#### SPECIAL PROVISION FOR CORING

CON:COK 1 of 1 12-23-21

- **a. Description.** This work consists of coring a basement wall for a water service entry point when a sleeve has not been provided.
- **b. Materials.** Per City of Kalamazoo Standard Specifications for Water Main and Service Installation, 2021
- **c. Construction Methods.** Core the basement wall as needed for the installation of a water service at a location per City of Kalamazoo Standard Specifications for Water Main and Service Installation, 2021.
- **d. Measurement and Payment.** The completed work, as described, is included in the cost of Water Serv, Yard. No additional payment shall be made for this work.

### SPECIAL PROVISION FOR WATER METER, INSTALL

CON:COK 1 of 1 02-27-23

- **a. Description.** This work consists of installing a new water meter.
- **b. Materials.** Per current City of Kalamazoo Standard Specifications for Water Main and Service Installation.

**Water Meters**: Meter and meter remotes will be supplied by the City with the new meter sized to match the existing.

- **A**. Contractor shall provide the following for **interior meter settings**:
  - Interior meter setter: Ford C38-13-2-188-NL for 5/8" meters; Ford C38-44-2-625-NL for 1" meters
  - ii. Ball Valve: Apollo 77FLF-105-01A
  - iii. Ground Wire: #6 AWG, stranded, bare copper grounding wire
  - iv. Ground Wire Clamps: Cast bronze ground clamp for use with stranded ground wire and sized to match the service size
  - v. Remote Wire: Agave Wire TIN22-3SOLRGB Solid Strand Meter Cable, 22 to 3 AWG, PVC, Red/Black/Green; or approved equal
- **B**. Contractor shall provide the following for **exterior meter settings**:
  - Exterior meter setter: Ford V81-22-33-NL for 5/8" meters; Ford V84-22-55-NL for 1" meters
- **c. Construction Methods.** Per current City of Kalamazoo Standard Specifications for Water Main and Service Installation. Contractor shall install the new meter, ground clamps, ground wire, and meter remote. The meter remote location shall be coordinated with homeowner or builder. The new meter and meter remote stickers shall be provided to the Engineer or authorized representative.
- **d. Measurement and Payment.** The completed work, as described, shall be measured and paid for at the contract unit price using the following item:

Contract Item (Pay Item)	Unit
Water Meter, Install	Each

Water Meter, Install includes payment in full for furnishing all material, labor, and equipment necessary to install a water meter as described.

#### SPECIAL PROVISION FOR REMOVING AND REPLACING PAVEMENT

CON:COK 1 of 1 10-31-18

- **a. Description.** This work consists of removing and replacing HMA, concrete, masonry, and other common pavement material, except sand and gravel, regardless of thickness, reinforcement and overlays.
- **b. Materials.** Materials shall be as follows:

HMA 13A, Modified and 36A, Modified Concrete, Grade P1 and S2

**c. Construction Methods.** Remove pavement to an existing joint or sawed joint. Saw cut pavement full depth in a straight neat line as directed by the Engineer. Do not use a crane and ball pavement breaker. Do not disturb remaining pavement. Assume ownership of removed materials and dispose of according to MDOT 2012 Standard Specifications for Construction subsection 205.03P.

After completion of the utility work, replace subgrade, subbase, and aggregate base in accordance with Michigan Department of Transportation Standard Plan for utility trenches R-83-Series. Replace sidewalk, driveway, and pavement matching existing materials.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

#### Contract Item (Pay Item)

Unit

HMA Pavement or Driveway, Remove and Replace	.Square Yard
Sidewalk, Remove and Replace	Square Foot
Curb and Gutter, Remove and Replace	Foot
Concrete Pavement or Driveway, Remove and Replace	

The limits of the construction will be established at the discretion of the Engineer. The unit price includes all labor, equipment, and materials to saw cut, remove, haul, dispose of the pavement. All other material removal and replacement shall be included with other contract items.

### SPECIAL PROVISION FOR WATER SERV, ABANDON

CON:COK 1 of 1 02-24-23

- **a. Description.** This work consists of abandoning a water service that is no longer in use or was placed in an improper location.
- **b. Materials.** Per City of Kalamazoo Standard Specifications for Water Main and Service Installation, 2021
- **c.** Construction Methods. If a service will no longer be used, the service shall be fully abandoned at the water main tap location. The corporation stop shall be shut off, piping removed, and a copper disc shall be installed on the corporation stop.
- **d. Measurement and Payment.** The completed work, as described, will be measures and paid for at the contract unit price using the following item:

Contract Item (Pay Item)	Unit
Water Serv, Abandon	Each

Water Serv, Abandon includes payment in full for furnishing all material, labor, and equipment necessary to perform the work as described. All material, labor, and equipment for excavation, disposal, and backfill is also included in this work. Removal and replacement of any pavement, sidewalk, and/or curb & gutter will be paid for separately.

#### SPECIAL PROVISION FOR WATER SERV, CONNECT TO EXISTING

CON:COK 1 of 1 02-24-23

- **a. Description.** This work consists of connecting a new water service to existing plumbing for a well-out or service relocation.
- **b. Materials.** Per current City of Kalamazoo Standard Specifications for Water Main and Service Installation and the Michigan Plumbing Code as modified by the local health department.
- **c. Construction Methods**. Per current City of Kalamazoo Standard Specifications for Water Main and Service Installation. All plumbing work shall be performed by State of Michigan plumbers according to the Michigan Plumbing Code as modified by the local health department.
  - 1. **Existing Well**: Includes all fittings to connect to an existing well lateral and capping the other end of lateral to the well.
  - 2. Basement Relocation: To be used when connecting to existing well is not feasible or to eliminate the need for a meter pit due to existing plumbing configuration. Includes all interior pipe, fittings and supports necessary to relocate the existing water service pipe into the house to a location that is more than 10 feet from the existing water service entrance location, including connecting to the homes interior plumbing
    - (1) The additional interior pipe and fittings shall be routed from the existing water service entrance to the new service entrance location using Type L copper pipe.
    - (2) Abandon existing service connection by removing pipe from foundation and sealing the existing penetration inside and outside the structure with non-shrink grout
    - (3) Restoration of unfinished interior surfaces shall be incidental.
- **d. Measurement and Payment.** The completed work, as described, shall be measured and paid for at the contract unit price using the following item:

Contract Item (Pay Item)	Unit
Water Serv, Connect to Existing	Hour

Water Serv, Connect to Existing includes payment in full for furnishing all material, labor, and equipment necessary to make the required connection as described.

# SPECIAL PROVISION FOR WATER SERV, PRIVATE, \_\_\_\_

CON:COK 1 of 1 02-27-23

**a. Description.** This work consists of installing a water service from a meter pit to 18 inches inside the exterior wall or the first valve, whichever is shorter.

#### b. Materials.

#### 1. Copper Service:

- i. Per current City of Kalamazoo Standard Specifications for Water Main and Service Installation
- ii. Service size shall be 1-1/4 inch
- iii. Splice spacing shall not exceed 1 for every 90 feet and shall not be within 10 feet of house foundation.

#### 2. HDPE Service:

- i. the first 5 feet of service from the meter setting shall be type K copper
- ii. remaining service material shall be HDPE SDR 9 CTS, 1 inch, 1-1/4 inch or 2 inch as directed by the City
- iii. service shall be installed with 12AWG high strength HDPE insulated tracer wire. Wire to have terminal loop 5 feet long inside of meter pit and 2 foot long inside house.
- iv. all pipe, fittings and connectors shall be NSF-61 and NSF-372 Certified and approved by City prior to installation
- v. service shall be pressure tested from the meter pit yolk to the house connection at 100-psi for one hour prior to backfilling. Pressure test shall be witnessed by the City
- vi. splice spacing shall not exceed 1 for every 500 feet and shall not be within 10 feet of house foundation
- **c. Construction Methods.** Per current City of Kalamazoo Standard Specifications for Water Main and Service Installation.
- **d. Measurement and Payment.** The completed work, as described, shall be measured and paid for at the contract unit price using the following item:

Contract Item (Pay Item)	Unit
Water Serv, Private, Copper	Foot
Water Serv, Private, HDPE	Foot

Water Serv, Private includes payment in full for furnishing all material, labor, and equipment necessary to install the water service from a meter setting to 18 inches inside the exterior wall or first valve, whichever is shorter, and the coring and grouting of the basement wall or floor slab. All material, labor, and equipment for excavation, disposal, backfill, slope restoration, and restoration of unfinished interior surfaces is also included in this work.

### SPECIAL PROVISION FOR WELL, ABANDON

CON:COK 1 of 1 01-03-23

- **a. Description.** This work consists of abandoning an existing water supply well using a State of Michigan Licensed Potable Well Driller
- **b. Materials.** Per Kalamazoo County Health Department and Michigan Department of Environment, Great Lakes, and Energy (EGLE)
- **c. Construction Methods**. Per requirements of Kalamazoo County Health Department and EGLE including the following:
  - 1. Removal and disposal of existing well pump and well piping from inside well casing
  - 2. Capping wires and water proofing termination of electrical connection to well head
  - 3. Filling the well casing with non-shrink grout or bentonite per requirements of Kalamazoo County Health Department.
  - 4. Cutting and capping of well below grade per requirements of Kalamazoo County Health Department and EGLE.
  - 5. Provide well abandonment forms and required documentation to property owner and Kalamazoo County Health Department.
  - 6. Restore any disturbed earth
- **d. Measurement and Payment.** The completed work, as described, shall be measured and paid for at the contract unit price using the following item:

Contract Item (Pay Item)	Unit
Well, Abandon	Each

Well, Abandon includes payment in full for furnishing all material, labor, and equipment necessary to abandon a drinking water well as described.