

**VILLAGE OF LOMBARD  
REQUEST FOR BOARD OF TRUSTEES ACTION**

For Inclusion on Board Agenda

    X     Resolution or Ordinance (Blue)                 Waiver of First Requested  
           Recommendations of Boards, Commissions & Committees (Green)  
           Other Business (Pink)

**TO:** PRESIDENT AND BOARD OF TRUSTEES

**FROM:** Scott Niehaus, Village Manager

**DATE:** September 26, 2018 (COW) (B of T)      **Date:** October 18, 2018

**TITLE:** North Broadway Interim Pump Station and Force Main  
Change Order No. 4 – Final Balancing

**SUBMITTED BY:** Carl Goldsmith, Director of Public Works 

**BACKGROUND/POLICY IMPLICATIONS:**

Final Balance Change Order No. 4 is a net increase of \$67,269.08. The change order represents costs for multiple agreed unit price items (AUP) required during the construction of the pump station and adjustments to contract quantities, based on field measurements.

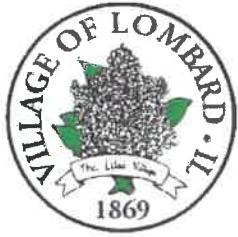
**FISCAL IMPACT/FUNDING SOURCE:**

Project #: SS 15 01  
Budget Amount: \$1,914,700  
Current Contract Amount: \$1,884,610.72  
Change Order #4: \$67,269.08  
Total Revised Contract Amount: \$1,951,879.80  
PO #: 2018-00000373

Review (as necessary):

Village Attorney X \_\_\_\_\_ Date \_\_\_\_\_  
Finance Director X \_\_\_\_\_ Date \_\_\_\_\_  
Village Manager X \_\_\_\_\_ Date \_\_\_\_\_

**NOTE:** All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



## Interoffice Memo

**To:** Scott Niehaus, Village Manager  
**From:** Carl Goldsmith, Director of Public Works  
**Date:** October 3, 2018  
**Subject:** North Broadway Interim Pump Station and Force Main Project  
 Change Order No. 4 – Final

Attached, please find Change Order No. 4 (final) for the North Broadway Interim Pump Station and Force Main Project. The change order is for a net increase of \$67,269.08, which includes multiple AUP and final measured contract quantities, as outlined below:

**AUP #2 – (\$3,501.94)**

AUP #2, which was processed with CO #2, included additional costs for the valve vault: earth retention system (ERS), earthwork, undercuts and stone replacement. The earthwork item was estimated; however, the final measured quantity was less than estimated. This resulted in a **deduct of \$3,501.94**.

**AUP #4 – \$1,866.24**

AUP #4 is for jetting of the force main trench expedite compaction and allow sidewalk installation.

**AUP #5 – \$15,535.80**

AUP #5 is for installation of helical piers at the valve vault. During construction of the valve vault, poor soils were encountered requiring use of piles to support the structure. The use of piles was more cost effective than undercutting and replacing with stone backfill.

**AUP #6 – (\$4,994.71)**

AUP #6 is a credit for re-routing of the 30" force main near the valve vault. Field conditions allowed the change, avoiding the need to lower the force main beneath an existing sewer. This resulted in a **deduct of \$4,994.71**.

**AUP #7 – \$7,500.00**

AUP #7 is for winter protection of concrete. Due to delays in material delivery and issues with the soils at the valve vault, concrete needed to be placed during late fall and winter. Additional protection was required to allow proper curing and prevent damage,

**AUP #8 – \$4,842.80**

AUP #8 is for undercutting and stone backfill for the generator pad and pump control building. As noted above, during construction poor soils were encountered requiring modification to properly support the generator and building.

**AUP #9 – (\$721.00)**

AUP #9 is a credit for Village assistance to clean-up the work area near the Prairie Path and provide detour signage. This resulted in a **deduct of \$721.00**.

**AUP #10 – \$2,221.14**

AUP #10 is for work related to removing an H-pile from the valve vault ERS to allow the force main connection to the valve vault. As noted above, poor soils were encountered during construction of the valve vault. The vault location was shifted slightly to reduce the number of helical piles; however, the revised location impacted the connection location between the force main and vault, relative to the ERS which was already installed.

**AUP #11 – \$6,439.10**

AUP #11 is for cleaning of the existing wet well. The wet well was installed in the early 2000's and over the years silted in. The silt was removed prior to bring the pump station on-line.

**AUP #12 – \$2,758.92**

AUP #12 is for additional dewatering of the wet well due to incorrect manufacturing of the draft tubes. During installation of the draft tubes, it was noted that the size was incorrect and they needed to be corrected. The contractor stopped dewatering while waiting on revisions; however, the delay resulted in the need to pump the wet well down again to protect valve vault while waiting on the draft tubes. This cost is attributable to the manufacturer and will be credited to the Village from Xylem, along with AUPs #22, #23 and #25. The total will be credited against the Village's annual maintenance fee.

**AUP #13 – \$1,955.74**

AUP #13 is for additional traffic control required due to time delays resulting from material delivery and ComEd service installation.

**AUP #14 – \$1,579.44**

AUP #14 is for changes required to the wet well penetrations due to draft tube misalignment resulting from conflicts in draft tube dimensioning and construction sequencing.

**AUP #15 – \$2,055.00**

AUP #15 is for cost difference between a 4' and 6' diameter manhole for air relief valves. CO #1 included an AUP for 4' diameter manholes; however, the air relief valve assembly for the 30" diameter force main was too large to fit in a 4' manhole.

**AUP #16a, b and c – \$9,571.00 (\$3,614 +\$777+\$5,180)**

AUP #16a, #16b and #16c is pavement removal and repair. Heavy equipment usage during construction damaged the pavement along North Broadway, near the intersection of Fairfield, requiring repair. The AUPs are for pavement removal, 6" stone backfill and 4" asphalt binder. The surface course was replaced by the 2018 Asphalt Paving and Patching contractor.

**AUP #17 – \$7,145.64**

AUP #17 is for additional electrical work required for the ComEd electric service drop at the pump station. After the contract was awarded, ComEd provided specific service connection requirements.

**AUP #18 – (\$1,575.00)**

AUP #18 is credit to the Village damage to eight (8) trees during construction. This resulted in a **deduct of \$1,575.00.**

**AUP #19 – \$1,002.26**

AUP #19 is to bring a buried manhole to grade. During pavement work on North Broadway, a buried manhole was found that needed to be provided a frame and brought to grade.

**AUP #21 – \$1,185.35**

AUP #21 is for backfilling sidewalk along Grace Street. As noted in AUP #4, the sidewalk along Grace was jettied to assist with compaction and allow expedited sidewalk installation. In spring, some settlement occurred adjacent to portions of the sidewalk, requiring backfilling.

**AUP #22 – \$2,758.92**

AUP #22 is for supplemental dewatering of the wet well to allow installation after modifications to the draft tubes. As noted in AUP #12 above, this cost is attributable to the manufacturer and will be credited to the Village from Xylem, along with AUPs #12, #23 and #25. The total will be credited again the Village's annual maintenance fee.

**AUP #23 – \$2,725.62**

AUP #23 is for additional time/cost for loading and unloading of the draft tubes for modifications resulting from incorrect manufacturing. This cost is attributable to the manufacturer and will be credited to the Village from Xylem, along with AUPs #12, #22 and #25. The total will be credited again the Village's annual maintenance fee.

**AUP #24 – \$7,068.16**

AUP #24 is for installation of air-vacuum valves to address noise (whistling) resulting from differential pressure in the draft tube during operation.

**AUP #25 – \$643.76**

AUP #25 is for installation of a safety grate at one of the access hatches. During shipping, one of the Village procured safety grates was not included. The manufacturer needed to ship the hatch after the fact and the contractor come back out and install. This cost is attributable to the manufacturer and will be credited to the Village from Xylem, along with AUPs #12, #22 and #23. The total will be credited again the Village's annual maintenance fee.

This change order will be presented to the Public Works Committee on October 9, 2018. If the Committee recommends approval, please present this change order to the President and Board of Trustees for their review and approval at their regular meeting on October 18, 2018. If approved, please have one signed original document sent to records and the other signed original document returned to Engineering for further processing.

**RESOLUTION**  
**R \_\_\_\_\_**

**A RESOLUTION AUTHORIZING A CHANGE ORDER**  
**INVOLVING AN INCREASE/DECREASE IN THE DOLLAR AMOUNT OF**  
**THE CONTRACT OF \$10,000 OR MORE AND/OR EXTENDING/ SHORTENING THE**  
**TIME IN WHICH THE CONTRACT IS TO BE COMPLETED BY THIRTY (30) DAYS**  
**OR MORE**

**WHEREAS**, pursuant to Illinois Compiled Statutes, Chapter 720, Section 5/33E-9, units of local government are required to make specific findings prior to authorizing any change order relative to a contract which would increase or decrease the dollar amount of the contract by \$10,000 or more, or would extend or shorten the time in which the contract is to be completed by thirty (30) days or more; and

**WHEREAS**, staff has presented and recommended the proposed Change Order No.4 to the contract between the Village of Lombard and the Glenbrook Excavating & Concrete, Inc. regarding the North Broadway Interim Pump Station and Force Main, as attached hereto as Exhibit "A" and made part hereof, (the "Change Order") to the Corporate Authorities of the Village of Lombard; and

**WHEREAS**, said Change Order attached hereto as Exhibit "A" would increase the dollar amount of the contract by \$67,269.08.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

**SECTION 1:** That after reviewing the explanation of staff as to the necessity of and reasons for the Change Order attached hereto as Exhibit "A", the President and Board of Trustees find as follows:

- A That the circumstances which necessitated said Change Order were not reasonably foreseeable at the time the contract was entered into.
- B. That the basis of the Change Order was not within the contemplation of the contract when the contract was signed.
- C. That it is in the best interests of the Village of Lombard to approve the Change Order in its proposed form.
- D. That to the extent that it may have been necessary to go to bid relative to the work contemplated by said Change Order; bidding is hereby specifically waived as to the Change Order work.

**SECTION 2:** That having made the findings set forth in Section 1 above, the President and Board of Trustees hereby approve the Change Order attached hereto as Exhibit "A", and

direct and authorize the Village President and Village Clerk to execute said Change Order on behalf of the Village.

Adopted this 18<sup>th</sup> day of October, 2018, pursuant to a roll call vote as follows:

Ayes: \_\_\_\_\_

Nays: \_\_\_\_\_

Absent: \_\_\_\_\_

Approved by me this 18<sup>th</sup> day of October, 2018.

\_\_\_\_\_  
**Keith Giagnorio**  
**Village President**

ATTEST:

\_\_\_\_\_  
**Sharon Kuderna**  
**Village Clerk**



| No.     | Item   | Current Quantity | Unit  | Unit Price   | Revised Quantity | Difference | Amount       | Description   |
|---------|--|------------------|-------|--------------|------------------|------------|--------------|---|
| AUP #2  | ERS Revision and Undercut at Valve Vault                         | 1                | L SUM | \$154,742.59 | 0.977            | (0.023)    | (\$3,501.94) | Adjustment to ERS modification proposal based on actual earth excavation quantities                 |
| AUP #4  | Jetting of Sidewalks on Grace St.                                | 0                | L SUM | \$1,866.24   | 1.00             | 1.0        | \$1,866.24   | Jetting of Sidewalks on Grace St. to expedite compaction and allow for sidewalk installation        |
| AUP #5  | Installing 4 helical piers at Valve Vault                        | 0                | L SUM | \$15,535.80  | 1.00             | 1.0        | \$15,535.80  | Poor soils encountered, piers necessary for support   |
| AUP #6  | Rerouting of 30" FM around structure and over 48" sewer          | 0                | L SUM | (4,994.71)   | 1.00             | 1.0        | (\$4,994.71) | Change in routing based on field conditions - credit  |
| AUP #7  | Winter protection of concrete                                    | 0                | L SUM | \$7,500.00   | 1.00             | 1.0        | \$7,500.00   | Delays from field conditions and materials pushed construction in winter                            |
| AUP #8  | Undercuts at Generator and Control Building foundations          | 0                | L SUM | \$ 4,842.80  | 1.00             | 1.0        | \$4,842.80   | Poor soils encountered, undercut necessary for support  |
| AUP #9  | Clean-up and detours signs at Prairie Path                       | 0                | L SUM | (721.00)     | 1.00             | 1.0        | (\$721.00)   | Village addressed safety issues for contractor - credit   |
| AUP #10 | Removal of H-pile to install 30" force main                      | 0                | L SUM | \$ 2,221.14  | 1.00             | 1.0        | \$2,221.14   | Moved valve vault to the south due to poor soils. Caused misalignment between ERS piling and 30" FM |
| AUP #11 | Cleaning wet well  | 0                | L SUM | \$ 6,439.10  | 1.00             | 1.0        | \$6,439.10   | Debris and sediment removed from well constructed early 2000's                                      |
| AUP #12 | Supplemental dewatering for valve vault due to draft tube issues | 0                | L SUM | \$ 2,758.92  | 1.00             | 1.0        | \$2,758.92   | Draft tube size issues, stopped work. Needed to come back later and pump to install VV link seals   |
| AUP #13 | Traffic control  | 0                | L SUM | \$ 1,955.74  | 1.00             | 1.0        | \$1,955.74   | Due to project delays, additional traffic control was necessary                                     |



|                      |  |   |       |             |        |       |                    |   |
|----------------------|--|---|-------|-------------|--------|-------|--------------------|---|
| AUP #14              | Wet well modifications for draft tube misalignment | 0 | L SUM | \$ 1,579.44 | 1.00   | 1.0   | \$1,579.44         | Changes to draft tube penetrations in wall due to dimensioning conflict and construction sequencing |
| AUP #15              | Difference between 4' and 6' air release MH        | 0 | L SUM | \$ 2,055.00 | 1.00   | 1.0   | \$2,055.00         | Needed to increase vault size to accommodate air release valve and 30" FM                           |
| AUP #16a             | Remove 13" HMA to subgrade                         | 0 | SY    | \$ 26.00    | 139.00 | 139.0 | \$3,614.00         | During construction pavement failed adjacent to work area and needed replacement                    |
| AUP #16b             | Install 4" compacted CA-6 subbase                  | 0 | SY    | \$ 21.00    | 37.00  | 37.0  | \$777.00           | During construction pavement failed adjacent to work area and needed replacement                    |
| AUP #16c             | Install 7" N-50 binder                             | 0 | SY    | \$ 35.00    | 148.00 | 148.0 | \$5,180.00         | During construction pavement failed adjacent to work area and needed replacement                    |
| AUP #17              | Revisions to ComEd electrical service              | 0 | L SUM | \$ 7,145.64 | 1.00   | 1.0   | \$7,145.64         | Revisions to ComEd electrical service   |
| AUP #18              | Damage to trees                                    | 0 | L SUM | (1,575.00)  | 1.00   | 1.0   | (\$1,575.00)       | During construction, stockpile of materials impacted trees - credit                                 |
| AUP #19              | Bring MH to grade on N. Broadway                   | 0 | L SUM | \$ 1,002.26 | 1.00   | 1.0   | \$1,002.26         | During roadway repairs uncovered buried structure   |
| AUP #21              | Backfilling sidewalk on Grace                      | 0 | L SUM | \$ 1,185.35 | 1.00   | 1.0   | \$1,185.35         | Address settlement adjacent o walk after sidewalk construction                                      |
| AUP #22              | Wet well dewatering - draft tube rework            | 0 | L SUM | \$ 2,758.92 | 1.00   | 1.0   | \$2,758.92         | Draft tube sizing incorrect (corrected by manufacturer) , required additional work                  |
| AUP #23              | Unloading & loading draft tubes (rework)           | 0 | L SUM | \$ 2,725.62 | 1.00   | 1.0   | \$2,725.62         | Draft tube sizing incorrect (corrected by manufacturer) , required additional work                  |
| AUP #24              | Install air-vac valves on draft tubes              | 0 | EA    | \$ 7,068.16 | 1.00   | 1.0   | \$7,068.16         | Air-vacuum valves needed to address pressure changes and whistling during operation of PS           |
| AUP #25              | Safety grate installation                          | 0 | EA    | \$ 643.76   | 1.00   | 1.0   | \$643.76           | One of the hatches shipped without safety grate, installed after main work completed at PS          |
| <b>TOTAL AMOUNT=</b> |  |   |       |             |        |       | <b>\$68,062.24</b> |   |

N. Broadway Interim PS and Force Main  
- Quantity Adjustment  
4 - FINAL  
Change Order #:

| No. | Item   | Current Quantity | Unit  | Unit Price  | Revised Quantity | Difference | Amount       |
|-----|--|------------------|-------|-------------|------------------|------------|--------------|
| 8   | TREE PROTECTION FENCE  | 17.00            | FOOT  | \$ 10.00    | 0.00             | -17.00     | -\$170.00    |
| 9   | PAVEMENT REMOVAL, 14"  | 195.00           | SQ YD | \$ 20.00    | 122.40           | -72.60     | -\$1,452.00  |
| 10  | DRIVEWAY CONCRETE REMOVAL  | 70.00            | SQ YD | \$ 15.00    | 87.33            | 17.33      | \$259.95     |
| 11  | DRIVEWAY HMA REMOVAL   | 68.00            | SQ YD | \$ 14.00    | 38.38            | -29.62     | -\$414.68    |
| 12  | PCC SIDEWALK REMOVAL   | 2500.00          | SQ FT | \$ 2.00     | 2640.50          | 140.50     | \$281.00     |
| 13  | HMA SIDEWALK REMOVAL   | 115.00           | SQ FT | \$ 2.00     | 110.00           | -5.00      | -\$10.00     |
| 14  | SAW CUT AND REMOVAL OF CURB AND GUTTER (REGULAR AND DEPRESSED)               | 295.00           | FOOT  | \$ 6.50     | 643.00           | 348.00     | \$2,262.00   |
| 18  | CLASS D, TYPE 2 PATCH FOR HMA BINDER COURSE, 7 1/2"                          | 140.00           | SQ YD | \$80.00     | 51.03            | -88.97     | -\$7,117.60  |
| 19  | CLASS D, TYPE 2 PATCH FOR HMA SURFACE, 1 1/2"                                | 150.00           | SQ YD | \$22.00     | 0.00             | -150.00    | -\$3,300.00  |
| 20  | DRIVEWAY CONCRETE PAVEMENT, 6" THICK   | 63.00            | SQ YD | \$70.00     | 125.71           | 62.71      | \$4,389.70   |
| 21  | HOT-MIX ASPHALT DRIVEWAY PAVEMENT - RESIDENTIAL                              | 65.00            | SQ YD | \$40.00     | 90.64            | 25.64      | \$1,025.60   |
| 22  | PCC PAVEMENT, 7"   | 40.00            | SQ YD | \$ 90.00    | 28.40            | -11.60     | -\$1,044.00  |
| 23  | PCC SIDEWALK REPLACEMENT   | 2619.00          | SQ FT | \$ 6.50     | 2640.50          | 21.50      | \$139.75     |
| 24  | DETECTABLE WARNING (PLASTIC)   | 176.00           | SQ FT | \$ 40.00    | 70.00            | -106.00    | -\$4,240.00  |
| 25  | PAINT PAVEMENT MARKING- LINE, 4", (WHITE)                                    | 60.00            | LF    | \$ 12.50    | 0.00             | -60.00     | -\$750.00    |
| 26  | PAINT PAVEMENT MARKING- LINE, 24", (WHITE)                                   | 12.00            | LF    | \$ 62.50    | 0.00             | -12.00     | -\$750.00    |
| 27  | CONCRETE CURB AND GUTTER   | 280.00           | FOOT  | \$ 35.00    | 628.00           | 348.00     | \$12,180.00  |
| 28  | REMOVAL AND REPLACEMENT OF WATER SERVICE LINE (EACH CROSSING 30" PIPE)       | 7.00             | EACH  | \$ 2,000.00 | 2.00             | -5.00      | -\$10,000.00 |
| 31  | 12" RCP, CLASS IV  | 10.00            | LF    | \$65.00     | 4.00             | -6.00      | -\$390.00    |
| 32  | 30" DIP CL 52 FORCE MAIN INCLUDING FITTINGS W/ POLYWRAP (OUTSIDE STRUCTURES) | 1310.00          | FOOT  | \$245.00    | 1279.50          | -30.50     | -\$7,472.50  |
| 40  | EARTHWORK WITHIN EARTH RETAINMENT SYSTEM AREA AT PUMP STATION SITE           | 950.00           | CU YD | \$58.00     | 976.90           | 26.90      | \$1,560.20   |
| 43  | TRENCH BACKFILL, CRUSHED LIMESTONE, CA-7                                     | 207.00           | CU YD | \$50.00     | 214.50           | 7.50       | \$375.00     |
| 55  | BOLLARD  | 8.00             | EACH  | \$500.00    | 3.00             | -5.00      | -\$2,500.00  |
| 56  | 4' HIGH ORANGE CONSTRUCTION FENCE  | 450.00           | FOOT  | \$3.00      | 254.00           | -196.00    | -\$588.00    |
| 57  | SILT FENCE   | 695.00           | FOOT  | \$3.00      | 400.00           | -295.00    | -\$885.00    |
| 59  | TOPSOIL, FURNISH AND PLACE, 4"   | 2000.00          | SQ YD | \$7.85      | 4082.28          | 2082.28    | \$16,345.90  |
| 60  | FERTILIZER, SEEDING, CLASS 1A AND BLANKET                                    | 2000.00          | SQ YD | \$3.30      | 4082.28          | 2082.28    | \$6,871.52   |
| 65  | DUST CONTROL WATER   | 8.00             | UNIT  | \$100.00    | 4.00             | -4.00      | -\$400.00    |
| 68  | SANITARY SERVICE AND CLEANOUTS   | 8.00             | EACH  | \$1,000.00  | 3.00             | -5.00      | -\$5,000.00  |

Change Order #4

**(\$793.16)**