

VICINITY MAP

ZONE ATLAS M-14-Z, L-14-Z

SCALE: NONE

GENERAL NOTES

NOTICE TO CONTRACTORS

1. CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION AS AMENDED THROUGH UPDATE 6, WILL BE REFERRED TO HEREIN AS THE "STANDARD SPECIFICATIONS".
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) AND DETERMINE LOCATION OF EXISTING UTILITIES.
3. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR THE SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITHOUT DELAY.
4. ALL EXISTING SIGNS, MARKERS, DELINEATORS, ETC., WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, STORED AND RE-SET BY THE CONTRACTOR.
5. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION CO-ORDINATION DIVISION A DETAILED CONSTRUCTION PLAN. SHALL TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION CO-ORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (758-2531) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATIONS.
6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY CONTRACTOR IN EXISTING OR NEW LOCATION AS INDICATED BY THIS SET.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, THE CONTRACTOR SHALL AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
8. CONTRACTOR IS RESPONSIBLE FOR SEPARATE CONSTRUCTION, TRAFFIC CONTROL PLAN TO BE APPROVED BY CITY PRIOR TO CONSTRUCTION.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE
INSTALLED PRIOR TO PAVING.
BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED
STREET USE.
TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE
CITY ENGINEER.
SIDEWALK AND WHEELCHAIR RAMPS WITHIN THE CURB
RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB
RETURN IS CONSTRUCTED.
IF CURB IS DERESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL
BE CONSTRUCTED UP TO ACCEPTANCE OF CURB AND GUTTER.
ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR
TO FINAL ACCEPTANCE.

CAUTION:
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITY AND OTHER IMPROVEMENTS.

dmg D. MARK GOODWIN & ASSOCIATES, P.
CONSULTING ENGINEERS
P. O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87198
(505) 438-2200

APPROVAL OF AS BUILT DRAWING
CHIEF CONSTRUCTION ENGINEER
Seton Cheng
DATE 4-10-98

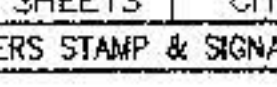
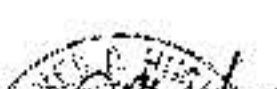
<u>SHEET NO.</u>	<u>SHEET</u>
1	TITLE SHEET
2	PLAT
3	PLAT
4	PAVING COMPOSITE
5	SAN JOSE AVENUE PAVING PROFILE
6	KARSTEN COURT PAVING PROFILE
7, 8, 9	BROADWAY PAVING PROFILE
10	GIBSON RESTROPING PLAN
11	UTILITY COMPOSITE
12	SAN JOSE AVENUE UTILITY PROFILE
13	KARSTEN COURT UTILITY PROFILE
14	BETHEL AVENUE UTILITY PROFILE
15	BROADWAY BOULEVARD UTILITY
16 & 17	CONSTRUCTION TRAFFIC DETAILS

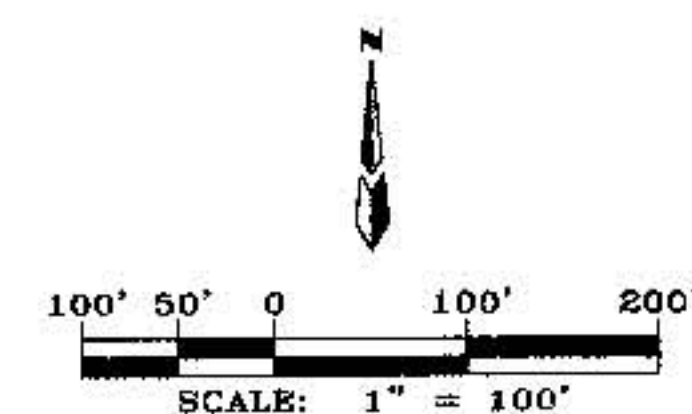
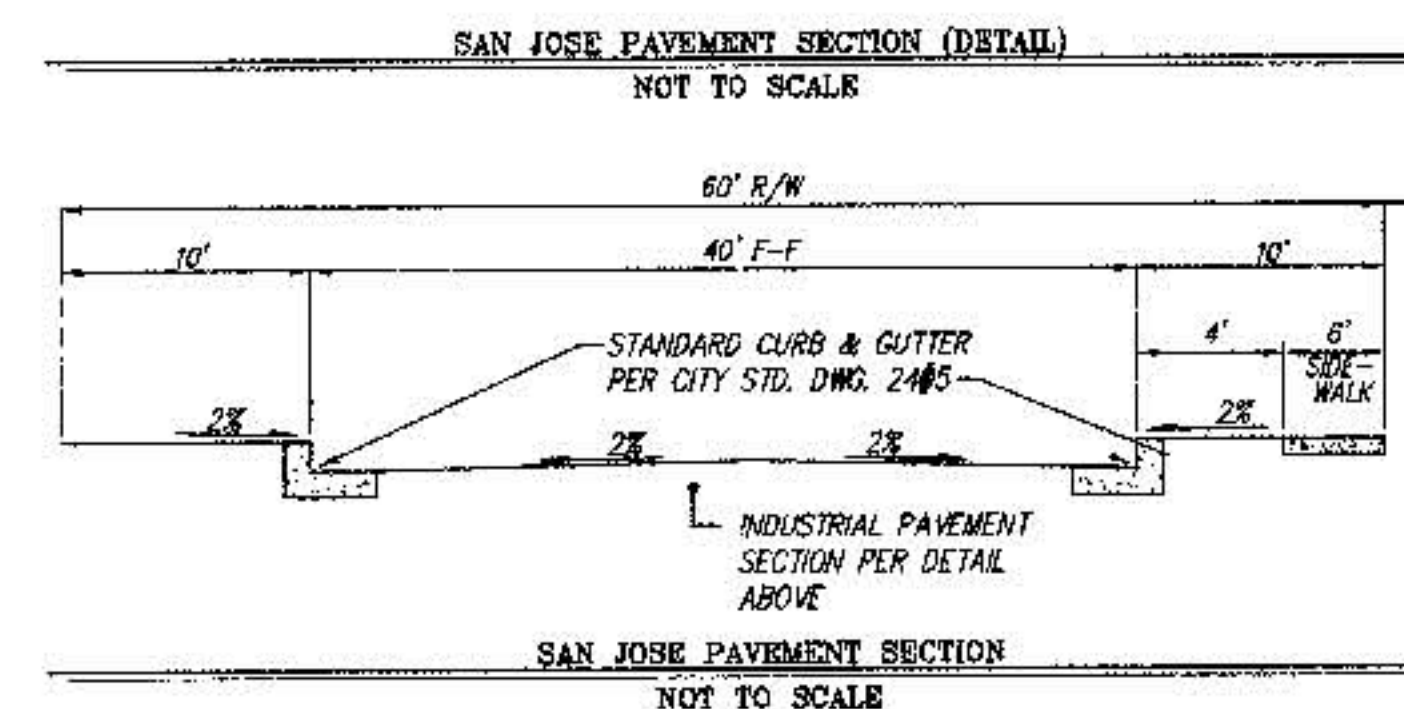
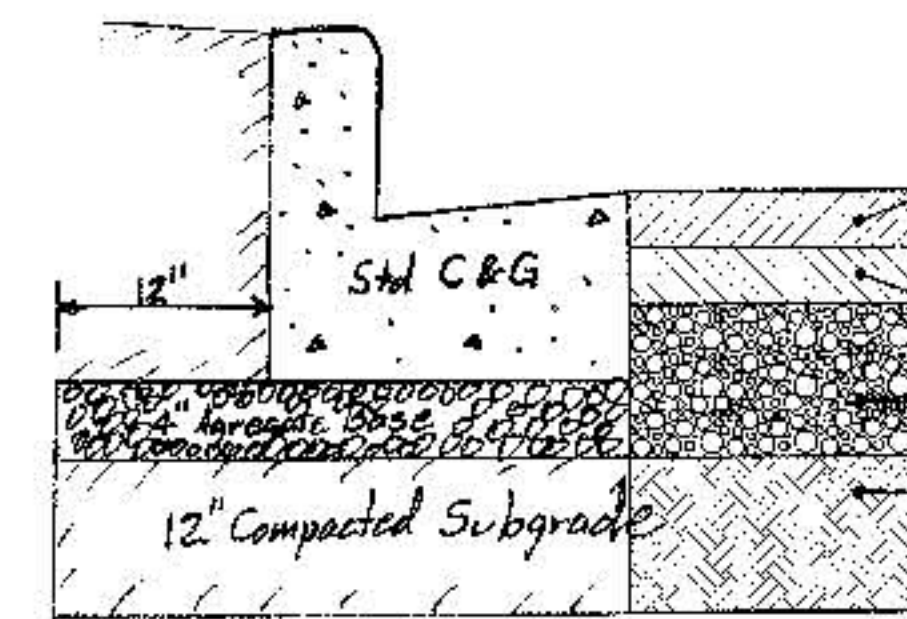
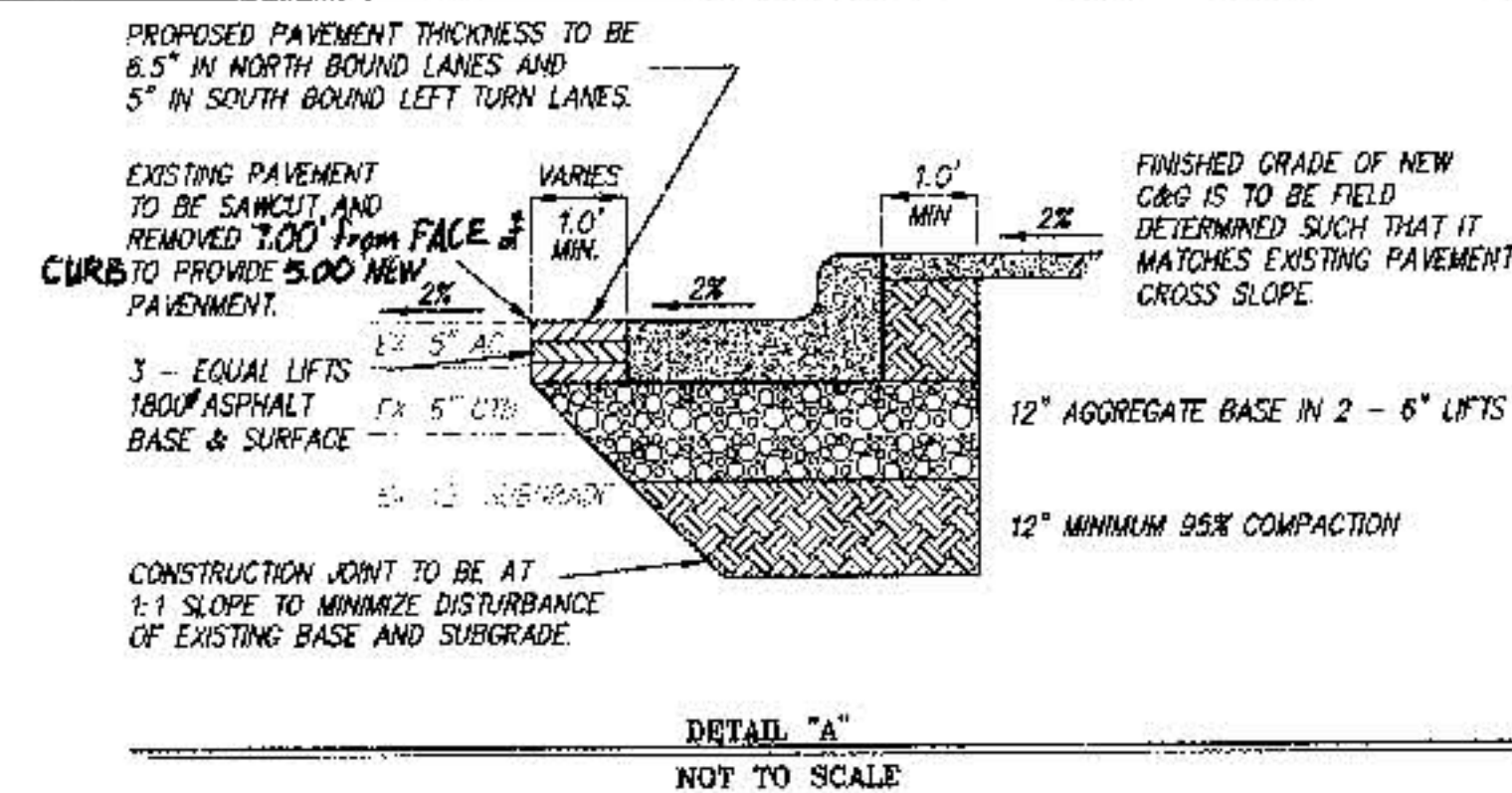
RECORD DRAWING

I hereby certify that the information contained on this drawing has been reviewed in accordance with information furnished by the contractor, CCM, Inc., and by the surveyor, ALS, Inc., and reflects the construction as actually accomplished. This plan as constructed is in substantial compliance with the Approved Plan.

James D. Hughes 7-16-98
James D. Hughes, SJMP# 11874

DRB CASE NO. 97-271

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE			APPROVALS	ENGINEER	DATE	*****	
			DRC CHAIRMAN	<i>William R. Smith</i>	5-20-98	APPROVED FOR CONSTRUCTION	
			TRANSPORTATION	<i>W. R. Smith</i>	4-25-98		
			WATER/WASTEWATER	<i>W. R. Smith</i>	4-25-98		
			HYDROLOGY	<i>W. R. Smith</i>	4-25-98		
			CIP	<i>W. R. Smith</i>	4-25-98		
			CONSTR. MGMT.	<i>W. R. Smith</i>	4-25-98	CITY ENGINEER	DATE
			CONSTR. COORD.	<i>W. R. Smith</i>	4-25-98		
CITY PROJECT NO.			5807.81		SHEET OF		
					1 17		



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James D. Hughes 7-6-98
James D. Hughes NMPE 11674

1.5" ASPHALT CONC. TYPICAL FINISH COURSE PLACED AFTER ALL MAINHOLE VALVES COVERS/RINGS ARE SET TO GRADE. 1800 LBS. STABILITY TYPE B GRADATION.

2" ASPHALT CONCRETE 1800 LBS. STABILITY TYPE 'A' GRADATION.

8" AGGREGATE BASE IN 2 - ~~8~~ LIFTS

12" SUBGRADE SOIL R-VALUE ~~≥ 300~~ PLACED IN 2-6" COMPACTED LIFTS. 95% MIN. COMPACTATION, AT OPT. MOISTURE ± 2.0% ASTM D1557, OR OPT. MOISTURE TO +4% ASTM D6308 FOR NO. 200 SIEVE. OR MORE MATERIAL PASSING THE NO. 200 SIEVE. TO EXTEND FULL WIDTH OF ROADWAY TO 1.0' BACK OF NEW CURB PER SECTION 301.4.1.1

Soil not having the minimum R value of 62 shall be removed to a depth of 2' and replaced by the Contractor, with suitable material or pavement section shall be designed by consultant according to the existing R value per CCA Standard Specifications.

SURVEY INFORMATION		BENCH MARKS	
NO.	FIELD NOTES	DATE	ACS MONUMENT
	34		"NN 361-3"
			Y=1475688.30
			X=381897.40
			G-G=0.99967845
			$\Delta\alpha = -00713.36''$
			CENTRAL ZONE
			(NAD 1927) SLO. 19
			ELEVATION=4966.0

16 Nov 1964
11
ENGINEER'S SEAL

87-8-X

UNITED STATES DEPARTMENT OF COMMERCE
BUREAU OF CUSTOMS AND BORDER PROTECTION
WASHINGTON, D.C. 20549

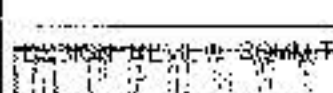
John D. [Signature]

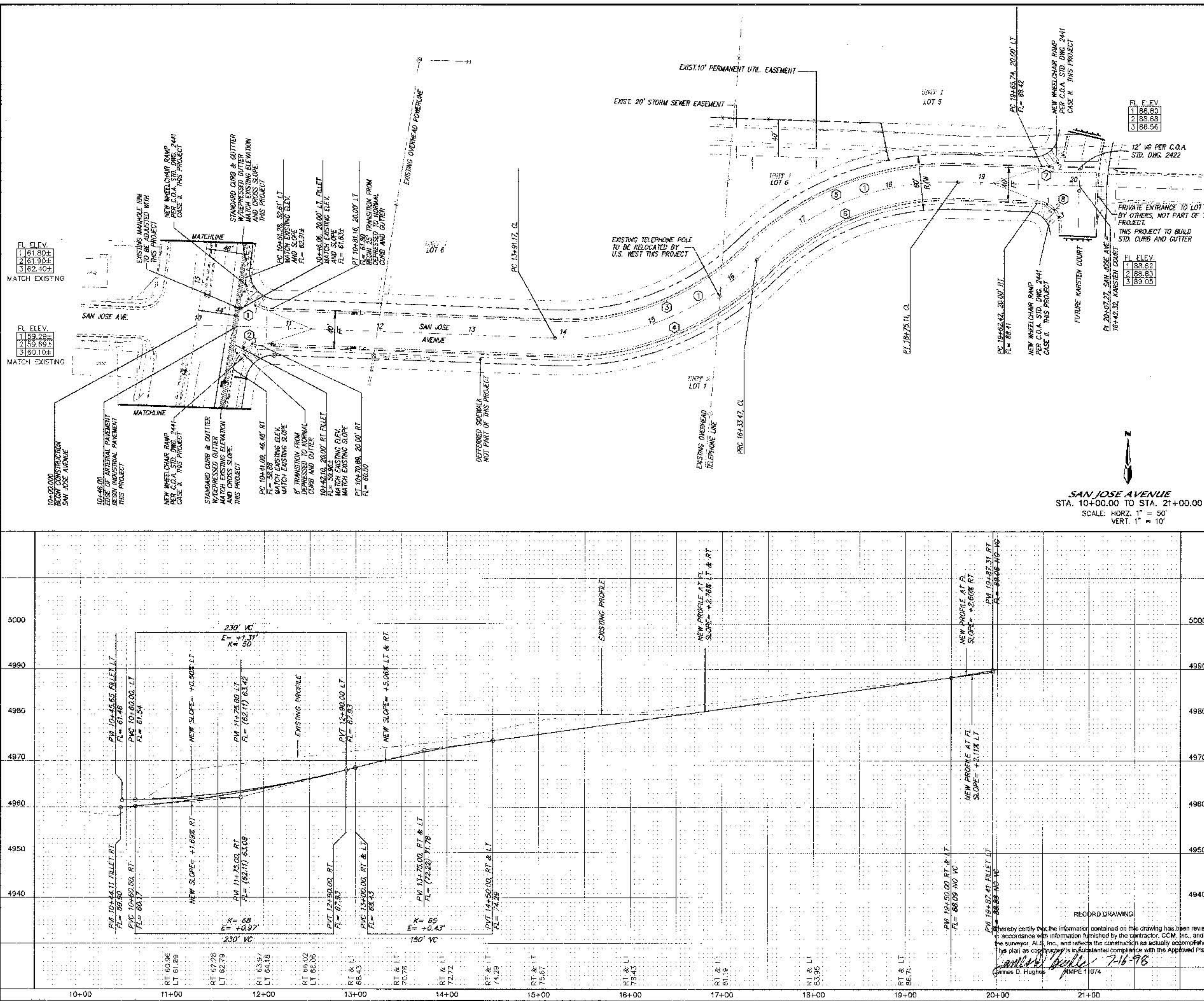
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dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9538

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: ***BROADWAY INDUSTRIAL CENTER
PAYING COMPOSITE***

CITY ENGINEER APPROVAL 		NO. DATE/YR _____ _____ _____ _____ _____		NO. DATE/YR _____ _____ _____ _____ _____	
CITY PROJECT NO.		ZONE MAP NO.		SHEET	
5807.81		M-14		4 17	



LEGEND

- NEW 8" STANDARD CURB & GUTTER
- NEW WHEELCHAIR RAMP PER C.O.A. STD. DWS. 2441 CASE II
- 50' CROWN TRANSITION PER C.O.A. STD. DWS. 2401
- PROPERTY LINE
- FUTURE IMPROVEMENTS
- CENTERLINE OF ROAD
- FUTURE CONSTRUCTION NOT PART OF THIS PROJECT
- SIDEWALK TO BE CONSTRUCTED THIS PROJECT
- ARTERIAL PAVEMENT THIS PROJECT
- POWER AND TELEPHONE POLES W/GUY WIRE

CURVE DATA - DESCRIBES CENTERLINE

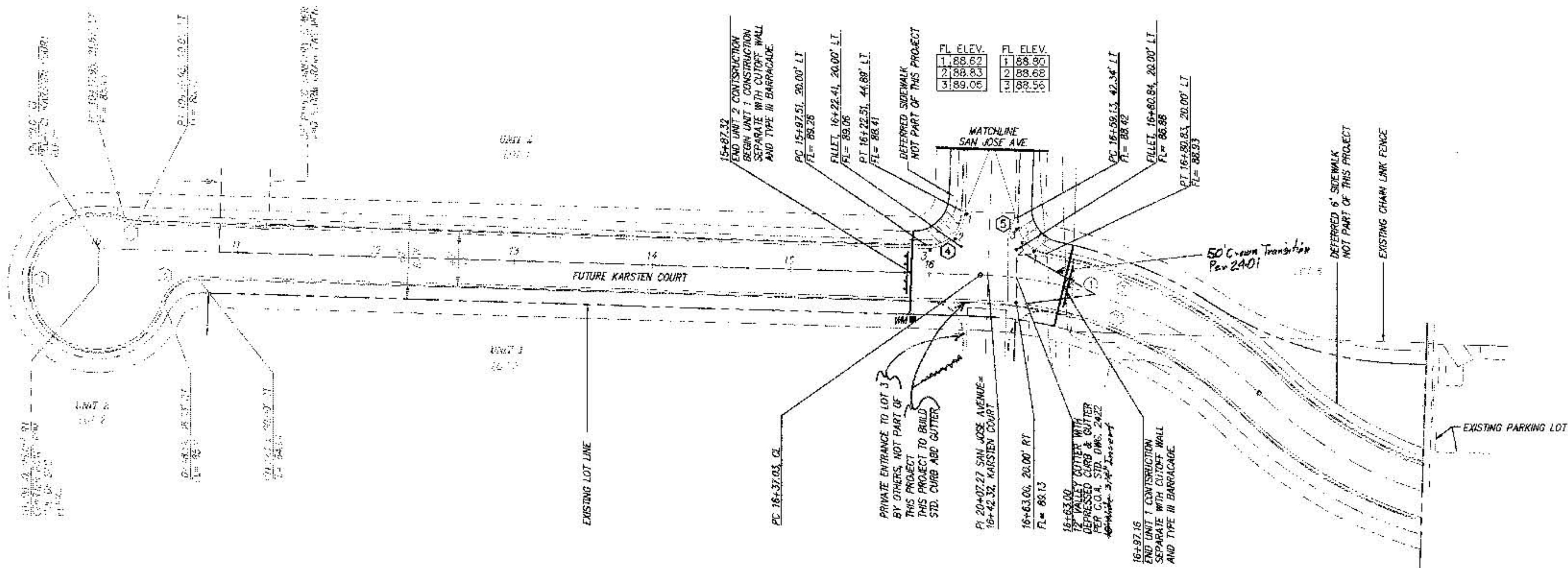
① $\Delta = 46'16''13''$ $R = 300.00'$ $L = 242.30'$ $T = 128.20'$	② $\Delta = 46'08'59''$ $R = 300.00'$ $L = 241.64'$ $T = 127.81'$
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CURVE DATA - DESCRIBES FACE OF NEW CURB

① $\Delta = 94'59'47''$ $R = 30.00'$ $L = 49.74'$ $T = 32.74'$	② $\Delta = 83'15'03''$ $R = 30.00'$ $L = 43.59'$ $T = 26.66'$	③ $\Delta = 46'16'36''$ $R = 280.00'$ $L = 226.15'$ $T = 119.65'$
④ $\Delta = 46'16'37''$ $R = 320.00'$ $L = 258.46'$ $T = 136.75'$	⑤ $\Delta = 46'08'59''$ $R = 320.00'$ $L = 257.75'$ $T = 136.33'$	⑥ $\Delta = 46'08'59''$ $R = 280.00'$ $L = 225.53'$ $T = 119.28'$
⑦ $\Delta = 81'50'29''$ $R = 25.00'$ $L = 35.71'$ $T = 21.67'$	⑧ $\Delta = 89'44'53''$ $R = 25.00'$ $L = 30.16'$ $T = 24.89'$	

CONTRACTOR CCM, Inc.
DATE 12-97
BY JDM
REVISIONS
NO. 1
DATE 12-97
DESIGNED BY JDM
DRAWN BY FSM
CHECKED BY DMG

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP
TITLE: BROADWAY INDUSTRIAL CENTER PAVING PROFILE-SAN JOSE AVENUE
DATE 12-97
NO. DAY/YR 507.81
DATE 12-97
NO. DAY/YR M-14
SHEET 5 OF 17



NOTES

NEW 8" STANDARD CURB & GUTTER

NEW WHEELCHAIR RAMP PER C.O.A. STD. DWG. 2441 CASE II

50' CROWN TRANSITION PER C.O.A. STD. DWG. 2401

PROPERTY LINE

FUTURE IMPROVEMENTS

CENTERLINE OF ROAD

SIDEWALK TO BE CONSTRUCTED THIS PROJECT

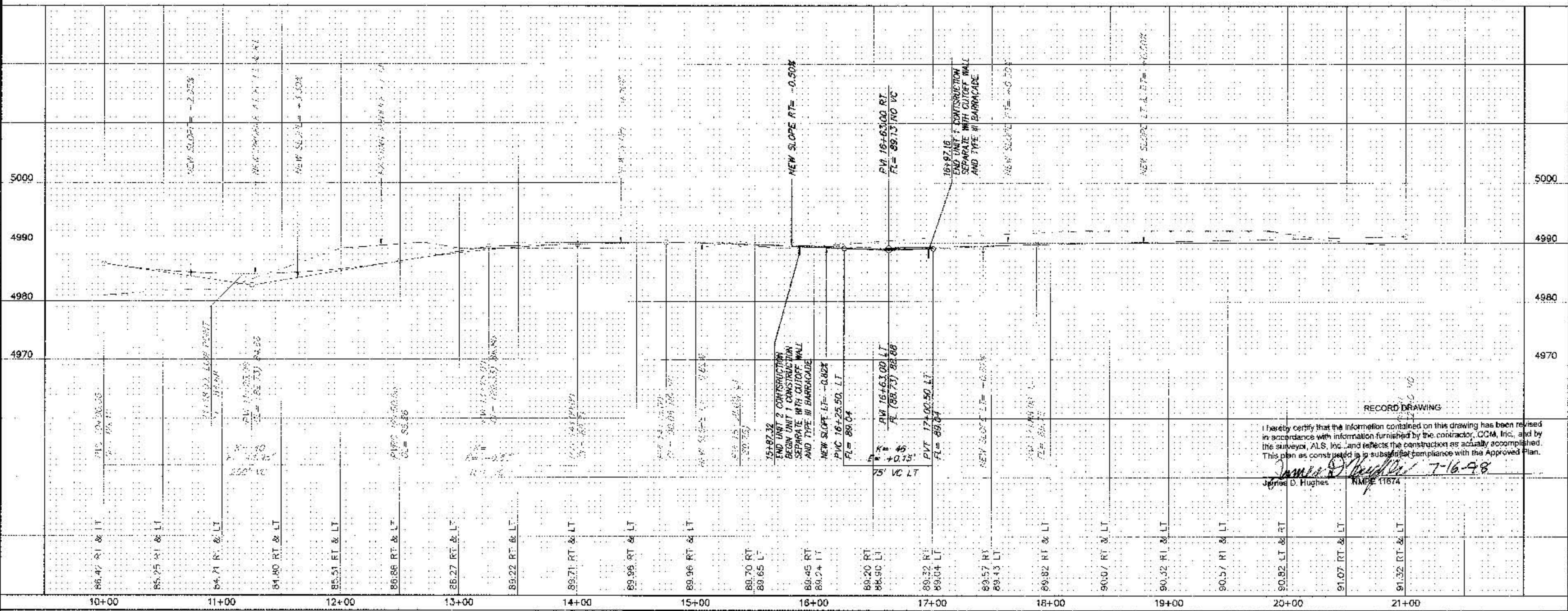
CURVE DATA - DESCRIBES CENTERLINE

①	$\Delta = 42^\circ 48' 41''$ $R = 300.00'$ $L = 224.16'$ $T = 117.60'$
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CURVE DATA - DESCRIBES FACE OF NEW CURB

①	$\Delta = 275^\circ 34' 11''$ $R = 50.00'$ $L = 240.48'$ $T = N/A$	②	$\Delta = 21^\circ 02' 20''$ $R = 25.00'$ $L = 9.18'$ $T = 4.64'$	③	$\Delta = 74^\circ 31' 49''$ $R = 25.00'$ $L = 32.52'$ $T = 19.02'$
④	$\Delta = 88^\circ 44' 53''$ $R = 25.00'$ $L = 39.16'$ $T = 24.89'$	⑤	$\Delta = 81^\circ 50' 29''$ $R = 25.00'$ $L = 35.71'$ $T = 21.67'$	⑥	$\Delta = 34^\circ 23' 56''$ $R = 320.00'$ $L = 192.12'$ $T = 89.05'$
⑦	$\Delta = 42^\circ 48' 37''$ $R = 300.00'$ $L = 209.21'$ $T = 109.76'$				

KARSTEN COURT
STA. 10+00.00 TO STA. 21+00.00
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'



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James D. Hughes
7-16-98

dmg MARK GOODWIN & ASSOCIATES, P.A.
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P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

BROADWAY INDUSTRIAL CENTER
PAVING PROFILE-KARSTEN COURT

REVISIONS	DATE	BY
DESIGN	12-97	JPH
CHKD	12-97	FSM
CHKD	12-97	DMG

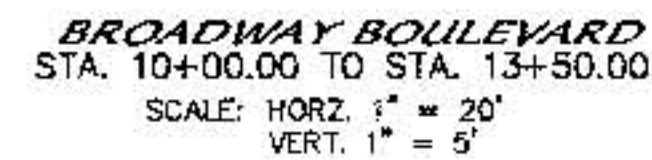
CITY PROJECT NO. 5807.81
70% MAP NO. M-14
SHEET 6 OF 17

CONTRACTOR CQM, Inc.		DATE 6-98	
SUPERVISOR ALS, Inc.		DATE 7-98	
DESIGNED BY JPH		DATE 12-97	
DRAWN BY FSM		DATE 12-97	
CHECKED BY DMG		DATE 12-97	
REMARKS		DATE	
DESIGN		12-97	
CHKD		12-97	
CHKD		12-97	

ENGINEER'S SEAL

James D. Hughes
7-16-98

70% MAP NO. M-14
SHEET 6 OF 17



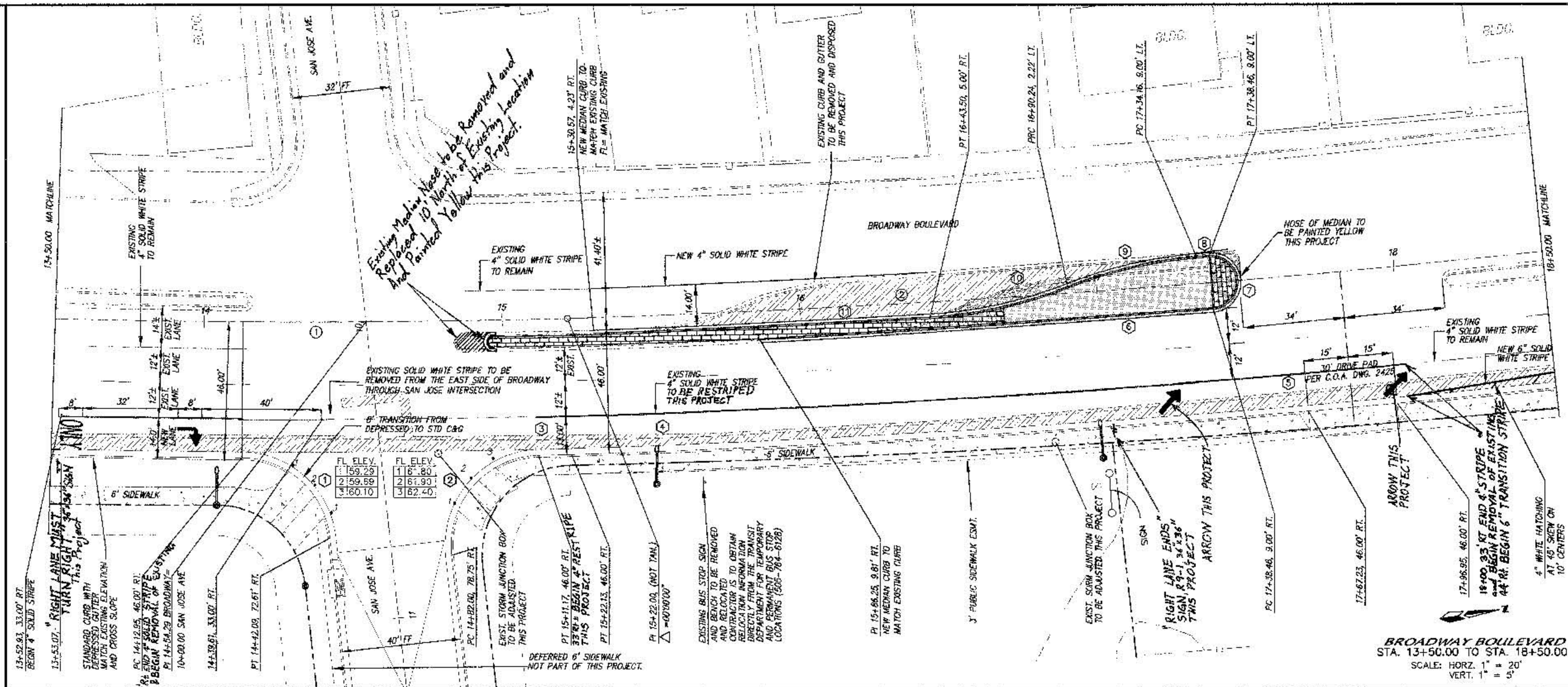
RECORD DRAWING

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James D. Hughes 7-16-98

James D. Hughes NME 116674

CITY PROJECT NO. 5807.81	ZONE MAP NO. M-14	SHEET OF 7 17
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LEGEND	
	NEW CURB AND GUTTER
	NEW WHEELCHAIR RAMP PER C.O.A. STD. DWG. 2441 CASE II
	50' CROWN TRANSITION
	PROPERTY LINE
	EXISTING IMPROVEMENTS
	STRIPING PLAN
	CENTERLINE OF ROAD
	ARTERIAL PAVEMENT
	REMOVE AND DISPOSE PAVEMENT
	NEW 6' SIDEWALK THIS PROJECT
	TEXTURED CONCRETE (RED BRICK PATTERN) PER C.O.A. DWG. 2502
	EXISTING STREET LIGHT
	EXISTING POWER POLE

CURVE DATA - DESCRIBES CENTERLINE

① $\Delta = 0323.08^\circ$ $R = 3228.60'$ $L = 190.78'$ $T = 95.42'$	② $\Delta = 0449.06^\circ$ $R = 4800.00'$ $L = 386.85'$ $T = 193.54'$
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CURVE DATA - DESCRIBES FACE OF CURB

① $\Delta = 8315.03^\circ$ $R = 30.00'$ $L = 43.59'$ $T = 26.68'$	② $\Delta = 9459.47^\circ$ $R = 30.00'$ $L = 49.74'$ $T = 32.74'$	③ $\Delta = 0011.40^\circ$ $R = 3274.60'$ $L = 11.12'$ $T = 5.56'$
④ $\Delta = 0041.44^\circ$ $R = 4646.00'$ $L = 56.41'$ $T = 28.20'$	⑤ $\Delta = 0342.32^\circ$ $R = 4643.40'$ $L = 300.57'$ $T = 150.34'$	⑥ $\Delta = 0044.58^\circ$ $R = 11658.36'$ $L = 152.32'$ $T = 76.26'$
⑦ $\Delta = 17958.20^\circ$ $R = 9.00'$ $L = 28.27'$ $T = N/A$	⑧ $\Delta = 0003.13^\circ$ $R = 4591.00'$ $L = 4.29'$ $T = 2.15'$	⑨ $\Delta = 1701.01^\circ$ $R = 150.00'$ $L = 44.55'$ $T = 22.44'$

SURVEY INFORMATION

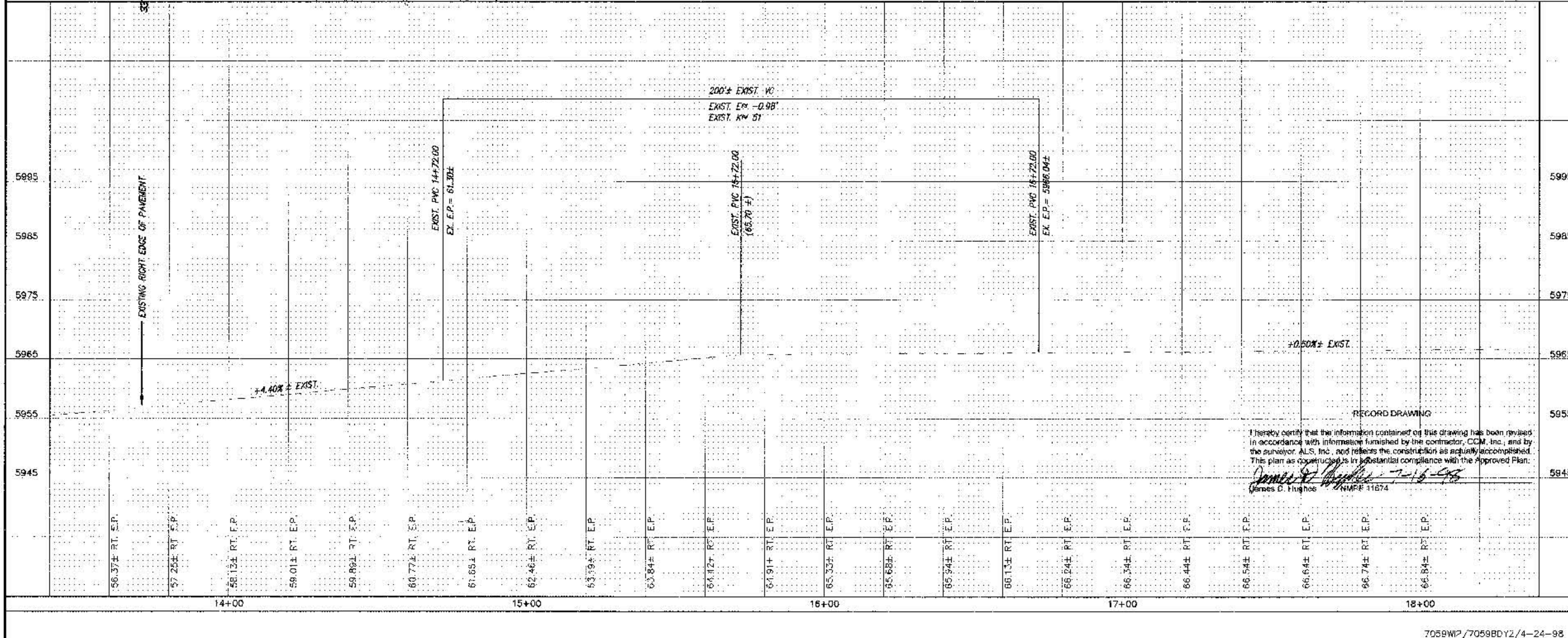
FIELD NOTES

BY

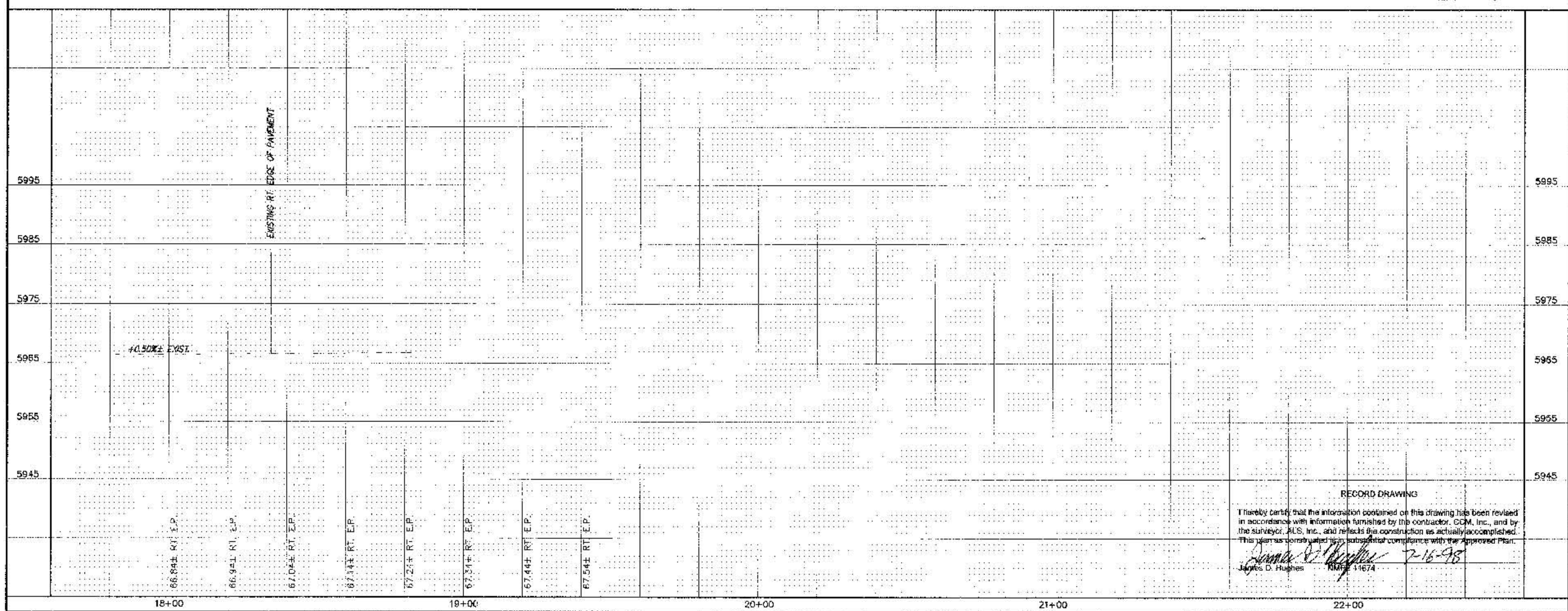
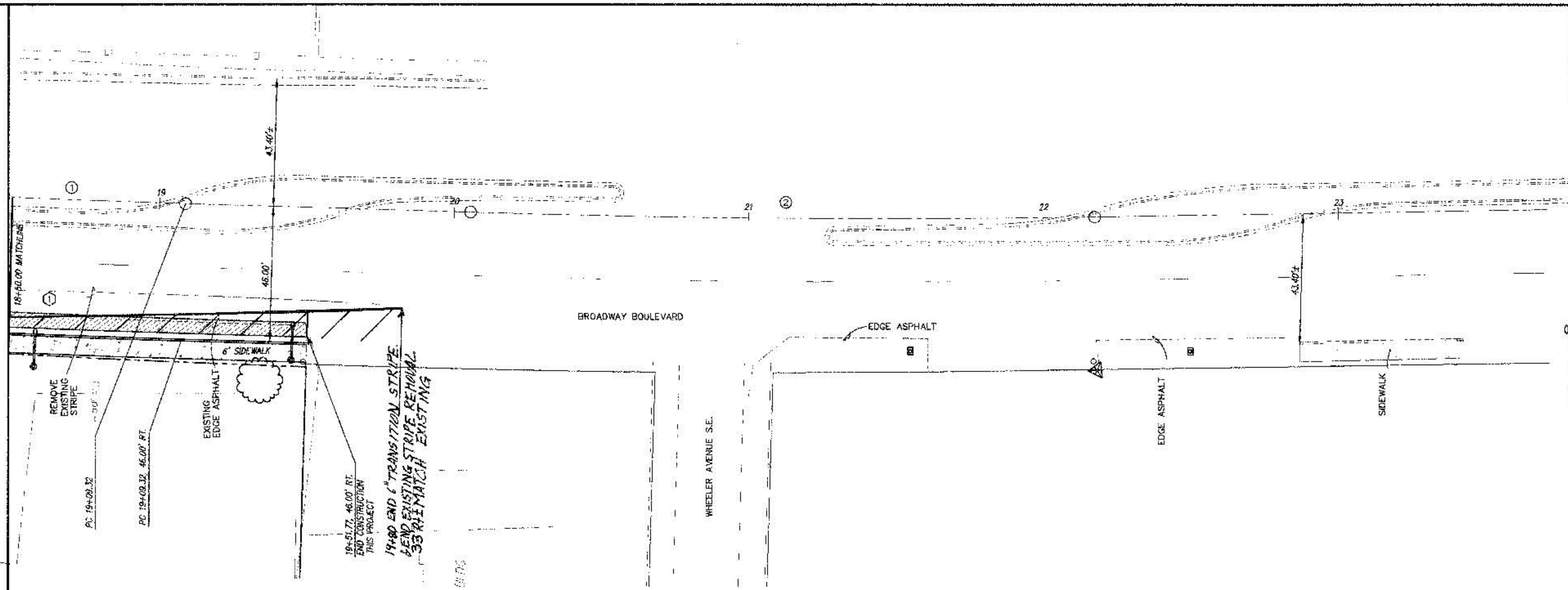
NO.

DATE

98



RECORD DRAWING	
I hereby certify that the information contained on this drawing has been reviewed in accordance with information furnished by the contractor, CCM, Inc., and by the surveyor, ALS, Inc., and that the construction as actually accomplished. This plan as constructed is in substantial compliance with the approved plan.	
James D. Hughes NMPE 11674	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: BROADWAY INDUSTRIAL CENTER PAVING PROFILE-BROADWAY BLVD.	
CITY PROJECT NO. 5807.81	ZONE: M-14
DESIGNED BY: JDM	CHECKED BY: DMG
DRAWN BY: FSM	DATE: 1-98
APPROVED BY: ALS	DATE: 1-98
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99 1-98	REVISED
100 1-98	REVISED



LEGEND

- NEW CURB & CUTTER
- NEW WHEELCHAIR RAMP PER C.O.A. STD. DWG. 2447
- EXISTING STREET LIGHT
- PROPERTY LINE
- FUTURE IMPROVEMENTS
- CENTERLINE OF ROAD
- EXISTING IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED THIS PROJECT
- ARTERIAL PAVEMENT THIS PROJECT

CURVE DATA - DESCRIBES CENTERLINE

①	$\Delta = 04^{\circ}49'06''$	②	$\Delta = 02^{\circ}58'20''$
	$R = 4600.00'$		$R = 4602.00'$
	$L = 396.95'$		$L = 211.86'$
	$T = 193.54'$		$T = 105.95'$

CURVE DATA - DESCRIBES FACE OF CURB

①	$\Delta = 03^{\circ}08'37''$
	$R = 4643.40'$
	$L = 254.77'$
	$T = 127.42'$

BROADWAY BOULEVARD
STA. 13+50.00 TO STA. 18+50.00
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

RECORD DRAWING

I hereby certify that the information contained on this drawing has been revised in accordance with information furnished by the contractor, CDM, Inc., and by the surveyor, ALS, Inc., and reflects the construction as actually accomplished. This drawing is not to be used for any other project without the approval of the City Engineer.

James D. Hughes 2-16-98
James D. Hughes RME 11674

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

BROADWAY INDUSTRIAL CENTER
PAVING PROFILE-BROADWAY BLVD.

DESIGNER'S SEAL

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 30606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

REMARKS

REVISIONS

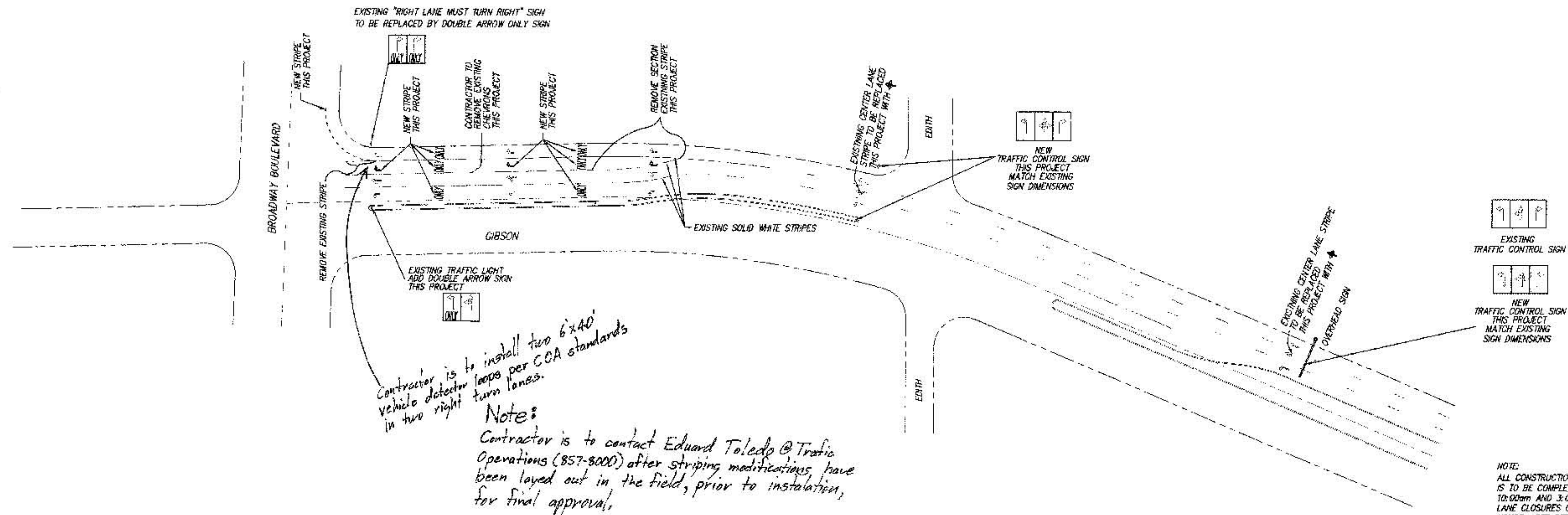
NO.	DATE	BY
1	1-98	ADH
2	1-98	ADH
3	1-98	ADH

DESIGNED BY: ADH
DRAWN BY: KSH
CHECKED BY: DMG

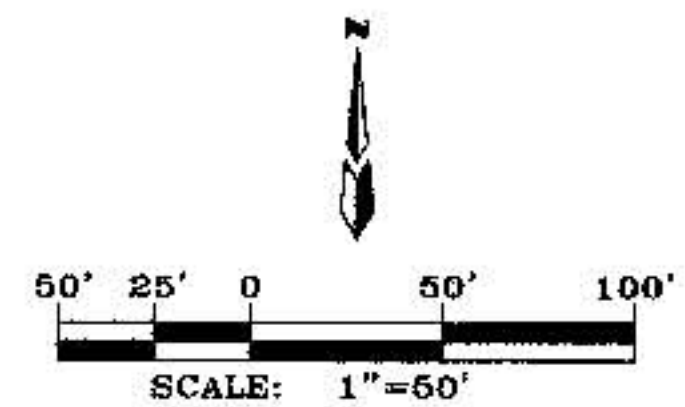
CONTRACTOR

CDM, Inc.
DATE: 1-98
DESIGNED BY: ALS
DATE: 1-98
DRAWN BY: ALS
DATE: 1-98
CHECKED BY: ALS
DATE: 1-98
RECORDED BY: ALS
DATE: 1-98

CITY PROJECT NO. 5807.81
ZONE MAP NO. M-14
SHEET 9 **OF** 17



NOTE:
ALL CONSTRUCTION THIS SHEET
IS TO BE COMPLETED BETWEEN
10:00am AND 3:00pm WITH SINGLE
LANE CLOSURES ONLY DURING THOSE
HOURS. PER DETAILS ON THE LAST
TWO SHEETS OF THIS PLAN SET.



dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 60626
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

DESIGN: **SEAN** COMM: **FILE** CITY ENGINEER APPROVAL: **FILE** NO. **DAY/YY** NO. **DAY/YY**
LAST DESIGN UPDATE: **FILE**

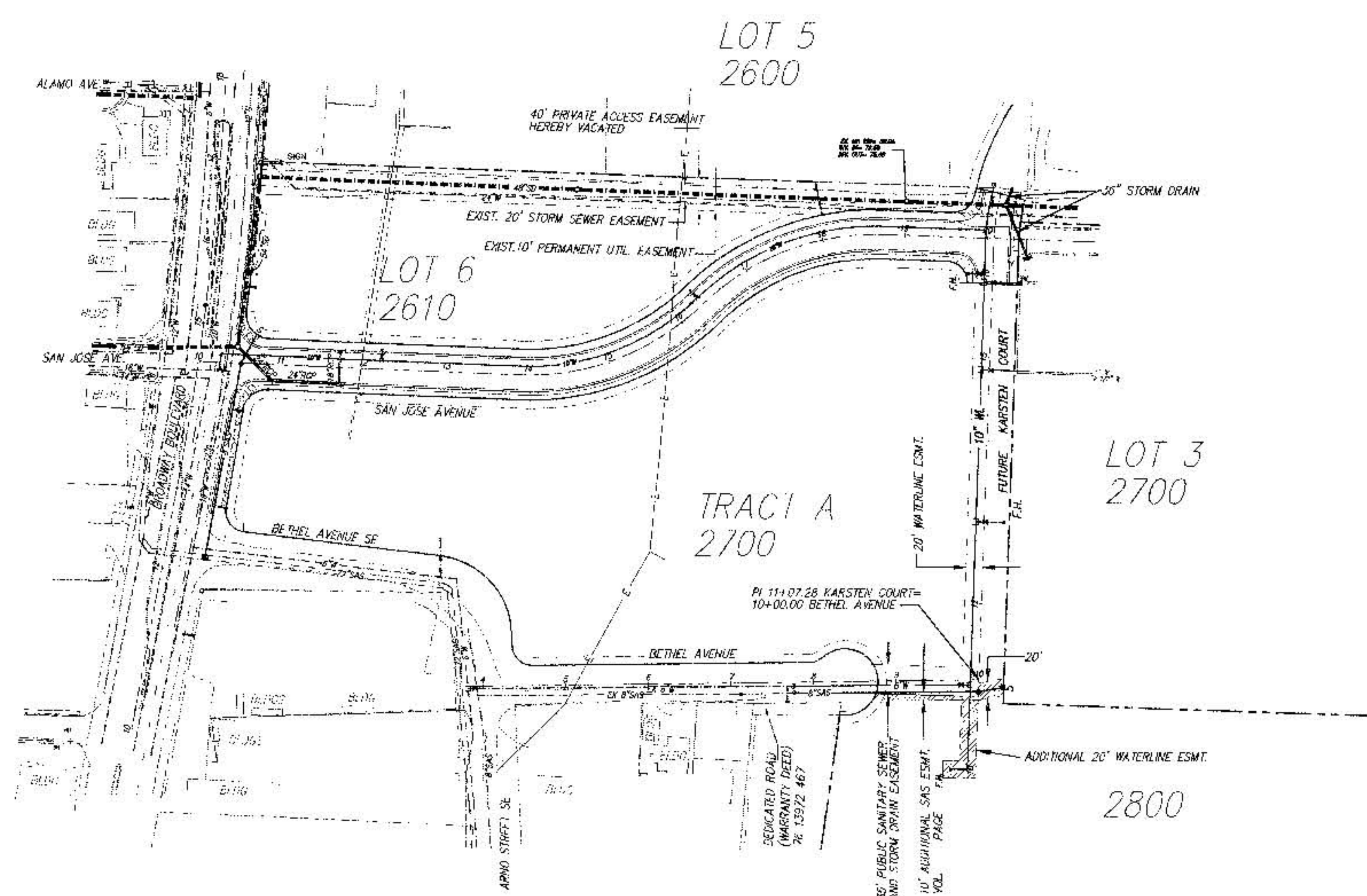
CITY PROJECT NO. **5807.81** ZONE MAP NO. **L-14** SHEET **10** OF **17**

AS BUILT INFORMATION			
CONTRACTOR	CCM, Inc.	DATE	1-98
WORK	ALB	DATE	1-98
DESIGNED BY	HGA	DATE	2-98
FIELD CHECK BY	ALS	DATE	2-98
REVISION BY	ALS	DATE	2-98
CHECKED BY	MGA	DATE	2-98
MICRO-FILM INFORMATION			
RECORDED BY		DATE	
INDEXED BY		DATE	

SURVEY INFORMATION		BENCH MARKS	
NO.	BY	DATE	



REMARKS	BY
REVISIONS	DATE
DESIGN	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE



- LEGEND**
- EXISTING CURB AND GUTTER
 - EXISTING SANITARY SEWER MANHOLE
 - EXISTING CABLE T.V. PEDESTAL
 - EXISTING WATER VALVE
 - EXISTING OVERHEAD ELECTRIC LINE
 - EXISTING OVERHEAD TELEPHONE LINE
 - EXISTING POWER POLE
 - EXISTING TELEPHONE PEDESTAL
 - EXISTING FIRE HYDRANT
 - EXISTING STORM SEWER MANHOLE
 - EXISTING DROP INLET
 - EXISTING LOT LINE
 - TRACT/LOT BOUNDARY
 - RIGHT OF WAY
 - PROPOSED FIRE HYDRANT EASEMENTS
 - EXISTING WATERLINE
 - PROPOSED WATERLINE
 - EXISTING SANITARY SEWER
 - EXISTING STORM DRAIN
 - EXISTING VWP GASLINE
 - MOUNTABLE CURB & GUTTER
 - STANDARD 8" CURB & GUTTER
 - PROPOSED STORM DRAIN LINE
 - PROPOSED SANITARY SEWER

AS BUILT INFORMATION			
CONTRACTOR	CCM, Inc.	DATE	6-98
DESIGNED BY	ALS	DATE	2-98
DRAWN BY	MGA	DATE	2-98
CHECKED BY	ALS	DATE	2-98
REVIEWED BY	MGA	DATE	2-98
RECORDED BY	CCM-FLM	DATE	6-98
NO.		DATE	

SURVEY INFORMATION			
FFID NO.		BY	
NO.		DATE	

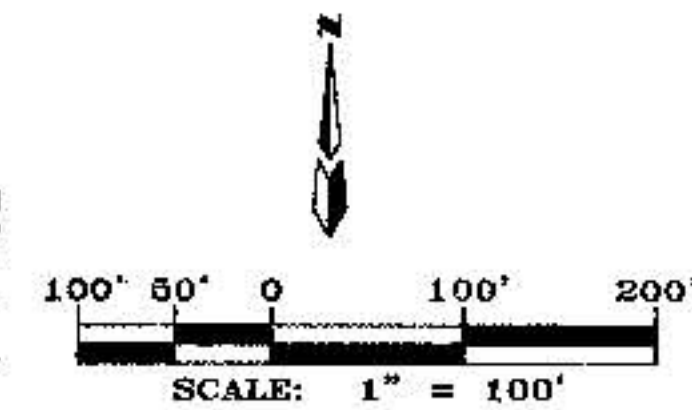


ENGINEER'S DATA			
REMARKS		DATE	1-98
DESIGNED BY	JDH	DATE	1-98
DRAWN BY	FSM	DATE	1-98
CHECKED BY	DMG	DATE	1-98

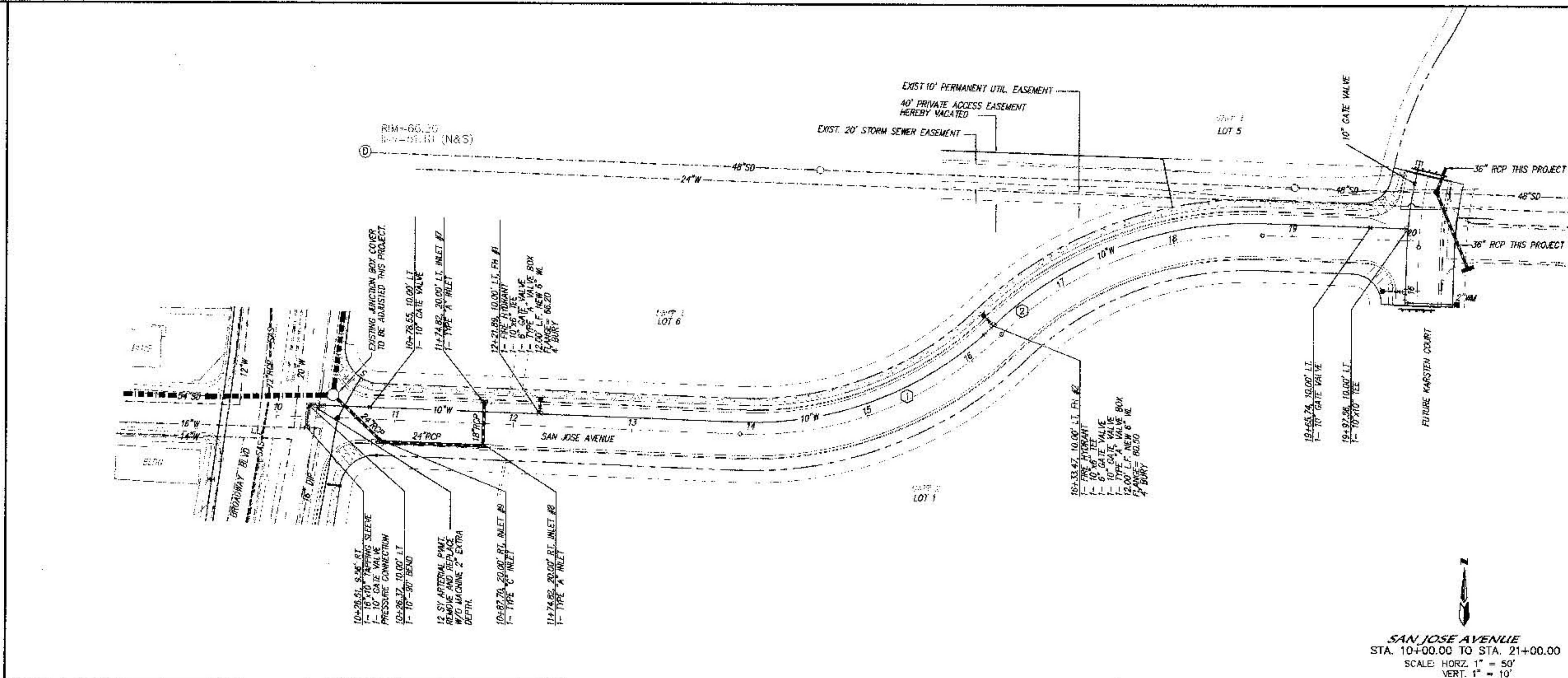
RECORD DRAWING

I hereby certify that the information contained on this drawing has been revised in accordance with information furnished by the contractor, CCM, Inc., and by the surveyor, ALS, Inc., and reflects the construction as actually accomplished. This plan as completed is in substantial compliance with the Approved Plan.

James D. Hughes 7-16-98
James D. Hughes
NAME 11674



dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 (505) 875-2200, FAX (505) 797-9539	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: BROADWAY INDUSTRIAL CENTER UTILITY COMPOSITE	
DESIGN-REVIEW COMMITTEE	CITY ENGINEER APPROVAL
NO. 08/20/99	NO. 08/20/99
CITY PROJECT NO. 5807.81	ZONE MAP NO. M-14
SHEET 11 OF 17	



NOTES

1. ALL FITTINGS ARE TO HAVE RESTRAINED JOINTS AS FOLLOWS.

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	-	-	46'
10"	26'	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

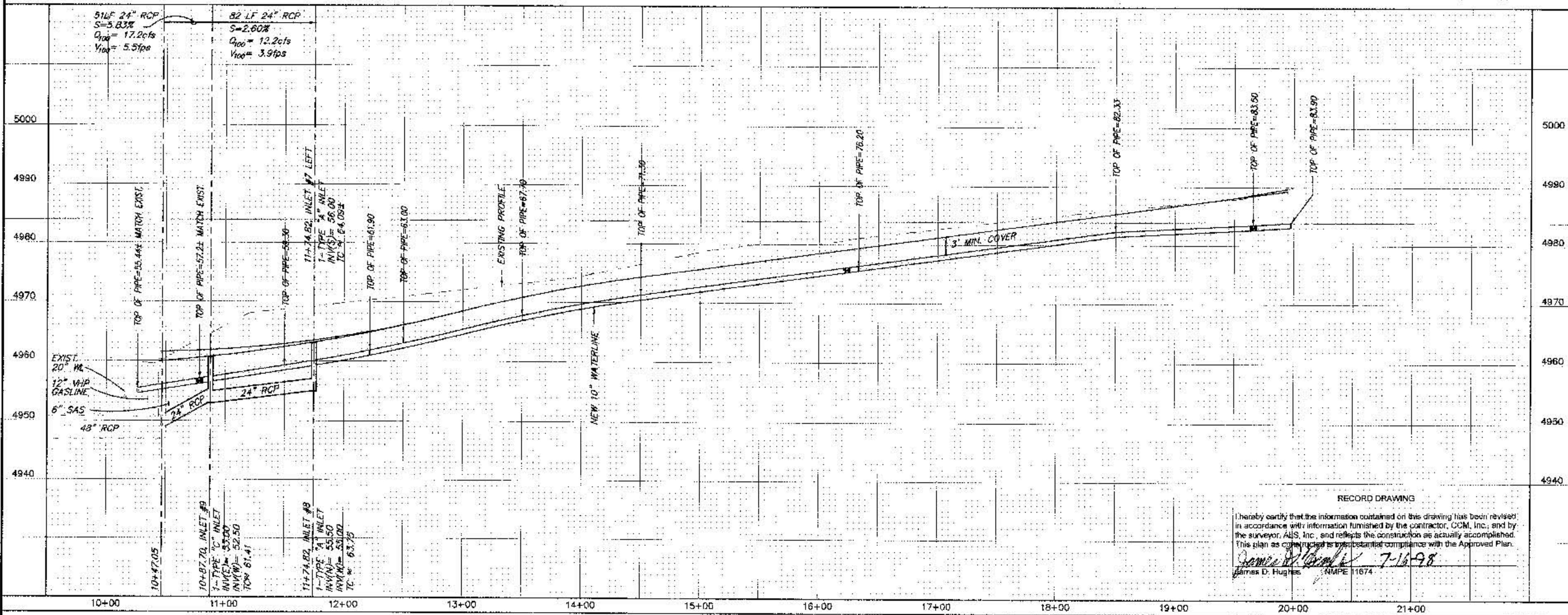
PIPE SIZE	LARGE SIDE	SMALL SIDE
10" X 6"	44'	-

PIPE SIZE	RUN	BRANCH
10" X 10" X 10"	15'	5'
10" X 10" X 6"	6'	1'
6" X 6" X 6"	10'	2'

CURVE DATA - DESCRIBES PIPE CURVE

① $\Delta = 46'16.38"$
 $R = 290.00'$
 $L = 234.23'$
 $T = 123.93'$

② $\Delta = 46'18.36"$
 $R = 310.00'$
 $L = 249.69'$
 $T = 132.06'$



dmg MARK GOODWIN & ASSOCIATES, P.A.
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

BROADWAY INDUSTRIAL CENTER
UTILITY PROFILE - SAN JOSE AVENUE

DESIGNED BY: *DMG* DATE: 12-97
DRAWN BY: *DMG* DATE: 12-97
CHECKED BY: *DMG* DATE: 12-97

AS BUILT INFORMATION

CONTRACTOR: *CCH, Inc.*
DATE: *7-16-98*
BY: *ALS*
CHECKED BY: *ALS*
DATE: *7-16-98*
RECORDED BY: *DMG*
DATE: *12-97*

FIELD NOTES

NO. *1* BY *DMG* DATE *12-97*

ENGINEER'S SEAL

James D. Hughes
7-16-98
11674

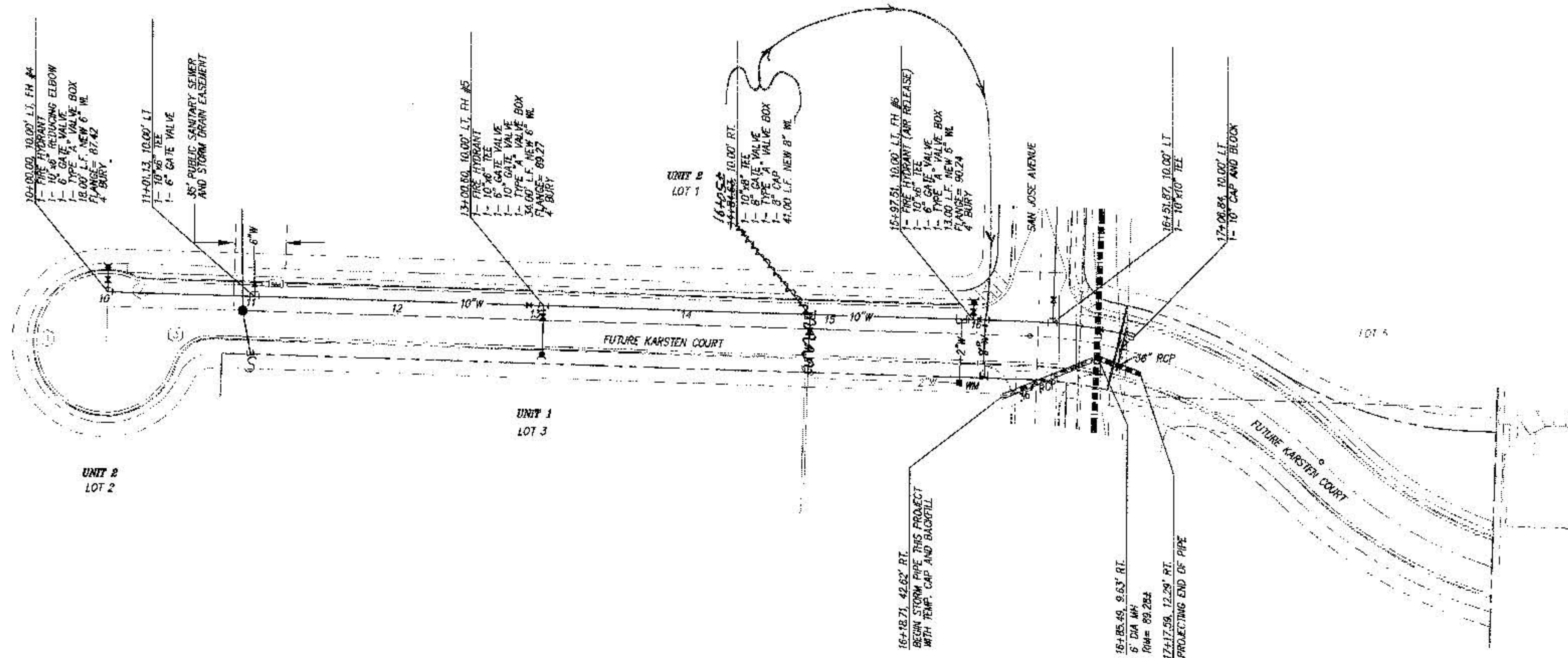
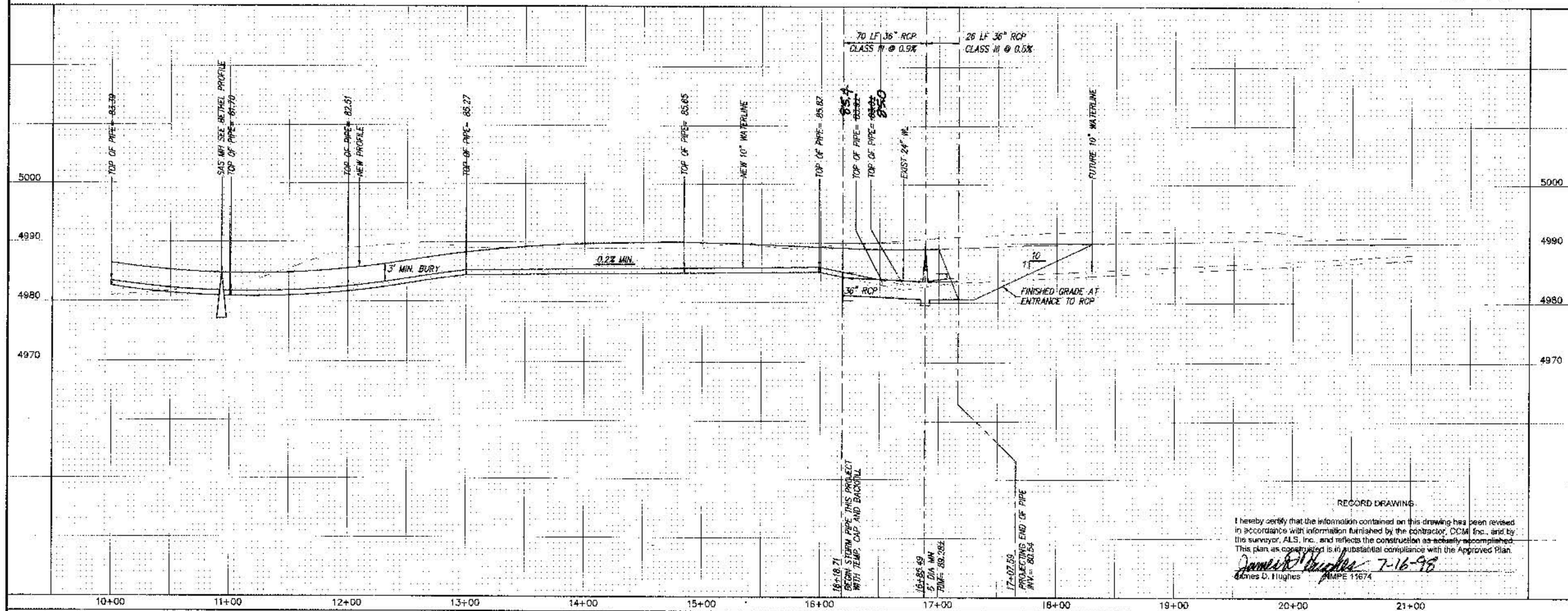
REMARKS

NO. *1* DATE *12-97*

DESIGN

NO. *1* DATE *12-97*

CITY PROJECT NO. 5807.81 **ZONE MAP NO.** M-14 **SHEET** 12 17



KARSTEN COURT
STA. 10+00.00 TO STA. 17+08.84
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'

NOTES

1. ALL FITTINGS ARE TO HAVE RESTRAINED JOINTS AS FOLLOWS.

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	-	-	46'
10"	-	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

RESTRAINED JOINT LENGTHS FOR REDUCERS (FT.)		
PIPE SIZE	LARGE SIDE	SMALL SIDE
10" X 6"	44'	-

RESTRAINED JOINT LENGTH FOR TEES (FT.)		
PIPE SIZE	RUN	BRANCH
10"x10"x10"	15'	5'
10"x10"x6"	6'	1'
6"x6"x6"	10'	2'

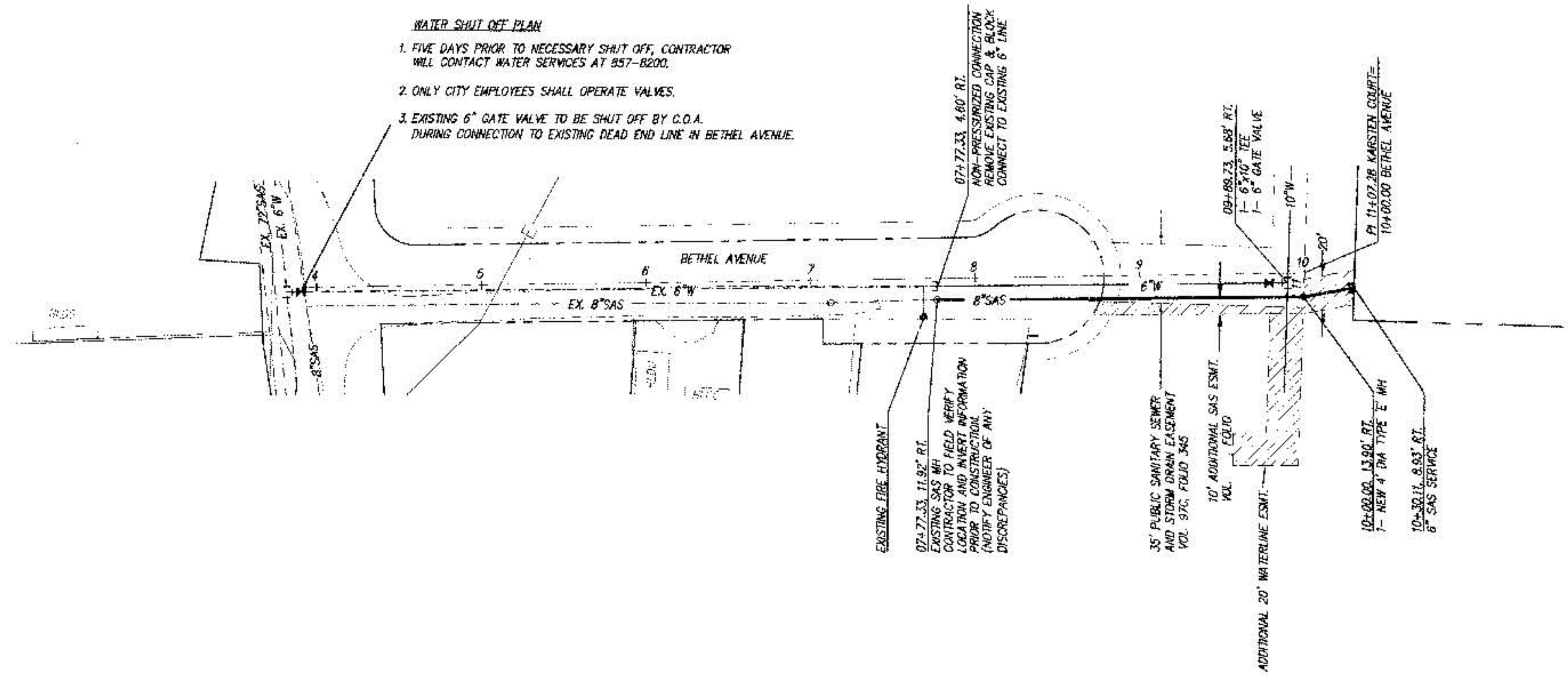
dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 528-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

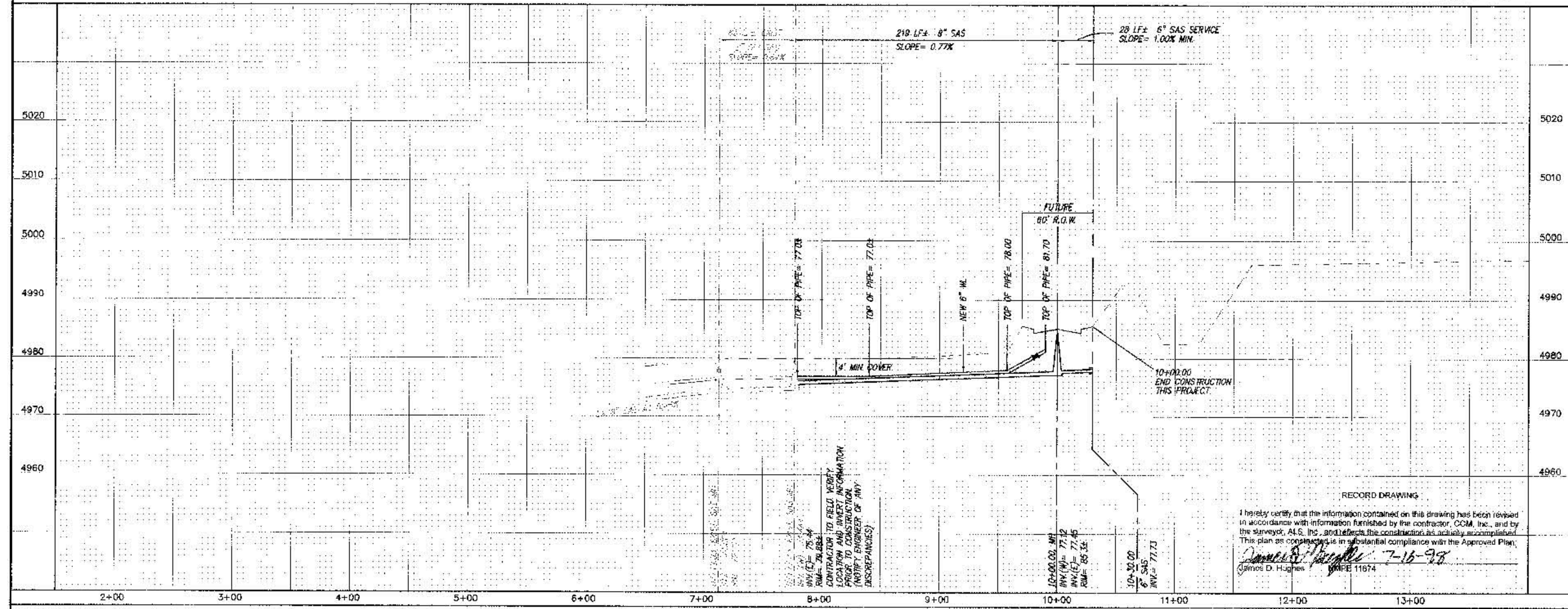
TITLE: **BROADWAY INDUSTRIAL CENTER
UTILITY PROFILE-KARSTEN COURT**

DESIGNED BY JGH	DATE 1-98	REMARKS REVISIONS	BY JGH
DRAWN BY FSM	DATE 1-98	DESIGN	DATE 1-98
CHECKED BY DMG	DATE 1-98		

CITY PROJECT NO. **5807.81** ZONE MAP NO. **M-14** SHEET **13** OF **17**



SAN JOSE AVENUE
STA. 10+00.00 TO STA. 21+00.00
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'



NOTES

1. ALL FITTINGS ARE TO HAVE RESTRAINED JOINTS AS FOLLOWS.

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	12'	7'	-	-	46'
10"	-	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

PIPE SIZE	LARGE SIDE	SMALL SIDE
10" X 6"	44'	-

PIPE SIZE	RUN	BRANCH
10" X 10" X 10"	15'	5'
10" X 10" X 6"	6'	1'
6" X 6" X 6"	10'	2'

AS BUILT INFORMATION

CONTRACTOR	WORK BY	INSPECTED BY	ACCEPTED BY	DESIGNED BY	CHECKED BY	RECORDED BY	NO.
CCM, Inc.	ALIS	MGA	ALIS	MGA	MGA	MGA	

DATE: 7-98

DATE: 7-98

DATE: 7-98

DATE: 7-98

DATE: 7-98

DATE: 7-98

DATE: 7-98

DATE: 7-98

ENGINEER'S SEAL

FIELD NOTES

NO. BY

DATE

DATE

DATE

DATE

DATE

DATE

DATE

MARK OGDON & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

BROADWAY INDUSTRIAL CENTER
UTILITY PROFILE - BETHEL AVENUE

DESIGNED BY: JDH
DRAWN BY: FSM
CHECKED BY: DMG

DATE: 2-98
DATE: 2-98
DATE: 2-98

RECORD DRAWING

I hereby certify that the information contained on this drawing has been revised in accordance with information furnished by the contractor, CCM, Inc., and by the surveyor, A.L.S., Inc., and reflects the construction as actually accomplished. This plan as constructed is in substantial compliance with the Approved Plan.

James D. Hughes
7-15-98
11674

CITY PROJECT NO. 5807.81

ZONE MAP NO. M-14

SHEET OF 14 17

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 TRAVELLED 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 ITS PLACEMENT AND MAINTENANCE.

25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

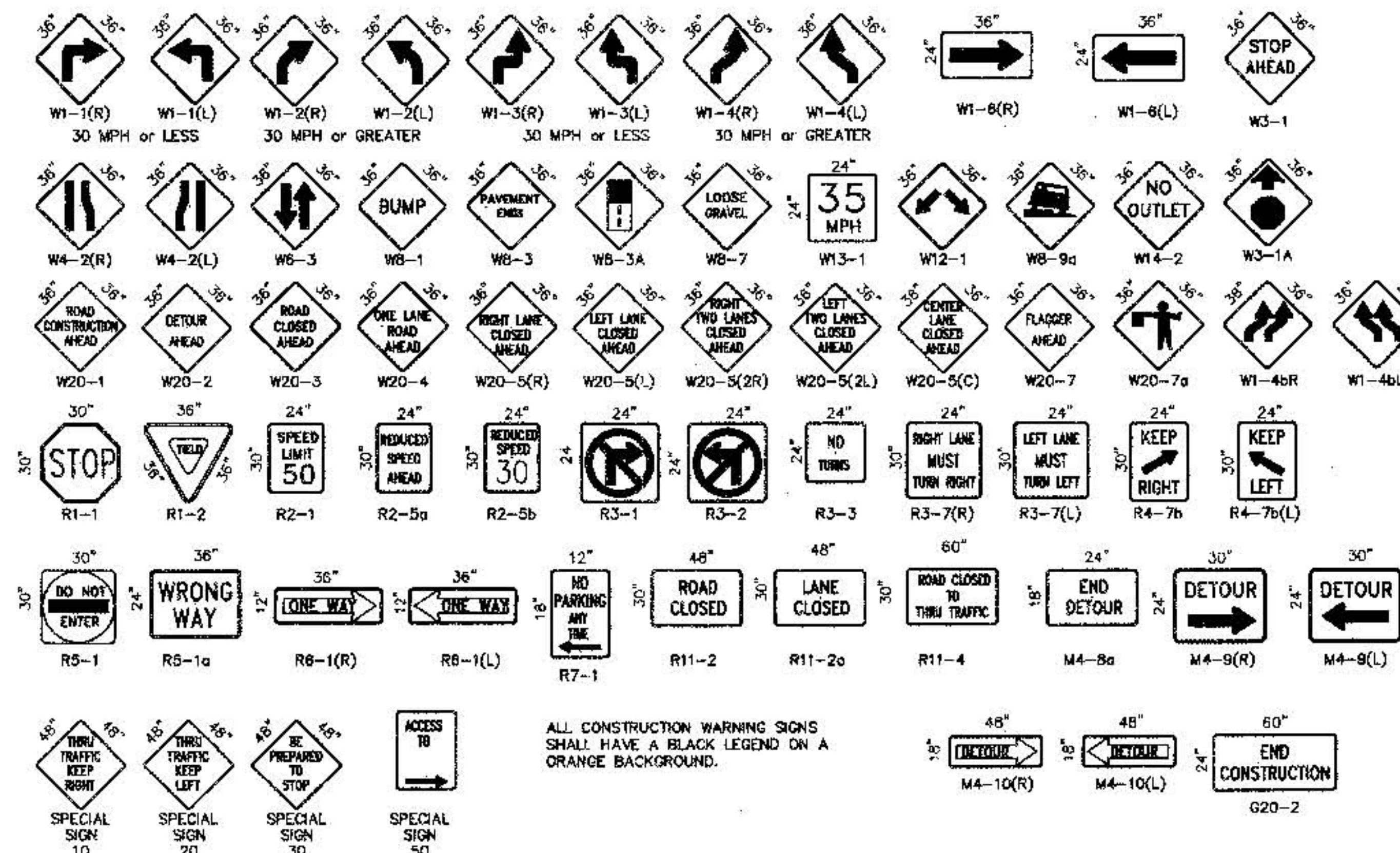
26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE MUTCD. 

27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY. 

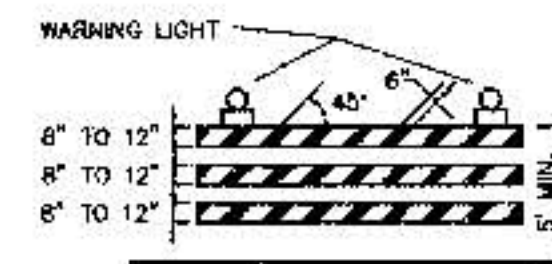
SPECIAL PROJECT TRAFFIC CONTROL NOTES

- ALL BARRICADE DEVICES ON BROADWAY BOULEVARD SHALL BE BARRELS (DRUMS). TYPE I, TYPE II, OR VERTICAL PANELS WILL NOT BE ALLOWED ON BROADWAY BOULEVARD.
- THE CONTRACTOR SHALL PERFORM AS MUCH WORK AS POSSIBLE WITHOUT EFFECTING TRAFFIC ON BROADWAY BOULEVARD. THIS SHALL INCLUDE ALL NEW CURB AND GUTTER, SIDEWALK, AND VALLEY CUTTER ON THE EAST SIDE OF BROADWAY.
- A TYPICAL (SINGLE) RIGHT LANE CLOSURE (SEE SHEET 16) BETWEEN THE HOURS FROM 8:30 AM AND 4:00 PM FOR FIVE DAYS IS ALLOWED TO CONSTRUCT THE SHOULDER IMPROVEMENTS ALONG THE EAST SIDE OF BROADWAY BOULEVARD.
- A TYPICAL (SINGLE) LEFT LANE CLOSURE (SEE SHEET 16) BETWEEN THE HOURS FROM 8:30 AM TO 4:00 PM FOR FIVE DAYS IS ALLOWED TO CONSTRUCT THE MEDIAN IMPROVEMENTS IN BROADWAY BOULEVARD. A SINGLE LANE CLOSURE IN EACH DIRECTION AT THE SAME TIME IS ALLOWED.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE LANE IN EACH DIRECTION ON BROADWAY BOULEVARD WHILE INSTALLING UTILITY CONNECTIONS. THIS SHALL BE PERFORMED BY USING TYPICAL LEFT AND RIGHT LANE CLOSURES AS THE UTILITY INSTALLATION PROCEEDS ACROSS BROADWAY BOULEVARD.
- IF THE CONTRACTOR ELECTS TO WORK OUTSIDE THE HOURS ALLOWED HEREIN, THEN ALL WORK EFFECTING TRAFFIC ON BROADWAY BOULEVARD SHALL BE PERFORMED ON A CONTINUOUS 24-HOUR PER DAY BASIS UNTIL COMPLETED.

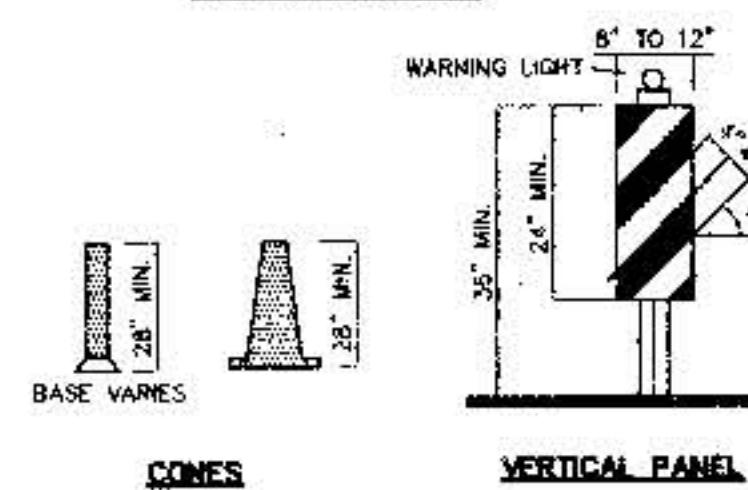
SIGN FACE DETAILS



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



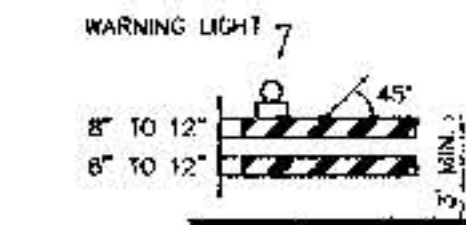
TYPE III BARRICADE



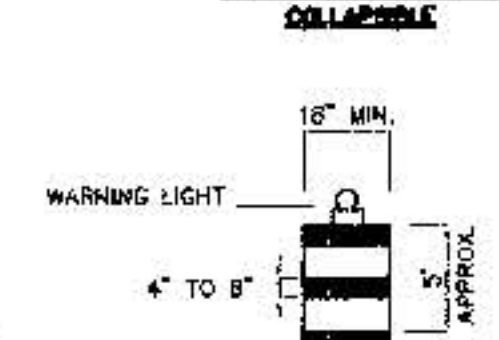
CONES

VERTICAL PANEL

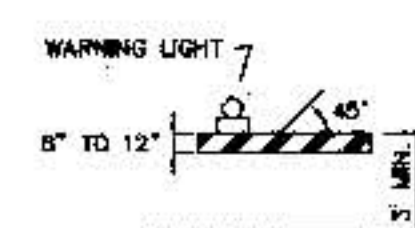
HIGH LEVEL WARNING DEVICE



TYPE I BARRICADE



BARREL



TYPE I BARRICADE

TRAFFIC CONTROL ELEMENTS

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 SPEED LIMIT OF THE STREET
- TAPER LENGTH - SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENTS

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 MILES PER HOUR	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
SHIFTER 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	L = $\frac{WS^2}{60}$
40 MPH OR LESS	
45 MPH OR GREATER	L = W X S
L = TAPER LENGTH	
W = WIDTH OF OFFSET IN FEET	
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH	

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
DESIGN REVIEW COMMITTEE	LAST UPDATE
PROJECT NO. 5807.81	MAP NO. 11-14
SHEET 17 OF 17	