

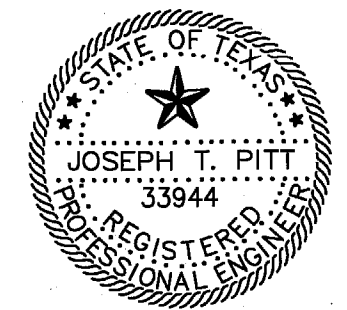
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 *THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH T. PITT, P.E. 33944 ON APRIL 8, 2009

ISSUE HISTORY:

CITY REVIEW	01/07/09
CITY COMMENT	04/09/09
CONTRACTOR'S PRICING	04/28/09
CITY COMMENT REV.	05/08/09
CITY COMMENT	05/18/09
CITY COMMENT	05/20/09

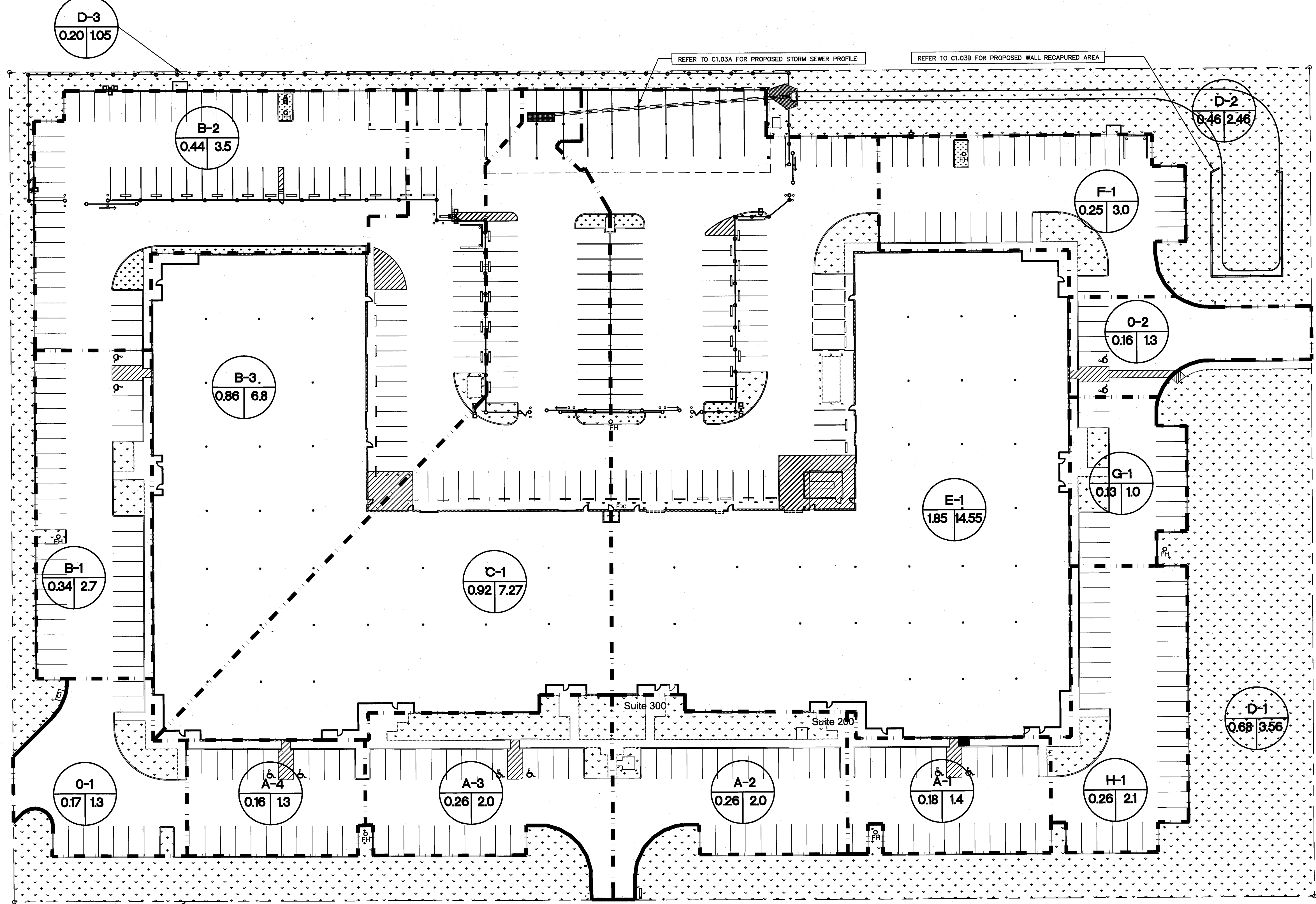
DRAWING INFO:

FILE:
 CURRENT ISSUE:
 DRAWN BY:
 CHECKED BY: JTP

SHEET NUMBER:

DRAINAGE AREA MAP

C1.04



WESTGROVE DRIVE

DRAINAGE DESIGN CRITERIA

BASIS:
 RATIONAL METHOD $Q = CIA$
 Q = CUBIC FEET PER SECOND
 C = RUNOFF COEFFICIENT
 I = DESIGN STORM INTENSITY
 A = DRAINAGE AREA (ACRES)

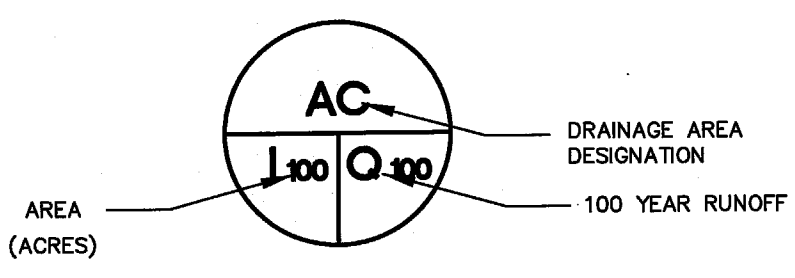
RUNOFF COEFFICIENT:
 0.90 OFFICE DEVELOPMENT

INTENSITY:
 RAINFALL INTENSITY-DURATION-FREQUENCY CURVES FOR AREA DEVELOPED FROM NATIONAL WEATHER SERVICE RAINFALL FREQUENCY DATA PRESENTED IN TECHNICAL MEMORANDUM NWS HYDRO-35, DATED JUNE 1977 AND TECHNICAL PAPER NO. 40, DATED MAY 1961.

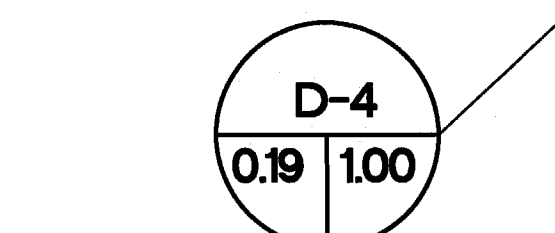
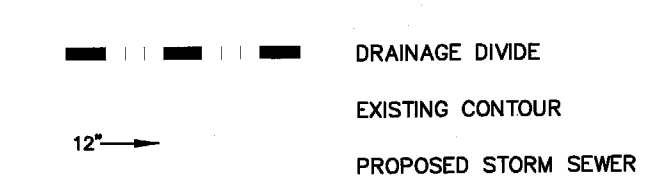
STORM FREQUENCY:
 100 YEAR

TIME OF CONCENTRATION:
 10 MINUTES

DRAINAGE SYMBOL LEGEND



DRAINAGE LEGEND



1" = 30'-0"



EXCEL PARKWAY

RECAPTURED DETENTION VOLUMES		
ORIGINAL VOLUME (@ PROPOSED WALL AREA)		
SURFACE AREA @ ELEV. 636	241 SF	VOLUME 36.2 CF
SURFACE AREA @ ELEV. 637	1,364 SF	VOLUME 802.6 CF
SURFACE AREA @ ELEV. 638	1,842 SF	VOLUME 1,603.0 CF
SURFACE AREA @ ELEV. 639	2,272 SF	VOLUME 2,056.8 CF
TOTAL ORIGINAL VOLUME 4,498.5 CF		
TOTAL VOLUME INSIDE AREA CREATED BY PROPOSED WALLS 6,988.5 CF		
VOLUME DIFFERENCE (INCREASE) 2,490.0 CF		

ORIGINAL DETENTION POND DESIGN CAPACITY (PER HALF PLANS, 1999) - 24,383 CF
 ACTUAL CAPACITY PER TOPOGRAPHIC SURVEY UP TO SURFACE ELEV. 639 - 16,800 CF
 CAPACITY AFTER PROPOSED IMPROVEMENTS - 17,090*

*NOTE: ANALYSIS OF THE DETENTION AREA HAS LED TO THE KNOWLEDGE THAT THE PROJECT WAS NOT CONSTRUCTED AS SHOWN ON THE ORIGINAL PLANS. WE HAVE ADDED WALLS NEARS THE WEST SIDE DRIVE IN THE DETENTION PLAN TO ACHIEVE ADDITIONAL STORAGE VOLUME THAT WAS LOST WITH THE INSTALLATION OF THE NEW PARKING IN THE EXISTING DETENTION AREA. THE AMOUNT OF LOST VOLUME WAS APPROXIMATELY 2,200 CUBIC FEET. THE WALL INSTALLATION ADDS APPROXIMATELY 2,500 CUBIC FEET.