

RECOMMENDED CONDITIONS AND MITIGATION OF PROJECT IMPACTS

Southern Delivery System
1041 Application
January 21, 2009

MEMORANDUM

TO: Pueblo Board of County Commissioners

FROM: Paul Banks, Banks and Gesso, LLC

THROUGH: Kim Headley, Pueblo Co. Planning and Development Director

DATE: January 21, 2009

SUBJECT: 1041 Permit Application No. 2008-002, Southern Delivery System
Colorado Springs Utilities
City of Fountain
Security Water District
Pueblo West Metropolitan District

INTRODUCTION

This report contains staffs' recommended conditions if the County Commissioners decide to approve the 1041 Permit Application. The recommended conditions of approval are accompanied by the details of mitigation practices which would also be required.

This report is a partial list of recommended conditions and the remainder will come at a later date. It is recommended that the Board seek and allow time for public comment on all recommended conditions and impact mitigation practices.

The categories of conditions and impact mitigation that staff has yet to complete are as follows:

- Use of new water rights
- Carriage of water to entities that are not currently project participants
- Lake Pueblo water level management
- Monetary mitigation for impacts to Fountain Creek
- Issues related to the potential enlargement of Lake Pueblo
- Issues related to Colorado Springs Stormwater Enterprise and wastewater collection systems
- Issues related to the use of the Joint Use Manifold and the North Outlet Works
- Management of river flows in the Arkansas River below the dam
- Labor practices, and
- Water quality monitoring

This report is organized as follows:

Environmental Conditions / Mitigation

E-1 Clear Springs Ranch

Construction Conditions / Mitigation

- C-1 Protection of Open Excavations and Trenches
- C-2 Lighting
- C-3 Construction Site Maintenance and Security
- C-4 Control of Access To Properties
- C-5 Pre-existing Condition Assessment
- C-6 Work Hours
- C-7 Permitting
- C-8 Dewatering
- C-9 Site Restoration
- C-10 Public Communications
- C-11 Dust and Other Air Emissions (Dust Control)
- C-12 Drainage and Erosion Control (Sediment Control)
- C-13 Pre-Mobilization Readiness Review
- C-14 Traffic Control
- C-15 Protection of Plants and Wildlife
- C-16 Noxious Weed Control
- C-17 Hazardous Waste Management
- C-18 Sustainable Design
- C-19 Sustainable Construction Practices
- C-20 Surface and Groundwater Flows
- C-21 Protection of Livestock
- C-22 Structural Integrity of Pueblo Dam

Socio-Economic Conditions / Mitigation

- SE-1 Juniper Pump Station Architecture
- SE-2 Cultural Resources
- SE-3 Electricity
- SE-4 Securing Land through Easements, Fee Purchase, or Condemnation

Operational Conditions / Mitigation

- O-1 Release Rate Limit
- O-2 Pipeline Drainage

Compliance Monitoring and Reporting Conditions / Mitigations

ENF-1 Compliance Monitoring and Reporting

County Roads – Conditions / Mitigation

ENVIRONMENTAL CONDITIONS / MITIGATIONS

E-1	Clear Springs Ranch Project														
	Applicant shall reduce sediment transport down Fountain Creek, improve water quality by reducing concentrations of nutrients, bacteria, and metals, and reduce flood threat downstream by providing enhanced overbank flood storage by construction of the Clear Springs Ranch Project.														
<p align="center">PROJECT DETAIL</p> <p>1. Construct new wetlands and stream channel improvements on Fountain Creek at the Clear Springs Ranch property. The wetland shall be designed as shown on Figure E-2.1 and shall include the acreages of various types of wetlands listed in Table E-2.1.</p> <p>TABLE E-2.1 Habitats Created at the Clear Springs Ranch Mitigation Site</p> <table> <tr> <th>Habitat Type</th><th>Approximate Size (acres)</th></tr> <tr> <td>Herbaceous (Emergent) Wetland</td><td>8.7</td></tr> <tr> <td>Wetland Shrub</td><td>3.8</td></tr> <tr> <td>Cottonwood Grove (Forested Wetland)</td><td>0.2</td></tr> <tr> <td>Wetland Shrub interplant Area</td><td>1.2</td></tr> <tr> <td>Upland Trees and Shrubs</td><td>0.4</td></tr> <tr> <td>Total</td><td>14.3</td></tr> </table> <p>2. Redirect approximately 1925 linear feet of channel of Fountain Creek in the wetlands area to reduce the slope and improve channel stability through this area. The redirected channel will have an increased length and sinuosity that are consistent with the broader stable channel objectives articulated in the USACE Watershed Study and the Corridor Master Plan. Applicant shall be responsible to obtain all necessary permits.</p>		Habitat Type	Approximate Size (acres)	Herbaceous (Emergent) Wetland	8.7	Wetland Shrub	3.8	Cottonwood Grove (Forested Wetland)	0.2	Wetland Shrub interplant Area	1.2	Upland Trees and Shrubs	0.4	Total	14.3
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Estimated Start Date	Commence construction concurrent with start of SDS construction in Pueblo County.														
Estimated Completion Date	Approximately 1 year following commencement of construction.														
Permits	Section 404 Individual Permit														

LEGEND

- COTTONWOOD GROVE (0.23 AC)
- HERBACEOUS WETLAND (8.67 AC)
- WETLAND SHRUB INTERPLANT (1.15 AC)
- UPLAND TREES AND SHRUBS (0.43 AC)
- WETLAND SHRUB (3.78 AC)
- BACKWATER HABITAT

TOTAL WETLAND ACRES : 14.28

VERIFICATION SCALE
 1" = 100'
 0 100 200 300

FILENAME: 005-C-001 Clear Slope
12/10/2008
PLOT TIME: 10:32:36 AM

CONSTRUCTION CONDITIONS / MITIGATION

C-1	Protection of Open Excavations and Trenches
	Applicant shall provide safe work sites for the residents of Pueblo County.
PROJECT DETAIL	
<ol style="list-style-type: none">1. Comply with applicable Codes, Standards, Laws and Regulations relating to the safety of persons or property or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain safeguards for such safety and protection.2. Provide and maintain temporary security fences to protect the Work Sites. Temporary security fencing is described in more detail in Construction Conditions C-3.3. Inspect open excavations and trenches for compliance with safety plans and document in daily inspection reports.4. Limit the maximum length of open trench to 400 linear feet.5. Shore or bench excavations as required by OSHA regulations.6. Protect streets, roads, highways, and other public thoroughfares that are closed to traffic by barricades with warning signs per Manual of Uniform Traffic Control Devices (MUTCD).7. Provide signage and lighting to alert general public of construction hazards, which could include surface irregularities, unramped walkways, grade changes, and trenches or excavations in roadways and in other public access areas.8. Designate a qualified and experienced safety representative at the Work Site whose duties and responsibilities shall be the maintaining, supervising and enforcement of safety plans and programs.	

C-2	Lighting
	Applicant shall minimize adverse light impacts to Pueblo County residents during night time hours.
PROJECT DETAIL	
<ol style="list-style-type: none">1. Comply with applicable Codes, Standards, Laws and Regulations relating to providing lighting for the safety of persons or property, or to the protection of property from damage, injury, or loss.2. Notify property owners within 500 feet of the site 48 hours prior to any night work, except in the case of emergency night work.3. Design lighting to prevent spillover, nuisance, or hazard effects of light and glare on adjacent locations and uses of land.	

4. Position, to the extent practical, lighting used for security around equipment storage areas away from residences and oncoming traffic. The use of cut-off type luminaries is required. Light bulbs and light sources shall be shielded so that they are not directly visible from any adjacent lot or public roadway. Spillover of lighting for adjacent properties will not exceed one half of one (.50) footcandle measured at any point ten feet (10') beyond a property line.
5. Provide individual light sources not exceeding 150,000 lumens per light source (typical of a 1250W metal halite light). Light standards will not exceed 24 feet in height. Generators used to power light sources will not exceed 70 dB at 25 feet from the source.

C-3	Construction Site Maintenance
	Applicant shall maintain construction sites and equipment in a safe and secure manner for the protection of Pueblo County residents.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Comply with applicable Codes, Standards, Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss, and shall erect and maintain safeguards for such safety and protection. 2. Protect open trenches as described in Construction Condition C-1. 3. Close open ends of installed pipeline during non-working periods. 4. Close access manholes during non-working hours. 5. Provide barricades and light as necessary to prevent unauthorized entry to construction areas and affected roads, streets, and alleyways, inside and outside of fenced area, and as required to ensure public safety and the safety of project personnel and others who may be affected by the Work. 6. Lock or otherwise disable construction equipment during non-working hours. 7. Store materials and equipment in secure areas and arrange to partition to provide security of contents and ready access for inspection and inventory. Combustible materials (paints, solvents, fuels) shall be stored in a well-ventilated building meeting safety standards. Hazardous materials shall be stored according to product specification, codes, and manufacturer's instructions. 8. Lock controlled access points (private property gates) providing entry to construction sites and maintain a secure key control to prevent unauthorized access. 9. Ensure that work is performed within right-of-way and easements in a systematic manner that minimizes inconvenience to property owners and the public and interferes as little as possible with public travel, whether vehicular or pedestrian. This will include that no residence or business will be cut off from vehicular traffic for a period exceeding 4 hours unless special arrangements have been made. Whenever it is necessary to cross, close, or obstruct roads, driveways, and walks, whether public or private, safe bridges, detours, or other temporary expedients for accommodation of public and private travel will be provided and maintained. 	

10. Sweep roadways, streets, and walkways affected by the work and adjacent to the work when necessary.
11. Erect temporary security fencing around active construction areas. Fences around office areas, staging areas, material storage areas, equipment storage areas and around open trenches in urban areas shall be a minimum of 6 feet high constructed of standard chain link fence materials. Fences around open trenches in rural areas may be standard plastic orange construction fence, 4 feet high, with posts at intervals no greater than 20 feet. Temporary 4-strand barbed wire fences shall be installed wherever necessary to prevent livestock from migrating out of their designated pasture. Temporary fences shall be maintained as needed during the construction period. Material selection for fencing between work area and adjacent property will be agreed upon between Applicant and the property owner.
12. Inspect site safety measures each work day and periodically during non-working days.
13. Provide 24/7 security services including mobile patrols, lighting and video surveillance.

C-4	Control of Access to Properties
	Applicant shall prevent unauthorized access to properties.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Work with property owners, both public and private, to understand the conditions of ingress and egress, security issues, property control and protection issues, regarding the property, prior to mobilization to the specific work area. 2. Establish mutually agreeable conditions of access with property owner, and require all personnel accessing the site to sign a statement indicating that they understand and will abide by the conditions of access. 3. Grant access to enter the property only to those individuals that have a legitimate SDS related need to access the property, and then shall only do so under the previously agreed access conditions. 4. Provide signs at gates and access points notifying individuals that specific conditions of entry exist. 5. Close and secure gates and entry points by a locking mechanism when not in use. Conditions of entry will specify approved access times and conditions on open gates. 6. Strictly control access to keys to entry point locks. Recipients of keys will be required to sign when receiving the key, and again when returning the key. Recipients will be required to advise the Site Health & Safety Officer when they have lost or misplaced a key. Keys will be required to be of a non-duplicating type. Locks and keys will be changed when a key is reported lost or misplaced. 7. Designate the Site Health and Safety Officer to monitor the access control system. 	

C-5	Pre-existing Condition Assessment
	Applicant shall determine the condition of Pueblo County residents' existing property so that it can be restored to preconstruction condition or better.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Perform an examination of pre-construction existing conditions of land surface, drainage, vegetation and structures adjacent to the construction site that could be damaged or altered by construction operations. The structure owner will be invited to attend. 2. Perform periodic reexaminations, if required, to document any changes, including, but not limited to, cracks in structures, settlement, leakage, and similar conditions. Examinations may include photography, sampling and expert assessments of existing or current conditions. 3. Document examinations in writing, and by photographs and audio-video recordings. Photography shall be by a professional commercial photographer, experienced in shooting interior/exterior construction photos, in daylight and nighttime conditions, and in good and inclement weather. 4. Provide copy of documentation to property owner for review and acceptance. A copy of the documentation shall be provided to the County. Applicant and the County shall each maintain a copy of the documentation. Such documentation shall be used as indisputable evidence in ascertaining whether and to what extent damage occurred as a result of Applicant's operations. 	

C-6	Work Hours
	Applicant shall limit work hours to minimize disturbance to Pueblo County residents.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Perform work within the hours of 7:00 am to 6:00 pm Monday through Friday. Work outside of these hours will be restricted to maintenance of traffic, safety, and construction controls, maintenance of construction equipment, and approved exceptions. Pueblo County and residences within 500 feet of the affected portion of the work site shall be notified 48 hours in advance of work outside of these hours, other than maintenance work. 	

C-7	Permitting
	Applicant shall obtain all applicable permits.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Obtain permits and comply with permit conditions and applicable regulations. Permits may include those listed below and in Section C, Table C-1 of the 1041 Application, as well as other permits that may be required under federal, State, County, or local regulatory jurisdiction. 	

- Bureau of Reclamation
 - Execution of Contracts (Reclamation Project Act 43 CFR 427)
 - Record of Decision (ROD)
- U.S. Fish and Wildlife Service
 - Depredation Permit
 - Section 7 Consultation (Endangered Species Act 50 CFR 402)
- U.S. Army Corps of Engineers
 - 404 Permit (Clean Water Act 33 CFR 320)
- Colorado Department of Transportation (CDOT)
 - Utility/Special Use Permit
 - State Highway Access Permit
- Colorado Department of Public Health and Environment (CDPHE)
 - Air Pollution Emission Permit for Land Development
 - Stormwater Construction Permit
 - Construction Dewatering General Permit
 - Minimal Discharge Industrial Wastewater General Permit
 - Water Quality Control Division Plan Approval
- Other State Permits/Approvals
 - 401 Certification (Clean Water Act 40 CFR 121)
 - Reservoir Plan and Dam Safety Emergency Preparedness Plan Approval
 - Section 106 Review (National Historic Preservation Act 36 CFR 800)
- Union Pacific/Burlington Northern Santa Fe Railroad Permits
 - Utility License/Pipeline Crossing Agreements
- Potential Regional Permits*
 - Various Building related Permits (i.e. electrical, mechanical, HVAC, structural, etc.)
 - Flood Plain Permits
- Potential County Permits*
 - Excavation/Grading Permits
 - Driveway Access Permits
 - Land Use/Zoning Permits
 - Building Permits
 - Grading and Erosion and Stormwater Quality Control Permits
 - Air Quality Construction Permits
 - Individual Sewage Disposal System Permits
 - Floodplain Permits
- Potential City Permits*
 - Excavation/Grading Permits
 - Land Use/Zoning Permits
 - Grading and Erosion and Stormwater Quality Control Permits
 - Driveway Access Permits

*As required by local agency with jurisdiction over the specific SDS Project work location. These may include the Pueblo Regional Building Department, Pueblo County, and Pueblo West Metropolitan District Department of Public Works.

2. Provide copies to Pueblo County within 60 days of obtaining permits.

C-8	Dewatering
	Applicant shall minimize dewatering impacts on Pueblo County properties and water courses.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Obtain a construction dewatering permit from the Colorado Department of Public Health and the Environment (CDPHE). 2. Create and implement a water control plan that includes descriptions of proposed ground and surface water control facilities including, but not limited to: equipment, methods, standby equipment and power supply, pollution control facilities, discharge locations, and provisions for temporary water supply; drawings showing locations, dimensions, and relationships of elements of each system; design calculations demonstrating accuracy of proposed dewatering system and components. Copies of plan will be provided to Pueblo County within 60 days of approval by CDPHE. 3. Control water during the course of construction, including weekends and holidays and during periods of work stoppages. Adequate backup systems shall be in place to maintain control of water. 4. Remove surface water controls when they are no longer needed. 5. Furnish, operate and maintain dewatering systems of sufficient size and capacity to continuously maintain excavations free of water, regardless of source, until backfilled to final grade. 6. Design and operate dewatering systems to prevent loss of ground as water is removed, to avoid inducing settlement or damage to existing facilities, completed work, or adjacent property, and to relieve artesian pressures and resultant uplift of excavation bottom. 7. Be responsible to obtain and comply with the requirements set forth in any applicable well permits required by the State. 	

C-9	Site Restoration
	Applicant shall provide Pueblo County residents with replacement vegetation and property to match pre-construction conditions or better.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Grade disturbed areas to preconstruction contours so preconstruction drainage paths are reestablished. 2. Reclaim disturbed land, except water areas and surface areas of roads, by seeding or planting to achieve a permanent vegetation cover as specified below. <ol style="list-style-type: none"> a. In accordance with Construction Condition C-5, a pre-construction evaluation of existing vegetation will be conducted to determine species diversity, woody plant density, and seasonal variety. 	

- b. Vegetation cover will be of the same seasonal variety native to the area of disturbed land, or species that support the post-construction land use. In those areas of disturbed vegetation where such seeds are not commercially available, seeds will be collected on-site to be used in revegetation, including, rare plants identified in the FEIS, by the Colorado Natural Heritage Program or by other qualified investigators.
 - c. Seeding and planting of disturbed areas will be conducted during the first normal period for favorable planting conditions after final preparation for seeding or planting.
 - d. Soil stabilizing practices will be used on all regraded and topsoiled areas.
 - e. The revegetated area will be considered acceptable if the revegetated area cover is not less than 90 percent of the pre-construction vegetation cover with similar species diversity. The pipeline access road will not be included in the 90 percent coverage calculation.
3. Restore roads and driveways so that:
- a. Surfaces are finished level with existing surfaces.
 - b. Sealed roadways are finished to match existing seal (asphalt, spray seal etc).
 - c. Unsealed roadways are to be finished to match existing surface. Concrete roadways/driveways shall be reinstated in such a manner as to match existing surface. Portions of slab damaged or rendered unstable by undermining (whether inadvertently or deliberately) should be included in the portion to be reinstated.
4. Restore damaged or injured property including outbuildings, to a condition similar or better to that existing before the damage or injury occurred, by repairing, rebuilding, or restoring the property.
5. Restore or replace fences and gates that are disturbed during construction will be restored.
6. Provide Pueblo County a security bond equal to \$2,000 per acre of land in permanent or temporary construction easement in each work package. The security bond shall be reimbursed in full to the Applicant two years following the final completion of the construction contract, upon successful revegetation, as described above. If successful revegetation is not achieved, the Applicant shall remedy, and the security bond will be held by Pueblo County for a further two years for the acreage impacted.

C-10	Public Communications
	Applicant shall keep Pueblo County residents informed of the SDS project and upcoming construction activities.

PROJECT DETAIL

1. Assign a Public Communications Officer as a single point of contact for responding to public questions, comments and concerns. The Officer's duties shall continue for one year following the final construction in Pueblo County.
2. Establish a local telephone number (a "hot-line") to allow citizens' access to the Public Communications Office and team throughout the duration of the Project. This telephone number will be included in the public information measures listed below, as well as on job site signage. The hot-line will be a combination of pre-recorded and live operator communications.
3. Develop and maintain a website that will include details of current and future project activities (i.e. schedules, type of work, phases, etc.)
4. Deliver individual resident "mailers" notifying each resident of future construction activity near their home. Residences within 500 feet of an upcoming construction zone will be informed thirty (30) days prior to construction. The mailers will include details of when construction will begin; when completion is planned; what types of activities are expected; an overview of the Project; and the hotline number.
5. Distribute individual resident "door hangers" to properties within 500 feet of the construction site. These will serve as reminders of future construction activities, and will be distributed seven (7) days prior to construction.

C-11	Dust and Other Air Emission Controls (Dust Control)
	Applicant shall minimize fugitive dust impacts to County residents.
PROJECT DETAIL	
1.	Prepare, submit and implement a fugitive dust control plan as required by the Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division. A copy of the plan will be submitted to Pueblo County.
2.	Implement standard fugitive dust control practices as specified in the fugitive dust control plan, including: <ol style="list-style-type: none"> a. Watering unpaved roads on site b. Limiting vehicle speeds to 30 mph on site. c. Covering excavated material with synthetic or natural cover or preventing sediment movement from the pile using silt fence. d. Installing vehicle tracking control at access points to the site. e. Re-vegetating disturbed areas as described in Construction Condition C-9 as soon as appropriate to reduce dust sources. f. Sweeping paved streets as necessary to remove construction dust.
3.	Perform particulate monitoring using real-time particulate monitors that are capable of monitoring particulate matter less than ten microns (PM10). Particulate levels will

be monitored immediately downwind at the working site and integrated over a period not to exceed 15 minutes. Monitoring will be conducted a minimum of once a day, with additional testing conducted if complaints are received. Instrumentation shall require necessary averaging hardware to accomplish this task. In order to ensure the validity of the fugitive dust measurements performed, there will be appropriate Quality Assurance/Quality Control (QA/QC) that includes the following features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and record keeping.

The action level will be established at 150 µg/m³ over the integrated period not to exceed 15 minutes. If particulate levels are detected in excess of 150 µg/m³, the upwind background level must be measured immediately using the same portable monitor. If the working site particulate measurement is greater than 100 µg/m³ above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust.

4. Use construction equipment that meets Colorado opacity standards for operating emissions. Construction equipment will be emissions tested at an approved facility prior to use on the site. This test will be performed each year that the equipment is used on the project. The certificates of approval for each item of construction equipment will be maintained by Applicant and be available for inspection by Pueblo County if requested.
5. Not burn waste materials, rubbish, or other debris on or adjacent to Site.

C-12	Drainage and Erosion Control (Sediment Control)
	Applicant shall maintain soil within construction zone
PROJECT DETAIL	
1.	Obtain a permit for Drainage and Erosion Control within a construction site: General Permit- Stormwater Discharges Associated with Construction Activity (Permit No: COR-030000).
2.	Implement a Stormwater Management Plan (SWMP) and Best Management Practices (BMPs) per Colorado Department of Transportation (CDOT) Erosion Control and Stormwater Quality Guide.
3.	Perform a pre-existing condition assessment of areas potentially subject to sedimentation from SDS construction as described in Construction Condition C-5.
4.	Restore lands outside of the work area that have been impacted by sediment from SDS construction consistent with Construction Condition C-9.
5.	Shall not release sediment impacting more than 4 square feet of land outside of the work.

C-13	Pre-Mobilization Readiness Review
	Applicant shall perform pre-mobilization readiness reviews prior to Applicant's contractor's beginning on-site construction activities.

PROJECT DETAIL

1. Prepare a Project Execution Plan (PEP) for each Work Package of the SDS Project (i.e., Pump Station, Pipeline Segment, Water Treatment Plant). The PEP will be structured to standardize and codify the project planning process for consistency and quality of implementation.
2. Perform a Pre-Mobilization Readiness Review to determine the project's readiness for mobilization of field activities. Pueblo County will be invited to participate in the review. Subject matter of a Readiness Review will, at a minimum, include:
 - a. Safety management and Emergency Preparedness policies and procedures.
 - b. Quality Assurance/Quality Control programs and procedures.
 - c. Required local, state, and federal permits and agency approvals have been acquired, the Contractor is aware of permit requirement and limitations, and appropriate Contractor policies and procedures are in place for compliance.
 - d. Site and security controls are in place.
 - e. Communications systems are in place and operational.
 - f. Temporary facilities are in place where required.
 - g. Safety plan and representative.
 - h. Utility Locations have been verified.
 - i. Agency Approvals (incl. Pueblo County).
 - j. Applicant shall verify that land, easement, and right-of-way acquisitions are complete and what limitations are related to Project access.

C-14	Traffic Control
	Applicant shall provide for safe vehicular and pedestrian traffic.
PROJECT DETAIL	
<ol style="list-style-type: none"> 1. Develop a traffic control plan complying with the applicable standards of the Manual on Uniform Traffic Control Devices. The Traffic Control Plan will be signed by an individual certified by the Colorado Department of Highways (CDOH) or the American Traffic Safety Services Association (ATSSA), as a Worksite Traffic Control Supervisor, whose signature shall constitute certification that the plan meets or exceeds MUTCD standards. The plan will include drawings(s) of the project location showing phases of the project, a list of the posted speed limits throughout the project, and a drawing(s) of the traffic control measures to be employed at the project site. 2. Comply with the Haul Route Plan accepted by Pueblo County. 	

C-15	Protection of Plants and Wildlife
	Applicant shall control impacts to native endangered and threatened flora and fauna.
PROJECT DETAIL	
1.	Protect native endangered and threatened flora and fauna in accordance with the Final Environmental Impact Statement.
2.	Submit a wildlife mitigation plan to the Colorado Division of Wildlife in accordance with their regulations prior to construction. This Plan will include actions the Applicant proposes to mitigate impacts that the SDS Project may have on fish and wildlife. As required by that statute, the Wildlife Commission will evaluate the probable impact of the project on fish and wildlife. The Applicant shall provide the official wildlife mitigation plan and official state position to Pueblo County Staff prior to construction.
3.	Coordinate with Reclamation to release flows to the Arkansas River through the flood control gates when the North Outlet Works is unavailable due to construction activities.

C-16	Noxious Weed Control
	Applicant shall control spread of noxious weeds resulting from project construction.
PROJECT DETAIL	
1.	Provide a person experienced in field identification of noxious weeds to locate existing noxious weeds that will be disturbed during construction in advance of ground-disturbing construction activities.
2.	If List A species are found, provide to the State Weed Coordinator mapping data pertinent to each population including: <ul style="list-style-type: none"> a. Species name b. Population location(s) including distribution and abundance c. Estimated infested acreage
3.	Implement an eradication program within the project limits. Eradicate existing Class A and B noxious weed populations.
4.	Adopt the following methods to prevent the spread of noxious weeds during construction. <ul style="list-style-type: none"> a. Major equipment (track equipment, rubber tire loaders, and backhoes) will be cleaned by high pressure air or water spray before being delivered to the project site. b. Use weed free seed, mulch, and borrow material.

c.	Use 100 percent certified weed free seed and mulch. Locally or regionally available seed and mulch will be used when practicable.
5.	Disturbed areas will be re-seeded as soon as practicable after the disturbance ends.

C-17	Hazardous Waste Management
	Applicant shall ensure that hazardous wastes are appropriately managed.
PROJECT DETAIL	
1.	Follow regulations to the handling, storage, transportation, and disposal of hazardous materials as set forth in the Code of Federal Regulation (CFR) 1910.120, DOT, EPA and NRC regulations, as applicable. The type and quantity of these materials will be small quantities (paints, solvents, fuels, etc.).
2.	Development and implement Health, Safety and Environmental plans including hazardous material management in compliance with Federal, State and Local regulations prior to mobilizing on-site for Project construction.

C-18	Sustainable Design
	Applicant shall, where practical, design SDS facilities to be sustainable or “green”.
PROJECT DETAIL	
1.	Make an effort to balance cut and fill for site grading and backfill to reduce imported or exported material.
2.	Use site and building design to promote energy and resource conservation.
3.	Motors and electrical equipment will be high-efficiency rated. Efficiencies will be determined by testing as set forth in ANSI/IEEE 112-Standard Test Procedures for Polyphase Induction Motors and Generators, Method B or Method F.

C-19	Sustainable Construction Practices
	Applicant shall, where practicable, use sustainable construction practices.
PROJECT DETAIL	
1.	Create opportunities for sustainable construction.
2.	Prepare a materials handling plan including recycling and reuse. This plan shall identify materials expected to be encountered during demolition, site clearing, field office operations, equipment maintenance, etc. In this plan, the Applicant shall define how these materials will be handled to maximize recycling and reuse opportunities and to minimize permanent disposal of such items including used motor oil, waste paper,

removed asphalt, removed concrete, used tires, etc.
3. Use minimum 10 percent bio diesel in construction equipment.
4. Purchase goods locally, when practical.

C-20	Surface Water and Groundwater Flows
	Applicant shall restore ground and surface water supplies to pre-construction conditions.
PROJECT DETAIL	
1.	Restore disturbed surfaces to pre-construction contours, as defined by the aerial survey and mapping.
2.	Perform pre-construction hydrologic investigations on properties that have active springs along the pipeline route. Design and construct the pipeline to prevent injury to springs.
a.	Use “flowable fill” for bedding and pipe zone material.
b.	Use native material that was removed from the trench in the trench zone above the pipe.
c.	Use trench plugs in areas where groundwater is encountered to prevent flow along the trenchline.

C-21	Protection of Livestock
	Applicant shall protect livestock on lands crossed by the project during construction.
PROJECT DETAIL	
1.	Work jointly with landowners and livestock owners to determine grazing areas, watering points and livestock pathways to food and water.
2.	Provide access for livestock through farm areas, not cut off ready access points of farmlands in which livestock are pastured, provide alternate accessible water sources, maintain existing fences required to restrain livestock, and keep gates closed and secure.
3.	Temporarily relocate livestock away from construction activities if requested by livestock owner.

C-22	Structural Integrity of Pueblo Dam
	Applicant shall not begin construction at Pueblo Dam until the Bureau of Reclamation has reviewed and accepted the construction plans, including review of dam safety of the modifications to the North Outlet Works
PROJECT DETAIL	
1. Provide Pueblo County with a copy of the Bureau of Reclamation's acceptance within 60 days.	

SOCIO-ECONOMIC/CONTRACTING PRACTICES

SE-1	Juniper Pump Station Architecture
	Applicant shall allow Pueblo County to appoint a representative who will participate in the final selection of the architecture for the Juniper Pump Station along with Colorado State Parks and the Bureau of Reclamation.

SE-2	Cultural Resources
	Applicant shall execute the Programmatic Agreement concerning the protection of cultural resources and comply with its provisions.
PROJECT DETAIL	
1. Provide a copy of the agreement to Pueblo County within 60 days of execution.	

SE-3	Electricity
	Applicant shall agree that construction of a new substation and transmission lines for the Juniper Pump Station shall require approval by Pueblo County of a Use by Review Permit Application as specified in the Public Use District (S-1) zoning regulations, which will not be unreasonably withheld by Pueblo County

SE-4	Securing Land Through Easements, Fee Purchase, or Condemnation
	Applicant shall secure land necessary for construction of the project in a fair and equitable manner.
PROJECT DETAIL	
1. Treat private property owners fairly and commit to using the power of eminent domain only as a last resort. 2. Offer to compensate landowners to have their own appraisal done if they disagree with the Applicant's appraisal.	

- | | |
|----|---|
| 3. | Reimburse landowners for relocation costs, title work, and closing costs. No landowner should have out-of-pocket losses from the project. |
| 4. | Provide proof to Pueblo County that they have secured the necessary rights to construct the project prior to starting construction at any given location. |

OPERATIONAL PRACTICES

O-1	Release Rate Limit
	Applicant shall limit the maximum release rate from the Williams Creek Reservoir to 300 cubic feet per second.

O-2	Pipeline Drainage
	Applicant shall limit the release rate of drains from the pipeline to a drainageway to the equivalent of less than a 2-year storm event in that drainageway, except in the case of emergency.

ENFORCEMENT PRACTICES

ENF-1	Compliance Monitoring
	Applicant shall monitor and report on the compliance with conditions of the 1041 permit.

PROJECT DETAIL

1. Prepare a quarterly report during project construction for Pueblo County that will provide a summary of activities related to the Conditions of the 1041 permit. The report will summarize the activities occurring in the reporting period, and a forecast of activities planned in the upcoming period.

Contents of the report will include:
 - a. Safety incident log.
 - b. Citizen call log.
 - c. Description of mitigation and restoration activities (i.e., quantity and location of repaired road surface, reseeding, etc.).
 - d. List of non-compliance issues by contractors (silt releases, work hour infractions, fines and penalties).
 - e. Sustainable construction practices employed.
 - f. Schedule and key milestones met and forecast.
2. Prepare an annual report after pumping starts for Pueblo County that will provide a summary of activities related to the Conditions of the 1041 permit.

Contents of the report will include, but will not be necessarily limited to:

- a. Maximum daily flow
- b. Maximum exchange flow from Williams Creek Reservoir
- c. Water quality monitoring
- d. Sediment monitoring

COUNTY ROADS – CONDITIONS / MITIGATION

The conditions listed below are accompanied by five (5) attachments. Only the summary of road repair costs and the haul route map are included in this report. All the attachments are available on the Pueblo County website.

1. The applicant shall make application for an Excavation Permit with the Pueblo County Public Works Department (Department) for each road crossing and comply with all conditions of that permit.
2. The applicant shall make application for an Access Permit with the Department for each access point onto a County roadway and comply with all conditions of that permit.
3. The applicant shall submit a Traffic Control Plan, to the Department for review and approval, for the project which conforms to applicable standards of the Manual on Uniform Traffic Control Devices. The traffic control plan shall be developed and administered by a certified Traffic Control Supervisor or their authorized personnel.
4. The applicant shall provide a plan to the Department defining the use of the pipeline route/easement as a construction "Staging Area" for approval. The Staging Area Plan shall define construction work times, material delivery hours, noise suppression, dust abatement, construction methods, etc. Deviation from the plan will require approval by the Department prior to a change in use.
5. The applicant shall provide a Haul Route Plan, for use of the public road system to provide access to the Staging Area/pipeline easement, to the Department for review and approval. The Haul Route Plan will identify the roads utilized by the applicant for construction vehicle traffic, maintenance of those roads during the project and rehabilitation of those roads. For the purpose of this plan, "construction vehicle" shall mean those vehicles requiring operators to possess a Commercial Drivers License (CDL) and/or weighing more than 10,001 pounds. The Haul Route Plan shall identify the final treatment for utilized roads and be developed cooperatively between Colorado Springs Utilities and the Department. The roads utilized in the Haul Route Plan shall be maintained by the applicant during pipeline construction periods such that they are passable by the motoring public at all times except when identified in an approved Traffic Control Plan as "Closed" or as otherwise approved by the Department. All road rehabilitation and maintenance work on the Haul Route Plan roads shall comply with the Pueblo County Roadway Design and Construction Standards. Costs for maintenance of the Haul Route Plan roads shall be borne solely by the applicant. The applicant shall initiate maintenance at the discretion of the Pueblo County Director of Public Works.

6. The haul route from the "Staging Area" to the State Highway System shall be limited to those roads identified in the above defined "Haul Route Plan Map" dated 12-31-08 ("Exhibit 1" and Haul Route Plan Road Table "Exhibit 2") or Haul Route Plan approved by the Department prior to commencement of pipeline installation activities that require use of roads identified in the Haul Route Plan. Said plan shall be incorporated within construction plan and specification documents. Identification by the applicant of additional roads they desire to be included in the Haul Route Plan for dedicated project use will require approval by the Department. The Department may include roads in the plan if it is determined that they are being used by the applicant's representative or their contractor by above identified "construction vehicles". The Department will notify the applicant, prior to inclusion in the Haul Route Plan, of the observed use of non Haul Route Plan roads. Incidental use of roads not specifically designated on the Haul Route plan is approved for the applicant, their representatives or contractor's vehicles weighing less than 10,001 pounds and/or not requiring a CDL license
7. Within thirty days of the applicant issuing a notice to proceed to its contractors to perform pipeline installation activities that require use of roads identified in the Haul Route Plan, the applicant shall establish a cash payment, escrow, or other financial instrument such as a performance bond, acceptable to the Department and the Pueblo County Attorney, to Pueblo County, in an amount estimated by the Department to cover the total costs for rehabilitation of the roads identified in the approved Haul Route Plan, to Pueblo County Roadway Design and Construction Standards (Standards) as noted in "Exhibit 4". If a financial instrument is selected, said financial instrument shall be held by Pueblo County until such time as the rehabilitation of Haul Route Plan roads are accepted by the County. The financial instrument is to be for an amount sufficient to cover the estimated costs established in "Exhibit 4", for rehabilitation of the Haul Route Plan roads plus estimated increases in costs over time as represented by the Construction Cost Index. It will be at the discretion of the Public Works Director to determine when it is necessary to commence rehabilitation of individual roads identified in the Haul Route Plan. Upon request of the Public Works Director, the applicant will be required to submit funds to the Department necessary to perform the rehabilitation of the individual roads selected by the Director of Public Works. The applicant will have 30 days to provide the requested funds to the Department. Upon such a request and payment of the funds, the applicant will be relieved of any further rehabilitation, maintenance or warranty obligation for that road section. Upon receipt of the requested funds, the total value of the financial instrument may be reduced by a same amount, less any increased cost over estimated costs in "Exhibit 4", at the discretion of the applicant. Pueblo County will commence maintenance of rehabilitated roads upon their completion and final acceptance by the County. Attached as "Exhibit 3" is the minimum defined cross-section and treatment for identified Haul Route Plan roads. The minimum pavement section may change based upon the outcome of a "Pavement Structure Design" which conforms to the Standards. In any event, all reasonable costs associated with rehabilitation of Haul Route Plan roads will be borne solely by the applicant including engineering design, construction, drainage, etc.
8. The applicant shall provide to the Department for review and approval, drainage calculations performed by a professional engineer licensed to practice in the State of Colorado, detailed plans on the "Blow-off Valves". The plans shall include any necessary drainage structures and erosion control measures and be incorporated into the construction plans.

9. The applicant shall submit a Stormwater Management Plan accepted by the responsible jurisdiction to the Department and incorporate that Stormwater Management Plan into the construction plans.
10. The applicant shall not unreasonably prohibit the installation of future roadways and utilities across the utility easement. Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Pueblo County Roadway Design and Construction Standards today or as modified in the future.
11. Pueblo County reserves the right to review the final construction plans and specifications, final Haul Route Plan, final Staging Area Plan, and other supporting documents and to modify these conditions of approval based upon that review to conform to final documents.

If you have any questions or require further information, please do not hesitate to contact this office.

C: Alf Randall, County Engineer
 Pat Coffee, General Services Engineer
 Bruce Spiller, CH2M Hill
 Daniel Higgins, Colorado Springs Utilities
 File

Exhibits: Exhibit 1 - Haul Route Plan Map
 Exhibit 2 - Haul Route Plan Roads Table
 Exhibit 3 - Haul Route Plan Treatment
 Exhibit 4 - Haul Route Plan Cost Estimates
 Exhibit 5 - Pueblo County Roadway Design and Construction Standards

EXHIBIT 1

HAUL ROUTE PLAN MAP
 (See Attached CSU Map)

EXHIBIT 2

PROPOSED HAUL ROUTE PLAN ROADS

Road Name	From / To	Description	Existing Surface
Purcell Bd S	SH 50 to Cellini Dr	South of 50	Paved
Spaulding Ave	Purcell Bd to Easement	East of Purcell	Paved/Gravel
Industrial Bd	Purcell Bd to Easement	East of Purcell	Paved
Blythe Dr	Industrial Bd to Holiday Dr	South of Industrial Bd	Paved
Holiday Dr	Blythe Dr to Easement	East of Blythe Dr	Paved/Gravel
Ranch Dr	Purcell Bd to Easement	East of Purcell	Gravel
Platteville Bd	Purcell Bd to Easement	East of Purcell	Paved
Purcell Bd N.	SH 50 to I-25	North of SH 50	Paved
Jaroso Dr	Purcell Bd to Easement	West of Purcell	Gravel
Platteville Bd	Purcell Bd to Easement	Northwest of Purcell	Chip Seal

All roads are public right-of-way, accepted for maintenance and HUTF eligible.

EXHIBIT 3

HAUL ROUTE PLAN ROADS TREATMENT PLAN

Purcell Bd South	Minor Arterial	Urban	2" Overlay; 32'
Purcell Bd (N of Hailey)	Minor Arterial	Urban	2" Overlay; Curb & Gutter; Storm Sewer
Purcell Bd (N of Industrial Bd)	Minor Arterial	Rural	4" HBP on 8" CL VI; Drainage improvements
Purcell Bd (N of Platteville Bd)	Minor Arterial	Rural	2" Overlay; 28'
Spaulding Ave	Major Collector	Urban/ Rural	4" HBP on 8" CL VI; Curb & Gutter, Storm Sewer
Industrial Bd	Minor Collector	Urban/ Rural	2" Overlay, Curb & Gutter, Storm Sewer; 4" HBP on 8" CL VI;
Blythe Dr	Local Commercial	Urban	2" Overlay, Curb & Gutter, Storm Sewer
Holiday Dr	Local Commercial	Urban	4" HBP on 8" CL VI; Curb & Gutter, Storm Sewer
Ranch Dr	Local Access	Rural	3" HBP on 6" CL VI; Drainage Improvements
Jaroso Dr	Local Access	Rural	3" HBP on 6" CL VI; Drainage Improvements
Platteville Bd	Minor Arterial	Rural	4" HBP on 8" CL VI; Drainage improvements

EXHIBIT 4

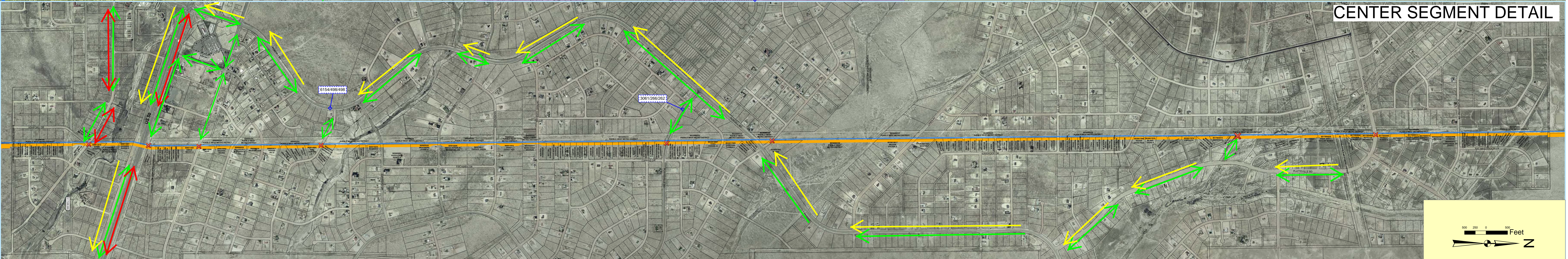
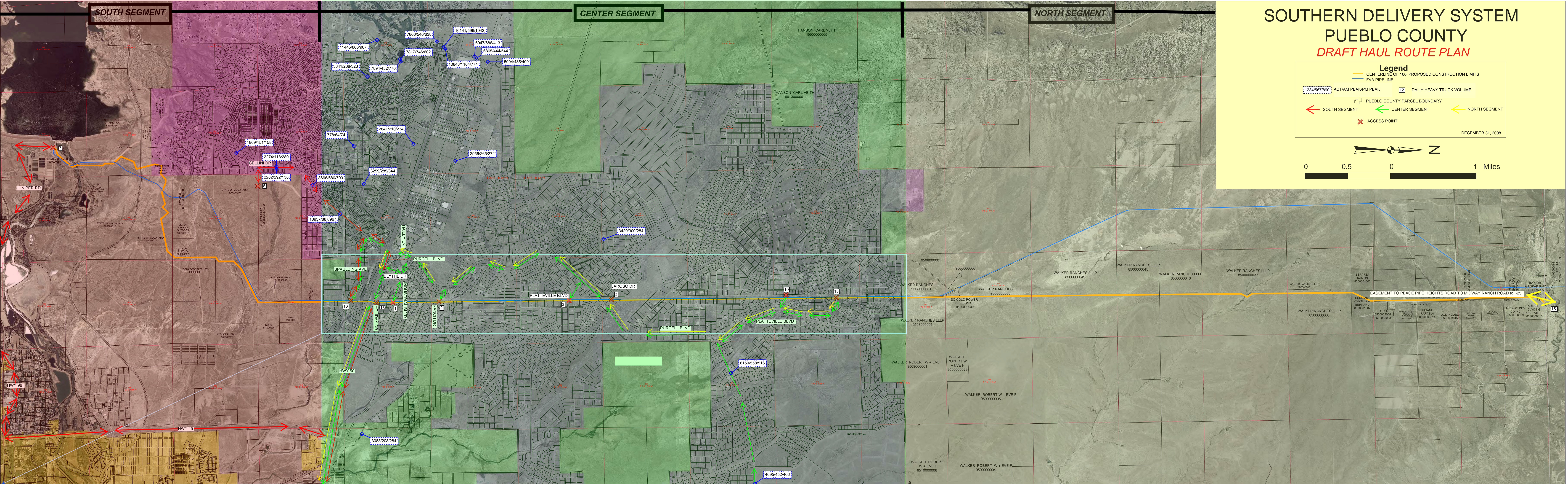
ESTIMATED HAUL ROUTE PLAN ROAD REHABILITATION COSTS

(See Attached)

EXHIBIT 5

PUEBLO COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS

(See Attached)



PUEBLO COUNTY PUBLIC WORKS
ENGINEERING DIVISION
33601 United Avenue
Pueblo, Colorado

PROJECT NO. 700330

DATE: December 23, 2008

PRELIMINARY DETAILED ESTIMATE SHEET NO.: 1 of 1

PROJECT NAME: Colorado Springs Utilities- Haul Route Plan Improvements

PREPARED BY: David Benbow

TITLE: General Services Engineer

ROADWAY		ESTIMATE
	Purcell Bd South	\$576,692.19
	Purcell Bd A	\$173,022.74
	Purcell Bd B	\$2,067,655.26
	Purcell Bd C	\$515,913.75
	Spaulding Ave	\$448,716.79
	Spaulding Ave B	\$320,383.80
	Industrial Bd	\$106,891.40
	Industrial Bd A	\$80,742.20
	Blythe Dr	\$155,767.70
	Holiday Dr	\$465,261.50
	Ranch Dr	\$120,844.13
	Platteville Bd S	\$135,602.28
	Jaroso Dr	\$45,133.99
	Platteville Bd N	\$902,142.12
TOTAL		\$6,114,769.84