical and topographic surveys, might be required. The original scope of services anticipates the possible need to revise and increase the scope and related fees necessary to complete the design.

On February 3, 2010, the City Council approved the First Amendment to Penfield & Smith's agreement in the amount of \$74,692.25 for additional design services required of the project including property surveys and a geotechnical report. As the project design and right-of-way acquisition has progressed, it has been determined that additional tasks are required to complete the project. A Second Amendment to Penfield & Smith's agreement is required for the additional work deemed necessary to complete the design.

DISCUSSION

The additional engineering services required to complete the design are generally described as follows:

1. **Drainage Study:** It was determined that the original drainage study prepared for the project was inadequate for the new design. A new drainage study will determine the volume of storm water run-off from upstream sources and the required storm drain system to appropriately convey the flows south of Princeton Avenue.
2. **Extension of Design to Condor Drive:** The RFP and scope of services in the original Penfield & Smith Agreement defined the eastern limits of the project to be those limits set forth in the original design which was about three hundred feet (300') west of Condor Drive. To provide a contiguous sidewalk on the south side of Princeton Avenue, it is necessary to revise the scope of design services to extend the sidewalk to Condor Drive.
3. **Storm Drain Re-design:** The inadequacy of the original drainage study and storm drain system requires the redesign of the storm drain system based on the results of the new drainage study.
4. **Prior Approved Additional Services:** Penfield & Smith is requesting retroactive approval of services provided at the request of the City which are not a part of the original scope of services. Most of these "out-of-scope" services relate to support for the City's right-of-way acquisition efforts.
5. **Future Design Support for Right-of Way Acquisition Efforts:** In both the First Amendment and this Second Amendment, "out-of-scope" services were (and are requested to be) approved retroactively. It is requested that an amount be approved to cover future authorized work of this nature.

The additional design fees associated with the above tasks are summarized below:

<u>Task</u>		<u>Amount</u>
1. Prepare a new Drainage Study	\$	51,650.00
2. Extension of design to Condor Drive	\$	24,045.00
3. Storm Drain re-design	\$	12,800.00
4. Past services required for design development and R-O-W efforts	\$	21,177.50
5. Future anticipated services in support of R-O-W acquisition	\$	20,327.50
	Total \$	130,000.00

FISCAL IMPACT

The proposed Second Amendment would increase Penfield & Smith's Agreement by \$130,000.00 from a not-to-exceed amount of \$353,840.25 to a not-to-exceed amount of \$483,840.25. A budget amendment is not necessary to fund the additional design services under the Second Amendment. The approved FY 2010/11 project budget has

sufficient funding to allow a line item transfer from the construction budget to the design budget. A future adjustment to the construction budget at the time of contract award may be necessary depending on the actual cost for construction.

STAFF RECOMMENDATION

Approve the Second Amendment with Penfield & Smith to increase the Scope of Services for the Princeton Avenue Widening Project in an amount not to exceed \$130,000.00 and authorize the City Manager to execute said amendment, subject to final language approval by the City Manager and City Attorney.

Attachment 1 – Penfield & Smith Proposal



Penfield & Smith

1327 Del Norte Road, Ste 200
Camarillo, CA 93010

tel 805-981-0706
fax 805-981-0251

www.penfieldsmith.com

Santa Barbara
Camarillo
Santa Maria
Lancaster

Civil Engineering

Land Surveying

Land Use Planning

Construction
Management & Inspection

Traffic & Transportation
Engineering

Transportation Planning

Structural Engineering

Water Resources
Engineering

GIS

October 21, 2010

W.O. 18305.04

Mr. David Klotzle, P.E.
City of Moorpark
Public Works Department
799 Moorpark Avenue
Moorpark, CA 93021

**SUBJECT: PRINCETON AVENUE WIDENING PROJECT
PROPOSED FEE FOR ADDITIONAL SERVICES**

Dear Mr. Klotzle,

In response to our meeting and conversations, and at the direction of the City and Mr. Ken Gilbert, please find this proposal for additional services related to the completion of the Princeton Avenue widening civil design. The additional scope of services includes:

- Drainage Study Preparation
- Extension of the design at the easterly end of the project to Condor Drive
- Storm Drain Plan and Profile Design
- Client Directed Out of Scope Services
- Future Right-of-Way Support

The total cost for the additional scope of services is **\$130,000.00**. The detailed scope and fee per item is outlined below.

Drainage Study Preparation

As stated in the original proposal dated February 18, 2008, Penfield & Smith proposed to review existing hydrology and watershed information and provide recommendations regarding the need to perform supplemental hydrological and/or hydraulic analysis. Based on our review, and at the direction of the City Penfield & Smith proposes to prepare a Final Drainage Study for the project. Tasks associated with preparation of the Drainage Study include:

- Research – Locate and review the latest DFIRM data available from FEMA or the Ventura County Watershed Protection District. Review available preliminary construction plans and previous drainage studies prepared for the affected watershed.
- Field Investigation – Walk the watershed to check existing drainage divides, size and location of storm drains and culverts. Provide

photographic documentation of the current conditions of the key features.

- Hydrologic Analysis – Prepare a hydrologic analysis of the peak flows discharging to Princeton Avenue. Determine if there will be any downstream controls due to backwater from Arroyo Simi or associated Ventura County Watershed Protection District channels. If any of this information is available from the DFIRM, it will be used in place of an independent analysis. Analyses will include 50-year and 100-year peak flow rates determined using accepted Ventura County hydrology calculation methods and computer software.
- Hydraulic Analysis– based on the proposed design, perform a hydraulic analysis and determine sizes of the proposed storm drain facilities. Exhibits (up to 11 x 17) will be prepared to depict the proposed pipe networks and associated flows. Hydraulic design will be completed using Hydraflow storm sewer design software by Autodesk.
- Report Preparation - A report will be prepared which will include a discussion of the existing and proposed conditions, assumptions, input data, methods of calculations and tabulated results. . Exhibits (limited to 11 x 17 size) will be included.
- Meetings – We assume that there will be two meetings at the City of Moorpark, one of which will coincide with the proposed Field Review.
- Preparation of the Drainage Study is estimated to have the following fee:

Fee: \$51,650.00

Extension of Design to Condor Drive

Per direction of the City, Penfield & Smith proposes to extend the design approximately 400-feet east to the intersection of Condor Drive. The extension of the design will include plan and profile of designed improvements including street stripping, curb and gutter, sidewalk, and sidewalk crossing striping connecting to the existing ADA crosswalk at Condor Drive. Also included will be revised striping plans extending approximately 300-feet east of Condor Drive on Princeton Avenue to allow for a two way left turn lane west of Condor Drive. The Extension of the plans to Condor Drive will include:

- Perform additional topographic surveys to supplement the existing survey data and topographic site maps.
- Demolition plans delineating improvements to be removed, protected in place or salvaged for reuse.
- Geometric control plans to define horizontal site layout and provide survey control information.
- Plan and profile plans to define vertical site layout and provide survey control information. The plans will provide contouring and spot elevations as deemed



appropriate to define the pavement surfaces and sidewalk improvements. The curbs will be profiled.

- Signing and striping plans.
- Utility relocation plan showing utilities to be constructed by Contractor and work to be done by public utility companies (i.e. Electric, Telephone, CATV, etc.).
- Details, cross sections, notes, cover sheet, and other information required to define the required work and end product.
- Preparation of Technical Specifications addressing the extended design.

Extension of the roadway design to approximately 400-feet east of Condor Drive and the striping design to approximately 300-feet east of Condor Drive is estimated to have the following fee:

Fee: \$24,045.00

Storm Drain Plan and Profile Design

The Penfield & Smith Preliminary Design, which was approved by the former Public Works Director, proposed addressing drainage needs for the project by simply replacing existing corrugated metal pipe (CMP) culverts with like-size new RCP piping within the construction limits of the project. Replacing existing culverts with new piping is a cost effective concept, but poses risk to the City in locations where the culvert outlet locations and downstream pipeline conditions and alignments are unknown. The risk associated with using existing downstream culverts is especially high in areas where flow is directed onto private property with unknown outlet locations. Based on recent direction by the City, Penfield & Smith proposes to prepare additional storm drain designs to redirect stormwater from existing underdeveloped culverts draining to private land and redirecting water the public rights-of-way of CalTrans and the Ventura County Watershed Protection District (VCWPD).

Penfield & Smith proposes to provide storm drain plan and profile for new RCP pipes sized to meet hydrologic conditions detailed in the proposed Drainage Study. The design of the new RCP pipes will replace existing CMPs with unknown alignments and non-recoded outlets. The proposed RCP storm drain lines will properly convey storm water from the Princeton Avenue alignment to either Arroyo Simi or VCWPD channels.

Preparation of additional plan and profile designs for the proposed RCP storm drain lines is estimated to have the following fee:

Fee: \$12,800.00

Client Directed Extra Services

During the initial stages of Phase 2 of the project, Penfield & Smith was directed by the City to conduct the following extra services:



- Provided Coordination with Earth Systems and Geodynamics for the preparation of geotechnical analysis.
- Review of the prepared geotechnical report for the project.
- Prepared right-of-way exhibits and coordinated with Hamner and Jewel related to the Conejo Ready Mix and Bennett sites.
- Prepared cost estimates and value engineering activities for various wall heights and the associated land takes for the Ready Mix and Bennett sites.
- Conducted boundary survey activities in conjunction with Hamner and Jewel.
- Reviewed existing improvements, prepared cost estimates, and conducted associated value engineering in conjunction with work performed by Hamner and Jewel for the for the Kavli site.
- Finalized legal descriptions related to the La Falda driveway ownership issues.
- Conducted research with Hamner and Jewel regarding the ROW easements at the Conejo Ready Mix site.

The fee to provide the above City directed out of scope services was:

Fee: \$21,177.50

Future Right-of-Way Support

Penfield & Smith proposes to conduct future right-of-way support related to easements and dedications suitable for the construction of the Princeton Avenue widening project. Future right-of-way support will include:

- Review of Title Acceptance Forms prepared by Hamner, Jewel & Associates for the City.
- Preparation of additional Legal Descriptions and exhibits, and coordination with the City and City's right-of-way consultant related to easements and dedications for the extension of the project to the East, additional sidewalk improvements, and drainage improvements as detailed above.
- Preparation of cost estimates and value engineering for improvements related to ROW acquisitions.



Future right-of-way support will be billed on a time and material basis and is estimated to have a fee not to exceed:

Fee: \$20,327.50

We have estimated the cost of our services based on our understanding at this time of the scope and complexity of the work. However, please note that our services will be performed on a time and materials basis, and it is possible that our actual charges could exceed the amount we have estimated. During the performance of our services, the need for additional or expanded services may be determined. We will make every reasonable effort to keep you informed of our progress and costs incurred.

If you have questions regarding this fee estimate for additional services, please contact me at (805) 981-0706 x 221 or via email at sdm@penfieldsmith.com.

Sincerely,

PENFIELD & SMITH



Scott D. Meckstroth, R.C.E. 63337
Project Engineer

Attachments
18305 04 CO-2 2010 10 21.docx

