APPENDIX A SWMP Checklist

To ensure that all necessary components of the SWMP have been included in the bid documents, the following SWMP checklist can be used:

Stormwater Management Plan Checklist

1. Items listed below that are applicable to your project must be included in the contract documents.

SWMP-Additional Information		
	Required for Projects with CDPS Permit.	
Runoff coeff	icient pre-construction post construction	
Existing soil	data	
Existing veg	etation	
Other water specification	quality measures not included in SWMP referenced in other contract plans and s	
APPLICATIO	TER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY PERMIT ON SUBMITTED TO CDPHE- permit application process is subject to revision. Checked water quality and regional environmental for revisions to application process.	
Signatory re	quirements obtained for permit	
Site Information F	Referenced In Plan Sheets	
	Required For All Projects.	
General loca	ation map	
Discharge lo	ocations — projects with drainage plans	
Receiving w	aters listed	
On site wetla	ands mapped and shown on the plans	
Endangered	species habitat mapped and shown on the plans	
Historic pres	servation information identified	
Other protect	sted environments or structures	
Stabilization Prac	tices	
	Required For All Projects With Earth Disturbances	
Area of distu	Irbance quantified	
Planting or s	seed plan included (species rates, types, method of planting, and soil preparation)	
Description of seeding wind	of interim stabilization (i.e., required for detours, stockpiles, temporary mulching between dows)	

SWMP-Additional Information			
	Description of permanent stabilization		
	Additional quantities included for incremental seeding and mulching (minimum 25 percent of total)		
	Soil preparation — fertilizer, surface roughening defined		
	Work access plan defined adjacent to sensitive environments (wetlands, forests, endangered species habitat)		
Struct	ural Best Management Practices		
	Required For All Projects With Earth Disturbances		
	208 PAY ITEMS INCLUDED IN PLANS as described in code item book		
	REVISED M-107-1 STANDARD INCLUDED if any		
	BMP locations included in tab/ or plan sheets		
	Relevant project special provisions included in specifications document		
	Additional details and special provisions included		
	Erosion control supervisor pay item included (projects with permits)		
	SWMP reviewed with construction project engineer		
	Sediment removal and disposal paid for separately		
	Equipment hours included for erosion control		
	Force account and additional as directed items included for unforeseen conditions		
	Concrete washout area defined		

STORMWATER MANAGEMENT PLAN - ADDITIONAL INFORMATION

Post-construction:

0.5

Site map and construction site

Areas of cuts and fills and

areas of soil disturbance: see

plan and profile sheets and

Surface waters: see title sheet and bridge hydraulic information sheet

Materials handling and spill prevention:

see water quality specification (107.25).

Inspection and maintenance: see erosion control specifications (107.25 or 208).

roadway cross sections.

(if existent)

ndaries: see title sheet

Estimated runoff coefficient

Pre-construction: 0.45

Existing data describing soil or quality of discharge: Soils are moderate deep to shallow. They are formed in erosive sandy material and contain high percentages of rock

Existing vegetation: Woodlands of the intermountains mixed with grasses, shrubs and forbs.

Proposed sequence for major activities, location of any other potential pollution source, areas used for storage of building materials, soils or wastes, and location of any dedicated asphalt or concrete batch plants: see water quality and erosion control specifications, and documents submitted by the contractor at the preconstruction conference.

100-year Flood plain boundaries: see bridge hydraulic information sheet (if existent).

Description of the construction activity, estimate of the total site area and of the area expected to undergo excavation, and name of the receiving water: see CDPS stormwater permit application.

Contract Document location of erosion control and stormwater quality management measures not referenced above nor included on the Stormwater Management Plan Sheet(s): ROADWAY AND DRAINAGE PLANS.

NOTES

CONCRETE WASHOUT WILL BE PERFORMED AT A LOCATION PRE-APPROVED BY THE ENGINEER.

DISTURBED SURFACES SHALL BE LEFT IN A ROUGHENED CONDITION AT ALL TIMES. ROUGHEN VERTICAL DEPTH SHALL BE 2 TO 4 INCHES.

CONTRACTOR SHALL NOT STOCKPILE TOPSOIL IN TEMPORARILY IMPACTED WETLANDS NOR USE AREA AS ACCESS ROAD.

IT IS ESTIMATED 50 BACKHOE HOURS USING A BACKHOE IN THE 200-250 HORSE POWER RANGE WILL BE REQUIRED FOR EROSION CONTROL AS DIRECTED.

EROSION LOGS AND FENCE (PLASTIC) WILL BE REQUIRED FOR WETLAND PROTECTION.

SEDIMENT REMOVAL AND DISPOSAL OF MATERIAL GENERATED BY STORM RUN-OFF WILL BE PAID FOR VIA SEDIMENT REMOVAL AND DISPOSAL (LS) REMOVE SEDIMENT FROM BEHIND OR WITHIN BMP'S IN ACCORDANCE TO STANDARD SPECIAL PROV. 208.

TOPSOIL, SEED AND MULCH ERODABLE SURFACES IN ACCORDANCE WITH DISTURBANCE LIMITS REFERENCED IN THE STANDARD SPECIFICATION 208. IT IS ESTIMATED THAT A MINIMUM OF 3 MOBILIZATIONS FOR SEEDING, MULCHING AND MULCH TACKIFIER WILL BE REQUIRED AND SHALL BE INCLUDED IN THE PRICE OF THE WORK.

	LOCATIC	ON & TABULATION	
STA.	EROSION LOG	EROSION BALES (WEED FREE)	FENCE (PLASTIC)
490+40 TO 495 RT.	460		∆ 460
499+60 TO 500+40 RT<	160		
TOES & ABOVE CULVERTS			
499+60 TO 500+40 RT 60'			80
ACROSS CHANNEL			
499+80 TO 500+20 RT 95'			40
507+28 TO 510 RT.	272		△ 272
488+87,493+70,509+78 LT		27 (9 PER INLET)	
(DITCH CHECKS AS DIRECTED)	210		
AS DIRECTED	50	20	
TOTAL	1152 LF	47 EACH	852 LF

△ 10 FT OFFSET FROM TOE

Computer File Information		Sheet Revisions	Colorado Denar	ment of Transportation	As Construct	ted	SAMPLES	STORMWATER	Project No./Code
Creation Date: Initials:	R-			•				5 · 5 ·	
Last Modification Date: Initials:	R-			NORTH MAIN AVE. E 300	No Revisions:	mm/dd/yy	IMANAGI	EMENT PLAN	BR 0502-049
Full Path:	R -			ANGO, COLORADO 81301	Revised:	mm/dd/vv	Designer:	Structure	12798
Drawing File Name:	R -		DEPARTMENT OF TRANSPORTATION PINO	e: 970 385 1400			Detailer:	Numbers	12100
Acad Ver. 2000 Scale: n.t.s. Units: English	R -		REGION 5	J.S.	Void:	mm/dd/yy	Sheet Subset:	Subset Sheets:	Sheet Number

SEEDING PLAN

NATIVE SEEDING

Soil preparation* fertilizer*, seeding, mulch tackifier and mulching will be required for an estimated 5 acres of disturbed area within the right-of-way limits which are not surfaced. The following types and rates shall be used:

COMMON NAME	BOTANICAL NAME	POUNDS PLS/ACRE
Western wheatgrass Arizona fescue Blue grama Sandberg bluegrass Siender wheatgrass Green needlegrass Yarrow Rocky Mountain pensternon Blackeyed Susan	Pascopyrum smithii v. rosanna Festuca arizonica v. redondo Bouteloua gracilis v. hachita Pos sandbergii Elymus trachycaulus v. primar Stipa vindula v. lodorm Achillea millefolium Penstemon strictus v. bandera Rudbeckia hirta	6.0 3.0 2.0 5.0 4.0 0.1 0.5 0.5
TOTAL		23.1

SEEDING APPLICATION: Drill seed 0.25 to 0.5 inches into the soil. In areas not accessible to a drill, hand broadcast at double the above rate and rake to a depth of 0.25 to 0.5 into the soil.

MULCHING APPLICATION: 1 1/2 tons of certified weed free hay per acre mechanically crimped into the soil in combination with an organic mulch tackifier per standard provision 213.

SPECIAL REQUIREMENTS: Due to low precipitation rates hydroseeding and hydromulching will not be allowed. Do not apply fertilizer in areas adjacent to wetlands or waterways.

	*FOR INFORM	ATION ONLY
FERTILIZER	AVAILABLE (%)	LBS/ACF
Nitrogen	18	27
Phosphorus	46	69
Potassium	0	0
Nitrogen Phosphorus Soil preparation	3	35 LBS 45 LBS 5 Acres

ROADWAY PROJECT TOTALS

PAY DESCRIPTION ITEM

203 BACKHOE

- 208 EROSION CONTROL SUPERVISOR
- 208 EROSION BALES (WEED FREE)
- 208 EROSION LOG 208 SEDIMENT REMOVAL AND DISPOSAL
- 212 SEEDING (NATIVE)
- 213 MULCHING (WEED FREE HAY)
- 213 MULCH TACKIFIER 216 SOIL RETENTION BLANKET (STRAW/COCONUT)
- 607 FENCE (PLASTIC) 700 EROSION CONTROL

** As directed by the Engineer

RE

UNIT	QUANTITY
HR	50
LS	1
EACH	47
LF	1152
LS	1
ACRE	5
ACRE	5
LBS	750
SY	300**
LF	85
FA	1