

**CITY OF COOS BAY CITY COUNCIL  
Agenda Staff Report**

<b>MEETING DATE</b> August 6, 2013	<b>AGENDA ITEM NUMBER</b>
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**TO:** Mayor Shoji and City Councilors

**FROM:** Jim Hossley, Public Works Director

**Through:** Rodger Craddock, City Manager *see*

**ISSUE:** Status of Library Foundation, City of Coos Bay

**BACKGROUND:**

At the June 19, 2012 council meeting the City Council authorized staff to proceed with further geotechnical investigation of the library building's northeast foundation. Council also authorized staff to obtain a structural engineering firm to design according to the findings of the geotechnical investigation. The City contracted with SHN to do the geotechnical evaluation and to date the City has paid SHN Engineering, Inc. \$11,920 for those services.

City staff obtained the services of ZCS Engineering, Inc. to provide the City with complete biddable construction documents to stabilize the settlement along the northeast wall and repair to the damaged finishes caused by the settlement to include the concrete floor. To date the City has paid ZCS Engineering, Inc. \$24,650 for structural design plans in accordance to the SHN report for the northeast corner.

During a library site inspection in January 2013, ZCS Engineering, SHN Engineering and City staff identified other locations throughout the Library that showed new signs of settlement. These new areas are not in the northeast area of the Library, they are on the south side and west side, which means the possibility that other foundation piles that were not part of the consultants' original scope of work are settling. After identifying the possibility of other pile settlement, City staff placed the project on hold until approval is given to further investigate. The geotechnical consultant considered several approaches for doing the additional investigation prior to settling on the approach presented to the City.

**ADVANTAGES:**

To determine the cause of building settlement, design a stabilization plan to prevent further structural deficiencies and to ensure public safety.

**DISADVANTAGES:**

Cost

**BUDGET:**

**SHN Engineering, Inc. expanded investigation scope;** The results of SHN investigation will be a comprehensive report which will contain conclusions regarding the source of distress. Conclusions will be based on the best available data, to include floor level survey, boring to base of bay mud, laboratory analysis, and settlement/pile analysis. Total cost \$30,500.

**ZCS Engineering, Inc. expanded scope;** The expanded scope of work will include a comprehensive structural evaluation of the facility to identify structural deficiencies and produce foundation reactions in an effort to identify overall settlement issues and prescribe a repair plan. The scope of their work will be defined as follows; Coordinate with SHN foundation elevations, revise construction documents, perform structural lateral and gravity calculations, produce summary of foundation reactions at each pile, produce a summary report of structural deficiencies and provide construction estimate. Total cost \$34,600.

Funds to complete the extended investigation of the Library will come from the Major Capital Reserve Fund (34-870-520-3046).

**RECOMMENDATION:**

If it pleases the Council, authorize staff to extend the foundation pile investigation for the Library to include the entire foundation system with the following professional consultants; SHN Engineering, Inc. and ZCS Engineering, Inc for a combined total not to exceed; \$65,100.00.