



36" W.M. In Douglas. From McCombs to Flora

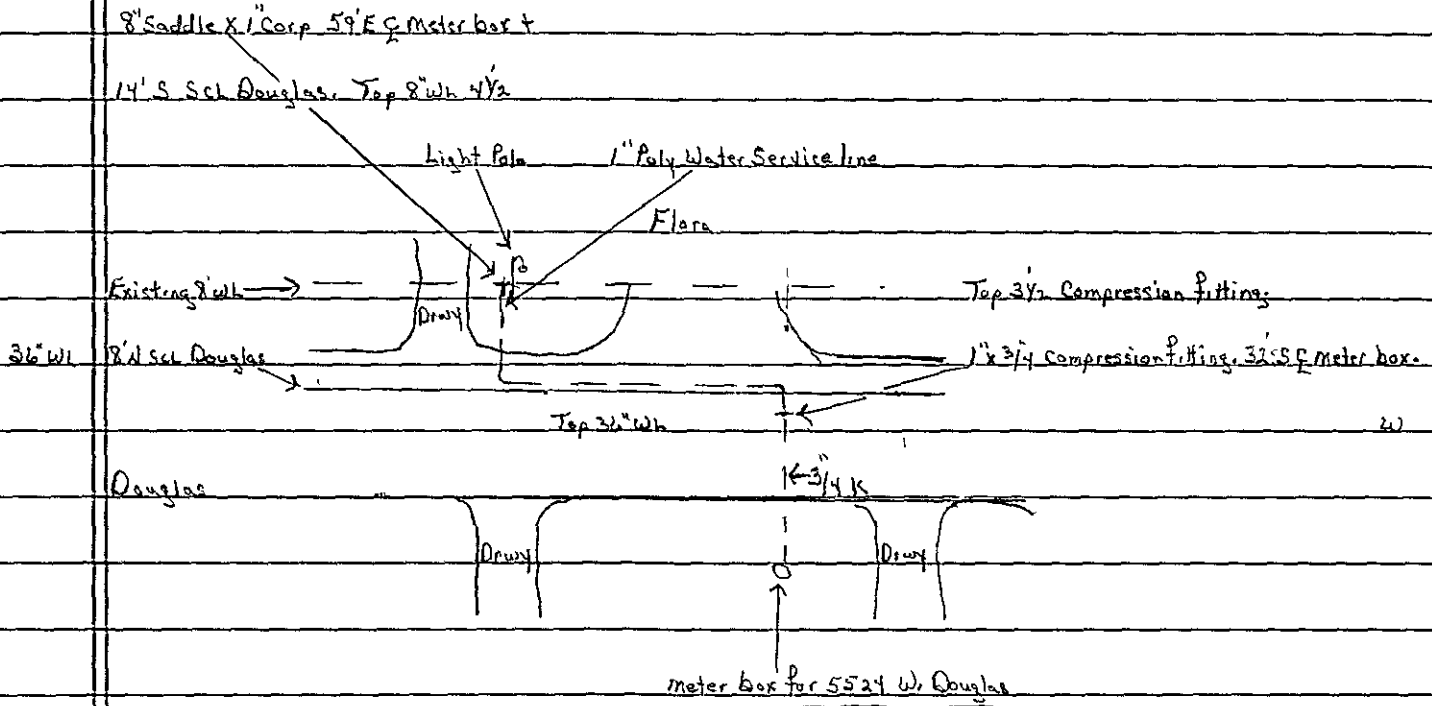
Project No. 448-90141

Doc No. 633781

Change order Work on Water Service line for 5524 W. Douglas

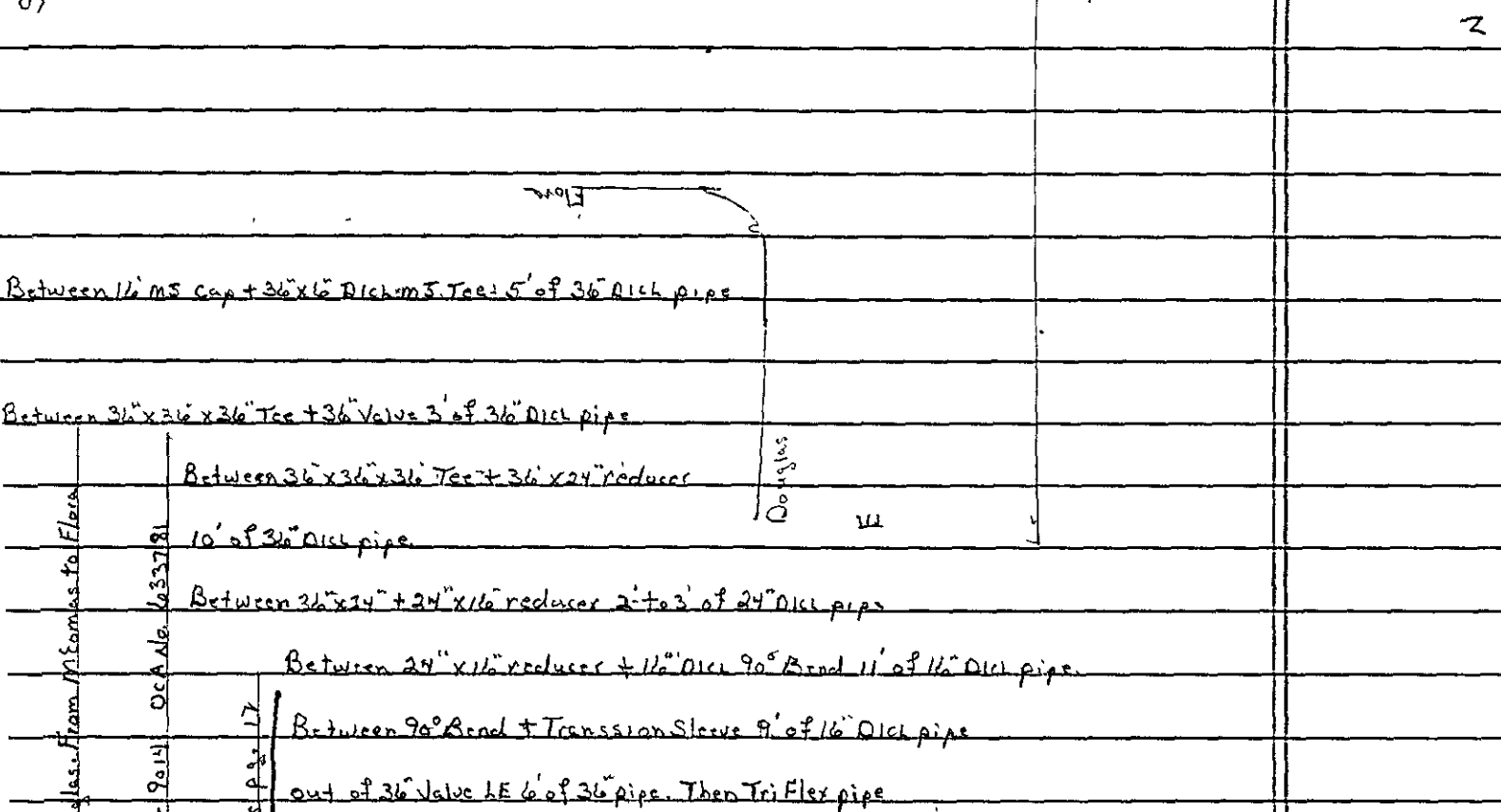
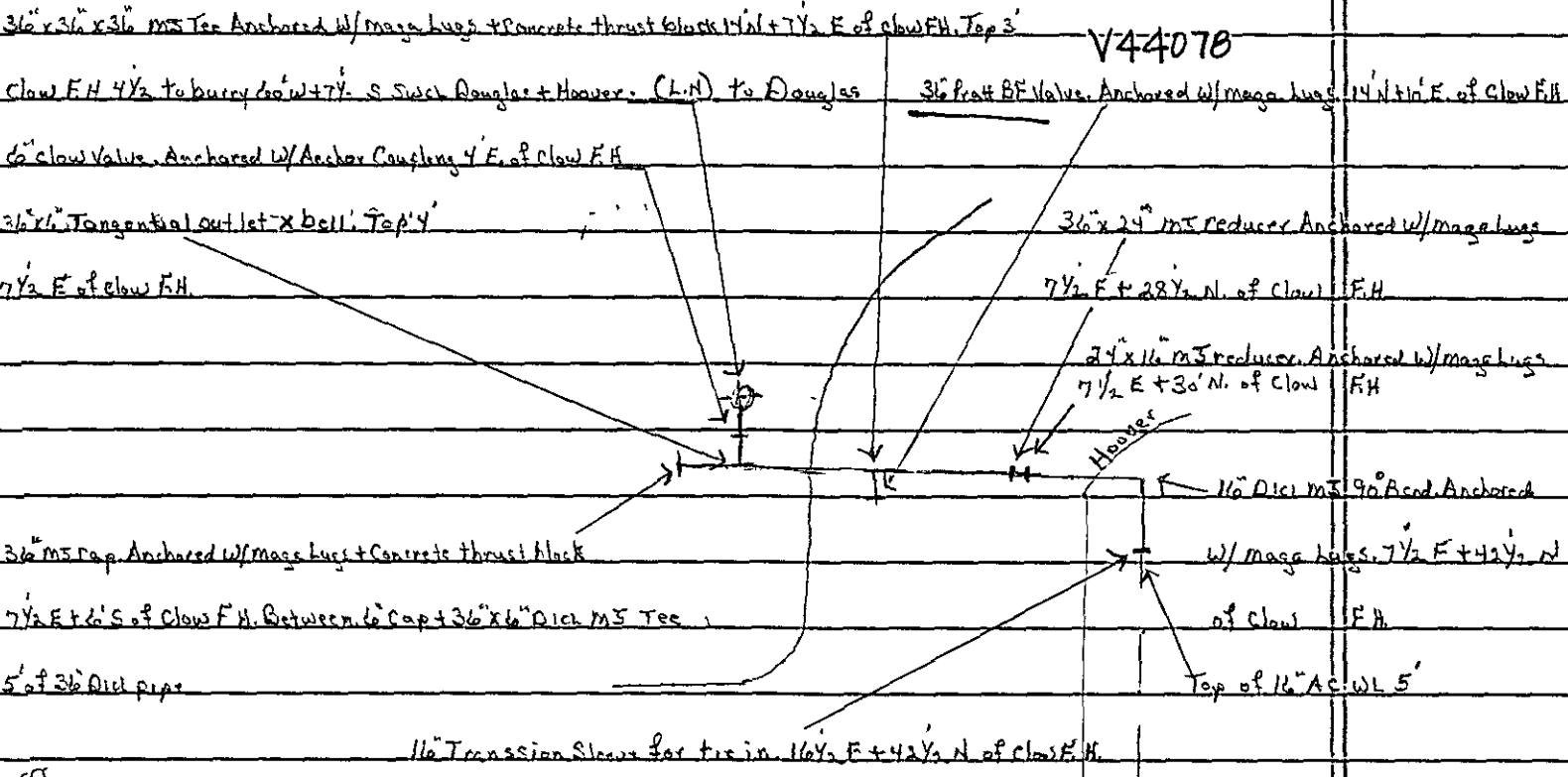
\* Refer to Plans Pg 17

S



1" Water Service line on South Side of 36" Dia W.M. Water Service line under the 36" W.M. Then 1" Water Service going up to 1" x 3/4" Compression Fitting to tie on 3/4" K line

N



3/4" W.M In Douglas From M Comes to Floor  
 Project No. 4/18-9014  
 OCA No. 633781  
 Refer to Plans Page 17

6" x 6" Tangential outlet x bell Anchored w/ mags lugs.

REFER TO PLAN SHEET

#17/23

out of 36" x 6" Dick MS Tee Anchor Coupling.

6" Clow Valve Anchored to Anchor Coupling.

6" Dick MS x Plain end 90° Bend Anchored w/ mags lugs (Bottom Bend)

6" Dick MS 90° Bend Anchored w/ mags lugs. (Top Bend)

Between 2-90° Bends 21" of 6" Dick pipe.

Between top 90° Bend + FH 20" of 6" Dick pipe

F.H. Anchored w/ mags lugs + Concrete thrust block

3

H13933 V44079

Clow F.H. 4 1/2' to bury 60' w + 7 1/2' S. Swick Douglas + Hoover

Top Dick MS 90° Bend 2 1/2' E of Clow F.H.

TS

6" Dick plain end x MS 90° Bend 3 1/2' E of Clow F.H.

36" Dick WL

6" Clow Valve 4' E of Clow F.H.

36" x 6" Tangential outlet x bell 17 1/2'

E of Clow F.H.

WL STA. 73+95.00, MAIN I =

BL#2 STA. 58+57.35, 19.98' Lt.

36" x 6" In Douglas, From Mccomas to Filora

Project No. 448-901H1, Circa 16.633781

Refer to Plans Pg. 17, WL Sta 73+95.00

E

36" Wt Douglas. From Micomas to Hoover. Project No 448-90141 Oca No 633781

Refer to plans pg 16 of 23

Wt Sta 66+52.00

S

E

W

Elder

1-6" Dick m 5 90° Bend. Anchored w/ Mags. lugs. 15' w + 7' N

Swel Douglas + Elder

Claw F.H. 4 1/2' to Bury 14' w + 3 1/2' S Swel

Douglas + Elder

1-6" Dick m 5 90° Bend. 1/2' E + 6' N Claw F.H.  
Anchored w/ Mags lugs (Top Bend)

6" Kennedy Valve 7' N + 4' E Swel Douglas + Elder

Anchored back to a 5 90° Bend

1-6" Dick Plain end x m 5 90° bend. 7 1/2' N + 5' E

Swel Douglas + Elder

36" Wt

36" x 16" Tangental outlet (Bottom) 9' N + 5' E Swel

Douglas

Douglas + Elder

Between 2-6" 90° Bends 18' of 6" Dick pipe

Between top 90° Bend + F.H. 5' of 6" Dick pipe

F.H. Shoe is Anchored w/ Mags + F.H. is dry blocked

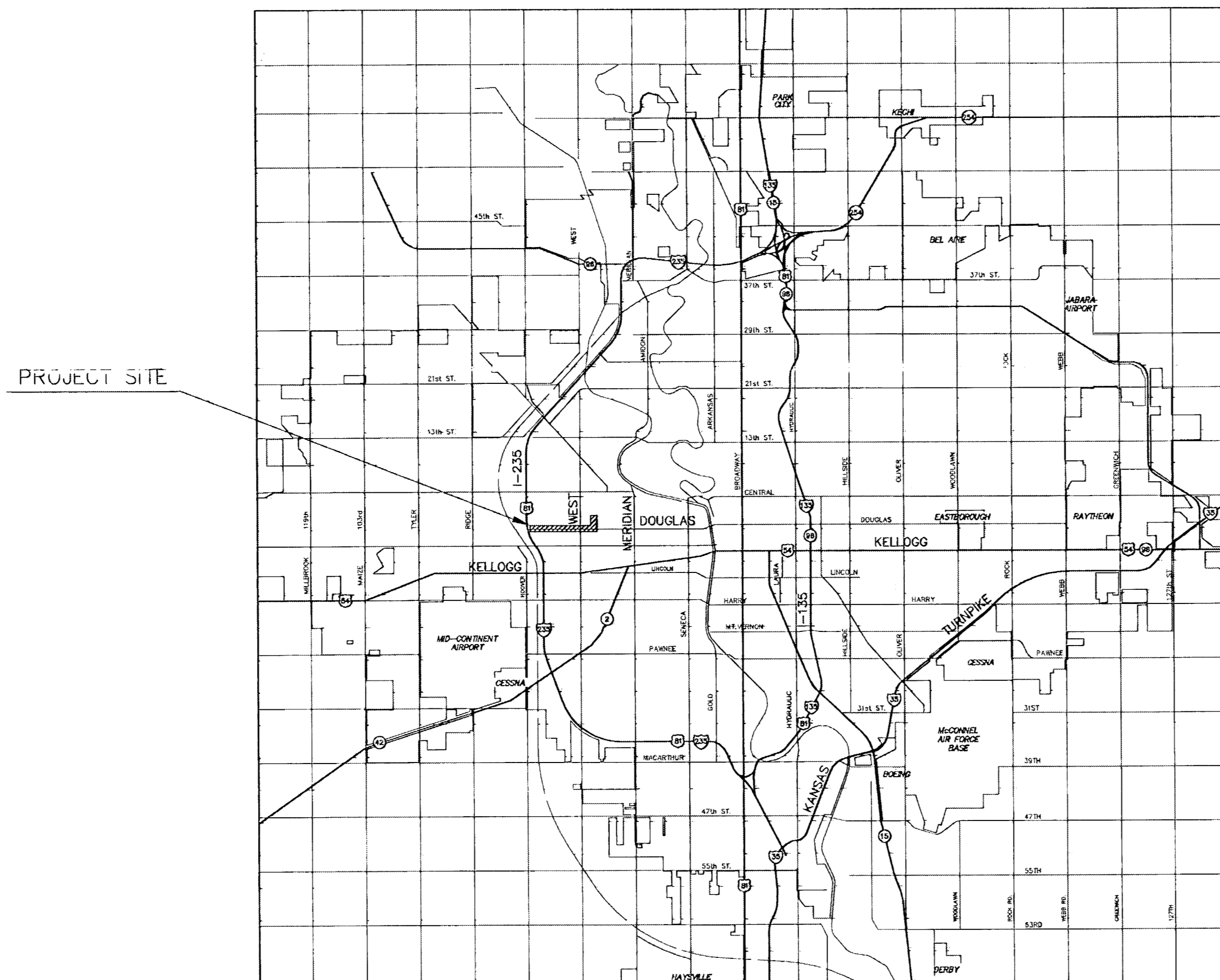
N

CONSTRUCTION PLANS FOR

# 36" WATER MAIN IN DOUGLAS FROM McCOMAS TO FLORA

THE CITY OF WICHITA  
SEDGWICK COUNTY, KANSAS

JAMES L. ARMOUR - CITY ENGINEER



### INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	KEY MAP, GENERAL NOTES, & LEGEND
3-5	WATER DETAILS
6-10	BMP DETAILS
11-16	PLAN & PROFILE MAIN 1
17	PLAN & PROFILE MAIN 1 & MAIN 2
18-20	PAVING PLANS
20-23	PAVING DETAILS

ITEM	MANUFACTURER	SIZE
MJ BUTTERFLY VALVE ASSEMBLY	PRATT	36"
FIRE HYDRANT ASSEMBLY	CLOW	6"
AIR RELEASE ASSEMBLY	VALV MATIC	3"

CORNEJO & SONS / WB CARTER - CONTRACTOR  
 J. TERHUNE - CITY OF WICHITA - FIELD PROJECT ENGINEER  
 G. STEINLE - CITY OF WICHITA, INSPECTOR  
 RELEASE DATE: 04/06/2009  
 AS-BUILT  
 APRASAS - 08/23/2010

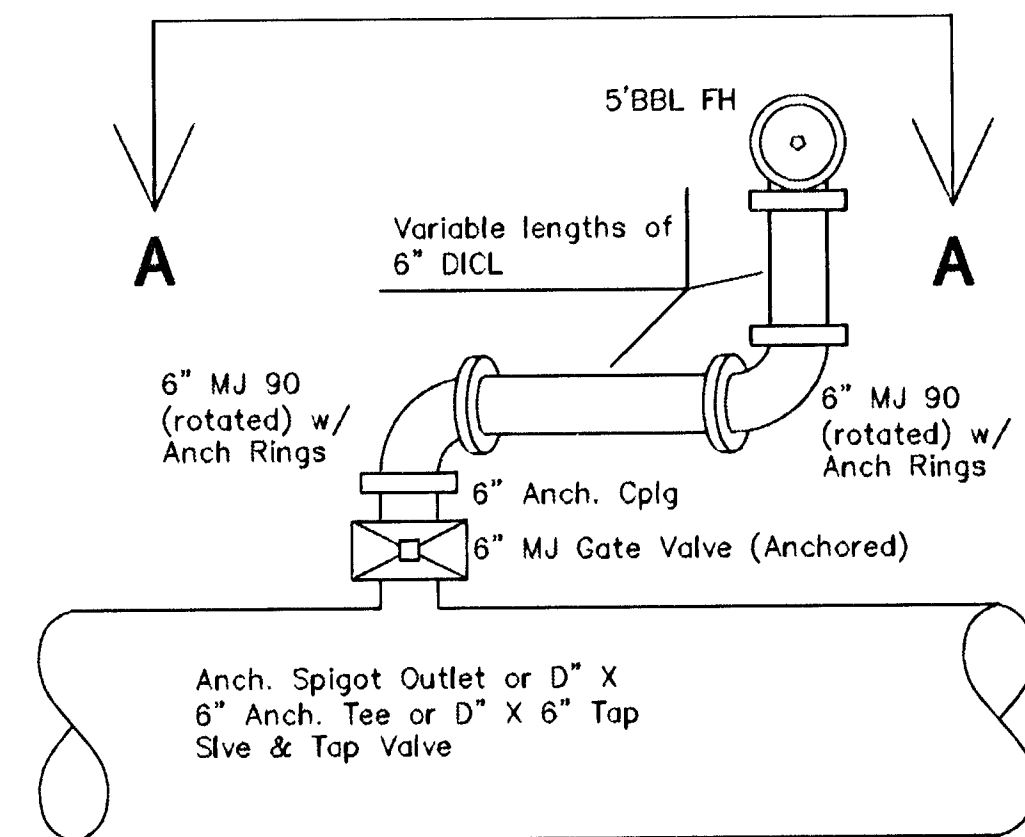
CITY OF WICHITA PROJECT NO. 448-80141

OCA #633781

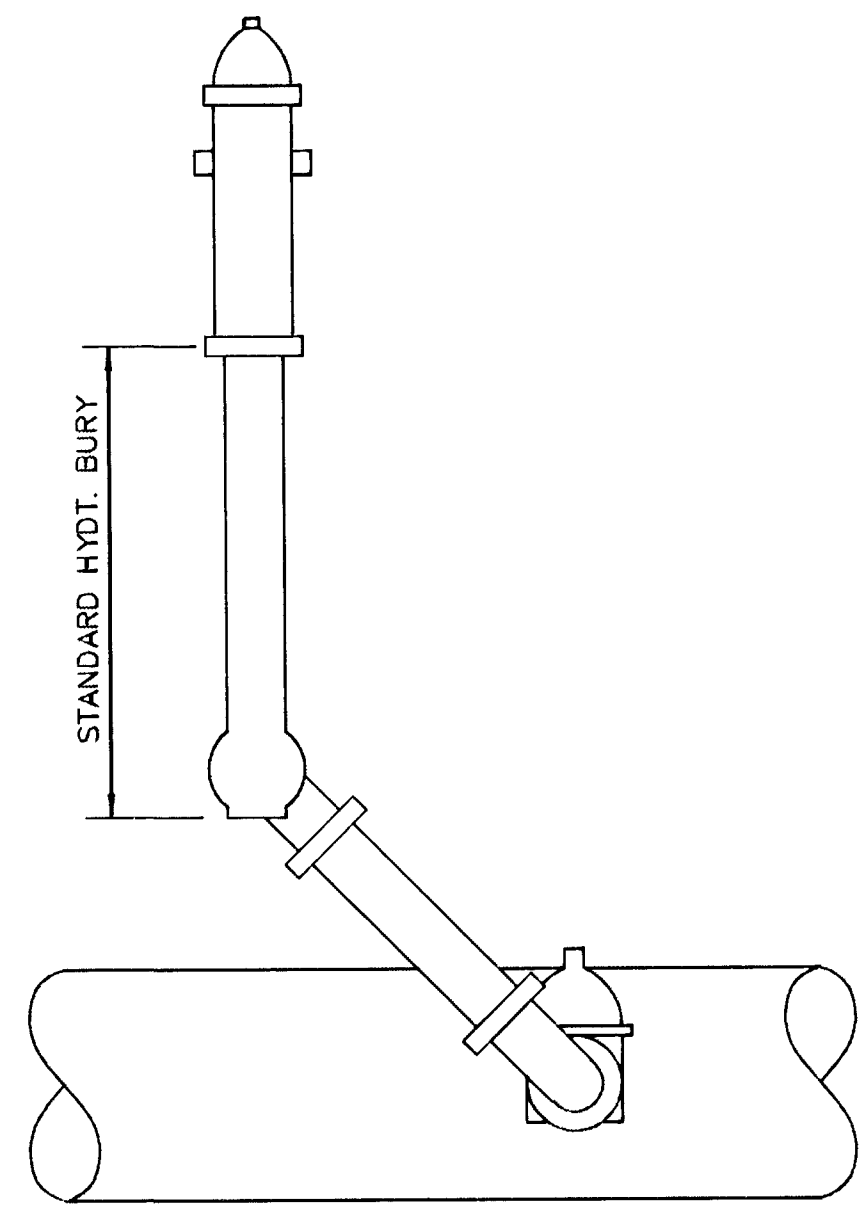
JULY, 2006

PLANS PREPARED BY  
**MKEC ENGINEERING CONSULTANTS INC.**  
 WICHITA, KANSAS





**PLAN VIEW**  
NO SCALE



(center outlet shown could be tan. bot. or top)  
**SECTION AA**  
NO SCALE

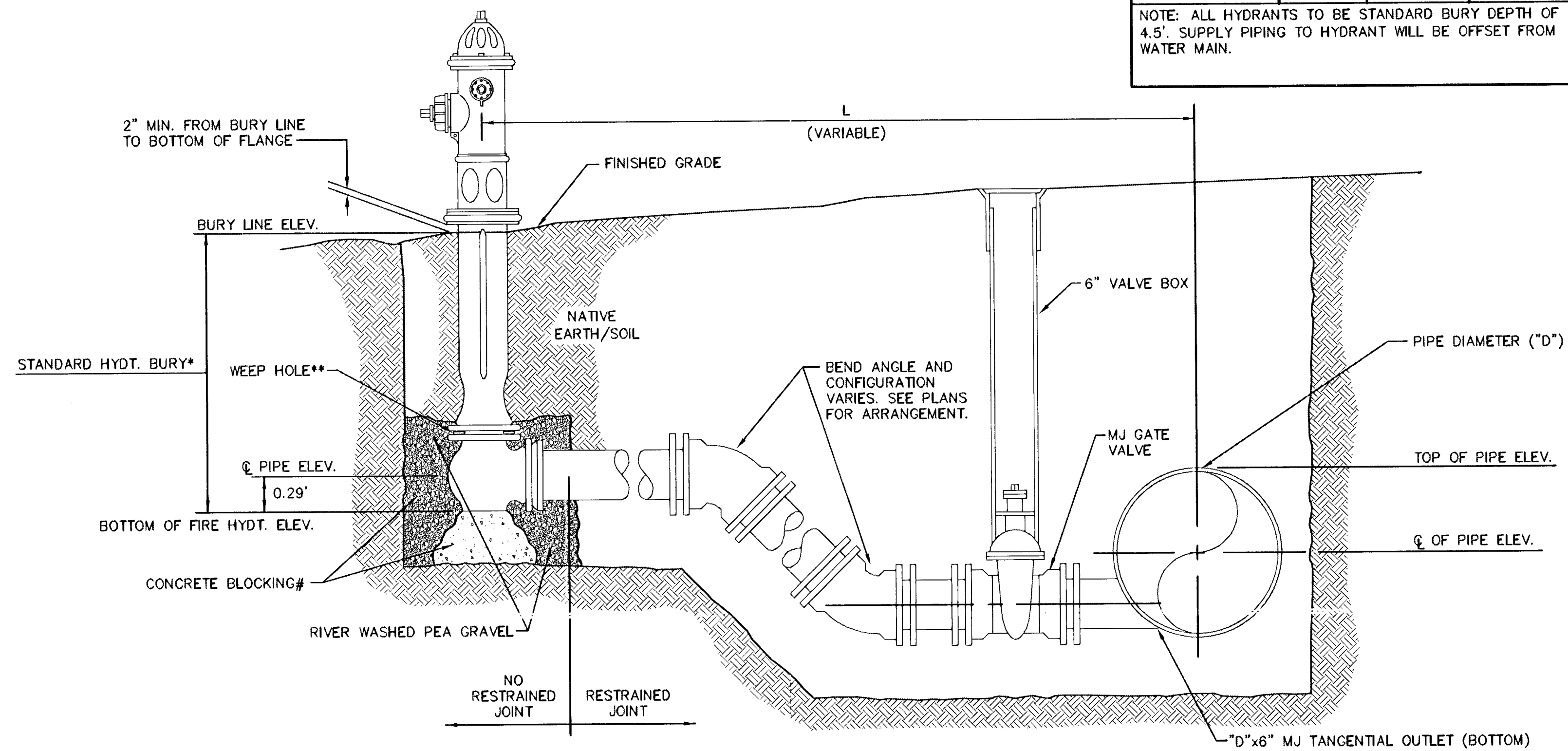
**SWING JOINT HYDRANT DETAIL**

**MATERIALS LIST**

- 1-MJ TANGENTIAL OUTLET ("D"x 6") (BOTTOM)
- 2-6" BEND DICL MJ (REFER TO PLANS FOR BEND)
- 2-6" DICL PIPE (LENGTH VARIABLE)
- 1-6" MJ GATE VALVE W/VALVE BOX
- 1-6" DICL MJ ANCHOR COUPLING (LENGTH VARIABLE)
- 1-FIRE HYDRANT
- CONCRETE BLOCKING (AS NEEDED)

FIRE HYDRANTS REQUIRED			
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*
23+17.00, MAIN 1	118.9	107.0	4.5'
66+52.00, MAIN 1	118.6	105.0	4.5'
73+95.00, MAIN 1	118.1	108.0	4.5'

NOTE: ALL HYDRANTS TO BE STANDARD BURY DEPTH OF 4.5'. SUPPLY PIPING TO HYDRANT WILL BE OFFSET FROM WATER MAIN.



- \*\* CAUTION! WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES.
- # CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.
- \* IF HYDRANT BURY IS IN EXCESS OF 5', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY.

**FIRE HYDRANT ASSEMBLY**

**36" WATER MAIN IN DOUGLAS FROM McCOMAS TO FLORA**

**MKEC**  
ENGINEERING CONSULTANTS, INC.

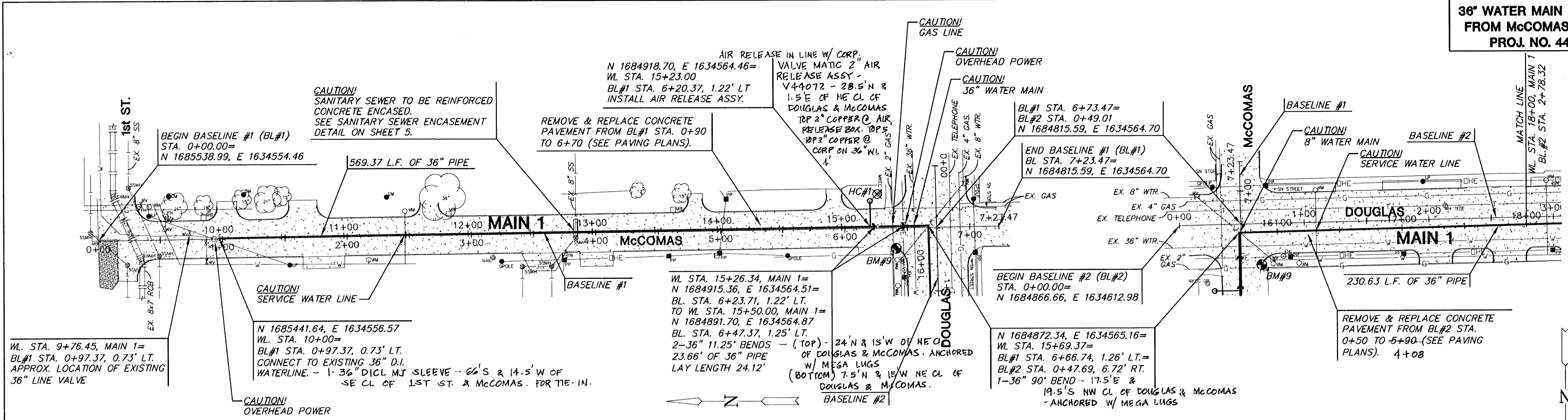
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-684-9600

PROJECT NAME  
**WATER DETAILS**  
**FIRE HYDRANT ASSEMBLY**

DESIGN BY: **BDM**  
DRAWN BY: **BDM**  
CHECKED BY: **SCU**

DATE: **JULY 2006**  
DRAWING NAME: **05703\_CD4**  
SHEET / OF: **4 / 23**

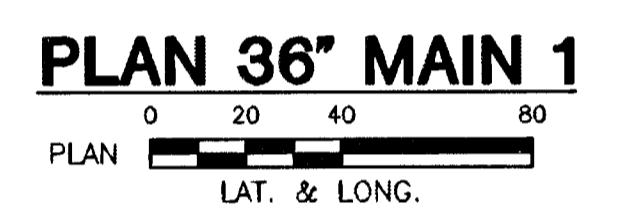
**36" WATER MAIN IN DOUGLAS FROM McCOMAS TO FLORA**  
**PROJ. NO. 448-80141**



**NOTE:**  
 CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXIST. 36" WATER LINE PRIOR TO CONSTRUCTION.

**NOTE:**  
 BASELINE #1 IS CENTER JOINT OF McCOMAS AS DEFINED BY NORTHING & EASTING COORDINATES ON THESE PLANS.

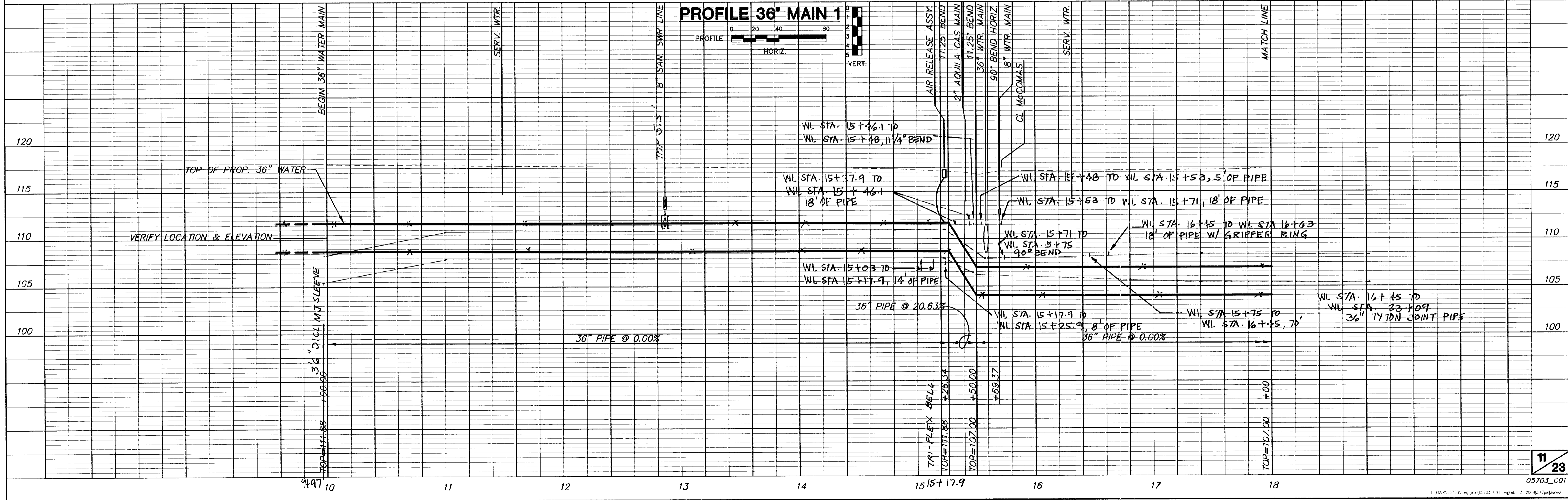
**CAUTION!!!**  
 UTILITY SERVICE LINES INDICATED WERE LOCATED FROM KANSAS ONE CALL. FIELD VERIFY DURING CONSTRUCTION (TYPICAL ALL PLANS).

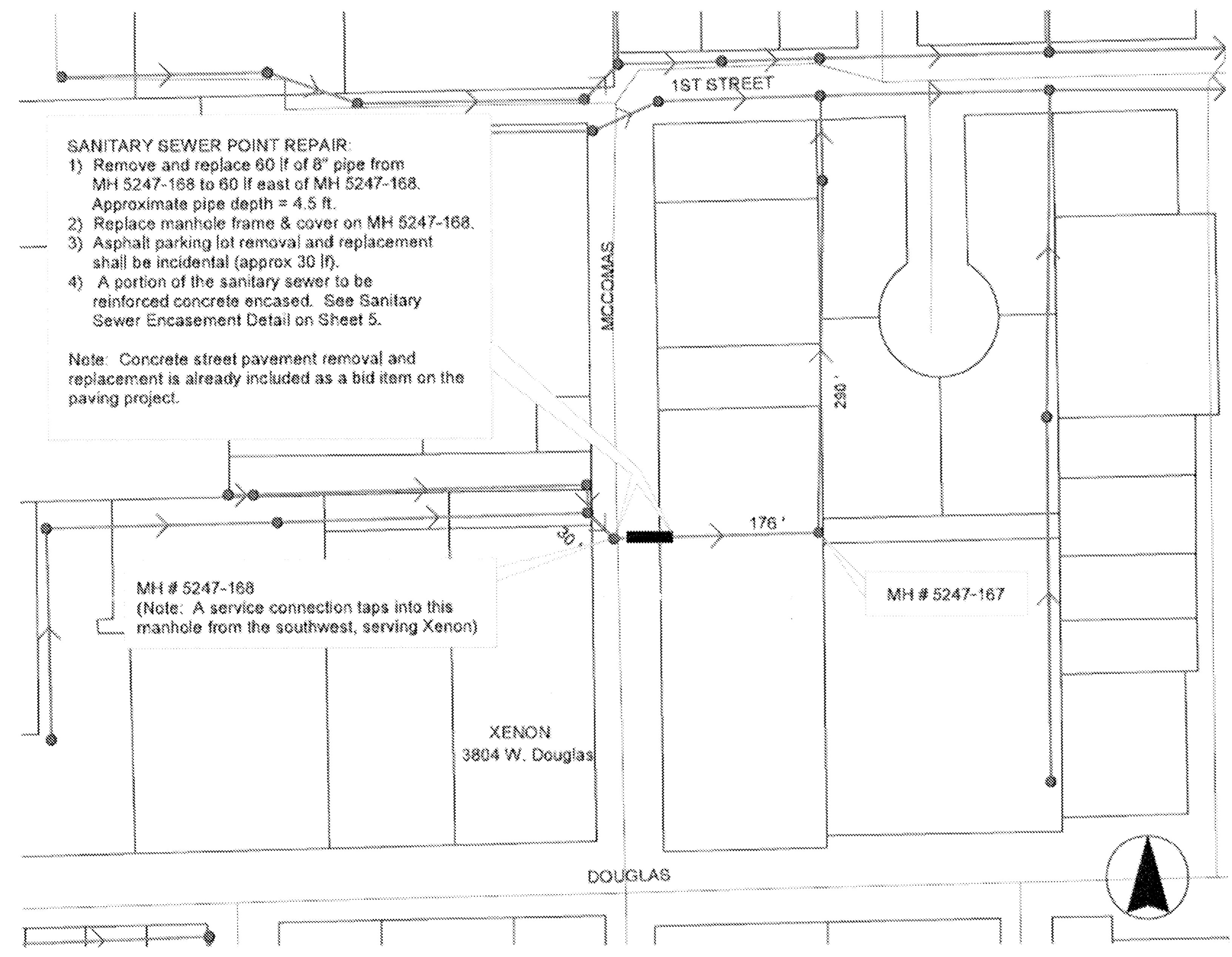


**HC#1**  
 IRON WITH RED MKEC D.P. CAP.  
 N 1684913.139, E 1634590.515  
 ELEV.=1305.060

**NOTE:**  
 BASELINE #2 IS CENTER JOINT OF DOUGLAS AVE. AS DEFINED BY NORTHING & EASTING COORDINATES ON THESE PLANS.

**BM#9**  
 1" TC 1.5' S. OF N RETURN NW COR. DOUGLAS & McCOMAS  
 ELEV.=117.395





**SANITARY SEWER POINT REPAIR:**

- 1) Remove and replace 60 lf of 8" pipe from MH 5247-168 to 60 lf east of MH 5247-168. Approximate pipe depth = 4.5 ft.
- 2) Replace manhole frame & cover on MH 5247-168.
- 3) Asphalt parking lot removal and replacement shall be incidental (approx 30 lf).
- 4) A portion of the sanitary sewer to be reinforced concrete encased. See Sanitary Sewer Encasement Detail on Sheet 5.

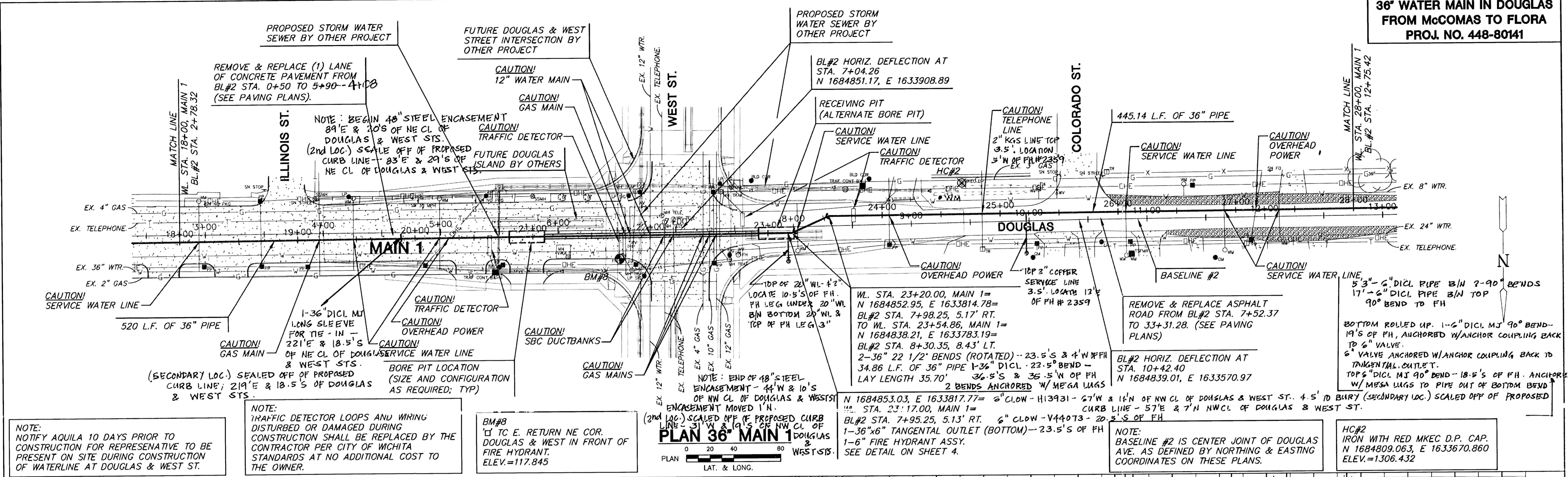
Note: Concrete street pavement removal and replacement is already included as a bid item on the paving project.

MH # 5247-168  
(Note: A service connection taps into this manhole from the southwest, serving Xenon)

MH # 5247-167

XENON  
3804 W. Douglas

**36" WATER MAIN IN DOUGLAS  
FROM McCOMAS TO FLORA  
PROJ. NO. 448-80141**



NOTE:  
NOTIFY AQUILA 10 DAYS PRIOR TO  
CONSTRUCTION FOR REPRESENTATIVE TO BE  
PRESENT ON SITE DURING CONSTRUCTION  
OF WATERLINE AT DOUGLAS & WEST ST.

NOTE:  
TRAFFIC DETECTOR LOOPS AND WIRING  
DISTURBED OR DAMAGED DURING  
CONSTRUCTION SHALL BE REPLACED BY THE  
CONTRACTOR PER CITY OF WICHITA  
STANDARDS AT NO ADDITIONAL COST TO  
THE OWNER.

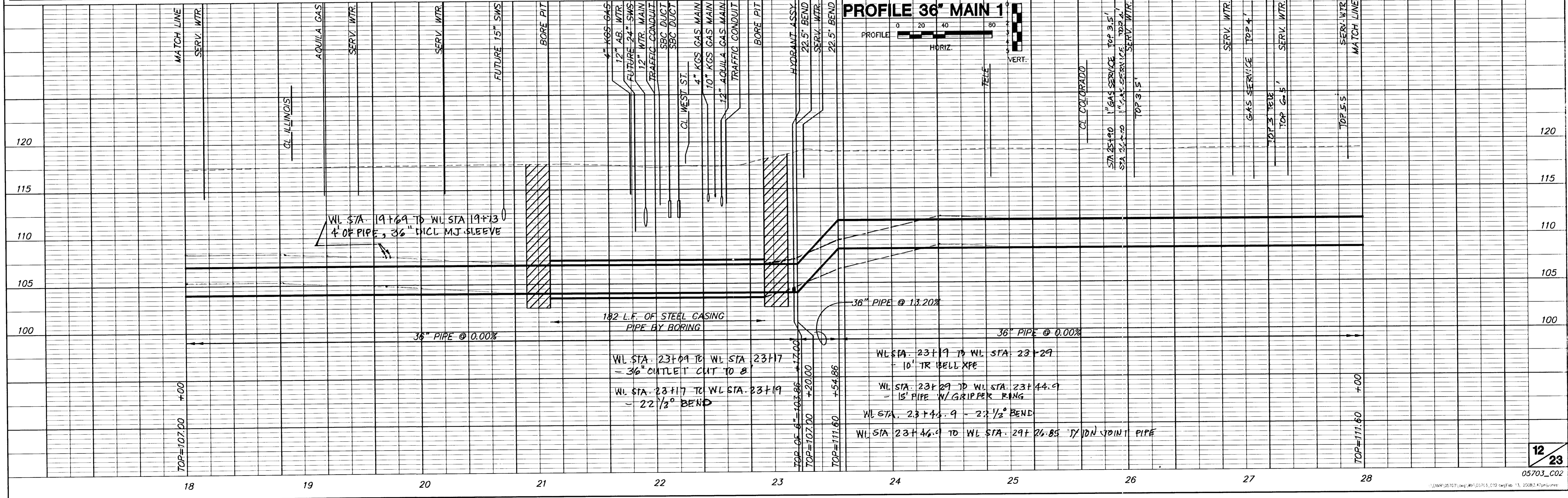
BM#8  
TO E. RETURN NE COR.  
DOUGLAS & WEST IN FRONT OF  
FIRE HYDRANT.  
ELEV.=117.845

NOTE: END OF 48" STEEL  
ENCASMENT - 44' W & 10'S  
OF NW CL OF DOUGLAS & WEST ST.  
(2nd LOC.) SCALED OFF OF PROPOSED CURB  
LINE - 10'S OF NW CL OF  
DOUGLAS &  
WEST STS.

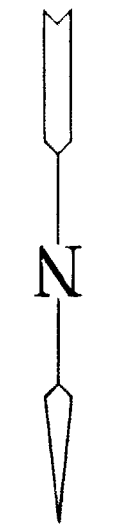
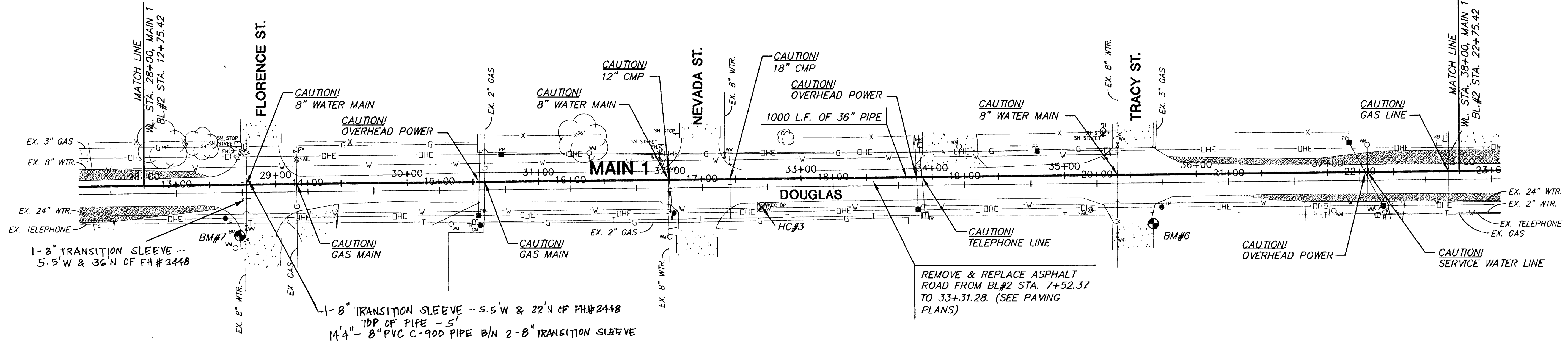
WL STA. 23+20.00, MAIN 1 =  
N 1684852.95, E 1633814.78 =  
BL#2 STA. 7+98.25, 5.17' RT.  
TO WL STA. 23+54.86, MAIN 1 =  
N 1684838.21, E 1633783.19 =  
BL#2 STA. 8+30.35, 8.43' LT.  
2-36" 22 1/2° BENDS (ROTATED) - 23.5'S & 4' W OF FH  
34.86 L.F. OF 36" PIPE 1-36" D1CL - 22.5° BEND -  
LAY LENGTH 35.70' 36.5'S & 36.5' W OF FH  
2 BENDS ANCHORED W/ MEGA LUGS

NOTE:  
BASELINE #2 IS CENTER JOINT OF DOUGLAS  
AVE. AS DEFINED BY NORTHING & EASTING  
COORDINATES ON THESE PLANS.

HC#2  
IRON WITH RED MKEC D.P. CAP.  
N 1684809.063, E 1633670.860  
ELEV.=1308.432



**36" WATER MAIN IN DOUGLAS  
FROM McCOMAS TO FLORA  
PROJ. NO. 448-80141**



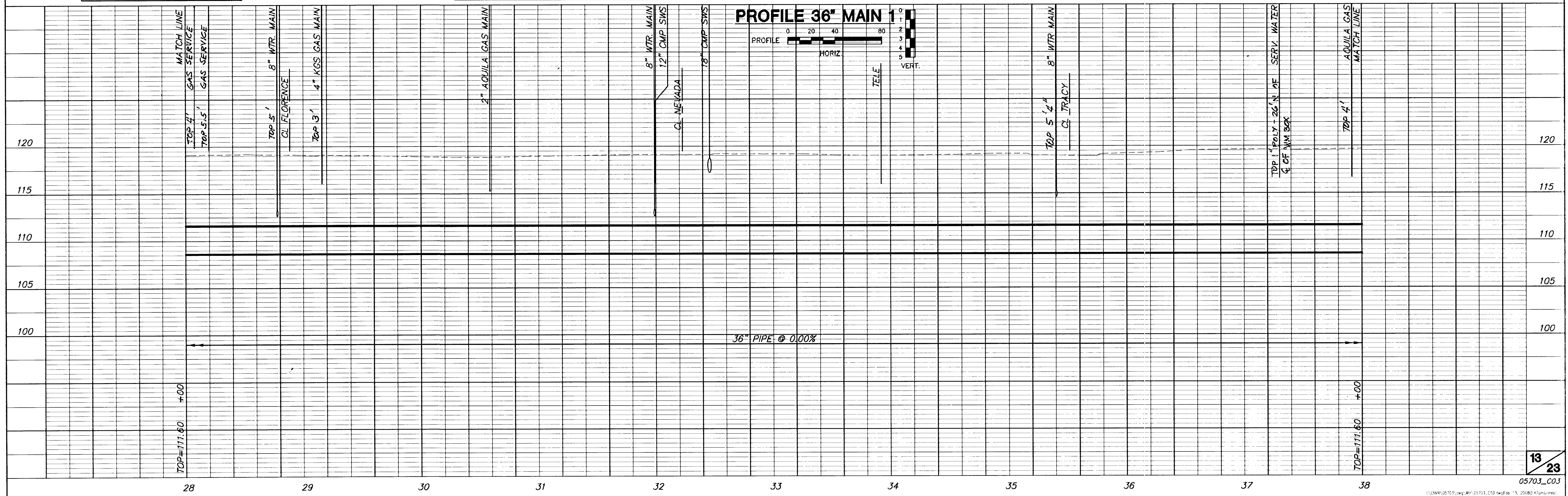
BM#7  
TC 1.0' N. OF SOUTH END OF  
CURB NE CORNER DOUGLAS &  
FLORENCE  
ELEV.=119.04

NOTE:  
BASELINE #2 IS CENTER JOINT OF DOUGLAS  
AVE. AS DEFINED BY NORTHING & EASTING  
COORDINATES ON THESE PLANS.

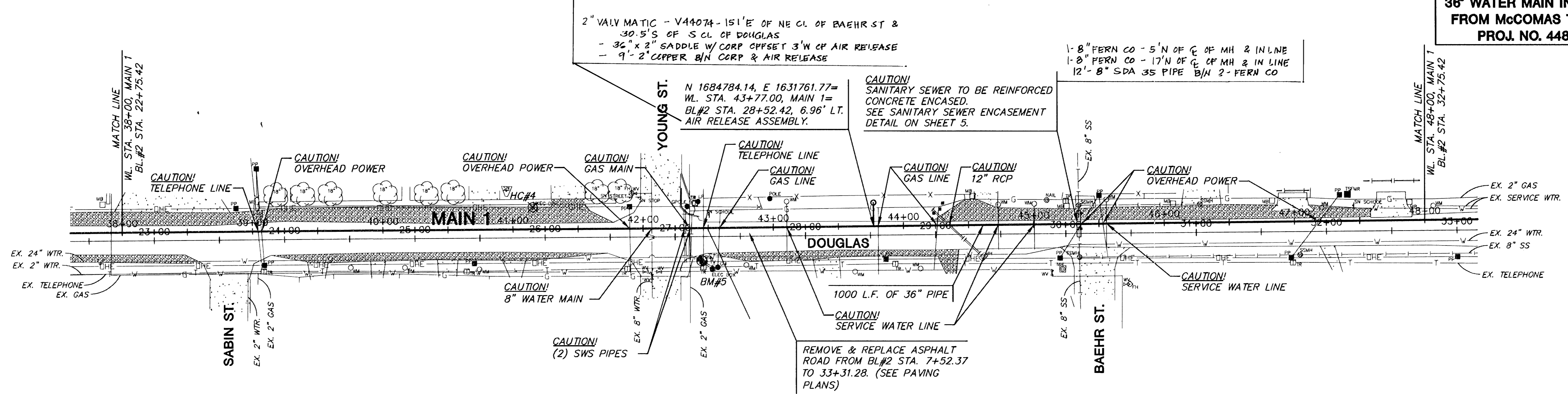
**PLAN 36" MAIN 1**  
0 20 40 80  
PLAN  
LAT. & LONG.

HC#3  
IRON WITH RED MKEC D.P. CAP.  
N 1684835.774, E 1632868.105  
ELEV.1306.788

BM#6  
TC S. END OF NW COR.  
DOUGLAS & TRACY  
ELEV.=118.21



**36" WATER MAIN IN DOUGLAS  
FROM McCOMAS TO FLORA  
PROJ. NO. 448-80141**

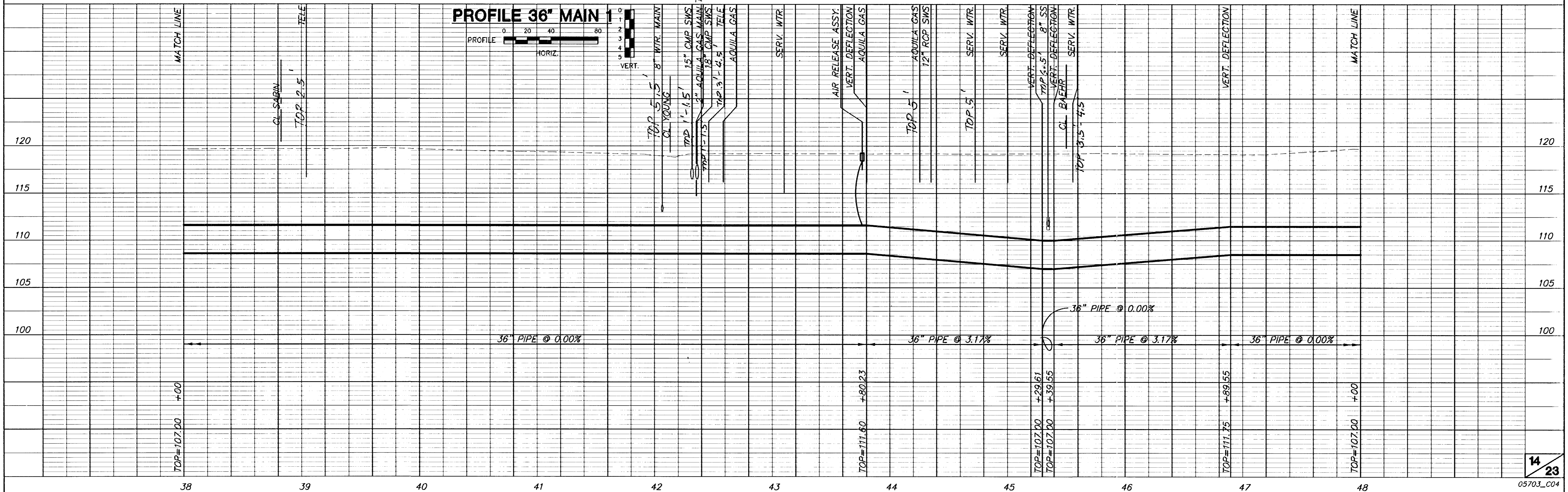


HC#4  
IRON WITH RED MKEC D.P. CAP.  
N 1684774.502, E 1632023.841  
ELEV.=1305.060

BM#5  
STEP SPIKE S. FACE OF PP @  
NW COR. DOUGLAS & YOUNG.  
ELEV.=120.215

**PLAN 36" MAIN 1**  
LAT. & LONG.

NOTE:  
BASELINE #2 IS CENTER JOINT OF DOUGLAS  
AVE. AS DEFINED BY NORTHING & EASTING  
COORDINATES ON THESE PLANS.





NOTE: REFER TO ATTACHED SHEETS FOR ADDITIONAL INFORMATION.

5'-36" DI CL PIPE B/N 36" DI MJ TEE & 36" CAP.  
 CAP-7.5'E & 6'S OF FH- ANCHORED W/ MEGA LUGS & CONC. THRUST BLOCK.  
 OUT OF 36"x6" TANGENTIAL OUTLET- ANCHOR COUPLING. 6" VALVE ANCHORED TO ANCHOR COUPLING.

N 1684686.66, E 1628758.93=  
 WL. STA. 74+05.00, MAIN 1=  
 BL#2 STA. 58+57.35, 29.98' LT.  
 1-36" RJ CAP

**36" WATER MAIN IN DOUGLAS FROM McCOMAS TO FLORA PROJ. NO. 448-80141**

N 1684709.30, E 1628761.29=  
 WL. STA. 73+77.18, MAIN 1=  
 BL#2 STA. 58+52.21, 19.98' LT.  
 1-36" RJ MJ BUTTERFLY VALVE ANCHORED W/ MEGA LUGS

N 1684696.65, E 1628758.65=  
 WL. STA. 73+95.00, MAIN 1=  
 BL#2 STA. 58+57.35, 19.98' LT. ANCHOR COUPLING  
 1-36"x6" TANGENTIAL OUTLET (BOTTOM)-7.5'E OF FH. TOP 4'  
 1-6" FIRE HYDRANT ASSY. - 6" CLOW- H13933 - 60' W &  
 SEE DETAIL ON SHEET 4. 7.5'S OF SW CL OF HOOVER & DOUGLAS  
 4.5' TO CURB

N 1684709.21, E 1628758.29=  
 WL. STA. 73+82.31, MAIN 1=  
 WL. STA. 0+00.00, MAIN 2=  
 BL#2 STA. 58+57.34, 7.41' LT.  
 1-36"x36" MJ TEE RESTAINED -

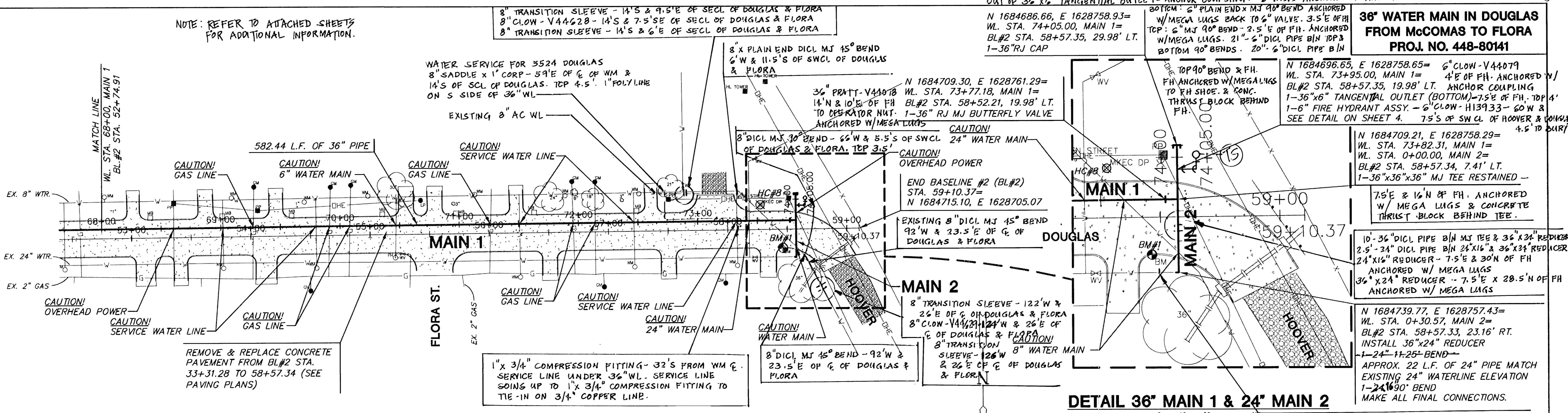
7.5'E & 16' N OF FH. ANCHORED W/ MEGA LUGS & CONCRETE THRUST BLOCK BEHIND TEE.

10'-36" DI CL PIPE B/N MJ TEE & 36" X 24" REDUCER  
 2.5'-24" DI CL PIPE B/N 24" X 16" & 36" X 24" REDUCER  
 24" X 16" REDUCER - 7.5'E & 30' N OF FH ANCHORED W/ MEGA LUGS  
 36" X 24" REDUCER - 7.5'E X 28.5' N OF FH ANCHORED W/ MEGA LUGS

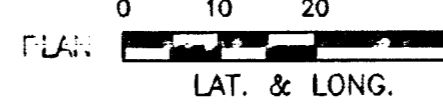
N 1684739.77, E 1628757.43=  
 WL. STA. 0+30.57, MAIN 2=  
 BL#2 STA. 58+57.33, 23.16' RT.  
 INSTALL 36"x24" REDUCER  
 1-24" 11-25" BEND -

APPROX. 22 L.F. OF 24" PIPE MATCH EXISTING 24" WATERLINE ELEVATION  
 1-24" 1690" BEND  
 MAKE ALL FINAL CONNECTIONS.

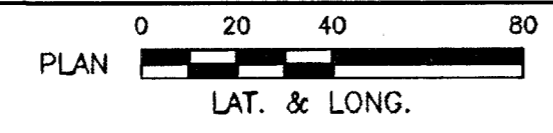
1-16" 90° BEND - 7.5'E & 42.5' N OF FH. ANCHORED W/ MEGA LUGS  
 16" TRANSITION SLEEVE FOR TIE-IN - 16.5'E & 12.5' N OF FH  
 9'-16" DI CL PIPE B/N 16" 90° BEND  
 11'-16" DI CL PIPE B/N 24" X 16" REDUCER



**DETAIL 36" MAIN 1 & 24" MAIN 2**



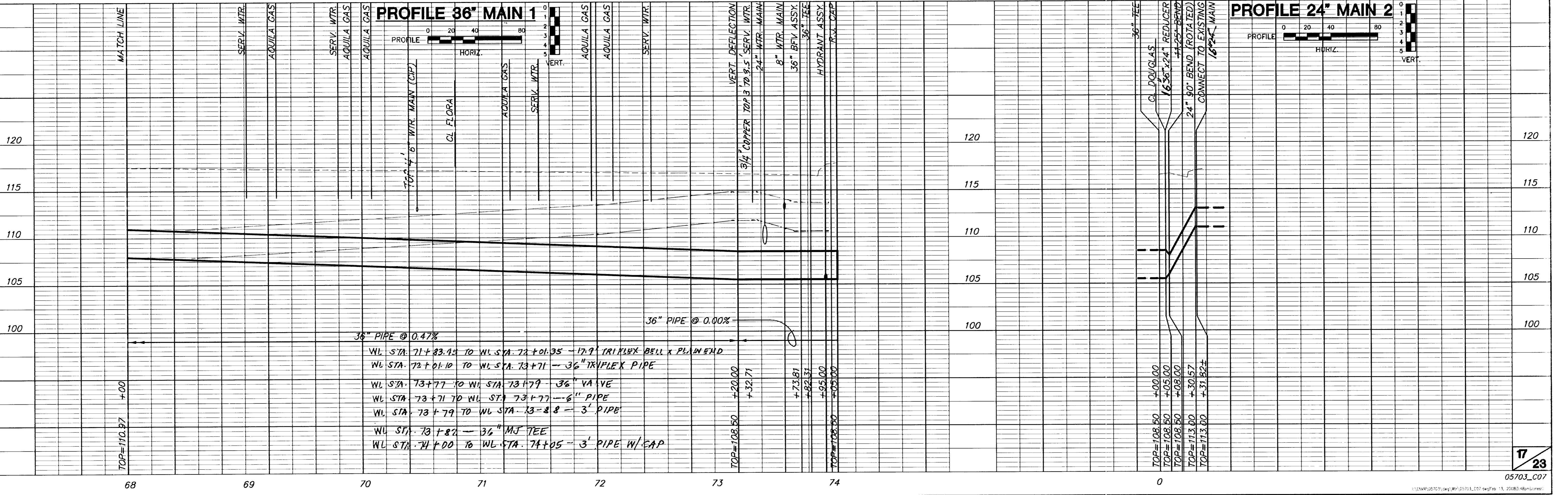
**PLAN 36" MAIN 1 & 24" MAIN 2**



NOTE:  
 BASELINE #2 IS CENTER JOINT OF DOUGLAS AVE. AS DEFINED BY NORTHING & EASTING COORDINATES ON THESE PLANS.

HC#8  
 IRON WITH RED MKEC D.P. CAP.  
 N 1684696.663, E 1628788.387  
 ELEV.=1305.021

BM#1  
 COW DISC W SIDE CONCRETE BASE FOR WESTAR TOWER SE COR. OF HOOVER & 2ND POSTED 120.47.  
 ELEV.=120.47



**PROFILE 36" MAIN 1**

**PROFILE 24" MAIN 2**

36" PIPE @ 0.47%	
WL STA. 71+83.74 TO WL STA. 72+01.35 - 17.7' TRIPLEX BELL X PLAIN END	
WL STA. 73+01.10 TO WL STA. 73+71 - 36" TRIPLEX PIPE	
WL STA. 73+77 TO WL STA. 73+79 - 36" VALVE	
WL STA. 73+71 TO WL STA. 73+77 - 6" PIPE	
WL STA. 73+79 TO WL STA. 73+88 - 3' PIPE	
WL STA. 73+82 - 36" MJ TEE	
WL STA. 74+00 TO WL STA. 74+05 - 3' PIPE W/EAP	

