KEY MAP

CITY OF ALBUQUERQUE, NEW MEXICO

INDEX

STEEL WATER LINE REPLACEMENT

PHASE IA

LASON 1-505-344-9404
BEST COPY AVAILABLE

CENTRAL AVENUE

PINE STREET TO UNIVERSITY BOULEVARD

WATER RESOURCES DEPARTMENT
APPROVAL OF AS BUILT DRAWINGS
Date 1/13/83

1 2 3 4 5 6 7 8 9 10 11 12
26 1/0/1/d 0/183

Richard S. Miller 1/13/81
City Engineer

David R. Broome
Project Engineer

DAVID R. BROSMAN
NEW MEXICO
6646
REGISTERED PROFESSIONAL ENGINEER

Set Number _____

Job Number 79038

RECORD DRAWING

SCANLON ASSOCIATES
CONSULTING ENGINEERS

1010

LEGEND

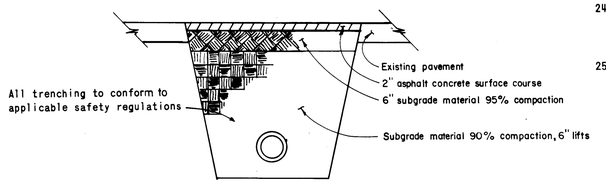
- CURB AND GUTTER
- LAYDOWN CURB, DRIVE PAD
- SIDEWALK
- MASONRY WALL
- TREE
- PARKING METER
- BENCH MARK
- GAS VALVE
- WATER METER (EXISTING)
- CATCH BASIN
- STREET LIGHT, LUMINAIRE
- PULL BOX
- PEDESTAL POLE WITH SIGNAL
- UTILITY POLE
- FIRE HYDRANT (EXISTING)
- STORM DRAIN MANHOLE
- WATER VALVE
- SANITARY SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- GAS METER
- TELEPHONE BOOTH
- SIGN
- NEW WATER VALVE
- NEW REDUCER
- NEW CAP OR PLUG
- LAYDOWN VALVE
- SURVEY LINE
- RIGHT - OF - WAY
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING STORM DRAIN
- EXISTING SANITARY SEWER
- EXISTING TRAFFIC CONTROL
- EXISTING TELEPHONE
- NEW WATER LINE
- SOIL BORING

NOTE: SHADED AREAS INDICATE WHERE THE ENGINEER HAS EXCAVATED LINES TO VERIFY LOCATIONS.

- NEW FIRE HYDRANT
- NEW WATER METER

ABBREVIATIONS

BFV	BUTTERFLY VALVE
BOC	BACK OF CURB
CCP	CONCRETE STEEL CYLINDER PIPE
C & G	CURB AND GUTTER
CI OR CIP	CAST IRON PIPE
℄	CENTER LINE
CMP	CORRUGATED METAL PIPE
DI	DUCTILE IRON PIPE
E	ELECTRICAL
ELEV.	ELEVATION
EXIST.	EXISTING
G	GAS
GV	GATE VALVE
H.P.	HIGH PRESSURE
I.E.	INVERT ELEVATION
INV.	INVERT
LT.	LEFT
RCP	REINFORCED CONCRETE PIPE
RT.	RIGHT
R/w	RIGHT - OF - WAY
S	SEWER
SD	STORM DRAIN
SL	SURVEY LINE
STA.	STATION
STL.	STEEL
T	TELEPHONE
T.C.	TRAFFIC CONTROL
T.S.	TRAFFIC SIGNAL
VCP	VITRIFIED CLAY PIPE
VPI	VERTICAL POINT OF INTERSECTION
W	WATER LINE
W.L.	WATER LINE
W.S.	WATER SERVICE



TYPICAL TRENCH DETAIL

(Temporary paving patch to be used for this project)

GENERAL NOTES

1. The Contractor shall notify all utility companies when working near their systems and shall have the utility companies locate utilities prior to excavation. Call 765-1234 regarding location of utility lines. Utility companies shall be given 48 hours advanced notice for line locations.
2. All existing utilities shown herein were taken as accurately as possible from record drawings and surface indications. It shall be the Contractor's responsibility to protect, maintain in service and verify exact locations of all affected utilities during construction of this project. Not all service lines are shown. Contractor to locate all service lines in advance and give proper notice before shutting off of service. See paragraph 18.3 of the Supplemental General Conditions. Disruption of service shall be for the minimum time possible.
3. Temporary relocation of utilities for the Contractor's convenience shall be at his own expense.
4. Butterfly Valve installation - All butterfly valves shall be installed in accordance with the standard drawing (in specification) except when attached between two fittings such as an elbow and a reducer. In that case the flange-plain end spool and restrained flexible coupling shall adjoin the next connecting fitting. The spool and restrained flexible coupling may not be called out on the drawings but are a requirement of the butterfly valve installation. The spool and restrained flexible coupling will be provided as an incidental item to the valve installation.
5. Existing materials to be removed and paid for on a unit basis shall be measured and quantities approved by the Engineer before removal. Payment for paving, curb and gutter, sidewalks and driveway pads will be paid for as called for in the specifications.
6. Payment for extra depth of trenching will be based on either direct field measurements by the Engineer or by centerline staking of the line by the Engineer at the Engineer's option. Measurement and calculations of depths will be based on depth to the invert of the pipe. No extra payment will be allowed for over excavating even where sand bedding is required.
7. Normally closed valves shall have welded valve covers in order to prevent tampering. After acceptance of the lines, the covers shall be tack welded closed. This shall be an incidental item of the valve box installation.
8. The sewer line construction called for herein shall be accomplished in a manner that does not interrupt sewer service. All equipment, labor, and material necessary to accomplish this goal shall be at the Contractor's expense and shall be paid for as per the unit items in the proposal. All new sewer lines shall be laid on same grade as existing.
9. Special attention is called to the sequence of construction of the project, traffic control requirements and liquidated damages. The Contractor shall meet all requirements of the specifications and plans concerning these items. The cost necessary to meet the sequence of construction and traffic control requirements will be paid as unit price items and will not be subject to extra compensation regardless of the length of time the project takes.
10. The Contractor shall be fully responsible for notifying and working with the owners of other utilities and shall be solely responsible for coordinating his activities with those of the utility owners.
11. The Contractor shall perform all necessary exploratory excavations prior to submittal of associated shop drawings and well in advance of ordering pipe material. The pipeline has been laid out to maintain uniform upward sloping grades west to east as much as possible and avoid conflicts. Some existing line elevations have been field verified (shown on drawings in shaded areas) and the remaining line elevations are from recorded drawings. It is desired to maintain the upward west to east slope. The Engineer will consider regrading the line to avoid conflicts uncovered in the field but these conflicts should be resolved prior to shop drawing submittals. All exploratory excavation and work shall be at the Contractor's cost and incidental to other items. If adequate exploratory work is not accomplished ahead of shop drawing submittals, the Contractor shall assume all extra cost (including fittings and piping changes) necessary for relaying the line to avoid unexpected conflicts.
12. The Contractor shall provide one electronic marker complete in place at each blind outlet or dead end of pipe and at each valve location. The marker shall be considered an incidental item as part of other payment items. The marker shall be installed in accordance with the manufacturer's instructions in regards to minimum clearance. The marker shall be immediately north of valves on north - south lines and immediately west of valves on east - west lines.
14. Remove all valve boxes and valves from abandoned water lines (as an incidental item and not subject to separate payment). All salvageable boxes and valves shall be delivered to the Water Resources Department stripped of any attached pipe.
15. Curb and gutter or pavement shown as existing and not to be removed under this contract which is damaged or displaced by the contractor or his subcontractors, shall be replaced by the Contractor at his expense. What is an allowable removal is covered in the specifications. However, in this regard, the plans shall take precedence over the specifications and any curbs, gutters or pavements shown specifically on the plans as not to be disturbed shall not be removed even if contrary to the specifications.
16. The maximum allowable quantities for payment for replacement of pavement due to installation and removal of water and sewer lines shall be computed in accordance with the specifications.
17. Thrust blocking will not be paid for separately and shall be considered as an incidental to other work.
18. Each line to be abandoned will be cut and capped or plugged with a watertight fitting and encased at the end of the line with concrete. This shall be an incidental item to other work and the Contractor shall not be paid separately for it.
19. See specifications for boring logs. (SC-1 through SC-4)
20. The overhead street lighting circuits in the area have voltages in excess of 5000 volts. Ten feet (10') of clearance between these lines and any equipment shall be maintained. If it is necessary to come closer than 10', or to work directly under these lines, P.N.M. shall be given 48 hours notice by the Contractor and the Contractor shall assume all coordination responsibilities to insure power is off before working near any lines.
21. Pavement Replacement: This project area will soon have a concrete intersection (construction to begin in May). Pavement replacement will not be in accordance with the Standard City Specifications, but in accordance with the details contained herein for temporary pavement replacement.
22. Pipe Material: Lines 6" to 12" Diameter - Asbestos Cement Class 200 or Ductile Iron Thickness Class 50.
    Lines 14" Diameter - Ductile Iron Thickness Class 50 or Concrete Cylinder design pressure of 200 psi.
    Lines 16" Diameter or Greater - Ductile Iron Thickness Class 50 or Concrete Cylinder design pressure of 150 psi.
23. Sewer line replacement to be with Class 50 Ductile Iron watertight joints. Concrete encase connections to existing.
24. Contractor shall support and block all existing utilities when new water lines must be installed beneath existing lines. The exact method of support for existing lines must be approved in advance by the Engineer. Any damage to existing utilities shall be the responsibility of the Contractor and no extra compensation shall be allowed to replace or repair existing utilities.
25. The Contractor shall have the option of rigid joints or thrust blocking. No extra reimbursement shall be allowed for either. Rigid joints of concrete cylinder pipe shall be in accordance with the City's Standard Detail.

AS BUILT INFORMATION
CONTRACTOR Kent Nowlin Const. Inc.
STAKED BY Scanlon Assoc. DATE 4/81
INSPECTOR BY DATE
MATERIALS BY City DATE 11/81
FIELD CATION BY DATE
VERIFICATION BY City DATE
CORRECTED BY Scanlon Assoc. DATE 10/82
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

SURVEY INFORMATION
BENCH MARKS
FIELD NOTES
NO. DATE BY

REFERENCES
MAP NO.
EST NO
W.O. NO.

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY D.R.B. DATE 3/80
DRAWN BY S.G.H. DATE 3/80
CHECKED BY D.R.B. DATE 3/80

26 1 0 1 0 0 2 8 3
1 2 3 4 5 6 7 8 9 10 11 12

WATER RESOURCES DEPARTMENT APPROVAL OF AS BUILT DRAWINGS
Date 6/30/83

RECORD DRAWING

PLANS PREPARED UNDER THE DIRECTION OF
DAVID R. BROSNAN NEW MEXICO 6848 REGISTERED PROFESSIONAL ENGINEER
Graphic Engineering Inc. JOB NO 77038

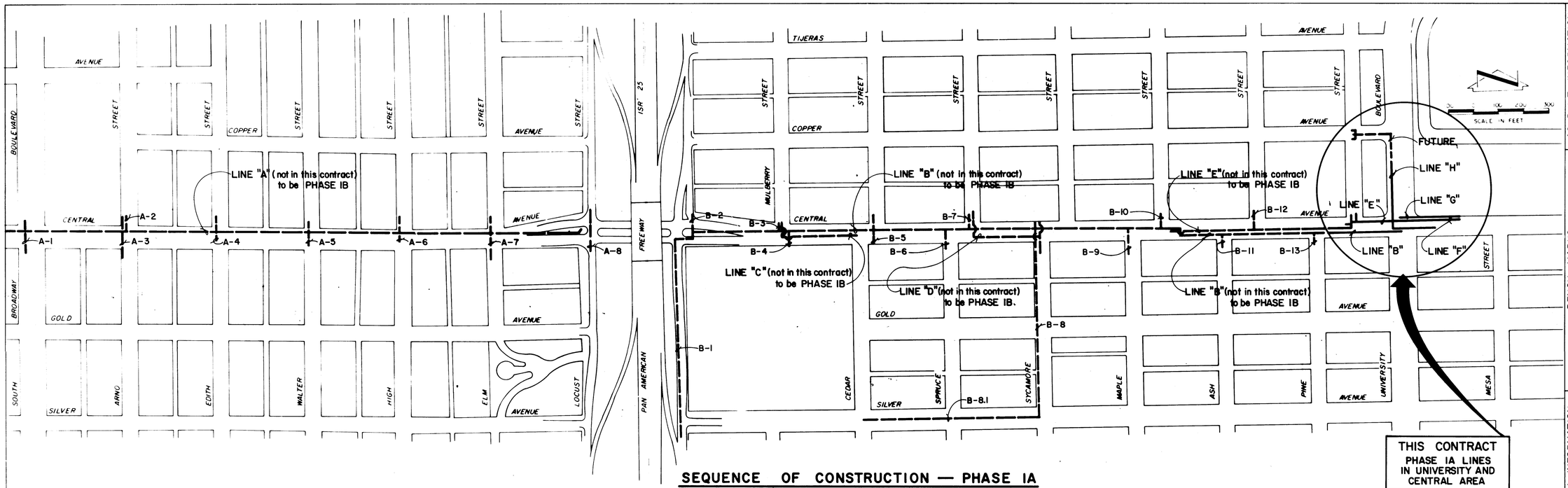
APPROVED FOR CONSTRUCTION
Richard Stiller 1/12/83
CITY ENGINEER DATE

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

TITLE: STEEL WATER LINE REPLACEMENT — PHASE IA
GENERAL NOTES, LEGEND, ABBREVIATIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste	M. Hickerson	1/9/01
A.C.E.-Design			Traffic	[illegible]	1/4/01
A.C.E.-Hydrology			Water	M. Hickerson	1/9/01

DRAWING NO. 1010
SHEET 2 OF 10



SEQUENCE OF CONSTRUCTION — PHASE IA

NOTES:

1. See Sequence of Construction Sheet 4 .
2. See Traffic Control Plan Sheets 9 and 10 .
3. Contractor shall maintain traffic control at all times.
4. Contractor shall be responsible for temporarily restraining all unfinished but partially used lines or valves. Any blocking or restraining needed for this purpose shall be considered an incidental item with no separate payment allowed.
5. Any variance from the sequence indicated here must be approved in writing in advance by the City of Albuquerque. Any proposed changes to the sequence must be submitted in writing. Any proposed sequences must be submitted in detail and be complete from beginning to end of each line (i.e., not a partial sequence). The sequence must be based on minimum interruption of service.

STEP 1

1. Construct portions of lines "E", "F","H"; (0+00 to 2+70±) and "G" as shown on Sheet 4.
   These lines can be constructed in any reasonable order.
   Do not connect to existing lines.
2. Construct line "B" from station 25+80 to station 28+70 ± . Do not connect yet.
3. Stub out line "B-14" with valve but do not connect to existing lines.
4. Pressure tap the existing 10" steel line (verify size) in middle of intersection. Construct temporary bypass line around 20" C.C.P.

STEP 2.

1. Connect line "B" and line "G". This needs to be carefully coordinated with the City. Shut down time on 20" line shall be minimized. Contractor shall work continuously until this process is completed. Reactivate 20" line as soon as possible.
   A. During this time, the temporary bypass on the 10" line will be used to keep the 10" line in service.
2. When ready, deactivate the 10" line east of University and connect line "G-1". This should be accomplished in the minimum time possible and be carefully coordinated with the City. Reactivate as soon as possible. Note; transfer the service connections between University and line "G-1". This will be done on a Sunday or at night. Note; line "G-1" must be completed and activated before beginning line "F-1".
3. Deactivate the 14" water line and the 2 - 16" water lines on Central. Coordinate with City.
4. Construct the remaining portions of line "F". Construct lines "F-1" and "F-2" making all necessary connections.
5. Reactivate the 16" line and use line "F-2". Keep valve on line "F" at station 1+12 closed .

STEP 3

1. Deactivate the 22" steel line. Coordinate with the City.
2. Construct the remainder of line "E" including "E-1", "E-2" and "E-3". Remove existing 22" and 16" lines where conflicting. Construct in minimum time possible. Activate line "E" as soon as possible including lines "E-1", "E-2" and "E-3".
3. Deactivate 10" steel line west of University. Extend line "B-14" and connect line "B-14" to existing line and to hydrant. This is to be carefully coordinated with the City (i.e., this line is important to Presbyterian Hospital). It is essential that the shut down on the existing line be minimal. Activate line "B" and "B-14". This connection will have to be done in the middle of the night.
4. Remove temporary bypass line and 10" line connections to the 20" C.C.P. blind flange valves at the 20" C.C.P.

STEP 4.

1. Make exploratory excavations at 36" and 22" lines (Note: these exploratory excavations can be accomplished before this step).
2. There is some uncertainty as to what exists at the end of the existing 36" line. As noted on the drawings additional valving and connections may be needed.
3. Complete line "H" from station 2+70± to end of line.

AS BUILT INFORMATION
DETAILED BY: Kent Nowlin Const. Inc. DATE: 4/81
IN SKETCH BY: Scanlon & Assoc. DATE: 11/81
ADDITIONS BY: City DATE:
FIELD CHECK BY: DATE:
DRAWING BY: Scanlon & Assoc. DATE: 10/82
MICRO-FILM INFORMATION
RE: MICRO: DATE:

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES BY DATE
NO NO

REFERENCES
MAP NO
EST NO
WO NO

REVISIONS
NO DATE REMARKS BY
DESIGNED BY DATE
DRAWN BY DATE
CHECKED BY DATE

1 2 3 4 5 6 7 8 9 10 11 12
2 6 1 0 1 0 0 3 8 3

WATER RESOURCES DEPARTMENT
APPROVAL OF AS BUILT DRAWINGS
Date 6/30/83

RECORD DRAWING

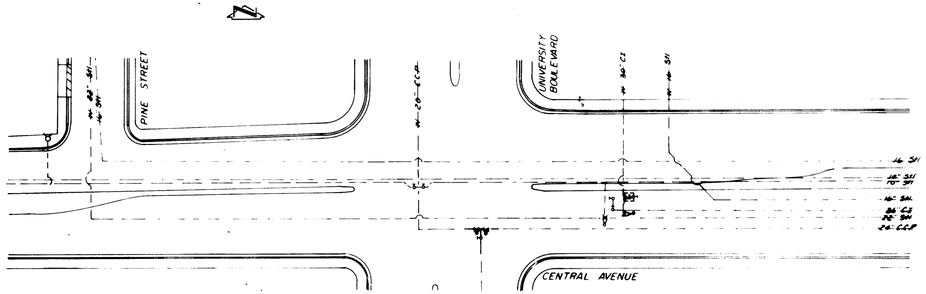
PLANS PREPARED UNDER THE DIRECTION OF
DAVID R. BROSMAN NEW MEXICO 6848 REGISTERED PROFESSIONAL ENGINEER
JOB NO 79030
APPROVED FOR CONSTRUCTION
CITY ENGINEER DATE 11/15/83

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

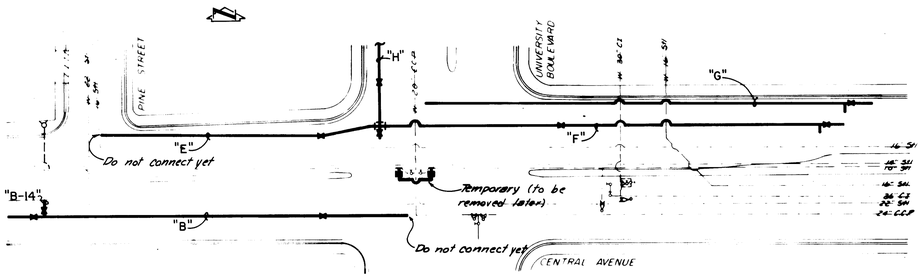
TITLE: STEEL WATER LINE REPLACEMENT — PHASE IA
NOTES ON SEQUENCE OF CONSTRUCTION & GENERAL SITE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		11/8/83
A.C.E.-Design			Traffic		11/2/83
A.C.E.-Hydrology			Water		11/9/83

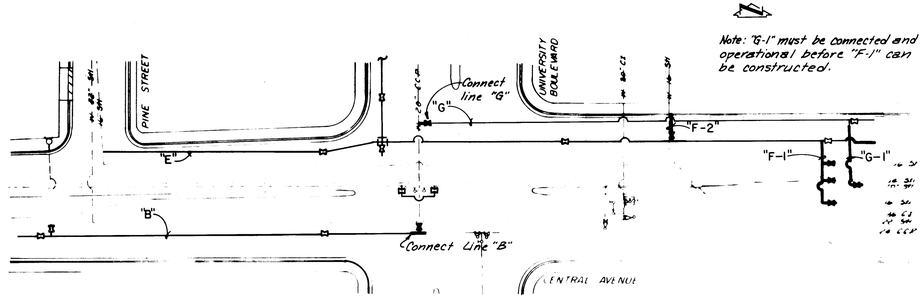
DRAWING NO. 101.0
SHEET 3 OF 10



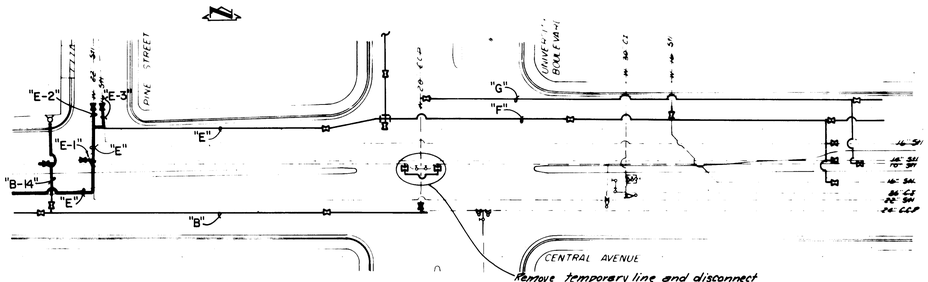
EXISTING WATER LINES



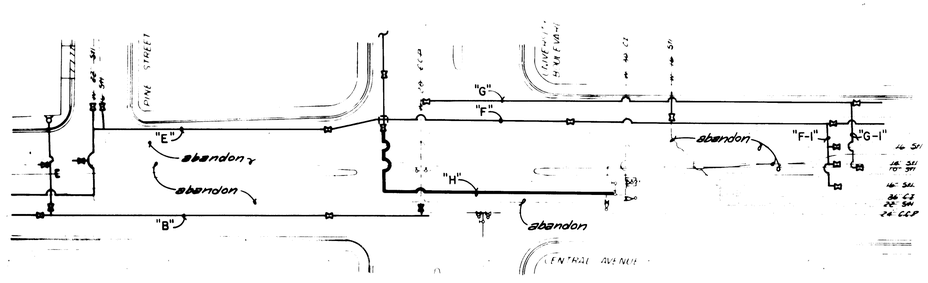
STEP 1



STEP 2



STEP 3



STEP 4

NOTE: Other utilities are not shown.

26 1010 0483

LEGEND

- EXISTING WATER LINE
- PROPOSED WATER LINE
- PROPOSED WATER LINE - INSTALLED IN PREVIOUS SEQUENCE

WATER RESOURCES DEPARTMENT APPROVAL OF AS BUILT DRAWINGS
Date 6/30/82

RECORD DRAWING

PLANS PREPARED UNDER THE DIRECTION OF
DAVID R. BRASHEAR NEW MEXICO 6438 REGISTERED PROFESSIONAL ENGINEER
JOB NO 71038

APPROVED FOR CONSTRUCTION
CITY ENGINEER 1/19/81 DATE

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

TITLE: STEEL WATER LINE REPLACEMENT — PHASE IA
CONSTRUCTION SEQUENCE — CENTRAL AVENUE & UNIVERSITY BOULEVARD

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		1/9/81
A.C.E. - Design			Traffic		1/12/81
A.C.E. - Hydrology			Water		1/9/81

DRAWING NO. 1010

SHEET 4 OF 10

REFERENCES
MAP NO
EST NO
WO NO

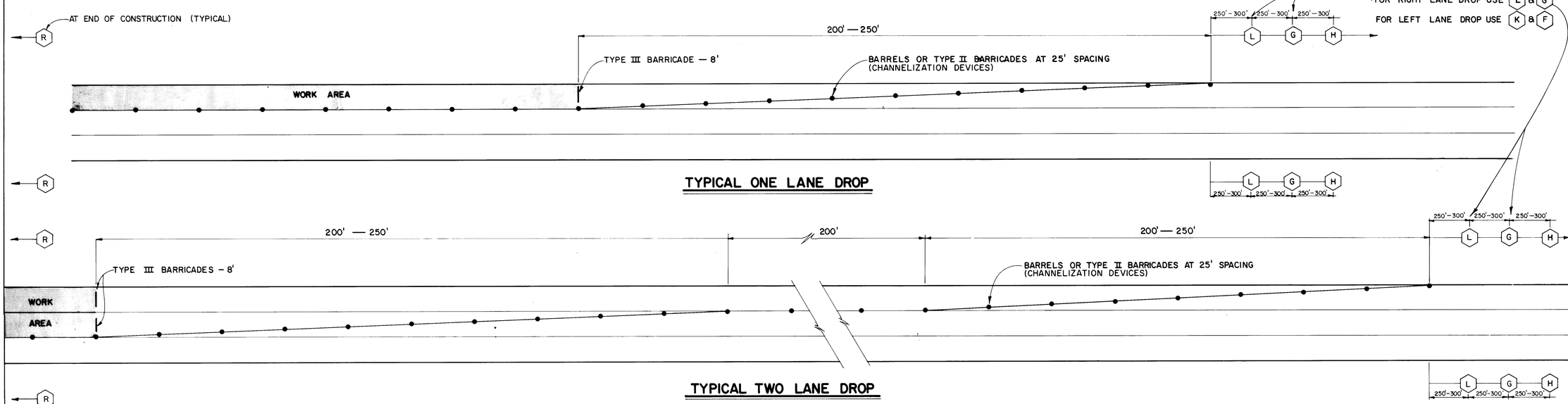
NO	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY D.R.B. DATE 8/80
DRAWN BY S.G.H. DATE 8/80
CHECKED BY D.R.B. DATE 8/80

AS BUILT INFORMATION
Kent Nowlin Const. Inc. 4/81
Scanlon & Assoc. 11/81
City
Scanlon & Assoc. 10/82
MICRO-FILM INFORMATION

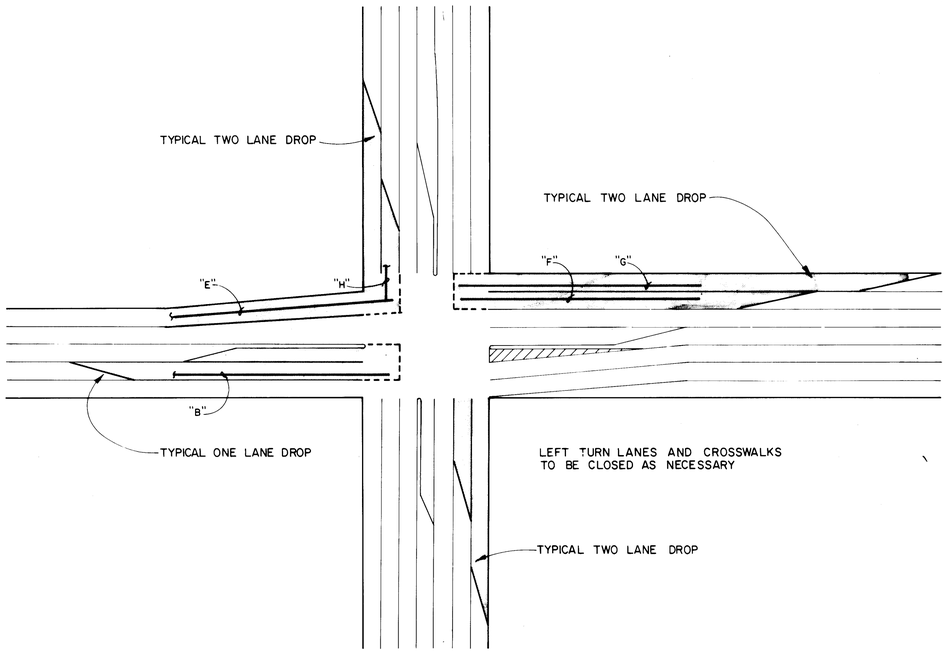
BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO BY DATE



TYPICAL ONE LANE DROP

TYPICAL TWO LANE DROP



TYPICAL INTERSECTION LAYOUT *

* DURING INSTALLATION OF LINES "B","E","H","F" & "G"

TRAFFIC CONTROL PLAN

1. All construction signs, channelization devices, barricades, and flagging operations shall conform to the Manual on Uniform Traffic Control Devices latest edition.
2. Typical drawings are to used as a guide. The Engineer will prepare detailed specific construction signing plans for the Contractor, which will be submitted to the City Traffic Engineer for the various traffic conditions encountered during each step or part of a step as required by the construction sequence plan. The Contractor shall notify the Engineer at least 72 hours in advance of his intended operation changes that affect traffic control so that the appropriate construction signing plans can be prepared and approved. The Contractor shall keep or have ready access to sufficient construction signs and barricades to properly control the traffic at all times. Only those signs and barricades specifically used at the job site will be eligible for payment.
3. Construction operations shall be planned so that equipment and manpower are confined to areas that will allow a minimum of one traffic lane open in each direction at all times. Any flagging operations required will be considered incidental to other items.
4. The Contractor shall be responsible for setting, resetting and maintaining all construction signs and barricades during all hours of the day.
5. All construction signs, channeliaztion devices and barricades shall be reflectorized with enclosed lens sheeting. All advance warning signs shall be equipped with Type A flashing warning lights. All channelization devices shall be equipped with Type C steady burning warning lights.
6. Any traffic signal adjustments required by the traffic control for construction will be done by the City Traffic Engineer.
7. Specialty signs may be required. These signs shall be supplied by the Contractor as soon as possible, after notified by the Engineer.
8. Measurement and payment for construction signing, barricades and channelization devices will be made at the appropriate unit prices bid for the following items:
   a) Type III Barricades - 8', per each
   b) Channelization Devices, per each (barrels, Type II barricades or vertical panels). The Engineer prefers the use of barrels; however, field conditions may require other devices. No intermixing of channelizing devices will be permitted.
   c) Construction Sign including portable sign support, per each. Message to be determined in the field.
   d) Construction Sign not requiring separate portable sign support, per each. Message to be determined in the field.

2 6 1 1 0 1 0 0 9 8 3

WATER RESOURCES DEPARTMENT
APPROVAL OF AS BUILT DRAWINGS
Date 6/3-/83

RECORD DRAWING

PLANS PREPARED UNDER THE DIRECTION OF
DAVID R. BROSMAN NEW MEXICO 6648 REGISTERED PROFESSIONAL ENGINEER
Bohannan Huston Inc. JOB NO 29038

APPROVED FOR CONSTRUCTION
CITY ENGINEER 11/13/81 DATE

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

TITLE: STEEL WATER LINE REPLACEMENT — PHASE IA
TRAFFIC CONTROL PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		1/9/81
A.C.E.-Design			Traffic		1/9/81
A.C.E.-Hydrology			Water		1/9/81

DRAWING NO. 1010

SHEET 9 OF 10

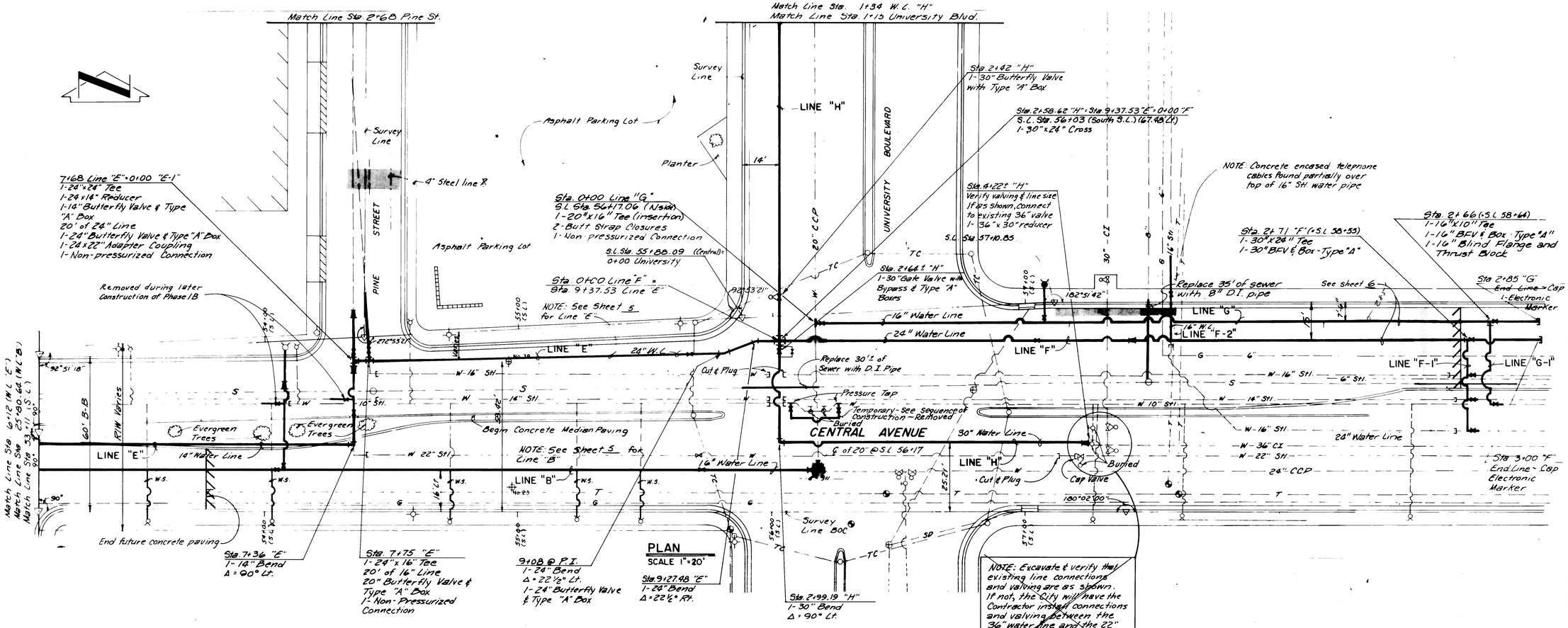
AS BUILT INFORMATION
CONTRACTOR Kent Nowlin Const. Inc.
WORK STAKED BY Scanlon & Assoc. DATE 4/81
WORK ACCEPTANCE RECOMMENDED BY City DATE 11/82
FIELD VERIFICATION BY City DATE
DRAWINGS CORRECTED BY Scanlon Assoc DATE 10/82
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

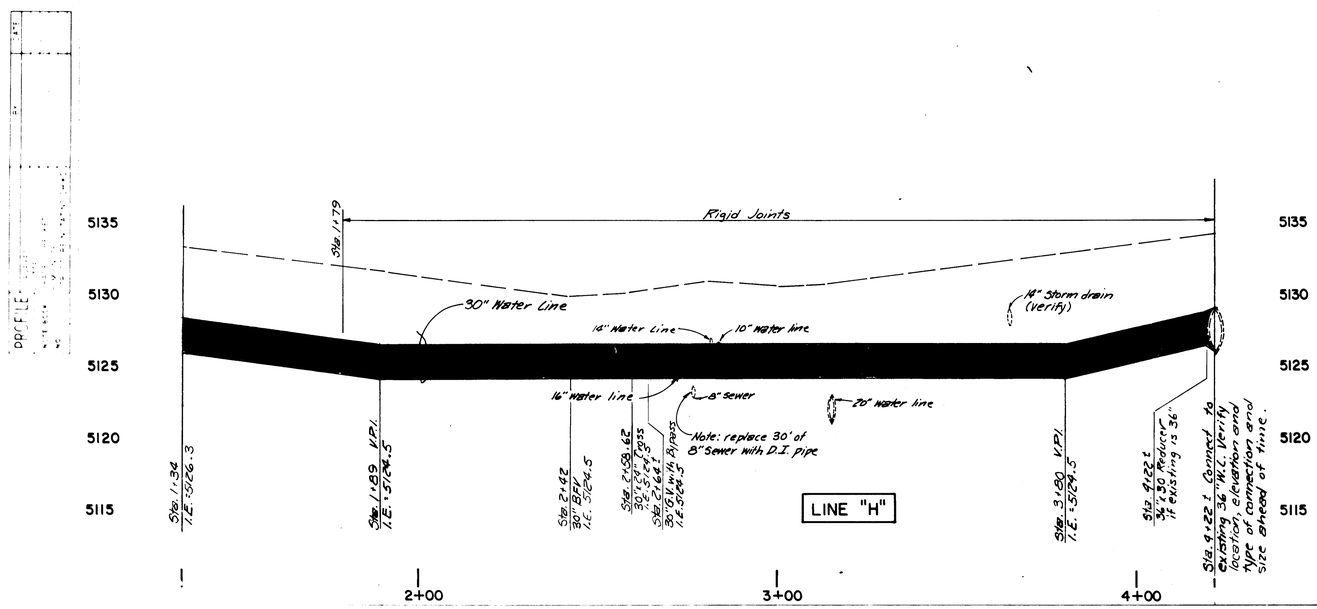
BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

REFERENCES
MAP NO.
EST. NO.
W.O. NO.

REVISIONS
NO. DATE REMARKS BY
DESIGNED BY D.R.B. DATE 8/80
DRAWN BY S.G.H. DATE 8/80
CHECKED BY D.R.B. DATE 8/80





Kent Nowlin Const. Inc. 4/81
Scanlon & Assoc. 11/81
City
City
Scanlon & Assoc. 10/82

5"x15" ACS Brass Disk set in median, 21.2' South of ℄ on the west bound lane of Central and 77.5' East of University. Elevation = 5134.24

Scanlon & Associates 11/79

REFERENCES
MAP NO A-15 2
EST NO W.O. NO

NO	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	DATE 8/80
		DRB	DATE 8/80
		SAH	DATE 8/80
		DRB	

DESIGNED BY
DRAWN BY
CHECKED BY

26. 1010 0883

WATER RESOURCES DEPARTMENT
APPROVAL OF AS BUILT DRAWINGS
Date 6/30/83

NOTE: 1. This sheet for Line "H". See other sheets for Lines "B", "E", "F" and "G"
2. See sheet 4 for sequence of construction.
3. Rigid joints optional to thrust block.

PLANS PREPARED UNDER THE DIRECTION OF
DARRELL R. BOWMAN
REGISTERED PROFESSIONAL ENGINEER
Drawn by
JOB NO 79038

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

TITLE STEEL WATER LINE REPLACEMENT — PHASE 1A
LINE "H"
PLAN & PROFILE

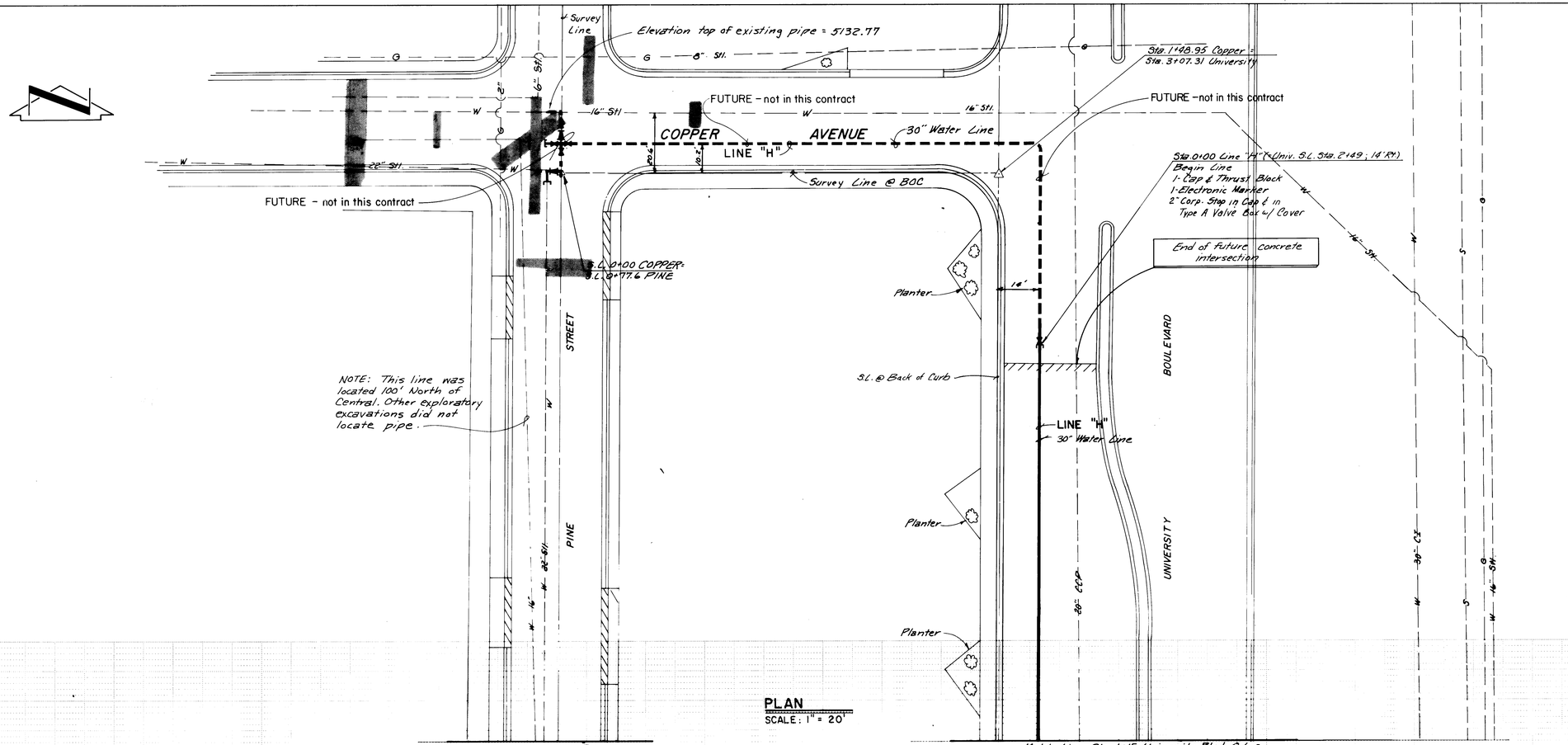
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. - Design			Traffic	N.A.	
A.C.E. - Hydrology			Water		1/9/81

APPROVED FOR CONSTRUCTION
CITY ENGINEER — DATE 1/9/81

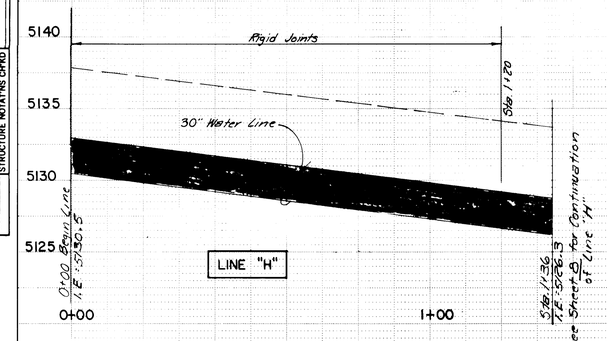
DRAWING NO 1010

SHEET 8 OF 10

RECORD DRAWING



PLAN
SCALE: 1" = 20'



PROFILE
SCALE: 1" = 20' HORZ.
1" = 5' VERT.

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.
BY
DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1258	Scanlon & Associates	11/79

BENCH MARKS
5"x15" ACS Brass Dist set in median, 21.2' south of ℄ on the west bound lane of Central and 77.5' east of University
Elevation = 5134.24

AS BUILT INFORMATION
CONTRACTOR Karl Nowlin Const. Inc.
WORK STAKED BY Scanlon & Assoc. DATE 4/81
INSPECTED BY
ACCEPTANCE BY City DATE 11/81
FIELD VERIFICATION BY DATE
DRAWINGS COMPILED BY Scanlon & Assoc. DATE 10/82
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

REFERENCES
MAP NO. K-15Z
EST. NO.
W.O. NO.

REMARKS
REVISIONS
DESIGN
NO. DATE BY

DESIGNED BY D.R.B. DATE 8/80
DRAWN BY S.G.H. DATE 8/80
CHECKED BY D.R.B. DATE 8/80

26.101.0 0783

WATER RESOURCES DEPARTMENT
APPROVAL OF AS BUILT DRAWINGS
Date 4/3/83

PLANS PREPARED UNDER THE DIRECTION OF
DAVID R. BRACKEMAN NEW MEXICO 3846 REGISTERED PROFESSIONAL ENGINEER
Scanlon & associates, inc. JOB NO. 77038

APPROVED FOR CONSTRUCTION
Richard S. Hill 1/8/81
CITY ENGINEER DATE

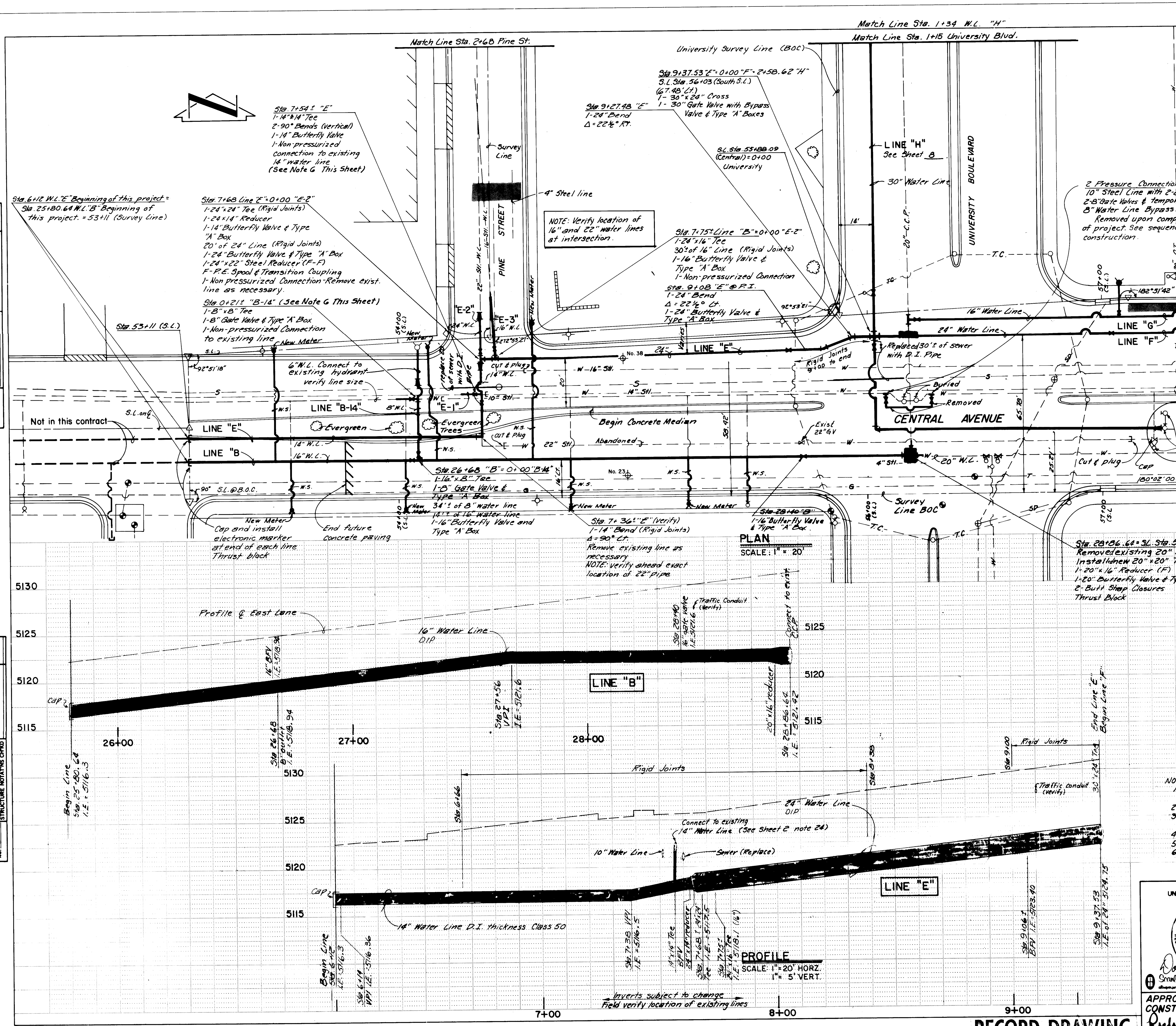
CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

TITLE: STEEL WATER LINE REPLACEMENT – PHASE 1A
LINE "H"
PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste	W. Hackemann	1/9/81
A.C.E.-Design			Traffic	N.A.	
A.C.E.-Hydrology			Water	W. Hackemann	1/9/81

DRAWING NO. 1010
SHEET 7 OF 10

RECORD DRAWING



Match Line Sta. 2+68 Pine St.
Match Line Sta. 1+34 W.L. "H"
Match Line Sta. 1+15 University Blvd.
University Survey Line (BOC)
Sta. 9+37.53 "E" = 0+00 "F" = 2+58.62 "H"
S.L. Sta. 56+03 (South S.L.)
(67.48' Lt.)
1 - 30" x 24" Cross
1 - 30" Gate Valve with Bypass Valve & Type "A" Boxes
Sta. 9+27.48 "E"
1-24" Bend
Δ = 22½° Rt.
Sta. 7+54 ± "E"
1-14" x 14" Tee
2-90° Bends (Vertical)
1-14" Butterfly Valve
1-Non-pressurized connection to existing 14" water line
(See Note 6 This Sheet)
S.L. Sta. 55+88.09 (Central) = 0+00 University
LINE "H" See Sheet 8
30" Water Line
UNIVERSITY BOULEVARD
Survey Line
4" Steel line
PINE STREET
NOTE: Verify location of 16" and 22" water lines at intersection.
2 Pressure Connections
10" Steel Line with 2-8" Taps
2-8" Gate Valves & Temporary 8" Water Line Bypass.
Removed upon completion of project. See sequence of construction.
NOTE: See Sheet 6 for lines "G" and "F"
Sta. 6+12 W.L. "E" Beginning of this project = Sta. 25+80.64 W.L. "B" Beginning of this project. = 53+11 (Survey Line)
Sta. 7+68 Line "E" = 0+00 "E-2"
1-24" x 24" Tee (Rigid Joints)
1-24 x 14" Reducer
1-14" Butterfly Valve & Type "A" Box
20' of 24" Line (Rigid Joints)
1-24" Butterfly Valve & Type "A" Box
1-24" x 22" Steel Reducer (F-F)
F-P.E. Spool & Transition Coupling
1-Non pressurized Connection - Remove exist. line as necessary.
Sta. 7+75 ± Line "B" = 0+00 "E-2"
1-24" x 16" Tee
30' ± of 16" Line (Rigid Joints)
1-16" Butterfly Valve & Type "A" Box
1-Non-pressurized Connection
Sta. 9+08 "E" @ P.I.
1-24" Bend
Δ = 22½° Lt.
1-24" Butterfly Valve & Type "A" Box
Sta. 0+21 ± "B-14" (See Note 6 This Sheet)
1-8" x 8" Tee
1-8" Gate Valve & Type "A" Box
1-Non-pressurized Connection to existing line
Sta. 53+11 (S.L.)
New Meter
6" W.L. Connect to existing hydrant verify line size
"E-2"
"E-3"
"E-1"
LINE "E"
LINE "B-14"
LINE "B"
LINE "G"
LINE "F"
LINE "F-2"
16" Water Line
24" Water Line
Replaced 30' ± of sewer with D.I. Pipe
Rigid Joints 9+00 to end
Buried
Removed
CENTRAL AVENUE
Begin Concrete Median
Abandoned
Evergreen
Evergreen Trees
Not in this contract
Exist. 22" GV
Cut & plug
Cap
Buried
Sta. 26+68 "B" = 0+00 "B-14"
1-16" x 8" Tee
1-8" Gate Valve & Type "A" Box
34' ± of 8" water line
1' ± of 16" water line
1-16" Butterfly Valve and Type "A" Box
Sta. 7+36 ± "E" (verify)
1-14" Bend (Rigid Joints)
Δ = 90° Lt.
Remove existing line as necessary
NOTE: verify ahead exact location of 22" pipe
Sta. 28+40 "B"
1-16" Butterfly Valve & Type "A" Box
Survey Line BOC
New Meter
Cap and install electronic marker at end of each line
Thrust block
End future concrete paving
Sta. 28+86.64 = S.L. Sta. 56+17 south
Remove existing 20" Bend (C.C.P. & Thrust Block)
Install new 20" x 20" Tee (F, F, P.E.) (C.C.P.)
1-20" x 16" Reducer (F)
1-20" Butterfly Valve & Type "A" Box (F)
2-Butt Strap Closures
Thrust Block
NOTE: Excavate & verify that existing line connections and valving are as shown. If not, the City will have the Contractor install connections and valving between the 36" water line & the 22" water line and between the 36" water line and the 30" water line.
This is special excavation and a payable item.
PLAN
SCALE: 1" = 20'
Profile @ East Lane
16" Water Line D.I.P.
Traffic Conduit (Verify)
Connect to exist. C.C.P.
LINE "B"
Sta. 25+80.64 I.E. 5116.3
Begin Line
Sta. 26+68 8" outlet I.E. 5118.94
Sta. 27+56 VPI I.E. 5121.6
20" x 16" reducer
Sta. 28+86.64 I.E. 5121.92
Rigid Joints
24" Water Line D.I.P.
Connect to existing 14" Water Line (See Sheet 2 note 24)
10" Water Line
Sewer (Replace)
14" Water Line D.I. thickness Class 50
LINE "E"
Traffic conduit (verify)
Begin Line Sta. 6+12 I.E. 5116.3
End Line "E" Begin Line "F"
Sta. 9+37.53 I.E. of 24" 5124.75
PROFILE
SCALE: 1" = 20' HORZ.
1" = 5' VERT.
Inverts subject to change
Field verify location of existing lines
5130
5125
5120
5115
5135
26+00
27+00
28+00
7+00
8+00
9+00

NOTE:
1. This sheet for Lines "B" and "E". See other sheets for Lines "F", "G" and "H".
2. See sheet 4 for sequence of construction.
3. Services west of University to be replaced and transfered to Line "B" including meters and boxes.
4. Be very careful of telephone lines (i.e., very expensive)
5. Rigid joints optional to thrust blocking.
6. These Valves were later Removed and Lines were Capped as part of PHASE IB Construction.

WATER RESOURCES DEPARTMENT
APPROVAL OF AS BUILT DRAWINGS
Date

26. 1010. 0583

AS BUILT INFORMATION
CONTRACTOR Kent Nowlin Const. Inc.
WORK STARTED BY Scanlon & Assoc. DATE 4/81
INSPECTOR'S ACCEPTANCE BY City DATE 11/81
FIELD VERIFICATION BY City
DRAWINGS CORRECTED BY Scanlon & Assoc. DATE 10/82
MICRO-FILM INFORMATION
RECORDED BY DATE

BENCH MARKS
5-K15 ACS Brass Disk set in nose of median, 21.2' South of ℄ on the west bound lane of Central and 77.5' East of ℄ of University
Elevation = 5134.24

SURVEY INFORMATION

FIELD NOTES NO.	BY	DATE
79038 1,2,3	Scanlon & Associates	11/79

REFERENCES
MAP NO. K-15Z
EST. NO.
W.O. NO.

REMARKS
REVISIONS
DESIGN
NO. DATE BY

PLANS PREPARED UNDER THE DIRECTION OF
DAVID R. BROWN REGISTERED ENGINEER 6646
Scanlon & associates inc.
JOB NO. 79038

APPROVED FOR CONSTRUCTION
1/13/81
CITY ENGINEER DATE

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

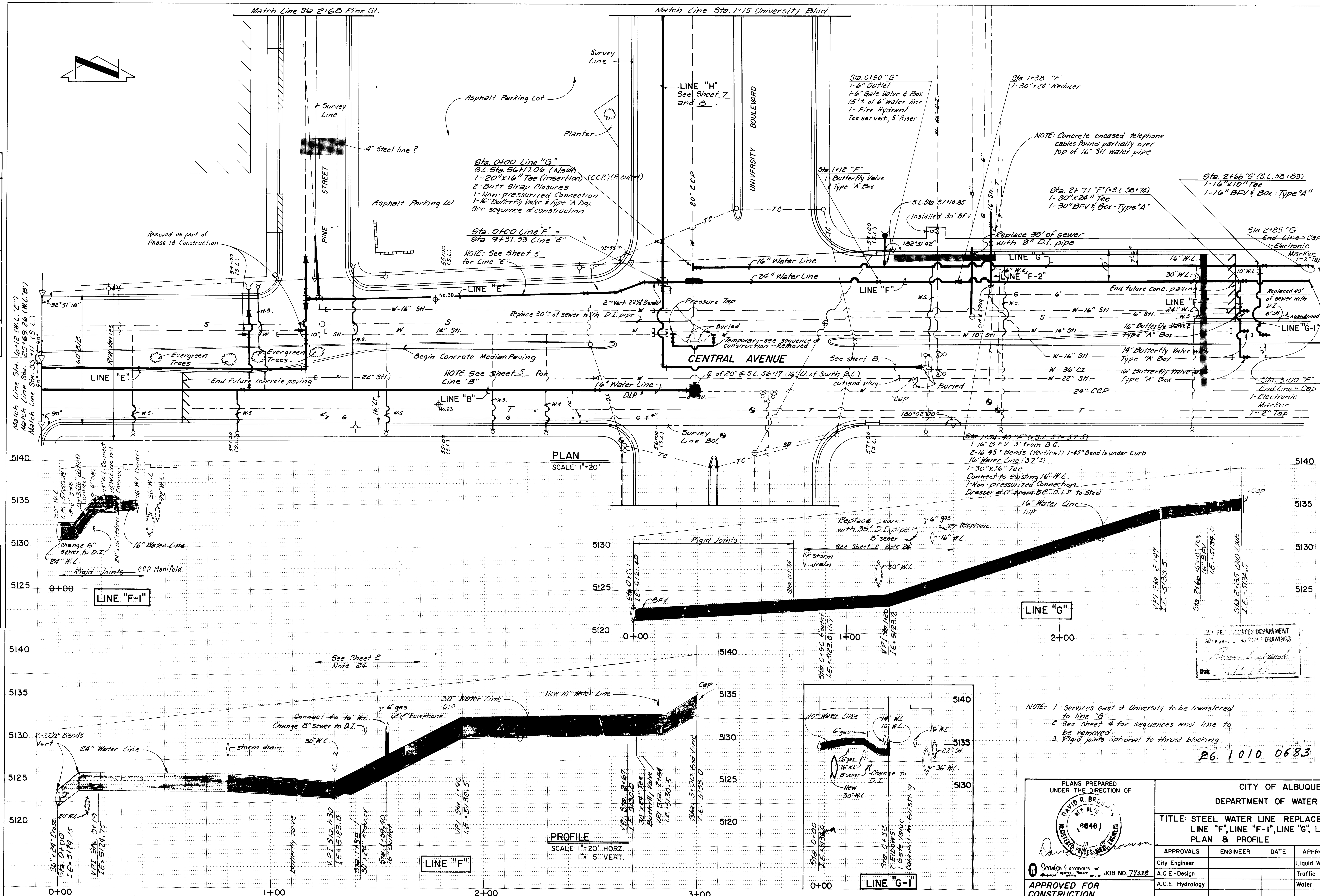
TITLE: STEEL WATER LINE REPLACEMENT - PHASE IA
LINE "B", LINE "E"
PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER
City Engineer			Liquid Waste	
A.C.E.-Design			Traffic	N.A.
A.C.E.-Hydrology			Water	

DRAWING NO. 1010
SHEET 5 OF

RECORD DRAWING

PLAN: SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / NOTE BOOK / NO. — BY — DATE
PROFILE: SURVEYED / PLOTTED / GRADES CHECKED / B.M.'s NOTED / STRUCTURE NOTATNS CHKD / NOTE BOOK / NO. — BY — DATE



AS BUILT INFORMATION	
CONTRACTOR	Kent Nowlin Const. Inc.
WORK STAKED BY	Scanlon & Assoc. DATE 4/81
INSPECTOR ACCEPTANCE BY	City DATE 11/81
FIELD VERIFICATION BY	City
DRAWINGS CORRECTED BY	Scanlon & Assoc. DATE 10/82

MICRO-FILM INFORMATION — RECORDED BY / DATE / NO.

BENCH MARKS: 5-K15 ACS Brass Disk set in nose of median, 21.2' South of ℄ on the west bound lane of Central and 77.5' East of ℄ of University. Elevation = 5134.24

SURVEY INFORMATION		
FIELD NOTES NO.	BY	DATE
79038 1,2,3	Scanlon & Associates	11/79

REFERENCES: MAP NO. K-15-Z; EST. NO.; W.O. NO.

NO.	DATE	REVISIONS / REMARKS	BY

DESIGN		
DESIGNED BY	D.R.B.	DATE 8/80
DRAWN BY	S.G.H.	DATE 8/80
CHECKED BY	D.R.B.	DATE 8/80

PLANS PREPARED UNDER THE DIRECTION OF David R. Brosman, Registered Professional Engineer 8646

Scanlon & Associates, Inc. JOB NO. 79038

APPROVED FOR CONSTRUCTION — Richard S. Hale, CITY ENGINEER, DATE 1/13/81

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

TITLE: STEEL WATER LINE REPLACEMENT — PHASE 1A LINE "F", LINE "F-1", LINE "G", LINE "G-1" PLAN & PROFILE

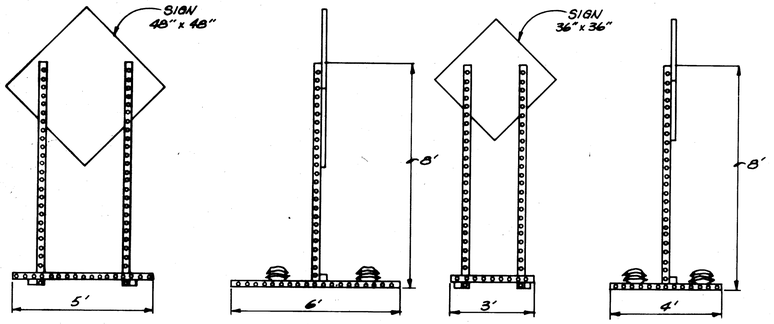
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		1/9/81
A.C.E.-Design			Traffic	N.A.	
A.C.E.-Hydrology			Water		1/9/81

DRAWING NO. 1010 — SHEET 6 OF 10

RECORD DRAWING

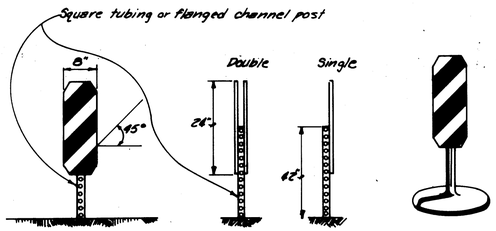
PLAN	SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED	BY	DATE

PROFILE	SURVEYED / PLOTTED CHECKED / GRADES CHECKED / B.M.'s NOTED / STRUCTURE NOTAT'NS CHK'D	BY	DATE



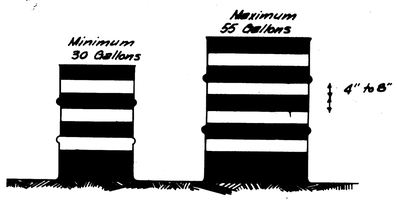
SAND BAGS SHALL BE UTILIZED FOR ADDED STABILITY. AS AN ALTERNATE TO THE SQUARE TUBE PORTABLE SIGN FRAME SHOWN ABOVE, AN APPROVED COMMERCIALLY MANUFACTURED PORTABLE SIGN FRAME MAY BE USED.

PORTABLE SIGN FRAMES (TYPICAL)



PANELS TO BE 0.080 MINIMUM, 6061-T6 OR 5052-H38 ALUMINUM ALLOY MOUNTED ON 1 1/2" MINIMUM SQUARE STEEL TUBING POST OR 1.33 #/ft. MINIMUM FLANGED CHANNEL POST. STRIPES SHALL SLANT DOWNWARD AT 45° TOWARD THE SIDE WHICH TRAFFIC IS TO PASS. FOR TEMPORARY INSTALLATION THE POST MAY BE SET TO 3 ft. BELOW GROUND OR THE PANELS MAY BE MOUNTED ON STANCHIONS.

CHANNELIZATION DEVICES — VERTICAL PANELS

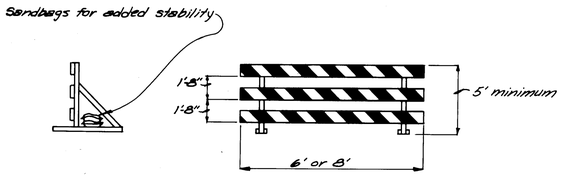


WITH THREE (3) ORANGE STRIPES MINIMUM AND ALTERNATING WHITE STRIPES, ALL REFLECTIVE TAPE OR SHEETING.

CHANNELIZATION DEVICES — BARRELS

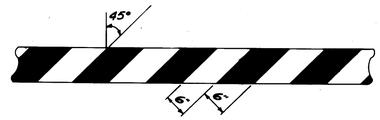
TYPE "II" BARRICADES HAVE FOUR (4) REFLECTORIZED RAIL FACES (TWO IN EACH DIRECTION). FOLDING STANDS SHALL BE OF MATERIALS SIMILAR TO TYPE "I" BARRICADE STANDS.

TYPICAL MOVABLE TYPE II BARRICADE



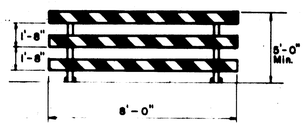
TYPE III BARRICADE FRAMING AND SUPPORTS SHALL BE 2" x 2" MINIMUM - 12 GAUGE SQUARE METAL TUBING OR DRIVEDOWN POSTS

TYPICAL MOVABLE TYPE III BARRICADE



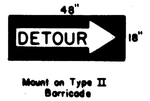
RAIL SHALL BE 1/2" MINIMUM 5 PLY SIGN GRADE PLYWOOD OR 2" x 8" S4S QUALITY WOOD. ON TYPES "I" AND "II", METAL RAILS, IF USED MUST BE LIGHT WEIGHT MATERIAL, COMMENSURATE WITH STRUCTURAL SOUNDNESS. STRIPES SHALL SLANT DOWNWARD AT 45° TOWARD THE SIDE WHICH TRAFFIC IS TO PASS.

DETAIL OF BARRICADE RAIL STRIPING



Ⓐ TYPE III BARRICADE (MOVEABLE)

Ⓑ R11-2A

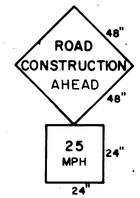


Ⓒ M4-10R (RIGHT ARROW)
Ⓓ M4-10L (LEFT ARROW)

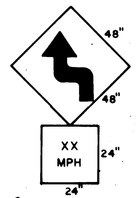
Ⓔ W20-3

Ⓕ W20-5

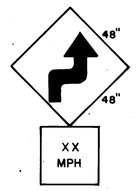
Ⓖ W20-5



Ⓗ W20-1 with W13-1



Ⓘ W1-3 with W13-1



Ⓙ W1-3 with W13-1

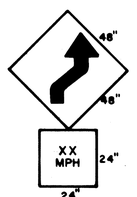
Ⓚ W4-2

Ⓛ W4-2

Ⓜ W6-3

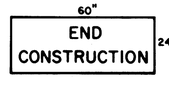
Ⓝ R3-1
LEFT or RIGHT

Ⓞ W1-4 with W13-1



Ⓟ W1-4 with W13-1

Ⓠ W20-3



Ⓡ G20-2

RECORD DRAWING

REFERENCES				SURVEY INFORMATION			BENCH MARKS	AS BUILT INFORMATION
MAP NO.		W.O. NO.		FIELD NOTES				CONTRACTOR Kent Nowlin Const. Inc.
EST. NO.				NO.	BY	DATE		STAKED BY Scanlon & Assoc. DATE 4/81
								INSPECTED & ACCEPTED BY City DATE 11/81
								FINAL LOCATION BY City DATE
								DRAWINGS CORRECTED BY Scanlon & Assoc. DATE 6/82
								MICRO-FILM INFORMATION
								RECORDED BY DATE
								NO

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY D.R.B. DATE 6/80
DRAWN BY S.O.H. DATE 6/80
CHECKED BY D.R.B. DATE 6/80

1 2 3 4 5 6 7 8 9 10 11 12
2 6 1 0 1 0 6 1 0 8 3

WATER RESOURCES DEPARTMENT APPROVAL OF AS BUILT DRAWINGS
Brian L. Spath
Date 6/30/83

PLANS PREPARED UNDER THE DIRECTION OF
DAVID R. BROSMAN NEW MEXICO 6868 REGISTERED PROFESSIONAL ENGINEER
David R. Brosman
Engineer
JOB NO. 79028

APPROVED FOR CONSTRUCTION
Richard S. Nelson 1/11/82
CITY ENGINEER DATE

CITY OF ALBUQUERQUE
DEPARTMENT OF WATER RESOURCES

TITLE: STEEL WATER LINE REPLACEMENT — PHASE IA
TYPICAL CONSTRUCTION SIGNING

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		1/11/82
A.C.E.-Design			Traffic		1/11/82
A.C.E.-Hydrology			Water		1/11/82

DRAWING NO. 1010

SHEET 10 OF 10