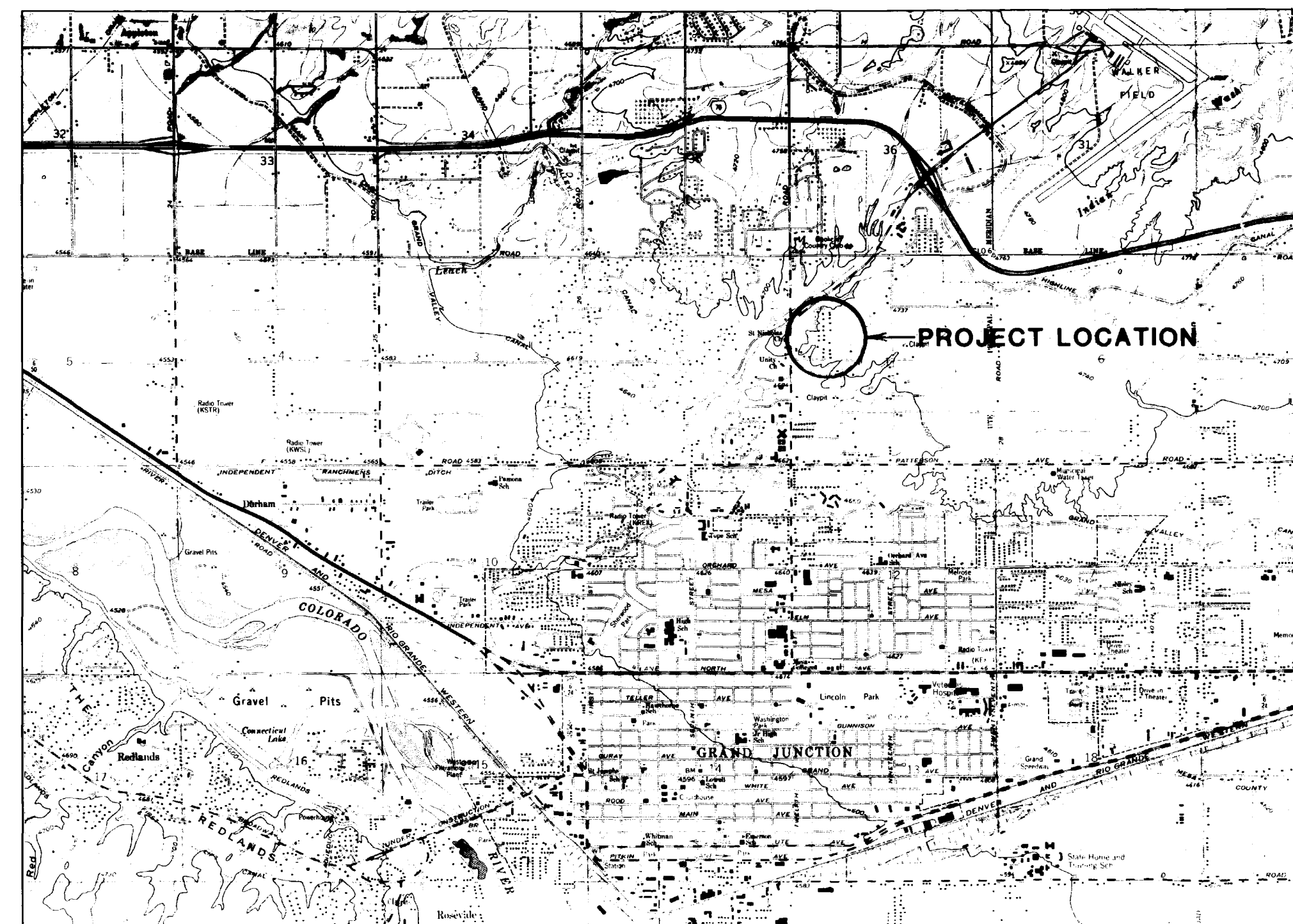


CITY OF GRAND JUNCTION, COLORADO

O'NAN SUBDIVISION SANITARY SEWER EXTENSION—1991

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2	LEGEND AND ABBREVIATIONS
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LOCATION MAP



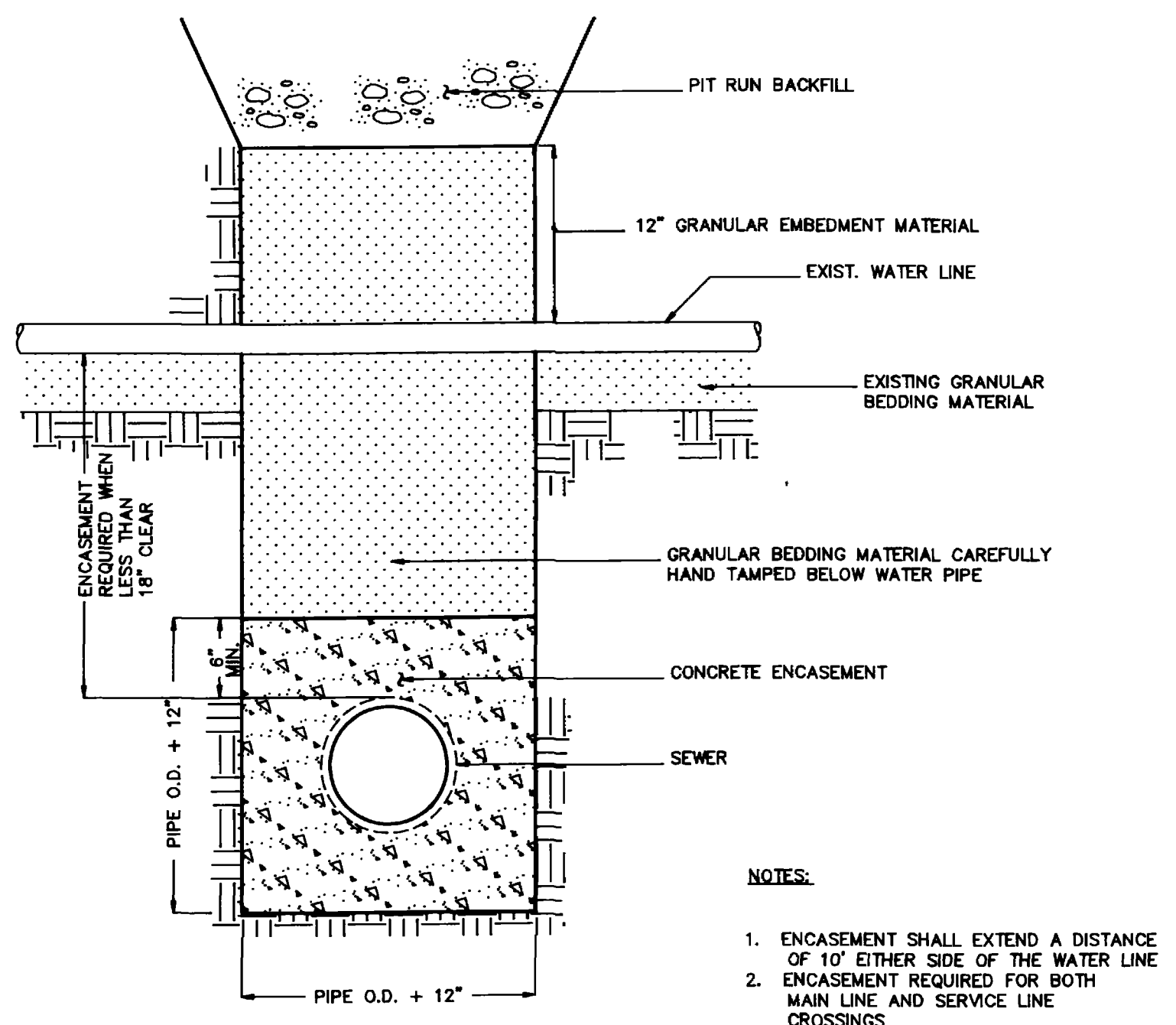
PREPARED BY:

Versar
ARCHITECTS AND ENGINEERS

760 HORIZON DRIVE
GRAND JUNCTION COLORADO

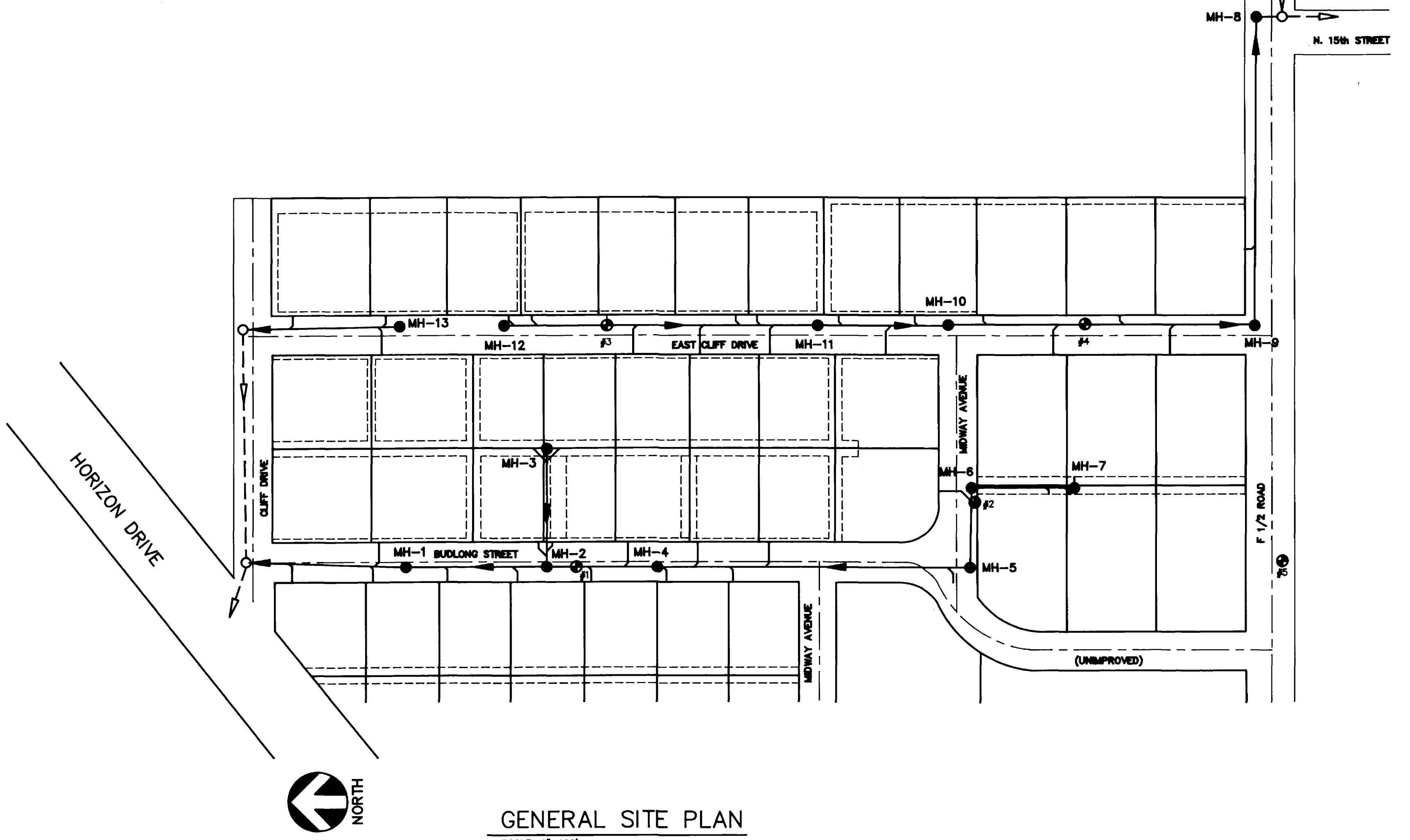


AS CONSTRUCTED

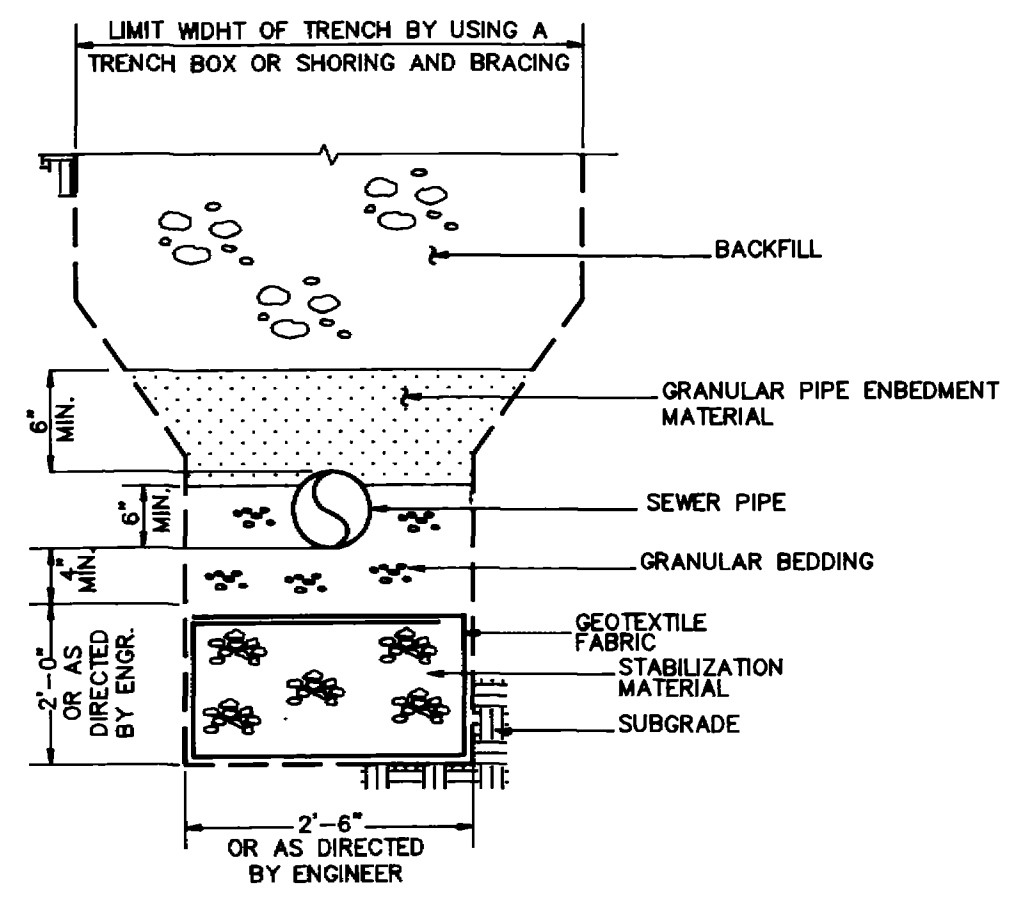


- NOTES:
1. ENCASEMENT SHALL EXTEND A DISTANCE OF 10' EITHER SIDE OF THE WATER LINE
 2. ENCASEMENT REQUIRED FOR BOTH MAIN LINE AND SERVICE LINE CROSSINGS
 3. ALTERNATE ENCASEMENT DETAIL PER CITY STANDARDS AND SPECIFICATIONS MAY BE USED IN LIEU OF CONCRETE ENCASEMENT AS SHOWN.

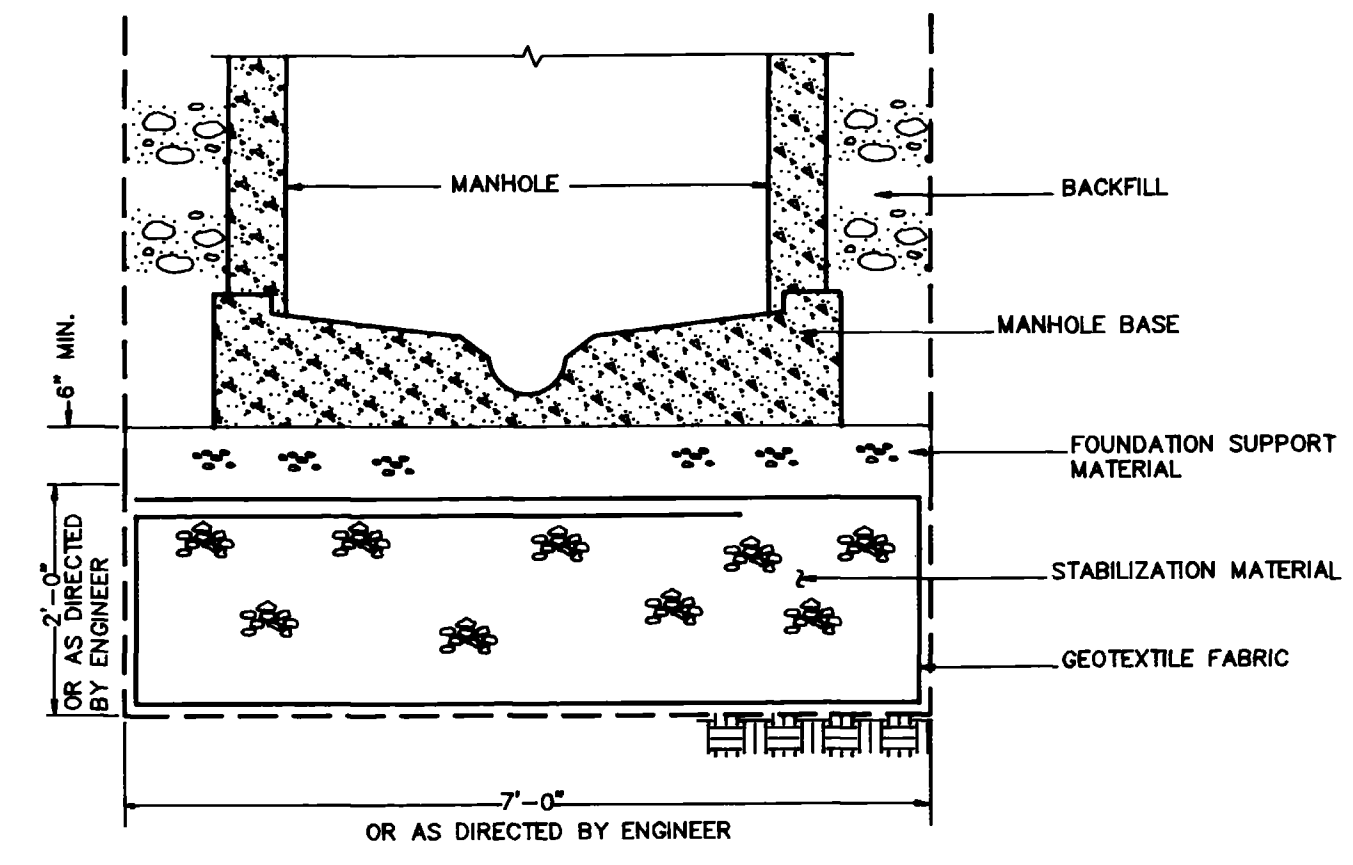
WATER AND SEWER LINE CROSSING
NOT TO SCALE



GENERAL SITE PLAN
SCALE: 1"=100'



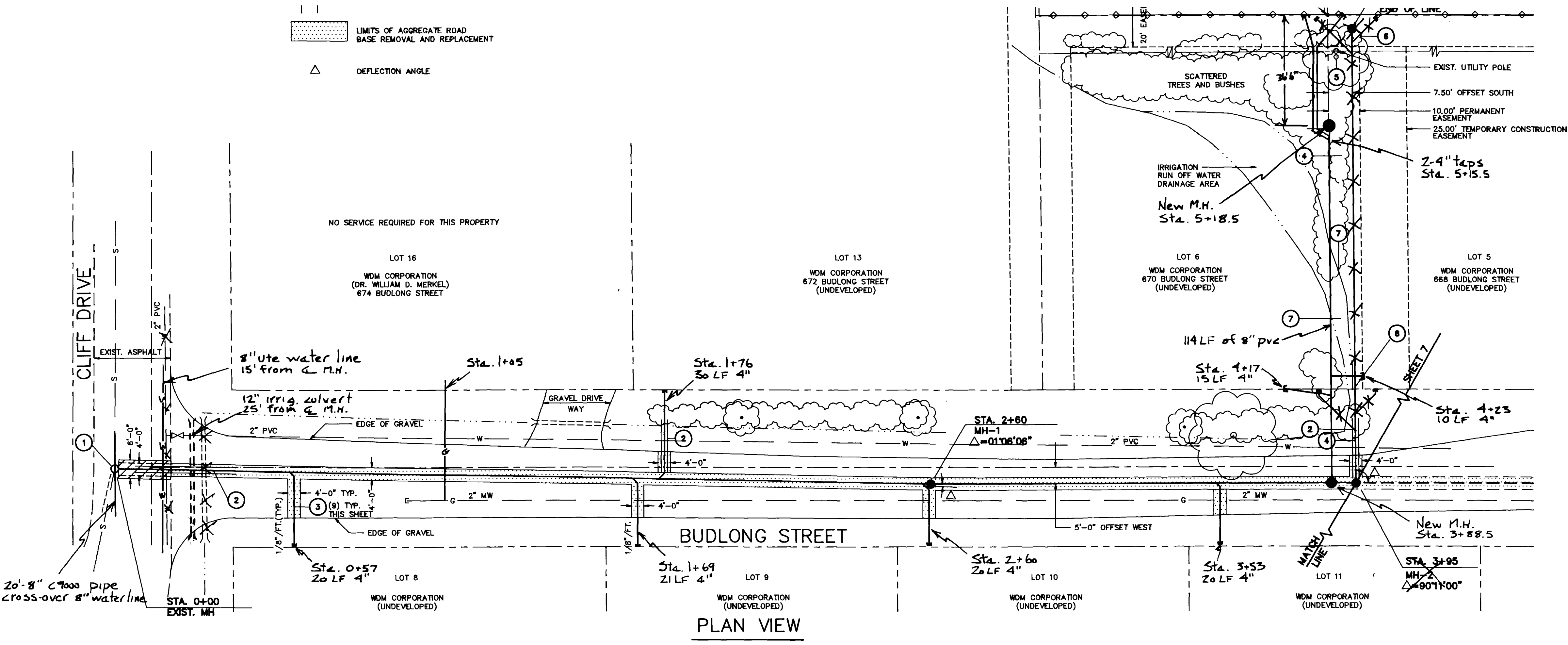
TRENCH STABILIZATION DETAIL
NOT TO SCALE



MANHOLE STABILIZATION DETAIL
NOT TO SCALE

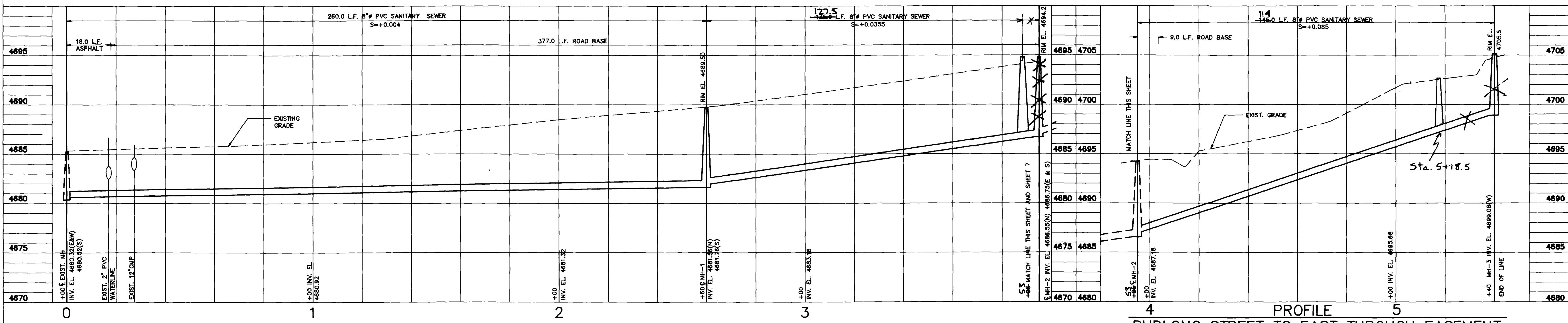
Versar INC.	THIS DRAWING IS THE PROPERTY OF VERSAR, AND IS NOT TO BE REPRODUCED, MODIFIED OR USED FOR ANY OTHER PROJECT OR EXTENSION OF THIS PROJECT EXCEPT BY AGREEMENT WITH SAID COMPANY.	SCALE <u>AS NOTED</u>	O'NAN SEWER EXTENSION	
		DRAWN <u>DG</u> CHECKED <u>CKK</u> APPROVED <u>CKK</u>	GRAND JUNCTION COLORADO	
		DATE <u>MAY 1991</u> PROJECT NO <u>9170.00</u>	SITE PLAN AND DETAILS	5/12

AS CONSTRUCTED



- ① CONNECT TO EXISTING MANHOLE. REFER TO DETAIL ON SHEET 4.
- ② CONSTRUCT WATERLINE CROSSING. REFER TO DETAIL ON SHEET 5.
- ③ CONSTRUCT 4" PVC SEWER SERVICE CONNECTION. REFER TO DETAIL ON SHEET 4. SLOPE PIPE AT 1/4" FOOT UNLESS OTHERWISE NOTED. EXTEND PIPE TO PROPERTY LINE AND CAP END AS SHOWN ON DRAWING. MARK END OF PIPE WITH A 5' LONG WOOD 2 x 4 WHICH IS BURIED 4'-6" AND IS 6" ABOVE FINISHED GRADE.
- ④ CLEAR AREA 3'-0" EITHER SIDE OF NEW SEWER ALIGNMENT OF SCATTERED BUSHES, SHRUBS AND SMALL TREES.
- ⑤ TRIM LOW HANGING BRANCHES FROM EXISTING TREE TO ALLOW ACCESS FOR EQUIPMENT.
- ⑥ REMOVE 5" TREE AND DO NOT REPLACE.
- ⑦ PROVIDE TEMPORARY BYPASS, DIKES OR DITCHES TO KEEP WASTE IRRIGATION WATER FROM ENTERING EXCAVATIONS. REGRADE THE AREA TO ORIGINAL CONDITION WHEN CONSTRUCTION IS COMPLETED.
- ⑧ SEWERLINE TRENCH MAY BE BACKFILLED WITH SUITABLE NATIVE MATERIAL AS APPROVED BY THE ENGINEER FROM THE RIGHT-OF-WAY TO THE EAST.

PLAN VIEW



PROFILE
BUDLONG STREET

PROFILE
BUDLONG STREET TO EAST THROUGH EASEMENT

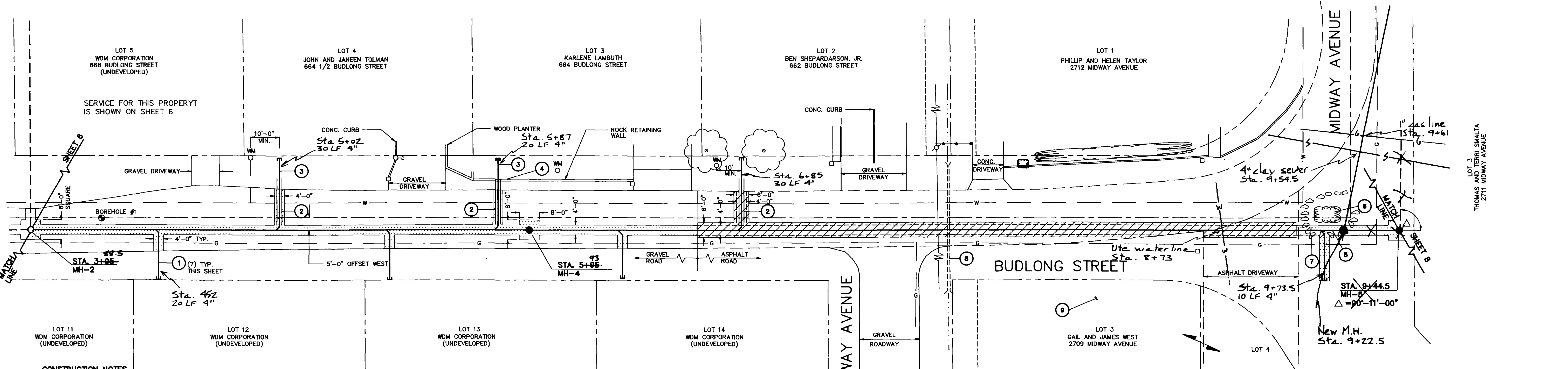


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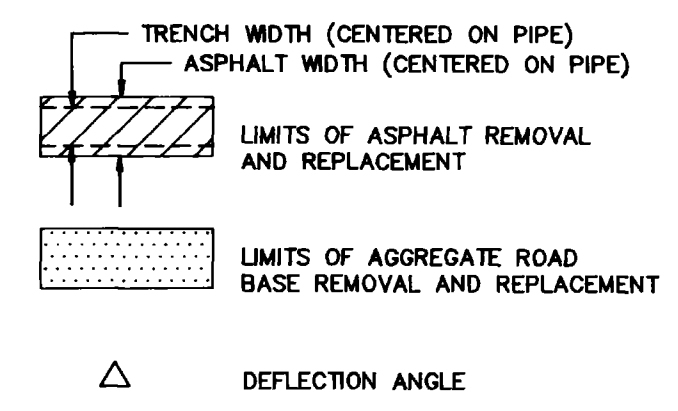
SCALE 1" = 20' HORIZ.
1" = 5' VERT.
DRAWN DG
CHECKED CKK
APPROVED CKK
DATE MAY 1991
PROJECT NO. 9170.00

O'NAN SEWER EXTENSION
GRAND JUNCTION COLORADO
PLAN AND PROFILE 6/12

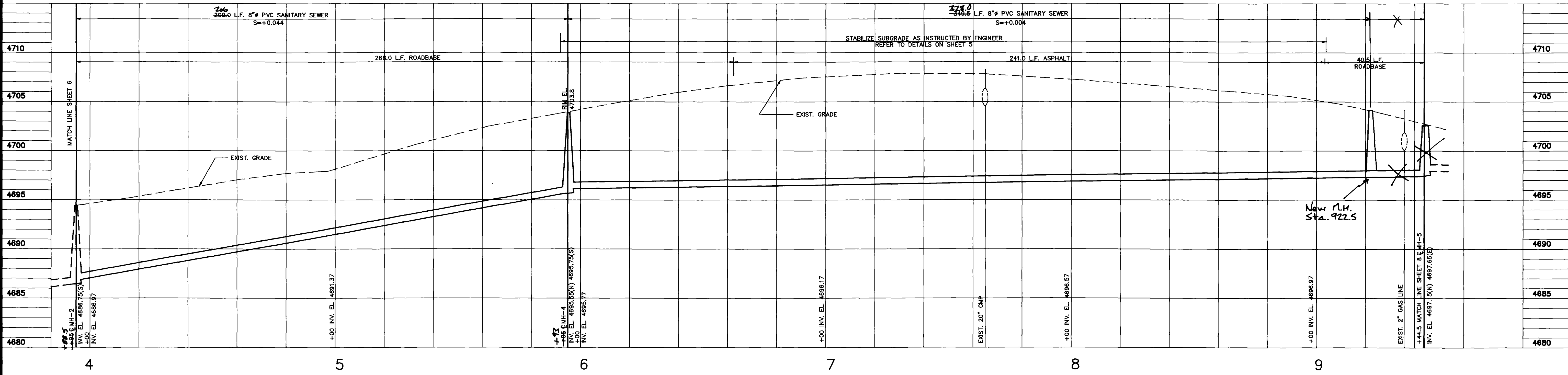
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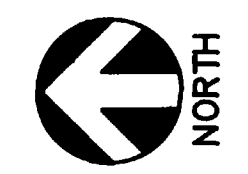
- CONSTRUCTION NOTES**
- CONSTRUCT 4" PVC SEWER SERVICE CONNECTION. REFER TO DETAIL ON SHEET 4. SLOPE PIPE AT 1/4" FOOT UNLESS OTHERWISE NOTED. EXTEND PIPE TO PROPERTY LINE AND CAP END AS SHOWN ON DRAWING. MARK END OF PIPE WITH A 5" LONG WOOD 2 x 4 WHICH IS BURIED 4'-6" AND IS 6" ABOVE FINISHED GRADE.
 - CONSTRUCT WATERLINE CROSSING. REFER TO DETAIL ON SHEET 5.
 - REPLACE SOD DISTURBED IN THIS AREA.
 - RECONSTRUCT ROCK RETAINING WALL TO ORIGINAL CONDITION.
 - REMOVE ROCK PLANTER AND REINSTALL WHEN CONSTRUCTION IS COMPLETED IN THIS AREA.
 - PROTECT EXISTING SHRUB FROM DAMAGE.
 - CAREFULLY REMOVE AND STOCKPILE EXISTING GRAVEL AND WASHED ROCK. REINSTALL GRAVEL WHEN CONSTRUCTION IS COMPLETED IN THIS AREA. REPLACE ALL GRAVEL LOST OR WASTED AT NO ADDITIONAL COST TO THE CONTRACT.
 - PROTECT EXISTING IRRIGATION LINE FROM DAMAGE. PROVIDE TEMPORARY BYPASS FOR WATER, OR IRRIGATION WATER MAY BE TURNED OFF AT THE HEAD-GATE AT CONTRACTOR'S DISCRETION. COORDINATE UTILITY SHUT DOWN WITH ALL AFFECTED WATER USERS. NOTIFY ALL USERS, BOTH UP STREAM AND DOWN STREAM AT LEAST 24 HOURS IN ADVANCE. WATER FLOW SHALL NOT BE DISCONTINUED FOR MORE THAN 48 CONSECUTIVE HOURS.
 - GRASS AREA DIRECTLY WEST OF THE PAVED ROAD IS SINKLERED. CONTRACTOR IS PROHIBITED FROM OPERATING EQUIPMENT, PARKING VEHICLES, STOCKPILING MATERIALS OR ENGAGING IN ANY OTHER ACTIVITIES WHICH MAY DISTURB OR DESTROY EXISTING IMPROVEMENTS.



PLAN VIEW

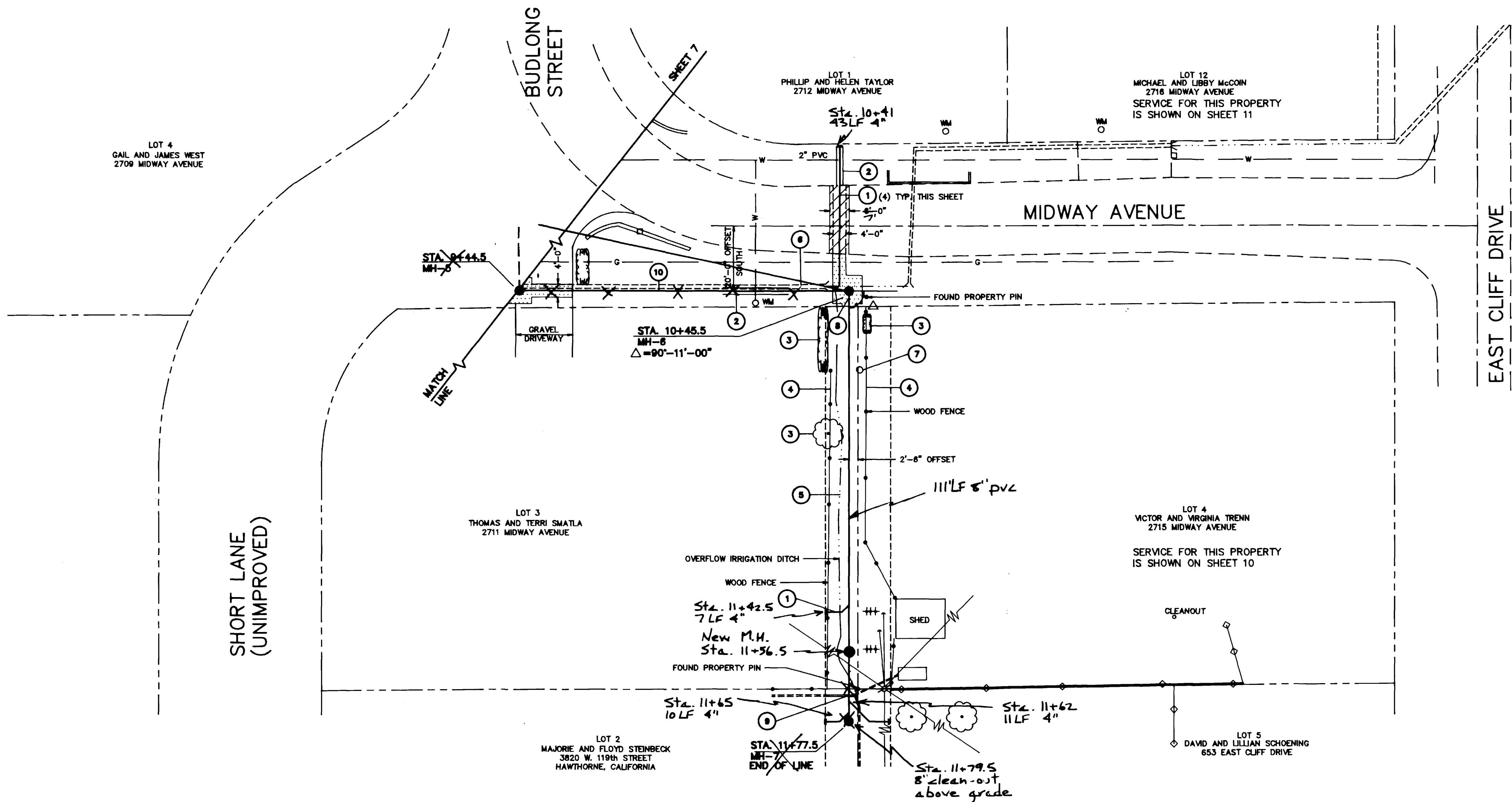


PROFILE
BUDLONG STREET

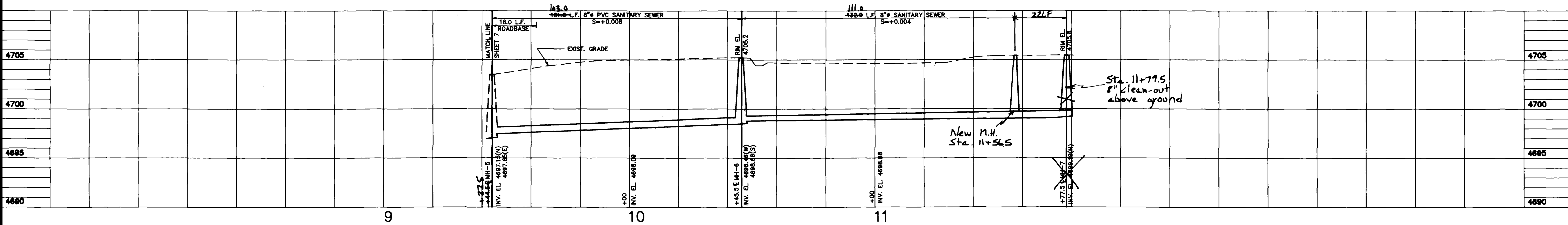
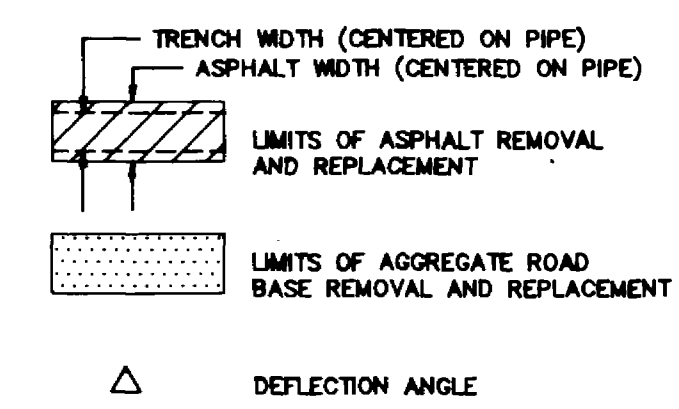


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		DRAWN <u>DG</u> CHECKED <u>CKK</u> APPROVED <u>CKK</u>	GRAND JUNCTION COLORADO	
		DATE <u>MAY 1991</u> PROJECT No. <u>9170.00</u>	PLAN AND PROFILE	7/12

NOT TO BE CONSTRUCTED



- CONSTRUCTION NOTES**
- 1 CONSTRUCT 4" PVC SEWER SERVICE CONNECTION, TYP. REFER TO DETAIL ON SHEET 4. SLOPE PIPE AT 1/4" FOOT UNLESS OTHERWISE NOTED. EXTEND PIPE TO PROPERTY LINE AND CAP END AS SHOWN ON DRAWING. MARK END OF PIPE WITH A 5' LONG WOOD 2 x 4 WHICH IS BURIED 4'-6" AND IS 6" ABOVE FINISHED GRADE.
 - 2 CONSTRUCT WATERLINE CROSSING. REFER TO DETAIL ON SHEET 5.
 - 3 PROTECT EXISTING SHRUBS AND TREE FROM DAMAGE.
 - 4 PROTECT EXISTING FENCE FROM DAMAGE.
 - 5 REGRADE EXISTING DITCH TO ORIGINAL CONDITION WHEN CONSTRUCTION IS COMPLETED IN THIS AREA.
 - 6 REMOVE, STORE, AND REINSTALL EXISTING 8" PVC IRRIGATION PIPE AS REQUIRED FOR CONSTRUCTION. PROVIDE TEMPORARY BYPASS FOR WATER, OR IRRIGATION WATER MAY BE TURNED OFF AT THE HEADGATE AT CONTRACTOR'S DISCRETION. COORDINATE UTILITY SHUT DOWN WITH ALL AFFECTED WATER USERS. NOTIFY ALL USERS BOTH UP STREAM AND DOWNSTREAM AT LEAST 24 HOURS IN ADVANCE. WATER FLOW SHALL NOT BE DISCONTINUED FOR MORE THAN 48 CONSECUTIVE HOURS.
 - 7 REMOVE EXISTING 24" TREE STUMP.
 - 8 SEWER TRENCH MAY BE BACKFILLED WITH SUITABLE NATIVE MATERIAL AS APPROVED BY THE ENGINEER FROM THE RIGHT-OF-WAY TO THE SOUTH.
 - 9 SAWCUT AND REMOVE CONCRETE IRRIGATION DITCH 3'-0" EITHER SIDE OF SEWER LINE. PROVIDE TEMPORARY BYPASS FOR IRRIGATION WATER AS DISCUSSED IN NOTE 6 ABOVE. RECONSTRUCT A NEW CONCRETE DITCH TO MATCH EXISTING LINES AND GRADES.
 - 10 REPLACE ALL SOG DISTURBED IN THIS AREA. SOODED AREA CONTAINS AN UNDERGROUND IRRIGATION SYSTEM. CONTRACTOR SHALL PROTECT SPRINKLER HEADS, BURIED PIPING, AND CONTROL WIRES AND ALL INCIDENTAL COMPONENTS OF THE IRRIGATION SYSTEM FROM DAMAGE. REPLACE OR REPAIR ANY PORTION OF THE SYSTEM INADVERTENTLY DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE CONTRACT.



PROFILE
MIDWAY AND EASEMENT TO SOUTH



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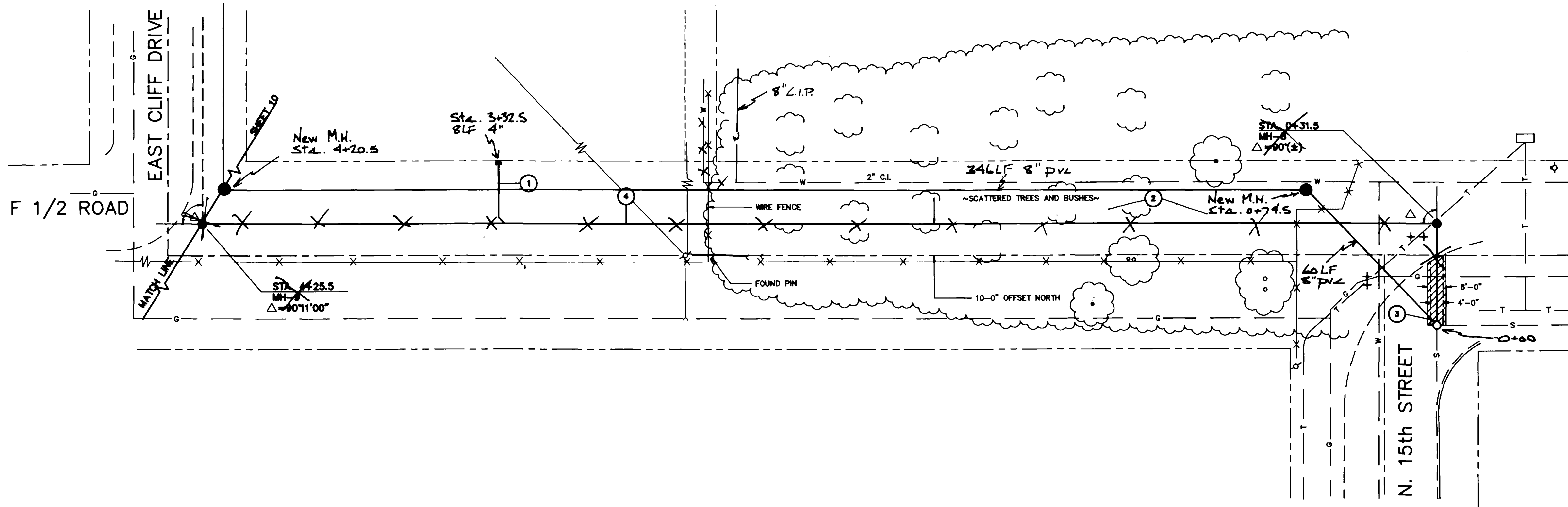
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1"=5' VERT.

DRAWN DG
CHECKED CKK
APPROVED CKK

DATE MAY 1991
PROJECT NO. 9170.00

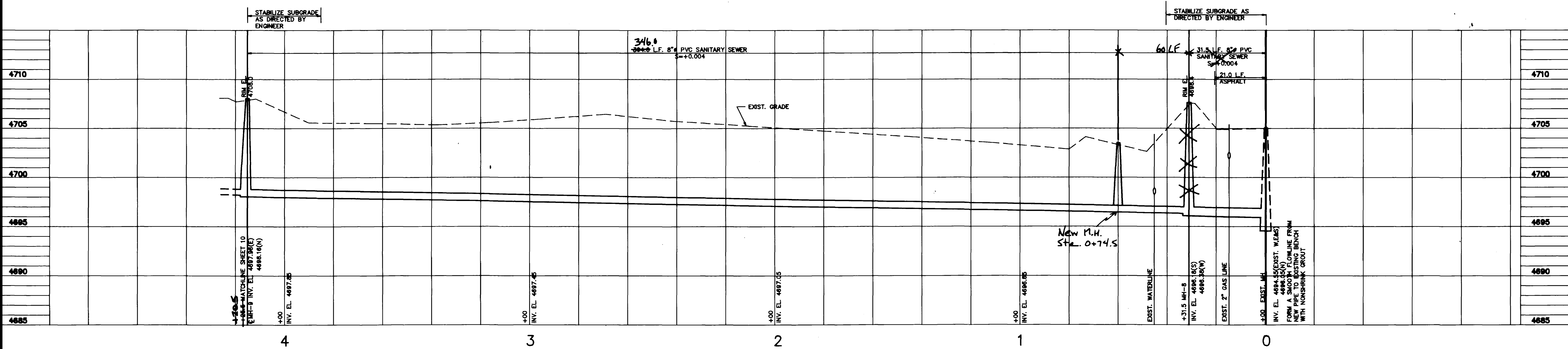
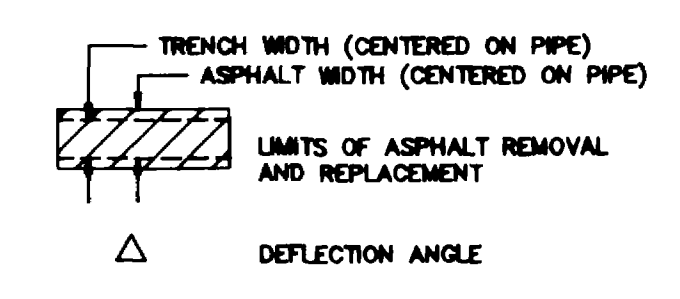
O'NAN SEWER EXTENSION	
GRAND JUNCTION COLORADO	
PLAN AND PROFILE	8/12

AS CONSTRUCTED



PLAN VIEW

- CONSTRUCTION NOTES**
- CONSTRUCT 4" PVC SEWER SERVICE CONNECTION. REFER TO DETAIL ON SHEET 4. SLOPE PIPE AT 1/4" FOOT UNLESS OTHERWISE NOTED. EXTEND PIPE TO PROPERTY LINE AND CAP END AS SHOWN ON DRAWING. MARK END OF PIPE WITH A 5' LONG WOOD 2 x 4 WHICH IS BURIED 4'-6" AND IS 8" ABOVE FINISHED GRADE.
 - CLEAR SCATTERED TREES (SAPLINGS) AND SHRUBS FROM THE CONSTRUCTION AREA. LEGALLY DISPOSE OF RUBBISH OFF SITE.
 - CONNECT TO EXISTING MANHOLE. REFER TO DETAIL ON SHEET 4.
 - SEWER LINE TRENCH MAY BE BACKFILLED WITH SUITABLE NATIVE MATERIAL AS APPROVED BY THE ENGINEER BETWEEN MH-8 AND MH-9.



PROFILE
F 1/2 ROAD

NOTE: STATIONING IS LEFT TO RIGHT ON THIS SHEET.

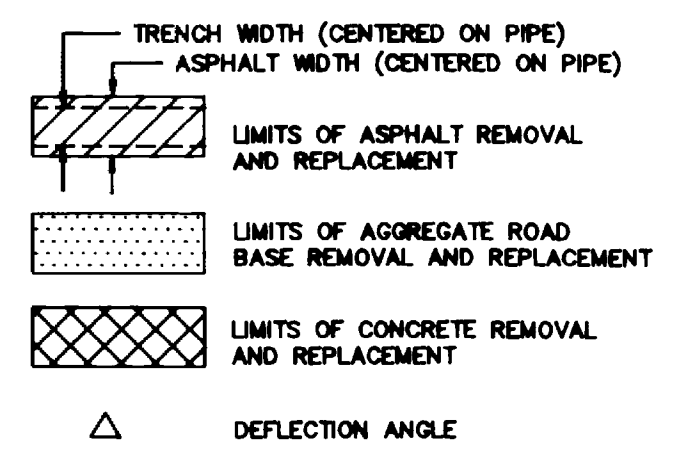
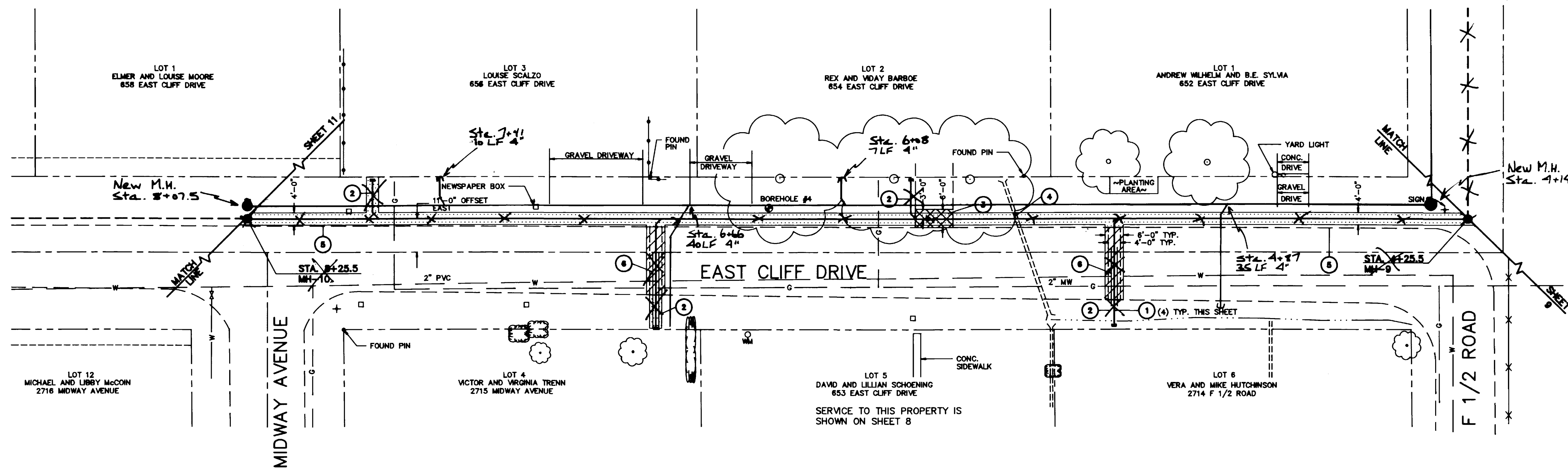


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		DRAWN DG CHECKED CKK APPROVED CKK	GRAND JUNCTION COLORADO	
		DATE MAY 1991 PROJECT NO 9170.00	PLAN AND PROFILE	

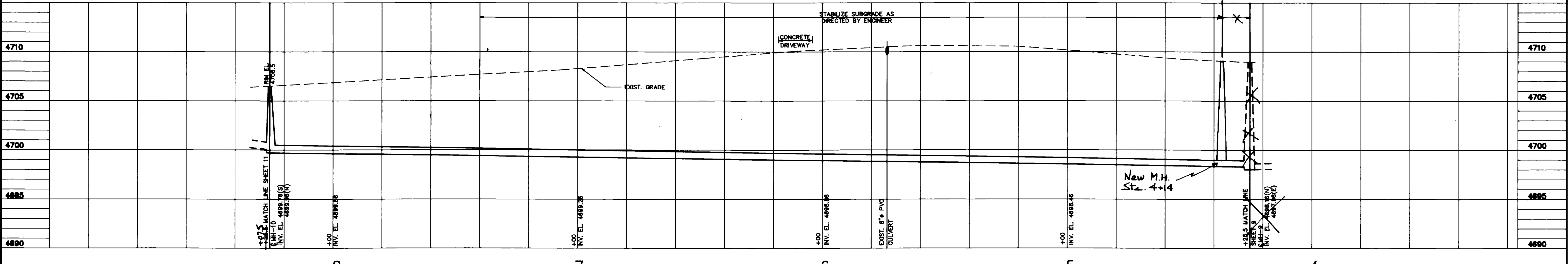
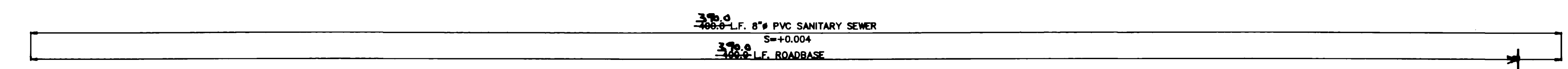
AS CONSTRUCTED

CONSTRUCTION NOTES

- ① CONSTRUCT 4" PVC SEWER SERVICE CONNECTION. REFER TO DETAIL ON SHEET 4. SLOPE PIPE AT 1/4" FOOT UNLESS OTHERWISE NOTED. EXTEND PIPE TO PROPERTY LINE AND CAP END AS SHOWN ON DRAWING. MARK END OF PIPE WITH A 5' LONG WOOD 2 x 4 WHICH IS BURIED 4'-6" AND IS 6" ABOVE FINISHED GRADE.
- ② REPLACE SOO DISTURBED IN THIS AREA.
- ③ PROPOSED CONCRETE DRIVEWAY (AT THE TIME OF DESIGN) MAY BE CONSTRUCTED BY HOMEOWNER PRIOR TO CONSTRUCTION UNDER THIS CONTRACT. REMOVE CONCRETE SLAB TO NEAREST JOINT IF SAID JOINT IS LOCATED WITHIN 10 FEET OF NEW SEWER LINE OR SAWCUT DRIVE AS SHOWN ON PLANS. POUR NEW CONCRETE DRIVEWAY, 6" THICK TO MATCH ACTUAL WIDTH AND FINISH TO MATCH EXISTING.
- ④ PROTECT EXISTING IRRIGATION LINE FROM DAMAGE. PROVIDE TEMPORARY BYPASS FOR WATER, OR IRRIGATION WATER MAY BE TURNED OFF AT THE HEADGATE AT CONTRACTOR'S DISCRETION. COORDINATE UTILITY SHUT DOWN WITH ALL AFFECTED WATER USERS. NOTIFY ALL USERS, BOTH UP STREAM AND DOWN STREAM AT LEAST 24 HOURS IN ADVANCE. WATER FLOW SHALL NOT BE DISCONTINUED FOR MORE THAN 48 CONSECUTIVE HOURS.
- ⑤ EDGE OF EXISTING ASPHALT NOT TO BE DISTURBED BY EXCAVATIONS UNLESS OTHERWISE SHOWN. ASPHALT DAMAGED BY OVEREXCAVATIONS, TRACKED EQUIPMENT, OUT-RIGGERS, OR OTHER CONSTRUCTION ACTIVITIES SHALL BE REMOVED TO LIMITS AS DESIGNATED BY ENGINEER AND REPLACED WITH 10" NEW BASE COURSE AND 3" NEW ASPHALT AT THE CONTRACTOR'S EXPENSE.
- ⑥ CONSTRUCT WATERLINE CROSSING. REFER TO DETAIL ON SHEET 5.



PLAN VIEW



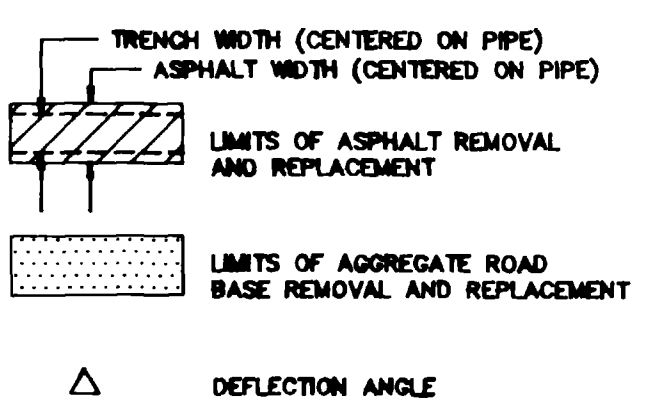
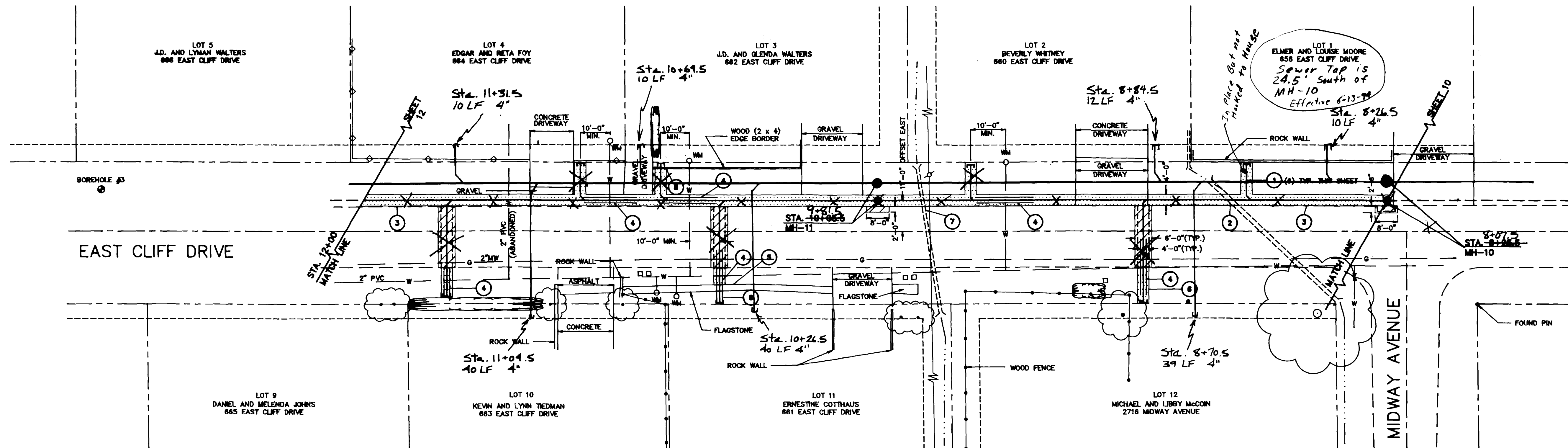
PROFILE EAST CLIFF DRIVE

NOTE: STATIONING IS RIGHT TO LEFT ON THIS SHEET.



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	DRAWN DG CHECKED CKK APPROVED CKK			GRAND JUNCTION COLORADO	
			DATE MAY 1991 PROJECT NO 9170.00	PLAN AND PROFILE 10/12	

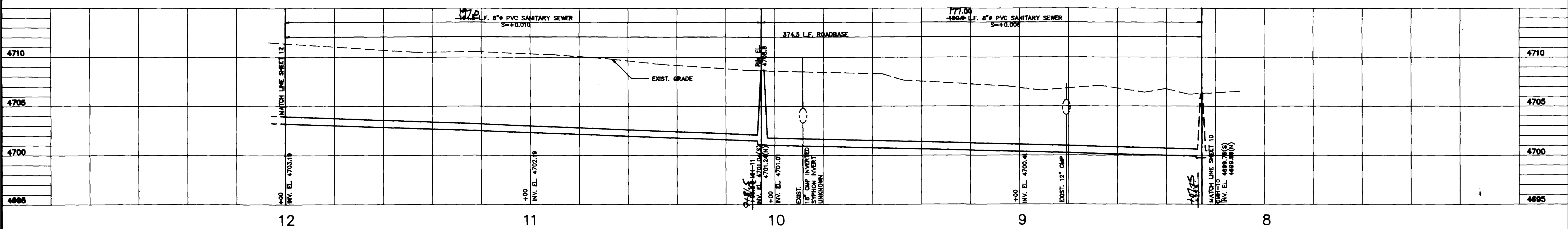
AS CONSTRUCTED



PLAN VIEW

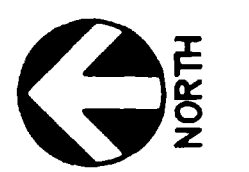
CONSTRUCTION NOTES

1. CONSTRUCT 4" PVC SEWER SERVICE CONNECTION. REFER TO DETAIL ON SHEET 4. SLOPE PIPE AT 1/4" FOOT UNLESS OTHERWISE NOTED. EXTEND PIPE TO PROPERTY LINE AND CAP END AS SHOWN ON DRAWING. MARK END OF PIPE WITH A 5' LONG WOOD 2 x 4 WHICH IS BURIED 4'-6" AND IS 6" ABOVE FINISHED GRADE.
2. PROTECT EXISTING IRRIGATION PIPE FROM DAMAGE. PROVIDE TEMPORARY BYPASS FOR WATER. OR IRRIGATION WATER MAY BE TURNED OFF AT THE HEADGATE AT THE CONTRACTOR'S DISCRETION. COORDINATE UTILITY SHUT DOWN WITH ALL AFFECTED WATER USERS. NOTIFY ALL USERS, BOTH UP STREAM AND DOWN STREAM AT LEAST 24 HOURS IN ADVANCE. WATER FLOW SHALL NOT BE DISCONTINUED FOR MORE THAN 48 CONSECUTIVE HOURS.
3. EDGE OF EXISTING ASPHALT NOT TO BE DISTURBED BY EXCAVATIONS UNLESS OTHERWISE SHOWN. ASPHALT DAMAGED BY OVEREXCAVATIONS, TRACKED EQUIPMENT, OUT-RIGGERS OR OTHER CONSTRUCTION ACTIVITIES SHALL BE REMOVED TO LIMITS AS DESIGNATED BY ENGINEER AND REPLACE WITH 10" NEW BASE COURSE AND 3" NEW ASPHALT AT THE CONTRACTOR'S EXPENSE.
4. CONSTRUCT WATERLINE CROSSING. REFER TO DETAIL ON SHEET 5.
5. REMOVE AND STORE EXISTING FLAGSTONE BORDER APPROXIMATELY 3' EITHER SIDE OF SERVICE LINE. REINSTALL STONES WHEN CONSTRUCTION IS COMPLETED IN THIS AREA.
6. REPLACE ALL SOD DISTURBED DURING CONSTRUCTION.
7. PROTECT EXISTING IRRIGATION PIPE FROM DAMAGE. PROVIDE TEMPORARY BYPASS FOR WATER. OR IRRIGATION WATER MAY BE TURNED OFF AT THE HEADGATE AT THE CONTRACTOR'S DISCRETION. PUMP OUT THE WATER FROM THE INVERTED SYPHON. COORDINATE UTILITY SHUT DOWN WITH ALL AFFECTED WATER USERS. NOTIFY ALL USER, BOTH UP STREAM AND DOWN STREAM AT LEAST 24 HOURS IN ADVANCE. WATER FLOW SHALL NOT BE DISCONTINUED FOR MORE THAN 48 CONSECUTIVE HOURS.
8. REMOVE AND STORE WOOD BORDER TO NEAREST JOINT. REINSTALL BORDER WHEN CONSTRUCTION IS COMPLETED IN THIS AREA.



PROFILE
EAST CLIFF DRIVE

NOTE: STATIONING IS RIGHT TO LEFT ON THIS SHEET.

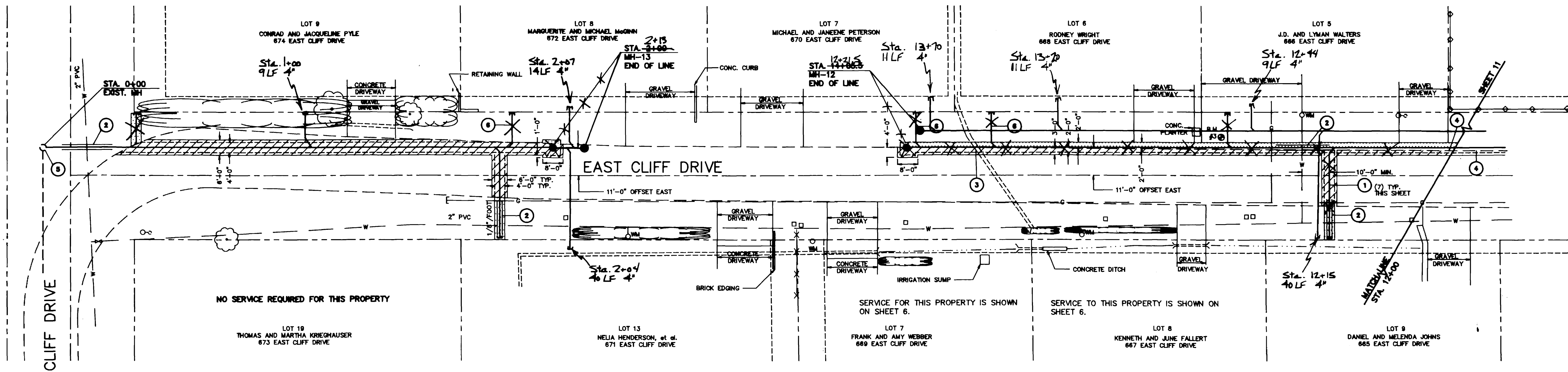


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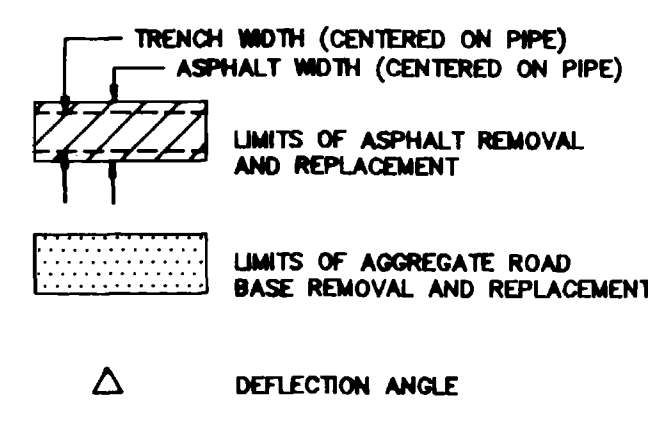
SCALE 1"=20' HORIZ.
1"=5' VERT.
DRAWN DG
CHECKED CKK
APPROVED CKK
DATE MAY 1991
PROJECT MQ 9170.00

O'NAN SEWER EXTENSION	
GRAND JUNCTION COLORADO	
PLAN AND PROFILE	11/12

AS CONSTRUCTED

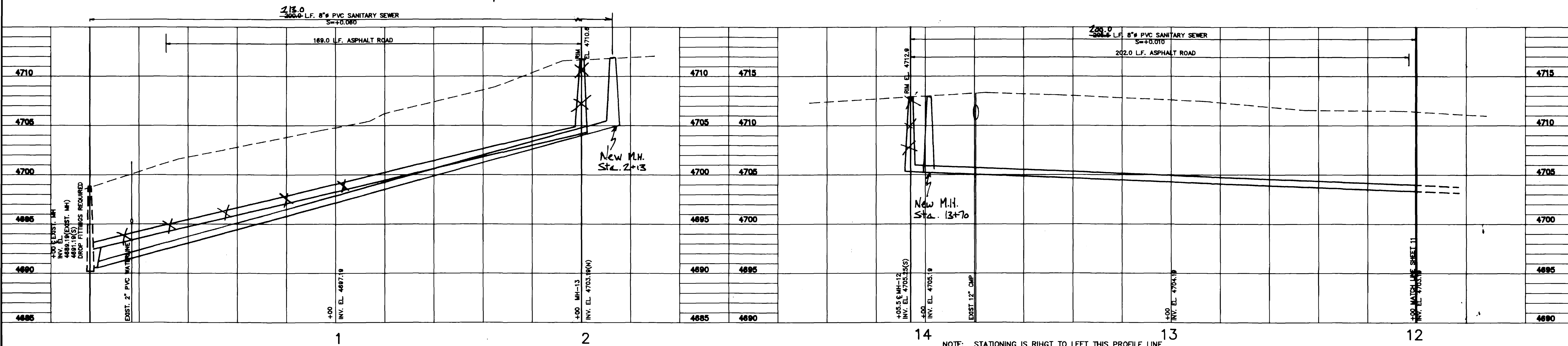


PLAN VIEW



CONSTRUCTION NOTES

- ① CONSTRUCT 4" PVC SEWER SERVICE CONNECTION. REFER TO DETAIL ON SHEET 4. SLOPE PIPE AT 1/4" / FOOT UNLESS OTHERWISE NOTED. EXTEND PIPE TO PROPERTY LINE AND CAP END AS SHOWN ON DRAWING. MARK END OF PIPE WITH A 5" LONG WOOD 2 x 4 WHICH IS BURIED 4'-6" AND IS 6" ABOVE FINISHED GRADE.
- ② CONSTRUCT WATERLINE CROSSING. REFER TO DETAIL ON SHEET 5.
- ③ PROTECT EXISTING IRRIGATION LINE FROM DAMAGE. PROVIDE TEMPORARY BYPASS FOR WATER, OR IRRIGATION WATER MAY BE TURNED OFF AT THE HEADGATE AT THE CONTRACTOR'S DISCRETION. COORDINATE UTILITY SHUT DOWN WITH ALL AFFECTED WATER USERS. NOTIFY ALL USERS, BOTH UP STREAM AND DOWN STREAM AT LEAST 24 HOURS IN ADVANCE. WATER FLOW SHALL NOT BE DISCONTINUED FOR MORE THAN 48 CONSECUTIVE HOURS.
- ④ EDGE OF EXISTING ASPHALT NOT TO BE DISTURBED BY EXCAVATIONS UNLESS OTHERWISE SHOWN. ASPHALT DAMAGED BY OVEREXCAVATIONS, TRACKED EQUIPMENT, OUT-RIGGERS, OR OTHER CONSTRUCTION ACTIVITIES SHALL BE REMOVED TO LIMITS AS DESIGNATED BY ENGINEER AND REPLACED WITH 10" NEW BASE COURSE AND 3" NEW ASPHALT AT THE CONTRACTOR'S EXPENSE.
- ⑤ CONNECT TO EXISTING MANHOLE. REFER TO DETAIL ON SHEET 4. (2) CONNECTIONS REQUIRED; (1) FOR DROP FITTINGS AND (1) FOR PIPE FLOWLINE.
- ⑥ REPLACE SOD DISTURBED IN THIS AREA.



NOTE: STATIONING IS LEFT TO RIGHT THIS PROFILE LINE.

PROFILE EAST CLIFF DRIVE



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SCALE 1"=20' HORIZ.
1"=5' VERT.
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O'NAN SEWER EXTENSION
GRAND JUNCTION COLORADO
PLAN AND PROFILE 12/12

AS CONSTRUCTED