

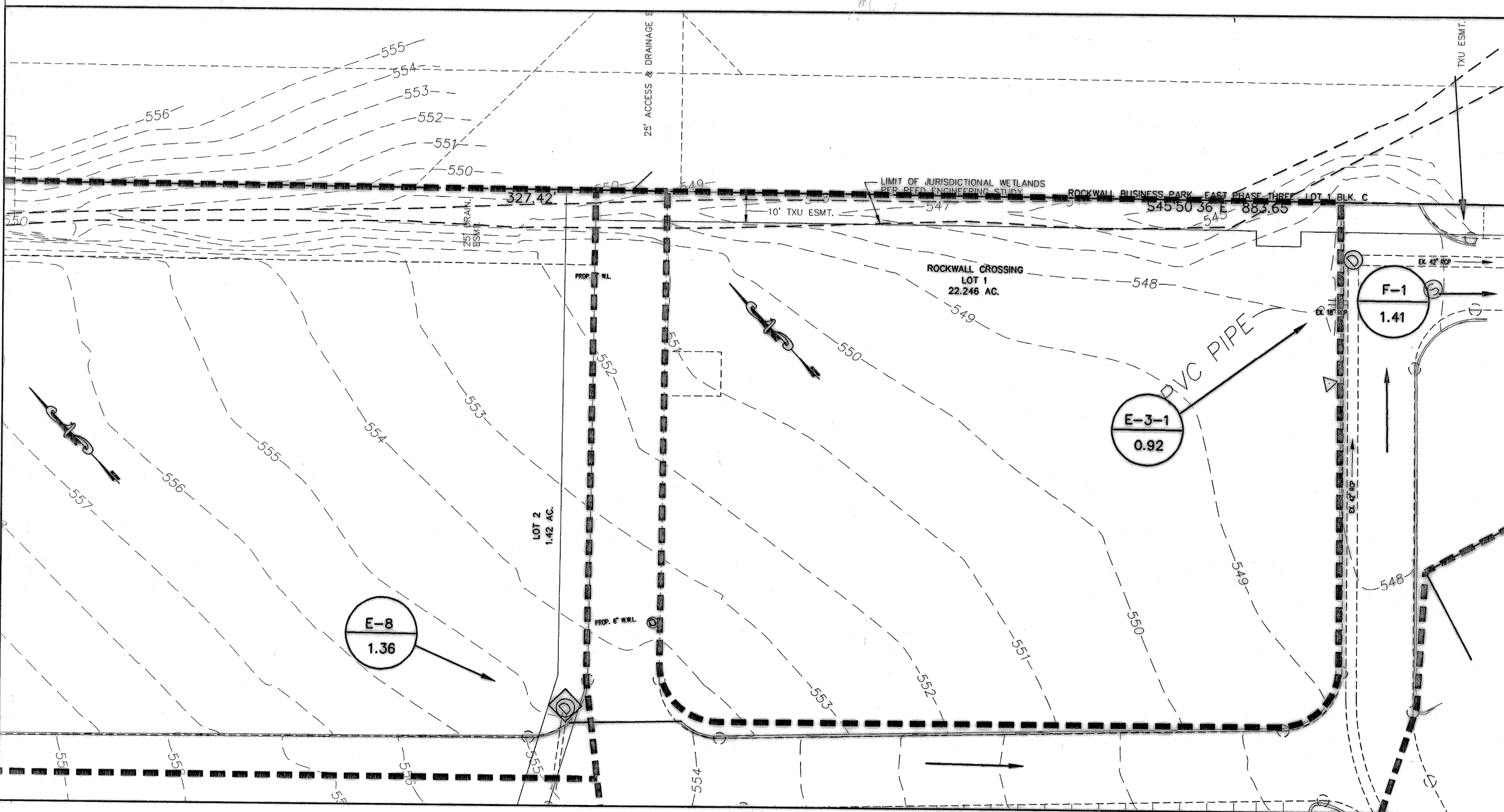
## PROPOSED CONDITIONS

**DISCLAIMER**  
 TO THE BEST OF OUR KNOWLEDGE, THE WALLACE GROUP, INC. HEREBY STATES THAT THIS PLAN IS AS-BUILT/RECORD DRAWINGS. THE INFORMATION PROVIDED IS BASED ON SURVEYING CONDUCTED AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

### DRAINAGE AREA SUMMARY

Drainage Area	100-Year Peak Flow (cfs)	Downstream Inlet	i (iph)	C	A (ac)
E-3-1A	3.62	E-3-1	9.80	0.90	0.41
E-3-1B	3.09	E-3-1B	9.80	0.90	0.35
E-3-1C	0.35	E-3-1B	9.80	0.90	0.04
E-3-1D	0.44	F-1	9.80	0.90	0.05
E-3-1E	0.71	OFF-SITE	9.80	0.90	0.08
E-8A	1.44*/3.70	E-3-1B*/E-8	9.80	0.35*/0.90	0.42
E-8B	0.79	E-3-1B	9.80	0.90	0.09
E-8C	2.81*/4.59	OFF-SITE*/E-8	9.80	0.35*/0.90	0.82
F-1	11.91	F-1	9.80	0.90	1.35
F-1A	0.79	E-3-1B	9.80	0.90	0.09
F-1B	0.18	E-3-1B	9.80	0.90	0.02

\* AREAS E-8A & E-8C SHALL BE COVEYED TO INLET/LINE E-8 DURING DEVELOPMENT OF LOT 2.



## EXISTING CONDITIONS

### INLET CAPACITY CALCULATIONS

Inlet	Area (ac)	Tc (min)	i (iph)	C	Q=CiA (cfs)	Carryover (cfs)	Capture (cfs)	Type	Allowable Depth (in)	Inlet Length (ft)	Capacity (cfs)
E-3-1C	0.04	10	9.80	0.90	0.4						
F-1A	0.09	10	9.80	0.90	0.8						
E-8A	0.42	10	9.80	0.35	1.4						
E-8B	0.09	10	9.80	0.90	0.8						
F-1B	0.02	10	9.80	0.90	0.2						
E-3-1B	0.35	10	9.80	0.90	3.1						
	1.01				6.6	0.0	6.6	Curb	3	10	12

Note: Capacity of grate inlets assume 50% open area of the grate and 50% clogging factor.

### CHANGE IN DOWNSTREAM HYDRAULIC GRADE LINE ELEVATIONS

Line	Change in Area (ac)	Line Tc (min)	i (iph)	C	Change in Q=CiA (cfs)	Approved in-Line Q(cfs)	Revised in-Line Q(cfs)	Approved Up HGL (ft)	Revised Up HGL (ft)	Up Ground Elev (ft)
E (above E-3-1B)	(0.09)	17.4	8.70	0.9	(0.7)	62.9	62.2	545.92	546.01	548.00
E (E-3-1B to E-3-1)	0.50	17.4	8.70	0.9	3.9	62.8	66.7	545.45	545.40	547.30
E (below E-3-1)	(0.02)	17.4	8.70	0.9	(0.2)	69.6	69.4	544.64	544.58	547.30
F	(0.06)	10	9.80	0.9	(0.5)	18.6	18.1			
Off-site	0.08	10	9.80	0.9	0.7	46.42	45.72	40.52		

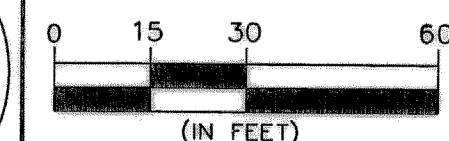
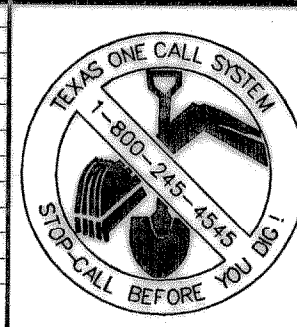
### HYDRAULIC GRADE LINE CALCULATIONS FOR PROPOSED SYSTEM

Node	Area (ac)	Inlet C	Inlet CA(ac)	System CA (ac)	Tc (min)	Vel. (fps)	System Tc (min)	System Intensity(iph)	System Q100 (cfs)	Fin. Grade Elev (ft)	HGL In (ft)	HGL Out (ft)	Description
E-3				0.68		3.79	10.08	9.79	6.69	548.50	546.87	546.05	EXISTING 42" LINE "E" STA. 4+80
E-3-1B	0.59	0.9	0.53	0.68	10.00	3.79	10.00	9.80	6.70	548.75	547.22	546.94	10' CURB INLET ON 18" RCP
E-8B													
F-1A													
F-1B													
E-3-1C													
E-8A	0.42	0.35	0.15										TEMPORARY OFF-SITE FLOW

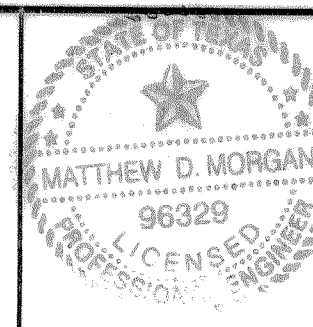
### NOTES:

- MANNING'S COEFFICIENT "N" = 0.013 FOR ALL PIPES.
- HEAD LOSS COEFFICIENT "K" = 1.25 FOR UPSTREAM INLETS, 0.80 FOR 90° BENDS, AND 0.50 FOR 45° BENDS, IN-LINE INLETS & WYES.

REV	DATE	BY	DESCRIPTION



DESIGNED: DPS  
 DRAWN: FAM  
 CHECKED: DPS



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DATE: 5/19/2008 NAME: Matthew D. Morgan

ENGINEERS ARCHITECTS  
 THE WALLACE GROUP INC.  
 SURVEYORS PLANNERS

PBA WEST RETAIL BUILDING  
 ROCKWALL CROSSING  
**DRAINAGE AREA MAP & CALCULATIONS**  
 PBA EAST

SHEET 16  
 OF 1 SHEETS