

City of Lake City
Missaukee County, Michigan

PROJ #2018740001.02

ADDENDUM #1

DATE: 7/30/2108

NOTICE: This Addendum No. 1, issued in accordance with the Contract Documents, is incorporated into the Contract Documents and supersedes and updates all conflicting information and is hereby amended in certain particulars as follows:

Date: July 30, 2018

CHANGES TO THE CONTRACT DOCUMENTS:

1. Please find the updated bid schedule attached.
 - a. Item No. 5, Crush, Stockpile, & Reuse as Agg Base.
 - b. Item No. 17, redefined as remove and replace stamped sidewalk.
 - c. Item No. 22, quantity reduced.
 - d. Item No. 23, remove and replaced with 6" InstaValve
2. Please find the updated Section 01025 Measurement and Payment attached.
 - a. Item No. 5, Clarify reuse of material, Additional MDOT 22A incidental
 - b. Item No. 17, redefined as remove and replace stamped sidewalk.
 - c. Item No. 22, quantity reduced to 12" shoulder gravel, changed to MDOT 22A
 - d. Item No. 23, remove and replace with 6" InstaValve
3. Section 02546 – AGGREGATE SURFACES Paragraph 2.01 MATERIALS replace "MDOT 21AA Aggregate" with "MDOT 22A Aggregate".
4. Replace Appendix A MDEQ Permit application with the attached MDEQ permit.

CHANGES TO THE PLANS:

1. Revised Plan sheet 3
 - a. Changed connection to existing on Main street
 - b. Use 6" insta-valve instead of tapping, sleeve/valve at Main Street
 - c. Added dig up and verify note 14. This applies to all sheets.

RESPONSE TO CONTRACTOR QUESTIONS:

1. The audio-video route survey is required for this project
2. The crush and stockpile existing bituminous pavement pay item should be crushed and stockpiled pavement to be reused as aggregate base. Any additional aggregate needed to meet the aggregate depth under the pavement is incidental to the crush stockpile, and reuse pay item.
3. Pavement markings are replacing parking space dividers along the road and any other lines that are present, if any.
4. Bid on paving as specified. Alternates are not being considered at this time.
5. Existing hydrant at Main/John will be replaced. It cannot be repaired.
6. No soil borings were performed. Ray Vasser indicated from experience in that area there will likely be clay and most likely dry. However, each contractor shall make their own determination and bid per the contract documents.
7. Walk through declined by all contractors present at the pre-bid meeting.
8. The main under the highway is believed to be ductile (but not guaranteed).
9. Soil Erosion Permit contact is Kate. She can be reached at 231-839-2890.

Addendum #1
City of Lake City
7/30/2018

10. The existing invert elevations on the storm sewer are provided on sheet 2.
11. It is the intent of the City to award the bid to the chosen contractor at the next board meeting August 13, assuming everything checks out and all required documentation is in place.
12. No engineer's estimate is available for this project.
13. One contractor expressed concerns about tapping cast iron pipe. Bid as is.

ADDENDUM ACKNOWLEDGMENT:

This Addendum No. 1 shall be attached to and shall become a part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may result in the rejection of the Bid.

END SECTION

DISTRIBUTION: (via email)

All Plan Holders
File

BID SCHEDULE

I. BASE BID - JOHN ST. WATER MAIN REPLACEMENT

Item		Estimated		Unit Price	Amount
No.	Item Description	Quantity	Unit		
1	Mobilization	1	LS		
2	Audio - Video Route Survey	1	LS		
3	Traffic Control	1	LS		
4	Soil Erosion and Sediment Control	1	LS		
5	Crush, Stockpile, & Reuse Existing Bituminous Pavement	5,100	SYD		
6	Curb and Gutter Removal	60	FT		
7	6" Watermain	628	FT		
8	4" Tapping Sleeve & Valve	2	EA		
9	6" Tapping Sleeve & Valve	3	EA		
10	6" Gate Valve & Box	1	EA		
11	1" Water Service Connect to Curb Stop	14	EA		
12	Hydrant Assembly	2	EA		
13	Connect to Existing Watermains & Abandon Existing	6	EA		
14	Salvage Existing Hydrant Assembly	1	EA		
15	Storm Sewer Manholes/Catchbasins (3' Diameter)	6	EA		
16	Storm Sewer 12" Class IV RCP	307	FT		
17	Remove and Replace stamped concrete	200	SFT		
18	Remove and Replace Concrete Sidewalk, 4" thick	1,075	SFT		
19	Remove and Replace Concrete Sidewalk, 6" thick	900	SFT		
20	Concrete Curb and Gutter, F4	30	FT		
21	Concrete Curb and Gutter, B2	28	FT		
22	22A Aggregate Base, 6 inch	239	SYD		
23	6" InstaValve	1	EA		
24	LSVP Typical Pavement Restoration	815	TON		
25	4E3 MDOT Pavement Restoration	32	TON		
26	Pavement Markings	1	LS		
27	Restoration	1	LS		
TOTAL - BASE BID					

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SUMMARY

- A. Refer to Article 14 of the General Conditions.
- B. Bid price includes all labor, tools, equipment, materials, transportation, and applicable fees, use tax, and sales tax necessary to complete the work in accordance with the Plans and Specifications.
- C. All measurement and payment will be based on completed work, ready for use, performed in strict accordance with the Plans and Specifications.
- D. Bid quantities listed in the Bid Schedule have been estimated and are only for the purpose of comparing, on a uniform basis, the Bids offered for the Work. Completed quantities for payment will be based on field measurements.
- E. Neither the Owner nor his agents shall be held responsible should any of the estimated quantities be found incorrect.
- F. Payment will be made only on items listed in the BID SCHEDULE. All other work not listed in the BID SCHEDULE shall be considered incidental to the performance of the Work.
- G. Owner reserves the right to delete any line item or quantity on the BID SCHEDULE.

1.02 APPLICATION FOR PAYMENT

- A. Pay period: 30 days.
- B. Payment requests shall be submitted on the forms included in the Specifications.

1.03 SUBMITTALS

- A. Submit Conditional Partial Waiver of Lien with each application for payment request, as specified in the General Conditions paragraph 14.2.
- B. Submit a schedule of values in accordance with Section 01300 for all Lump Sum Bids items.
- C. Prior to the first partial payment, submit a construction progress schedule in accordance with Section 2 of the General Conditions.

1.04 ITEMS OF THE BID FORM

Measurement and Payment for the Pay Items listed on the Bid Schedule shall be as follows:

- A. Item No. 1 Mobilization
 - 1. Payment includes obtaining bond, preparatory work and operation, for the movement of personnel, equipment, supplies, and incidentals to the project site; establishment of a project office and other facilities needed to undertake the Work.
 - 2. Unit of measure: Lump Sum.

- B. Item No. 2 Audio Visual Route Survey
1. Payment includes two copies of an audio-video recording (DVD or USB drive) of the proposed site construction area submitted to Engineer for review prior to the preconstruction meeting. Any video coverage not acceptable to the Owner shall be redone at no additional charge. No materials or equipment are to be on the construction site prior to review and approval of the audio-video recording.
 2. Unit of measure: Lump Sum
- C. Item No. 3 Traffic Control
1. Payment includes furnishing and operating all barricades, signing, detour routes, flagmen, fencing, warning devices and other materials and equipment to control traffic and safeguard the work site.
 2. Unit of measure: Lump Sum.
- D. Item No. 4 Soil Erosion and Sedimentation Control
1. Payment includes obtaining soil erosion permit, installation, monitoring, cleaning and replacement as required of inlet filters or approved protection measures at all storm water collection structures throughout the construction area. Other measures as required to prevent sand and sediment from entering open drains, ditches, culverts and discharging to adjacent lakes and all other needed work as stated in Section 2071 or as required by soil erosion permit or as directed by the engineer.
 2. Unit of Measure: Lump Sum.
- E. Item No. 5 Crush, Stockpile, and Reuse Existing Bituminous Pavement
1. Payment includes crushing and salvaging pavement, stockpiling, shape and reuse as shown to limits shown on the drawing. Any additional make up material to reach required thickness shall be MDOT 22A and be considered incidental.
 2. Unit of measure: Square yard of pavement crushed, based on existing pavement width shown on plans.
- F. Item No. 6 Curb and Gutter Removal
1. Payment includes saw cutting and removal of curb and gutter as required or as shown on plans, disposal of removed material and traffic control.
 2. Unit of measure: Lineal foot removed.
- G. Item No. 7 Water Main
1. Payment includes all labor necessary for proper installation of the watermain including but not limited to dewatering if necessary, piping, fittings, joint restraints, bedding, backfill, fill materials, thrust blocks, locators, flushing and testing.
 2. Unit of measure: Lineal foot installed, measured along center of pipe from center of fitting to center of fitting for each size and material of pipe listed in the Bid Schedule.
- H. Item Nos. 8 & 9 Tapping Sleeve & Valve
1. Payment includes installation, tapping sleeve, tapping valve, valve box with lid, piping, fittings and tapping the water main.
 2. Unit of measure: Each tapping sleeve and valve installed for each size listed in the Bid Schedule.
- I. Item Nos. 10 Gate Valve & Box
1. Payment includes furnishing and installation of valve, valve box with lid, restraints, and testing.
 2. Unit of measure: Each valve installed for each size listed in the Bid Schedule.
- J. Item No. 11 Replacement of Existing Water Services
1. Payment includes installation, (either open cut or directional bore) excavation, compaction, trimming, corporation stop, piping, fittings, flushing, disinfection, adapter if

necessary, and connection to service line. New service line shall be 1" unless otherwise noted. New and replacement work will be limited to the ROW area and six- (6) feet from the ROW line. Service replacement near sidewalks should include no more than three - (3) sidewalk squares being disturbed.

2. Unit of measure: Each water service installed or replaced for each size and length listed in the Bid Schedule.
- K. Item No. 12 Hydrant Assembly
1. Payment includes installation of hydrant including snow barrel, shut off valve, valve box with lid, tee, piping from main to hydrant, and pipe restraints as shown on plans.
 2. Unit of measure: Each hydrant assembly installed.
- L. Item No. 13 Connect to Existing Water Mains & Abandon Existing
1. Payment includes making connection, plugging existing main, remove existing valve (valve housing, assembly, box and lid) delivery of valves to City DPW or disposal, fittings, joint restraints, bedding, backfill, fill materials, thrust blocks, locators, flushing, testing and material removal and all other needed work as stated in Section 02660 or as directed by the engineer.
 2. Unit of measure: Each.
- M. Item No. 14 Salvage Existing Hydrant Assembly
1. Payment includes removal of existing hydrants, delivery of hydrants to City DPW or disposal.
 2. Unit of measure: Each.
- N. Item No. 15 Remove and Replace Storm Sewer Manholes/Catchbasin
1. Payment includes installation, excavation, compaction, storm sewer manhole/catch basin, frame & casting, cleaning, backfill new storm sewer manhole/catch basin as well as cutting/removing existing structure, connection of existing piping, and disposing of materials as required. Location of new structures to be coordinated with the Owner.
 2. Unit of measure: Each structure listed in the Bid Schedule.
- O. Item No. 16 Remove and Replace Storm Sewer
1. Payment includes installation, excavation, compaction, piping, fittings, cleaning, backfill new storm sewer as well as cutting existing pipe, installing plugs to existing, connection to existing, and removing and disposing of materials as required.
 2. Unit of measure: Lineal foot installed, measured along center of pipe from end to end for each size and material of pipe listed in the Bid Schedule.
- P. Item No. 17 Remove and Replace Stamped Sidewalk
1. Payment includes removal of existing sidewalk, preparation of base, base material, placement of aggregate, compaction, placement of stamped concrete, finishing, and testing. Area to be no larger than shown on plan without approval by engineer.
 2. Unit of measure: Square Foot of sidewalk pavers measured in place.
- Q. Item No. 18 & 19 Remove and Replace Concrete Sidewalk
1. Payment includes removal of existing (no more than three continuous sections for each service or hydrant), preparation of base, base material, placement of aggregate, compaction, reinforcement, placement of concrete, finishing, and testing.
 2. Unit of measure: Square Foot of concrete surface measured in place.
- R. Item Nos. 20 & 21 Concrete Curb and Gutter
1. Payment includes placement of curb and gutter as required or as shown on plans, preparation of base, base material, placement of concrete curb and gutter to match existing, traffic control and testing.

2. Unit of measure: Lineal foot installed for each type of curb and gutter listed in the Bid Schedule.
- S. Items Nos. 22 Aggregate Base Course
1. Payment includes preparation of subbase, placement of salvaged crushed material, furnishing and placement of MDOT 22A aggregate as needed, compaction, traffic control and testing.
 2. Unit of measure: Square yard measured in place.
- T. Item No. 23 Six Inch (6") InstaValve
1. Payment includes installation, InstaValve, valve box with lid, piping, fittings, restraints, as required.
 2. Unit of measure: Each InstaValve installed for each size listed in the Bid Schedule.
- U. Item Nos. 24 & 25 Bituminous Pavement Restoration
1. Payment includes saw cutting and removal of existing, aggregate base, placement and preparation of base, bituminous material, placement of pavement, and testing.
 2. Unit of measure: Tons of asphalt measured in place to the limits as shown on Drawings, for the type of bituminous restoration listed in the Bid Schedule as defined within the Specifications.
- V. Item No. 26 Pavement Markings
1. Payment includes identifying and replacing pavement markings in kind where the removal of the existing roadway or other construction related activities have eliminated or compromised the markings.
 2. Unit of measure: Lump Sum
- W. Item No. 27 Restoration
1. Payment includes providing, placing and grading topsoil, providing and placing seed, fertilizer, and mulch, finish raking and restoration of all areas disturbed by construction activities.
 2. Unit of measure: Lump Sum

END OF SECTION

PERMIT APPLICATION FOR WATER SUPPLY SYSTEMS
(CONSTRUCTION - ALTERATION - ADDITION OR IMPROVEMENT) AS DESCRIBED HEREIN
Required under the Authority of 1976 PA 399, as amended

This application becomes an Act 399 Permit only when signed and issued by authorized Michigan Department of Environmental Quality (DEQ) Staff. See instructions below for completion of this application.

1. Municipality or Organization, Address and WSSN that will own or control the water facilities to be constructed. This permit is to be issued to: City of Lake City 115 West John Street P.O. Box 1 Lake City, MI 49651 WSSN: 3700	Permit Stamp Area (DEQ use only) <div style="text-align: center;"> MICH DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT NO. W 187027 JUL 13 2010 EXAMINED AND APPROVED FOR COMPLIANCE WITH ACT 399, P.A. 1976 <i>PM</i> </div>	
2. Owner's Contact Person (provide name for questions): Contact: Ray Vasser Title: Public Works Phone: 231-839-4561		
3. Project Name (Provide phase number if project is segmented): John Street Watermain Replacement	4. Project Location (City, Village, Township): Lake City	5. County (location of project): Missaukee

ISSUED UNDER THE AUTHORITY OF THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENT QUALITY

cc: *D. GREEN GRAHAM, PE*
Costing Control

Issued by: *Brian E. [Signature]*

Reviewed by: *[Signature]*

☒ **If this box is marked see attached special conditions.**

Instructions: Complete items 1 through 5 above and 6 through 21 on the following pages of this application. Print or type all information except for signatures. Mail completed application, plans and specifications, and any attachments to the DEQ District Office having jurisdiction in the area of the proposed construction.

Please Note:

- This **PERMIT** only authorizes the construction, alteration, addition or improvement of the water system described herein and is issued solely under the authority of 1976 PA 399, as amended.
- The issuance of this **PERMIT** does not authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other DEQ permits, or approvals from other units of government as may be required by law.
- This **PERMIT** expires two (2) years after the date of issuance in accordance with R 325.11306, 1976 PA 399, administrative rules, unless construction has been initiated prior to expiration.
- Noncompliance with the conditions of this permit and the requirements of the Act constitutes a violation of the Act.
- Applicant must give notice to public utilities in accordance with 1974 PA 53, (MISS DIG), being Section 460.701 to 460.718 of the Michigan Compiled Laws, and comply with each of the requirements of that Act.
- All earth changing activities must be conducted in accordance with the requirements of the Soil Erosion and Sedimentation Control Act, Part 91, 1994 PA 451, as amended.
- All construction activity impacting wetlands must be conducted in accordance with the Wetland Protection Act, Part 303, 1994 PA 451, as amended.
- Intentionally providing false information in this application constitutes fraud which is punishable by fine and/or imprisonment.
- Where applicable for water withdrawals, the issuance of this permit indicates compliance with the requirements of Part 327 of Act 451, Great Lakes Preservation Act.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit Application for Water Systems (Continued)

6. **Facilities Description** – In the space below provide a detailed description of the proposed project. Applications without adequate facilities descriptions will be returned. SEE EXAMPLES BELOW. Use additional sheets if needed.

47 linear feet of 6-inch PVC on John Street between Main Street and Canal Street

581 linear feet of 6-inch PVC on John Street from Gladwin Street to Houghton Street.

In addition to the installation of new watermain, the work also includes fire hydrant replacement, and provide new services along John Street from Main Street to Houghton Street. There is also some repair to the existing stormwater piping.

EXAMPLES – EXAMPLES – EXAMPLES – EXAMPLES – EXAMPLES – EXAMPLES

Water Mains	500 feet of 8-inch water main in First Street from Main Street north to State Street. OR 250 feet of 12-inch water main in Clark Road from an existing 8-inch main in Third Avenue north to a hydrant.
Booster Stations	A booster station located at the southwest corner of Third Avenue and Main Street, and equipped with two, 15 Hp pumps each rated 150 gpm @ 200 feet TDH. Station includes backup power and all other equipment as required for proper operation.
Elevated Storage Tank	A 300,000 gallon elevated storage tank located in City Park. The proposed tank shall be spherical, all welded construction and supported on a single pedestal. The tank shall be 150 feet in height, 40 feet in diameter with a normal operating range of 130 – 145 feet. The interior coating system shall be ANSI/NSF Standard 61 approved or equivalent. The tank will be equipped with a cathodic protection system, and includes a tank level control system with telemetry.
Chemical Feed	A positive displacement chemical feed pump, rated at 24 gpd @ 110 psi to apply a chlorine solution for Well No. 1. Chlorine is 12.5% NaOCL, ANSI/NSF Standard 60 approved and will be applied at a rate of 1.0 mg/l of actual chlorine.
Water Supply Well	Well No. 3, a 200 foot deep well with 170 feet of 8-inch casing and 30 feet of 8-inch, 10 slot screen. The well will be equipped with a 20 Hp submersible pump and motor rated 200 gpm @ 225 feet TDH, set at 160 feet below land surface.
Treatment Facilities	A 5 million gpd water treatment plant located at the north end of Second Avenue. The facility will include 6 low service pumps, 2 rapid mix basins, 4 flocculation/sedimentation basins, 8 dual media filters, 3 million gallon water storage reservoir and 6 high service pumps. Also included are chemical feed pumps and related appurtenances for the addition of alum, fluoride, phosphate and chlorine.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit Application for Water Systems (Continued)

General Project Information – Complete all boxes below.

7. Design engineer's name, engineering firm, address, phone number, and email address:

Daren Graham, P.E.
Gosling Czubak Engineering Sciences, Inc.
1280 Business Park Drive
Traverse City, MI 49686
231-947-8568 email:dpgraham@goslingczubak.com

8. Indicate who will provide project construction inspection:

- ☒ Organization listed in Box 1.
☐ Engineering firm listed in Box 7.
☐ Other - name, address, and phone number listed below.

9. Is a basis of design attached?

☐ YES ☒ NO

If no, briefly explain why a basis of design is not needed. replacement of existing 4" watermain to 6" watermain

10. Are sealed and signed engineering plans attached?

☒ YES ☐ NO

If no, briefly explain why engineering plans are not needed.

11. Are sealed and signed construction specifications attached?

☒ YES ☐ NO

If specifications are not attached, they need to be on file at DEQ.

12. Were Recommended Standards for Water Works, Suggested Practice for Water Works, AWWA guidelines, and the requirements of Act 399 and its administrative rules followed?

☒ YES ☐ NO

If no, explain which deviations were made and why.

13. Are all coatings, chemical additives and construction materials ANSI/NSF or other adequate 3rd party approved?

☒ YES ☐ NO

If no, describe what coatings, additives or materials did not meet the applicable standard and why.

14. Are all water system facilities being installed in the public right-of-way or a dedicated utility easement?
(For projects not located in the public right-of-way, utility easements must be shown on the plans.)

☒ YES ☐ NO

If no, explain how access will be obtained.

15. Is the project construction activity within a wetland (as defined by Section 324.30301(d)) of Part 303, 1994 PA 451?

☐ YES ☒ NO

If yes, a wetland permit must be obtained.

16. Is the project construction activity within a 100-year floodplain (as defined by R 323.1311(e)) of Part 31, 1994 PA 451, administrative rules?

☐ YES ☒ NO

If yes, a flood plain permit must be obtained.

17. Is the project construction activity within 500 feet of a lake, reservoir, or stream?

☒ YES ☐ NO

If yes, a Soil and Erosion Control Permit must be obtained or indicate if the owner listed in box 2 of this application is an Authorized Public Agency (Section 10 of Part 91, 1994 PA 451) ☐ Owner is APA.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit Application for Water Systems (Continued)

18. Will the proposed construction activity be part of a project involving the disturbance of five (5) or more acres of land?
☐ YES ☒ NO

If yes, is this activity regulated by the National Pollutant Discharge Elimination System storm water regulations?

☐ YES: NPDES Authorization to discharge storm water from construction activities must be obtained.

☐ NO: Describe why activity is not regulated:

Please call 517-241-8993 with questions regarding the applicability of the storm water regulations.

19. Is the project in or adjacent to a site of suspected or known soil or groundwater contamination?

☐ YES ☒ NO

If yes, attach a copy of a plan acceptable to the DEQ for handling contaminated soils and/or groundwater disturbed during construction. Contact the local DEQ district office for listings of Michigan sites of environmental contamination.

20. IF YOU ARE A CUSTOMER/WHOLESALE/BULK PURCHASER, COMPLETE THE FOLLOWING

1) Name and WSSN of source water supply system (seller) _____

2) Does the water service contract require water producer/seller to review and approve customer/wholesale/bulk purchaser water system construction plans?

☐ YES ☐ NO

If yes to #2, the producer/seller approval letter must be attached when submitted to DEQ.

21. **Owner's Certification** The owner of the proposed facilities or the owner's authorized representative shall complete the owner's certification. It is anticipated that the owner will either be a governmental agency (city, village, township, county, etc.) or a private owner (individual, company, association, etc.) of a Type I public water supply.

OWNER'S CERTIFICATION

I, Raymond Vasser (name), acting as the City Superintendent (title/position) for

the City of Lake City (entity owning proposed facilities) certify that this project has

been reviewed and approved as detailed by the Plans and Specifications submitted under this application, and is in compliance with the requirements of 1976 PA 399, as amended, and its administrative rules.

Raymond Vasser
Signature

6-29-18
Date

231 884 0654
Phone

*Original signature only, no photocopies will be accepted.

SPECIAL CONDITIONS:

The following are conditions of this permit:

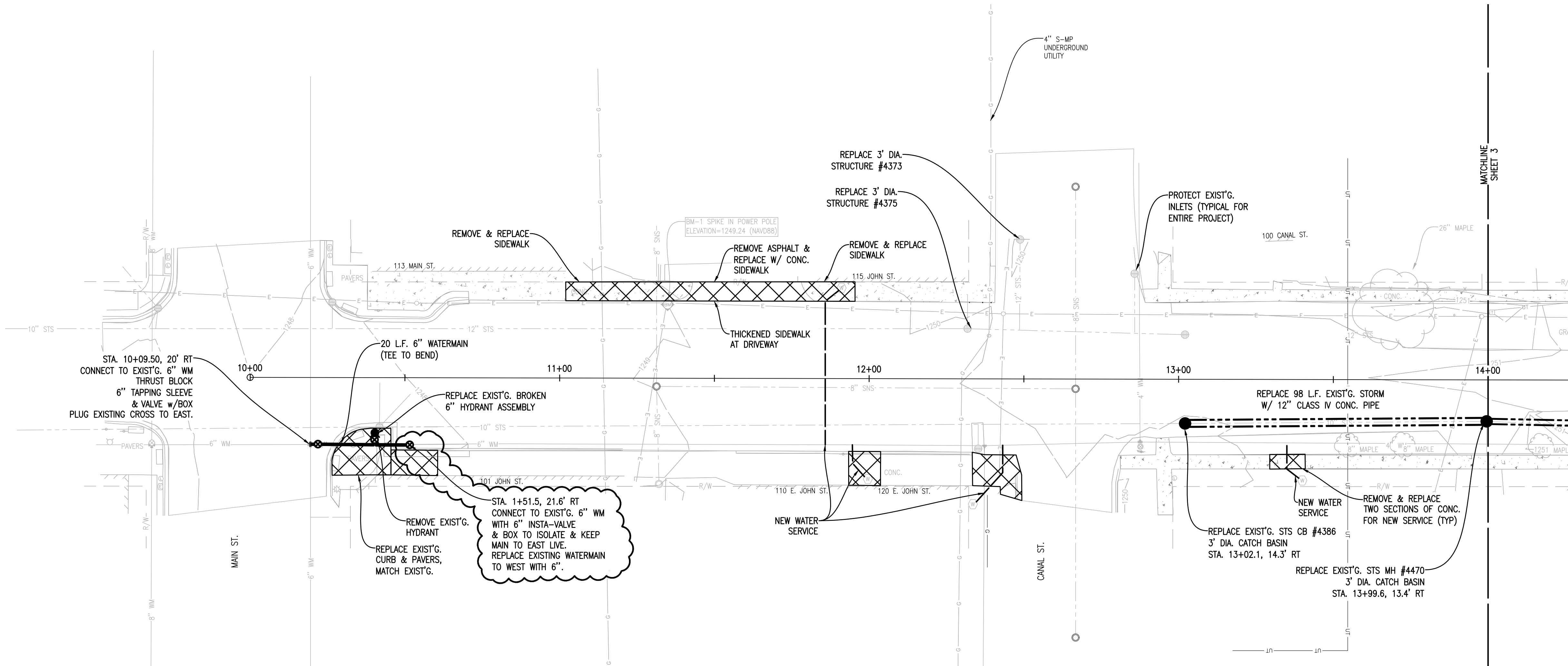
1. The City of Lake City shall require or provide a qualified construction inspector to oversee all construction work. This inspector shall be on-site during all water main installation activities.
2. The City of Lake City shall submit to this office an inspection/certification report within 90 days of project completion. This report shall include relevant field notes, verification that all conditions of this permit have been met, and verification that the project has been constructed in accordance with plans and specifications approved by this office. Please include a set of as-built drawings as part of this report.
3. The City of Lake City shall document all service line materials associated with this project in accordance with PA 399.

PERMIT NUMBER W 187027	DATE July 13, 2018	ISSUED TO: City of Lake City WSSN: 03700
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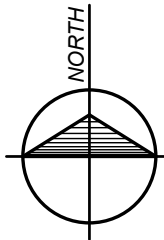
GoslingCzubak
engineering sciences, inc.
1280 Business Park Dr.
Traverse City, Michigan
231-946-9191 phone
info@goslingczubak.com
www.goslingczubak.com

CIVIL ENGINEERING
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JOHN ST. (66' R/W) WATERMAIN IMPROVMENTS PLAN - STA. 0+00 TO 14+00

SCALE: 1" = 20'



NOTES:

- PAVEMENT ON JOHN STREET WITHIN THE RESTORATION LIMITS SHOWN IS TO BE CRUSHED & SHAPED. PROVIDE NEW PAVEMENT & MATCH EXISTING GRADES PER DETAIL. RESTRIPE NEW ASPHALT TO MATCH EXISTING.
- ALL WATER SERVICES TO BE 1" UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL WATER SERVICES TO BE CONNECTED AT PROPERTY LINES UNLESS OTHERWISE NOTED.
- REFERENCE DETAIL SHEET FOR CONNECTION OF PROPOSED SERVICE LEADS TO EXISTING SERVICE LEADS.
- MINIMUM DEPTH OF COVER ON NEW WATER MAIN TO BE 5 FT. 6 IN. (MINIMUM).
- CONTRACTOR TO EXCAVATE AND VERIFY LOCATION OF EXISTING WATER MAINS PRIOR TO CONSTRUCTION. COORDINATE WITH ENGINEER AS TO AREAS NEEDING VERIFICATION.
- PROPOSED WATER MAIN SHALL MAINTAIN A MINIMUM OF 10 FT. HORIZONTAL AND 18" VERTICAL CLEARANCE FROM ALL SEWER LINES.
- LOCATE, CUT, PLUG & ABANDON EXISTING WATER SERVICE.
- ALL EXISTING GATE VALVES AND HYDRANTS SHALL BE SALVAGED FOR OWNER AND PLACED IN LOCATION DESIGNATED BY OWNER.
- ALL NEW WATER SERVICES INCLUDE NEW SADDLE (FOR SERVICES LARGER THAN 1") AND CORP STOP AND NEW CURB STOP AND BOX, UNLESS OTHERWISE NOTED.
- ALL STORM SEWER SHALL BE MDOT CLASS IV CONCRETE.
- PROVIDE ALL TRAFFIC CONTROL DEVICES NECESSARY TO MEET MMUTCD REQUIREMENTS. PROVIDE TEMPORARY ACCESS TO ALL HOMES AND BUSINESSES DURING CONSTRUCTION.
- CONTRACTOR TO PULL SOIL EROSION PERMIT PRIOR TO CONSTRUCTION.
- DIG UP AND VERIFY ALL CONNECTIONS TO EXISTING PRIOR TO ORDERING AND CONSTRUCTION. COST IS INCIDENTAL TO CONNECTION TO EXISTING AND FOR 6" INSTA-VALVE



Know what's below.
Call before you dig.

THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THIS PLAN, ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT 1 (800) 482-7171 OR 811 THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

**MAIN ST. TO CANAL ST.
JOHN ST. WATERMAIN REPLACEMENT
CITY OF LAKE CITY**

Date Issued: ###/###/###
Date Surveyed: 06/07/2018
Designed By: WCB
Drawn By: AMB
Checked By: DPG
Scale: AS NOTED

Original sheet size is 22x34

Location:
SECTION 6
T 22 N, R 7 W
LAKE TOWNSHIP
MISSAUKIE COUNTY
MICHIGAN

Project Number:
2018740001.01

Sheet: