

**Engineering and Administration Work
Houston Engineering – Task 2B
December 29, 2020**

Task 2B - Scope of Effort – Preliminary Plans, Ditch Petition, and Right of Way

Sub Task	Task Description (not listed in chronological order)
1	Preliminary design survey (topo, utilities, etc. along construction route)
2	Geotechnical evaluation - structural design parameters (including soil borings) Foundation, dewatering, constructability, excavation issues
3	Electrical supply design and coordination- Coordination with power company, analysis of power needs, off-peak options
4	Develop preliminary planset (to 30%) Includes design of hydraulic features, AIS filtration, forcemain and outlet, channels, pipes and drainage system and lake inlet system; prepare plan sheets; value engineering; update engineer's opinion of probable cost.
5	Permitting Prepare draft Operations Plan; Preliminary MNDOT, counties and townships meetings for permits/agreements
6	Todd County Ditch 41 Petition Process Assist with preparation and submittal, participate in meetings, provide engineering support to address requests from Todd County ditch authority
7	Right of Way Process and Descriptions Landowner discussions, Legal descriptions, review of legal documents
8	Continued Outreach with landowners, agencies, public
9	Assist with 429 Hearing (update feasibility report, presentation at meeting)
10	Project Management to include progress meetings and updates
	Total Cost for Above Services – \$104,404
11	Contingency for additional services approved by the LSLID Board - \$7,596
	Total Contract Amount for Task 2B Services - \$112,000

Note: These services will be billed at 2020 rates. These services will be delivered at the direction of the LSLID Board and will include the delivery of a preliminary plan (to 30% complete) for the project and completion of preliminary tasks for permitting, the Todd County petition process, the Right of Way process and outreach. These services include estimated costs for the landowner meetings and petition process, since there are unknowns in the amount of work that will be required. For example, if detailed modeling is required by Todd County, the costs could be greater. In addition, virtual meetings are assumed for most meetings.

It is anticipated that these services will be completed by March 15, 2021 or later depending on completion of petition process. These costs can be matched by the DNR grant up to a maximum of \$52,000.

MEMORANDUM

To: Lake Shamineau LID Board
From: Mike Opat, HEI Project Manager
Subject: Summary of Scope of Services & Deliverables
Date: 12/22/2020
Project: Lake Shamineau High Water Outlet
Task 2B: Preliminary Plans, Ditch Petition & Right of Way

SUMMARY OF SCOPE OF SERVICES & DELIVERABLES

The purpose of this memorandum is to document the basis for the scope of services to be provided by Houston Engineering, Inc. (HEI) as part of Task 2B: Preliminary Plans, Ditch Petition & Right of Way. The memorandum will also describe the deliverables that will be provided by HEI to the Lake Shamineau Lake Improvement District (LSLID). The scope of services was developed through a series of discussions between the LSLID (Cindy Kevern, Ardis Sandstrom and Rick Rosar) and HEI (Mike Opat). The scope of services was developed to include subtasks and associated labor hours anticipated beginning January 1, 2021 and extending through approximately March 15, 2021 with work pertaining to the pending ditch petition process potentially extending beyond that date. It is assumed that Task 2A will be closed out on December 31, 2020, so any remaining tasks in Task 2A have been accounted for in Task 2B. HEI and the LSLID have agreed that the tasks performed under Task 2B will be billed with HEI's 2020 rate table because the agreement was signed in 2020. The subtasks included in Task 2B are described in more detail below.

Task 2B include the development of 30% level construction plans (plan and profile sheets with limited details). These plans will be completed following the collection of additional survey information on the proposed construction corridor as well as a geotechnical (i.e. soil and groundwater conditions) evaluation near the proposed pump station. The design work will include preliminary designs of key project features, including hydraulic features (piping, pumps, valves, pumpstation, etc.); AIS filtration; forcemain and outlet; channels, pipes and drainage system; and the lake inlet. This effort will also include value engineering considerations and an updated engineer's opinion of probable cost. The deliverables associated with these tasks will include a 30% level plan set, a geotechnical report, and the updated engineer's opinion of probable cost.

The LSLID is continuing to secure necessary right of way for the project and the completion of the 30% level plans will allow for greater certainty in quantifying the location and size of the right of way needed for the project. Task 2B includes support and assistance with landowner negotiations as well as the creation of necessary maps, exhibits and other right of way documents to facilitate the right of way acquisition process.

The LSLID is submitting a petition to utilize Todd County Ditch No. 41 (TCD 41) as an outlet and Todd County, through its role as the ditch authority for TCD 41, might request additional engineering data in support of the petition. The extent of the engineering effort that could be required is not known at this point, so Task 2B includes an assumed number of hours for the purpose of addressing any such request or at least provide an initial budget to keep the project moving while a supplemental scope and budget is developed. The bulk of this effort was carried over from Task 2A. Task 2B also includes permitting related efforts pertaining to coordination with road authorities and the development of a draft

Operation Plan. Other subtasks included in Task 2B include continued outreach with landowners and agencies, as well as additional support to the LSLID including assistance with the Chapter 429 process. A contingency in the amount of approximately \$7,600 has also been included to account for additional hours that might be requested by the LSLID. HEI will not expend any contingency funds without prior direction and approval from the LSLID.