



Colorado Springs Utilities

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April 12, 2012

Pueblo County
Department of Planning and Development
229 West 12th Street
Pueblo, Colorado 81003
Attention: Julie Ann Woods, Director of Planning and Development

Subject: Pueblo County Construction Progress Summary, Southern Delivery System

Dear Ms. Woods,

The enclosed report provides information demonstrating the substantial steps that have been taken toward completion of the Southern Delivery System (SDS). The report includes descriptions of design and construction activities, permitting and land acquisition achievements, and representative construction photographs.

Please contact Mark Pifher at 719-668-8693 with any questions regarding this information.

Sincerely,

John A. Fredell
Program Director
Southern Delivery System

cc:

Gary Raso, Special Assistant County Attorney
Ray Petros, Special Counsel

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Southern Delivery System Pueblo County Construction Progress Summary

Prepared for:
Pueblo County

Submitted by:
**Colorado Springs Utilities, SDS Project Manager
on behalf of SDS Participants**



**Installation of SDS South Pipeline 3
in Pueblo County**

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Acronyms and Abbreviations

| | |
|------------------|--|
| 1041 permit | Pueblo County 1041 Permit No. 2008-002 |
| Applicant | Colorado Springs Utilities, SDS Project Manager |
| BMPs | Best Management Practices |
| CDPHE | Colorado Department of Public Health and Environment |
| County | Pueblo County |
| CSU | Colorado Springs Utilities |
| EPC | El Paso County |
| LCERP | Local Collectors Evaluation and Rehabilitation Program |
| LF | linear feet |
| MHERP | Manhole Evaluation and Rehabilitation Program |
| PDC | Pueblo Dam Connection |
| Project | Southern Delivery System Project |
| R&R | Collection System Rehabilitation and Replacement Project |
| Reclamation | Bureau of Reclamation |
| ROD | Record of Decision |
| SDS | Southern Delivery System Project |
| SDS Participants | Colorado Springs Utilities, City of Fountain, Security Water District, and Pueblo West Metropolitan District |
| UPRR | Union Pacific Railroad |
| USGS | US Geological Survey |

Work Package Designations

| | |
|-------------------------|--------------------------------|
| BPS | Bradley Pump Station |
| FW1A, FW1B, FW3 | Finished Water |
| JPS | Juniper Pump Station |
| N1A, N1B, N1C, N2A, N2B | North Pipeline |
| PDC1A, PDC1B | Pueblo Dam Connection |
| S1, S2, S3, S4A, S4B | South Pipeline |
| UWCR | Upper Williams Creek Reservoir |
| WCPS | Williams Creek Pump Station |
| WTP | Water Treatment Plant |

Executive Summary

On April 21, 2009, the Pueblo Board of County Commissioners adopted Resolution 09-22, pursuant to which the Pueblo County 1041 permit for the Southern Delivery System (SDS or Project) was approved. Condition No. 2 of the permit states:

“This Permit is valid indefinitely for the life of the SDS Project, provided Applicant is in compliance with this Permit. If the Applicant fails to take substantial steps to construct the permitted development within thirty-six (36) months from the date of the Permit, then the Permit may be revoked or suspended by the County in accordance with its Areas and Activities Regulations. The Applicant may submit a written request to Pueblo County for an extension of the time period to begin construction under the Permit for good cause.”

This report is submitted by Colorado Springs Utilities (CSU), as the Project Manager, to demonstrate that Applicant has taken timely, substantial steps to construct the permitted development within Pueblo County.

Project components within the County include:

- Storage in Pueblo Reservoir
- Acquired all right-of-way in Pueblo County
- Modification of the Pueblo Reservoir north outlet works for a pipeline intake
- A Pueblo West turnout from the outlet on the north side of the Arkansas River
- The Juniper Pump Station
- A 66" raw water pipeline extending north from Juniper Pump Station to the El Paso County line

Construction progress to date is explained further in this submission, as well as in previous Quarterly Reports filed with Pueblo County in compliance with permit Condition No. 25 (Mitigation Appendix ENF-1), and in the Annual Reports filed with the Bureau of Reclamation (Reclamation) under the Record of Decision (ROD) for SDS, with copies provided to the County. In addition, the County has received copies of the final design and specification documents for each of the construction bid packages located within the County.

The following is a brief description of SDS construction progress in Pueblo County:

- Construction of the Pueblo Dam Connection 1A (PDC1A), including installation of Best Management Practices (BMPs), construction of a coffer dam, placement of the valve house foundation, installation of valves and piping, and installation of steel tunnel liner.
- Construction of BMPs and preparation for trenching for Pipeline Segment S1, including 5,876 linear feet (LF) of rock cleared for the pipe trench through March 2012 and 1,000 LF of pipe delivered the first week of April.

- Construction of BMPs and trenching for Pipeline Segment S2, tunneling under Highway 50, and placement of 15,707 LF of 66" steel pipe installed in trench, with 12,097 LF of total pipe welded through March 2012.
- Construction of BMPs and trenching for Pipeline Segment S3, and placement of 31,473 LF of 66" steel pipe installed in trench, with 23,536 LF of total pipe welded through March 2012.
- Completion of final design for Pueblo Dam Connection 1B (PDC1B) through March 2012.
- Completion of 30% design for the Juniper Pump Station through March 2012.
- The provision of a \$2.2 million payment to Pueblo County for sediment removal.
- Expenditure of \$51.6 million in Project construction work within Pueblo County through February 2012.
- Expenditure of \$30.5 million in Project construction work outside Pueblo County through February 2012.
- The expenditure of \$225 million in total Project permitting, land, legal, mitigation, project management, and construction and engineering through February 2012.
- Construction in September 2011 of a wetlands mitigation project on Fountain Creek in compliance with the Corps of Engineer's section 404 permit for SDS.

1.0 Purpose and Background

As stated in the Executive Summary, Condition No. 2 of the Pueblo County 1041 permit requires that “substantial steps to construct” SDS must be taken by April 21, 2012, i.e., within 36 months of the date of permit issuance. CSU, as Project Manager, in accordance with the 1041 permit requirements, has been submitting quarterly progress updates to Pueblo County. As evidenced by these updates, the permit Applicant has taken substantial steps toward Project completion, such that no “extension of the time period to begin construction” (Condition No. 2) need be requested.

Phase 1 of the Project entails six major work packages within Pueblo County and 11 major packages outside the County. These work packages are designated in **Table 1** and **Table 2**:

TABLE 1. Work Package Designations within Pueblo County

| Work Package Designation | Work Package Description |
|--------------------------|---|
| PDC1A | Pueblo Dam Connection |
| PDC1B | Pipeline from Pueblo Dam Connection 1A to Juniper Pump Station including Pueblo West Connection |
| S1 | Pipeline from Juniper Pump Station to Pueblo West |
| S2 | Pipeline through Pueblo West |
| S3 | Pipeline from Pueblo West to El Paso County line |
| JPS | Juniper Pump Station |

TABLE 2. Work Package Designations Outside Pueblo County

| Work Package Designation | Work Package Description |
|--------------------------|--|
| S4A | Pipeline from S3 to Hanover and Squirrel Creek roads |
| S4B/N1A/N1B | Pipeline through El Paso County from Squirrel Creek Road to Peaceful Valley Road |
| N1C/N2A | Pipeline from N1B to Bradley Road and then east to the future Upper Williams Creek Reservoir site, continuing to Bradley Road and then north to Highway 94 |
| N2B | Pipeline extending west along Highway 94 to the SDS Water Treatment Plant |
| WCPS | Williams Creek Pump Station |
| BPS | Bradley Pump Station |
| WTP | Water Treatment Plant and Finished Water Pump Station |
| FW1A | Pipeline from Finished Water 1B north to Constitution Avenue |
| FW1B | Pipeline originating at the Water Treatment Plant and Finished Water Pump Station north across Highway 24 to the east fork of Sand Creek |
| FW3 | Pipeline extending from Finished Water 1A west along Constitution Avenue to Powers Boulevard |
| UWCR | Upper Williams Creek Reservoir (Preliminary Design and land acquisition only in Phase 1) |

2.0 Permitting and Land Acquisition

As noted below, Applicant has acquired all major permit approvals for the Project and the majority of land interests necessary for construction, including all lands within Pueblo County.

2.1 Permit Acquisition

Applicant has acquired all major permits and approvals necessary to construct the Project. In addition to the Pueblo County 1041 permit for the County, this includes:

- Record of Decision – Bureau of Reclamation
- Clean Water Act Section 404 Individual Permit – US Army Corps of Engineers
- Approvals of Location - El Paso County
- Fish and Wildlife Mitigation Plan – Colorado Division of Wildlife
- 401 Certification – Colorado Department of Public Health and Environment
- Fountain Creek Watershed, Flood Control and Greenway District Resolution 2010-01

In addition, numerous construction specific permits have been acquired, including the Colorado Department of Public Health and Environment (CDPHE) construction permits, Union Pacific Railroad (UPRR) License Agreement, Reclamation Special Use Permits, El Paso County (EPC) Site Development Plans, etc.

2.2 Land Acquisition

Applicant has acquired all property interests necessary for construction activities within Pueblo County. Approximately \$2.29 million has been expended on land and relocation (excluding labor costs). **Appendix 1** is a map depicting the property interests acquired to date.

2.3 Permit Construction Related Activities

- A. The Pueblo County 1041 permit required Applicant to perform certain sediment dredging (Condition No. 8). The parties, upon further consultation, agreed that this Condition would be met through a payment of \$2.2 million to the County, which was made on September 27, 2010.
- B. Under Condition No. 6 of the 1041 permit, Applicant is to pay a total of \$50 million to the County in order to mitigate effects of SDS on Fountain Creek in Pueblo County. As specifically requested in this Condition, \$300,000 of the funds was to be paid in equal installments beginning July 1, 2009. The last such payment was made to the County on June 28, 2011.

- C. CSU has expended \$23.8 million on wastewater system projects under Condition No. 7 of the 1041 permit, which includes three years of implementing a Local Collectors Evaluation and Rehabilitation Program (LCERP), Manhole Evaluation and Rehabilitation Program (MHERP), Collection System Rehabilitation and Replacement Project (R&R), and Wastewater Reuse System (non-potable system).
- D. Applicant continues to maintain SDS haul route roads within Pueblo County at its expense in compliance with Condition No. 13 of the 1041 permit.
- E. Applicant has conducted, and continues to conduct as construction corridors are finalized, wildlife and vegetation surveys, cultural resource surveys, and dust and noise control surveys. The results are incorporated into the pertinent construction documents, and a cultural resources treatment plan was developed. Approximately \$84,589 has been spent to date on such survey work within Pueblo County.
- F. Applicant, in compliance with the 1041 permit revegetation and noxious weed control requirements, has submitted to Pueblo County bonds for revegetation of all active and imminent work package construction, prequalified revegetation contractors, and commenced procurement of a revegetation contractor for work packages S2 and S3.
- G. In conjunction with the installation of the 66" pipeline within Pueblo County, Applicant has ensured the implementation of dust and noise control measures with continuous monitoring to avoid violation of identified standards.
- H. Applicant, in conformance with the 1041 permit conditions, continues to collect and provide to the Pueblo County Planning Department and the Bureau of Reclamation, water quality data for identified locations along Fountain Creek. US Geological Survey (USGS) data were submitted in the last annual report.
- I. In addition to the above, Applicant has prepared and submitted certain documents per the commitments described in the Project ROD and other programmatic agreements, including:
- Environmental Commitments Plan – Accepted by Reclamation on March 24, 2011
 - Geomorphic Mitigation Plan – Approved by Reclamation on April 26, 2011
 - Integrated Adaptive Management Plan – Accepted by Reclamation on March 24, 2011
 - Monitoring Plan – Accepted by Reclamation on March 24, 2011
 - Socioeconomic Construction Management Plan – Approved by Reclamation on April 26, 2011

3.0 Design and Construction Activities

Within the past 36 months, Applicant has significantly advanced the amount of time and resources concerning SDS design and construction activities both within, and outside of, Pueblo County.

3.1 Design Activities

Design activities associated with work to be performed within Pueblo County are shown in **Table 3**.

TABLE 3. Design Activities within Pueblo County

| Work Package | Percent Complete | Est. Expenditures through Feb. 2012 | Engineering Firm |
|--------------|------------------|-------------------------------------|--------------------|
| PDC1A | 100% | \$2.2 million | CH2M HILL |
| PDC1B | 100% | \$781,909 | CH2M HILL |
| S1, S2, S3 | 100% | \$4 million | CH2M HILL |
| JPS | 30% | \$1.6 million | CDM/Western Summit |

Design activities associated with work to be performed outside of Pueblo County are shown in **Table 4**.

TABLE 4. Design Activities Outside Pueblo County

| Work Package | Percent Complete | Est. Expenditures through Feb. 2012 | Engineering Firm |
|--------------|------------------|-------------------------------------|--------------------|
| S4B/N1A/N1B | 100% | \$1.9 million | CH2M HILL |
| BPS/WCPS | 30% | \$5.3 million | CDM/Western Summit |
| WTP | 60% | \$10.5 million | McCarthy/Carollo |
| FW1A | 100% | \$593,088 | CH2M HILL |
| FW1B | 100% | \$457,954 | Dewberry |
| FW3 | 30% | \$26,146 | Dewberry |
| UWCR | 30% | \$930,840 | CH2M HILL |

3.2 Construction Activities

To date, Applicant has undertaken significant construction activities within Pueblo County, some of which are referenced in the Executive Summary. **Table 5** summarizes the scope of construction work within Pueblo County and the location of construction photographs in **Appendix 2**.

TABLE 5. Construction Activities within Pueblo County

| Work Package | Construction Progress through March 2012 | Pipe Installed in Trench through March 2012 | Total Construction Costs through Feb. 2012 | Est. Final Completion Date | Photo Appendix |
|--------------|--|---|--|----------------------------|----------------|
| PDC1A | <ul style="list-style-type: none"> Installed steel liner within dam Constructed valve house Installed valves and pipe | N/A | \$7 million | 29-Jun-12 | APPX 4 |
| PDC1B | <ul style="list-style-type: none"> Prepared bid package for construction contractor procurement Planning for Q3 2012 construction | N/A | \$0 | 11-Jul-13 | N/A |
| S1 | <ul style="list-style-type: none"> Constructing BMPs and temporary fencing Preparing for trenching Manufacturing and delivering pipe | N/A | \$5.7 million | 29-Jan-13 | APPX 1 |
| S2 | <ul style="list-style-type: none"> Completed boring under Highway 50 Delivering and installing pipe Procuring revegetation contractor | 15,707 LF | \$22.3 million | 17-Aug-12 | APPX 2 |
| S3 | <ul style="list-style-type: none"> Delivering and installing pipe Procuring revegetation contractor | 31,473 LF | \$16.3 million | 28-Sep-12 | APPX 3 |
| JPS | <ul style="list-style-type: none"> Procured Design-Build firm Planning for Q1 2014 construction | N/A | \$0 | 01-Mar-16 | N/A |

In addition to the construction activities within Pueblo County as outlined above, Applicant has undertaken extensive construction activities on the Project outside of Pueblo County. These activities are summarized in **Table 6**:

TABLE 6. Construction Activities Outside Pueblo County

| Work Package | Construction Progress through March 2012 | Pipe Installed in Trench through March 2012 | Total Construction Costs through Feb. 2012 | Est. Final Completion Date | Photo Appendix |
|--------------|---|---|--|----------------------------|----------------|
| S4B/N1A/N1B | <ul style="list-style-type: none"> Completed trenching and pipe delivery Installation of pipe nearly complete | 41,893 LF | \$22.7 million | 19-Oct-12 | APPX 5 |
| FW1A | <ul style="list-style-type: none"> Construction complete | 8,160 LF | \$4.6 million | 15-Apr-11 | APPX 6 |
| FW1B | <ul style="list-style-type: none"> Construction nearly complete Installing final BMPs | 4,098 LF | \$3.2 million | 21-Jun-12 | APPX 7 |

4.0 Conclusion

The information in this report and attached appendices demonstrates that the Applicant has taken “substantial steps to construct the permitted development” (1041 permit Condition No. 2) since the issuance of the 1041 permit by Pueblo County. Through February 2012, Applicant partners have spent \$225 million in total Project permitting, land, legal, mitigation, project management, and construction and engineering efforts. The initial connection to Pueblo Dam is approaching completion, approximately 47,180 LF (about 9-miles) of pipe has been installed in trench and approximately 35,633 LF (about 7-miles) of pipe has been welded through the end of March within Pueblo County. It is anticipated that all pipeline construction work within Pueblo County should be complete by January 2013. Construction of the second Pueblo Dam Connection work package should be complete by July 2013 and construction related to Juniper Pump Station should be complete by March 2016. Applicant will continue ongoing permit compliance efforts, such as ensuring revegetation success and monitoring for water quality.

During each step in the construction process, Applicant and its contractors have remained vigilant in the oversight of Project activities to ensure continual compliance with all of the 1041 permit terms and conditions. It is Applicant’s hope and expectation that, once completed, the Project will be a demonstration to how authorities at all levels of government can work together in efforts designed to meet critical public infrastructure needs while accommodating the social, economic, and environmental concerns of all involved.

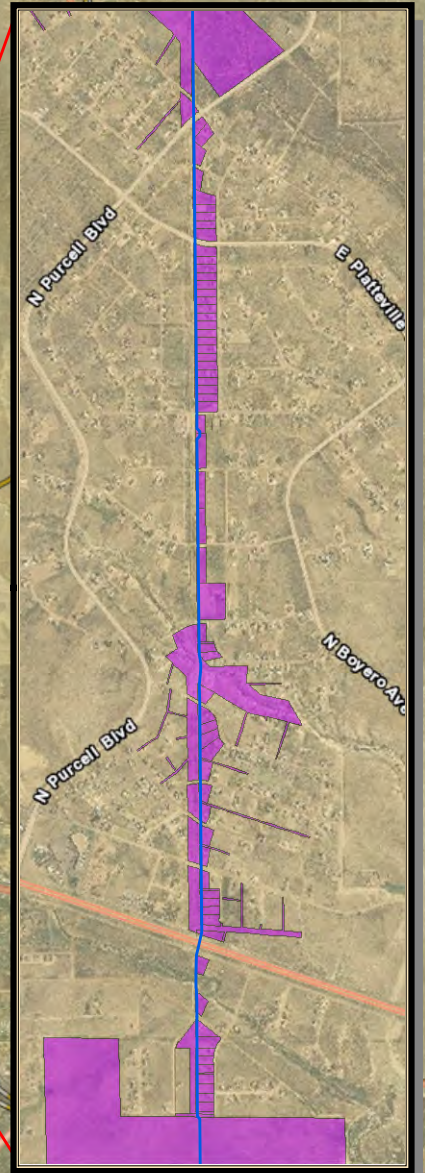
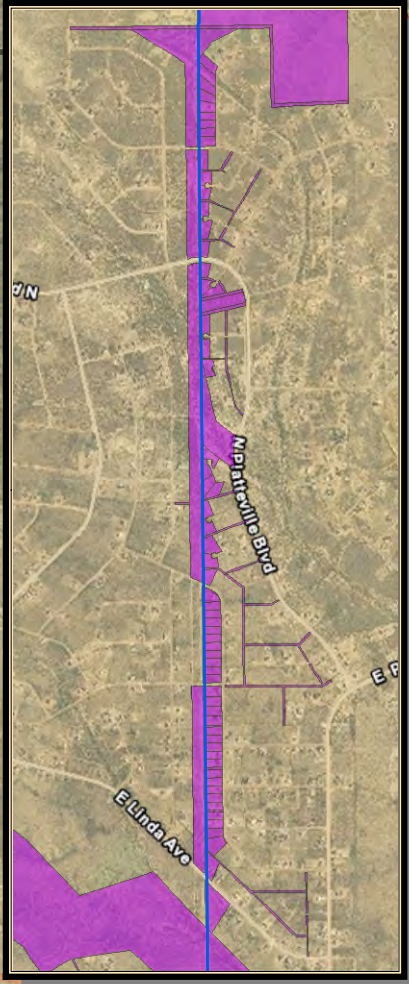
Map of Acquired Property

Southern Delivery System Pueblo County Acquired Parcels



EL PASO COUNTY

PUEBLO COUNTY



S3

S2

S1






PUEBLO
WEST

PUEBLO

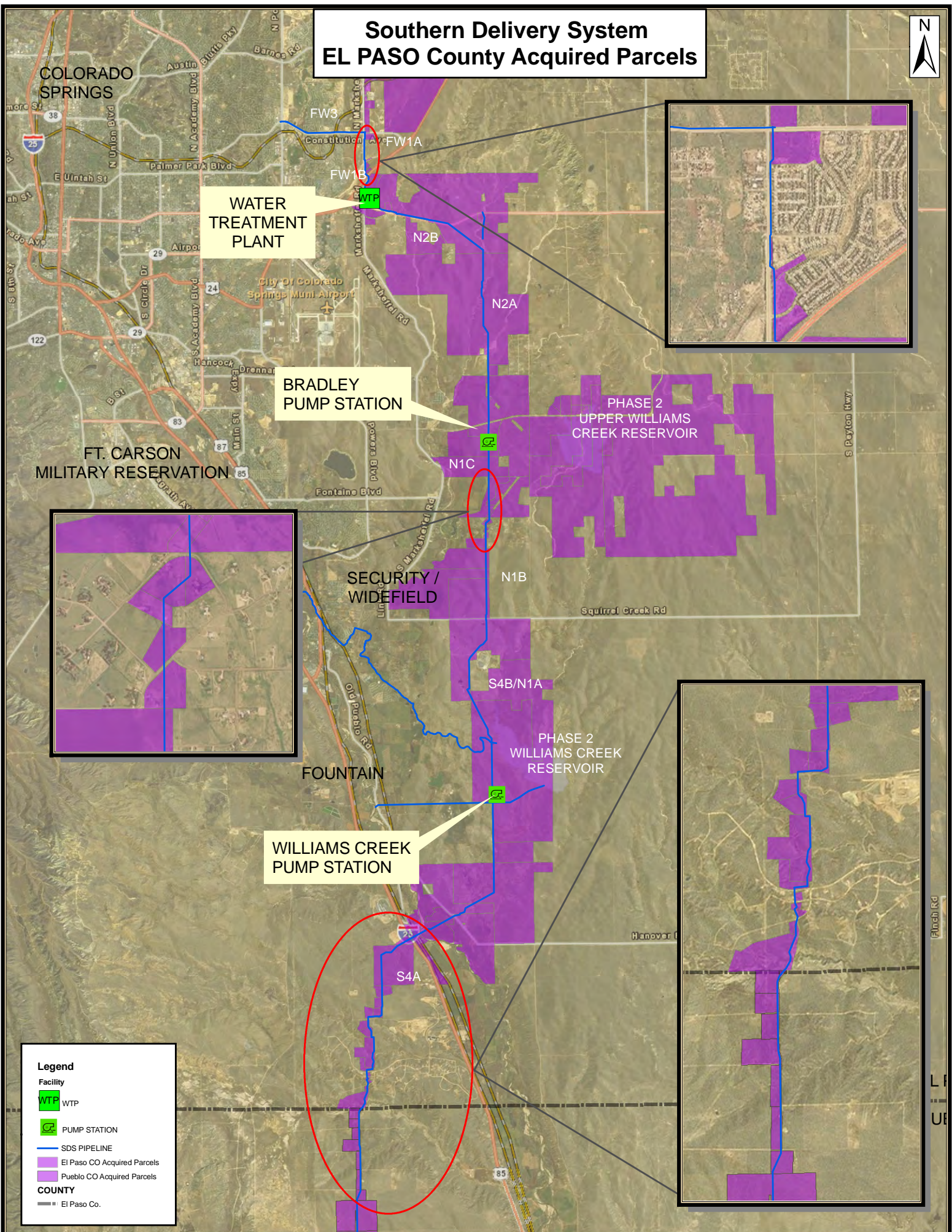
PUEBLO
RESERVOIR

JUNIPER
PUMP STATION

Legend

-  PUMP STATION
-  SDS PIPELINE
-  Pueblo CO Acquired Parcels
-  El Paso CO - Acquired Parcels
-  COUNTY LINE

Southern Delivery System EL PASO County Acquired Parcels



Legend
 Facility

WTP

PUMP STATION

SDS PIPELINE

El Paso CO Acquired Parcels

Pueblo CO Acquired Parcels

 COUNTY

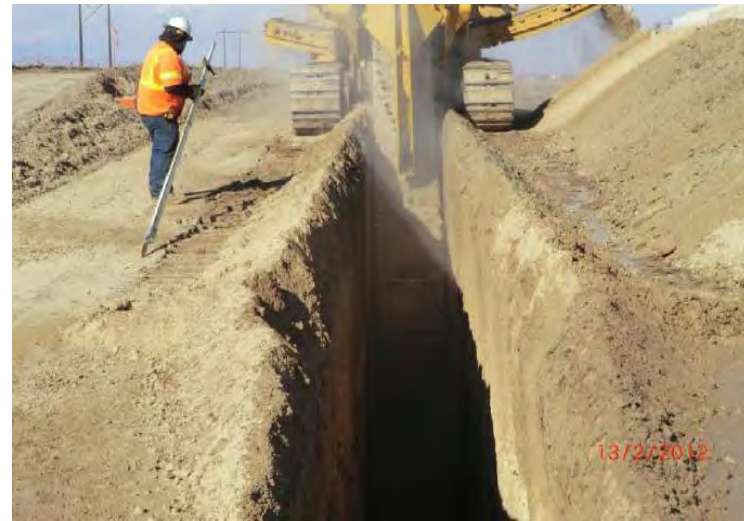
El Paso Co.

Construction Photographs

SOUTH PIPELINE 1



CREW CONSTRUCTING SOIL BERM FOR BMP



ROCK TRENCHING OPERATION



CREW SETTING THRUST BLOCK



SUBCUTTING FOR ROCK TRENCHING OPERATION

SOUTH PIPELINE 2



PIPELINE INSTALLATION



PIPE IN TRENCH



SETTING PIPE



PIPE PLACEMENT FOR HIGHWAY 50 TUNNEL CROSSING

SOUTH PIPELINE 3



PIPE IN TRENCH



PIPE INSTALLATION



OPEN TRENCH EXCAVATION



BATCH PLANT ASSEMBLY

PUEBLO DAM CONNECTION 1A



VIEW OF WYE SECTION AND VALVE FACILITY FROM TOP OF PUEBLO DAM



PLACING FIXED CONE VALVE



PROJECT SITE LOOKING DOWN FROM TOP OF PUEBLO DAM



PUMPING CONCRETE AT NORTH SHORE RETAINING STRUCTURE

SOUTH PIPELINE 4B/NORTH PIPELINE N1A/NORTH PIPELINE N1B



*N1B CONTROLLED LOW-STRENGTH BACKFILL
MATERIAL PLACEMENT*



TRENCH EXCAVATION



N1B PIPELINE PROGRESSING NORTH



BLOWOFF FOUNDATION CONSTRUCTION

FINISHED WATER PIPELINE 1A



DUAL FINISHED WATER PIPE INSTALLATION



DUAL FINISHED WATER PIPE INSTALLATION



DUAL FINISHED WATER PIPE INSTALLATION



DUAL FINISHED WATER PIPE INSTALLATION

FINISHED WATER PIPELINE 1B



DUAL PIPE INSTALLATION IN COMMON TRENCH



TEMPORARY PAVING OF MEADOWBROOK PARKWAY FOR RE-OPENING



START OF MEADOWBROOK PARKWAY CROSSING



AIR VACUUM VAULT SECTION PLACED FOR 42" PIPELINE