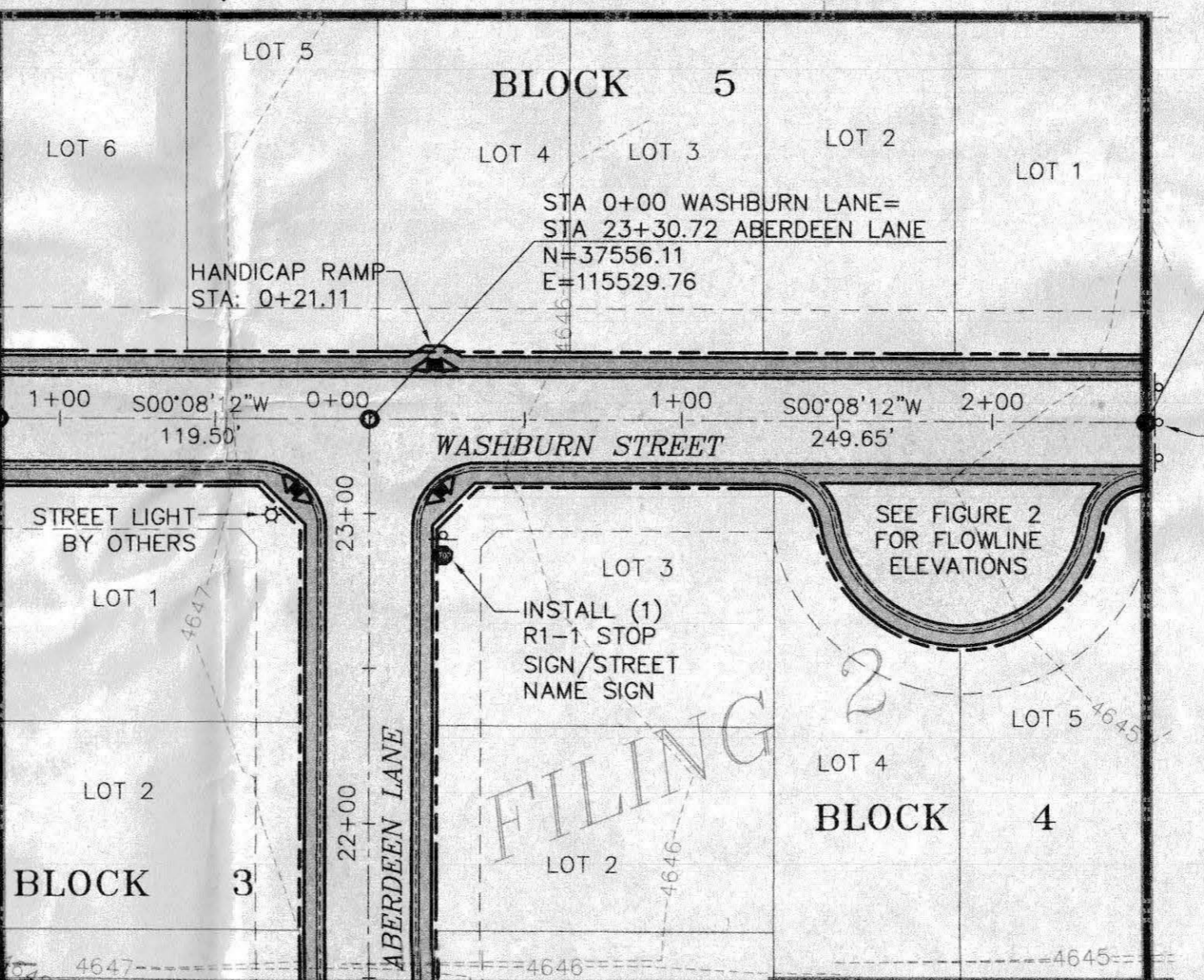
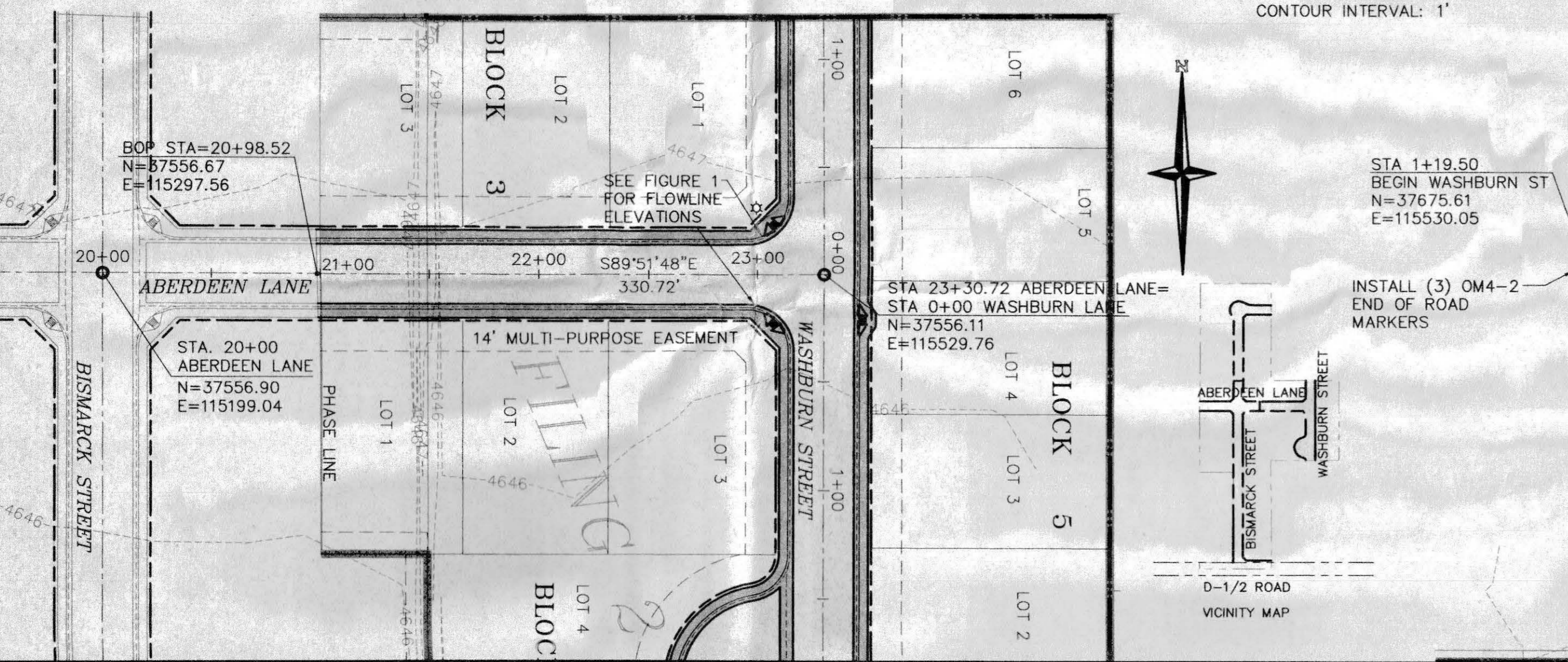


CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2 BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.



PROJECT BENCHMARK:
INTERSECTION OF D 1/2 AND 31 ROADS
MESA CNTY BRASS CAP NE CORNER OF
NE 1/4, SE 1/4, SEC 16
N: 36806.17
E: 115844.96
ELEV. 4643.73

NOTE: CONTACT CITY TRAFFIC OPERATIONS
SUPERVISOR, 970/244-1573, PRIOR TO ANY
SIGN MATERIAL ORDER OR INSTALLATION

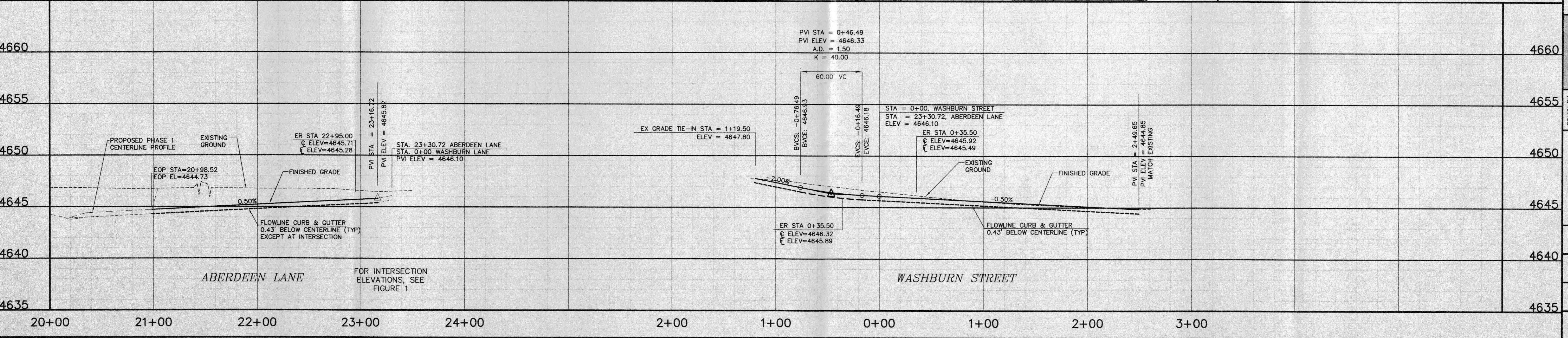
SIGN TYPE	MATERIAL FACING	QUANTITY
(OM4-2) END OF ROAD MARKERS	HIGH INTENSITY	6
(R1-1) STOP	HIGH INTENSITY	1
(D3) STREET NAME	HIGH INTENSITY	2

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
Acceptance of these plans does not relieve the developer, contractor, or the engineer from performance with the City of Grand Junction Standard Specifications.

City of Grand Junction Engineering Division Representative _____ Date _____

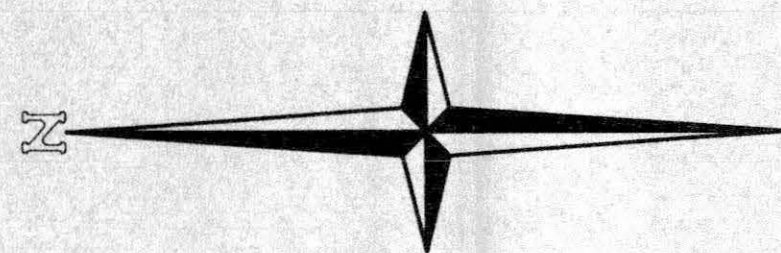
ACCEPTED AS CONSTRUCTED

City of Grand Junction Engineering Division Representative _____ Date _____



BY: CHD	DESCRIPTION:
DATE:	REVISION:
CITY OF GRAND JUNCTION	
G B R WEST, LLC	
DAKOTA WEST SUBDIVISION	PLAN & PROFILE
ABERDEEN LANE/WASHBURN STREET	
THOMPSON-LANGFORD CORP. ENGINEERS AND LAND SURVEYORS 829 25 1/2 RD., SUITE B210 GRAND JUNCTION, COLORADO PH. (970) 243-6087 FAX (970) 241-2845 tlc@tlwest.com	
NO	
DRAWN BY: MRH	CHECKED BY: JWM
DATE:	April 23, 2003
SCALE:	Horiz: 1" = 50' Vert: 1" = 5'
Project No:	0543-001
SHEET NO:	7 OF 12

05-079



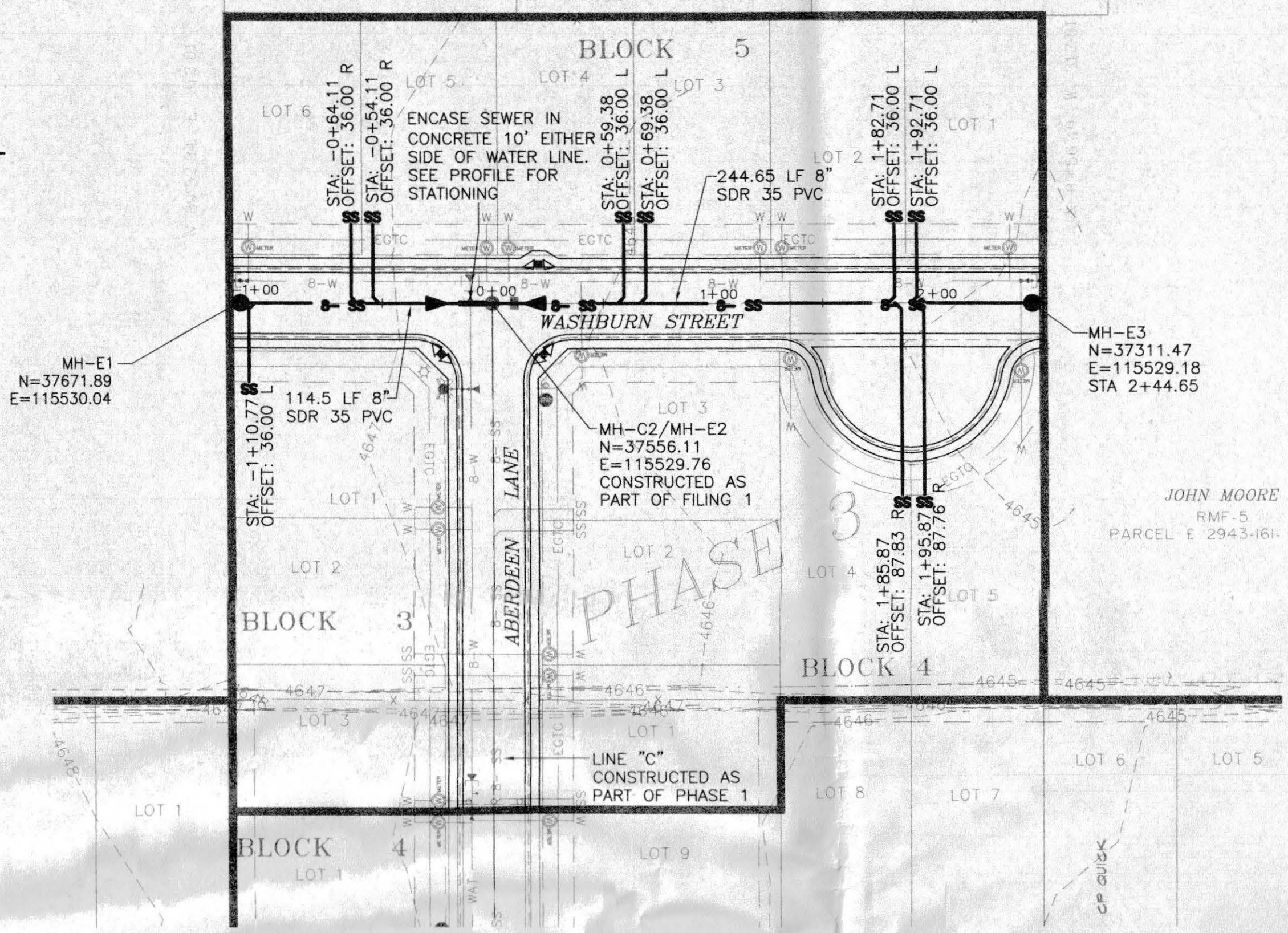
FRANK F. RUBALCABA
RSF-R
PARCEL E 2943-161-00-011

GWENDOLYN D. SANDIDGE
RSF-R
PARCEL E 2943-161-00-067

ROBBIE F. SANDIDGE
RSF-R
PARCEL E 2943-161-00-052

PROJECT BENCHMARK:
INTERSECTION OF D 1/2 AND 31 ROADS
MESA CNTY BRASS CAP NE CORNER OF
NE 1/4, SE 1/4, SEC 16
N: 36806.17
E: 115844.96
ELEV. 4643.73

(IN FEET)
1 inch = 50 ft.
CONTOUR INTERVAL: 1'



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2 BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

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ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
CENTRAL GRAND VALLEY SANITATION DISTRICT

City of Grand Junction Engineering Division Representative _____ Date _____

_____ Date _____

ACCEPTED AS CONSTRUCTED

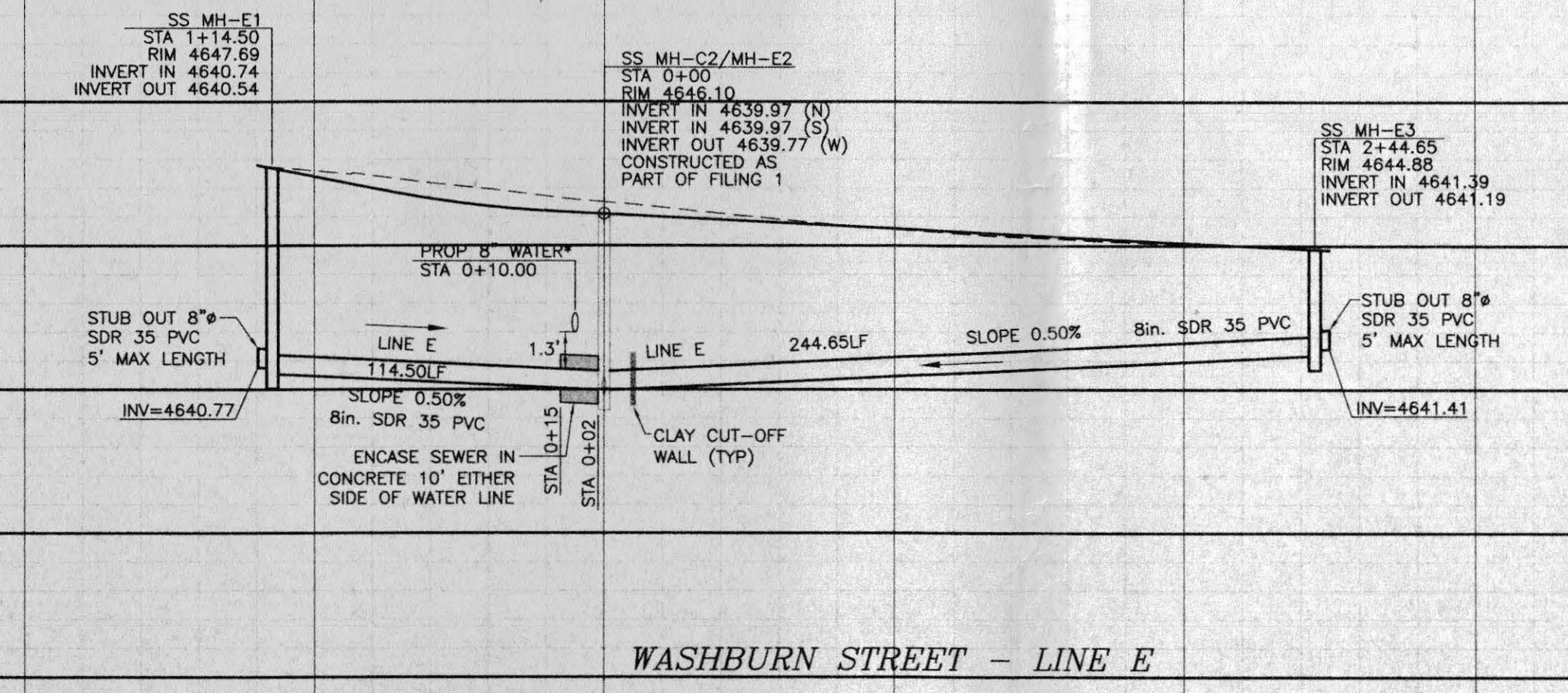
INITIAL ACCEPTANCE
CENTRAL GRAND VALLEY SANITATION DISTRICT

City of Grand Junction Engineering Division Representative _____ Date _____

_____ Date _____

BY	CHD
DESCRIPTION	
DATE	
REVISION	
CITY OF GRAND JUNCTION	
G & R WEST, LLC	
DAKOTA WEST SUBDIVISION WASHBURN STREET SANITARY SEWER LINE "E"	
THOMPSON-LANGFORD CORP. ENGINEERS AND LAND SURVEYORS 529 25 1/2 RD., SUITE B210 GRAND JUNCTION, COLORADO PH. (970) 243-6067 FAX (970) 241-2845 tlc@tlwest.com	
DRAWN BY: MH	CHECKED BY: JWM
DATE:	April 23, 2003
SCALE:	Horiz: 1" = 50' Vert: 1" = 5'
Project No:	0543-001
SHEET NO:	9 OF 12

4660										4660
4655										4655
4650										4650
4645										4645
4640										4640
4635										4635
4630										4630
4625										4625
		2+00	1+00	0+00	1+00	2+00	3+00			



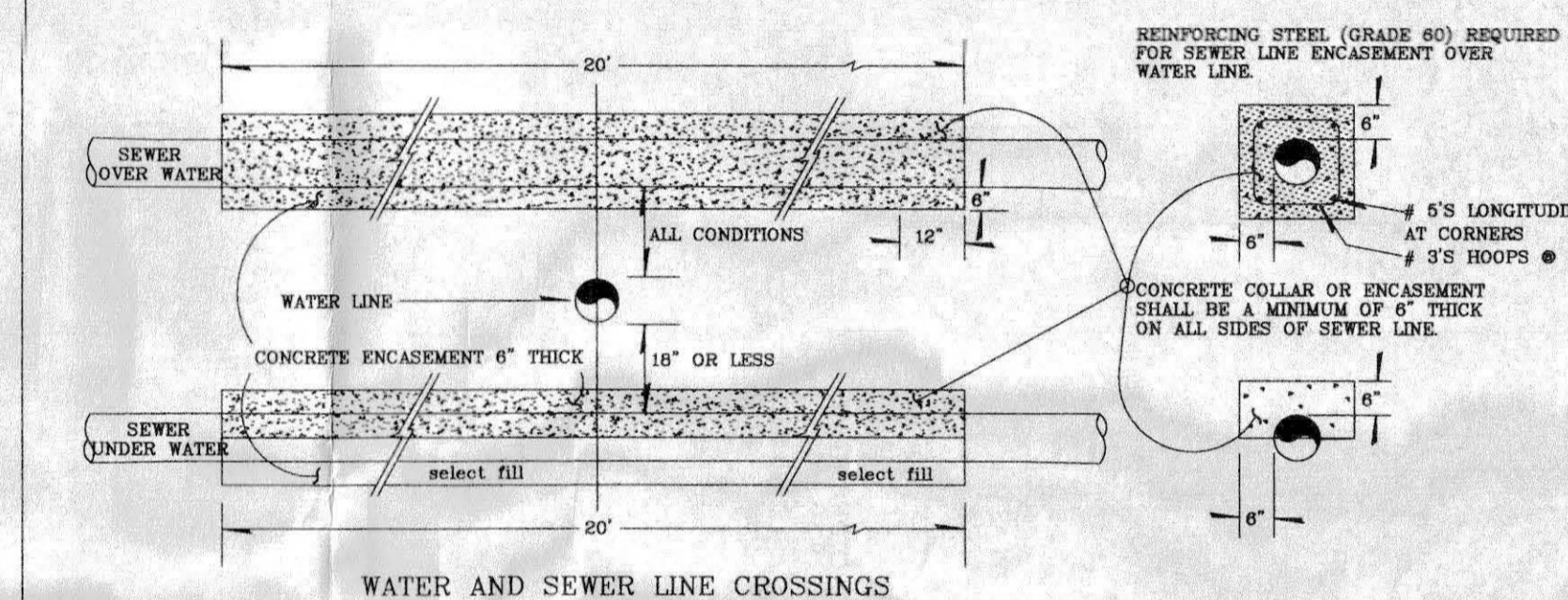
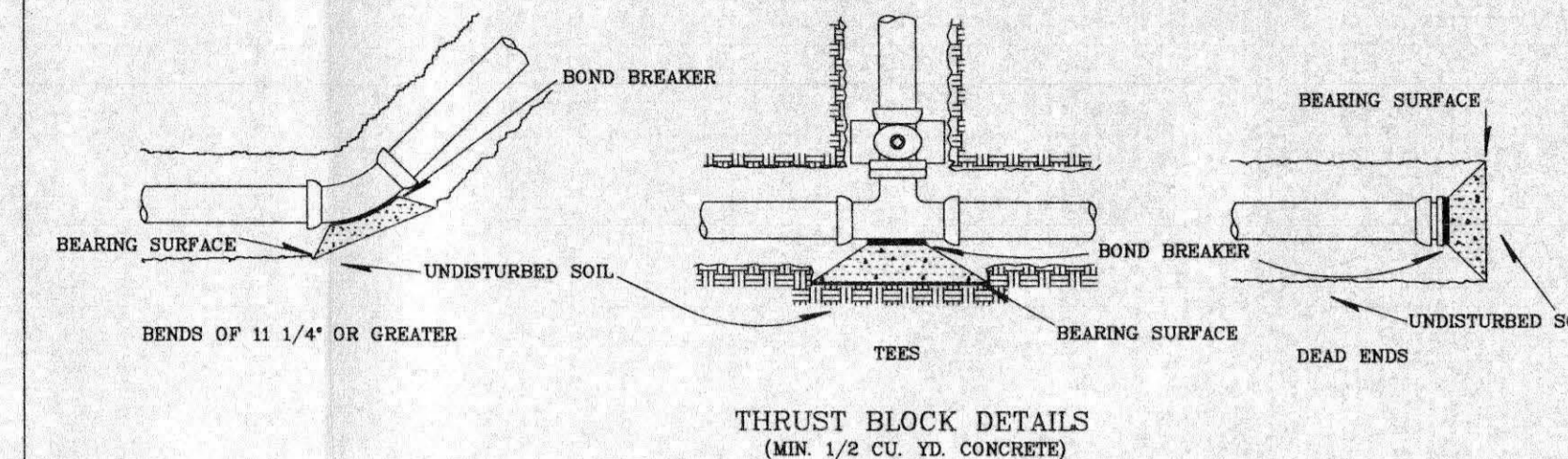
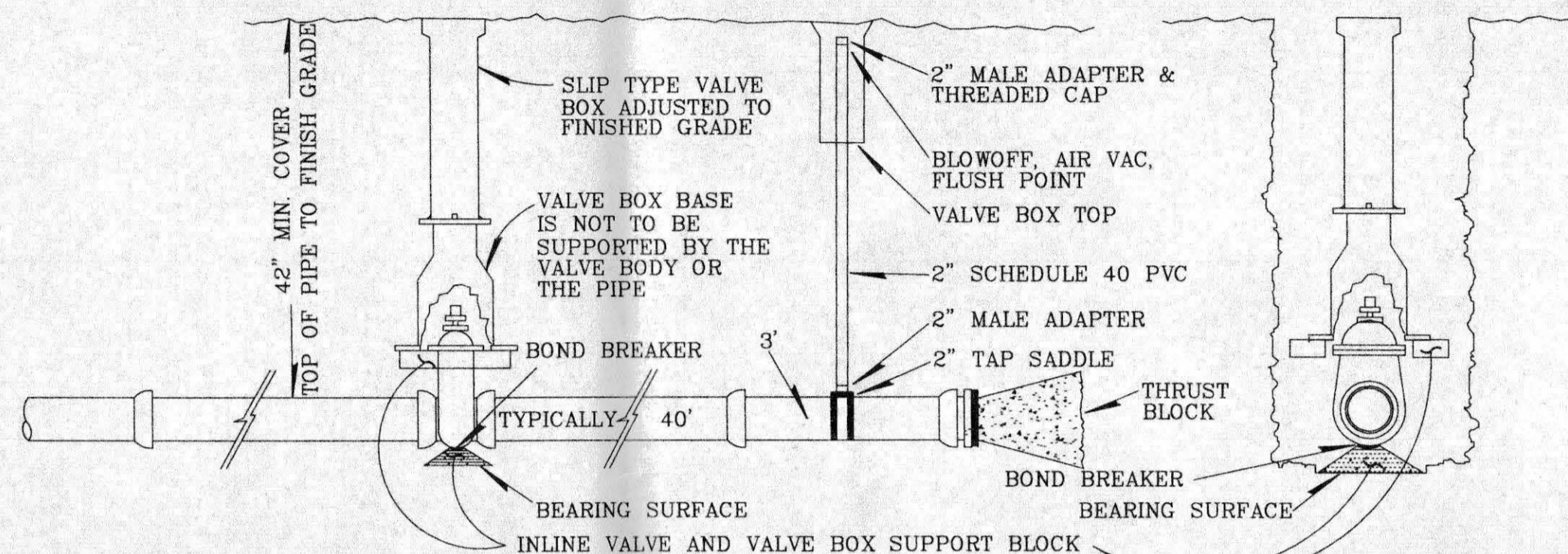
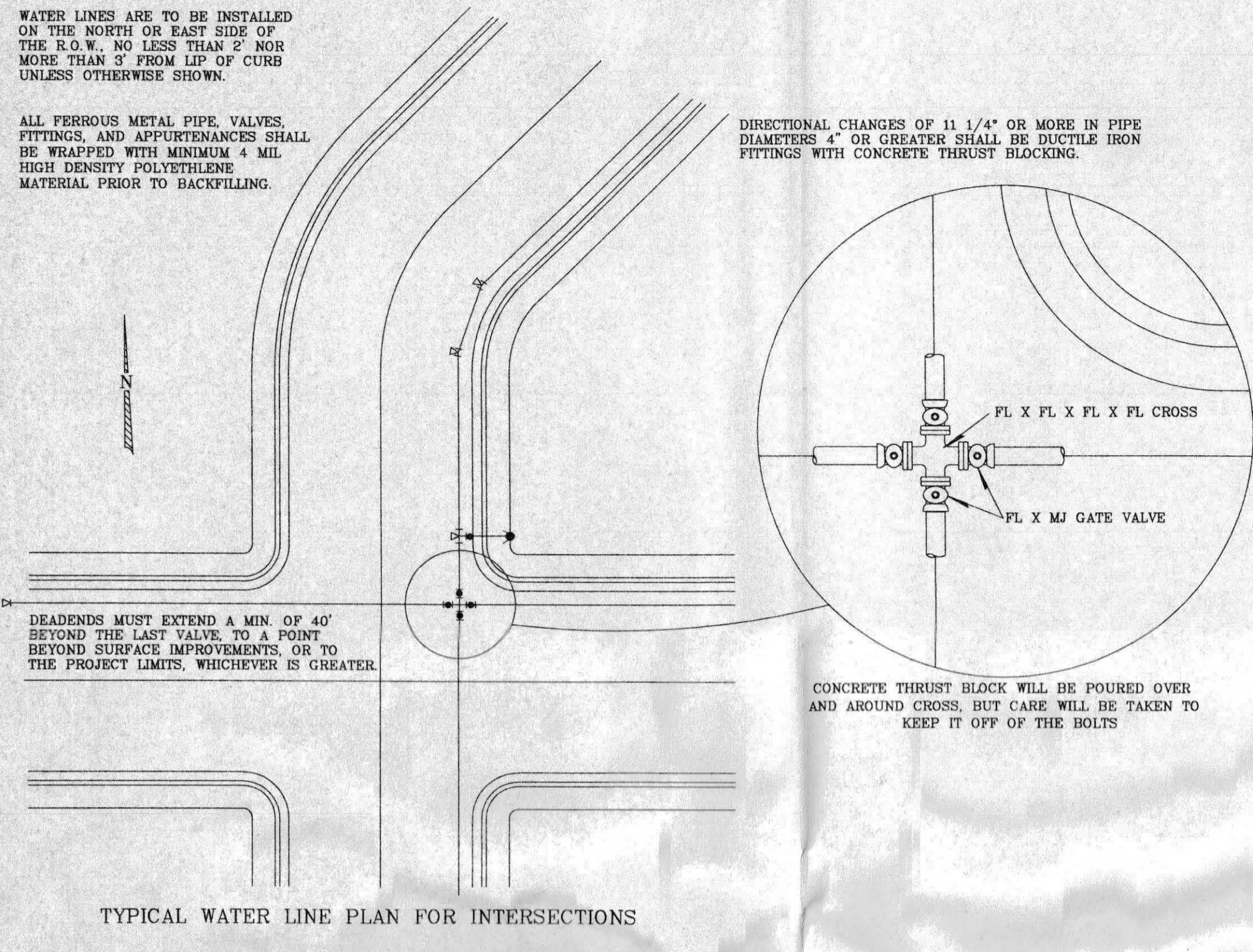
WASHBURN STREET - LINE E

03-079

WATER LINES ARE TO BE INSTALLED ON THE NORTH OR EAST SIDE OF THE R.O.W. NO LESS THAN 2' NOR MORE THAN 3' FROM LIP OF CURB UNLESS OTHERWISE SHOWN.

ALL FERROUS METAL PIPE, VALVES, FITTINGS, AND APPURTENANCES SHALL BE WRAPPED WITH MINIMUM 4 MIL HIGH DENSITY POLYETHYLENE MATERIAL PRIOR TO BACKFILLING.

DIRECTIONAL CHANGES OF 11 1/4° OR MORE IN PIPE DIAMETERS 4" OR GREATER SHALL BE DUCTILE IRON FITTINGS WITH CONCRETE THRUST BLOCKING.



Note: Not all drawings on this typical will apply to every project

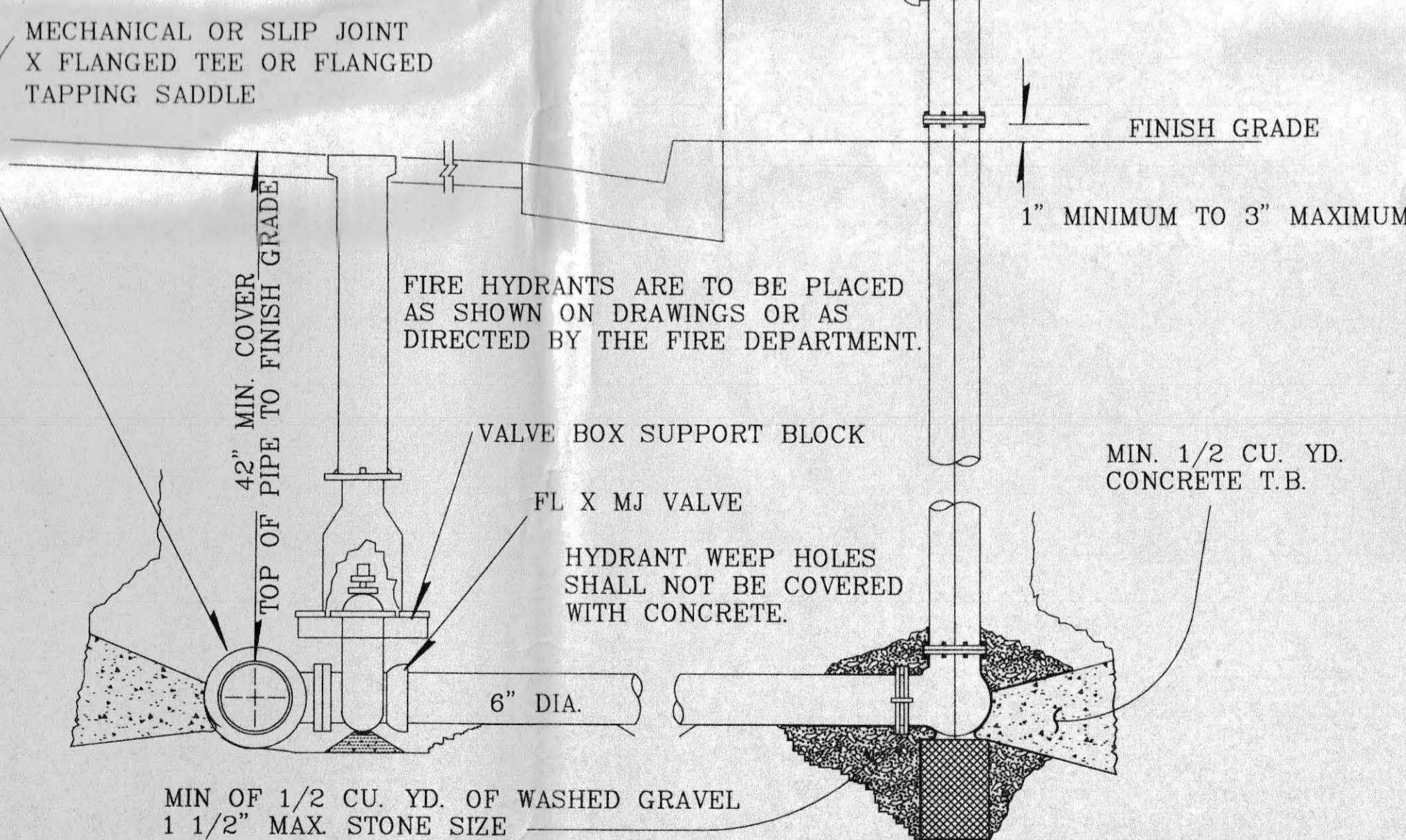
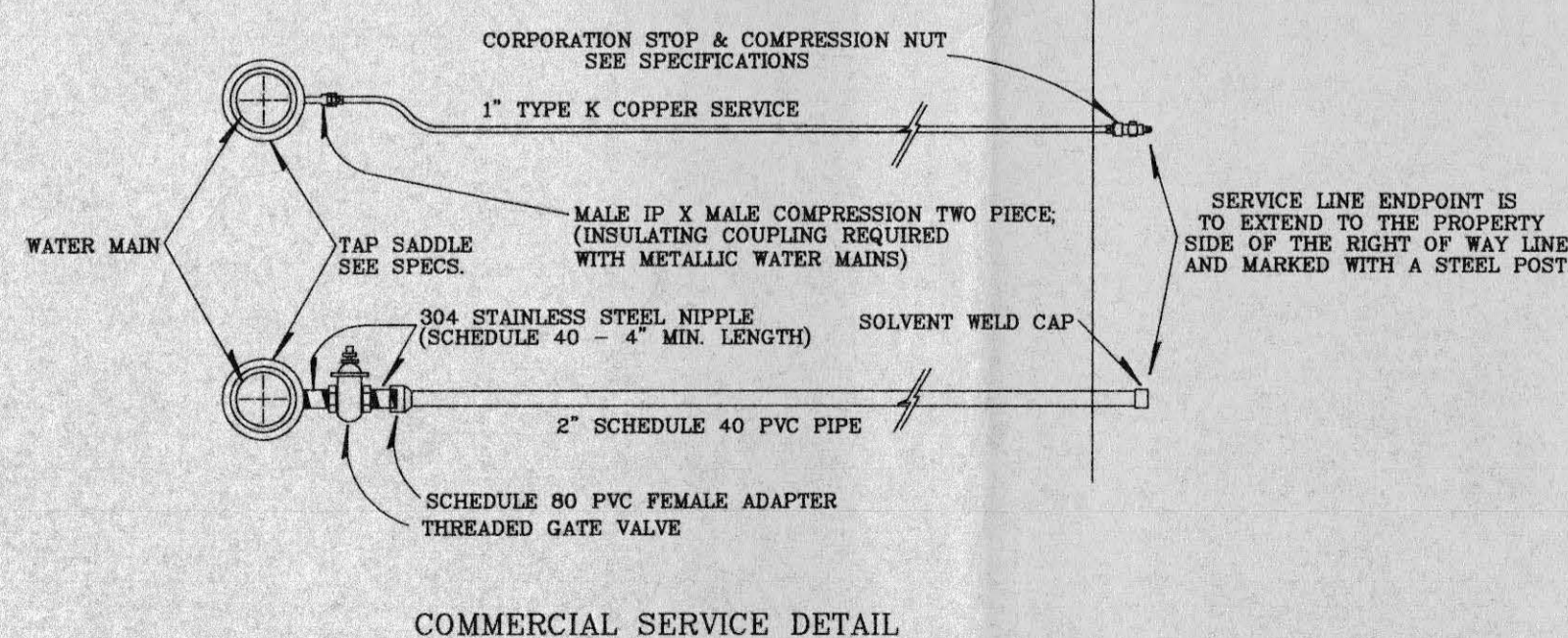
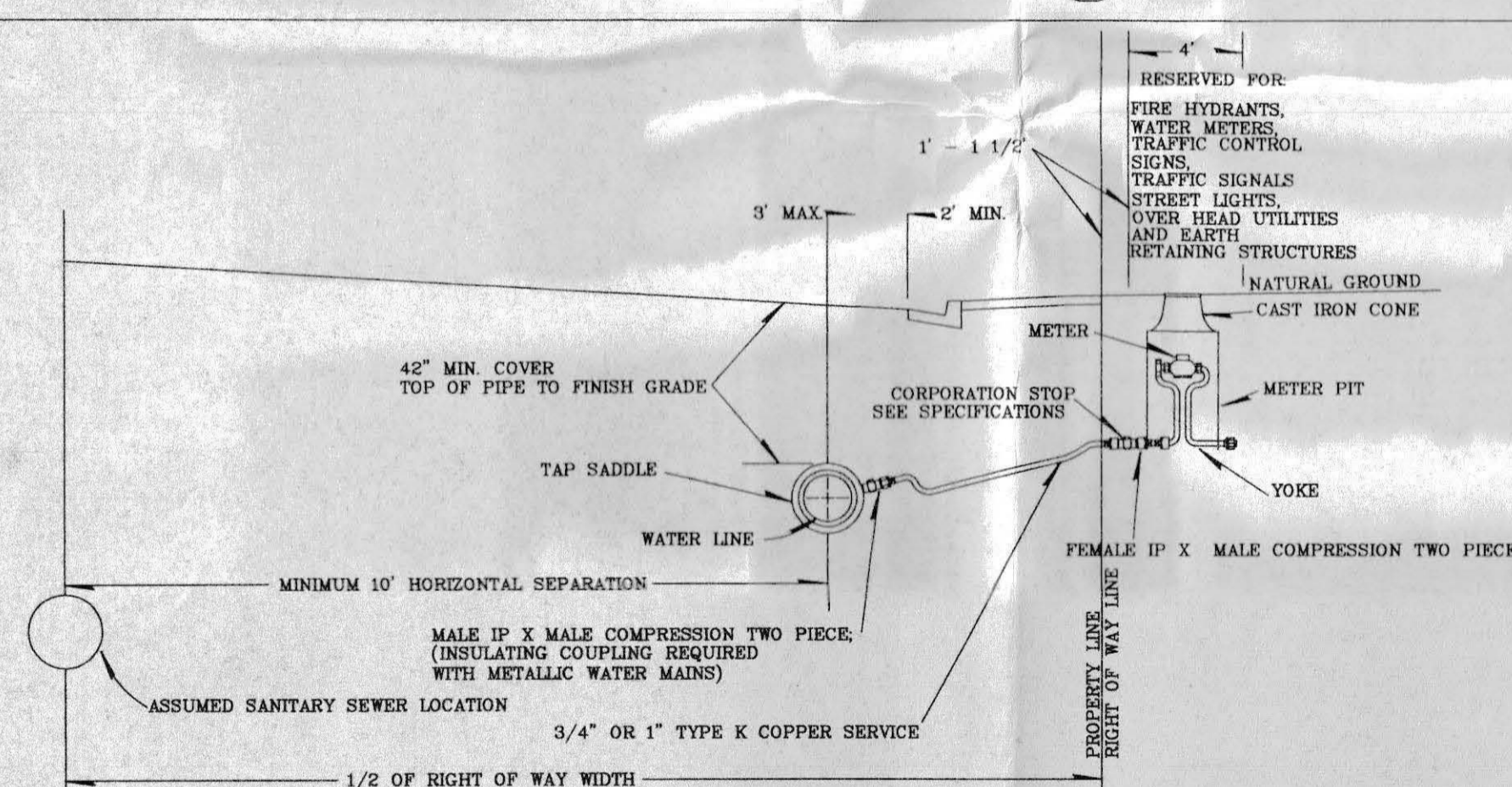


TABLE FOR CONCRETE THRUST BLOCKING BEARING AREAS (IN SQ. FT.)

SIZE	BENDS				TEE BRANCH SIZE AND DEAD ENDS
	90°	45°	22 1/2°	11 1/4°	
6	4.0	2.2	1.1	0	2.8
8	7.1	3.8	2.0	1.0	5.0
10	11.1	6.0	3.0	1.5	7.8
12	16.0	8.6	4.4	2.2	11.3
14	21.7	11.8	6.0	3.0	15.4
16	28.4	15.3	8.0	4.0	20.0

F.H. THRUST BLOCKS SHALL BE A MIN. OF 1/4 CU. YD. IN MASS AND HAVE A MIN. BEARING AREA OF 5 SQ. FT.

AREAS GIVEN ARE BASED ON INTERNAL STATIC PRESSURE OF 100 P.S.I. AND SOIL BEARING CAPACITY OF 1,000 LBS. PER SQ. FT.

AREAS FOR ANY PRESSURE AND SOIL BEARING CAPACITY MAY BE OBTAINED BY MULTIPLYING TABULATED VALUES BY A CORRECTION FACTOR "F"

F = ACTUAL SPECIFIED TEST PRESSURE IN HUNDREDS OF LBS. / ACTUAL SOIL BEARING CAPACITY IN THOUSANDS OF LBS.

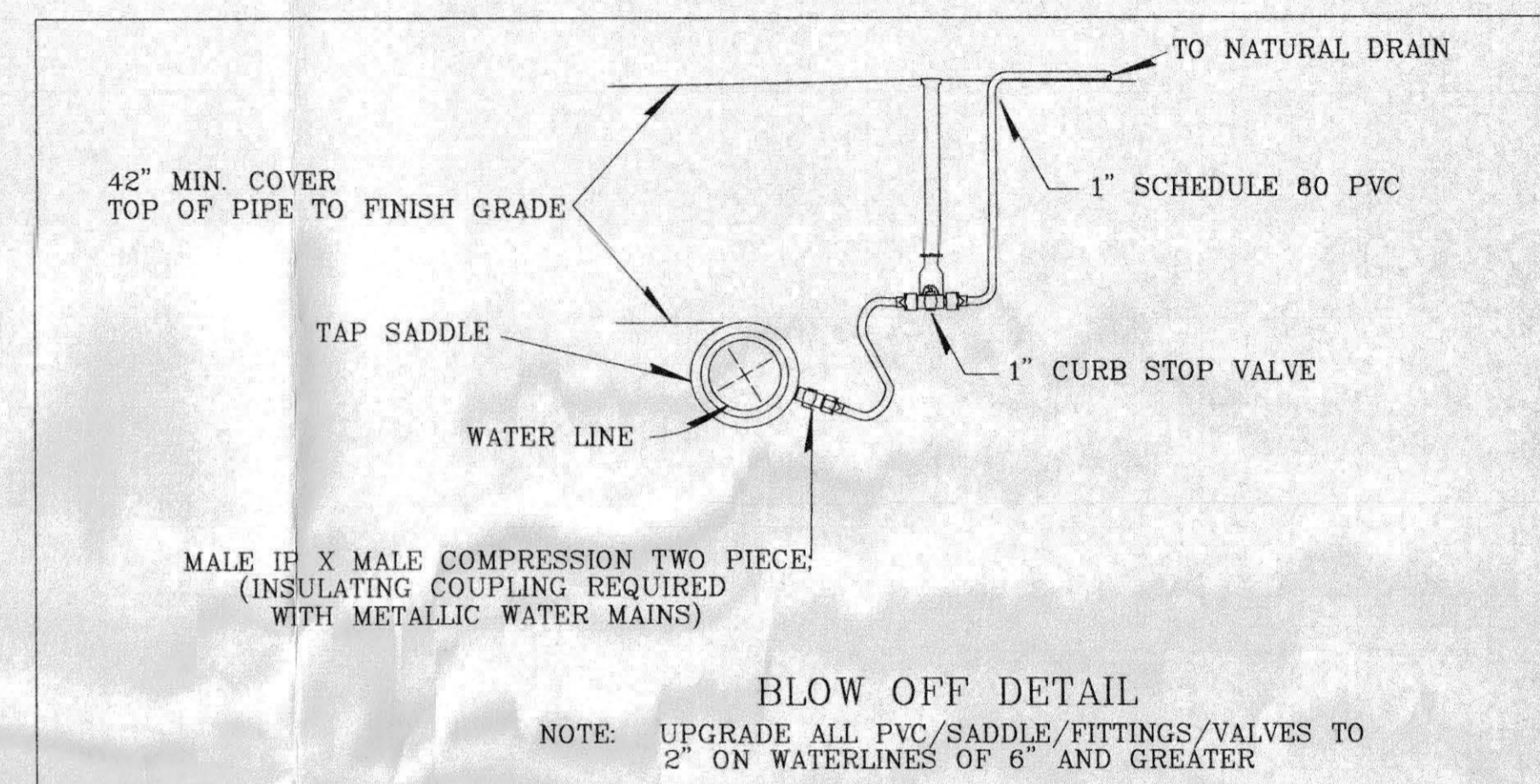
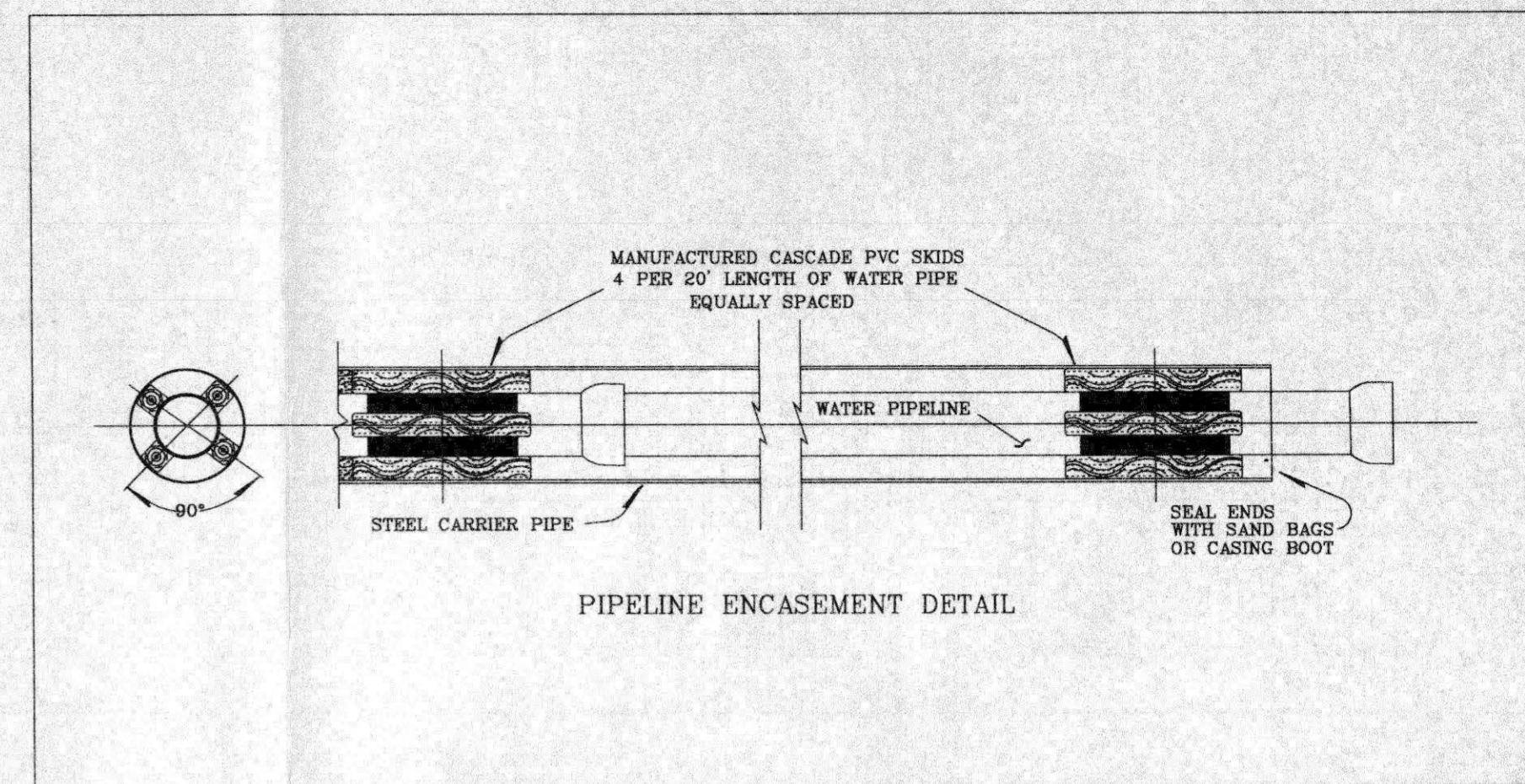
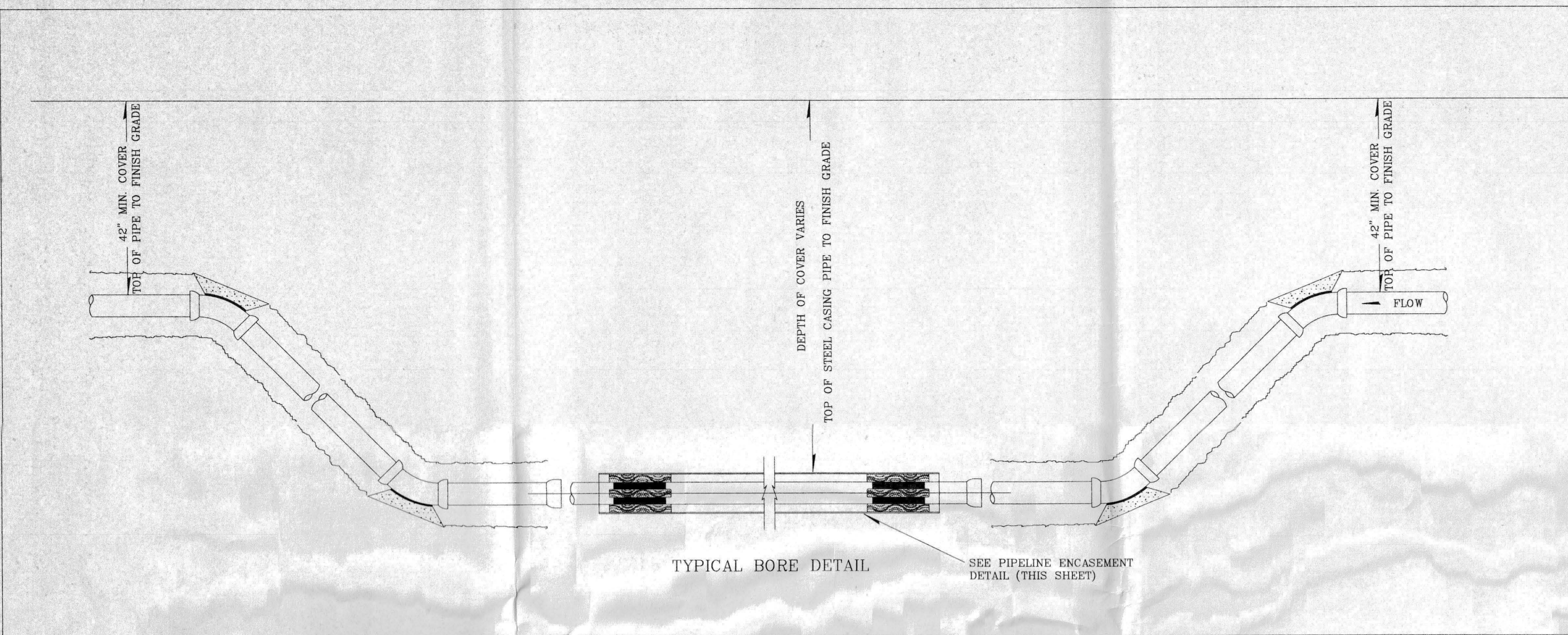
Revised All references to Flare type fittings changed to Mar 99 Compression type fittings

Clifton Water District

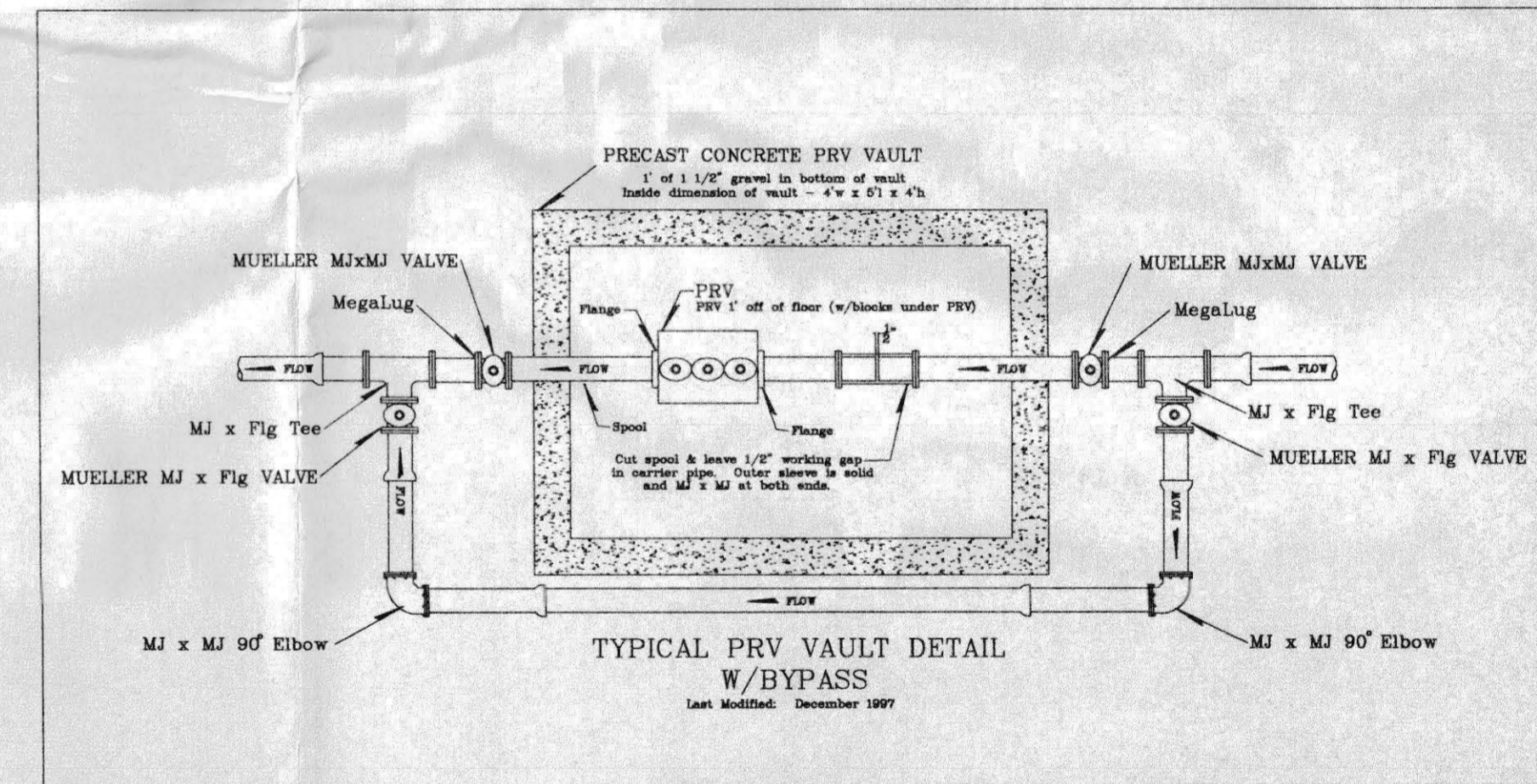
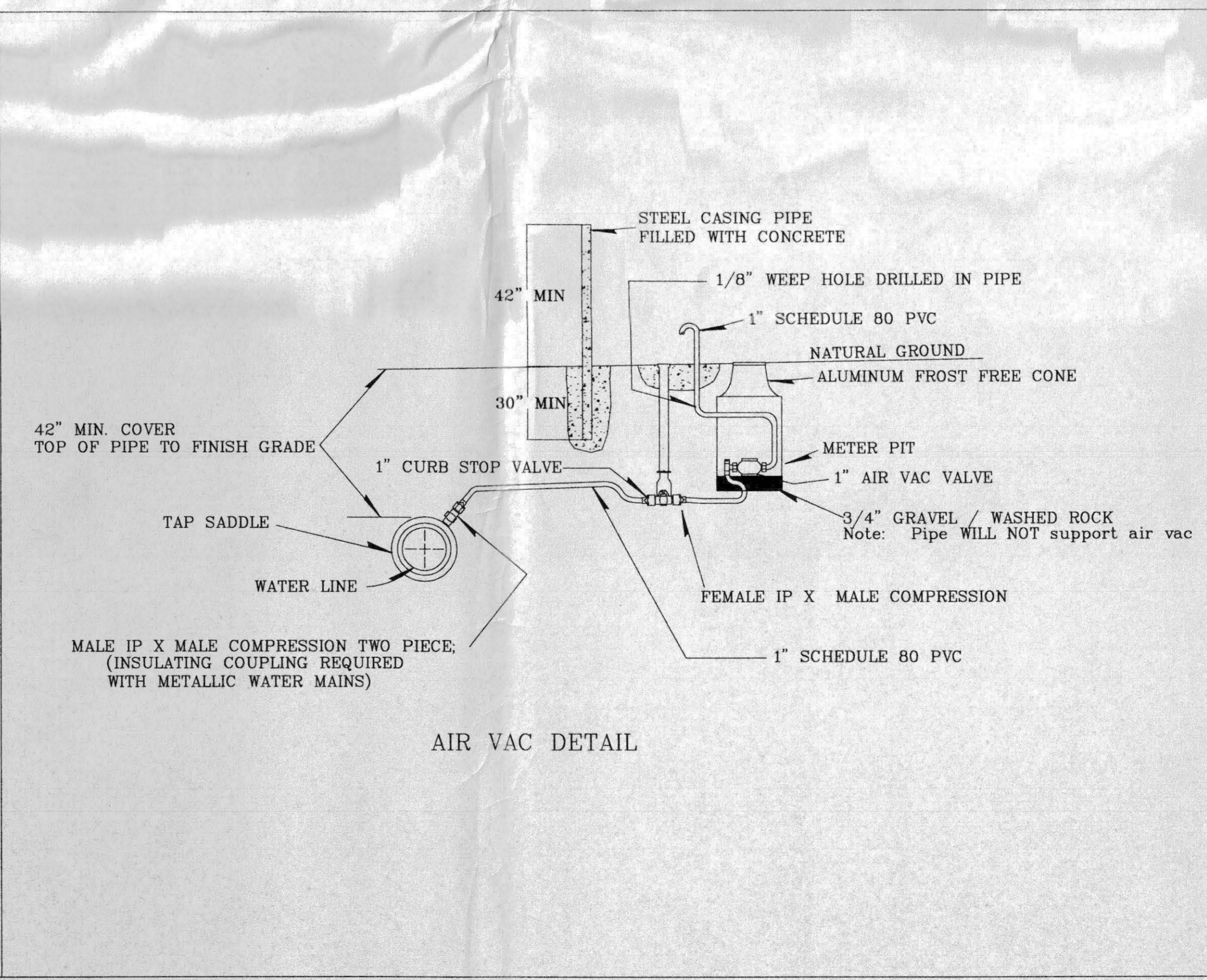
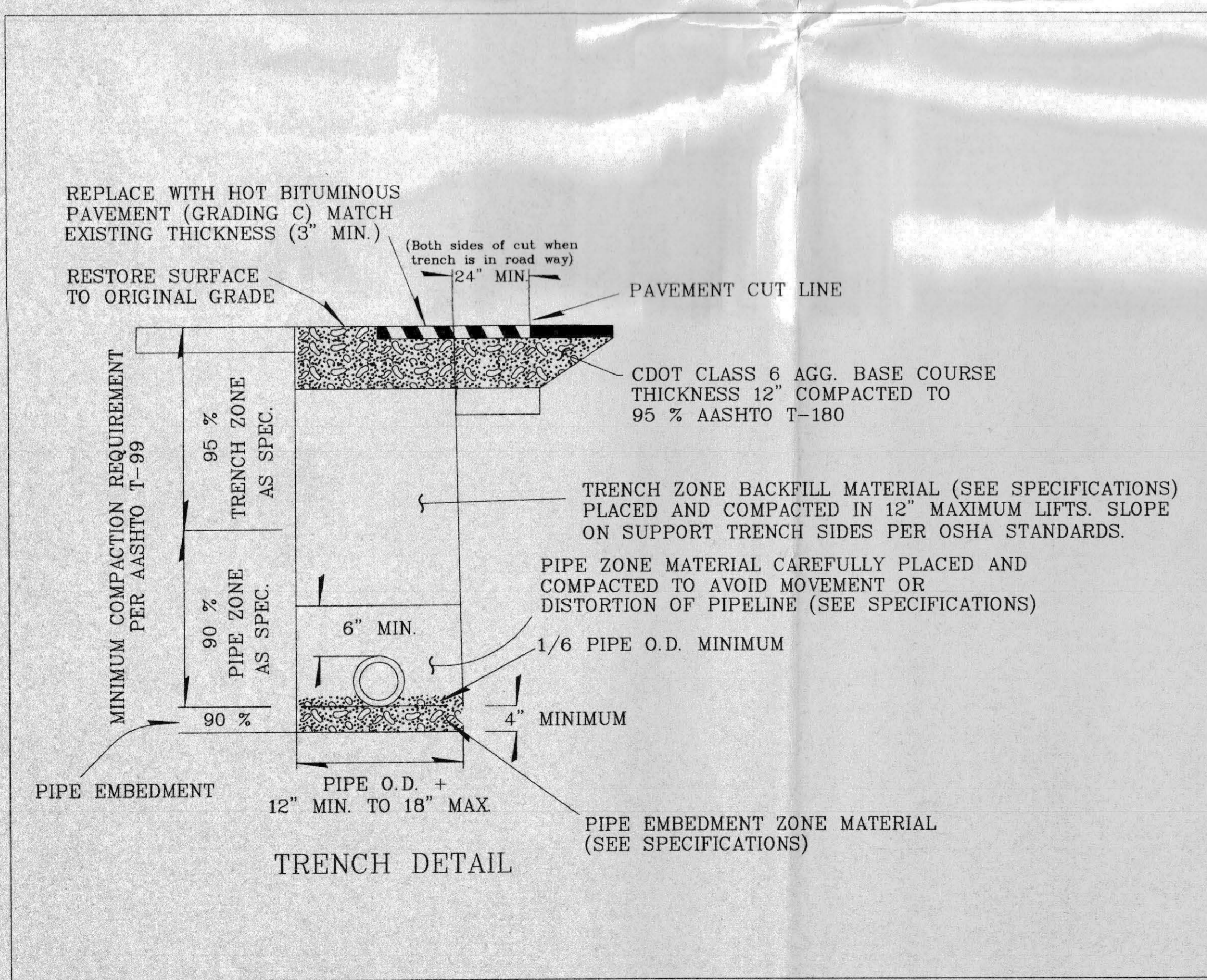
Typical Water Line Installation Dtls., Sht. 1

Drw By	Chk By	App By	Date	Scale	Sheet
E.D.P.	D.E.T.		Sep 97	None	10 OF 12

03-099



Note: Not all drawings on this typical will apply to every project



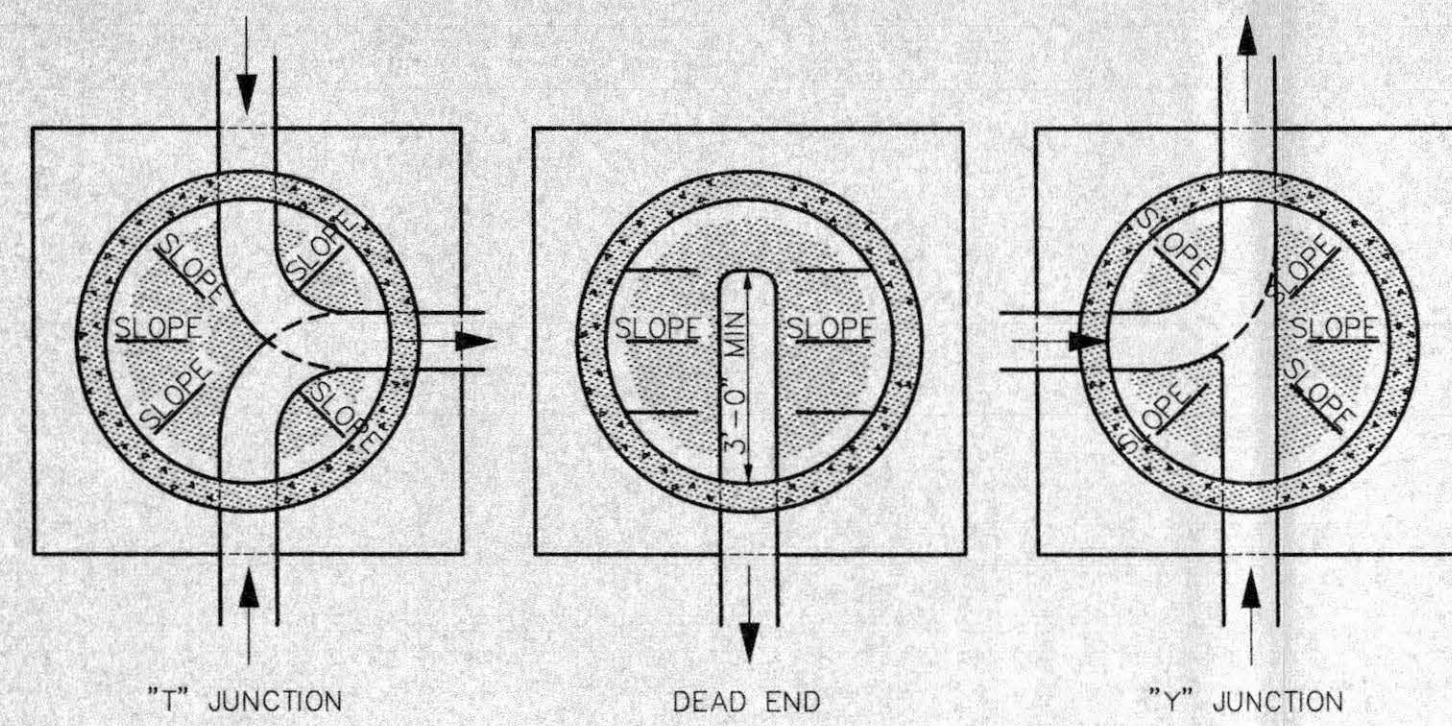
Revised Mar 99 All references to Flare type fittings changed to Compression type fittings ... Air Vac detail modified slightly

Clifton Water District

Typical Water Line Installation Dtls., Sht. 2

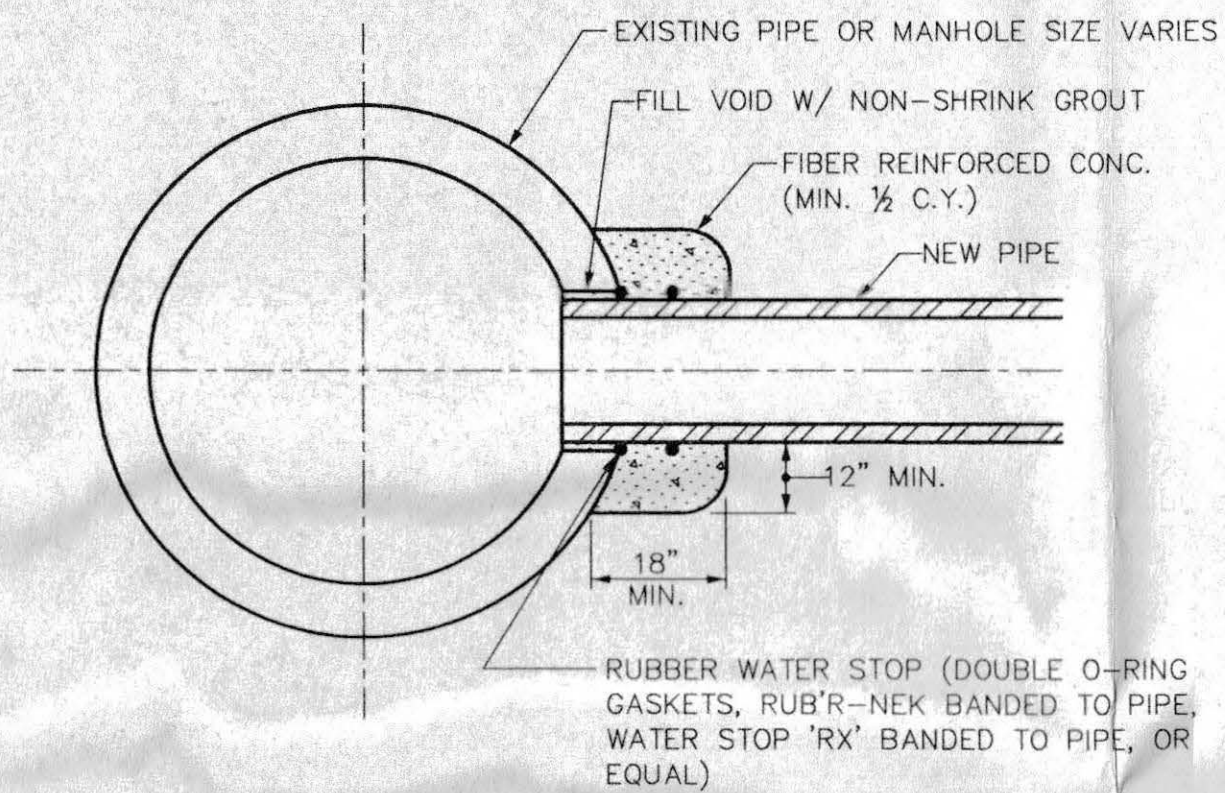
Drw By	Chk By	App By	Date	Scale	Sheet
E.D.P.	D.E.T.		Sep 97	None	11 OF 12

03-079



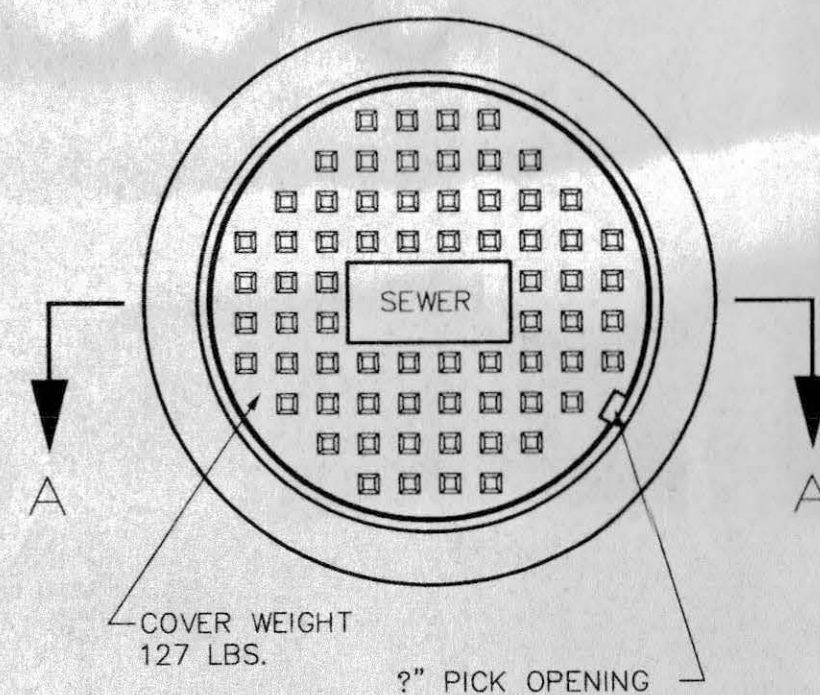
INVERTS SHALL BE FORMED TO PROVIDE A 24" MINIMUM APPROACH IN LINE WITH EACH PIPE FOR MAINTENANCE EQUIPMENT.

SECTION B-B

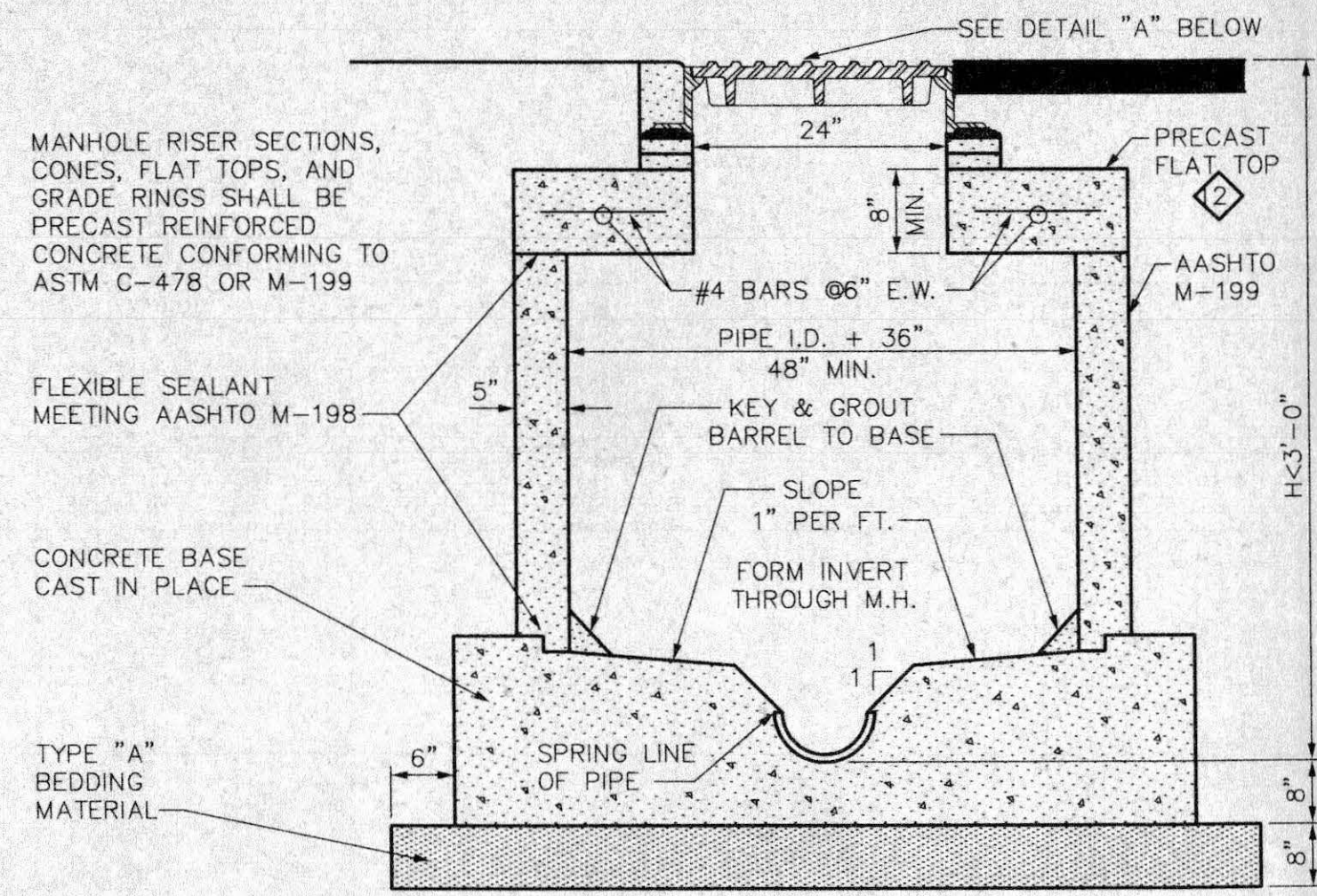
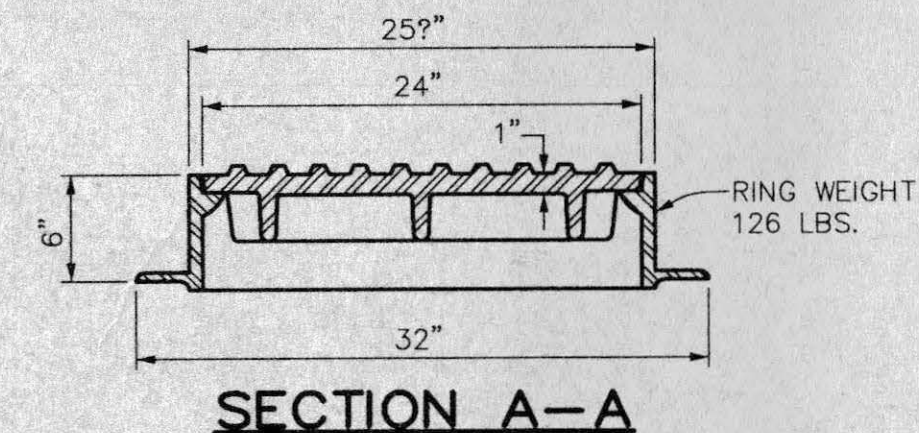


NOTE: IF THE HOLE IN THE EXISTING PIPE OR MANHOLE IS CORED, THE CONNECTION CAN BE MADE BY INSTALLING A FLEXIBLE PIPE TO MANHOLE CONNECTOR ("BOOT") AND THE CONCRETE ENCASEMENT ELIMINATED.

CONNECTION TO EXISTING MANHOLE OR INLET BOX



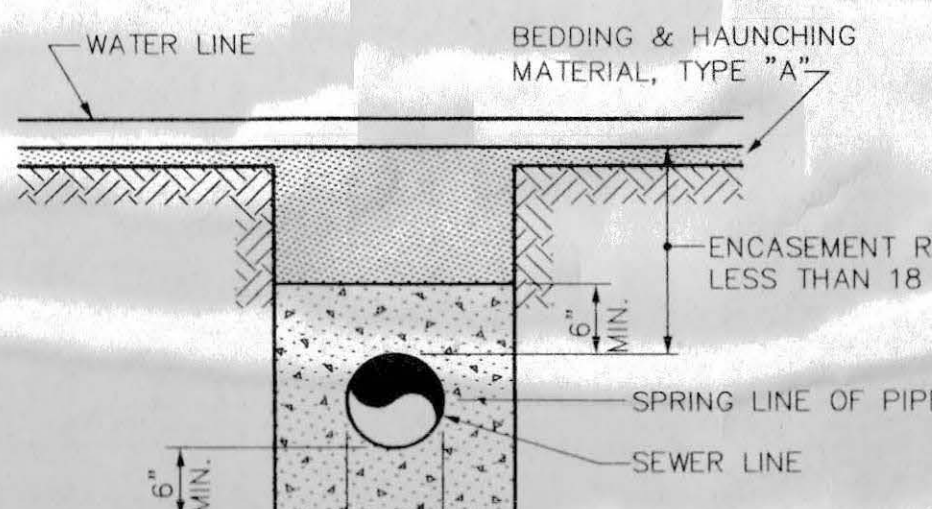
STANDARD CAST IRON MANHOLE RING & COVER



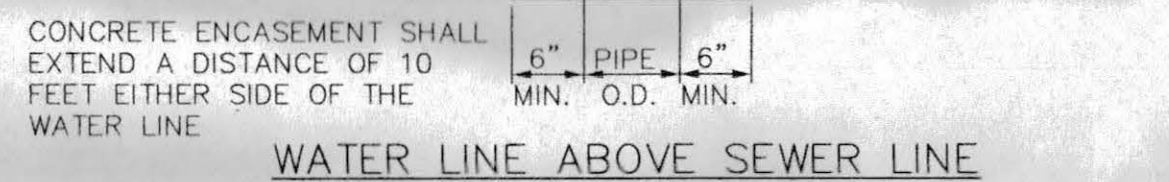
STANDARD SHALLOW MANHOLE CAST-IN-PLACE BASE

- NOTES
- 1) CONCRETE ENCASEMENT SHALL EXTEND 10' EITHER SIDE OF WATER LINE.
 - 2) STEEL REINFORCEMENT MAY BE DELETED IF FIBER-REINFORCED CONCRETE IS USED.

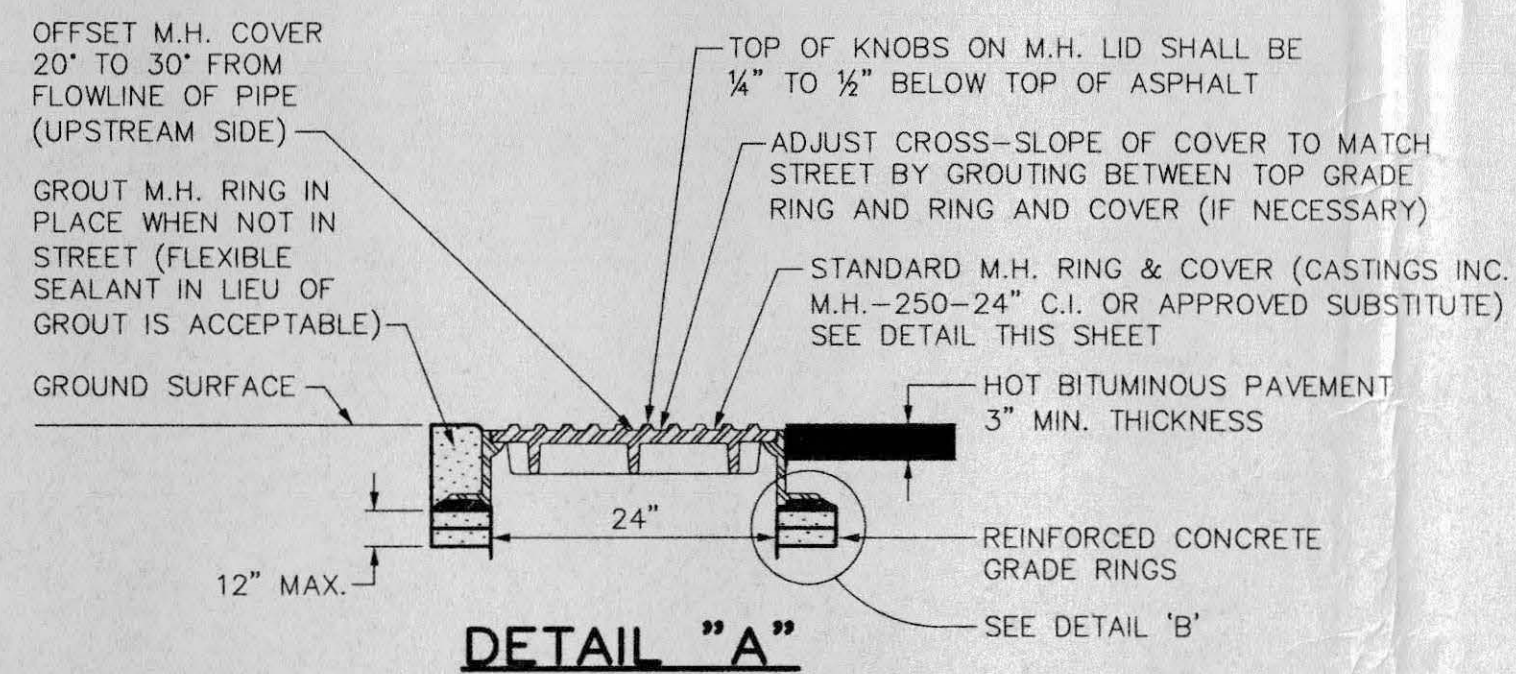
WATER LINE BELOW SEWER LINE



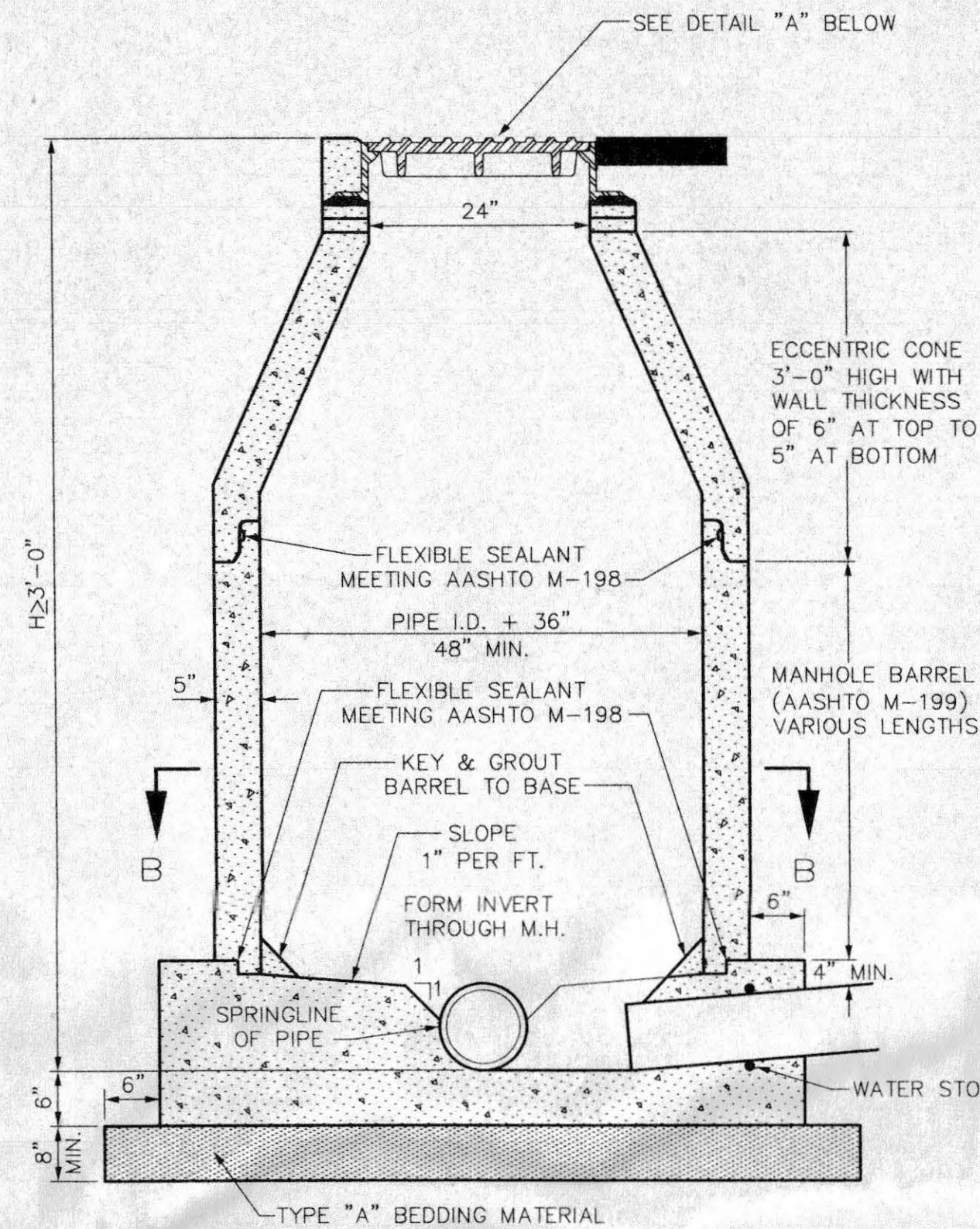
WATER LINE ABOVE SEWER LINE



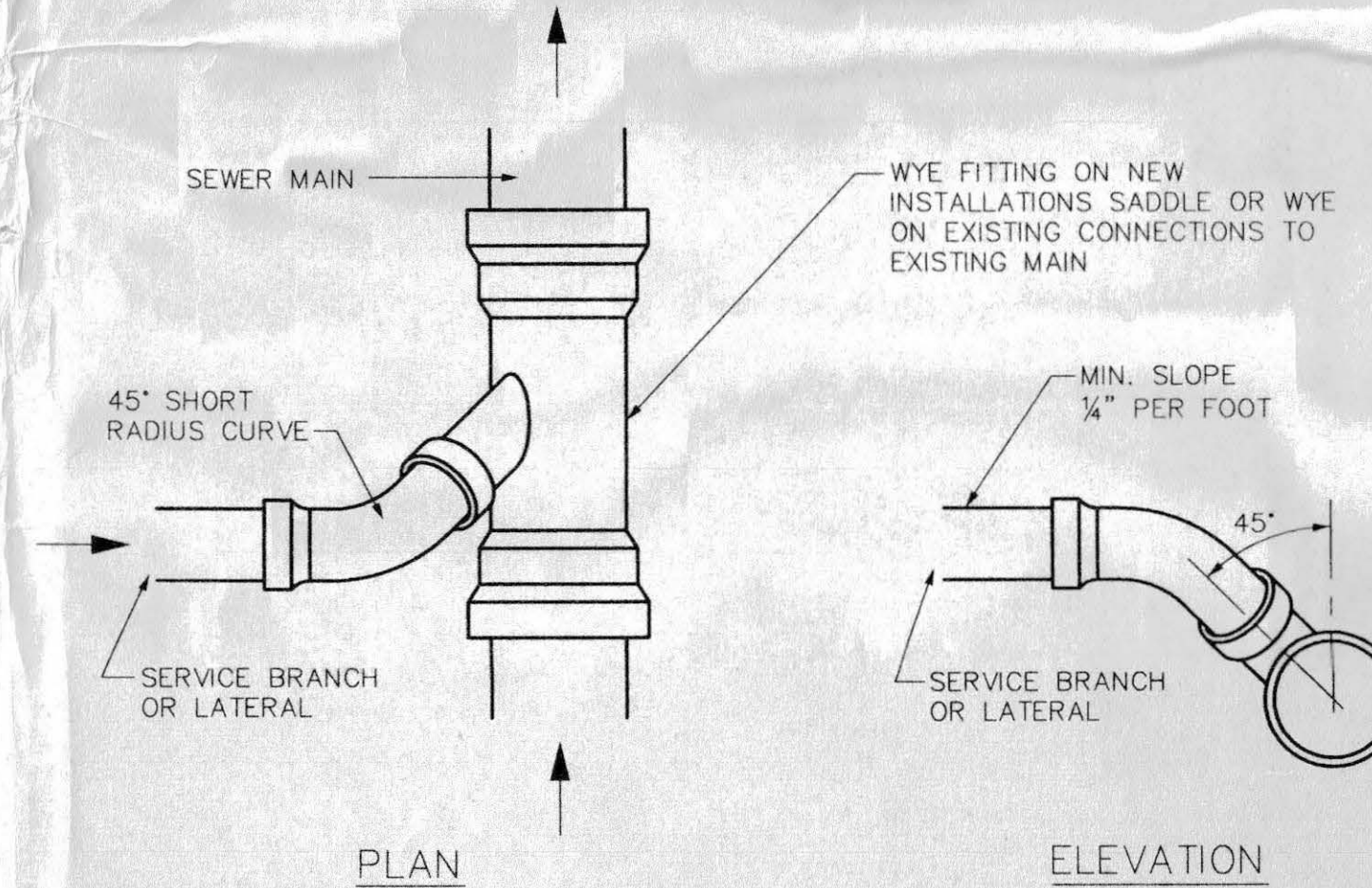
CONCRETE ENCASEMENT DETAIL



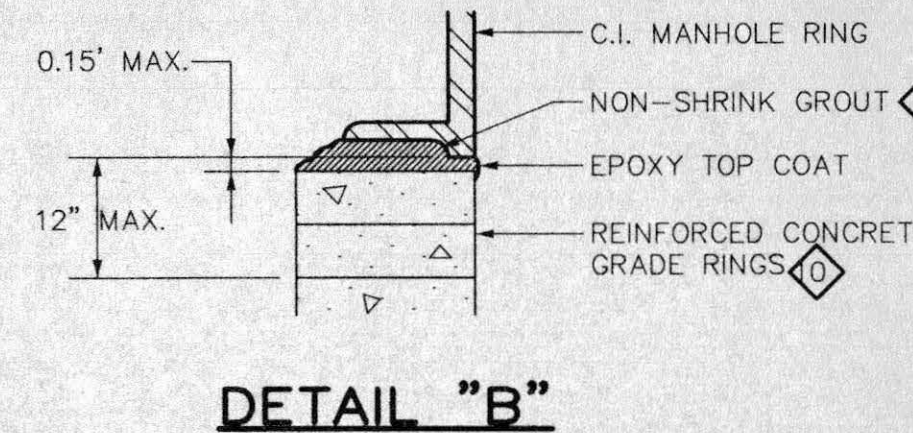
DETAIL "A"



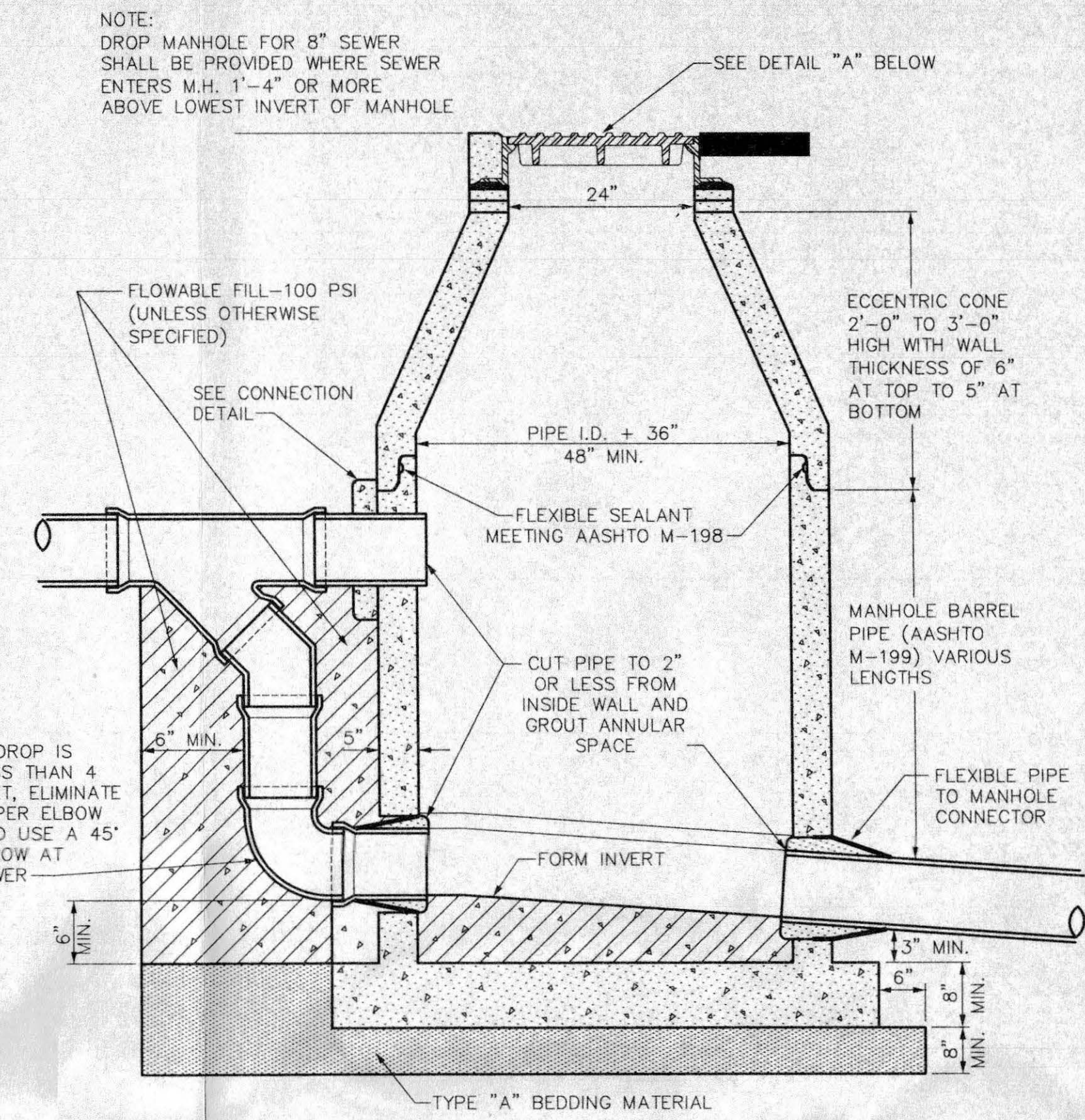
STANDARD MANHOLE CAST-IN-PLACE BASE



TYPICAL SERVICE "Y" CONNECTION

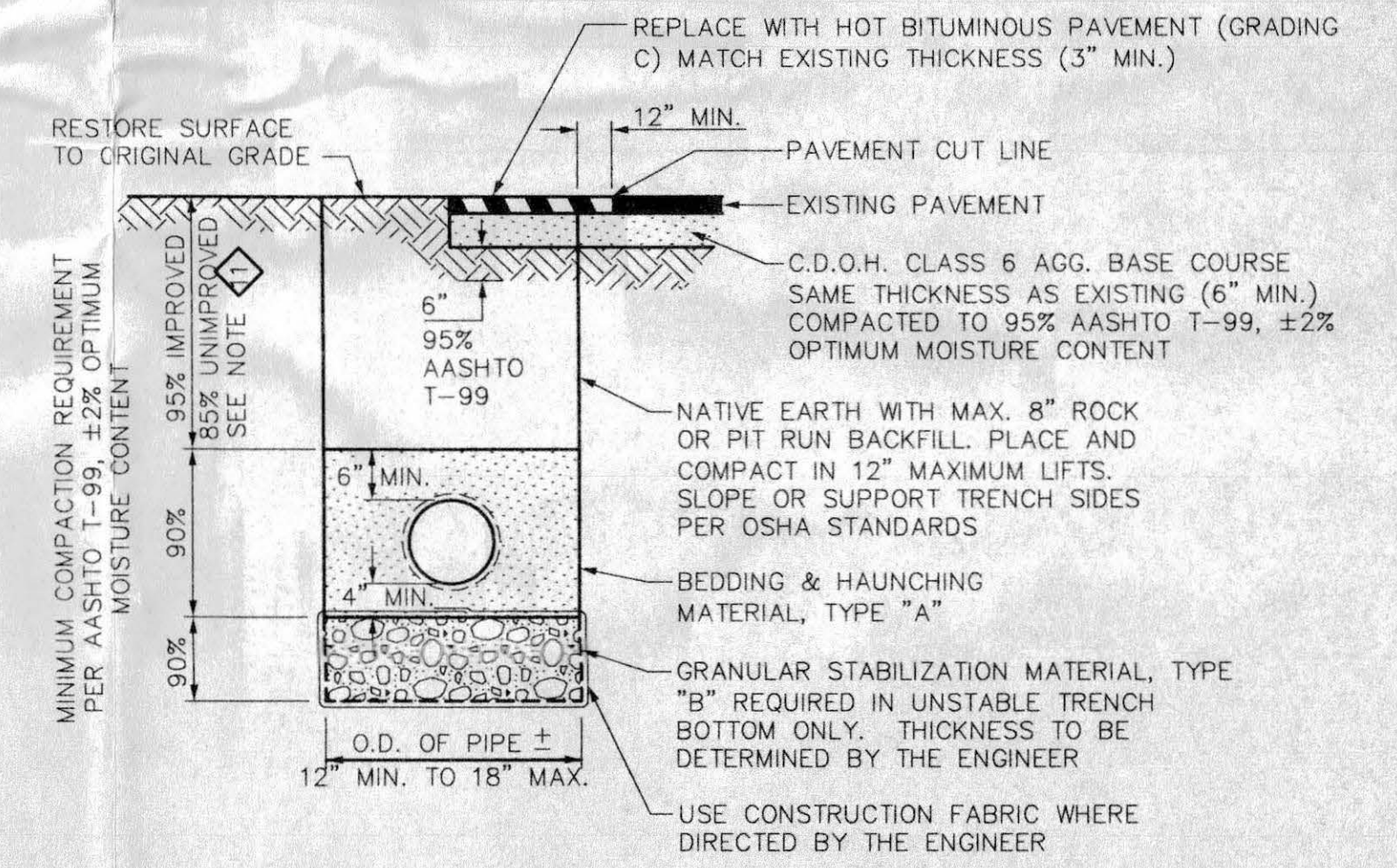


DETAIL "B"



DROP MANHOLE PRECAST BASE

NOTE: PRECAST BASE AND FLEXIBLE PIPE CONNECTORS CAN BE USED IN LIEU OF CAST-IN-PLACE BASE FOR ALL MANHOLE TYPES



TYPICAL TRENCH DETAIL

SIEVE SIZE	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES		
	PIPE BEDDING & HAUNCHING MATERIAL (TYPE A)	GRANULAR STABILIZATION MATERIAL (SCREENED OR CRUSHED ROCK TYPE B)	PIT RUN AGGREGATE (TO BE USED WHERE SPECIFIED OR DIRECTED BY THE ENGINEER)
8 INCH	---	---	---
2 INCH	---	100	---
1/2 INCH	100	---	---
NO 200	20 MAX	15 MAX	20 MAX

ALL BACKFILL MATERIAL SHALL BE PLACED FULL WIDTH IN 12" MAX. LIFTS AND COMPACTED TO THE MIN. RELATIVE DENSITIES SHOWN

GENERAL NOTES

1. Concrete shall be Colorado Division of Highways Class 'B' (Section 601.02).
2. All cement used in mortar, concrete bases, grade rings, riser sections, cones, and flat tops, for sanitary sewer manholes, shall be Type I or modified Type II Portland Cement with less than 5% tricalcium aluminate.
3. Manhole riser sections, cones, flat tops, and grade rings shall be precast reinforced concrete conforming to ASTM C-478 or AASHTO M-199.
4. Backfill around manholes and other structures shall be placed in 8" max. lifts and compacted to 95% AASHTO T-99.
5. All work shall be in accordance with approved plans and District specifications.
6. Manhole cone and flat top sections shall be positioned such that the manhole ring and cover are offset 20 degrees to 30 degrees from the upstream main sewer line into the manhole.
7. Manhole steps shall be installed in vertical alignment with the ring and cover.
8. Refer to Plans or Specifications for any manhole waterproofing and/or corrosion protection that may be required for the project.
9. Manhole ring and cover can be set to finished grade, using non-shrink grout to adjust rim elevation. Grout shall not exceed 0.15 ft. thickness and shall have a finish coat of epoxy applied to all grout surfaces exposed to the interior of the manhole. Epoxy top coat requirement may be deleted provided non-shrink grout is installed in accordance with manufacturers recommendations and instructions and is acceptable to the Engineer.
10. Precast concrete grade rings are to be used for grade adjustment on all new manholes. Paving rings are not allowed for grade adjustment unless otherwise approved by the District Engineer.
11. Minimum trench compaction requirements:
 - 95% in all areas of public or street right-of-ways including trenches beneath pavement, graveled areas, borrow ditches, and open space.
 - 85% or to match existing (whichever is greater) in unimproved or landscaped areas, fields, or private easements that are not within road or street right-of-ways.
12. Flat lid slabs are allowed only when the shortest precast eccentric cone is too tall or as required by the Plans.

SCALE: HORIZONTAL N.T.S.
VERTICAL N.T.S.

REVISIONS	DATE
REVIEW	01-2002

WestWater Engineering
2516 Foresight Circle, #1
Grand Junction, CO 81505
(970) 241-7076

CENTRAL GRAND VALLEY SANITATION DISTRICT

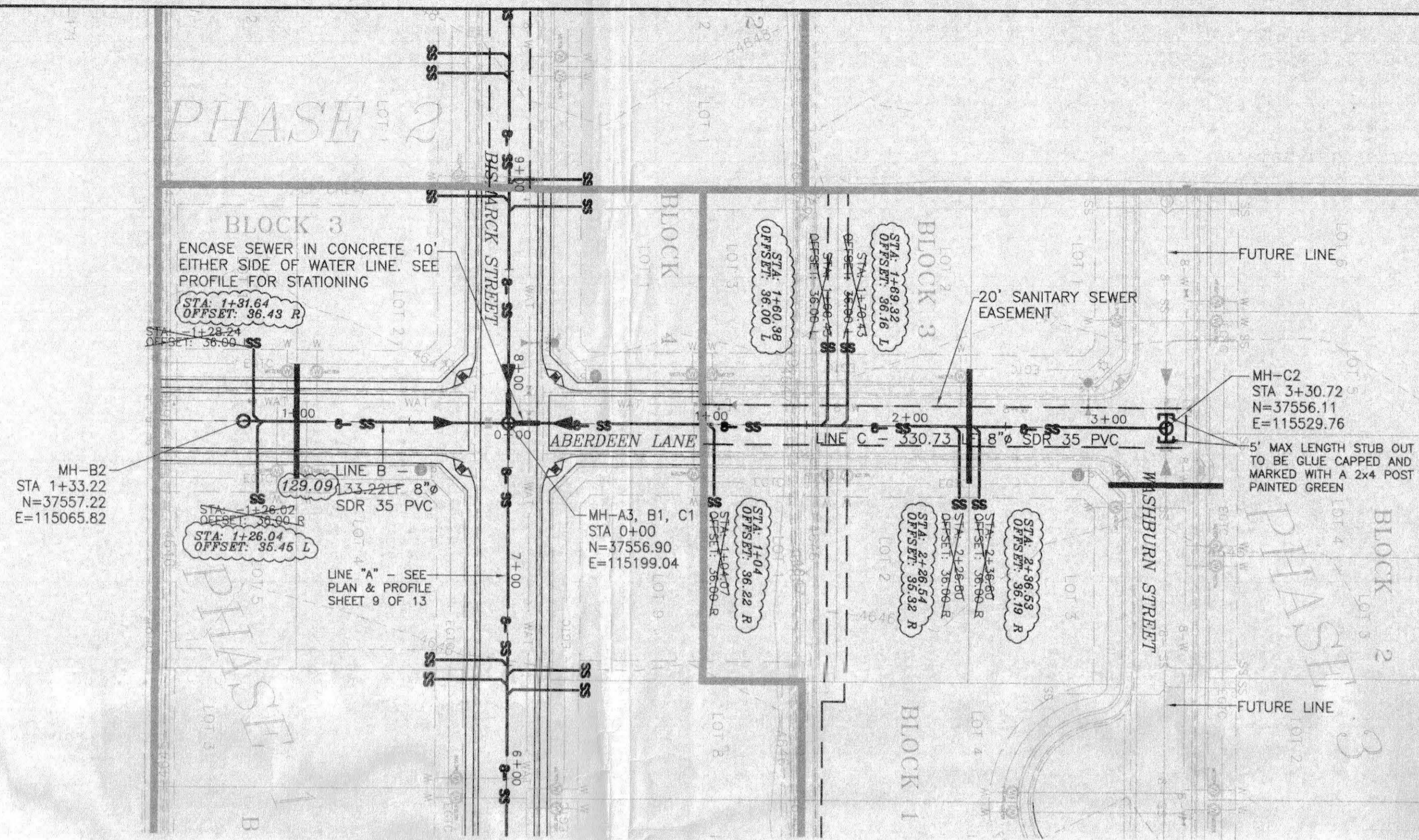
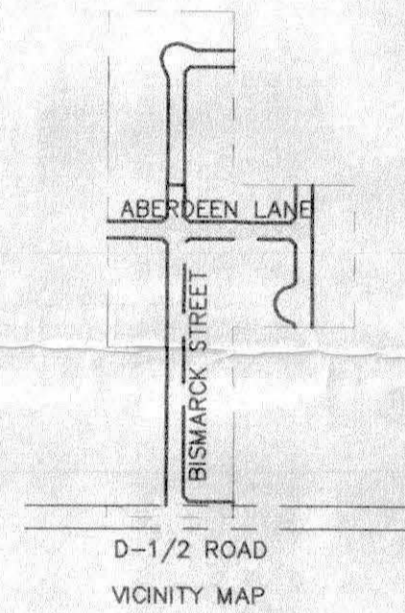
SANITARY SEWER DETAILS

Design by:	Drafted by:	Date:	Project No.:	Sheet
	WWE	6/26/02	545-001	12

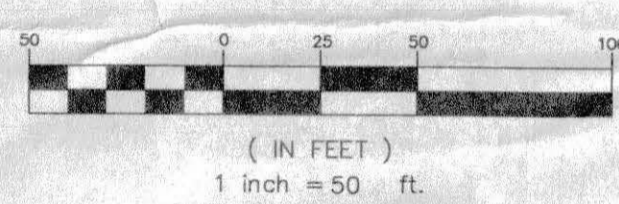
NOTE:
SEWER SERVICE STATIONING IS RELATIVE TO SANITARY SEWERLINE STATIONING. SEWER SERVICES ARE TO BE ASBUILT PRIOR TO BACKFILLING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE ASBUILTS WITH THE ENGINEER PRIOR TO BACKFILLING TRENCHES.

* UTILITY SHOWN ON PROFILE FOR INFO ONLY. CONTRACTOR TO VERIFY ACTUAL LOCATION.

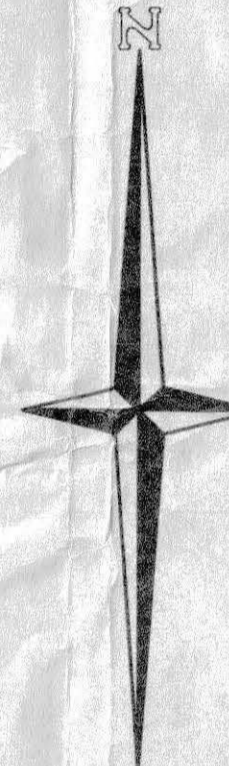
SEWERLINES EXTENDING INTO NEXT PHASES ARE TO BE RETESTED AFTER INSTALLATION OF ALL UTILITIES IS COMPLETED



PROJECT BENCHMARK:
INTERSECTION OF D 1/2 AND 31 ROADS
MESA CNTY BRASS CAP NE CORNER OF
NE 1/4, SE 1/4, SEC 16
N: 36806.17
E: 115844.96
ELEV. 4643.73



CONTOUR INTERVAL: 1'



ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.

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City of Grand Junction Engineering Division Representative

Date

ACCEPTED AS CONSTRUCTED

City of Grand Junction Engineering Division Representative

Date

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.

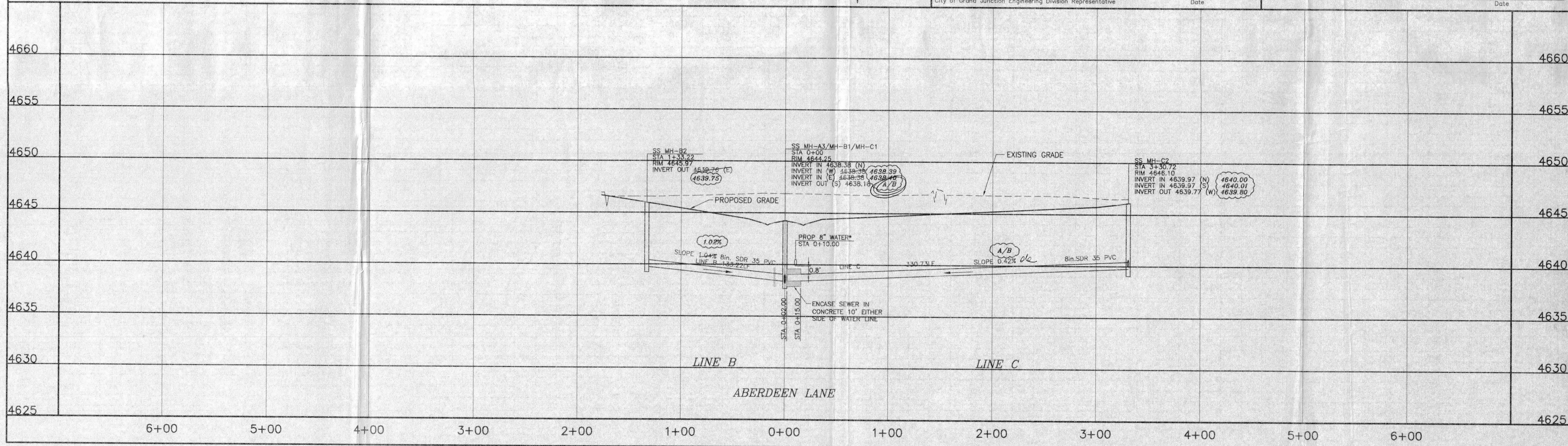
CENTRAL GRAND VALLEY SANITATION DISTRICT

Date

INITIAL ACCEPTANCE

CENTRAL GRAND VALLEY SANITATION DISTRICT

Date



DATE	7/11/03	REVISION	1	DESCRIPTION	REVISED TO AS-BUILT CONDITIONS	BY	MRH	CHKD	JMM
DAKOTA WEST SUBDIVISION ABERDEEN LANE SANITARY SEWER LINE B & C									
G & R WEST, LLC CITY OF GRAND JUNCTION									
THOMPSON-LANGFORD CORP. ENGINEERS AND LAND SURVEYORS 529 25 1/2 RD., SUITE B210 GRAND JUNCTION, COLORADO PH. (970) 243-6067 FAX (970) 241-2845 Tlc@tlcwest.com									
DRAWN BY:	MH	CHECKED BY:	JMM						
DATE:	March 3, 2003								
SCALE:	Horiz: 1" = 50' Vert: 1" = 5'								
Project No.:	0543-001								
SHEET NO.:	14 OF 17								

G & R WEST, LLC

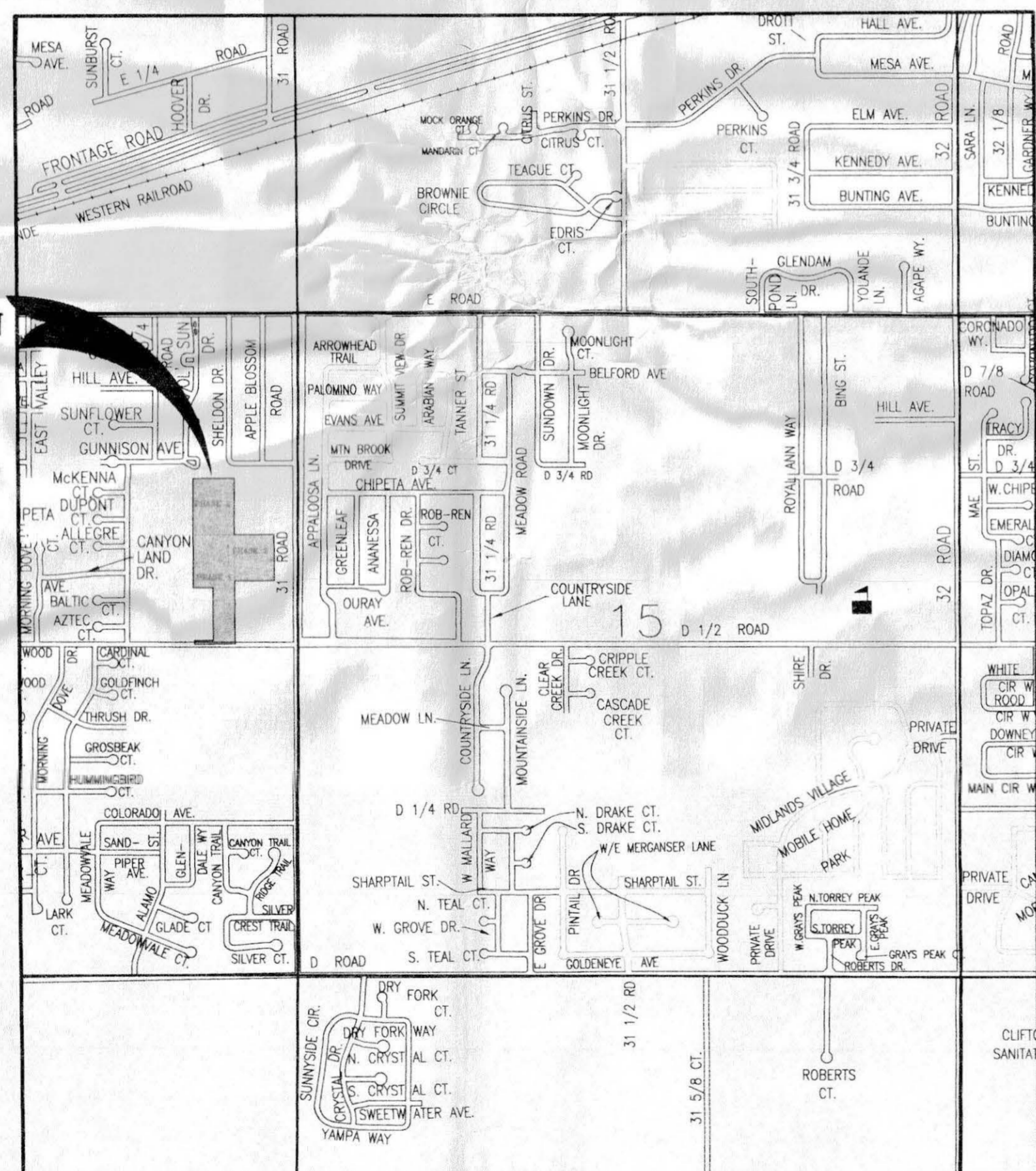
2650 El Corona Drive
Grand Junction, Co. 81501
PH. (970) 255-8164

FINAL CONSTRUCTION PLANS FOR DAKOTA WEST SUBDIVISION (FILING 2)

SUBMITTED
JULY 7, 2003

DAKOTA WEST 2 APPROVED

PROJECT LOCATION



VICINITY MAP

TITLE

SHEET 1 OF 12	COVER SHEET/LOCATION MAP
SHEET 2 OF 12	GENERAL LEGEND AND CONSTRUCTION NOTES
SHEET 3 OF 12	UTILITY/COMPOSITE PLAN
SHEET 4 OF 12	GRADING & DRAINAGE PLAN
SHEET 5 OF 12	STORM WATER MANAGEMENT PLAN
SHEET 6 OF 12	BISMARCK STREET/MANDAN LANE PLAN AND PROFILE
SHEET 7 OF 12	ABERDEEN LANE/WASHBURN STREET PLAN AND PROFILE
SHEET 8 OF 12	LINE "D" SANITARY SEWER PLAN & PROFILE
SHEET 9 OF 12	LINE "E" SANITARY SEWER PLAN & PROFILE
SHEET 10 OF 12	CLIFTON WATER DETAIL SHEET 1
SHEET 11 OF 12	CLIFTON WATER DETAIL SHEET 2
SHEET 12 OF 12	CENTRAL GRAND VALLEY SANITATION DISTRICT DETAILS

THOMPSON-LANGFORD CORP.

529 25 1/2 RD., SUITE B210
GRAND JUNCTION, COLORADO
PH. (970) 243-6067

JOB NO. 0543-001

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.

Acceptance of these plans does not relieve the developer, contractor, or engineer from conformance with the City of Grand Junction Standard Specifications for Road and Bridge Construction.

City of Grand Junction Engineering Division Representative _____ Date _____

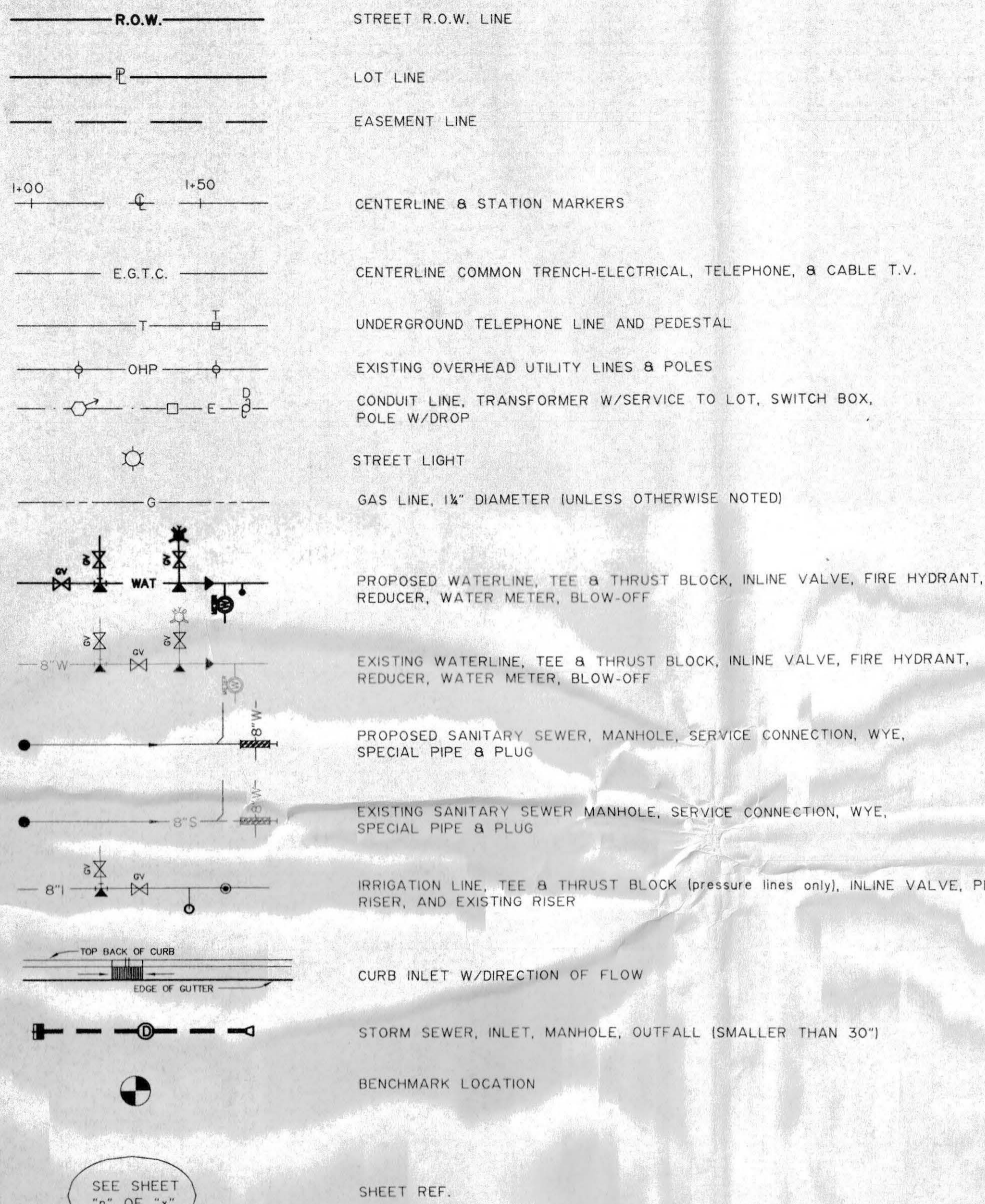
ACCEPTED AS CONSTRUCTED

CITY OF GRAND JUNCTION ENGINEERING

City of Grand Junction Engineering Division Representative _____ Date _____

S:\design\0543-001\dwg\final\PHASE 2\COVER.DWG. 7/4/2003 5:12:01 PM. HP Design\MLT750C Plus (E_A0).pc3 11-2003-019

LEGEND



GENERAL CONSTRUCTION NOTES

1. Alignment, centerline curve data, and stationing to be verified from approved subdivision plat before construction.
2. Locations of existing utilities shown on these plans are approximate only. Contractor is to contact affected utility for specific locations before digging.
3. All satisfactory excess excavation from either utility or street construction shall be spread uniformly across the lots as directed by the Owner or his designated representative. All unsatisfactory or waste material including vegetation, roots, concrete, rocks, or other debris, shall be hauled from the project by the Contractor. No separate pay.
4. Contractor shall give 48 hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior to commencement of work. Contractor shall assure himself that all construction permits have been obtained prior to commencement of work. All permits obtainable by the Contractor shall be obtained at the Contractor's expense.
5. Contractor shall confine his construction operations to the rights-of-way, easements, and lots, as shown on Plans and Plat. Any damage to private facilities outside these limits shall be repaired by the Contractor at no expense to the Owner.
6. All road construction, and related work, all materials, performance and quality of work, shall conform to the requirements of the City of Grand Junction Standards and Specifications.
7. All utility installations are to be performed in accordance with the technical specifications of the City of Grand Junction. All water and sewer lines must be tested and approved prior to street construction. All water lines to be constructed in accordance with the technical specifications of Clifton Water District. All sewer lines to be constructed in accordance with the technical specifications of the Central Grand Valley Sanitation District.
8. Contractor shall familiarize himself with the geotechnical testing requirements of the City of Grand Junction and the affected utility districts. Though the owner is paying for the testing, it shall be the responsibility of the Contractor to contact the testing firm 24 hours in advance of the need for testing, and to verify that the appropriate numbers of tests have been taken. The results of the required types of tests and numbers of passing tests shall be furnished to the Engineer for verification before final acceptance by the Owner will be granted. All failing tests shall be brought to the immediate attention of the Engineer and retests shall be performed until passing results are obtained. All utility lines, including service lines falling within Public rights-of-way or Public easements shall be tested.

STORM SEWER CONSTRUCTION NOTES

1. All storm sewer line construction shall be in accordance with the City of Grand Junction Standards and Specifications.
2. All Reinforced Concrete storm sewer pipe shall conform to ASTM Standard Specifications, C-76, Class III unless otherwise noted.
3. All polyvinyl chloride (PVC) pipe and fittings shall conform to ASTM Standard Specifications, D3034 and F679, SDR-35 unless otherwise noted.
4. All High Density Polyethylene (HDPE) pipe and fittings to conform to the following:
12 inch to 36 inch shall meet ASSHTO M294,
42 inch to 48 inch shall meet ASSHTO MP6.

SANITARY SEWER CONSTRUCTION NOTES

1. All sewer line construction shall conform to the Central Grand Valley Sanitation District Standards and Specifications.
2. All materials and workmanship shall conform to the Standards and Specifications of the Central Grand Valley Sanitation District. The Central Grand Valley Sanitation District reserves the right to accept or reject any materials and or workmanship that does not conform to its Standards and Specifications.
3. The Contractor shall have one signed copy of the Plans and a copy of the Central Grand Valley Sanitation District Standards and Specifications at the job site at all times.
4. All sanitary sewer pipe shall be PVC SDR-35 unless otherwise specified. All pipe joints shall be 13 foot joints unless otherwise approved by the Project Engineer.
5. All sewer mains to be laid to grade utilizing a "pipe laser".
6. All sanitary sewer services to be 4 inch PVC SDR-35 unless otherwise specified.
7. Cleanouts are required at 100 foot intervals on all lines greater than 100 feet in length.
8. All service line connections to the new main shall be accomplished with full body wyes or tees. Tapping saddles will not be allowed.
9. A minimum of 10 feet of horizontal separation shall be maintained at all times between the waterline and sewer line except at specified crossings.
10. Where sanitary sewers cross under waterline with less than 18 inches of vertical separation, and in all cases where the sanitary sewer crosses over the waterline at any depth, provide total Concrete Encasement of pipe for a length of 10 feet, either side of waterline. See the Central Grand Valley Sanitation District Details. Include cost of waterline crossing (Total concrete pipe encasement, pipe, and approved backfill), in unit price bid per lineal foot of sanitary sewer in appropriate sizes.
11. Sewer service stub-outs shall extend 14 feet beyond the property line or through front lot easements, whichever is greater, and shall be glue capped and marked with a steel fence post painted green and buried so that 3 feet remains above grade. As-built surveying for vertical grade of stub-out required PRIOR to backfill.
12. No service line shall be connected directly into a manhole.
13. The Contractor is responsible for all required sewer line testing to be completed in accordance with the Central Grand Valley Sanitation District Standards and Specifications. Final testing to be accomplished only after all other infrastructure has been installed. This includes waterlines, gas lines, electric lines, etc. Testing will be performed after all compaction of street subgrade and prior to street paving. Final lamping will also be accomplished after paving is completed to insure that the line is clean. These tests will be the basis for issuing initial Acceptance of the sewer line extension.
14. Manholes shall be constructed as shown on the Central Grand Valley Sanitation District Sanitary Sewer Detail sheet.
15. Water stop gaskets and clamp assemblies are to be furnished and installed at all connections to manholes.
16. Metal grade rings are NOT to be used on top of manhole rings to adjust to finish pavement elevation. All adjustments to finish grade on new manholes shall be made using concrete grade rings and grout beneath the cast iron ring as shown on the Standard Sanitary Sewer Detail sheet.
17. All trenches shall be compacted to 95% within 2% of optimum moisture content, as determined by AASHTO T-99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab. A copy of the compaction test results shall be provided to the District during the course of the project.
18. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for sewer line trench back fill unless otherwise approved by the Engineer.
19. To inhibit the movement of groundwater through sewer bedding and haunching material, clay cutoff walls of native material are to be constructed approximately 10 feet upstream from each manhole as shown on sanitary sewer plan and profiles. The cut-off wall shall extend from 6 inches below to 6 inches above granular back fill material and shall be 2 feet wide. If native material is not suitable, the Contractor shall import material approved by the Engineer.
20. The invert channel of the dead-end manhole on the West end of Madan Lane (MH-D3) should be a minimum 3/4 of the length through the manhole to facilitate testing and to provide access for the District's cleaning and maintenance equipment.
21. The Contractor should notify the District at least 48 hrs. prior to commencement of construction.
22. All sanitary sewer notes apply to all sheets pertaining to the sanitary sewer line.
23. Red Line As-built Drawings shall be submitted to the City Utility Engineer at least 72 hours PRIOR to paving for review.
24. The Contractor shall obtain a City of Grand Junction Street Cut Permit for all work within existing City Right-of-way.

PAVING CONSTRUCTION NOTES

1. All road widths, and radii are to face of curb or flowline unless noted otherwise. Any "spot" design elevations are to flowline of curb and gutter unless otherwise noted.
2. TOC = top of curb elevation
BOW = back of sidewalk
EOP = edge of pavement elevation
RIM = rim of manhole
INV = invert elev. of manhole or inlet
CL = centerline
PL = property line
FL = flowline
EI = elevation
3. The top of existing ground or the top of areas cut to final grade are to be scarified, moistened and recompact to 95% of AASHTO T99 in accordance with Geotechnical recommendation before starting up with embankments or before base is placed.
4. Contractor to protect existing utilities and appurtenances. Manholes, drainage inlets, utility lines, etc., damaged, covered or filled with dirt or debris by the Contractor shall be cleaned and repaired at no expense to the Owner.
5. Aggregate base course must be compacted 95% within 2% of optimum moisture content, as determined by AASHTO T-180.
6. Hot-mix asphaltic concrete to be CDOT Grading C. A mix design for the proposed pit must be approved by Engineer prior to placement of pavement.
7. Where proposed pavement is to match existing pavement, existing pavement is to be square cut, full base thickness is to be brought to match line and existing surface is to be tack-coated before proposed surface is placed.
8. Handicap ramps are to be constructed where indicated on the plans and in accordance with current City of Grand Junction Standard Details.
9. Curb, gutter and drainage pans are to have expansion joints at each change in horizontal alignment of curb and gutter, but in no case at a greater distance apart than 100 feet. Locate dummy grooved joints between expansion joints at intervals not exceeding 10 feet.
10. Include backing of curb and Gutter and or sidewalk with native fill material per the typical roadway section in the unit price bid for embankment.

WATERLINE CONSTRUCTION

1. All waterline construction shall be in accordance with the Clifton Water District standards and specifications.
2. Contractor shall notify the Clifton Water District 48 hours prior to the beginning of construction.
3. All trenches shall be compacted to 95% within 2% of optimum moisture content, as determined by AASHTO T-99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab.
4. Maximum cover required over top of new waterlines is 4'-6".
5. All water mains, sizes 4" through 12", to be DR-18 PVC conforming to AWWA C-900.
6. All service connections to be 3/4" Type "K" copper.
7. Cast iron fittings to conform to AWWA C-110.
8. Fire Hydrants shall conform to AWWA C-502-85.
9. All materials, labor and equipment required for testing and disinfection of waterlines shall be furnished by Contractor. Disinfection of waterlines shall conform to AWWA C-651-99 or latest revision thereof. No separate pay.
10. All pipe bends/angle points, both horizontal and vertical, as called for on the plans are to be thrust blocked per Clifton Water District details and Technical Specifications.
11. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for waterline trench backfill unless otherwise approved by the Engineer.

NO.	DESCRIPTION	DATE

CITY OF GRAND JUNCTION
**GENERAL LEGEND
AND CONSTRUCTION NOTES**

THOMPSON-LANGFORD CORP.
ENGINEERS AND LAND SURVEYORS
529 25 1/2 RD., SUITE B210
GRAND JUNCTION, COLORADO
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tlc@tlwest.com



DRAWN BY: MHH
CHECKED BY: JWM

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
Acceptance of these plans does not relieve the developer, contractor, or the engineer from conformance with the City of Grand Junction Standard Specifications.

City of Grand Junction Engineering Division Representative _____ Date _____

ACCEPTED AS CONSTRUCTED

City of Grand Junction Engineering Division Representative _____ Date _____

ACCEPTED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE
CENTRAL GRAND VALLEY SANITATION DISTRICT

St. L. Bond _____ Date 7-21-03

INITIAL ACCEPTANCE
CENTRAL GRAND VALLEY SANITATION DISTRICT

_____ Date _____

APPROVED FOR CONSTRUCTION
CLIFTON WATER DISTRICT

Walt... _____ Date 07-11-03

ACCEPTED AS CONSTRUCTED
CLIFTON WATER DISTRICT

_____ Date _____

DATE:	July 7, 2003
SCALE:	Horiz: N.T.S.
Project No.:	0543-001
SHEET NO.:	2 OF 12