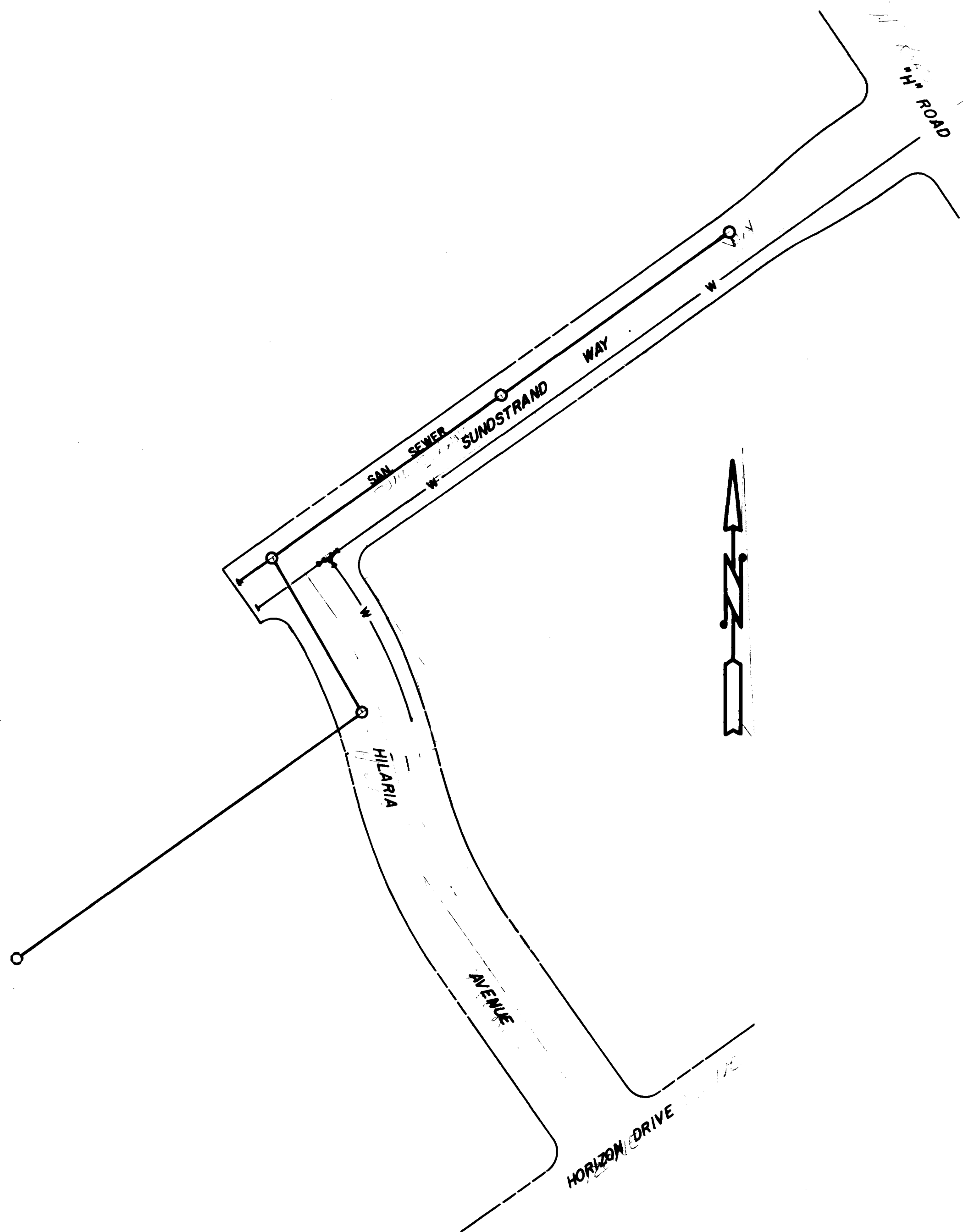


SUNDSTRAND DEVELOPMENT SANITARY SEWER AND WATERLINE EXTENSIONS



1. COVER SHEET
2. DRAFTING STANDARDS & ABBREVIATIONS
3. SUMMARY OF APPROXIMATE QUANTITIES
- 4-7. PLAN & PROFILE SHEETS
8. STANDARD SANITARY SEWER DETAILS (SS-1)
9. STANDARD WATERLINE DETAILS (W-1)
- 10-13. TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION C.D.O.H. STD S-614-50
14. BARRICADES, DRUMS, CONCRETE BARRICADES (TEMPORARY) & VERTICAL PANELS C.D.O.H. STD S-614-51

CITY OF GRAND JUNCTION

DEPARTMENT OF PUBLIC WORKS AND UTILITIES, ENGINEERING DIVISION



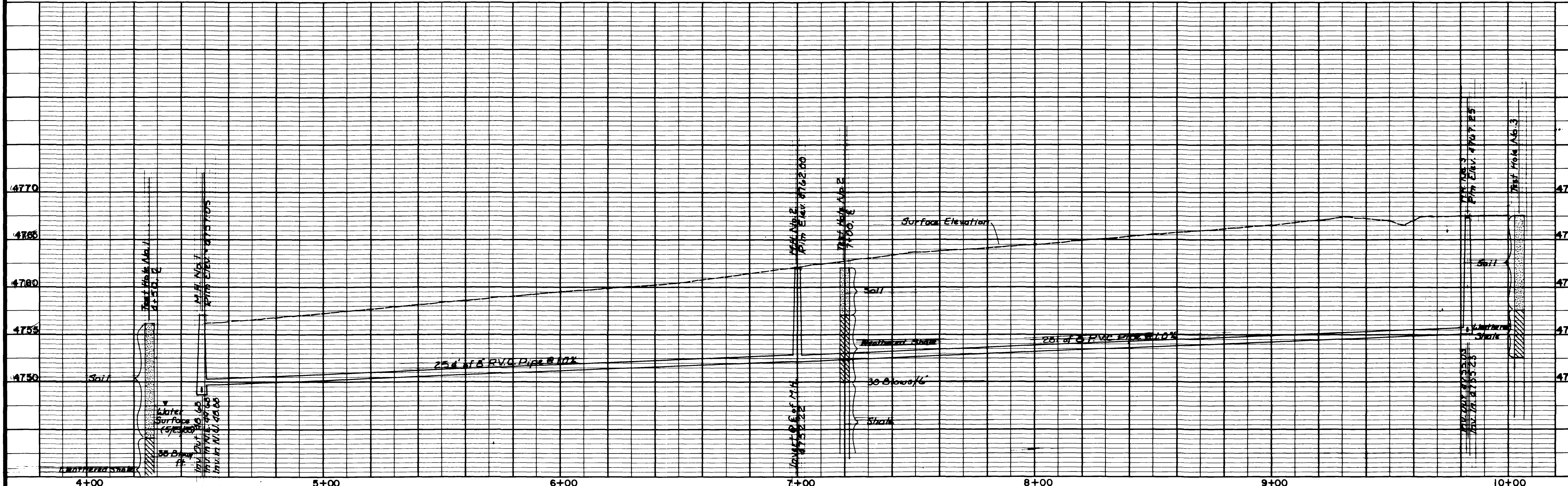
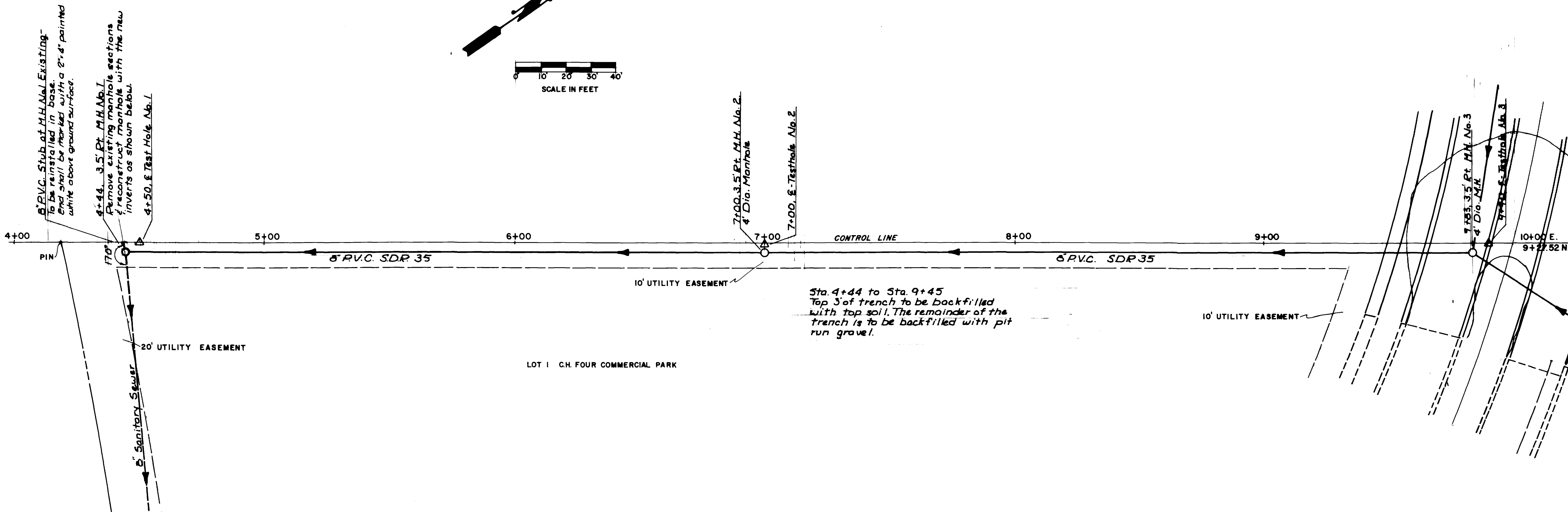
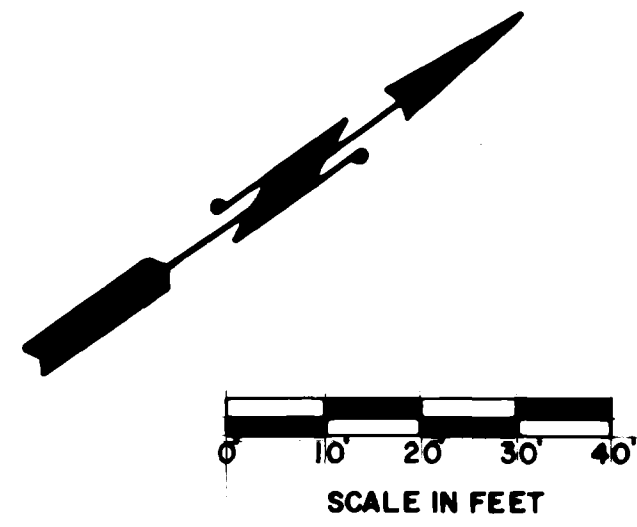
BID TABULATION SHEET

SUNDSTRAND SANITARY SEWER & WATERLINE EXTENSIONS
June 27, 1985

ITEM NO.	REF. NO.	CONTRACT ITEM	UNITS	QUANTITY	COMMERCIAL SERVICES		LYLE STATES CONSTRUCTION		PARKERSON CONSTRUCTION		NIKKO CONSTRUCTION		MARTIN'S TRANSPORTATION & EXCAVATING		TRI STAR CONTRACTING		ENGINEER'S ESTIMATE		UNIT PRICE	TOTAL PRICE
					UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE		
1.		Exploratory Excavation to Verify Locations & Elevations of Existing Underground Installations	Lump Sum	Lump Sum	560.00	560.00	1200.00	1200.00	1100.00	1100.00	1000.00	1000.00	150.00	150.00	1250.00	1250.00	400.00	400.00		
2.		Construction Staking	Lump Sum	Lump Sum	2040.00	2040.00	2200.00	2200.00	3200.00	3200.00	5000.00	5000.00	1000.00	1000.00	2500.00	2500.00	3000.00	3000.00		
3.		Strip & Stockpile Topsoil	Cu. Yd.	5352	0.75	4014.00	1.00	5352.00	1.40	7492.80	3.10	16,591.20	0.70	3746.40	1.40	7492.80	3.00	16,056.00		
4.		Dust Control	Days	5	440.00	2200.00	400.00	2000.00	300.00	1500.00	250.00	1250.00	360.00	1800.00	500.00	2500.00	100.00	300.00		
SANITARY SEWER LINE																				
5.		Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 1 to M.H. No. 2	L.F.	252	11.50	2898.00	11.49	2895.48	18.00	4536.00	10.00	2520.00	18.55	4674.60	12.50	3150.00	16.00	4032.00		
6.		Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 2 to M.H. No. 3	L.F.	279	15.00	4185.00	11.49	3205.71	18.00	5022.00	10.00	2790.00	18.55	5175.40	19.77	5515.83	18.00	5022.00		
7.		Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 3 to M.H. No. 4	L.F.	272	15.00	4080.00	11.49	3125.28	18.00	4896.00	10.00	2720.00	18.55	5045.60	19.63	5339.36	25.00	6800.00		
8.		Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 4 to M.H. No. 5 and 8" Stub-out	L.F.	505	14.20	7171.00	11.49	5802.45	18.00	9090.00	10.00	5050.00	18.55	9367.75	22.50	11,362.50	30.00	15,150.00		
9.		Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 5 to M.H. No. 6	L.F.	156	19.00	2964.00	11.49	1792.44	18.00	2808.00	10.00	1560.00	18.55	2893.80	22.50	3510.00	35.00	5460.00		
10.		Furnish & Install 6" Dia. P.V.C. ASTM D 3034 SDR35	L.F.	99.5	26.00	2587.00	11.49	1143.26	16.00	1592.00	9.00	895.00	17.72	1763.14	19.73	1963.14	30.00	2985.00		
11.		Reconstruct Existing M.H. No. 1	Each	1	500.00	500.00	700.00	700.00	600.00	600.00	1020.00	1020.00	500.00	500.00	906.00	906.00	600.00	600.00		
12.		Furnish & Install 4' Dia. Standard Manhole with Cast Iron Ring and Cover (M.H. No. 2)	Each	1	925.00	925.00	740.00	740.00	1100.00	1100.00	1380.00	1380.00	1100.00	1100.00	4500.00	4500.00	1200.00	1200.00		
13.		Furnish & Install 4' Dia. Standard Manhole with Cast Iron Ring and Cover (M.H. No. 3)	Each	1	1075.00	1075.00	840.00	840.00	1400.00	1400.00	1380.00	1380.00	1100.00	1100.00	4750.00	4750.00	1400.00	1400.00		
14.		Furnish & Install 4' Dia. Drop Manhole with Cast Iron Ring & Cover (M.H. No. 4)	Each	1	1675.00	1675.00	1200.00	1200.00	1700.00	1700.00	1620.00	1620.00	1500.00	1500.00	4750.00	4750.00	2000.00	2000.00		
15.		Furnish & Install 4' Dia. Standard Manhole with Cast Iron Ring & Cover (M.H. No. 5)	Each	1	1075.00	1075.00	995.00	995.00	1500.00	1500.00	1380.00	1380.00	1100.00	1100.00	4750.00	4750.00	1800.00	1800.00		
16.		Furnish & Install 4' Dia. Standard Manhole with Cast Iron Ring & Cover (M.H. No. 6)	Each	1	1150.00	1150.00	1045.00	1045.00	1800.00	1800.00	1380.00	1380.00	1300.00	1300.00	4750.00	4750.00	2000.00	2000.00		
17.		Granular Stabilization Material (Pit Run) (Furnish, Haul & Compact)	Ton	5190	5.40	28,026.00	6.40	33,216.00	4.50	23,355.00	4.40	22,836.00	5.00	25,950.00	8.75	45,412.50	6.50	33,735.00		
WATERLINE:																				
18.		Traffic Control (Advance Warning Signs, Barricades, Flagmen) (H Road Crossing)	Lump Sum	Lump Sum	880.00	880.00	620.00	620.00	800.00	800.00	528.00	528.00	400.00	400.00	6875.00	6875.00	800.00	800.00		
19.		Cut & Remove Asphalt	Sq. Yd.	28	1.50	42.00	6.00	168.00	4.00	112.00	6.00	168.00	150.00	4200.00	8.93	250.04	2.00	56.00		
20.		Trench Patching (3" Thick) Hot Bituminous Grading E Pavement Including Aggregate Base Course Class 6 (12" Thick) (H Road - Same Day)	Sq. Yd.	28	30.25	847.00	20.00	560.00	40.00	1120.00	36.00	1008.00	400.00	11,200.00	22.32	624.96	20.00	560.00		
21.		Furnish & Install 8" Dia. P.V.C. Pipe AMWA C-900 Class 150 with Fittings	L.F.	346	10.00	3460.00	14.30	4947.80	15.00	5190.00	14.00	4844.00	16.26	5625.96	21.25	7352.50	18.00	6228.00		
22.		Furnish & install 6" Dia. P.V.C. Pipe AMWA C-900 Class 150 With Fittings	L.F.	24	11.50	276.00	15.00	360.00	11.00	264.00	13.00	312.00	8.16	195.84	18.75	450.00	15.00	360.00		
23.		Furnish & Install 10" Dia. P.V.C. Pipe AMWA C-900 Class 150 With Fittings	L.F.	1030	17.30	17,819.00	17.06	17,571.80	16.50	16,995.00	26.00	26,780.00	17.41	17,932.00	20.00	20,600.00	21.00	21,630.00		
24.		Furnish & Install 10" Dia. Fl. x M.J. Gate Valves	Each	3	715.00	2145.00	710.00	2130.00	900.00	2700.00	1000.00	3000.00	855.60	2566.80	1250.00	3750.00	700.00	2100.00		
25.		Furnish & Install 8" Dia. Fl. x M.J. Gate Valve	Each	3	490.00	1470.00	520.00	1560.00	800.00	2400.00	600.00	1800.00	634.65	1903.95	1000.00	3000.00	500.00	1500.00		
26.		Furnish & Install 8" Dia. M.J. Gate Valve	Each	1	500.00	500.00	535.00	535.00	800.00	800.00	600.00	600.00	712.65	712.50	1063.00	1063.00	500.00	500.00		
27.		Furnish & Install 6" Dia. Fl. x M.J. Gate Valve	Each	3	350.00	1050.00	380.00	1140.00	600.00	1800.00	420.00	1260.00	436.58	1309.74	875.00	2625.00	450.00	1350.00		
28.		Furnish & Install New Fire Hydrant	Each	3	1080.00	3240.00	970.00	2918.00	1000.00	3000.00	1500.00	4500.00	1513.24	4539.73	1250.00	3750.00	1000.00	3000.00		
29.		Furnish & Install 10" Dia. M.J. Gate Valve	Each	1	735.00	735.00	740.00	740.00	900.00	900.00	900.00	900.00	875.50	875.50	1375.00	1375.00	700.00	700.00		
30.		Granular Stabilization Material (Pit Run) (Furnish, Haul & Compact)	Tons	650	5.40	3510.00	6.40	4160.00	4.50	2925.00	4.40	2860.00	5.00	3250.00	8.75	5687.50	6.50	4225.00		
31.		Barricading Along H Road at Sundstrand Way	Days	15	50.00	750.00	150.00	2250.00	200.00	3000.00	30.00	450.00	375.00	5625.00	75.00	1125.00	80.00	1200.00		
TOTAL BID						\$103,849.00	\$107,105.22	\$114,697.80	\$119,382.70	\$128,504.05	\$172,930.13	\$146,349.00								

SUMMARY OF APPROXIMATE QUANTITIES

REF NO.	CONTRACT ITEM SUNDSTRAND SANITARY SEWER & WATERLINE EXTENSIONS	UNIT	QUANTITY																
1.	Exploratory Excavation to Verify Locations & Elevations of Existing Underground Installations	Lump Sum	Lump Sum																
2.	Construction Staking	Lump Sum	Lump Sum																
3.	Strip & Stockpile Topsoil	Cu. Yd.	5352																
4.	Dust Control	Days	5																
5.	Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 1 to M.H. No. 2	L.F.	252																
6.	Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 2 M.H. No. 3	L.F.	279																
7.	Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 3 to M.H. No. 4	L.F.	272																
8.	Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 4 to M.H. No. 5 & 8" Stub-out	L.F.	505																
9.	Furnish & Install 8" Dia. P.V.C. Pipe ASTM D 3034 SDR35 M.H. No. 5 to M.H. No. 6	L.F.	156																
10.	Furnish & Install 6" Dia. P.V.C. ASTM D 3034 SDR35	L.F.	99.5																
11.	Reconstruct Existing M.H. No. 1	Each	1																
12.	Furnish & Install 4' Dia. Standard Manhole With Cast Iron Ring & Cover (M.H. No. 2)	Each	1																
13.	Furnish & Install 4' Dia. Standard Manhole With Cast Iron Ring & Cover (M.H. No.3)	Each	1																
14.	Furnish & Install 4' Dia. Drop Manhole with Cast Iron Ring & Cover (M.H. No. 4)	Each	1																
15.	Furnish & Install 4' Dia. Standard Manhole With Cast Iron Ring & Cover (M.H. No. 5)	Each	1																
16.	Furnish & Install 4' Dia. Standard Manhole with Cast Iron Ring & Cover (M.H. No. 6)	Each	1																
17.	Granular Stabilization Material (Pit Run)(Furnish, Haul & Compact)	Ton	5190																
18.	Traffic Control (Advance Warning Signs, Barricades, Flagmen)(H Road Crossing)	Lump Sum	Lump Sum																
19.	Cut & Remove Asphalt	Sq. Yd.	28																
20.	Trench Patching (3" Thick) Hot Bituminous Grading E Pavement Including Aggregate Base Course Class 6 (12" Thick)(H Road-Same Day)	Sq. Yd.	28																
21.	Furnish & Install 8" Dia. P.V.C. Pipe AMWAC-900 Class 150 With Fittings	L.F.	346																
22.	Furnish & Install 6" Dia. P.V.C. Pipe AMWAC-900 Class 150 With Fittings	L.F.	24																
23.	Furnish & Install 10" Dia. P.V.C. Pipe AMWAC-900 Class 150 With Fittings	L.F.	1030																
24.	Furnish & Install 10" Dia. Fl. x M.J. Gate Valves	Each	3																
25.	Furnish & Install 8" Dia. Fl. x M.J. Gate Valves	Each	3																
26.	Furnish & Install 8" Dia. H.J. Gate Valve	Each	1																
27.	Furnish & Install 6" Dia. Fl. x M.J. Gate Valve	Each	3																
28.	Furnish & Install New Fire Hydrant	Each	3																
29.	Furnish & Install 10" Dia. M.J. Gate Valve	Each	1																
30.	Granular Stabilization Material (Pit Run) (Furnish, Haul & Compact)	Tons	650																
31.	Barricading along H Road at Sundstrand Way	Days	15																
	TOTAL BID:																		



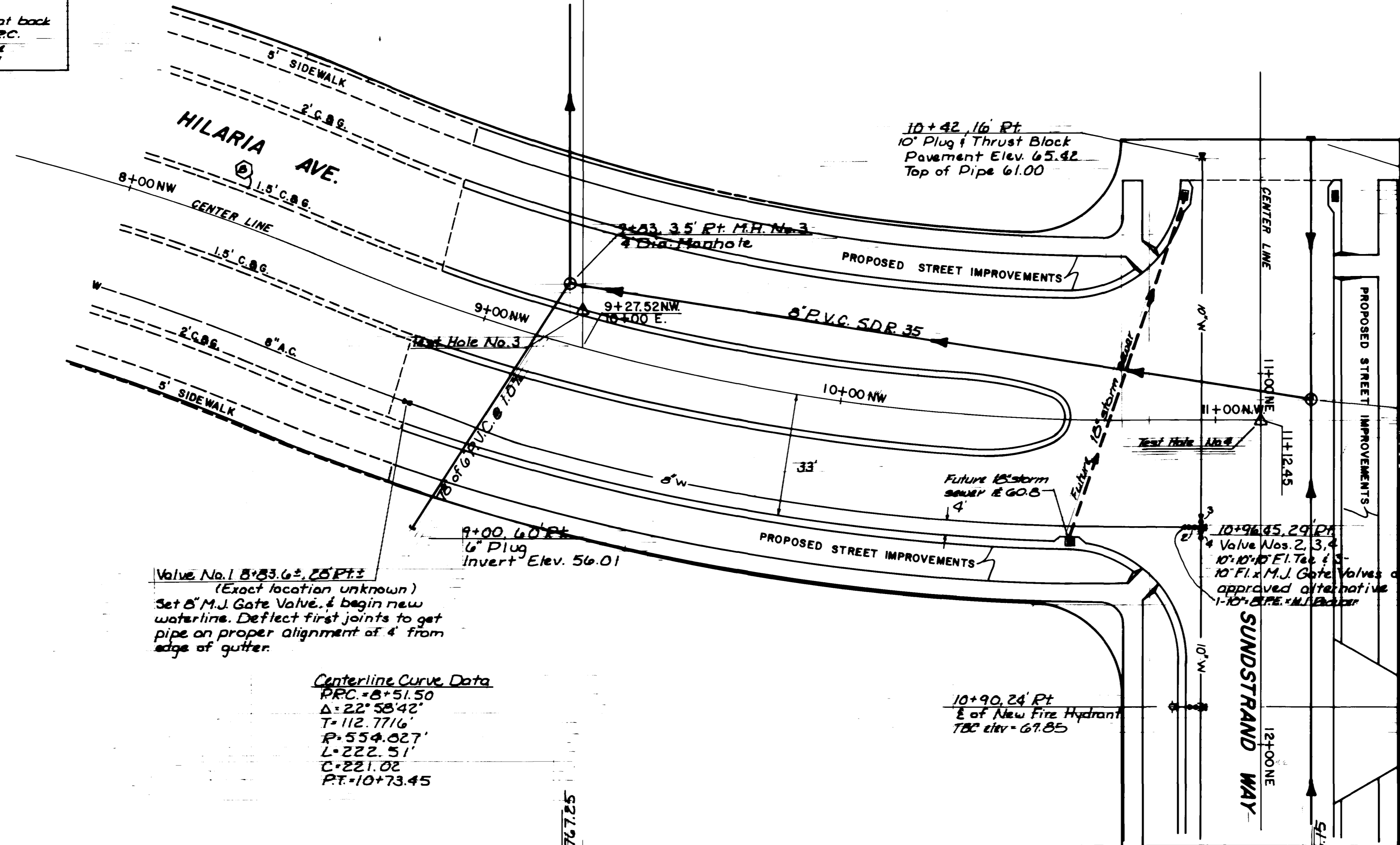
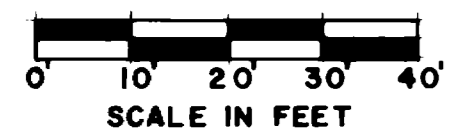
REVISION A	DESCRIPTION	DATE	DRAWN BY	DC	DATE	4-12-82
REVISION B		6-20-82	CHECKED BY	T.A.B.	DATE	4-12-82
REVISION C			APPROVED BY	J.L.B.	DATE	4-13-82
REVISION D			FIELD BOOK NO.	11012	PAGE	312-355

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

SUNDSTRAND DEVELOPMENT
SEWER & WATER
CONSTRUCTION PLAN & PROFILE

SHEET NO. 4
 OF 14
 FILE NO.

Bench Mark:
 ② Set chis. sq. at back
 of curb at P.C.
 Hilaria Avenue
 E.L. 4767.812



Value No. 1 8'x3.6" 20' P.T.
 (Exact location unknown)
 Set 6" M.J. Gate Valve, & begin new
 waterline. Deflect first joints to get
 pipe on proper alignment of 4' from
 edge of gutter.

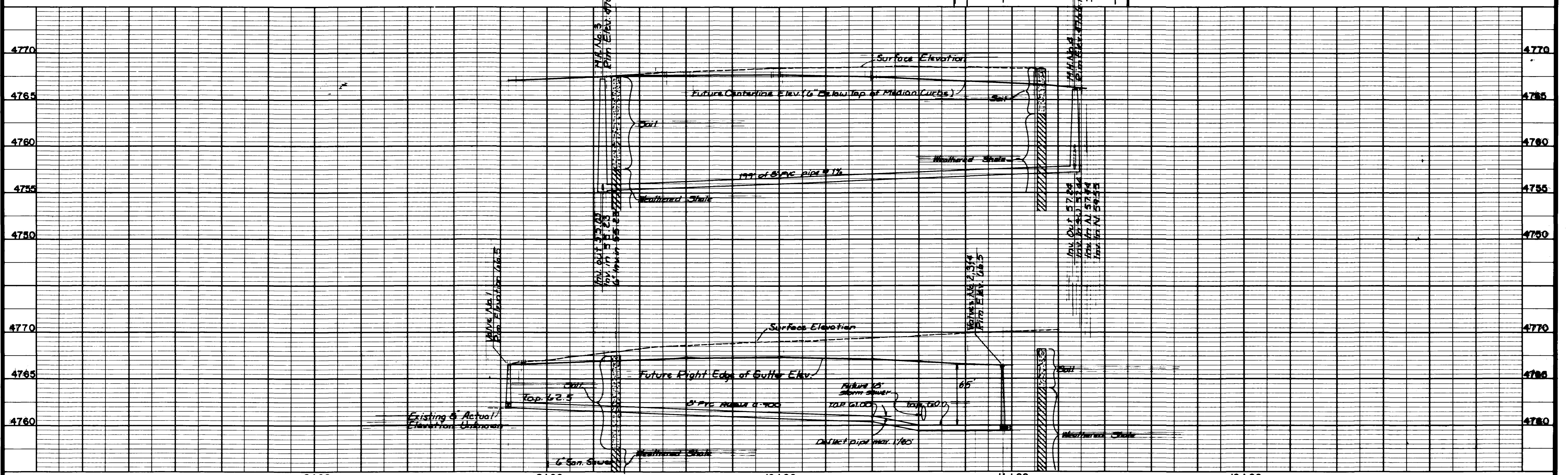
Centerline Curve Data
 P.C. = 8+51.50
 Δ = 22° 58' 42"
 T = 112.7716'
 P = 554.027'
 L = 222.51'
 C = 221.02'
 P.T. = 10+73.45

10+90.24' Pt.
 E of New Fire Hydrant
 T.B.C. elev = 67.85

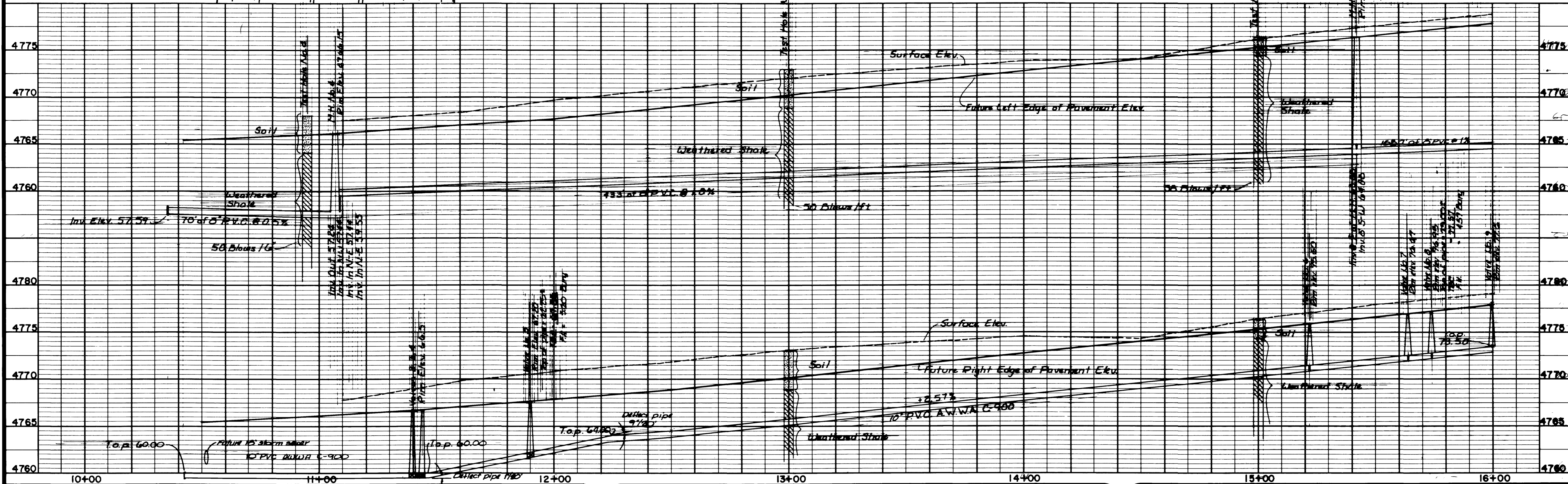
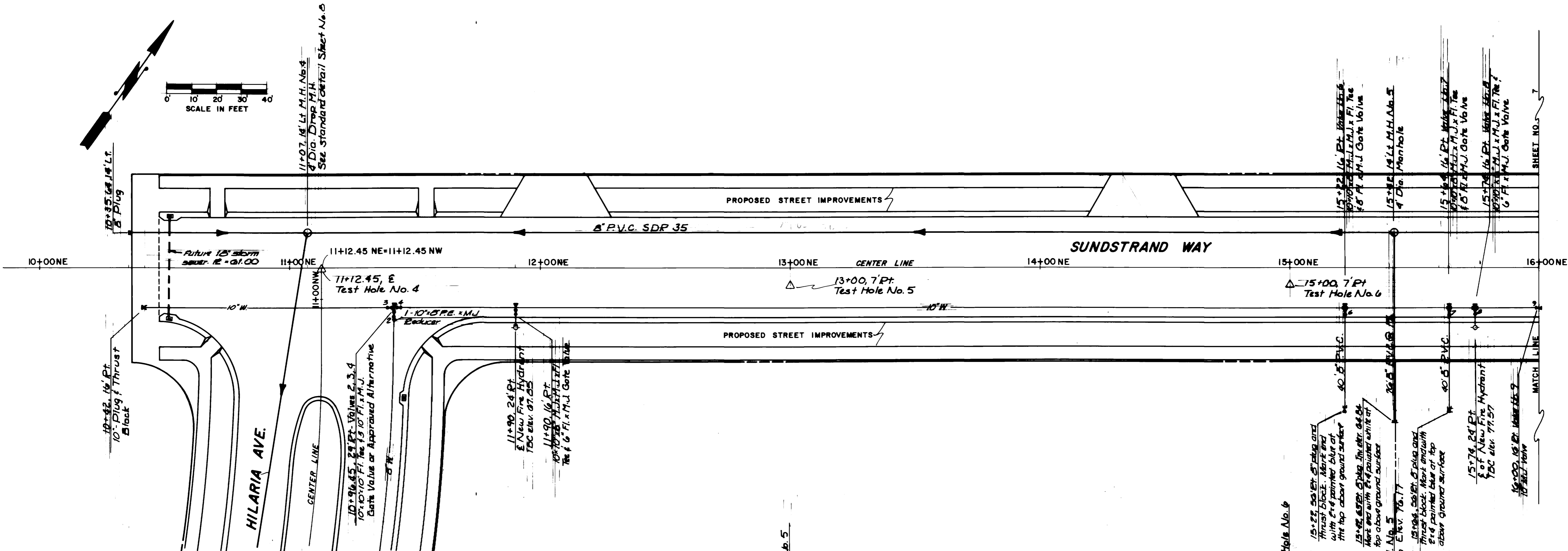
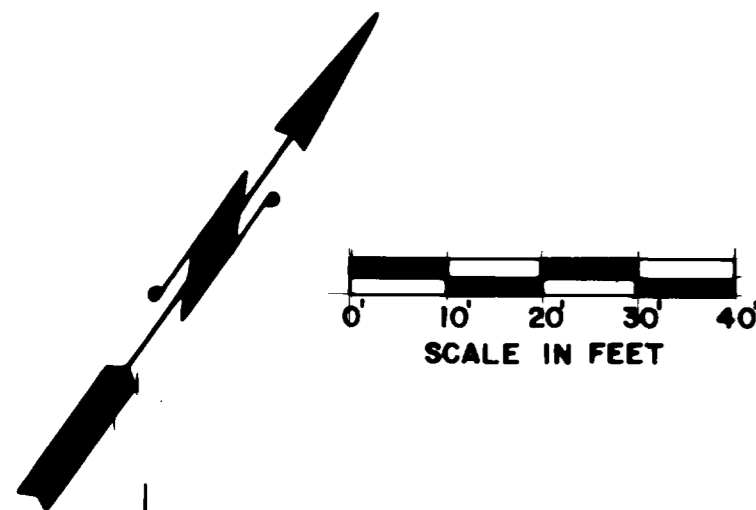
10+35.64 14' Lt.
 Plug 6" Sanitary Sewer
 Pavement Elevation 65.42
 @ 10+42.14' Lt.

11+07.14' Lt. M.H. No. 4
 4' Dia. Drop Manhole - See
 Standard Detail Street No. 6

11+90.16' Pt.
 10" 10'x6" M.J. x M.J. x Fl. Tee
 4' 6" Fl. x M.J. Gate Valve



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	SCALE	DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION CITY OF GRAND JUNCTION, COLORADO	SUNDSTRAND DEVELOPMENT SEWER & WATER CONSTRUCTION PLAN & PROFILE	SHEET NO. <u>5</u> OF <u>14</u> FILE NO.
REVISION			CHECKED BY	DATE	PLAN			
REVISION			APPROVED BY	DATE	PROFILE			
REVISION			FIELD BOOK NO.	PAGE	HORIZ.	VERT.		



REVISION	DESCRIPTION	DATE	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
REVISION A	Addendum #1	6-20-85	D.C.	6-12-85	T.A.B.	6-12-85	J.J.B.	6-13-85
REVISION B								
REVISION C								
REVISION D								

SCALE: HORIZ. 1"=20' VERT. 1"=5'
 FIELD BOOK NO. 26#12 PAGE 312-365

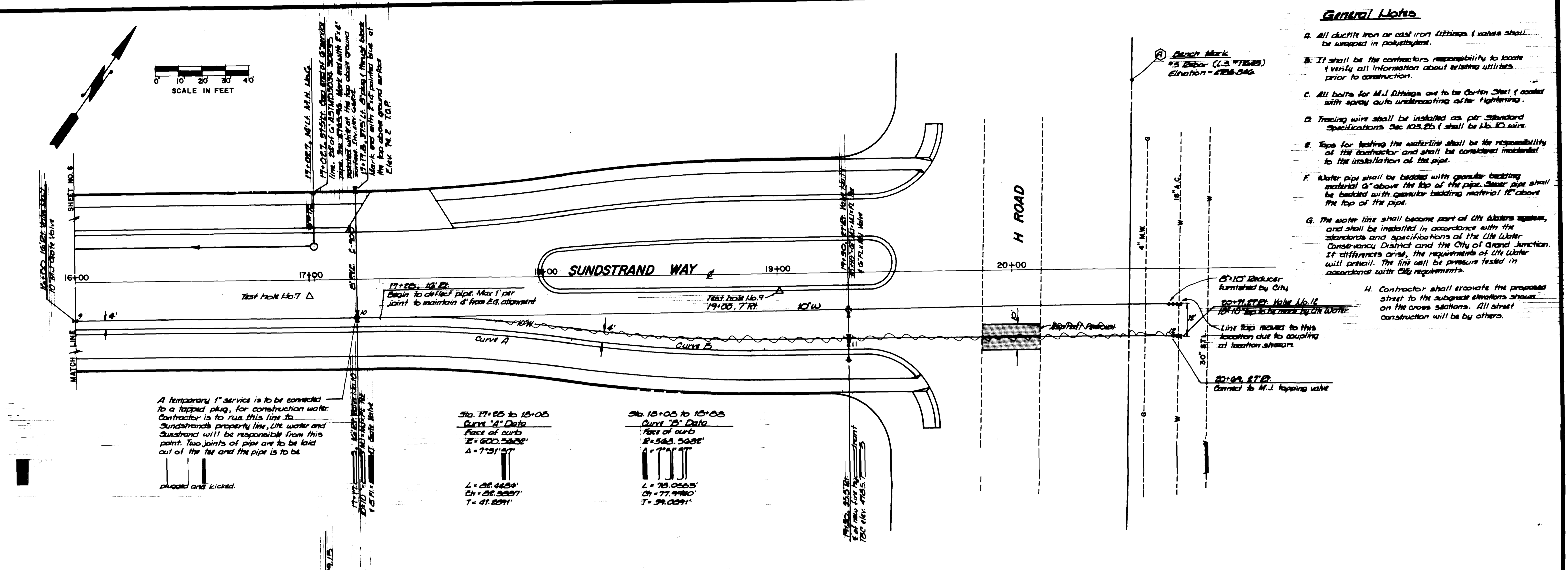
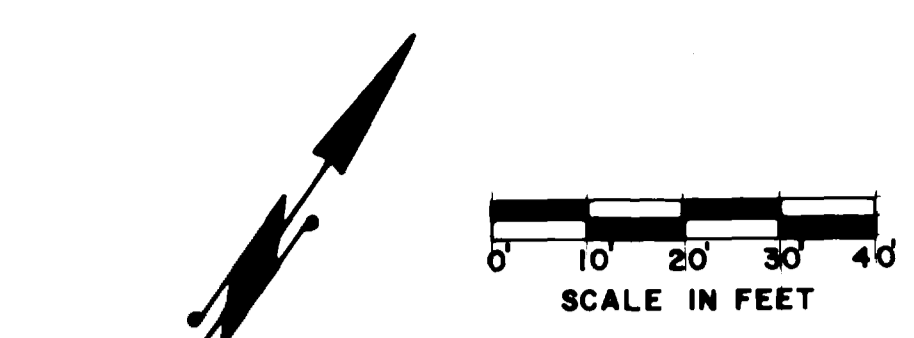
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION
CITY OF GRAND JUNCTION, COLORADO

SUNDSTRAND DEVELOPMENT
SEWER & WATER
CONSTRUCTION PLAN & PROFILE

SHEET NO. 6 OF 14
 FILE NO.

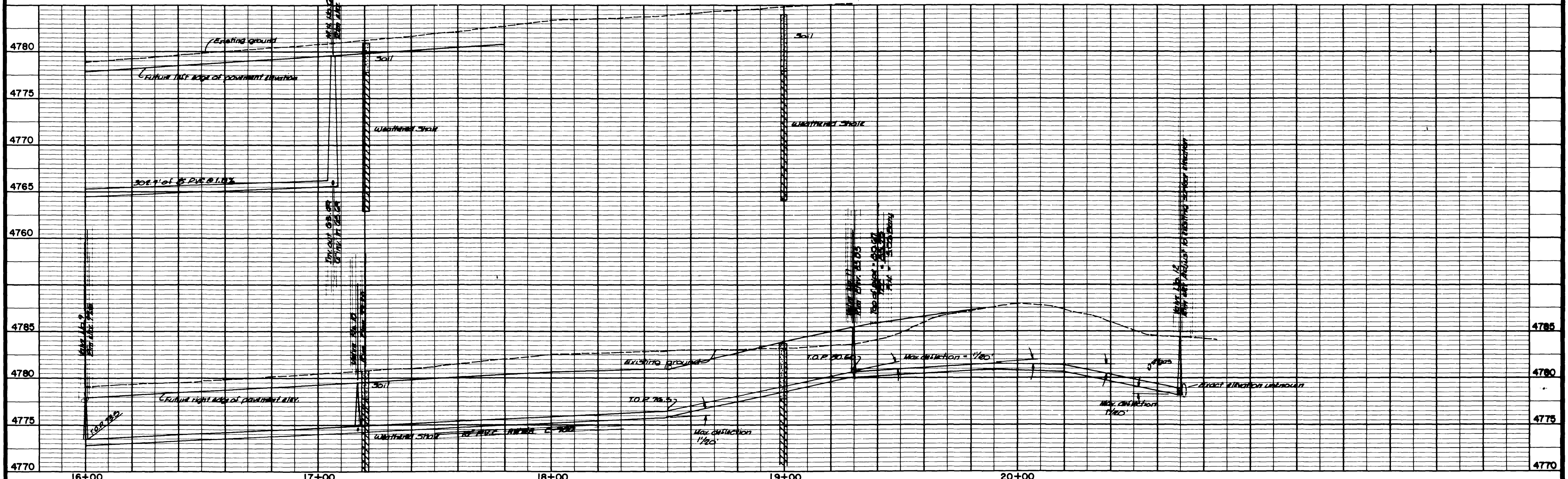
General Notes

- A. All ductile iron or cast iron fittings & valves shall be wrapped in polyethylene.
- B. It shall be the contractor's responsibility to locate & verify all information about existing utilities prior to construction.
- C. All bolts for M.J. fittings are to be Cor-Ten Steel & coated with spray auto undercoating after tightening.
- D. Tracing wire shall be installed as per Standard Specifications Sec. 103.26 & shall be No. 10 wire.
- E. Taps for testing the waterline shall be the responsibility of the contractor and shall be considered incidental to the installation of the pipe.
- F. Water pipe shall be bedded with granular bedding material 6" above the top of the pipe. Sewer pipe shall be bedded with granular bedding material 10" above the top of the pipe.
- G. The water line shall become part of the abutting system, and shall be installed in accordance with the standards and specifications of the Life Water Conservancy District and the City of Grand Junction. If differences arise, the requirements of the Life Water will prevail. The line will be pressure tested in accordance with City requirements.
- H. Contractor shall excavate the proposed street to the subgrade elevations shown on the cross sections. All street construction will be by others.



A temporary 1" service is to be connected to a tapped plug, for construction water. Contractor is to run this line to Sundstrand's property line. Life water and Sundstrand will be responsible from this point. Two joints of pipe are to be laid out of the tap and the pipe is to be dugged and kicked.

Sta. 17+25 to 18+05	Sta. 18+05 to 18+25
Curve "A" Data	Curve "B" Data
Face of curb	Face of curb
E = 600.5002'	E = 585.5002'
A = 7.5147'	A = 7.5147'
L = 32.6424'	L = 25.0063'
Cd = 32.9297'	Cd = 27.9480'
T = 41.2911'	T = 39.0291'



REVISION A REVISION B REVISION C REVISION D	DESCRIPTION Submittal # 1 Date: 6-20-05	DATE 6-18-05 6-18-05 6-18-05 6-18-05	DRAWN BY L. J. B. CHECKED BY J. A. B. APPROVED BY L. J. B. FIELD BOOK NO. 44-02	DATE 6-18-05 DATE 6-18-05 DATE 6-18-05 DATE 6-18-05	PAGE 318-365	SCALE PLAN 1" = 20' PROFILE 1" = 5'	DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION CITY OF GRAND JUNCTION, COLORADO	SUNDRAND DEVELOPMENT SEWER & WATER CONSTRUCTION PLAN & PROFILE	SHEET NO. 7 OF 14 FILE NO.
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