



INNOVATIVE DESIGN. CLASSIC RESULTS.

**DRAINAGE BASIN FEE ADJUSTMENT – SAND CREEK DRAINAGE BASIN
FOR
RETREAT AT TIMBERRIDGE FILING NO. 3
EL PASO COUNTY, CO**

Prepared for:

Timberridge Development Group, LLC
2138 Flying Horse Club Drive
Colorado Springs, CO 80921
(719) 592-9333

Prepared By:

Classic Consulting Engineers & Surveyors, LLC
619 N. Cascade Ave. Suite 200
Colorado Springs, CO 80903

(719) 785-0790

Job Number: 1185.30



September 23, 2024

El Paso County
Department of Public Works
2880 International Circle
Colorado Springs, CO 80910

Attn: Elizabeth Nijkamp, Deputy County Engineer

**RE: *Drainage Basin Fee Adjustment Request for Timberridge Development Group, LLC
Retreat at Timberridge Filing No. 3
East of Vollmer Road along Arroya Lane (Sand Creek Drainage Basin),
El Paso County, CO***

Dear Elizabeth:

The purpose of this Sand Creek Drainage Basin Fee Adjustment Request is to increase the Sand Creek Drainage Basin Fee to reflect updated costs from Contractor bidding for the Arroya Lane Box Culvert Crossing at Reach SC-9, Segment 171.

PROJECT DESCRIPTION

The Retreat at Timberridge Filing No. 3 Community is located in portions of the Section 21, 22, 27 and 28, Township 12 South, Range 65 West of the sixth Principal Median, within the County of El Paso, State of Colorado. The proposed 100-year drainage flow crossing of Arroya Lane at Sand Creek is what is triggering this request.

The proposed Retreat at Timberridge Filing No. 3 Plat consists of public roads and rural and urban residential lots.

The proposed plat is north of the Filing No. 2 Antelope Ravine Drive and Elk Antler Lane intersection, and south of Arroya Lane (the "Site") in El Paso County, Colorado.

As defined in Table VIII-4 "Sand Creek Drainage Basin Planning Study – Roadway Culvert Crossing Cost Estimate – Sand Creek Basins", the Arroya Lane Crossing is not reflected as a reimbursable cost due to the proposed 6'x12' concrete box culvert was not identified as a 100-year facility (only 10-year facility was proposed). As a 100-year conveyance drainage facility was required by El Paso County, the proposed double 6'x12' concrete box culvert is now being proposed as a fully reimbursable expense. As the facility was not reimbursable, referencing the costs of DBPS proposed 10-year facility will not be analyzed. See attachments from DBPS attached to this request.

DRAINAGE FEES AND REIMBURSABLE COSTS

Reimbursable Costs

The Sand Creek drainage improvements at the Arroya Lane Crossing of Sand Creek are fully approved and bid.

The Request is to reflect the bid costs associated with the Arroya Lane 100-Year Crossing and increase the Drainage Basin Fee by the bid costs.

The process is:

1. Drainage fee adjustment request application provided to El Paso County.
 - Request presented and approved at the Drainage Board
 - Request sent to El Paso County Board of County Commissioners

The current 2024 Sand Creek Drainage Fee is **\$23,821** per impervious acre. The remaining unplatted area within the Sand Creek Drainage Basin as determined by El Paso County as 2,755 acres with a 36.5% average imperviousness.

The resultant Drainage Fees that could be collected is now $\$23,821 \times 2,755 \text{ Ac} \times 36.5\% \text{ imp} = \$23,952,802$, by adding in the Arroya Lane Crossing costs from the Contractor bid of \$762,886, the resultant overall drainage costs are \$24,716,688 which results in a proposed drainage fee of \$24,580, an increase of \$759/impervious acre.

The increase in Drainage Basin Fee, if approved, would apply to the remaining El Paso County unplatted parcels within the Drainage Basin (2,755 acres).

Table 3: Drainage Fee Increase Summary

Remaining unplatted parcels in Sand Creek Basin	Area (ac)	Current 2024 Drainage Fee / Impervious Acre	Current Drainage Fee Total with 36.5% Imperviousness	100-Year Facility Cost (Arroya Lane Crossing)	Proposed Drainage Fee/Impervious Acre	Proposed Basin Fee Increase
	2755	\$23,821	\$23,953,802.00	\$762,886.00	\$29,580	\$759.00

PROPOSED DRAINAGE BOARD MOTIONS

Classic Consulting Engineers and Surveyors, LLC (CCES). (“Project Engineer”) and Timberridge Development Group, LLC (“Owner”) would like to present the following motion to the City of Colorado Springs/El Paso County Drainage Board for review and recommendation for approval.

- Move to revise the Sand Creek Drainage Basin Fee from \$23,821 to \$xxx. An increase of \$xxx per acre.
 - If approved, this increase in the Drainage Basin Fee would apply to 2,755 acres (1,006 impervious acres) of remaining unplatted property within the Sand Creek Drainage Basin, as provided by El Paso County.

CONCLUSION

This Drainage Basin Fee Adjustment Request amends the previously approved Sand Creek Drainage Fee to reflect the actual Sand Creek Crossing Costs at Arroya Lane and will cause an increase in the Drainage Basin Fee of \$759.

Sincerely,

Classic Consulting Engineers & Surveyors, LLC

A handwritten signature in blue ink that reads "Kyle R. Campbell". The signature is written in a cursive, flowing style.

Kyle R. Campbell, P.E.
Owner

DBPS COST / FACILITIES

TABLE VIII-4: SAND CREEK DRAINAGE BASIN PLANNING STUDY
ROADWAY CULVERT CROSSING COST ESTIMATE

SAND CREEK BASINS									
ROADWAY	REACH NUMBER	DRAINAGEWAY SEGMENT	CROSSING TYPE	LENGTH	UNIT	UNIT COST	TOTAL COST	TOTAL REIMBURSABLE COST	
BANNING-LEWIS PRKW	SC-8	186	6'Hx10'W CBC	120	LF	\$390	\$46,800	\$46,800	
ARROYO LANE	SC-9	171	6'Hx12'W CBC	80	LF	\$510	\$40,800	\$0	
YOLLMER ROAD	SC-8	169	60-INCH CMP	80	LF	\$120	\$9,600	\$0	
	SC-9	173	"	80	LF	\$120	\$9,600	\$0	
BURGESS ROAD	SC-9	176	42-INCH CMP	80	LF	\$75	\$6,000	\$0	
	SC-9	178	2-42-INCH CMP	80	LF	\$150	\$12,000	\$0	
CENTER TRIBUTARY									
TERMINAL AVENUE	CT-2	144	4-5'11x8'W CBC	60	LF	\$1,200	\$72,000	\$0	
OMAHA BOULEVARD	CT-2	146-2	3-4'11x9'W CBC	80	LF	\$900	\$72,000	\$0	
WEST FORK SAND CREEK									
WOOTEN ROAD	WF-1	153	2-4'11x6'W CBC	100	LF	\$480	\$48,000	\$0	
EDISON AVENUE	WF-1	153	2-4'11x6'W CBC	60	LF	\$240	\$14,400	\$0	
PALMER PARK BLVD.	WF-1	154-2	2-4'11x10'W CBC	80	LF	\$540	\$43,200	\$0	
CHICAGO RIRR	WF-1	165-1	4'11x8'W CBC	220	LF	\$270	\$59,400	\$0	
HALF MOON DRIVE	WF-1	165-2	4'11x6'W CBC	60	LF	\$240	\$14,400	\$0	

TOTAL CULVERT CONSTRUCTION COSTS, SAND CREEK \$1,902,600 \$1,111,000

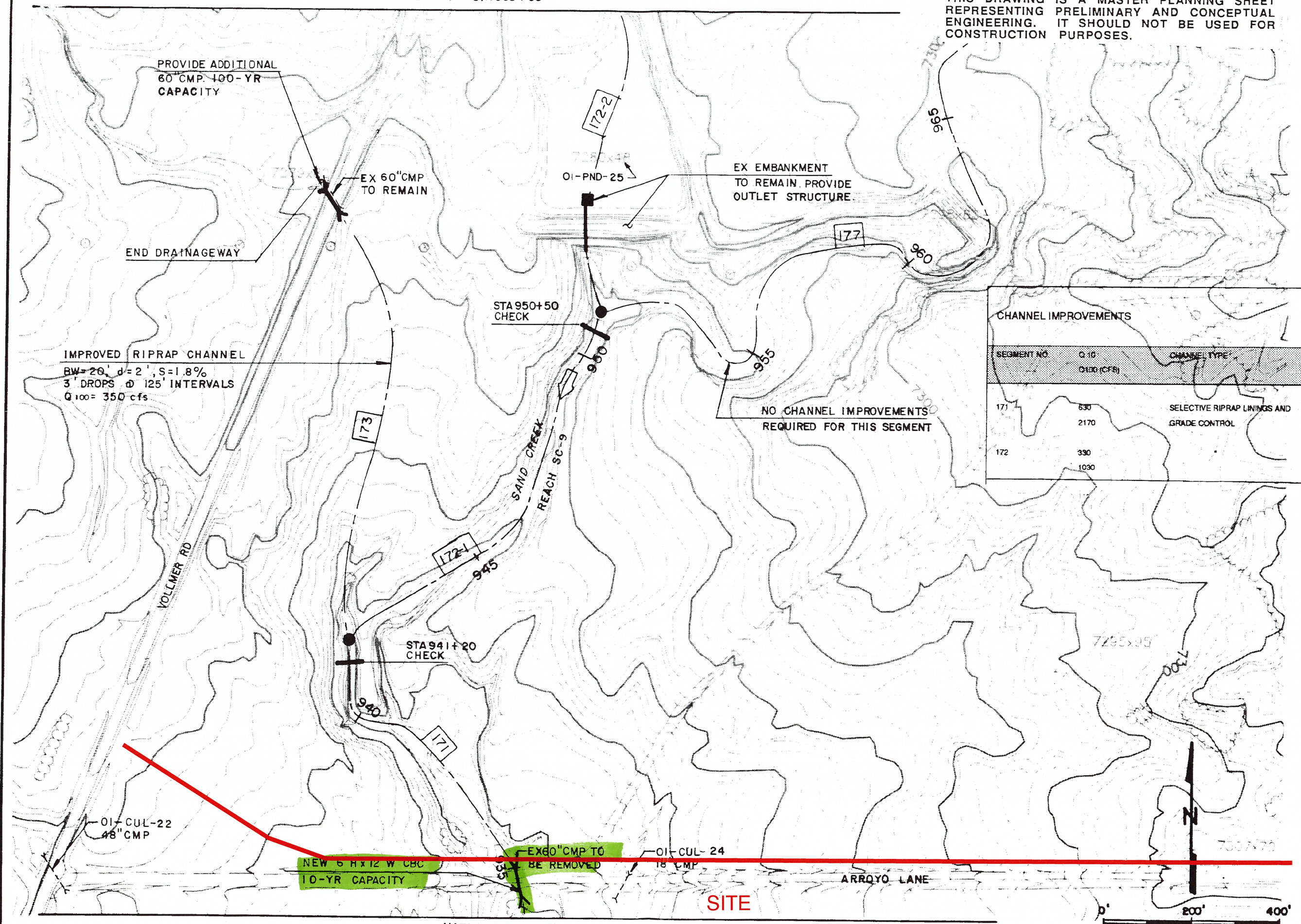
**100-YEAR ARROYA LANE
CROSSING BID SUMMARY**

Site Name:	TimberRidge Arroya Lane - Double Box Culvert (6'x12')						
Job #:					Lots:	-	
By:	Adam Doyle	DU/AC:	-		Acres:	-	
Date:	September 30, 2024	CL:	-				
Revised:		Lots:	-				
ESTIMATE							
Item #	Item	Quantity	Units	Unit Price	Total Cost	Comments	
d1000	PLANNING	0	ls	\$ -	\$ -	N/A	
d3000	ENGINEERING	0	ls	\$ -	\$ -	N/A	
d4000	SURVEYING	0	ls	\$ -	\$ -	N/A	
d5000	SOILS ENGINEERING	0	ls	\$ -	\$ -	N/A	
d8000	EXCAVATION						
	Double Box Culvert Excavation	1	ls	\$ 59,700.00	\$ 59,700		
	Double Box Culvert Backfill	1	ls	\$ 150,302.40	\$ 150,302		
	Dewatering	1	ls	\$ 50,000.00	\$ 50,000		
	Misc. Earthwork	1	ls	\$ 25,000.00	\$ 25,000		
	SUBTOTAL				\$ 285,002		
d8500	EROSION CONTROL / STORMWATER						
	SUBTOTAL				\$ -	N/A	
d9000	SANITARY SEWER						
	SUBTOTAL				\$ -	N/A	
d10000	WATER						
	SUBTOTAL				\$ -	N/A	
d11000	GAS						
	SUBTOTAL				\$ -	N/A	
d12000	ELECTRIC						
	SUBTOTAL				\$ -	N/A	
d13000	COMMUNICATIONS						
	SUBTOTAL				\$ -	N/A	
d14000	DRAINAGE CONSTRUCTION						
	Mobilization	1	ea	\$ 20,000.00	\$ 20,000		
	Concrete Pump Truck	1	ea	\$ 15,000.00	\$ 15,000		
	Double 6'x12' Arch Culvert	65	lf	\$ 4,000.00	\$ 260,000		
	North Headwall & Wingwalls	1	ls	\$ 95,825.00	\$ 95,825		
	South Headwall & Wingwalls	1	ls	\$ 87,059.00	\$ 87,059		
	SUBTOTAL				\$ 477,884		
d15000	CURB AND GUTTER						
	SUBTOTAL				\$ -	N/A	
d16000	ASPHALT PAVING						
	SUBTOTAL				\$ -	N/A	
d17000	SIDEWALK						
	SUBTOTAL				\$ -	N/A	
d18000	FENCE						
	SUBTOTAL				\$ -	N/A	
d19000	LANDSCAPING						
	SUBTOTAL				\$ -	N/A	
d22000	MISCELLANEOUS / WARRANTY	0	ls	\$ -	\$ -	N/A	
d20000	FEES						
	SUBTOTAL				\$ -	N/A	
	CONSTRUCTION SUBTOTAL				\$ 762,886		
d24000	CONTINGENCY			0%	\$ -		
	TOTAL ESTIMATED COST				\$ 762,886		

Reimbursable Costs				
ITEM	QUANTITY	UNIT	UNIT COST	TOTAL COST
Double Box Culvert Excavation	1	ls	\$ 59,700.00	\$ 59,700
Double Box Culvert Backfill	1	ls	\$ 150,302.40	\$ 150,302
Dewatering	1	ls	\$ 50,000.00	\$ 50,000
Misc. Earthwork	1	ls	\$ 25,000.00	\$ 25,000
Mobilization	1	ea	\$ 20,000.00	\$ 20,000
Concrete Pump Truck	1	ea	\$ 15,000.00	\$ 15,000
Double 6'x12' Arch Culvert	65	lf	\$ 4,000.00	\$ 260,000
North Headwall & Wingwalls	1	ls	\$ 95,825.00	\$ 95,825
South Headwall & Wingwalls	1	ls	\$ 87,059.00	\$ 87,059
			Subtotal	\$ 762,886

DBPS MAP

THIS DRAWING IS A MASTER PLANNING SHEET REPRESENTING PRELIMINARY AND CONCEPTUAL ENGINEERING. IT SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.



PROVIDE ADDITIONAL 60" CMP 100-YR CAPACITY

EX 60" CMP TO REMAIN

END DRAINAGEWAY

IMPROVED RIPRAP CHANNEL
 BW=20', d=2', S=1.8%
 3' DROPS @ 125' INTERVALS
 Q₁₀₀=350 cfs

STA 950+50 CHECK

EX EMBANKMENT TO REMAIN. PROVIDE OUTLET STRUCTURE.

NO CHANNEL IMPROVEMENTS REQUIRED FOR THIS SEGMENT

STA 941+20 CHECK

OI-CUL-22 48" CMP

NEW 6'x12' W.C.B.C. 10-YR CAPACITY

EX 60" CMP TO BE REMOVED

OI-CUL-24 18" CMP

SITE

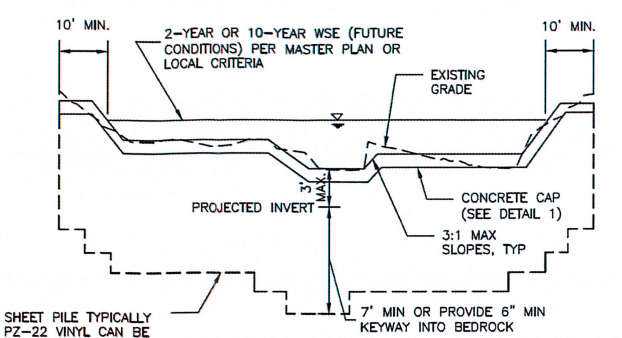
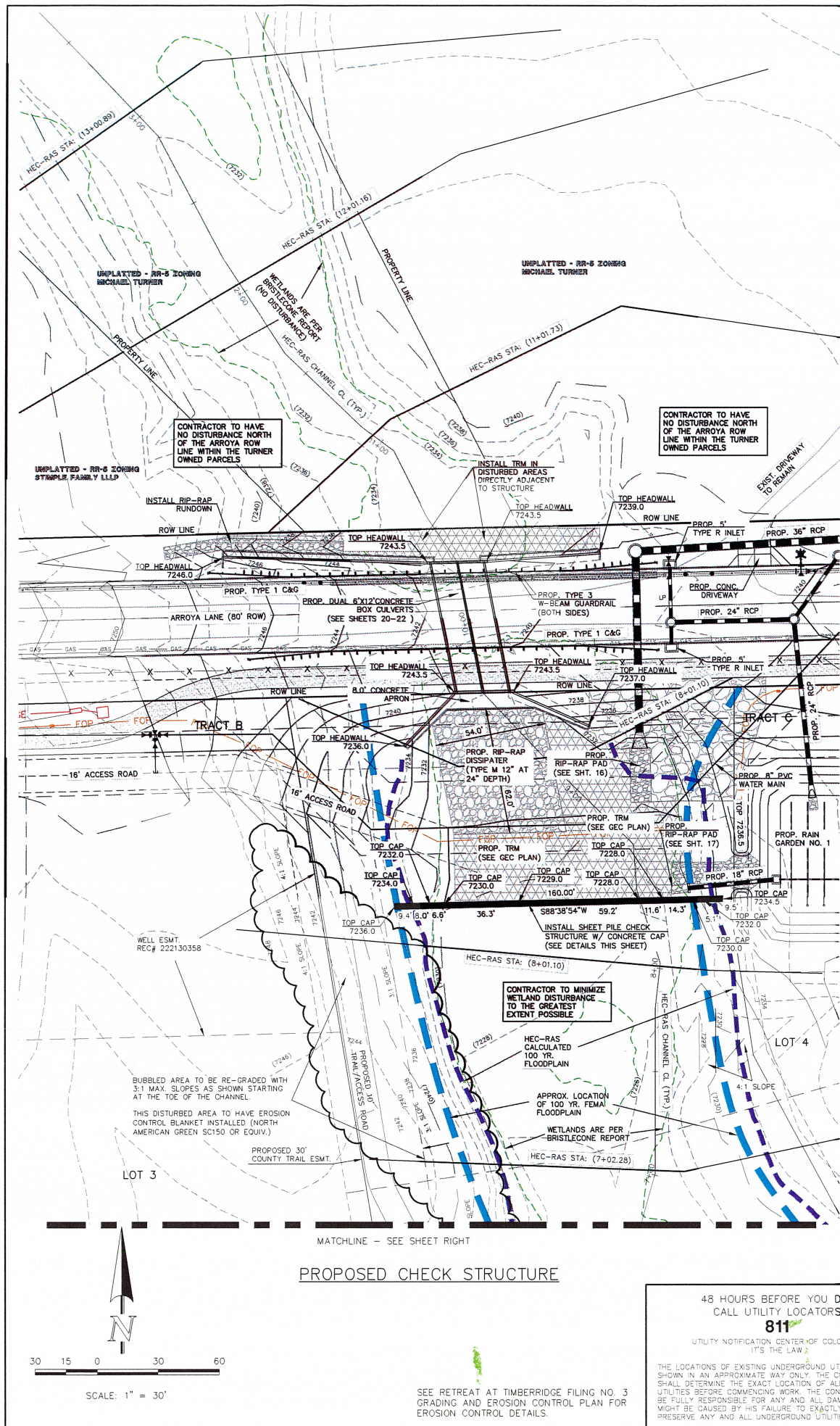
CHANNEL IMPROVEMENTS		
SEGMENT NO.	Q ₁₀ Q ₁₀₀ (cfs)	CHANNEL TYPE
171	530 2170	SELECTIVE RIPRAP LININGS AND GRADE CONTROL
172	330 1030	



Kiowa Engineering Corporation
 419 W. Bijou Street
 Colorado Springs, Colorado
 80905-1308

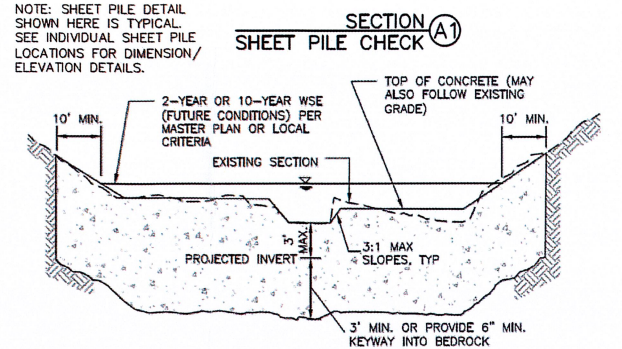
SAND CREEK DRAINAGE BASIN PLANNING STUDY
 PRELIMINARY DESIGN PLANS

Project No	90-04-09
Date:	9/92
Design:	RNW
Drawn:	EAK
Check:	RNW
Revisions:	

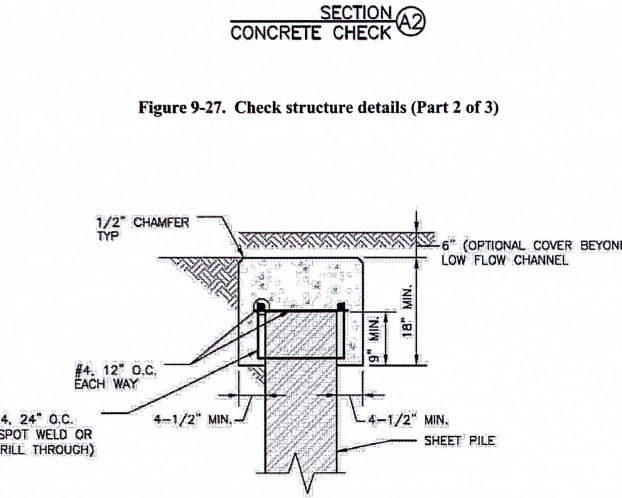


SHEET PILE TYPICALLY PZ-22 VINYL CAN BE USED IN SANDY SOILS AND WHERE THERE ARE NO ROCKS

NOTE: THE STRUCTURE MAY BE COVERED WITH 6" OF SOIL OUTSIDE OF THE LOW FLOW AREA.

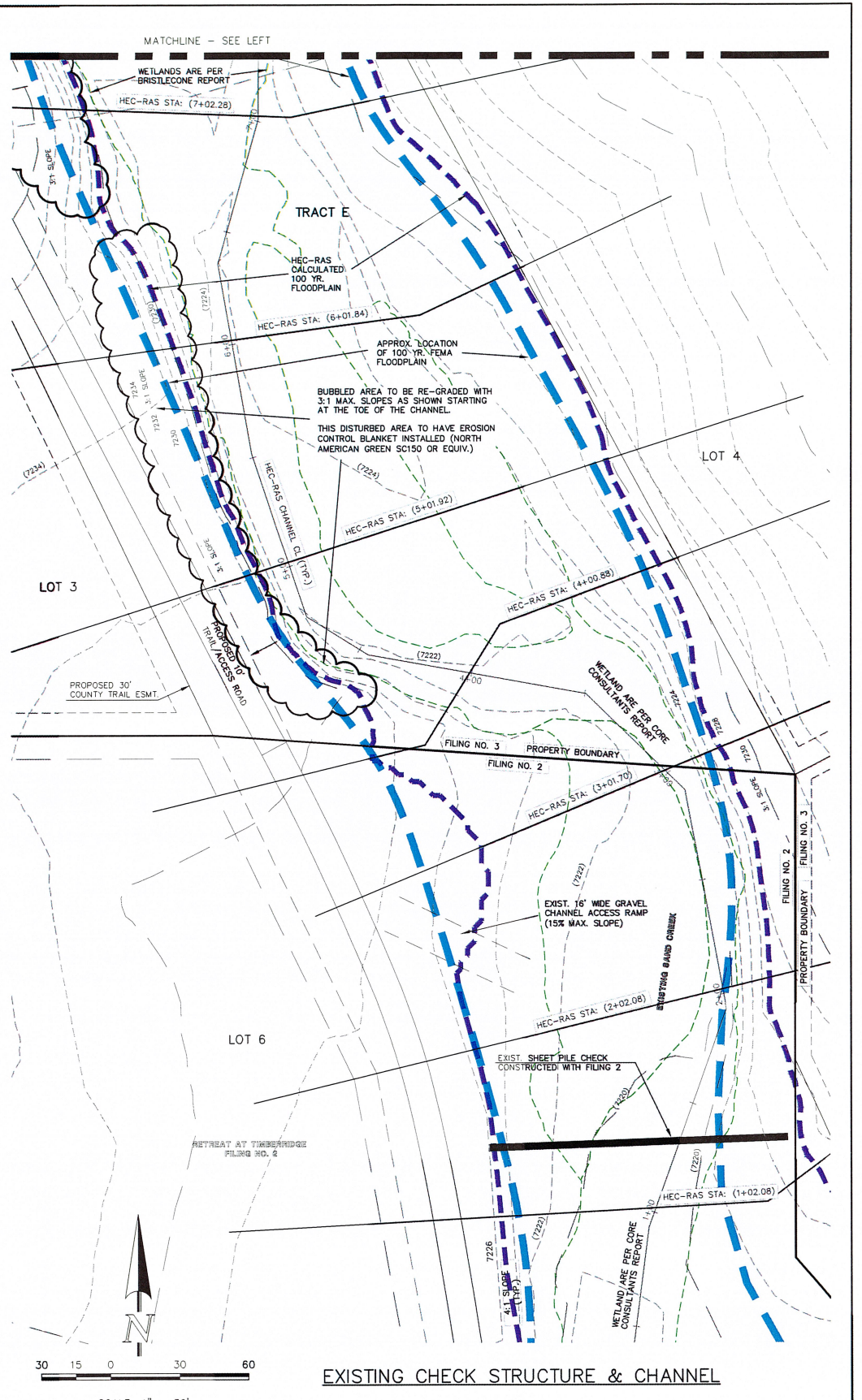


NOTES: 1. TRENCH IN UNDISTURBED SOIL FORM TOP 6" OF CHECK. DO NOT OVER EXCAVATE TO FORM WALLS OR CONSTRUCT A FOOTING.
 2. THE STRUCTURE MAY BE COVERED WITH 6" OF SOIL OUTSIDE OF THE LOW FLOW AREA.
 3. VIBRATE CONCRETE INTO TRENCH.



DETAIL 1
 CONCRETE SHEET PILE CAP

Figure 9-28. Check structure details (Part 3 of 3)



48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS
811
 UTILITY NOTIFICATION CENTER OF COLORADO
 IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NO.	REVISION	DATE
1	REVISED PER COUNTY COMMENTS	9/22/23
2	REVISED PER COUNTY COMMENTS	10/31/23
3	REVISED PER ROADWAY ELEVATION CHANGE	1/26/24
4	REVISED PER COUNTY COMMENTS	4/18/24

REVIEW:
 PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING AND REGISTERED SURVEYORS, LLC

MARC A. WHORTON, COLORADO LICENSE #37155, DATE 5/15/2024

CLASSIC CONSULTING
 619 N. Cascade Avenue, Suite 200
 Colorado Springs, Colorado 80903
 (719)785-0790
 (719)785-0799(Fax)

RETREAT AT TIMBERIDGE FILING NO. 3
 CONSTRUCTION PLANS
 CHECK STRUCTURE

DESIGNED BY	MAW	SCALE	DATE
MAW	(H) 1" = 30'		4-15-21

DRAWN BY	MAW	(H) 1" = 30'	SHEET	OF
MAW	(H) 1" = 30'		19	27

CHECKED BY	(V) 1" = N/A	JOB NO.
	(V) 1" = N/A	1185.30

C:\TEMP\PROJECTS\TIMBERIDGE\DRAWING\CHECK_STRUCTURE\9-27-23\9-27-23-11.DWG, DATE: 5/15/2024, 2:48:11 PM, P. 1