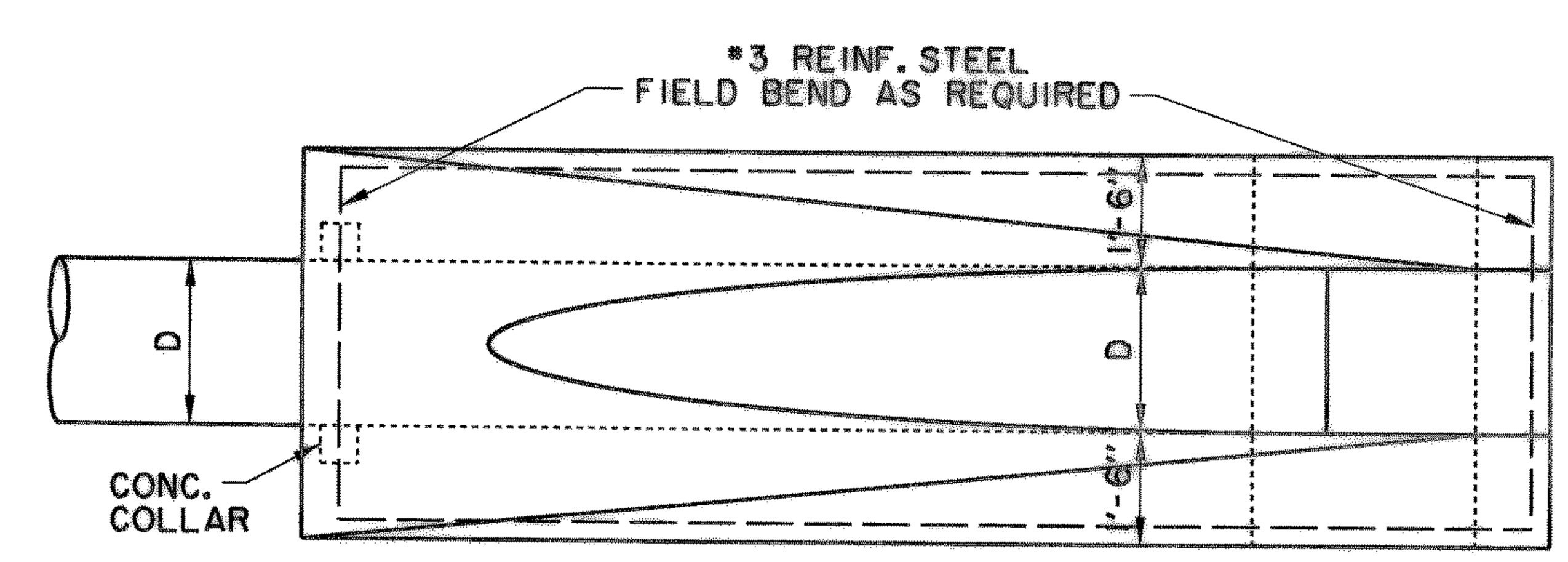
EMMA JANE & DAVY CROCKETT
STORMWATER PIPE CALCULATIONS - DECEMBER 17, 1997

COLLECTION POINT UPSTREAM STATION	COLLECTION POINT DOWNSTREAM STATION	DISTANCE BETWEEN COLLECTION POINTS	AREA NO.	AREA A (ACRES)	INCREMENTAL RUNOFF COEFF. C	DRAINAGE A INCREM. CA	ACCUM. CA	TIME @ UPSTREAM STATION (MIN.)	DESIGN STORM FREQUENCY (YEAR)	RAINFALL INTENSITY I (IN./HR)	STORM WATER RUNOFF Q (CFS)	SLOPE OF HYDRAULIC GRADIENT S (FT/FT)	PIPE SIZE (INCHES)	VELOCITY IN STORM SEWER V (FPS)	HEAD LOSS COEFF. Kj	HEAD LOSS AT UPSTREAM WYE STATION (FT)	FLOW TIME IN PIPE (MIN)	TIME @ DOWNSTREAM STATION (MIN)	DESIGN Q (CFS)	VELOCITY HEAD Hv (FT)	H.G. AT UPSTREAM STATION (FT)	H.G. AT DOWNSTREAM STATION (FT)	REMARKS
LINE "B" - EMMA JANE AT SAM HOUSTON																							
756.99	746.69	10.30	B-1	0.26	0.52	0.14	0.14	10.00	100	9.80	1.32	0.0002	18	0.75	1.25	0.01	0.23	10.23	1.32	0.01	567.96	567.96	
746.69	695.09	51.60					0.14	10.23	100	9.80	1.32	0.0002	18	0.75	0.35	0.01	1.15	11.38	1.32	0.01	567.95	567.95	
695.09	549.01	146.08	B-2&3	1.58	0.80	1.26	1.40	11.38	100	9.80	13.71	0.0075	21	5.70	0.60	0.50	0.43	11.81	13.71	0.50	567.45	566.35	LAT B-2 & 3
549.01	533.58	15.43					1.40	11.81	100	9.80	13.71	0.0075	21	5.70	0.35	0.33	0.05	11.85	13.71	0.50	566.03	565.91	
533.58	530.33	3.25					1.40	11.85	100	9.80	13.71	0.0075	21	5.70	0.75	0.13	0.01	11.86	13.71	0.50	565.77	565.75	
LAT "B-2"																							
43.00	10.71	32.29	B-2	1.32	0.82	1.08	1.08	10.00	100	9.80	10.61	0.0016	21	2.62	1.25	0.13	0.21	10.21	6.29	0.11	568.16	568.11	
10.71	0.00	10.71	B-3	0.26	0.68	0.18	1.26	10.21	100	9.80	12.34	0.0061	21	5.13	0.60	0.34	0.03	10.24	12.34	0.41	567.76	567.70	LAT B-3
LAT "B-3"																							
31.73	0.00	31.73	B-3	0.26	0.68	0.18	0.18	10.00	100	9.80	1.73	0.0015	21	2.52	1.25	0.12	0.21	10.21	6.05	0.10	568.21	568.16	
LINE "A" - EXISTING LINE IN BOURN STREET AT DAVY CROCKETT																							
LAT "A-1" - EXISTING LATERAL																							
45.84	0.00	45.84	A-1	0.07	0.50	0.04	0.04	10.00	100	9.80	0.34	0.0000	18	0.19	1.25	0.00	3.97	13.97	0.34	0.00	554.16	554.16	
LAT "A-2" - EXISTING LATERAL																							
56.06	0.00	56.06	A-2	0.61	0.50	0.31	0.31	10.00	100	9.80	2.99	0.0008	18	1.69	1.25	0.06	0.55	10.55	2.99	0.04	554.14	554.09	

EMMA JANE & DAVY CROCKETT
INLET CALCULATIONS - FEBRUARY 2, 1998

INLET TYPE & NO.	INLET LOCATION	DRAINAGE AREA NUMBER	PEAK FLOW FOR AREA "Qp-5" (CFS)	CARRY-OVER FROM UPSTREAM INLET "Qco" (CFS)	TOTAL FLOW AT INLET "Qt-5" (CFS)	PARABOLIC CROWN STREET: STREET SECTION WIDTH & CROWN	PARABOLIC CROWN STREET: STREET SLOPE "So" (FT/FT)	STREET CAPACITY ROW-ROW (CFS)	STREET CAPACITY CURB-CURB (CFS)	FLOW DEPTH "y" (FT)	WIDTH OF SPREAD "Sp" (FT)	CAP. PER FOOT OF INLET "Q"/ (CFS/FT)	LENGTH OF INLET REQ. FOR "Qa" "La" (FT.)	INLET LENGTH SELECTED "L" (FT.)	"L"/"La"	"Q"/"Qa" FROM FIGURE 3.5	FLOW INTERCEPTED "Q"="Qa"x("Q"/"Qa") (CFS)	CARRY-OVER FLOW TO DOWNSTREAM "Qco" (CFS)
I STD.	DAVY CROCKETT	A-1	0.22	0.00	0.22	29'BB / 6"CR	0.0140	49.49	12.14	0.13	2.00	0.74	0.30	5	16.92	1.00	0.22	0.00
I STD.	DAVY CROCKETT	A-2	1.88	0.00	1.88	29'BB / 6"CR	0.0113	44.46	10.91	0.29	5.13	0.91	2.06	5	2.43	1.00	1.88	0.00
I DROP	SAM HOUSTON	B-1	0.83	0.00	0.83	29'BB / 6"CR	0.0050	29.58	7.26	0.29	5.15	0.91	0.91	12	13.19	1.00	0.83	0.00
I STD.	EMMA JANE	B-2	6.66	0.00	6.66	29'BB / 6"CR	0.0150	51.23	12.57	0.50	14.00	1.15	5.78	10	1.73	1.00	6.66	0.00
I STD.	EMMA JANE	B-3	1.09	0.00	1.09	29'BB / 6"CR	0.0150	51.23	12.57	0.25	4.20	0.87	1.25	10	7.97	1.00	1.09	0.00
NONE	DAVY CROCKETT	C-1	1.38	0.00	1.38	29'BB / 6"CR	0.0050	29.58	7.65	0.30	5.51	0.92	1.49	0	0.00	0.00	0.00	1.38
NONE	EMMA JANE	C-2	1.54	0.00	1.54	29'BB / 6"CR	0.0400	83.66	20.53	0.25	4.20	0.87	1.77	0	0.00	0.00	0.00	1.54
NONE	EMMA JANE	C-3	0.89	0.00	0.89	29'BB / 6"CR	0.0400	83.66	20.53	0.21	3.30	0.83	1.08	0	0.00	0.00	0.00	0.89
NONE	DAVY CROCKETT	C-4	1.17	3.81	4.98	29'BB / 6"CR	0.0050	29.58	7.26	0.50	14.00	1.15	4.32	0	0.00	0.00	0.00	4.98
NONE	DAVY CROCKETT	C-5	0.12	0.00	0.12	29'BB / 6"CR	0.0050	29.58	7.26	0.12	2.00	0.73	0.16	0	0.00	0.00	0.00	0.12
NONE	DAVY CROCKETT	C-6	0.25	0.12	0.37	29'BB / 6"CR	0.0050	29.58	7.26	0.21	3.30	0.83	0.45	0	0.00	0.00	0.00	0.37

INLET TYPE & NO.	INLET LOCATION	DRAINAGE AREA NUMBER	PEAK FLOW FOR AREA "Qp-100" (CFS)	CARRY-OVER FROM UPSTREAM INLET "Qco" (CFS)	TOTAL FLOW AT INLET "Qt-100" (CFS)	STREET SECTION WIDTH & CROWN	STREET SLOPE "So" (FT/FT)	STREET CAPACITY ROW-ROW (CFS)	STREET CAPACITY CURB-CURB (CFS)	FLOW DEPTH "y" (FT)	WIDTH OF SPREAD "Sp" (FT)	CAP. PER FOOT OF INLET "Q"/ (CFS/FT)	LENGTH OF INLET REQ. FOR "Qa" "La" (FT.)	INLET LENGTH SELECTED "L" (FT.)	"L"/"La"	"Q"/"Qa" FROM FIGURE 3.5	FLOW INTERCEPTED "Q"="Qa"x("Q"/"Qa") (CFS)	CARRY-OVER FLOW TO DOWNSTREAM "Qco" (CFS)
I DROP	SAM HOUSTON	B-1	1.32	0.00	1.32	29'BB / 6"CR	0.0050	29.58	7.26	0.33	6.06	0.96	1.38	12	8.69	1.00	1.32	0.00
I STD.	EMMA JANE	B-2	10.61	0.00	10.61	29'BB / 6"CR	0.0150	51.23	12.57	0.50	14.00	1.15	9.21	10	1.09	1.00	6.29	4.32
I STD.	EMMA JANE	B-3	1.73	4.32	6.05	29'BB / 6"CR	0.0150	51.23	12.57	0.48	13.44	1.13	5.36	10	1.87	1.00	6.05	0.00



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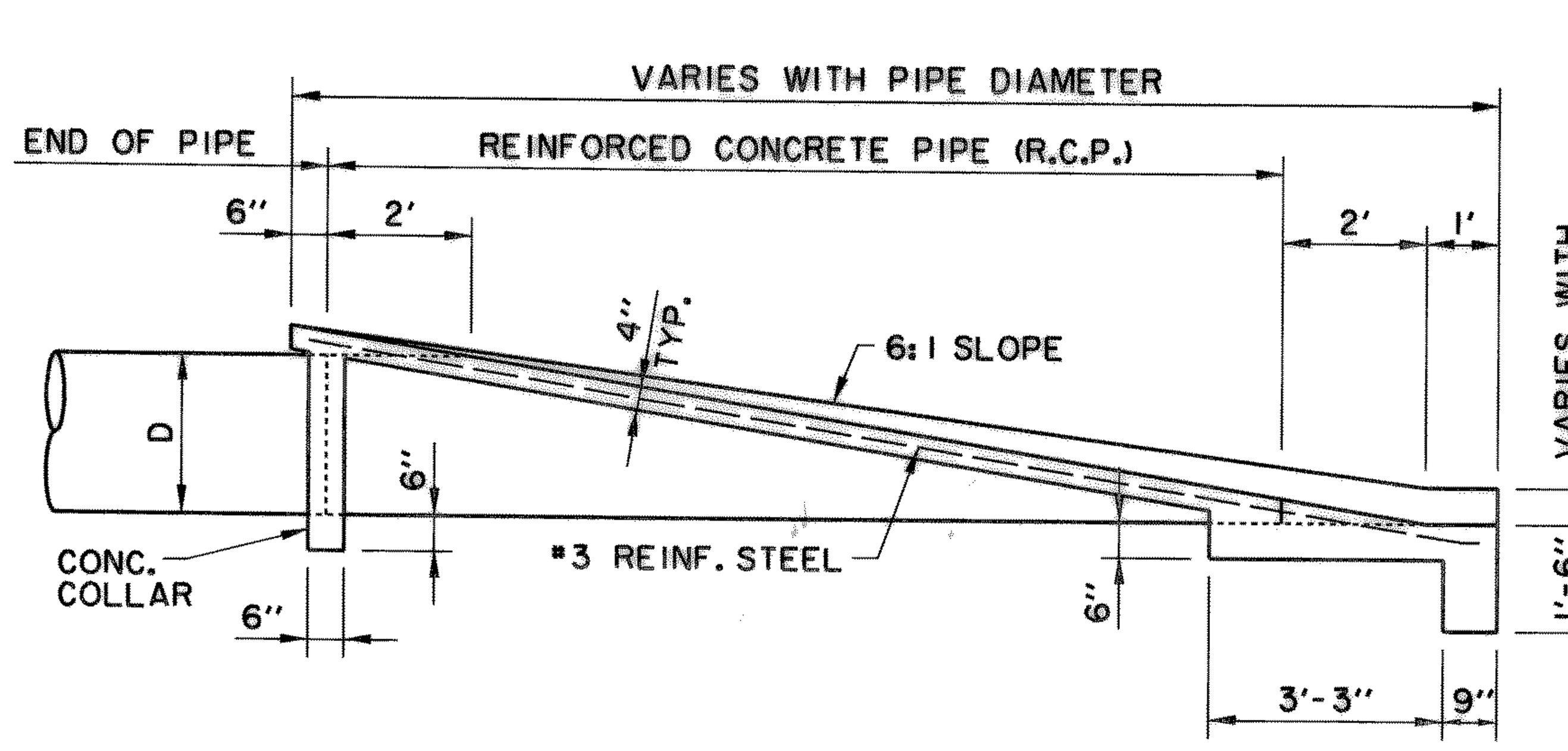

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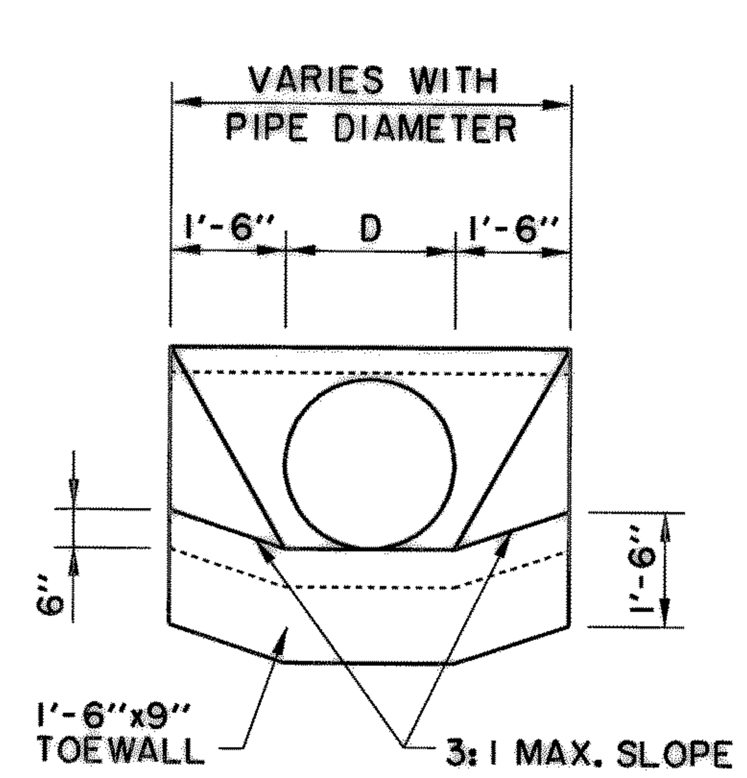

END ELEVATION

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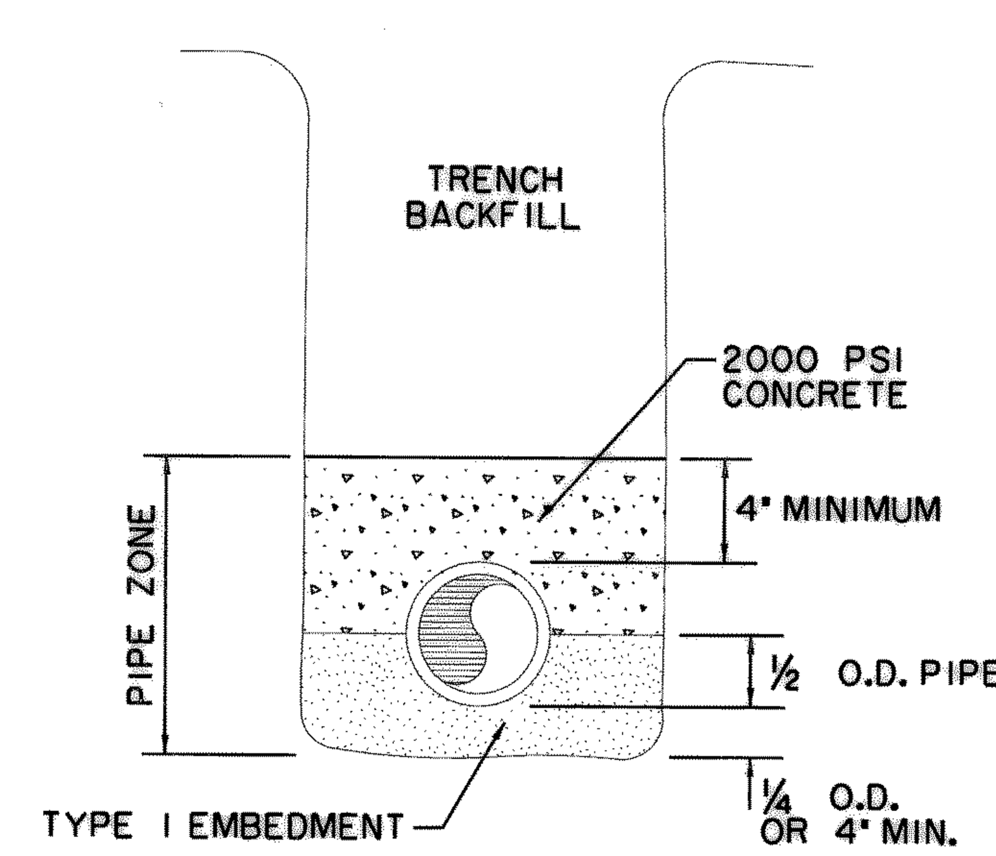
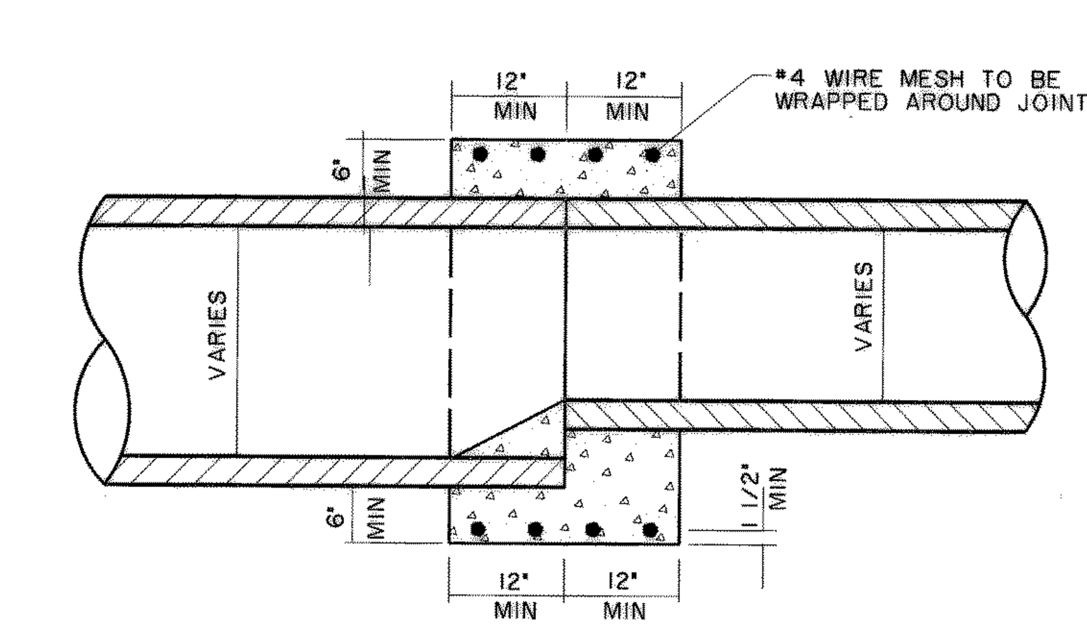


CONCRETE CAP EMBEDMENT DETAIL



DETAIL OF CONCRETE COLLAR
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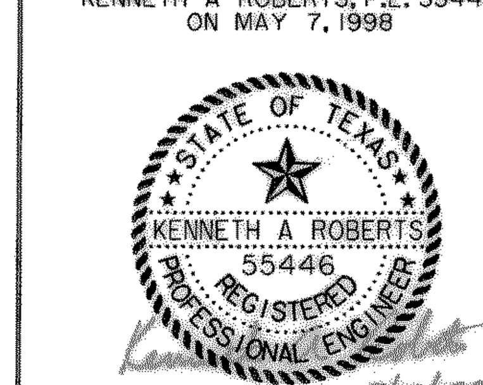

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2/5/99

STORMWATER CALCULATIONS & DETAILS

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DESIGN	DRAWN	APPR.	SCALE	DATE	PROJECT NO.	NO.
HZI	HZI	KAR	NONE	MAY 98	01226201	ST-2

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