



MEMORANDUM

TO: Honorable Mayor and City Council, Project Management Team
c/o Jeff Hulsether, PE – City Engineer

FROM: Scott D. Hedlund, PE, PMP

DATE: August 13, 2016

RE: Brainerd Lakes Regional Airport Utility Extension
Bi-Monthly Project Status Update
SEH No. BRDMN 131759 20.00

The following is an update on the status of the Construction Phase of the project:

- I. Construction Progress
 - A. Construction started April 11, 2016 in the Lum Park area.
 - B. Horizontal Directional Drilling (HDD)
 1. Area 1
 - a. 12-inch gravity sanitary sewer under Lum Park Road has been installed.
 - b. 6-inch sewer force main between Pine Shores Road and Jordan Road has been installed.
 - c. 12-inch water main between the new booster station site in Lum Park and 13th Avenue NE, and along 13th Avenue NE between I Street and TH 210 has been installed.
 - d. 16-inch water main under Lum Park Road has been installed.
 - e. **16-inch water main along TH 210 between Lum Park Road and the future development stubs TH 210 crossing between Pine Shores Rd and Jordan Road has been installed except for a 140 foot stretch near the future crossing.**
 - f. **12-inch water between Jordan Road and Whiteley Creek has been installed.**
 - g. 12-inch gravity sewer along TH 210 between Lum Park and Ash Ave (between manholes SS4 and SS7) has been installed.
 - (1) Contractor is addressing grade issues.
 - h. 16-inch water main along TH 210 between manholes SS4 and SS10 has been installed.
 - (1) Connections and testing remain.
 - i. **12-inch gravity sewer between manholes SS4 and SS10 has been installed.**

- j. **10-inch gravity sewer between Whiteley Creek and Jordan Lift station has been installed.**
 - k. **10-inch gravity sewer between Whiteley Creek and TH210 crossing by airport.**
 - l. **10-inch gravity sewer on airport side of TH 210 near airport installation has been started.**
 - m. **Ongoing grade verification and testing.**
 - 2. Area 2
 - a. 6-inch sewer force main pipe has been installed.
- C. Jack Bore Steel Casings Under TH 210 (Project Area 1)
 - 1. Sewer and water crossings approximately 400 feet east of Lum Park Road
 - a. Casing and sanitary sewer carrier pipe have been installed.
 - (1) A change order for extra time to complete the pilot hole due to boulder obstructions is planned for approval consideration at a future City Council meeting.
 - b. **Casing for water main started, hit boulder obstruction 50 feet on 6/10/16.**
 - (1) **Change Order No. 3 changing to hammer installation method was not accepted by the City Council on 7/18/16 and a formal City appeal letter was mailed to the Contractor (Tom's Backhoe Service) on 8/8/16.**
 - (a) **This Change Order is moving to the dispute resolution process outlined in the Contract.**
 - 2. Water crossing at Ash Ave
 - a. Casing and carrier pipe have been installed.
 - 3. Water crossing at Wonderland Park Road cul-de-sac
 - a. Casing and carrier have been installed.
 - 4. **Sewer and water crossing at Pine Shores Road**
 - a. **Casings and carrier pipes have been installed**
 - 5. **Sewer and water crossings for future stubs between Pine Shores Road and Jordan Road.**
 - a. **Planned to start the week of August 15th.**
- D. Open cut sewer and water (Project Area 1)
 - 1. 12" sanitary and manholes from the Lum Park lift station to manhole SS 4 have been installed and connected.
 - a. Verification of grades and testing remains.
 - 2. **8" sanitary south from the Jordan Road Lift Station junction manhole is being installed.**
 - 3. 16" water main between the north side of Lum Park Road and TH 210 has been installed up to the jack bore pit.
 - 4. **16" water main along TH 210 between Lum Park Road and future development TH 210 crossing stubs between Pine Shores Road and Jordan Road has been installed except for a 140 foot stretch near the future crossing.**
 - 5. **Ongoing open cut sewer and water pipe, manholes, valves, hydrants, and tie-ins; and testing.**
- E. E Street open cut sewer (Project Area 3)
 - 1. All planned sewer has been installed.
 - a. Testing and televising remains.
 - 2. **E Street has been final paved.**
 - 3. **After review of televising tapes showed a sag in the sewer pipe beyond specified tolerances, it was determined the newly installed sewer east of 8th Ave NE needs to be dug up and relayed to planned grades at Tom's Backhoe Service's expense.**
- F. Lum Park lift station/booster station site (Project Area 1)
 - 1. **Underground piping has been installed.**

- a. **Grade verification and testing remains.**
 2. **Ongoing dewatering operations to complete booster station foundation.**
 3. **Booster station soil corrections have been completed and footings have been installed.**
 4. **Foundation walls are planned to be poured the week of August 15th.**
 5. **Booster station building is planned for delivery in mid-September.**
 - G. **Jordan Road lift station**
 1. **Dewatering and excavation has begun**
 2. **Structure installation is planned for August start.**
 - H. **Dewatering**
 1. **Ongoing dewatering operations in the vicinity of Jordan Road and Whiteley Creek.**
 2. **Tom's Backhoe is working with Minnesota Department of Natural Resources (DNR) on updating the project dewatering permit.**
 - a. **The DNR issued a cease and desist order to stop dewatering that affects Whiteley Creek on August 8th until the permit details get resolved.**
 3. Two property owners on northwest side of TH 210, east of Wonderland Park Road continue to be connected to a temporary above ground water system served from existing water main on Wonderland Park Road.
 - I. **Cured In-Place Pipe (CIPP) work (Project Area 4) on E Street west from League Ave NE**
 1. **Lining of the existing sanitary sewer has been completed.**
 2. **Manhole rehabilitation and service boot work remains.**
- II. **Construction Schedule/Staging**
 - A. The Contractor has conveyed the following general construction schedule/staging plans (subject to change):
 1. Complete most of the work in the Lum Park area outside of the lift station site in August.
 2. Ongoing booster and lift station site construction in Lum Park.
 3. Continue pipe installation in Area 1 along and under TH 210 generally moving east from Lum Park.
 - a. Jack bores are planned to continue through September.
 - b. HDD work is planned to continue through August.
 - c. Ongoing open cut manhole, pipe, and tie-in work.
 4. Area 2 work is near substantially complete, testing remains.
 5. Complete (Area 3) E Street final paving and turf restoration by the end of August.
 - a. **Sewer and street restoration re-work east of 8th Ave NE is planned for late August or early September.**
 6. Complete sewer lining on E Street corridor west of 1st Avenue NE (Area 4) in August.
 - B. To help address the consultant team's observations that the Contractor's original schedule may be slipping, SEH created a computer generated sequencing and scheduling plan from the first two schedules submitted by the Contractor, shared them with the Contractor, and discussed with the project team.
 1. With Application for Payment No. 2, SEH implemented the changes/updates the Contractor wanted into an updated sequencing and scheduling plan dated June 13, 2016 and distributed to the project team.
 - a. This has been the process each subsequent month as the project has moved forward.
- III. **External Communications**
 - A. The latest monthly project update construction newsletter to property owners along the project corridor was mailed out July 15th.
 - B. A separate mailing to Area 4 property owners only went out June 24th advising that sewer lining work on E Street is planned to start in the next few weeks.

- C. A separate mailing to Area 1 property owners west of TH 210 off the Pine Shores Road/ Jordan Road loop was mailed out July 15, 2016 advising that the Pine Shores Road access to TH 210 would be closed for 7 – 10 days starting on or around July 18th to facilitate utility construction, and that there will be a posted detour and guide signs.
- D. Project website → <http://www.sehinc.com/online/brd>
 - 1. Has monthly construction project update newsletters, project location map, PMT meeting minutes, City update memos, and basis of design report available for viewing and download.

IV. Overall Schedule

A. Construction

- 1. City Council Award Construction Contract: February 22, 2015
- 2. Notice To Proceed: March 17, 2016
- 3. Preconstruction Conference: April 5, 2016
- 4. Started Construction: April 11, 2016
- 5. Weekly Construction Progress Meetings: Tuesdays at 9:30am, Lum Park (subject to change)
- 6. Contract Construction Substantial Completion Date: October 21, 2016
- 7. Contract Construction Final Completion Date: December 14, 2016

V. Budget Status

A. Construction Contract (low bid Tom's Backhoe Service): \$8,591,721.58

- 1. Applications For Payment
 - a. **Work Through 7/29/16:**
 - (1) **Work Certified (including Materials Stored On-Site): \$3,706,465.71**
 - (2) **Retainage (5%): \$185,323.26**
 - (3) **Total Amount Eligible To Be Paid To Date: \$3,521,141.88**
 - b. **Payment #4 for \$1,430,040.17 is planned for approval by the City Council on 8/15/16.**
- 2. Change Orders:
 - a. Change Order No. 1 for \$9,750 for adding a necessary sewer force main air release manhole at the intersection of 13th Avenue NE and I Street was approved on 5/16/16.
 - b. Change Order No. 2 for -\$775.00 for combination of adding casing lengths in certain areas to avoid existing private utilities and a credit for reducing casing diameters for all 8-inch water main carrier pipe was approved by the city council on 7/5/16.
 - c. **Change Order No. 3 for \$88,037.50 for addressing a boulder obstruction in the Lum Park / TH 210 jack bore steel casing installation by switching installation methods was not accepted by the city council on 7/18/16 and a formal City appeal letter was sent to Tom's Backhoe Service 8/8/16.**
 - (1) **This change order is now in the dispute resolution process outlines in the construction contract.**
 - d. **Change Order No. 4 for \$27,490.00 for removal of buried concrete rubble along TH 210 water main trench through Anderson Brothers Construction's yard was not accepted by the city council on 7/18/16 and a formal City appeal letter was sent to Tom's Backhoe Service 8/8/16.**
 - (1) **This change order is now in the dispute resolution process outlines in the construction contract.**
 - e. **Change Order No. 5 for -\$260,792.93 for eliminating the gravity sewer between manhole SS#10 and Pine Shores Road due to buried concrete rubble making directional drilling infeasible was approved by the city council on 7/18/16.**

- f. A future change order related to extra time spent by the jack/bore subcontractor at the jack bore steel casing installations addressing boulders in casing paths at Lum Park crossings is anticipated.
- B. Consultant budget (construction):
 - 1. Approved construction services contract: \$623,092.00.
 - 2. **Invoiced to date: \$335,566.16.**
 - 3. Scope changes:
 - a. The intensity of construction observation needed to date is higher than assumed for the consultant contract; contractor has been working at times 6 days a week during daylight hours and his schedule appears to be slipping; consultant contract is hourly and will continue to be monitored; a fee amendment request would be brought forward in the future if at such time overall construction observation hours are projected to be exceeded.

Attachment – project location map
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BRAINERD AIRPORT UTILITY EXTENSION

BRAINERD, MINNESOTA

PUBLIC IMPROVEMENT NUMBER 14-15

PLAN REVISION SUMMARY				
1	JLS	01/12/16	ADDENDUM 1 - COMPLETE SET	
2	BDY	03/28/16	ADDENDUM 2 - C63,01P6,01P8,01E16,04C2	
3	BDY	03/28/16	ADDENDUM 3 - C63,004,001,01E13,01E15,001,01C3,01C8,01C13,01C19,04C2	
4	BDY	03/28/16	ADDRESS MOH PLAN REVIEW COMMENTS - 01C5,01C11,01C21,01P2,01P3,02C4,02C5	



Know what's below.
Call before you dig.



CONSTRUCTION DOCUMENTS

PROJECT LOCATION



BRAINERD, MINNESOTA

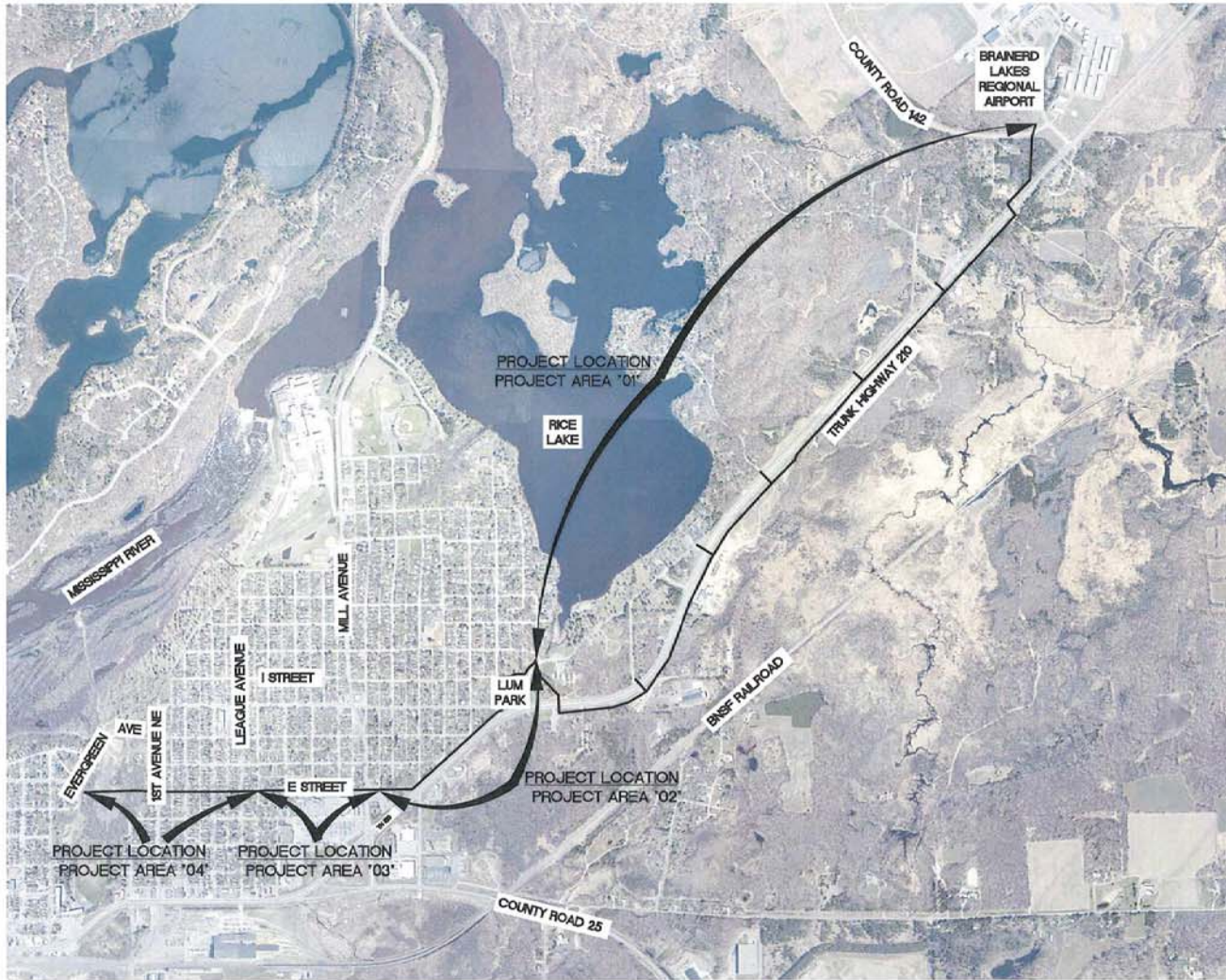
CITY OFFICIALS

MAYOR _____ ED MEWK
 CITY ADMINISTRATOR _____ JIM THOREEN
 CITY COUNCIL _____ SUE HILGART
 ____ MARY KOEP
 ____ CHIP BORKENHAGEN
 ____ DAVID PRITSCHET
 ____ KELLY BEVANS
 ____ GARY SCHEELER
 ____ GABE JOHNSON
 CITY ENGINEER _____ JEFF HULSEATHER
 PUBLIC UTILITIES _____ SCOTT MAGNUSON

APPROVED:
Jeffery M. Hansen 12-21-15
 CITY ENGINEER DATE

Scott D. Hedlund 12-21-15
 PROJECT MANAGER DATE

Don W. Ruse 12-21-15
 PROJECT ENGINEER DATE



NOTE:
 THE SUBSURFACE UTILITY QUALITY INFORMATION IN THIS
 PLAN IS LEVEL D. THIS UTILITY QUALITY LEVEL WAS
 DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE
 38-92 ENTITLED "STANDARD GUIDELINES FOR THE
 COLLECTION AND DEPICTION OF EXISTING SUBSURFACE
 UTILITY DATA."
 THE CONTRACTOR SHALL CALL THE GOPHER STATE ONE
 CALL SYSTEM AT 811 BEFORE COMMENCING EXCAVATION.

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