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# WASHINGTON STREET RECONSTRUCTION PUTS ADAMS COUNTY BACK ON TRACK

Concrete pavement is constructed at the intersection of Washington Street and 66th Avenue. *(Photo courtesy of Scott Contracting Inc.)*

By Leslie Shivers

The section of North Washington Street between 58th Avenue and 70th Avenue was a congested two-lane street serving the industrial area just to the southeast of the I-25/I-76/I-270 interchanges. Drainage was accomplished with side ditches, and ponding and splash-back were issues.

Budgeted at $7.8 million, this project widened the road to four lanes and improved drainage on Washington Street from 68th Avenue south to the Union Pacific tracks just north of 58th. Nearly two miles of storm pipe, 55 inlets and 33 manholes were installed. New concrete curbs and sidewalks with ADA-compliant curb ramps were built. Pavement was upgraded with concrete intersections and new asphalt. Water lines were relocated and traffic signals were improved.

Rene Valdez, construction manager for the Adams County Transportation Department, says that completion of the project has resulted in "huge safety improvements both in a drainage perspective and a traffic perspective."

The new storm sewer system runs along the west side of Washington Street and spills into a new detention pond that was built on the east side of Washington Street just south of 70th Avenue (SH 224) to protect the quality of water draining into the adjacent Clear Creek.

The new storm sewer consists of 66 in. and 72 in. reinforced concrete pipe installed at depths of over 20 ft. starting at the new pond, then running south under the I-76 overpass and down Washington Street through much of the project.

**Fresh new curb and gutter work boasts new storm inlets, while grading operations are underway in the background.** ***(Photo courtesy of Scott Contracting Inc.)***


A 36 in. water delivery line runs along the east side of Washington Street delivering water from Denver to the North Washington Street Water and Sanitation District. Portions of the line were located at a depth less than the required 5 ft.

Some of these sections had to be lowered, but in other areas relocation costs were avoided by using a special foam insulation to prevent winter freeze. Scott Contracting had worked with the material before, but some extra time was required for Denver Water to evaluate and approve the installation.

## JUGGLING COMPLEXITIES, MEETING CHALLENGES

Barton Puryear, operations manager and staff counsel for Scott Contracting Inc., says that clearance issues involved with running the storm sewer line underneath the I-76 overpass was one of several challenges their team encountered. Clearance was increased by lowering Washington Street, which also provided easier access for everyday truck traffic.

Puryear points out that the need to accommodate existing electrical lines, gas lines, water mains and services is common with any major roadway construction. Adding to the complexity, the cemented cobble soils in the area sometimes prevented accurate potholing. "And when the elusive utilities were found, they were often directly in conflict with the new storm sewer installation – requiring on-the-fly problem solving," Puryear says.

Manuel Cordova, project manager for Adams County Transportation Department, described the difficult soil as "real cobbly, pit run kind of material that didn't have a lot of structure. We were 20 ft. to 25 ft. deep (to install the storm sewer), so we had shoring blocks stacked double."

And, says Puryear, "Soils stabilization was required near the I-76 bridge where the antique footers from the former bridge and an old box culvert were left in place."

A retaining wall nearly 500 ft. long and

up to 17 ft. high was constructed at the southeast corner of Washington Street and 68th Avenue. Existing utilities presented challenges, including an 18 in. HDPE pipe delivering irrigation water to nearby farms and Xcel's power-delivery poles.

"We had to get creative with one of our retaining walls because we would have undermined some of their poles if we had done it as originally planned," Valdez says.

Cordova says the poles ended up having to be moved anyway because of the grades and placement of the poles.

The weather didn't cooperate either. Major rainstorms stopped the work and left standing water that had to be pumped out before work could continue.

## RISKY SURPRISE

Construction transected existing facilities, which resulted in some new surprises. The project team knew that an abandoned gas station had two underground tanks that had to be removed. A third tank made its presence known only when a backhoe broke into it.

The contents of the tank had contaminated the surrounding soil, which had to be stockpiled and profiled for proper disposal. The Colorado Department of Public Health and Environment had to be notified, along with the state engineer at the Department of Water Resources.

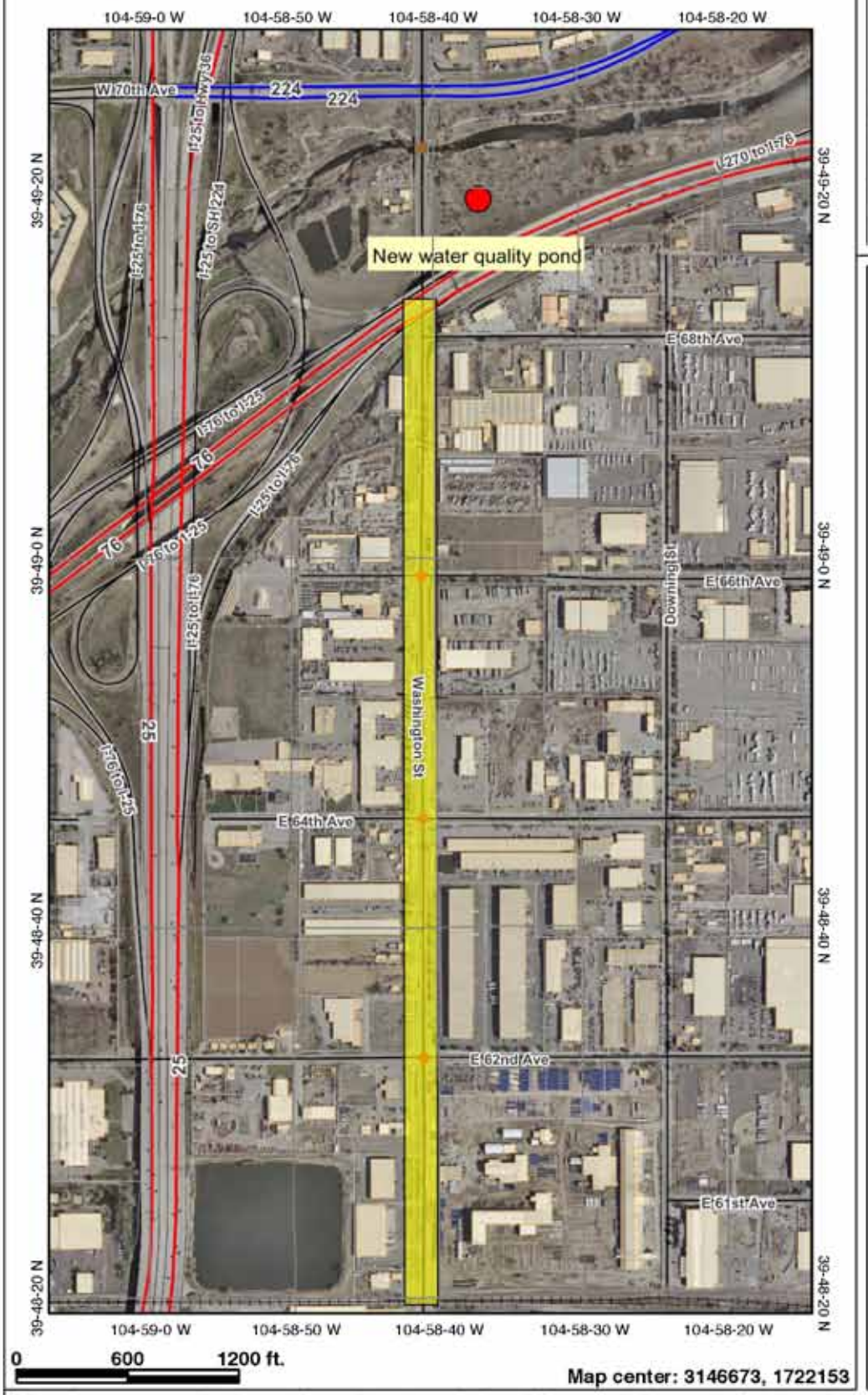
Valdez says that the whole process delayed the project by about two weeks. To minimize the delay, AG Wassenaar Inc. was hired to handle the reporting requirements and additional monitoring and testing that was required.

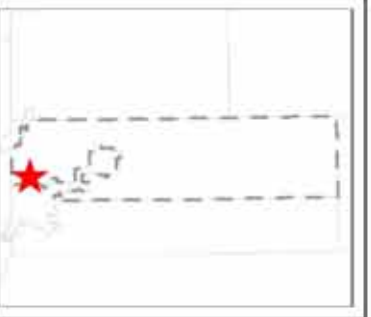
Traffic control in this industrial area with its high volumes of truck traffic was another challenge for the construction crews. Puryear described it as "confining work areas between live traffic on one side and the myriad of ongoing businesses on the other, combined with restricted work hours."

**A major rainfall left pools that had to be pumped out prior to resuming construction.** ***(Photo courtesy of Scott Contracting Inc.)***

**A box base manhole is installed.** ***(Photo courtesy of Scott Contracting Inc.)***

# Washington Street Phase III



## Legend

- County Boundary
- Adjacent Counties
- Township
- Traffic Signals
- Bridges
- Railroads
- Major
- Streets
- Hwy outline
- Road outline
- Interstates
- US, State Hwys
- Tollways
- Streets/Roads
- Residential Buildings
- Parcels
- 2010 West Aerials
- 2010 East Aerials

Scale: 1:10,298

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

## CONNECTING THE PIECES

Adams County is working its way south in reconstructing Washington Street as funding has allowed, starting with Phase I near Coronado Parkway, just south of 84th Avenue. Phase II completed work from SH 224 (70th Avenue) north to 78th Avenue. Phase IV, the final project, will address Washington Street from 58th Avenue south to the county line near 52nd Avenue. Phase IV is currently in design stages, with construction slated to begin in 2016 if funding is available.

The Washington Street corridor was identified as a strategic corridor and had been slated to receive funding from the Adams County road and bridge fund. The project received a windfall when the Pecos Street grade separation project qualified for funding from the Denver Regional Council of Governments.

As a result, some of the existing funding for the Pecos Street project had to be moved to another project with regional impact. Adams County selected the Washington Street project.

**Pumper truck onsite to pour overflow structure on toe walls for outfall structure.** ***(Photo courtesy of Adams County.)***

**Drainage system ready for installation behind the retaining wall at Washington Street and 68th Avenue.** ***(Photo courtesy of Adams County.)***

**Formwork on the final section of the retaining wall at 68th Avenue, put in place to protect the grades of a truck dealership and farmers' irrigation behind the wall.** ***(Photo courtesy of Scott Contracting Inc.)***

## KEYS TO SUCCESS

The segment of Washington Street that was reconstructed in the Phase III project now boasts much improved drainage – just in time to prevent significant flooding from the historic September storms.

"I think we would have had to shut down the road, based on the amount of water we've seen there in the past just with a typical rain," Valdez says.

The county worked with local businesses to coordinate combined access, reduce access points and improve traffic flow and safety. Monthly newsletters helped keep everyone informed, Valdez says. "When it seems like there isn't much progress being made, it sometimes helps to inform everyone of the issues that are involved," he says.

Paving intersections in concrete will help reduce maintenance issues and accommodate the heavy traffic in the area.

Cordova says that Scott Contracting "really went above and beyond" to keep the traffic flowing and minimize the inconvenience of the traffic and detours in the area.

Valdez agreed. "Scott Contracting really was a big part of making this project a huge success," he says. "We were considerate of issues that arose from their perspective, and they were considerate of our issues. Creating a partnership always makes a project more successful."