



SCOPE OF WORK AND PROJECT DESCRIPTION

DESIGN OF THE REPLACEMENT RAW WATER PIPELINE FROM THE WATER TREATMENT PLANT TO SUMMERS LANE RESERVOIR AND FROM HIGHWAY 20 TO WATERFALL GULCH

The City of Fort Bragg is seeking proposals from qualified consultants interested in contracting with the City to design a replacement raw water transmission line and to prepare construction drawings and contract documents supporting the construction of approximately 15,000 LF of raw water transmission line and appurtenances from the City's Water Treatment Facility to Summers Lane Reservoir and from Highway 20 to Waterfall Gulch.

This pipeline is critical to the secure supply of raw water from the City's best quality sources, and the existing pipeline is nearing the end of its service life. Much of this transmission line has been in place for decades, and consists of a mixture of PVC, asbestos concrete, ductile iron and steel pipe. A portion of the existing pipeline is above ground and is supported by a trestle. Flow in the pipeline is gravity-fed throughout its length from two sources to the City water treatment plant at the east end of Cedar Street. The uppermost source is at an elevation of nearly 400 feet. The alignment crosses two waterways, the Hare Creek crossing and the Noyo River crossing. The Noyo River crossing lies just above sea level.

The project design shall include Phases II-V of the raw water line replacement (Figure 1). The section of water line from the north side of Highway 20 to the Summers Lane Reservoir was constructed as Phase I in 2013 and will not be a part of this project. The Hare Creek and Noyo River crossings and the section from Waterfall Gulch intake to Road 450 are relatively new and will not need to be replaced. Construction will be phased as shown below:

Phase I - Complete

Phase II - from the Water Treatment Plant to the north side of the Noyo River crossing

Phase III - from the south side of the Noyo River crossing to Summers Lane Reservoir

Phase IV - from the north side of Highway 20 (replacing the current Highway 20 crossing) to the north side of the Hare Creek crossing

Phase V - from the south side of the Hare Creek crossing to the new line along Waterfall Gulch which ends at Road 450

The existing pipeline and new replacements are located in a geologically active area, characterized by steep slopes, shallow ground water, heavy forestation, and a challenging construction environment with areas of sensitive riparian habitat and difficult access. Phases II and III are partially located within the Coastal Zone (Figure 2). The City is beginning the Environmental and Coastal Zone permitting process and will provide results of biologic and archeologic studies to support the optimal pipe location upon study completion. The biological study will inventory and locate relevant trees; some additional work may be needed for the existing conditions survey. The City will be securing a Timber Harvest Plan for the project. The proposals should anticipate providing support of the City throughout the Coastal Development and any other environmental permitting or other related processes. There are more specifically described tasks which are listed under Additional Tasks below, and are optional to the RFP.

Figure 1

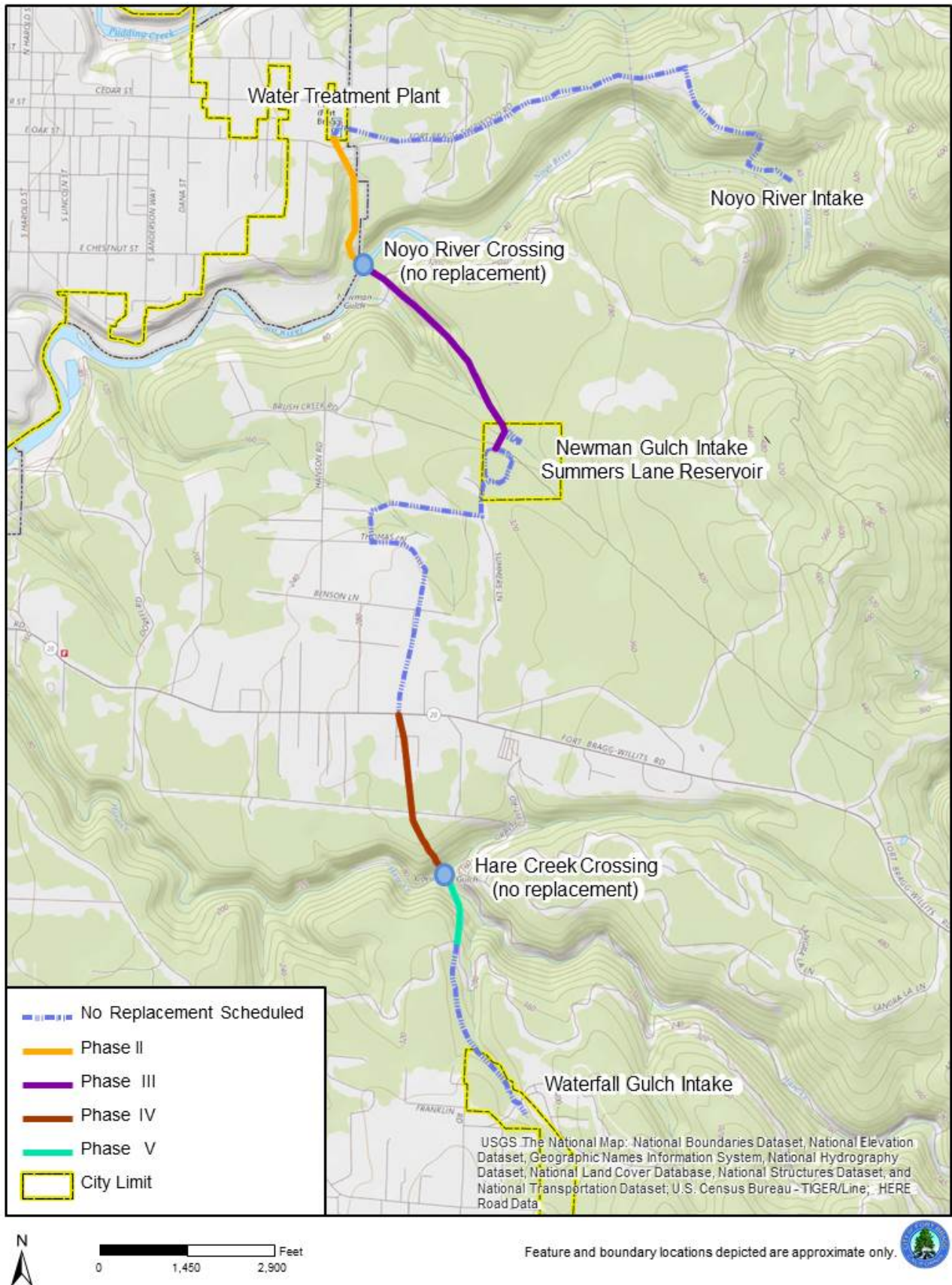
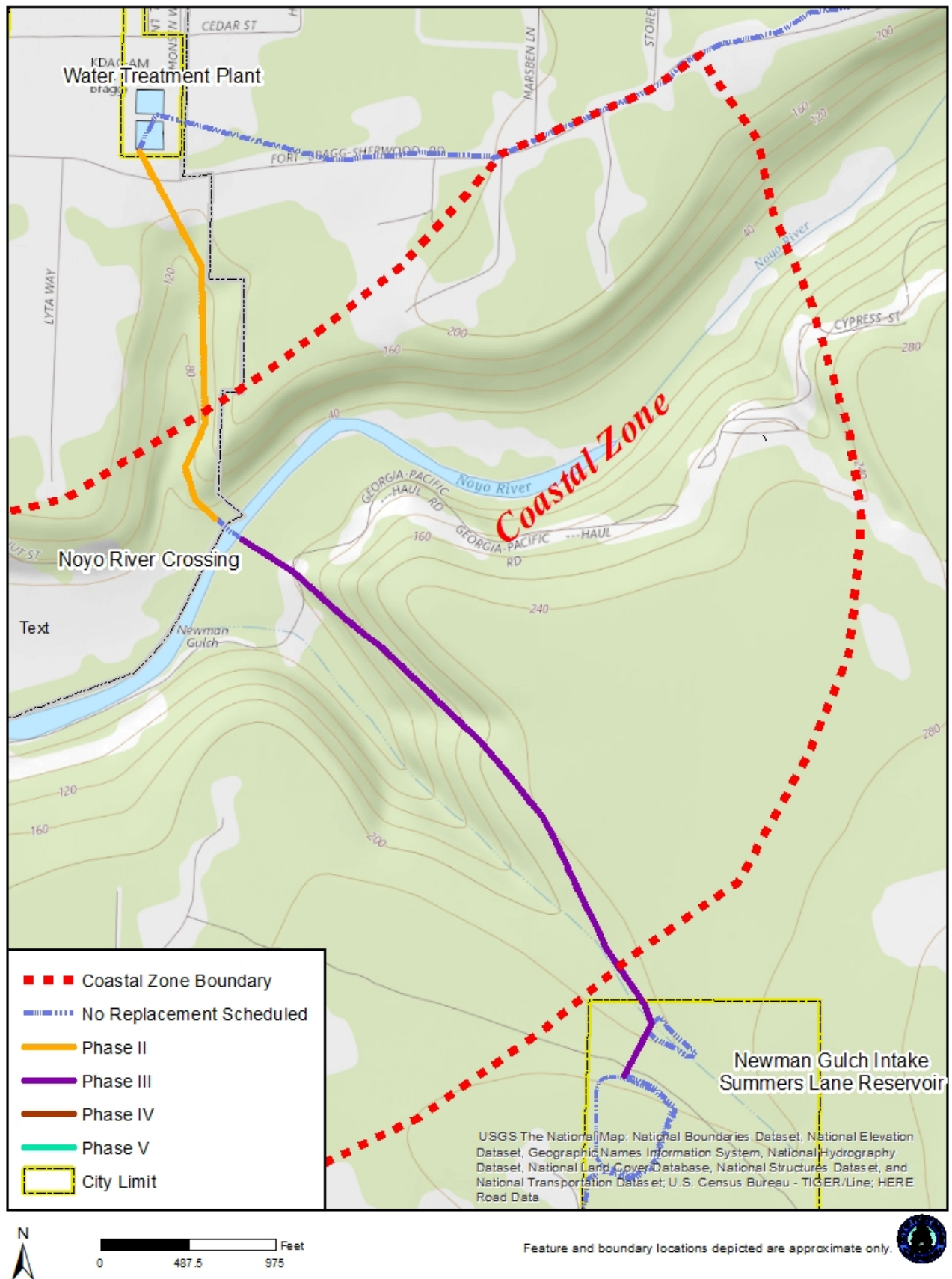


Figure 2



SCOPE OF WORK

This contract would consist of the following tasks:

Pre-Design

1. Identify and map existing pipeline location by researching and reviewing maps and by performing field work. Complete land survey and mapping of the existing pipeline route sufficient for design.
2. Complete a field investigation and assessment of existing conditions and constraints of the pipeline and appurtenances.
3. Prepare an analysis of project practicability, including a hydraulic analysis of the proposed replacement pipeline using material and diameter alternatives to verify capacity and operations needs and requirements and provide results in a report that includes operations and maintenance costs over the service life.
4. Preparation of preliminary design, mapping, and a detailed project description to support environmental review and permitting.

Design

5. Preparation of preliminary design and cost estimation, mapping, and a detailed project description to support applications and reports needed for seeking of project funding. Potential sources include United States Department of Agriculture (USDA), State Revolving Fund (SRF), Community Development Block Grant (CDBG) or other Federal or State agency sources.
6. Preparation of construction documents and construction cost estimates to be submitted for review at 60% and 100% completion. At a minimum, construction documents shall include improvement plans, specifications, engineer's opinion of costs, and any other relevant attachments needed to construct the project. The design shall assume that construction will be required to be Buy American compliant as well as other Federal contracting requirements.
7. All construction documents shall be fully compliant with all of the requirements of any funding source. Consultant is responsible for thoroughly reviewing and understanding the design and construction requirements imposed by funding sources, and to ensure they are fully incorporated into the construction documents. Consultant shall work with City staff to ensure that the contract documents reflect all the funding source requirements.
8. It is very likely that the project will be built in phases over an extended period of time. The contract documents shall be organized in such a fashion as to make updating them convenient and maintain internal consistency.
9. The design shall anticipate ongoing maintenance needs and pipeline access.
10. Coordination of and attendance at 4-5 project meetings, including preparation of agendas and meeting notes that incorporate all agency comments.

Additional Tasks:

1. Provide environmental consulting services to assist in permit acquisition. Phased construction will likely occur over an extended period of time. The environmental issues may need to be revisited and updated or modified during the design and/or construction process.
 - Describe how your firm or sub-consultant can assist in environmental permit acquisition. What would be the anticipated timeline for the process?

2. Preparation of Timber Harvest Plan
 - Construction will require removal of many trees which will need a Timber Harvest Plan (THP). It is anticipated that each phase will require its own THP. The documents should be prepared such that adjustments can be readily implemented. Describe how your firm or sub-consultant can accomplish this.
3. Provide potential funding sources and assistance with funding acquisition.
 - Describe how your firm or sub-consultant can assist with funding acquisition.

Primary Project Deliverables (in paper and digital format):

1. Survey data: Raw data points and processed data.
2. Topographic/existing conditions maps along existing/proposed alignment.
3. Maps of existing and proposed easements. City will provide approximate locations of existing easements.
4. Technical Report on the existing conditions and constraints of the pipeline and appurtenances, with copies of all data in an appendix
5. Project Practicability Report including hydraulic analysis of proposed replacement pipeline using material and diameter alternatives to verify capacity and operational needs. Include operations and maintenance costs over anticipated service life.
6. Preliminary design, cost estimation, mapping and a detailed project description to support environmental review and permitting analysis and for seeking project funding from a variety of State and Federal sources.
7. Improvement Plans, specifications, engineer's opinion of costs, and any other relevant documents needed to construct the project. These shall be submitted to the City for review at 75%, 90%, and 100% completion. The documents shall be prepared for phased construction.
8. Completed construction documents that comply with requirements imposed by funding source(s) that are designed and organized in such a way as to make updating them convenient and yet maintain internal consistency.
9. Coordination of meetings and preparation of agendas and meeting notes for meetings attended. Meeting notes shall incorporate agency comments.

EVALUATION CRITERIA

Proposals will be evaluated on the basis of the following criteria:

- Capabilities and resources of the firm.
- Qualifications and experience of key individuals.
- Schedule for completion of work.
- Proposed cost.

The above selection criteria are provided to assist proposers and are not meant to limit other considerations that may become apparent during the course of the selection process.

Proposals will be reviewed and evaluated by the City of Fort Bragg and a recommendation for award of contract will be presented to the Fort Bragg City Council.