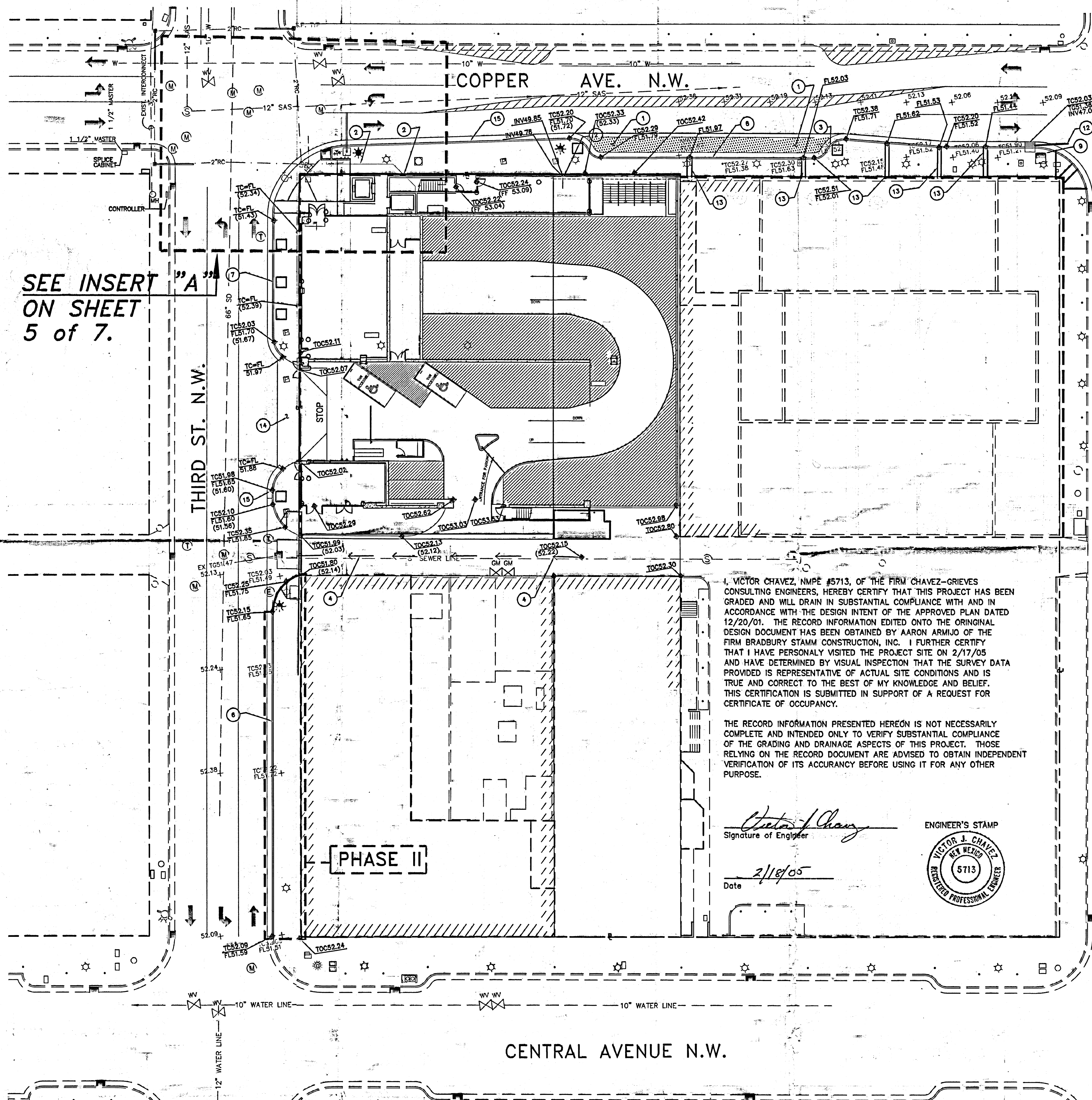
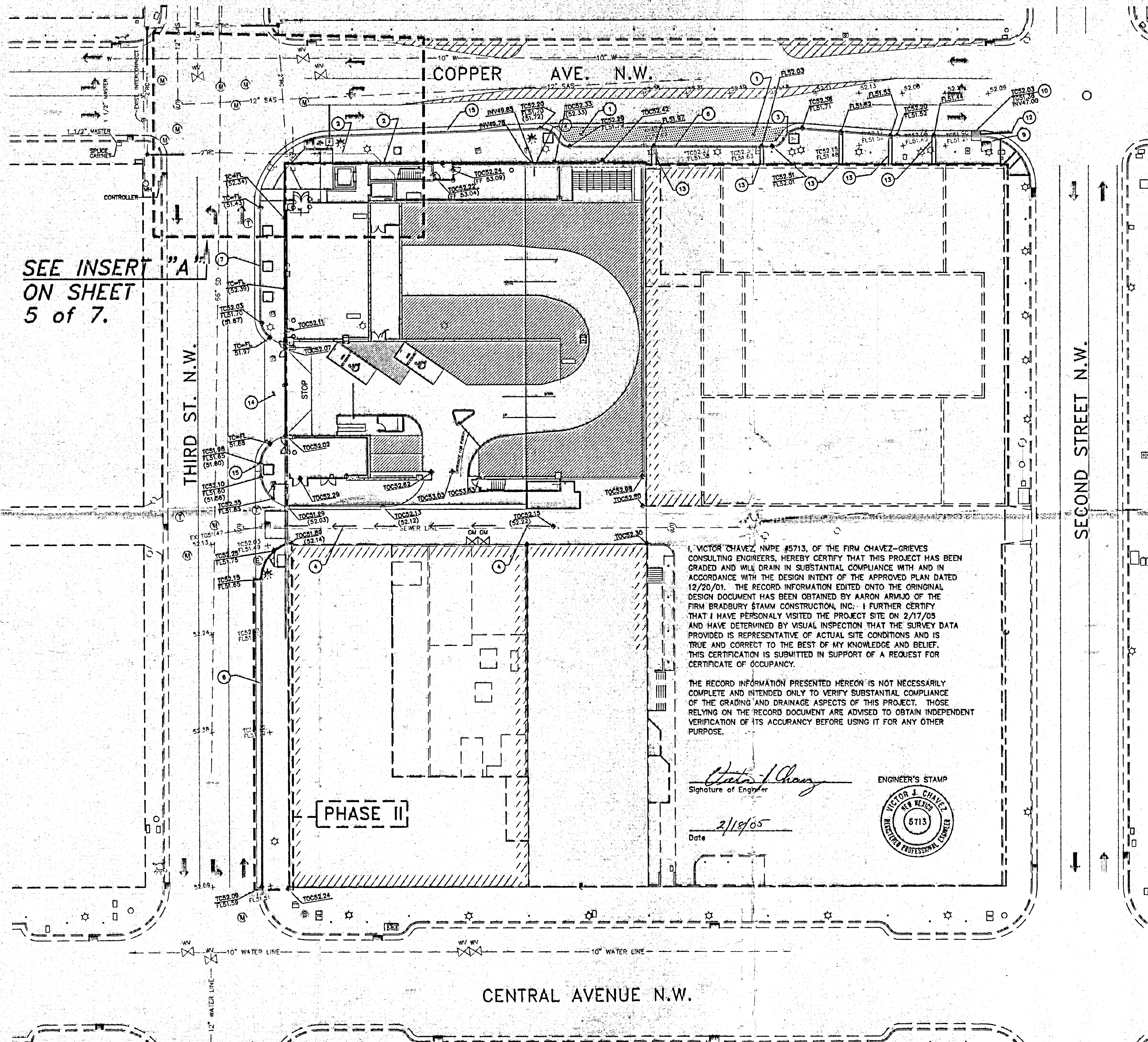






CONSTRUCTION NOTES

GENERAL

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, INCLUDING A TOP SOIL DISTURBANCE PERMIT, PRIOR TO START OF CONSTRUCTION.

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

REFERENCE MADE TO COA STD DWGS. REFER TO CITY OF ALBUQUERQUE STANDARD DRAWINGS AS AMENDED THROUGH UPDATE #8.

REFERENCE MADE TO APWA REFERS TO AMERICAN PUBLIC WORKS ASSOCIATION.

REFERENCE MADE TO NMSHD REFERS TO NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT.

THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE DESIGN. SUCH CONDITIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY.

EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.

EXISTING FENCING THAT IS NOT DESIGNATED FOR REMOVAL SHALL NOT BE DISTURBED. ANY FENCING THAT IS DISTURBED OR ALTERED BY THE CONTRACTOR SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IF THE CONTRACTOR WOULD LIKE TO REMOVE FENCING TO FACILITATE CONSTRUCTION OPERATIONS, THIS MAY BE DONE WITH THE OWNER'S PERMISSION AND THE CONTRACTOR SHALL RESTORE THE FENCE TO ITS ORIGINAL CONDITION PRIOR TO THE CLOSE OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR SECURITY OF THE SITE UNTIL THE FENCE IS REPLACED.

THE CONTRACTOR SHALL USE THE DESIGNATED STAGING AREA FOR STORAGE OF EQUIPMENT AND MATERIAL. NO MATERIAL OR EQUIPMENT MAY BE STORED OR LEFT ON SITE AT ANY OTHER LOCATION. THE OWNER ASSUMES NO LIABILITY FOR CONTRACTOR'S EQUIPMENT OR MATERIAL IN THE STAGING AREA. SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IF NO STAGING AREA IS DESIGNATED ON THESE PLANS, AN OFFSITE STAGING AREA SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.

WORK WITHIN CITY RIGHT-OF-WAY

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. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OR ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL AT HIS OWN EXPENSE, RETAIN A LICENSED SURVEYOR TO ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.

ALL CONSTRUCTION WITHIN CITY R.O.W. OR EASEMENTS MUST BE DONE FROM WORK ORDER DOCUMENTS APPROVED BY THE CITY OF ALBUQUERQUE.

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS TO CONSTRUCT FACILITIES WITHIN CITY RIGHT-OF-WAY.

ELECTRONIC MARKER DISCS SHALL BE PLACED IN ACCORDANCE WITH SECTION 170 OF THE CITY OF ALBUQUERQUE, STANDARD SPECIFICATIONS, PUBLIC WORKS CONSTRUCTION.

DIMENSIONS

ALL DIMENSIONS IN PARKING AREAS AND DRIVES ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

ALL STATIONING IS TO CENTERLINE OF RIGHT-OF-WAY UNLESS OTHERWISE NOTED.

ALL SLOPES AND GRADES ARE IN FEET/FOOT UNLESS OTHERWISE NOTED.

ELEVATIONS SHOWN FOR CURB AND GUTTER ARE FLOWLINE ELEVATIONS UNLESS OTHERWISE NOTED.

SOILS

UNLESS OTHERWISE SPECIFIED SUBGRADE SOILS AND STRUCTURAL FILL MATERIALS SHALL BE COMPACTED TO THE FOLLOWING PERCENTAGES OF THE ASTM D 1557 MAXIMUM DENSITY.

STRUCTURAL FILL IN THE BUILDING AREA	95
SUBBASE FOR SLAB SUPPORT	95
MISCELLANEOUS BACKFILL BELOW STRUCTURAL FILL OR ROAD PAVEMENT	95
MISCELLANEOUS BACKFILL BELOW UNPAVED, NON-BUILDING AREAS	90
ROAD PAVEMENT SUBGRADE	95
SIDEWALK SUBGRADE	90
CURB AND GUTTER SUBGRADE	95

PAVING

WHEN ABUTTING NEW PAVEMENT TO EXISTING, CUT BACK EXISTING PAVEMENT TO A NEAT, STRAIGHT LINE AS REQUIRED TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVING TO EXISTING.

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TV & SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISHED GRADE.

SURVEY MONUMENTATION

THE 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 SURVEY MONUMENT THAT IS DISTURBED. REPLACEMENT SHALL BE DONE ONLY BY A REGISTERED SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, OBTAIN THE SERVICES OF A REGISTERED SURVEYOR TO ADJUST THE MONUMENT AS REQUIRED AND PROPERLY REPORT THE NEW DATA TO THE CONTROLLING AUTHORITIES.

TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL PLANS. ALL SIGNS, BARRICADES, CHANNELIZATION DEVICES, SIGN FRAMES AND SECTION OF SIGNAL DEVICES SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION. PRIOR TO CONSTRUCTION, TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE GOVERNING AUTHORITY.

UTILITIES

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED TO THE ENGINEER BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ACCORDANCE WITH CHAPTER 62, ARTICLE 14-1 THROUGH 14-8, NMSA 1978.

THE EXISTING UTILITIES DEPICTED ON THESE PLANS WERE DERIVED FROM INFORMATION PROVIDED TO THE ENGINEER BY OTHERS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF PERTINENT UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. CONTRACTOR IS TO EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ANY POTENTIAL DISRUPTIONS IN UTILITY SERVICE WITH THE UTILITY COMPANIES AFFECTED AT LEAST 24 HOURS PRIOR TO THE DISRUPTION.

CONTRACTOR SHALL EXPOSE AND VERIFY INVERT ELEVATIONS OF RELEVANT SANITARY SEWER LINES BEFORE SETTING ANY NEW INVERTS. SHOULD INVERTS DIFFER MORE THAN 0.20' FROM THOSE SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED TO DETERMINE ANY RESULTING CHANGES IN DESIGN.

CONTRACTOR SHALL COORDINATE WITH WATER SYSTEMS DIVISION (857-8200) THREE WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES.

EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION (857-8200) THREE DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF.

MINIMUM DEPTH OF COVER: WATER = 48" SEWER = 24" GAS = 24"

CONTRACTOR SHALL RECORD 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.

INSTALL RESIDENTIAL WATER SERVICE LINES PER C.O.A. STANDARD DRAWING 2360.

INSTALL RESIDENTIAL SANITARY SEWER SERVICE LINES PER C.O.A. STANDARD DRAWING 2125.

SANITARY SEWER LINES SHALL BE PVC SDR-35, WATER LINES SHALL BE PVC C-900.

ACCESSIBLE FACILITIES

ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE, FIRM, SLIDE-RESISTANT, AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.

LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20. CROSS SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.

THE SITE SHALL COMPLY WITH ANS A117.1-1992, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".

NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 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, 1985.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		

EXISTING SITE CONDITIONS AND DRAINAGE PATTERN

THE 0.43 ACRE SITE IS COMPLETELY PAVED AND SURFACE DRAINS TO THE STREETS TO THE NORTH AND WEST. A MAJORITY OF THE RUNOFF IS COLLECTED IN A TYPE "A" STORM INLET ON THE CORNER OF COPPER AVENUE AND THIRD STREET. THIS INLET CONNECTS TO A 66" RCP MAIN LINE RUNNING THROUGH THIRD STREET. A TYPE "D" STORM INLET IS LOCATED IN THE MIDDLE OF THE ENTRANCE TO THE ALLEY FROM THIRD STREET. THIS COLLECTS THE REMAINDER OF THE RUNOFF FROM THE SITE AND CONNECTS TO THE SAME 66" RCP MAIN LINE AS THE OTHER INLET.

PROPOSED SITE CONDITIONS AND DRAINAGE PATTERN

UNDER PROPOSED CONDITIONS THE SITE WILL REMAIN 100% IMPERVIOUS AND RUNOFF WILL BE DIRECTED TO A 10" PVC STORM DRAIN LINE BY DRAINS ON THE PARKING STRUCTURE. THE STORM DRAIN WILL CARRY THE FLOWS TO THE WEST AND DISCHARGE THROUGH THE BACK OF THE EXISTING INLET. THIS WILL REDUCE STREET FLOWS ON COPPER AVENUE AND THIRD STREET.

HYDROLOGY CALCULATIONS

RAINFALL ZONE 2
P360 = 2.35" P10DAYS = 3.95"
AREA = 0.43 ACRES
EXISTING LAND TREATMENTS A=0 B=0 C=0 D=100
PROPOSED LAND TREATMENTS A=0 B=0 C=0 D=100
EXCESS PRECIPITATION FACTOR A=0.53 B=0.78 C=1.13 D=2.12
PEAK DISCHARGE, QP A=1.56 B=2.28 C=3.14 D=4.70

EXCESS PRECIPITATION, E = (2.12 x 0.43)/12 = 2.12 (EXISTING)
EXCESS PRECIPITATION, E = (2.12 x 0.43)/12 = 2.12 (PROPOSED)

100-YR, 6-HOUR VOLUME CALCULATION
V360 = E x A = 2.12 x 0.43 / 12 = 0.08 ACRE-FT

100-YR, 10-DAY VOLUME CALCULATION
V10DAY = V360 + AD x (P10DAYS - P360) / 12
V10DAY = 0.08 + 0.43 x (3.95 - 2.35) / 12 = 0.13 ACRE-FT

100-YR, 6-HOUR PEAK FLOW RATE CALCULATION
Q100 = QPD x AD
Q100 = 4.70 x 0.43 = 2.04 CFS

PROJECT BENCHMARK

A 1 3/4" ALUMINUM DISK STAMPED "ACS BM, 19-K14" EPOXIED TO THE TOP OF THE CURB, LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF TIERRAS AVE. AND THIRD ST. NW. ELEVATION = 4952.842' (MSLD 1929)

SURVEY INFORMATION

A.L.T.A./A.C.S.M. LAND TITLE SURVEY PERFORMED BY SOUTHWEST SURVEYING CO. ALBUQUERQUE, NEW MEXICO. APRIL 1998.

SUPPLEMENT SPOT ELEVATIONS PERFORMED BY CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC. ALBUQUERQUE, NEW MEXICO. DECEMBER 1999.

LOCATION

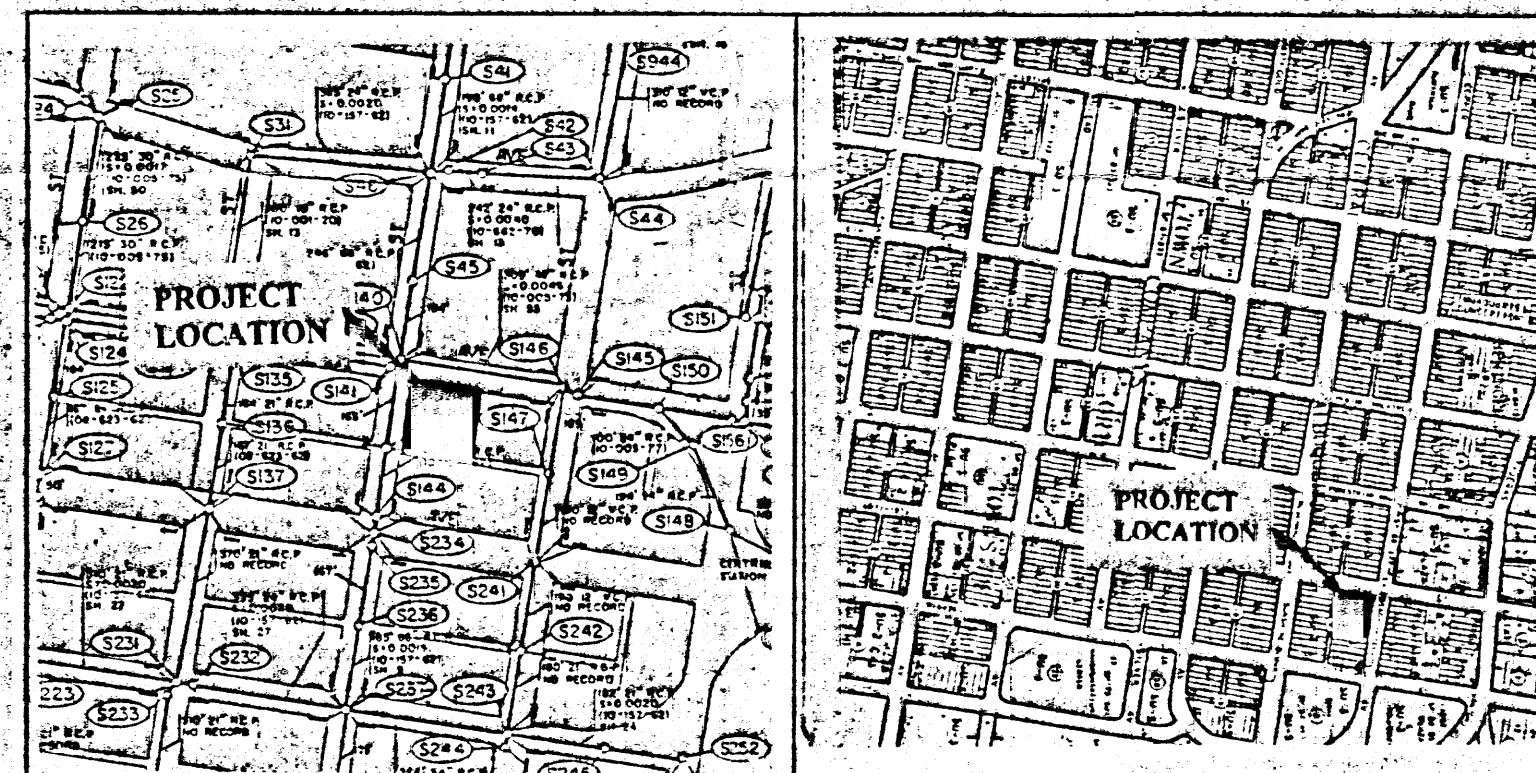
AS SHOWN ON THE VICINITY MAP, THE SITE IS LOCATED BETWEEN THIRD STREET AND SECOND STREET ON COPPER AVENUE

ABBREVIATIONS

BLOG = BUILDING	LP = LIGHT POLE
BM = BENCHMARK	L/S = LANDSCAPING
CB = CATCH BASIN	MH = MANHOLE
CO = CLEANOUT	PL = PROPERTY LINE
CONC = CONCRETE	PP = POWER POLE
CL = CHAIN LINK	PVC = POLYVINYL CHLORIDE PIPE
DIA = DIAMETER	RCP = REINFORCED CONCRETE PIPE
DI = DROP INLET	RD = ROOF DRAIN
ELEV = ELEVATION	ROW = RIGHT OF WAY
ESMT = EASEMENT	S = SLOPE
EXIST = EXISTING	SAS = SANITARY SEWER LINE
FF = FINISHED FLOOR ELEVATION	SD = STORM DRAIN
FG = FINISHED GRADE	STD = STANDARD
FH = FIRE HYDRANT	T = SIDEWALK
FL = FLOW LINE	TA = TOP OF ASPHALT
FT = FINISHED FLOOR ELEVATION	TC = TOP OF CURB
FPW = FIRE PROTECTION WATER	TOC = TOP OF CONCRETE
G = GAS	TG = TOP OF GRATE
GM = GAS METER	TOW = TOP OF WALL
GV = GATE VALVE	TYP = TYPICAL
HC = HANDICAP	W = WATER
HI PT = HIGH POINT	WM = WATER METER
INV = INVERT ELEVATION	WV = WATER VALVE
LEN = LENGTH	
LF = LINEAR FEET	

LEGEND

⊞	= EXISTING DROP INLET
+	= NEW DROP INLET
→	= TRAFFIC FLOW
⋈	= FIRE HYDRANT
☆	= LIGHT POLE
⊗	= TRAFFIC SIGNAL
□	= TRAFFIC SIGNAL BOX
⊙	= SEWER MANHOLE
⊕	= TELEPHONE MANHOLE
⊖	= ELECTRIC MANHOLE
⊗	= MANHOLE
⊗	= WATER METER
⊗	= WATER VALVE
⊗	= GAS METER
⊗	= PEDESTRAIN SIGNAL
⊗	= PARKING METER



FACILITIES MAP K-14-N VICINITY MAP K-14-Z

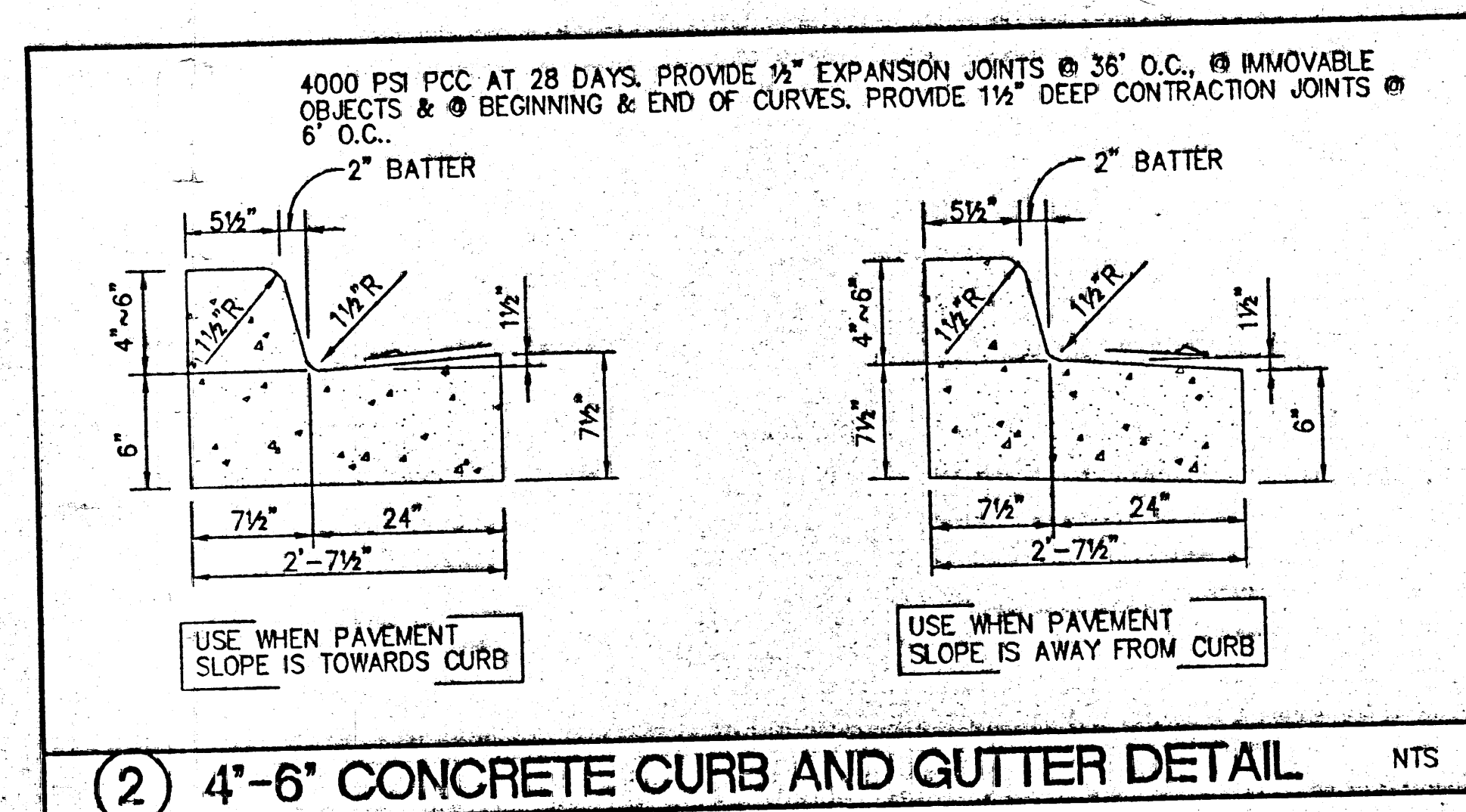
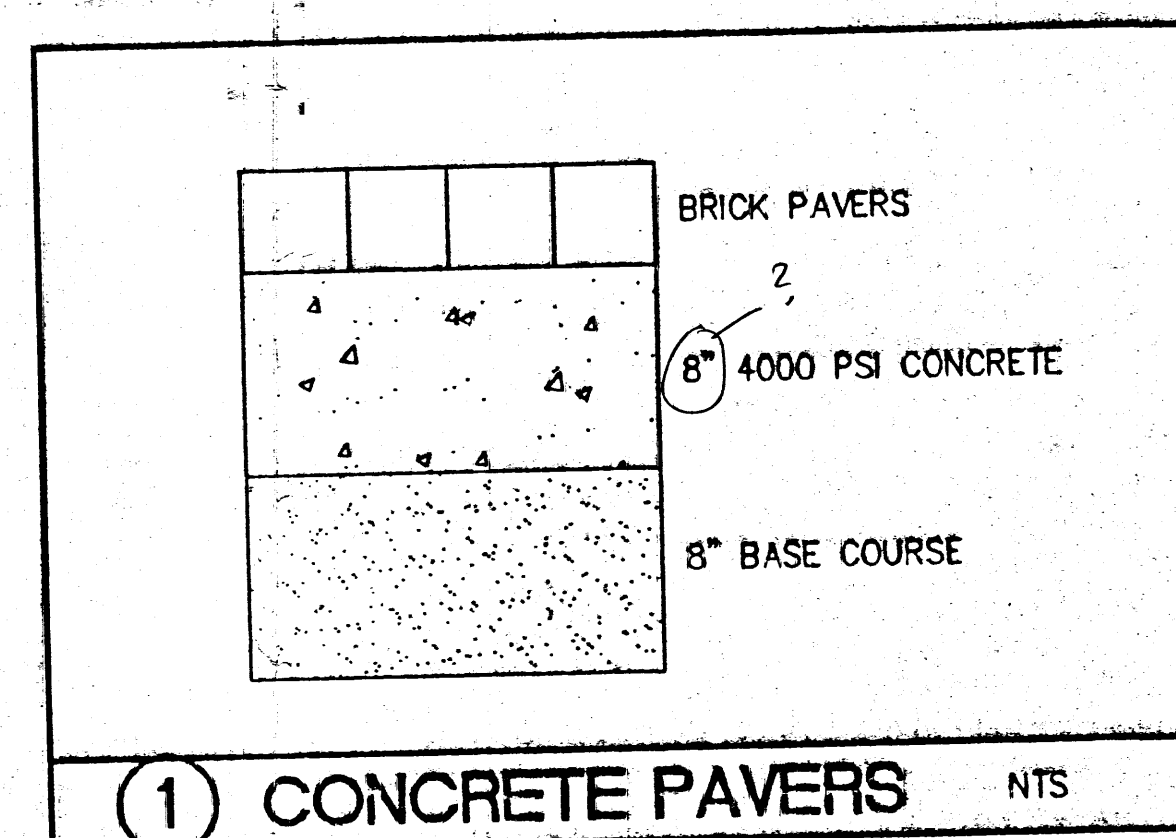
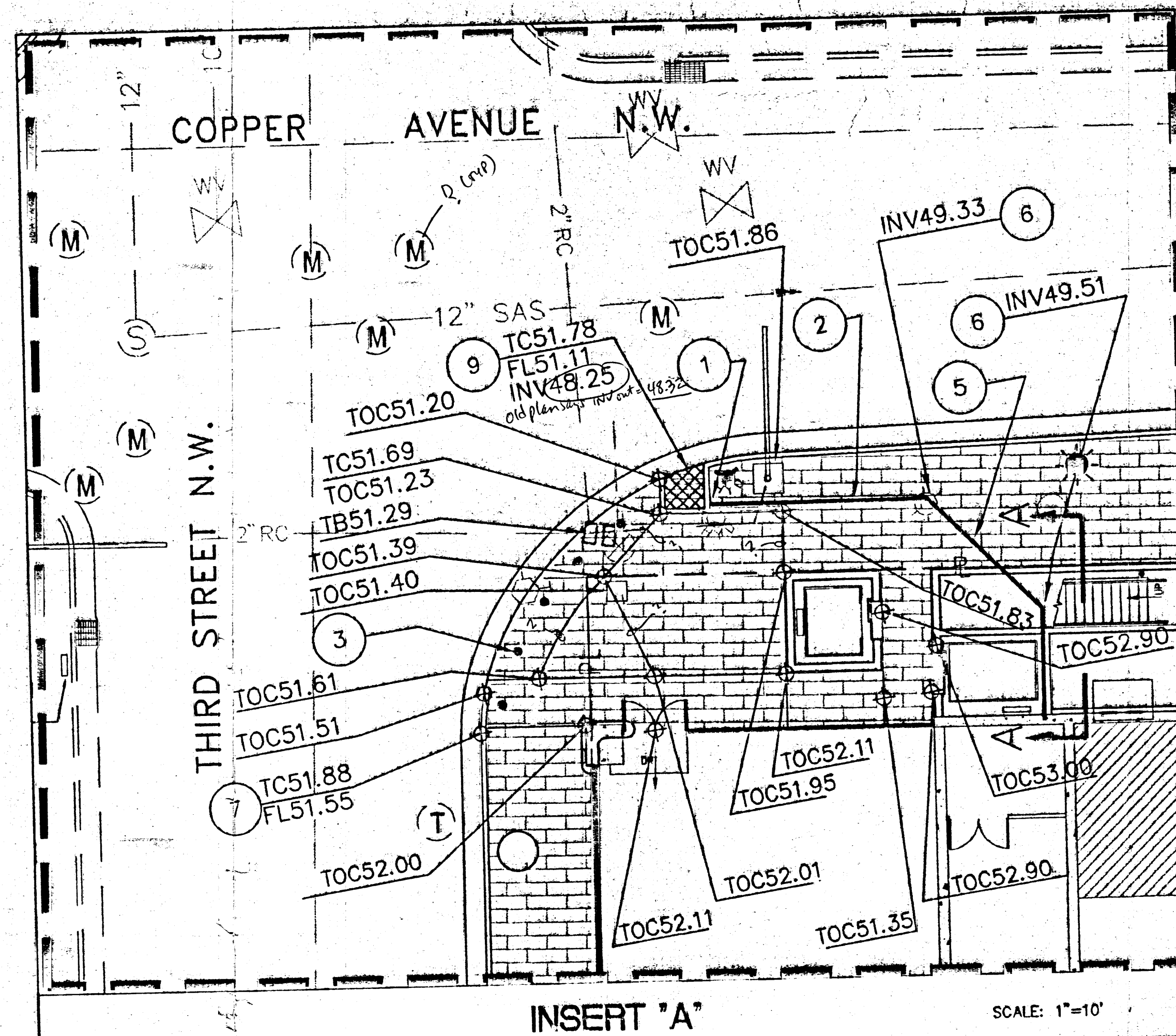
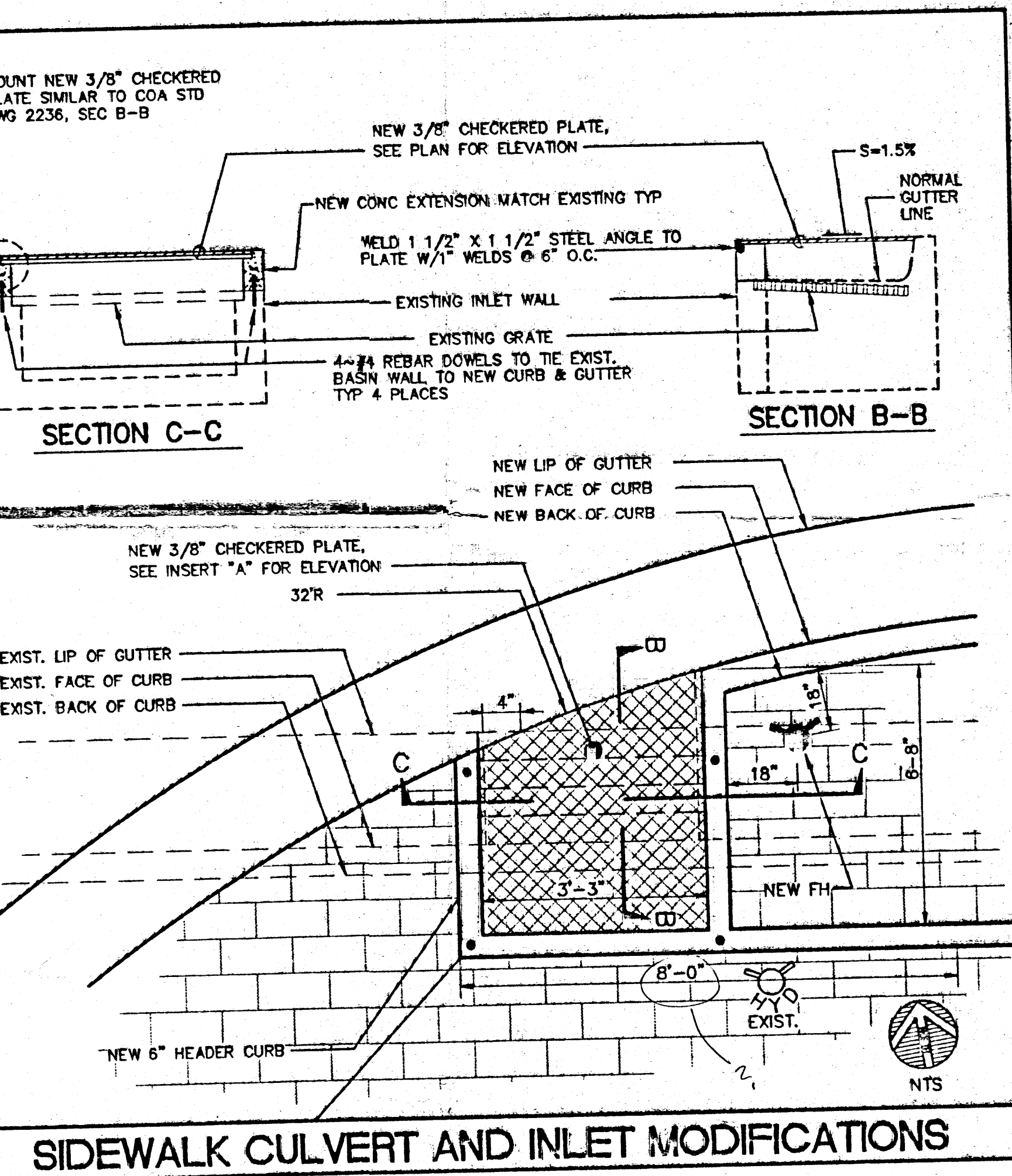
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: ACROPOLIS PARKING STRUCTURE

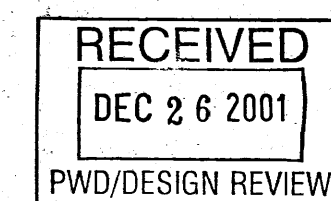
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
RECEIVED DEC 20 2001 HYDROLOGY SECTION			
City Project No.	XXXXXX	Zone Map No.	K-14-Z
Sheet	1	Of	2



1. CONNECT NEW STORM DRAIN LINE TO SIDE OF EXISTING INLET PER COA STD DWG 2237.
2. INSTALL 22.00 LF 10" SDR35 PVC AT 1.5 % SLOPE.
3. SET BOLLARDS 18" FROM FACE OF CURB. TYP
4. NOT USED.
5. INSTALL 16.00 LF 10" SDR35 PVC AT 1.5% SLOPE.
6. INSTALL 45" BEND.
7. CONSTRUCT 4" CURB PER DETAIL 2 THIS SHEET
8. NOT USED.
9. SIDEWALK CULVERT & INLET MODIFICATIONS, SEE DETAIL THIS SHEET.

ENGINEER'S SEAL 		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION		
REMARKS BY		FIELD NOTES						
		NO.	BY	DATE				
		SOUTHWEST SURVEYING CO. INC.		1/79R				
		A 1 3/4" ALUMINUM DISK STAMPED "ACS RM. 19-K14" EXPOSED TO THE TOP OF THE CURB. LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF TERNAS AVE. AND THIRD ST. N.W. ELEVATION = 4952.642 (MSD 1928)						
REVISIONS								
DESIGN								
DESIGNED BY	J. KELLEY	DATE	12/21/01					
DRAWN BY	A. BRICENO	DATE	12/21/01					
CHECKED BY	J. KELLEY	DATE	12/21/01					

8'-0" dimension for?
8" core thickness?



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: SIDEWALK EXPANSION ON THIRD STREET
AND COPPER AVE.
DETAIL SHEET

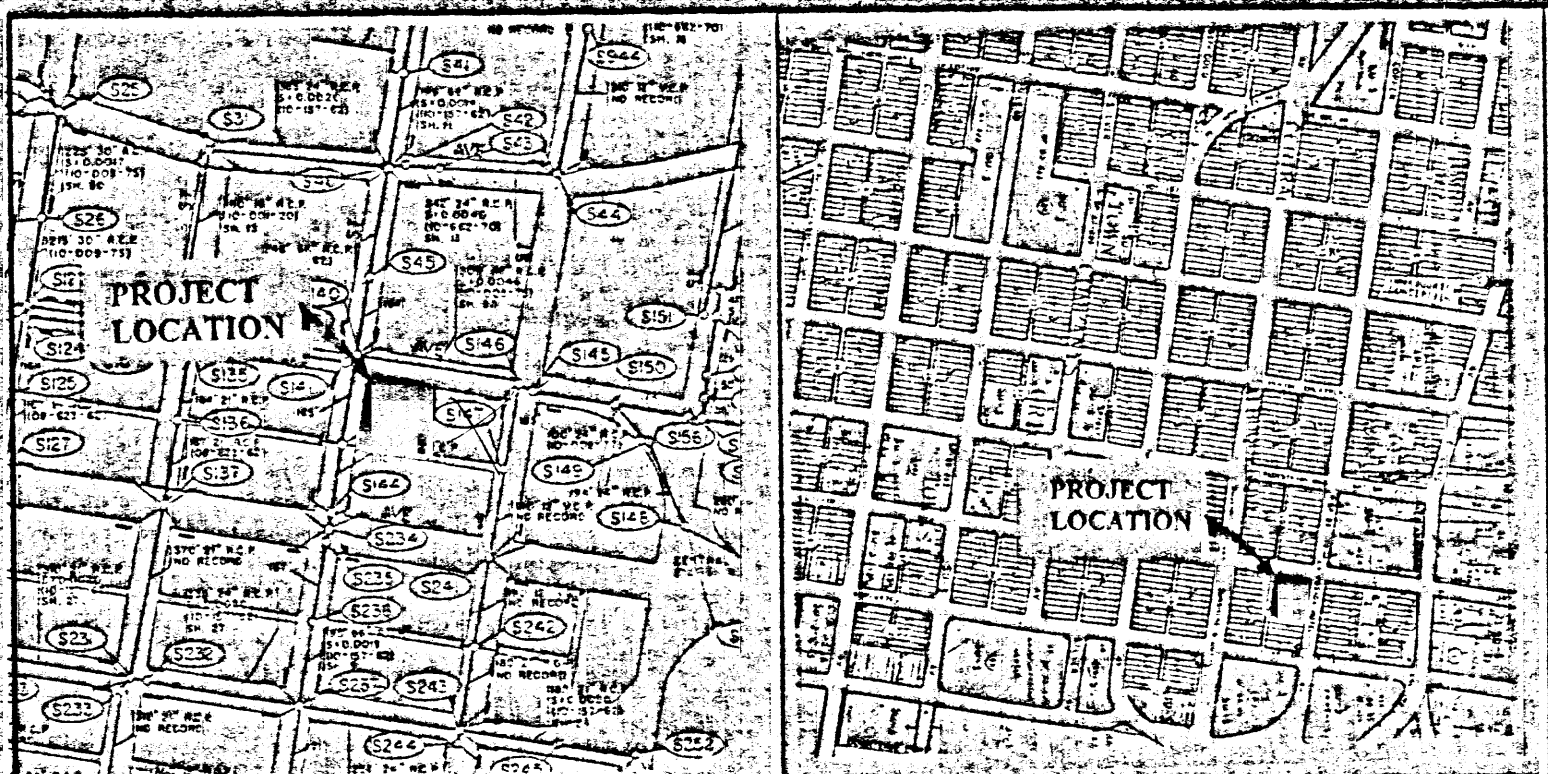
Design Review Committee	City Engineer Approval
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City Project No.

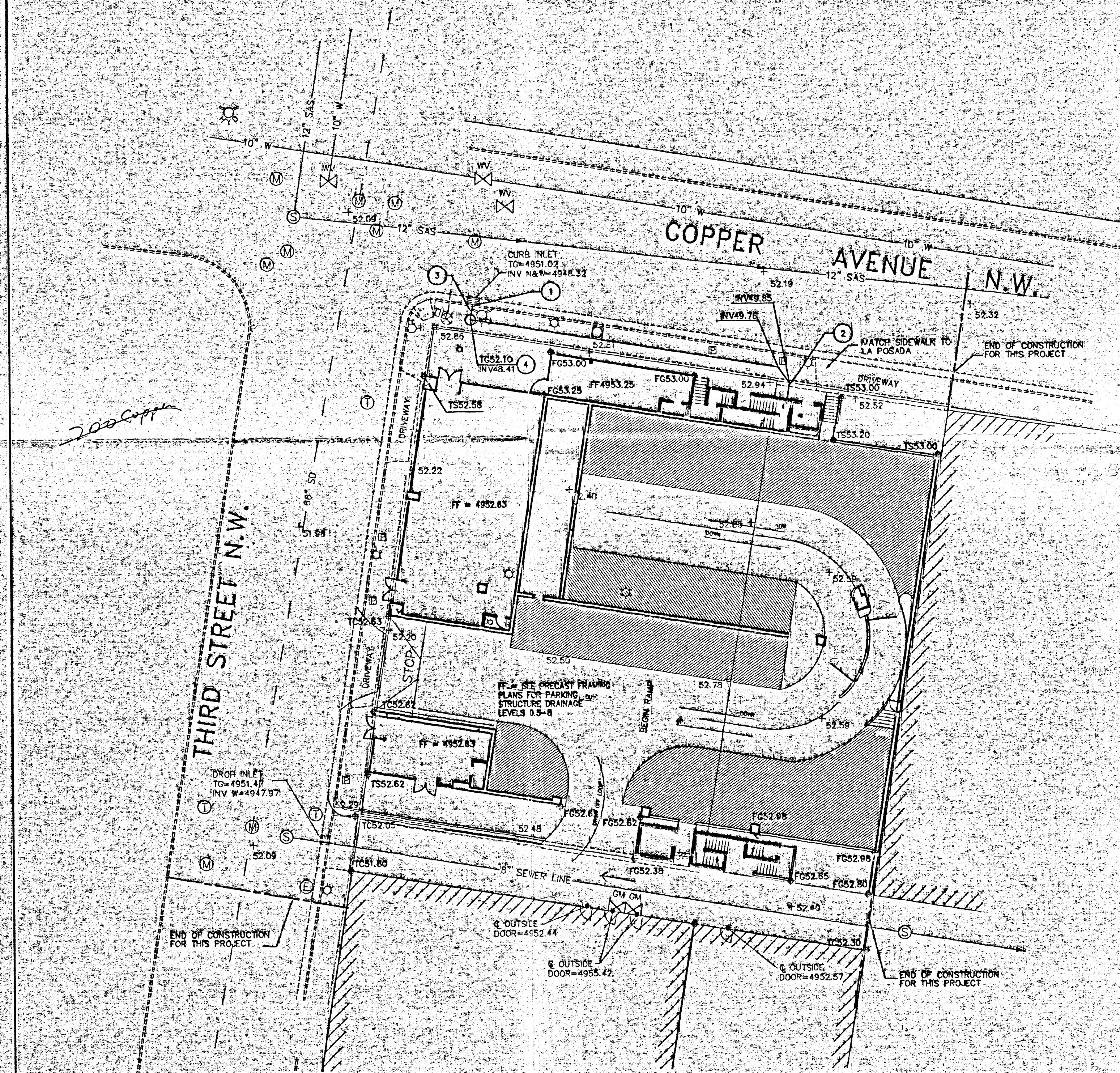
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Sheet 1 of 1

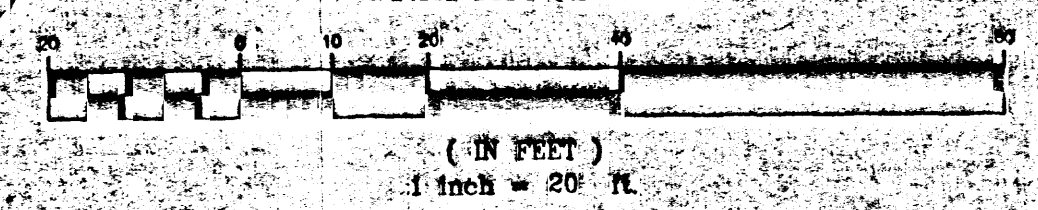
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FACILITIES MAP K-14-N VICINITY MAP K-14-Z



GRADING AND DRAINAGE PLAN
GRAPHIC SCALE



LOCATION

AS SHOWN ON THE VICINITY MAP, THE SITE IS LOCATED BETWEEN THIRD STREET AND SECOND STREET ON COPPER AVENUE

EXISTING SITE CONDITIONS AND DRAINAGE PATTERN

THE 0.43 ACRE SITE IS COMPLETELY PAVED AND SURFACE DRAINS TO THE STREETS TO THE NORTH AND WEST. A MAJORITY OF THE RUNOFF IS COLLECTED IN A TYPE "A" STORM INLET ON THE CORNER OF COPPER AVENUE AND THIRD STREET. THIS INLET CONNECTS TO A 66" RCP MAIN LINE RUNNING THROUGH THIRD STREET. A TYPE "D" STORM INLET IS LOCATED IN THE MIDDLE OF THE ENTRANCE TO THE ALLEY FROM THIRD STREET. THIS COLLECTS THE REMAINDER OF THE RUNOFF FROM THE SITE AND CONNECTS TO THE SAME 66" RCP MAIN LINE AS THE OTHER INLET.

PROPOSED SITE CONDITIONS AND DRAINAGE PATTERN

UNDER PROPOSED CONDITIONS THE SITE WILL REMAIN 100% IMPERVIOUS AND RUNOFF WILL BE DIRECTED TO A 10" HOPE STORM DRAIN LINE BY DRAINS ON THE PARKING STRUCTURE. THE STORM DRAIN WILL CARRY THE FLOWS TO THE WEST AND DISCHARGE THROUGH THE BACK OF THE EXISTING INLET. THIS WILL REDUCE STREET FLOWS ON COPPER AVENUE AND THIRD STREET.

HYDROLOGY CALCULATIONS

RAINFALL ZONE 2
P360 = 2.35" P10DAYS = 3.95"
AREA = 0.43 ACRES
EXISTING LAND TREATMENTS A=0 B=0 C=0 D=100
PROPOSED LAND TREATMENTS A=0 B=0 C=0 D=100
EXCESS PRECIPITATION FACTOR A=0.53 B=0.78 C=1.13 D=2.12
PEAK DISCHARGE - CP A=1.56 B=2.28 C=3.14 D=4.70

EXCESS PRECIPITATION, E = (2.12 X 0.43) / 12 = 2.12 (EXISTING)
EXCESS PRECIPITATION, E = (2.12 X 0.43) / 12 = 2.12 (PROPOSED)

100-YR. 6-HOUR VOLUME CALCULATION
V360 = E X A = 2.12 X 0.43 / 12 = 0.08 ACRE-FT

100-YR. 10-DAY VOLUME CALCULATION
V10DAY = V360 + AD X (P10DAYS - P360) / 12
V10DAY = 0.08 + 0.43 X (3.95 - 2.35) / 12 = 0.13 ACRE-FT

100-YR. 6-HOUR PEAK FLOW RATE CALCULATION
Q100 = QPD X AD
Q100 = 4.70 X 0.43 = 2.04 CFS

LEGEND

- [Symbol] = EXISTING DROP INLET
- [Symbol] = NEW DROP INLET
- [Symbol] = TRAFFIC FLOW
- [Symbol] = FIRE HYDRANT
- [Symbol] = LIGHT POLE
- [Symbol] = TRAFFIC SIGNAL
- [Symbol] = TRAFFIC SIGNAL BOX
- [Symbol] = SEWER MANHOLE
- [Symbol] = TELEPHONE MANHOLE
- [Symbol] = ELECTRIC MANHOLE
- [Symbol] = MANHOLE
- [Symbol] = WATER METER
- [Symbol] = WATER VALVE
- [Symbol] = GAS METER
- [Symbol] = PEDESTRAIN SIGNAL
- [Symbol] = PARKING METER

GENERAL NOTES

1. REMOVE AND REPLACE ALL EXISTING CURB AND GUTTER AT EXISTING GRADES.

KEYED NOTES

1. CONNECT NEW STORM DRAIN LINE TO BACK OF EXISTING INLET PER COA STD DWS 2237.
2. INSTALL 10" HOPE AT 1.5% SLOPE.
3. INSTALL 24" CLASS III RCP AT 2% SLOPE.
4. CONSTRUCT 6" DIAMETER TYPE "C" MANHOLE PER COA STD DWS 2101. LABEL COVER AS STORM.

ABBREVIATIONS

- FF FINISHED FLOOR
- FG FINISHED GRADE
- FL FLOW LINE
- INV INVERT
- TC TOP OF CURB
- TG TOP OF GRATE
- TS TOP OF SIDEWALK

PROJECT BENCHMARK

A 134" ALUMINUM DISK STAMPED "ACS BM, 19-K14" EPOXYED TO THE TOP OF THE CURB, LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF TIJERAS AVE. AND THIRD ST. N.W. ELEVATION = 4952.842' (MSLD 1822)

SURVEY INFORMATION

A.L.T.A./A.C.S.M. LAND TITLE SURVEY PERFORMED BY SOUTHWEST SURVEYING CO., ALBUQUERQUE, NEW MEXICO, APRIL 1998.
SUPPLEMENT SPOT ELEVATIONS PERFORMED BY CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC., ALBUQUERQUE, NEW MEXICO, DECEMBER 1999.

NOTICE TO CONTRACTOR

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. 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 INTERM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 785-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY	
TITLE	
PERMIT NO.	MAP NO.
DESIGN APPROVAL	Hydrology Section Date
MAINTENANCE APPROVAL	Storm Drain Maintenance Date
ACCEPTANCE	Construction Section/Permits Date

RECEIVED
MAR 29 2000
PWD/DESIGN REVIEW

DESIGNED BY:	JK	SCALE:	1:20
DRAWN BY:	JK	JOB NUMBER:	P45-100-99
REVIEWED BY:	VC	DATE:	1/28/00

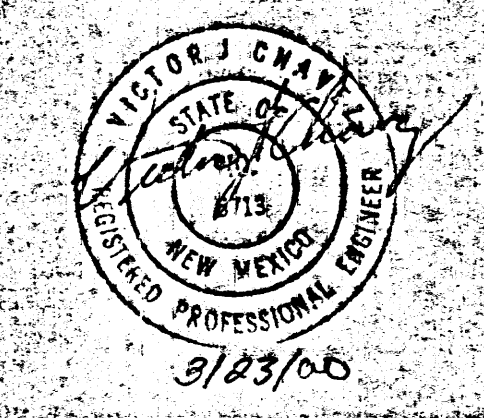
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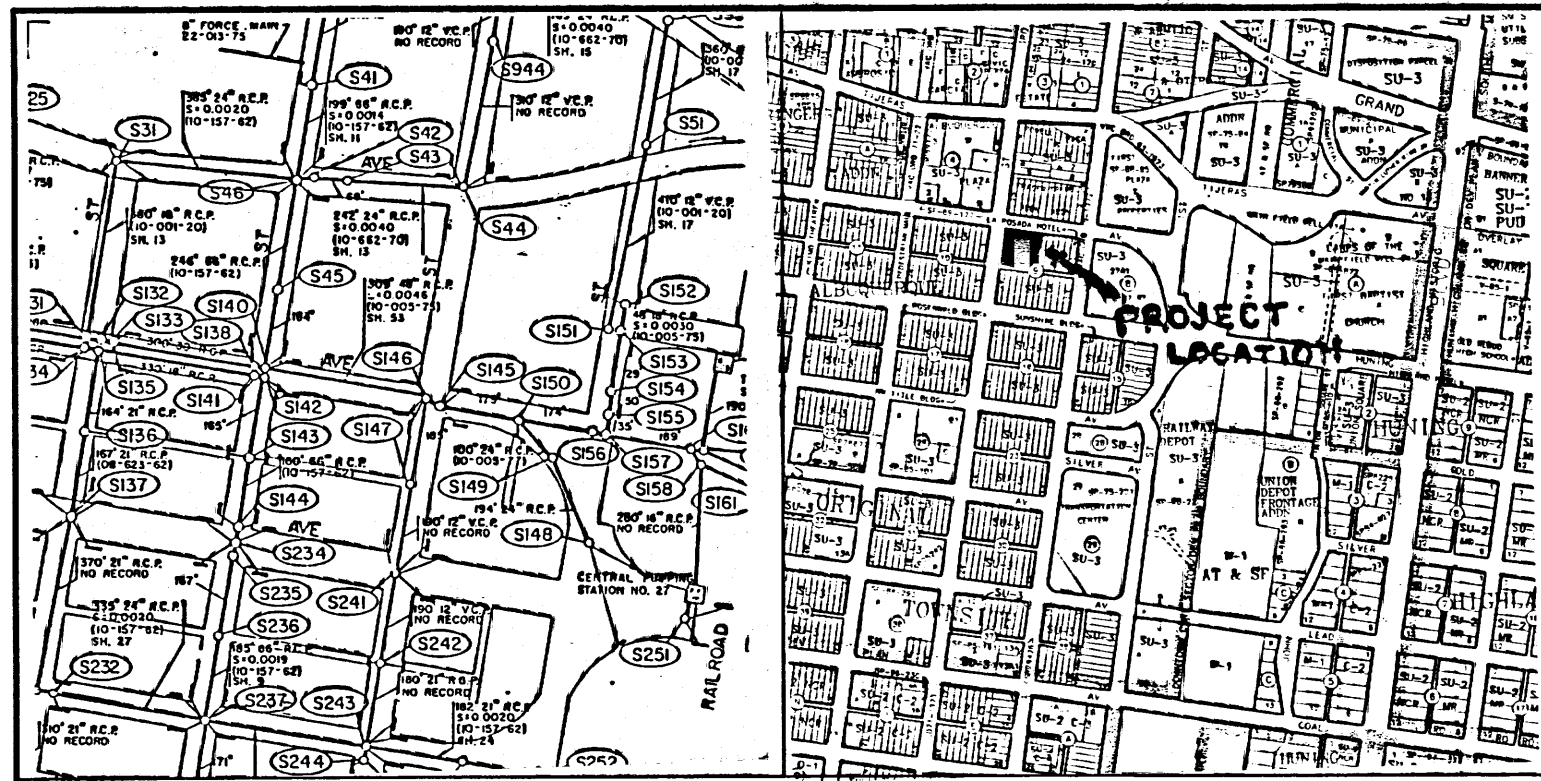
CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.
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ACROPOLIS PARKING STRUCTURE
ALBUQUERQUE, NM

GRADING AND DRAINAGE PLAN



CB NO. P45-100-99
FILE P4500C010100.DWG
ENG/TECH JK
REV 03-23-00 R



FACILITIES MAP K-14-N VICINITY MAP K-14-Z

LOCATION

AS SHOWN ON THE VICINITY MAP, THE SITE IS LOCATED BETWEEN THIRD STREET AND SECOND STREET ON COPPER AVENUE

EXISTING SITE CONDITIONS AND DRAINAGE PATTERN

THE 0.43 ACRE SITE IS COMPLETELY PAVED AND SURFACE DRAINS TO THE STREETS TO THE NORTH AND WEST. A MAJORITY OF THE RUNOFF IS COLLECTED IN A TYPE "A" STORM INLET ON THE CORNER OF COPPER AVENUE AND THIRD STREET. THIS INLET CONNECTS TO A 66" RCP MAIN LINE RUNNING THROUGH THIRD STREET. A TYPE "D" STORM INLET IS LOCATED IN THE MIDDLE OF THE ENTRANCE TO THE ALLEY FROM THIRD STREET. THIS COLLECTS THE REMAINDER OF THE RUNOFF FROM THE SITE AND CONNECTS TO THE SAME 66" RCP MAIN LINE AS THE OTHER INLET.

PROPOSED SITE CONDITIONS AND DRAINAGE PATTERN

UNDER PROPOSED CONDITIONS THE SITE WILL REMAIN 100% IMPERVIOUS AND RUNOFF WILL BE DIRECTED TO COPPER AVENUE THROUGH DRAINS ON THE PARKING STRUCTURE. THE CURB AND GUTTER WILL BE MOVED OUT INTO THE STREETS TO PROVIDE A FIFTEEN FOOT SETBACK TO THE PROPERTY LINE AND WILL BE SET TO MATCH THE EXISTING ASPHALT. NEW INLETS WILL BE CONSTRUCTED TO TIE TO THE SAME 66" RCP STORM LINE AS UNDER EXISTING CONDITIONS. THE INVERTS OF THE STORM INLETS REMAIN THE SAME AND THE DISCHARGE PIPES WILL BE CLASS III RCP AND THE SAME SIZE AS THE EXISTING PIPES. THE STORM INLET ON THIRD STREET WILL BE RELOCATED TO THE NORTH CORNER OF THE INTERSECTION OF THE ALLEY AND THIRD STREET. THIS WILL ALLOW THE CONSTRUCTION OF A TYPE "A" INLET INSTEAD OF THE TYPE "D". THE SLOPE OF THE CURB AND GUTTER WILL BE SET TO MAKE THE LOW POINT AT THE NEW INLET, WHICH IS TO BE MOVED APPROXIMATELY TWELVE FEET FROM ITS CURRENT POSITION.

HYDROLOGY CALCULATIONS

RAINFALL ZONE 2
P360 = 2.35" P100DAYS = 3.95"
AREA = 0.43 ACRES
EXISTING LAND TREATMENTS A=0 B=0 C=0 D=100
PROPOSED LAND TREATMENTS A=0 B=0 C=0 D=100
EXCESS PRECIPITATION FACTOR A=0.53 B=0.78 C=1.13 D=2.12
PEAK DISCHARGE, QP A=1.56 B=2.28 C=3.14 D=4.70

EXCESS PRECIPITATION, E = $(2.12 \times 0.43) / 12 = 2.12$ (EXISTING)
EXCESS PRECIPITATION, E = $(2.12 \times 0.43) / 12 = 2.12$ (PROPOSED)

100-YR, 6-HOUR VOLUME CALCULATION
 $V360 = E \times A = 2.12 \times 0.43 / 12 = 0.08$ ACRE-FT

100-YR, 10-DAY VOLUME CALCULATION
 $V10DAY = V360 + AD \times (P10DAYS - P360) / 12$
 $V10DAY = 0.08 + 0.43 \times (3.95 - 2.35) / 12 = 0.13$ ACRE-FT

100-YR, 6-HOUR PEAK FLOW RATE CALCULATION
 $Q100 = QPD \times AD$
 $Q100 = 4.70 \times 0.43 = 2.04$ CFS

LEGEND

- = EXISTING DROP INLET
- = NEW DROP INLET
- = TRAFFIC FLOW
- = FIRE HYDRANT
- = LIGHT POLE
- = TRAFFIC SIGNAL
- = TRAFFIC SIGNAL-BOX
- = SEWER MANHOLE
- = TELEPHONE MANHOLE
- = ELECTRIC MANHOLE
- = MANHOLE
- = WATER METER
- = WATER VALVE
- = GAS METER
- = PEDESTRIAN SIGNAL
- = PARKING METER

ABBREVIATIONS

- FF FINISHED FLOOR
- FL FINISHED GRADE
- FL FLOW LINE
- INV INVERT
- TC TOP OF CURB
- TG TOP OF GRATE
- TS TOP OF SIDEWALK

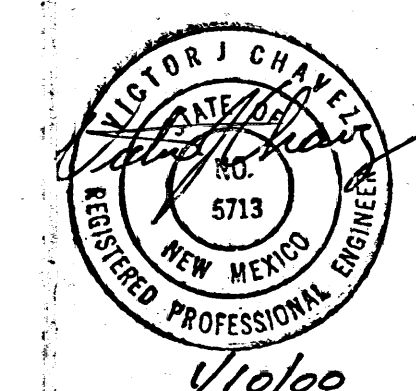
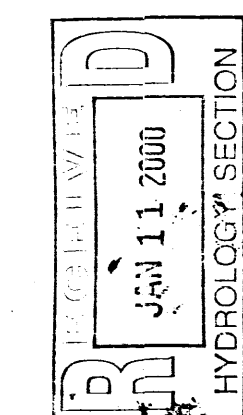
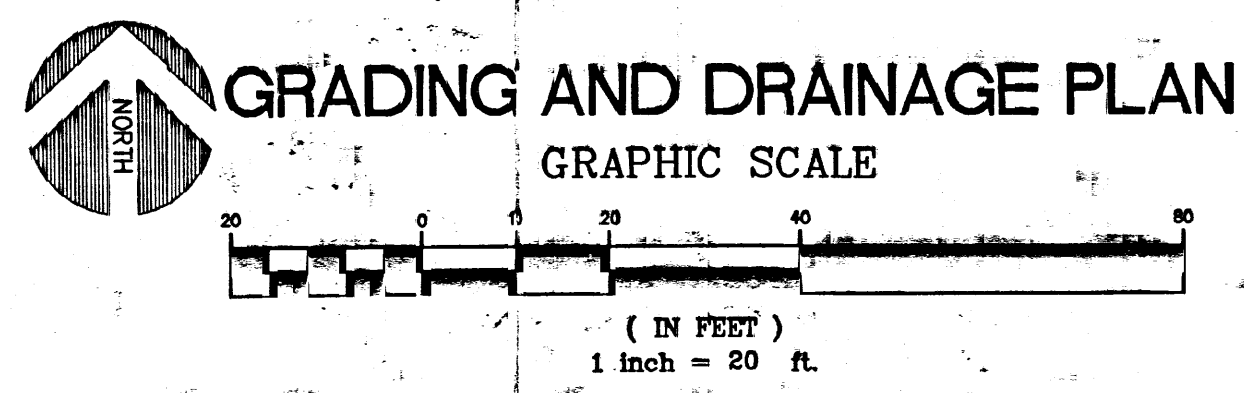
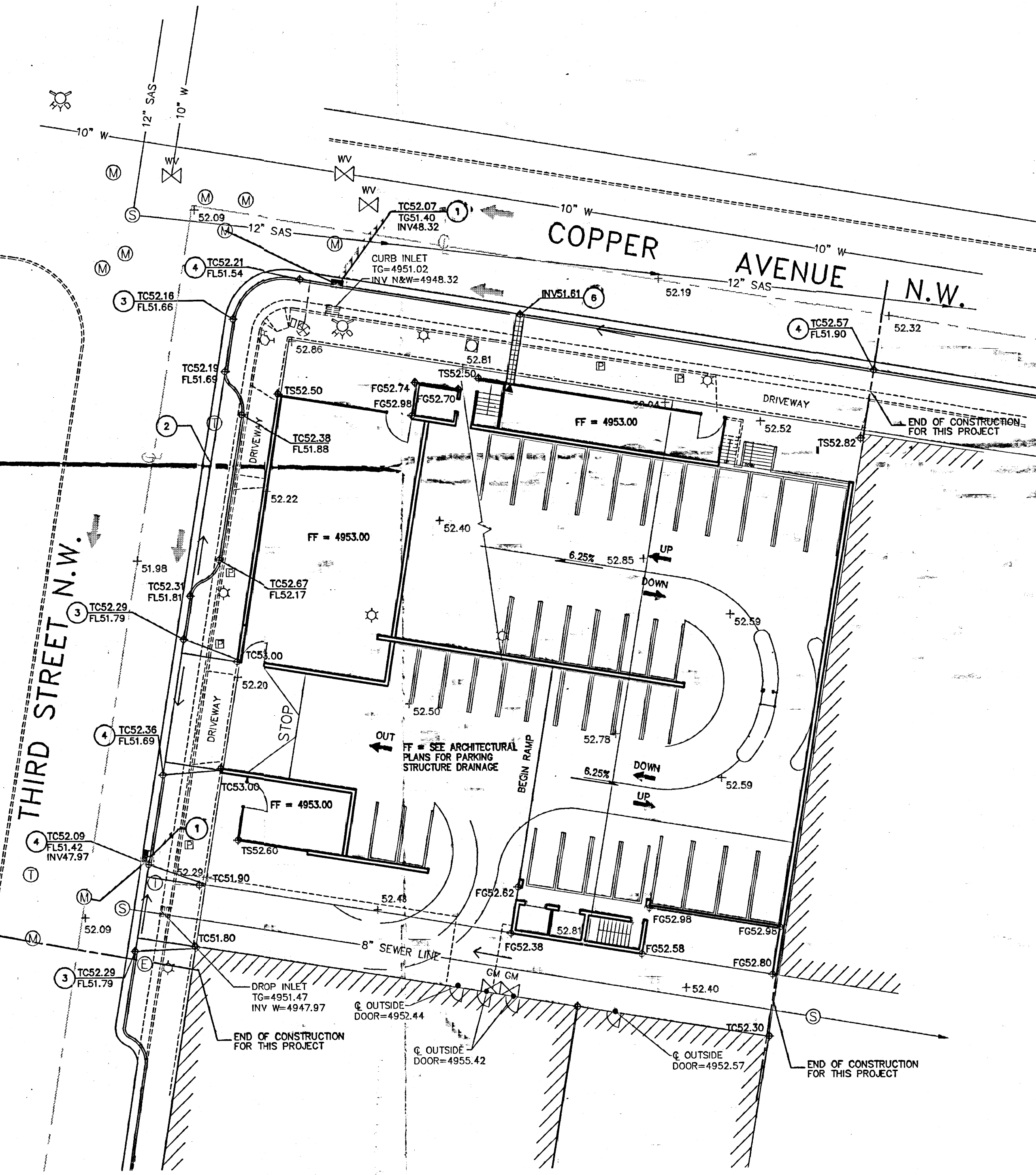
PROJECT BENCHMARK

A 1 1/2" ALUMINUM DISK STAMPED "ACS BM, 19-K14" EPOXIED TO THE TOP OF THE CURB, LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF TIJERAS AVE. AND THIRD ST. N.W. ELEVATION = 4952.842' (MSLD 1929)

SURVEY INFORMATION

A.L.T.A./A.C.S.M. LAND TITLE SURVEY PERFORMED BY SOUTHWEST SURVEYING CO. ALBUQUERQUE, NEW MEXICO. APRIL 1998.

SUPPLEMENT SPOT ELEVATIONS PERFORMED BY CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC. ALBUQUERQUE, NEW MEXICO. DECEMBER 1999.



REV.	DATE	DESCRIPTION	DRAWN	APPRD.

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DESIGNED BY:	JK	SCALE:	1:20
DRAWN BY:	JK	JOB NUMBER:	P45-100-99
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