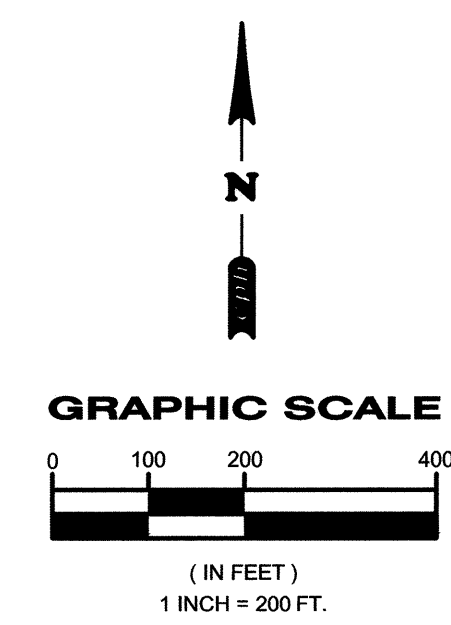
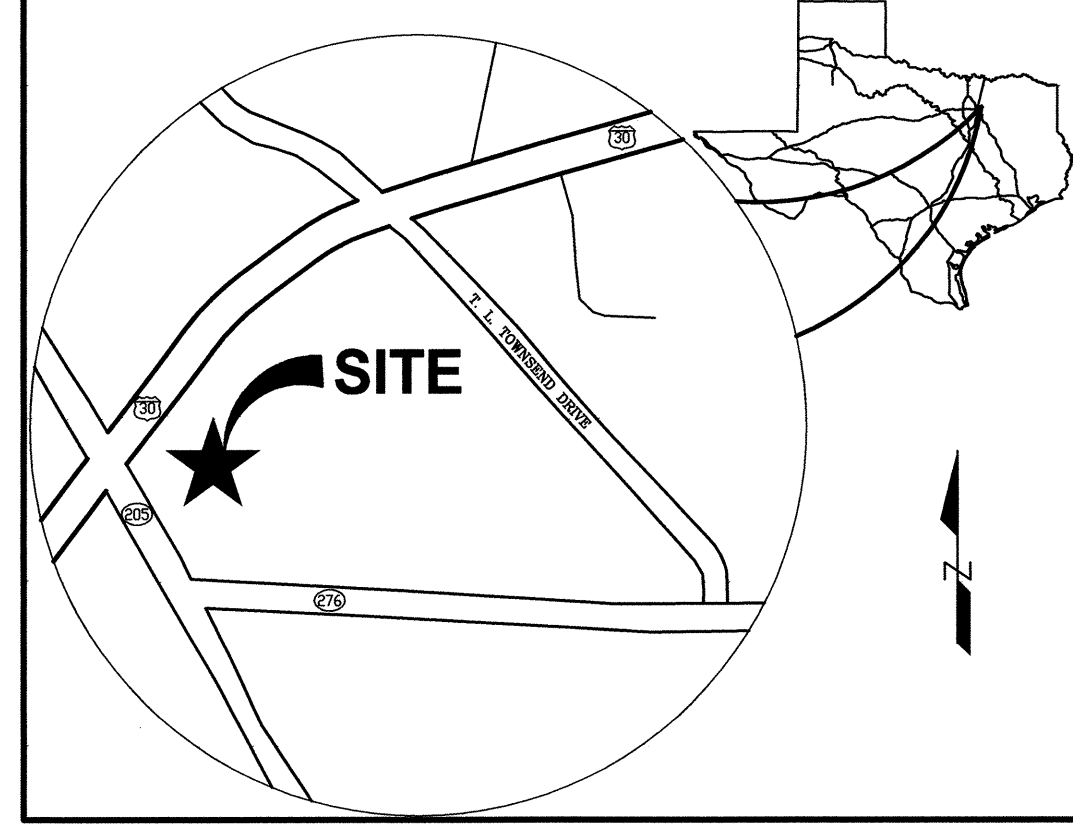




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 Environmental Scientists  
 Construction  
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 Design/Build



**POST - DRAINAGE AREA MAP LEGEND**

- PROPERTY LINE
- STORM SEWER PIPE CENTERLINE
- EXISTING CONTOUR
- MAJOR DRAINAGE AREA

1  
 X.X AC  
 X.X CFS

- NODE I.D.
- AREA IN ACRES
- CFS
- FLOW ARROW

**EXISTING OFFSITE DRAINAGE AREA**

AREA DESIGNATION	TIME OF CONCENTRATION (MINUTES)	INTENSITY IN/HR.	FULLY DEVELOPED RUN-OFF COEFFICIENT	ACRES (AC.)	FULLY DEVELOPED Q100 (CFS)	DRAINS TO
O-1	16.83	9	0.9	66.83	541.32	ALL DRAINS TO 9'X5' RCBC
O-2	10	9.8	0.9	4.86	42.87	ALL DRAINS TO 9'X5' RCBC
O-3	10	9.8	0.9	2.16	19.05	ALL DRAINS TO 9'X5' RCBC

**Tc CALCULATIONS FOR OFFSITE AREA**

TOTAL LENGTH OF PIPE FROM UPSTREAM INLET TO EXITING OUTFALL = 2.049'  
 TOTAL TIME AT 5 fps = (2.049/5)  
 = 410 SEC.  
 = 6.83 MIN.

TOTAL Tc = 10+6.83 = 16.83 MIN.  
 Iw @ 16.83 MIN. = 9.0  
 Q = CIA = 9.0 X 0.9 X 66.83 = 541.32 CFS.

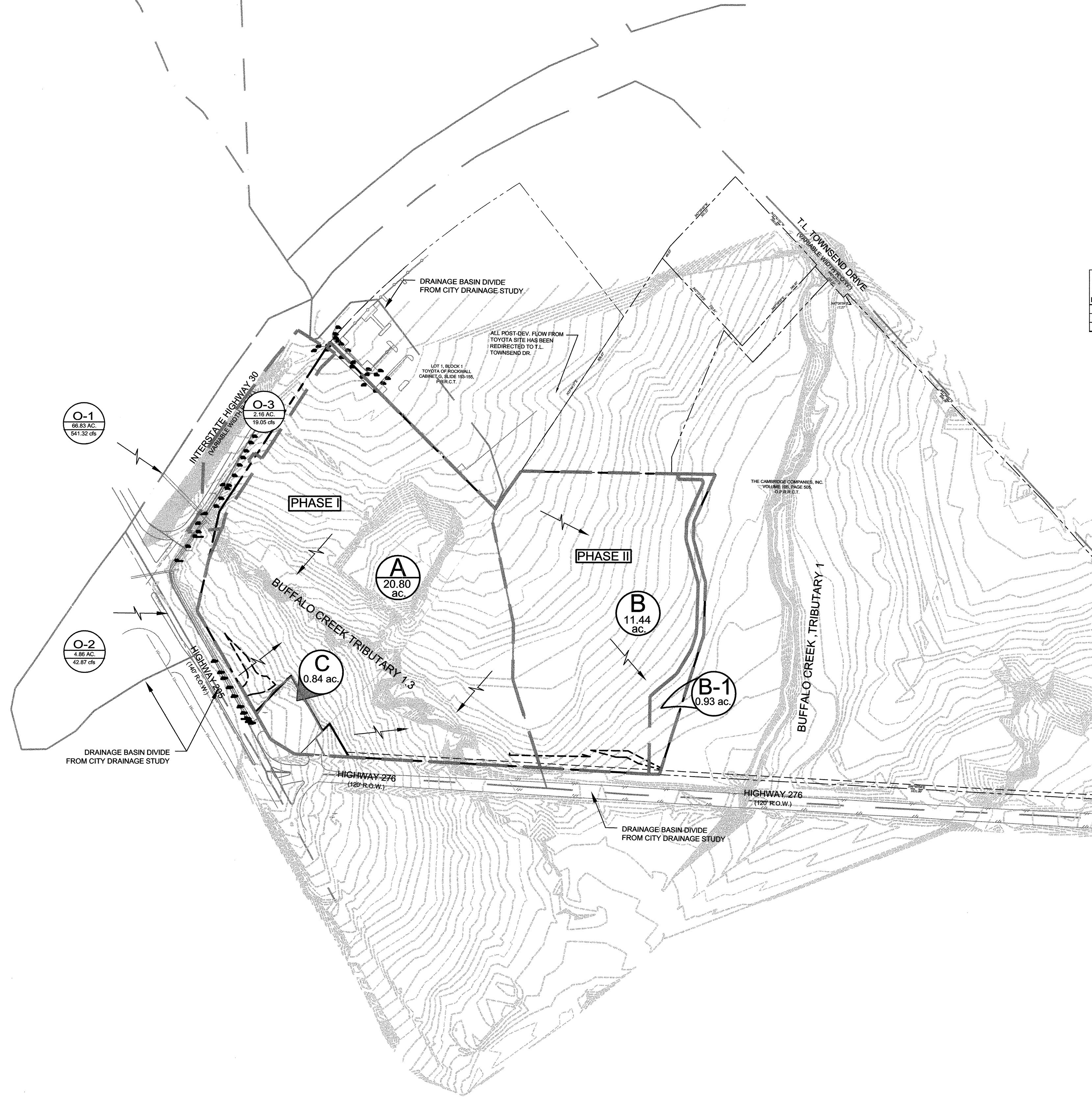
TOTAL EXISTING FLOW FOR BOX CULVERT DRAINAGE = 541.32 + 42.87 + 19.05  
 = **603.24 CFS.**

NOTE:  
 1. FLOWS FOR TXDOT R.O.W. OBTAINED FROM PLANS FOR S.H. 205 DATED 3-31-2006

**EXISTING DRAINAGE AREA**

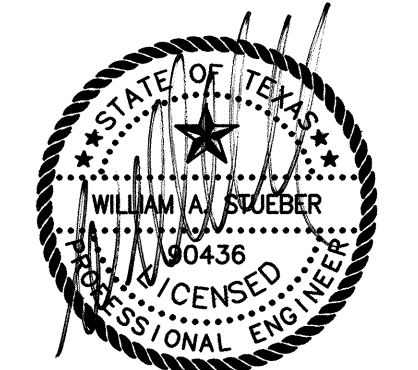
AREA DESIGNATION	TIME OF CONCENTRATION (MINUTES)	INTENSITY IN/HR.	FULLY DEVELOPED RUN-OFF COEFFICIENT	ACRES (AC.)	FULLY DEVELOPED Q100 (CFS)	DRAINS TO
A	20	8.3	0.35	20.8	60.42	BUFFALO CREEK TRIBUTARY
B	20	8.3	0.35	11.44	33.23	BUFFALO CREEK TRIBUTARY
B-1	20	8.3	0.35	0.93	2.70	BUFFALO CREEK TRIBUTARY
C	10	9.8	0.9	0.84	7.41	BUFFALO CREEK TRIBUTARY

TOTAL CONTRIBUTORY FLOW INTO TRIBUTARY 1.3 = 60.42 + 7.41 = 67.83 CFS.



Was	By	Date	Revision
WAS	AS-BUILT	05/04/09	PER AS-BUILT
WAS	NO CHANGES THIS SHEET	01/09/09	NO CHANGES THIS SHEET
WAS	NO CHANGES THIS SHEET	11/06/08	NO CHANGES THIS SHEET
WAS	NO COMMENTS TO THIS SHEET	09/23/08	NO COMMENTS TO THIS SHEET
WAS	NO COMMENTS TO THIS SHEET	08/04/08	NO COMMENTS TO THIS SHEET
WAS	NO COMMENTS TO THIS SHEET	06/26/08	NO COMMENTS TO THIS SHEET
WAS	PER CITY COMMENTS REC. 5/29/08	06/03/08	PER CITY COMMENTS REC. 5/29/08
WAS	NO COMMENTS TO THIS SHEET	05/19/08	NO COMMENTS TO THIS SHEET
WAS	NO COMMENTS TO THIS SHEET	03/07/08	NO COMMENTS TO THIS SHEET
WAS	NO COMMENTS TO THIS SHEET	12/05/07	NO COMMENTS TO THIS SHEET
WAS	NO COMMENTS TO THIS SHEET	10/31/07	NO COMMENTS TO THIS SHEET

Designed by: HMH  
 Drawn by: AC  
 Checked by: WAS  
 Approved by: 10/19/2007  
 Scale: 1" = 200'  
 Date: 10/19/2007  
 Job No.: S13217  
 File: DAM PH1



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**RECORD DRAWING**  
 TO THE BEST OF OUR KNOWLEDGE CPH ENGINEERS, INC., HEREBY STATES THAT THIS PLAN IS A REPRESENTATION OF THE AS-BUILT CONDITIONS OF THE SUBJECT PROJECT. THE INFORMATION PRESENTED IS BASED ON INFORMATION PROVIDED BY THE CONTRACTOR ALONG WITH DATA PROVIDED BY THE PROJECT LAND SURVEYOR.

"NOTICE"  
 THE SIZE OF THIS PLAN MAY HAVE BEEN SLIGHTLY ALTERED BY REPRODUCTION PROCESSES. THIS MUST BE CONSIDERED WHEN SCALING ANY REPRODUCED PLAN FOR THE PURPOSE OF COLLECTING DATA.

**PRE - DRAINAGE AREA MAP**  
**ROCKWALL CENTRE CORNERS**  
 INTERSTATE HIGHWAY 30 AND S.H. 205  
 CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS