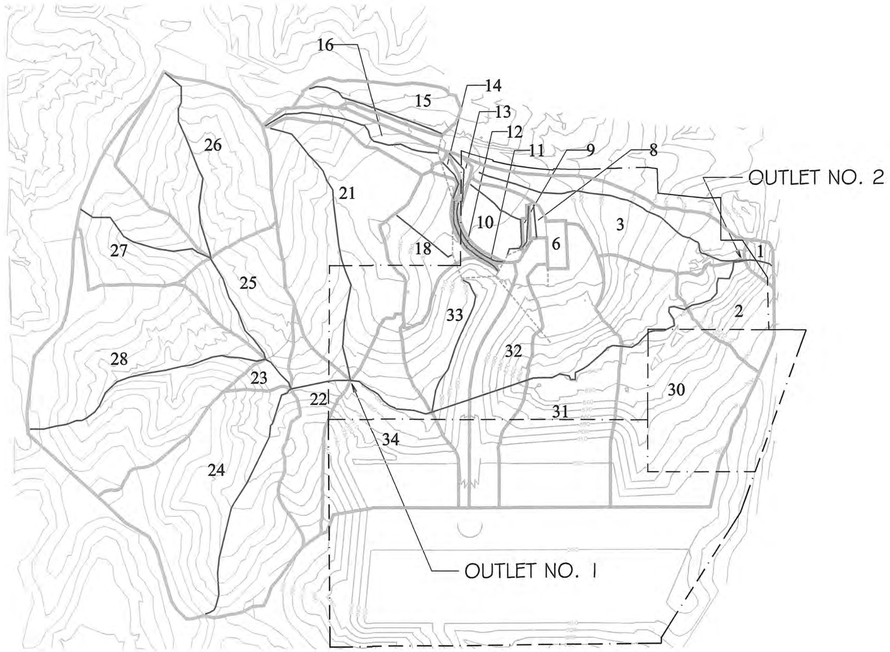
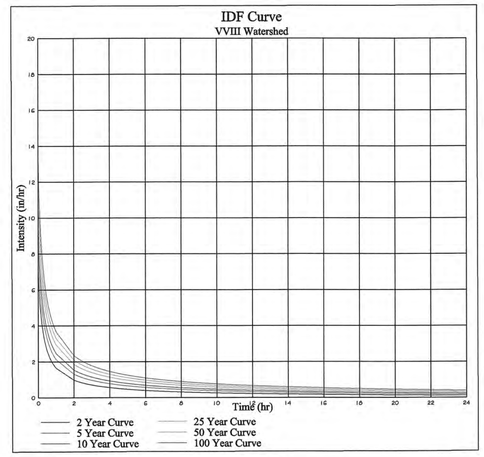
SUB-BASINS FOR VVIII WATERSHED

SCENERIO: INITIAL GRADING



RAINFALL IDF CURVES FOR PARKVILLE, MISSOURI



AVAILABLE HYDROGRAPHS

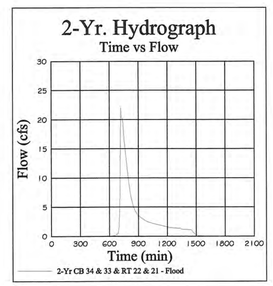
UH = UNIT HYDROGRAPH CF = COMPUTED FLOOD CB = COMBINED RT = ROUTED

2 YR	50 YR	UH	CF	SUB BASIN NO.	2 YR	50 YR	UH	CF	SUB BASIN NO.
X	X	X	X	1	X	X		X	CB 26 & 27
X	X	X	X	2	X	X		X	RT 26 & 27
X	X	X	X	3	X	X		X	CB 28 & 25 & RT 26 & 27
X	X	X	X	6	X	X		X	RT 28 & 25
X	X	X	X	8	X	X		X	CB 24 & 23 & RT 28 & 25
X	X	X	X	9	X	X		X	RT 24 & 23
X	X	X	X	10	X	X		X	CB 22 & 21 & RT 24 & 23
X	X	X	X	11	X	X		X	RT 22 & 21
X	X	X	X	12	X	X		X	CB 13 THRU 16 & 18
X	X	X	X	13	X	X		X	CB 8 THRU 12
X	X	X	X	14	X	X		X	RT 13 THRU 16 & 18
X	X	X	X	15	X	X		X	RT 8 THRU 12
X	X	X	X	16	X	X		X	CB 34 & 33 & RT 22 & 21 (OUTLET #1)
X	X	X	X	18	X	X		X	RT 34 & 33
X	X	X	X	21	X	X		X	CB 32 & RT 43 & 33
X	X	X	X	22	X	X		X	RT 6
X	X	X	X	23	X	X		X	RT 32
X	X	X	X	24	X	X		X	CB 31 & RT 32 & RT 6 & RT 8 THRU 18
X	X	X	X	25	X	X		X	RT 31
X	X	X	X	26	X	X		X	CB 30 & RT 31
X	X	X	X	27	X	X		X	RT 30
X	X	X	X	28	X	X		X	CB 2 & RT 30
X	X	X	X	30	X	X		X	CB 3 & 1
X	X	X	X	31	X	X		X	CB 1 THRU 3 & RT 30 (OUTLET #2)
X	X	X	X	32					
X	X	X	X	33					
X	X	X	X	34					

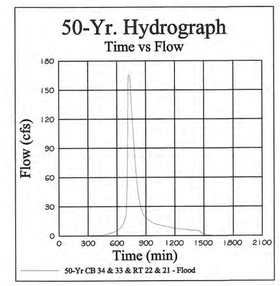
HYDROGRAPHS - OUTLET NO. 1

CULVERT UNDER NEW NORTH - SOUTH ROAD

(SUB-BASINS 22 THRU 28 PLUS 33 & 34)



103
2-Yr CB 34 & 33 & RT 22 & 21
Qp= 21.99 cfs
Tp= 720.00 min

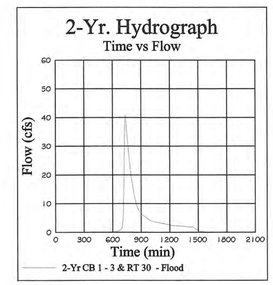


104
50-Yr CB 34 & 33 & RT 22 & 21
Qp= 165.83 cfs
Tp= 732.00 min

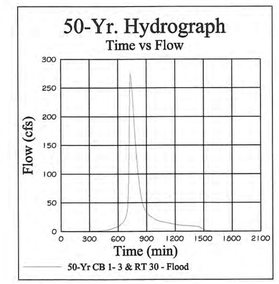
HYDROGRAPHS - OUTLET NO. 2

EXISTING BOX CULVERT TO BRUSH CREEK

(ALL SUB-BASINS)



91
2-Yr CB 1 THRU 3 & RT 30
Qp= 40.76 cfs
Tp= 734 min



102
50-Yr CB 1 THRU 3 & RT 30
Qp= 274.75 cfs
Tp= 734 min

LAND USES FOR VVIII WATERSHED

SCENERIO: INITIAL GRADING

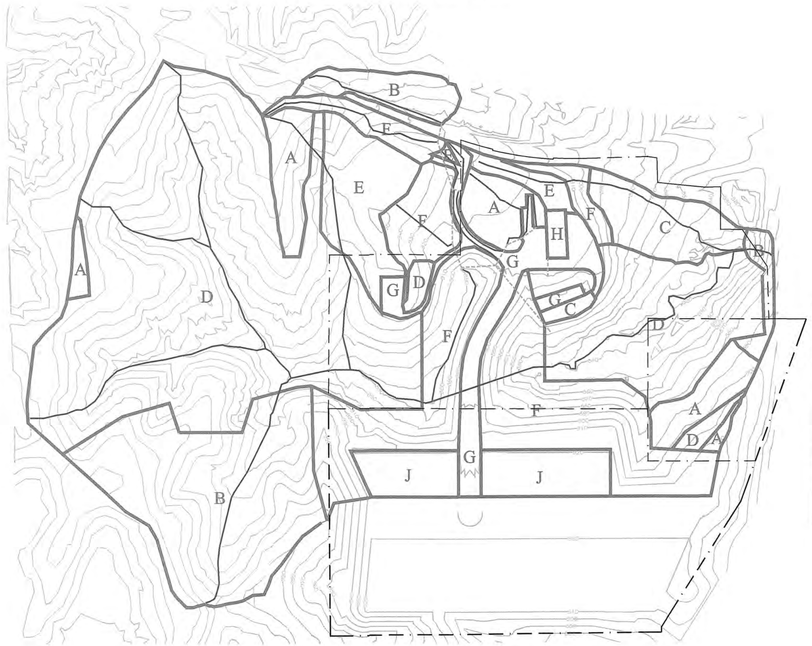


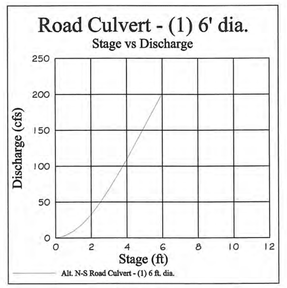
TABLE OF LAND USES

LAND USE	CN	C
A GRASSY FIELD - AVG. SLOPES	71	.11
B GRASSY FIELD - STEEP SLOPES	71	.16
C GRADED W/ VEGETATION	86	.11
D DENSE WOODS	70	.18
E MAINTAINED LAWN - FLAT	74	.11
F MAINTAINED LAWN - SLOPED	74	.16
G PAVEMENT	98	.80
H ROOF	98	.90
J NEWLY GRADED - FLAT	91	.11

STAGE - DISCHARGE DIAGRAMS FOR CULVERTS AT OUTLET NO. 1

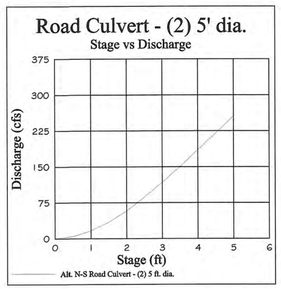
FOR 50 YEAR, 24 HOUR STORM EVENT = 0.36 IN/HR OR 8.64 IN. TOTAL RAINFALL

(DESIGN Q = 165.8 CFS)



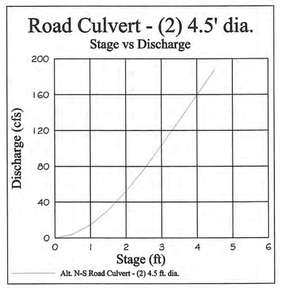
CHOICE I

MAX. DISCHARGE = 201.2 CFS



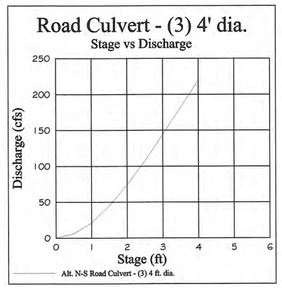
CHOICE II

MAX. DISCHARGE = 255.1 CFS



CHOICE III

MAX. DISCHARGE = 187.6 CFS



CHOICE IV

MAX. DISCHARGE = 219.1 CFS

DRAWN BY: BS	APPROVED BY:	REVISIONS	
DATE: 1/17/05	PROJ. NO. 05VV3		
DWG. NO.: 05VV3-H2	DWG. FILE: DWG\VVIII\AO\05VV3-H2.DWG		
SCALE: 1" = 300'			

TERRADYNE, LTD.
16203 N.W. 45 HIGHWAY
KANSAS CITY, MO 64152
FOR U.S. MAIL ONLY: P.O. BOX 180, WALDRON, MO 64092
PH: (816) 891-8800
FX: (816) 891-8899

PROJECT: I-435 & MO HWY 45 DEVELOPMENT

SHT. NAME: SUMMARY OF WATERSHED ANALYSIS FOR VERTICAL VENTURES III, LLC PROPERTY AFTER PROPOSED INITIAL GRADEING

SHT. NO. H2