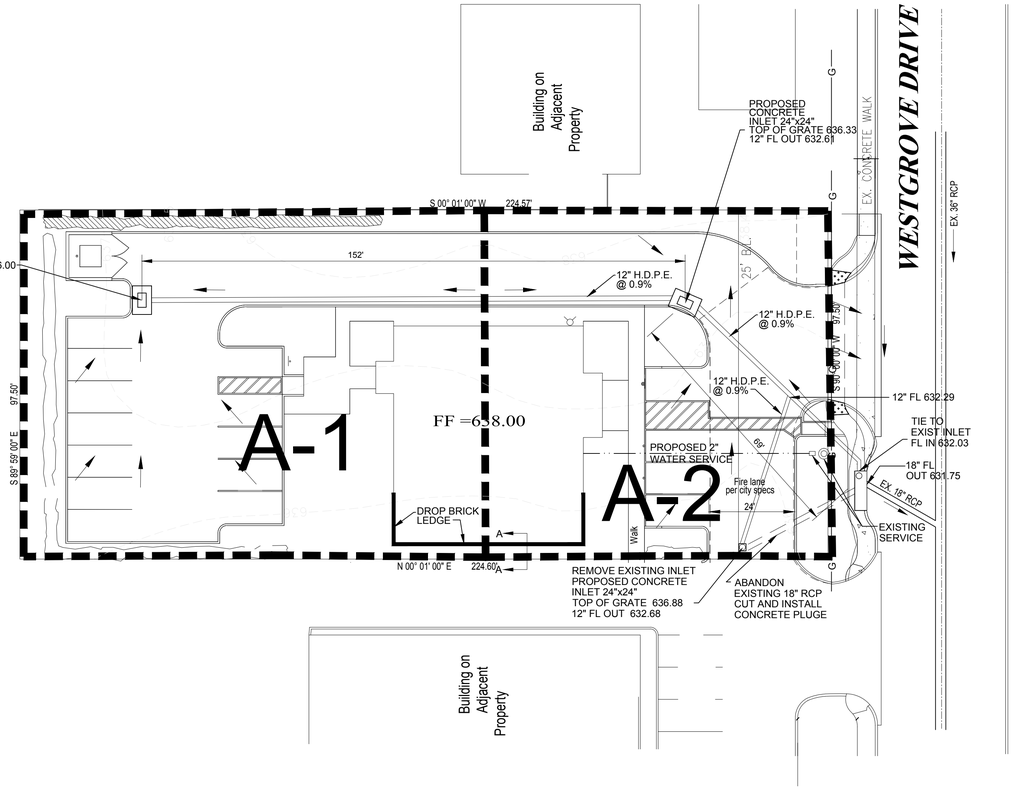
LEGEND

SWALE LINE
EXISTING CONTOURS
XXX.X PROPOSED GRADE ELEVATIONS
PROPOSED FLOW DIRECTION
110 PROPOSED CONTOURS
DRAINAGE AREA



UTILITY NOTES;

1) MAINTAIN 10'–0" HORIZONTAL CLEARANCE BETWEEN WATER & SANITARY SEWER STRUCTURES AND SERVICES.

2) REFER TO THE TOWN OF ADDISON PUBLIC WORKS MANUAL FOR SPECIFICATIONS AND DETAILS FOR THE FOLLOWING:

A) WATER, FIRE AND IRRIGATION TAP AND METERS
B) SANITARY SEWER TAP AND SERVICE.
C) PAVEMENT CUT, REMOVAL AND REPLACEMENT
D) DRIVE WAY CONNECTION AND CURB RETURN DETAILS
E) STORM SEWER CONNECTION DETAILS

3) ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR UNDERSIZED FIRE SERVICES. INTERNAL DIMENSIONS HAVE BEEN TAKEN FROM PLANS BY OTHERS. FIRE SERVICE I.D. & METER I.D. ULTIMATELY DETERMINED BY FINAL FIRE SYSTEM DESIGN. ENGINEER OF RECORD HAS NOT PERFORMED AN ANALYSIS FOR THE SIZING OF DOMESTIC, FIRE & IRRIGATIONS TAPS, METERS & SERVICE LINES. ALL INTERNAL DIMENSIONS AS SPECIFIED BY OWNER AND OTHER CONTRACTORS.

SITE NOTES:

1) PRIVATE STORM DRAIN PIPE TO BE CONSTRUCTED OF H.D.P.E. ADS–N12 OR EQUAL
2) ALL GRATE INLETS TO 12"x12" SQUARE LOW PROFILE WITH $\frac{5}{16}$" OR GREATER GRATE OPENINGS WITH A MINIMUM SURFACE AREA OPENING OF 0.30 FT OR 43 IN
3) 24"X24" GRATE INLET TO BE SQUARE LOW PROFILE WITH A MINIMUM OF $\frac{3}{8}$" GRATE OPENING WITH A MINIMUM SURFACE AREA OPENING OF 1.2FT OR 172 IN.
4) ALL ROOF DOWN SPOUTS SHALL CONNECT DIRECTLY TO PRIVATE STORM SEWER SYSTEM

24" GRATE INLET
$Q=(CO)A\ (2gd)^{.5}$
Where:
Q= INLET CAPACITY
Co= ORFICE CAPACITY=0.69
A= CLEAR OPENING AREA OF GRATE (Ft)
g= 32.2 Ft/S
d= DEPTH OF WATER ABOVE TOP OF GRATE (Ft)
$Q_{3in} = .67\ (1.2)(2*32.2*.25)^{.5} = 3.21cfs$
$Q_{6in} = .67\ (1.2)(2*32.2*.5)^{.5} = 4.6cfs$

EXISTING DRAINAGE CALCULATIONS

Drainage Area No.	Impervious Area	Pervious Area	Total Area (Acres)	"C" Impervious	"C" Pervious	"CW"	"TC" (min)	I100	Q100 (cfs)
A-1	0.24	0.04	0.28	1.0	0.25	0.89	10	9.27	2.31
A-2	0.24	0.02	0.26	1.0	0.25	0.94	10	9.27	2.27

PROPOSED DRAINAGE CALCULATIONS

Drainage Area No.	Impervious Area	Pervious Area	Total Area (Acres)	"C" Impervious	"C" Pervious	"CW"	"TC" (min)	I100	Q100 (cfs)
A-1	0.22	0.06	0.28	1.0	0.25	0.84	10	9.27	2.18
A-2	0.23	0.03	0.26	1.0	0.25	0.91	10	9.27	2.19

STATE OF TEXAS
ERIC L. DAVIS
86895
LICENSED PROFESSIONAL ENGINEER

02/09/2016

11/5/2013

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DRAINAGE AREA
ENGINEERED FOR:
BENTLEY CUSTOM HOMES

BUILDER: BENTLEY CUSTOM HOMES
ADDITION:
ADDRESS: 4397 WESTGROVE
LOT: BLOCK: A
CITY: ADDISON, TEXAS

PLAN: GRADING
ELD JOB NO.:
DRAWN BY: BW
FIRM REGISTRATION #: 3987

SCALE: 1"=20'

SHEET G04