

CHANNEL STABILITY AND BANK PROTECTION ELEMENTS COTTONWOOD COMMONS

LOCATED IN THE
CITY OF COLORADO SPRINGS

MAY 1998

DATE	
BY	
CHECKED BY	
APPROVED BY	

PROJECT NO.	
DATE PLOTTED	
SCALE	
SHEET NO.	3
TOTAL SHEETS	



Vicinity Map

Sheet	Description
1	Cover Sheet and General Notes
2	Plan View and Bank Protection Details
3	Structural Details

GENERAL NOTES

The layout, size, location, and number of all system underground utilities are approximate when shown on the drawings. It shall be the responsibility of the contractor to verify the existence and location of all underground utilities along the route of work. Similar responsibility notwithstanding, the contractor shall be responsible for locating all unknown utilities and protecting them from harm.

Call 1-800-452-1887 for location of all sewerer utilities.

All construction activities on this site must comply with the State of Colorado Permitting process for Streambank Erosion Management and reconstruction activity. For information please contact Colorado Department of Health, Water Quality Control Division, WQAD-1642, 5207 Cherry Creek Drive South, Denver, Colorado 80222-3326, Attention: Permits and Enforcement Section. Phone: (303) 555-3559.

STRUCTURAL NOTES

Concrete shall be 5000' Class A or B.

Reinforcing shall be prepared in the field.

Approved concrete mixture shall be provided for.

The following minimum minimum cover dimensions shall be provided for reinforcement:

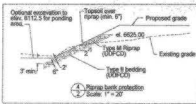
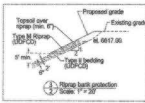
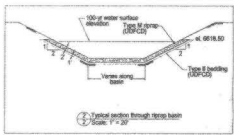
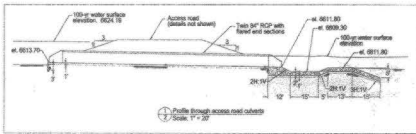
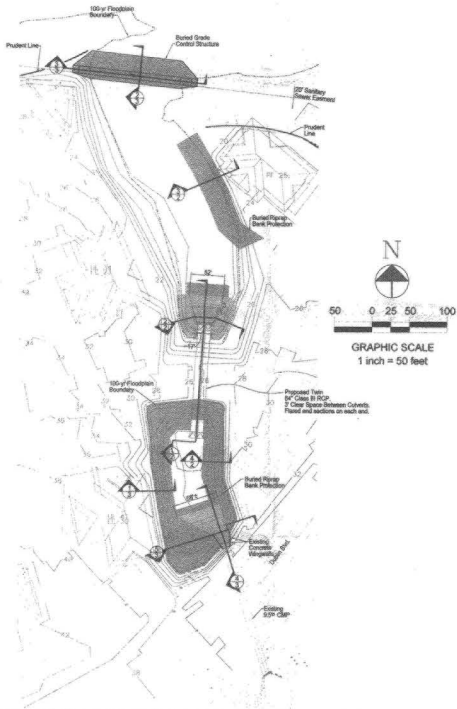
- Concrete used against and perpendicular to earth: 2"
- Concrete exposed to earth or weather: 2"

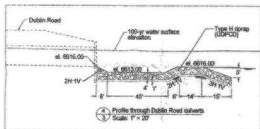
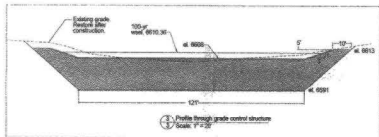
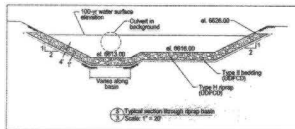
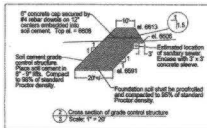
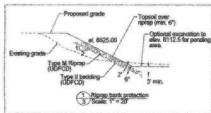
Placement of all reinforcement shall comply with ACI 318-88.

The minimum column length for all vertical piles shall be 1'-0". The minimum pile length for all retaining piles shall be 1'-0". The minimum pile length for all retaining piles shall be 1'-0".

All construction joints shall be full depth to provide a good bond and shall be thoroughly cleaned before being concrete placed; reinforcing steel shall be continuous through joints, unless otherwise specified.

Retaining steel shall be grade 40 or grade 60 with a minimum Fy-43K psi.





GRADATIONS

(According to Urban Drainage and Flood Control District)

Reinforcement	% Greater Than Given Size by Weight	Intermediate Rock Dimension (in)
Type M	75-100	2 1/2
	50-75	4-6
	25-50	8-12
Type VI	75-100	2 1/2
	50-75	4-6
	25-50	8-12
Bedding Dimension	U.S. Standard Sieve Size	% Passing in Weight
Type I	3"	85-100
	4"	75-85
	6"	65

STRUCTURAL DETAILS

COTTONWOOD COMMONS

Sheet	Scale	Revision	Date
3	1" = 2'		
4	1" = 2'		
5	1" = 2'		

Project No.	Client
13-000000	AVRES ASSOCIATES

Drawn By	Checked By	Date
J. J. [Signature]	J. J. [Signature]	11-11-2011

AVRES ASSOCIATES
Engineering, Construction, Planning
10000 E. 12th Avenue, Suite 100
Denver, CO 80231
Phone: 303.751.7800
Fax: 303.751.7801
www.avres.com