



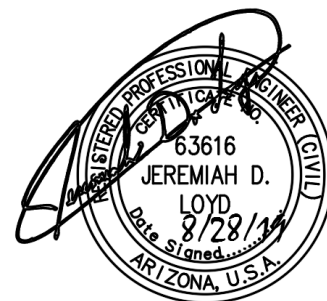
Town of Eagar  
Sidewalk Improvements Project

Final Special Conditions  
September 2019

**SPECIAL CONDITIONS  
FOR CONSTRUCTION**

**TOWN OF EAGAR**

**EAGAR SIDEWALK IMPROVEMENTS PROJECT**



Expires: 03-31-22

**Where Roads Hit the Trails**

P. O. Box 1300 • Eagar, AZ 85925-1300 • (928) 333-4128 • 22 West 2nd Street • [www.eagaraz.gov](http://www.eagaraz.gov)

## Table of Contents

SPECIAL CONDITIONS.....	4
LOCATION OF THE WORK.....	4
PROPOSED WORK .....	4
LIMITS OF PROJECT BID AREA .....	4
MEASUREMENTS AND PAYMENTS .....	5
DEFINITIONS.....	5
CONTRACT STANDARD SPECIFICATIONS.....	6
WORKING HOURS .....	7
NOISE MITIGATION .....	7
SAW CUTTING .....	7
PERMITS.....	7
CONDITION OF MATERIALS.....	7
SUBGRADE PREPARATION AND EARTHWORK .....	8
DISPOSAL OF EXCESS MATERIAL .....	8
CLEAN-UP .....	8
DEFACED SURFACES.....	8
COORDINATION WITH UTILITIES.....	8
CONSTRUCTION SURVEYING.....	8
PRE-CONSTRUCTION DOCUMENTATION .....	9
CONSTRUCTION WITHIN TEMPORARY CONSTRUCTION EASEMENTS.....	9
PAY ITEMS .....	9
REMOVAL, RELOCATION AND ADJUSTMENT ITEMS.....	9
RELOCATE FIRE HYDRANT ASSEMBLY .....	9
RELOCATE STREET SIGNS .....	9
RELOCATE/RECONSTRUCT MAIL BOX .....	10
REMOVE EXISTING CONCRETE AND PAVER SIDEWALKS.....	10
SAWCUT AND REMOVE CONCRETE HEADER CURB .....	10
SAWCUT AND REMOVE WALL.....	10
ROADWAY ITEMS .....	11

CONCRETE SIDEWALK, MAG DET 230.....	11
CURB RAMP, TYPE B, MAG DET 236-5 .....	11
CURB RAMP, MAG DET 238-3 .....	11
CONCRETE DRIVEWAY, DETAIL 5 .....	12
CONCRETE DRIVEWAY, DETAIL 6 .....	12
LANDSCAPE AND DECORATIVE ITEMS .....	13
LANDSCAPE RESTORATION .....	13
GENERAL CONSTRUCTION ITEMS .....	14
MOBILIZATION / DEMOBILIZATION .....	14
TRAFFIC CONTROL.....	15
CONTRACTOR QUALITY CONTROL .....	15
APPENDIX A: GENERAL SIDEWALK PLAN EXHIBIT .....	21
APPENDIX B: DESIGN EXHIBITS .....	22
APPENDIX C: BID SCHEDULE .....	23
APPENDIX D: PROPERTY INVENTORY.....	26

## **SPECIAL CONDITIONS**

The work described herein for this project shall be performed in accordance with the Maricopa Association of Governments [MAG] uniform Standard Specifications and Uniform Standard Details for Public Works Construction, 2015 Edition and all revisions through 2019 and additional Special Conditions that follow.

In the event a conflict exists between documents associated with these improvements, the order of precedence shall be as follows:

1. Addenda
2. The Special Conditions for Construction
3. Appendices to the Special Conditions for Construction
4. MAG Uniform Standard Specifications' and Details for Public Works Construction

### **LOCATION OF THE WORK**

The Eagar Sidewalk Improvements are located in the Town of Eagar, within Apache County, Arizona (Section 4, Township 8 North, Range 29 East), and make up a region in the northwest section of town bounded by Main Street to the east, and Burk Street to the west. See **Appendix A: General Sidewalk Plan Exhibit** for a map of the project Bid Area.

### **PROPOSED WORK**

The work consists of providing a safe pedestrian route compliant with current ADA guidelines in the Public Right-of-Way by installing a new 4-ft wide concrete sidewalk attached to a proposed 4" concrete roll curb. , installing new pedestrian curb ramps, and reconstructing existing driveways and curb ramps within the project limits. This project also includes the removal/relocation of existing features, such as driveways, signs, mailboxes, fire hydrants, and other features that are required to complete the work.

Details related to construction activities are provided in the following Appendices of these Special Conditions.

1. **Appendix A: General Sidewalk Plan Exhibit**, showing the limits of construction within the Project Bid Area and identifying the location of specific construction features such as curb ramps
2. **Appendix B: Design Exhibits**, providing details related to construction no covered by the MAG Uniform Standard Specifications and Details for Public Works Construction
3. **Appendix C: Bid Schedule**, providing a quantity summary of major items of work
4. **Appendix D: Property Inventory**, providing a summary of private properties impacted by this project including a summary of major existing features and expected impact to those features.

### **LIMITS OF PROJECT BID AREA**

The limits of the Project Bid Area are shown in **Appendix A: General Sidewalk Plan Exhibit**, as indicated by the hatched northwest portion of town. The quantities presented in **Appendix C: Bid Schedule** are based only on the properties contained within this highlighted area. The Contractor shall base their bid prices on the improvements within the Project Bid Area.

The additional properties shown in **Appendix A: General Sidewalk Plan Exhibit** and detailed in **Appendix D: Property Inventory** are provided for the informational purposes only. The Town, at its sole discretion, may authorize the contractor to provide improvements to properties outside of the Project Bid Area. The Contractor shall not perform improvements to properties outside of the Project Bid Area without prior written authorization from the Town. Improvements to properties outside the Project Bid Area shall be provided at the same unit prices agreed upon by the Town and the Contractor for the improvements within the Project Bid Area.

#### **MEASUREMENTS AND PAYMENTS**

Payments for improvements will be made for the quantities presented in **Appendix C: Bid Schedule** at the unit prices agreed upon between the Contractor and the Town. It will be the Contractor's responsibility to perform their own measurements of the Project Bid Area referred to in this document to verify the bid quantities. Change orders will not be implemented due to the Contractor's under estimation of the areas or quantities being bid. At the sole discretion of the Town, discrepancies may be resolved with field measurements at the final pay request.

**Appendix A: General Sidewalk Plan Exhibit** highlights the Project Bid Area to be bid upon as outlined in the scope of work. **Appendix B: Design Exhibits** provide specific details for the construction activities indicated on the General Sidewalk Plan Exhibit. **Appendix D: Property Inventory** provides a summary of construction activities associated with each private property, major existing features, and expected impacts to each property.

#### **DEFINITIONS**

The following list of definitions is used to clarify the existing features presented in **Appendix D: Property Inventory** and throughout these Special Conditions. This list is intended to inform the Contractor of various existing features that will be encountered in the Project Bid Area that may be in conflict with the proposed improvements:

##### **Existing General Landscape**

- *Decomposed Granite* - Small-sized angular rock cover. Includes various types, colors and sizes.
- *River Rock* - Medium-sized angular rock cover, rip-rap, or smooth rock. Includes various types, colors and sizes.
- *Boulders* - Large-sized rocks. May be imbedded in existing ground or loose. Includes various types, colors and sizes.
- *Sod* - Grass. Includes various types. Includes various conditions.

##### **Existing Landscape Features:**

- *Steep Grade* - Existing side slopes greater than 5:1. Additional grading may be required behind new sidewalk to match existing ground.

- *Decorative Header* - Loose curbing of various types and material including brick, wood, asphalt and other materials that border landscaping areas, driveways and other features.
- *Private Path* - Various types of concrete, asphalt, brick pavers, flagstone and other materials that create a pathway from the roadway to the residence.
- *Irrigation* - Various types of sprinklers, drips, emitters and other irrigation outputs. Also includes various types underground and above-ground piping networks associated with the irrigation.
- *Tree, Shrub, Cactus* - Large vegetation of various types and sizes, which may be listed in the property inventory.
- *Fence* - Fences of various types, sizes, and materials including wood fences, wrought iron fences, chain link fences, and other material fences.
- *Concrete Header* - Concrete curving that appears to require saw cutting for removal. Property inventory may provide descriptions.

#### **Driveway and Sidewalk:**

- *Driveway Details #* - References design detail found in **Appendix B: Design Exhibits**.
- *Additional Driveway Detail #* - Indicated a property has more than one existing driveway. References design detail found in **Appendix B: Design Exhibits**.
- *Sidewalk* - Existing concrete, brick paver, or other material sidewalk to be removed.

#### **Miscellaneous Relocation Items:**

- *Sign (Description)* - Existing sign to be relocated. Various descriptions which may be listed in the property inventory:
  - "Address" - Small, short signs with the address number printed
  - "Stop" or "Stop Ahead" - Stop signs may include street name signs
  - "Speed Limit" - Speed limit signs
  - "Real Estate" - temporary real estate sign
  - "Foundation" - Indicates sign has visible concrete foundation
- *Mailbox (Description)* - Existing mailbox to be relocated. Various descriptions which may be listed in the property inventory:
  - "Wood Post" or "Wood", "metal Post" or "Metal", "Plastic", "Brick" - Indicates primary mailbox/mailbox post material
  - "*Conc. Foundation*" - Indicates mailbox has visible concrete foundation
  - "*Large*" - Indicates mailbox is larger than standard size

## **CONTRACT STANDARD SPECIFICATIONS**

**The following Standard Specifications and Standard Drawings referenced in the project contract documents are required for construction of this project:**

- MAG Uniform Specifications and Details for Public Works Construction, 2015 Edition, and Revisions through 2019.
- 2010 ADA Standards for Accessible Design
- 2009 Manual on Uniform Traffic Control Devices (MUTCD) with Supplements

#### **WORKING HOURS**

Work on this project shall not begin before 6:00 a.m. and shall conclude prior to 7:00 p.m. each weekday unless otherwise approved by the Town. Work at times other than those specified will be considered by the Town subject to the duration and type of activity proposed and the resulting impact on adjacent residential areas.

Hours for hauling operations shall be subject to approval by, and if necessary, permits from the Town of Eagar and Apache County in accordance with local ordinances.

#### **NOISE MITIGATION**

The Contractor is responsible for any construction noise mitigation measures needed to meet the noise ordinances of the Town of Eagar and Apache County.

#### **SAW CUTTING**

Saw cuts at locations where new improvements abut existing asphalt pavement or concrete surfaces will be required. This shall include existing bituminous pavements, sidewalks, driveways and curbs and gutters where new construction shall match the elevation of existing surfaces that are to remain. Saw cut lines may be subject to change by direction of the Town to best fit the conditions found in the field. Saw cuts shall be made a minimum depth of 1 1/2" and in all cases deep enough to ensure a neat vertical joint.

No measurement or payment will be made for saw cutting. The cost shall be considered incidental to the cost of other items.

#### **PERMITS**

Contractor is responsible for obtaining all necessary permits from appropriate governing agencies, including the Town of Eagar and Apache County, and paying applicable fees prior to starting construction activities. The cost of acquiring necessary permits shall be considered incidental to the cost of other items.

#### **CONDITION OF MATERIALS**

All materials incorporated into the project are expected to be placed into service in new, clean and unblemished condition. Any materials stored unprotected from their original manufacture's packaging shall be cleaned of any foreign matter prior to use. All stored materials shall be protected from surface scarring and dents. All materials found to deviate from manufacture's original size, shape or condition may be subject to reorder at the discretion of the Town.

### **SUBGRADE PREPARATION AND EARTHWORK**

Subgrade preparation will be per MAG Section 301. Scarifying, re-grading and compacting existing subgrade for new improvements will not be measured for separate payment but shall be considered incidental to the cost of the item being installed.

All subgrade preparation, excavation, grading, backfill, borrow, embankment, or fill construction required on the project will not be measured for separate payment but shall be considered incidental to other contract bid items.

### **DISPOSAL OF EXCESS MATERIAL**

All excess material shall be removed from the site of each operation within two (2) days after material has been discarded. No material shall be placed in the gutter so as to block drainage.

### **CLEAN-UP**

Upon completion of the work (including permanent pavement replacement and repair of any damage adjacent to the work) and before final acceptance, the Contractor shall have three (3) days to clean up all ground occupied by him in connection with the work including rubbish, trash, signs, barricades, equipment, etc. All parts of the work shall be left in a neat, presentable and workman like manner. Contractor shall acknowledge a punch list of repairs and a date of completion.

### **DEFACED SURFACES**

When possible, defaced work shall be repaired within the same day as finishing operations, in all cases defaced surfaces shall be repaired by the end of the following work day.

### **COORDINATION WITH UTILITIES**

Prior to starting any construction activities, the Contractor shall submit a Blue Stake ticket and inform all utilities of upcoming work. Contractor shall be responsible for avoiding impacts with existing utility facilities. If any impacts are unavoidable, the contractor shall inform the Town and the utility company and shall coordinate the relocation with the utility.

Contractor shall comply with MAG Standards Section 105.6.

No separate measurement or payment shall be made for coordination with utilities, the cost to be considered included with the cost of other items.

### **CONSTRUCTION SURVEYING**

The Contractor shall set the construction stakes, establish easements, lines, grades and elevations to include necessary appurtenances and shall be responsible for their conformance with specifications. Construction surveying shall be performed in compliance with MAG Standards Section 105.8.

No separate measurement or payment shall be made for construction surveying, the cost to be considered included with the cost of other items.



### **PRE-CONSTRUCTION DOCUMENTATION**

Prior to any construction activities adjacent to a private property, the Contractor shall document existing conditions on each property by video tape and photographs. A copy of these documents shall be submitted to the Town at least 5 working days prior to the Contractor commencing work on any segment. Compensation for this work shall be considered included in the in the bid item price for other items.

### **CONSTRUCTION WITHIN TEMPORARY CONSTRUCTION EASEMENTS**

Temporary construction easements or rights-of-entry located on private property have been obtained by the Town to construct proposed improvements such as driveways, landscape re-establishment and general grading/ The contractor shall leave all construction areas within a temporary construction easement or right-of-entry in as good as or better condition than before construction.

## **PAY ITEMS**

Quantities associated to the scope of work are listed in **Appendix C: Bid Schedule**. The Contractor shall include all costs necessary to complete all work associated with these items. Any work necessary to complete the project as represented in the Special Conditions which are not specifically noted to as a pay item on the Bid Schedule shall be considered incidental to the project and no separate payment shall be made.

### **REMOVAL, RELOCATION AND ADJUSTMENT ITEMS**

Removal, relocation and adjustment items shown below are necessary for the installation of the concrete sidewalk. Locations of these items are summarized in **Appendix D: Property Inventory**. Contractor shall be responsible for confirming the location and quantities of these items. Additional removal, relocation, landscape/hardscape restoration, and adjustment items not shown are to be considered incidental to the cost of other items.

#### **RELOCATE FIRE HYDRANT ASSEMBLY**

Contractor shall relocated existing fire hydrants within the path of the new concrete sidewalk to a new location within Town right-of-way as indicated in **Appendix D: Property Inventory**.

Fire hydrant relocation shall conform with MAG Standard Specifications Sections 610, 611, 630, 756 and MAG Standard Details 360-1, 360-3, and 362. The contractor shall provide all materials, equipment and labor to relocate the fire hydrant, valve and water line connection.

Measurement and payment will be at the contract unit price bid per each and shall be full compensation for the item complete in place.

#### **RELOCATE STREET SIGNS**

Contractor shall relocate existing street signs within the path of the new concrete sidewalk to a new location within Town right-of-way as indicated in **Appendix D: Property Inventory**.

The Contractor shall be responsible for relocating the identified existing signs, and if necessary removing the existing sign foundation and sign post. The work under this item shall comply with MAG Uniform Standard Specifications Section 350. The Contractor shall be responsible for replacing any signs or sign posts that are damaged during the relocation.

Relocate Signs shall be measured as a unit for each sign removed and reinstalled. This item shall include all items associated with performing the relocation, including but not limited to the nuts, washers, bolts, foundations, or clamps required to attach the relocated sign to the existing/new sign post or light pole.

#### **RELOCATE/RECONSTRUCT MAIL BOX**

Contractor shall relocate existing mail boxes within the path of the new concrete sidewalk as indicated in **Appendix D: Property Inventory**.

The Contractor shall be responsible for relocating the identified mail boxes and if necessary reconstructing the mailbox in kind. The work under this item shall comply with MAG Standard Specifications Section 350. The Contractor shall be responsible for replacing any components that are damaged during the relocation. The Contractor shall coordinate with the property owner to determine the desired location of the new mail box.

Relocate/Reconstruct Mail Box shall be measured as a unit for each mail box relocated and reconstructed, including but not limited to: posts, mail box, bricks/blocks and foundations (removed and new)

#### **REMOVE EXISTING CONCRETE AND PAVER SIDEWALKS**

Contractor shall remove existing sidewalks that are not ADA compliant within the path of the new concrete sidewalk as indicated in **Appendix D: Property Inventory**.

Removal of existing improvements such as sidewalk shall conform to MAG Standard Specifications Section 350. Backfill and compaction of all excavated areas shall be to the densities as prescribed in Section 301 of the MAG Specifications. All surplus materials shall be immediately hauled from the job site and disposed in accordance with Section 205 of the MAG Specifications.

Measurement and payment shall be made at the contract unit price bid per square foot and shall be full compensation for the item complete and proper disposal of all waste. No separate measurement or payment will be made for saw cutting, the cost will be included in the cost of removal.

#### **SAWCUT AND REMOVE CONCRETE HEADER CURB**

#### **SAWCUT AND REMOVE WALL**

Contractor shall remove existing header curb and walls (including foundations) within the path of the new concrete sidewalk as indicated in **Appendix D: Property Inventory**.

Removal of existing improvements such as curb and walls shall conform to Section 350 of the MAG Standard Specifications. Backfill and compaction of all excavated areas shall be to the densities as

prescribed in MAG Section 301. All surplus materials shall be immediately hauled from the job site and disposed in accordance with MAG Section 205 of the Standard Specifications.

Where the existing curb or wall extends beyond the path of the new sidewalk, the Contractor shall paint and/or texture the newly exposed face in such a way that it mimics the existing condition.

Measurement and payment shall be made at the contract unit price bid per linear foot and shall be full compensation for the item complete and proper disposal of all waste. No separate measurement or payment will be made for saw cutting, the cost will be included in the cost of removal.

### **ROADWAY ITEMS**

Roadway construction items shown below are necessary for the installation of the concrete sidewalk. Locations of these construction items are shown in **Appendix A: General Sidewalk Plan Exhibit** and are summarized in **Appendix D: Property Inventory**. Construction activities shall conform to **Appendix B: Design Exhibits** and applicable MAG Standard Details.

Contractor shall be responsible for confirming the location and quantities of these items. Additional construction items not shown are to be considered incidental to the cost of other items.

### **CONCRETE SIDEWALK, MAG DET 230**

Contractor shall construct new ADA compliant concrete sidewalk at the locations indicated in **Appendix A: General Sidewalk Plan Exhibit** and **Appendix D: Property Inventory**.

Concrete sidewalk per MAG Standard Detail 230 shall conform to MAG Standard Specifications Sections 301, 340, 725 Class "A" and 729. The Contractor shall provide all materials, equipment and labor to install the concrete sidewalk in place.

The sidewalk shall be 4-ft wide and constructed attached to the back of existing curb as indicated in Detail 1: Typical Section found in **Appendix B: Design Exhibits**. Concrete sidewalks shall include a 5-ft by 5-ft passing space at 200-ft maximum intervals, as shown in Detail 7: Sidewalk Passing Space Detail found in **Appendix B: Design Exhibits**.

Existing features, such as fire hydrants, street lights and street signs to be protected in place are identified in **Appendix D: Property Inventory**. The Contractor shall avoid impacts with these indicated items as shown in Detail 2: Detached Sidewalk in **Appendix B: Design Exhibits**.

Measurement and payment will be at the contract unit price bid per square foot and shall be full compensation for the item complete, including all materials and labor.

### **CURB RAMP, TYPE B, MAG DET 236-5**

### **CURB RAMP, MAG DET 238-3**

Contractor shall construct new ADA compliant concrete curb ramps at the locations indicated in **Appendix A: General Sidewalk Plan Exhibit**.

Curb ramps shall conform to MAG Standard Details 236-5, Type B (single ramp) and 238-3 and shall conform to MAG Standard Specifications Sections 301, 340, 725 Class 'A' and 729. The Contractor shall provide all materials, equipment and labor to install the curb ramps.

New curb ramp locations shown in **Appendix A: General Sidewalk Plan Exhibit** are approximate. Contractor shall place the ramps in such a manner that they align to provide the shortest feasible pedestrian crossing distance. The Contractor shall locate the ramps to avoid impacts with existing or proposed above-ground features if possible. If field conditions exist that prevent the construction of curb ramps, field adjustments will be made as recommended by the Town.

This item shall include the removal of existing roll curb or curb and gutter and the placement of new curb and gutter as necessary to construct the new curb ramps. The Contractor shall provide a transition from existing roll curb adjacent to the new curb ramp as shown on MAG Detail 236-5 and MAG Detail 221. Removal of adjacent asphalt may be necessary to provide space for forming of new curb and gutter. Asphalt pavement will be saw cut to a width of 24-inches from the edge of finished gutter. Asphalt that must be removed as a part of curb ramp construction will be replaced by the Contractor within two (2) working days. Replacement asphalt shall match the depth of existing asphalt and shall conform to MAG Standard Specifications Section 321. No separate measurement or payment will be made for the removal and replacement of curb, gutter, curb transitions, and asphalt, the cost shall be considered incidental to the construction of the new curb ramp.

Detectable warnings shall be installed at all new curb ramp locations as indicated in MAG Standard Details 236-5 and 238-3. Detectable warnings shall conform to MAG Standard Specifications Section 340.

This item shall be measured and paid for as a single unit measured at each curb ramp location and shall include all labor and materials necessary to complete the work in place, which shall include but is not limited to any and all saw cutting, removals and replacement of asphalt pavement, removal and replacement of curb and gutter, subgrade preparation, concrete and curbing for the new curb ramp and detectable warnings.

#### **CONCRETE DRIVEWAY, DETAIL 5**

#### **CONCRETE DRIVEWAY, DETAIL 6**

Contractor shall construct concrete driveways providing ADA compliant pedestrian access at all existing driveway locations within the limits of new sidewalk construction as indicated in **Appendix A: General Sidewalk Plan Exhibit**.

Properties with driveways to be reconstructed are identified in **Appendix D: Property Inventory**. New driveway construction shall be in accordance with Details 5 & 6: Driveway Details in **Appendix B: Design Exhibits**. Dimensions shown on Details 5 & 6 are based on typical driveway measurements. Contractor shall verify dimensions and reconstruction limits for each driveway; if field conditions do not allow

maximum slopes to be maintained, contractor shall notify the Town prior to reconstruction of the driveway.

Concrete driveways shall be 5" thick PCCP, Class B, and shall conform to MAG Standard Specifications Sections 301, 340, 725 Class 'B' and 729. Driveways will be constructed in accordance with Details 5 & 6 and in accordance with MAG Standard Detail 250, Joint material and joint spacing shall conform to MAG Standard Details 250 and 251. The contractor shall provide all materials, equipment and labor to install the concrete driveways.

Existing ADA compliant driveways are to be protected in place with the new sidewalk construction, as shown in Details 3 & 4 in **Appendix B: Design Exhibits** at the properties indicated in **Appendix D: Property Inventory**.

Concrete driveway construction shall be measured and paid for by as a single unit measured at each driveway location and shall include all labor and materials necessary to complete the work in place, which shall include but is no limited to any and all saw cutting, grading, joint material, concrete placement, concrete removal, removals and replacement of asphalt pavement, removals and replacement of brick pavers and subgrade and subgrade preparation.

#### **LANDSCAPE AND DECORATIVE ITEMS**

Landscape and decorative items shown below are necessary for the installation of the concrete sidewalk. A summary of existing landscape conditions and major landscape, irrigation and decorative items are summarized in **Appendix D: Property Inventory**. The contractor shall be responsible for confirming the location and quantities of these items. Additional landscape and decorative items not shown are to be considered incidental to the cost of the other items.

#### **LANDSCAPE RESTORATION**

The Contractor shall leave all construction areas in an improved yard, in or outside the right-of-way, in as good as or better condition than before construction.

For grass area removal for forming the sidewalk, the Contractor shall remove all construction and concrete debris, rocks and trash and backfill with clean fill dirt and sod to within 2 inches below the top of sidewalk. Contractor shall also remove and relocate encountered sprinkler, irrigation or drip systems as detailed below.

Plants, bushes and trees shall be protected to the greatest extent possible. Where an existing plant, bush or tree is within the path of the new sidewalk and must be removed, it shall be either salvaged, stored and re-planted to an area outside the new sidewalk or replaced in kind. The Contractor shall coordinate with the property owner and the Town to determine the appropriate area for relocation.

Prior to construction, the Contractor shall notify the Town of any private property encumbrances that will be in conflict with the work such as fences, planter, decorative structures, various yard decorations (e.g. benches, archways, yard art, garden features), etc. These items, through coordination with the

property owner and the Town, shall be relocated outside of the existing sidewalk. Relocated or replaced fences, planters, or decorative structures shall be replaced in kind with items in as good or better condition than before construction. All sprinkler, irrigation and drip systems disturbed during construction shall be restored to an operational system covering the same landscaped area as before. Repairs will utilize materials and workmanship equal to or better than those existing prior to construction.

The Contractor shall notify the property owner when and if damages occur to sprinkler, irrigation and drip systems and shall notify the property owner of the Contractor's schedule to complete the system repair.

The Contractor shall not dump soil or waste material on private property without first obtaining written permission from the property owner for said dumping.

If Construction activity impacts the roots, trunk or branches of existing trees, the Contractor shall take all necessary precautions to ensure the survival and protection of the trees. the Contractor shall hire a Certified Arborist to investigate the surrounding trees and locate existing roots. Existing roots shall be excavated by hand and hand-pruned as necessary to where the root is healthy and no longer conflicts with construction.

Restoring landscaping or irrigation systems to a condition equal to or better than that existing before construction was done by repairing, rebuilding, or otherwise restoring as directed by the Town shall be quantified and paid for as a single lump sum and shall include all labor and materials required to complete the work.

## **GENERAL CONSTRUCTION ITEMS**

### **MOBILIZATION / DEMOBILIZATION**

Mobilization and demobilization shall conform to the requirements of MAG Standard Specification Section 109.10.

Measurement and payment for Mobilization/Demobilization will be made as a Lump Sum which includes compensation to the Contractor for expenses to set up marshalling yards, to relocate equipment to and from the project site and to perform final cleanup. Payment shall be compensation in full for all related items and all incidental work not specifically covered in other pay items. The Town shall compensate the Contractor for a one-time, round trip mobilization/demobilization of the Contractor's personnel equipment, supplies and incidentals, establishment of a marshalling yard and other facilities required for the performance of the work on the project, as well as preparatory work and operations prior to the commencement of the work on the project site.

Payment, measured as provided above, will be made at the contract lump sum price as a single complete unit of work. Payment shall be made in two equal portions. The first payment shall be paid with the Contractor's initial billing and shall be made for  $\frac{1}{2}$  of the total line item price. The final

payment shall be paid as part of the final payment due to the Contractor once the project has been accepted as complete by the Town.

### **TRAFFIC CONTROL**

Traffic control shall be provided in accordance with MAG Standard Specifications Section 401 and the Manual of Uniform Traffic Control Devices.

The Contractor shall prepare traffic control plans [TCP] for the project and submit them for review and approval at least seven (7) working days before the pre-construction conference to the Town. The TCP shall include all items necessary to safely control traffic and pedestrians in and around the work area and address how local access to adjacent properties will be maintained in accordance with the specifications herein. Any changes to the traffic control plan during construction shall be submitted to the Town for approval at least seventy-two (72) hours before implementation.

The Contractor shall maintain all existing traffic signs erect, clean and in full view of the intended traffic at all times throughout the project. If any sign interfere with construction, the Contractor shall notify the Town so that appropriate permission can be given to the Contractor to remove said sign. Signs will be stored in a safe environment so that the integrity of the sign can be maintained until the sign can be reset. The Contractor shall be responsible for having all the temporary traffic control signs installed and maintained during construction.

Existing driveways and access to residences, alleys, parking lots, utility facilities and private property shall be maintained at all times. Short-term closures may be permitted subject to notification to the owner seven (7) calendar days in advance of the proposed closure and the approval of the Town.

Emergency vehicle, postal delivery, garbage pickup, school bus routes, bus transit routes and driveway accesses to private property shall be maintained at all times. Short-term closures may be permitted subject to prior approval by the Town and property owner. Contractor shall notify property owners ten (10) calendar days in advance of any construction on driveways that result in closures.

All work items associated with maintenance of traffic, including but not limited to preparation of the traffic control plan, coordinating with property owners and furnishing traffic control devices will be measured and paid as a single lump sum item.

### **CONTRACTOR QUALITY CONTROL**

The Contractor shall be responsible for furnishing all personnel, materials, supplies, facilities and equipment necessary to provide an acceptable quality in the production, handling and placement of all materials. The Contractor shall comply with all provisions of Section 106 of the MAG Specifications and the provisions listed below.

The Contractor shall establish and maintain an effective quality control program that includes, but is not limited to, the establishment of a quality control plan and the utilization of an approved Quality Control Laboratory and approved Quality Control Personnel.

**Quality Control Plan (QCP):** A written QCP shall be submitted at the preconstruction conference and work shall not begin until the quality control program has been reviewed and accepted by the Town. The QCP shall at a minimum address the following:

1. Quality Control Organization, including resumes and certifications for the quality control manager, quality control supervisor and all technicians performing sampling and testing.
2. A Minimum Sampling and Testing Plan specific to the project bid quantities developed in accordance with these specifications and the requirements of Table 106-2.
3. Corrective action for materials that do not meet the specified quality requirements.
4. System for maintaining quality control records and submitting reports.
5. Where applicable, commercial supplier quality control qualifications and personnel must also be addressed.

**Quality Control Laboratory:** All field and laboratory sampling and testing shall be performed by a laboratory accredited through the AASHTO Accreditation Program (AAP) for the test methods being performed. All commercial suppliers providing quality control results to the project shall also be accredited through the AAP.

**Quality Control Personnel:** The Contractor shall designate a Quality Control Manager to be responsible for implementing, monitoring and as necessary, adjusting the processes to assure acceptable quality. The Quality Control Manager shall be a full-time employee of the Contractor.

The Quality Control Laboratory shall designate a Quality Control Supervisor to oversee the QCP and to coordinate quality control activities with the Contractor and the Construction Manager. The Quality Control Supervisor shall serve as a central point of contact for the Quality Control Laboratory and shall be available to answer questions pertaining to the quality control program.

Technicians performing field sampling and testing shall be employees of the Quality Control Laboratory and shall be certified as appropriate by the Arizona Technical Testing Institute (ATTI) and/or the American Concrete Institute (ACI) per Table 106-1. Technicians working for commercial suppliers must also meet the appropriate certification requirements.

The Town's laboratory firm will be an additional, separate laboratory engaged by the Town and is identified as the acceptance laboratory with respect to the reference in Section 106 of the MAG Specifications.

**Table 106-01 Quality Control Technician Requirements**

Material	Field Requirements	Laboratory Requirements
Soils and Aggregate	ATTI Field Certification	ATTI Laboratory Soils and Aggregate Certification



Concrete	ACI Concrete Field Testing Technician - Grade 1 Certification	ACI Concrete Strength Testing Technician Certification
Asphaltic Concrete	ATTI Field Certification	ATTI Asphalt Certification

**Materials Sampling and Testing Requirements:** The minimum frequencies for sampling and testing materials shall be as per Table 106-2. Additional testing required for retests, correlation testing, or as otherwise directed by the Construction Manager are not included in the stated frequencies. It is the Contractor's responsibility to coordinate with quality control personnel to ensure that these minimum frequencies are being met. The minimum frequencies for sampling and testing materials shall be as per Table 106-2. Additional testing required for retests, correlation testing or as otherwise directed by the Town are not included in the stated correlation frequencies. It is the Contractor's responsibility to coordinate with quality control personnel to ensure that these minimum frequencies are being met.

**Quality Control Records and Reporting:** The Contractor shall submit weekly quality control reports to the Town. The weekly quality control report shall state which materials were incorporated into the project during the reporting period, identify the quality control measures taken to assure quality, include all test results and clearly identify materials that do not meet specification requirements.

A uniform methodology for identifying tests and samples shall be identified in the QCP and used during the project. All tests and samples shall be clearly identified, including sample identification information, sample date, sample location, material description, materials use and the technician who obtained the sample. The results for all required tests, including the specifications and other control requirements and any remedial actions taken, shall also be included with the report.

Daily diaries for each quality control technician on the project shall also be included in the weekly report. Daily diaries should clearly identify the types of work performed by the Contractor and the process control measures taken by the quality control technician to assure quality. The reporting period of each weekly quality control reports shall end on Friday at midnight and the report shall be submitted to the Construction Manager by the following Wednesday.

Prior to final acceptance of the project a final quality control report shall be submitted to the Construction Manager that includes a summary of all quality control activities performed for the project. This report shall be stamped by a Professional Engineer registered in the State of Arizona, knowledgeable in materials testing.

**Measurement and Payment:** Contractor quality control will be measured for payment on a lump sum basis as a single unit of work and paid on a monthly basis based on the approved schedule and percentage of work complete, which price shall be for full compensation for the work, complete as described herein to the satisfaction of the Town. In the event that there are additional contractor

quality control costs associated with agency approved changes in construction scope, such costs shall be included in the resulting change orders.

<b>Table 106-2 Materials Sampling and Testing Requirements</b>				
<b>Material</b>	<b>Type of Test</b>	<b>Test Method</b>	<b>Sampling Point</b>	<b>Minimum Sampling/Testing Frequency<sup>1</sup></b>
<b>Structure Backfill (MAG 206) (MAG 702)</b>	Gradation	AASHTO T311/T11	Source	One per 2,000 tons
	PI	AASHTO T89/T90	Source	One per 2,000 tons
	Proctor Density	AASHTO T99	Source	One at start of production, then as material changes
	Field Density	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One per 200 CY
<b>Imported Borrow (MAG 210)</b>	Gradation	AASHTO T311/T11	Source	One per soil type per source
	PI	AASHTO T89/T90	Source	One per soil type per

				source
	Proctor Density	AASHTO T99	Source	One per soil type
	Field Density	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One Per 800 CY & min 1 per shift
<b>Fill Construction (MAG 211)</b>	Proctor Density	AASHTO T99	Source	One per soil type
	Field Density	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One Per 800 CY & min 1 per shift
<b>Subgrade (MAG 301)</b>	Gradation	AASHTO T311/T11	Source	One per soil type
	PI	AASHTO T89/T90	Source	One per soil type
	Proctor Density	AASHTO T99	Source	One per soil type
	Swell Test	ASTM D4546	In-Place	As requested by engineer (curb, gutter and sidewalk only)
	Field Density	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One per 1,500 LF per lane pass (2,000 SY)
<b>Aggregate Base (MAG 310) (MAG 702)</b>	Gradation	AASHTO T311/T11	Source	One per 2,000 tons per source
	PI	AASHTO T89/T90	Source	One per 2,000 tons per source
	Fractured Faces	ASTM D5821	Source	One per 10,000 tons per source

**Table 106-2 Materials Sampling and Testing Requirements (Cont.)**

<b>Material</b>	<b>Type of Test</b>	<b>Test Method</b>	<b>Sampling Point</b>	<b>Minimum Sampling/Testing Frequency<sup>1</sup></b>
<b>Aggregate Base (MAG 310) (MAG 702)</b>	Abrasion	AASHTO T96	Source	One per source
	Proctor Density	AASHTO T99	Source	One at start of production, then as material changes
	Field Density	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One per 1,000 LF per lane lift (1,300 SY)
<b>Asphalt Concrete Pavement (MAG 321) (MAG 325)</b>	Mix Design			One per mix
	% Asphalt	AASHTO T308	Lay-Down	One per sub-lot (four per lot)
	Gradation	AASHTO T30	Lay-Down	One per sub-lot (four

<b>(MAG 710)</b>				per lot)
	Rice Density	AASHTO T209	Lay-Down	One Per lot
	% Laboratory Voids	AASHTO T269	Lay-Down	One Per lot
	Field Density	ASTM D2950	Roadway	Establish rolling pattern Minimum one per 500 LF per paving pass
	% In-Place Air Voids	AASHTO T269	Roadway	Two locations per sub-lot (two cores per location)
<b>Pipe Bedding (MAG 601)</b>	Gradation	AASHTO T99	Source	One per soil type
	PI	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One Per 800 CY & min 1 per shift
	Field Density	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One per 200 CY
<b>Trench Backfill (MAG 601)</b>	Proctor Density	AASHTO T99	Source	One per soil type
	Field Density	AASHTO T310 <sup>2</sup> or AASHTO T191 <sup>2</sup>	In-Place	One per 500 LF per lift
<b>Decomposed Granite (MAG704)</b>	Gradation	AASHTO T311/T11	Source	One per source
	PI	AASHTO T89/T90	Source	One per source
<b>Riprap (MAG704)</b>	Gradation	AASHTO T27 (Visual)	Source	One per source
<b>Portland Cement</b>	Mix Design			One per mix
	Slump	ASTM C143	Discharge	One per 100 CY
<b>Concrete (MAG 725)</b>	Temperature	ASTM C1064	Discharge	One per 100 CY
	Compressive Strength	ASTM C39	Discharge	One set of 4 cylinders

## **APPENDIX A: GENERAL SIDEWALK PLAN EXHIBIT**

## **APPENDIX B: DESIGN EXHIBITS**

**APPENDIX C: BID SCHEDULE**

ITEM NO.	ITEM DESCRIPTION	UNIT	1st-3rd Ave Sidewalks		
			FINAL	DATE:	9/10/2019
			QUANTITY	UNIT PRICE	AMOUNT
1	Mobilization	LS	1		
2	Survey & Staking	LS	1		
3	Remove Existing Concrete Curb	LF	20		
4	Grade For Concrete Flatwork	LS	1		
5	Roll Curb include 3" AB under sidewalk (MAG Std Dtl 220-1, Type D)	LF	3,360 *7,775		
6	4' Concrete Sidewalk (MAG Std Dtl 230) (include 3" AB under sidewalk)	SF	13,250		
7	Concrete Sidewalk Ramps (MAG Std Dtl 236-4, Single)	EA	6 *12		
8	Curb and Gutter Transition (MAG Std Dtl 221)	EA	5		
9	Adjust Water Valve Box to Grade (MAG Std Dtl 391-2)	EA	1		
10	Traffic Control	LS	1		
11	Quality Control	LS	1		
11	Tax	LS	1		



ITEM NO.	ITEM DESCRIPTION	UNIT	1st-3rd Ave Main St to N. Harless St. Mill & Overlay		
			FINAL DATE: 9/10/2019		
			QUANTITY	UNIT PRICE	AMOUNT
1	Mobilization	LS	1		
2	2" Full Depth Mill	SY	4,925 *11,325		
3	Subgrade Preparation	SY	4,925 *11,325		
4	2" Asphaltic Cement	SY	4,925 *11,325		
5	Adjust Water Valve Box to Grade (MAG Std Dtl 391-2)	EA	4		
6	Adjust Manhole Frame & Cover (MAG Std Dtl 422)	EA	1		
7	Traffic Control	LS	1		
8	Tax	LS	1		

## **APPENDIX D: PROPERTY INVENTORY**

PROPERTY LOCATION		LANDSCAPE ITEMS		HARDSCAPE ITEMS	MISCELANEOUS ITEMS	
APN	STREET ADDRESS	EXISTING GENERAL	EXISTING LANDSCAPE	DRIVEWAY AND	ADDITIONAL RELOCATIONS	PROTECT IN PLACE
104-12-043D	74 N MAIN ST					
104-12-043E	74 N MAIN ST					
104-12-042D						
104-12-042E	71 W 1ST AVE			Driveway-Detail 5		
104-12-056B						
104-12-056A	149 N HARLESS ST					
104-12-008	11 W 2ND AVE					
104-12-009				Driveway-Detail 5		
104-12-010						
104-11-041B	214 N MAIN ST					
104-11-041A	60 W 2ND AVE					
104-11-042	62 W 2ND AVE					
104-11-037A	82 W 2ND AVE					
104-11-037B						
104-11-038C	44 W 3RD AVE			Driveway-Detail 5		
104-11-038D						
104-11-038A	15 W 3RD AVE					
104-11-012	44 W 3RD AVE					
104-11-013	56 W 3RD AVE					