

UNIT PRICE BID PROPOSAL

To County of Bernalillo, Albuquerque, New Mexico (hereinafter called "Contracting Agency"):

1. The undersigned (hereinafter called "Bidder") in compliance with your invitation for bids for the construction of Camino Alto Bridge Crossing Bernalillo County, New Mexico Project Number 57-91, having carefully examined the Contract Documents and the sites of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to construct the project in accordance with the Contract Documents, within the time set forth herein, and at the unit prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents of which this proposal is a part. Quantities shown in this unit prices proposal and in alternates, if any, are estimated, and actual payment will be made on the basis of confirmed quantities a constructed.

2. UNIT PRICE BID PROPOSAL

BID ITEM NO.	DESCRIPTION	EST. UNIT QUANTITY	UNIT PRICE	AMOUNT
201002	CLEARING AND GRUBBING	L.S. 1		
202001	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S. 1		
203001	UNCLASSIFIED EXCAVATION	C.Y. 1,296		
203010	BORROW	C.Y. 3,791		
207001	SUBGRADE PREPARATION	S.Y. 3,500		
212010	CLASS A SEEDING	ACRE 0.70		
212190	CLASS I TEMP. SOIL STABILANT	ACRE 0.42		
304001	BASE COURSE	TON 1,100		
304090	BASE COURSE/SUBBASE TESTING BY CONTRACTOR	L.S. 1		
401002	PLANT MIX BITUMINOUS PAVEMENT, TYPE 1, GRADE B	TON 510		
401090	PLANT MIX BITUMINOUS PAVEMENT, TESTING BY CONTRACTOR	L.S. 1		

BID ITEM NO.	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
401102	85-100 BITUMINOUS MATERIAL	TON	26		
401150	HYDRATED LIME	TON	8		
406001	CORING BY THE CONTRACTOR	EA.	5		
407012	ASPHALT FOR TACK COAT	TON	2		
408012	ASPHALT FOR PRIME COAT	TON	7		
501324	24" CULVERT PIPE	L.F.	203		
504015	REINFORCING BARS, GRADE 60	LBS.	103,170		
509050	STRUCTURAL CONCRETE, CLASS A	C.Y.	600		
603030	WIRE ENCLOSED RIPRAP	C.Y.	374		
604034	FILTER FABRIC	S.Y.	220		
606005	METAL BARRIER W-BEAM	L.F.	500		
606009	METAL BARRIER THRIE BEAM	L.F.	225		
606151	METAL BARRIER ANCHORAGE, TYPE C	EACH	4		
606403	PRECAST CONCRETE WALL BARRIER TYPE II	L.F.	400		
618001	TRAFFIC CONTROL MANAGEMENT	L.S.	1		
621001	MOBILIZATION	L.S.	1		
701010	PLYWOOD OR ALUMINUM PANEL SIGN	S.F.	77		
701101	POST FOR PLYWOOD/ALUMINUM PANEL SIGNS	L.F.	195		
702000	CONSTRUCTION SIGNING	S.F.	273		
702103	STEEL AND BASE POSTS FOR CONSTRUCTION SIGNING	L.F.	416.5		

BID ITEM NO.	DESCRIPTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
702145	PORTABLE SIGN SUPPORT	EA.	10		
702215	BARRICADE TYPE III, 8 FT.	EA.	4		
702349	CHANNELIZATION DEVICES (BARRELS), TYPE A	EA.	5		
702350	CHANNELIZATION DEVICES (BARRELS), TYPE B	EA.	15		
703100	TRAFFIC MARKER - GUIDES	EA.	9		
703101	TRAFFIC MARKER - HAZARD	EA.	4		
704010	REFLECTORIZED PAINTED MARKINGS	L.F.	6,360		
704016	ADHESIVE NON-METALLIC MARKING TAPE	L.F.	200		
870001	CONSTRUCTION STAKING BY CONTRACTOR	L.S.	1		

SUBTOTAL OF ALL BID ITEMS = \$ \_\_\_\_\_

NEW MEXICO GROSS RECEIPTS TAX AT 5.75% = \$ \_\_\_\_\_

TOTAL BASE BID (ALL BID ITEMS AND NMGR) = \$ \_\_\_\_\_

THE AWARD OF THE BID WILL BE BASED ON THE LOWEST RESPONSIBLE BIDDER, EXCLUDING ANY AND ALL GROSS RECEIPTS TAX, MEETING ALL SPECIFICATIONS.

9. The undersigned, as Bidder, hereby declares that the only persons or firms interested in the proposal as principal or principals is or are named herein and that no other persons or firms than herein mentioned have any interest in this proposal or in the contract to be entered into; that this proposal is made without collusion with any person, company, or parties making a bid or proposal; and that it is in all respect fair and in good faith without collusion or fraud.
10. The Bidder agrees to furnish to the Contracting Agency all information and data necessary for the Contracting Agency to determine the ability of the Bidder to perform the work.

This Bid Proposal is hereby respectfully submitted by:

\_\_\_\_\_  
Name of Bidder

By \_\_\_\_\_

(Signature)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Bidder's New Mexico Contractor's License Number & Classification

\_\_\_\_\_  
Bidder's New Mexico Resident Business Preference Number

\_\_\_\_\_  
Printed Name & Title of Bidder's Authorized Representative

\_\_\_\_\_  
Bidder's Address

\_\_\_\_\_  
Bidder's Telephone Number

(SEAL) If Bid Proposal is submitted by a corporation.



**MINIMUM WAGE RATES**  
LABOR & INDUSTRIAL DIVISION - PUBLIC WORKS BUREAU, SANTA FE, NEW MEXICO

DEPARTMENT, AGENCY OR BUREAU		DECISION NUMBER
BERNALILLO COUNTY, PWD		BE 92-860 A
DESCRIPTION OF WORK		DATE OF DECISION
Camino Alto Bridge Reconstr. - Removal of exist. CMP culverts & road surface; constr. new concrete box culverts & asph. concrete road surface		5/18/92
LOCATION (CITY OR OTHER DESCRIPTION)		TYPE OF CONSTRUCTION - "A"
Bernalillo County		STREET, HIGHWAY, UTILITY AND LIGHT ENGINEERING
COUNTY		DECISION EXPIRES *
BERNALILLO		9/18/92

	BASE	FRINGE + BENEFITS
BRICKLAYER, BLOCKLAYER, STONEMASON.....	14.51	2.67
CARPENTER.....	9.19	.44
CEMENT MASON.....	9.13	.26
IRONWORKER--REINFORCING.....	8.50	.92
IRONWORKER--STRUCTURAL.....	8.46	3.37
PAINTERS:		
SPRAY.....	9.96	.44
BRUSH.....	11.56	.44

\*DECISION EXPIRES ON THIS DATE IF BIDS ARE NOT SUBMITTED PRIOR TO THIS DATE OR AS A RESULT OF A NEW VALID SURVEY EFFECTIVE AT LEAST 10 DAYS PRIOR TO BID SUBMISSION DATE.

## ELECTRICIANS ADDENDUM:

	BASE	FRINGE + BENEFITS
Groundman (Outside).....	13.59	2.68
Equipment Operator (Outside)...	16.41	2.77
Lineman or Tech. (Outside).....	17.00	2.80
Cable Splicer (Outside).....	18.18	2.84

<b>OPERATORS**</b>		FRINGE BENEFITS .26
<b>GROUP I</b> CONCR. PAVING CURING MACHINE.....		8.75
<b>GROUP II</b> BELT TYPE CONVEYORS (MATERIAL & CONCR.); BROOM (SELF PROP); FORK LIFT, GREASE TRUCK OPR.; HEAD OILER; HYDRO LIFT; TRACTOR (UNDER 50 DRAWBAR HP WITH OR WITHOUT ATTACH.); INDUS. LOCO. BRAKEMAN; FRONT END LOADER (2 CY OR LESS); FIREMAN; OILER; SCREEDMAN; ROLLER (PULL TYPE); MULCHING MACHINE; ROLLER (SELF-PROPELLED).....		8.95
<b>GROUP III</b> CONCR. PAVING FORM GRADER; CONCR. PAVING GANG VIBRATOR; CONCR. PAVING JOINT OR SAW MACH.; CONCR. PAVING SUB GRADER; TRACTOR W/BACKHOE ATTACH.; SUBGRADE OR BASE FINISHER; POWER PLANT (ELECT. GEN. OR WELDING MACH.).....		9.53
<b>GROUP IV</b> BULLDOZER (INCL. SELF-PROPELLED ROLLER W/DOZER ATTACHMENT); BATCH OR CONTINUOUS MIX PLANT (CONCR. SOIL-CEMENT OR ASPH.); ROLLER (STEEL WHEEL); FRONT END LOADER (2 CY THRU 10 CY); SCRAPER OPER.; MOTOR GRADER.....		9.55
<b>GROUP V</b> ASPH. DISTR.; ASPH. PAVING OR LAYDOWN MACH.; ASPH. RETORT HEATER; MIXER, HVT DUTY, ASPH. OR SOIL CEMENT; TRENCHING MACH.; CLAM TYPE SHAFTMUCKER; BACKHOE, CLAMSHELL, DRAGLINE, GRADALL, SHOVEL (UNDER 4 CY); ELEVATING GRADER OR BELT LOADER; CRANES (CRAWLER OR MOBILE) UNDER 20 TON; AIR COMPRESSOR (300 CFM & OVER); CRUSHING SCREENING & WASHING PLANTS; DRUG. MACH. (CABLE CORE OR ROTARY); MIXER, CONCR. (1 CY & LESS); PUMP (6" INTAKE OR OVER); WINCH TRUCK; HOIST (1 DRUM); INDUS. LOCO. MOTORMAN; LUMBER STACKER; TRACTOR (50 DRAWBAR HP OR OVER).....		9.55
<b>GROUP VI</b> CONCR. PAVER MIXER; HOIST (2 DRUM & OVER); SIDE BOOM; TRAVELING CRANE; PILEDRIVER; BACKHOE, CLAMSHELL, DRAGLINE, GRADALL, SHOVEL (4 CY TO 3 CY); CRANES (CRAWLER OR MOBILE) 20 TON TO 40 TON; FRONT END LOADER (OVER 10 CY); MIXER, CONCR. (OVER 1 CY); MECHANIC AND/OR WELDER.....		9.70
<b>GROUP VII</b> CONCR. SLIP-FORM PAVING MACH.; CONCR. PAVING FINISHING MACH.; CONCR. PAVING LONGITUDINAL FLOAT; GUNITE MACH.; REFRIG. JUMBO FORM OR DRUG.; STAGE; SLUSHER; CONCR. PAVING SPREADER; PUMPCRETE MACH.; GROUT PUMP OPR. ....		9.75
<b>GROUP VIII</b> MINE HOIST; BULLDOZER (MULTIPLE UNITS); SCRAPER (MULTIPLE UNITS); MUCKING MACHINE.; BACKHOE, CLAMSHELL, DRAGLINE, GRADALL, SHOVEL (OVER 3 CY); CRANES (CRAWLER OR MOBILE) OVER 40 TONS.....		9.75
<b>GROUP IX</b> BELT LOADER (CMI TYPE) OPR.; PIPEMOBILE OPR. ASSISTANT; DERRICK, CABLEWAY.....		10.40
<b>GROUP X</b> PIPEMOBILE OPR.; MOLE OPR. ....		11.20
<b>TRUCK DRIVERS**</b>		FRINGE BENEFITS .26
<b>GROUP I</b> PICK-UP TRUCK 1/2 TON OR UNDER; WAREHOUSEMAN; DUMP TRUCK, UNDER 8 CUBIC YARDS; FLAT BED, 1 1/2 TON OR UNDER ..		7.23
<b>GROUP II</b> DUMP TRUCK, 8 TO 16 CUBIC YARDS; TANK TRUCK, UNDER 6,000 GALLONS; FLATBED, OVER 1 1/2 TON.....		7.43
<b>GROUP III</b> SPREADER BOX (SELF-PROPELLED); DISTRIBUTOR (ASPHALT) TRANSIT MIX; LOWBOY, LIGHT EQUIPMENT; OFF-HIGHWAY HAULER; TANK TRUCK, OVER 6,000 GALLONS; DUMP TRUCK, OVER 16 CUBIC YARDS; TRAILER SEMI-TRAILER DUMP.....		7.63
<b>GROUP IV</b> DIESEL-POWERED TRANSPORT; LOWBOY, HEAVY EQUIPMENT....		7.83
<b>LABORERS**</b>		FRINGE BENEFITS .33
<b>GROUP I--UNSKILLED:</b> BUILDING & COMMON LABORER; CARPENTER TENDER; CHAINMAN; RODMAN; STAKEDRIVER; CONCR. BUGGY OPR. (HAND); CONCR. WORKERS; FLAGMAN; SOIL. SAMPLE TESTER.....		6.54
<b>GROUP II--SEMI-SKILLED</b> AIR & POWER TOOL MAN; ASPH. HEATERMAN; ASPH. JOINTMAN; ASPH. RAKER; BATCHING PLANT SCALEMAN; TENDERERS (TO CEMENT MASON & PLASTERER); CHAIN SAWMAN; CONCR. POWER BUGGYMAN; CONCR. TOUCHUP MAN; CONCR. SAWMAN; CURBING MACH., ASPH. OR CEMENT; CUTTING TORCHMAN; METAL FORM SETTER--ROAD; GRADE SETTER; HOD CARRIER; MORTAR MIXER & MASON TENDER; POWDERMAN OR BLASTER HELPER; SAND-BLASTER; SCALER; VIBRATORMAN (HAND TYPE); VIBRATORY COMPACTOR (HAND TYPE); WINDOW WASHER; NURSERYMAN-GARDNER; WAGON, AIR TRACT, DRILL & DIAMOND DRILLER (OUT-SIDE) & TENDER; ROADWAY JARDWARE WORKER.....		6.84
<b>GROUP III--MISCELLANEOUS</b> GUNITE PUMPCRETEMAN & NOZZLEMAN; MULTIPLATE SETTER; MANHOLE BUILDER; PIPELAYER; POWDERMAN-BLASTER-MAKE-UP; LANDSCAPER.....		7.24
<b>**FRINGE BENEFITS GROUPED FOR OPERATORS, TRUCK DRIVERS, AND LABORERS APPLY TO ALL CLASSIFICATIONS LISTED BENEATH EACH OF THESE CRAFTS.</b>		
<b>9.90 ALL LABORERS OR MECHANICS MAY WORK FROM BLUEPRINTS AND DO LAYOUT.</b>		
<b>10.40 WELDER RECEIVES RATE PRESCRIBED FOR CRAFT PERFORMING OPERATION TO WHICH WELDING IS INCIDENTAL.</b>		3/5/91

THE SCHEDULE OF WAGES SHALL BE POSTED BY THE CONTRACTOR IN A PROMINENT AND EASILY ACCESSIBLE PLACE AT THE SITE OF THE WORK. FOR DESCRIPTIONS FOR CLASSIFICATIONS LISTED ON THIS WAGE DECISION ARE AVAILABLE AT THE LABOR & INDUSTRIAL DIVISION, PUBLIC WORKS BUREAU, SANTA FE, NEW MEXICO.

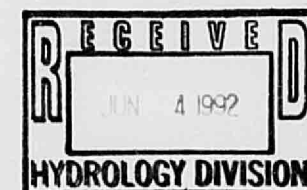
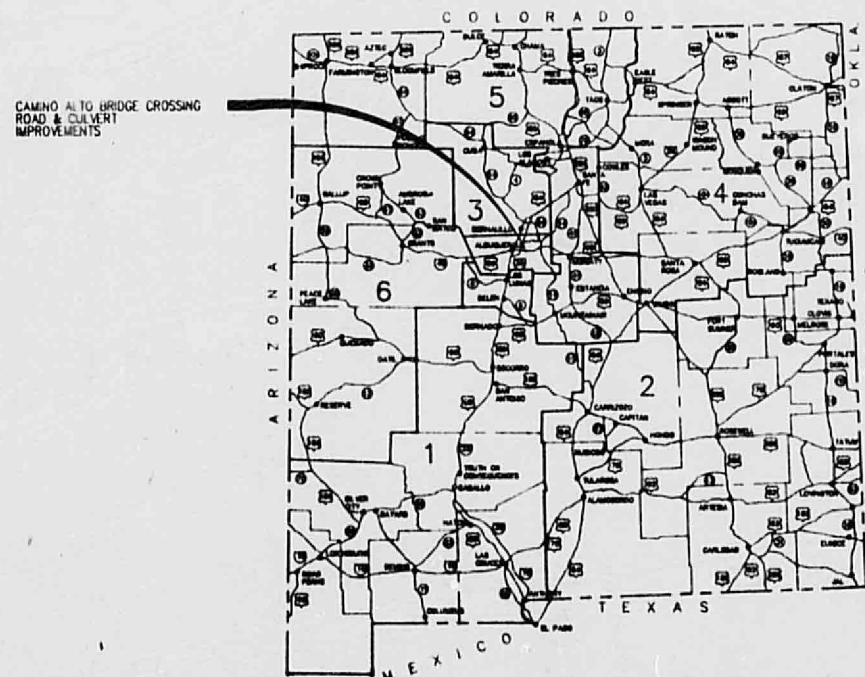
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# BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION CONSTRUCTION PLANS

CAMINO ALTO BRIDGE CROSSING

BERNALILLO COUNTY

BCP 57-91



SUBMITTED: *Final* DATE: *5/22/92*  
RICHARD G. VAUGHAN & ASSOC

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
BERNALILLO COUNTY MANAGER  
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
DIRECTOR OF COUNTY PUBLIC WORKS

RICHARD G. VAUGHAN & ASSOC. - ALBUQUERQUE

COMP FILE  
BCCA1-1

B.C. PROJECT 57-91

SHEET 1-1

SCALE 1/4" = 1'

25x11

32x11

25x11

# CONVENTIONAL SIGN

ON PLAN

ON PROFILE



- STATE LINE
- COUNTY LINE
- LAND GRANT LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- CITY OR TOWN LIMIT
- UNFENCED PROPERTY LINE
- REFERENCE LINE & POINT
- WIRE FENCE
- RAIL FENCE
- STONE OR ADOBE FENCE
- PICKET FENCE
- TELEPHONE-TELEGRAPH LINE
- PROTECTION DITCH & DIKE
- RETAINING WALL
- ARROYO
- RIVER OR CREEK
- IRRIGATION DITCH
- CONCRETE SIDEWALK
- PRESENT TRAVELED ROAD
- TRAIL -- CULVERT
- RAILROAD-TITLE PAGE
- RAILROAD-PLAN PAGE

- POWER POLE/LINE
- SIGN/NO. POSTS
- BOX CULVERT
- BURIED TELEPHONE CABLE

## BOOK NUMBERS

SR 910308A & B - PROPERTY SURVEY  
SR 910307 & 910307AD - TOPO SURVEYS

## SCALES

PLAN 1" = 30' HORIZONTAL  
PROFILE 1" = 30' VERTICAL  
LAYOUT 1" = 1.55 MILES

## SHIPPING POINTS: ALBUQUERQUE

THE 1984 EDITION OF NEW MEXICO STATE HIGHWAY  
DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD  
AND BRIDGE CONSTRUCTION SHALL GOVERN  
CONSTRUCTION OF THIS PROJECT

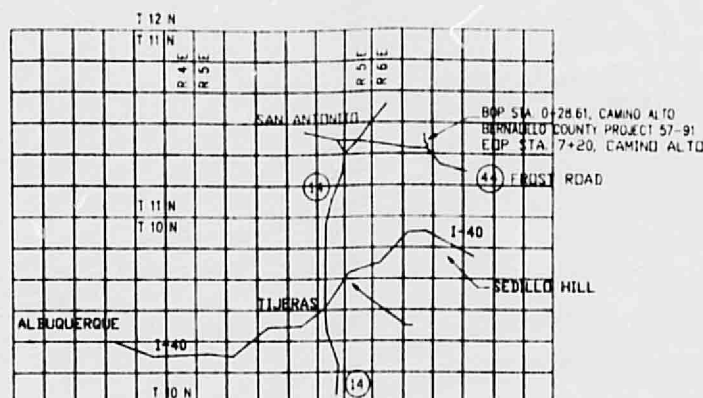
- RIGHT OF WAY LINE
- P.C. 6+73.4
- SURVEY CENTER LINE
- RAILROAD CATTLEGUARD
- HIGHWAY CATTLEGUARD
- BRIDGE CULVERT
- SPILLWAY
- HOUSE & VACANT HOUSE
- CHURCH CEMETARY SCHOOL
- TOWN-TITLE PAGE
- BLUFF OR HILLS
- SURFACING PIT

- WINDMILL
- ARTESIAN WELL
- SECTION CORNER
- SECTION CORNER
- MAILBOX
- GATE
- BURIED GAS LINE
- TBX TELEPHONE BOX
- CBX CABLE BOX
- PP POWER POLE
- DECIDUOUS TREE
- EVERGREEN TREE
- SIGN
- FENCE
- WV WATER VALVE
- FIELD REBAR

- BRIDGE
- PIPE CULVERT
- BOX CULVERT
- BOX CULVERT
- DATUM LINE 4515.2
- GROUND ELEVATION
- DATUM LINE 4515.05
- GRADE ELEVATION

LENGTH OF PROJECT - 0.1309 MILES  
LENGTH OF ROW - 0.1309 MILES

THIS PROJECT BEGINS AND ENDS IN T11N, R6E, SEC20



## MAJOR STRUCTURES

STA. 2+71.07 - 3+14' x 8' x 111.17' CBC'S

## TYPE OF CONSTRUCTION:

NEW ROADWAY CONSTRUCTION, SHOULDER WIDENING, EARTHWORK,  
METAL BARRIER INSTALLATION, EROSION CONTROL MEASURES,  
TRAFFIC CONTROL, PERMANENT SIGNING, MAJOR STRUCTURES  
(CONCRETE BOX CULVERTS), STRUCTURE EXTENSIONS, CHANNEL  
IMPROVEMENTS, AND MISCELLANEOUS CONSTRUCTION.

## PLANS DESIGNED AND ASSEMBLED MAY, 1992 BY

RICHARD G. VAUGHAN, PE  
RICHARD G. VAUGHAN & ASSOC.  
3700 COORS RD. NW  
ALBUQUERQUE, NEW MEXICO 87120  
(505) 831-4811

SUBMITTED: Final  
DATE: 5/22/92

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA1-2

APPROVED

B.C. PROJECT 57-91

SHEET 1-2

F.H.R.A.	STATE	BCP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	B.C. PROJECT 57-91	1-2	

IDENT NO.	DESCRIPTION	DATE	BY
	BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT		
	BERNALILLO COUNTY		
	CAMINO ALTO BRIDGE CROSSING		
	VICINITY MAP		

25x10

32x10

25x10



## INDEX TO SHEETS - DESIGN DRAWINGS AND STANDARD NMSHTD SERIALS

F.W.A.	STATE	BCP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	B.C. PROJECT 57-91	13	

REV. CAD

SHEET NO.	DESCRIPTION	FILE NAME	REV. DATE	SERIAL
1-1	COVER	BCCA-05.DWG		
1-2	VICINITY MAP	BCCA1-2.DWG		
1-3	INDEX OF SHEETS - SUMMARY OF QUANTITIES	BCCA1-3.DWG		
1-4	GENERAL NOTES, SPECIAL PROVISIONS, AND SPECIAL PROVISIONS	BCCA1-4.DWG		
	SUBTOTAL: 4			
2-1	TYPICAL SECTIONS	BCCA2-1.DWG		
2-2	SURFACING SCHEDULE - STRUCTURE QUANTITIES	BCCA2-2.DWG		
2-3	MISC. QUANTITIES	BCCA2-3.DWG		
2-4	METAL BARRIER INSTALLATION	BCCA2-4.DWG		
2-5	EROSION CONTROL PLAN	BCCA2-5.DWG		
2-6	SURFACING P.T.	BCCA2-6.DWG		
	SUBTOTAL: 6			
3-1	P&P STA. 0+00 TO 7+20	BCCA3-1.DWG		
	SUBTOTAL: 1			
4-1	TURNOUT P&P 1-2	BCCA4-1.DWG		
	SUBTOTAL: 1			
5-1	CONSTRUCTION SIGNING - SIGN FACE DETAILS	BCCA5-1.DWG		
5-2	CONSTRUCTION SIGNING - 2-LANE SHOULDER WORK	BCCA5-2.DWG		
5-3	CONSTRUCTION SIGNING - DETOUR CONSTRUCTION	BCCA5-3.DWG		
5-4	TRAFFIC CONTROL DEVICES - CONSTRUCTION SIGNING	BCCA5-4.DWG		
	SUMMARY OF QUANTITIES			
	SUBTOTAL: 4			
6-1	PERMANENT SIGNING & STRIPING - SUMMARY OF QUANTITIES	BCCA6-1.DWG		
6-2	STANDARD HIGHWAY SIGN FACE DETAILS - "R" CODE SIGNS	BCCA6-2.DWG		
6-3	STANDARD HIGHWAY SIGN FACE DETAILS - "W" CODE SIGNS	BCCA6-3.DWG		
6-4	STANDARD HIGHWAY SIGN FACE DETAILS - "W" CODE SIGNS	BCCA6-4.DWG		
	SUBTOTAL: 4			
7-1	STRUCTURE SECTIONS - CHANNEL IMPROVEMENTS	BCCA7-1.DWG		
	SUBTOTAL: 1			

## SUMMARY OF QUANTITIES

SHEET NO.	DESCRIPTION	FILE NAME	REV. DATE	SERIAL
	EXCAVATION AND BACKFILL FOR BRIDGES, WALLS AND CULVERTS		11/7/80	REB-001
	MAX. & MIN. COVERS STEEL-ROUND		1/28/85	BMC-001
	PIPES CORR. METAL & STRUCT. PLATE			
	MAX. & MIN. COVERS ALUMINUM - ROUND		1/28/85	BMC-003
	PIPES CORR. METAL & STRUCT. PLATE			
	CORR. METAL CULVERT & PIPE ARCHES		1/28/85	BMC-005
	BEDDING AND BACKFILL DETAILS			
	BARRIER POST ANCHORAGE BLOCK FOR EXISTING AND NEW CBC CONSTRUCTION		8/19/88	BPAB-001
	BARRIER POST ANCHORAGE BLOCK FOR EXISTING AND NEW CBC CONSTRUCTION		8/19/88	BPAB-002
	WIRE ENCLOSED RIPRAP		9/12/89	BRP-001
	CONCRETE BOX CULVERT BARRELS TRIPLE OPENING SKEW		8/25/87	CB-33 (SHT 1 OF 4)
	DESIGN NO. 1			
	CONCRETE BOX CULVERT BARRELS TRIPLE OPENING 30' SKEW		2/26/86	CB-33-30 (SHT 1 OF 2)
	DESIGN NO. 1			
	EROSION CONTROL AT CULVERT OUTLETS DETAILS		3/17/80	EC-61
	FILL HEIGHTS AND BEDDING DETAILS FOR CONCRETE PIPE CULVERTS		9/9/74	M-16-71
	METAL BARRIER MATERIALS AND PLACEMENT PROCEDURE		2/1/85	M-21-62
	THREE BEAM METAL BARRIER OVER CBC & UNDERPASSES		3/26/76	M-21-67A
	METAL BARRIER THREE BEAM ROADSIDE AND BOX CULVERT		3/13/78	M-21-75 SHT 1 OF 2
	SPECIAL METAL BARRIER TRANSITION DETAILS		7/31/78	M-21-75 SHT 2 OF 2
	METAL BARRIER AT BRIDGE APPROACHES		2/5/85	M-21-77 SHT 1 OF 2
	APPROACH SLOPE PREPARATION METAL BARRIER		2/7/85	M-21-77 SHT 2 OF 2
	METAL BARRIER (BREAKAWAY) TYPE		1/28/86	M-21-77C SHT 1 OF 3
	END ANCHORAGE (WOOD POSTS)			
	METAL BARRIER (BREAKAWAY) TYPE		3/14/88	M-21-77C SHT 2 OF 3
	END ANCHORAGE (STEEL POSTS)			
	METAL BARRIER (BREAKAWAY) TYPE		9/30/87	M-21-77C SHT 3 OF 3
	END ANCHORAGE STEEL POSTS (SOIL PLATE)			
	MISC. DETAILS		8/11/86	RMD-001
	SUPERELEVATION FOR SIMPLE AND SPIRALED CURVES - SHEET 1 OF 2		11/30/87	SE-2
	DESIGN LOADS FOR SQ. TUBING POSTS		5/14/81	SN-75-1
	ALUMINUM PANEL SIGN DETAILS		4/25/88	SN-75-2 SHT 1 & 2
	TRAFFIC MARKER - GUIDE DETAILS		9/24/79	SN-75-7
	TRAFFIC MARKER - HAZARD DETAILS		2/27/78	SN-75-8
	BARRICADES AND CHANNELIZATION DEVICES		9/20/88	SN-77-9
	DESIGN LOADS FOR BREAKAWAY FLANGED CHANNEL POSTS		6/30/82	FBAC-001
	DESIGN DETAILS FOR BREAKAWAY FLANGED CHANNEL AND HARDWARE		3/10/86	FBAC-002
	STEEL METAL BARRIER POSTS		2/5/85	TSCP-001
	WINGWALLS FOR NORMAL CONCRETE BOX CULVERTS (2 SHEETS)		11/29/87	WCB-0 SHT 1
	PROJECT TOTALS = 54		1/30/88	(SHT 2)

ITEM NO.	DESCRIPTION	UNIT	ROADWAY ESTIMATE	FINAL	CHANNEL ESTIMATE	FINAL	CONSTRUCTION SIGNING ESTIMATE	FINAL	PERMANENT SIGNING ESTIMATE	FINAL	CONSTRUCTION ENGINEERING ESTIMATE	FINAL	PROJECT TOTAL ESTIMATE	FINAL
201002	CLEARING AND GRUBBING	LS											1.00	
202001	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS											1.00	
203001	UNCLASSIFIED EXCAVATION	CY	481.48		814.81								1298.30	
203010	BORROW	CY	3791.34		0.00								3791.34	
207001	SUBGRADE PREPARATION	SY	3500.00										3500.00	
212010	CLASS A SEEDING	AC	0.48		0.24								0.70	
212090	CLASS I TEMP SOIL STABILANT	AC	0.28		0.15								0.42	
304001	BASE COURSE	TON	1100.00										1100.00	
304090	BASE COURSE/SUBBASE TEST CONTRACTOR	LS									LS		1.00	
401002	PMBP TYPE I, GRADE B	TON	510.00								LS		510.00	
401090	P.M.B.P. TESTING BY THE CONTRACTOR	LS									LS		1.00	
401102	85-100 BITUMINOUS MATERIAL	TON	28.00										28.00	
401150	HYDRATED LIME	TON	8.00										8.00	
406001	CORING BY THE CONTRACTOR	EA									5.00		5.00	
407012	ASPHALT FOR TACK COAT	TON	2.00										2.00	
408012	ASPHALT FOR PRIME COAT	TON	7.00										7.00	
501824	24" CULVERT PIPE	LF	203.00										203.00	
504015	REINFORCING BARS GRADE 60	LB	103170.00										103170.00	
509050	STRUCTURAL CONCRETE CLASS A	CY	600.00										600.00	
603030	WIRE ENCLOSED RIPRAP	CY	323.02		50.91								373.93	
604034	FILTER FABRIC	SY	220.00										220.00	
606005	METAL BARRIER W-BEAM	LF	500.00										500.00	
606009	METAL BARRIER THREE BEAM	LF	225.00										225.00	
606151	METAL BARRIER ANCHORAGE TYPE C	EA	4.00										4.00	
606403	PRECAST CONCRETE RAIL BARRIER TYPE II	LF					400.00						400.00	
618001	TRAFFIC CONTROL MANAGEMENT	LS									LS		1.00	
621001	MOBILIZATION	LS												
701010	PLYWOOD OR ALUMINUM PANEL SIGN	SF							77.00				77.00	
701101	POST FOR PLYWOOD/ALUMINUM PANEL SIGNS	LF							195.00				195.00	
702000	CONSTRUCTION SIGNING	SF					273.00						273.00	
702103	STEEL AND BASE POSTS FOR CONST. SIGNING	LF					416.50						416.50	
702145	PORTABLE SIGN SUPPORT	EA					10.00						10.00	
702215	BARRICADE TYPE III, 8 FT	EA					4.00						4.00	
702349	CHANNELIZATION DEVICES (BARRELS) TYPE A	EA					5.00						5.00	
702350	CHANNELIZATION DEVICES (BARRELS) TYPE B	EA					15.00						15.00	
703100	TRAFFIC MARKER - GUIDES	EA					9.00						9.00	
703101	TRAFFIC MARKER - HAZARD	EA					4.00						4.00	
704010	REFLECTORIZED PAINTED MARKINGS	LF	5760.00				600.00						6360.00	
704018	ADHESIVE NON-METALLIC MARKING TAPE	LF					200.00						200.00	
870001	CONSTRUCTION STAKING BY CONTRACTOR	LS									LS		1.00	

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP. FILE  
BCCA1-3

APPROVED

B.C. PROJECT 57-91

SHEET 1-3

BERNALILLO COUNTY  
PUBLIC WORKS DEPARTMENT

BERNALILLO COUNTY

CAMINO ALTO BRIDGE CROSSING

INDEX TO SHEETS  
SUMMARY OF QUANTITIESFinal  
5/22/92

**GENERAL NOTES:**

1. TURNOUTS SHALL BE PAVED TO THE RIGHT-OF-WAY OR AS NOTED WITH FULL SECTION. SURFACING IS TO BE ADJUSTED AT TURNOUTS TO ELIMINATE ABRUPT CHANGES IN THE RIDING SURFACE. SEE SERIAL RMD-001.
2. EARTHWORK QUANTITIES ARE BASED ON A SHRINKAGE FACTOR OF 20% IN ROADWAY EMBANKMENT.
3. THE DESIGN "N" VALUE FOR THIS PROJECT IS 29. MATERIAL WITH AN "N" VALUE OF LESS THAN 29 SHALL NOT BE PLACED OR ALLOWED TO REMAIN WITHIN 2 FEET OF FINISHED SUBGRADE.
4. SURVEY CONTROL FOR THIS PROJECT IS THE EXISTING ROADWAY CENTERLINE. SHEET 3-1 PROVIDES TIES TO FIELD SET BRASS CAP ON NORTH END OF THE PROJECT.
5. ALL EXISTING TRAFFIC SIGNS, AND OTHER SIGNS SHALL BE REMOVED OR RESET AS NOTED.
6. THE CONTRACTOR SHALL ADJUST GRADES IF NECESSARY FOR TURNOUTS AND CROSS ROADS TO DRAIN AND TO FIT EXISTING FIELD CONDITIONS. PAYMENT FOR ANY STAKING REQUIRED TO COMPLETE WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM NO. 870001-CONSTRUCTION STAKING BY THE CONTRACTOR. GRADES SHALL BE APPROVED BY THE PROJECT MANAGER.
7. THE CONTRACTOR SHALL CLEAN EXISTING STRUCTURES THAT ARE TO REMAIN AND/OR BE EXTENDED. COST OF THIS WORK WILL BE CONSIDERED INCIDENTAL TO COMPLETION OF THE PROJECT. SEE SPECIAL PROVISION 208B.
8. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE CONSTRUCTION ZONE UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. THE SAFETY DEVICES FOR THE SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE PROJECT MANAGER BEFORE IMPLEMENTING. THERE WILL BE NO DIRECT PAYMENT OR MEASUREMENT FOR THE DESIGN, MATERIALS, INSTALLATION, AND REMOVAL OF THE SAFETY BARRIER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING INGRESS AND EGRESS TO THE RESIDENTS ON CAMINO ALTO FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING THE RESIDENTS INFORMED OF CONSTRUCTION THAT AFFECTS INGRESS AND EGRESS.
10. THE REMOVAL OF EXISTING DRAINAGE STRUCTURES AND THE INSTALLATION OF NEW DRAINAGE STRUCTURES SHALL BE ACCOMPLISHED IN PHASES TO CONFORM WITH THE TRAFFIC CONTROL PLANS, DETOUR PLANS, AND STRUCTURE PLACEMENT PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING EXISTING DRAINAGE PATTERNS DURING THE CONSTRUCTION. SALVAGE DRAINAGE STRUCTURES AS DIRECTED BY THE PROJECT MANAGER.
11. THE CONTRACTOR SHALL PLAN HIS DAILY SURFACING OPERATIONS ON A SCHEDULE WHICH WILL RESULT IN NOT MORE THAN ONE (1) DAYS OPERATION OF EXPOSED LONGITUDINAL JOINTS. THE LONGITUDINAL JOINTS SHALL NOT HAVE A HEIGHT GREATER THAN TWO (2.0) INCHES AND SHALL NOT BE EXPOSED LONGER THAN 24 HOURS. ALL LONGITUDINAL JOINTS SHALL HAVE A ONE FOOT OR 6:1 MINIMUM TAPER AND TRANSVERSE JOINTS SHALL HAVE A FOUR FOOT OR 24:1 MINIMUM TAPER.

**GENERAL NOTES: (CONT)**

12. THE CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIAL IN AN ENVIRONMENTALLY ACCEPTABLE MANNER AT A LOCATION ACCEPTABLE TO THE PROJECT MANAGER.
13. WARP SLOPES WHERE NECESSARY TO STAY WITHIN RIGHT-OF-WAY OR CONSTRUCTION EASEMENT LIMITS.
14. THE CONTRACTOR SHALL BE RESTRICTED TO THE USE OF A 35 TON NON-VIBRATING ROLLER MAXIMUM TO OBTAIN THE REQUIRED COMPACTION IN EMBANKMENT AND SUBGRADES IN URBAN OR OTHER AREAS WHERE THE USE OF HEAVIER EQUIPMENT COULD DAMAGE UNDERGROUND UTILITIES OR OTHER PERMANENT STRUCTURES.
15. ANY INFORMATION REQUIRED ON THE MONUMENTATION PLANS FOR THIS PROJECT MAY BE OBTAINED FROM THE PROJECT MANAGER.
16. UTILITY OWNERS SHALL BE NOTIFIED PRIOR TO ANY WORK IN AND AROUND EXISTING UTILITIES. FIELD VERIFY THE EXISTING WATER LINE AND CHECK THE LINE PRIOR TO ANY WORK. LINE BREAKS AFTER THE INITIAL CHECK ARE THE RESPONSIBILITY OF THE CONTRACTOR.
17. THE CONTRACTOR IS HEREBY ADVISED THAT UTILITY RELOCATION BY THE UTILITY COMPANIES WILL BE DONE CONCURRENTLY WITH CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE FOR UTILITY WORK IN CONJUNCTION WITH HIS OWN WORK AND SHALL BE REQUIRED TO COORDINATE THE SCHEDULING OF WORK WITH THE RESPECTIVE UTILITY COMPANIES. NO CLAIM FOR DELAY WILL BE ALLOWED AND THE CONTRACTOR MUST PROVIDE FOR THESE CONTINGENCIES WHEN BIDDING THE PROJECT.

**SPECIAL PROVISIONS**

FOR MINIMUM WAGE RATES  
FOR TAXES IMPOSED BY THE STATE OF NEW MEXICO, SECTION 107 (11/1/88)  
FOR SUBMISSION OF WEEKLY PAYROLLS (6/17/88)  
FOR APPRENTICES (4/26/82)  
MODIFYING SECTION 101 - ABBREVIATIONS AND DEFINITIONS (8/12/87)  
MODIFYING SECTION 105 - CONTROL OF WORK (5/8/90)  
MODIFYING SECTION 106 - CONTROL OF MATERIALS (6/24/88)  
MODIFYING SECTION 108 - PROSECUTION AND PROGRESS (6/23/88)  
MODIFYING SECTION 401 - PLANT MIX BITUMINOUS PAVEMENT (PMBP) (3/29/90)  
FOR PLANT MIX BITUMINOUS PAVEMENT TESTING BY THE CONTRACTOR - SECTION 401-B (3/29/90)  
MODIFYING SECTION 402 - BITUMINOUS MATERIALS (3/6/91)  
MODIFYING SECTION 501 - PIPE CULVERTS AND UNDERDRAINS (10/4/89)  
MODIFYING SECTION 503 - PORTLAND CEMENT CONCRETE (8/28/90)  
FOR FILTER FABRIC - SECTION 604-A (10/31/89)  
MODIFYING SECTION 606 - METAL AND CONCRETE BARRIER (7/28/88)  
FOR TRAFFIC CONTROL MANAGEMENT - SECTION 618 (2/11/91)  
MODIFYING SECTION 701 - TRAFFIC SIGNS & SIGN STRUCTURES (4/5/88)  
MODIFYING SECTION 702 - TRAFFIC CONTROL DEVICES FOR DETOURS (9/20/89)

**SUPPLEMENTAL SPECIFICATIONS**

MODIFYING SECTION 101 - ABBREVIATIONS AND DEFINITIONS (6/1/89)  
MODIFYING SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS (1/14/87)  
MODIFYING SECTION 103 - AWARD AND EXECUTION OF CONTRACT (1/14/87)  
MODIFYING SECTION 104 - SCOPE OF WORK (4/26/89)  
MODIFYING SECTION 105 - CONTROL OF WORK (2/1/89)  
MODIFYING SECTION 106 - CONTROL OF MATERIALS (1/14/87)  
MODIFYING SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC (9/12/89)  
MODIFYING SECTION 108 - PROSECUTION AND PROGRESS (1/14/87)  
MODIFYING SECTION 109 - MEASUREMENT AND PAYMENT (12/28/88)  
MODIFYING SECTION 203 - EXCAVATION, BORROW, EMBANKMENT (6/30/86)  
MODIFYING SECTION 304 - BASE COURSE AND SUBBASE (6/21/90)  
MODIFYING SECTION 401 - PLANT MIX BITUMINOUS PAVEMENT (1/8/91)  
MODIFYING SECTION 402 - BITUMINOUS MATERIALS (5/19/91)  
MODIFYING SECTION 408 - PRIME COAT (2/2/87)  
MODIFYING SECTION 501 - PIPE CULVERTS AND UNDERDRAINS (6/30/86)  
MODIFYING SECTION 503 - PORTLAND CEMENT CONCRETE (9/28/88)  
MODIFYING SECTION 504 - STEEL REINFORCEMENT (10/29/84)  
MODIFYING SECTION 509 - CONCRETE STRUCTURES (2/19/87)  
MODIFYING SECTION 603 - RIPRAP (2/28/90)  
MODIFYING SECTION 606 - METAL AND CONCRETE BARRIER (2/2/87)  
MODIFYING SECTION 621 - MOBILIZATION (9/19/84)  
MODIFYING SECTION 702 - TRAFFIC CONTROL DEVICES FOR DETOURS (6/1/87)  
MODIFYING SECTION 703 - TRAFFIC MARKERS (6/8/87)  
MODIFYING SECTION 704 - PAVEMENT MARKINGS (2/6/90)  
MODIFYING SECTION 870 - CONSTRUCTION STAKING BY THE CONTRACTOR (1/3/89)

F.R.B.A.	STATE	BCP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	B.C. PROJECT 57-91	1-4	

REV - CAB

SUBMITTED: *Final*  
DATE: *5/22/92*

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA1-4

APPROVED

BERNALILLO COUNTY  
PUBLIC WORKS DEPARTMENT  
BERNALILLO COUNTY  
CAMINO ALTO BRIDGE CROSSING  
GENERAL NOTES, SPECIAL PROVISIONS,  
SUPPLEMENTAL SPECIFICATIONS

B.C. PROJECT 57-91

SHEET 1-4

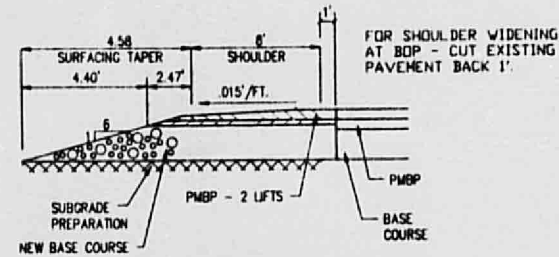
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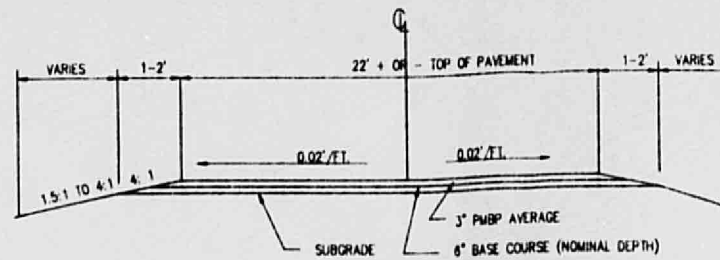


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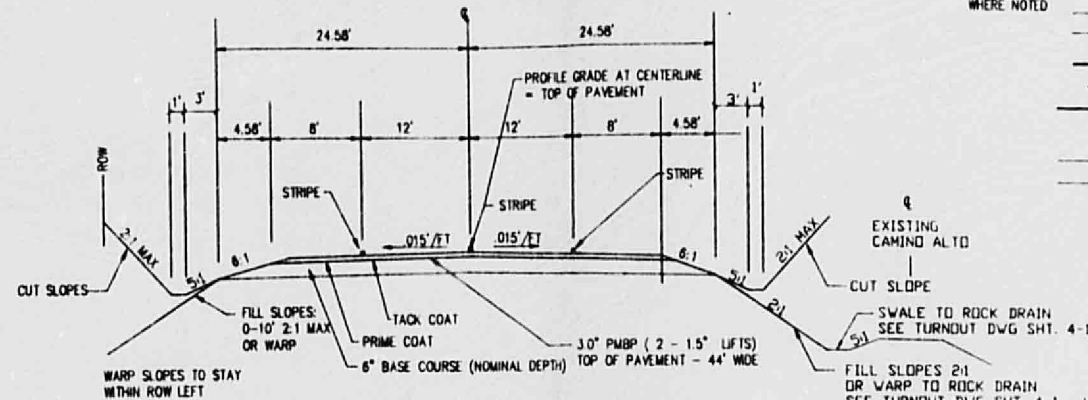
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AVERAGE DAILY TRAFFIC (2011) ESTIMATED 800



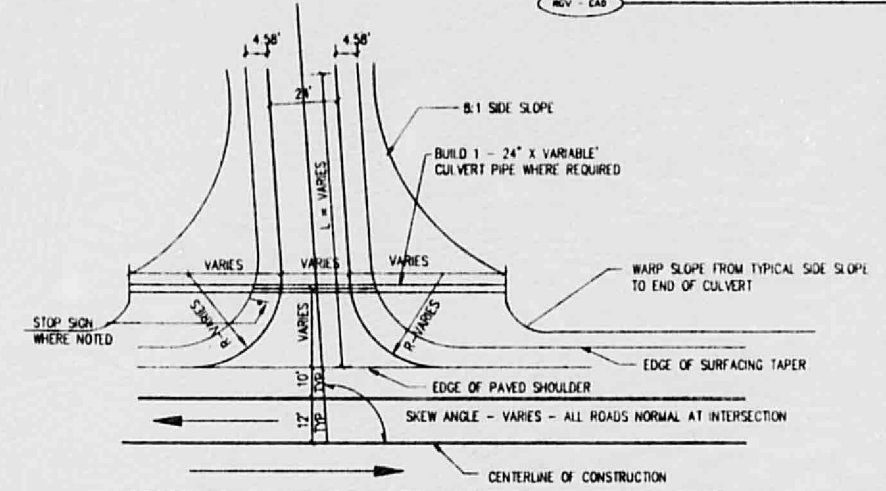
SHOULDER DETAIL  
TYPICAL ROADWAY SECTION



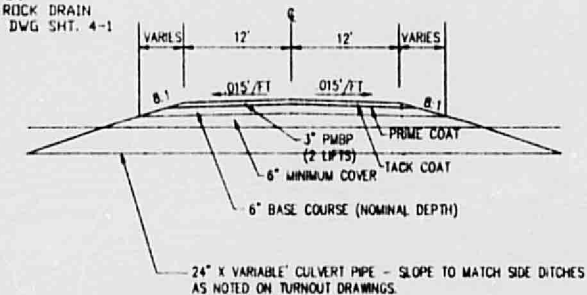
TYPICAL EXISTING  
ROADWAY SECTION



TYPICAL SECTION - NEW CONSTRUCTION



TYPICAL TURNOUT PLAN



TYPICAL SECTION - TURNOUTS

## LENGTH OF PROJECT

STATION	TO STATION	LINEAL FEET	MILES	REMARKS
0+28.61	0+71.12	42.51	.0806	SHOULDER WIDENING
0+71.12	7+20.00	648.88	1.2289	NEW CONSTRUCTION
TOTALS		691.39	1.3095	
MAJOR STRUCTURES				
2+71.07	3 - 14' C&G	111		NEW CONSTRUCTION
TOTALS		111		

## TYPICAL SECTION SURFACING

STATION	ROAD CONST.	SHOULDER	SURFACING TAPER
0+28.61 TO 0+71.12	NONE	3.0" PMBP (2 - 1.5" LIFTS) 6" BC	4.58' @ 6.00:1
0+71.12 TO 7+20.00	3" PMBP (2 LIFTS)	3.0" PMBP (2 - 1.5" LIFTS) 6" BC	4.58' @ 6.00:1

## NOTES:

1. SEE SHEET 4-1 FOR TURNOUT PROFILES

SUBMITTED: *Final*  
DATE: *5/22/92*

RICHARD G. VAUGHAN & ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA2-1

APPROVED

B.C. PROJECT 57-91

SHEET 2-1

IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY CAMINO ALTO BRIDGE CROSSING			
TYPICAL SECTIONS			

25x10

32x10

25x10



## SURFACING SCHEDULE

F.H.W.A. REGION NO.	STATE	BCP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	B/C PROJECT 57-91	2-2	

RGV - CAD

SUBGRADE  
PREP

## BASE COURSE

## PMBP

ASPHALT

SURFACING SCHEDULE				ITEM 207001 SUBGRADE PREP		ITEM 304001 BASE COURSE				ITEM 401002 PMBP TYPE I-GRADE B		ITEM 401102 85-100 BIT MAT	ITEM 401150 HYD LIME	ITEM 407012 ASPHALT TACK COAT	ITEM 408012 ASPHALT PRIME COAT
STATION TO STATION	NO. &/OR LIN FT	WIDTH	SQ YDS	AVG WIDTH IN FT	NORMAL DEPTH IN IN.	SQ YDS	TONS	AVG WIDTH IN FT	DEPTH IN IN.	PMBP TYPE I-GRADE B 3" THICK SQ YDS	TONS	TONS	TONS	TONS	TONS
NEW CONST- 3.0' PMBP/6" BASE COURSE															
0+71.12 TO 6+67.29 MAINLINE	596.17	24.00	1589.79	24.00	6.00	1589.79	519.33	24.00	3.00	1589.79	262.98	13.15	3.94	1.01	3.40
NEW CONST 2- 8' SHDRS/4.58' SURF TAPERS															
1+48.91 TO 3+56.10 SHOULDER LT	230.19	25.16	643.51	22.11	6.00	565.41	184.70	17.53	3.00	448.27	74.15	3.71	1.11	0.29	1.04
1+48.91 TO 4+02.10 SHOULDER RT															
SURF CONNECTIONS- 3.0' PMBP/6" BASE COURSE															
6+67 TO 7+20 MAINLINE-LANE TAPER	53.00	22.00	129.56	22.00	6.00	129.56	42.32	22.00	3.00	129.56	21.43	1.07	0.32	0.08	
SHOULDER TAPERS															
28.61 TO 1+48.91 & 3+56.10/4+02.10 TO 5+07.33	248.53	12.58	347.39	11.05	6.00	305.23	99.71	8.76	3.00	241.99	40.03	2.00	0.60	0.15	0.56
PAVED TURNOUTS-24' - GARDEN ROAD	1.00		433.33		6.00	400.00	130.67		3.00	381.11	63.04	3.15	0.95	0.24	0.82
3' PMBP ON 6" BASE COURSE															
PAVED TURNOUTS-24' TO CAMINO ALTO	1.00		244.44		6.00	221.11	72.23		3.00	216.67	35.84	1.79	0.54	0.14	0.46
3' PMBP ON 6" BASE COURSE															
ADDITIONAL METAL	2.00		40.00		6.00	133.00	43.45		1.50	133.00	11.00	0.55	0.17	0.03	0.09
BARRIER INSTALLATION															
PROJECT TOTALS			3428.02			3344.10	1092.41			3140.39	508.47	25.42	7.63	1.94	6.38
USE			3500.00			3400.00	1100.00			3200.00	510.00	26.00	8.00	2.00	7.00

## STRUCTURE QUANTITIES

STRUCTURE QUANTITIES -- CAMINO ALTO			ITEM NO 203001 UNCLASSIFIED EXCAVATION INLET/OUTLET CY	ITEM NO 501624 24" CULVERT PIPE LENGTH	ITEM NO 504015 GRADE 60 REBAR LB	ITEM NO 509050 CLASS A CONCRETE CY	ITEM NO 603030 12" WIRE ENCL RIPRAP CY	ITEM NO 604034 FILTER FABRIC SY
STATION	STRUCTURE NO. AND DESCRIPTION	SKEW						
2+71.07	1 BUILD 3-14'x8'x111.17' CBC 30 SKEW 50' LT. & 50' RT. BUILD EROSION CONTROL PADS FROM INLET AND OUTLET TO END OF NEW WINGWALLS LT. & RT.	SKEW			103159.55	599.00	73.33	220.00
1+83.12 LT	GARDEN ROAD TURNOUT - BUILD 1-24"x105' CUL PIPE-SKEW 37' LT - 2.381% PIPE SLOPE	SKEW		105.00				
3+65.10 RT	CAMINO ALTO RD TURNOUT-BUILD 1-24"x78' CUL PIPE-SKEW 53.83' RT - 2.564% PIPE SLOPE	SKEW		78.00				
5+94.50	2 1 - 24" x 42' CMC - SKEWED IN PLACE EXTEND IN KIND - 20' LT - SLOPE = 7.02%	SKEW		20.00				
	TOTALS - ALL STRUCTURE QUANTITY SHEETS		0.00	203.00	103159.55	599.00	73.33	220.00
	USE		0.00	203.00	103170.00	600.00	74.00	220.00

## ESTIMATED SURFACING FACTORS

	BITUMINOUS MATERIAL			ESTIMATED		
	BS-100	SPEC 407	SPEC 408	GALLONS PER TON	UNIT WT LBS/CY	HYDRATED LIME
BASE COURSE - TYPE 1B					3920	
PLANT MIX BITUMINOUS PAVEMENT TYPE 1 GR B	50%				3920	15% BY WT
ASPHALT FOR TACK COAT		0.02-0.15 GAL/S/SY		235.66		
ASPHALT FOR PRIME COAT			0.35-0.55 GAL/S/SY	256.06		

		
IDENT. NO.	DESCRIPTION	DATE BY
REVISIONS (OR CHANGE NOTICES)		
<p align="center"><b>BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT</b></p>		
<p align="center"><b>BERNALILLO COUNTY</b></p>		
<p align="center"><b>CAMINO ALTO BRIDGE CROSSING</b></p>		
<p align="center"><b>STRUCTURE QUANTITIES SURFACING SCHEDULE</b></p>		

SUBMITTED: Final  
DATE: 8/22/92

RICHARD G. VAUGHAN & ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA2-2

APPROVED

B.C. PROJECT 57-91

SHEET 2-2

25 × 10

32 × 10

25 × 11 L

ITEM NO. 202001  
REMOVAL OF STRUCTURES AND OBSTRUCTIONS

STATION TO	STATION	LN FT/NO	LOCATION	DESCRIPTION
0+00	7+20		PROJECT	SIGNS TO BE REMOVED & RESET
1+70		80'-10"	LEFT	CMP
2+00		87'-80"	RIGHT	CMP
2+08		1	RIGHT	CABLE BOX - REMOVAL BY OTHERS
3+42		1	LEFT	POWER POLE - REMOVAL BY OTHERS
5+92		1	LEFT	SIGNAL POLE - REMOVAL BY OTHERS

EARTHWORK ESTIMATE SUMMARY

STATION TO	STATION	EXCAVATION	EMBANKMENT	SHRINK	BORROW	EXCESS	REMARKS
0+28.61	7+20	481.48	4033.33	808.87	4358.52	0.00	MAIN ROADWAY
TOTALS		481.48	4033.33	808.87	4358.52	0.00	MAIN ROADWAY
EAST CHANNEL		518.52	208.37	41.27	0.00	270.68	CHANNEL
WEST CHANNEL		296.30	0.00	0.00	0.00	296.30	CHANNEL
CHANNEL TOTALS		814.81	208.37	41.27	0.00	567.18	CHANNEL
NET BORROW & EXCESS					3791.34	0.00	
PROJECT TOTALS		1296.29	4239.70	847.94	3791.34	0.00	

SHRINKAGE FACTOR OF 20% ASSUMED FOR EARTHWORK COMPUTATIONS.  
EXISTING ROAD SURFACING MAY BE BROKEN UP AND USED IN EMBANKMENT.  
BORROW SHALL BE OBTAINED FROM COMMERCIAL SOURCES.  
EXCESS SHALL BE USED IN ROADWAY.

ENVIRONMENTAL REQUIREMENTS

THE FOLLOWING ITEMS REQUIRE SPECIAL ATTENTION:

- 1.
2. THERE ARE NO SPECIAL ENVIRONMENTAL CONCERNS.
- 3.

ITEM NO. 201002  
CLEARING AND GRUBBING

BID AS A LUMP SUM FOR THE PROJECT

ITEM NO. 401090  
P.M.B.P. TESTING BY THE CONTR

BID AS A LUMP SUM FOR THE PROJECT

ITEM NO. 618001  
TRAFFIC CONTROL MANAGEMENT

BID AS A LUMP SUM FOR THE PROJECT

ITEM NO. 406001  
CORING BY CONTRACTOR

5 / EACH

ITEM NO. 870001  
CONSTRUCTION STAKING BY CONTRACTOR

BID AS A LUMP SUM FOR THE PROJECT

ITEM NO. 621001  
MOBILIZATION

BID AS A LUMP SUM FOR THE PROJECT

ITEM NO. 304090  
BASE COURSE/SUBASE TEST CONTR

BID AS A LUMP SUM FOR THE PROJECT

ITEM NO. 704010  
REFLECTORIZED PAINTED MARKINGS

STATION TO	STATION	LF YELLOW	LF WHITE	REMARKS
0+00	7+20	1440	1440	DOUBLE CENTER YELLOW & SHOULDER STRIPES
USE		1440	1440	DOUBLE APPLICATION TOTAL = 2880*2 = 5760

SEE SHEET 5-4 FOR CONSTRUCTION STRIPING QUANTITIES.

ITEM NO. 703100  
TRAFFIC MARKER GUIDES

STATION TO	STATION	LOCATION	NO.	REMARKS
0+00	1+50	LT.	3	SPACE @ 50' +/- O.C. AROUND CURVE
4+50	7+00	RT.	6	SPACE @ 50' +/- O.C. AROUND CURVE
PROJECT TOTAL			9	

ITEM NO. 703101  
TRAFFIC MARKER - HAZARD

STATION TO	STATION	LOCATION	NO.	REMARKS
PROJECT LENGTH		RT.	2	TWO AT CBC
PROJECT LENGTH		LT.	2	TWO AT CBC
PROJECT TOTAL			4	

SEE STRUCTURE QUANTITY SHEET FOR LOCATION

F.H.W.A.	REGION NO.	STATE	BCP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	B.C. PROJECT	57-91	2-3	

IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY			
CAMINO ALTO BRIDGE CROSSING			
MISCELLANEOUS QUANTITIES			

RICHARD G. VAUGHAN & ASSOC - ALBUQUERQUE

COMP FILE  
BCCA2-3

APPROVED

B.C. PROJECT 57-91

SHEET 2-3

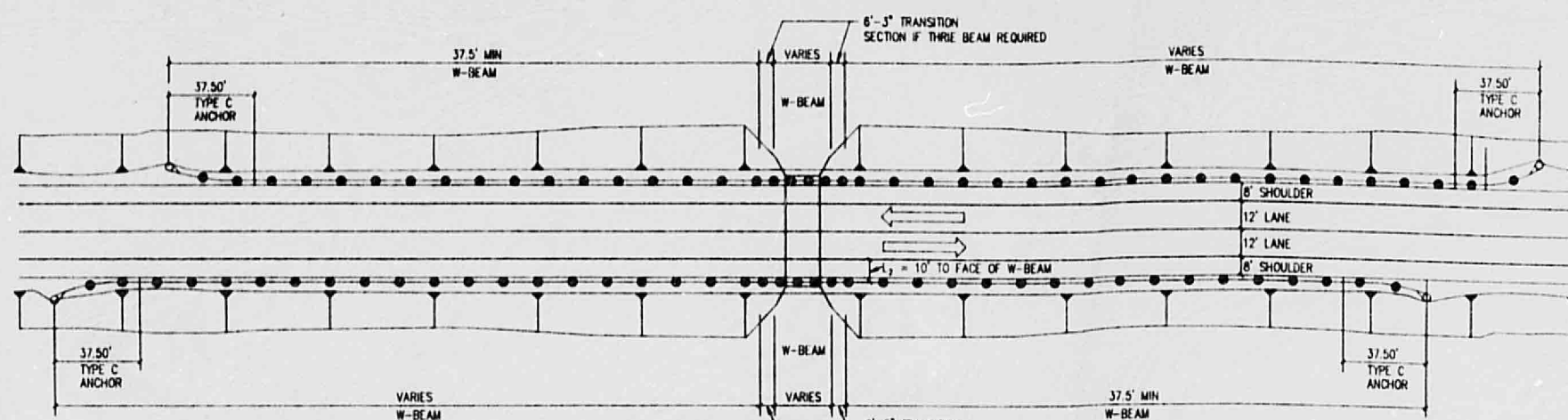
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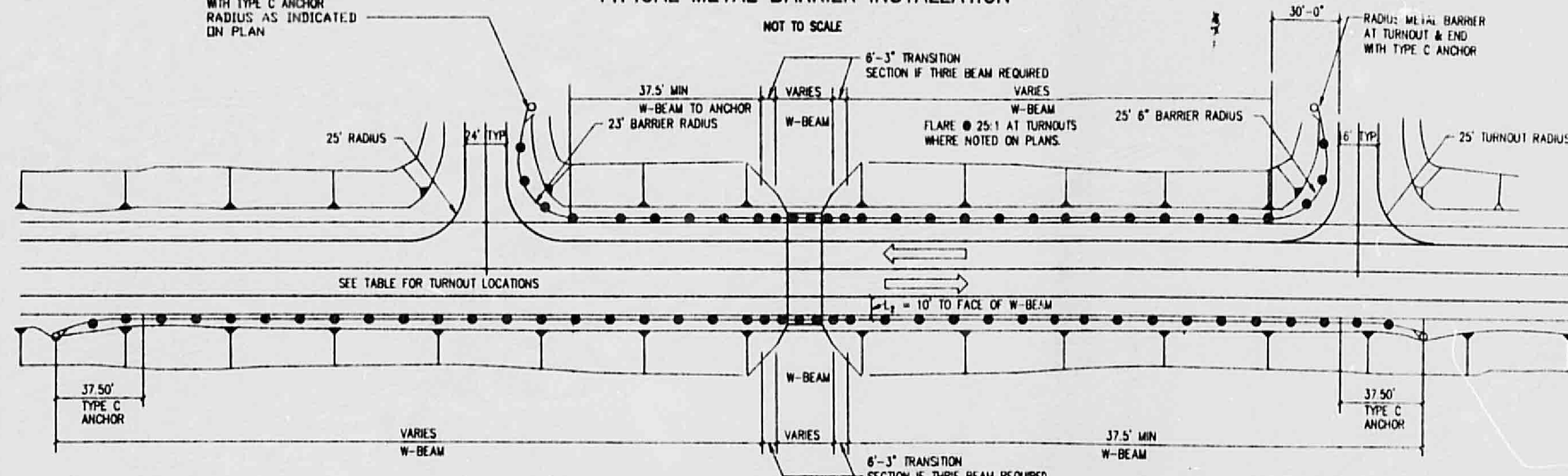
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F.H.W.A.	STATE	BCP	SHEET	TOTAL
REGION NO.			NO.	SHEETS
6	NEW MEXICO	B.C. PROJECT 57-91	2-4	



TYPICAL METAL BARRIER INSTALLATION



TYPICAL METAL BARRIER INSTALLATION AT TURNOUTS

**NOTE:**

USE 25:1 PAVEMENT FLARE INSTEAD OF 15' AT ENDS OF METAL BARRIERS

FOR ADDITIONAL METAL BARRIER  
DETAILS SEE STANDARD SERIALS:  
M-21-62  
M-21-75 SHEETS 1 AND 2  
M-21-77 SHEET 2 MODIFIED  
M-21-77C SHEETS 1, 2 AND 3  
DRAWING 021  
BPAB-001 & 002

ITEM 606005 METAL BARRIER W-BEAM  
ITEM 606009 METAL BARRIER THRIE BEAM

STATION TO STATION	LOCATION	W-BEAM LIN. FT.	THRIE BEAM INCL. TRANS.	TYPE C ANCHORAGE	REMARKS
0+32.37 FORWARD	RT	187.5	112.5	2	$L_2 = 10'$
2+33.50 FORWARD	LT	282.5	112.5	1	
2+33.50 BACKWARD-RAD	LT	50.0		1	
TOTAL		500.0	225.0	4	

SUBMITTAL: *Final*  
DATE: *5/22/92*

IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY			
CAMINO ALTO BRIDGE CROSSING			
METAL BARRIER INSTALLATION			

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP. FILE:  
BCCA2-4

APPROVED \_\_\_\_\_

B.C. PROJECT 57-91

SHEET 2-4

25X11

32X11

25X11

## EROSION CONTROL PLAN

F.H.W.A. REGION NO.	STATE	BCP PROJECT NO.	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	57-91	2-5	

REV. CAD

## A. ERODIBLE SURFACE AREA

THERE IS NO LIMIT TO ERODIBLE SURFACE AREA EXPOSED AT ONE TIME FOR THIS PROJECT

## B. TEMPORARY SOIL STABILANT

TEMPORARY SOIL STABILANT PER ACRE SHALL CONSIST OF DRY POWERED MUCLOD DERIVED FROM SEED HUSKS OR SEMIREFINED SEAWED EXTRACT, EITHER SHALL BE MIXED WITH VIRGIN WOOD CELLULOSE MULCH COMBINED WITH WATER, MIXED ACCORDING TO MANUFACTURER'S RECOMMENDATION AND APPLIED UNIFORMLY. THIS OPERATION SHALL BE APPLIED AT THE DISCRETION OF THE PROJECT MANAGER TO AREAS IN WHICH THERE WILL BE A SIGNIFICANT DELAY IN APPLYING PERMANENT MEASURES AND/OR THE SOIL ERODIBILITY IS SEVERE.

## C. PERMANENT MEASURES

"ALL SOIL SLOPES SHALL BE SCARIFIED OR LEFT ROUGH AS THEY ARE CONSTRUCTED" (NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1984 EDITION, SECTION 211.031 CONSTRUCTION REQUIREMENTS, SEQUENCE OF OPERATIONS). THIS MAY BE ACCOMPLISHED ON STEEPER SLOPES BY WALKING A TRACKED VEHICLE PERPENDICULAR TO THE SLOPE. INDENTATIONS SHALL BE A MINIMUM OF THREE INCHES DEEP. ALL SOILS AREAS 3:1 OR FLATTER EXPOSED DURING CONSTRUCTION WITHIN PROJECT LIMITS SHALL BE TREATED WITH CLASS "A" SEEDING. SLOPES STEEPER THAN 3:1 SHALL BE TREATED WITH CLASS "C" SEEDING. ANY CLASS "C" SEEDING REQUIRED SHALL BE MEASURED AND PAID FOR UNDER CLASS "A" SEEDING. HAY MULCH FOR SEEDING SHALL BE BARLEY STRAW AT THE RATE OF 1-1/2 TONS PER ACRE. MULCH FOR CLASS "A" SEEDING SHALL BE ANCHORED WITH TACKIFIER AS IN CLASS "C" SEEDING.

THE PITS AND HAUL ROADS SHALL BE TREATED WITH CLASS "A" SEEDING AS REQUIRED.

CONTRACTORS' CAMPSITES, STOCKPILE AREAS AND ANY OTHER NON DESIGNATED HAUL ROAD OR DISTURBED AREA SHALL BE TREATED WITH CLASS "A" SEEDING AND NO MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

MULCH ANCHORING TACK FOR CLASS "C" SEEDING SHALL BE THE SAME AS THE TEMPORARY SOIL STABILANT EXCEPT THAT IT IS APPLIED AS AN OVERSPRAY AFTER FERTILIZER, SEED AND MULCH ARE IN PLACE. TACK SHALL BE APPLIED AT A SUFFICIENT RATE SO AS TO PREVENT MULCH FROM MOVING DUE TO WINDS OR TURBULENCE CREATED BY TRAFFIC ON THE ROADWAY. AREAS WHERE MULCH FAILS TO ADHERE SHALL BE REMULCHED AND TACKED AND NO EXTRA PAYMENT SHALL BE MADE THEREFOR.

WHEN SEEDING IS APPLIED, ALL VEGETATION WHICH WILL INTERFERE WITH THE SEED AND MULCH MAKING CONTACT WITH THE SOIL SHALL BE REMOVED.

CLASS "C" MULCH SHALL BE APPLIED FROM SEPTEMBER 1 THROUGH APRIL 30. MULCH SHALL BE BARLEY STRAW AT THE BASE RATE OF 1.5 TONS PER ACRE AND SHALL BE ANCHORED AS IN CLASS "C" SEEDING ABOVE.

## \*\*SEED MIX

SPECIES	ORIGIN	LBS. PURE LIVE SEED PER ACRE
Bouteloua gracilis (BLUE GRAMA)	HACHITA OR LOVINGTON	1.0
Bouteloua curtipendula (SIDEHATS GRAMA)	VAUGHN OF MINER	4.0
Agropyron smithii (WESTERN WHEATGRASS)	BARTON OR ARRIBA	4.0
Hilaria jamesii (GALLETA)	VIVA	0.5
Buchloe doctyloides (BUFFALOGRASS)	TEXOKA OR SHARPS	4.0
TOTAL		17.0

THE FOLLOWING SEED SHALL REMAIN UNMIXED AND BE BROADCAST AND RAKED INTO AREAS DESIGNATED BY THE LANDSCAPE ARCHITECT, AND AT LEAST ONE WEEKS NOTICE SHALL BE GIVEN PRIOR TO SEEDING TO ALLOW AREAS TO BE SELECTED:

		LBS. PURE LIVE SEED
Gallardia aristata (FIREWHEEL)	ANY	7.0
Petalostemum purpureum (P. PRAIRIE COVER)	ANY	7.0
Linum lewisii (BLUE FLAX)	ANY	7.0
Penstemon strictus (ROCKY MT. PENSTEMON)	ANY	7.0
Chrysanthemum leucanthemum (OX-EYE DAISY)	ANY	7.0
TOTAL		35.0

\*\* THE PROJECT MANAGER SHALL CONTACT CHARLES PFEIFFER AT THE NEW MEXICO DEPARTMENT OF AGRICULTURE (846-2888) TWO WEEKS PRIOR TO SEEDING SO THAT AN OFFICIAL SEED SAMPLE CAN BE TAKEN.

## FERTILIZER REQUIREMENTS

## CHEMICAL

SLOW RELEASE NITROGEN (I.E., UREA FORMALDEHYDE)  
PHOSPHORUS, AS P2 O5  
SULPHUR (IN WATER SOLUBLE FORM)

ACTUAL MIN  
POUNDS/ACRE

50  
46  
48

## SEEDING DATES

- \* A. PERIOD A TO B - MAY 1 THROUGH MAY 31
- B. PERIOD B TO E - JUNE 1 THROUGH AUGUST 31
- C. PERIOD C TO D - NONE
- \*\* D. PERIOD E TO A - SEPTEMBER 1 THROUGH APRIL 30

\* WATER FOR PERIOD A TO B SHALL BE APPLIED ACCORDING TO SECTION 212.39 OF THE STANDARD SPECIFICATIONS AT THE FOLLOWING RATES AND SHALL BE CONTINUED UNTIL JUNE 14:

FIRST TWO WEEKS - FOUR APPLICATIONS ON ONE INCH EACH, TIMED THREE DAYS APART.

SUBSEQUENT WEEKS - ONE INCH PER WEEK.

- \*\* DURING THIS PERIOD CLASS "G" MULCH SHALL BE APPLIED. IT SHALL BE THE RESPONSIBILITY OF THE PROJECT MANAGER TO ADVISE THE CONSTRUCTION BUREAU OF THE NEED TO INITIATE A PROJECT TO PERFORM PERMANENT SEEDING.

ANY PROPOSED CHANGES OR MODIFICATION TO THIS PLAN SHALL BE DISCUSSED WITH THE LANDSCAPE ARCHITECT PRIOR TO MAKING SUCH CHANGES OR MODIFICATIONS.

## ITEM 212090 - CLASS "I" TEMPORARY SOIL STABILANT

	PROJECT
ROADWAY	.28 ACRES
CHANNEL	.15 ACRES
TOTAL	.43 ACRES *
* 60% OF ALL SEEDING	

## ITEM 212010 - CLASS "A" SEEDING

	PROJECT
ROADWAY	.46 ACRES
CHANNEL	.24 ACRES
TOTAL	.70 ACRES

IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY			
CAMINO ALTO BRIDGE CROSSING			
EROSION CONTROL PLAN			

SUBMITTED *Final*  
DATE: *5/22/92*

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA2-5

APPROVED

B.C. PROJECT 57-91

SHEET 2-5

25x11

32x11

25x11

# USE COMMERCIAL PIT FOR SURFACING AND BORROW

I certify that this pit has received Environmental  
and Archaeological Clearance subject to the  
following restrictions:

- A. none  
B. all avoidance - see notes

Environmental Program Manager \_\_\_\_\_ Date \_\_\_\_\_

SUBMITTED *Final*  
DATE: *5/22/92*

RICHARD G. VAUGHAN & ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA2-8

APPROVED \_\_\_\_\_

B.C. PROJ. 57-91

SHEET 2-6

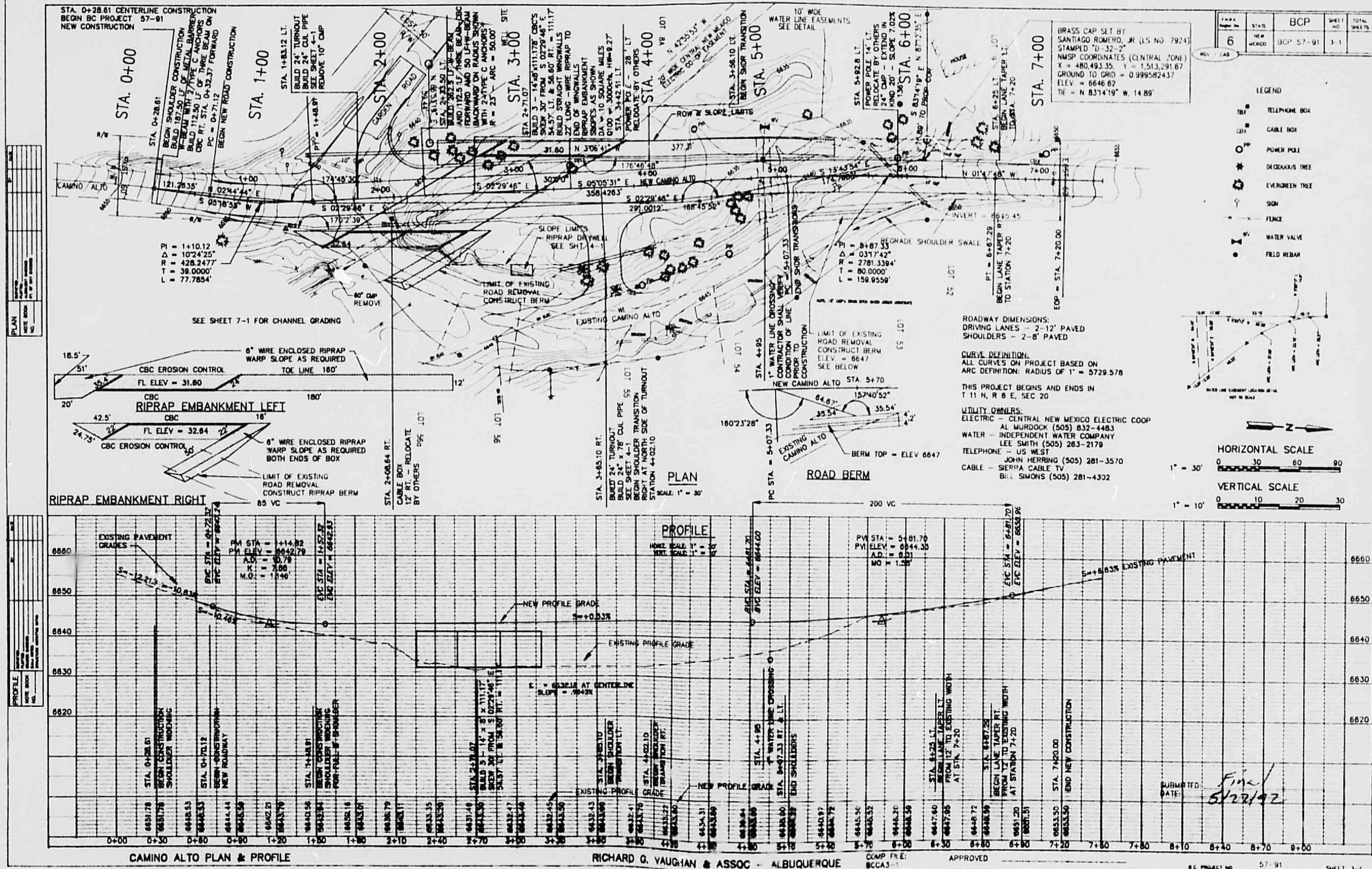
SURF. PIT NO.			F.H.W.A.		NMP		SHEET TOTAL	
REVISIONS OR CHANGE NOTICES			REGION NO.	STATE			NO.	SHEETS
NO.	DESCRIPTION	DATE						
			6	NEW MEXICO	BC PROJECT 57-91		2-6	
ACAD DESIGN								
CAMINO ALTO BRIDGE CROSSING - BERNALILLO COUNTY								
<p>HYDRATED LIME WILL BE REQUIRED TO MEET DESIGN REQUIREMENTS FOR PLANT MIX BITUMINOUS PAVEMENT. THIS IS TO BE ADDED BY A CONTROLLED PROCESS IN ACCORDANCE WITH SPECIFICATIONS.</p> <p>NATURAL FINES PASSING THE NO. 4 SCREEN ARE TO BE PRESCREENED DURING PMBP PRODUCTION AND PLACED IN A SEPARATE STOCKPILE. CRUSHED COARSE AND FINE AGGREGATES PRODUCED FOR PMBP ARE ALSO TO BE STOCKPILED SEPARATELY.</p> <p>THE LIQUID LIMIT AND SAND EQUIVALENT OF THE ASPHALT CONCRETE AGGREGATE WILL BE DETERMINED FROM REPRESENTATIVE SAMPLES TAKEN AFTER THE AGGREGATE MATERIALS HAVE BEEN BLENDED AND PRIOR TO MIXING WITH BITUMINOUS MATERIALS.</p> <p>"THIS PIT HAS BEEN DESIGNATED FOR USE ON THIS PROJECT AND APPEARS SUITABLE FOR THE PRODUCTION OF THE SPECIFIED MATERIALS. THE CONTRACTOR MAY, IF DESIRED, EXPLORE OTHER SOURCE(S) WHICH WILL PRODUCE SPECIFICATION AGGREGATE. WHEN ENDORSED BY THE ENVIRONMENTAL SECTION, AND APPROVED BY THE MATERIALS LAB. BUREAU, THE DISTRICT ENGINEER, AND THE ENGINEERING/OPERATIONS DIVISION DIRECTOR, THE CONTRACTOR MAY USE THE NEW SOURCE(S) IN LIEU OF THIS PIT. ALL MATERIALS PIT ACTIONS SHALL BE GOVERNED BY THIS NOTE AND BY SECTION 106 OF THE STANDARD SPECIFICATIONS."</p>								
<p>THE MATERIAL PIT DATA INDICATED HEREON IS FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL DETERMINE THE ACCURACY OF THE INFORMATION AND THE REQUIREMENTS NECESSARY TO PRODUCE SPECIFICATION MATERIALS.</p> <p>EXCLUSIVE RIGHTS TO PIT NO. _____ ARE NOT GRANTED TO THE CONTRACTOR UNDER THIS CONTRACT AND THE STATE MAY ASSIGN PORTIONS OF THE PIT TO OTHER PROJECTS FOR THE PRODUCTION OF AGGREGATES. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO MINIMUM AREA, DESIGNATED BY THE ENGINEER, NECESSARY TO PRODUCE THE AGGREGATE FOR THIS PROJECT.</p>								
REQUIREMENTS FOR TREATED & UNTREATED SURFACING								
<p>ADDITIVES REQUIRED: SEALING ASPHALT _____ % CONCENTRATE GRADE-HEAT STABLE.</p> <p>ESTIMATE FOR PRIME COAT: USE 0.35-0.55 GALLONS SUPP. 408 PER SQUARE YARD</p> <p>ESTIMATE FOR TACK COAT: USE 0.02-0.15 GALLONS SEC. 407 PER SQUARE YARD</p> <p>ESTIMATE FOR SEALING EMULSION: USE 0.10 GALLONS SPEC. 405 PER SQ. YD.</p> <p>% PLANT MIX BITUM. PAVEMENT 5.0 % 85-100/M60 AG-10 BY WGT. OF TOTAL MIX</p> <p>ASPHALT P. MIX BITUM. BINDER COURSE _____ % BY WGT. OF TOTAL MIX</p> <p>RECOMM. OPEN GRADED FRICTION COURSE _____ % BY WGT. OF TOTAL MIX</p>								
SURFACE TREATMENT:								
<p>1st COURSE _____ GALS. _____ SQ. YARD _____ LBS. OF AGGREGATE PER SQUARE YARD</p> <p>2nd COURSE _____ GALS. _____ SQ. YARD _____ LBS. OF AGGREGATE PER SQUARE YARD</p>								
SPECIFICATIONS FOR SURFACING AGGREGATES (% PASSING)								
SIEVE SIZE	BASE COURSE	PMBP TYPE I-B						
1 1/2"								
1"	100							
3/4"	80-100	100						
5/8"								
1/2"		80-100						
3/8"								
NO. 4	30-80	70-80						
NO. 10	20-45	32-45						
NO. 40		10-22						
NO. 80								
NO. 200	3-10	3-8						
L.L.	25 OR LESS	SANDY						
P.I.		NP						
WEAR	50 OR LESS	40 OR LESS						
S.L.N.	18 OR LESS	15 OR LESS						
F.F.N.	50 OR MORE	75 OR MORE						
<p>UNIT WEIGHT OF UNTREATED SURFACING _____ = 3970 LBS. PER CUBIC YARD</p> <p>UNIT WEIGHT OF PLANT MIX BITUM. PAVEMENT _____ = 3970 LBS. PER CUBIC YARD</p> <p>UNIT WEIGHT OF _____ = _____ LBS. PER CUBIC YARD</p> <p>UNIT WEIGHT OF OPEN GRADED FRICTION COURSE _____ = _____ LBS. PER CUBIC YARD</p>								
DEVELOPMENT RECOMMENDATIONS FOR THE PRODUCTION OF SURFACING MATERIALS BASED ON:								
<p>1 - SAMPLES AND LOGS FROM THE INDICATED TEST HOLES.</p> <p>2 - STRIPPING OVERBURDEN TO THE DEPTHS RECOMMENDED.</p> <p>3 - WORKING A VERTICAL FACE, EXPOSING THE APPROVED PRODUCTION DEPTH IN ONE LIFT AFTER STRIPPING AS RECOMMENDED.</p>								
<p>CONCRETE AGGREGATES MAY BE OBTAINED FROM APPROVED COMMERCIAL SOURCES OR FROM ANY OTHER SOURCE WHEN TESTED AND APPROVED BY THE CENTRAL LABORATORY.</p> <p>MIXING WATER FOR PORTLAND CEMENT CONCRETE, CEMENT TREATED BASE COURSE, ETC. MAY BE OBTAINED FROM ANY SOURCE WHEN TESTED AND APPROVED BY THE CENTRAL LABORATORY.</p>								

25x11

32x11

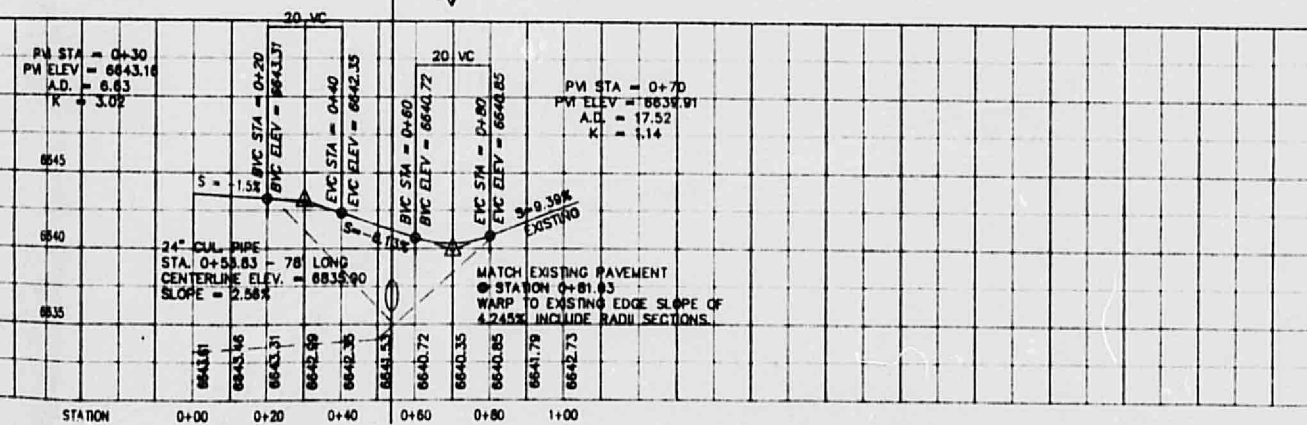
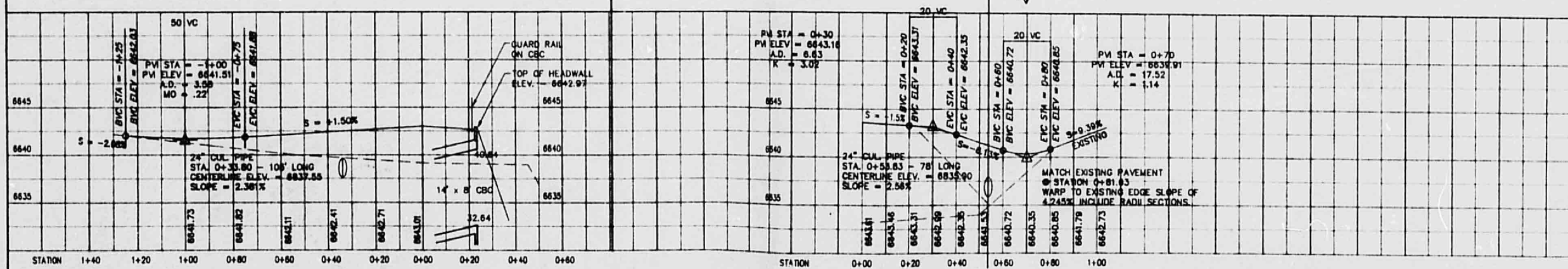
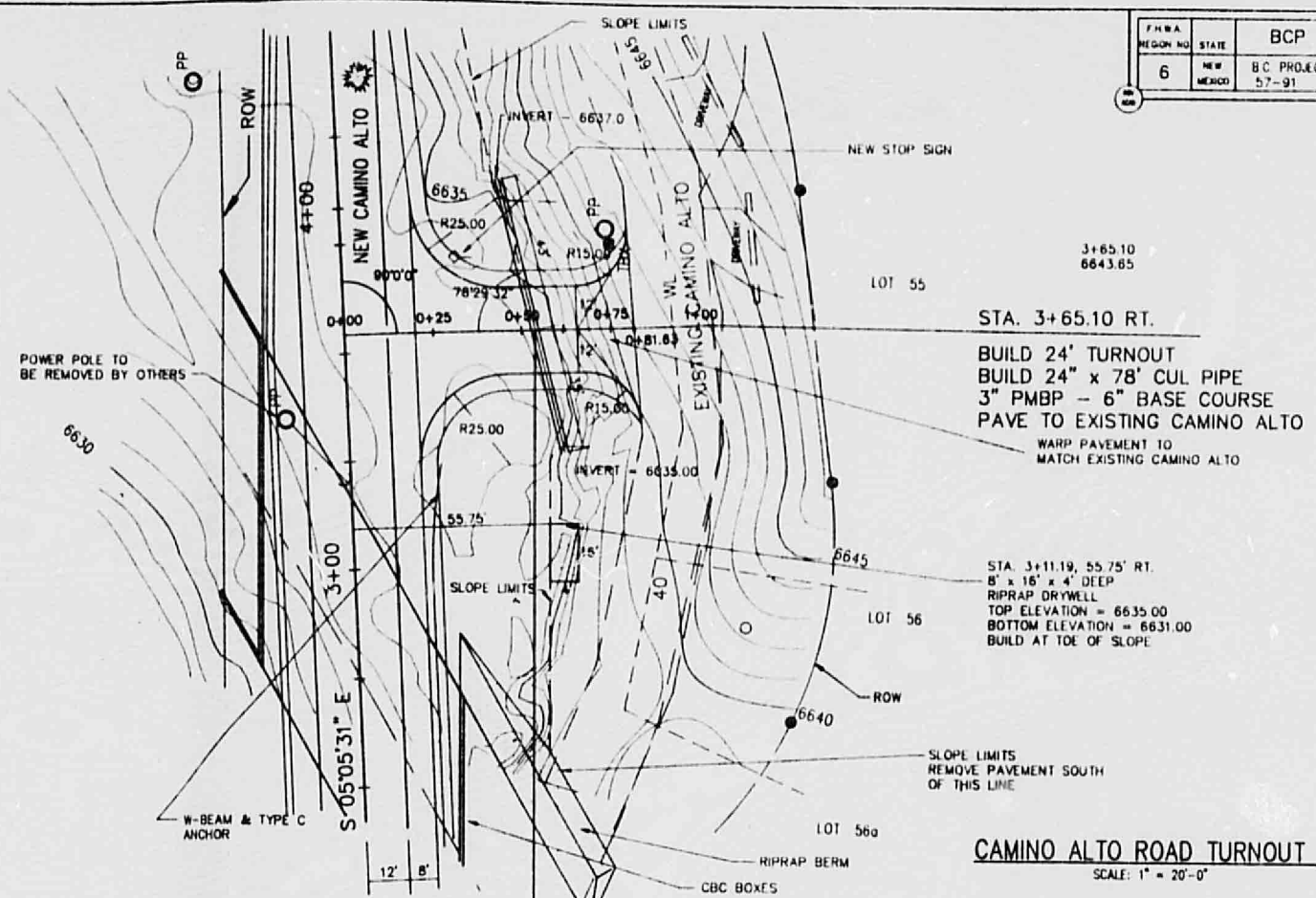
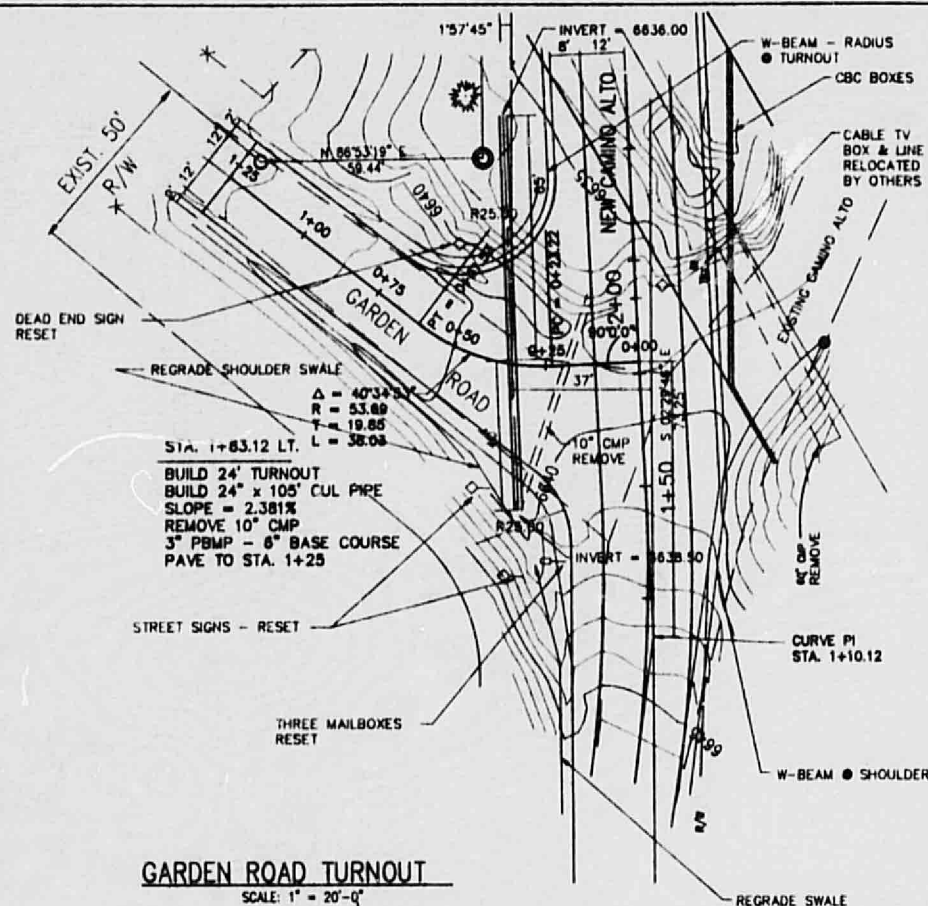
25x11







F.H.W.A.	STATE	BCP	SHEET	TOTAL
6	NEW MEXICO	B.C. PROJECT 57-91	4-1	



SUBMITTAL: *Final*  
DATE: *5/22/92*

RICHARD G. VAUGHAN & ASSOC - ALBUQUERQUE

COMP FILE: BCCA4-1

APPROVED

B.C. PROJECT NO. 57-91 SHEET 4-1

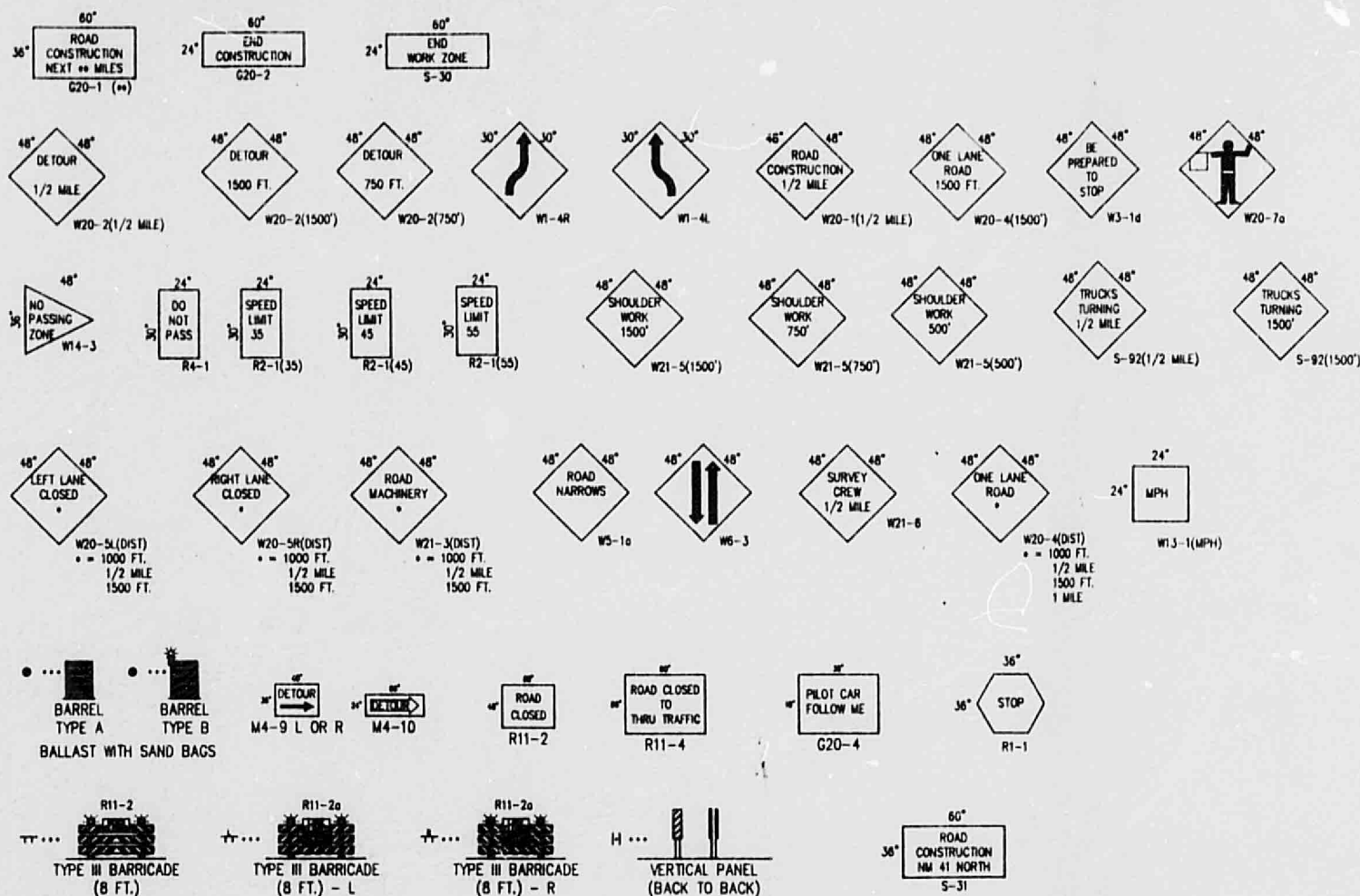
25x10

32x10

25x10

## SIGN FACE DETAILS

NOT ALL SIGNS ARE UTILIZED IN THESE PLANS



SIGNS R1-1, R2-1, R4-1, W14-3, R11-2, & R11-4  
ARE NOT BLACK ON ORANGE AS REQUIRED BY NOTE 3 ON SHEET 5-4.

F.H.W.A. REGION NO.	STATE	BCP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	B.C. PROJECT 57-91	5-1	

IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY			
CAMINO ALTO BRIDGE CROSSING			
CONSTRUCTION SIGNING SIGN FACE DETAILS			

SUBMITTAL: *Final*  
DATE: *5/24/92*

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP. FILE  
BCC-5-1

APPROVED

B.C. PROJECT 57-91

SHEET 5-1

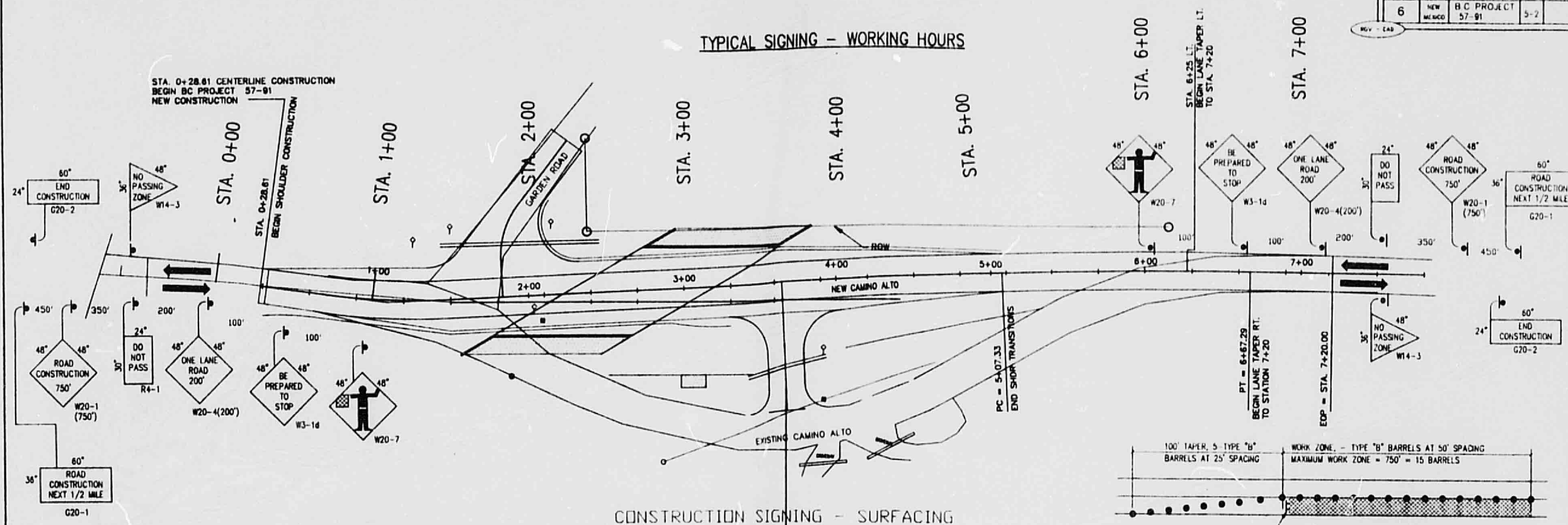
25x10

32x10

25x10

F.H.W.A.	STATE	BCP	SHEET	TOTAL
6	NEW MEXICO	B.C. PROJECT 57-91	5-2	

## TYPICAL SIGNING - WORKING HOURS



## CONSTRUCTION SIGNING - SURFACING

## SHOULDER/PAVING OPERATIONS

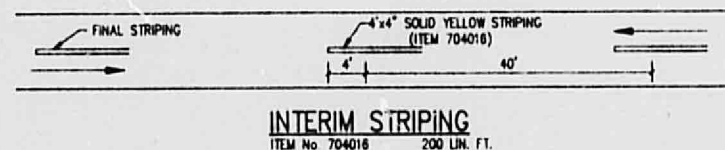


FIG. 1

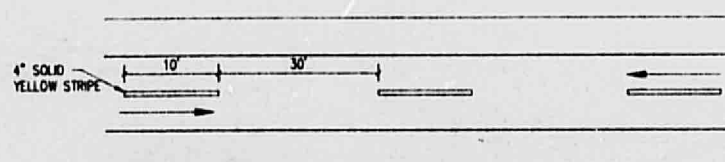
INTERIM STRIPING  
ITEM 4x10" BROKEN YELLOW STRIPE  
(704010) TOTAL 200 LIN. FT.

FIG. 2

THE CONTRACTOR SHALL PLACE REFLECTORIZED PAINTED MARKINGS (ITEM 704010) ON EACH LIFT OF SURFACING AT THE END OF EACH DAYS OPERATION. THESE MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DETAILS SHOWN IN FIGURE 2 ABOVE. IN THE EVENT THE PAINTED MARKINGS CANNOT BE PLACED AS DESCRIBED ABOVE, THE CONTRACTOR SHALL WITH THE APPROVAL OF THE ENGINEER, PLACE ADHESIVE NON-METALLIC TAPE (ITEM 704016) IN ACCORDANCE WITH THE DETAIL IN FIGURE 1 ABOVE.

NOTE: DURING CONSTRUCTION OPERATION TRAFFIC SHALL BE MOVED THROUGH THE WORK ZONE USING PILOT CAR. ALL PILOT CARS SHALL BE EQUIPPED WITH THE FOLLOWING SIGN:



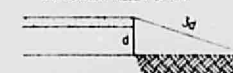
THE PILOT CAR, APPLICABLE SIGN, AND OTHER ITEMS RELATED TO THE USE OF THE PILOT CAR SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFOR.

NOTE: SHOULDER WORK CONSTRUCTION SHALL BE RESTRICTED TO ONE SIDE AT A TIME. SIGNING DETAILS DURING WORKING HOURS IS THE SAME AS SURFACING SIGNING DETAIL.

SIGNS G20-1, G20-2, SHALL BE PLACED AT THE PROJECT LIMITS, AND REMAIN IN PLACE FOR THE DURATION OF THE PROJECT.

NOTE: IN AREAS OF EXISTING ROADWAY WORK THE CONTRACTOR SHALL ASSURE THAT NO PAVEMENT DROP OFFS ARE LEFT EXPOSED DURING NON-WORKING HOURS. CONTRACTOR SHALL INITIATE CORRECTIVE MEANS TO ACHIEVE A MINIMUM 3d SLOPE AS SHOWN IN DETAIL BELOW.

## TEMPORARY FILLET DETAIL



AT THE END OF THE WORKING DAY IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A DRIVING SURFACE FREE OF OBSTRUCTION. (TWO-WAY TRAFFIC)

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP FILE  
BCC45-2

APPROVED

SUBMITTAL  
DATE: 5/27/92

IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY			
CAMINO ALTO BRIDGE CROSSING			
CONST. TRAFFIC CONTROL PLAN 2-LANE SURFACING OPERATION			

B.C. PROJECT 57-91 SHEET 5-2

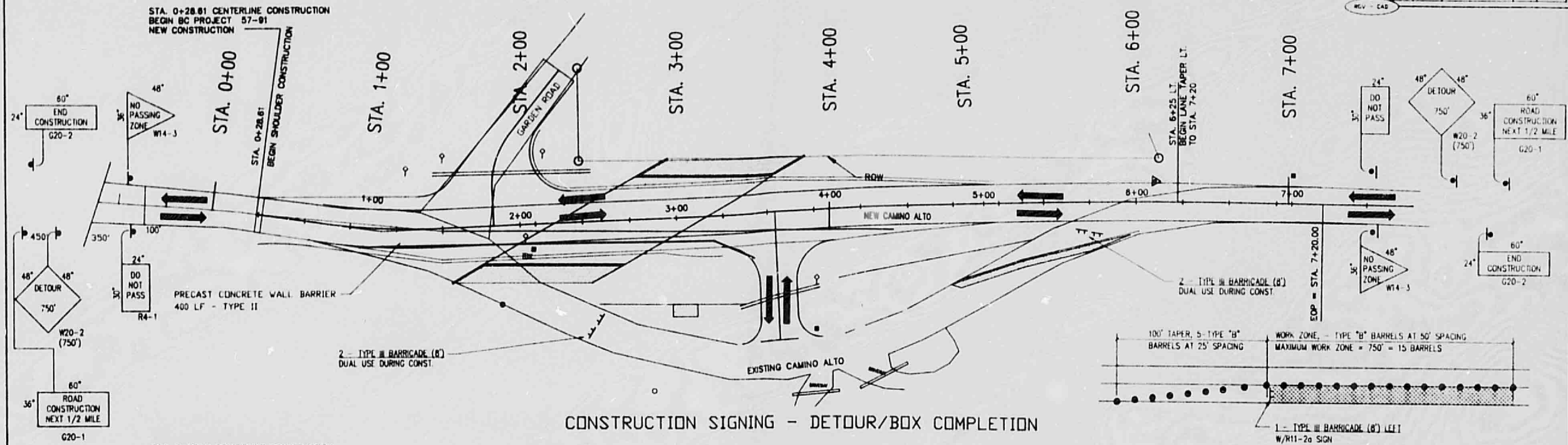
25x10

32x10

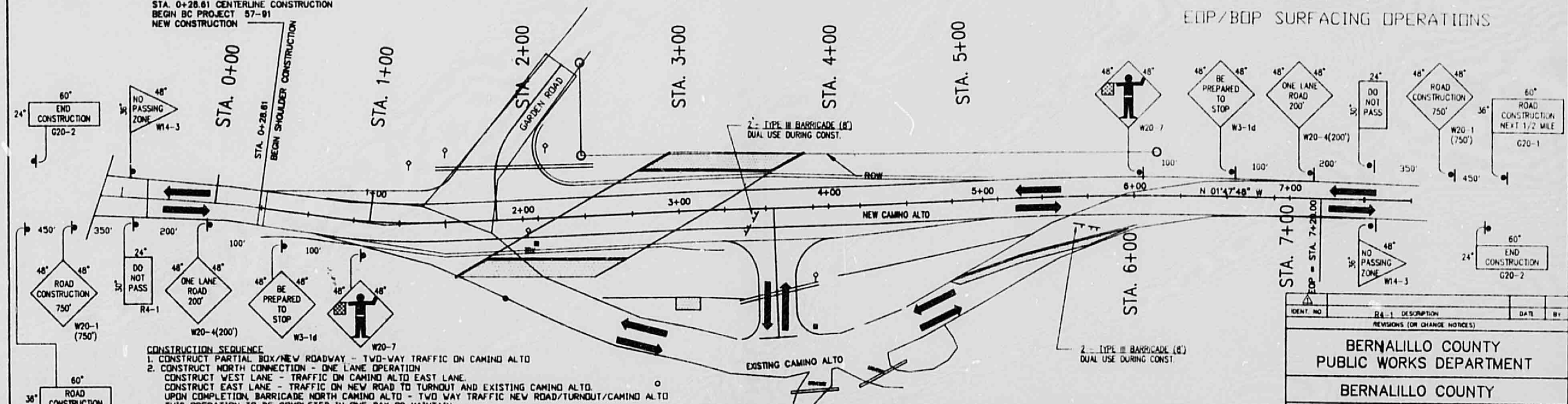
25x10



F.H.W.A.	STATE	BCP	SHEET	TOTAL
6	NEW MEXICO	B.C. PROJECT 57-91	5-3	



CONSTRUCTION SIGNING - DETOUR/BOX COMPLETION



CONSTRUCTION SIGNING - PARTIAL BOX/NEW ROAD CONSTRUCTION

- CONSTRUCTION SEQUENCE**
1. CONSTRUCT PARTIAL BOX/NEW ROADWAY - TWO-WAY TRAFFIC ON CAMINO ALTO
  2. CONSTRUCT NORTH CONNECTION - ONE LANE OPERATION  
CONSTRUCT WEST LANE - TRAFFIC ON CAMINO ALTO EAST LANE.  
CONSTRUCT EAST LANE - TRAFFIC ON NEW ROAD TO TURNOUT AND EXISTING CAMINO ALTO.  
UPON COMPLETION, BARRICADE NORTH CAMINO ALTO - TWO WAY TRAFFIC NEW ROAD/TURNOUT/CAMINO ALTO  
THIS OPERATION TO BE COMPLETED IN ONE DAY OR MAINTAIN PILOT CAR OPERATION FOR DURATION OF CONNECTION WORK.
  3. CONSTRUCT SOUTH CONNECTION - ONE LANE OPERATION  
CONSTRUCT WEST LANE AND GARDEN ROAD TURNOUT - TRAFFIC ON CAMINO ALTO EAST LANE.  
INSTALL PRECAST BARRIER ON BOX AND NORTH.  
CONSTRUCT PARTIAL EAST LANE/NOMINALLY TO STA. 1+70 +/- - TRAFFIC ON NEW ROAD  
INSTALL REMAINING PRECAST BARRIER AND DETOUR TRAFFIC TO NEW ROAD.  
THIS OPERATION TO BE COMPLETED IN ONE DAY OR MAINTAIN PILOT CAR OPERATION FOR DURATION OF CONNECTION WORK.

IDENT. NO.	REVISIONS (OR CHANGE NOTICES)	DATE	BY
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY			
CAMINO ALTO BRIDGE CROSSING			
CONSTRUCTION SIGNING			

SUBMITTAL DATE: *Final 5/22/92*

## CONSTRUCTION SIGNING

										MOUNTING REQUIREMENTS				BASE POSTS	
CONSTRUCTION	SIGNING - combine etc									FLANGED	CHANNEL	DRIVEDOWN	POSTS	PORTABLE	BASE POSTS
SIGN CODE	TYPE	AREA	NO	TOTAL AREA	LEFT	POST LENGTH CENTER	RIGHT	TOTAL		3.00/FT	4.00/FT	2 3/16"	2 1/2"	SUPPORT	TOTAL LENGTH
SURFACING															
1-SETUP															
G20-1	ROAD CONST (50MILES)	15.00	2.00	30.00	9.50		9.50	38.00	X			X			4.00
W20-1(750)	ROAD CONST(750)	18.00	2.00	32.00	9.50		9.50	38.00	X			X			4.00
W20-4(200)	ONE LANE ROAD (200)	18.00	2.00	32.00	9.50		9.50	38.00	X			X		2.00	14.00
W3-16	BE PHE TO STOP	18.00	2.00	32.00	9.50		9.50	38.00	X			X		2.00	0.00
W20-7	FLAGMAN	18.00	2.00	32.00	9.50		9.50	38.00	X			X		2.00	0.00
G20-2	END CONST	18.00	2.00	32.00	9.50		9.50	38.00	X			X			0.00
R4-1	DO NOT PASS	8.00	2.00	16.00				16.00	X			X			4.00
W14-3	NO PASSING ZONE	8.00	2.00	16.00		9.50	9.50	19.00	X			X			2.00
BARRICADE	TYPE III (LAMP) ROAD CLOSED	4.00							X						4.00
BARRRELS	TYPE A	4.00													7.00
BARRRELS	TYPE B	15.00													14.00
TOTALS				200.00				285.00						6.00	63.00
ADDITIONAL															
STRUCTURE /															
SHOULDER WORK															
CROSS TURNOUT S															
W20-2(750)	DETOUR 750'	18.00	2.00	32.00	9.50		9.50	38.00	X			X			4.00
P.C.	PRECAST WALL BARRIER	400.00													14.00
B.I.	BARRIER DELINATOR	10.00													
TOTALS				32.00				38.00							14.00
CROSS HAUL RO	AD (IF REQUIRED)														
1 SETUP															
S82(1/4)	TRUCKS TURNING(1/4)	16.00	2.00	32.00										4.00	0.00
R1-1	STOP SIGN	8.00	1.00	8.00		9.50		9.50						2.00	7.00
TOTALS				41.00				9.50						4.00	7.00
TOTALS				273.00				332.50						10.00	84.00

SUMMARY OF QUANTITIES  
CONSTRUCTION

ITEM NO	BID ITEM	UNITS	TOTAL
702000	CONSTRUCTION SIGNING	SF	273.0
702103	POST FOR CONSTRUCTION SIGNING	LF	416.5
702145	PORTABLE SIGN SUPPORT	EA	10.0
702215	BARRICADE - TYPE III - B	EA	4.0
702349	CHANNELIZATION DEVICE (BRL) TYPE A	EA	5.0
702350	CHANNELIZATION DEVICE (BRL) TYPE B	EA	15.0
704016	ADH NON-METAL MARK TAPE	LF	200.0
704010	REFLECTORIZED PAINTED MARKINGS	LF	600.0
606403	PRECAST CONC WALL BAR TYPE II	LF	400.0
INCIDENTAL	BARRIER DELINATORS	EA	10.0

ITEM NO. 704010  
REFLECTORIZED PAINTED MARKINGS

STATION	TO	STATION	LF YELLOW	LF WHITE	REMARKS
WALL BARRIER EDGE STRIPE				400	SINGLE WHITE
INTERIM STRIPING ON PAVEMENT				200	
TOTAL				600	
USE			200+2+400 = 800		

QUANTITIES FOR CONSTRUCTION STRIPING ONLY

## NOTES:

1. TRAFFIC CONTROL PLAN AND QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED. PLACING, RELOCATION, AND THE MAINTENANCE OF TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DIRECTED BY THE PROJECT MANAGER ARE TO BE INCIDENTAL TO THE UNIT BID PRICE.

2. ALL TRAFFIC CONTROL DEVICES FOR DETOURS SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - SECTION 702 (1984 EDITION) AND CHAPTER VI OF THE 1988 EDITION MUTCD AND CURRENT REVISIONS.

3. ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTIVE ORANGE UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON WHITE REFLECTORIZED UNLESS OTHERWISE SPECIFIED.

4. BID ITEM - (STEEL POSTS AND BASE POSTS FOR DETOUR SIGNS). THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST AS PER NEW MEXICO STANDARD SERIALS. REFER TO SERIALS SH 75-1, TBAC-001-10 AND TBAC-002-11.

5. BID ITEM - (TYPE III BARRICADE - 6' OR 8'). TYPE III BARRICADES SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED TYPE "A" FLASHING PLACONS PLYWOOD ARROW AND ROAD CLOSED SIGNS ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.

6. BID ITEM - (TYPE I BARRICADE - 2'). TYPE I BARRICADE SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED HIGH INTENSITY FLASHING BEACONS ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.

7. BID ITEM - (VERTICAL PANELS, SINGLE TYPE OF BACK TO BACK 8'X 24"). VERTICAL PANELS SHALL BE ORANGE ON WHITE REFLECTORIZED SHEETING .060 MIN 8061 T-6. PANELS TO BE MOUNTED ON DRIVEDOWN POST EITHER 3' DRIVE OR ON STANCHION. BID UNIT - PER EACH.

8. FLAGGING SHALL BE PROVIDED FOR SAFETY AND/OR AS DIRECTED BY THE PROJECT MANAGER. FLAGGERS SHALL USE STOP/SLOW PADDLES (18"X 18" MIN) IN ACCORDANCE WITH THE MUTCD. THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFORE.

9. BID ITEM - (CHANNELIZATION DEVICE BARREL TYPE "A" OR "B"). CHANNELIZATION DEVICE BARRELS SHALL BE ORANGE ON WHITE REFLECTORIZED. TYPE "A" REQUIRES NO BEACON. TYPE "B" SHALL BE EQUIPPED WITH BEACON AS SPECIFIED IN THE STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 702.021(g), 1984 EDITION.

10. THE PROVISIONS AS INCLUDED IN THE PLANS AND SPECIFICATIONS FOR HANDLING AND CONTROLLING TRAFFIC DURING CONSTRUCTION OF THE PROJECT MAY BE CHANGED BY THE COUNTY TRAFFIC ENGINEER IF, BECAUSE OF FIELD CONDITION AS ACTUALLY ENCOUNTERED, SUCH CHANGES ARE DESIRABLE AT THE DISCRETION OF THE PROJECT MANAGER. THESE CHANGES WILL BE MADE BY WRITTEN INSTRUCTION TO THE CONTRACTOR, AND SHALL BE CONSIDERED AN AMENDMENT TO THE PLANS AND SPECIFICATIONS AS OF THE DATE OF THE CHANGE.

11. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC ENGINEER FOR APPROVAL.

12. NO PAYMENT WILL BE MADE FOR ANY ADDITIONAL COST RESULTING FROM APPROVED TRAFFIC CONTROL PLAN CHANGES REQUESTED BY THE CONTRACTOR.

13. ITEM 704010 IS INCLUDED FOR PAVEMENT STRIPING BETWEEN SURFACING LIFTS AS DIRECTED BY THE PROJECT MANAGER.

14. BID ITEM - (SAND BARREL VEHICULAR IMPACT ATTENUATOR UNIT). SAND BARREL VEHICULAR ATTENUATOR, UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AT COMPLETION OF THE CONSTRUCTION.

15. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PERSON ON SITE DURING WORKING HOURS AND ON CALL DURING NON WORKING HOURS TO INSPECT AND MAINTAIN PROJECT TRAFFIC CONTROL, OR AS DIRECTED BY THE PROJECT MANAGER.

16. ALL NON-APPLICABLE SIGNING SHALL BE REMOVED OR COVERED COMPLETELY WITH AN OPAQUE NON-LIGHT TRANSMITTING MATERIAL. ALL REMAINING, NON-APPLICABLE TRAFFIC CONTROL DEVICES ARE TO BE REMOVED AND STORED AT LOCATIONS DESIGNATED BY THE PROJECT MANAGER.

17. BID ITEM - (PRECAST CONCRETE WALL BARRIER). PRECAST CONCRETE WALL BARRIER WHEN USED FOR TRAFFIC CONTROL PURPOSES, SHALL BECOME THE PROPERTY OF THE COUNTY OF BERNALILLO AT COMPLETION OF THE PROJECT. PRECAST CONCRETE WALL BARRIER SHALL NOT REVERT TO THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.

PRECAST CONCRETE WALL BARRIER SHALL BE FABRICATED IN EITHER 10' OR 12.5' UNITS TO THE DIMENSIONS SHOWN ON PLANS. ALL PRECAST CONCRETE WALL BARRIER UTILIZED IN THE WORK SHALL BE OF THE SAME LENGTH AND DESIGN. INTERMIXING WILL NOT BE ALLOWED. WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF SECTION 503-PORTLAND CEMENT CONCRETE AND SECTION 504.022(c)-STEEL REINFORCEMENT.

WHEN NEW PRECAST CONCRETE WALL BARRIER IS CALLED FOR ON THE PLAN, THE WALL BARRIER SHALL BE DELIVERED TO THE DESIGNATED AREA AND SITE AT COMPLETION OF WORK. THE CONTRACTOR IS TO UNLOAD AND STOCKPILE PRECAST CONCRETE WALL BARRIER AS DIRECTED BY THE PROJECT MANAGER. HAULING AND STOCKPILING OF NEW PRECAST CONCRETE WALL BARRIER TO DESIGNATED AREA AND SITE SHALL BE INCIDENTAL TO THE ITEM FOR PRECAST CONCRETE WALL BARRIER. THE DESIGNATED AREA IS THE \*\*\*\*\* YARD. Haul DURING NORMAL WORKING HOURS.

18. CONTRACTOR SHALL MAINTAIN ONE GAP BETWEEN WORK ZONES.

SUBMITTAL: *Final*  
DATE: *5/22/92*

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA5-4

APPROVED

B.C. PROJECT 57-91 SHEET 5-4

25x11

32x11

25x11



## PERMANENT SIGNING

PERMANENT SIGNING - CAMINO ALTO										MOUNTING REQUIREMENTS				BASE POSTS	
SIGN CODE	TYPE	AREA	NO.	TOTAL AREA	LEFT	POST LENGTH CENTER	RIGHT	TOTAL	FLANGED	CHANNEL	DRIVEDOWN THICK	POSTS	PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH
R1-1	STOP	9.00	1.00	9.00		9.50		9.50	X		2 3/16"	2 1/2"		1.00	3.50
R2-1	SPEED LIMIT (25 MPH)	9.00	2.00	18.00		9.50		18.00	X					2.00	7.00
R4-1	DO NOT PASS	9.00	2.00	18.00		9.50		18.00	X					2.00	7.00
W14-3	NO PASSING ZONE	9.00	2.00	18.00	9.50			38.00	X					4.00	14.00
W1-2L	CURVE LEFT	9.00	1.00	9.00		9.50	9.50	19.00	X					1.00	3.50
W1-2R	CURVE RIGHT	9.00	1.00	9.00		9.50		9.50	X					1.00	3.50
W5-1	PAV. WIDENS	9.00	2.00	18.00	9.50		9.50	38.00	X					4.00	14.00
TOTALS				77.00				142.50							52.50

SUMMARY OF QUANTITIES  
PERMANENT SIGNING

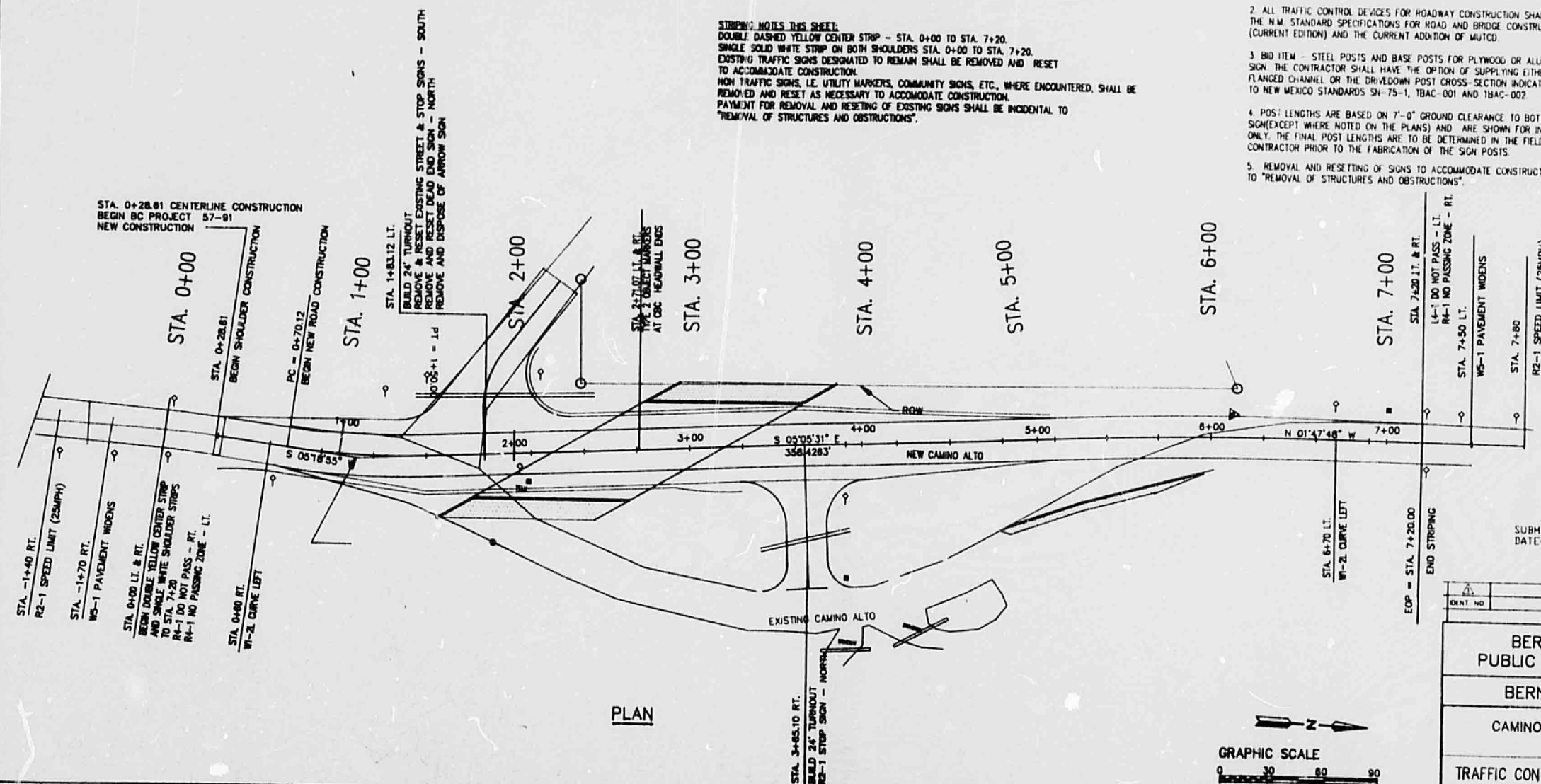
ITEM NO.	BID ITEM	UNITS	TOTAL
701010	PLY./AL. PANEL SIGN	SF	77.00
701101	STEEL & BASE POSTS	LF	195.00
704010	REF. PAINTED MARKINGS	LF	5760.00

## NOTES:

- QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED.
- ALL TRAFFIC CONTROL DEVICES FOR ROADWAY CONSTRUCTION SHALL COMPLY WITH THE N.M. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION) AND THE CURRENT ADDITION OF MUTCD.
- BID ITEM - STEEL POSTS AND BASE POSTS FOR PLYWOOD OR ALUMINUM PANEL SIGN. THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST CROSS-SECTION INDICATED. REFER TO NEW MEXICO STANDARDS SN-75-1, TBAC-001 AND TBAC-002.
- POST LENGTHS ARE BASED ON 7'-0" GROUND CLEARANCE TO BOTTOM OF THE SIGN (EXCEPT WHERE NOTED ON THE PLANS) AND ARE SHOWN FOR INFORMATION ONLY. THE FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE FABRICATION OF THE SIGN POSTS.
- REMOVAL AND RESETTING OF SIGNS TO ACCOMMODATE CONSTRUCTION IS INCIDENTAL TO "REMOVAL OF STRUCTURES AND OBSTRUCTIONS".

## STRIPING NOTES THIS SHEET:

DOUBLE DASHED YELLOW CENTER STRIP - STA. 0+00 TO STA. 7+20.  
SINGLE SOLID WHITE STRIP ON BOTH SHOULDERS STA. 0+00 TO STA. 7+20.  
EXISTING TRAFFIC SIGNS DESIGNATED TO REMAIN SHALL BE REMOVED AND RESET TO ACCOMMODATE CONSTRUCTION.  
NEW TRAFFIC SIGNS, I.E. UTILITY MARKERS, COMMUNITY SIGNS, ETC., WHERE ENCOUNTERED, SHALL BE REMOVED AND RESET AS NECESSARY TO ACCOMMODATE CONSTRUCTION.  
PAYMENT FOR REMOVAL AND RESETTING OF EXISTING SIGNS SHALL BE INCIDENTAL TO "REMOVAL OF STRUCTURES AND OBSTRUCTIONS".


 SUBMITTAL DATE: *Final*  
 5/22/92

IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT			
BERNALILLO COUNTY			
CAMINO ALTO BRIDGE CROSSING			
TRAFFIC CONTROL DEVICES-PERM. SIGNING SUMMARY OF QUANTITIES			

RICHARD G. VAUGHAN &amp; ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA6-1

APPROVED

B.C. PROJECT 57-91

SHEET 6-1

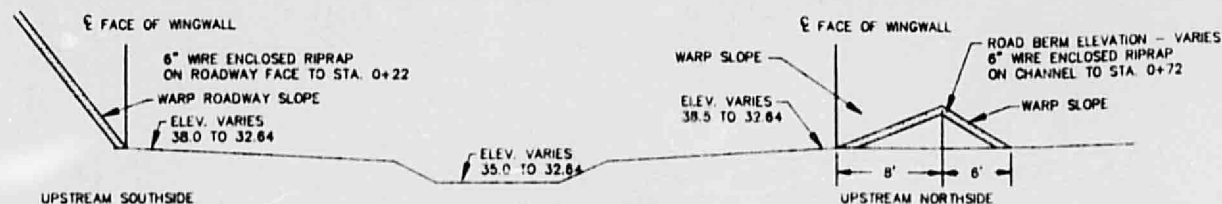
25X11

32X11

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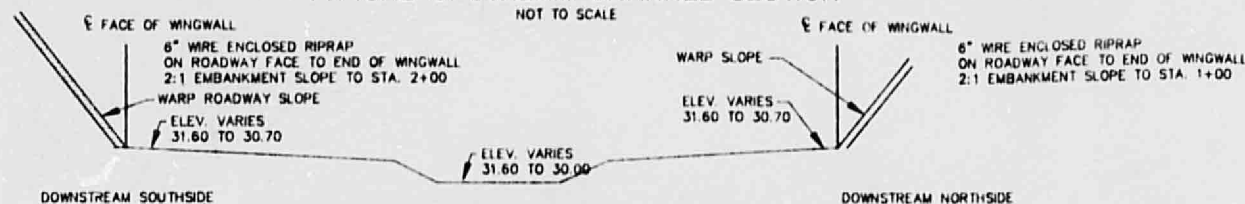


F.H.R.A.	STATE	BCP	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	B.C. PROJECT 57-91	7-1	



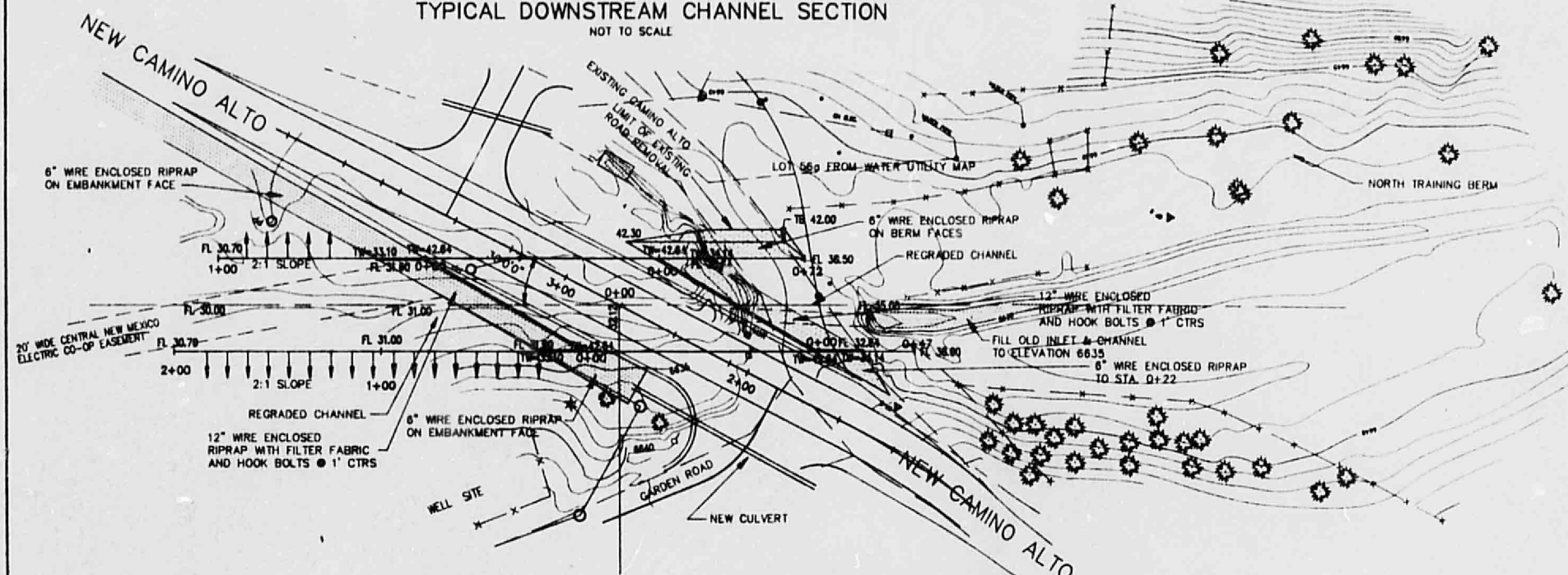
TYPICAL UPSTREAM CHANNEL SECTION

NOT TO SCALE



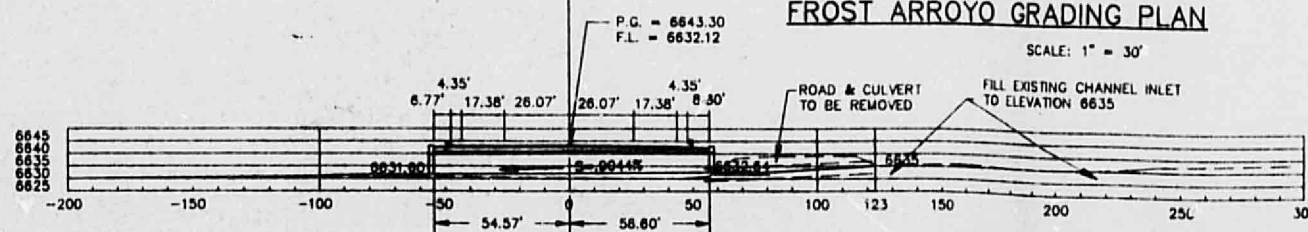
TYPICAL DOWNSTREAM CHANNEL SECTION

NOT TO SCALE



FROST ARROYO GRADING PLAN

SCALE: 1" = 30'



STRUCTURE 1 - STA. 2+71.07  
BUILD 3 14'x11'17" CBC - SKEW 30° - 54.57' LT. & 56.00' RT.  
BUILD NEW WINGWALLS, BUILD NEW EROSION CONTROL PADS  
FROM INLET AND OUTLET TO END OF 22' STRAIGHT WINGWALLS  
REBUILD CHANNEL RT. & LT. TO MATCH NEW HEADWALLS  
AS SHOWN ON ARROYO PLAN & SECTIONS

SERIALS  
BEB-001, BPAB-001, BPAB-0002, BRR-001  
CB-33 (SHT. 1 OF 4), CB-33-30 (SHT. 1 OF 2), EC-81, M-21-62, M-21-67A,  
M-21-77 (SHT. 1 & 2 OF 2)  
M-21-77C (3 SHTS.), RDX-001, WCB-0 (2 SHTS.)  
TSP

NEW CROSSING STORM DATA:

100 YR - SIX HOUR - DPM  
Q100 = 3000 CFS  
HW = 9' AVG ABOVE BOX FLOWLINE  
MAXIMUM WATER SURFACE  
ELEVATION = 6641.80

EXISTING CROSSING STORM DATA:

100 YR - SIX HOUR - DPM  
Q100 = 3000 CFS  
HW = 3' AVG OVER EXISTING ROADWAY SECTION  
MAXIMUM WATER SURFACE  
ELEVATION = 6642.00

SUBMITTAL: *Final*  
DATE: *5/22/92*

IDENT. NO.	DESCRIPTION	DATE	BY
	REVISIONS (OR CHANGE NOTICES)		
	BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT		
	BERNALILLO COUNTY		
	CAMINO ALTO BRIDGE CROSSING		
	ARROYO GRADING		

RICHARD G. VAUGHAN & ASSOC - ALBUQUERQUE

COMP FILE:  
BCCA7-1

APPROVED

B.C. PROJECT 57-91

SHEET 7-1

25x10

32x10

25x10

0000 0000 1357



25x10