

DIAGRAM 1
DETENTION BASIN OPTIONS

PROJECT
 IVINS CITY
 WASHINGTON COUNTY, UTAH

ALPHA

ENGINEERING
COMPANY
 148 E. TABERNACLE, ST. GEORGE, UT, 84770
 Telephone: (435) 628-6500

REVISION	DATE	BY	APPROVED

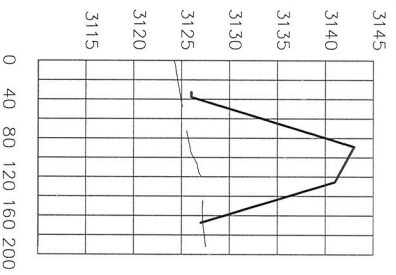
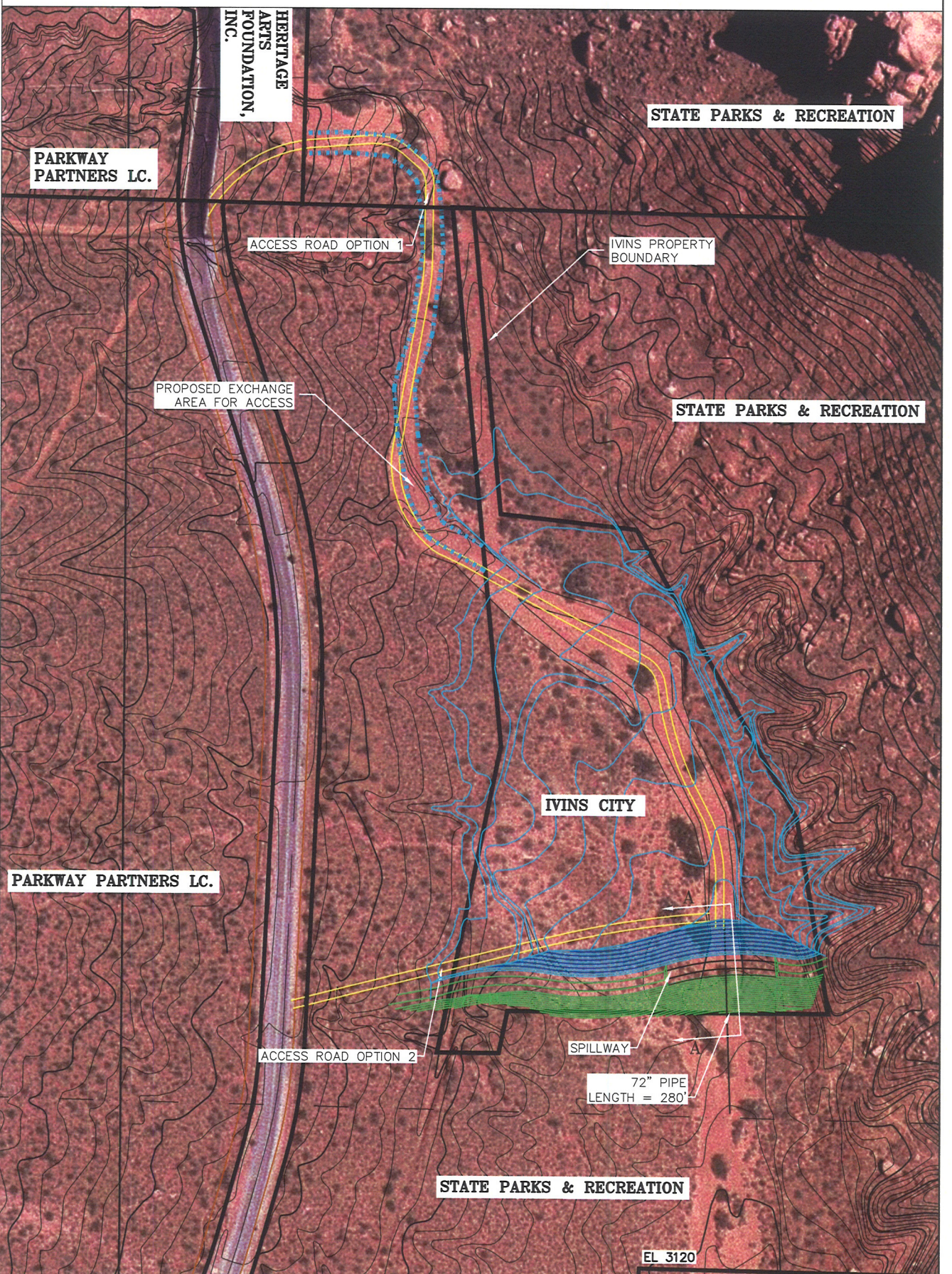
JOB #	483-15
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CHECKED BY	
DATE	MARCH 2005
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Pond Name : SNOW CANYON
 Average Volume : 1924535.7446 ft³ - 44.18 acre ft
 Conic Volume : 1913478.7499 ft³ - 43.93 acre ft
 Area : 295511.04 ft²
 Perimeter : 3274.2442 ft
 Rim Elevation : 3143.0000 ft
 Bottom Elevation: 3128.0000 ft

- CONTOUR LEGEND
- INUNDATED AREA, 1' CONTOURS
 - DIKE, 1' CONTOURS
 - EXISTING GROUND, 2' CONTOURS

AREA CALCS
 IVINS AREA = 7 ACRES
 AFFECTED AREA FOR 100 YR EVENT = 7 ACRES

NOTE: WASH WILL REMAIN NATURAL WITHIN
 DETENTION BASIN AREA.



SECTION A-A

Site Volume Table: Unadjusted

Site	Stratum Surf1	Surf2	yards	yards	yards	Method
			Cut	Fill	Net	
463-15	dike-6-5-06	eg-contours	188	16162	15974 (F)	Composite

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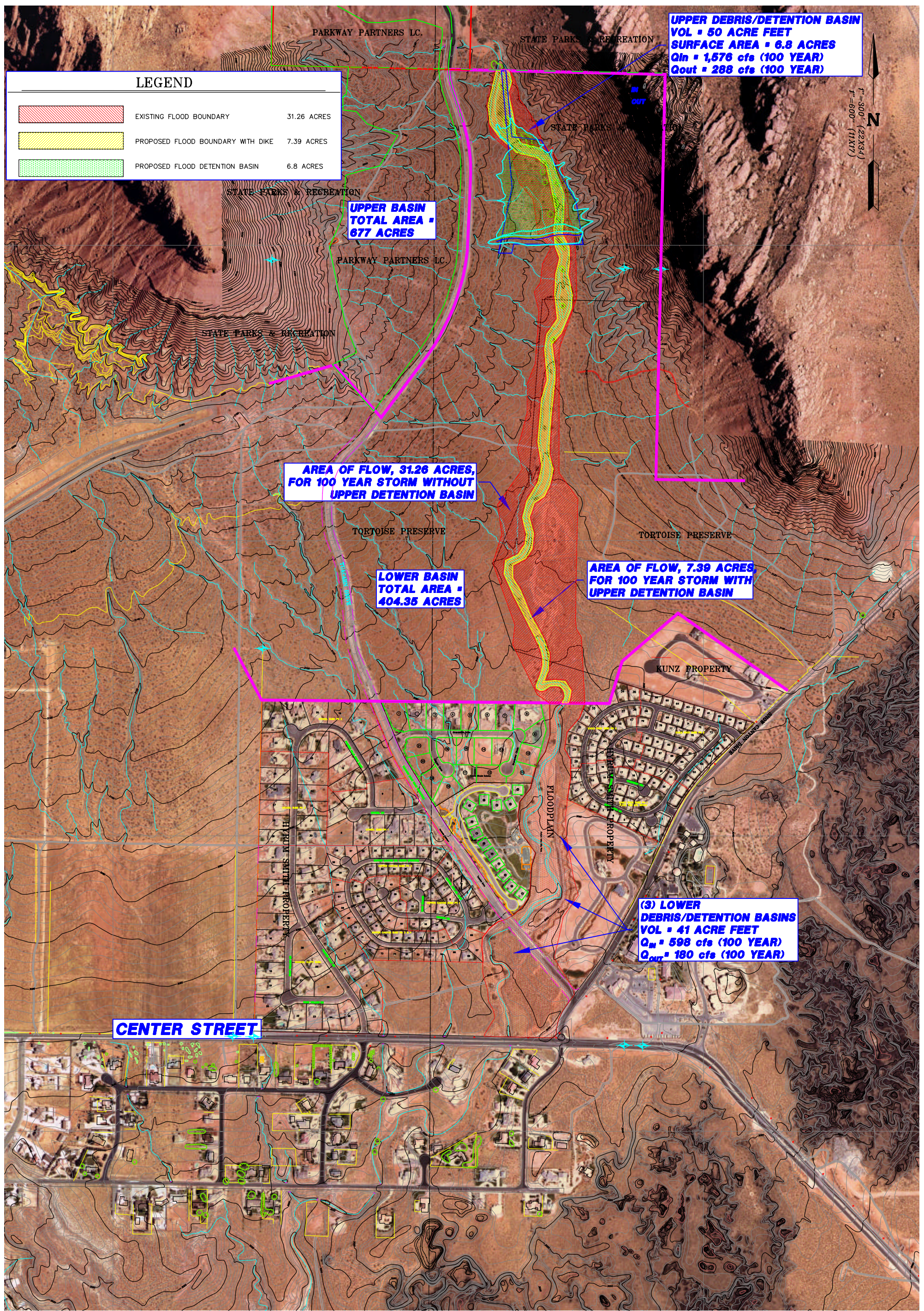
DIAGRAM 2
DIKE EL = 3146 HIGH WATER 3143

PROJECT
 SNOW CANYON DETENTION
 IVINS, UTAH

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UPPER DEBRIS/DETENTION BASIN
VOL = 50 ACRE FEET
SURFACE AREA = 6.8 ACRES
Q_{in} = 1,576 cfs (100 YEAR)
Q_{out} = 288 cfs (100 YEAR)

LEGEND	
	EXISTING FLOOD BOUNDARY 31.26 ACRES
	PROPOSED FLOOD BOUNDARY WITH DIKE 7.39 ACRES
	PROPOSED FLOOD DETENTION BASIN 6.8 ACRES

UPPER BASIN
TOTAL AREA =
677 ACRES

AREA OF FLOW, 31.26 ACRES,
FOR 100 YEAR STORM WITHOUT
UPPER DETENTION BASIN

LOWER BASIN
TOTAL AREA =
404.35 ACRES

AREA OF FLOW, 7.39 ACRES
FOR 100 YEAR STORM WITH
UPPER DETENTION BASIN

KUNZ PROPERTY

(3) LOWER
DEBRIS/DETENTION BASINS
VOL = 41 ACRE FEET
Q_{in} = 598 cfs (100 YEAR)
Q_{out} = 180 cfs (100 YEAR)

CENTER STREET

FLOODPLAIN



JOB #	463-15
NAME	RMM
DATE	May 26, 2005
SCALE	1" = 300' (600' = 11X17)
PAGE	1

TITLE	TUACAHN DRAINAGE STUDY
PROJECT	IVINS CITY WASHINGTON COUNTY, UTAH

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