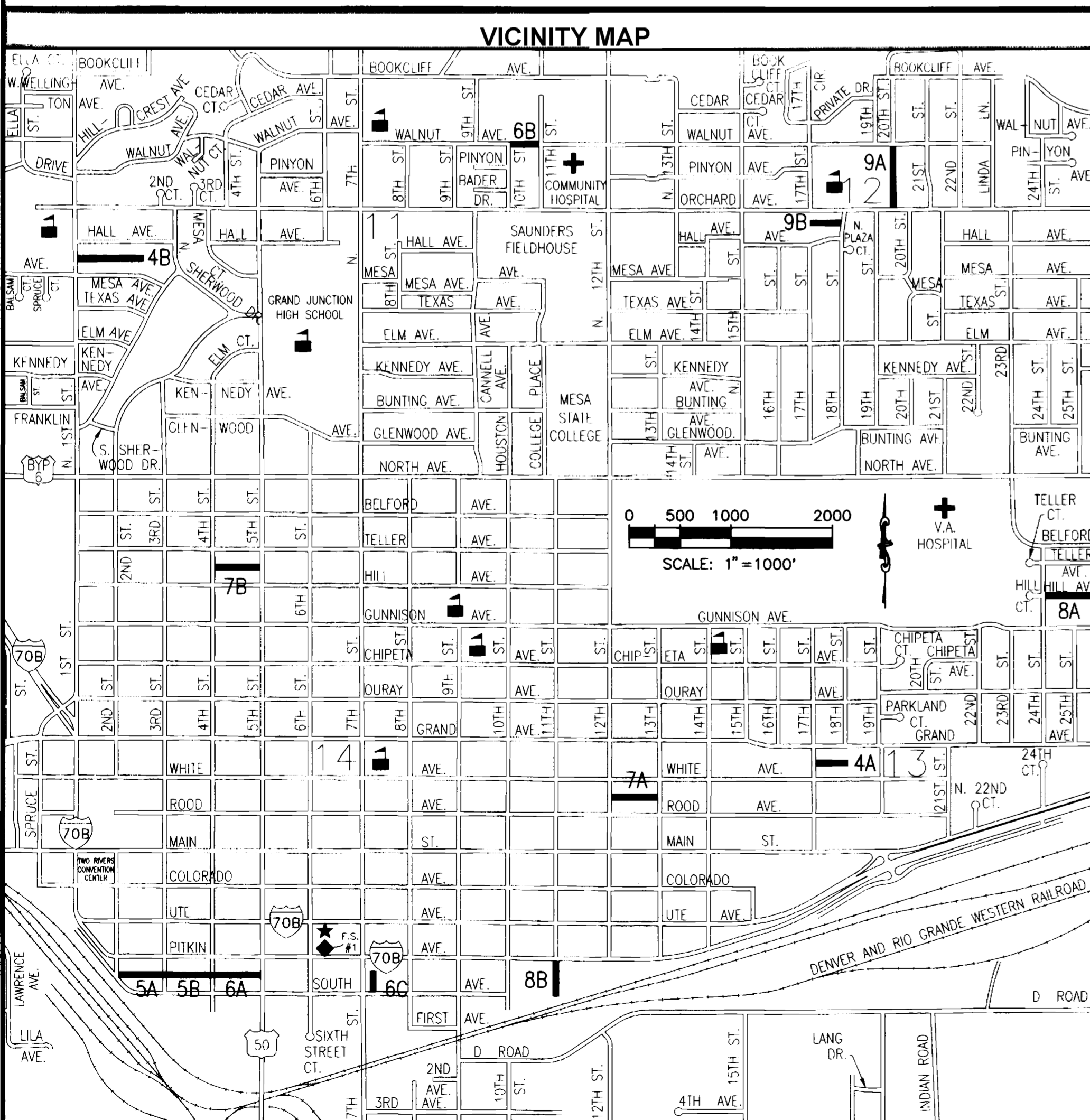


1996 SEWERLINE REPLACEMENTS

DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.

*City of Grand Junction, Colorado
Department of Public Works*

ACTUAL SEWER MAIN LINE CAMERA NOTES



SHEET INDEX	
SHEET #	SHEET DESCRIPTION
1	COVER SHEET
2	QUANTITIES SUMMARY
3	DRAFTING STANDARDS & ABBREVIATIONS
4 - 9	PLAN AND PROFILE SHEETS (Sheet 4 includes typ. alley approach dwy grading detail)
10	EXHIBIT "E" (STANDARD PAVEMENT DETAILS)
11	EXHIBIT "F" (STANDARD SANITARY SEWER DETAILS)

ENGINEERING APPROVALS					
PROJECT PHASE	SIGNATURE	DATE			
BIDDING	<i>Gerald R Williams</i>	6/26/96			
CONSTRUCTION					
FINAL ACCEPTANCE					

UTILITIES AND AGENCIES						
AGENCY	NAME	POSITION	MAILING ADDRESS	CITY, STATE	VOICE	FAX
GRAND JUNCTION, CITY OF	MIKE CURTIS	PROJECT ENGINEER	250 N. 5th STREET	GRAND JUNCTION, CO 81501	256-4004	244-1599
PSCO	JOHN SALAZAR	AREA #4			244-2781	
PSCO	JON PRICE	AREA #3			244-2693	
TCI	GLENN VANCIL		2502 FORESIGHT CIRCLE	GRAND JUNCTION, CO 81504	245-8750	245-6803
U.S. WEST	MAX WARD	ENGINEER			244-4721	

WILLIAMS ENGINEERING
1231 19 Road
Fruita, CO 81521-9689
(970) 858-1014 Phone
(970) 858-1007 FAX

GENERAL NOTES

(G01) Unless noted otherwise, Standard Details and Specifications and Special Provisions apply.

(G02) Notes numbered between 20 and 99 pertain to Work governed by the City of Grand Junction's standard specifications, as may be modified by Project Contract Documents.

(G03) Notes numbered between 200 and 699 pertain to Work governed by corresponding sections of the CDOT Standard Specifications for Road and Bridge Construction, as may be modified by Owner Standard Specifications and/or Project Contract Documents.

(G04) Notes numbered above 1000 pertain to miscellaneous Work not governed by standard specifications.

(G05) Note numbers preceded with a "C" and italicized are informational or general in nature and, as incidental to the Work, are no-pay items.

(G06) Property lines shown are approximate only.

ASBUILT
7-13-99

ITEM/REFERENCE NO. & DESCRIPTION OF WORK	UNITS	SHT. 4	SHT. 5	SHT. 6	SHT. 7	SHT. 8	SHT. 9	MISC.	ESTIMATED TOTAL QUANTITY	ACTUAL TOTAL QUANTITY	COMMENTS
20.1 Construct 8" SDR 35 PVC sanitary sewer.	LF	572	925	804	994	794	844	0	4933		
20.6 Construct new sewerline through existing manhole, cut out top of...	EA	0	2	0	0	0	1	0	3		
21.1 Connect the proposed sewerline to the existing MH, and grout seal...	EA	4	1	4	4	3	4	0	20		
24.8 Install full body wye sewer tap and connect to all active existing...	EA	22	32	21	32	23	26	0	156		
61.2 Provide MH corrosion protection per Special Provisions.	EA	0	1	0	0	0	2	0	3		
62.1 Reshape the MH invert with epoxy grout. Grout thickness shall be at...	EA	3	1	1	4	1	2	0	12		
64.1 Construct standard 4' dia. MH.	EA	0	0	1	0	1	0	0	2		
81.1 Overexcavate trench below required bedding as directed by Engineer...	CY	0	0	0	0	0	0	100	100		
83.1 Provide flowable fill backfill.	CY	0	0	0	0	64	0	16	80		
202.21 Remove manhole.	EA	0	0	1	1	1	0	0	3		
202.34 Remove concrete valley gutter to joints or dimensions where...	SY	0	0	5.3	0	0	0	0	5.3		
202.35 Remove all concrete curb, gutter, sidewalk, driveway, and/or slabs...	SY	0	0	0	0	61.7	0	0	61.7		
202.37 Remove concrete curb, gutter, sidewalks, driveways, pavement...	EA DWY	1	3	1	5	0	1	0	11		
202.41 Remove asphalt pavement as shown.	SY	21.1	51.8	312.5	111.6	852	1149.8	0	2498.8		
202.53 Remove sanitary sewer.	LF	572	925	804	994	794	844	0	4933		
203.2 Excavate and/or backfill as required for proposed improvements.	EA DWY	1	3	1	5	0	1	0	11		
209.1 Provide water and dust control.	LS	--	--	--	--	--	--	1	1		
210.13 Reset manhole rim to finish grade.	EA	0	1	0	0	0	0	0	1		
210.55 Relocate traffic sign.	EA	0	0	0	0	1	0	0	1		
212/213.4 Replace removed or damaged grass sod along the edge of...	LF	0	17	0	0	0	0	0	17		
212/213.5 Replace removed or damaged landscape rock on plastic along...	LF	0	15	0	10	72	0	0	97		
300/400.2 Construct 6" ABC and 3" single lift HMA pavement.	SY	0	914.4	98.9	65.6	0	0	0	1078.9		
300/400.5 Construct ABC and HMA pavement patch. Match existing...	SY	21.1	51.8	312.5	111.6	857	1149.8	0	2498.8		
608.11 Construct concrete sidewalk.	SY	0	0	0	0	3.3	0	0	3.3		
608.31 Construct concrete driveway.	SY	0	173.2	46.1	261.5	0	18.7	0	499.3		
608.32 Construct concrete disabled pedestrian ramp.	SY	0	0	0	0	4.3	0	0	4.3		
609.1 Construct concrete valley pan gutter.	SY	6.0	0	5.3	0	59.0	0	0	70.3		
609.3 Construct concrete curb and gutter.	LF	0	0	0	0	190	0	0	190		
625.3 Provide construction surveying and red-lined plans as-constructed...	LS	--	--	--	--	--	--	1	1		
626.1 Provide all mobilization, bonds, insurances, and other incidentals...	LS	--	--	--	--	--	--	1	1		
630.1 Provide traffic control in accordance with General Contract Conditions.	LS	--	--	--	--	--	--	1	1		
1997.1 Provide newsletters per Special Conditions.	LS	--	--	--	--	--	--	1	1		
1998.1 Provide project signs per Special Conditions.	LS	--	--	--	--	--	--	1	1		
1999 FORCE ACCOUNT	LS	--	--	--	--	--	--	1	1		

REVISION Δ _____ DATE _____
REVISION Δ _____ DATE _____
REVISION Δ _____ DATE _____

SCALE _____	PLAN _____	PROFILE _____
HORIZ. _____	HORIZ. _____	VERT. _____

WILLIAMS ENGINEERING
 1231 19 ROAD, FRUITA, COLORADO 81521-9689
 (970) 858-1014 PHONE (970) 858-1007 FAX

1996 SEWERLINE REPLACEMENTS
 QUANTITIES SUMMARY

City of Grand Junction
Persigo WWTP
2145 River Rd.
Grand Junction CO. 81505
(970) 244-1487

City of Grand Junction
Persigo WWTP
2145 River Rd
Grand Junction CO 81505
(970) 244-1487

City of Grand Junction
Persigo WWTP
2145 River Rd.
Grand Junction CO. 81505
(970) 244-1487

Site Data

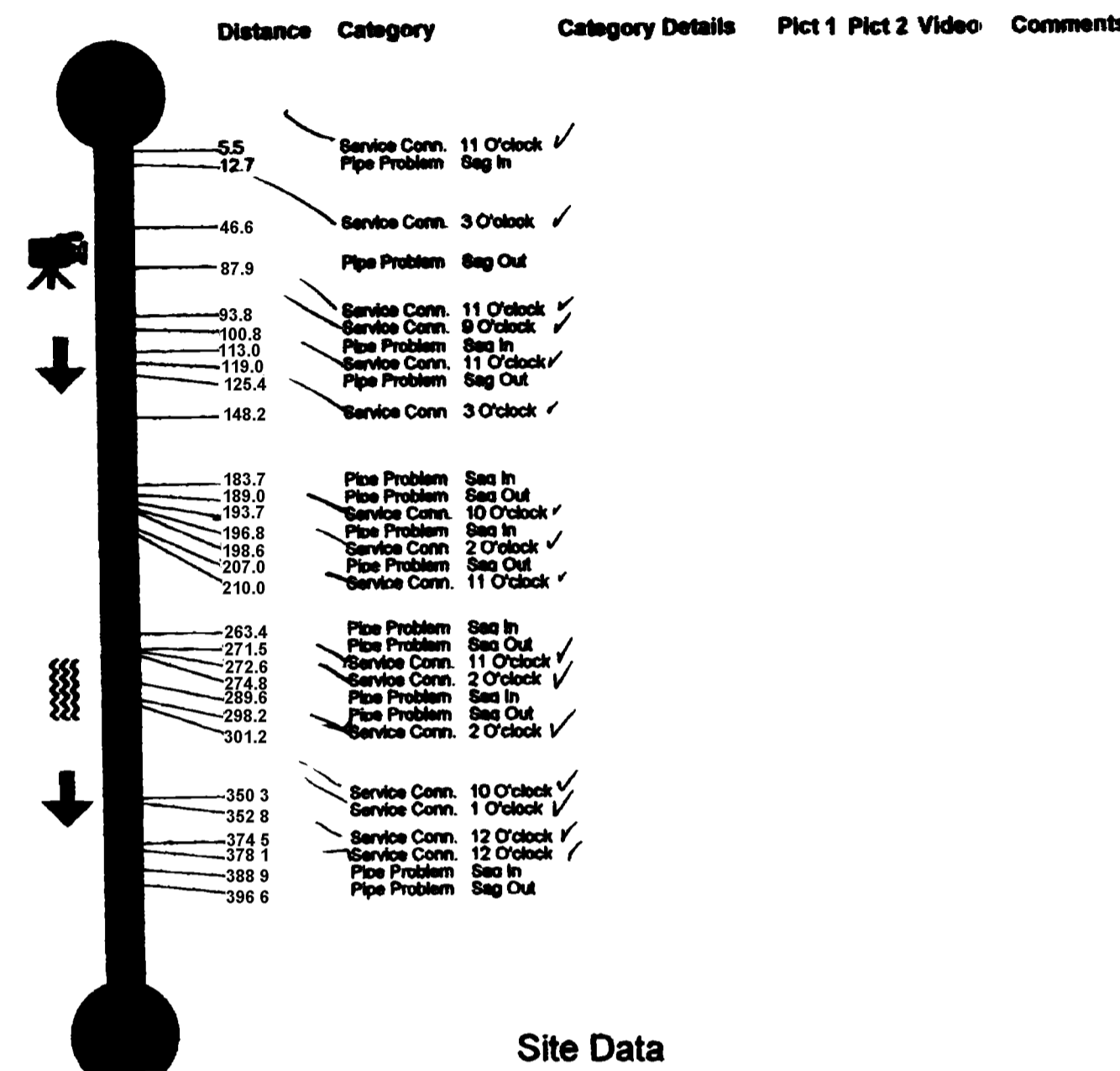
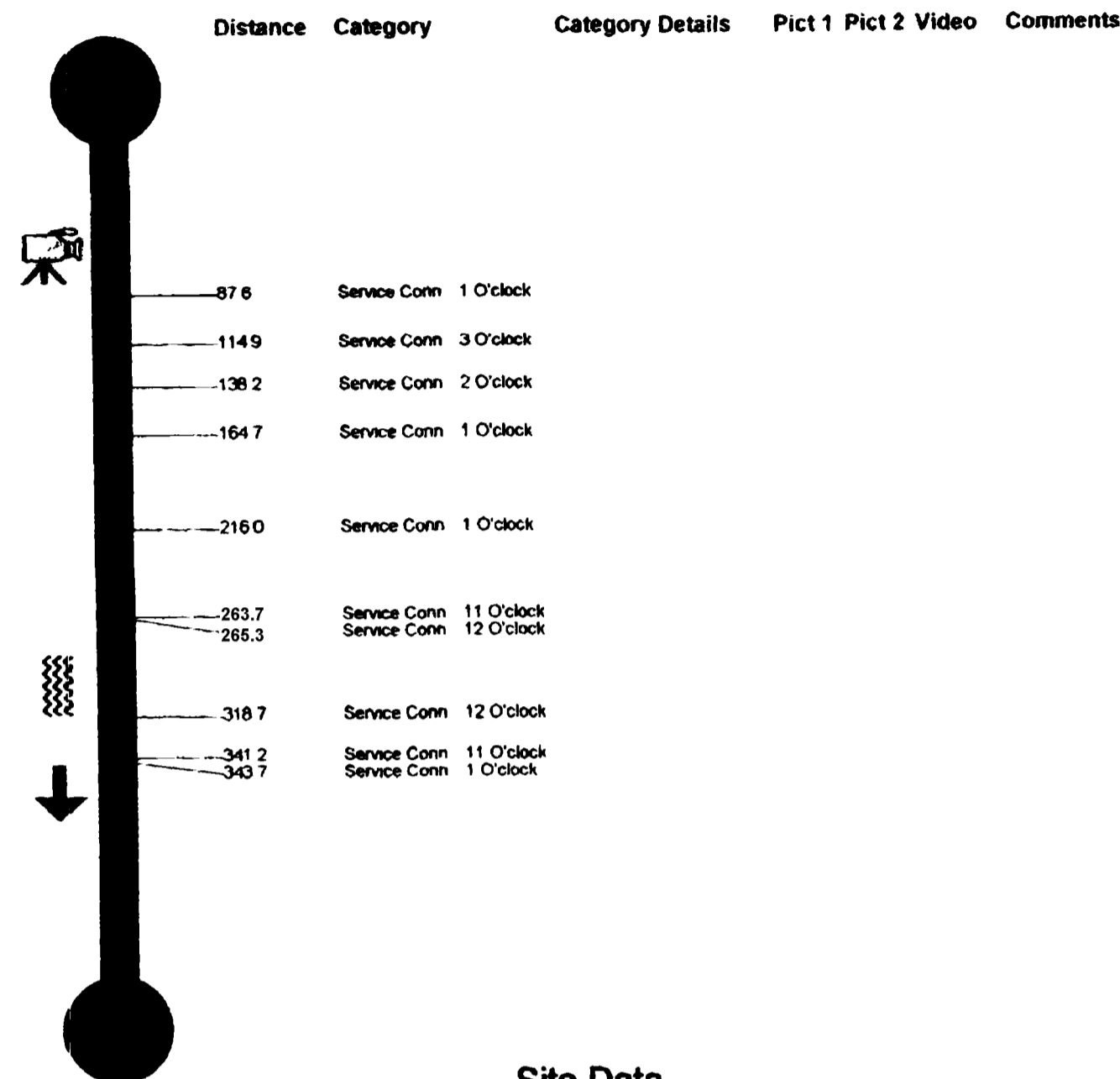
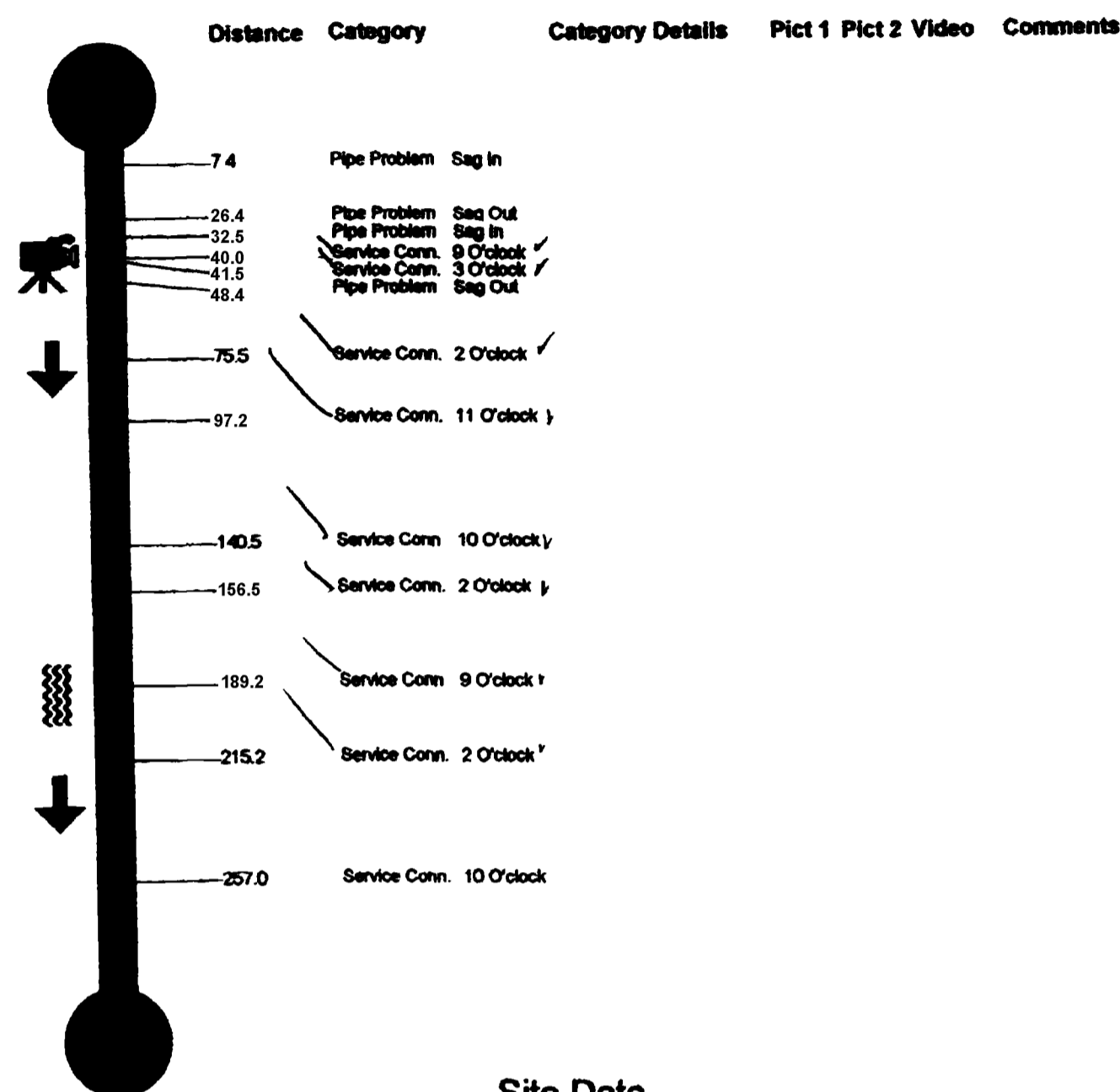
Project Name	Site ID	City	Street	Starting Ftg.	Date	Time	TapelID
Ball-Mean	1	Grand Jct.	Ball-Mean	5.0	Dec. 04 1998	02:58:55 PM	67
M.H. Start	M.H. Stop	M.H. Depth	Pipe Size(in)	Type of Pipe	Direction	Surface Condition	Final Footage
1 M.E. East	1st St.	7 (ft) 4 (in)	8	PVC	Away-DS	Dirt	+0294.6

Site Data

Project Name	Site ID	City	Street	Starting Ftg.	Date	Time	TapelID
5-2 Pitken-South	1	Grand Jct.	3-2 Pitken-South	0	Oct. 12 1998	10:31:13 AM	65
M.H. Start	M.H. Stop	M.H. Depth	Pipe Size(in)	Type of Pipe	Direction	Surface Condition	Final Footage
3rd	2nd	10 (ft)	8	PVC	Away-DS	Paved Asphalt	+0461.5

Site Data

Project Name	Site ID	City	Street	Starting Ftg.	Date	Time	TapelID
5-2 Pitken-South	2	Grand Jct.	4-3 Pitken-South	0	Nov. 30 1998	02:56:01 PM	67
M.H. Start	M.H. Stop	M.H. Depth	Pipe Size(in)	Type of Pipe	Direction	Surface Condition	Final Footage
4th	3rd	9 (ft) 0 (in)	8	PVC	Away-DS	Paved Asphalt	+0448.0



Site Data

Project Name	Site ID	City	Street	Starting Ftg.	Date	Time	TapelID
5-2 Pitken-South	3	Grand Jct.	5-4 Pitken-South	0	Dec. 01 1998	09:29:01 AM	67
M.H. Start	M.H. Stop	M.H. Depth	Pipe Size(in)	Type of Pipe	Direction	Surface Condition	Final Footage
5th	4th	8 (ft) 9 (in)	8	PVC	Away-DS	Paved Asphalt	+0491.0

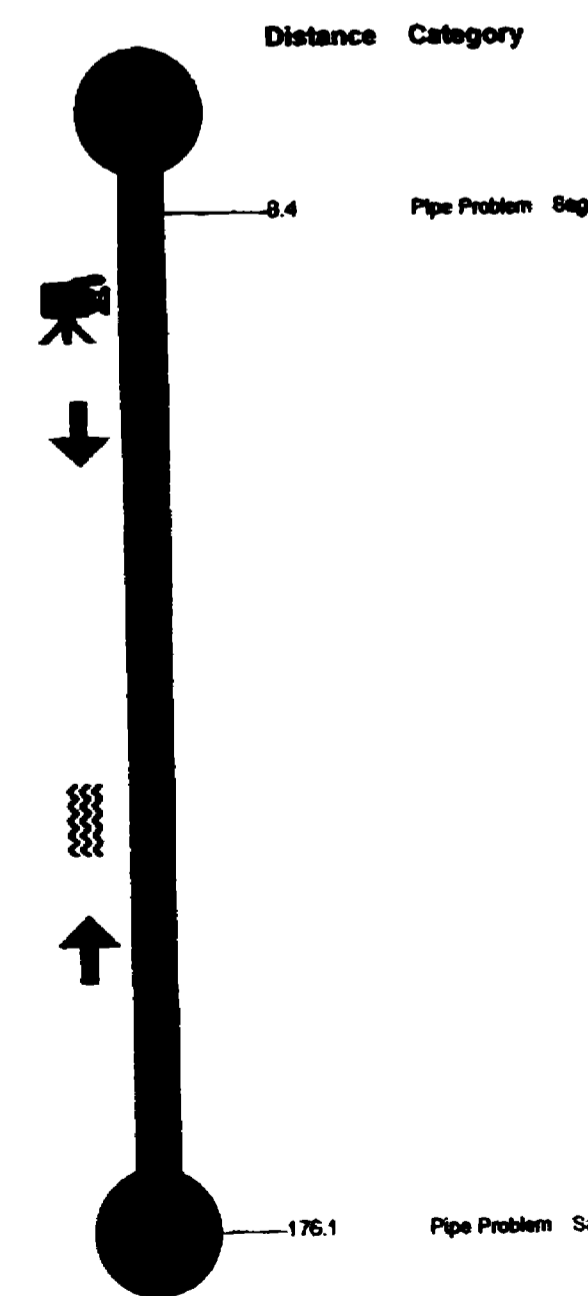
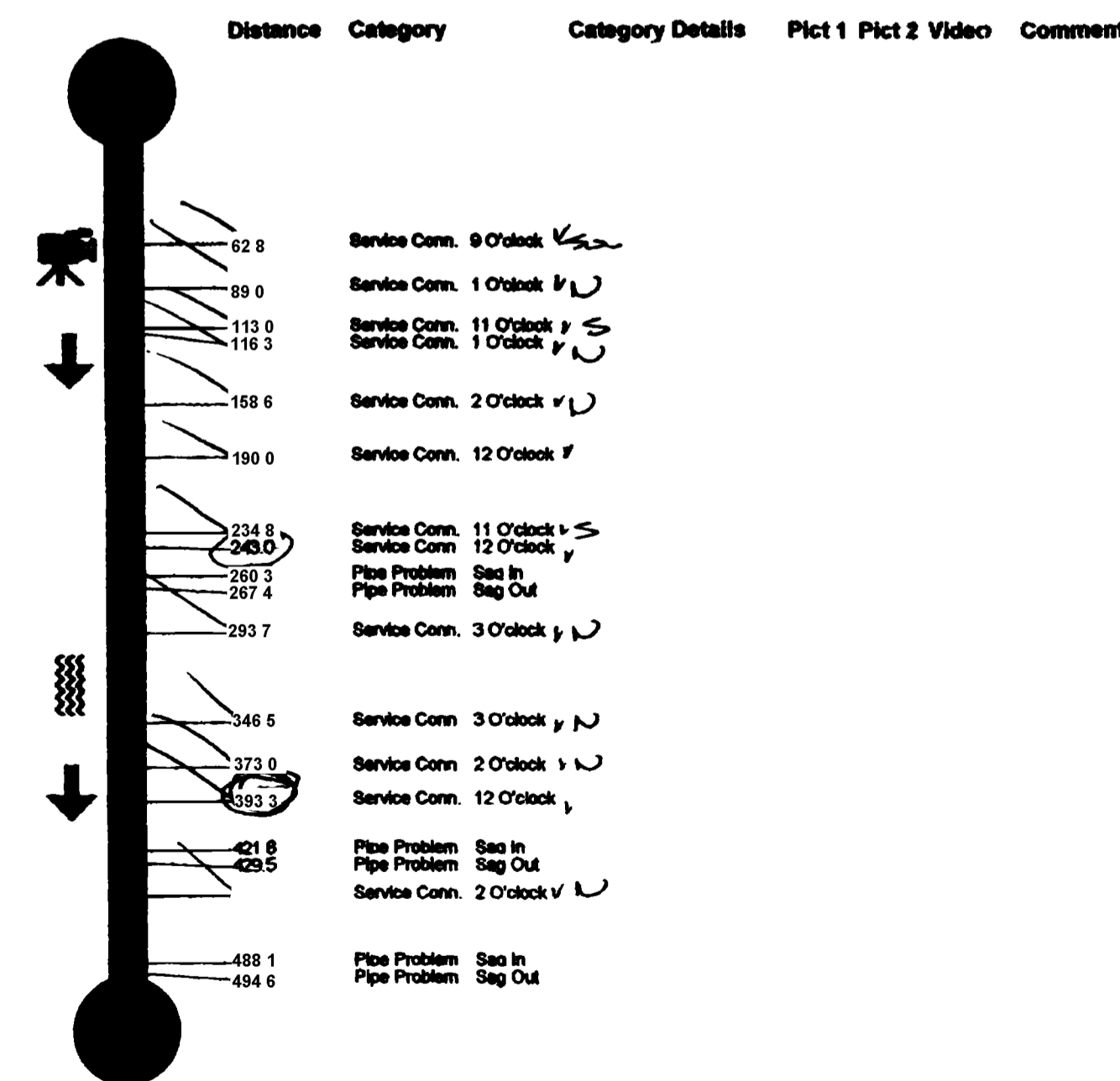
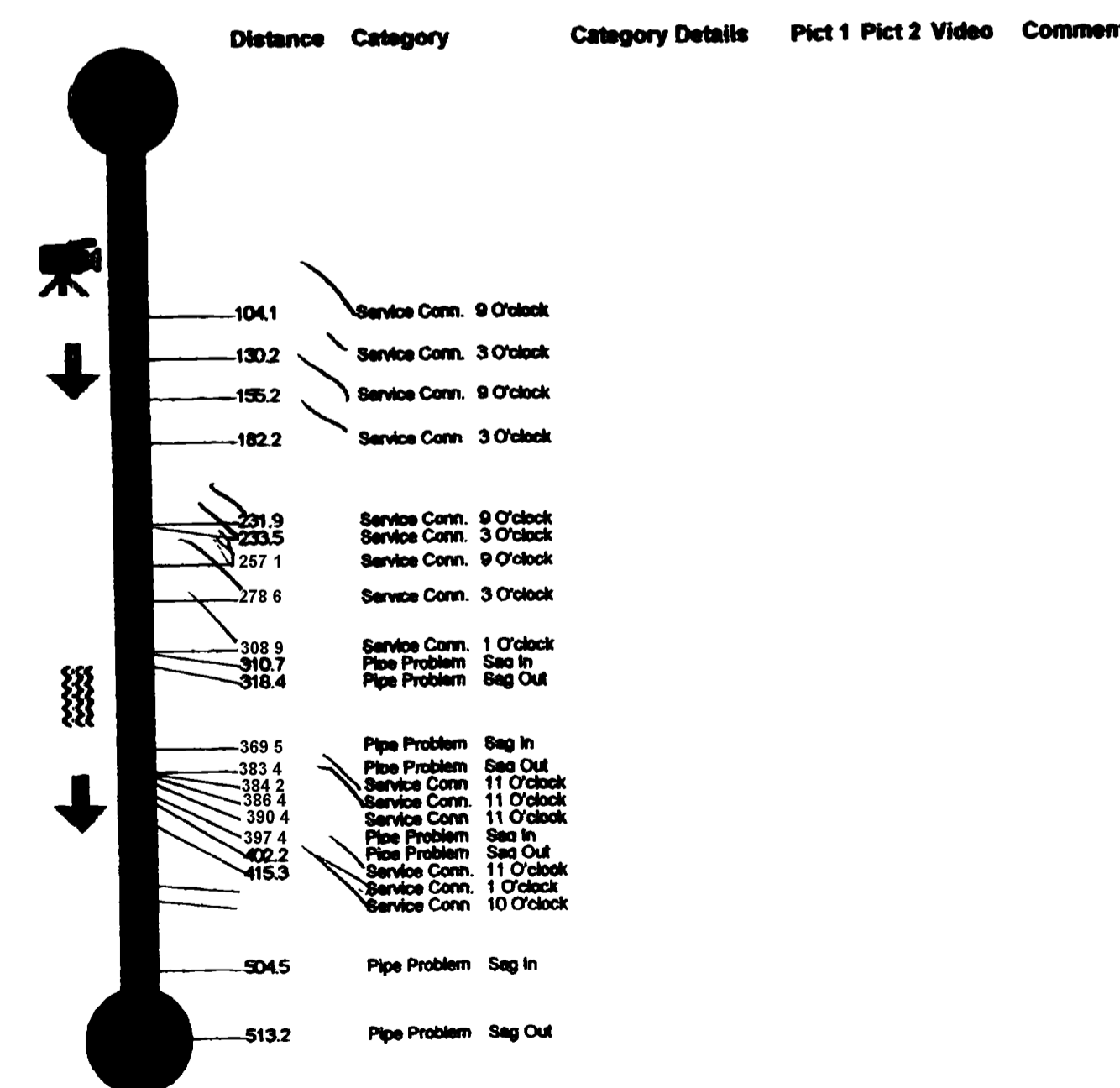
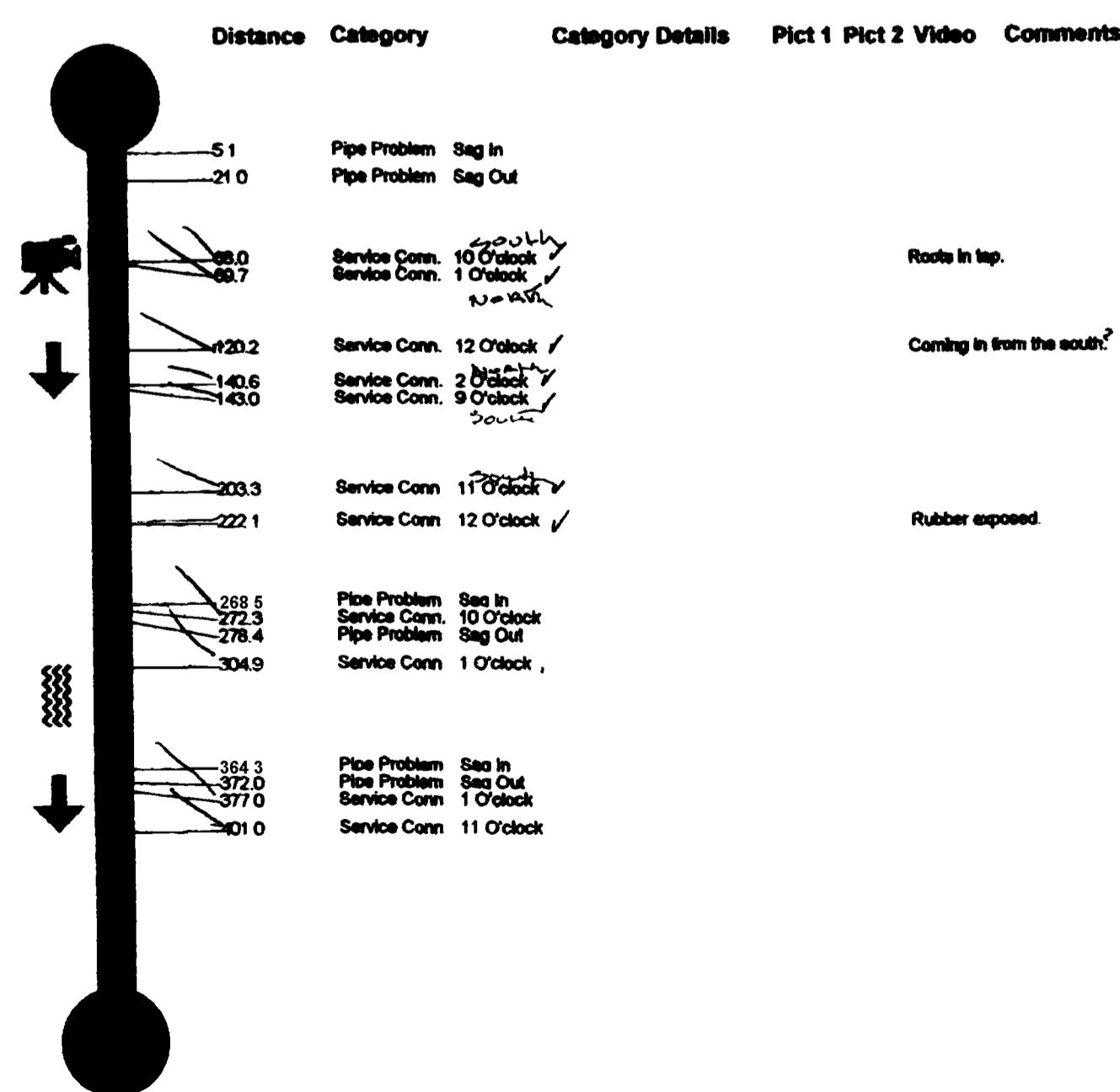
Site Data

Project Name	Site ID	City	Street	Starting Ftg.	Date	Time	TapelID
White - Road	1	Grand Jct.	White-Road	4.0	Dec. 10 1998	10:35:00 AM	67
M.H. Start	M.H. Stop	M.H. Depth	Pipe Size(in)	Type of Pipe	Direction	Surface Condition	Final Footage
13th	12th	7 (ft) 0 (in)	8	PVC	Away-DS	Dirt	+0514.4

Site Data

Project Name	Site ID	City	Street	Starting Ftg.	Date	Time	TapelID
Hill-Teller	1	Grand Jct.	Hill-Teller	5.0	Dec. 04 1998	09:48:43 AM	67
M.H. Start	M.H. Stop	M.H. Depth	Pipe Size(in)	Type of Pipe	Direction	Surface Condition	Final Footage
5th	4th	6 (ft) 6 (in)	8	PVC	Away-DS	Paved Asphalt	+0496.5

Project Name	M.H. Start	M.H. Stop
11th St	1st M.E. West Pitken	



DESCRIPTION DATE

REVISION A	ASBUILT PER INSPECTORS	7-13-99
REVISION B	PLANS	
REVISION C		
REVISION D		

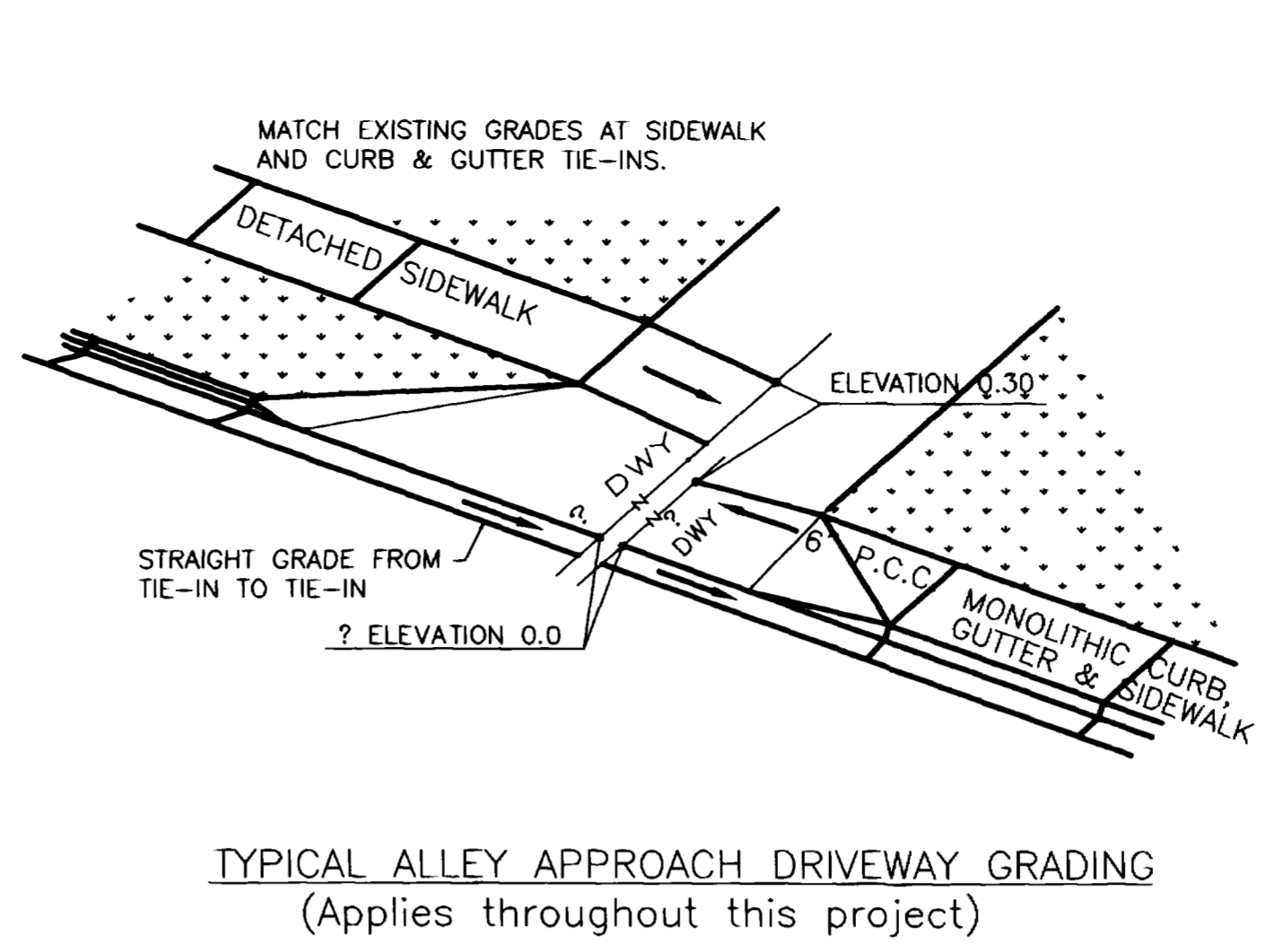
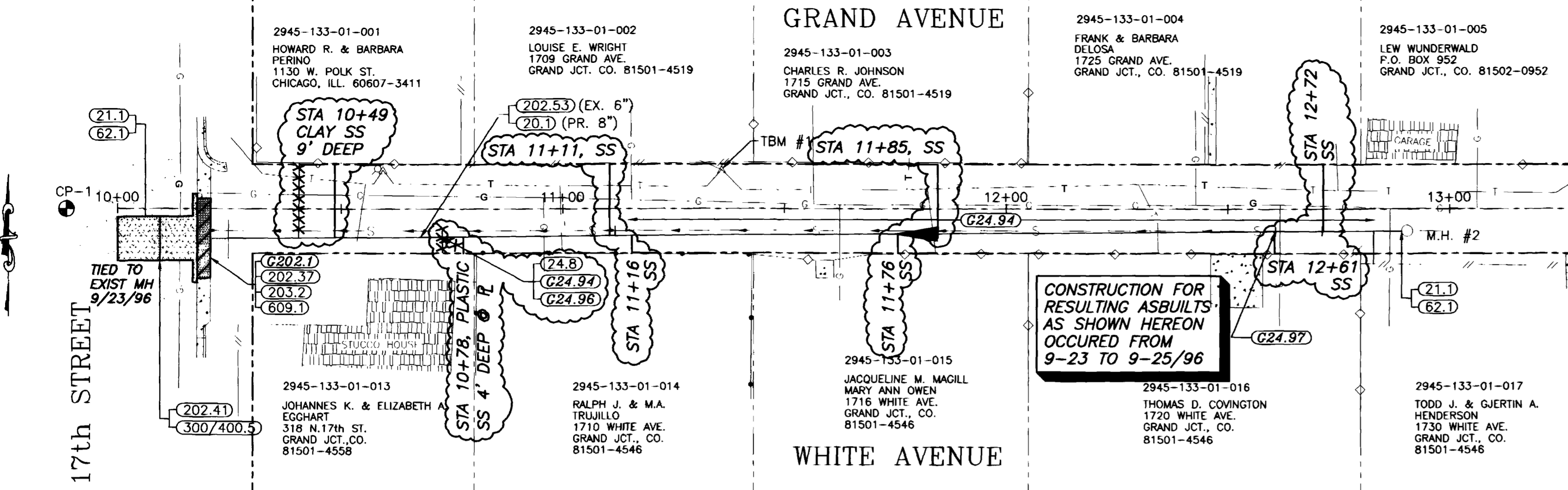
DRAWN BY	JCS	DATE	
DESIGNED BY		DATE	
CHECKED BY	MC	DATE	
APPROVED BY		DATE	

SCALE

PLAN	PROFILE
HORIZ. NA	HORIZ. NA
VERT. NA	VERT. NA

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING AND TECHNICAL SERVICES DIVISIONS
CITY OF GRAND JUNCTION, COLORADO

1996 SEWERLINE REPLACEMENTS
SEWER MAIN LINE CAMERA FINDINGS



SHADING AND TEXTURE LEGEND

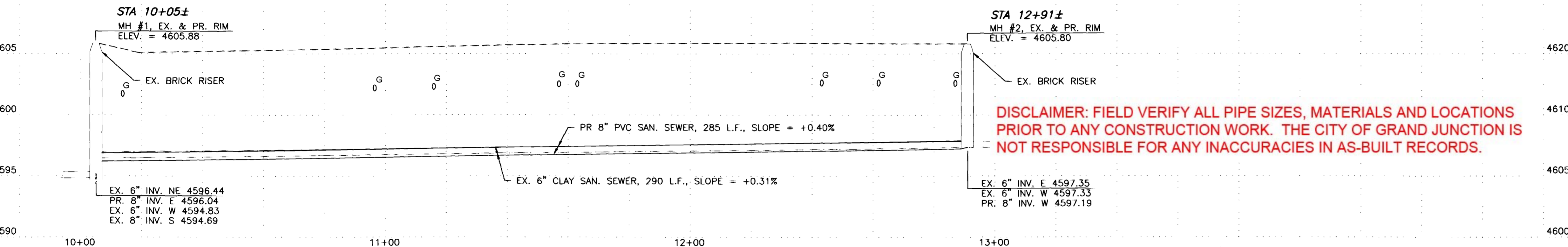
FACILITY OR SURFACE TREATMENT	EXISTING	PROPOSED	REMOVE & REPLACE
ASPHALT PAVEMENT	[Pattern]	[Pattern]	[Pattern]
CONCRETE (C, G, SW, SLABS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DWYs, RAMPS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DECORATIVE)	[Pattern]	[Pattern]	[Pattern]
CLASS 6 AGGREGATE GRAVEL	[Pattern]	[Pattern]	[Pattern]
LANDSCAPE ROCK ON PLASTIC	[Pattern]	[Pattern]	[Pattern]
GRASS SOD	[Pattern]	[Pattern]	[Pattern]
BUILDING	[Pattern]	[Pattern]	[Pattern]

COORDINATES (TOP PLAN)

PT	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
CP-1		0.0	988.50	4605.70
TBM #1		8.71	1136.31	4607.25
MH-1		-6.80	1105.02	--
MH-2		-4.93	1290.90	--

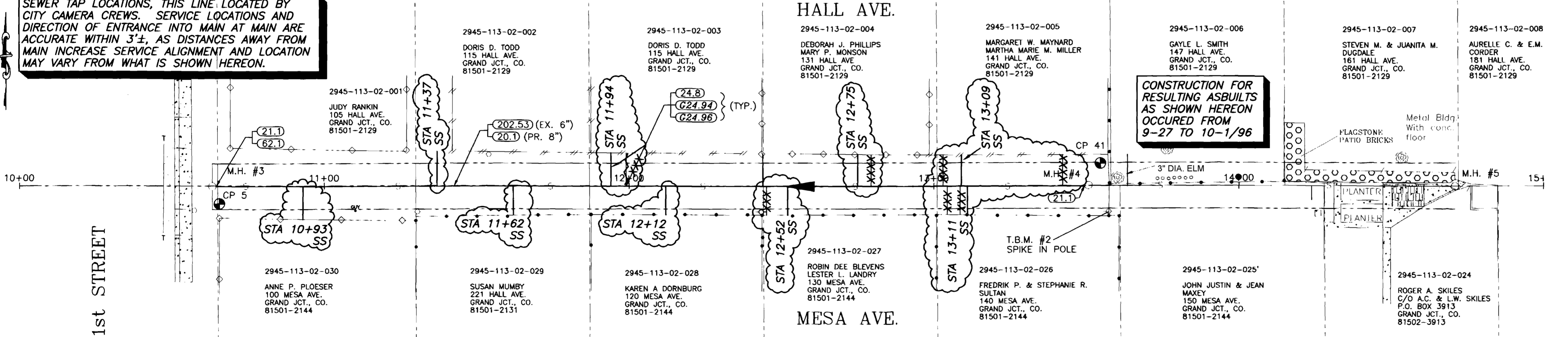
COORDINATES (BOTTOM PLAN)

PT	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
CP-5		-5.83	1065.61	4609.01
CP-41		7.39	1354.59	4610.73
TBM #2		-8.42	1357.34	4611.02
MH-3		-0.17	1063.29	--
MH-4 (TO BE REMOVED)		0.17	1350.70	--
MH-5		-0.13	1470.88	--

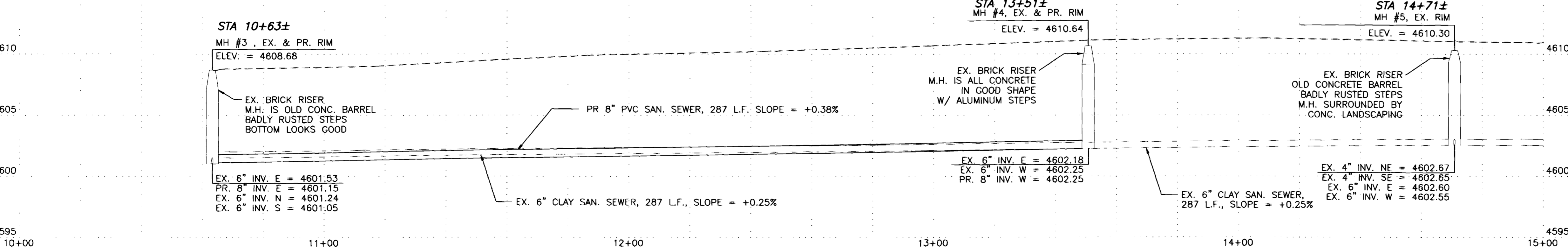


CONSTRUCTION NOTES

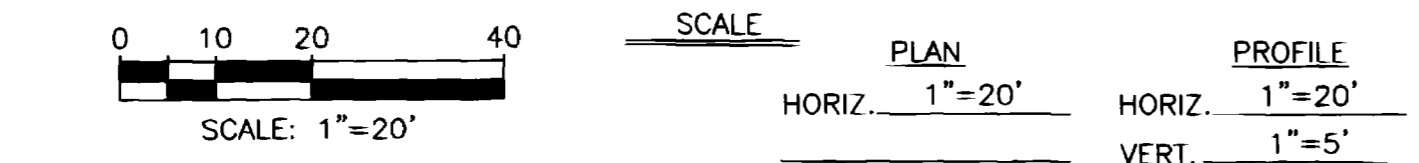
- (20.1) Construct 8" SDR 35 PVC sanitary sewer.
- (21.1) Connect the proposed sewerline to the existing MH, and grout seal around pipe.
- (24.8) Install full body wye sewer tap and connect to all active existing sewer services.
- (G24.94) Not all sewer services may be shown. The Contractor shall locate all active services and provide as-constructed locations for all taps.
- (G24.96) Use of dye is effective in locating active sewer taps. If in doubt as to whether a tap is active or not, replace and reconnect.
- (G24.97) The existing sewer service enters the top of the pipe. In-coming direction is unknown.
- (62.1) Reshape the MH invert with epoxy grout. Grout thickness shall be at least 1". Remove existing concrete as required.
- (G202.1) Boundary shows limits of demolition and removals. Any removals and replacements outside of the boundary shall be at the contractor's expense, unless specifically provided for otherwise.
- (G202.37) Remove concrete curb, gutter, sidewalks, driveways, pavement, and/or slabs to joints or dimensions where shown; otherwise, remove as required for construction. Sawcut as necessary.
- (G202.41) Remove asphalt pavement as shown.
- (G202.53) Remove sanitary sewer.
- (G203.2) Excavate and/or backfill as required for proposed improvements.
- (300/400.5) Construct ABC and HMA pavement patch. Match existing thickness unless noted otherwise.
- (609.1) Construct concrete valley gutter.



ASBUILT 7-13-99



REVISION	DESCRIPTION	DATE
REVISION A	ASBUILT PER INSPECTORS PLANS	7-13-99
REVISION B		
REVISION C		



WILLIAMS ENGINEERING
 1231 19 ROAD, FRUITA, COLORADO 81521-9689
 (970) 858-1014 PHONE (970) 858-1007 FAX

1996 SEWERLINE REPLACEMENTS
 COLLECTOR SEWERS
 17th-18th, White-Grand & 1st-3rd, Mesa-Hall

SHEET 4
FILENAME 96SLR-4.DWG

02092604.tif

SEWER TAP LOCATIONS, THIS LINE LOCATED BY CITY CAMERA CREWS. SERVICE LOCATIONS AND DIRECTION OF ENTRANCE INTO MAIN AT MAIN ARE ACCURATE WITHIN 3'±, AS DISTANCES AWAY FROM MAIN INCREASE SERVICE ALIGNMENT AND LOCATION MAY VARY FROM WHAT IS SHOWN HEREON.

CONSTRUCTION FOR RESULTING ASBUILTS AS SHOWN HEREON OCCURRED FROM 8-6 TO 8-13/96

CONSTRUCTION FOR RESULTING ASBUILTS AS SHOWN HEREON OCCURRED FROM 8-6 TO 8-13/96

DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.

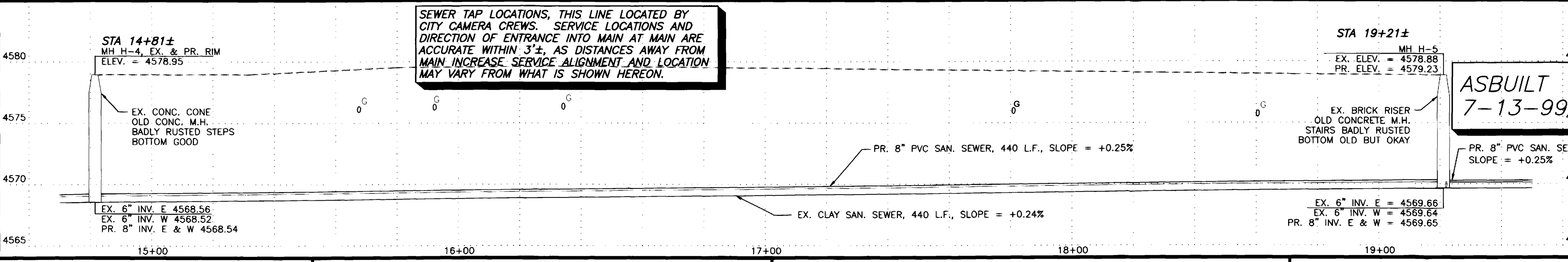
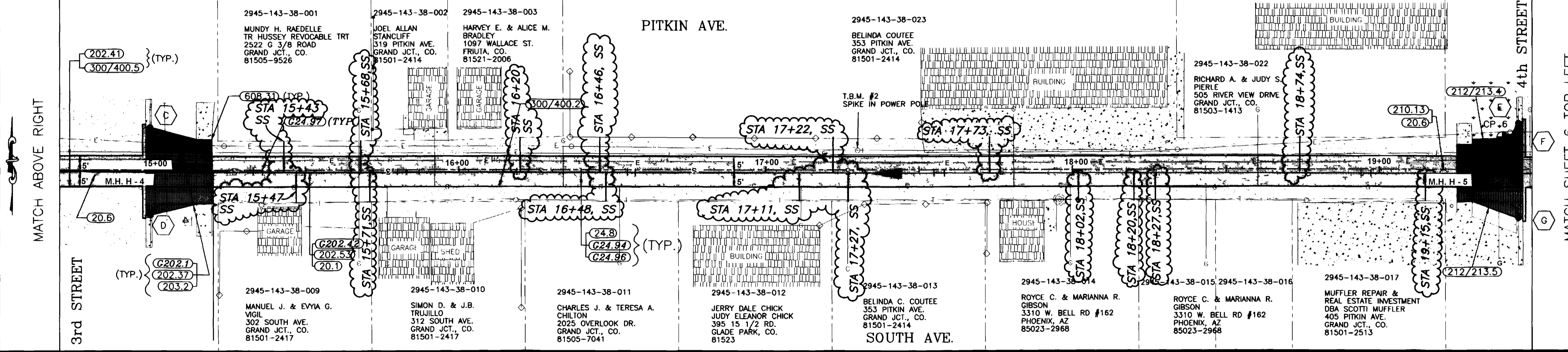
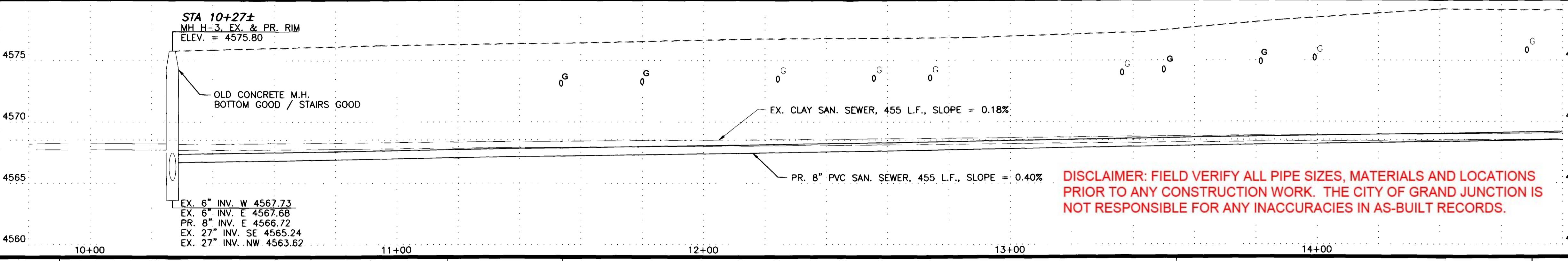
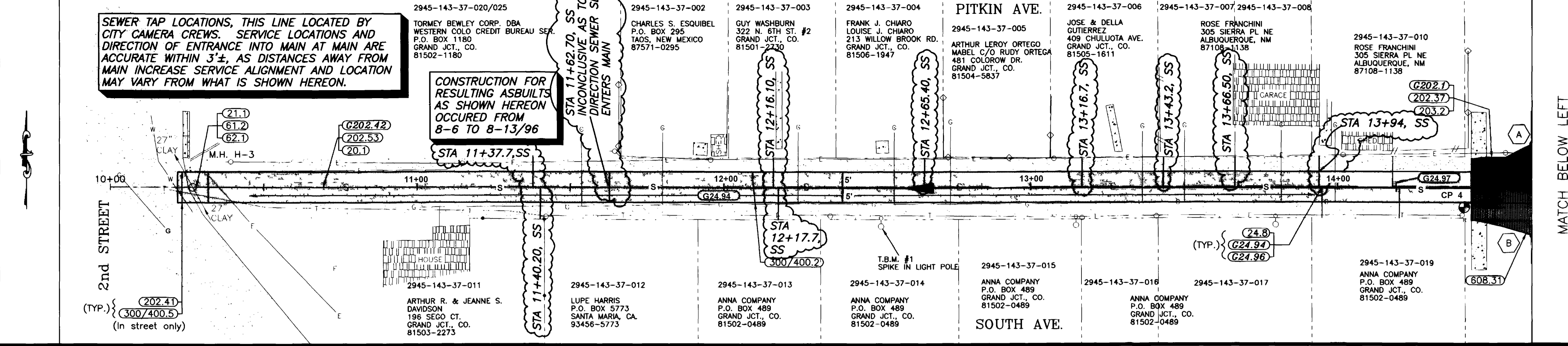
FACILITY OR SURFACE TREATMENT	EXISTING	PROPOSED	REMOVE & REPLACE
ASPHALT PAVEMENT	[Pattern]	[Pattern]	[Pattern]
CONCRETE (C, G, SW, SLABS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DWYS, RAMPS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DECORATIVE)	[Pattern]	[Pattern]	[Pattern]
CLASS 6 AGGREGATE GRAVEL	[Pattern]	[Pattern]	[Pattern]
LANDSCAPE ROCK ON PLASTIC	[Pattern]	[Pattern]	[Pattern]
GRASS SOD	[Pattern]	[Pattern]	[Pattern]
BUILDING	[Pattern]	[Pattern]	[Pattern]

PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
CP-4		-6.71	1441.29	4578.62
2ND&PITK		194.35	979.73	4577.01
TBM #1		-12.81	1251.26	4577.03
M.H. #H-3		0.00	1026.85	--
A	EDGE OF DWY @ ?	13.95	1463.65	4578.05
B	EDGE OF DWY @ ?	-15.94	1463.65	4578.14

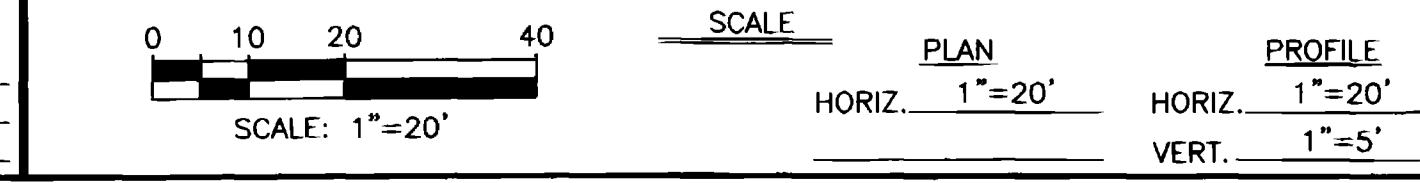
PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
CP-5		205.44	1454.34	4578.46
CP-6		10.48	1940.11	4578.74
TBM #2		6.39	1730.00	4579.26
M.H. #H-4		-0.32	1481.48	--
M.H. #H-5		-1.40	1920.99	--
C	EDGE OF DWY @ ?	13.90	1499.34	4578.56
D	EDGE OF DWY @ ?	-14.72	1499.54	4578.59
E	EDGE OF DWY @ ?	14.98	1945.36	4578.37
F	EDGE OF DWY @ ?	10.08	1942.61	4578.67
G	EDGE OF DWY @ ?	-15.86	1945.40	4577.77

CONSTRUCTION NOTES

- (20.1) Construct 8" SDR 35 PVC sanitary sewer.
- (20.6) Construct new sewerline through existing manhole, cut out top of pipe, reshape bottom of manhole.
- (21.1) Connect the proposed sewerline to the existing MH, and grout seal around pipe.
- (24.8) Install full body wye sewer tap and connect to all active existing sewer services.
- (G24.94) Not all sewer services may be shown. The Contractor shall locate all active services and provide as-constructed locations for all taps.
- (G24.96) Use of dye is effective in locating active sewer taps. If in doubt as to whether a tap is active or not, replace and reconnect.
- (G24.97) The existing sewer service enters the top of the pipe. In-coming direction is unknown.
- (61.2) Provide MH corrosion protection per Special Provisions.
- (62.1) Reshape the MH invert with epoxy grout. Grout thickness shall be at least 1". Remove existing concrete as required.
- (G202.1) Boundary shows limits of demolition and removals. Any removals and replacements outside of the boundary shall be at the contractor's expense, unless specifically provided for otherwise.
- (G202.37) Remove concrete curb, gutter, sidewalks, driveways, pavement, and/or slabs to joints or dimensions where shown; otherwise, remove as required for construction. Sawcut as necessary.
- (G202.41) Remove asphalt pavement as shown.
- (G202.42) Removal of asphalt pavement within alleys for pipe-line work shall be paid for as part of the pipeline construction unit price.
- (202.53) Remove sanitary sewer.
- (203.2) Excavate and/or backfill as required for proposed improvements.
- (210.13) Reset manhole rim to finish grade.
- (212/213.4) Replace removed or damaged grass sod along the edge of proposed improvements.
- (212/213.5) Replace removed or damaged landscape rock on plastic along the edge of proposed improvements.
- (300/400.2) Construct 6" ABC and 3" single lift HMA pavement.
- (300/400.5) Construct ABC and HMA pavement patch. Match existing thickness unless noted otherwise.
- (608.31) Construct concrete driveway.

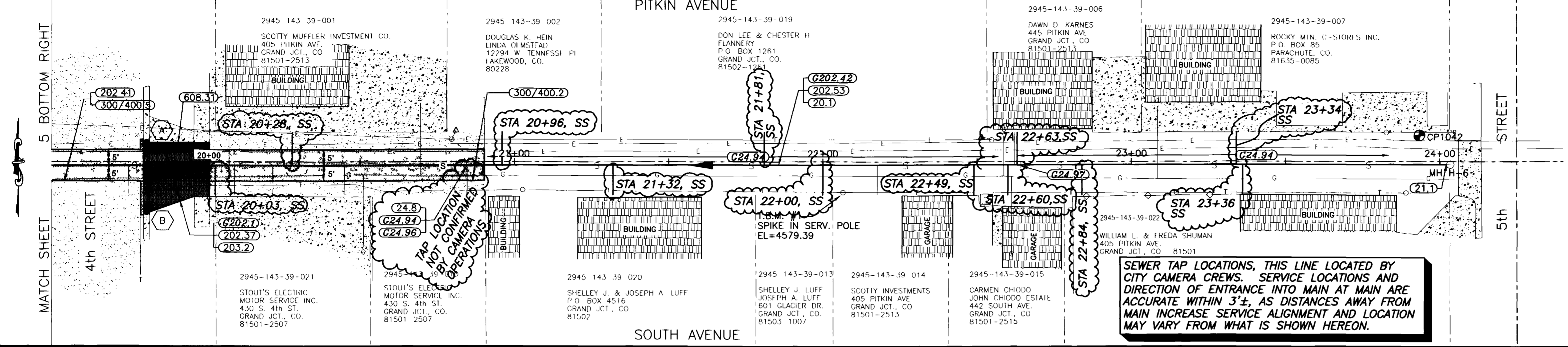


REVISION	DESCRIPTION	DATE
REVISION A	ASBUILT PER INSPECTORS PLANS	7-13-99
REVISION B		
REVISION C		



WILLIAMS ENGINEERING
 1231 19 ROAD, FRUITA, COLORADO 81521-9689
 (970) 858-1014 PHONE (970) 858-1007 FAX

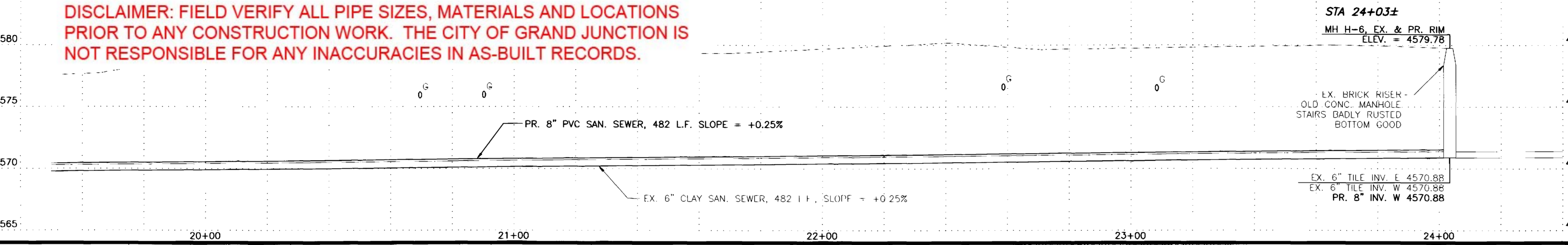
1996 SEWERLINE REPLACEMENTS
 COLLECTOR SEWERS
 2nd-3rd, South-Pitkin & 3rd-4th, South-Pitkin
 SHEET 5
 FILENAME 96SLR-5.DWG
 02092605.tif



SHADING AND TEXTURE LEGEND			
FACILITY OR SURFACE TREATMENT	EXISTING	PROPOSED	REMOVE & REPLACE
ASPHALT PAVEMENT	[Pattern]	[Pattern]	[Pattern]
CONCRETE (C, G, SW, SLABS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DWYs, RAMPS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DECORATIVE)	[Pattern]	[Pattern]	[Pattern]
CLASS 6 AGGREGATE GRAVEL	[Pattern]	[Pattern]	[Pattern]
LANDSCAPE ROCK ON PLASTIC	[Pattern]	[Pattern]	[Pattern]
GRASS SOD	[Pattern]	[Pattern]	[Pattern]
BUILDING	[Pattern]	[Pattern]	[Pattern]

COORDINATES (TOP PLAN)				
PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
CP6		10.48	1940.11	4578.74
CP1042		8.38	2393.30	4580.01
TBM #1		-9.71	2206.59	4580.56
MH H-6		-9.91	2402.47	--
A	EDGE OF DWY @ ?	6.23	1980.77	4578.01
B	EDGE OF DWY @ ?	-16.10	1980.80	4577.88

DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.

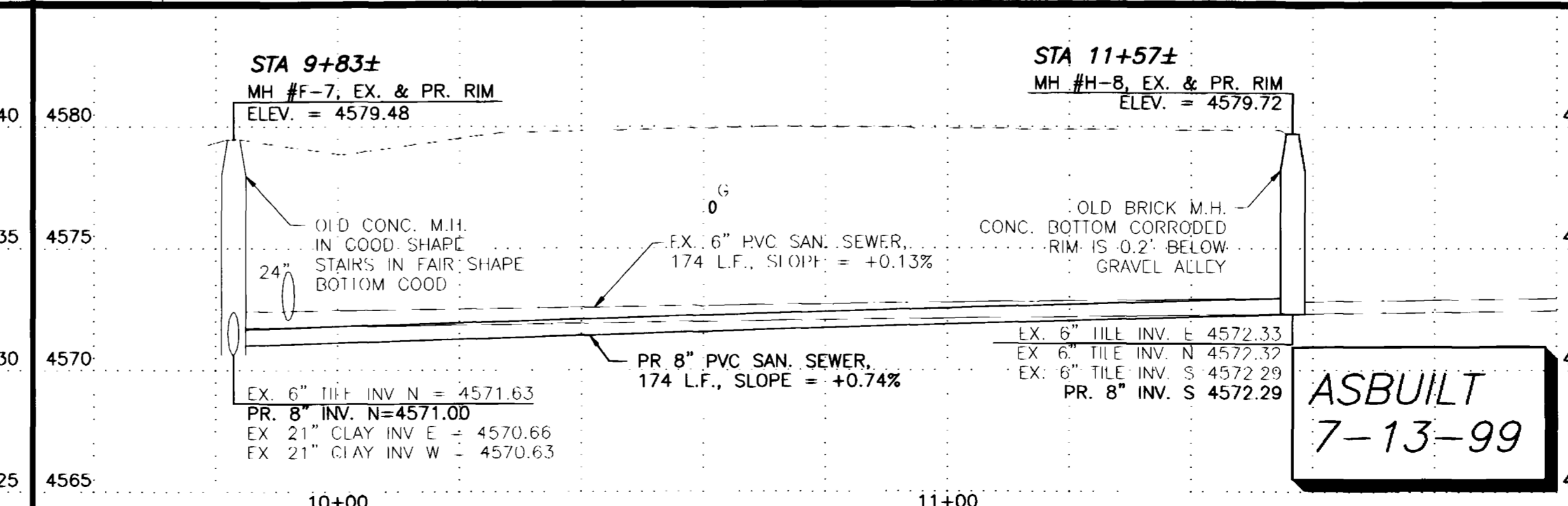
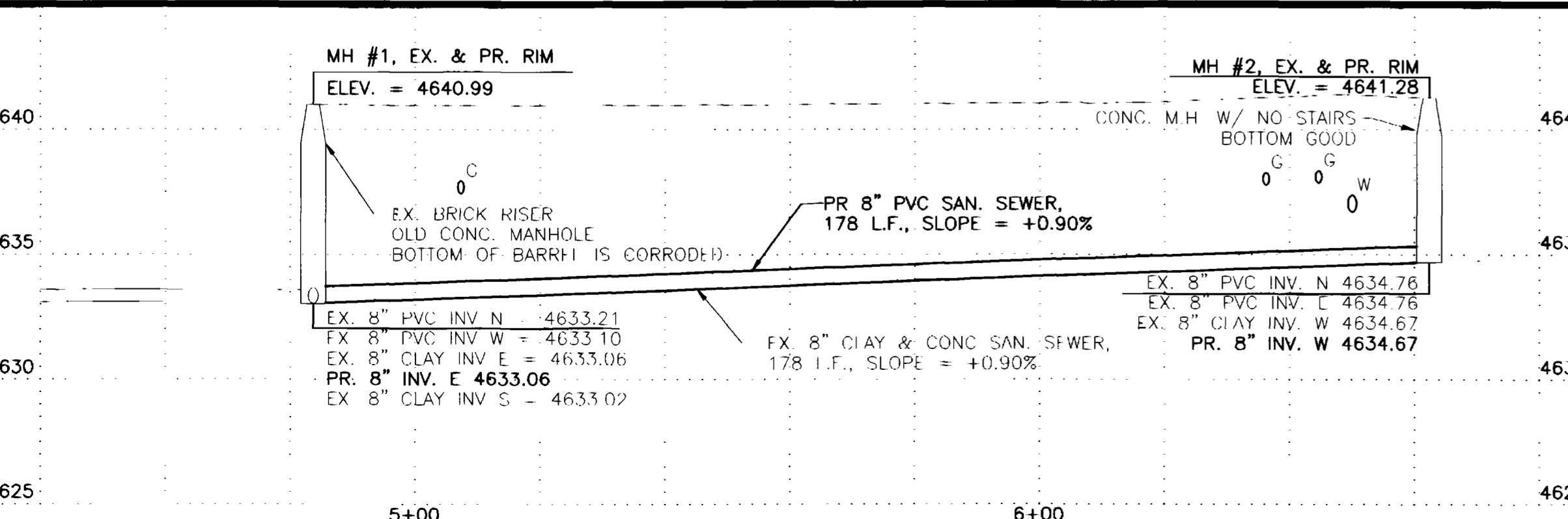
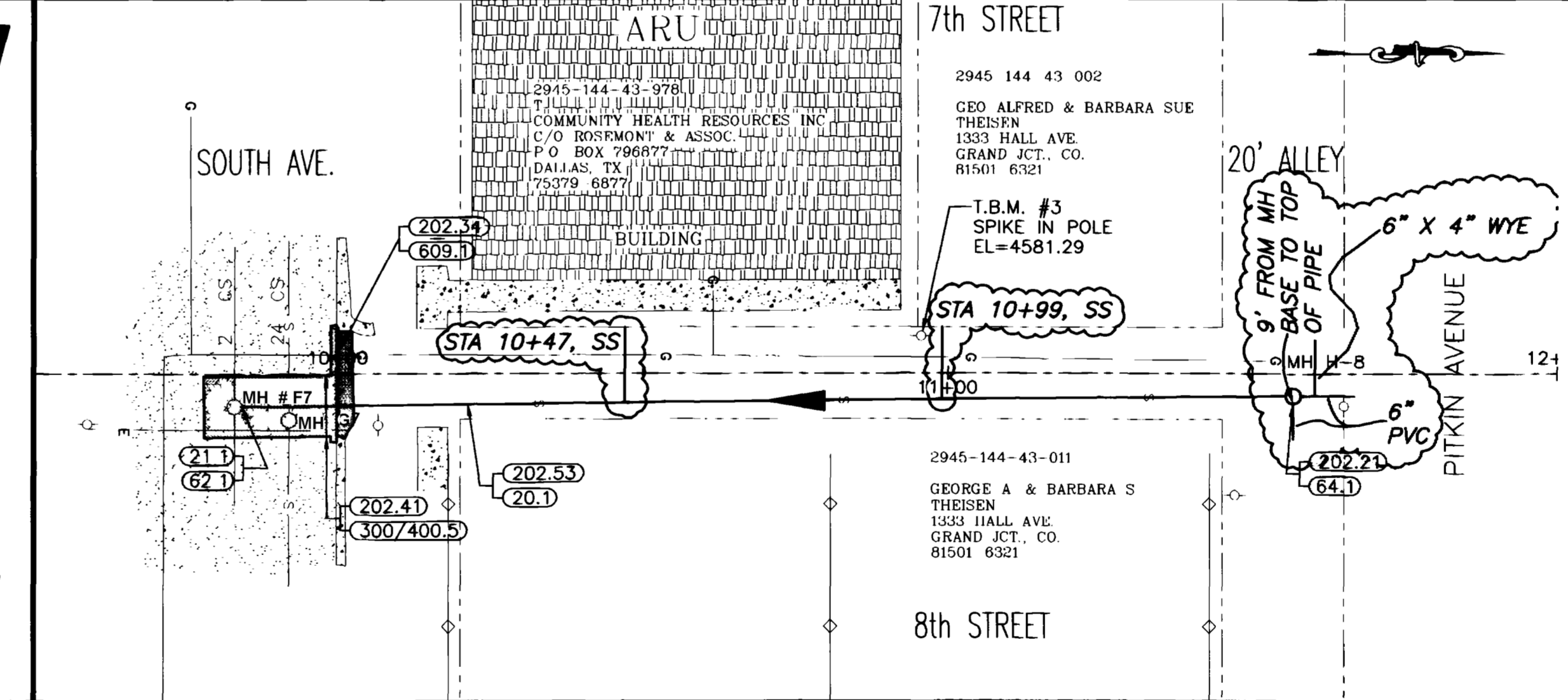
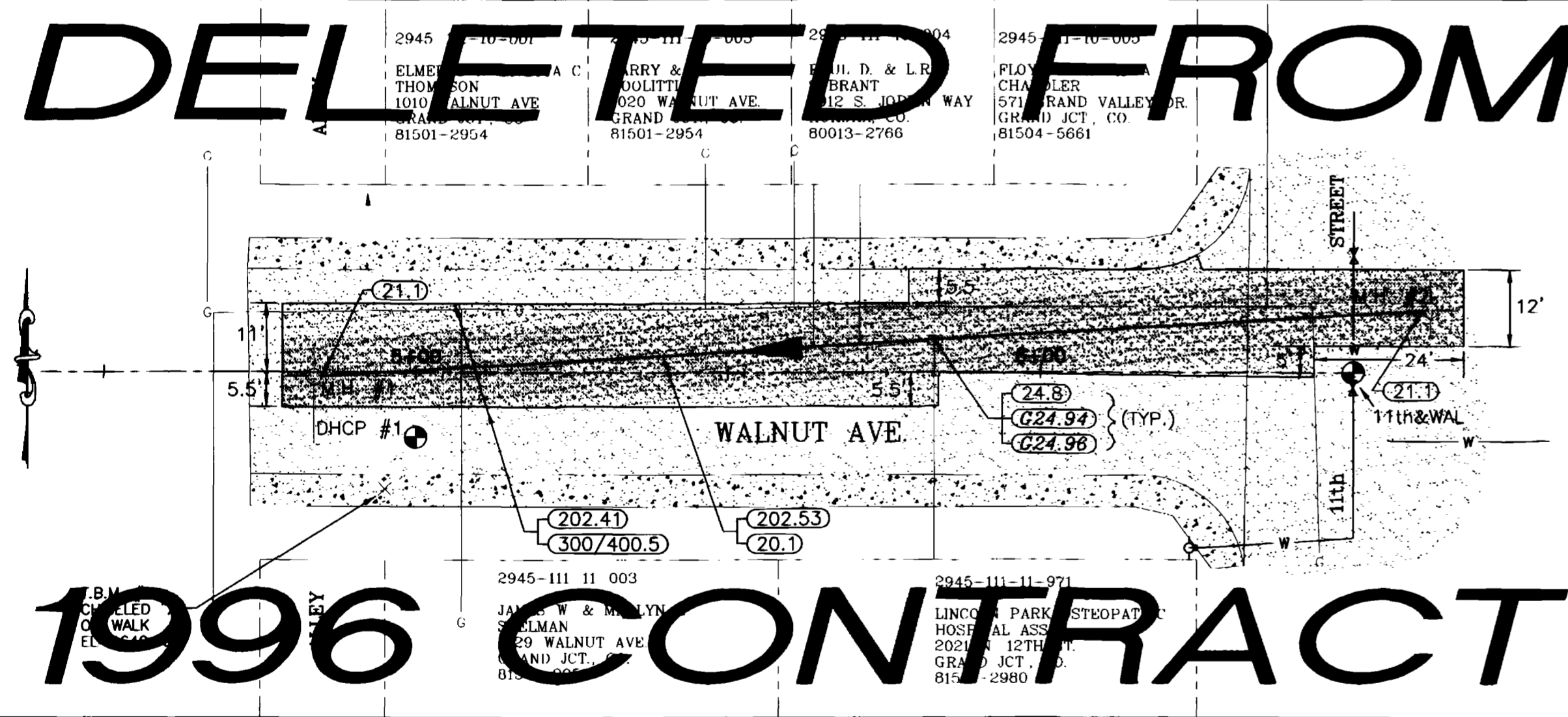


COORDINATES (BOTTOM LEFT)				
PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
10th & WALNUT		0.0	320.00	4640.78
11th & WALNUT		0.0	650.00	4641.51
TBM #2		-18.62	495.11	4640.69
DHCP #1		-10.37	500.00	4640.00
MH #1		-0.68	483.70	--
MH #2		9.95	662.37	--

COORDINATES (BOTTOM RIGHT)				
PT.	DESCRIPTION	NORTHING (STATIONING)	EASTING (0.0 = ?)	ELEVATION
8th & SOUTH CP2		1000.00		--
7th & SOUTH CP57		1000.00	-218.08	4578.42
TBM #3		1095.54	-6.10	4581.29
MH #F-7		983.00	5.42	--
MH #H-8		1156.67	3.67	--

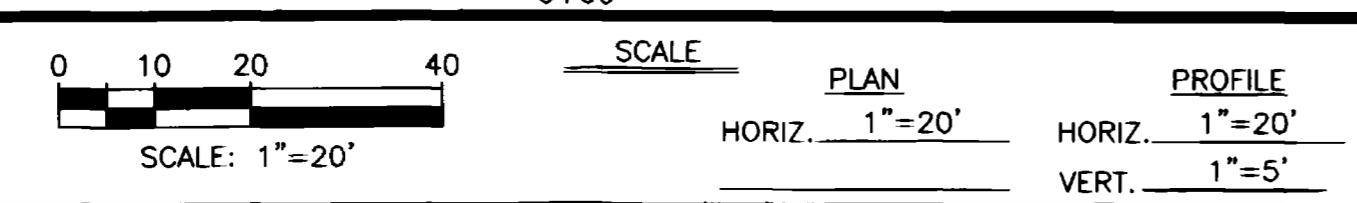
CONSTRUCTION NOTES

- (20.1) Construct 8" SDR 35 PVC sanitary sewer.
- (21.1) Connect the proposed sewerline to the existing MH, and grout seal around pipe.
- (24.B) Install full body wye sewer tap and connect to all active existing sewer services.
- (24.94) Not all sewer services may be shown. The Contractor shall locate all active services and provide as-constructed locations for all taps.
- (24.96) Use of dye is effective in locating active sewer taps. If in doubt as to whether a tap is active or not, replace and reconnect.
- (24.97) The existing sewer service enters the top of the pipe. In-coming direction is unknown.
- (62.1) Reshape the MH invert with epoxy grout. Grout thickness shall be at least 1". Remove existing concrete as required.
- (64.1) Construct standard 1.219m dia. MH.
- (202.1) Boundary shows limits of demolition and removals. Any removals and replacements outside of the boundary shall be at the contractor's expense, unless specifically provided for otherwise.
- (202.21) Remove manhole.
- (202.34) Remove concrete valley gutter to joints or dimensions where shown; otherwise, remove as required for construction. Sawcut where necessary.
- (202.37) Remove concrete curb, gutter, sidewalks, driveways, pavement, and/or slabs to joints or dimensions where shown; otherwise, remove as required for construction. Sawcut as necessary.
- (202.41) Remove asphalt pavement as shown.
- (202.42) Removal of asphalt pavement within alleys for pipeline work shall be paid for as part of the pipeline construction unit price.
- (202.53) Remove sanitary sewer.
- (203.2) Excavate and/or backfill as required for proposed improvements.
- (300/400.2) Construct 6" ABC and 3" single lift HMA pavement.
- (300/400.5) Construct ABC and HMA pavement patch. Match existing thickness unless noted otherwise.
- (304.4) Construct aggregate surface course.
- (608.31) Construct concrete driveway.
- (609.1) Construct concrete valley pan gutter.



ASBUILT 7-13-99

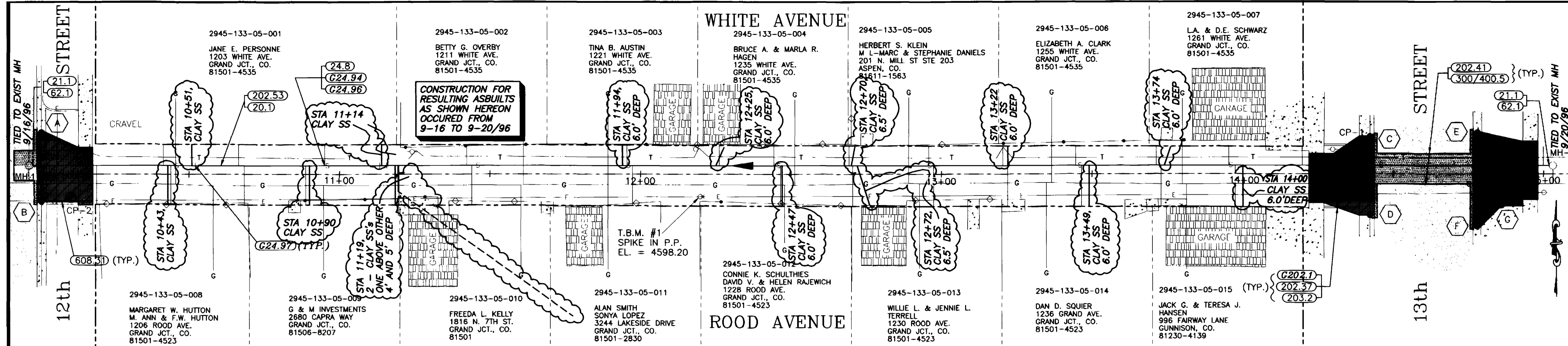
REVISION	DESCRIPTION	DATE
REVISION A	ASBUILT PER INSPECTORS PLANS	7-13-99
REVISION B		
REVISION C		



WILLIAMS ENGINEERING
 1231 19 ROAD, FRUITA, COLORADO 81521-9689
 (970) 858-1014 PHONE (970) 858-1007 FAX

1996 SEWERLINE REPLACEMENTS
 COLLECTOR SEWERS
 4th-5th, South-Pitkin, Walnut & 11th, ARU Alley

SHEET 6
 FILENAME 96SLR-6.DWG
 02092606.tif

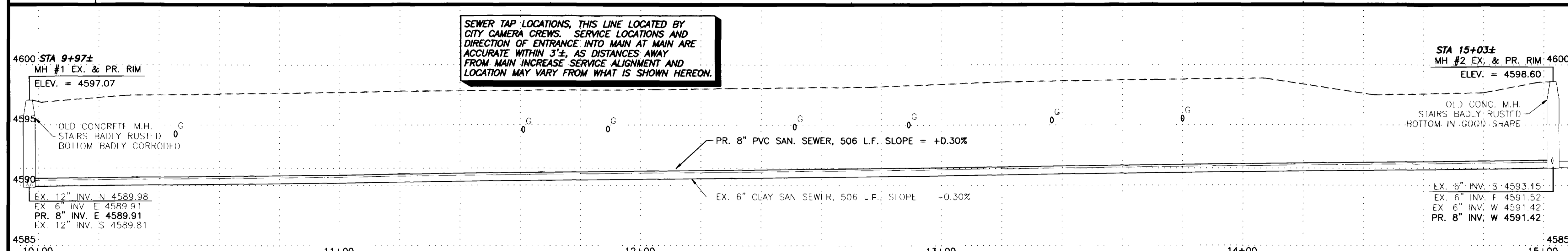


SHADING AND TEXTURE LEGEND

FACILITY OR SURFACE TREATMENT	EXISTING	PROPOSED	REMOVE & REPLACE
ASPHALT PAVEMENT	[Pattern]	[Pattern]	[Pattern]
CONCRETE (C, G, SW, SLABS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DWYs, RAMPS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DECORATIVE)	[Pattern]	[Pattern]	[Pattern]
CLASS 6 AGGREGATE GRAVEL	[Pattern]	[Pattern]	[Pattern]
LANDSCAPE ROCK ON PLASTIC	[Pattern]	[Pattern]	[Pattern]
GRASS SOD	[Pattern]	[Pattern]	[Pattern]
BUILDING	[Pattern]	[Pattern]	[Pattern]

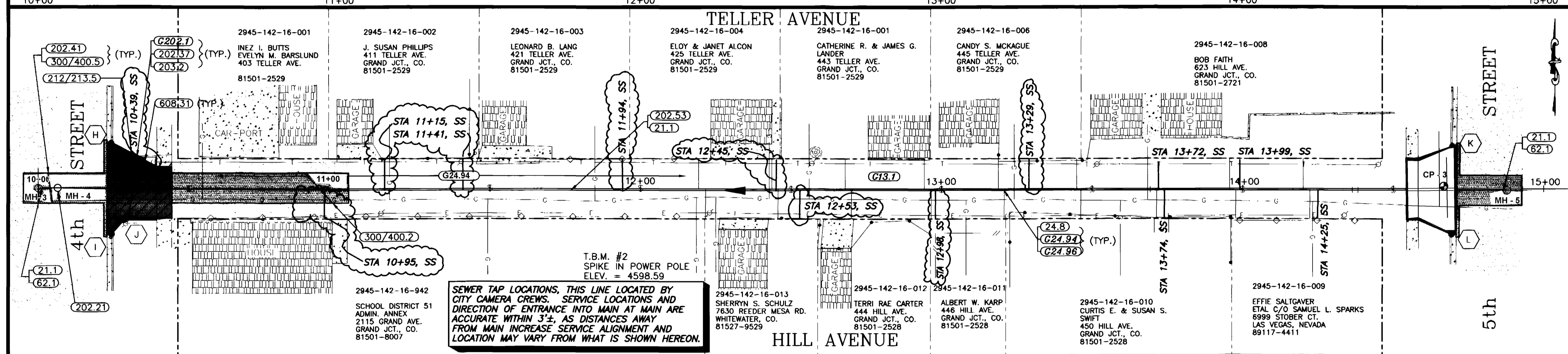
COORDINATES (TOP PLAN)

PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
CP-1	EDGE OF DWY @ ?	6.34	1438.42	4597.84
CP-2	EDGE OF DWY @ ?	-7.73	1010.71	4597.15
MH-1	EDGE OF DWY @ ?	2.87	996.93	--
MH-2	EDGE OF DWY @ ?	2.73	1503.07	--
TBM #1	EDGE OF DWY @ ?	-7.41	1219.81	4598.20
A	EDGE OF DWY @ ?	13.88	1000.96	4597.26
B	EDGE OF DWY @ ?	-9.13	1000.97	4596.80
C	EDGE OF DWY @ ?	12.40	1442.21	4598.40
D	EDGE OF DWY @ ?	-13.61	1442.28	4598.57
E	EDGE OF DWY @ ?	13.74	1447.98	4597.58
F	EDGE OF DWY @ ?	-17.26	1477.94	4598.45
G	EDGE OF DWY @ ?	-10.26	1486.06	4598.33



COORDINATES (BOTTOM PLAN)

PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
CP-3	EDGE OF DWY @ ?	0.00	1000.00	0.0
MH-3	EDGE OF DWY @ ?	0.17	1000.00	--
MH-4 (REMOVE)	EDGE OF DWY @ ?	0.24	1006.46	--
MH-5	EDGE OF DWY @ ?	-0.50	1020.36	--
TBM #2	EDGE OF DWY @ ?	-7.94	1222.97	4598.59
H	EDGE OF DWY @ ?	15.12	1024.19	4595.27
I	EDGE OF DWY @ ?	-15.05	1024.33	4595.27
J	EDGE OF DWY @ ?	-10.40	1028.52	4595.27
K	EDGE OF DWY @ ?	14.18	1469.73	4597.38
L	EDGE OF DWY @ ?	-15.05	1469.41	4597.73



CONSTRUCTION NOTES

(G13.1) This alley may have asphalt pavement, the removal of which is unclassified, and shall be paid for under the applicable Bid Schedule item.

(20.1) Construct 8" SDR 35 PVC sanitary sewer.

(21.1) Connect the proposed sewerline to the existing MH, and grout seal around pipe.

(24.8) Install full body wye sewer tap and connect to all active existing sewer services.

(G24.94) Not all sewer services may be shown. The Contractor shall locate all active services and provide as-constructed locations for all taps.

(G24.96) Use of dye is effective in locating active sewer taps. If in doubt as to whether a tap is active or not, replace and reconnect.

(G24.97) The existing sewer service enters the top of the pipe. In-coming direction is unknown.

(62.1) Reshape the MH invert with epoxy grout. Grout thickness shall be at least 1". Remove existing concrete as required.

(G20.2.1) Boundary shows limits of demolition and removals. Any removals and replacements outside of the boundary shall be at the contractor's expense, unless specifically provided for otherwise.

(202.21) Remove manhole.

(202.37) Remove concrete curb, gutter, sidewalks, driveways, pavement, and/or slabs to joints or dimensions where shown; otherwise, remove, as required for construction. Sawcut as necessary.

(202.41) Remove asphalt pavement as shown.

(202.53) Remove sanitary sewer.

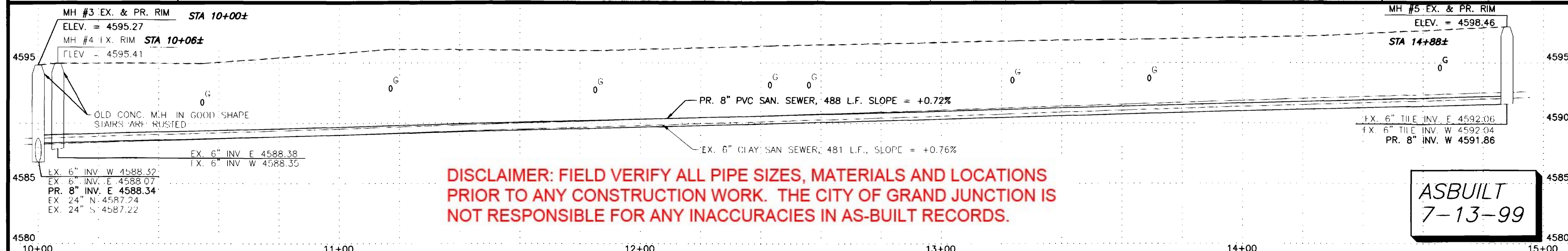
(203.2) Excavate and/or backfill as required for proposed improvements.

(212/213.5) Replace removed or damaged decorative rock along the edge of proposed improvements.

(300/400.2) Construct 6" ABC and 3" single lift HMA pavement.

(300/400.5) Construct ABC and HMA pavement patch. Match existing thickness unless noted otherwise.

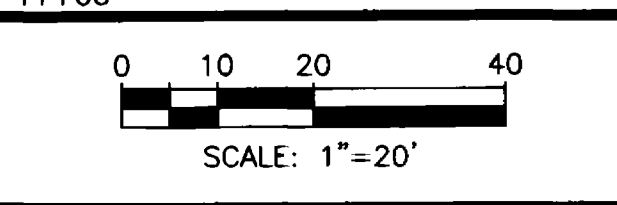
(608.31) Construct concrete driveway.



DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.

**ASBUILT
7-13-99**

REVISION	DESCRIPTION	DATE
1	ASBUILT PER INSPECTORS PLANS	7-13-99

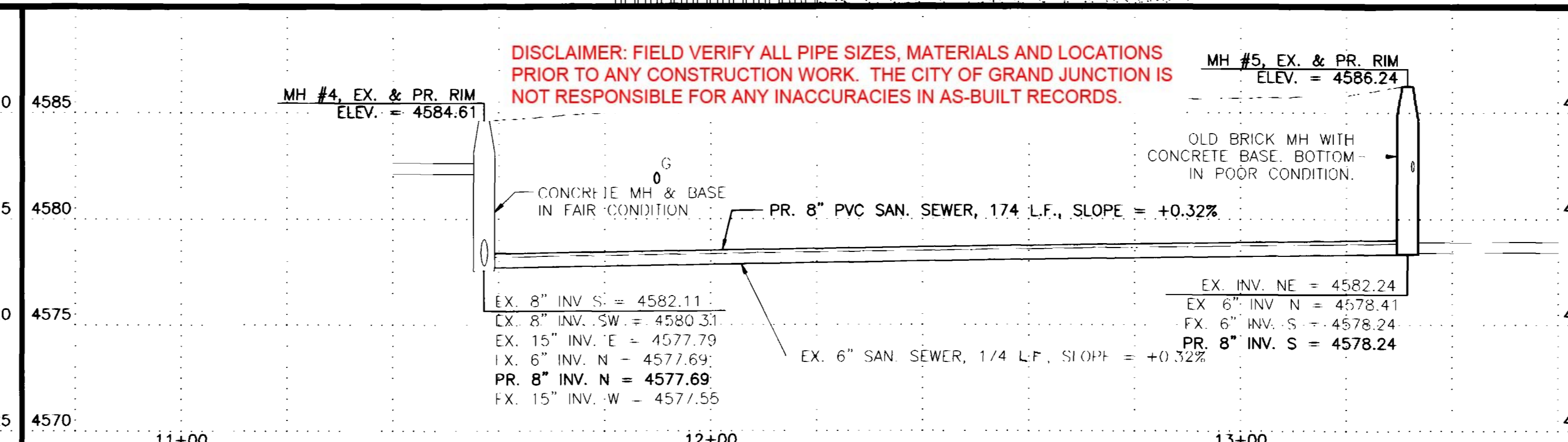
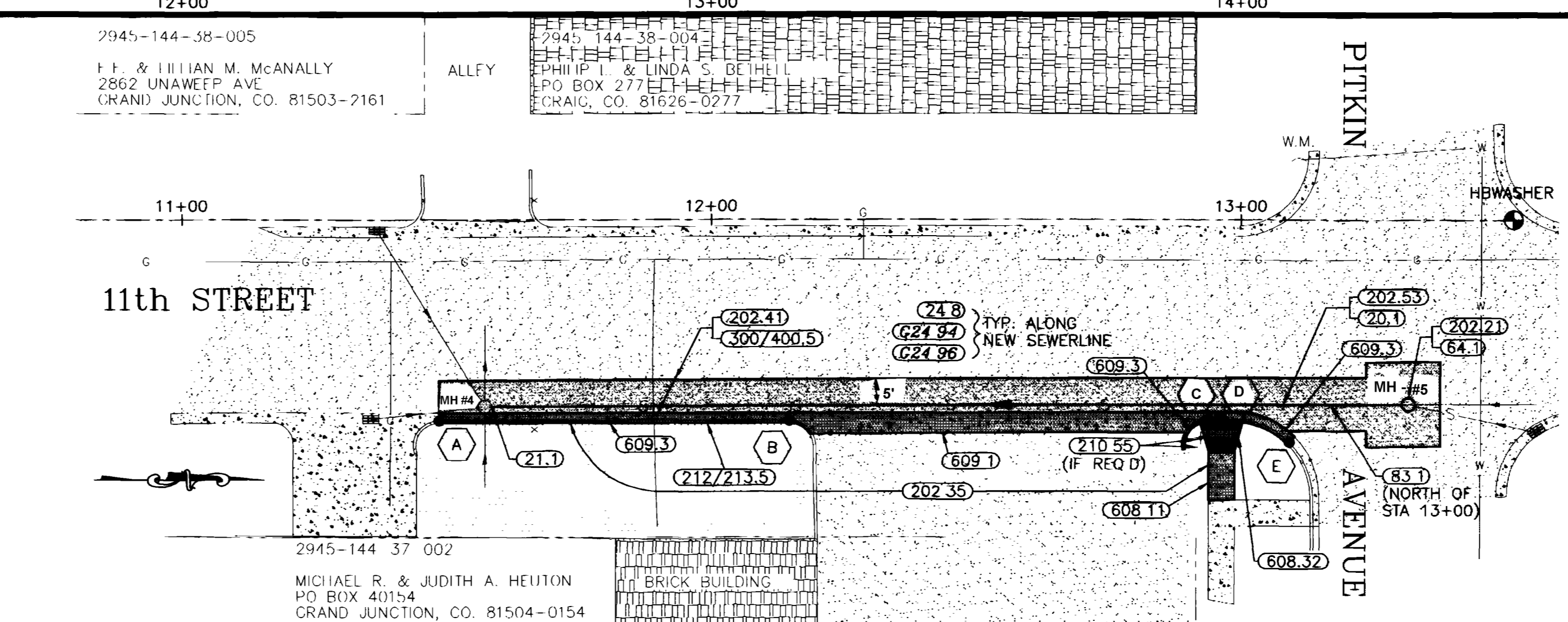
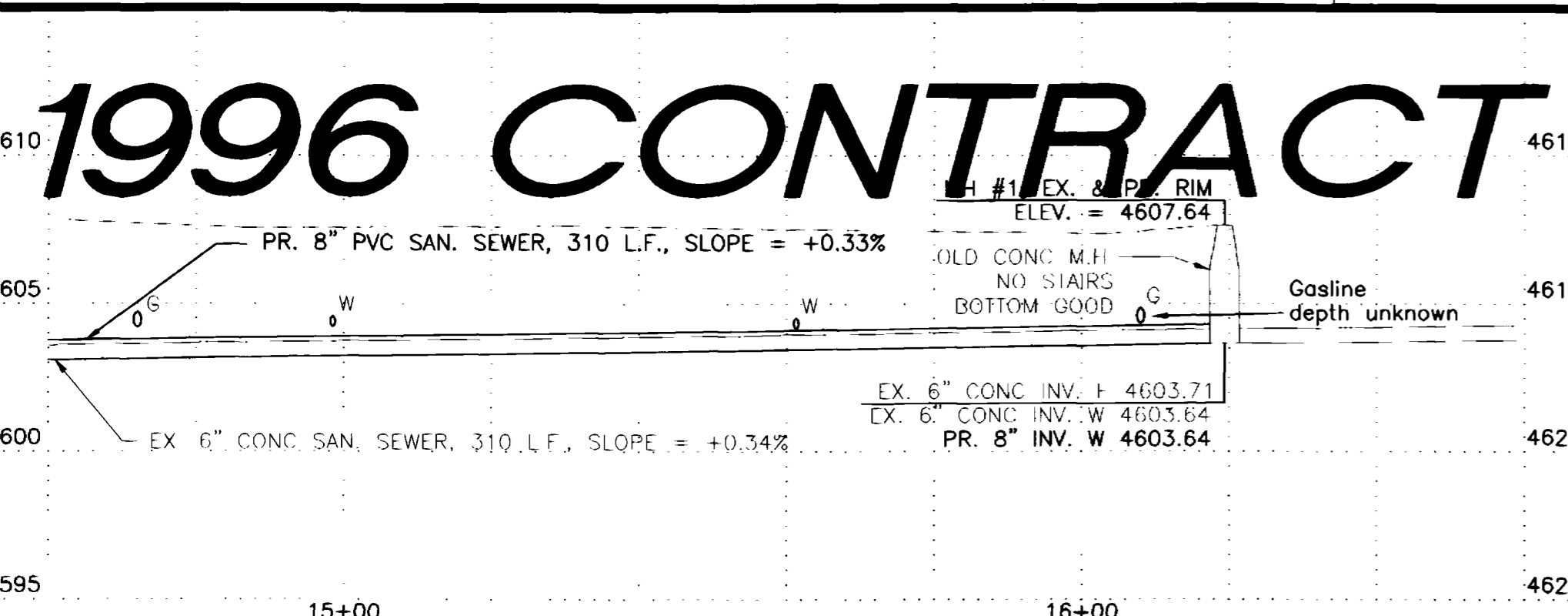
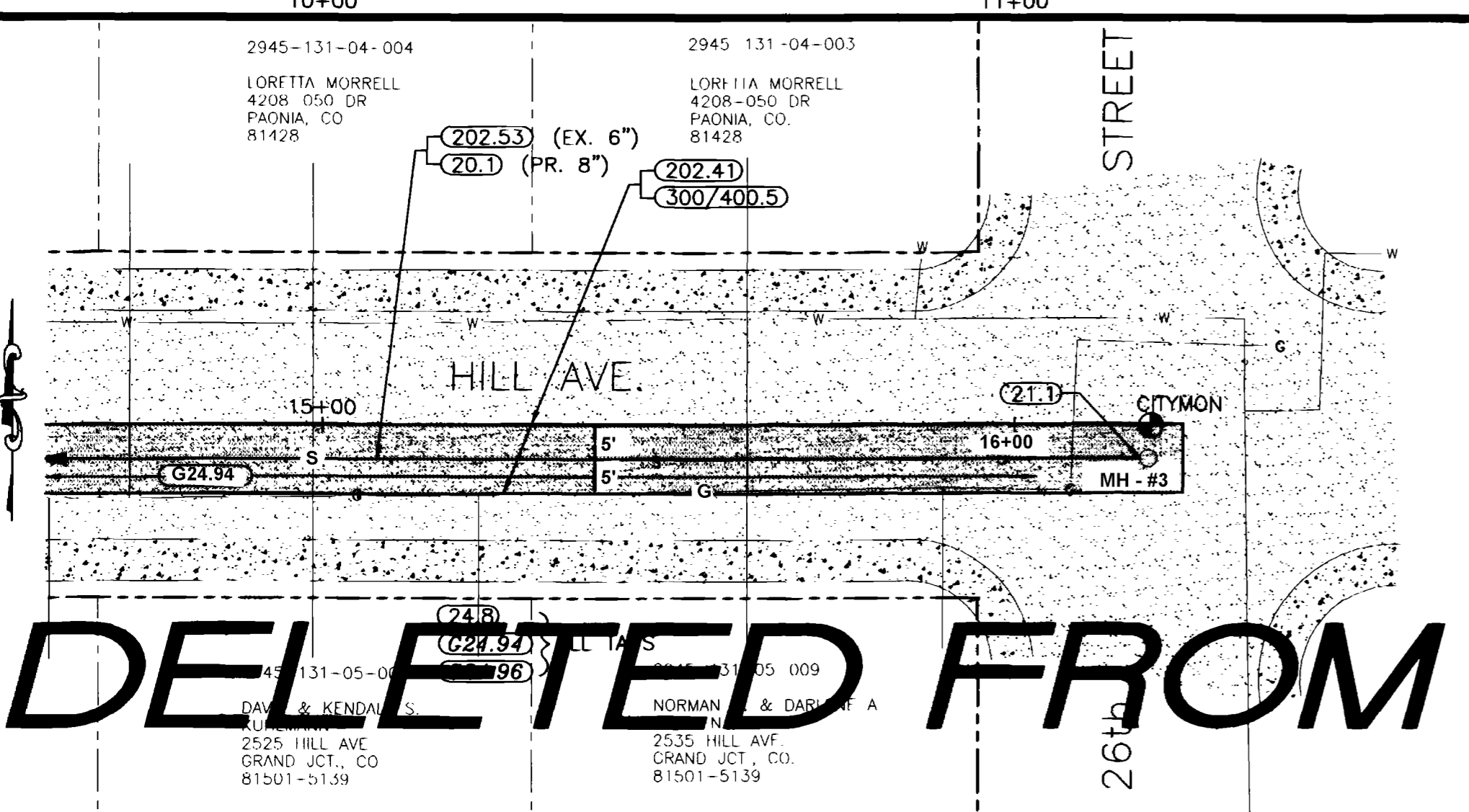
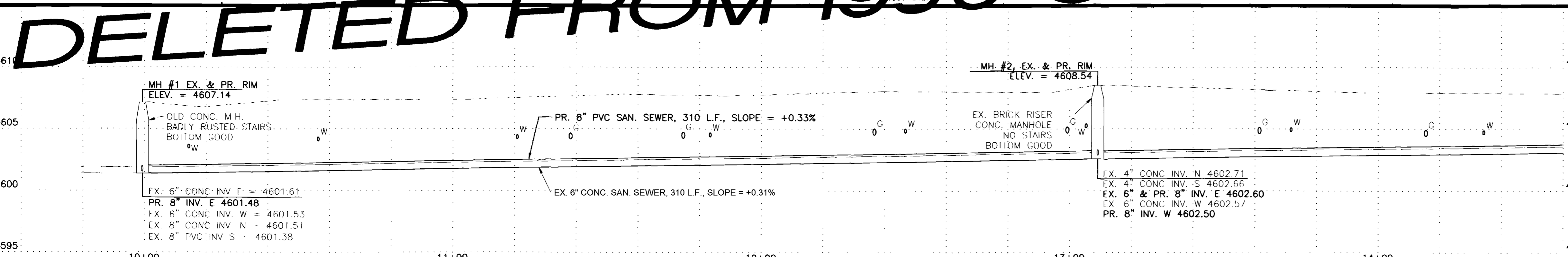
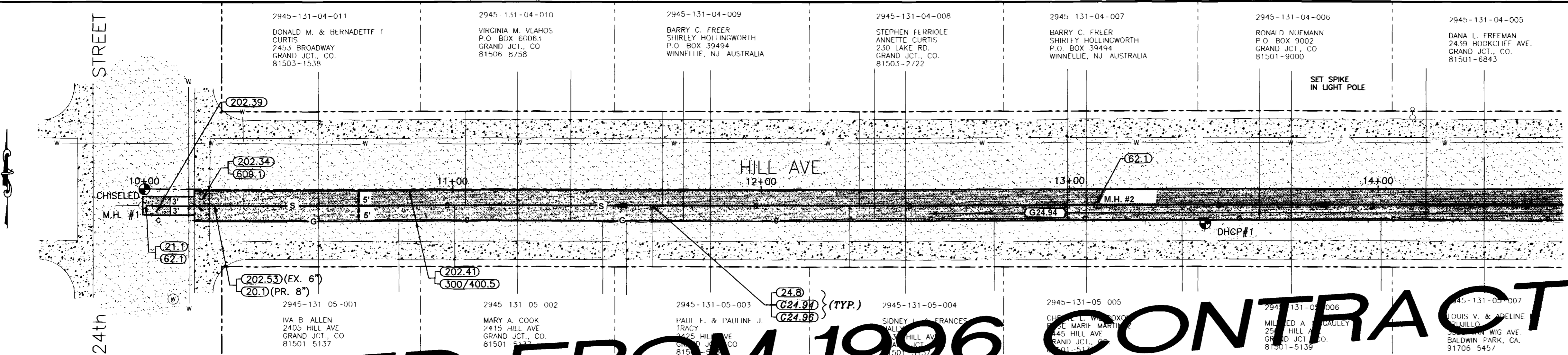


SCALE	PLAN	PROFILE
HORIZ. 1"=20'	HORIZ. 1"=20'	VERT. 1"=5'

WILLIAMS ENGINEERING
 1231 19 ROAD, FRUITA, COLORADO 81521-9689
 (970) 858-1014 PHONE (970) 858-1007 FAX

1996 SEWERLINE REPLACEMENTS
 COLLECTOR SEWERS
 12th-13th, White-Rood & 4th-5th, Hill-Teller

SHEET 7
FILENAME 96SLR-7.DWG



SHADING AND TEXTURE LEGEND

FACILITY OR SURFACE TREATMENT	EXISTING	PROPOSED	REMOVE & REPLACE
ASPHALT PAVEMENT	[Pattern]	[Pattern]	[Pattern]
CONCRETE (C, G, SW, SLABS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DWYS, RAMPS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DECORATIVE)	[Pattern]	[Pattern]	[Pattern]
CLASS 6 AGGREGATE GRAVEL	[Pattern]	[Pattern]	[Pattern]
LANDSCAPE ROCK ON PLASTIC	[Pattern]	[Pattern]	[Pattern]
GRASS SOD	[Pattern]	[Pattern]	[Pattern]
BUILDING	[Pattern]	[Pattern]	[Pattern]

COORDINATES (TOP PLAN)

PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
	CHISELED	0.0	1000.00	4608.22
	DHCP#1	-11.05	1343.93	4608.22
	SPIKE	23.04	1411.12	4608.07
	MH-1	-5.30	999.34	---
	MH-2	-5.16	1309.12	---

COORDINATES (BOTTOM LEFT)

PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
	CITYMON	0.0	1619.73	4607.47
	MH-3	-4.77	1619.35	---

COORDINATES (BOTTOM RIGHT)

PT.	DESCRIPTION	NORTHING (STATIONING)	EASTING (0.0 = ?)	ELEVATION
	"X" INROC	1000.00	0.0	4584.49
	HWASHER	1351.46	0.0	4585.62
	MH-4	1157.27	-35.28	---
	MH-5	1331.57	-34.78	---
	A ? AT CURB RETURN	1148.63	37.86	4584.47
	B ? AT CURB RETURN	1214.68	37.91	4585.12
	C ? AT CURB RETURN	1293.76	37.66	4583.91
	D ? AT ? RAMP	1296.24	37.64	4583.93
	E ? AT ? CURB RET.	1309.06	41.94	4585.26

CONSTRUCTION NOTES

- (20.1) Construct 8" SDR 35 PVC sanitary sewer.
- (21.1) Connect the proposed sewerline to the existing MH, and grout seal around pipe.
- (24.8) Install full body wye sewer tap and connect to all active existing sewer services.
- (G24.94) Not all sewer services may be shown. The Contractor shall locate all active services and provide as-constructed locations for all taps.
- (G24.96) Use of dye is effective in locating active sewer taps. If in doubt as to whether a tap is active or not, replace and reconnect.
- (62.1) Reshape the MH invert with epoxy grout. Grout thickness shall be at least 1". Remove existing concrete as required.
- (64.1) Construct standard 4' dia. MH.
- (83.1) Provide flowable fill backfill.
- (202.21) Remove manhole.
- (202.34) Remove concrete valley gutter to joints or dimensions shown; otherwise, remove as required for construction. Sawcut where necessary.
- (202.35) Remove all concrete curb, gutter, sidewalk, driveway, and/or slabs as shown. Sawcut where necessary.
- (212/213.5) Replace removed or damaged landscape rock on plastic along the edge of proposed improvements.
- (202.39) Sawcut, remove and replace concrete pavement, including doweling, to dimensions shown. Construct 8" thick Portland Cement concrete pavement patch. Smooth steel dowels (1" dia. x 15") shall be placed at 12" centers and located in center of thickness on North and South sides of patch only.
- (202.41) Remove asphalt pavement as shown.
- (202.53) Remove sanitary sewer.
- (210.55) Relocate traffic sign.
- (300/400.5) Construct ABC and HMA pavement patch. Match existing thickness unless noted otherwise.
- (608.11) Construct concrete sidewalk.
- (608.32) Construct concrete disabled pedestrian ramp.
- (609.1) Construct concrete valley pan gutter.
- (609.3) Construct concrete curb and gutter.

DELETED FROM 1996 CONTRACT

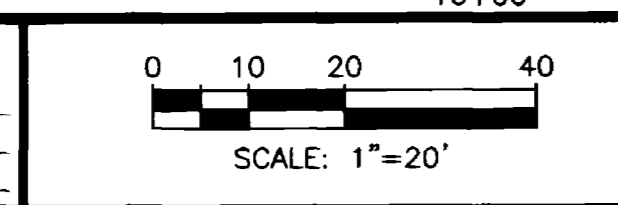
DELETED FROM 1996 CONTRACT

1996 CONTRACT

DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.

ASBUILT
7-13-99

REVISION	DESCRIPTION	DATE
REVISION A	ASBUILT PER INSPECTORS PLANS	7-13-99
REVISION B		
REVISION C		

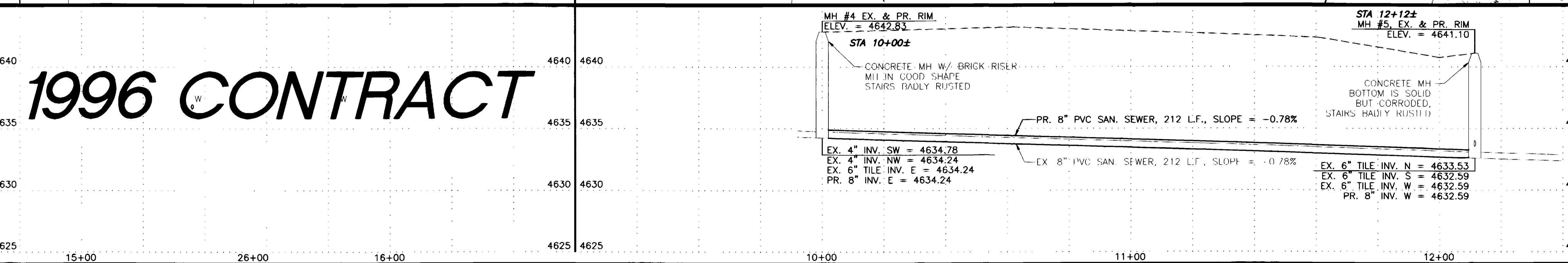
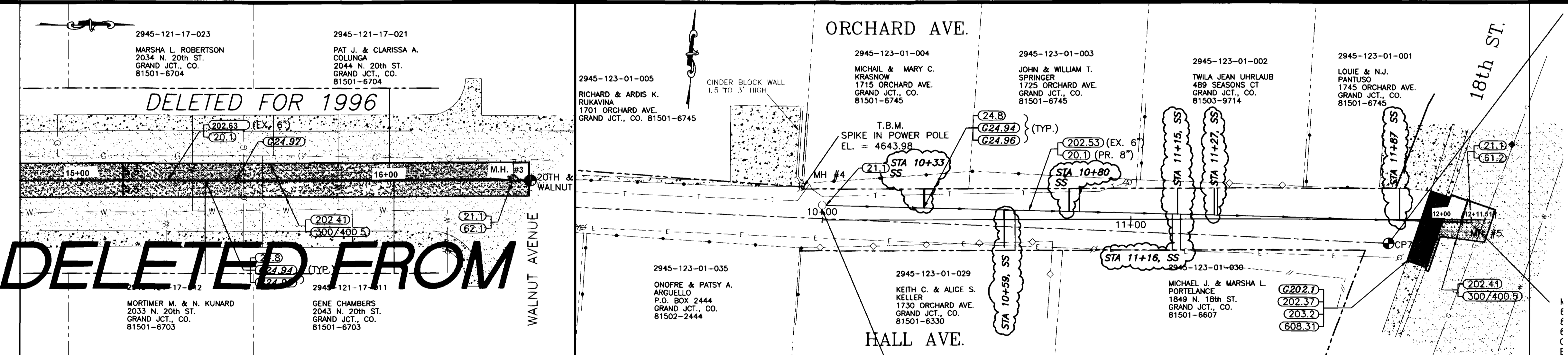
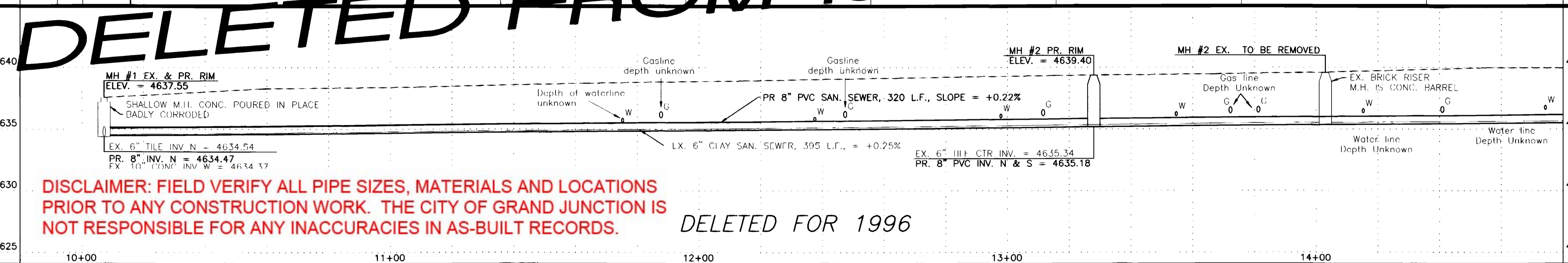
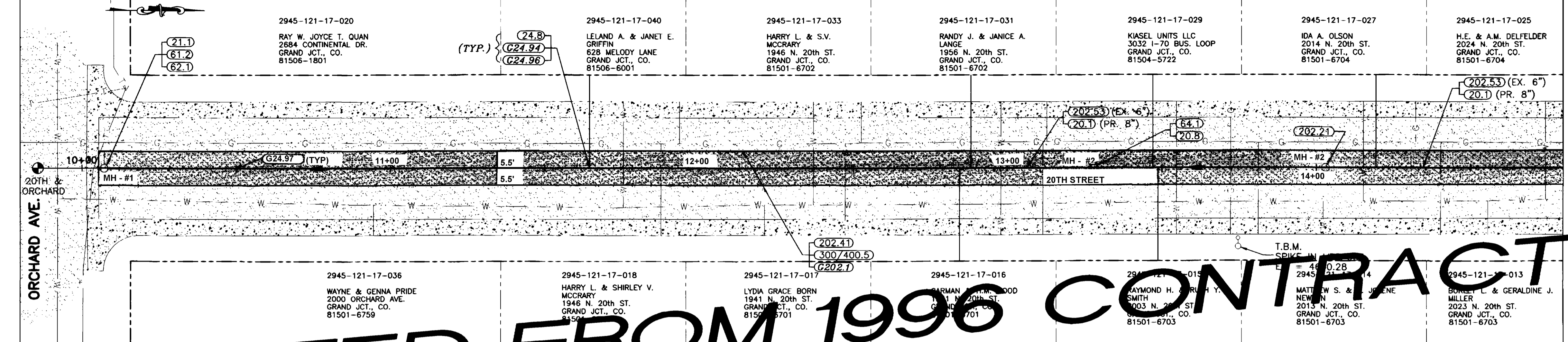


SCALE	PLAN	PROFILE
	HORIZ. 1"=20'	HORIZ. 1"=20'
		VERT. 1"=5'

WILLIAMS ENGINEERING
1231 19 ROAD, FRUITA, COLORADO 81521-9689
(970) 858-1014 PHONE (970) 858-1007 FAX

1996 SEWERLINE REPLACEMENTS
COLLECTOR SEWERS
24th-26th, Hill Ave. & 11th, Pitkin Ave. - Alley

SHEET 8
FILENAME 96SLR-8.DWG



SHADING AND TEXTURE LEGEND

FACILITY OR SURFACE TREATMENT	EXISTING	PROPOSED	REMOVE & REPLACE
ASPHALT PAVEMENT	[Pattern]	[Pattern]	[Pattern]
CONCRETE (C, G, SW, SLABS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DWYS, RAMPS)	[Pattern]	[Pattern]	[Pattern]
CONCRETE (DECORATIVE)	[Pattern]	[Pattern]	[Pattern]
CLASS 6 AGGREGATE GRAVEL	[Pattern]	[Pattern]	[Pattern]
LANDSCAPE ROCK ON PLASTIC	[Pattern]	[Pattern]	[Pattern]
GRASS SOD	[Pattern]	[Pattern]	[Pattern]
BUILDING	[Pattern]	[Pattern]	[Pattern]

COORDINATES (TOP & BOTTOM LEFT PLAN)

PT.	DESCRIPTION	NORTHING (STATIONING)	EASTING (0.0 = ?)	ELEVATION
	20th & ORCHARD	985.73	0.00	4640.40
	20th & WALNUT	1645.56	0.00	4640.40
	TBM LITEPOLE	1374.63	25.44	4640.28
	MH-1	1007.20	0.14	--
	MH-2	1402.94	-0.01	--
	MH-3	1640.00	-0.43	--

COORDINATES (BOTTOM RIGHT PLAN)

PT.	DESCRIPTION	NORTHING (0.0 = ?)	EASTING (STATIONING)	ELEVATION
	CP-2	107.98	1271.52	--
	CP-7	-7.81	1183.43	4641.51
	CP 68	12.75	724.03	4639.90
	TBM #2	10.33	993.37	4643.98
	MH-4	4.75	1000.00	--
	MH-5	-1.02	1211.43	--

- ### CONSTRUCTION NOTES
- (20.1) Construct 8" SDR 35 PVC sanitary sewer.
 - (20.8) Construct sewerline through new manhole, cut out top of pipe, form bottom of manhole around new pipe.
 - (21.1) Connect the proposed sewerline to the existing MH, and grout seal around pipe.
 - (24.8) Install full body wye sewer tap and connect to all active existing sewer services.
 - (24.94) Not all sewer services may be shown. The Contractor shall locate all active services and provide as-constructed locations for all taps.
 - (24.96) Use of dye is effective in locating active sewer taps. If in doubt as to whether a tap is active or not, replace and reconnect.
 - (24.97) The existing sewer service enters the top of the pipe. In-coming direction is unknown.
 - (61.2) Provide MH corrosion protection per Special Provisions.
 - (62.1) Reshape the MH invert with epoxy grout. Grout thickness shall be at least 1". Remove existing concrete as required.
 - (64.1) Construct standard 4' dia. MH.
 - (202.21) Remove manhole.
 - (G202.1) Boundary shows limits of demolition and removals. Any removals and replacements outside of the boundary shall be at the contractor's expense, unless specifically provided for otherwise.
 - (202.37) Remove concrete curb, gutter, sidewalks, driveways, pavement, and/or slabs to joints or dimensions where shown; otherwise, remove as required for construction. Sawcut as necessary.
 - (202.41) Remove asphalt pavement as shown.
 - (202.53) Remove sanitary sewer.
 - (203.2) Excavate and/or backfill as required for proposed improvements.
 - (300/400.5) Construct ABC and HMA pavement patch. Match existing thickness unless noted otherwise.
 - (608.31) Construct concrete driveway.

DISCLAIMER: FIELD VERIFY ALL PIPE SIZES, MATERIALS AND LOCATIONS PRIOR TO ANY CONSTRUCTION WORK. THE CITY OF GRAND JUNCTION IS NOT RESPONSIBLE FOR ANY INACCURACIES IN AS-BUILT RECORDS.

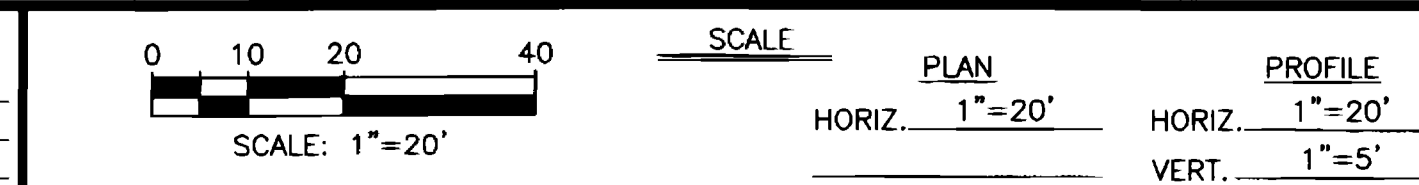
DELETED FROM 1996 CONTRACT

DELETED FROM 1996 CONTRACT

1996 CONTRACT

**ASBUILT
7-13-99**

REVISION	DESCRIPTION	DATE
REVISION A	ASBUILT PER INSPECTORS PLANS	7-13-99
REVISION B		
REVISION C		



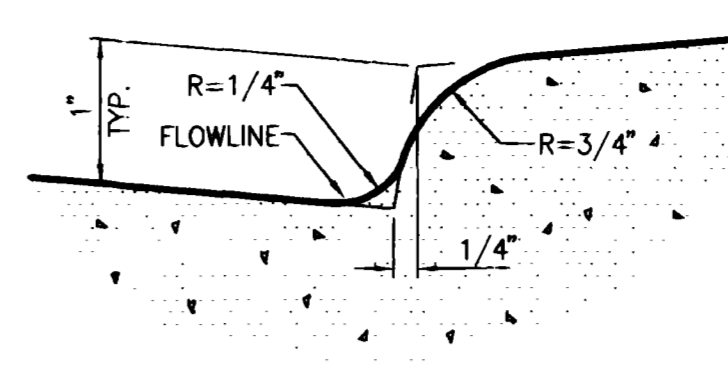
WILLIAMS ENGINEERING
 1231 19 ROAD, FRUITA, COLORADO 81521-9689
 (970) 858-1014 PHONE (970) 858-1007 FAX

**1996 SEWERLINE REPLACEMENTS
 COLLECTOR SEWERS**
 20th, Orchard-Walnut & 18th, Hall-Orchard

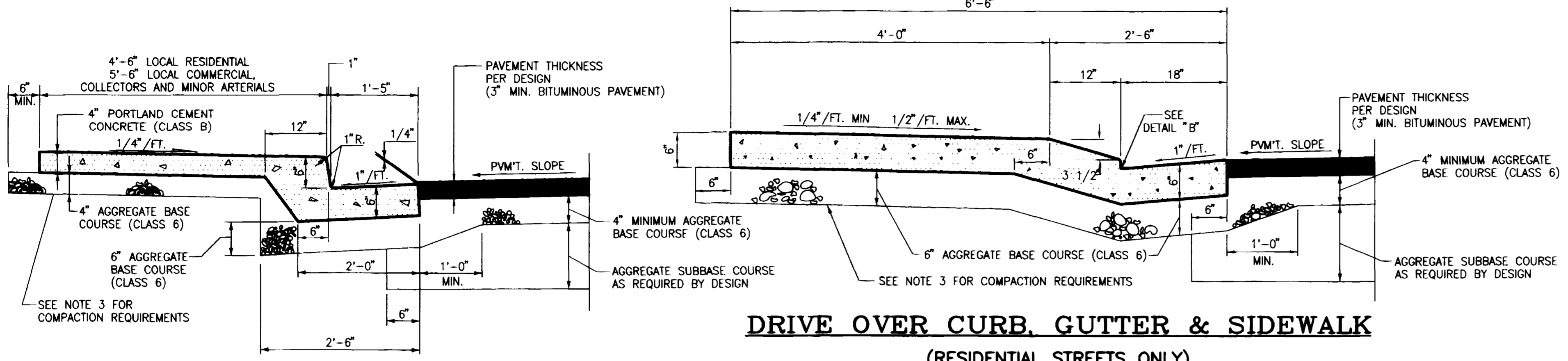
SHEET 9
 FILENAME
 96SLR-9A.DWG

GENERAL NOTES

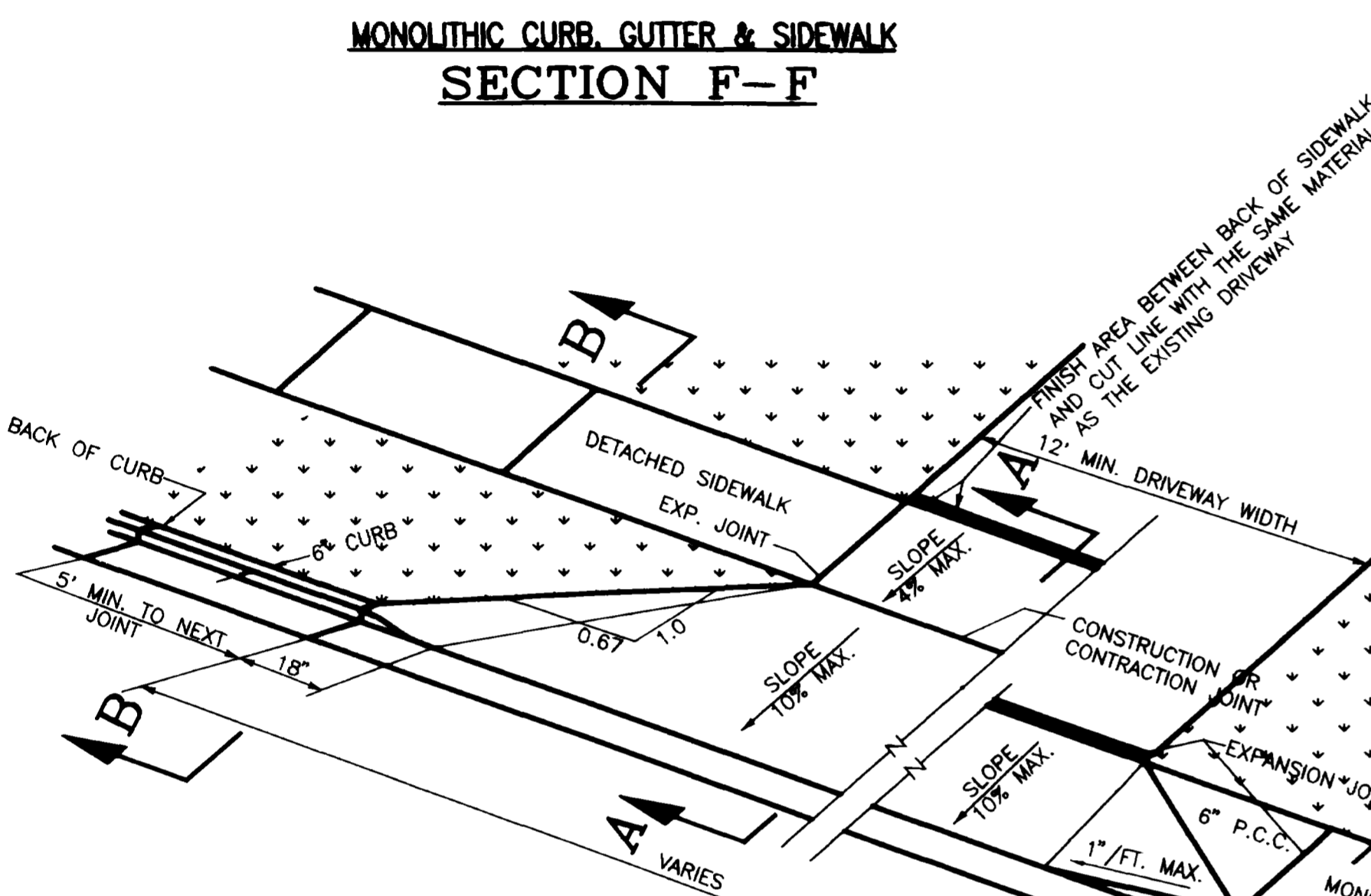
1. ALL PORTLAND CEMENT CONCRETE SHALL BE COLORADO DIVISION OF HIGHWAYS CLASS "B". ALL CONCRETE SHALL BE MIXED, PLACED, CURED AND TESTED IN ACCORDANCE WITH CITY OF GRAND JUNCTION STREET CONSTRUCTION SPECIFICATIONS.
2. ALL CONCRETE WORK WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED BY A LICENSED CURB, GUTTER & SIDEWALK CONTRACTOR. A PERMIT IS REQUIRED AT EACH LOCATION WHERE CONCRETE IS REMOVED, ALTERED OR PLACED.
3. ALL CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS, DRAINAGE PANS AND OTHER CONCRETE WORK SHALL BE UNDERLAID WITH AGGREGATE BASE COURSE (CLASS 6) COMPACTED TO AT LEAST 90% OF AASHTO T-180 MAXIMUM DENSITY. SEE DETAILS FOR BASE THICKNESS. THE TOP 6 INCHES OF SUBGRADE UNDER ALL CONCRETE SHALL BE COMPACTED TO AT LEAST 90% OF AASHTO T-99 MAXIMUM DENSITY. ALL SATURATED OR UNSUITABLE SUBGRADE MATERIAL SHALL BE REMOVED AND REPLACED.
4. ALL EXISTING PAVEMENT NOT DESIGNATED FOR REMOVAL WHICH IS DAMAGED BY CONSTRUCTION SHALL BE REPLACED IN-KIND BY CONTRACTOR.
5. ALL DRIVEWAY CONCRETE (APRON AND SIDEWALK CROSSING) SHALL BE 6 INCHES THICK (MIN.) FOR RESIDENTIAL USES AND 8" THICK (MIN.) FOR ALL OTHER USES.
6. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED IN ALL CURBS, GUTTERS, SIDEWALKS, V-PANS, ETC., AT ENDS OF HORIZONTAL CURVES, AT EDGES OF DRIVEWAY SECTIONS AND AT MAXIMUM SPACING OF 100'. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 10' SPACING.
7. VEHICULAR TRAFFIC SHALL BE KEPT OFF NEW CONCRETE FOR A MINIMUM OF FIVE DAYS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
8. AN APPROVED CURING/SEALING COMPOUND SHALL BE APPLIED TO ALL EXPOSED CONCRETE IMMEDIATELY AFTER FINISHING.
9. ALL CONCRETE SHALL BE PROTECTED FROM FREEZING FOR 5 DAYS AFTER BEING PLACED. NO CONCRETE SHALL BE PLACED ON FROZEN GROUND.
10. UNDER NO CIRCUMSTANCES SHALL WATER BE ADDED TO CONCRETE SURFACES DURING FINISHING OPERATIONS.
11. HANDICAP RAMPS SHALL BE INSTALLED AT EACH CORNER OF ALL STREET INTERSECTIONS. SEE EXHIBIT "C" FOR DETAILS.



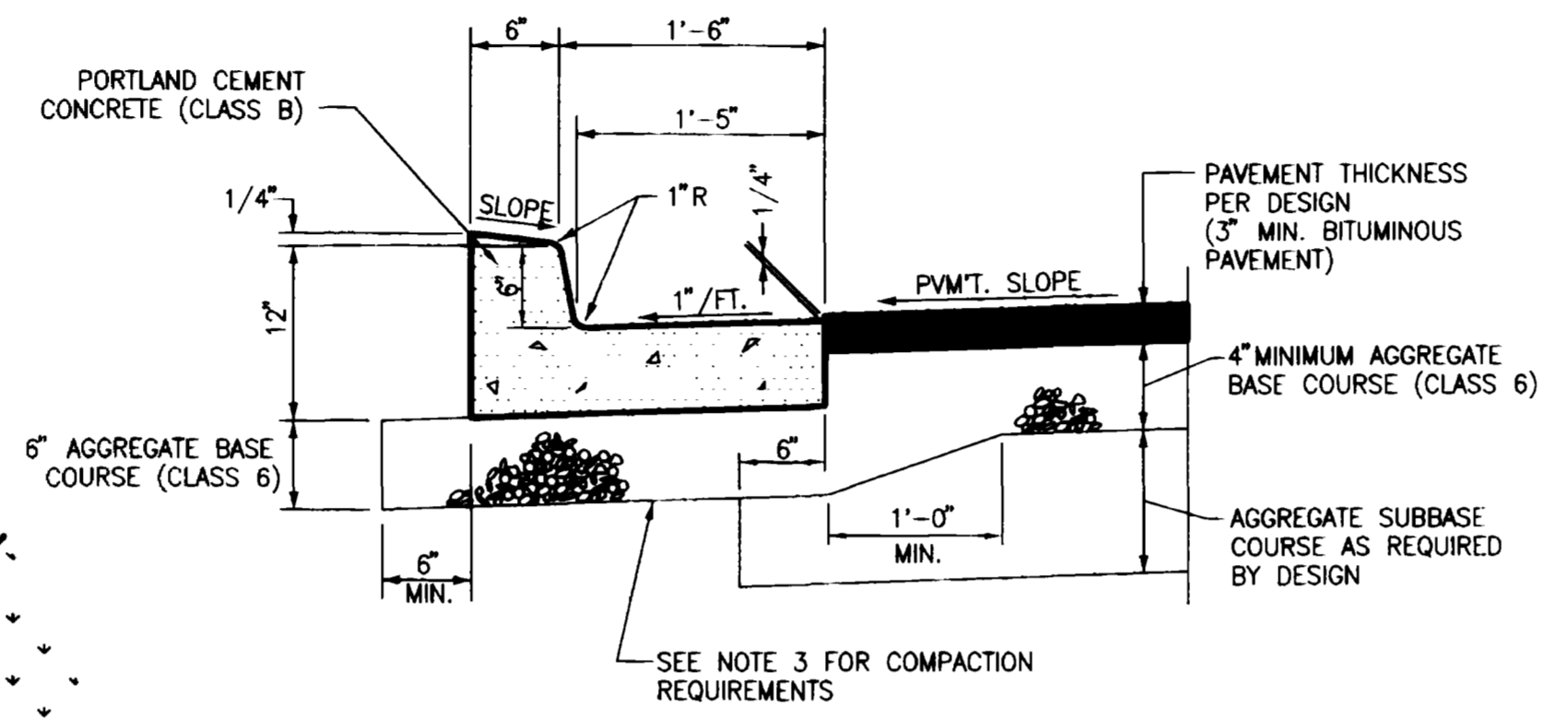
DETAIL "B"



**DRIVE OVER CURB, GUTTER & SIDEWALK
(RESIDENTIAL STREETS ONLY)**



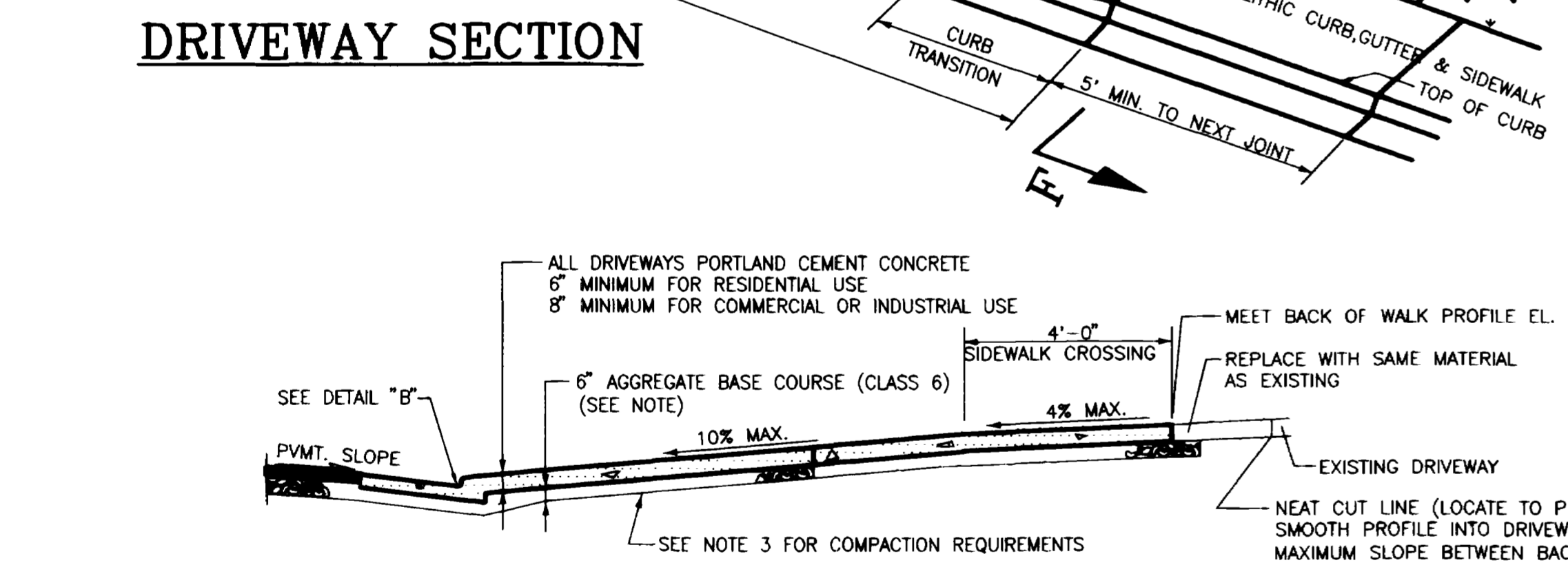
**MONOLITHIC CURB, GUTTER & SIDEWALK
SECTION F-F**



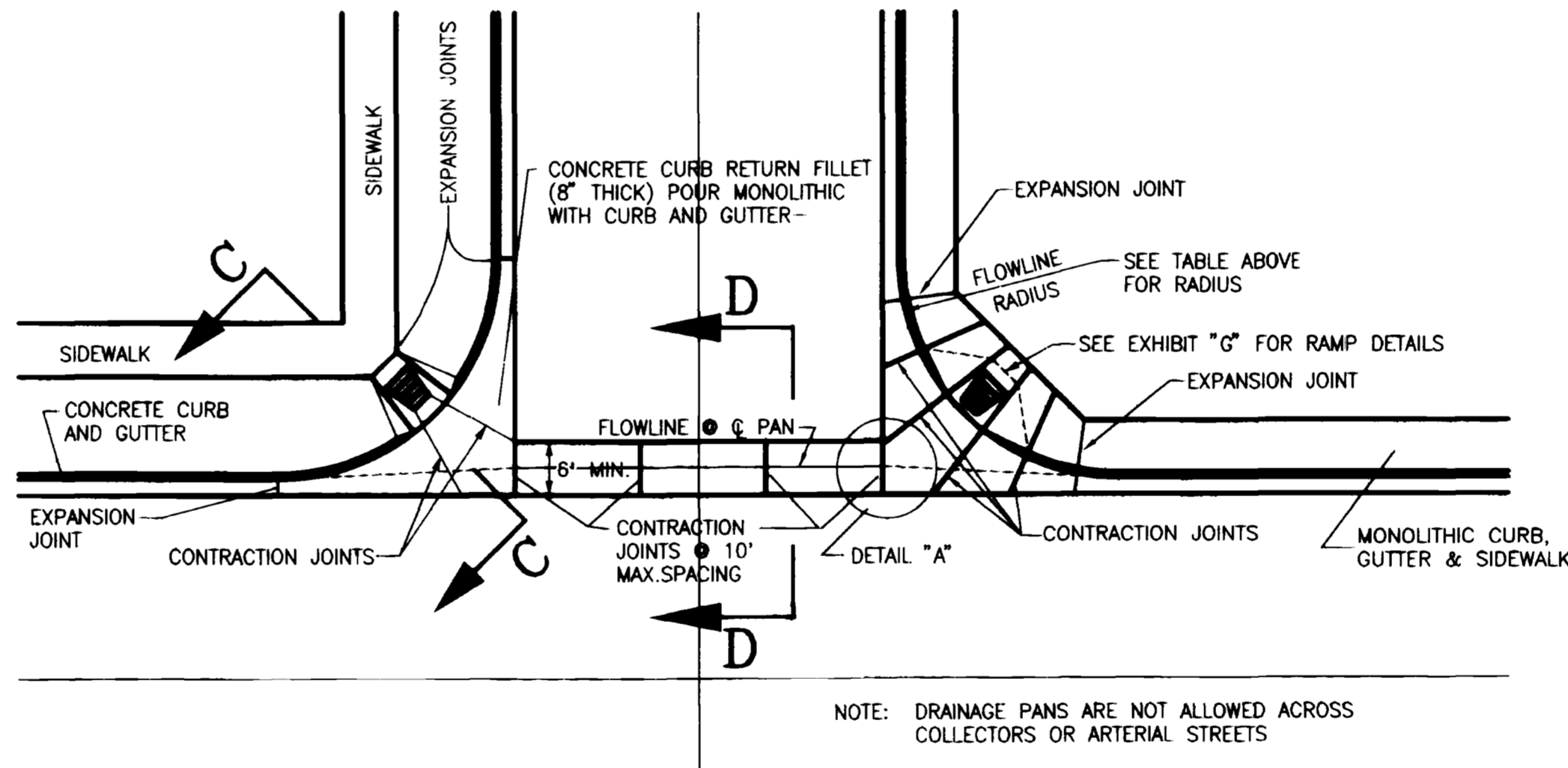
CURB & GUTTER

THROUGH STREET	INTERSECTING STREET				
	ARTERIAL	COLLECTOR	LOCAL RESIDENTIAL	LOCAL COMMERCIAL	LOCAL INDUSTRIAL
ARTERIAL	30'	30'	30'	30'	*
COLLECTOR	-	30'	25'	30'	*
LOCAL RESIDENTIAL	-	-	20'	-	-
LOCAL COMMERCIAL	-	-	20'	30'	*
LOCAL INDUSTRIAL	-	-	20'	*	*

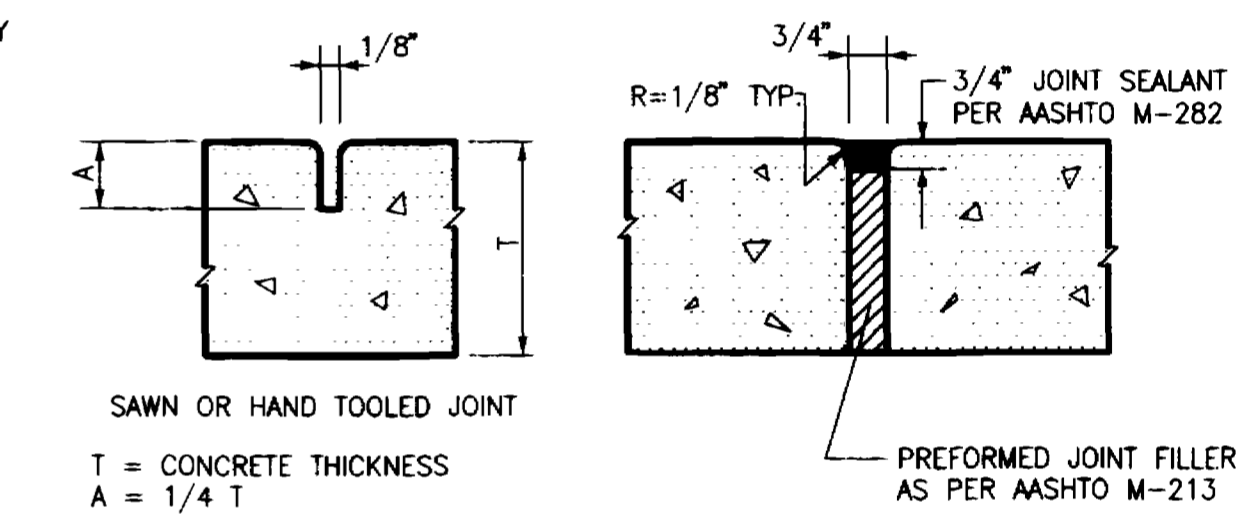
* RADII AT INTERSECTIONS WITH INDUSTRIAL STREETS SHALL BE INDIVIDUALLY DESIGNED BASED ON TURNING REQUIREMENTS FOR WB-50 TRUCKS.



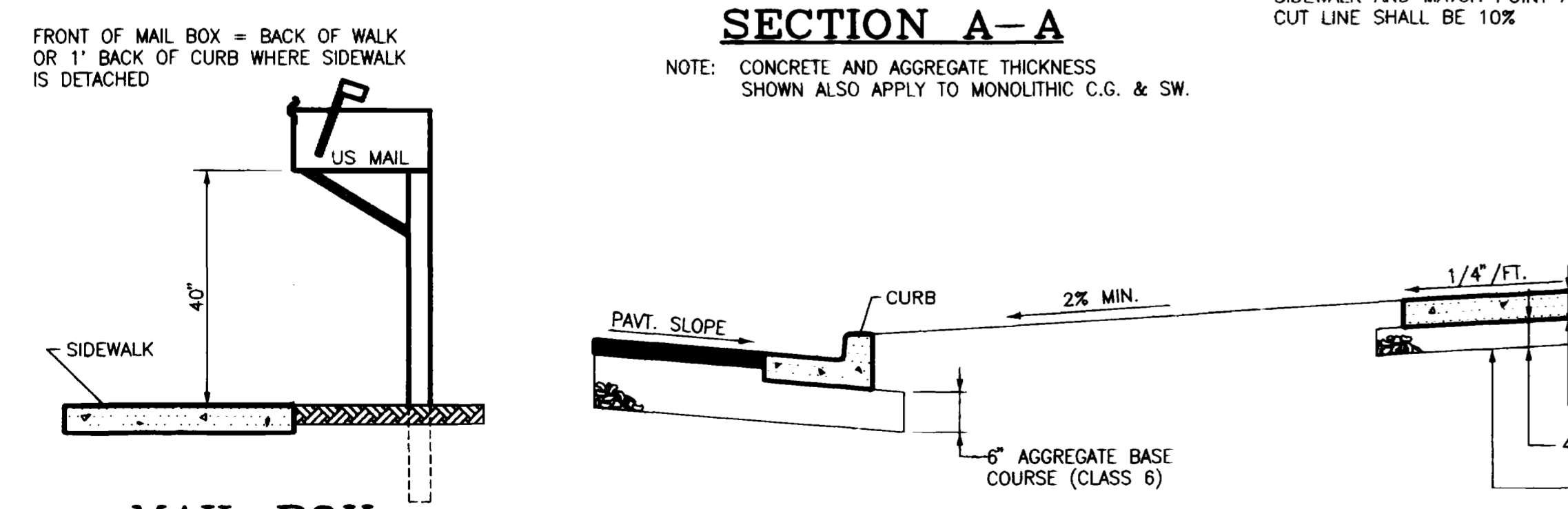
DRIVEWAY SECTION



STREET INTERSECTION AND DRAINAGE PAN DETAILS



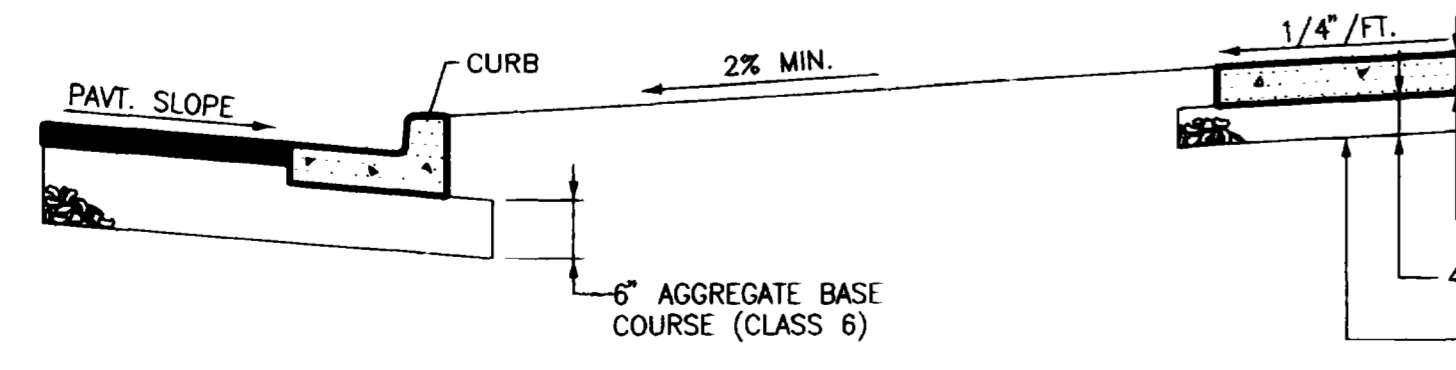
CONCRETE JOINT DETAILS



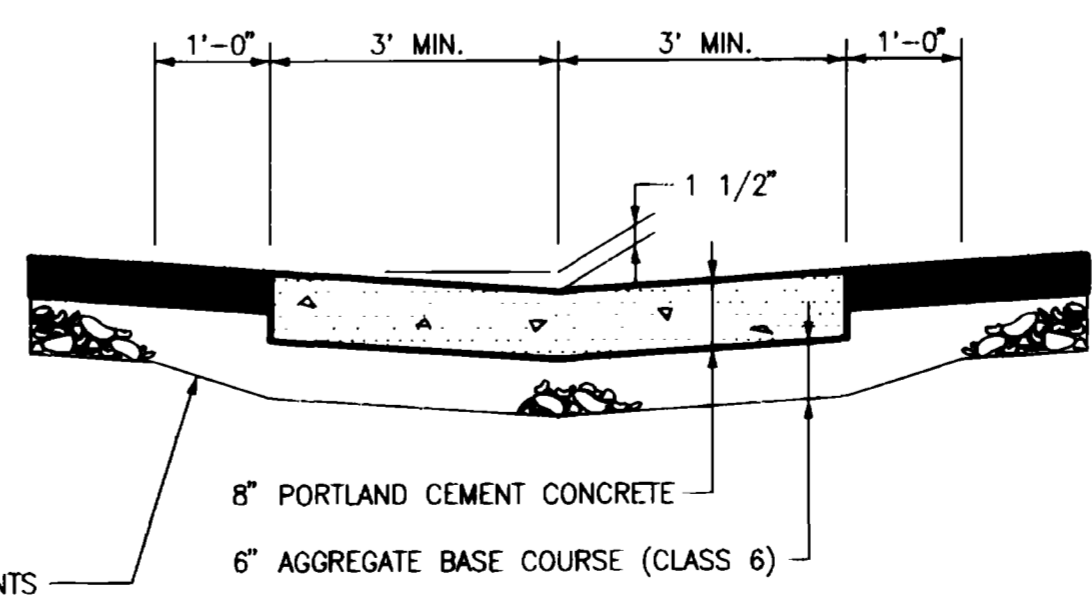
SECTION A-A



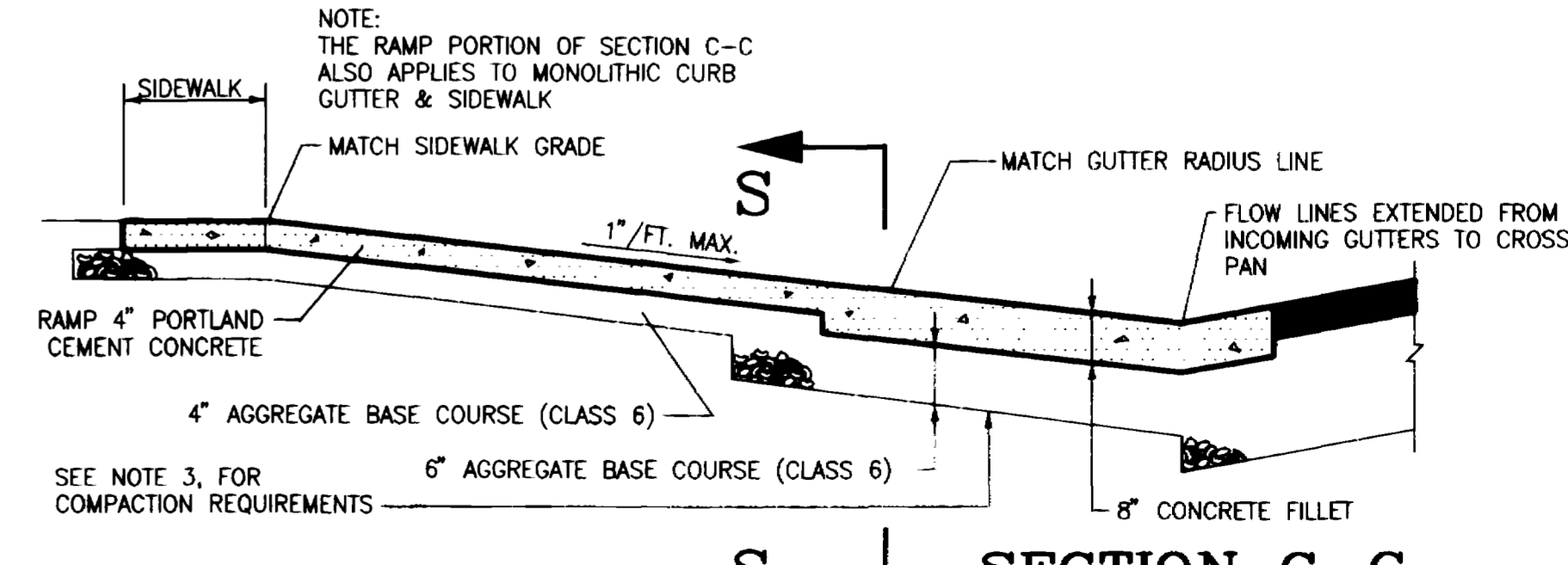
MAIL BOX INSTALLATION



SECTION B-B



SECTION D-D



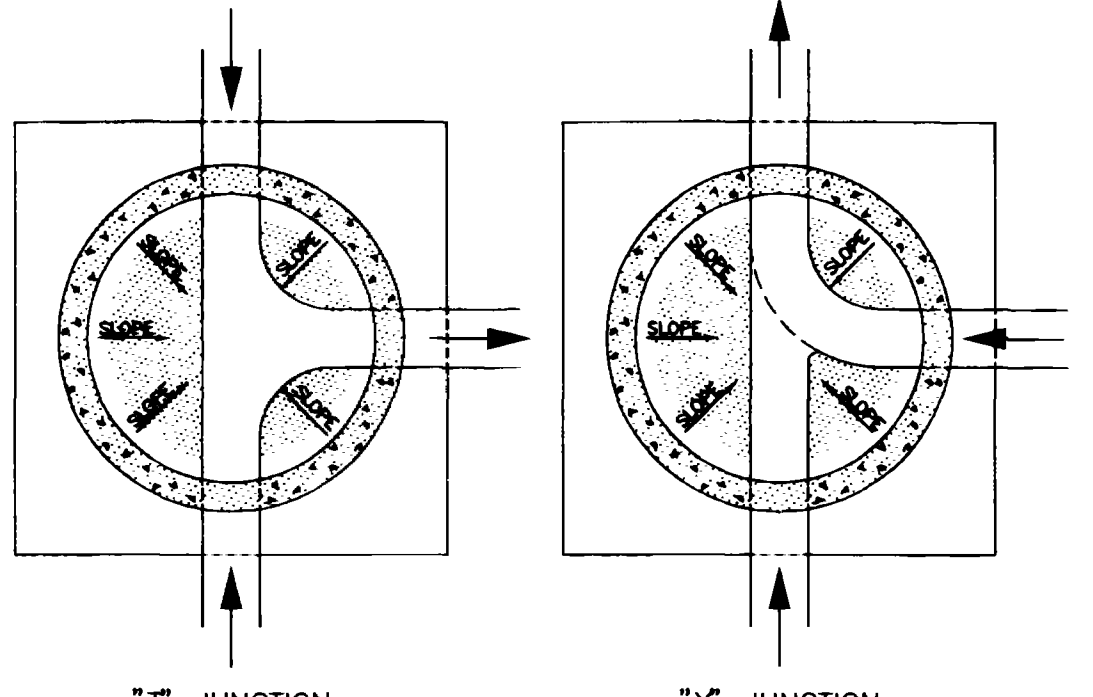
SECTION C-C

DESCRIPTION	DATE	DRAWN BY	N.O.P.	DATE	SCALE
ADOPTED BY CITY COUNCIL RESOLUTION	7/1/92			6/29/92	
REVISION BY CITY COUNCIL RESOLUTION	6/15/94			6/29/92	
REVISION				6/29/92	
REVISION					

**DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION 244-1554
CITY OF GRAND JUNCTION, COLORADO**

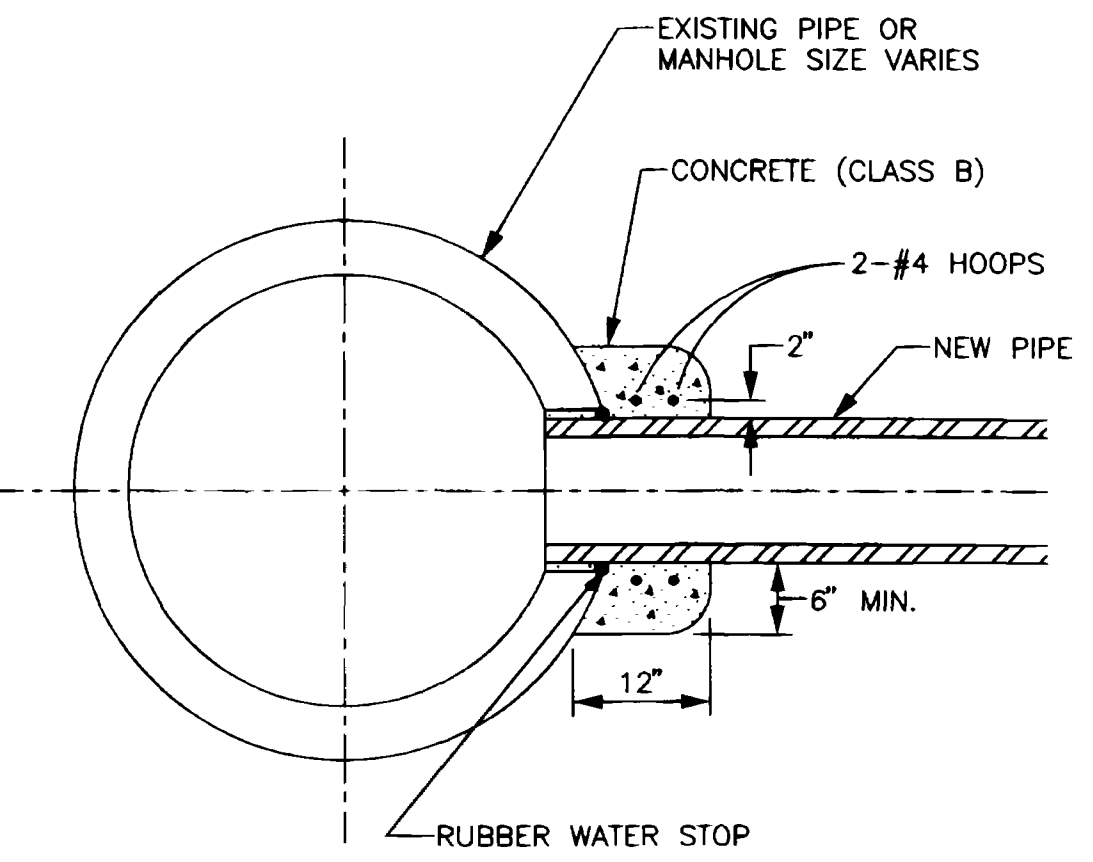
**EXHIBIT "E"
STANDARD CONCRETE DETAILS**

SHEET NO. 96SLR-10
OF _____
FILE NO. 96SLR-10.DWG



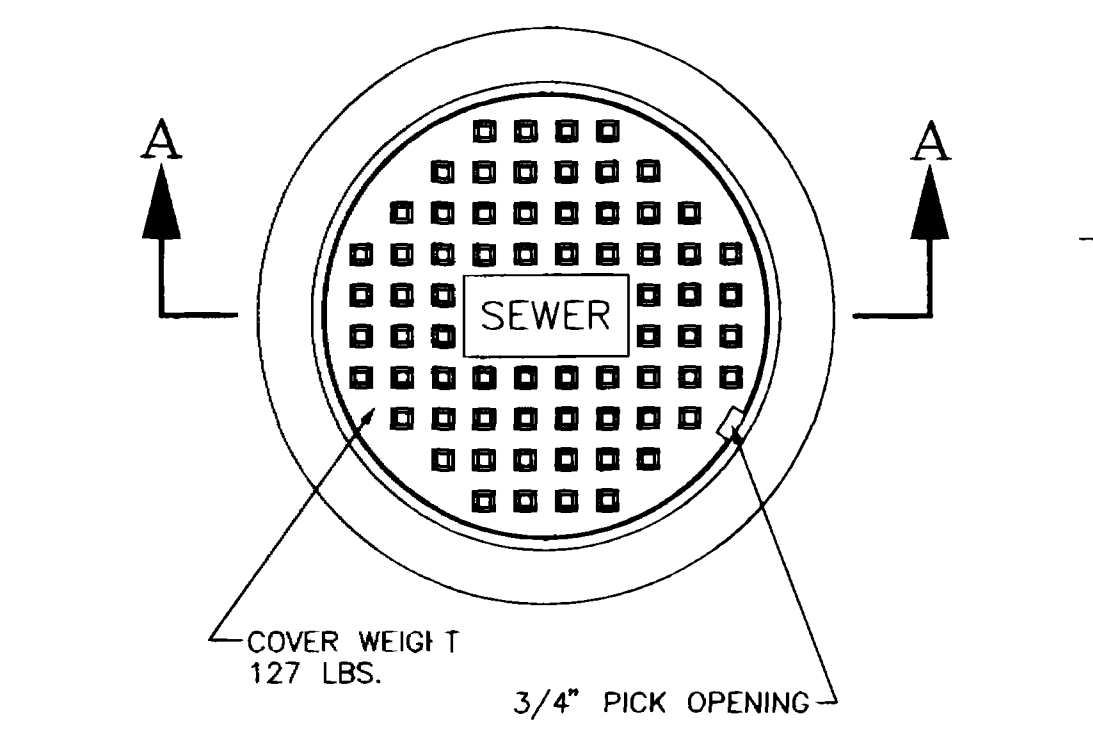
"I" JUNCTION
"Y" JUNCTION
INVERTS SHALL BE FORMED TO PROVIDE A 24" MIN. APPROACH IN LINE WITH EACH PIPE FOR MAINTENANCE EQUIPMENT.

SECTION B-B

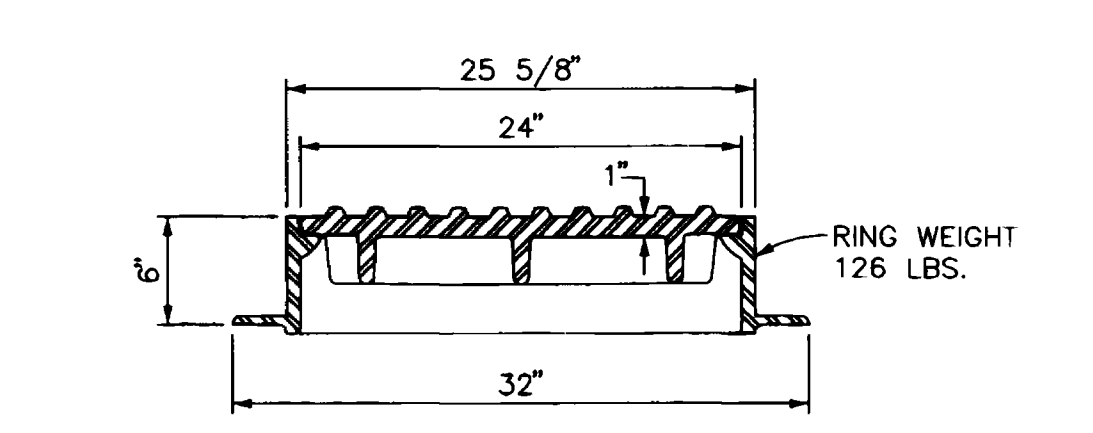


NOTE: IF THE HOLE IN THE EXISTING PIPE OR MANHOLE IS CORED, THE CONNECTION CAN BE MADE BY INSTALLING A FLEXIBLE PIPE TO MANHOLE CONNECTOR ("BOOT") AND THE CONCRETE ENCASUREMENT ELIMINATED.

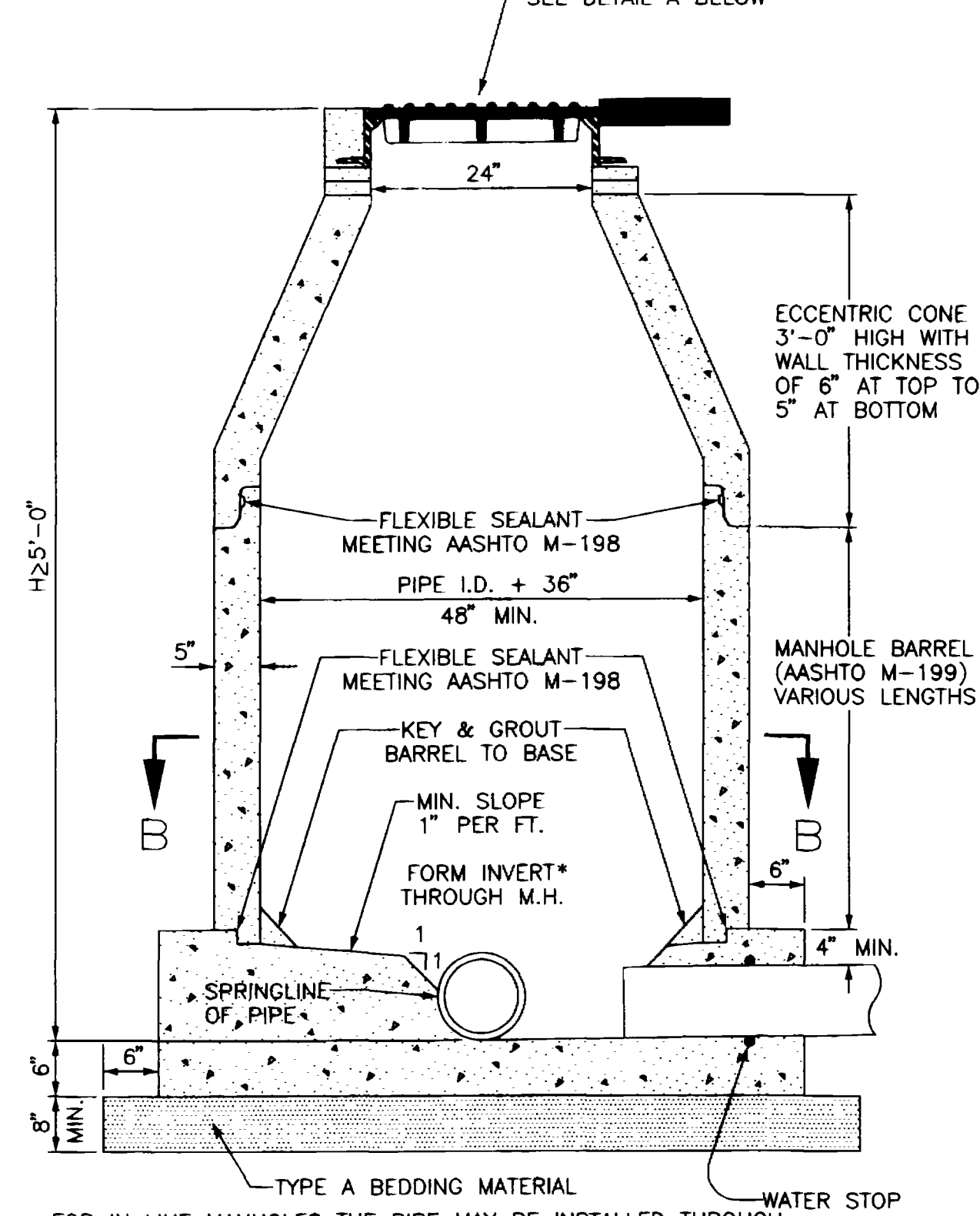
CONNECTION TO EXISTING MANHOLE OR INLET BOX



STANDARD CAST IRON MANHOLE RING & COVER

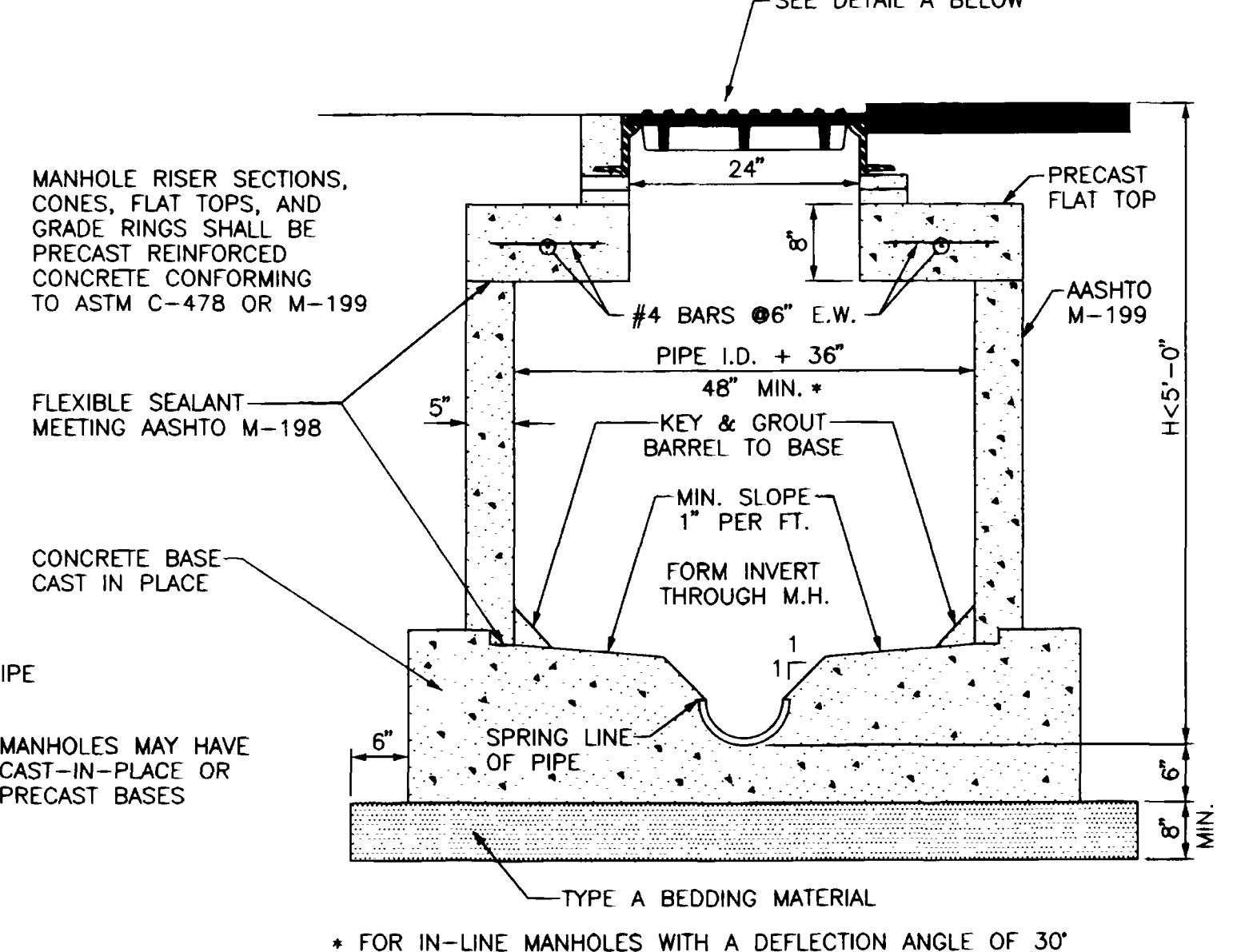


SECTION A-A



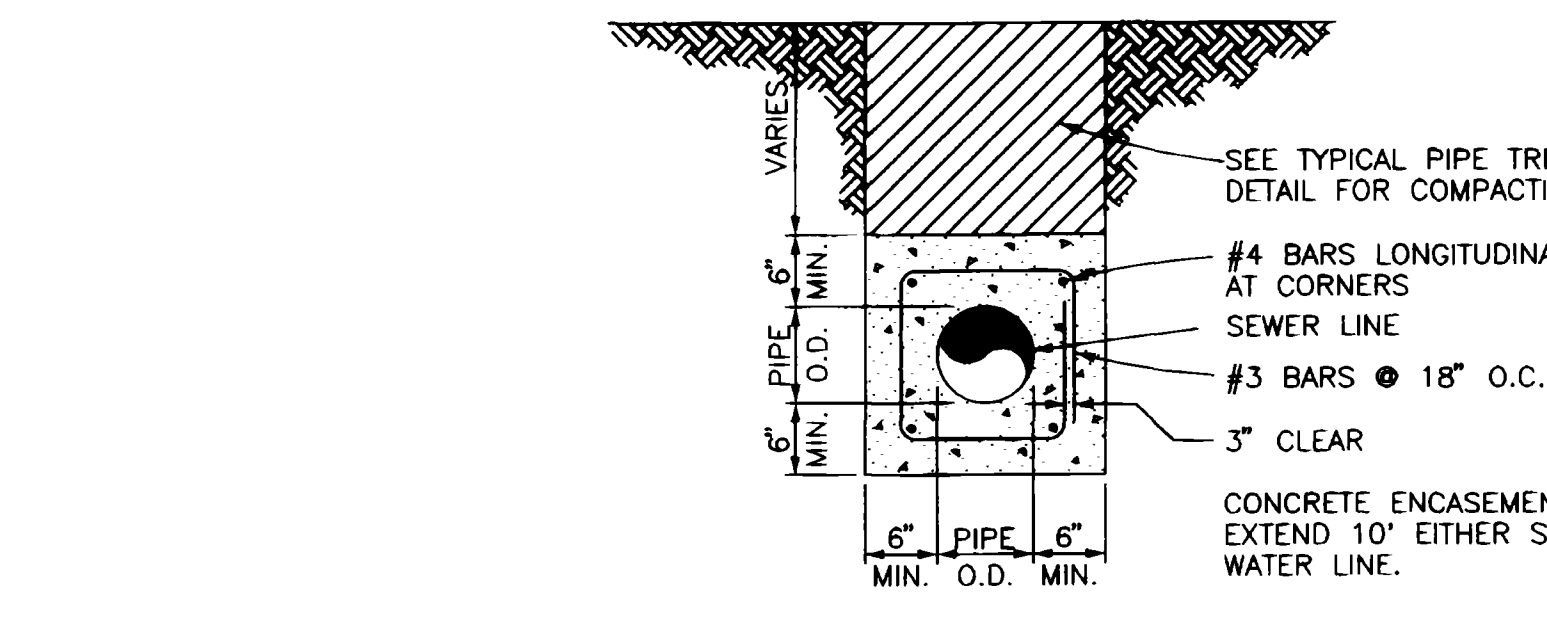
* FOR IN-LINE MANHOLES THE PIPE MAY BE INSTALLED THROUGH THE MANHOLE AND THE TOP HALF REMOVED.

STANDARD MANHOLE CAST-IN-PLACE BASE

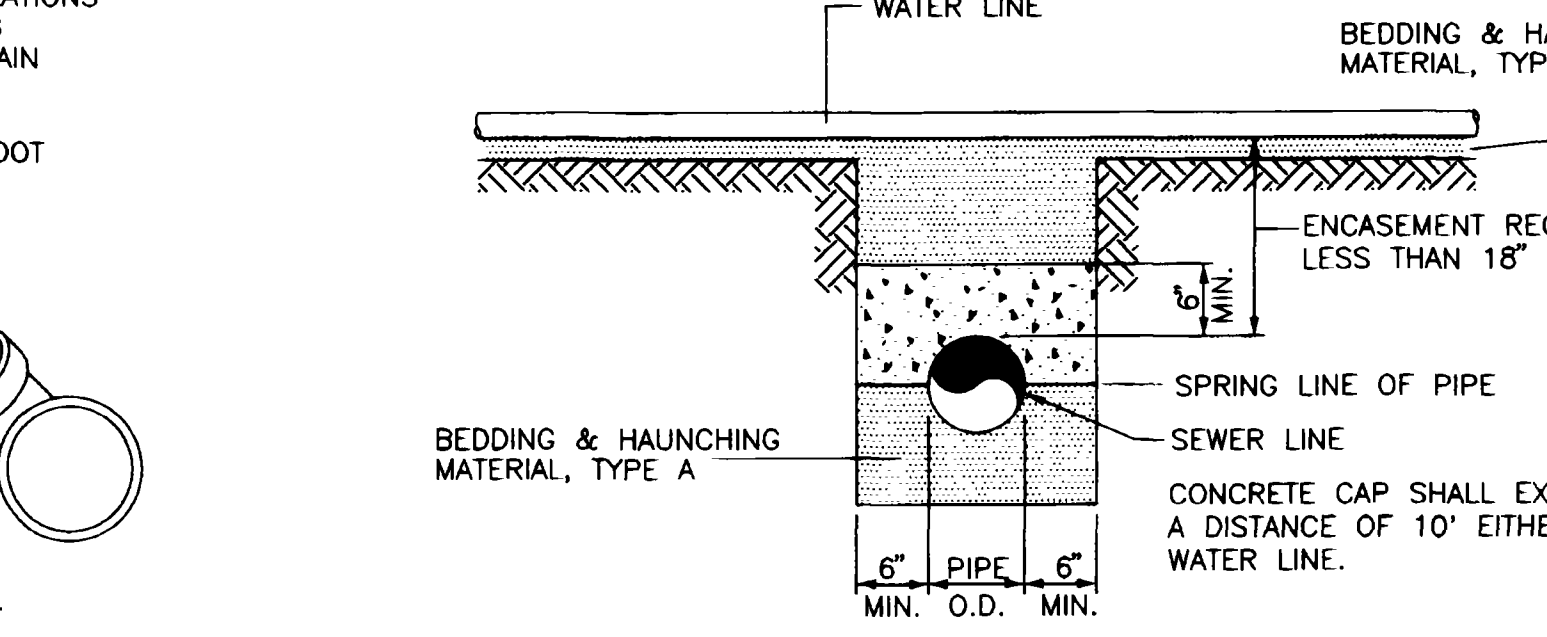


* FOR IN-LINE MANHOLES WITH A DEFLECTION ANGLE OF 30° OR LESS A 30° BARREL MAY BE USED.

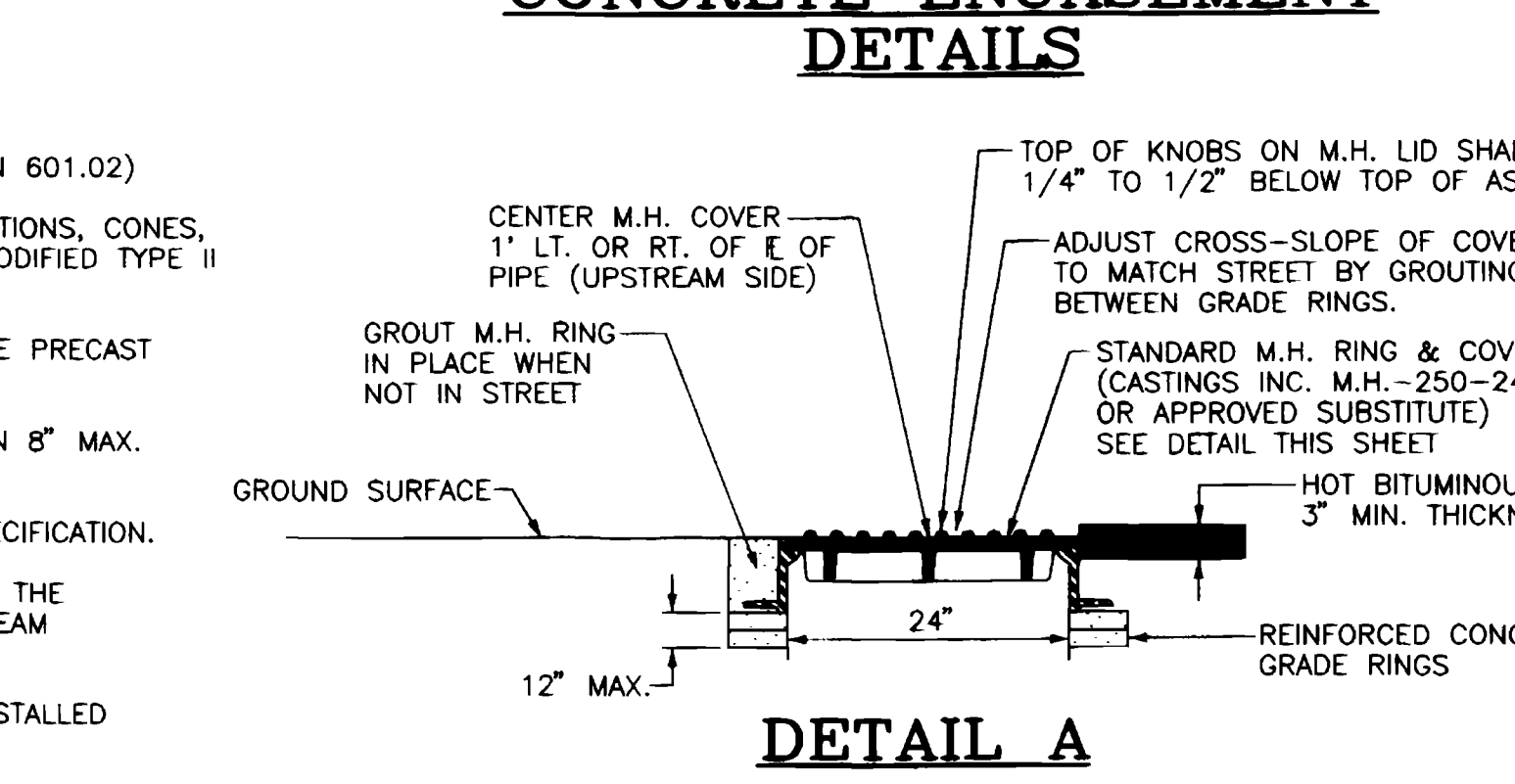
STANDARD SHALLOW MANHOLE CAST-IN-PLACE BASE



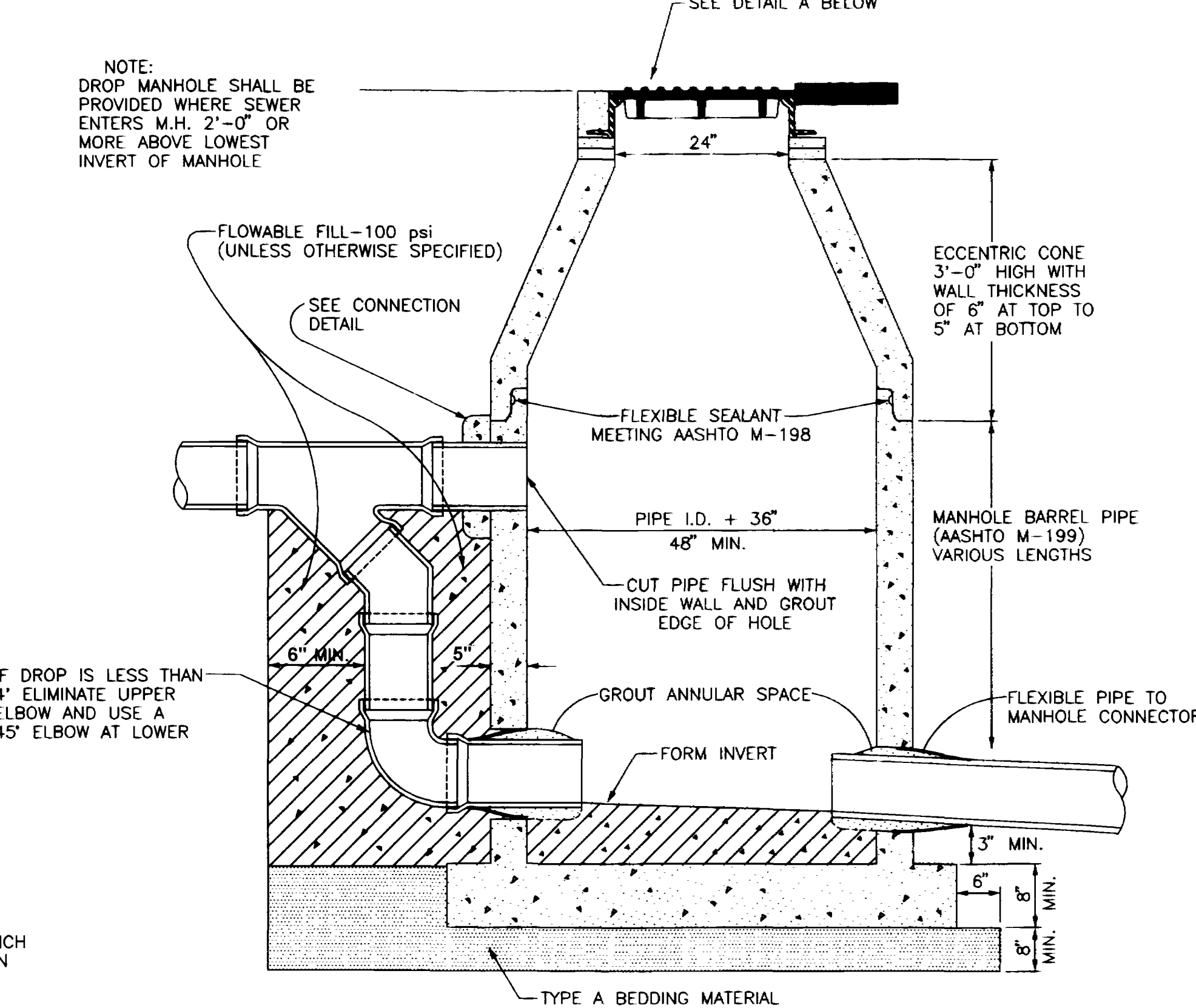
CONCRETE ENCASEMENT DETAILS



CONCRETE ENCASEMENT DETAILS

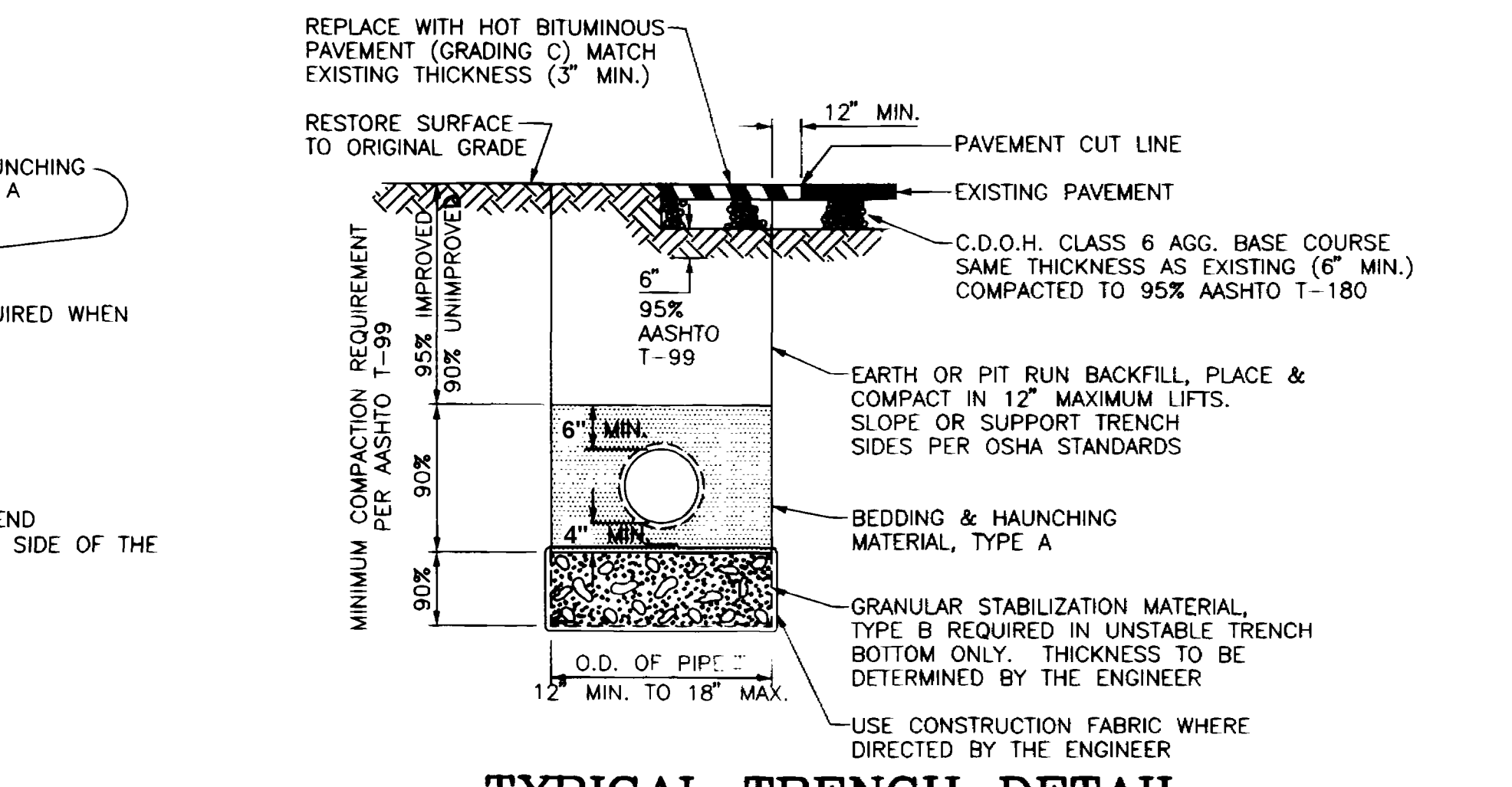


DETAIL A



IF DROP IS LESS THAN 4' ELIMINATE UPPER ELBOW AND USE A 45° ELBOW AT LOWER

DROP MANHOLE PRECAST BASE



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	---	---	100
2 INCH	---	100	---
1 INCH	100	---	---
NO 4	---	15 MAX	30 MAX
NO 200	20 MAX	---	---

ALL BACKFILL MATERIAL SHALL BE PLACED FULL WIDTH IN 12" MAX. LIFTS AND COMPACTED TO THE MIN. RELATIVE DENSITIES SHOWN
NOTE: NATIVE MATERIAL MAY BE USED IN LIEU OF GRANULAR BEDDING & HAUNCHING MATERIAL IF APPROVED BY THE CITY ENGINEER AND THE NATIVE MATERIAL IS IN COMPLIANCE WITH SIZE REQUIREMENTS FOR "TYPE A".

DESCRIPTION	DATE	DRAWN BY	N.O.P.	DATE	SCALE
ADOPTED BY CITY COUNCIL RESOLUTION	7/1/92			6/27/92	
REVISION BY CITY COUNCIL RESOLUTION	6/15/94			6/27/92	
REVISION				6/27/92	
REVISION					

DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION 244-1554
CITY OF GRAND JUNCTION, COLORADO

EXHIBIT "I"
Standard Sanitary Sewer Details
SHEET NO. 11
OF
FILE NO. 96SLR-11.DWG
02092611.tif