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CITY OF WICHITA, KANSAS

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

ON 47TH STREET SOUTH, FROM SENECA TO BROADWAY

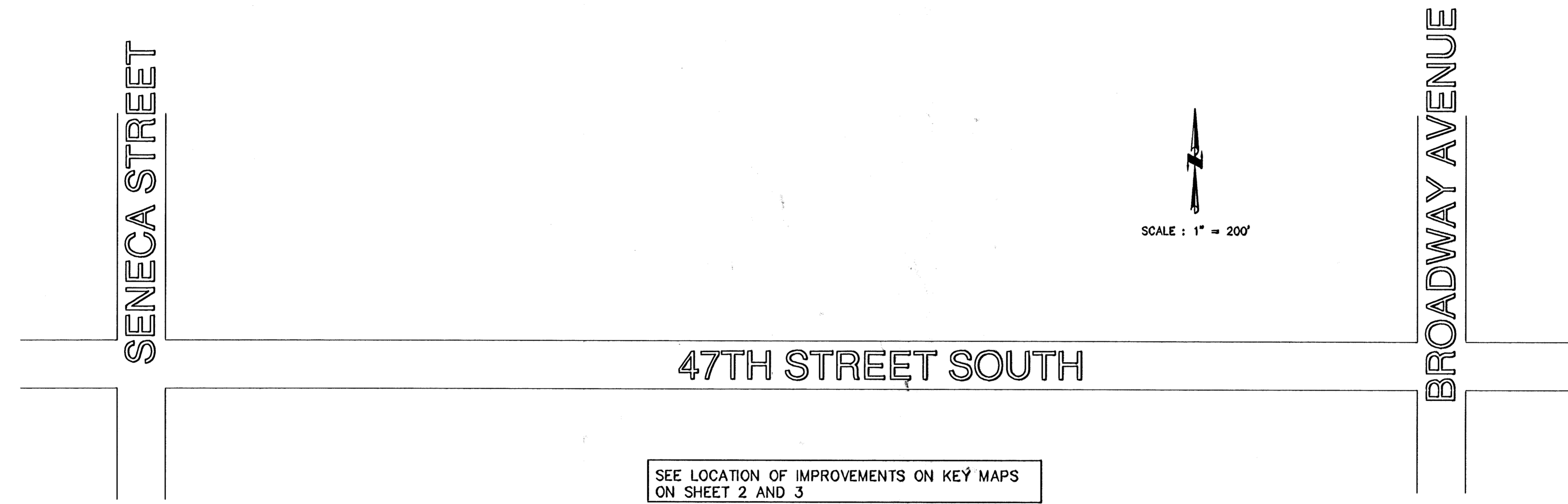
PROJECT NO.: 448-88975

INDEX CODE:

GENERAL NOTES:

- CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS GAS & ELECTRIC	316-261-6421
KGE GAS	316-942-8350
SOUTHWESTERN BELL TELEPHONE CO.	316-383-0454
WICHITA WATER DEPARTMENT	316-269-4553
MULTIMEDIA CABLEVISION	316-262-4270
WICHITA SEWER MAINTENANCE	316-268-4210
KANSAS ONE-CALL	1-687-2470
- ALL WATER MAINS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF WICHITA, KANSAS STANDARD SPECIFICATIONS FOR WATER MAIN INSTALLATION NO. 14533.
- THE WATER MAIN SHALL BE CONSTRUCTED ON THE ALIGNMENT SHOWN BY THE PLANS. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE. THE COST FOR ANY NECESSARY TREE TRIMMING, CLEARING AND/OR GRUBBING SHALL BE INCLUDED IN THE PRICE BID FOR INSTALLED WATER MAIN PIPE.
- OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.
- CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED TO THE PROJECT AND IS PRESENT ON THE SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
- EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAW.
- GRASS AREAS DISTURBED BY CONSTRUCTION OR STORAGE OF MATERIALS SHALL BE REPLANTED EITHER BY SEEDING OR SODDING WITH THE SAME TYPE OF GRASS AS WAS EXISTING PRIOR TO WATER LINE CONSTRUCTION. SEE "SPECIAL PROVISIONS" IN THE STANDARD SPECIFICATION NO. 14533 FOR SEEDING AND SODDING OF COOL SEASON AND WARM SEASON GRASSES.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJACENT TO THE CONSTRUCTION OF THIS PROJECT, A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO BEGINNING CONSTRUCTION.
- TOP OF EXISTING WATER LINE ELEVATIONS ARE TAKEN FROM CITY RECORDS. CONTRACTOR SHALL UNCOVER THE EXISTING WATER LINE IN ORDER TO ASCERTAIN THIS ELEVATION PRIOR TO BEGINNING CONSTRUCTION. ADJUSTMENTS IN PROFILE GRADE MAY HAVE TO BE MADE IF TOP OF EXISTING WATER LINE ELEVATION IS DIFFERENT THAN AS SHOWN ON PLANS.
- INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA AND LOCAL BUSINESS OR RESIDENTIAL TRAFFIC GENERATED WITHIN THE PROJECT AREA ARE TO BE CARRIED THROUGH CONSTRUCTION AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS, SHOWN.



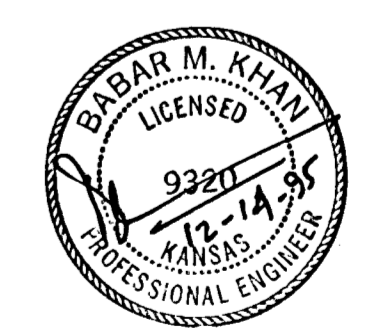
SEE LOCATION OF IMPROVEMENTS ON KEY MAPS ON SHEET 2 AND 3

BENCH MARKS:

- BENCH MARK NO. 1: CITY DISK @ 74" NORTH AND 44 FEET EAST OF CENTERLINES OF SENECA AND 47TH STREET SOUTH. ELEV. = 1274.74
- BENCH MARK NO. 2: CHISELED SQUARE ON CURB AT NORTH END OF NORTHEAST RETURN AT INTERSECTION OF OSAGE AND 47TH STREET SOUTH. ELEV. = 1274.77
- BENCH MARK NO. 3: CHISELED SQUARE ON CURB AT NORTH END OF NORTHEAST RETURN AT INTERSECTION OF LA CLEDE AND 47TH STREET SOUTH. ELEV. = 1276.47
- BENCH MARK NO. 4: CHISELED SQUARE ON TOP OF SOUTHWEST CORNER BRICK WALL AROUND SIGN AT NORTHEAST CORNER OF INTERSECTION OF PALUSADE AND 47TH STREET SOUTH. ELEV. = 1277.12
- BENCH MARK NO. 5: CHISELED SQUARE ON CURB, 95 FEET SOUTH OF CENTERLINE OF 47TH STREET SOUTH AND ON WEST CURB OF WATER STREET. ELEV. = 1273.20
- BENCH MARK NO. 6: CHISELED SQUARE ON TOP OF NORTH SIDE LIGHT BASE AT NORTHWEST CORNER OF PARKING LOT OF SHOPPING CENTER ON SOUTHWEST CORNER OF BROADWAY AND 47TH STREET SOUTH. ELEV. = 1275.09

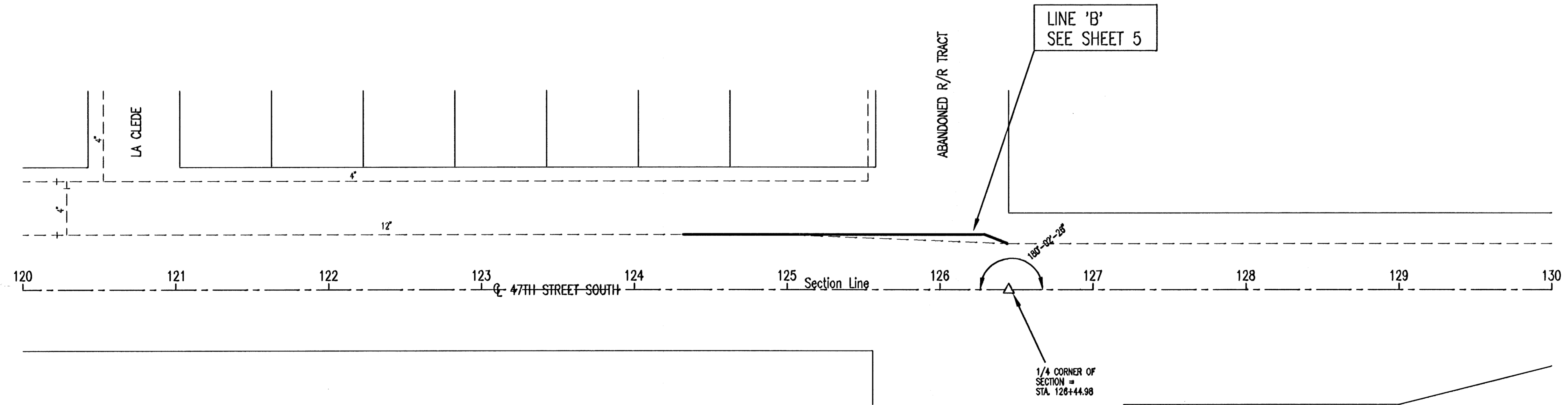
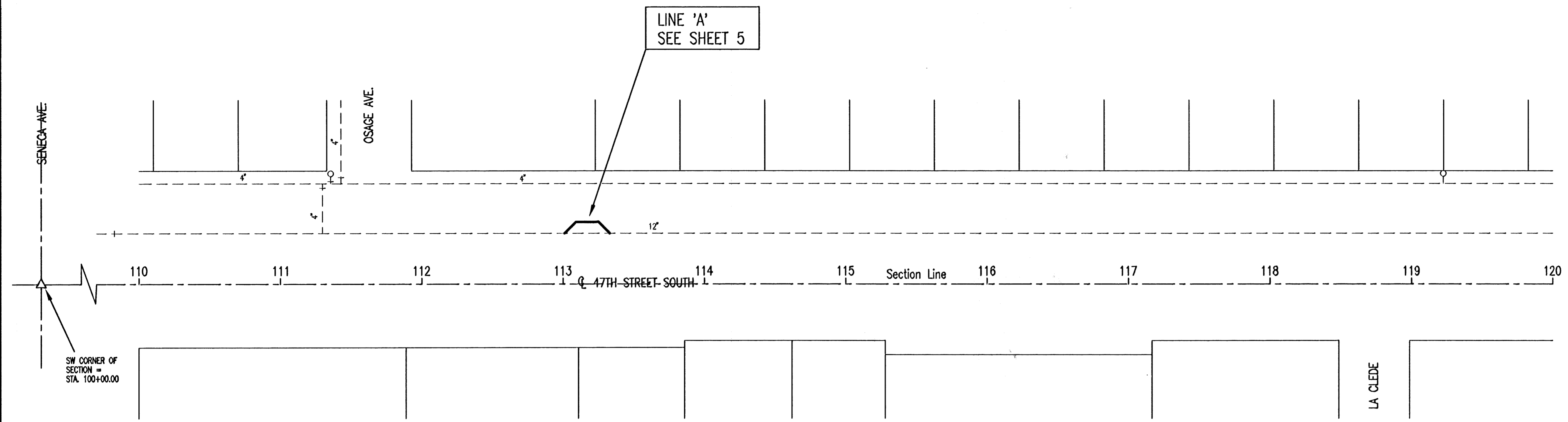
LOCATION MAP

MICHAEL E. LINDEBAK, P.E., CITY ENGINEER




TITLE SHEET		
SCALE:	APPROVED:	DRAWN BY: F.A.
DATE:	CHECKED: B.K.	SHEET NO.:
PROJECT NO:	1 OF 7	
95-17 (MUNICIPAL)		
MUNICIPAL ENGINEERS 254-LAURA, SUITE 201 WICHITA, KANSAS 67211 316-262-3842		

SCALE: 1" = 40'

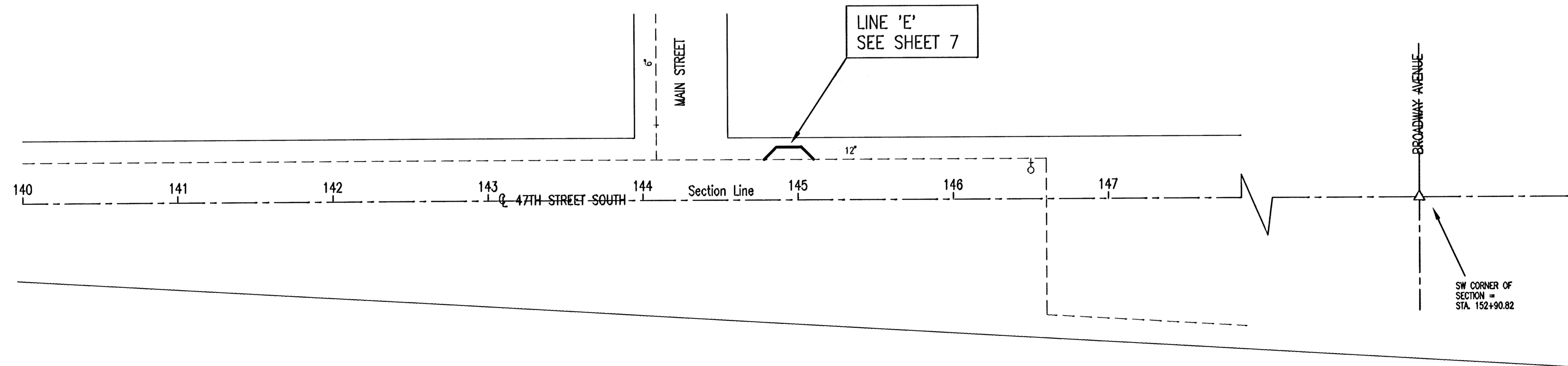
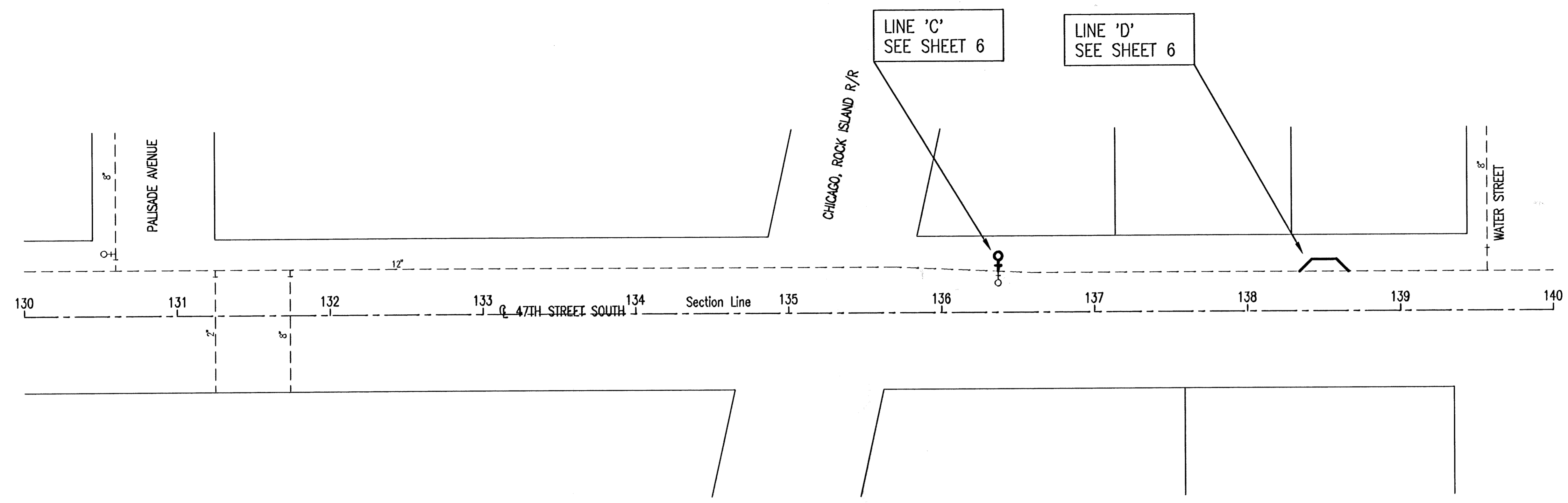


PROJECT SCHEDULE:

Contractor shall make all necessary connections for Line 'A' during one shut-down. Connections for Lines 'B', 'C', 'D', & 'E' will be made during a second shut-down. Line shut-downs will be only during off-peak hours. Contractor shall operate full crews continuously during these shut-downs in order to minimize shut-down time.

KEY MAP		
SCALE:	APPROVED:	DRAWN BY:
DATE:		CHECKED:
PROJECT NO.:	448-88975	SHEET NO.: 2 OF 7
 MUNICIPAL ENGINEERS 264-LAURA, SUITE 201 WICHITA, KANSAS 67211 316-262-3842		

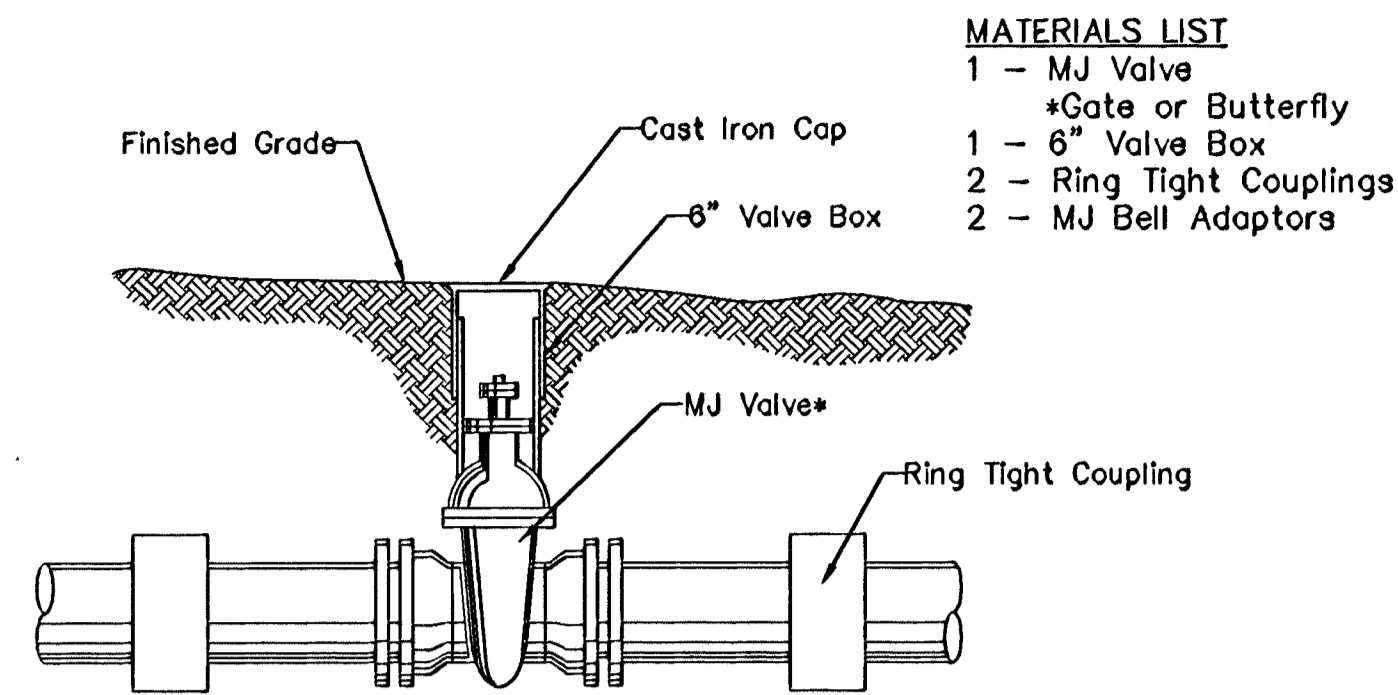
SCALE: 1" = 40'



KEY MAP

SCALE:	APPROVED:	DRAWN BY:
DATE:	CHECKED:	SHEET NO.:
PROJECT NO.:	448-38975	3 OF 7

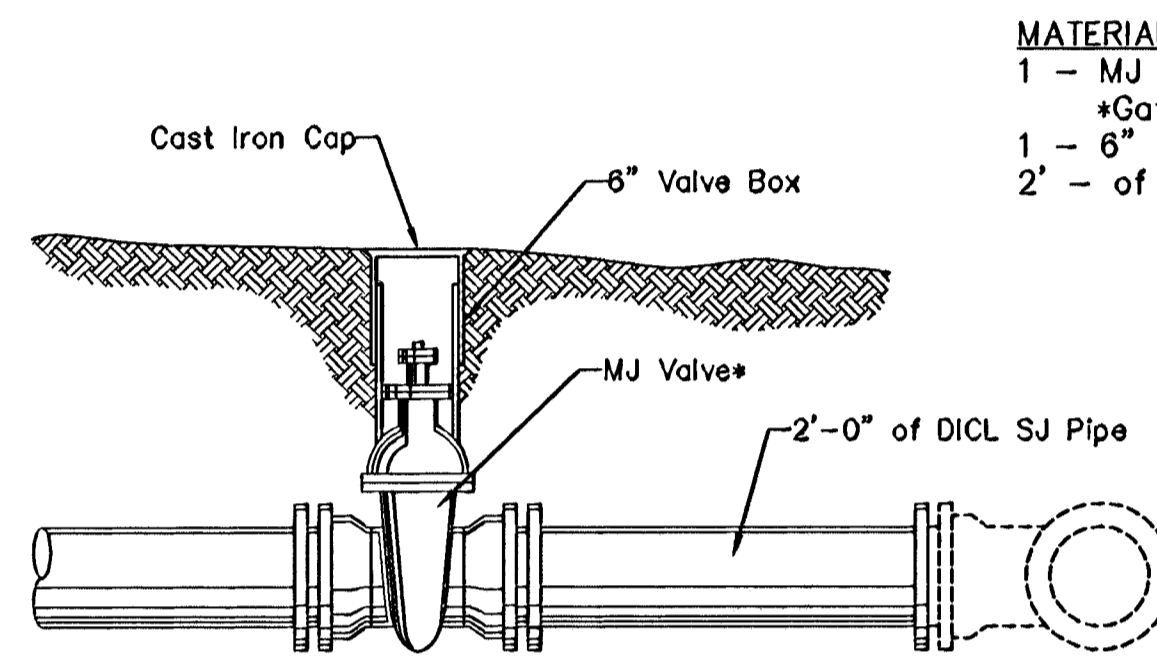
ME MUNICIPAL ENGINEERS
 254-LAURA, SUITE 201
 WICHITA, KANSAS 67211
 316-262-3842



LINE VALVE ASSEMBLY

* See Plans for the Type of Valve to be Used.

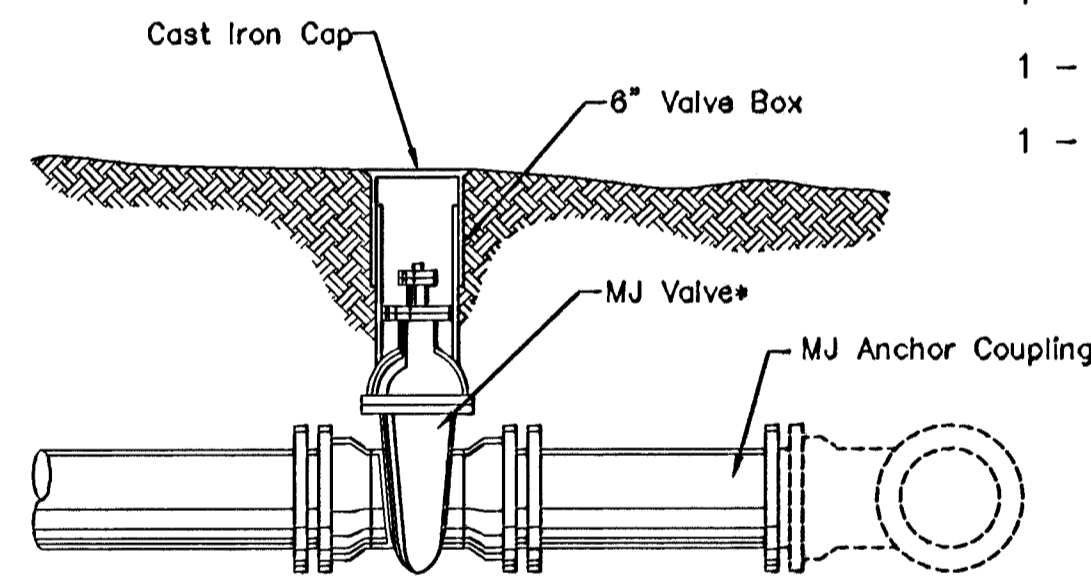
- MATERIALS LIST**
 1 - MJ Valve
 *Gate or Butterfly
 1 - 6" Valve Box
 2 - Ring Tight Couplings
 2 - MJ Bell Adaptors



VALVE ASSEMBLY

* See Plans for the Type of Valve to be Used.

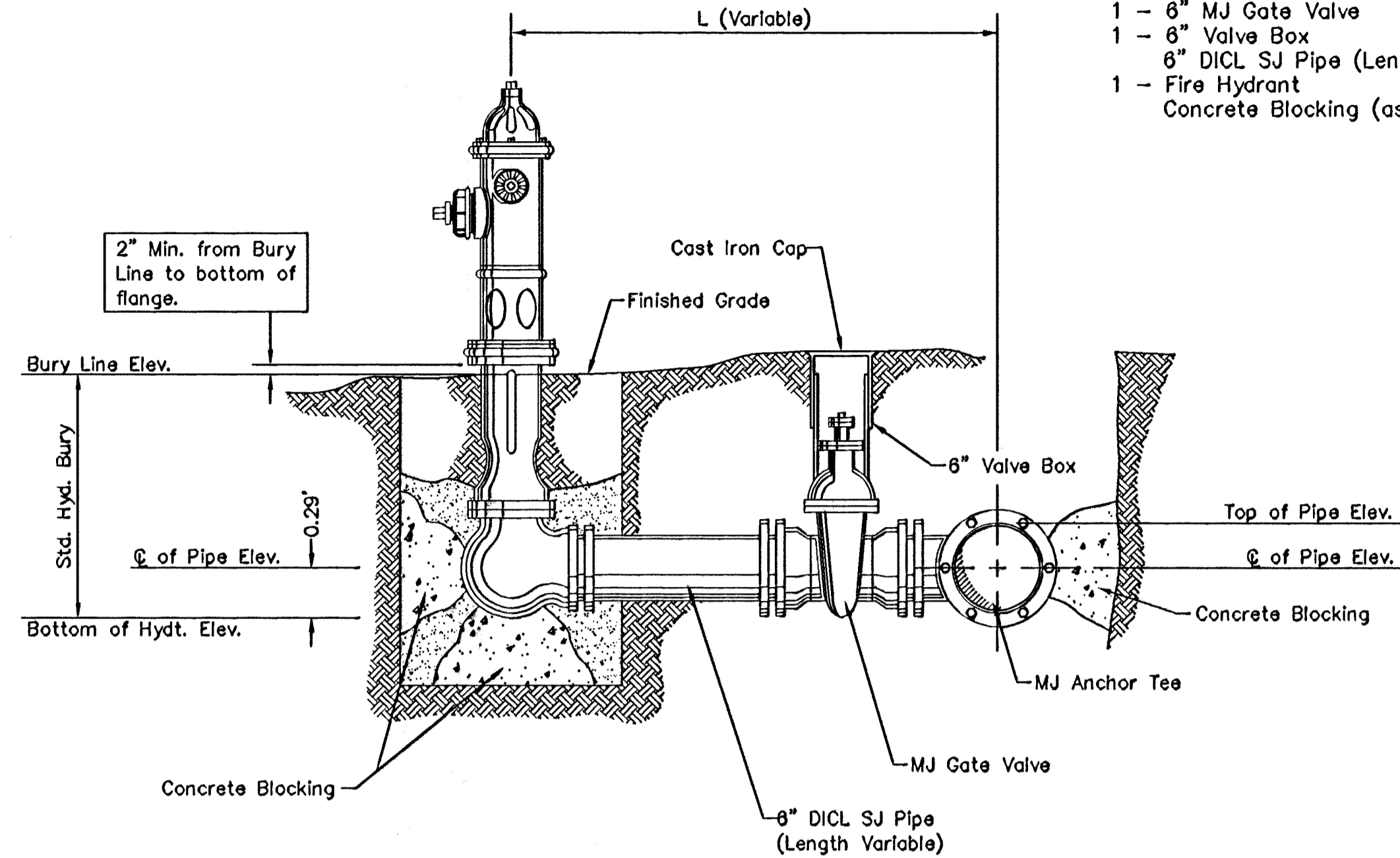
- MATERIALS LIST**
 1 - MJ Valve
 *Gate or Butterfly
 1 - 6" Valve Box
 2' - of DICL SJ Pipe



ANCHORED VALVE ASSEMBLY

* See Plans for the Type of Valve to be Used.

- MATERIALS LIST**
 1 - MJ Valve
 *Gate or Butterfly
 1 - MJ Anchor Coupling (12" or Smaller)
 1 - 6" Valve Box

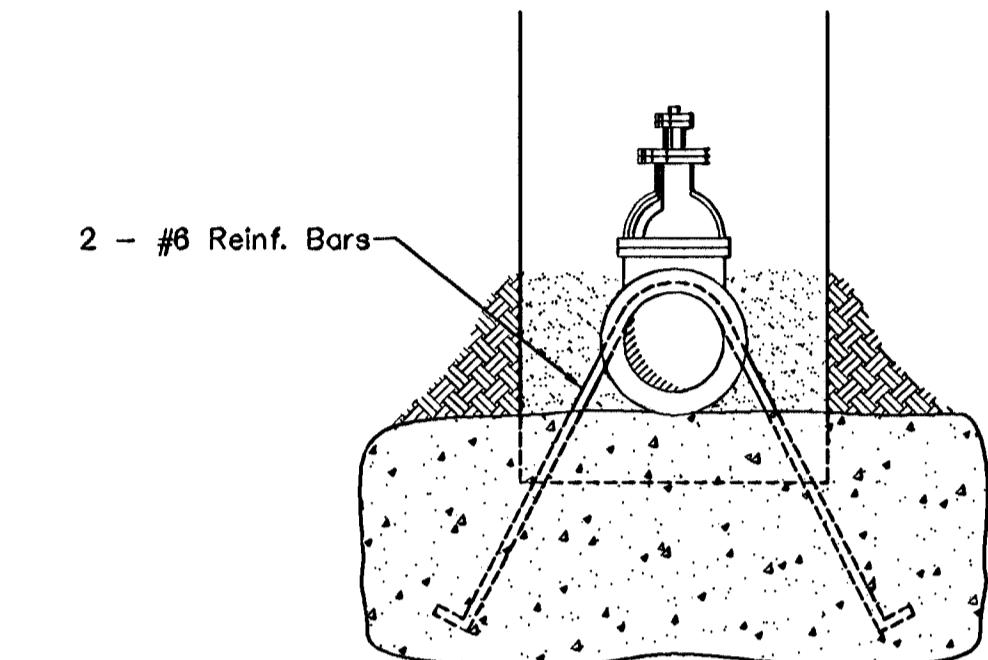
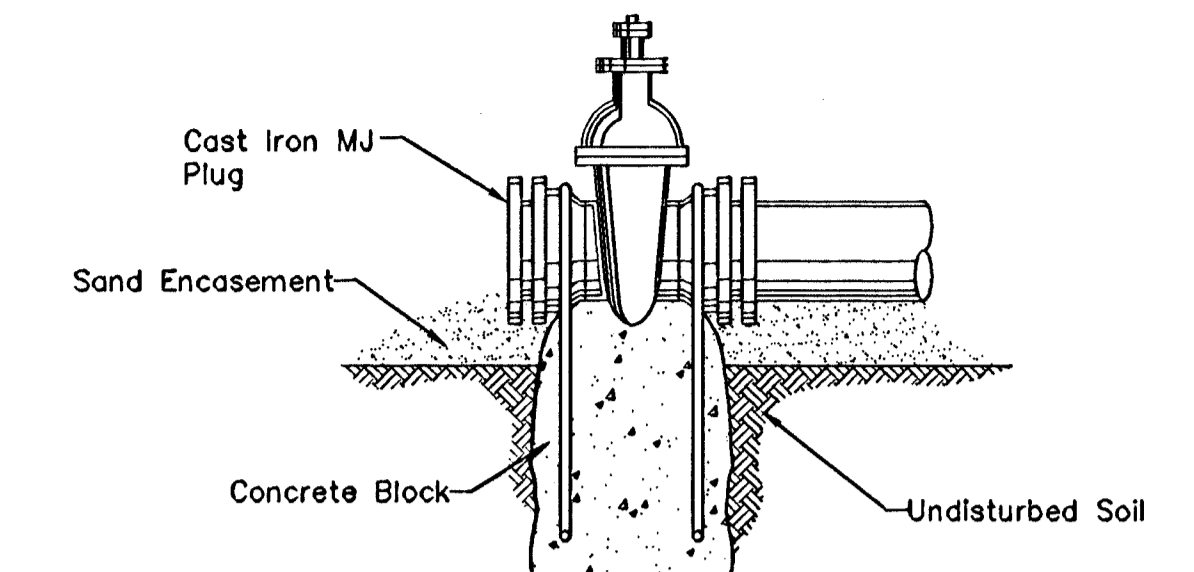


FIRE HYDRANT ASSEMBLY

FIRE HYDRANTS REQUIRED				
LINE NO.	STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQ'D
C	136+37.00	1277.86	1269.20	9'-6"*

* USE STD. 5' HYD. BURY PLUS EXTENSIONS AS NEEDED.

- MATERIALS LIST**
 1 - MJ Anchor Tee ("D" x 6")
 1 - 6" MJ Gate Valve
 1 - 6" Valve Box
 6" DICL SJ Pipe (Length Var.)
 1 - Fire Hydrant
 Concrete Blocking (as Needed)



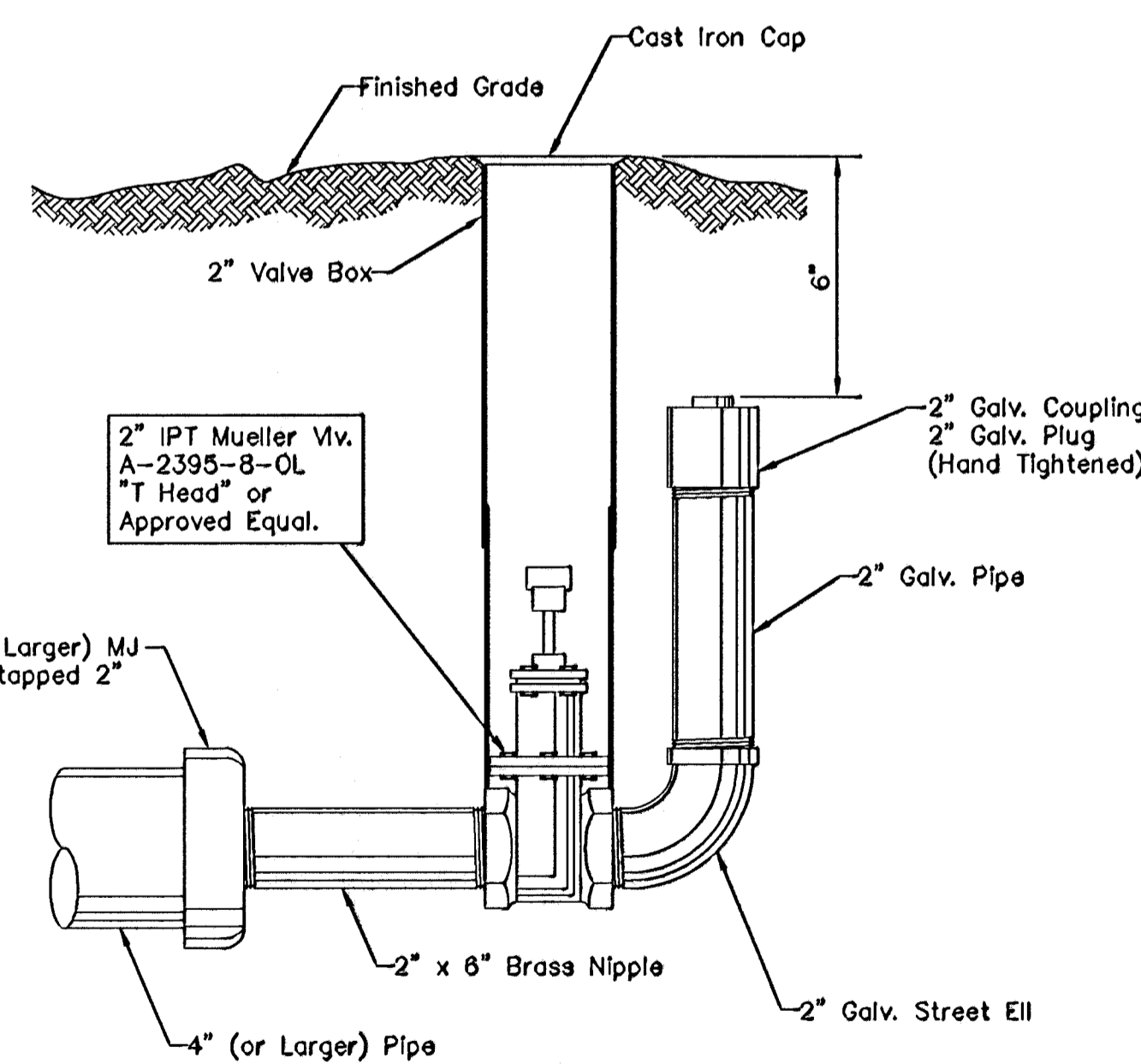
Notes:

- Concrete Block of Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
- Provide clearance around flanges to M.J. accessories.
- Valve Block to be included in bid item of concrete for thrust blocks.
- All valves of dead ends and at other locations as called out on the plans shall be blocked as shown here.

THRUST AT VALVES	
VALVE	THRUST @ 150#/in ²
4"	1,890 lbs.
6"	4,245 lbs.
8"	7,540 lbs.
12"	16,965 lbs.

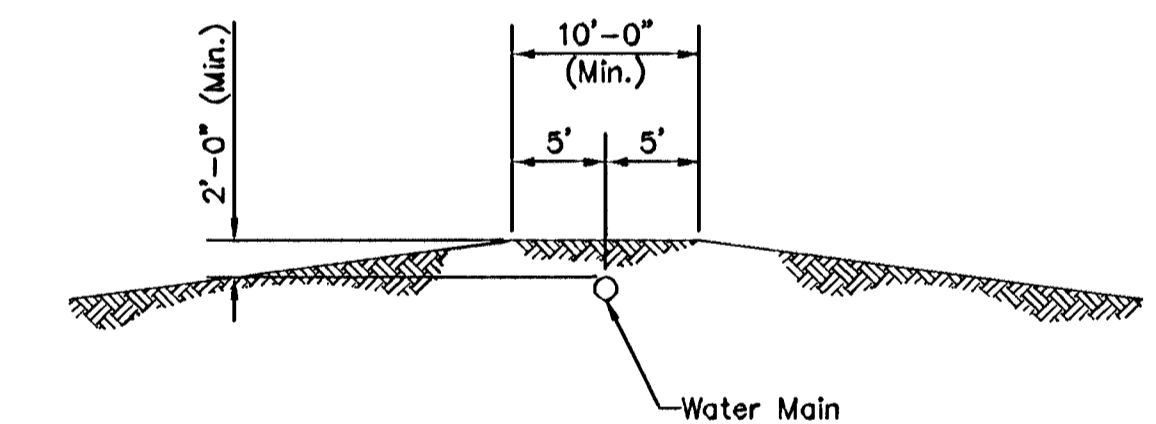
ANCHORED VALVE ASSEMBLY (SPECIAL)

Per S.E.P. 103.6



2" BLOWOFF ASSEMBLY

- MATERIALS LIST**
 1 - 2" Valve Box
 1 - CIMJ Cap
 1 - 2" x 6" Brass Nipple
 1 - 2" IPT Mueller Valve A-2395-8-OL "T Head" or Approved Equal.
 1 - 2" Galv. Street Ell
 2" Galv. Pipe (as Req'd)
 1 - 2" Galv. Coupling
 1 - 2" Galv. Plug

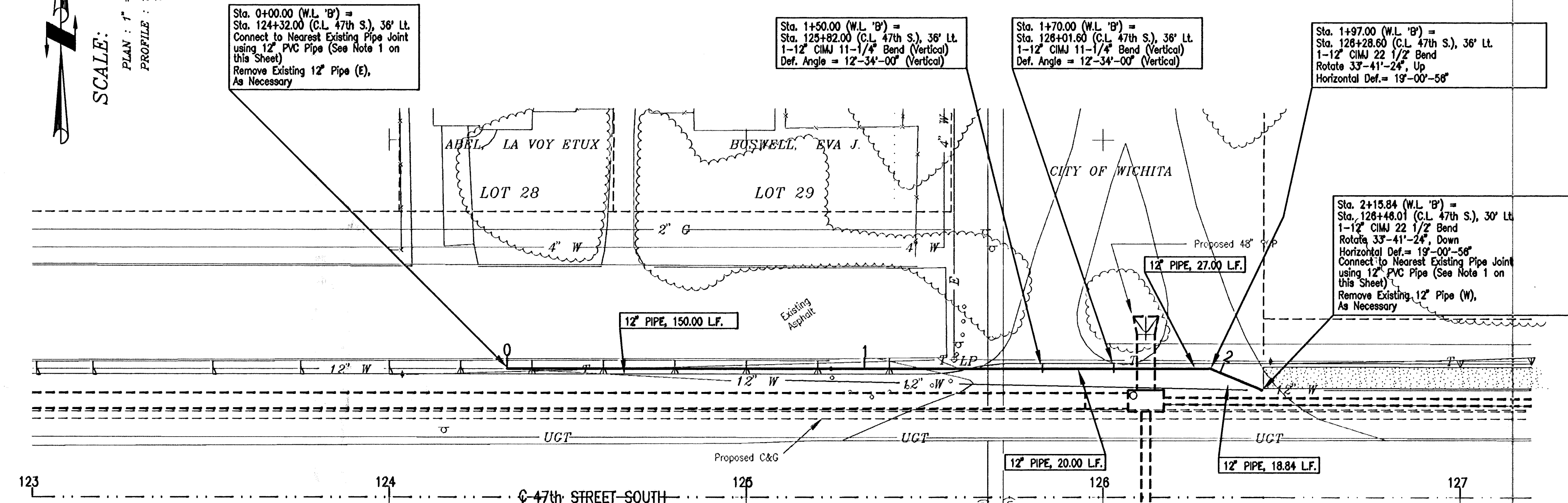
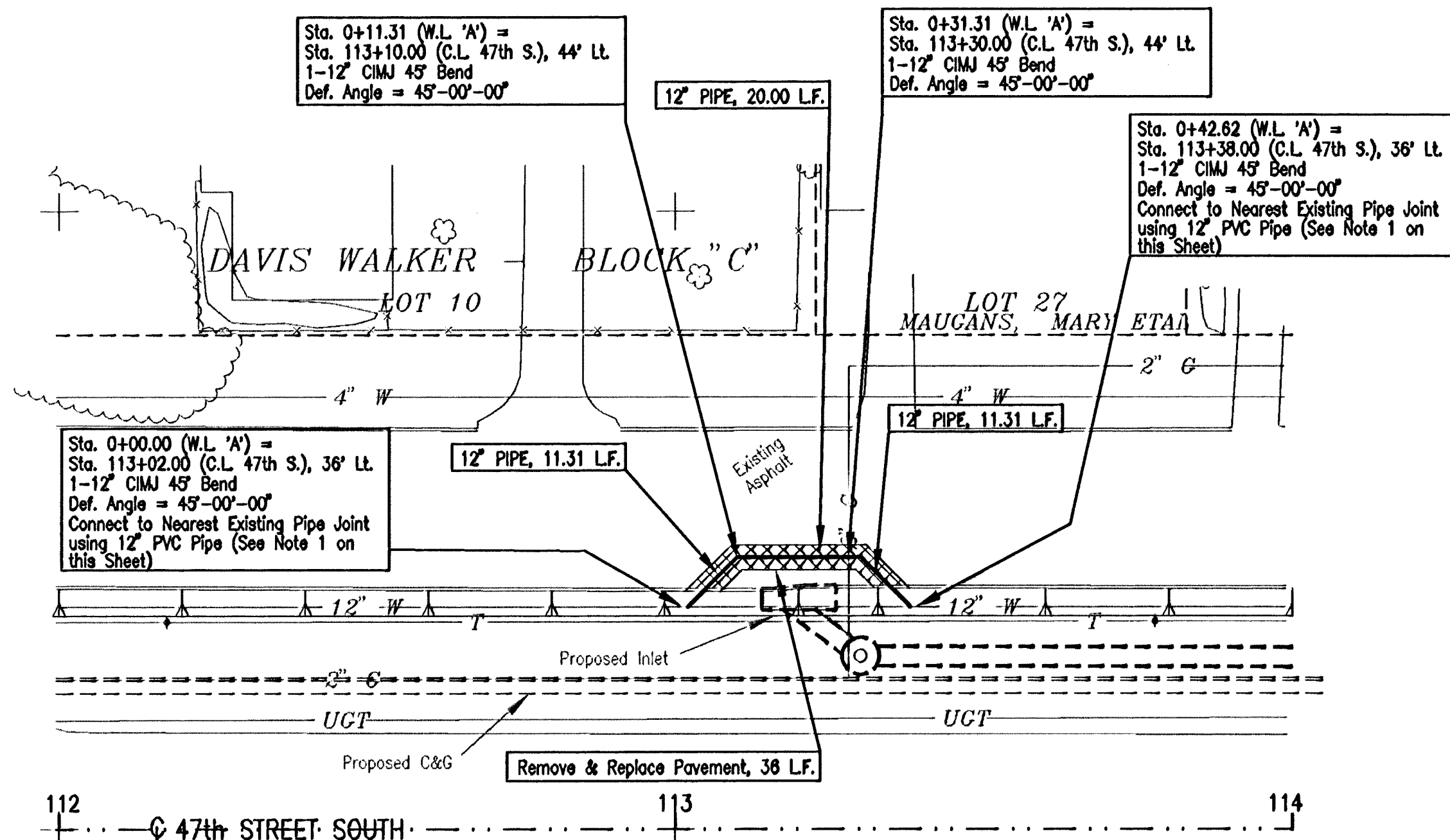
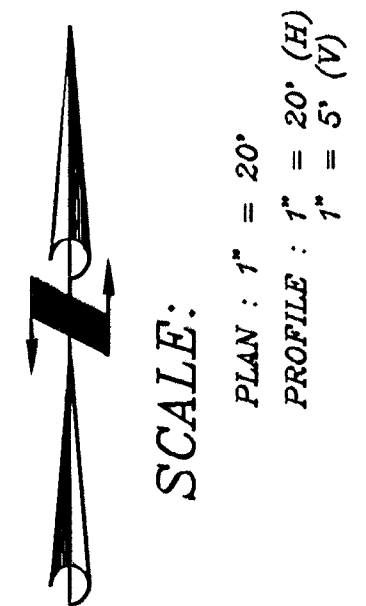


PROTECTIVE FILL DETAIL

Minimum protective fill shall be provided in all instances where cover over the proposed water line is less than two (2) feet. (cost subsidiary to pipe installation).

CITY OF WICHITA, KANSAS	
STANDARD WATER ASSEMBLY DETAILS	
JANUARY, 1987	
PROJECT NUMBER 448-88975	SHEET OF 4 OF 7

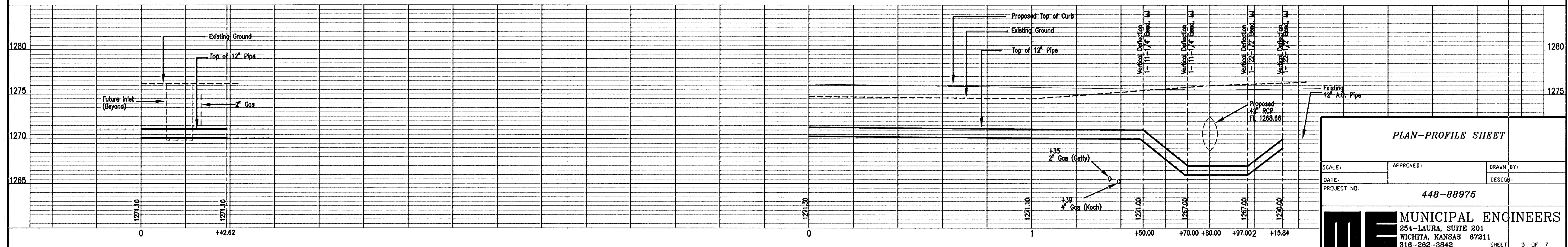
DETAIL/WATDET.DWG



LINE 'A'

LINE 'B'

NOTE 1: Connection to Existing 12" A.C. Water Line will be made at existing pipe joint nearest to 45° or 22-1/2° bend shown on plans. Field cutting of existing 12" A.C. pipe is not allowed. 12" pipe bid quantity has been increased by 13 LF. for each such connection.



PLAN-PROFILE SHEET

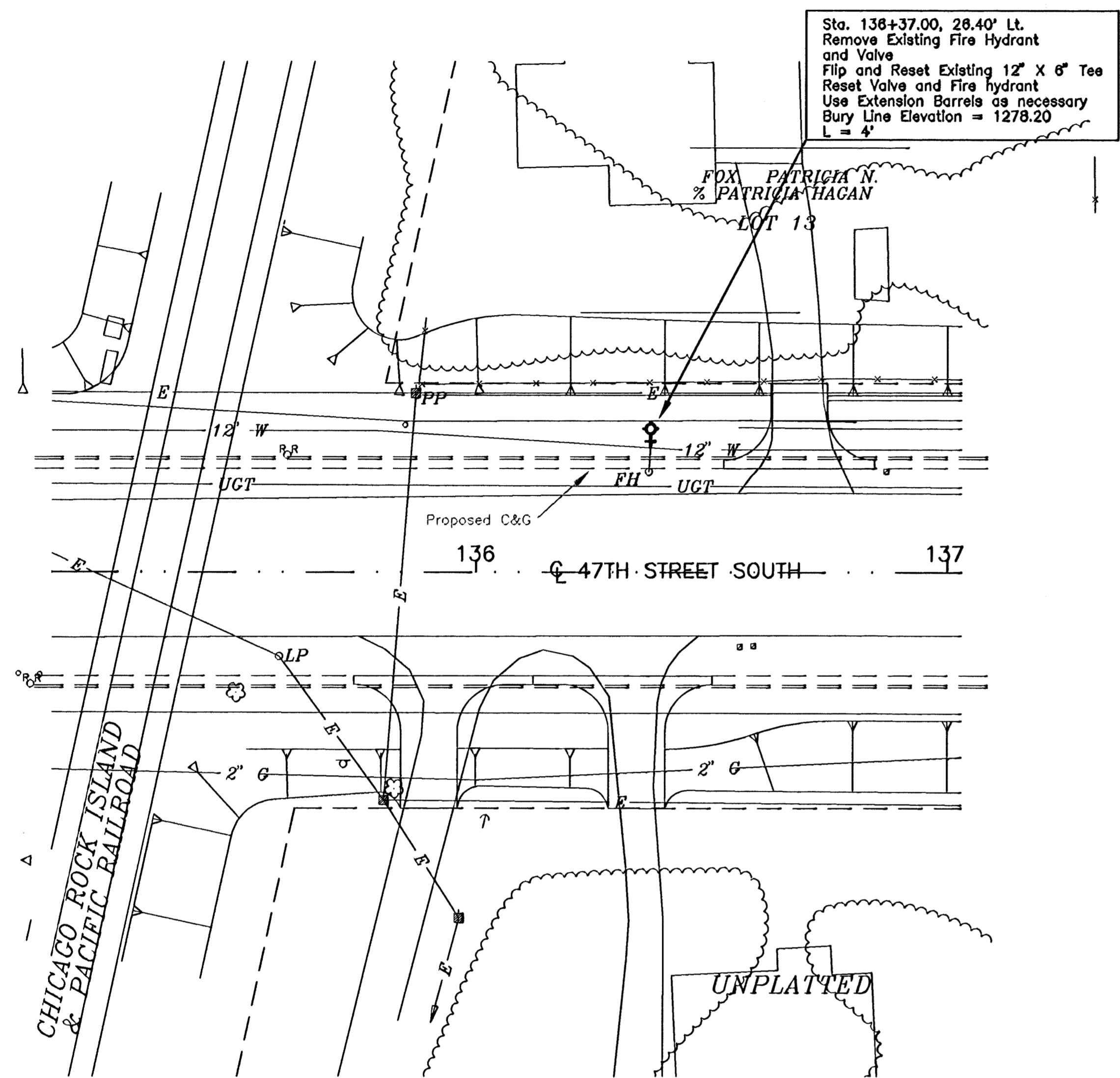
SCALE: _____ APPROVED: _____ DRAWN BY: _____
 DATE: _____ DESIGN: _____
 PROJECT NO: **448-88975**

ME MUNICIPAL ENGINEERS
 204-LAURA, SUITE 201
 WICHITA, KANSAS 67211
 316-262-3848 SHEET 5 OF 7



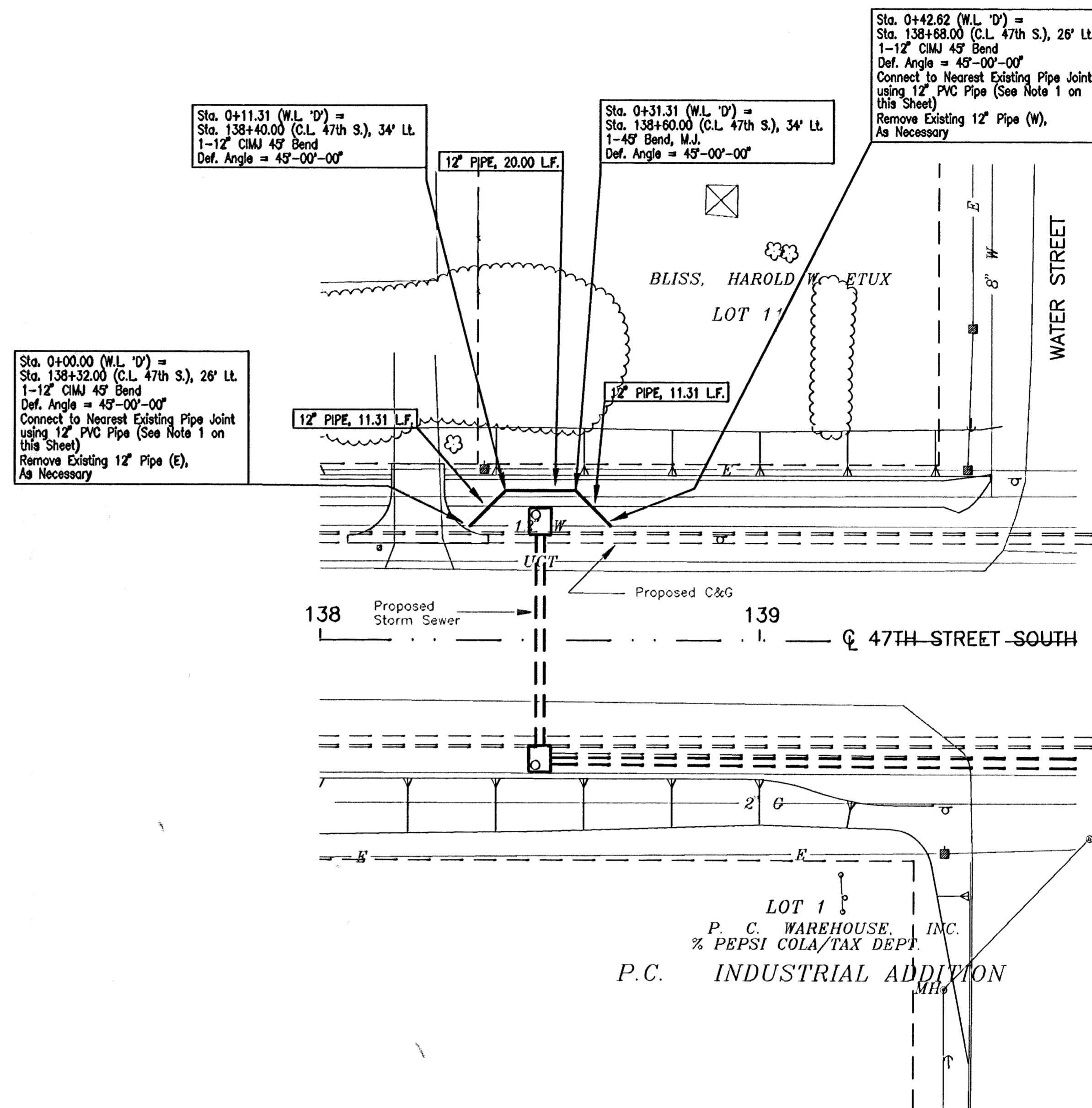
SCALE:

PLAN: 1" = 20'
PROFILE: 1" = 5' (V)

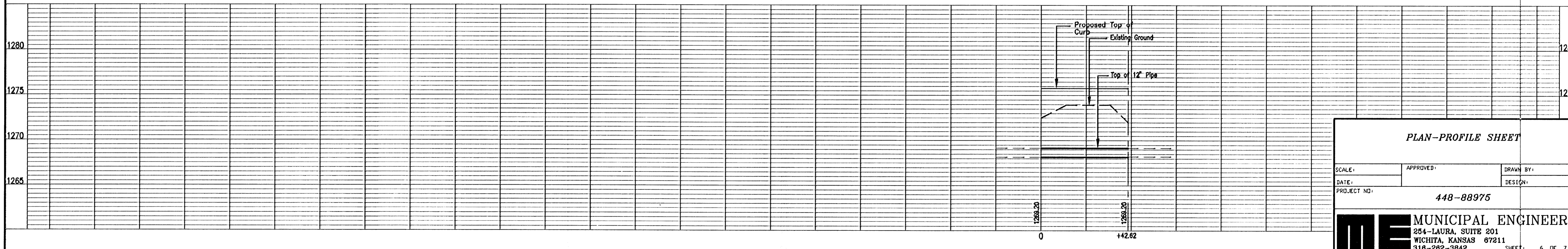


LINE 'C'

NOTE 1: Connection to Existing 12" A.C. Water Line will be made at existing pipe joint nearest to 45° or 22-1/2° bend shown on plans. Field cutting of existing 12" A.C. pipe is not allowed. 12" pipe bid quantity has been increased by 13 lf. for each such connection.



LINE 'D'



PLAN-PROFILE SHEET

SCALE:	APPROVED:	DRAWN BY:
DATE:		DESIGN:
PROJECT NO. 448-88975		
ME MUNICIPAL ENGINEERS 254-LAURA, SUITE 201 WICHITA, KANSAS 67211 316-282-3842		

SHEET: 6 OF 7

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