TO:

**BOARD OF DIRECTORS** 

FROM:

**BRUCE BUEL** 

E-2

**AGENDA ITEM** 

JUNE 10, 2009

DATE:

JUNE 4, 2009

WILLOW ROAD WATERLINE EXTENSION PROJECT PHASE 2 CANNON ENGINEERING DESIGN SERVICES TASK ORDER

# ITEM

APPROVE EXECUTION OF TASK ORDER WITH CANNON TO PERFORM ENGINEERING DESIGN SERVICES FOR WILLOW ROAD WATERLINE EXTENSION PROJECT PHASE 2 [RECOMMEND APPROVAL].

# **BACKGROUND**

San Luis Obispo County is currently designing the Willow Road Extension Project Phase 2 from Hetrick Road to US 101 that includes Frontage Road south to Sandydale Drive. The District's 2007 Water and Sewer Master Plan Update recommended the construction of a 12 inch diameter waterline in this segment of Willow Road as well as a 12 inch diameter waterline and a short segment of 16 inch diameter waterline south on Frontage Road to Sandydale Drive. Attached is a Project Overview Map that indicates the location of the proposed Phase 2 waterlines. Installation of the District's waterlines concurrent with the County's roadway project is more cost-effective than installing the waterlines in the future since the waterlines can be installed before the roadway is paved. The County is finalizing the design for the roadway and the District needs to develop a design for the waterlines so that the projects can be bid concurrently.

Cannon is currently designing the Willow Road Waterline Extension Phase 1 project for the District. Given the working relationship that Cannon has developed with County staff in coordinating the Phase 1 project, the knowledge of the County's requirements acquired during the design of Phase 1, and the level of coordination effort anticipated to be required for the Phase 2 project, staff proposes that the District utilize Cannon to perform the design for Phase 2 as well. Attached is Cannon's proposal for the engineering design of the Willow Road Waterline Extension Project Phase 2. The proposed budget for the work is \$89,840 and includes both preliminary as well as final engineering design services.

# FISCAL IMPACT

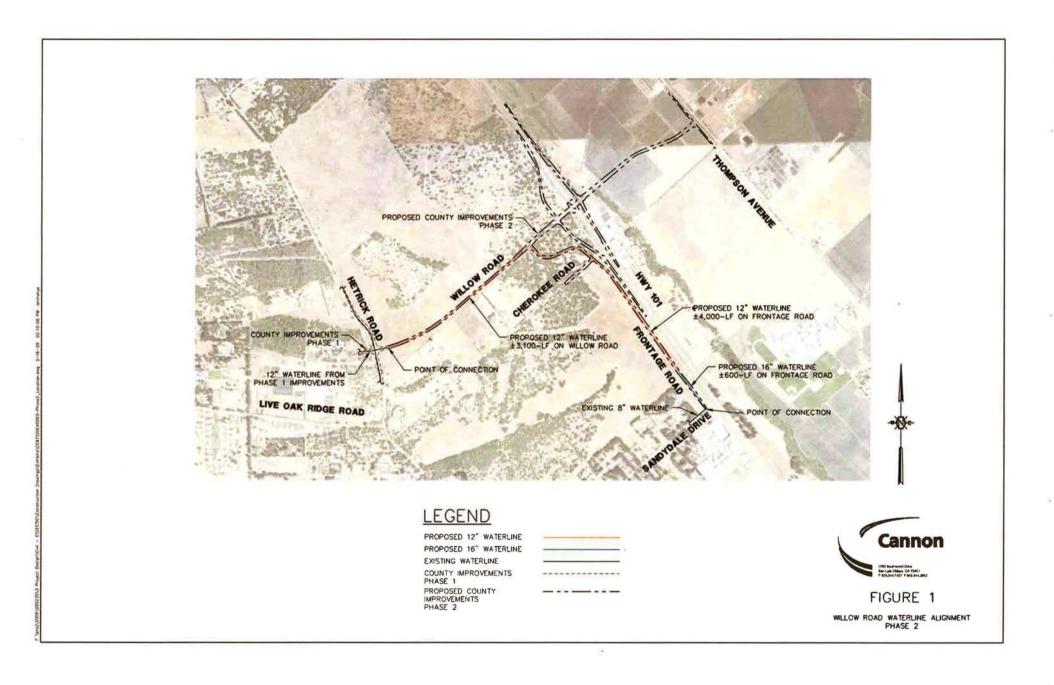
The proposed FY 09-10 Budget includes \$300,000 in the Water Capacity Charge Fund (Fund #700) for the design and beginning of construction of the Willow Road Waterline Extension Project Phase 2. The estimated construction cost based on the 2007 Water and Sewer Master Plan cost indexed to the May 2009 Engineering News Record Construction Cost Index is \$1,650,000 and will be updated once the design is finalized.

# RECOMMENDATION

Staff recommends that your Honorable Board authorize staff to execute a Task Order with Cannon for the design of the Willow Road Waterline Extension Project Phase 2 for a not-toexceed amount of \$89,840.

# **ATTACHMENTS**

- Project Overview Map
- Proposed Scope of Work





March 13, 2009

Mr. Peter Sevcik, PE District Engineer Nipomo Community Services District 148 S. Wilson Street Nipomo, CA 93444

PROJECT:

WILLOW ROAD WATERLINE EXTENSION, PHASE II

Dear Peter:

Attached is our proposal for Phase II of the Willow Road Waterline Extension. We have the 35% Construction Drawings for the County's portion of the work. In order to keep pace with the County's project, we will begin work on Phase II upon your authorization.

A few things you will notice about this proposal are as follows:

- The timeline for the project has been modified to better facilitate coordination with the County's schedule.
- We removed the bid support and construction observation portion from the scope as you requested.

Thank you for opportunity to continue our support with the Willow Road Waterline Extension project.

If you have any questions, please give me a call.

Sincerely,

Jeff Spannbauer, PE Associate Civil Engineer

C 66131

1050 Southwood Drive, San Luis Obispo, CA 93401 **T** 805.544.7407 **F** 805.544.3863

CannonCorp.us



#### PROJECT UNDERSTANDING AND APPROACH

Our understanding of the project is based on the County's 35% Submittal - Willow Road Phase II Construction Drawings, Dated October 2008, our knowledge of the Water and Sewer Master Plan, and our recent conversations with District staff.

Based on this research and information, we understand that the NCSD would like to install approximately 3,100 LF of 12-inch diameter waterline from Hetrick Road to Frontage Road, approximately 4,000 LF of 12-inch diameter waterline from Willow Road to approximately 600 LF north of Sandydale Drive, and approximately 600 LF of 16-inch diameter waterline from the end of the 12-inch diameter waterline to Sandydale Drive. (See Figure 1: Willow Road Waterline Alignment, Phase II; at the end of this section.) These improvements are to be made in conjunction with the County's Willow Road Phase II Improvement project.

We anticipate that the efforts required to prepare the Phase II Construction Documents will be similar to those required in Phase I with one exception; we recommend that the submittal due dates for the 35%, 50%, 95% and Final Construction Documents lag behind the County's comparable submittals by 30-days. This will help save time, money and effort by limiting rework.

Our approach to successful completion of this project consists of providing professional services in two progressive phases: Preliminary Engineering and Design and Construction Documents. Bid Support Services and Construction Engineering Services have been excluded from the scope because estimation of these efforts (in conjunction with the County's work) is difficult at this time.

Phase I, Preliminary Engineering, includes fundamental project research, data collection, and coordination necessary to assist in defining the design criteria and performance objectives for the project. This phase includes coordination with the County, supplemental topographic survey, utility research, supplemental geotechnical engineering, and culminates with the development of a Preliminary Design Submittal for the waterline improvements along Willow Road and Frontage Road. The Preliminary Design will include a complete set of construction plans at a 35% level of completion, showing the horizontal alignment of the pipeline in relation to the County's improvements.

Phase II, Design and Construction Documents, includes the preparation and submittal of the 50% and 95% review submittals of the Construction Documents, securing permits, and preparation of "Final" construction plans, specifications, and cost estimates.



	Project Manager	Associate Civil Engineer	Civil Engineer II	Administrative Assistant	Total Hours	Fee Estimate Subtotal	Reimbursable Expenses	Fee Estimate TOTAL
RATE	\$ \$160	\$130	\$100	\$70	V C			
		но	URS			E. Griffe Ch		4.0
Project Management Services	8	16		12	36	\$4,200		\$4,200
Coordinate with the County's Willow Road Extension Project Staff	16	35			51	\$7,110		\$7,110
Preliminary Engineering Services								
Task 1. Project Kick-off Meeting with NCSD Staff	8	3		2	13	\$1,810		\$1,810
Task 2. Meet with County Staff	6	10		2	18	\$2,400		\$2,400
Task 3. Assist the District in Securing Right-of-Entry Agreements	2	4	5	5	16	\$1,690		\$1,690
Task 4. Supplemental Geotechnical Evaluation		4			4	\$520		\$520
Task 5. Supplemental Topographic Survey and Utility Research		10	23		33	\$3,600		\$3,600
Task 6. Preliminary Design Drawings	15	55	92		162	\$18,750		\$18,750
Submittal and District Review							\$200	\$200
Task 7. Preliminary Design Submittal Review Meeting	8	10		2	20	\$2,720		\$2,720
							Subtotal:	\$31,690
Design and Construction Document Services								
Task 8. Prepare and Submit 50% Design Documents, Bid Specifications, and Cost	18	42	96		156	\$17,940	\$200	\$18,140
Task 9. Prepare and Submit 95% Design Documents, Bid Specifications, and Cost	18	42	96		156	\$17,940	\$200	\$18,140
Task 10. Assist in Securing Permits		12			12	\$1,560		\$1,560
Task 11. Prepare and Submit Final Design Documents, Bid Specifications, and Cost Estimate	25	20	20		65	\$8.600	\$400	\$9,000
							Subtotal:	\$46,840



#### SCOPE OF WORK:

Our detailed scope of services on the following pages describes our proposed tasks, specifically included and excluded services, expected deliverables, and anticipated efforts for design. This scope description provides a brief summary of these anticipated tasks. We are happy to elaborate on any of these task descriptions.

### PROJECT MANAGEMENT SERVICES

Effective consultation and coordination between all parties involved is essential for the successful completion of this project. We are committed to regular communication with District and the County in order to guarantee efficient flow of information and consistent project direction. "Communicate, communicate, communicate" is a rule we live and work by here at Cannon.

Project management services will include regular reports, meetings, and presentations to the Board. Specifically, we will perform the following tasks as requested on a monthly basis throughout the duration of design:

- Task i Prepare and submit monthly progress reports. These reports will include a
  progress to date summary for the major design tasks, and an estimate of remaining tasks
  and duration prior to completion. We will submit these reports via email, but will be
  appropriate for formal distribution if needed.
- Task ii Meet with District staff. Each meeting will offer a key interaction opportunity for
  the representatives of the District to review progress, look at plans, and direct the project.
  Furthermore, should project issues arise midstream, these meetings will allow for the
  immediate resolution of such issues. Meetings allow all parties a chance to voice
  concerns, propose suggestions, and walk away with an understanding of the resolution.

## PHASE I: PRELIMINARY ENGINEERING SERVICES

- Task 1 Project Kick-off Meeting. We will orchestrate and attend a Project Kick-off Meeting with appropriate personnel from the District. This meeting agenda will focus on project understanding, team involvement, project constraints, and the anticipation of design development impediments. This meeting will also include a project introduction, review of background information and project scope, and an overview of the project schedule. This meeting represents a key opportunity for representatives from the District to steer the consultant team and further clarify critical elements of the project scope.
- Task 2 Coordination Meeting with County. We will orchestrate and attend a coordination meeting with the appropriate personnel from the County of San Luis Obispo. The purpose of this meeting will be to confirm schedule and phasing of the County's project, establish preferred communication methods between the County design staff and our design staff, determine milestones for design review and coordination, secure a hard copy of their geotechnical report and electronic copies of their topographic survey and roadway improvement plans. This meeting will establish guidelines for ongoing coordination between the District's waterline project and the County's roadway project.
- Task 3 Assist District in Securing Right-of-Entry Agreements. In accordance with applicable provisions of the California Civil code, we will prepare proper notification letters to impacted property owners within the project limits in order for us to perform the



necessary preliminary engineering services, including the field survey and geotechnical investigations. These letters will be provided to the District for mailing on District's letterhead for proper distribution to the landowners.

- Task 4 Supplemental Geotechnical Evaluation. We will coordinate with the County to
  obtain the geotechnical evaluation used for their design of the proposed roadway. We will
  review this report to determine if it addresses the design considerations needed to
  properly install the waterlines: recommendations for pipe bedding and backfill
  requirements, thrust blocks, suitability of existing soils for use in subsequent trench
  backfill, shoring and bracing, and depth to groundwater (if applicable). If the geotechnical
  information is lacking sufficient detail, we will provide an additional scope of work to
  provide these services.
- Task 5 Supplemental Topographic Survey and Utility Research. We will coordinate with
  the County to obtain the topographic survey used for their design of the proposed
  roadway. We will review the survey to determine if it contains the level of detail needed to
  prepare design plans for the proposed pipeline. Details we will look for include but are not
  limited to basis of bearing, benchmark, boundary information (proposed and existing), and
  existing utility information. If the topographic survey is lacking sufficient detail, we will
  provide an additional scope of work to provide these services.

Additionally, we will conduct utility research with the public and private utility providers who have existing facilities within the proposed project areas and obtain record drawings and as-built information. Potential utility conflicts and/or relocation requirements will be identified and evaluated as needed to minimize unexpected design modifications or construction delays. We will compile and review the documents for inclusion into the electronic base map to use in preliminary design and related tasks defined below.

- Task 6 Preliminary Design Drawings. With the topographic survey, record data boundary information, utility research and geotechnical evaluation from the previous tasks, we will prepare a Preliminary design package for your review and comment. The purpose of the Preliminary design package will be to resolve critical issues along each run of pipe prior to proceeding with final design. The Preliminary Design Drawings will include sufficient information to verify that the overall design concept will meet both the needs of the District and the County. Ten sets of the conceptual drawings will be provided in full size (24" x 36"). Additionally, we will submit these drawings to the County for their review and invite them to attend a Preliminary Design Submittal Review Meeting.
- Task 7 Preliminary Design Submittal Review Meeting. Upon your review of the
  Preliminary Design Drawings, we will attend a meeting with the District staff to review and
  discuss the submittal. The County will be invited for coordination purposes. This meeting
  will allow opportunity for detailed discussion on project issues at the 35% design level.
  We will receive direction from staff on requested revisions to incorporate prior to the next
  phase of review.

## PHASE II: DESIGN AND CONSTRUCTION DOCUMENT SERVICES

Tasks 8 and 9 – Prepare and submit design documents, bid specifications and cost estimates (50%/95%): Based on the findings and results of the previous tasks, we will prepare and submit 10 design plan packages at the 50% and 95% approximate completion levels. The design plan packages will include the title sheet, notes sheet, plan and profile sheets, detail sheets, technical specifications and cost estimate necessary to construct the project. Plans will be prepared in accordance with District standards.



Technical specifications shall be prepared using District standard boilerplate specifications. We will attend a meeting with the District staff to review and discuss the design submittal for both the 50% and 95% submittals.

- Task 10 Assist in securing permits. We understand that the District is exploring the
  feasibility of building these improvements in conjunction with the County's Willow Road
  improvements. Should these projects be worked conjointly, no additional permitting is
  anticipated. However, in the event that the waterline construction cannot be included with
  the County's work, we will assist the District in securing the necessary encroachment
  permits from the County. No other permitting requirements are anticipated at this time.
- Task 11 Prepare and submit design documents, bid specifications and cost estimates (Final). Based on the finalized project design issues resolved during the preceding tasks, we will prepare and submit a Final Construction Documents Bid package. This submittal package will contain complete Construction Plans, technical specifications, known permit conditions, and an Opinion of Probable Construction Costs. The final plans will incorporate comments from the District and County reviews of the 95% Design Plan package. (See Appendix B: Sample Work for an example of design plans.) Bid documents will be prepared in the District's standard format. We will provide electronic copies and 20 hard copy sets of the complete bid package to the District.

#### ASSUMPTIONS AND EXCLUSIONS

Certain services that typically accompany a project of this type are excluded from this scope of work at this time. The following is a list of services may be added to our Scope of Work on a Time and Materials basis as needed:

- Field verification and/or determination of property boundaries, easements, and public right-of-way, right-of-way dedications, and easement acquisitions.
- Survey monumentation, records of survey, and legal descriptions and exhibits.
- Project meetings (other than those described in the Scope of Work), local agency liaison, and application and permit processing and tracking.
- NPDES compliance reporting, Storm Water Pollution Prevention Plans (SWPPP), and Erosion and Sediment Control Drawings.
- Archeological, botanical, biological, geotechnical, and landscaping project services.
- Permitting or approvals through San Luis Obispo County.

Additional work will be billed on a Time and Materials basis or as an addendum to this proposal with prior written authorization from the NCSD.

#### SCHEDULE:

To be determined based on the County's schedule.

#### ACCEPTANCE AND TERMS:

Appendix A details the terms for work; however, we are familiar with the standard City contract, and will work with you to resolve any comments we may have in a separate document to form the agreement. Cannon Associates bills monthly for work in progress and payment is due within 10 calendar days of receipt of the bill. Overdue amounts will be surcharged at 18 percent per annum or 1.5 percent monthly.



# ACCEPTANCE OF PROPOSAL

Proposa	al Date:	March 13, 2009					
Client:		Nipomo Community Services District					
		148 S. Wilson Street					
		Nipomo,CA 93444					
Project:		Willow Road Waterline Extension, Phase II					
Scope o	of Work:	As described in proposal dated March 13, 2009					
Fixed F	ees:	\$89,840					
Appendix A details the terms for work. Cannon bills monthly for work in progress and payment is due within 10 calendar days of receipt of the bill. Overdue amounts will be surcharged at 18 percent per annum or 1.5 percent monthly. Materials are charged at cost plus 15 percent. Reimbursables are not included in fixed fee; see attached "Reimbursable Expense Schedule" for rates. If the client requests, or the client's schedule requires work to be done on an overtime basis, a multiplier of 1.5 will be applied to the above rates for weekdays as well as weekends and holidays.  Please indicate your acceptance of this proposal by signing below.  In witness whereof, the parties hereto have caused this agreement consisting of proposal letter, Appendix A and any other necessary and applicable documents to be executed of the date and year first above written. In Appendix A, Cannon hereinafter referred to as Cannon The Client, as noted below, hereinafter referred to as Client.							
Client:	Nipomo Community S District	Services	Cannon				
XPeter Sevcik			Larry P. Kraemer, PE Director, Public Works Division C 44813				
Date: _			Date:				