



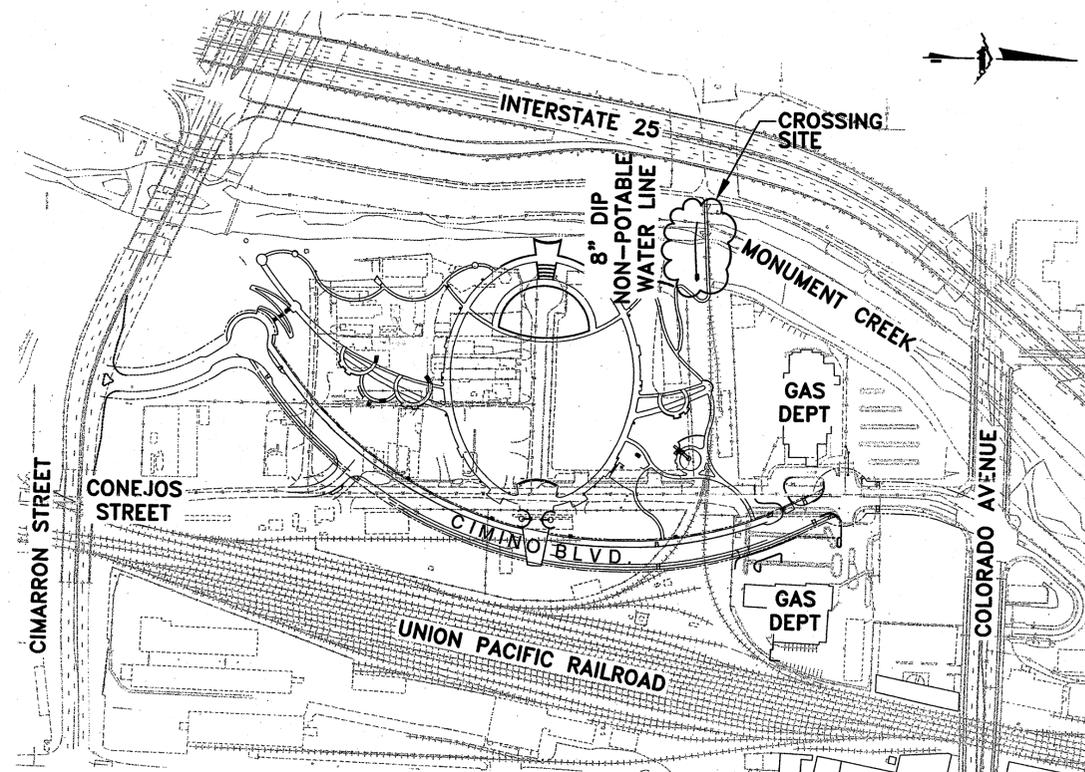
Colorado Springs Utilities  
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**PLANNING & ENGINEERING DEPARTMENT  
DESIGN SERVICES**

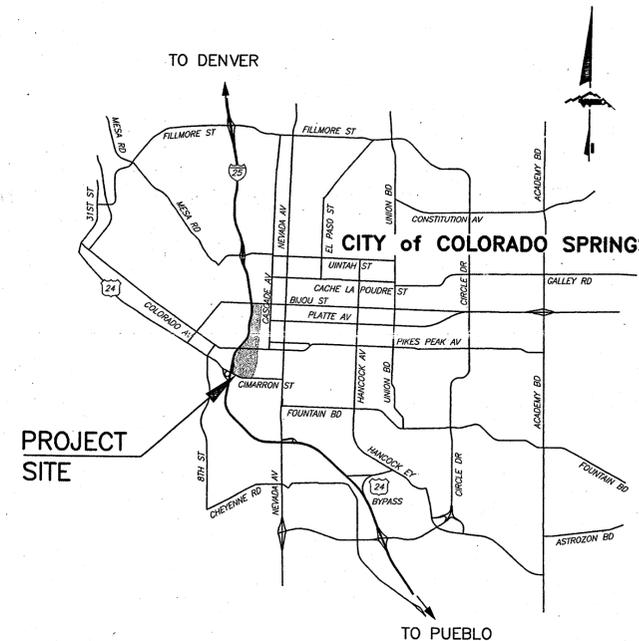
Approved for Construction

By: *[Signature]* 10F4 1-20-04  
CSU Design Services: Date

**CONFLUENCE PARK PHASE 2 IMPROVEMENTS  
INSTALL APPROXIMATELY 205 FT OF 8"  
NON-POTABLE WATER LINE UNDER MONUMENT CREEK**



**SITE MAP**  
Scale: 1"=500'



**VICINITY MAP**  
Scale: none

**PRIVATE MAIN EXTENSION**

**NON-POTABLE WATER STATEMENT**

THE UNDERSIGNED OWNER/DEVELOPER AGREES THAT THE INSTALLATION OF THESE PROPOSED NONPOTABLE WATER FACILITIES WILL BE MADE IN ACCORDANCE WITH COLORADO SPRINGS UTILITIES STANDARDS AND SPECIFICATIONS AND SHALL PROVIDE A MINIMUM OF FIVE FEET (5'0") AND A MAXIMUM OF SIX FEET (6'0") OF COVER OVER THE WATER MAIN(S). ANY CHANGES REQUIRED TO MEET THE ABOVE STIPULATIONS SHALL BE AT THE EXPENSE OF THE OWNER/DEVELOPER. COVER IN EXCESS OF SIX FEET (6'0") SHALL BE SUPPORTED BY PLAN AND PROFILE DRAWINGS APPROVED BY THE COLORADO SPRINGS UTILITIES. THE APPROVAL DATE ON THE PLAN(S) EXPIRES IN (6) MONTHS AND SHALL REQUIRE RE-SUBMITTAL FOR SIGNATURE IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

SIGNED *[Signature]* OWNER/DEVELOPER DATE 1/13/04

JAMES W. FREES URBAN REDEVELOPMENT  
PRINTED NAME THUNDER

ADDRESS URBAN REDEVELOPMENT, CITY PLANNING  
704 E. BOULDER ST  
COLORADO SPRINGS, CO 80903



BENJAMIN E. SHEETS, COLORADO P.E. NO. 35165  
FOR AND ON BEHALF OF WILSON & COMPANY, INC.

DATE

**WILSON & COMPANY**  
Engineers & Architects

**WN001**

(AS BUILT INFORMATION)

DATE STARTED:	
DATE COMPLETED:	
FOREMAN:	
INSPECTOR:	
CONTRACTOR:	

(PROJECT RELATED INFORMATION)

MASTER WORK ORDER NUMBER:	1220657
PROJECT NUMBER:	2003-N010
FIMS MAP:	G-33, G-34
SHEET NO:	1 OF 4
NETWORK LOCATION & DRAWING TITLE:	P:\9931000402\DWG_BID SET\WATER (NON-POT)(10-16-03)\WN001
REVISIONS:	

# GENERAL NOTES

1. THE COLORADO SPRINGS UTILITIES DOES NOT GUARANTEE NONPOTABLE WATER TO THE SUBJECT AREA. ALLOCATION OF NONPOTABLE WATER TO SERVE THIS AREA WILL DEPEND UPON THE SUPPLY AVAILABLE AT THE TIME OF APPLICATION. THE COLORADO SPRINGS UTILITIES' POLICY IS FIRST COME FIRST-SERVED.
2. NOTE: CORROSION PROTECTION REQUIRED  
ALL DUCTILE IRON PIPE, TO INCLUDE FITTINGS AND VALVES WILL BE WRAPPED WITH POLYETHYLENE TUBING BONDED AT EACH JOINT AND ELECTRONICALLY ISOLATED AS SPECIFIED IN THE COLORADO SPRINGS UTILITIES STANDARD SPECIFICATIONS.  
INSULATING COUPLINGS OR FLANGES AND TEST STATIONS SHALL BE INSTALLED AS SPECIFIED IN THE FIELD BY THE CSU INSPECTOR.  
9# & 17# MAGNESIUM ANODES SHALL BE INSTALLED AS SPECIFIED IN THE FIELD BY THE CSU INSPECTOR. ALL ANODES WILL BE FURNISHED BY THE CSU CORROSION CONTROL DEPARTMENT AND INSTALLED BY THE CONTRACTOR. 24-HOUR NOTICE IS REQUIRED.
3. THE CONTRACTOR IS REQUIRED TO NOTIFY COLORADO SPRINGS UTILITIES PIPELINE INSPECTION OFFICE, 2 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION. IF THIS PROJECT INVOLVES A TAP, DO NOT CALL TO SCHEDULE THE TAP UNTIL THE PIPE INSPECTION NOTIFICATION HAS BEEN GIVEN.
4. ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL AT HIS EXPENSE, SUPPORT AND PROTECT ALL NONPOTABLE WATER MAINS SO THAT THEY FUNCTION CONTINUOUSLY DURING CONSTRUCTION. SHOULD A MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATIONS IT WILL BE REPAIRED IMMEDIATELY BY EITHER THE CONTRACTOR OR THE COLORADO SPRINGS UTILITIES CONSTRUCTION DEPARTMENT AT THE FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ANY INTERRUPTIONS TO EXISTING NONPOTABLE WATER SERVICES.
7. REUSE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE COLORADO SPRINGS UTILITIES INSPECTOR.
8. ALL NONPOTABLE WATER PIPING, VALVES, OUTLETS AND FIXTURES, AND OTHER APPURTENANCES SHALL BE COLORED CODED IN CONFORMANCE WITH THE NATIONAL INDUSTRIAL COLOR CODE AS FOLLOWS: ALL NEW BURIED DISTRIBUTION PIPING IN THE NONPOTABLE WATER DISTRIBUTION SYSTEM SHALL BE COLORED PURPLE PIPE, PANTONE 522, AND EMBOSSED OR BE STAMPED/MARKED "CAUTION-NONPOTABLE WATER DO NOT DRINK"; OR BE INSTALLED WITH A PURPLE IDENTIFICATION TAPE, OR A PURPLE POLYETHYLENE VINYL WRAP, COLOR TO BE PANTONE 512, OR AS OTHERWISE APPROVED BY THE COLORADO SPRINGS UTILITIES. (REFERENCE CHAPTER 5.25.9 AND CHAPTER 9.05)
9. ALL NONPOTABLE WATER VALVES, OUTLETS, PUBLIC ENTRANCES AND BOUNDARIES OF AREAS IRRIGATED WITH NONPOTABLE WATER SHALL BE TAGGED OR SIGNED WITH THE FOLLOWING WORDS "NONPOTABLE WATER-DO NOT DRINK." (REFERENCE CHAPTER 9.05)
10. CHANGES IN DESIGN DETERMINED NECESSARY TO CONFORM TO FIELD CONDITIONS MAY REQUIRE ADDITIONAL MATERIALS NOT INDICATED ON THIS PLAN. ALL CHANGES SHALL BE APPROVED BY CSU DESIGN SERVICES.
11. THE FOLLOWING TIE-IN POINTS WERE NOT FIELD VERIFIED FOR LOCATION AND SHALL BE EXPOSED PRIOR TO CONSTRUCTION. NOTIFY CSU FOR SCHEDULING OF SURVEY CREW TO CONFIRM EXACT ALIGNMENT, IF NECESSARY, POINTS ARE AS FOLLOWS: STA 0+00
12. ALL PIPELINE ELEVATIONS SHOWN ARE TO THE BOTTOM OF PIPE, UNLESS OTHERWISE NOTED.
13. PLAN AND PROFILE IS REQUIRED.
14. DUCTILE IRON PIPE IS REQUIRED.
15. REUSE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE COLORADO SPRINGS UTILITIES INSPECTOR.

# DATUM

## COORDINATE SYSTEM

VERTICAL - NORTH AMERICAN VERTICAL DATUM 1929 (NAVD 29)  
HORIZONTAL - NORTH AMERICAN DATUM 1983 (NAD 83)  
CONTROL - PROJECT SPECIFIC (REFER TO "CONFLUENCE PARK PHASE 1A" CONTROL PLAN)

## BENCHMARKS

1. STAINLESS STEEL ROD STAMPED "A 396 1983" WITHIN A 3-INCH MONUMENT BOX LOCATED AT THE INTERSECTION OF SIERRA MADRE STREET AND THE DENVER AND RIO GRAND WESTERN RAILROAD (138.1 FT) SOUTHEAST OF THE STREET. ELEVATION = 5953.48
2. BENCH MARK DISK STAMPED "G 3 RESET 1937" SET IN THE TOP OF AN 8-INCH BY 10-INCH CONCRETE POST LOCATED AT THE WEST BIJOU STREET VIADUCT ON THE FIRST CONCRETE PIER EAST OF THE TRACK. ELEVATION = 5989.50

# PRE-EXCAVATION

## CHECK LIST

- GAS AND OTHER UTILITY LINES SHOWN ON CONSTRUCTION PLANS
- UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) - CALL AT LEAST TWO (2) BUSINESS DAYS AHEAD - 1-800-922-1987
- UTILITIES LOCATED AND MARKED ON THE GROUND
- EMPLOYEES BRIEFED ON MARKING AND COLOR CODES \*
- EMPLOYEES TRAINED ON EXCAVATION AND SAFETY PROCEDURES FOR NATURAL GAS LINES
- WHEN EXCAVATION APPROACHES GAS LINES, EMPLOYEES MUST EXPOSE LINES BY CAREFUL PROBING AND HAND DIGGING

## \* STANDARD UTILITY MARKING COLOR CODE

NATURAL GAS - YELLOW  
ELECTRIC - RED  
WATER - BLUE  
WASTEWATER - GREEN

# MATERIALS

## SYSTEM

TOTAL	UOM	USED	MATERIAL DESCRIPTION
1	EA	1	ANCHOR (REVERSE), CONCRETE, MJ, 4"
2	EA	2	ANCHOR (REVERSE), CONCRETE, MJ, 8"
*	EA	10	ANODES, 17 LB
*	EA	4	ANODES, 9 LB
2	EA	2	BEND, 8" x 11-1/4 DEGREE, MJ
2	EA	2	BEND, 8" x 45 DEGREE, MJ
4	EA	4	BOX, VALVE, BOTTOM SECTION, 36"
4	EA	4	BOX, VALVE, TOP SECTION W/OUT LID, 26"
2	EA	2	CLAMP, MEGALUG, RESTRAINING, 4" DIP
16	EA	16	CLAMP, MEGALUG, RESTRAINING, 8" DIP
4	EA	4	CLAMP, MEGALUG, RESTRAINING, 16" DIP
12	LF	12	DRILLED CAISSONS 16"
36	LF	36	ENCASEMENT, CONCRETE, 16" PIPE
205	LF	205	PIPE, SLIP JOINT, DIP, 8"
4	EA	4	PIPE, SLIP JOINT, DIP, 16"
1	EA	1	PLUG, MEGALUG, RESTRAINING, 4" DIP
1	EA	1	REDUCER, MJ, 8" X 4"
36	LF	36	SLEEVE, STEEL, 16"
1	EA	1	TEE, SWIVEL, MJ, 16" X 8"
*	EA	3	TEST STATION, CORROSION
1	EA	1	THRUST BLOCK, CONCRETE, 1/2 CY
3	EA	3	VALVE, MJ, GATE, 350# 8"
1	EA	1	VALVE, MJ, BUTTERFLY, 350# 16"
1	EA	1	VAULT (PRECAST), CONCRETE, 4" METER
		27	Pipe DIP, 4"

\* TO BE DETERMINED IN FIELD PER CSU FIELD INSPECTOR

## NOTES:

1. THIS MATERIAL LIST MAY VARY DEPENDING ON INSTALLATION AND DOES NOT INCLUDE MISCELLANEOUS PIPELINE OR APPURTENANCE MATERIALS.
2. THIS LIST IS NOT TO BE USED FOR BIDDING PURPOSES, REFER TO CONFLUENCE PARK PHASE 2 PROJECT MANUAL FOR BID ITEM LIST.

## Approved for Construction

By: Al Jarama 2014 1-20-04  
CSU Design Services: \_\_\_\_\_ Date

By: \_\_\_\_\_  
CSU Operations: \_\_\_\_\_ Date



BENJAMIN E. SHEETS, COLORADO P.E. NO. 35165  
FOR AND ON BEHALF OF WILSON & COMPANY, INC.

DATE

**WILSON & COMPANY**  
Engineers & Architects

**WN002**

## RETIRED IN GROUND OR JUNKED OUT MATERIAL LIST

	JUNKED OUT MATERIAL					RETIRED IN GROUND MATERIAL				
	(SIZE)	(FOOTAGE)	(TYPE)	(DEGREE)	(NUMBER)	(SIZE)	(FOOTAGE)	(TYPE)	(DEGREE)	(NUMBER)
PIPE										
PIPE										
VALVE										
HYDRANT										
CROSS										
REDUCER										
BENDS										
TEES										

## (AS BUILT INFORMATION)

DATE STARTED: \_\_\_\_\_  
DATE COMPLETED: \_\_\_\_\_  
FOREMAN: \_\_\_\_\_  
INSPECTOR: \_\_\_\_\_  
CONTRACTOR: \_\_\_\_\_

⊙ ANODE ACTUAL  
BVV BUTTERFLY VALVE  
BOP BOTTOM OF PIPE  
BOV BLOWOFF ASSEMBLY AND VALVE  
CMP CORRUGATED METAL PIPE  
CPLG.(INS.) COUPLING (INSULATING),(REDUCING), (STRAIGHT)  
CRA CONCRETE REVERSE ANCHOR  
CTRB CONCRETE THRUST REACTION BLOCK  
DEFL DEFLECT  
DIP DUCTILE IRON PIPE  
ELEV ELEVATION  
EX EXISTING  
FLG FLANGE  
FM FORCE MAIN

## ABBREVIATIONS

GPM GALLONS PER MINUTE  
GRD BRK GRADE BREAK  
HYD ASSY INCLUDES FIRE HYDRANT, LATERAL, VALVE, TIE RODS, AND REVERSE ANCHOR.  
INV INVERT  
LOC LOCATION  
MJ MECHANICAL JOINT  
N,S,E,W NORTH,SOUTH,EAST,WEST  
PH POT HOLE  
PL PROPERTY LINE  
PSI POUNDS PER SQUARE INCH  
PUPS 12" OR SMALLER, USE PLAIN END BY PLAIN END, 30" LENGTH, 16" OR LARGER USE PLAIN END BY PLAIN END, 24" LENGTH, PROPOSED  
PROP

PVC POLYVINYL CHLORIDE PIPE  
RCP REINFORCED CONCRETE PIPE  
RED REDUCER  
RSNT MJ RESTRAINT (i.e. MEGALUG)  
SJ SLIP JOINT  
SAN SANITARY SEWER STATION  
STA STATION  
TOP TOP OF PIPE  
TS TEST STATION  
UNK UNKNOWN  
WL WATER LINE

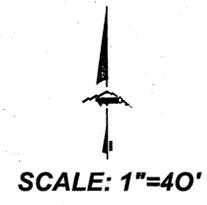
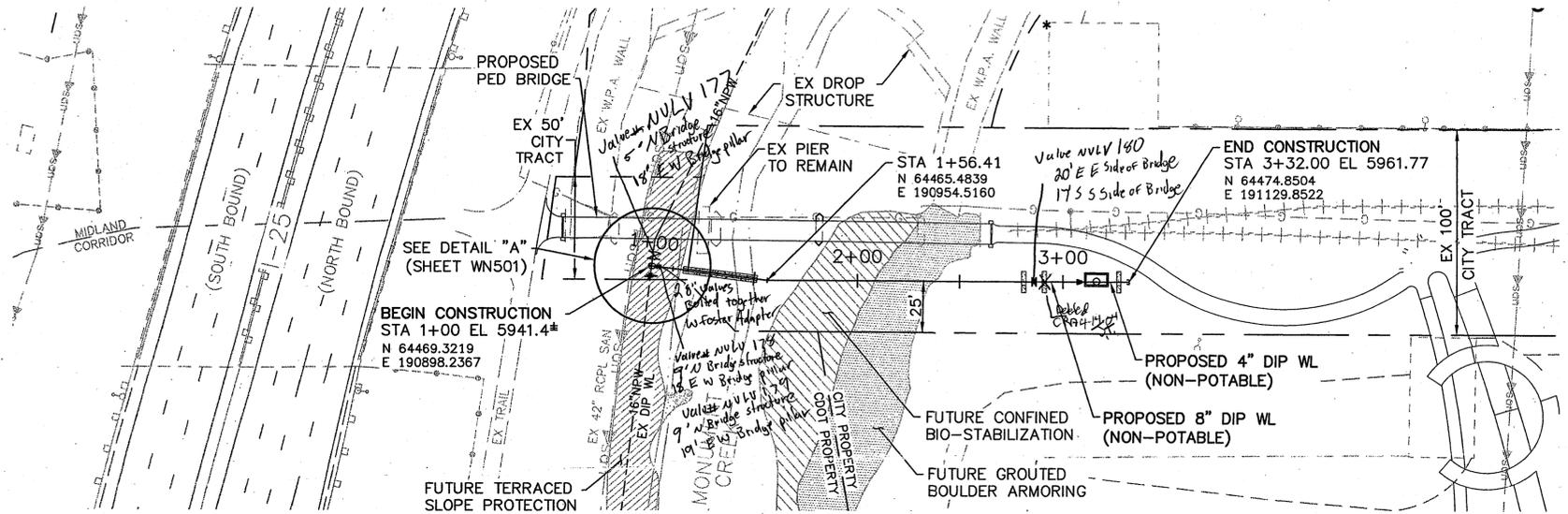
## (PROJECT RELATED INFORMATION)

MASTER WORK ORDER NUMBER: 1220657  
PROJECT NUMBER: 2003-N010  
FIMS MAP: ~~G-33~~, G-34  
SHEET NO: 2 OF 4  
NETWORK LOCATION & DRAWING TITLE:  
P:\9931000402\DWG\BID SET\WATER (NON-POT)\10-16-03\WN002  
REVISIONS:

**CONFLUENCE PARK PHASE 2 IMPROVEMENTS**  
INSTALL APPROXIMATELY 205 FT OF 8" NON-POTABLE WATER LINE UNDER MONUMENT CREEK

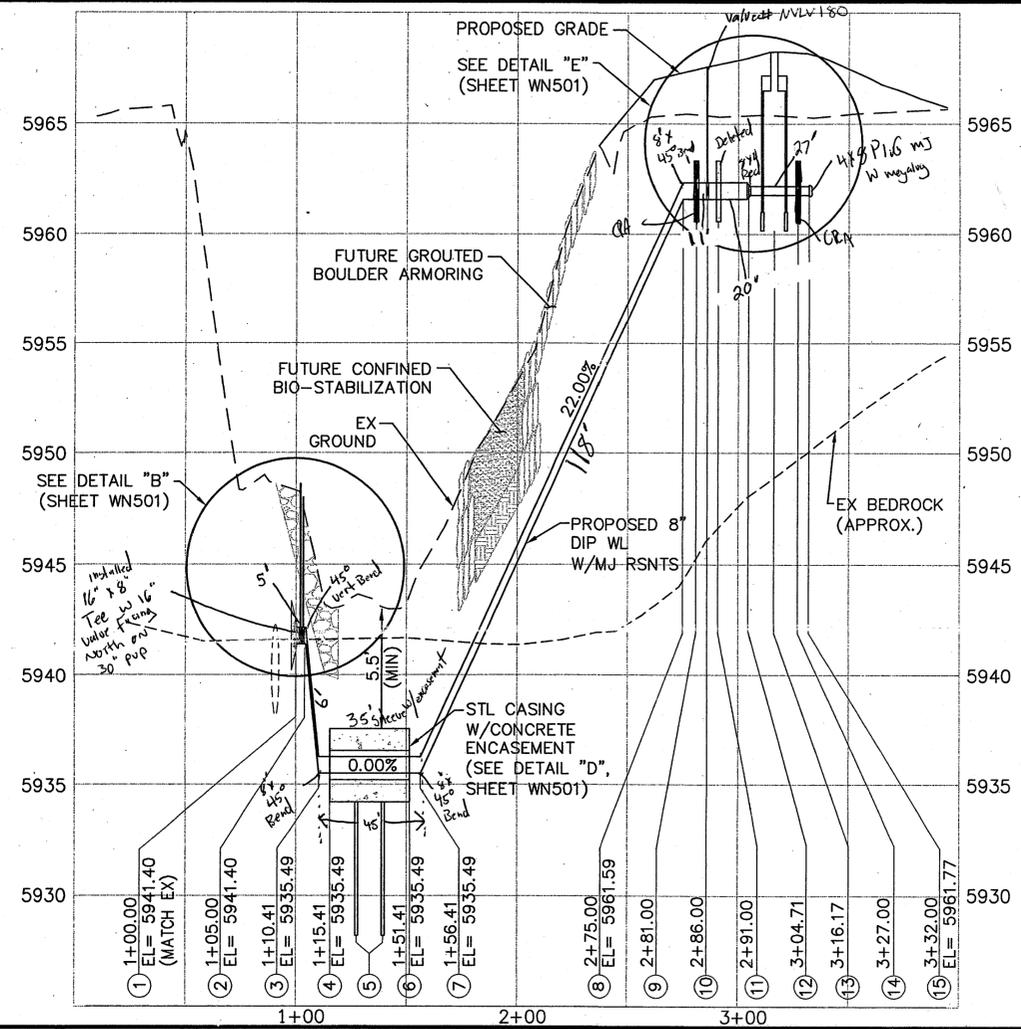
**Colorado Springs Utilities**  
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DESIGN BY: BES DATE: DECEMBER 1, 2003  
CHECKED BY: FLW DATE: DECEMBER 2, 2003



**NOTES:**

1. ALL 8" AND 16" DIP PIPE JOINTS WILL BE RESTRAINED WITH MECHANICAL JOINT RESTRAINTS.
2. REFER TO THE "CONFLUENCE PARK PHASE 2" IRRIGATION PLANS FOR SYSTEM CONTINUATION.
3. FUTURE CHANNEL IMPROVEMENTS SHOWN ON THIS PLAN REFLECT THE "SEC 206 PRELIMINARY RESTORATION PLAN" DATED MAY 7 2002 FOR CONFLUENCE PARK PREPARED BY MCLAUGHLIN WATER ENGINEERS, INC.



**PIPE PRESSURE:**

- STATIC**
  - 194 PSI (MIN)
  - 206 PSI (MAX)
- SURGE (ASSUMED)**
  - 100 PSI
- TOTAL**
  - 294 PSI (MIN)
  - 306 PSI (MAX)

*Mountain Air Shut - 1-30-04  
Finish - 4-26-04*

**PROFILE SCALE:**  
1"=40' HORIZ.  
1"=4' VERT.

**KEYED NOTES:**

1. 16" X 8" SWIVEL TEE (CL 350) w/CTRB = 1/2 YDS, W/2-16" MJ RSNTS, 1-8" MJ RSNT, 16" BUTTERFLY VALVE 4.25' S, 8" GATE VALVES (CL 350) 2.1" AND 3.4' EAST W/4-8" MJ RSNTS (SEE DETAILS "A" & "B", SHEET WN501)
2. 8" X 45' (VERT) BEND (CL 350) W/2-8" MJ RSNTS, DEFL 0' IN AND OUT OF BEND (ACT DEFL 45'00"00")
3. 8" X 45' (VERT) BEND (CL 350) W/2-8" MJ RSNTS, DEFL 0' IN AND OUT OF BEND (ACT DEFL 45'00"00")
4. BEGIN CONCRETE ENCASED 16" STEEL CASING PIPE (SEE DETAIL "D", SHEET WN501)
5. 2-16" DIA X 6.0 LF DRILLED CAISSONS, STA'S 1+27.42 & 1+39.41 (SEE DETAIL "C", SHEET WN501)
6. END CONCRETE ENCASED 16" STEEL CASING PIPE (SEE DETAIL "D", SHEET WN501)
7. 8" X 11-1/2" (VERT) BEND (CL 350) W/2-8" MJ RSNTS, DEFL 0'34'43" IN AND OUT OF BEND (ACT DEFL 12'24'26")
8. 8" X 11-1/2" (VERT) BEND (CL 350) TIED BACK TO CRA (SEE NOTE 9), W/2-8" MJ RSNTS, DEFL 0'34'43" IN AND OUT OF BEND (ACT DEFL 12'24'26")
9. CONCRETE REVERSE ANCHOR W/MJ RSNT
10. 8" VALVE (CL 350) TIED BACK TO CRA (SEE NOTE 11), W/2-8" MJ RSNTS
11. CONCRETE REVERSE ANCHOR W/MJ RSNT
12. 8" X 4" MJ X MJ RED (CL 350), 1-8" MJ RSNT, 1-4" MJ RSNT
13. PRECAST CONCRETE VAULT, 4" METER PER CITY STD. NPS-2, RIM EL = 5968.25, VAULT TOP EL = 5967.17 BEGIN STA 3+10.50, END STA 3+21.84
14. CONCRETE REVERSE ANCHOR W/MJ RSNT
15. 4" SJ PLUG (CL 350) TIED BACK TO CRA

**Approved for Construction**

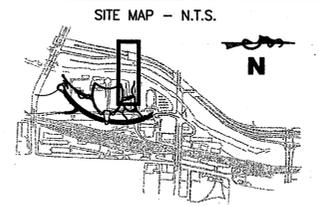
By: Al Jarama 3054 1-20-04  
CSU Design Services: Date

By: \_\_\_\_\_ Date

CSU Operations: \_\_\_\_\_ Date

*Benjamin E. Wilson*  
BENJAMIN E. WILSON, P.E. NO. 35165  
FOR AND ON BEHALF OF WILSON & COMPANY, INC.

**WILSON & COMPANY**  
Engineers & Architects  
**WN101**



**LEGEND**

<ul style="list-style-type: none"> <li>AIR &amp; VACUUM VALVE STA CENTERLINE</li> <li>FENCE</li> <li>EXISTING SANITARY SEWER</li> <li>EXISTING STORM DRAIN</li> <li>EXISTING GAS</li> <li>EXISTING ELECTRIC (O/H OR U/G*)</li> <li>EXISTING TELEPHONE (O/H OR U/G*)</li> <li>EXISTING TELEVISION</li> <li>EXISTING FIBER OPTIC</li> <li>EXISTING WATER</li> <li>PROPOSED WATER</li> </ul>	<ul style="list-style-type: none"> <li>W - W</li> <li>SAN - SAN</li> <li>SS - SS</li> <li>G - G</li> <li>E - E</li> <li>T - T</li> <li>TV - TV</li> <li>FO - FO</li> <li>W - W</li> </ul>	<ul style="list-style-type: none"> <li>RIGHT-OF-WAY/PROPERTY LINE</li> <li>FIRE HYDRANT (EXISTING)</li> <li>FIRE HYDRANT (PROPOSED)</li> <li>STORM CULVERT VALVE (PROPOSED)</li> <li>VALVE (EXISTING)</li> <li>BLOWOFF ASSY. (PROPOSED)</li> <li>BLOWOFF ASSY. (EXISTING)</li> <li>PLUG (PROPOSED)</li> <li>PLUG (EXISTING)</li> </ul>	<ul style="list-style-type: none"> <li>W - W</li> </ul>
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\* O/H = OVERHEAD, U/G = UNDERGROUND

**(PROJECT RELATED INFORMATION)**

MASTER WORK ORDER NUMBER:	1220657
PROJECT NUMBER:	2003-N010
FIMS MAP:	G-33, G-34
SHEET NO.:	3 OF 4
NETWORK LOCATION & DRAWING TITLE:	P:\931000402\DWG\BID SET\WATER(NON-POT)(10-16-03)\WN101
REVISIONS:	

**CONFLUENCE PARK PHASE 2 IMPROVEMENTS**  
INSTALL APPROXIMATELY 205 FT OF 8" DIP NON-POTABLE WATER LINE UNDER MONUMENT CREEK

**Colorado Springs Utilities**  
*It's how we're all connected*

DESIGN BY:	BES	DATE:	DECEMBER 1, 2003
CHECKED BY:	FLW	DATE:	DECEMBER 2, 2003

P:\931000402\Cvg Bid Set\Water (Non-Pot)(10-16-03)\WN101.DWG, isyout, 1/12/2004 8:08:34 AM, mobbyd

