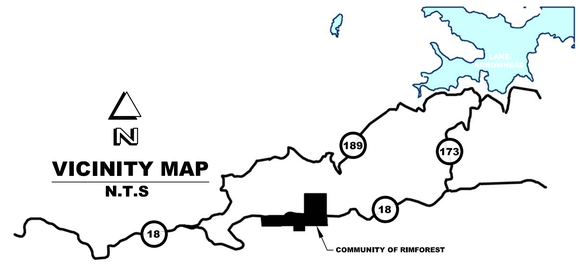
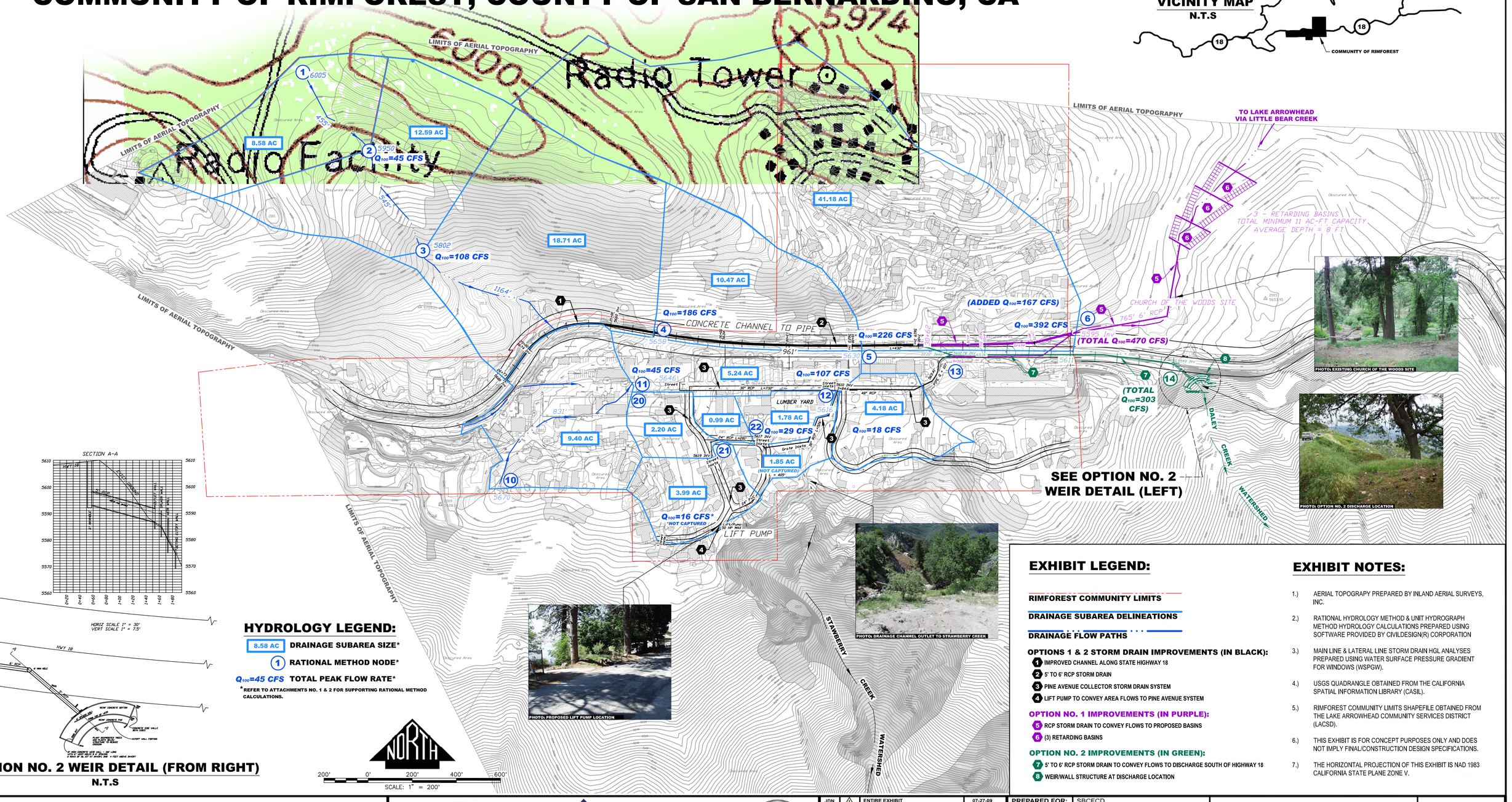
EXHIBIT “F”

Hydrology/Hydraulics Study Map
Proposed Options No. 1 & 2

EXHIBIT "F"

PROPOSED OPTIONS NO. 1 & 2 - HYDROLOGY/HYDRAULICS STUDY MAP
COMMUNITY OF RIMFOREST, COUNTY OF SAN BERNARDINO, CA





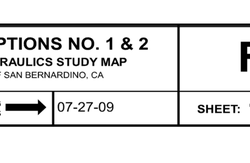
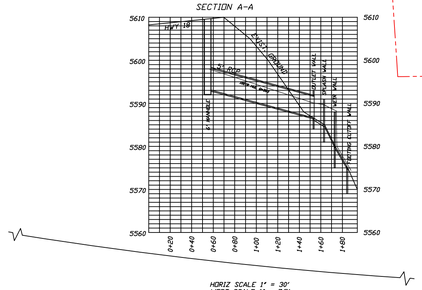


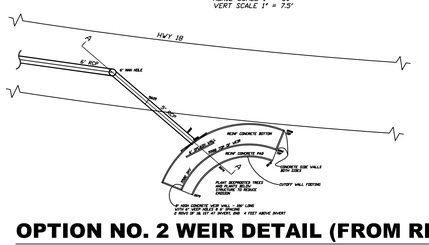
PHOTO: EXISTING CHURCH OF THE WOODS SITE

PHOTO: OPTION NO. 2 DISCHARGE LOCATION

PHOTO: DRAINAGE CHANNEL OUTLET TO STRAWBERRY CREEK

PHOTO: PROPOSED LIFT PUMP LOCATION





OPTION NO. 2 WEIR DETAIL (FROM RIGHT)
N.T.S

HYDROLOGY LEGEND:

- 8.58 AC — DRAINAGE SUBAREA SIZE*
- (1) — RATIONAL METHOD NODE*
- Q_{100}=45 CFS — TOTAL PEAK FLOW RATE*

*REFER TO ATTACHMENTS NO. 1 & 2 FOR SUPPORTING RATIONAL METHOD CALCULATIONS.

NORTH

200' 0' 200' 400' 600'

SCALE: 1" = 200'

EXHIBIT LEGEND:

- RIMFOREST COMMUNITY LIMITS
- DRAINAGE SUBAREA DELINEATIONS
- DRAINAGE FLOW PATHS

OPTIONS 1 & 2 STORM DRAIN IMPROVEMENTS (IN BLACK):

1. IMPROVED CHANNEL ALONG STATE HIGHWAY 18
2. 5' TO 6' RCP STORM DRAIN
3. PINE AVENUE COLLECTOR STORM DRAIN SYSTEM
4. LIFT PUMP TO CONVEY AREA FLOWS TO PINE AVENUE SYSTEM

OPTION NO. 1 IMPROVEMENTS (IN PURPLE):

5. RCP STORM DRAIN TO CONVEY FLOWS TO PROPOSED BASINS
6. (3) RETARDING BASINS

OPTION NO. 2 IMPROVEMENTS (IN GREEN):

7. 5' TO 6' RCP STORM DRAIN TO CONVEY FLOWS TO DISCHARGE SOUTH OF HIGHWAY 18
8. WEIR/WALL STRUCTURE AT DISCHARGE LOCATION

EXHIBIT NOTES:

1.) AERIAL TOPOGRAPY PREPARED BY INLAND AERIAL SURVEYS, INC.

2.) RATIONAL HYDROLOGY METHOD & UNIT HYDROGRAPH METHOD HYDROLOGY CALCULATIONS PREPARED USING SOFTWARE PROVIDED BY CIVILDESIGN(R) CORPORATION

3.) MAIN LINE & LATERAL LINE STORM DRAIN HGL ANALYSES PREPARED USING WATER SURFACE PRESSURE GRADIENT FOR WINDOWS (WSPGW).

4.) USGS QUADRANGLE OBTAINED FROM THE CALIFORNIA SPATIAL INFORMATION LIBRARY (CASIL).

5.) RIMFOREST COMMUNITY LIMITS SHAPEFILE OBTAINED FROM THE LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT (LACSD).

6.) THIS EXHIBIT IS FOR CONCEPT PURPOSES ONLY AND DOES NOT IMPLY FINAL/CONSTRUCTION DESIGN SPECIFICATIONS.

7.) THE HORIZONTAL PROJECTION OF THIS EXHIBIT IS NAD 1983 CALIFORNIA STATE PLANE ZONE V.

PROPOSED OPTIONS NO. 1 & 2
HYDROLOGY/HYDRAULICS STUDY MAP
IN THE COUNTY OF SAN BERNARDINO, CA

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CIVIL ENGINEERING G.I.S. LAND SURVEYING
(909)885-3866 ~ Fax (909)881-1781

HILLTOP GEOTECHNICAL INCORPORATED

Michael Brandman Associates

BY	MARK	REVISION DESCRIPTION	DATE
JDN	1	ENTIRE EXHIBIT	07-27-09

PREPARED FOR:	SBCFCD
JOB NO:	093458
PREPARED BY:	JDN
CHECKED BY:	DWJ

NOTE: *Joseph E. Bonadiman & Associates, Inc. does not warranty the accuracy of the G.I.S. data presented in this Exhibit. This Exhibit may contain information copyrighted to the County of San Bernardino.*

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IN THE COUNTY OF SAN BERNARDINO, CA

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 07-27-09

F

SHEET: 1 OF 1