

HERITAGE UNIT 1  
DRB PROJECT NO. 1003354  
DRB APPLICATION NO. 04DRB-00457

HERITAGE UNIT 2  
DRB PROJECT NO. 1003353  
DRB APPLICATION NO. 04DRB-00452

As-Built Block Information

Contractor: TLC Company, Inc.  
Work Staked By: Rio Grande Surveys  
Inspectors Acceptance By: COA/Bill Woodward/Mike Sedillo  
Field Verification By: COA Same as Above  
Drawings Corrected BY: Vector Engineering, Karen Aspelin



NOTES:

1. CONTRACTOR SHALL WORK CONTINUOUSLY, 24 HOURS PER DAY, ON ALL ARTERIAL ROADWAYS WHEN TRAFFIC LANES ARE CLOSED TO TRAFFIC UNLESS THE WORK VIOLATES THE CITY'S NOISE ORDINANCE.
2. IF THE CONTRACTOR IS NOT ALLOWED TO WORK AT NIGHT DUE TO THE CITY'S NOISE ORDINANCE, THE CONTRACTOR SHALL OPEN ALL TRAFFIC LANES TO TRAFFIC WITH THE PROPER USE OF TRENCH PLATES DURING NON-WORKING HOURS, AND MUST WORK MINIMUM HOURS FROM 9:00 A.M. TO 3:00 P.M. MONDAY THROUGH SATURDAY.
3. ARTERIAL STREETS ARE AS INDICATED IN THE "LONG RANGE ROADWAY SYSTEM" MAP PUBLISHED BY THE MID-REGION COUNCIL OF GOVERNMENTS (MRCOG).

PLANS FOR CONSTRUCTION

PASEO DEL NORTE AND  
RAINBOW BLVD. SIGNAL PLAN  
PROJECT #738486

INDEX OF SHEETS

- 1 TITLE SHEET & GENERAL NOTES  
2 SUMMARY OF QUANTITIES & MISC. SCHEDULES  
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6 TRAFFIC SIGNAL NOTES  
7 SIGNAL PLAN  
8 SIGNAL PLAN-FUNCTION CHARTS  
9 SIGNAL PLAN-CONDUITS AND CABLES  
10 SIGNING AND STRIPING PLAN

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

NAME *Karen Aspelin* 09/12/11  
DATE



FINAL SUBMITTAL

APPROVED AS RECORD DRAWINGS  
DMD/CSD  
CITY CONSTRUCTION ENGINEER  
DATE: 12 Oct. 2011



GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1988 EDITION THROUGH UPDATE #7, INCLUDING AMENDMENT NO. 1, AND WILL BE REFERRED TO HEREIN AS "STANDARD SPECIFICATIONS".
2. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY OR EASEMENTS MUST BE DONE FROM APPROVED WORK ORDER DOCUMENTS FROM THE CITY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. CONTRACTOR AGREES THAT HE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
5. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650 SUBPART P.
6. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
7. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. ONLY THE CITY SURVEYOR SHALL REPLACE SURVEY MONUMENTS. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO STANDARD SPECIFICATIONS SECTION 4.4.
8. SEVEN (7) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL SUBMIT TO DMD CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE DMD CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF STANDARD SPECIFICATIONS. PERMIT REQUESTS MAY BE DENIED OR DELAYED DUE TO CONFLICTS WITH OTHER PROJECTS IN THE AREA.
9. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
10. CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
11. AT HIS OWN EXPENSE, CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS, CURB AND GUTTER, WHEELCHAIR RAMPS, AND SIDEWALK DURING CONSTRUCTION APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE, PER STANDARD SPECIFICATIONS.
12. ALL STREET STRIPING, ALTERED OR DESTROYED, SHALL BE REPLACED WITH THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS BY CONTRACTOR TO SAME LOCATION AS EXISTING, OR AS INDICATED BY THIS PLAN SET. CONTRACTOR SHALL COORDINATE WITH CITY TRAFFIC OPERATIONS.
13. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
14. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND MAINTAIN ALL CONSTRUCTION SIGNING UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY.
15. EXISTING UTILITY LINE LOCATIONS ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION OF ANY SUCH EXISTING LINES IS BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.
16. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES.
17. REMOVALS SHALL BE DISPOSED OF OFF-SITE AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
18. WHEN ABUTTING EXISTING PAVEMENT TO NEW, SAWCUT EXISTING PAVEMENT TO A STRAIGHT EDGE AND AT A RIGHT ANGLE, OR AS APPROVED BY THE FIELD ENGINEER. REMOVAL OF BROKEN OR CRACKED PAVEMENT WILL ALSO BE REQUIRED.
19. REMOVAL OF EXISTING CURB AND GUTTER OR SIDEWALK SHALL BE TO THE NEAREST JOINT OR SAW CUT.



UTILITY COMPANY CONTACTS

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4625 Edith Blvd., NE  
Albuquerque, New Mexico 87107  
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**McLeodUSA**  
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**QWEST LONG DISTANCE**  
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(505) 246-0501

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BRIAN KURITA  
23751 N 23RD AVE.  
PHOENIX, AZ 85085  
(480) 226-7725



CITY ITEM NO.	DESCRIPTION	UNIT	QTY.
SIGNAL IMPROVEMENTS			
421.010	METER PEDESTAL (SIGNAL, SIX CIRCUIT)	EACH	1
421.015	SERVICE CONNECTION (SIGNAL)	EACH	1
422.003	TRAFFIC SIGNAL PEDESTAL POLE, 13 FEET	EACH	<del>4</del> 4
422.019	TRAFFIC SIGNAL MASTARM, 35-FOOT ARM, TYPE III, TROMBONE	EACH	2
422.021	TRAFFIC SIGNAL MASTARM, 40-FOOT ARM, TYPE III, TROMBONE	EACH	2
423.001	TRAFFIC SIGNAL FOUNDATION FOR PEDESTAL POLE	EACH	<del>4</del> 4
423.002	TRAFFIC SIGNAL MASTARM FOUNDATION	EACH	4
423.003	TRAFFIC SIGNAL CONTROLLER FOUNDATION (TYPE M & P CABINET)	EACH	1
424.011	ELECTRICAL CONDUIT, 3", INCLUDING TRENCHING, BACKFILL, PATCHING, PUSHING, BORING & JACKING	LIN.FT.	<del>1700</del> 1605
424.1X	ELECTRICAL CONDUIT, 4", INCLUDING TRENCHING, BACKFILL, PATCHING, PUSHING, BORING & JACKING	LIN.FT.	<del>385</del> 0
425.003	ELECTRICAL PULL BOX (LARGE)	EACH	6
425.020	TRAFFIC SIGNAL MANHOLE	EACH	1
426.001	SINGLE CONDUCTOR #2	LIN.FT.	<del>2540</del> 1764
426.003	SINGLE CONDUCTOR #6	LIN.FT.	<del>1760</del> 1319
426.010	MULTI-CONDUCTOR CABLE, #5	LIN.FT.	<del>1760</del> 1197
426.011	MULTI-CONDUCTOR CABLE, #7	LIN.FT.	<del>280</del> 309
426.014	MULTI-CONDUCTOR CABLE, #20	LIN.FT.	<del>1285</del> 1158
427.002	3 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH	9
427.004	5 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH	5
427.0XX	PEDESTRIAN SIGNAL, L.E.D., COUNTDOWN	EACH	8
427.031	3 SECTION BACKPLATE	EACH	5
427.033	5 SECTION BACKPLATE	EACH	3
428.010	PUSH BUTTON STATION	EACH	8
428.050	LOOP LEAD-IN CABLE	LIN.FT.	80
428.071	PHASE SELECTOR MODULE 2 CHANNEL	EACH	1
428.075	OPTICAL DETECTOR 1D/1C	EACH	4
428.078	OPTICAL DETECTOR CABLE	LIN.FT.	<del>1285</del> 891
428.090	MACHINE VISION VEHICLE DETECTION SYSTEM	EACH	1
428.092	VIDEO COAXIAL CABLE	LIN.FT.	<del>1280</del> 873
428.093	VIDEO POWER CABLE	LIN.FT.	<del>1280</del> 873
428.094	VIDEO CAMERA	EACH	4
429.001	TRAFFIC ACTUATED CONTROLLER	EACH	1
429.021	8 PHASE DUAL RING CONTROLLER CABINET	EACH	1
432.001	ROADWAY LUMINAIRE, TYPE 250S	EACH	4
ROADWAY IMPROVEMENTS			
205.010	FILL, BORROW, HAUL & COMP	CU.YD.	<del>0</del> 0
301.020	SUBGRADE PREP, 12"	SQ.YD.	<del>559</del> 559
302.01X	AGGREGATE BASE COURSE, CRUSHED, 5" AT 95% COMPACTION	SQ.YD.	<del>719</del> 719
336.022	ASPHALT CONCRETE, SUPERPAVE, 2"	SQ.YD.	<del>733</del> 733
336.120	TACK COAT	SQ.YD.	<del>0</del> 0
340.023	WHEELCHAIR ACCESS RAMP, 4" PCC	SQ.YD.	38
340.110	HEADER CURB, PCC	LIN.FT.	<del>103</del> 103
341.010	ASPHALT CONCRETE CURB, MACHINE EXTRUDED	LIN.FT.	<del>135</del> 135
343.020	EX. PAVEMENT, ASPHALT CONCRETE < 4" THICK, SAWCUT, REMOVE AND DISPOSE	SQ.YD.	<del>187</del> 187
343.070	EX. CURB, ASPHALT CONCRETE, REMOVE AND DISPOSE	LIN.FT.	<del>45</del> 45
346.110	MEDIAN PAVEMENT, 4" THICK, COLORED PC CONCRETE, INCL. SUBGRADE COMPACTION	SQ.FT.	<del>140</del> 140
441.001	REFLECTORIZED PLASTIC PAVEMENT MARKING, 4" WIDTH	LIN.FT.	<del>344</del> 344
441.004	REFLECTORIZED PLASTIC PAVEMENT MARKING, 12" WIDTH	LIN.FT.	<del>932</del> 932
441.005	REFLECTORIZED PLASTIC PAVEMENT MARKING, 24" WIDTH	LIN.FT.	<del>0</del> 0
441.010	REFLECTORIZED PLASTIC ARROW, RIGHT	EACH	2
441.011	REFLECTORIZED PLASTIC ARROW, LEFT	EACH	2
441.020	REFLECTORIZED PLASTIC WORD, ONLY	EACH	1
443.101	REMOVAL OF PAVEMENT STRIPE	LIN.FT.	<del>723</del> 723
450.001	ALUMINUM PANEL SIGN	SQ.FT.	<del>19</del> 19
450.101	SIGN POST & BASE POST, REMOVE AND SALVAGE	EACH	8
450.102	SIGN POST & BASE POST, REMOVE AND RELOCATE	EACH	1
XXXXX	DETECTABLE WARNING SURFACE	SQ.FT.	60
340.050a	Curb & Gutter, Std., PCC	LIN.FT.	60
343.140	Sawcut Asphalt	LIN.FT.	240
202.010	Exc. & Disp., Unclass.	CU.YD.	12

SURFACING SCHEDULE			301.02		302.01X			336.022			336.022			336.12	
			Subgrade Prep		Aggregate Base Course, 5"			HMA SP III Complete (2" LIFT)			HMA SP IV Complete (2" LIFT)			Asphalt Material for Tack Coat	
Sta to Sta	Description	Length (ft)	Width (ft)	Area (SY)	Width (ft)	Depth (in)	Area (SY)	Width (ft)	Depth (in)	Area (SY)	Width (ft)	Depth (in)	Area (SY)	Width (ft)	Area (SY)
10+00 to 10+85	NEW PAVEMENT FOR RIGHT TURN TAPER (1ST LIFT)	85	8.4	79	8.4	5	79	7.1	2	67				7.1	67
10+00 to 10+85	NEW PAVEMENT FOR RIGHT TURN TAPER (2ND LIFT)	85						7.1	2	67					
10+85 to 12+02	NEW PAVEMENT FOR RIGHT TURN LANE (1ST LIFT)	117	16.8	218	16.8	5	218	14.11	2	183				14.11	183
10+85 to 12+02	NEW PAVEMENT FOR RIGHT TURN LANE (2ND LIFT)	117						14.11	2	183					
12+02 to 12+51	NEW PAVEMENT AROUND CURB RADIUS (1ST LIFT)			90		5	90		2	90					90
12+02 to 12+51	NEW PAVEMENT AROUND CURB RADIUS (2ND LIFT)								2	90					
	NEW ASPHALT TRAIL AT SW CORNER	36	6	24							6	2	24		
	NEW ASPHALT TRAIL AT SE CORNER	43	6	29							6	2	29		
	NEW ASPHALT AT SOUTH MEDIAN NOSE (1ST LIFT)			77			77		2	77					77
	NEW ASPHALT AT SOUTH MEDIAN NOSE (2ND LIFT)								2	77					
Project Total				\$17			465			835			53		#17

\*\* For Contractor's Information Only

Estimated Surfacing Factors						
Item	PG 64-22	PG 70-28+	Unit Weight (lb/cy)	Gallons/ SY	Gallons/ Ton	Hydrated Lime
Base Course			3950			
HMA (SPIII)	6.00%		4086			1.50%
Asphalt for Tack Coat				0.08	240	
Asphalt for Prime Coat				0.45	240	
OGFC		6.50%	3640			1.00%

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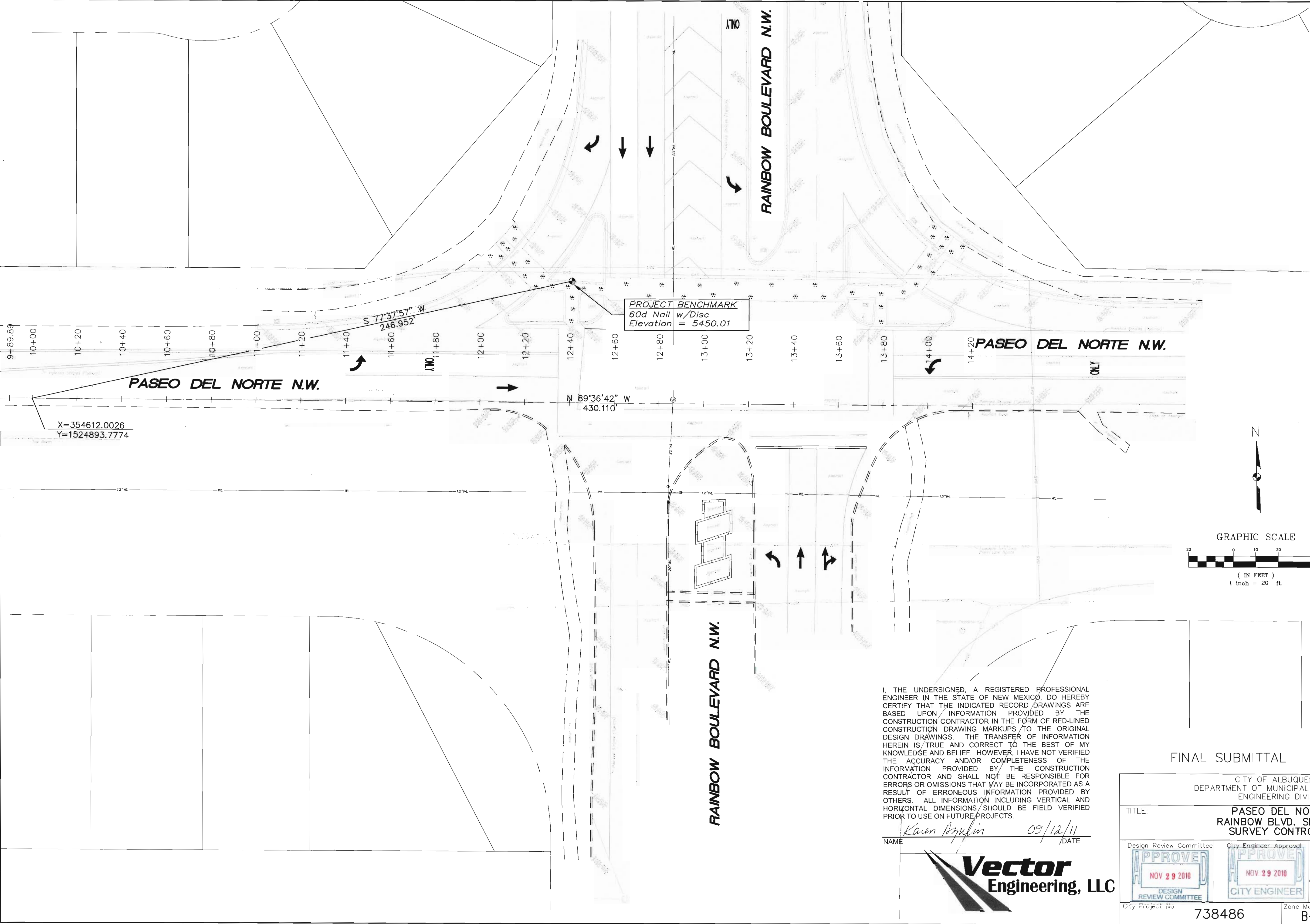
Karen Angulin 09/12/11  
NAME DATE



FINAL SUBMITTAL

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION			
TITLE: PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN SUMMARY OF QUANTITIES AND MISC. SCHEDULES			
Design Review Committee APPROVE NOV 29 2010 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVE NOV 29 2010 CITY ENGINEER	City Project No. 738486	Zone Map No. B-9
Sheet 2		Of 10	





SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	BY	DATE	STATION 5-B9 IS LOCATED AT THE INTERSECTION UNVERSE BLVD. AND PASEO DEL NORTE N.W. THE STATION IS ON THE HEADER CURB IN THE N.W. TRAFFIC CONTROL TURN ISLAND OF THE INTERSECTION STAMPED "5-B9 2003" DATUM ELEV=5432.303 NAD 83 NORTHING=1524927.88 EASTING=357543.86	CONTRACTOR	DATE
				WORK BY	DATE
				ACCEPTANCE BY	DATE
				FIELD BY	DATE
				DRAWINGS BY	DATE
				CORRECTED BY	DATE
				MICRO-FILM INFORMATION	DATE
				RECORDED BY	DATE
				NO.	

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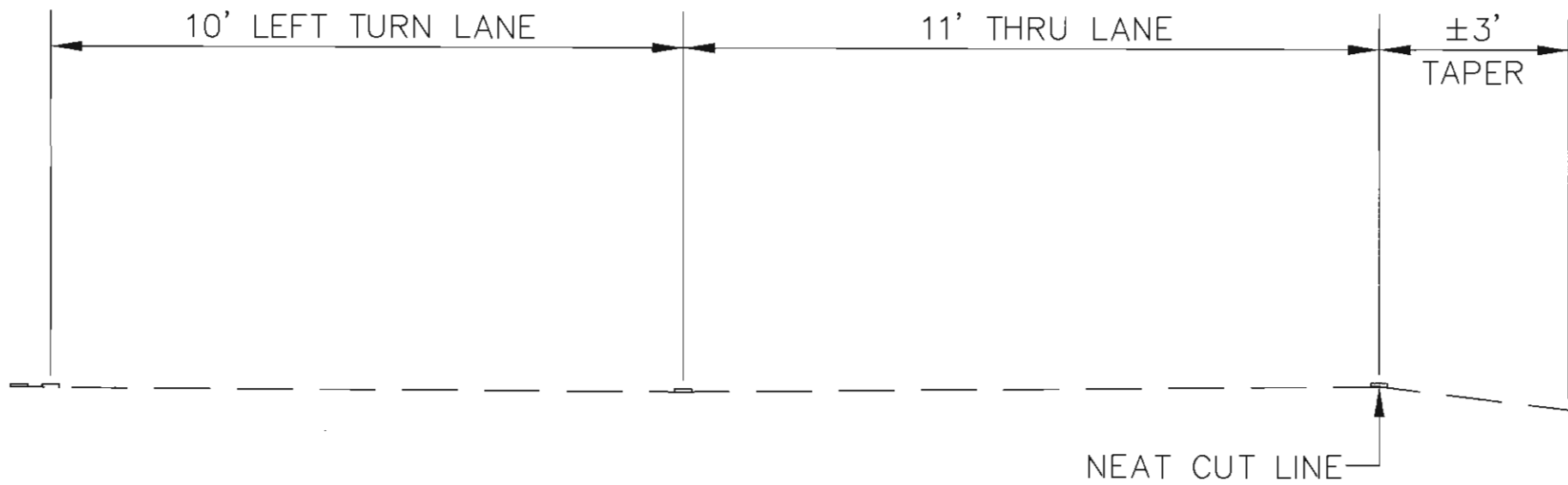
NAME Karen Aspin DATE 09/12/11



FINAL SUBMITTAL

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION			
TITLE: PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN SURVEY CONTROL SHEET			
Design Review Committee	City Engineer Approval	No. / Day / Yr.	No. / Day / Yr.
APPROVED NOV 29 2010 DESIGN REVIEW COMMITTEE	APPROVED NOV 29 2010 CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
738486	B-9	3	10





EXISTING TYPICAL SECTION

① POINT DATA		
NO.	X	Y
1	354840.774	1524869.170
2	354836.021	1524862.119
3	354845.289	1524853.795
4	354848.683	1524848.921
5	354852.315	1524842.652
6	354852.612	1524837.219
7	354848.053	1524826.901

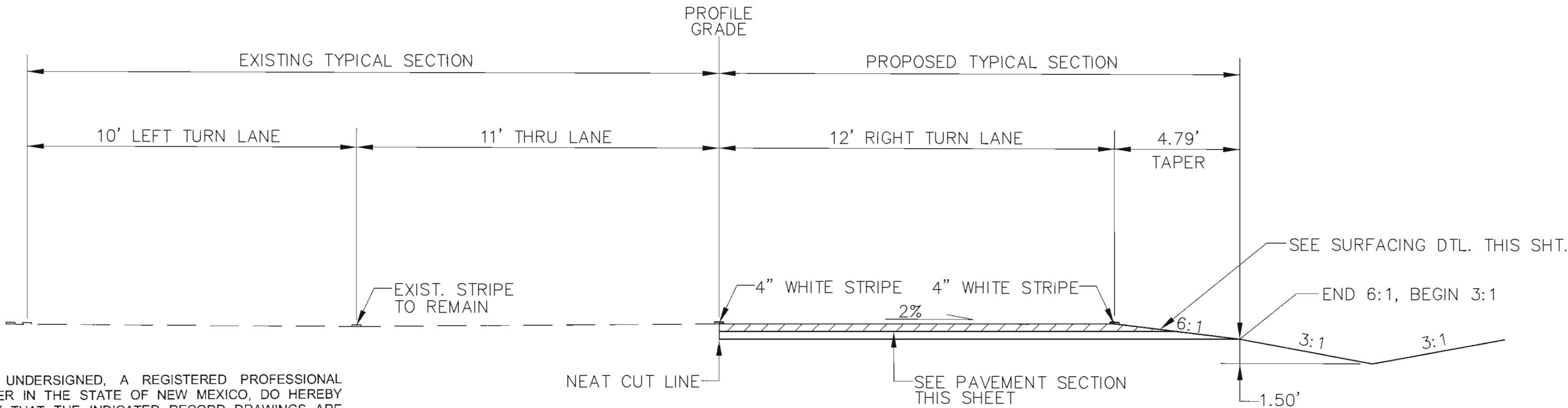
① POINT DATA		
NO.	X	Y
8	354847.135	1524820.464
9	354852.642	1524820.263
10	354853.101	1524823.481
11	354858.100	1524834.794
12	354855.503	1524852.872
13	354856.083	1524853.208
14	354851.909	1524859.071

POINT DATA FOR WHEEL CHAIR RAMP A

① POINT DATA		
NO.	X	Y
1	354993.226	1524874.388
2	354984.884	1524861.284
3	354983.280	1524855.438
4	354981.526	1524848.268
5	354983.958	1524837.301
6	354994.361	1524825.083
7	354995.861	1524820.442
8	355002.712	1524820.930
9	354999.879	1524827.857

① POINT DATA		
NO.	X	Y
10	354988.526	1524841.191
11	354987.594	1524847.477
12	354989.821	1524852.588
13	354992.676	1524857.889
14	355000.172	1524869.401

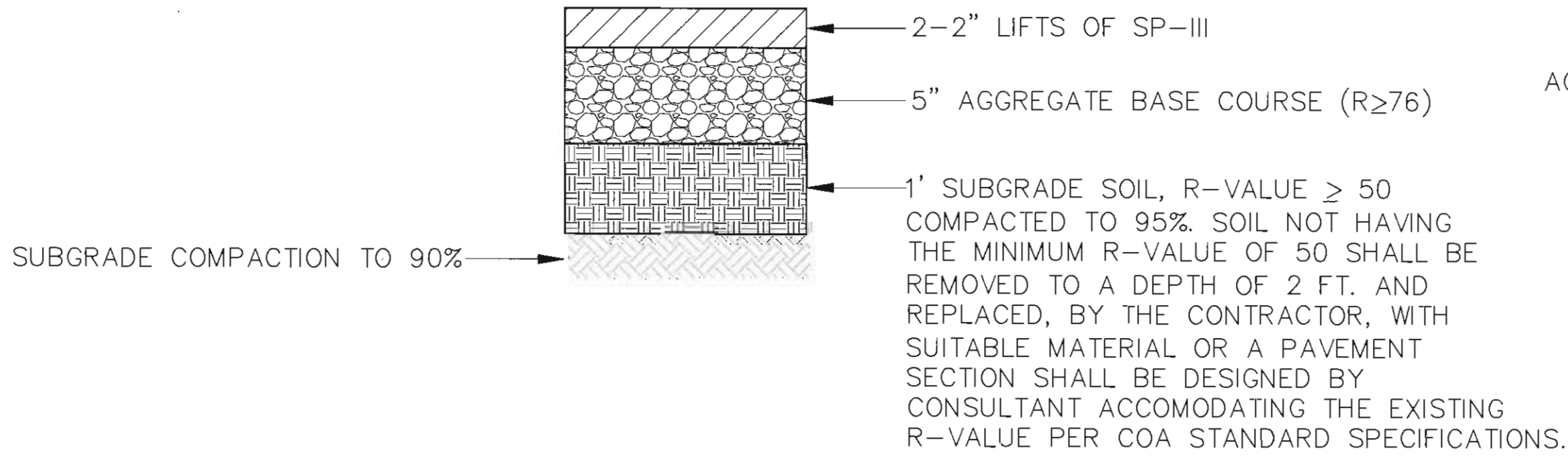
POINT DATA FOR WHEEL CHAIR RAMP B



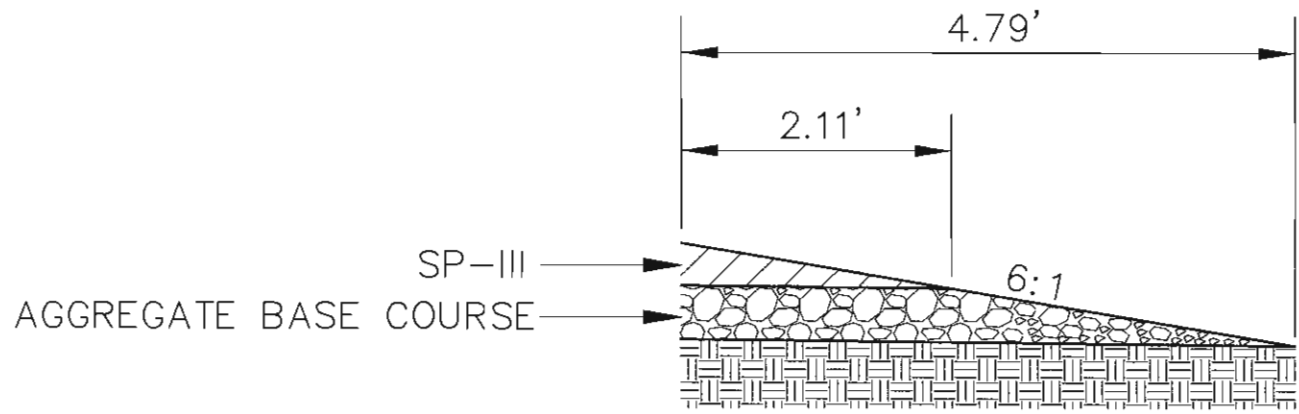
PROPOSED TYPICAL SECTION  
SEE SECTION A-A SHT. 5

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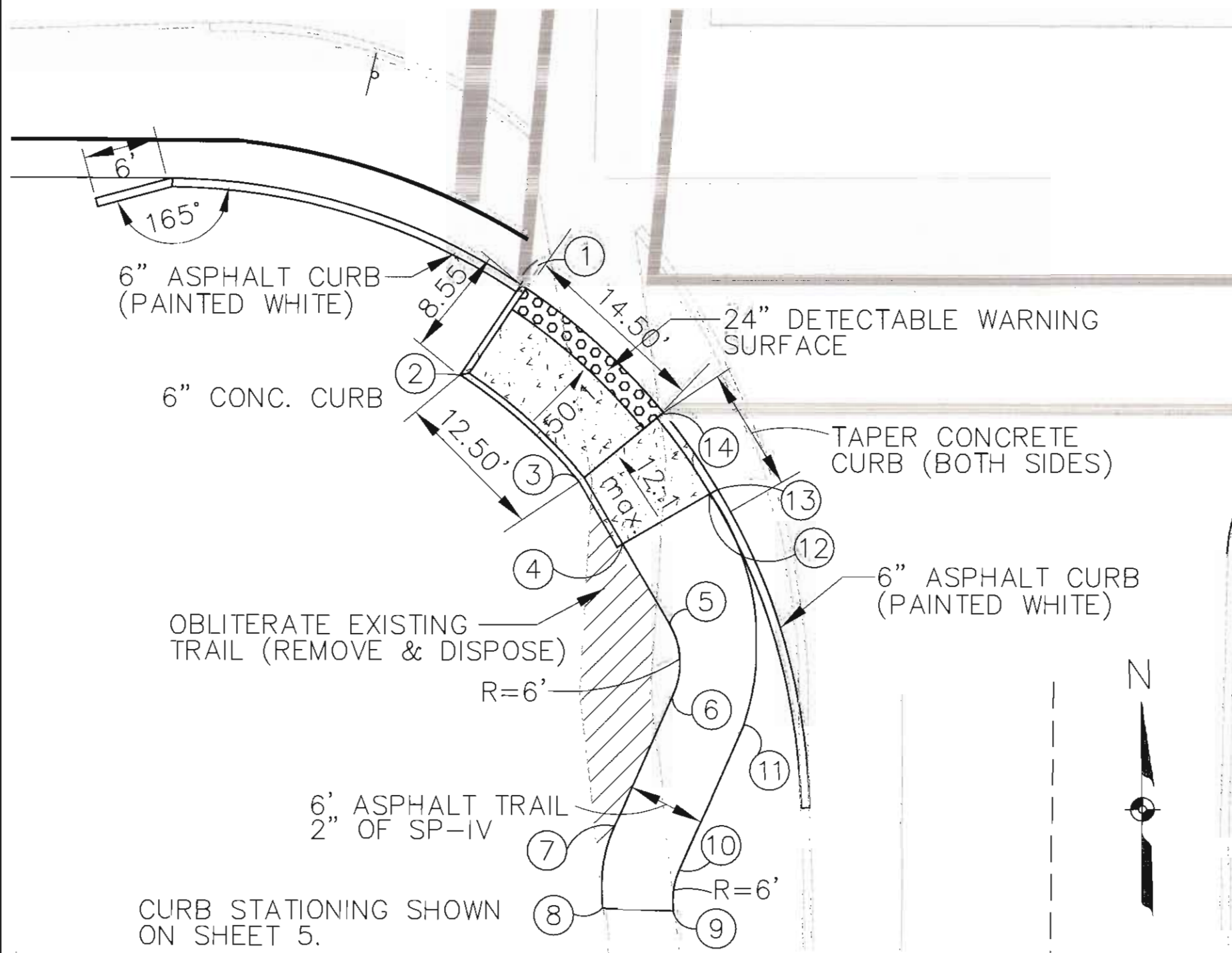
NAME Karen Dzulyn DATE 09/12/11



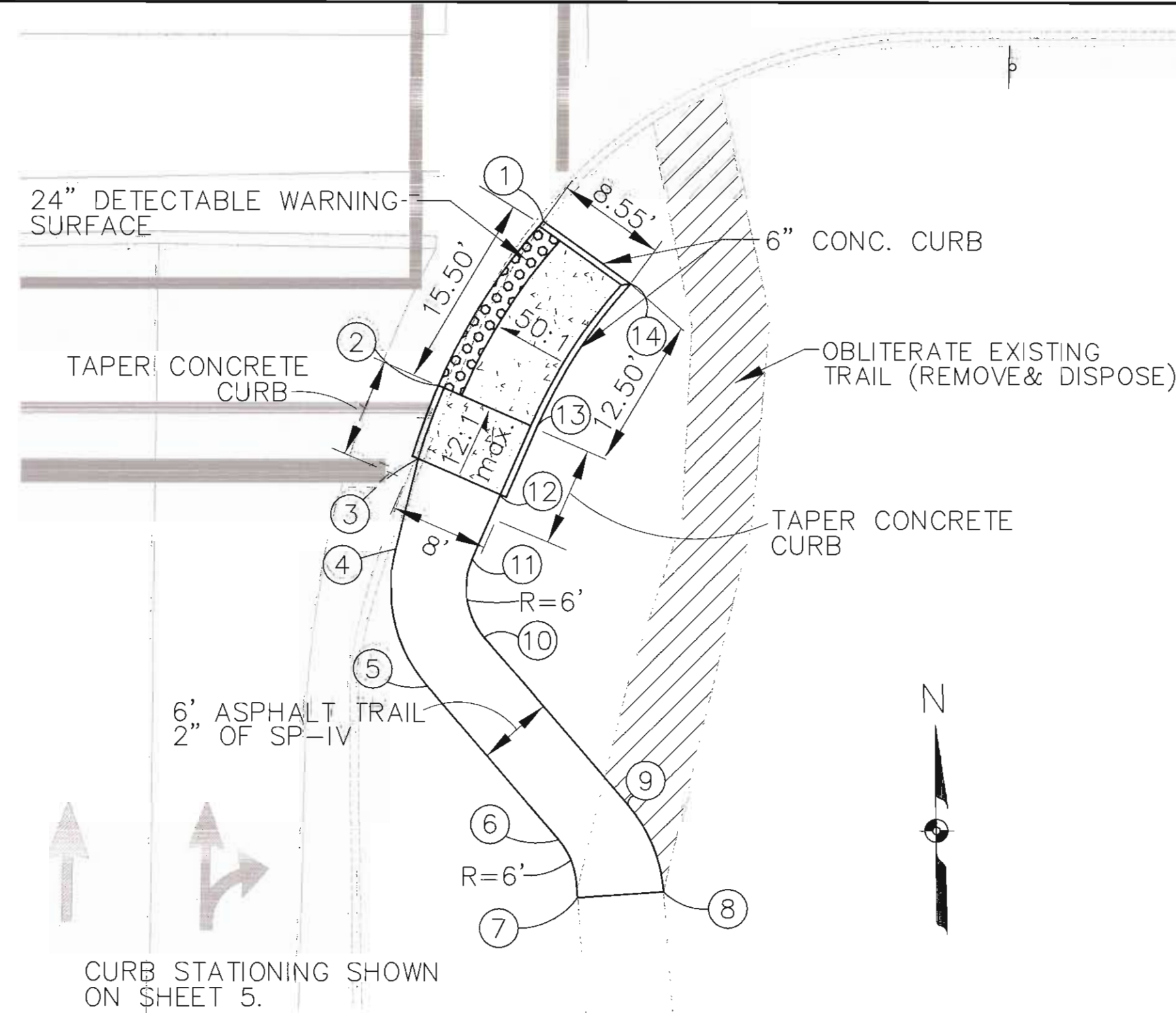
DETAIL-NEW TEMPORARY PAVEMENT SECTION



SURFACING TAPER DETAIL



WHEEL CHAIR RAMP DETAIL A  
(MODIFIED WHEEL CHAIR RAMP PER COA STD DWG 2440 & 2441)



WHEEL CHAIR RAMP DETAIL B  
(MODIFIED WHEEL CHAIR RAMP PER COA STD DWG 2440 & 2441)

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN		CITY OF ALBUQUERQUE	
CONTRACTOR	DATE	STATION 5-B9 IS LOCATED AT THE INTERSECTION OF UNIVERSE BLVD. AND PASEO DEL NORTE N.W.	DATE	FIELD NOTES	DATE	ENGINEER'S SEAL	DATE	NO.	DATE	DESIGNED BY	DATE	CITY OF ALBUQUERQUE	DATE
INSPECTOR'S	DATE	THE STATION IS ON THE HEADER CURB IN THE N.W. TRAFFIC CONTROL TURN ISLAND OF THE INTERSECTION STAMPED "5-B9 2003"	DATE							KA	10/2010	DEPARTMENT OF MUNICIPAL DEVELOPMENT	DATE
DRAWN BY	DATE	DATUM ELEV.=5432.303 NAD 83	DATE							BN	10/2010	ENGINEERING DIVISION	DATE
CHECKED BY	DATE	NORTHING=1524927.88	DATE							CB	10/2010		DATE
		EASTING=357543.86											

FINAL SUBMITTAL

**Vector Engineering, LLC**

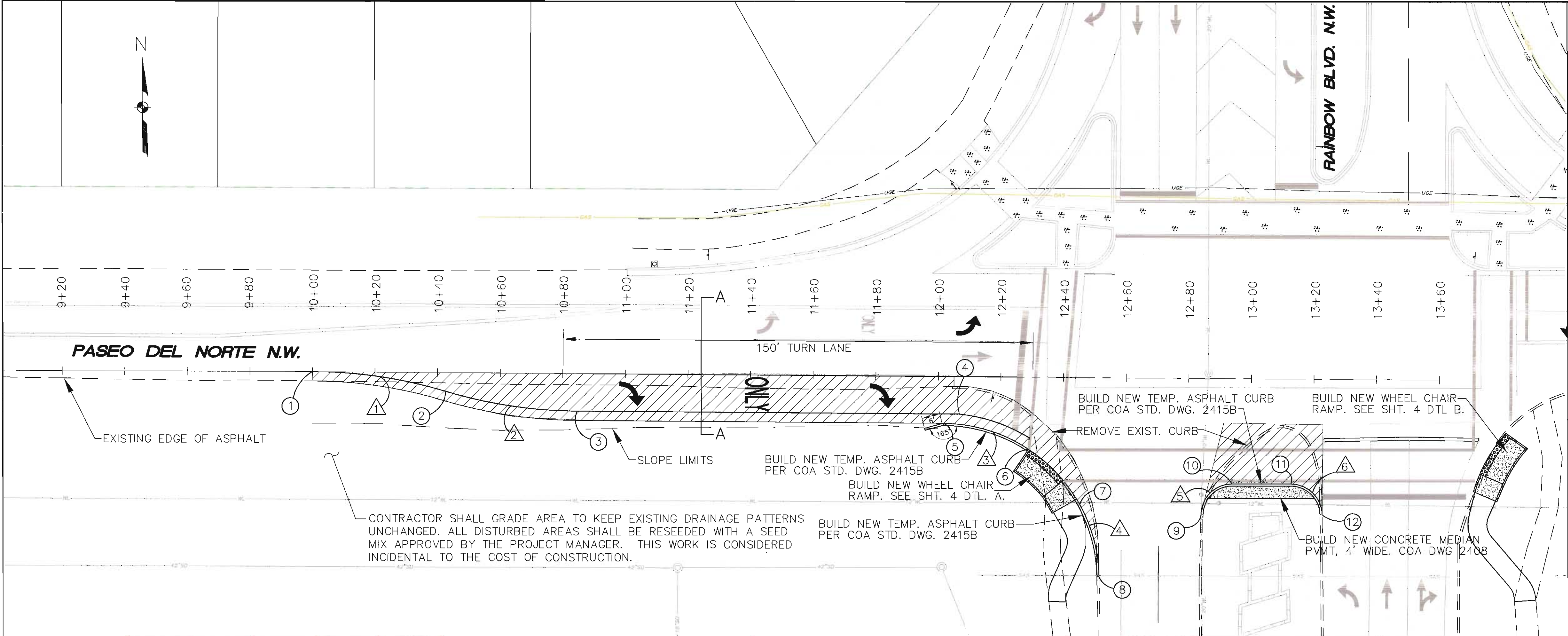
CITY PROJECT NO. **738486** ZONE MAP NO. **B-9** SHEET **4** OF **10**

TITLE: **PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN TYPICAL SECTION AND MISCELLANEOUS DETAILS**

APPROVE: **NOV 29 2010** DESIGN REVIEW COMMITTEE

APPROVE: **NOV 29 2010** CITY ENGINEER

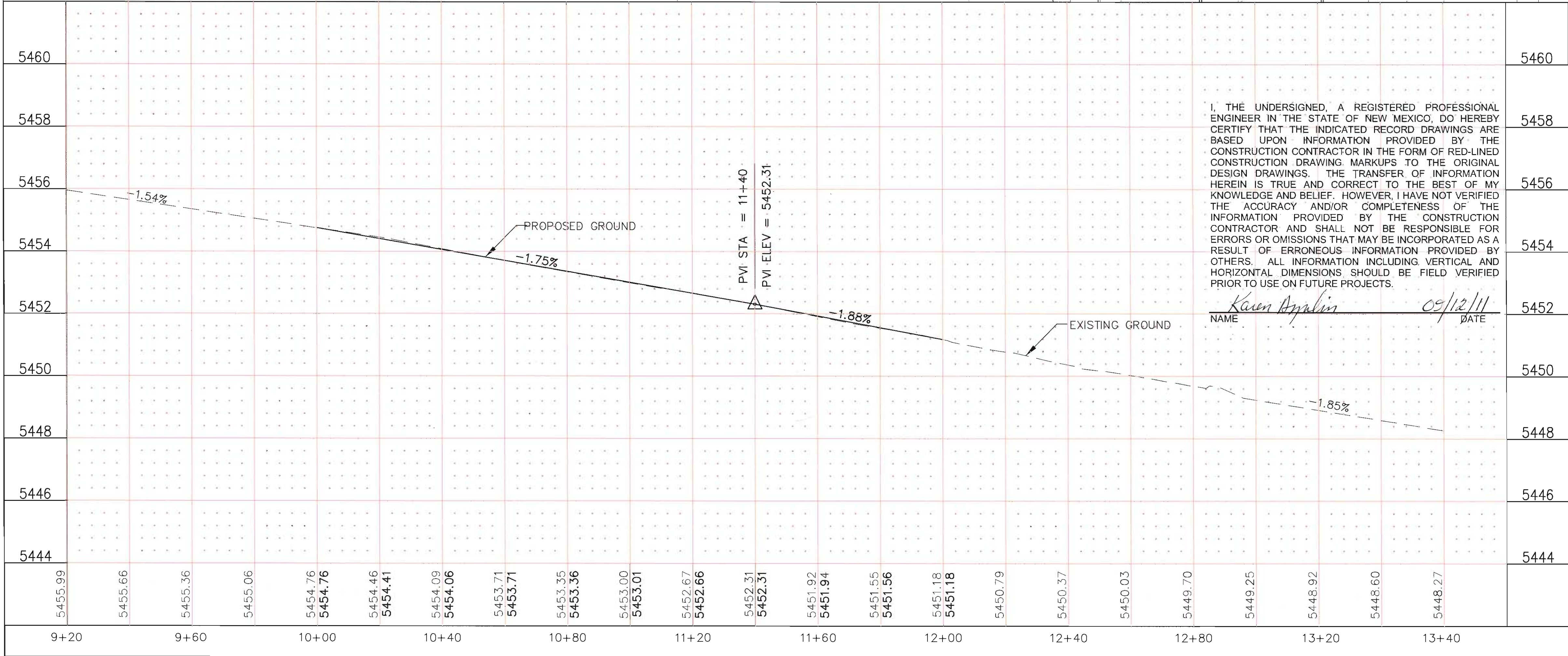




① POINT DATA		
NO.	X	Y
1	X=354612.006	Y=1524893.809
2	X=354654.581	Y=1524887.515
3	X=354696.561	Y=1524881.224
4	X=354818.642	Y=1524880.397
5	X=354813.577	Y=1524877.431
6	X=354843.756	Y=1524867.039
7	X=354857.079	Y=1524851.473
8	X=354863.230	Y=1524828.360
9	X=354895.789	Y=1524847.946
10	X=354905.785	Y=1524858.070
11	X=354924.486	Y=1524858.073
12	X=354934.487	Y=1524848.206

△ CURVE DATA		
NO.	RADIUS	TANGENT
1	150.000'	21.744'
2	150.000'	21.440'
3	50.000'	16.840'
4	50.000'	17.706'
5	10.000'	9.771'
6	10.000'	9.869'

NOTES:  
1.) SEE SHEET 4 FOR ROADWAY TYPICAL SECTIONS.  
2.) POINT DATA NUMBERS 5 THRU 8 ELEVATIONS ARE BASED ON FLOWLINE.  
3.) POINT DATA NUMBER 5 BEGIN ASPHALT CURB, POINT DATA NUMBER 6 END ASPHALT CURB.  
4.) POINT DATA NUMBER 7 BEGIN ASPHALT CURB, POINT DATA NUMBER 8 END ASPHALT CURB.  
5.) HATCHED AREA REPRESENTS LIMITS OF NEW ASPHALT.



NOTES:  
1.) SEE SHEET 4 FOR ROADWAY TYPICAL SECTIONS.  
2.) POINT DATA NUMBERS 5 THRU 8 ELEVATIONS ARE BASED ON FLOWLINE.  
3.) POINT DATA NUMBER 5 BEGIN ASPHALT CURB, POINT DATA NUMBER 6 END ASPHALT CURB.  
4.) POINT DATA NUMBER 7 BEGIN ASPHALT CURB, POINT DATA NUMBER 8 END ASPHALT CURB.  
5.) HATCHED AREA REPRESENTS LIMITS OF NEW ASPHALT.

FINAL SUBMITTAL

GRAPHIC SCALE  
20 0 10 20 40  
( IN FEET )  
1 inch = 20 ft.  
VERT. 1"=2'

**Vector Engineering, LLC**

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION	
TITLE: PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN PASEO DEL NORTE PLAN AND PROFILE	
Design Review Committee APPROVED NOV 29 2010 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 29 2010 CITY ENGINEER
City Project No. 738486	Zone Map No. B-9
Sheet 5	Of 10

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	STATION 5+89 IS LOCATED AT THE INTERSECTION	DATE	NO.	BY	NO.	BY
INSPECTOR'S ACCEPTANCE BY	DATE	UNIVERSITY BLVD. AND PASEO DEL NORTE N.W.	DATE				
VERIFICATION BY	DATE	THE STATION IS ON THE HEADER CURB IN THE N.W. TRAFFIC CONTROL TURN ISLAND OF THE INTERSECTION STAMPED "5+89 2003"	DATE				
DRAWINGS CORRECTED BY	DATE						
MICRO-FILM INFORMATION	DATE						
RECORDED BY	DATE						
NO.							



TRAFFIC SIGNAL GENERAL NOTES

- 1. THIS PROJECT INCLUDES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE PASEO DEL NORTE/ RAINBOW BOULEVARD INTERSECTION.
- 2. ALL WORK ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE CURRENT NATIONAL ELECTRIC CODE, THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS, AND THE CITY OF ALBUQUERQUE'S TRAFFIC ENGINEERING OPERATIONS SPECIFICATIONS (CURRENT EDITION).
- 3. LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, AND MANHOLES SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICAN WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE CITY'S TRAFFIC ENGINEERING OPERATIONS PERSONNEL IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
- 4. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
- 5. THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND ANY DRIVEWAYS FOR SIDE STREET CROSSINGS. BEFORE CONDUIT CAN BE BORED, DRILLED, OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES. THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER.
- 6. SPLICING OF TRAFFIC SIGNAL MCC WILL BE PERMITTED IN LARGE PULL BOXES, INCLUDING LARGE MEDIAN PULL BOXES. SPLICING IN PULL BOXES WILL BE CONNECTED USING GEL-FILLED WIRE NUTS. SPLICING OF VIDEO DETECTION CABLE WILL NOT BE PERMITTED FROM THE MASTARM BASE TO THE CONTROLLER CABINET. SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE DETECTOR TO THE CONTROLLER CABINET.
- 7. ALL VIDEO DETECTION CABLE SHALL BE TAGGED AT THE CONTROLLER CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLE SHALL BE TAGGED AT THE CONTROLLER CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
- 8. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS (857-8000) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES AT THE INTERSECTION. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN THE FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A SIGNAL CONTROLLER DOOR IS TO BE OPENED AT THE INTERSECTION.
- 9. THE CONTRACTOR SHALL NOTIFY PNM 30 DAYS IN ADVANCE OF ANY ANTICIPATED POWER SERVICE CONNECTIONS OR MODIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH PNM TO MAINTAIN ELECTRICAL SERVICE IN THE CITY'S NAME AT THE INTERSECTION.
- 10. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARD WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION. THIS WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT.
- 11. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE DISCONNECTED AT THE LARGE PULL BOX ADJACENT TO THE POLE.
- 12. IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACKFILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACKFILL.
- 13. THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS AT THE INTERSECTION.
- 14. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES, THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE N.E.C.
- 15. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED. EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULL BOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
- 16. THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC IF SIGNALS ARE TURNED OFF.
- 17. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING, IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES. COST OF LOCATING LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS

- 1. ALL TRAFFIC SIGNAL EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE AND SHALL BE APPROVED BY CITY STAFF BEFORE BEING INSTALLED. THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING EQUIPMENT FOR THIS INTERSECTION:
  - A. ECONOLITE ASC 2S-2100 TRAFFIC SIGNAL CONTROLLER WITH TS-2 CABINET.
  - B. ECONOLITE EIGHT-PHASE DUAL RING "P" SIZE CONTROLLER CABINET WIRED FOR FULL EIGHT-PHASE OPERATION, TELEMTRY BOARDS, "IT" TRANSIENT VOLTAGE SURGE SUPPRESSOR AND ALL CONNECTING HARNESSSES
  - C. THE CONTROLLER CABINET SHALL BE EQUIPPED WITH A MMU-16LE SMARTMONITOR WITH LCD DISPLAY.
  - D. VIDEO DETECTION CAMERAS SUPPLIED FOR THE PROJECT SHALL BE AUTOSCOPE SOLO TERRA.
- 2. EMERGENCY VEHICLE OPTICAL DETECTOR (EVOD) SYSTEM EQUIPMENT SHALL BE 3M "OPTICOM" MODEL 762 (OR MOST CURRENT ACCEPTABLE MODEL) PHASE SELECTORS MOUNTED ON 3M OPTICOM MODEL 760 RACKS, OR APPROVED EQUAL. ALL RACKS SHALL BE CAPABLE OF PROVIDING FOUR CHANNELS OF DETECTION. PHASE SELECTOR MODULES SHALL BE CAPABLE OF TWO CHANNELS OF DETECTION EACH. OPTICAL DETECTORS SHALL BE 3M "OPTICOM" MODEL 711, ONE CHANNEL, ONE DIRECTION OR APPROVED EQUAL. OPTICAL DETECTOR CABLE SHALL BE 3M "OPTICOM" MODEL 138 OR EQUAL. A MANUFACTURER'S REPRESENTATIVE SHALL ASSIST THE CONTRACTOR IN THE FIELD AS WORK PROGRESSES TO COMPLETE THE INSTALLATION OF ALL EVOD EQUIPMENT AND ASSIST IN SETTING UP, TURNING ON, PROGRAMMING, AND FIELD TESTING PREEMPTION EQUIPMENT, INCLUDING EMITTERS, TO INSURE THAT THE EQUIPMENT IS OPERATIONAL.
- 3. ALL INDICATIONS OF ALL VEHICLE SIGNAL ASSEMBLIES AND ALL PEDESTRIAN SIGNAL INDICATORS SHALL BE L.E.D. SIGNALS OF A TYPE AND MANUFACTURER APPROVED BY THE CITY OF ALBUQUERQUE. PEDESTRIAN SIGNALS SHALL INCLUDE COUNTDOWN INDICATIONS. THE COUNTDOWN SHALL BE FOR THE CLEARANCE ONLY AND SHALL NOT INCLUDE THE WALK TIME.
- 4. ALL SIGNAL ASSEMBLIES, PEDESTRIAN SIGNALS, PEDESTRIAN PUSH BUTTONS, CABINETS, AND FITTINGS AT THE INTERSECTION SHALL COMPLY WITH THE CITY OF ALBUQUERQUE TYPE AND COLOR FINISH REQUIREMENTS.
- 5. ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS, STEEL COVERS, AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE.
- 6. ALL BACKPLATES SHALL BE LOUVERED.
- 7. TYPE III STANDARDS AT THE INTERSECTION SHALL HAVE 40' CAMERA MOUNTING HEIGHTS AND 10' ARMS.

TRAFFIC SIGNAL INCIDENTAL ITEMS

- 1. REMOVAL OF EXISTING PULL BOXES, CONDUITS, OR OTHER SIGNAL AND LIGHTING EQUIPMENT NOT SPECIFICALLY ENUMERATED AS BID ITEMS FOR INSTALLATION OF NEW SIGNAL AND LIGHTING EQUIPMENT.
- 2. CABLE TESTING AND DIAGRAMS.
- 3. BORING, DRILLING, PUSHING, AND TRENCHING, INCLUDING REMOVAL AND REPLACEMENT OF PAVEMENT, SIDEWALKS, DRIVE PADS, VALLEY GUTTERS, WHEELCHAIR RAMPS, CURB & GUTTER, AND LANDSCAPING (INCLUDING SPRINKLERS) FOR INSTALLATION OF PULL BOXES, CONDUITS, AND SIGNAL FOUNDATIONS, EXCEPT AS NOTED ON THE PLANS.
- 4. LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.
- 5. DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL.
- 6. APPRISING PUBLIC THROUGH THE LOCAL NEWS MEDIA.
- 7. REMOVAL, SALVAGE, AND TRANSPORTATION OF EXISTING EQUIPMENT (INCLUDING SIGNS) TO THE CITY TRAFFIC ENGINEERING OPERATIONS YARD, OR HAULING OF WASTE MATERIALS TO THE CITY LANDFILL, AS APPROPRIATE.
- 8. LEAN FILL FOR CONDUIT TRENCHES.
- 9. PULL BOX ADJUSTMENTS TO GRADE.
- 10. OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL.
- 11. REMOVAL AND REPLACEMENT IN KIND OR BETTER OF LANDSCAPING INCLUDING SPRINKLERS, FOR INSTALLATION OF PULL BOXES, CONDUITS, AND SIGNAL AND LIGHTING FOUNDATIONS.
- 12. CONDUIT TRACE WIRE

ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY NOT BE COMPLETE. THIS LIST DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIALS REQUIRED BY THE SPECIAL PROVISIONS SERIALS (STANDARD DETAILS), SUPPLEMENTAL SPECIFICATIONS, OR THE STANDARD SPECIFICATIONS

TRAFFIC SIGNAL LEGEND

NEW	EXISTING	ITEM
		PULL BOX
		SERVICE POLE
		METER PEDESTAL
		CONTROLLER CABINET
		CONDUIT RUN (SIGNALS)
		CONDUIT RUN (INTERCONNECT)
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER (SIGNAL)
		CONDUIT RUN NUMBER (POWER SERVICE)
		CONDUIT RUN NUMBER (INTERCONNECT)
		CONDUIT RUN NUMBER (WARNING BEACON)
		TYPE II STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACKPLATE, AND OPTICAL DETECTOR
		TYPE III STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACKPLATE, OPTICAL DETECTOR, LUNIMAIRE, AND CAMERA
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNAL (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		SPLICE CABINET
		TRAFFIC MANHOLE
		VIDEO CAMERA

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

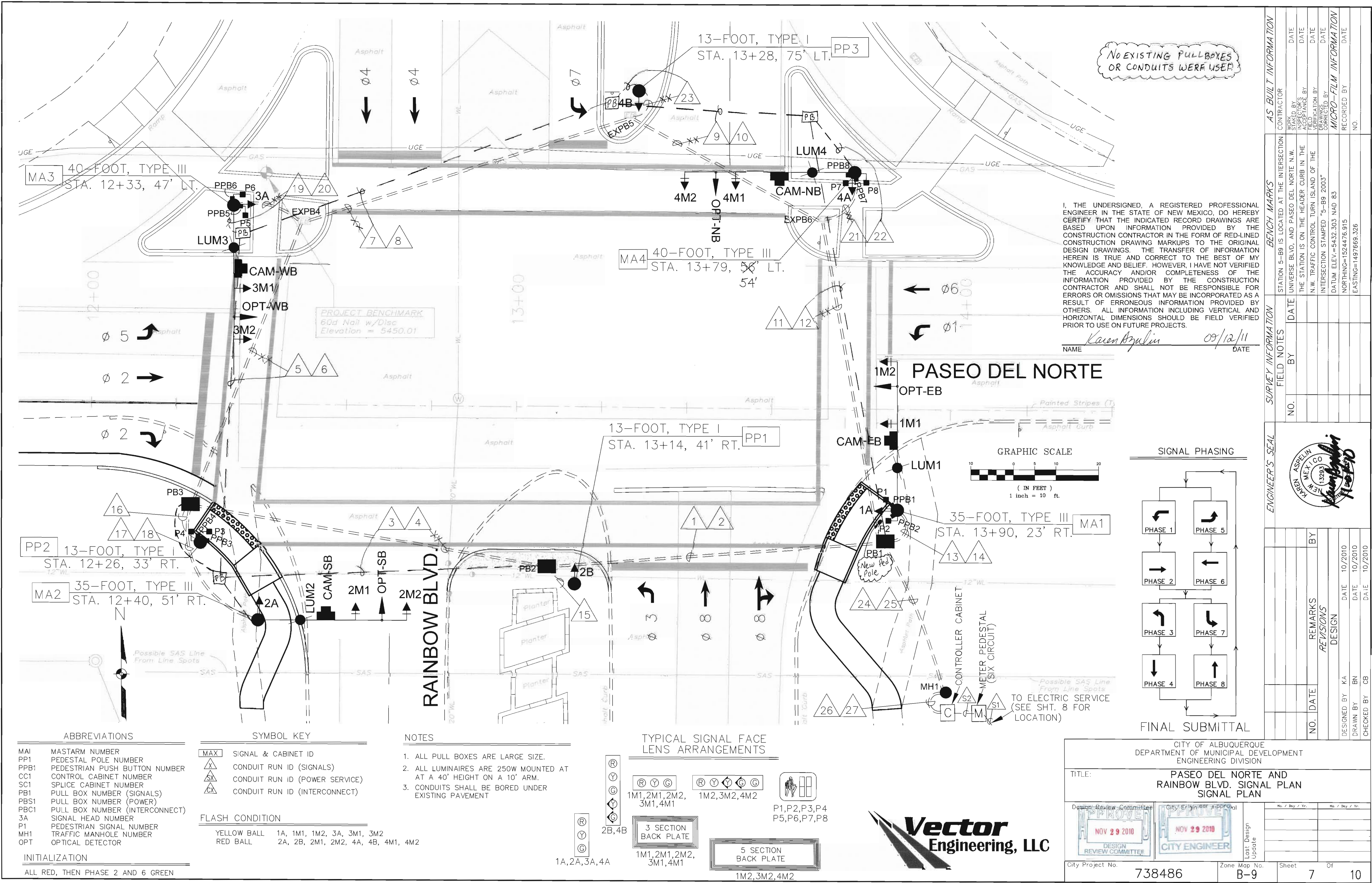
NAME: Karen Ogilvie DATE: 09/12/11

FINAL SUBMITTAL

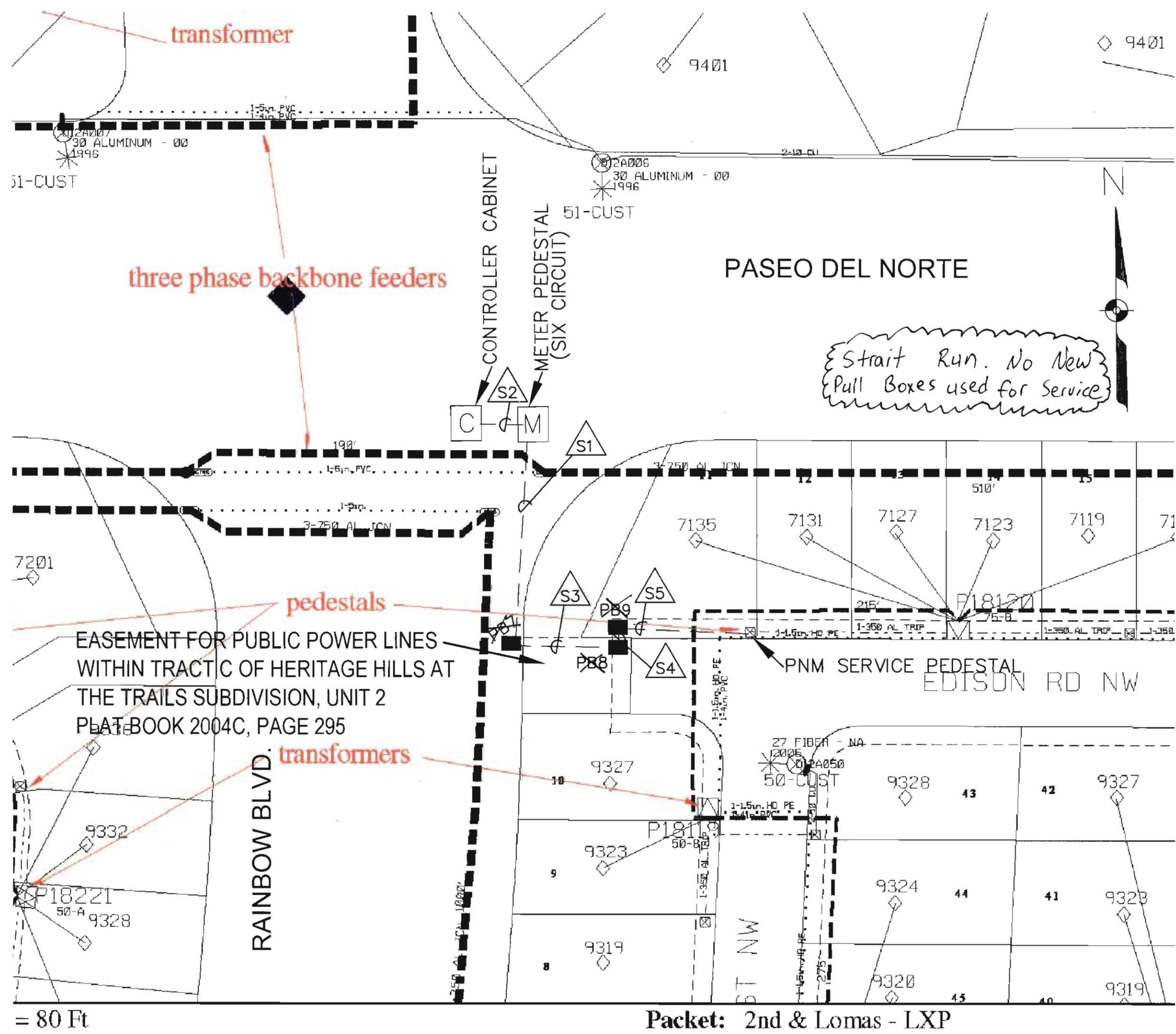
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION			
TITLE: PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN TRAFFIC SIGNAL NOTES & LEGEND			
Design Review Committee APPROVED NOV 29 2010 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 29 2010 CITY ENGINEER	City Engineer Initials _____ DATE _____/_____/_____	City Engineer Signature _____ DATE _____/_____/_____
City Project No. 738486	Zone Map No. B-9	Sheet 6	10









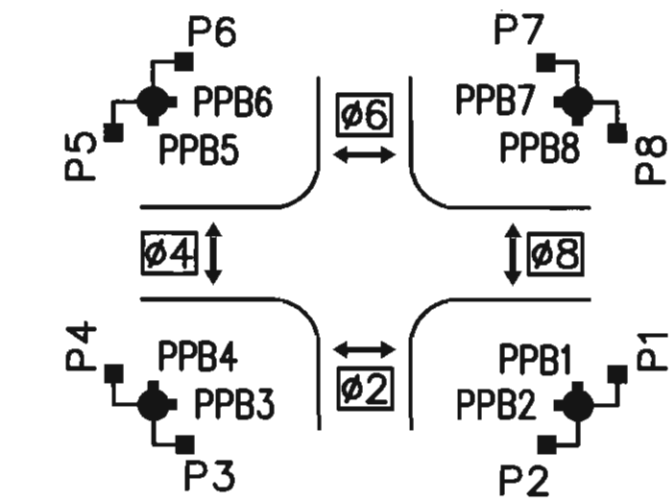


POWER SERVICE LOCATION (NOT TO SCALE)

NOTE: PORTIONS OF CONDUIT RUNS S3, S4, AND S5 ARE LOCATED IN UTILITY EASEMENTS ON PRIVATE PROPERTY. THE CONTRACTOR SHALL CONTACT THE HOMEOWNER PRIOR TO WORK IN THESE AREAS AND INFORM HIM/HER OF THE WORK TO BE DONE. THE CONTRACTOR SHALL EXERCISE CAUTION IN PERFORMING THE WORK AND SHALL MINIMIZE DISTURBANCE TO PRIVATE PROPERTY, INCLUDING LANDSCAPING. DISTURBED AREAS SHALL BE REPLACED AS THEY WERE AT THE EXPENSE OF THE CONTRACTOR. THIS SHALL BE INCIDENTAL TO THE ITEM FOR RIGID ELECTRICAL CONDUIT.

Traffic Signal Facilities Easement  
Doc#: 2010127700  
Date: 12/14/10

PEDESTRIAN SIGNAL & PUSHBUTTON IDENTIFICATION



BACK UP TIME SETTING

	01	02	03	04	05	06	07	08
MINIMUM INITIAL	10	15	10	10	10	15	10	10
VEHICLE EXTENSION	3	3	3	3	3	3	3	3
MAXIMUM 1	30	30	30	30	30	30	30	30
MAXIMUM 2	40	40	40	40	40	40	40	40
YELLOW CHANGE	4	4	4	4	4	4	4	4
RED CLEAR	2	2	2	2	2	2	2	2
WALK	0	7	0	7	0	7	0	7
PEDESTRIAN CLEAR	0	30	0	30	0	30	0	30
OPERATION	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
		RECALL				RECALL		

FUNCTION CHART – 115 VOLT CIRCUIT						
CONDUCTOR			RING 1 – MULTI CONDUCTOR CABLE 20		RING 2 – MULTI CONDUCTOR CABLE 20 2/	
CONDUCTOR NUMBER	BASE COLOR	TRACER	FUNCTION	FIELD CONNECTION 1/	FUNCTION	FIELD CONNECTION
1	BLACK	–	SPARE	SPARE	SPARE	SPARE
2	WHITE	–	SPARE	SPARE	SPARE	SPARE
3	RED	–	SPARE	SPARE	SPARE	SPARE
4	GREEN	–	PHASE 1 GREEN	GREEN ARROW 3M2	PHASE 5 GREEN	GREEN ARROW 1M2
5	ORANGE	–	PHASE 1 YELLOW	YELLOW ARROW 3M2	PHASE 5 YELLOW	YELLOW ARROW 1M2
6	BLUE	–	SPARE	SPARE	SPARE	SPARE
7	WHITE	BLACK	SPARE	SPARE	SPARE	SPARE
8	RED	BLACK	PHASE 2 RED	RED BALL 1M1, 1M2, 1A	PHASE 6 RED	RED BALL 3M1, 3M2, 3A
9	GREEN	BLACK	PHASE 2 GREEN	GREEN BALL 1M1, 1M2, 1A	PHASE 6 GREEN	GREEN BALL 3M1, 3M2, 3A
10	ORANGE	BLACK	PHASE 2 YELLOW	YELLOW BALL 1M1, 1M2, 1A	PHASE 6 YELLOW	YELLOW BALL 3M1, 3M2, 3A
11	BLUE	BLACK	PHASE 2 WALK	PEDESTRIAN WALK P2, P3	PHASE 6 WALK	PEDESTRIAN WALK P6, P7
12	BLACK	WHITE	PHASE 2 DON'T WALK	PEDESTRIAN DON'T WALK P2, P3	PHASE 6 DON'T WALK	PEDESTRIAN DON'T WALK P6, P7
13	RED	WHITE	SPARE	SPARE	SPARE	SPARE
14	GREEN	WHITE	PHASE 3 GREEN	GREEN ARROW 4A, 4M2	PHASE 7 GREEN	GREEN ARROW 2A
15	BLUE	WHITE	PHASE 3 YELLOW	YELLOW ARROW 4A, 4M2	PHASE 7 YELLOW	YELLOW ARROW 2A
16	BLACK	RED	PHASE 4 RED	RED BALL 2A, 2B, 2M1, 2M2	PHASE 8 RED	RED BALL 4A, 4B, 4M1, 4M2
17	WHITE	RED	PHASE 4 GREEN	GREEN BALL 2A, 2B, 2M1, 2M2	PHASE 8 GREEN	GREEN BALL 4A, 4B, 4M1, 4M2
18	ORANGE	RED	PHASE 4 YELLOW	YELLOW BALL 2A, 2B, 2M1, 2M2	PHASE 8 YELLOW	YELLOW BALL 4A, 4B, 4M1, 4M2
19	BLUE	RED	PHASE 4 WALK	PEDESTRIAN WALK P4, P5	PHASE 8 WALK	PEDESTRIAN WALK P1, P8
20	RED	GREEN	PHASE 4 DON'T WALK	PEDESTRIAN DON'T WALK P4, P5	PHASE 8 DON'T WALK	PEDESTRIAN DON'T WALK P1, P8

FUNCTION CHART – 24 VOLT CIRCUIT 3/					
CONDUCTOR		RING 1–MULTI CONDUCTOR CABLE 5		RING 2–MULTI CONDUCTOR CABLE 5	
NUMBER	BASE COLOR	FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION
1	BLACK	PHASE 2 PPB	PPB2 & PPB3	SPARE	SPARE
2	WHITE	COMMON	PPB2, PPB3, PPB4, PPB5	COMMON	PPB1, PPB6, PPB7, PPB8
3	RED	PHASE 4 PPB	PPB4 & PPB5	SPARE	SPARE
4	GREEN	SPARE	SPARE	PHASE 6 PPB	PPB6 & PPB7
5	ORANGE	SPARE	SPARE	PHASE 8 PPB	PPB1 & PPB8

NOTES:

- 1/ IDENTIFY CONDUCTORS LISTED AS "115 VOLTS".
- 2/ WRAP RING 2 CABLE AT EACH SPLICE POINT WITH COLORED ELECTRICAL TAPE. THE IDENTIFICATION MARKING SHALL BE PROVIDED ON EACH RING 2 CABLE AT EACH SPLICE AND LOCATED 6" BACK FROM THE END.
- 3/ IDENTIFY CONDUCTORS LISTED AS "PPB – LOW VOLTAGE" AT EACH SPLICE POINT. FIVE (5) CONDUCTOR CABLE SHALL BE 24 VOLTS AND USED FOR PUSH BUTTONS ONLY.

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

Karen Ogulim 09/12/11  
NAME DATE



FINAL SUBMITTAL

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION			
TITLE: PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN SIGNAL PLAN – FUNCTION CHARTS			
Design Review Committee APPROVED NOV 29 2010 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 29 2010 CITY ENGINEER	No. / Rev. / Yr.	No. / Rev. / Yr.
City Project No. 738486	Zone Map No. B-9	Sheet 8	Of 10



CONDUIT AND CONDUCTOR REQUIREMENTS											
CONDUIT LENGTH, SIZE & TYPE				CONDUIT FILL BY CONDUCTOR LENGTH AND TYPE							
RUN ID	3"	4"	TYPE	REMARKS	MCC 5 (# @ FT)	MCC 7 (# @ FT)	MCC 20 (# @ FT)	SCC 2 (# @ FT)	SCC 6* (# @ FT)	OPTICOM (# @ FT)	VIDEO CABLE (# @ FT)
1	80'		REC	PB1 TO PB2	1 @ 85'		2 @ 85'	2 @ 85'	2 @ 85'		
2	80'		REC	PB1 TO PB2						2 @ 85'	2 @ 85'
3	90'		REC	PB2 TO PB3	1 @ 95'		2 @ 95'	2 @ 95'	2 @ 95'		
4	90'		REC	PB2 TO PB3						2 @ 95'	2 @ 95'
5	80'		REC	PB3 TO <del>PB4</del>	1 @ 85'		2 @ 85'	2 @ 85'	2 @ 85'		
6	80'		REC	PB3 TO <del>PB4</del>						1 @ 85'	1 @ 85'
7	<del>EXISTING</del>		REC	<del>PB4</del> TO <del>PB5</del>	1 @ 85'		2 @ 85'		2 @ 85'		
8	<del>EXISTING</del>		REC	<del>PB4</del> TO <del>PB5</del>	EMPTY						
9	<del>EXISTING</del>		REC	<del>PB5</del> TO <del>PB6</del>	1 @ 55'		2 @ 55'		2 @ 55'		
10	<del>EXISTING</del>		REC	<del>PB5</del> TO <del>PB6</del>	EMPTY						
11	70'		REC	<del>PB6</del> TO PB1	1 @ 75'		2 @ 75'	2 @ 75'	2 @ 75'		
12	70'		REC	<del>PB6</del> TO PB1						1 @ 75'	1 @ 75'
13	30'		REC	PB1 TO MA1	1 @ 35'		1 @ 35'	2 @ 35'	2 @ 35'		
14	30'		REC	PB1 TO MA1						1 @ 35'	1 @ 35'
15	30'		REC	PB2 TO PP1		1 @ 35'			2 @ 35'		
16	30'		REC	PB3 TO PP2	1 @ 35'		1 @ 35'	2 @ 35'	2 @ 35'		
17	30'		REC	PB3 TO MA2	1 @ 35'		1 @ 35'	2 @ 35'	2 @ 35'		
18	30'		REC	PB3 TO MA2						1 @ 35'	1 @ 35'
19	30'		REC	<del>PB4</del> TO MA3	1 @ 35'		1 @ 35'	2 @ 35'	2 @ 35'		
20	30'		REC	<del>PB4</del> TO MA3						1 @ 35'	1 @ 35'
21	30'		REC	<del>PB6</del> TO MA4	1 @ 35'		1 @ 35'	2 @ 35'	2 @ 35'		
22	30'		REC	<del>PB6</del> TO MA4						1 @ 35'	1 @ 35'
23	30'		REC	<del>PB5</del> TO PP3		1 @ 35'			2 @ 35'		
24	100'		REC	MH1 TO PB1	1 @ 105'		2 @ 105'	2 @ 105'	2 @ 105'		
25	100'		REC	MH1 TO PB1						4 @ 105'	4 @ 105'
26	15'		REC	CC TO MH1	1 @ 20'		2 @ 20'	2 @ 20'	2 @ 20'		
27	15'		REC	CC TO MH1						4 @ 20'	4 @ 20'
			REC								
S1		150'	REC	METER TO PB7				3 @ 155'			
S2		40'	REC	METER TO CC				3 @ 45'			
S3		35'	REC	PB7 TO PB8				3 @ 40'			
S4		10'	REC	PB8 TO PB9				3 @ 15'			
S5		50'	REC	PB9 TO ELECTRIC SERVICE				3 @ 55'			
			REC								
			REC								
SUBTOTALS	1,200'	285'			780'	70'	1,385'	2,140'	1,700'	1,160'	1,160'

\* ONE SCC 6 SHALL BE GREEN (BOND) AND ONE SHALL BE WHITE (NEUTRAL)

SUBTOTAL, THIS TABLE	0'	0'	0'	80'	480'	210'	0'	400'	0'	205'	200'
SUBTOTAL, PREVIOUS TABLE	0'	1,200'	285'	0'	780'	70'	1,385'	2,140'	1,700'	1,160'	1,160'
TOTAL	0'	1,200'	285'	80'	1,260'	280'	1,385'	2,540'	1,700'	1,365'	1,360'

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

Karen Byrdlin 09/12/11  
NAME DATE



FINAL SUBMITTAL

CITY OF ALBUQUERQUE  
DEPARTMENT OF MUNICIPAL DEVELOPMENT  
ENGINEERING DIVISION

TITLE: PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN  
SIGNAL PLAN - CONDUITS AND CABLES

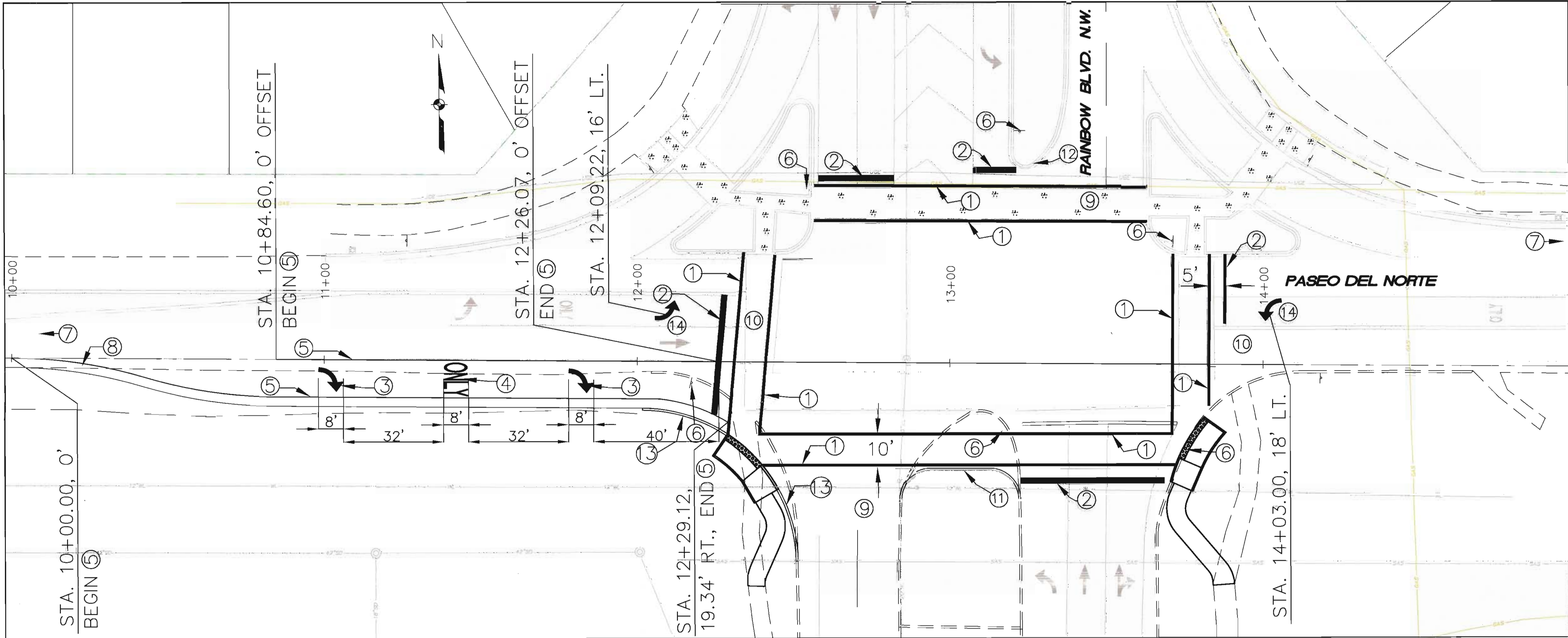
Design Review Committee: APPROVE NOV 29 2010  
City Engineer: APPROVE NOV 29 2010

City Project No. 738486  
Zone Map No. B-9  
Sheet 9 of 10

DESIGNED BY: KA  
DRAWN BY: BN  
CHECKED BY: CB

REVISIONS  
DESIGN  
NO. DATE  
1 10/2010  
2 03/2010  
3 10/2010



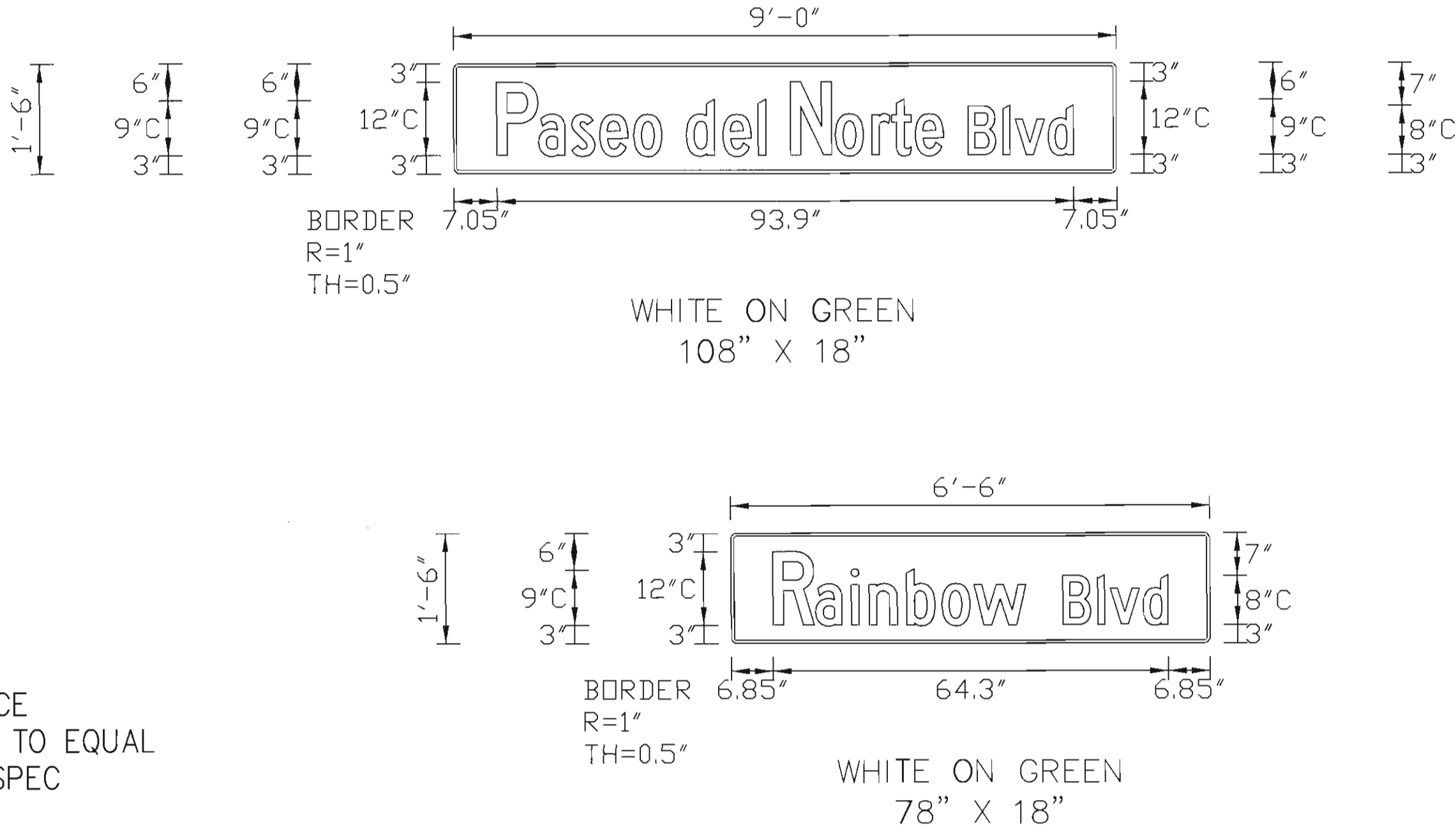


KEYED NOTES:

- 1) 12" WHITE THERMOPLASTIC CROSSWALK STRIPE (10' WIDE CROSSWALK)
- 2) 24" WHITE THERMOPLASTIC STOP BAR (OFFSET 5' FROM CROSSWALK)
- 3) RIGHT-TURN ARROW - WHITE THERMOPLASTIC (8' TALL)
- 4) WORD "ONLY" - WHITE THERMOPLASTIC (8' TALL)
- 5) 4" THERMOPLASTIC SOLID WHITE PAVEMENT STRIPE
- 6) REMOVE EXISTING "STOP" SIGN AND SALVAGE
- 7) REMOVE EXISTING "STOP AHEAD" SIGN AND SALVAGE
- 8) RELOCATE SCHOOL XING SIGN BEHIND NEW RIGHT-TURN LANE
- 9) MASTARM SIGN - "Paseo del Norte Blvd" - SEE DETAIL THIS SHEET
- 10) MASTARM SIGN - "Rainbow Blvd" - SEE DETAIL THIS SHEET
- 11) PAINT MEDIAN NOSE YELLOW (INCIDENTAL TO CONSTRUCTION)
- 12) REFRESH EXISTING MEDIAN NOSE PAINT (INCIDENTAL TO CONSTRUCTION)
- 13) PAINT NEW ASPHALT CURB WHITE (INCIDENTAL TO CONSTRUCTION)
- 14) REPLACE EXISTING LEFT-TURN ARROW-WHITE THERMOPLASTIC (8' TALL)

GENERAL NOTES:

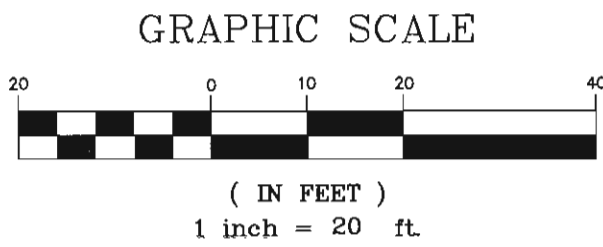
- 1.) ALL CONFLICTING STRIPING SHALL BE ERADICATED BY WATER BLASTING OR SURFACE PLANING OF THE ROADWAY TO A MAXIMUM DEPTH OF 0.25 INCHES AND A WIDTH TO EQUAL TWO TIMES THE WIDTH OF THE STRIPE OR MARKING TO BE REMOVED. REFER TO SPEC SECTION 443.
- 2.) ALL STRIPING SHALL CONFORM TO THE CURRENT EDITION OF THE M.U.T.C.D.
- 3.) ALL STRIPING TO BE REFLECTIVE PREFORMED THERMOPLASTIC TAPE.
- 4.) SIGNS TO BE SALVAGED SHALL BE DELIVERED TO THE CITY'S PINO YARDS. CONTACT TED KORBIN AT 857-8025.



I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

Karen Aguilera 09/12/11  
NAME DATE

FINAL SUBMITTAL



CITY OF ALBUQUERQUE  
DEPARTMENT OF MUNICIPAL DEVELOPMENT  
ENGINEERING DIVISION

TITLE: PASEO DEL NORTE AND RAINBOW BLVD. SIGNAL PLAN  
SIGNING AND STRIPING PLAN



No. / Day / Yr.	No. / Day / Yr.

City Engineer No. 738486 Zone Map No. B-9 Sheet 10 Of 10

SURVEY INFORMATION			BENCH MARKS		AS-BUILT INFORMATION	
NO.	BY	FIELD NOTES	STATION 5-B9 IS LOCATED AT THE INTERSECTION		CONTRACTOR	
			UNIVERS BLVD. AND PASEO DEL NORTE N.W.	WORK	STATION	DATE
			THE STATION IS ON THE HEADER CURB IN THE	INSPECTED BY	NO.	DATE
			N.W. TRAFFIC CONTROL TURN ISLAND OF THE	FIELD	NO.	DATE
			INTERSECTION STAMPED "5-B9 2003"	VERIFICATION BY	NO.	DATE
			DATUM ELEV =5432.303 NAD 83	CORRECTED BY	NO.	DATE
			NORTHING=1524927.88	MICRO-FILM INFORMATION		
			EASTING=357543.86	RECORDED BY	NO.	DATE
				NO.	NO.	DATE

