

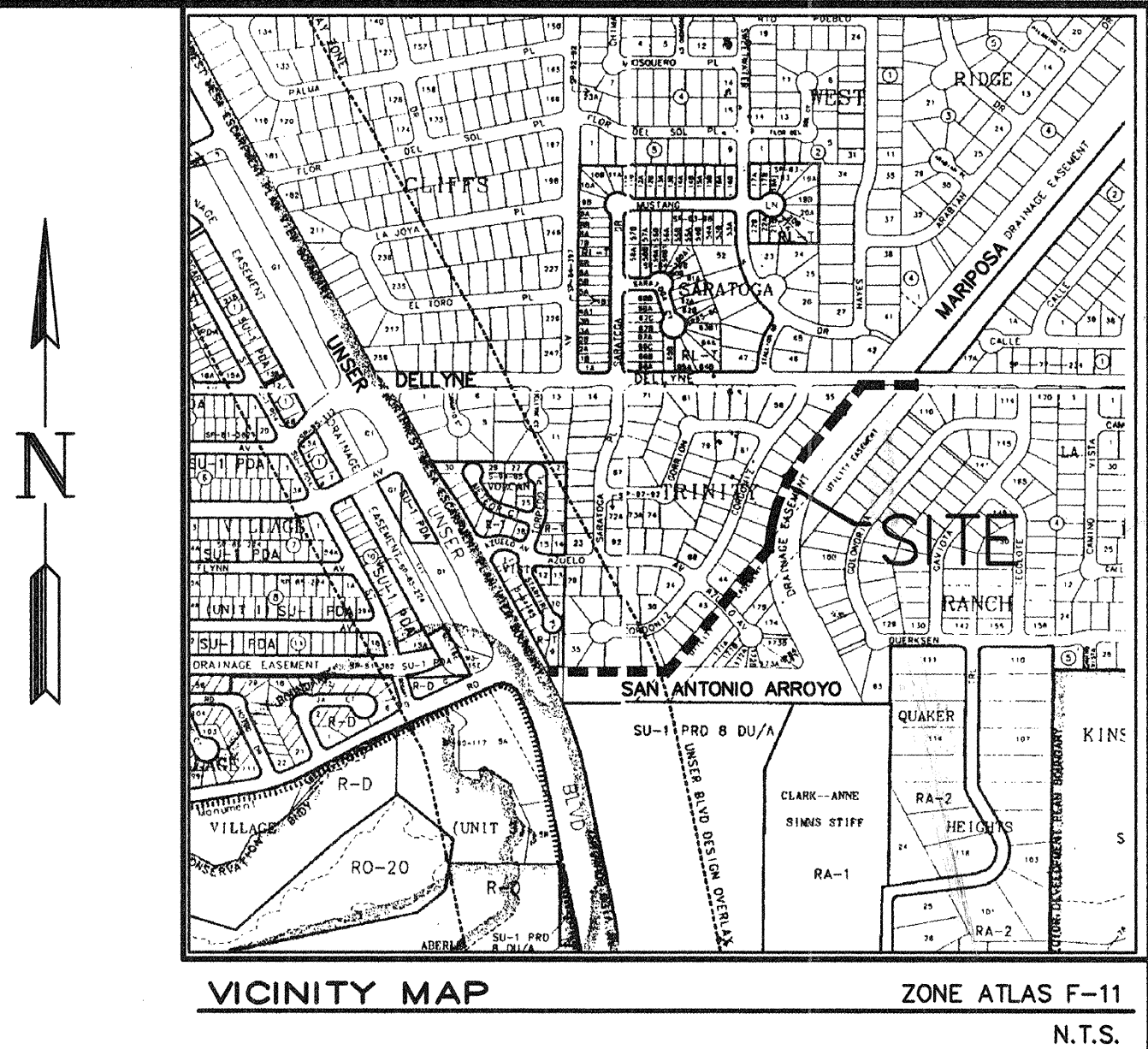
MARIPOSA DIVERSION TRAIL CONNECTION DELLYNE TO UNSER

CONSTRUCTION PLANS ALBUQUERQUE, NEW MEXICO



INDEX OF SHEETS

SHEET NO.	TITLE
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13	SIGNING & CONSTRUCTION TRAFFIC CONTROL STANDARDS
14	TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES



FOR INFORMATION ONLY

I, Gary Werner, N.M.P.E. CERTIFY THAT
THE DRAWING OF THE "AS-BUILT" DIMENSIONS
WAS DONE UNDER MY SUPERVISION.
Gary Werner

Resource Technology, Inc.
Civil Engineering 5501 Jefferson Blvd. NE, Suite 200
Environmental Sciences Albuquerque, New Mexico 87109
Water Resources E-mail: rti@nmnet
Landscape Architecture Telephone: (505) 243-7300
Planning Facsimile: (505) 243-7400

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
A	12	<u>W. B. B. B.</u>	11-25-02	<u>Shen Sam Bala</u>	11-25-02	<u>Shen Sam Bala</u>	11-25-02
ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER	DATE	APPROVED FOR CONSTRUCTION	
		DRC CHAIRMAN		<u>June Page</u>	5-14-02	<u>June Page</u> 5/14/02 CITY ENGINEER DATE	
		TRANSPORTATION		<u>June Page</u>	5/7/02		
		WATER/WASTEWATER		<u>June Page</u>	5/12/02		
		HYDROLOGY		<u>June Page</u>	5/9/02		
		CONSTR. COORD.		<u>June Page</u>	5/14/02		
AMAFCA		<u>June Page</u>		4/1/02			
CITY PROJECT NO.				644605		SHEET 1 OF 14	
22 APRIL '02							

GOVERNING SPECIFICATIONS

- MONUMENTATION INFORMATION

- ## EARTHWORK

- 7) THE CONTRACTOR SHALL WARP SLOPES WHERE NECESSARY TO STAY WITHIN THE RIGHT-OF-WAY OR CONSTRUCTION LIMITS, OR TO MEET EXISTING STRUCTURES.
- 8) ALL EXCAVATION SHALL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 9) THE CONTRACTOR SHALL BE RESTRICTED TO THE USE OF A 35 TON NON-VIBRATING ROLLER MAXIMUM TO OBTAIN THE REQUIRED COMPACTION IN EMBANKMENT AND SUB GRADE IN URBAN OR OTHER AREAS WHERE THE USE OF HEAVIER EQUIPMENT COULD DAMAGE UNDERGROUND UTILITIES OR OTHER PERMANENT STRUCTURES.

WASTE DISPOSAL REQUIREMENTS

- ## HAZARDOUS SPILLS REQUIREMENTS

- ## ENVIRONMENTAL COMPLIANCE

- 14) THE AIR POLLUTION CONTROL REGULATION OF THE ALBUQUERQUE - BERNALILLO COUNTY AIR QUALITY CONTROL BOARD LIMIT EMISSIONS OF PARTICULATE MATTER AND THE USE OF CUT BACK ASPHALT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLARIFY THESE RESTRICTIONS WITH THE ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO SUBMITTAL OF BIDS TO AVOID CONFLICT WITH THE REGULATIONS. CALL THE ENVIRONMENTAL HEALTH DEPARTMENT AT 768-2600.

UTILITIES

- ## GENERAL CONSTRUCTION

- ## CONSTRUCTION STAKING

- ## CONSTRUCTION SURVEYING

- | UTILITY CONTACTS | | |
|----------------------|----------------|---------------------|
| <u>BUSINESS</u> | <u>NAME</u> | <u>PHONE NUMBER</u> |
| PNM-ELECTRIC | ROBERT GARCIA | 241-3334 |
| PNM-GAS | KELLY BOUSKA | 241-7752 |
| QWEST | MARSHALL BEGAY | 245-6584 |
| COA UTILITY ENGINEER | GREG OLSON | 768-2719 |

FOR INFORMATION ONLY



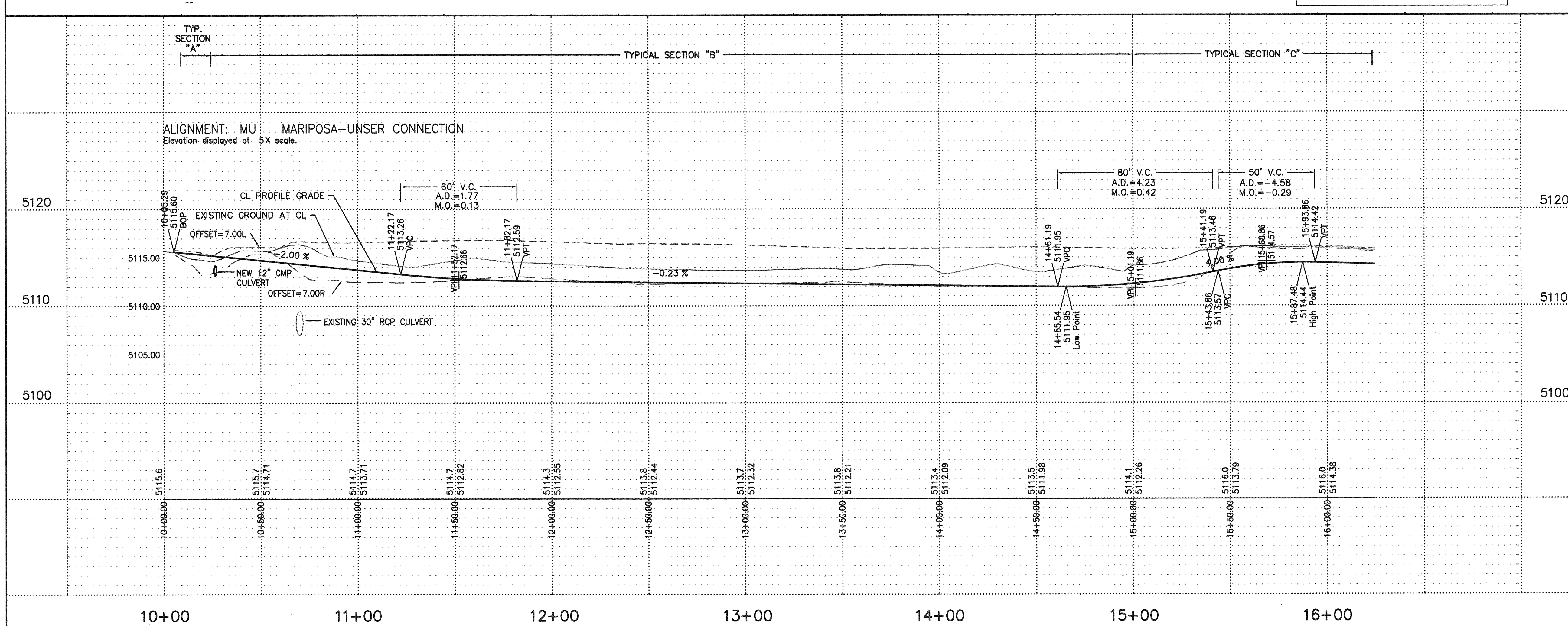
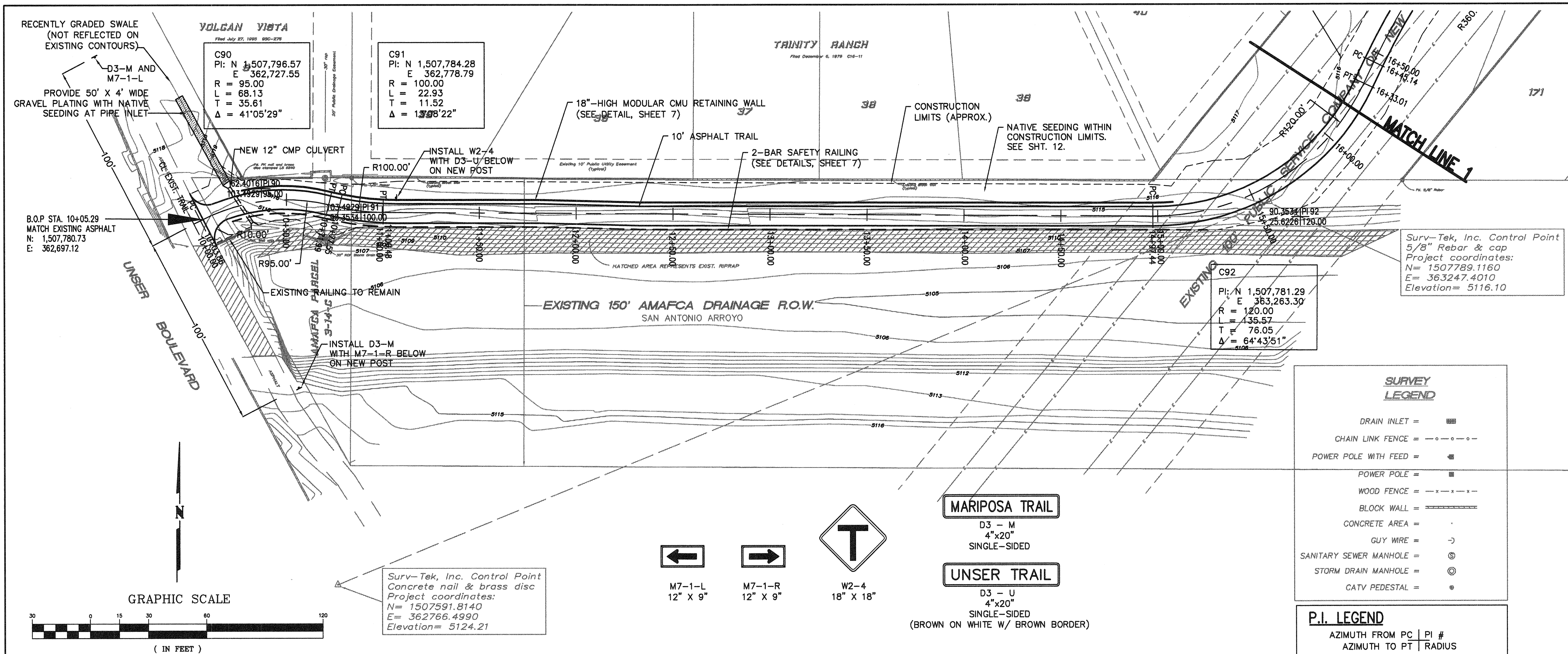
CITY OF ALBUQUERQUE
PARKS AND RECREATION DEPARTMENT
PLANNING AND DESIGN DIVISION

TITLE: **COA TRAILS 2001**
MARIPOSA DIVERSION TRAIL CONNECTION
GENERAL NOTES

[illegible]

PROJECT NO.	644605	MAP NO.	E,F -11	SHEET	2	OF	14
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Order No. Q00710



NOTES:

- STA. 10+05 - SAWCUT EXISTING ASPHALT TO CLEAN, STRAIGHT EDGES. APPLY TACK COAT TO CUT SURFACE. BEGIN CONSTRUCTION OF 10' ASPHALT TRAIL.
- STA. 10+05 TO STA. 10+55 - APPLY 4" SOLID YELLOW REFLECTIVE STRIPE ALONG CENTERLINE OF NEW ASPHALT TRAIL.
- STA. 10+55 TO STA. 17+87 - APPLY 4" DASHED YELLOW REFLECTIVE STRIPE ALONG TRAIL CENTERLINE.
- STA. 10+20 (7'RT.) TO STA. 15+24 (10'RT.) - INSTALL 2-BAR SAFETY RAILING 2' FROM EDGE OF TRAIL (TYP.), WIDENING TO 5' FROM TRAIL AT EAST END.
- STA. 10+23 (10'LT.) TO STA. 10+30 (10'RT.) - INSTALL 12" CMP CULVERT WITH BEVELED END SECTIONS BENEATH TRAIL. PROVIDE MIN. 12" COVER TO TOP OF ASPHALT. REGRADE EXISTING SWALE AT INLET TO PROVIDE 5% (MAX.) CHANNEL SLOPE AND 3:1 (MAX.) SIDE SLOPES WITH GRAVEL MULCH.
- STA. 10+28 (7'LT.) TO STA. 15+10 (7'LT.) BUILD 18" HIGH MODULAR CMU RETAINING WALL 2' FROM LEFT EDGE OF TRAIL. CUT EXISTING GROUND BACK AT 3H:1V FROM TOP OF WALL TO MEET EXISTING GROUND.
- STA. 10+05 (100' RT. AND LT.) - INSTALL TWO EACH M7-1 "ARROW" WITH D3-M "MARIPOSA TRAIL" SIGNS ABOVE ON NEW POSTS, 3' FROM EDGE OF EXISTING TRAIL.
- STA. 11+05 (9'LT.) - INSTALL W2-4 "INTERSECTION" AND D3-U "UNSER TRAIL" SIGNS ON NEW POST AT TOP OF NEW RETAINING WALL.

AS-BUILT INFORMATION

CONTRACTOR	DATE
WORKED BY	DATE
INSPECTED BY	DATE
ACCEPTANCE BY	DATE
VERIFICATION BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
RECORDED BY	DATE
NO.	

BENCH MARKS

STATION NAME	5.2 MILES NW OF DOWNTOWN ALBUQ. ON THE W. RIDGE OF A VOLCANIC OUTCROP. AT COORS AND I-40, GO NORTH ON COORS RD .9 MILES TO REDLANDS RD. TURN LT., GO WEST .1 MILES TO ATRISCO DR. TURN RT. AND GO NORTH 1.7 MILES. STATION IS ABOUT 400' WEST OF THIS POINT.
EASTING	1506551.87
NORTHING	362216.44
ELEVATION	5255.21

SURVEY INFORMATION

FIELD NOTES	DATE
BY	
NO.	

ENGINEERS SEAL

Gary Werner, N.M.P.S.

CERTIFY THAT THE DRAWING OF THE "AS-BUILT" DIMENSIONS WAS DONE UNDER MY SUPERVISION.

Gary Werner

FOR INFORMATION ONLY

SCALE: 1"=30' HORIZ.
1"=6' VERT.

Resource Technology, Inc.

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SURV TEK, INC.

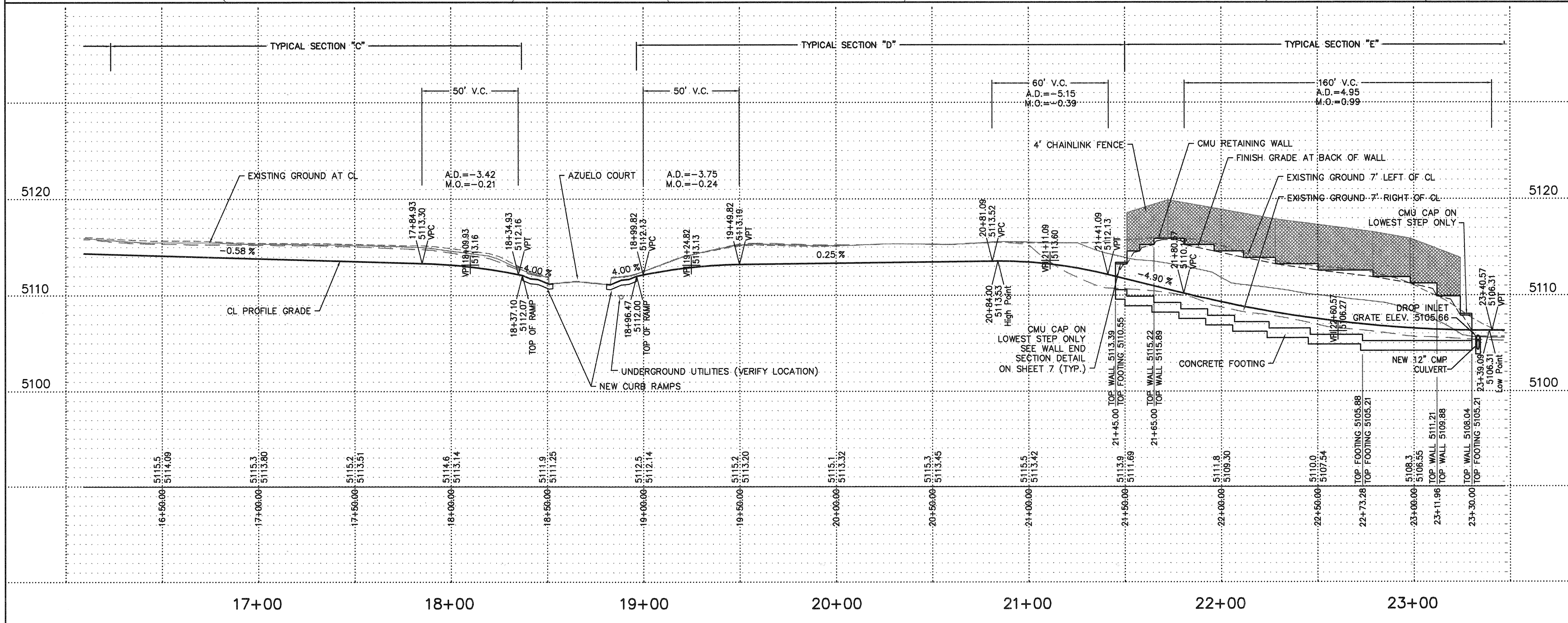
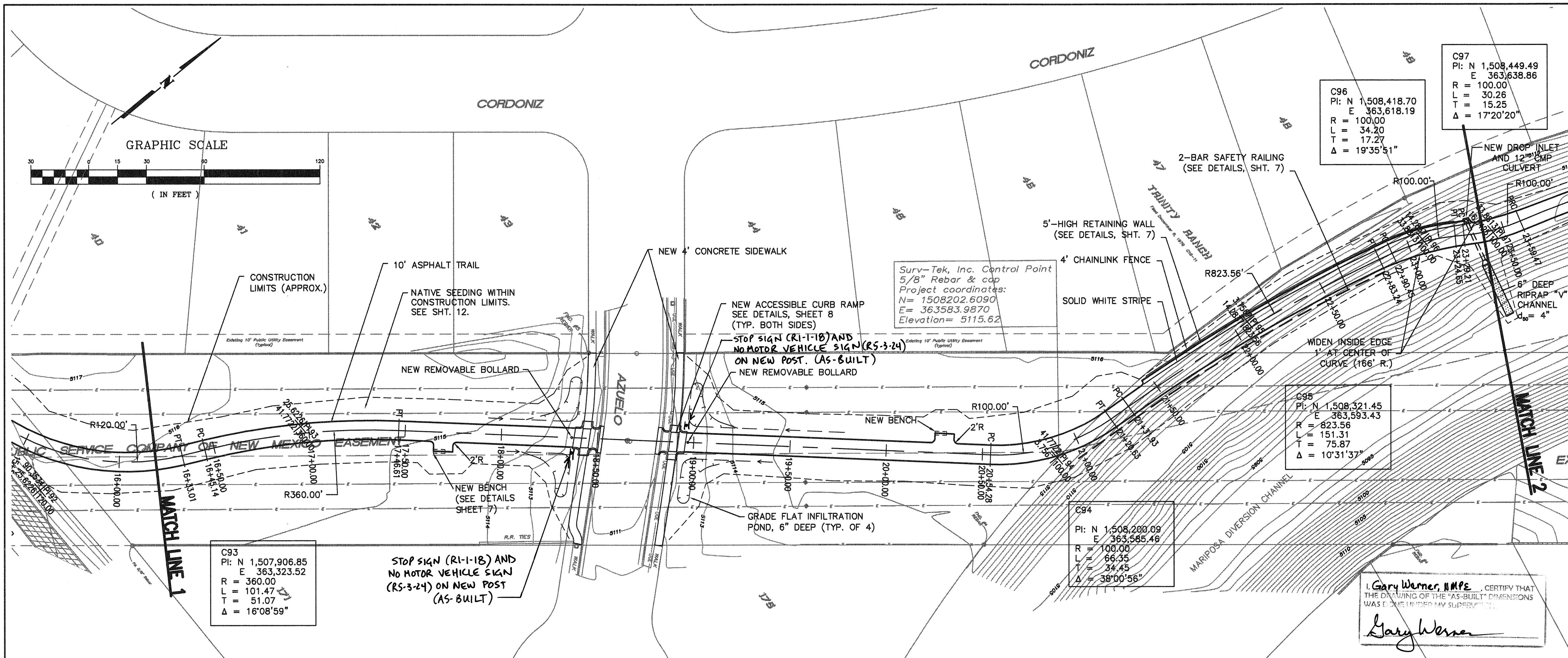
Consulting Surveyors
5549 Paradise Blvd. N.W. Albuquerque, New Mexico 87114
Phone: 505-897-5566 Fax: 505-897-5577

CITY OF ALBUQUERQUE
PARKS AND RECREATION DEPARTMENT
PLANNING AND DESIGN DIVISION

TITLE: **COA TRAILS 2001**
MARIPOSA - UNSER CONNECTION
PLAN AND PROFILE

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED	APPROVED		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		

PROJECT NO. **644605** MAP NO. **F-11** SHEET **3** OF **14**



NOTES:

- STA. 17+65 TO STA. 17+75 (5' RT.) - BUILD 5' WIDE BY 10' LONG ASPHALT PAD AND INSTALL 6' RECYCLED PLASTIC BENCH, PER DETAILS ON SHEET 7.
- STA. 18+36 - INSTALL REMOVABLE BOLLARD (GUARD POST) AT CENTERLINE OF TRAIL, 1' BACK FROM TOP OF CONC. RAMP, PER COA STD. DWG. 2250.
- STA. 18+37 TO STA. 18+97 - BUILD NEW CONCRETE RAMPS AND SIDEWALK CONNECTIONS PER DETAILS ON SHEET 8, AND COA STD. DWGS. 2430, 2432, 2440, AND 2441. REMOVE EXISTING CURB AND GUTTER, AS NEEDED, TO NEAREST JOINT.
- STA. 18+97 - INSTALL REMOVABLE BOLLARD (GUARD POST) AT CENTERLINE OF TRAIL, 1' BACK FROM TOP OF NEW CONC. RAMP, PER COA STD. DWG. 2250.
- STA. 17+87 TO STA. 18+37 - APPLY 4" SOLID YELLOW REFLECTIVE CENTER LINE STRIPE ALONG CENTERLINE OF TRAIL.
- STA. 18+96 TO STA. 19+46 - APPLY 4" SOLID YELLOW REFLECTIVE CENTERLINE STRIPE ALONG CENTERLINE OF TRAIL.
- STA. 19+46 TO STA. 29+31 - APPLY 4" DASHED REFLECTIVE YELLOW STRIPE ALONG CENTERLINE OF TRAIL, EXCEPT THAT STRIPE SHOULD FOLLOW 25' RADIUS (5' FROM RIGHT EDGE OF ASPHALT) THROUGH TRANSITION TO EDGE OF CONCRETE AT STA. 29+26.
- STA. 20+25 TO STA. 20+35 (5' LT.) - BUILD 5' WIDE BY 10' LONG ASPHALT PAD AND INSTALL 6' RECYCLED PLASTIC BENCH, PER DETAILS ON SHEET 7.
- STA. 20+97 (10' RT.) TO STA. 22+83 (7' RT.) - INSTALL 2-BAR SAFETY RAILING 2' FROM EDGE OF TRAIL (TYP.) WIDENING TO 5' FROM EDGE OF TRAIL AT SOUTH END.
- STA. 21+45 (7' LT.) TO STA. 23+30 (7.5' LT.) - BUILD 5' CMU RETAINING WALL PER DETAILS ON SHEET 7. PAVE LEFT TRAIL SHOULDER TO WALL TO PREVENT EROSION AT BASE.
- STA. 21+51 TO STA. 23+24 (8.5' LT.) - INSTALL 173 L.F. 4' HIGH CHAINLINK FENCE WHERE WALL HEIGHT EXCEEDS THREE FEET.
- STA. 23+32 (7' LT.) TO STA. 23+43 (44' RT.) - BUILD NEW DROP INLET WITH "TURTLE BACK" GRATE (NEENAH R-4360-A OR EQUIVALENT) AND 12" CMP CULVERT BENEATH TRAIL. (SEE DETAILS, SHEET 7) PROVIDE TAPERED END SECTION AND RIPRAP SLOPE PROTECTION AT PIPE OUTFALL.
- STA. 22+83 TO STA. 23+29 (RT.) - WIDEN ASPHALT BY 1' THROUGH INSIDE OF CURVE, TO APPROX. 166' RADIUS.
- STA. 23+24 TO STA. 23+65 (LT.) - WIDEN ASPHALT BY 1' THROUGH INSIDE OF CURVE, TO APPROX. 166' RADIUS.
- STA. 21+45 (5' LT.) TO STA. 23+33 (5.5' LT.) - APPLY 4" SOLID WHITE REFLECTIVE PAINTED STRIPE AT EDGE OF TRAIL TO DEFINE PAVED SHOULDER AREA. MAINTAIN 2' CLEARANCE FROM WALL.
- STOP SIGNS AND NO MOTOR VEHICLE SIGNS ADDED AT AZUELO (STA. 18+40 & 18+95) - AS-BUILT

FOR INFORMATION ONLY
SCALE: 1"=30' HORIZ.
1"=6' VERT.

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Water Resources E-mail: rth@rti.com
Landscape Architecture Telephone: (505) 243-7300
Planning Facsimile: (505) 243-7400

SURV TEK, INC.
Consulting Surveyors
5625 Paradise Blvd. N.W. Albuquerque, New Mexico 87114
Phone: 505-897-3566 Fax: 505-897-3577

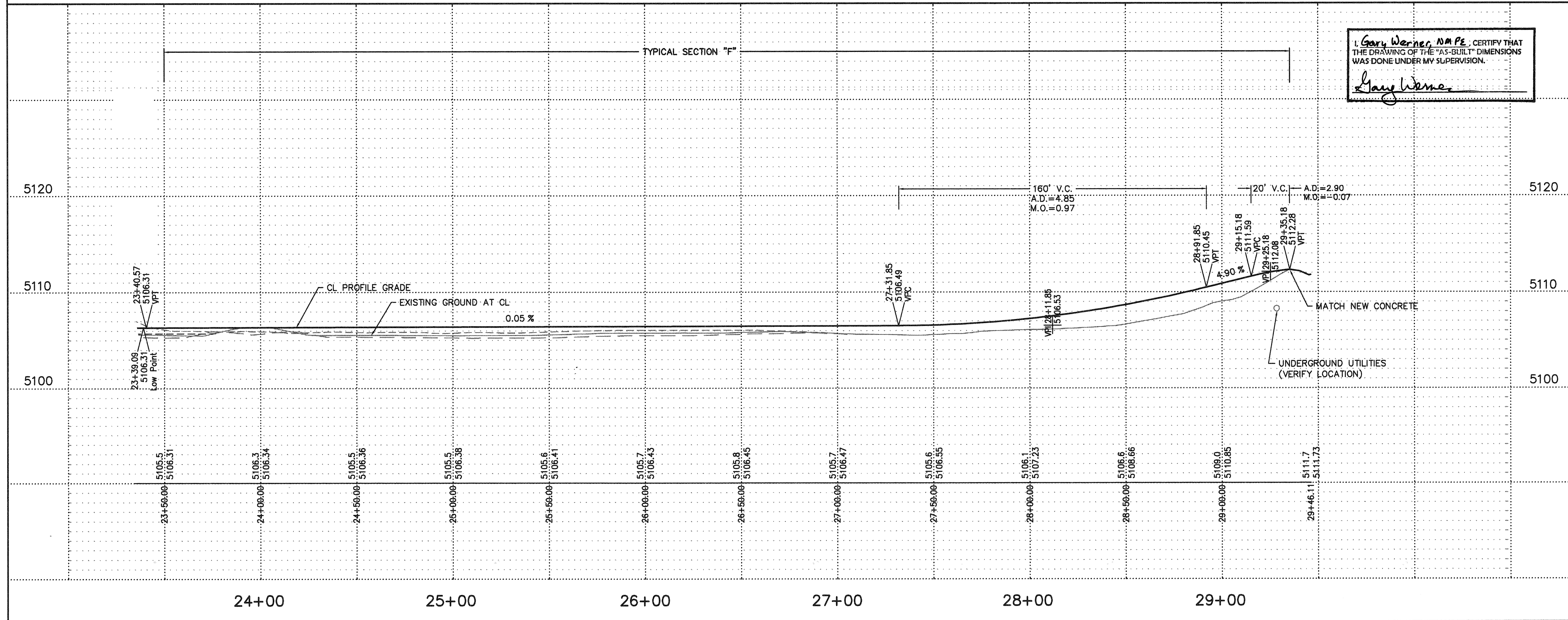
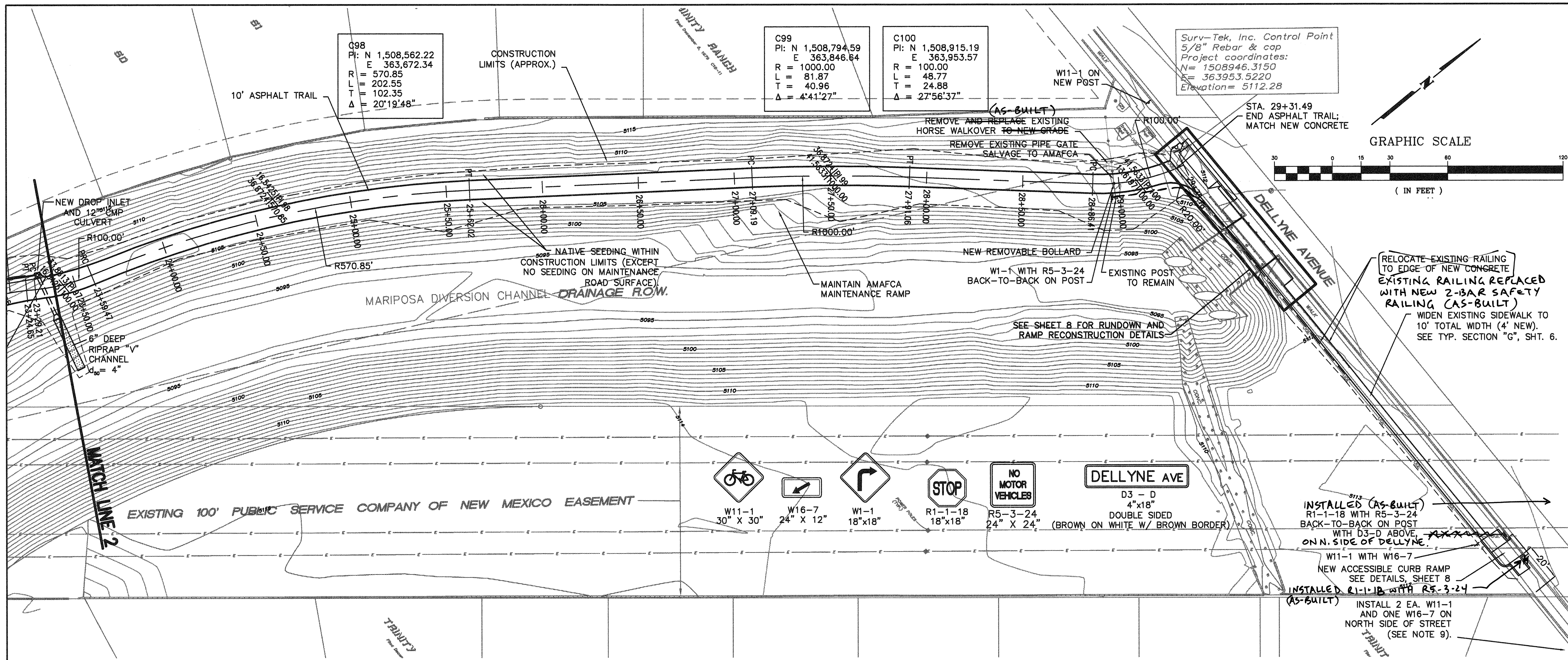
CITY OF ALBUQUERQUE
PARKS AND RECREATION DEPARTMENT
PLANNING AND DESIGN DIVISION

TITLE: **COA TRAILS 2001**
MARIPOSA - USER CONNECTION
PLAN AND PROFILE

DESIGN REVIEW COMMITTEE
APPROVED
MAY 14 2002
CITY ENGINEER

DESIGNED BY RMO
DRAWN BY RMO
CHECKED BY
DATE 8/01
DATE 1/02
DATE
DATE

PROJECT NO. **644605** MAP NO. **E-11 F-11** SHEET **4** OF **14**



NOTES:

- STA. 28+97 (RT. TO LT.) - REMOVE EXISTING PIPE GATE AND HINGE POST; SALVAGE TO AMAFCA. (LOCK POST TO REMAIN AT EDGE OF CHANNEL). INSTALL NEW REMOVABLE BOLLARD AT CENTERLINE OF TRAIL, PER COA STD. DWG. 2250. REMOVE EXISTING TIMBER HORSE WALKOVER WEST OF GATE, AND REPLACE AT NEW FINISHED GRADE AFTER TRAIL CONSTRUCTION IS COMPLETE. **CNOT REPLACED-AS-BUILT**
- STA. 29+35 (10' LT. TO 20' RT.) - REMOVE EXISTING 35' WIDE CONC. DRIVE PAD AND REPLACE WITH NEW 24' WIDE 6" CONCRETE DRIVE PAD. ACCORDING TO DETAILS ON SHEET 8.
- STA. 29+35 (20' RT. TO 82' RT.) - RELOCATE EXISTING PIPE RAILING APPROX. 4' SOUTH; REMOVE EXISTING SIDEWALK RAMP EAST AND WEST OF EXISTING RUNDOWN (TO REMAIN). BUILD 4" CONCRETE SIDEWALK (10' WIDE) AND SUSPENDED RUNDOWN. CROSSING PER DETAILS ON SHEET 8. **EXISTING RAILING REPLACED w/NEW**
- STA. 29+35 (82' RT. TO 277' RT.) - BUILD NEW 4" CONCRETE SIDEWALK (4" WIDE, ADJACENT TO EXISTING 6" SIDEWALK) AND CURB RAMP, PER DETAILS ON SHEET 8 (SEE ALSO TYP. SECTION G, SHEET 6).
- STA. 28+96 (8' RT.) - INSTALL W1-1 "SHARP CURVE" AND RS-3-24 "NO MOTOR VEHICLES" SIGNS BACK TO BACK, (ON SAME POST) 3' FROM EDGE OF TRAIL.
- STA. 29+35 (243' RT.) - INSTALL R1-1-18 "STOP" AND RS-3-24 "NO MOTOR VEHICLES" SIGNS BACK TO BACK ON NEW POST, WITH D3-D "DELLYNE AVE." SIGN ABOVE, 3' BACK FROM EDGE OF RAMP, CENTERED BETWEEN SIDEWALK AND STREET CURBS.
- STA. 29+30 (35' LT.) - INSTALL W11-1 "BICYCLE CROSSING" SIGN ON NEW POST BETWEEN SIDEWALK AND CURB, APPROX. 25' WEST OF NEW DRIVEPAD.
- STA. 29+35 (250' RT.) - INSTALL W11-1 "BICYCLE CROSSING" AND W16-7 "ARROW WARNING" SIGNS 3' FROM EDGE OF CURB AT NEW RAMP. Coordinate final placement with Traffic Operations.
- (NOT SHOWN ON PLANS) - INSTALL W11-1 "BICYCLE CROSSING" AND W16-7 "ARROW" SIGNS AT LEAST 3' FROM BACK OF SIDEWALK AND EDGE OF EXISTING TRAIL ALONG NORTH SIDE OF DELLYNE. INSTALL ADDITIONAL W11-1 SIGN 150' EAST OF EXISTING TRAIL RAMP. COORDINATE FINAL PLACEMENT WITH Traffic Operations.
- APPROX. 49' 2-BAR SAFETY RAILING INSTALLED (STA. 28+95 RT. TO TIE-IN TO NEW RAILING ON DELLYNE.) **AS-BUILT - SEE DETAIL SHEET 8.**

FOR INFORMATION ONLY

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1"=6' VERT.

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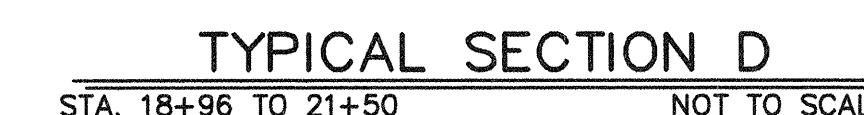
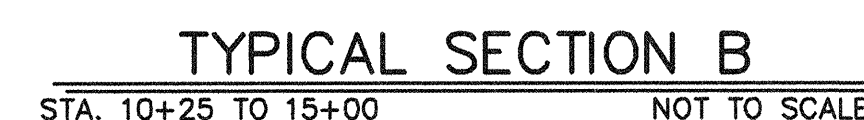
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Phone: 505-897-5366 Fax: 505-897-5377

CITY OF ALBUQUERQUE
PARKS AND RECREATION DEPARTMENT
PLANNING AND DESIGN DIVISION

TITLE: **COA TRAILS 2001**
MARIPOSA - UNSER CONNECTION
PLAN AND PROFILE

Design Review	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE	CITY ENGINEER		

PROJECT NO. **644605** MAP NO. **E-11** SHEET **5** OF **14**



Gary Werne

PROJECT NO.	644605	MAP NO.	E, F-LL	SHEET	6	OF	14
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ENGINEERS SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		STATION NAME: "3-F-10" ACS BRASS TABLET IS LOCATED		CONTRACTOR	
		NO.	BY	DATE	5.2 MILES NW OF DOWNTOWN ALBUQ. ON THE W. RIDGE OF	WORKED BY	DATE
					A VOLCANIC OUTCROP. AT COORS AND I-40, GO NORTH ON	SURVEYOR'S	DATE
					COORS RD .9 MILES TO REDLANDS RD. TURN LT., GO WEST	ACCEPTANCE BY	DATE
					.1 MILES TO ATRISCO DR. TURN RT. AND GO NORTH 1.7	FIELD VERIFICATION BY	DATE
					MILES. STATION IS ABOUT 400' WEST OF THIS POINT.	DRAWINGS CORRECTED BY	DATE
					NORTHING: 1506551.87	MICRO-FILM INFORMATION	
					EASTING: 362216.44	RECORDED BY	DATE
						NO.	

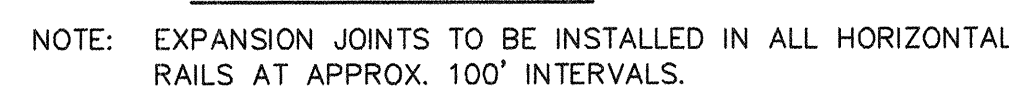
SEAL OF JAMES H. PAGE
REGISTERED PROFESSIONAL ENGINEER
NO. 14778
STATE OF NEW MEXICO

DESIGNED BY RWO DATE 1/02

DRAWN BY RMO DATE 1/02

REVISIONS

DESIGN



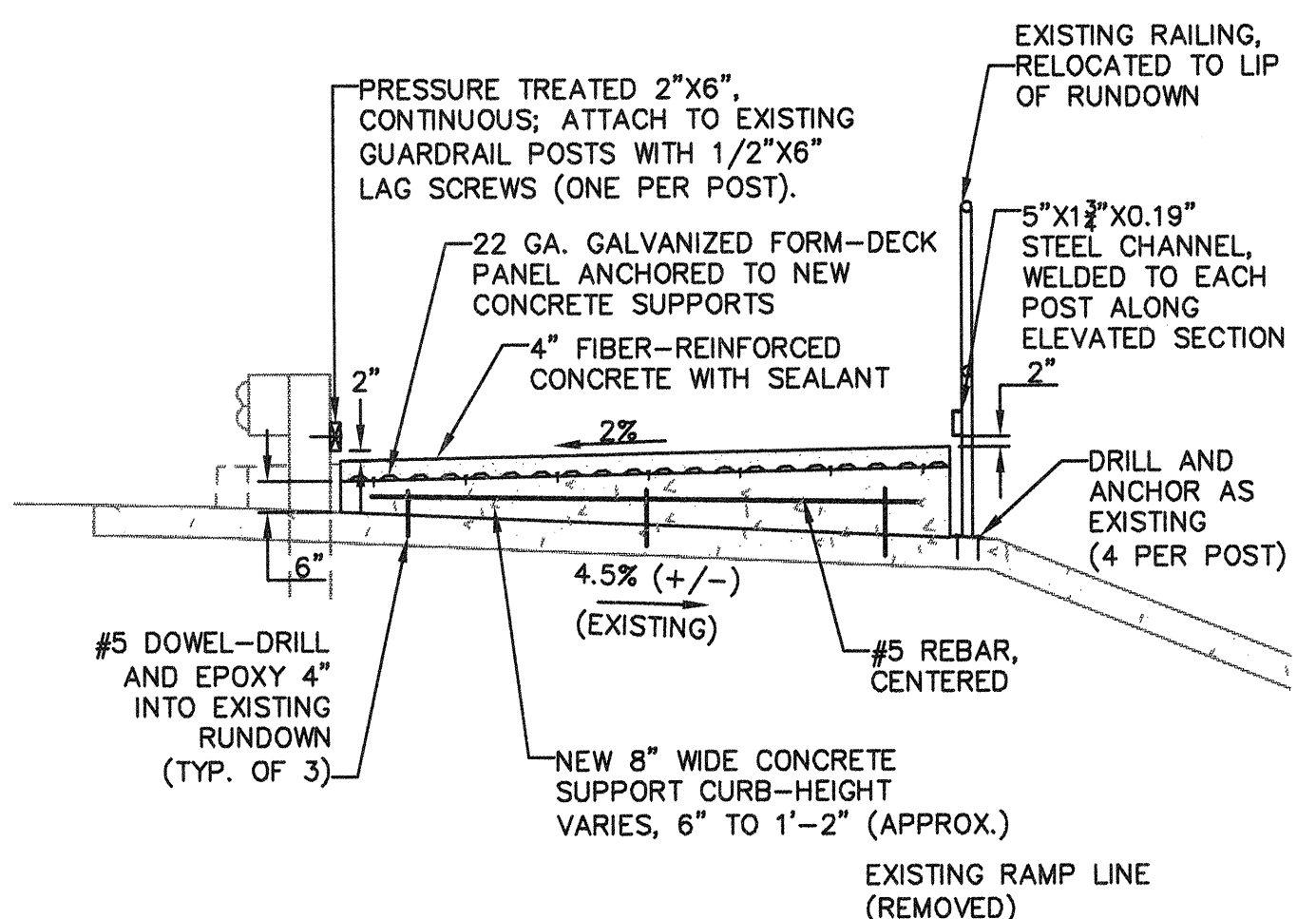
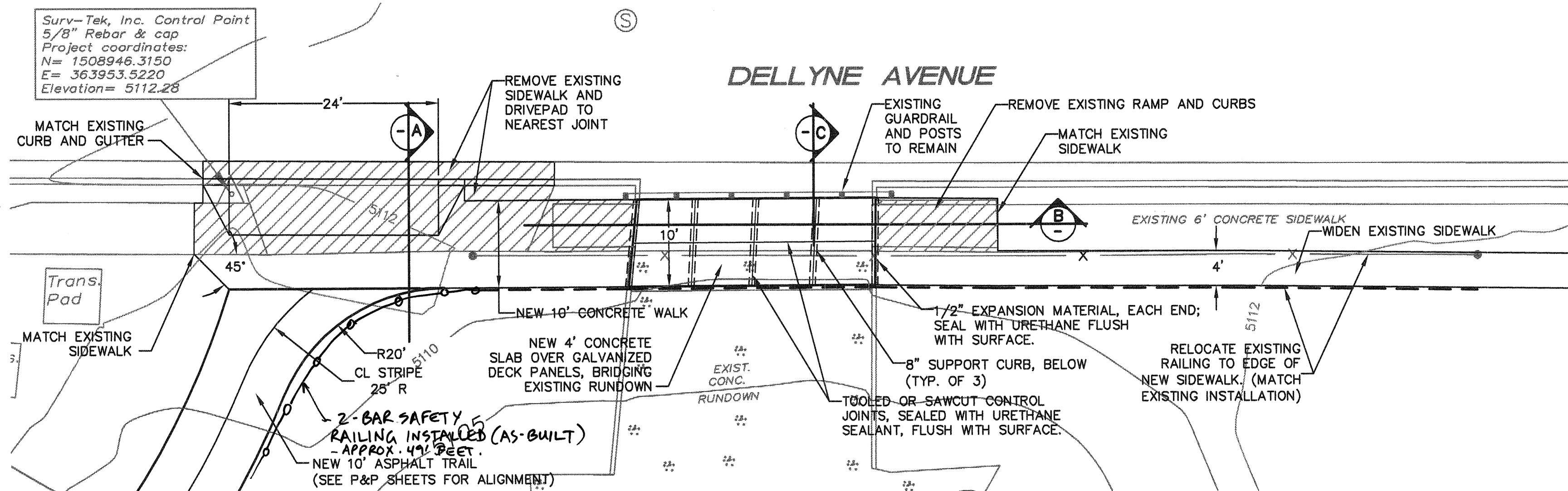
RAILING SLIP JOINT DETAIL

N.T.S.



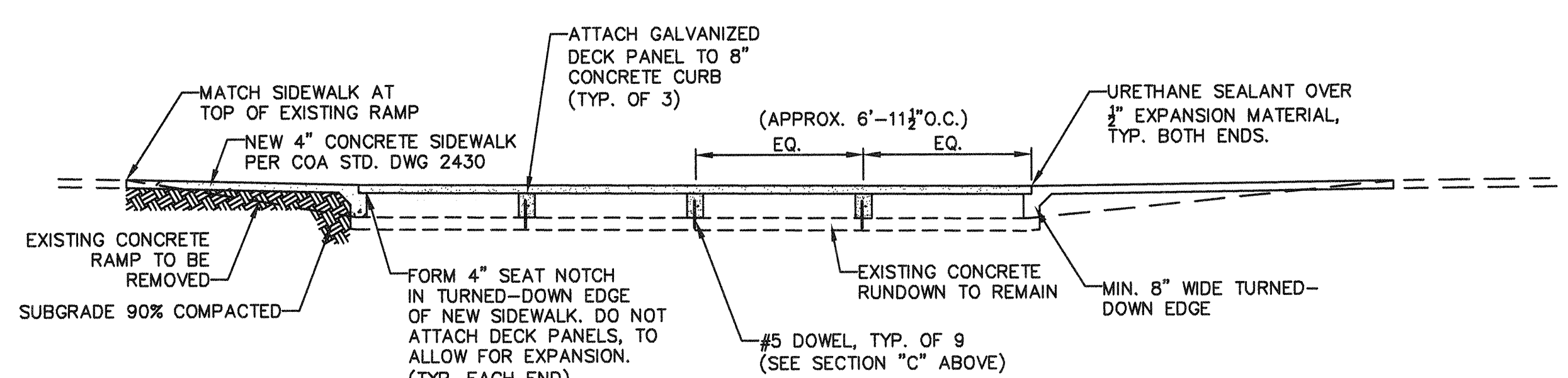
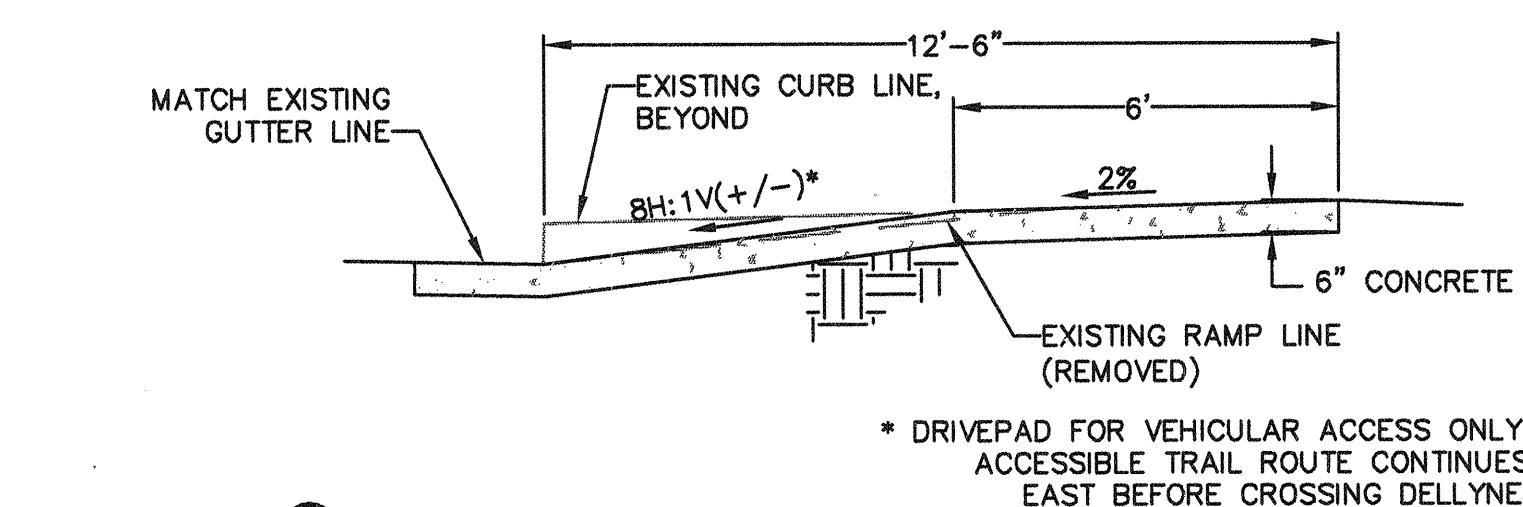
4. PROVIDE PAINT AND PLASTIC COLOR SAMPLES FOR BENCH PRIOR TO ORDERING.

PROJECT NO.	644605	MAP NO.	E-1 F-1	SHEET 7 OF 14
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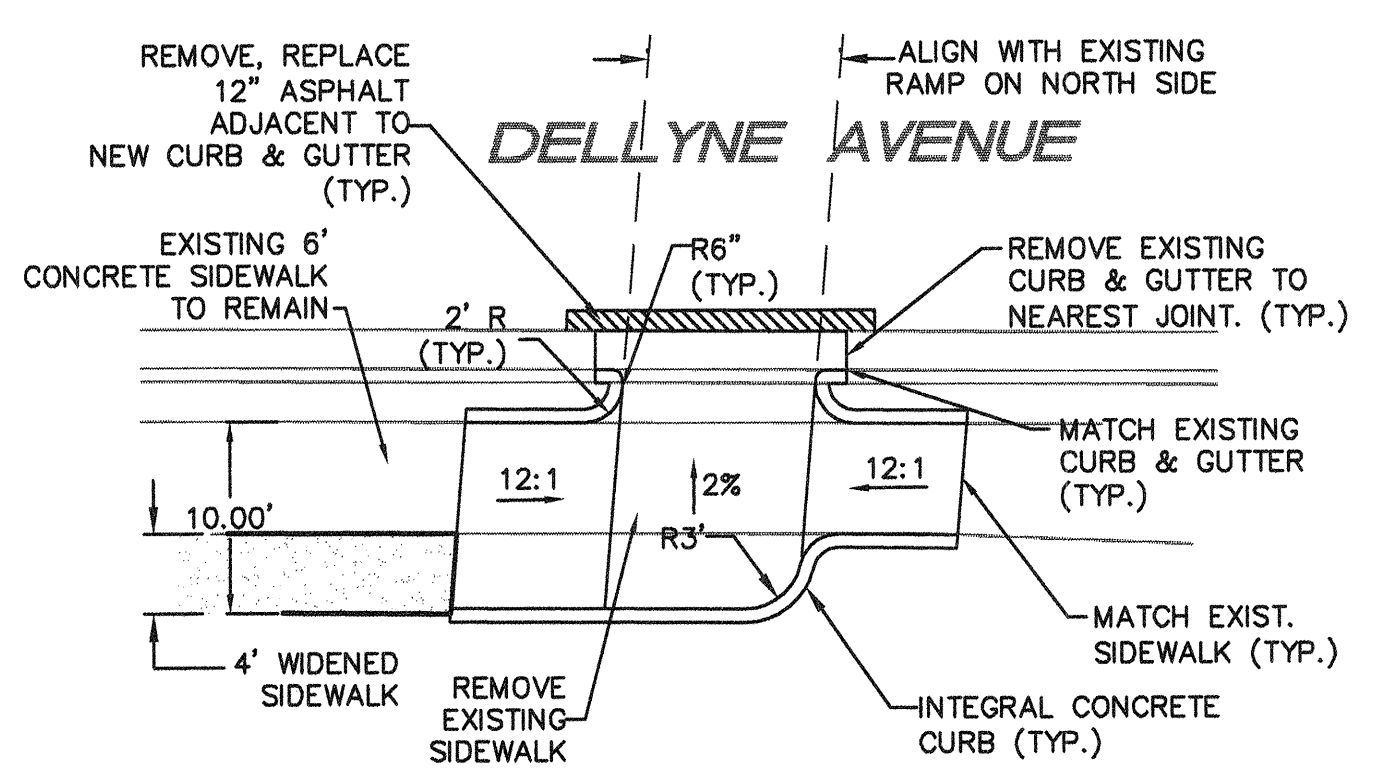
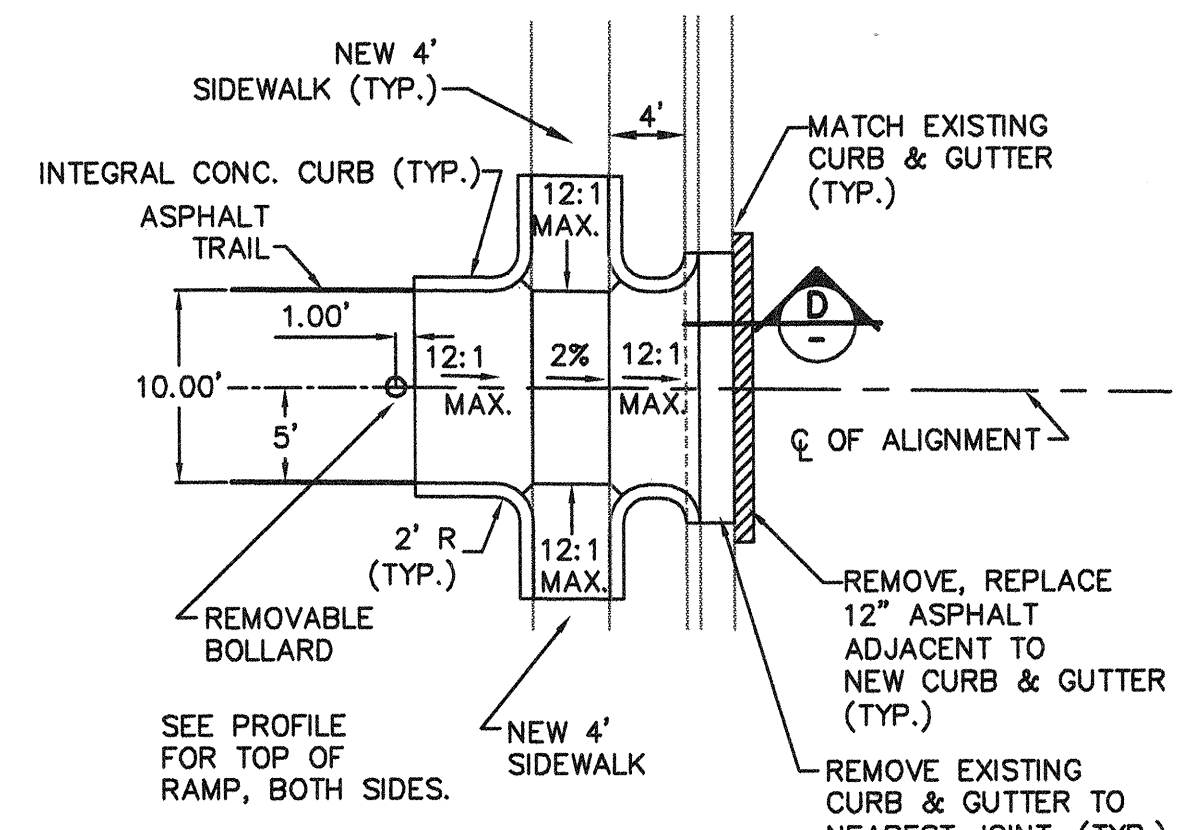
DELLYNE AVE. DRIVEPAD & RUNDOWN MODIFICATION DETAIL
PLAN VIEW

SECTION C
RUNDOWN CROSSING DECK AND SUPPORT



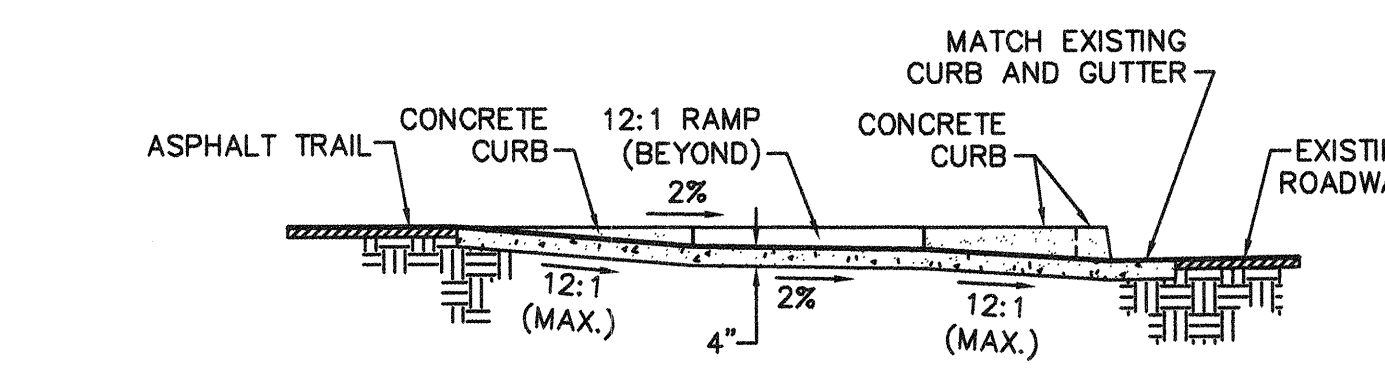
SECTION A
DRIVEPAD/NEW SIDEWALK

SECTION B
RUNDOWN CROSSING



PLAN VIEW

DELLYNE AVE. CURB RAMP DETAILS



RAMP SECTION D

AZUELO CT. CURB RAMP DETAILS

NOTES:
1. CONTROL JOINTS IN NEW SIDEWALK SHALL BE PLACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICES. JOINTS SHALL BE SAWCUT WHEREVER POSSIBLE; OTHERWISE TOOLED JOINTS SHALL BE FILLED WITH URETHANE SEALANT, FLUSH WITH SURFACE OF CONCRETE.

AS BUILT INFORMATION			
STATION NAME: 3.3-F-10" ACS BRASS TABLET IS LOCATED 5.2 MILES NW OF DOWNTOWN ALBUQ. ON THE W. RIDGE OF A VOLCANIC OUTCROP. AT COORS AND I-40, GO NORTH ON COORS RD. 9 MILES TO REDLANDS RD. TURN LT. GO WEST .1 MILES TO ATRISCO DR. TURN RT. AND GO NORTH 1.7 MILES. STATION IS ABOUT 400' WEST OF THIS POINT.	CONTRACTOR	WORK STARTED BY	DATE
		FIELD ACCEPTANCE BY	DATE
		DRAWINGS BY	DATE
		CORRECTED BY	DATE
		RECORDED BY	DATE
		NO.	
		NORTHING: 1506551.87	
		EASTING: 362216.44	
		ELEVATION: 5255.21	

SURVEY INFORMATION			
FIELD NOTES	DATE	BY	NO.

ENGINEERS SEAL
JUNE PAGE
REGISTERED PROFESSIONAL ENGINEER
22 APR 02

FOR INFORMATION ONLY

GARY WERNER, N.M.P.E., CERTIFY THAT THE DRAWING OF THE "AS-BUILT" DIMENSIONS WAS DONE UNDER MY SUPERVISION.
Gary Werner

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CITY OF ALBUQUERQUE
PARKS AND RECREATION DEPARTMENT
PLANNING AND DESIGN DIVISION

TITLE: COA TRAILS 2001
MARIPOSA-UNSER CONNECTION
RAMP AND RUNDOWN DETAILS

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVE MAY 14 2002 DESIGN REVIEW COMMITTEE	APPROVE MAY 14 2002 CITY ENGINEER		
Last Design Update			

PROJECT NO. 644605
MAP NO. E-11
F-11
SHEET 8 OF 14

TEMPORARY EROSION CONTROL MEASURES

Temporary erosion control measures will be required at certain locations until permanent measures are installed. These are listed below by type and location:

Type of Control	From Trail CL Station / Offset	To Trail CL Station / Offset	Quantity	Comment
Silt Fence	10+27 13' right	15+65 30' right	545 l.f.	Along top of channel riprap
Silt Fence	21+00 48' right	29+35 25' right	840 l.f.	Along east edge of existing sidewalk
Silt Fence	29+35 25' right	47+50 39' right	14 l.f.	6' south of existing sidewalk
Silt Fence	29+35 69' right	29+35 119' right	50 l.f.	6' south of existing sidewalk

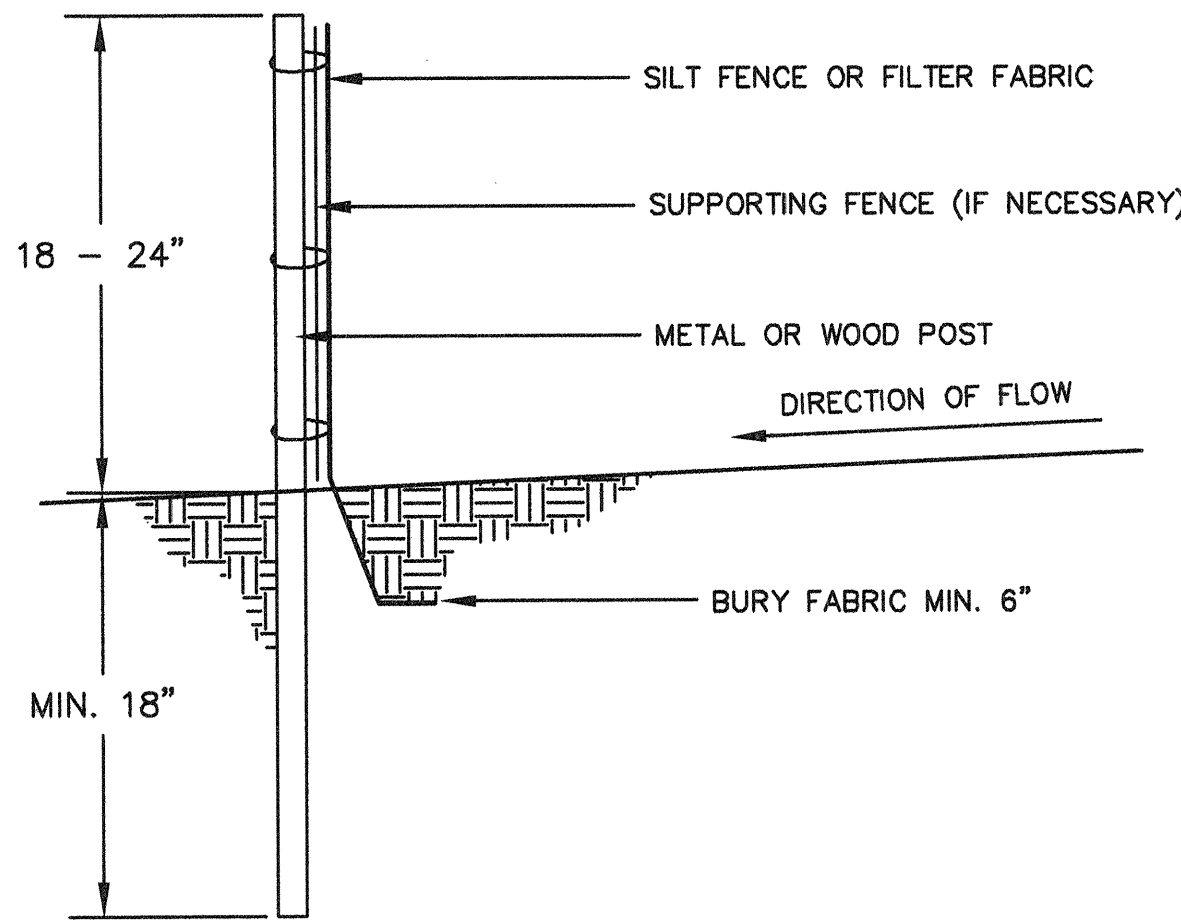
N.I.C.

ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED UPON COMPLETION OF THE PERMANENT MEASURES INDICATED AT RIGHT.

DUST ABATEMENT: All exposed soil areas shall be kept dust-free at all times during construction. Dust abatement measures may include application of water or temporary soil stabilant. If watering equipment is used for dust abatement, this operation shall be given priority over any other use of this equipment. Pits, haul roads, and other areas occupied by the contractor in connection with the work shall be maintained for the duration of the project.

If work operations are suspended or exposed areas will not be worked for more than seven (7) days, the contractor shall apply temporary soil stabilant as approved by the project manager. Application shall be according to manufacturer's instruction, unless such application is not producing acceptable results. In this case, rate of application should be increased until acceptable results are obtained.

Dust abatement activities as described above are incidental to the project, and no direct payment shall be made.



SILT FENCE DETAIL

NOT TO SCALE

PERMANENT EROSION CONTROL MEASURES

All soil areas exposed during construction (except trail shoulders) shall be treated with native seeding, in accordance with section 1012 of the COA standard specifications, as modified in the project supplemental technical specifications. The native seed mix for this project shall be as follows:

COMMON NAME	SCIENTIFIC NAME	LBS. PLS/AC
GRASSES		
Sideoats Grama	Bouteloua curtipendula	2
Blue Grama	Bouteloua gracilis "Hachita"	3
Galleta	Hilaria jamesii "Viva"	3
Indian Ricegrass	Oryzopsis hymenoides	2
WILDFLOWERS		
Purple Aster	Aster bigelovii	0.5
Desert Marigold	Baileya multiradiata	0.5
Dakota Verbena	Verbena bipinnatifida	1
TOTAL:		12

All slopes steeper than 3H:1V shall receive 2" layer of 3/4" Santa Ana Tan (or equivalent) gravel mulch in addition to native seeding. Seeding of these areas shall be in accordance with section 1012.6.2.3 of the City Std. Specifications: seeding with gravel mulch.

FOR INFORMATION ONLY

I, Gary Werner, NMPE, CERTIFY THAT THE DRAWING OF THE "AS-BUILT" DIMENSIONS WAS DONE UNDER MY SUPERVISION.
Gary Werner

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Civil Engineering 5501 Jefferson Blvd. NE, Suite 200
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Landscape Architecture Telephone: (505) 243-7300
Planning Facsimile: (505) 243-7400

CITY OF ALBUQUERQUE
PARKS AND RECREATION DEPARTMENT
PLANNING AND DESIGN DIVISION

TITLE: COA TRAILS 2001
MARIPOSA DIVERSION TRAIL CONNECTION
EROSION CONTROL AND REVEGETATION SHEET

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED MAY 14 2002 DESIGN REVIEW COMMITTEE	APPROVED MAY 14 2002 CITY ENGINEER		

PROJECT NO. 644605 MAP NO. EF-11 SHEET 12 OF 14

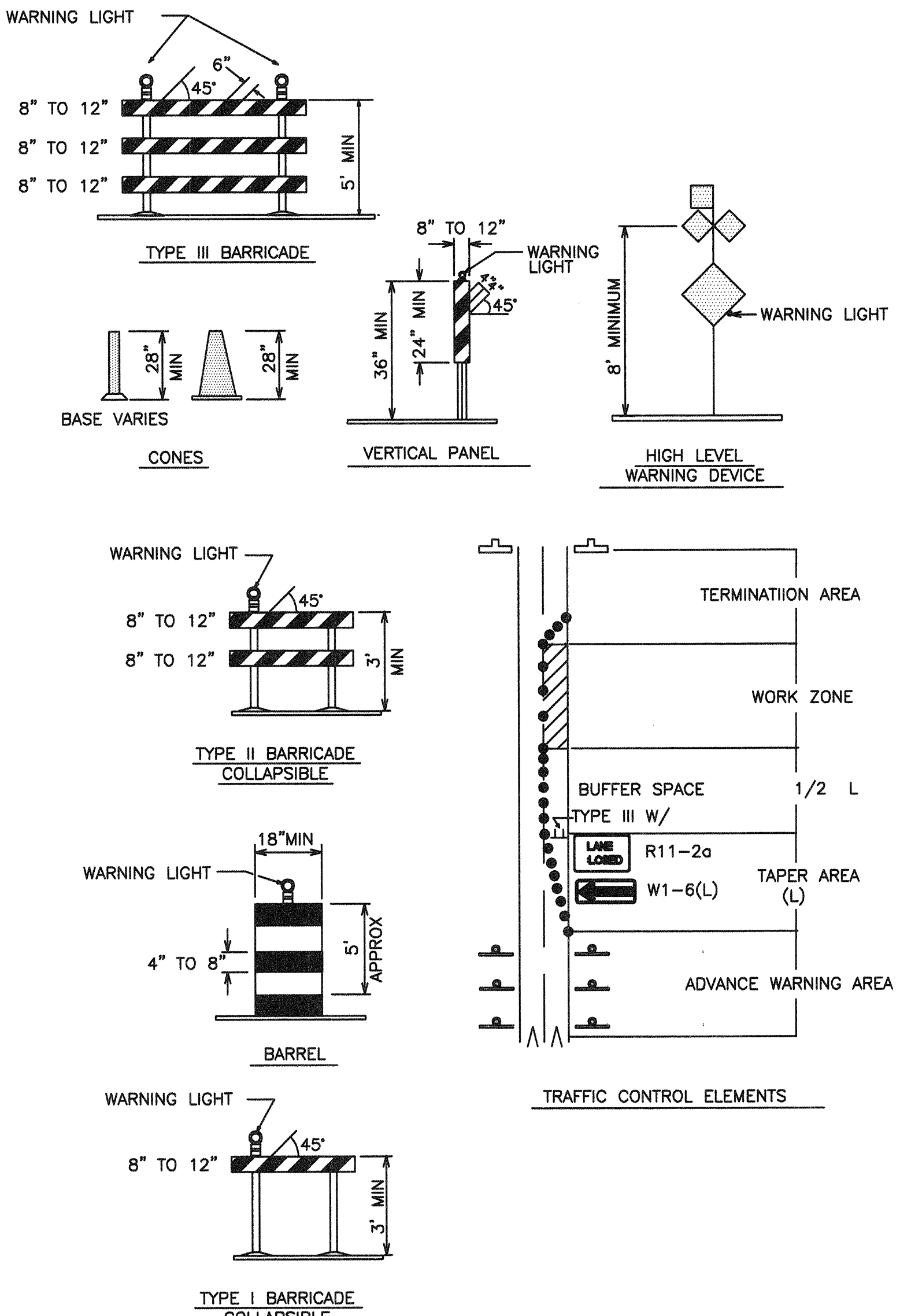
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
JUNE PAGE JUN 14 2002 REGISTERED PROFESSIONAL ENGINEER 22 AP '02		NO.	BY	DATE	STATION NAME: "3-F-10" ACS BRASS TABLET IS LOCATED 5.2 MILES NW OF DOWNTOWN ALBUQ. ON THE W. RIDGE OF A VOLCANIC OUTCROP. AT COORS AND I-40, GO NORTH ON COORS RD. 9 MILES TO REDLANDS RD. TURN LT., GO WEST .1 MILES TO ATRISCO DR. TURN RT. AND GO NORTH 1.7 MILES. STATION IS ABOUT 400' WEST OF THIS POINT.	CONTRACTOR	DATE
DESIGNED BY		NO.	BY	DATE	REMARKS	WORK STARTED BY	DATE
DRAWN BY		NO.	BY	DATE	REVISIONS	FIELD ACCEPTANCE BY	DATE
CHECKED BY		NO.	BY	DATE	DESIGN	FIELD CORRECTION BY	DATE
		NO.	BY	DATE	REVISIONS	RECORDED BY	DATE
		NO.	BY	DATE	REVISIONS	NO.	DATE

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
 3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION, WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.
27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.



LEGEND

WORK AREA

BARRICADE - TYPE I, TYPE II, OR BARREL

BARRICADE - TYPE III

VERTICAL PANEL

WARNING SIGN

DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET

FLAGMAN POSITION

SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE STREET LIMIT OF THE STREET

TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED LIMIT (MPH)	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT

40 MPH OR LESS $L = \frac{WS^2}{60}$

40 MPH OR GREATER $L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

SIGN FACE DETAILS

ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

FOR INFORMATION ONLY

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: TRAFFIC CONTROL
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
COA	STD		

CITY PROJECT NO. 644605 ZONE MAP NO. E,F-11 SHEET 13 OF 14

ENGINEER'S SEAL				SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
NO.		BY		DATE		CONTRACTOR		DATE	
		J.D.L.				WORK STARTED BY		DATE	
		REVISED GENERAL NOTE				INSPECTOR'S FIELD		DATE	
		REMARKS		BY		VERIFICATION BY		DATE	
		REVISIONS				CORRECTED BY		DATE	
		DESIGN				MICRO-FILM		INFORMATION	
DESIGNED BY BOHANNAN HUSTON		DATE 5-97				RECORDED BY		DATE	
DRAWN BY BOHANNAN HUSTON		DATE 5-97						NO.	
CHECKED BY R'HANNAN HUSTON		DATE 5-97							