

# Monthly Report

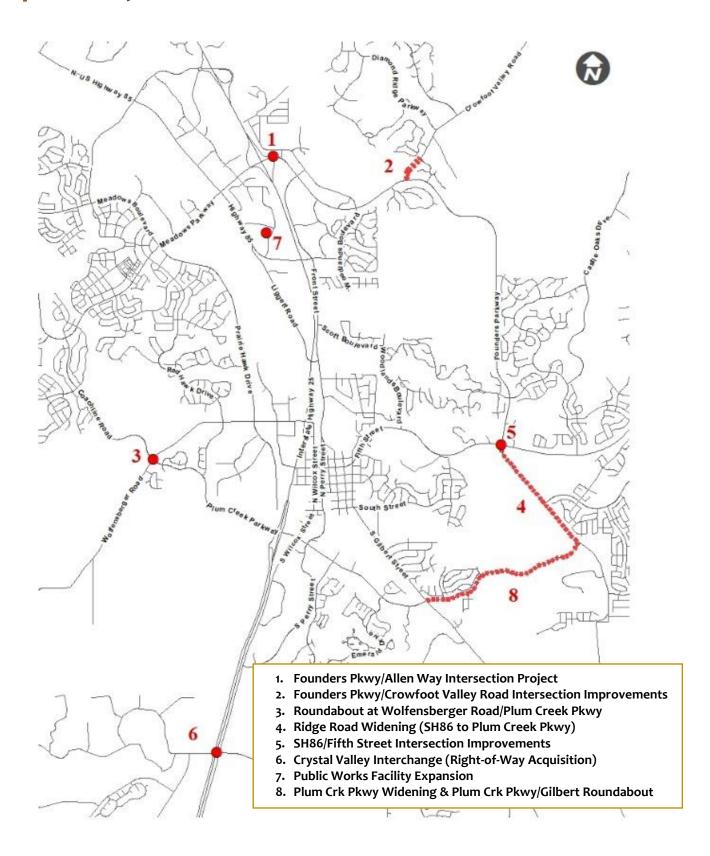
June 2019

The Public Works Depatment operates under the CAN DO philosophy – We are committed to doing the job right with a positive attitude while staying dedicated to meeting the needs of our Town values and continually searching for opportunities to improve.

PW Mission: To provide outstanding service, safety and support for transportation infrastructure and maintenance.



### **Capital Projects**



- Founders Pkwy/Allen Way Intersection
   Improvement Project
   – This project will address the need for the following improvements:
  - An additional eastbound left turn lane from Founders Parkway to Allen Way
  - A dedicated right turn lane from Founders Parkway to Allen Way
  - An additional southbound right turn lane from Allen Way to westbound Founders Parkway
  - An additional I-25 northbound on-ramp lane
  - A second through lane at Allen Way and Allen Street

Phase: Design & ROW Acquisition

- June 18, 2019 awarded a construction contract with Noraa Concrete Construction Corporation
- June 25, a pre-Construction Conference was held

Budget: \$760,000

**Design Completion:** Complete **Construction Completion:** Fall 2019

- Founders Pkwy (SH86)/Crowfoot Valley Road
   Intersection Improvement Project and Crowfoot
   Valley Road Widening Project This project will address the need for the following improvements:
  - An additional eastbound left turn lane from Founders Parkway to Crowfoot Valley Road
  - An additional northbound lane on Crowfoot Valley Road between Founders Parkway and Knobcone Drive
  - A southbound free right turn lane from Crowfoot Valley Road to westbound Founders Parkway
  - Widen Founders Parkway both eastbound and westbound between the Crowfoot Valley Road and Woodlands Boulevard
  - Widen Crowfoot Valley Road from Founders Parkway to Knobcone Drive

Phase: Construction

- The contractor has placed the lower lifts of asphalt pavement along the south side of Founders Pkwy
- The contractor has been clearing and grubbing along the west side of Crowfoot.
- The contractor has completed the work at the pond, including seeding.
- Weather has created some delays. The contractor is assessing schedule to determine if adjustments can be made to meet original completion date

Budget: \$3,550,000

Construction Completion: Winter 2019

3. Wolfensberger Road/Plum Creek Parkway

**Roundabout Project** - This project will accomplish the design and construction of a roundabout at this intersection to improve operations and minimize potential accidents.

Phase: Construction

- Placed the final asphalt lift
- Completed final striping of the new roadway
- Completed all sidewalk; placement of topsoil and seeding
- Started the close out documentation of the project

Budget: \$1.14M

Construction Completion: Spring 2019

4. Ridge Road Widening – Ridge Road will be widened from two to four lanes between the Founders Parkway (SH86)/Fifth Street/Ridge Road intersection and Plum Creek Parkway

Phase: Design

100% plans have been provided. Staff is working on requesting proposals to initiate the ROW acquisition, and utility relocation process

Budget: \$400,000

Design Completion: Spring 2019

- 5. Founders Parkway (SH86)/Fifth Street Intersection Improvements – A roundabout has been identified as the preferred upgrade Phase: Design
  - Staff will find out if the Town will receive DRCOG funding in August of 2019.
  - Design is on hold until DRCOG funding is known. Design is 30% complete.

**Budget:** \$340,000

Design Completion: Pending award

Crystal Valley Interchange – Right-of-Way
 Acquisition – The purpose of this project is to achieve acquisition of remaining right-of-way.

Phase: Right-of Way Acquisition

- Appraisal Services started.
- Acquisition Services
  - East Side of I-25 Six Notice of Interest letters have been sent.
  - East Side of I-25 Started working on offer letters.
  - West Side of I-25 Town working with CDOT on the Access Line Locations.

**Budget:** Development Escrow ROW

Completion: Fall 2019

 Public Works Facility Expansion – This project consists of the addition and renovation of the Service Center building.

Phase: Construction

Work has continued on both the new phases of the addition which include; 1. The addition of two new fleet service bays on the north side of the existing building and 2. New office space on the south side of the existing building.

**Budget:** \$4,960,349

Construction Finish: Spring 2020

- 8. Plum Creek Parkway Widening and Plum Creek
  Parkway/Gilbert Street Roundabout Project This
  project will address the need for the following
  improvements:
  - Convert Plum Creek Parkway/Gilbert Street intersection into a roundabout
  - Reconstruct the existing 2-lane section of Plum Creek Pkwy from Gilbert to Eaton streets
  - Widen Plum Creek Parkway from Gilbert Street to Eaton Street
  - Widen Plum Creek Parkway from Eaton Street to Ridge Road

Phase: Design and ROW Acquisition -

- Continued working on the Widening of Plum Creek Pkwy from Eaton St. to Ridge Road design package.
- Continued finalizing the Roundabouts and Widening of Plum Creek Pkwy from Gilbert St. to Eaton St.
- Completed separate Storm Drainage
   Construction Plan package for bidding this fall.
- Prepared updated drainage report and GESC report for Storm Drainage Construction plan.
- All ROW Appraisals have been completed
- Notice of Intent to Acquire letters have been mailed out for all properties.
- Working on offer letters.

**Budget:** \$794,375

Design & ROW Completion: Spring 2019

### **Engineering Division**

### 2019 Pavement Maintenance

**Program (PMP)** — The 2019 PMP will focus its efforts in the West PMP area with additional work taking place on primary streets (Meadows Boulevard, Wolfensberger Rd., Butterfield Crossing, Foothills Dr., Cherokee Dr., & Morning View Dr.).

Sidewalk, curb and gutter repairs continue throughout the West PMP area. Affected residents are being

notified that repair and maintenance work is to begin, via letters and variable message boards. Work is progressing through the residential areas as scheduled, and is on track to wrap up this month.



In general, work will progress through the West PMP area in a clockwise manner, starting in an area off Cherokee Drive. The Town's contractors will be preparing the streets to receive slurry seal, crack seal and mastic as well as asphalt patching and slurry. Asphalt patching began June 10, and will run through the month. The asphalt slurry seal will follow July 8.

Butterfield Crossing was closed from the entrance to Butterfield Park, east to Rosecrown Ave. This was done in an effort to speed up the project, as several days were lost due to inclement weather. Bottom mat paving in phases 2 & 3 was completed before the closure. The project is planning to be complete before school starts.

Full Depth Reclamation work is complete in phase I the reclamation process of the asphalt in phase 2 began on Monday, June 17. Bottom mat paving on Arrowleaf Court, in phase 2, occurred on Friday, June 21.



Concrete restoration work began on Foothills Drive, Cherokee and Meadows Blvd. on Monday, June 10. Work consisted of curb, gutter and sidewalk repair, removal of concrete pavement, diamond grinding and joint sealing. Contractor is working in a clockwise fashion to minimize disruption to the traveling public.

### 2019 Facilities Parking Lot Improvements Program - This contract

will see needed improvements to three parking lots at Town Parks, and one Parking lot in the Downtown area as follows:

- Crystal Valley Tank
- Coachline Tank
- Red Hawk Golf Course (South half)
- Founders Park (Asphalt and Concrete sections)

Work is schedule to begin in August and continue through September.

### 2019 Bridge Maintenance Program

(BMP) - The contractor continues to work on the Perry Street Bridge this month. Contractor was able to

complete the thin bond overlay on the bridge deck. This will be cure for a few days, then the area will be thoroughly swept to remove any lose aggregate. Final pavement markings will be applied, and bridge will be

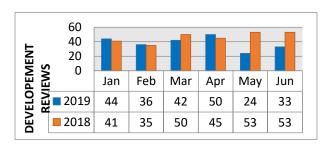


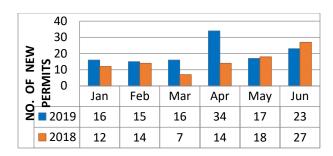
complete. Contractor has moved work to the Front Street Flyover Bridge. Bridge Painting to begin in late summer.

## Development Review and Permitting

**Development Review** - Included in the 50 submittals are 21 first time applications with four pre-applications. All reviews were completed on or before the due date by the PW Development Services Team.

### Permitting - 17 right-of-way permits were issued.





# Transportation Planning & Traffic Engineering Division

### Taxi Voucher Program

For the month of June, the Taxi Voucher Program funded 125 rides; this was a 26% decrease from last May's total of 169 rides. In June, 20 individuals used the Town's Taxi service. Of those that used the service in June, 75% of the rides were for work, 15% were for grocery shopping trips, and 10% for medical appointments.

### **Traffic Engineering and Operations**

**Traffic Signal Operations and Maintenance** 

In the month of June, staff addressed two requests from the public related to traffic safety and signal operation. A total of 24 traffic signal maintenance tasks were completed in June. Travel Time Index (TTI)

The overall combined TTI across Town corridors in June was 1.40 which is a four star rating.



### **Street Light Operations**

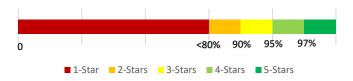
The Town owned and operated street lights are inspected on a monthly basis with regard to the total percentage that are operational (i.e. on at night and off

during the day). In the month of June, approximately 96% of these street lights were operational.



### **Beacon Operations**

The Town owned and operated beacons: school zone flashers, pedestrian rapid flashing, yellow flasher, and stop sign red flasher are inspected on a monthly basis with regard to the total percentage that are operational. In the month of June, four observations of pedestrian beacons not operating as intended was found. There were no instances of school beacons not operating as intended for the first few days of June. Based on this, June's operational status is at 86%.



## Street Signs and Pavement Marking Maintenance

During the month of June the crew accomplished a total of 1,410 tasks. This number of tasks is above the typical monthly average. Of these tasks 524 of them were windshield inspections related to markings, signs and rapid flash beacons. Sign work related to fabrication, install, repairs, replacements, etc. counted for 125 tasks. Marking work accounted for 660 tasks of original installs, crosswalk and stop bar replacement. The crew also completed 18 tasks related to special events, including working the new fire engine dedication event hosted by Castle Rock Fire. The other major special event the team provided excellent service for was the delivery and pickup of traffic control devices for Car Show Weekend.

In addition, the team provided excellent support and response to two separate weather incidents providing emergency services with traffic control. The team was also trained up on proper hand paint machine practices and proper usage.

Finally, the first round of long line painting is nearly complete with one final day of painting following bad weather delays. All painting of crosswalks and stop bars at signalized intersections are complete.

### **Transportation Planning**

Neighborhood Traffic Calming Program (NTCP):

The neighborhood traffic calming program exists to verify and address resident speeding concerns on local neighborhood streets and certain collector roadways. The following are the current locations where applications are occurring:

- Whispering Oak Drive
- Diamond Ridge Parkway
- N. Meadows Drive (south of Meadows Blvd

### Downtown Bike Parking:

Town staff has ordered 11 new bike racks to install in Downtown. A number of locations have been identified by working with the DDA, Parks and Recreation, Police, and Development Services departments. The racks are planned to be installed later this summer with the assistance of the Parks and Recreation Department. The funds to buy the racks were part of the Town's grant award of \$2,250 through the Colorado Department of Public Health and Environment (CDPHE). The grant application did not require a local match from the Town.

### **Traffic Signal System Capital Improvements**

<u>Traffic Signal System Upgrades (Phase 3)</u> – This project is the third phase of a multi-year project that was approved as part of the Town's Strategic Plan early in 2015. The two main components of the Phase 3 project are installation of closed circuit television (CCTV) and travel time monitoring devices at key intersections.

In June, we provided monthly travel time index (TTI) data from all devices including service level metrics in the monthly operational report. CDOT's COTrip is now receiving Castle Rock's travel time data and has provided connectivity and sharing paths for CCTV still images to be sent to COTrip also.

**Budget:** \$520,000

**Construction Completion:** Summer 2019

<u>2019 Intersection Signalization Construction Projects</u> – In June, the Town's signal construction contractor, Sturgeon Electric, continued work at two intersections,

Meadows Boulevard and Future Street and the reconstruction of the Factory Shops Boulevard and New Memphis Court span wire signal.

**Budget:** \$667,000

Construction Completion: Fall 2019

2019 Illuminated Street Name Sign Project –In June, Staff reviewed intersection improvement projects at CDOT signals, including Founders Parkway and Crowfoot, and Founders Parkway and Allen St, and confirmed the feasibility to incorporate illuminated street name signs as a part of these projects. The locations in 2019 now include Factory Shops Blvd / New Memphis Court, Meadows Blvd. / Future Street, and I-25 northbound and southbound off-ramps and Meadows/Founders Parkway. In addition, ahead of the originally planned scheduled signs will go in at I-25 / Plum Creek Parkway, Founders / Crowfoot Valley Road, and Founders / Allen. This project is on schedule for completion in 2019 and within budget.

**Budget:** \$55,000

Design Completion: End of 2019

### Fleet Services







As we drive around this Town of ours and see how busy all the different departments are with all the growth, almost all of them have to rely on their Town issued vehicles to keep up the first class service that we provide to the citizens of Castle Rock. Here at the Fleet Division we take great pride in knowing that those vehicles are reliable and safe to operate.

Fleet Services Division was busy in June 2019 Keeping Castle Rock on the move. The Fleet Division billed out \$56,000 of parts and labor. The Fleet finished 79% of our work orders in the first 24-hours of being reported which was above our benchmark of 75% being done in the first 24-hours. Vehicle availability for the month was very good at 98.5% which is above our benchmark of 95%. Technician productivity was also above our benchmark at 78.4%. Fleet auctioned off four vehicles in June and netted the Town \$64,000. We also were able to put into service two new vehicles., One Police Interceptor and one light plant trailer for the Water

Department. Work orders completed were 124 which is higher than our average of 105 a month.

**Objective/Benchmark:** Complete at least 75% of our Work orders within 24-hours of coming to shop. **Outcome:** Fleet team completed 78% of the work orders within 24-hours of opening repair requests or service requests. This benchmark number shows how quick the Fleet Division is working on vehicles to get them back on the road.

**Objective/Benchmark:** Town vehicles and equipment available for use 95% of time.

**Outcome:** Town vehicles and equipment were available 98.5% of the time. This high fleet availability rate means that Town vehicles and equipment are ready when they are called upon to perform.

**Objective/Benchmark:** Technician productivity percentage of 70% (APWA standard) **Outcome:** Technician productivity was 78.4%. This was well above our benchmark of 70% compared to the standard set by the American Public Works Associations (APWA).

# Street Operations & Maintenance Division

During the month of **June**, the Street Operations & Maintenance Division (SO&MD) performed work in five (5) maintenance operations:

- Crack Seal Operations
- Asphalt and pothole patching
- Vegetation Control
- Street Sweeping
- Special Operations
- Gravel Road Maintenance

#### **Crack Seal Operations.**

Crack seal operations have begun now that the weather

has been more accommodating. In the month of June crews have used 16,310 pounds of crack seal material to seal up 10.18 miles of roadway. These operations enhance the lifespan of town roadways by preventing water infiltration.



### **Asphalt Patching**

Streets crews have carried out various asphalt patching and pothole filling throughout the month of June. Crews used 21.39 tons of hot mix asphalt as well as 840 pounds of cold mix asphalt to fill numerous potholes as well as larger asphalt patches. Hot mix asphalt is the preferred medium as it provides a far more permanent patch and is much less expensive than cold mix. During these summer months hot mix is readily available and as such crews will use it to combine pothole and partial or full depth patching operations.

### **Street Sweeping**

Streets Division crews have been working to keep the downtown areas clean and tidy by undertaking overnight street sweeping operations, completing 92.67 lane mile during the month of June. Streets crews also worked to sweep up large amounts of



flood debris resulting from heavy rainstorms. These daytime operations cleaned up 85.29 lane miles of roadway. These operations resulted in 57.32 tons of material being removed from the roadways.

### **Vegetation Control**

Streets division crews the first round of mowing operations with the completion of 91.11 edgeline miles of roadway verge area mowed. 180 gallons of herbicide was applied to medians and selected verge areas. A more aggressive weed control program is a large part of the greater efficiency with the mowing operations this year.

### **Special Operations**

Streets crews in concert with other Departments, deployed to mitigate flooding that had occurred during a relatively heavy rain storm. Streets personnel were working to clear the roads of standing water up to two feet deep in areas of the Promenade, Outlet Mall, and Castleton Court. Crews also deployed street sweepers following the flooding to clean up the aftermath of the storms.

### **Gravel Road Maintenance**

Streets crews responded to Rocky View Road and Castle Oaks Drive to smooth the road out after a rough winter.

Crews spent three days working to grade and rebuild the road surface making for a much safer and more pleasant drive. The wintertime conditions, plowing, as well as heavy construction traffic have all taken their toll on these gravel roads.