FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FLOOD PLAIN DELINEATION AND TOPOGRAPHIC MAPPING
FOR SKUNK CREEK WASH
FROM CAP TO NEW RIVER MOUNTAIN

FCD 95-16

PHOTOGRAMMETRIC CONTROL

provided for:

MONTGOMERY WATSON
6245 North 24th Parkway, Suite 208
Phoenix, Arizona 85016-2030

prepared by:

COLLINS/PINA CONSULTING ENGINEERS, INC.
3800 North Central Avenue, Suite 200
Phoenix, Arizona 85012

January 4, 1996

Collins / Piña
Consulting Engineers, Inc.

Collins/Piña
Consulting Engineers, Inc.

July 19, 1996

JUL 19 1996

Jerry A. Collins
Raul Fco. G. Piña, P.E., P.L.S.
Bayard T. Stevenson III, P.E., P.L.S.
John C. Siath, P.E., P.L.S.
John E. Melanson, P.E.
King Fai Lai, P.E.
E. Bruce Wilson, P.E., P.L.S.
Charles A. Horvath
Wilbur C. DuBois III, P.E.
Michael L. Schloeman, P.L.S.
Stephen A. Sample, P.L.S.
Richard B. Howell, Jr., P.L.S.
Arthur A. Witzell, P.L.S.
Lee Harbers, C.P., P.L.S.

Laurie Miller
Montgomery Watson
6245 North 24th Parkway, Suite 208
Phoenix, AZ 85016

RE: Skunk Creek Floodplain Delineation Study
FCD 95-16

Dear Laurie:

As required by FEMA Document 37, dated January 1995, Collins/Piña performed a vertical accuracies check of the mapping for the above referenced project.

Per Section A4-4, Paragraph C, 3rd Order Class 1 map, the Root Mean Square Error (RMSE) for well defined features interpolated between workmap contours (2' CI) is 0.67 ft. Our calculations show the RMSE for the mapping of this project conforms to these guidelines.

Sincerely

COLLINS/PIÑA CONSULTING ENGINEERS, INC.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
26412
ARTHUR A.
WITZELL
Date Signed 7-19-96
ARIZONA, U.S.A.

Art Witzell, P.L.S.
Phoenix office

630 East 9th Street
Tucson, Arizona 85705
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520.884.5278 fax

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Suite 200
Phoenix, Arizona 85012
602.264.7505 phone
602.264.0568 fax

To convert from 1929 NGVD to 1988 NAVD:

29 NGVD + 0.62 meters = 88 NAVD
29 NGVD + 2.03 feet = 88 NAVD
29 NGVD + 0.63 meters = 88 NAVD
29 NGVD + 2.07 feet = 88 NAVD

VERTCON Transformation Program supplied by the U.S. Government

VERTical CONversion (VERTCON) Transformation Program
Between NGVD 29 and NAVD 88
Version 1.0

==========

Station Name: 1025

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 44 46.00000	112 07 30.00000	.62

Station Name: 1023

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 45 17.00000	112 06 59.00000	.62

Station Name: 1021

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 45 43.00000	112 07 25.00000	.62

Station Name: 1019

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 46 8.00000	112 07 35.00000	.62

Station Name: 1018

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 46 33.00000	112 07 25.00000	.62

Station Name: 1017

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 47 .00000	112 07 9.00000	.63

Station Name: 1015

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 47 26.00000	112 07 23.00000	.63

Station Name: 1013

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 47 52.00000	112 07 33.00000	.63

Station Name: 1012

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 48 16.00000	112 07 14.00000	.63

Station Name: 1011

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 48 48.00000	112 07 .00000	.63

Station Name: 1009

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 49 8.00000	112 07 3.00000	.63

Station Name: 1007

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 49 28.00000	112 06 44.00000	.63

Station Name: 1006

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 49 51.00000	112 06 28.00000	.63

Station Name: 1004

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 50 9.00000	112 05 57.00000	.63

Station Name: 1002

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 50 27.00000	112 05 42.00000	.63

Station Name: 1000

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 50 36.00000	112 05 14.00000	.63

Station Name: 2013

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 52 18.00000	112 04 55.00000	.63

Station Name: 2011

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 52 44.00000	112 04 55.00000	.63

Station Name: 2009

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 53 10.00000	112 04 39.00000	.63

Station Name: 2008

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 53 35.00000	112 04 35.00000	.63

Station Name: 2006

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 54 1.00000	112 05 .00000	.63

Station Name: 2003

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 54 26.00000	112 05 26.00000	.63

Station Name: 2000

Latitude	Longitude	NAVD 88 - NGVD 29 (meters)
33 54 58.00000	112 04 55.00000	.63

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NGS Station Sheets

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009

Section 1

MONTGOMERY WATSON

SURVEYOR'S REPORT

Collins / Piña
Consulting Engineers, Inc.

Collins/Piña
Consulting Engineers, Inc.

February 27, 1996

Jerry A. Collins
Raul Fco. G. Piña, P.E., P.L.S.
Bayard T. Stevenson III, P.E., P.L.S.
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Lee Harbers, C.P., P.L.S.

Laurie Miller
Montgomery Watson
6245 N. 24th Parkway, Suite 208
Phoenix, AZ 85016

RE: Skunk Creek Floodplain Delineation Study
Surveyors Report

Dear Laurie:

The following is an account of the steps and procedures used to determine the horizontal and vertical coordinates of the panels/targets as required for the aerial mapping of the Skunk Creek Study.

1) Kick off meeting with Montgomery Watson, Kenney Aerial Mapping and Collins/Piña - Discussion included scheduling, formats and deliverables.

2) Meeting with Kenney Aerial Mapping - discussion included the placement of panels, their sizes and flight lines. Horizontal and vertical coordinates for the panels would be in ASCII file format in the following manner - comma delimited:
   PT#, N, E, Elev., Desc.

3) Placement of panels was determined by getting an approximate latitude and longitude location from 7.5 minute series quad maps for each panel, then entering the latitude - longitude into a hand held GPS unit. The GPS unit was used in the field as a locating device giving us directions on where to place the panels on the ground.

4) After the panels were placed on the ground, precise locations were determined using Trimble Navigation GPS Unit 4000 SSi RTK Total Station. This consists of a base station, roving unit and a data collector. Raw data was post processed using TrimMap software. NGS triangulation station "Skunk", which is approximately 1 mile south of the C.A.P., was used as a control point for the project. It has published horizontal coordinate values and a published vertical datum. NGS triangulation station "Carl"

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which is approximately 4 miles north of panel No. 2000 was used as a closing point. It has published horizontal coordinate values. "Skunk" was held when we tied in to "Carl" and our linear error was +0.75' in 16.9 miles. This gives us a precision of 1:118883 if we assume that neither tri-station has moved and the published coordinate values are correct. We find the results acceptable.

5) To verify vertical accuracies of the GPS values a bench circuit was run from "Skunk" north to Panel No. 2000. Along the way several other panels were also tied into the circuit. The Flood Control District provided us several established ERM's and we were able to find one along Desert Hills Road and tie in to our circuit. The field notes show that the ERM, "Skunk" and the other panels tied are on the same datum.

   You will notice that the elevations obtained from our bench circuit for the tied panels are slightly different than those elevations produced by GPS. We run the circuit to verify the vertical accuracy of GPS and make sure it meets the mapping standards required for this project. In this case it does so we held the elevations from GPS.

   Our bench circuit also established ERM's for this project as required by FEMA 37 guidelines.

6) After post processing the results are reviewed to ensure they meet the guidelines in the Scope of Work. Discrepancies were resolved at this time.

7) The vertical conversion equation (1929 NGVD to 1988 NAVD) is as follows:

   For panel points 1018 and south,
   1929 NGVD + 2.03 feet = 1988 NAVD
   For panel points 1016 & 1017 and north,
   1929 NGVD + 2.07 feet = 1988 NAVD

   The conversion has a 0.04 feet equation change approximately 1.3 miles south of Carefree Highway.

8) Field check cross sections were obtained at 1 mile intervals and the values withheld from Kenney Aerial as a means to verify mapping accuracies. Each map sheet has been checked and except for a few

anomalies in areas of steep terrain or vegetation growth we find the the maps conform to standard accuracies.

9) All survey work meets or exceeds Federal Emergency Management Agency (FEMA) minimum criteria as defined in FEMA Document 37, Flood Insurance Study Guidelines and Specifications for Study Contractors, January 1995. This would include, but is not limited to: the establishment of "permanent" elevation reference marks (ERMs); field control; and verification of profiles by the ground survey profile procedure.

Collins/Piña presents herewith the results of this work.

Sincerely,

COLLINS/PIÑA CONSULTING ENGINEERS, INC.

Arthur A. Witzell, P.L.S.

AAW:lm

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
26412
ARTHUR A.
WITZELL
Date Signed 2-27-96
ARIZONA, U.S.A.

SCOPE OF WORK

Collins / Piña
Consulting Engineers, Inc.

1.5 The consultant is responsible for placing the legal advertising at the beginning of the study, notifying the public of the study. The ad will be run in a widely circulated newspaper two times, with approximately one week between runs. The ad must also be run two times in a local newspaper that serves the area being studied. After the ad is run the consultant will supply the District with the original affidavit of publication from each of the newspapers for each day that the ad ran.

1.6 The consultant shall notify all property owners and obtain any necessary Rights of Entry for the study area. The consultant shall furnish the District with a list of all the property owners notified and a sample Right of Entry letter.

1.7 The consultant shall meet with officials from the local public works department. The purpose of this meeting is to identify local flooding problems and obtain information on current and planned public works projects, channel modifications, storm-drainage systems, development, and corporate limits.

1.8 The District shall plan and conduct two public meetings in conjunction with this study. The first meeting will be to inform the public of the purpose and scope of the study. The second meeting will be to inform the public and obtain public comment on the study results, and shall take place prior to the submittal of the final report to FEMA. The consultant/District shall be responsible for the preparation of the graphic displays for these meetings. One representative from the consultant shall attend each of the meetings. The consultant shall respond to the public's comments and make revisions to the study if necessary.

1.9 Consultant/District Performance Evaluations will be performed. An informal evaluation will be performed at the completion of the hydrologic analysis. A formal evaluation will be performed at the completion of the project upon receipt of all deliverables.

TASK 2 - DATA COLLECTION

2.1 The consultant shall collect and review pertinent data from the District and other outside sources. Data to be collected will include previous flood hazard reports and hydrology for the study area; existing topographic mapping; historical flooding information; as-built plans for existing structures; FEMA Flood Hazard Boundary Maps and any Letters of Map Amendment and/or Revisions, and other pertinent information.

2.2 A written report summarizing the data collected shall be submitted to the District for information purposes. A preliminary draft of this report is due within 90 days of Notice to Proceed.

TASK 3 - TOPOGRAPHIC MAPPING

3.1 An aerial survey subcontractor shall be retained by the consultant as part of this contract. The consultant shall coordinate all the aerial surveying work with the aerial surveying subcontractor to ensure that the specifications of the aerial surveying work are met. The consultant is responsible for ensuring that the topographic mapping covers the area of delineation. Quality control on surveys will be per FEMA Document 37, Flood Insurance Study Guidelines and Specifications for Study Contractors, March 1993.

3.2 Digital contour and planimetric data developed for this study shall be delivered according to the District's HIS specifications.

3.3 Digital Terrain Models shall be delivered following the guidelines stated in Digital Terrain Model Mapping, Data Collection & Delivery Specifications, Release 1.0 May 1994.

3.4 Prepare topographic mapping to a 2-foot contour interval, with a scale of 1 inch = 200 feet, with spot elevations ~~and/or 1 foot contours~~ on all section line and mid-section line roads.

3.5 Ground Control:

a. The consultant shall provide all survey control using 1983 NAD.

b. The consultant shall systematically set panel points and establish horizontal and vertical control throughout the areas to be mapped for use in compilation by the aerial survey contractor. Where readily available, surveys will tie into the State Plane Coordinate System. Field control shall be sufficient to readily allow for compilation of maps by the aerial survey contractor at the desired map scale and contour interval, and will be based on the National Geodetic Vertical Data of 1929 (NGVD). A conversion factor, including documentation of how it was derived, will be provided by the consultant to allow comparison of NGVD 29 elevations to NAVD 88 elevations and will be included in the Technical Data Notebook.

c. The horizontal and vertical control points shall be located and marked by the consultant. The controls for the aerial mapping shall be in sufficient numbers and shall be in locations which will be compatible with the accuracy of the mapping requirements. The controls shall be of at least third order accuracy. Section corners, quarter corners, and mid-section points shall be used for control points wherever possible.

3.6 The consultant shall provide permanent non-erasable topographic mylars of the work study drawings. The drawings shall be 24" X 36" in size, with a scale of 1 inch = 200 feet and a contour interval of 2 foot for all mapping, ~~with the exception of section line roads which will have a contour interval of 1 foot.~~ A cover sheet will be provided with the project title, date of topographic mapping, and a location map showing geographic range covered by each specific mapping sheet. Each drawing shall include the floodplain and floodway delineations and a minimum of a north arrow, scale, section corners and quarter corners, current and proposed streets and highway names, State Plane Coordinate System, major drainage features, corporate boundaries, cross section lines, channel station center line, index map, and description and elevation of elevation reference marks (ERMs). A note explaining the proper means to convert the NGVD 29 elevations to NAVD 88 elevations shall be included in "NOTES" in the map border. ~~See Exhibit 2 for how the drawings are to be laid out.~~ The mapping will have an accuracy such that ninety percent (90%) of all contours shall be within one-half contour of the true elevations and the remaining ten percent (10%) of the contours shall not be in error by more than one contour interval.

TASK 4 - FIELD SURVEY

4.1 Prepare topographic mapping to a 2 foot contour interval with a scale of 1 inch = 200 feet, with spot elevations or 1 foot contours on all section line and mid-section line roads, for floodplain/floodway delineation areas as identified in Task 6 or FEMA criteria, whichever is more stringent.

4.2 Ground Control for Floodplain Delineations:

4.2.1 All topographic mapping and survey work shall meet or exceed Federal Emergency Management Agency (FEMA) minimum criteria as defined in FEMA Document 37, Flood Insurance Study Guidelines and Specifications for Study Contractors, ~~March 1993~~ Jan. 1995. This would include, but is not

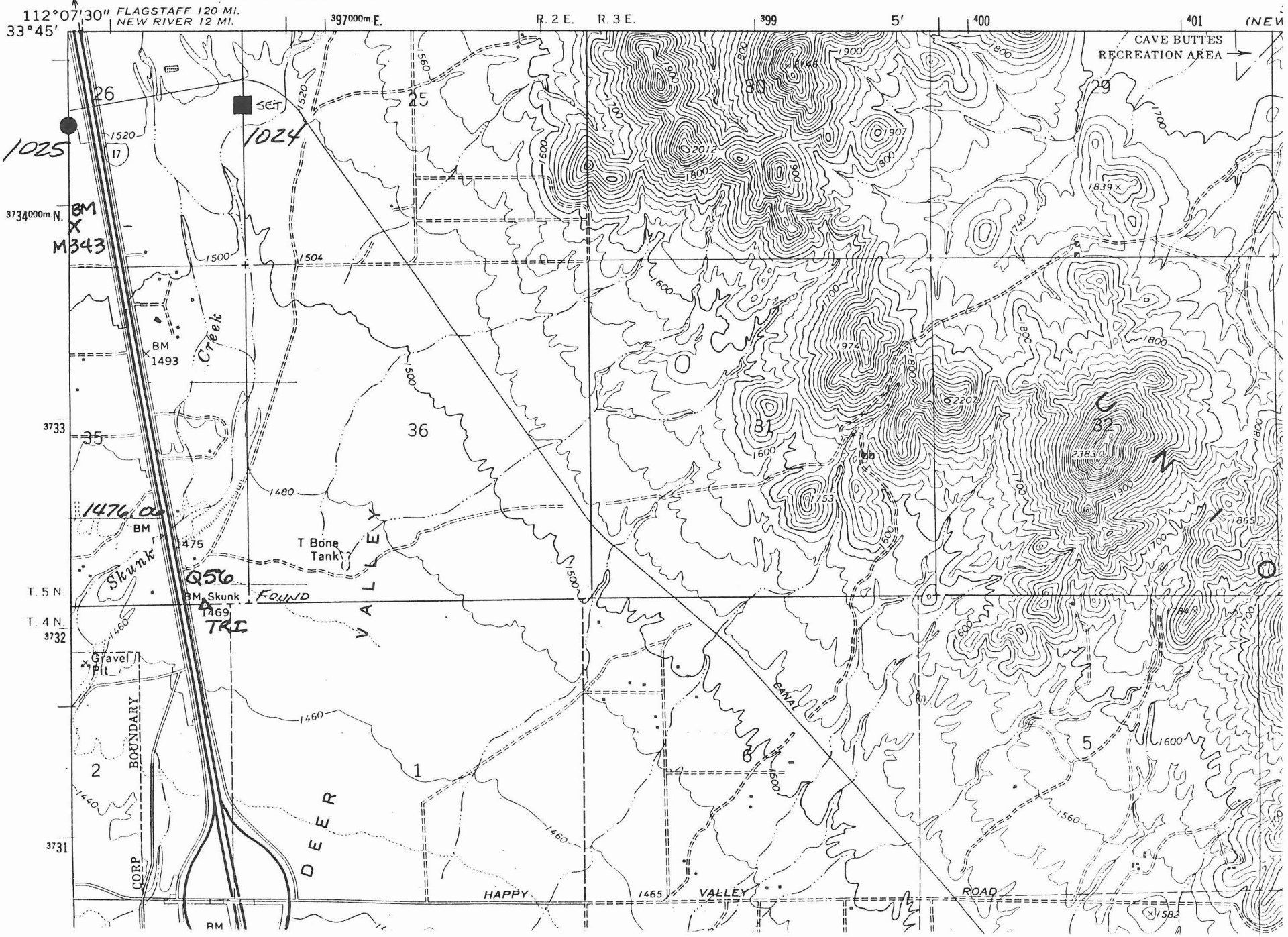
Section 2

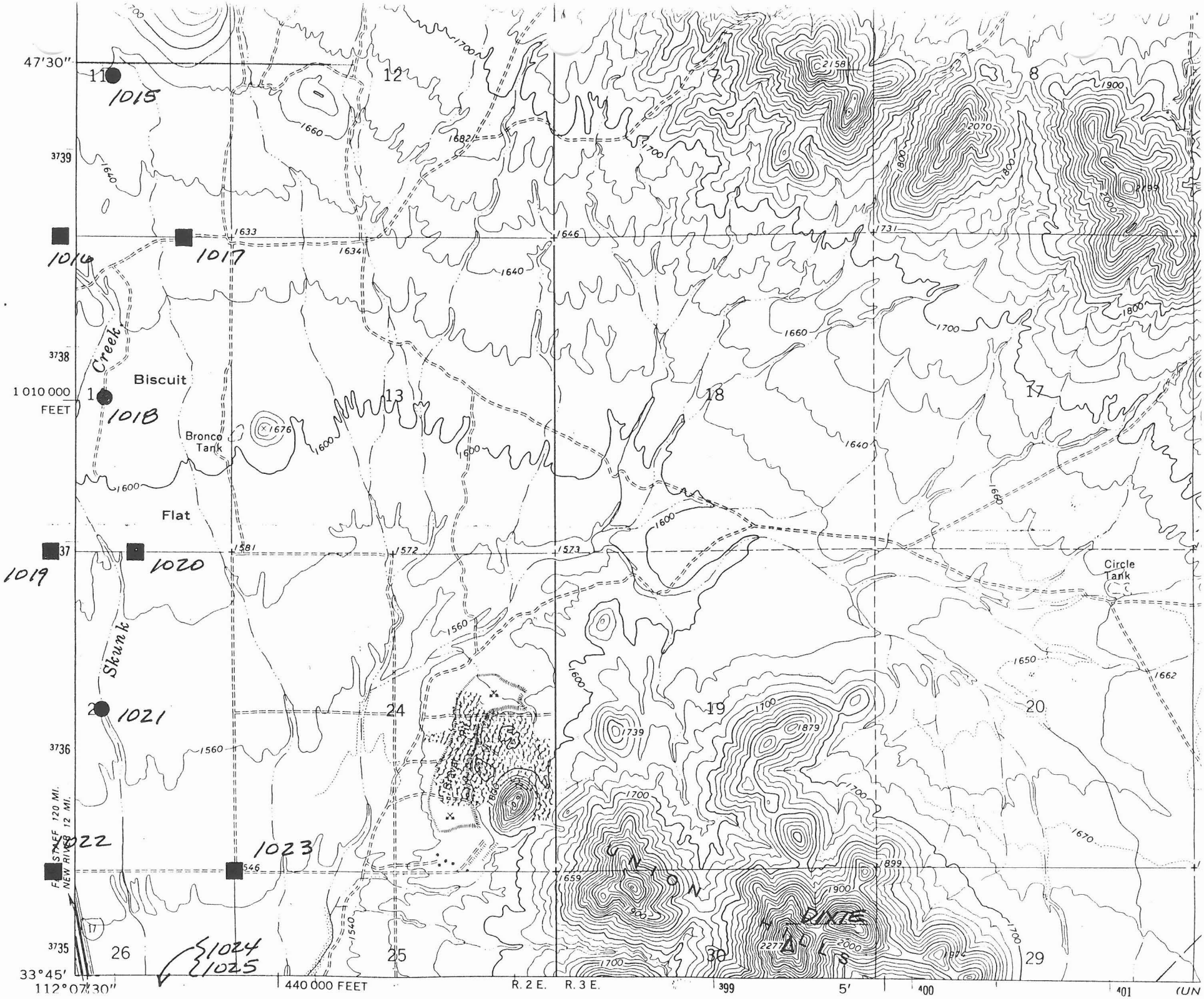
PANEL LAYOUT MAPS

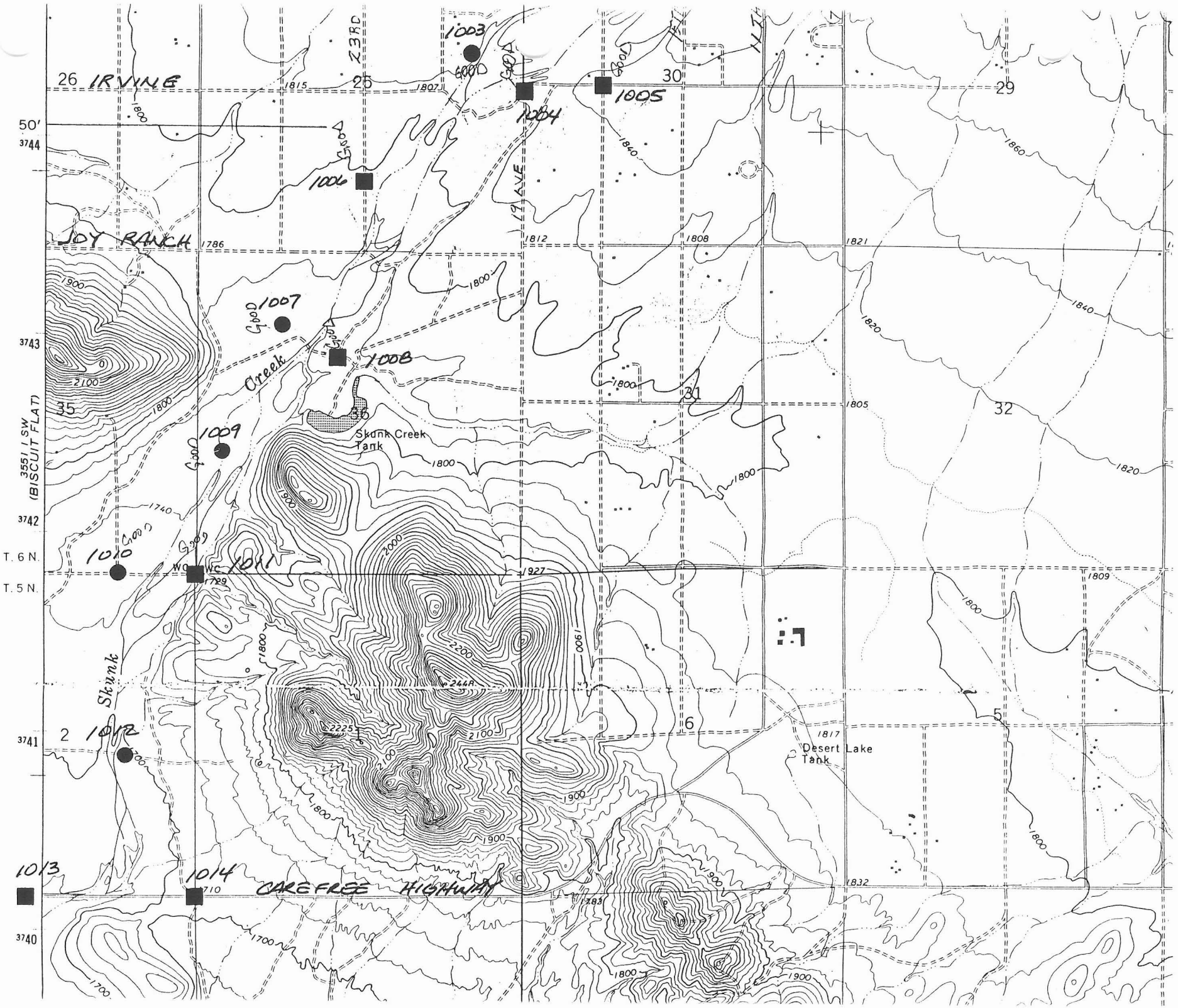
Collins/Piña
Consulting Engineers, Inc.

355I I SW
(BISCUIT FLAT)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY




47'30"
3739
3738
1 010 000
FEET
3737
3736
3735
33°45'
112°07'30"
440 000 FEET
R. 2 E.
R. 3 E.
399
5'
400
401
Biscuit
Creek
Bronco
Tank
Flat
Skunk
Circle
Tank
CANYON
BUTTES
FLAGSTAFF 120 MI.
NEW RIVER 12 MI.
1015
1014
1017
1018
1019
1020
1021
1022
1023
1024
1025


26
IRVINE
25
23RD
30
29
1003
1004
1005
1006
JOY RANCH
1007
Good
Creek
1008
35
31
32
Skunk Creek Tank
1009
1010
1011
T. 6 N.
T. 5 N.
Skunk
1012
2
6
5
Desert Lake Tank
1013
1014
CAREFREE HIGHWAY
3551 I SW (BISCUIT FLAT)
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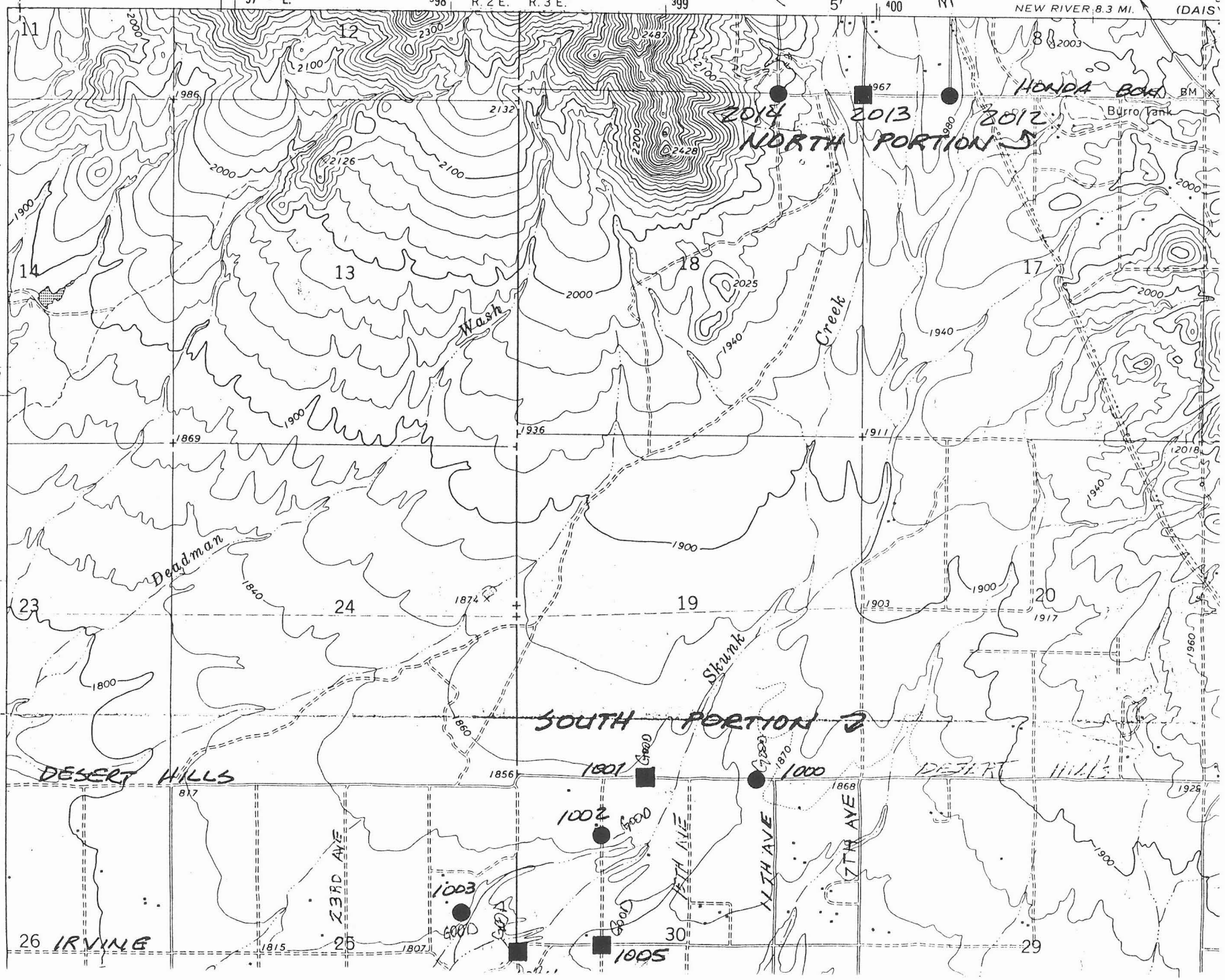
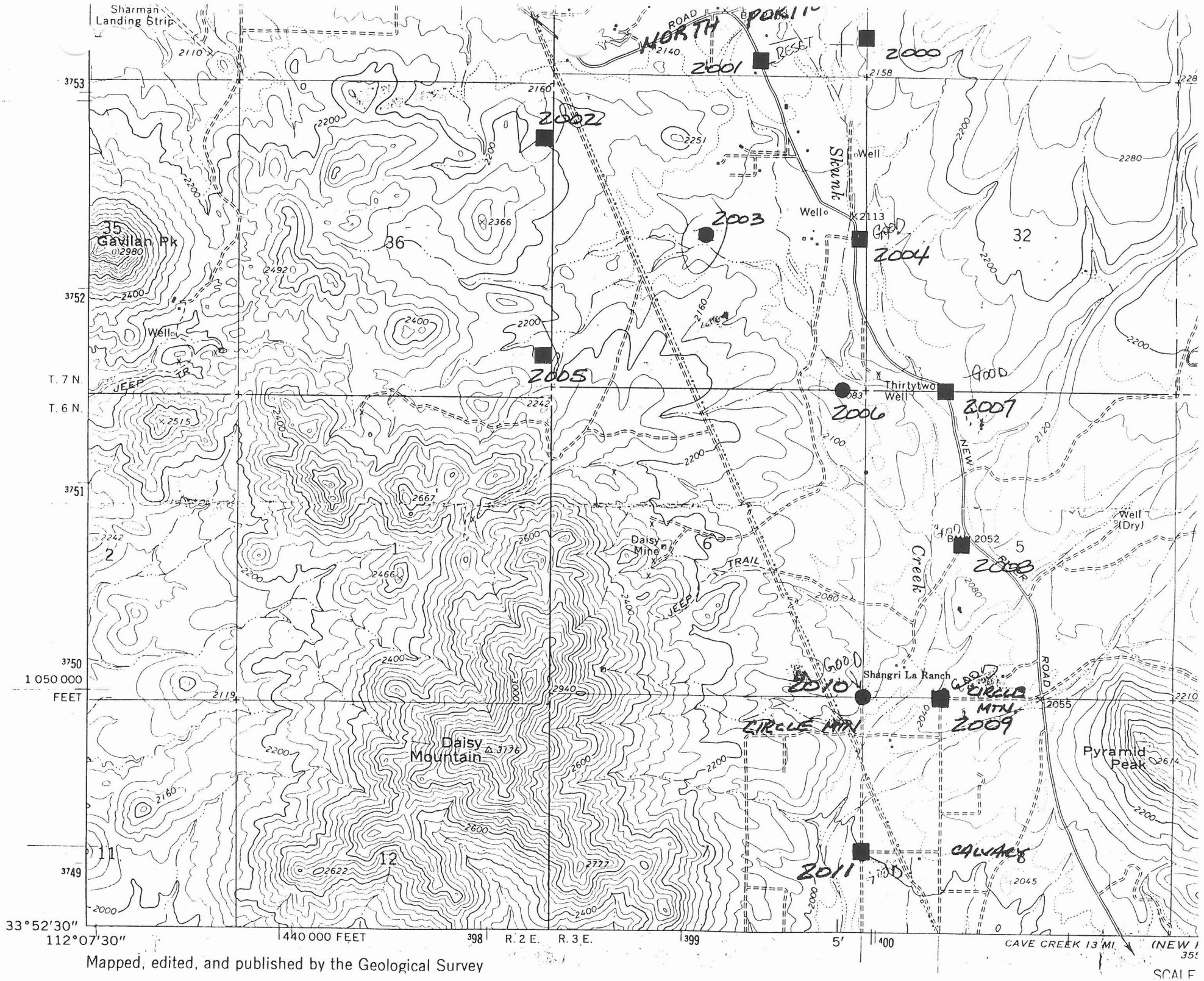
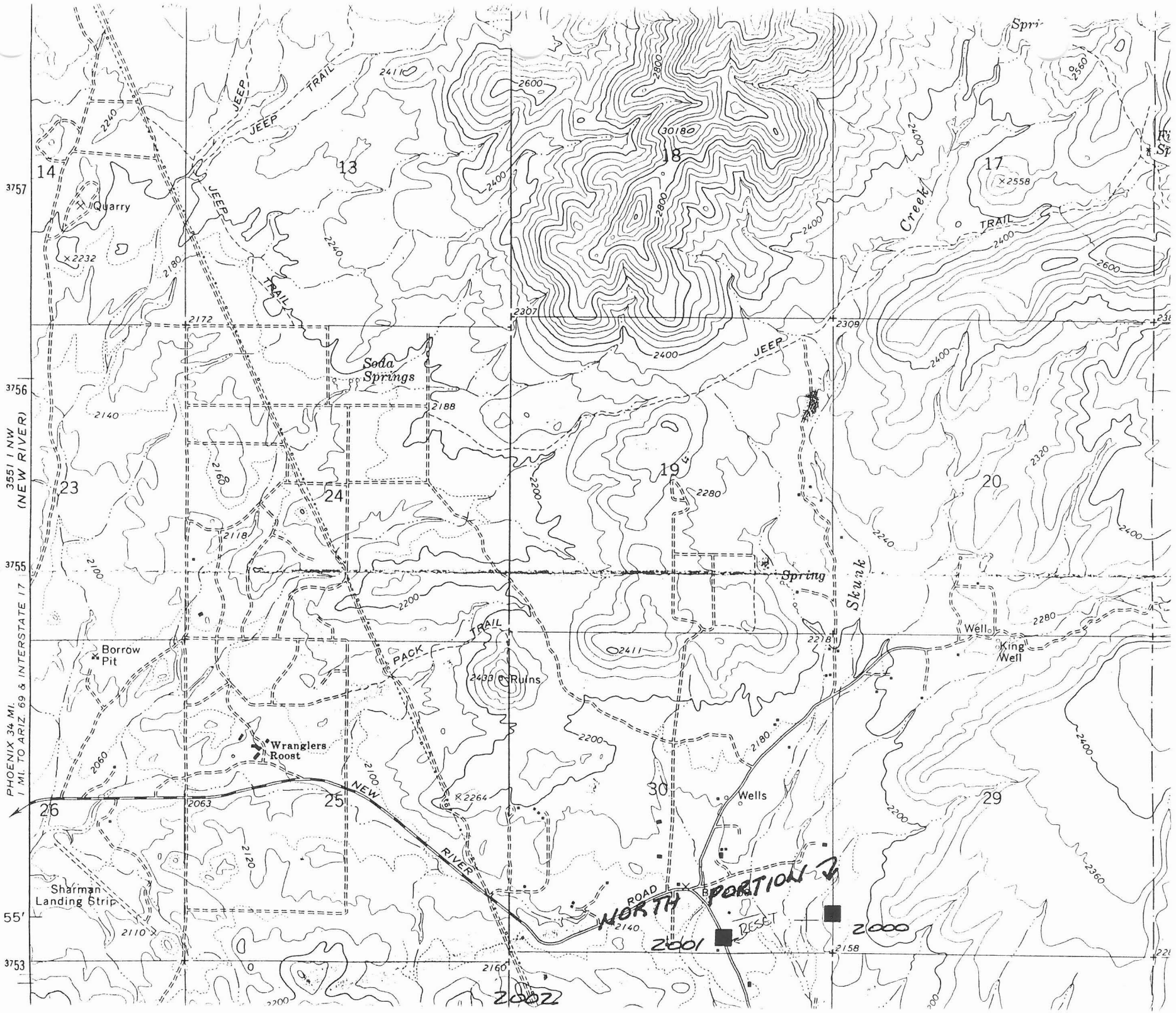
3743
3742
3741
3740

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY





Mapped, edited, and published by the Geological Survey


JEEP TRAIL
JEEP
JEEP
TRAIL
Quarry
Soda Springs
JEEP
Spring
Skunk Creek
TRAIL
Borrow Pit
PACK TRAIL
Ruins
Wranglers Roost
NEW RIVER
Wells
Well
King Well
Sharman Landing Strip
ROAD
NORTH PORTION
RESET
2000
2001
2002
3551 I NW (NEW RIVER)
PHOENIX 34 MI. I MI. TO ARIZ. 69 & INTERSTATE 17
3757
3756
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3753
55'
14
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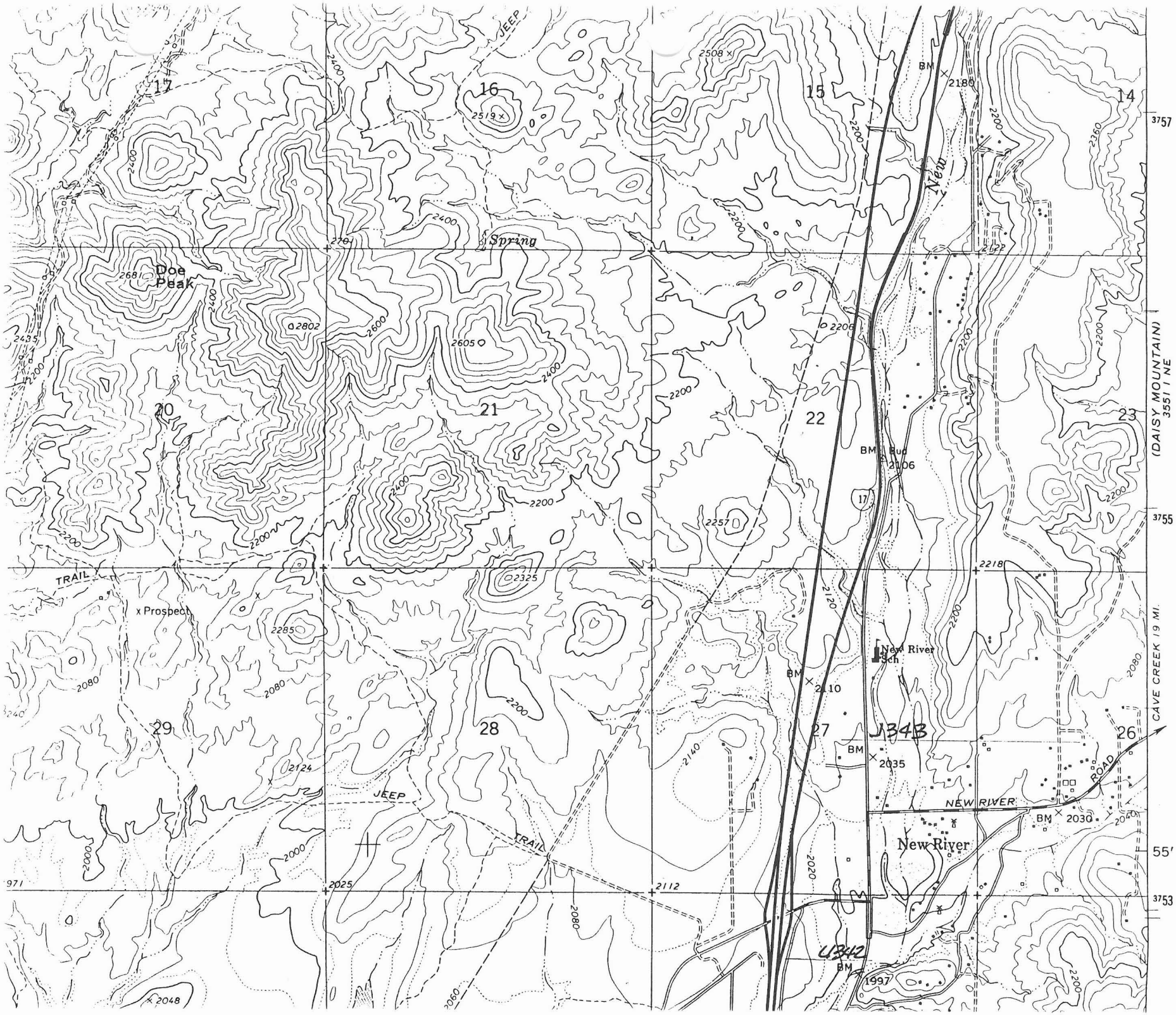
JEEP
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15
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2508
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2400
2200
2360
New
Spring
Doe Peak
2802
2605
2206
21
22
23
20
BM
Bug
2106
17
2257
2325
2218
TRAIL
Prospect
2285
2120
New River Sch
2080
2110
29
28
27
J34B
26
2035
2140
2124
JEEP
TRAIL
NEW RIVER
ROAD
2030
New River
2000
2025
2112
2020
U34J
1997
2048
3757
3755
55'
3753
(DAISY MOUNTAIN)
35511 NE
CAVE CREEK 19 MI.

T. 8
T. 7 N.
3761
3760
3759
3758
57'30"
3757
TEE RANCH 1.1 MI.
PIPELINE
TRAIL
JEEP
Gravel Pit
Quarry
River
Neon
BM 2160
BM 2180
Cairn 2616
1994
1926
2010
2825
2506
1880
2000
2200
2400
2238
2290
2340
2168
2176
2590
2624
2647
2389
2600
2762
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2508
2519
2280
2360
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3
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16
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14

PANEL DETAILS

Collins/Piña
Consulting Engineers, Inc.

Collins/Piña Consulting Engineers, Inc.

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Phoenix, Arizona 85012
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FAX (602) 264-0568

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ Chk. ____
Date ____ Date ____ Date ____

Project: SKUNK CREEK
PANEL DIAGRAMS

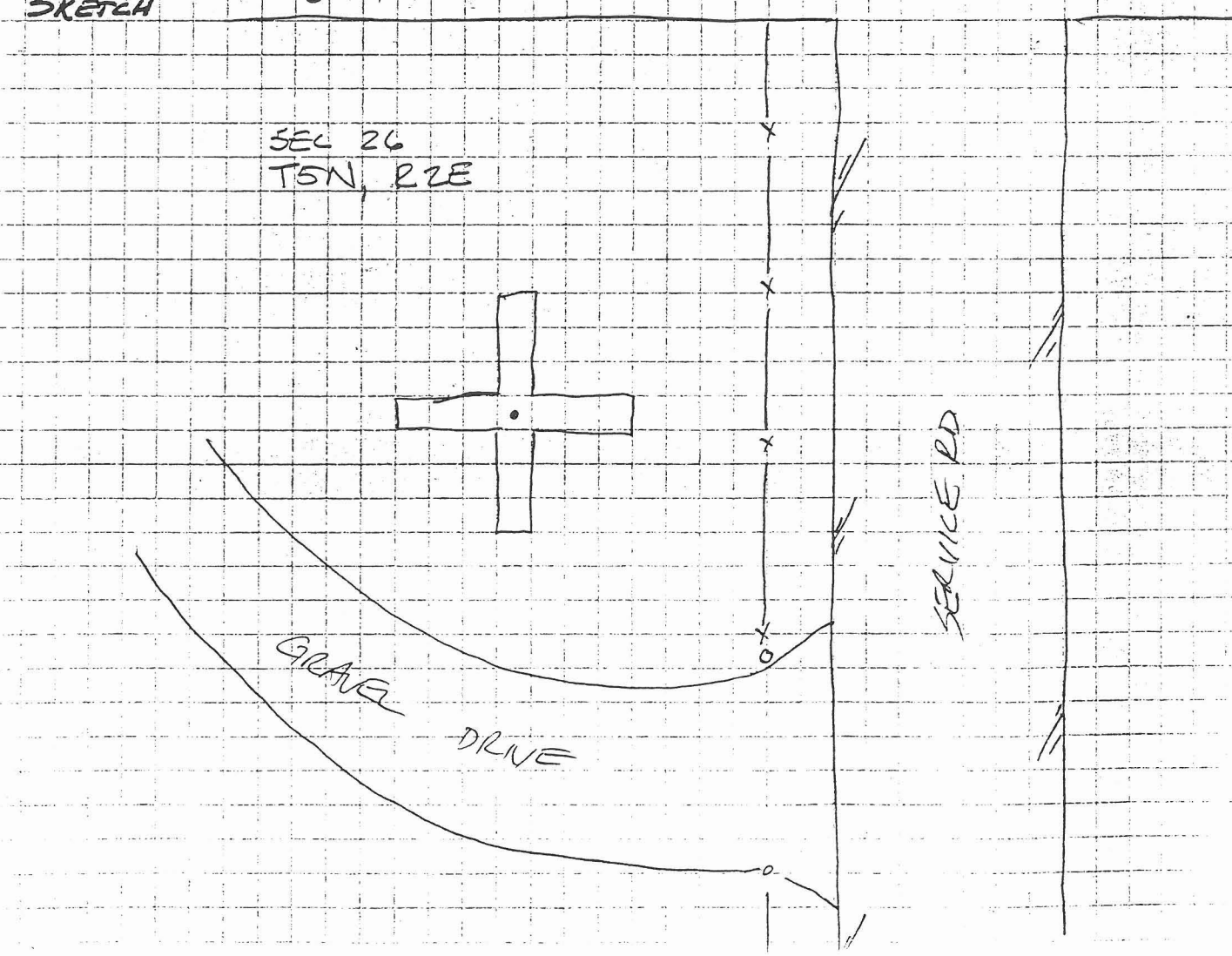
PT. NO. 1025

LATITUDE 33-44-46
LONGITUDE 112-07-30

PAPER 11-25-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
ENTRANCE TO CAP ON WEST SIDE OF I-17

SKETCH



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FAX (602) 264-0568

Job No. Sht of
Calc. Chk. Chk
Date Date Date

Project SKUNK CREEK
PANEL DIAGRAMS

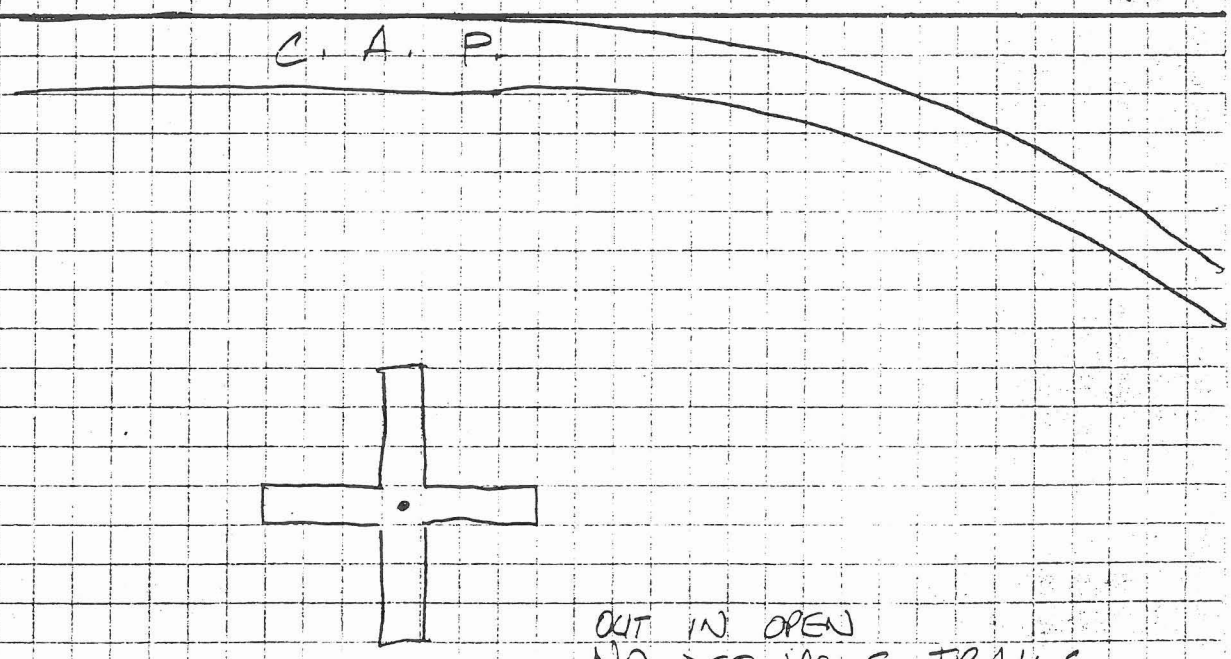
PT. NO. 1024

LATITUDE 33-44-49
LONGITUDE 112-06-58

PAPER 11-24-95 6' LEGS
PAINTED

DESCRIPTION: 1/2" IRON ROD SET
SOUTH OF C.A.P. CANAL

SKETCH



OUT IN OPEN
NO DEFINABLE TRAILS

SEC 26
T5N, R2E

Collins/Piña Consulting Engineers, Inc.

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FAX (602) 264-0568

Job No. _____ Sht. _____ of _____

Project SKUNK CREEK PANEL DIAGRAMS

Calc. _____ Chk. _____ B'chk. _____

Date _____ Date _____ Date _____

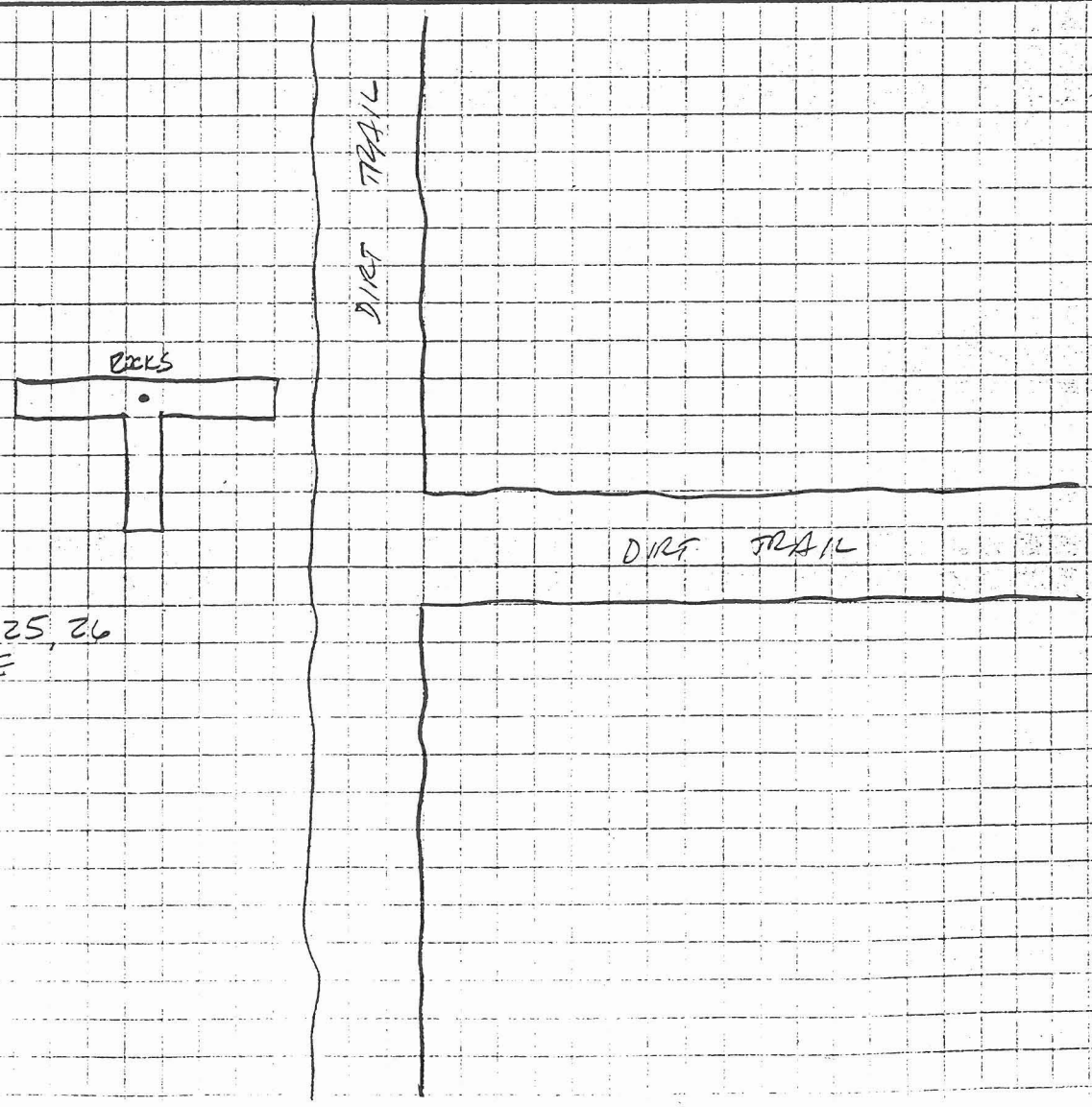
PT. NO. 1023

LATITUDE 33-45-17
LONGITUDE 112-06-59

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: IRON ROD FOUND W/CAP C.B.A.
SECTION 23 SE CORNER

SKETCH



SEC 23, 24, 25, 26
T5N, R2E

Collins/Piña Consulting Engineers, Inc.

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Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ Rev. ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 1022

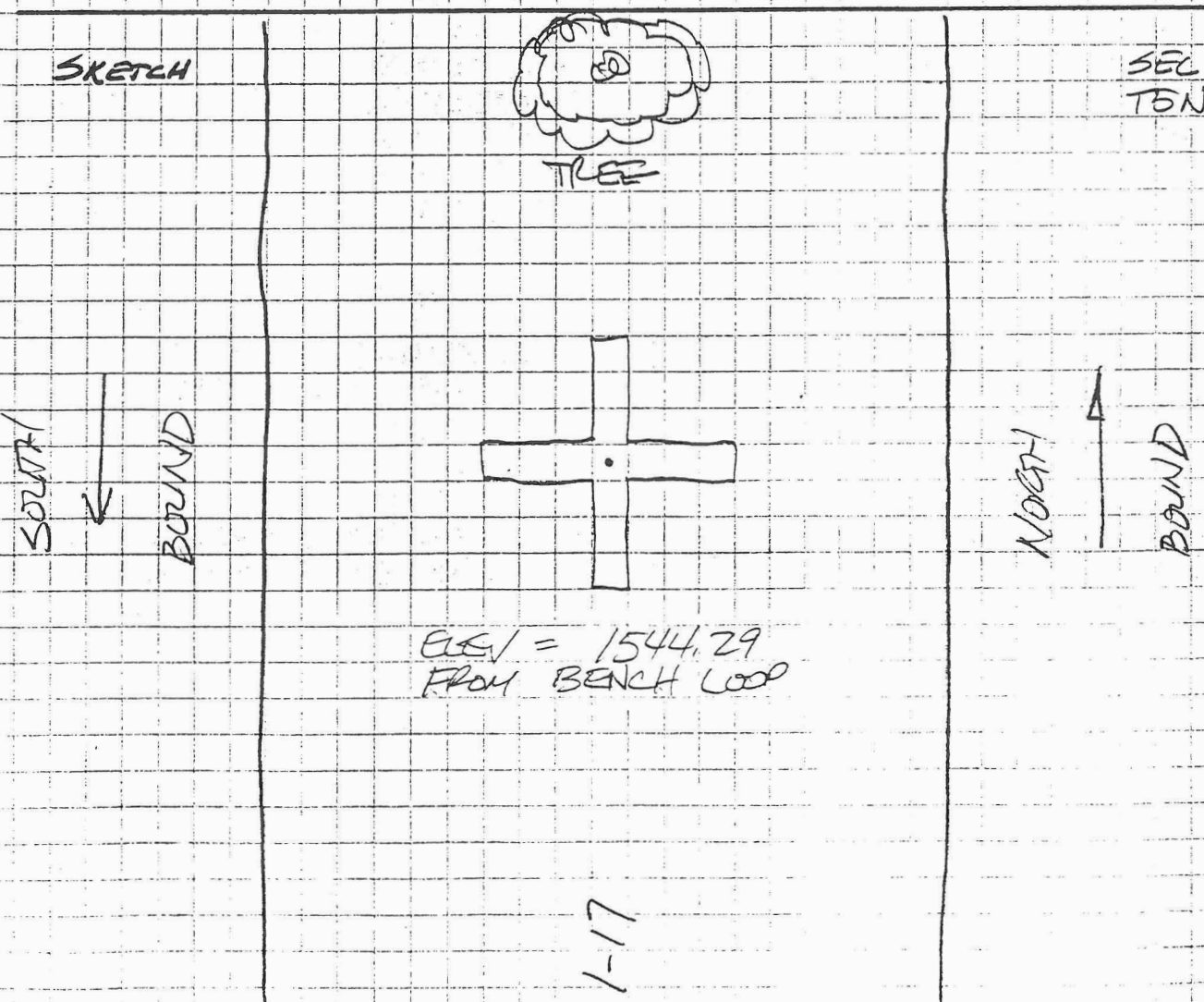
LATITUDE 33-45-17
LONGITUDE 112-07-34

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET IN CENTER MEDIAN OF I-17

SKETCH

SEC 23-26
T5N, R2E



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Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ Rev. ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 1021

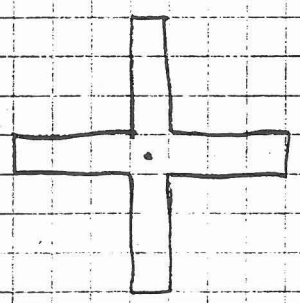
LATITUDE 33-45-43
LONGITUDE 112-07-25

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 23
T5N, R2E



OUT IN FIELD
NO LANDMARKS
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Project SKUNK CREEK
PANEL DIAGRAMS

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ Rvwd. ____
Date ____ Date ____ Date ____

PT. NO. 1020

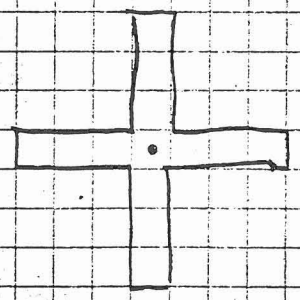
LATITUDE 33-46-08
LONGITUDE 112-07-18

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 14 & 23
T5N, R2E



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Job No. ____ Sht ____ of ____
Calc. ____ Chk. ____ Ehk. ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 1019

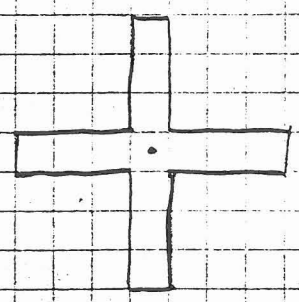
LATITUDE 33-46-08
LONGITUDE 112-07-35

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 14 & 23
T5N, R2E



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Job No. _____ Sht. _____ of _____

Project SKUNK CREEK
PANEL DIAGRAMS

Calc. _____ Chk. _____ B'chk. _____

Date _____ Date _____ Date _____

PT. NO. 1018

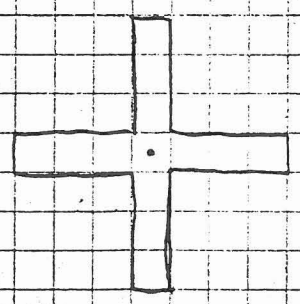
LATITUDE 33-46-33
LONGITUDE 112-07-25

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 14
T5N, R2E



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Job No. ____ Sht. ____ of ____
Calc. ____ Chk ____ B'chk. ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 1017

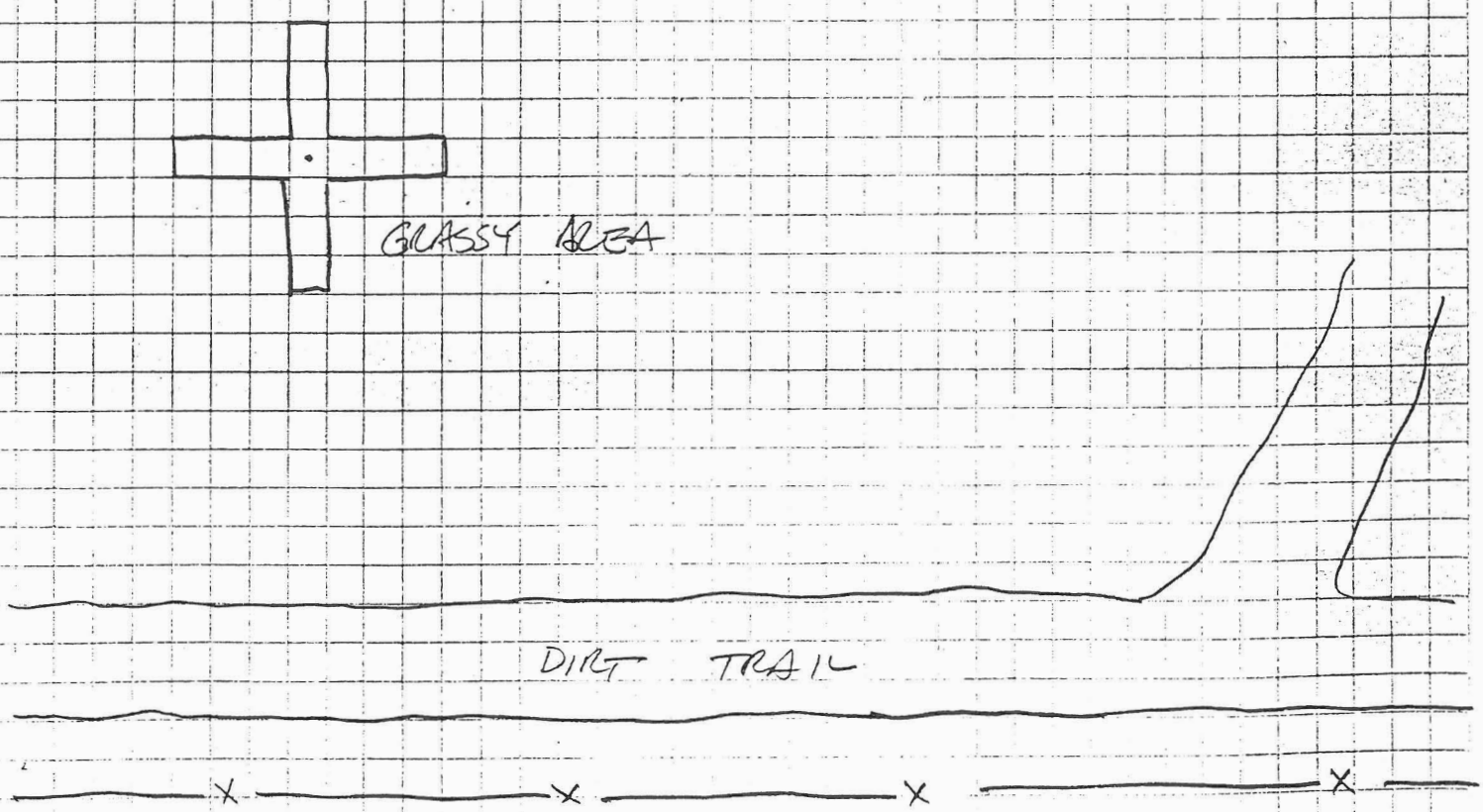
LATITUDE 33-47-00
LONGITUDE 112-07-09

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 11 & 14
T5N, R2E



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Job No. ____ Sht. ____ of ____

Project SKUNK CREEK
PANEL DIAGRAMS

Calc. ____ Chk. ____ B'chk. ____

Date ____ Date ____ Date ____

PT. NO. 1016

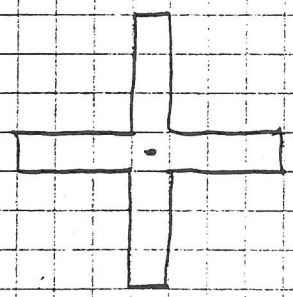
LATITUDE 33-47-00
LONGITUDE 112-07-33

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 11 & 14
T5N, R2E



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Job No. ____ Sht. ____ of ____
Project SKUNK CREEK PANEL DIAGRAMS
Calc. ____ Chk. ____ Bk. ____
Date ____ Date ____ Date ____

PT. NO. 1015

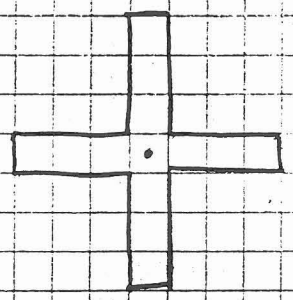
LATITUDE 33-47-26
LONGITUDE 112-07-23

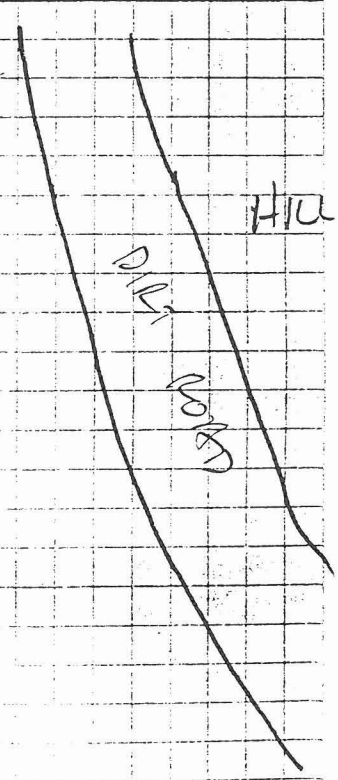
PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 11
T5N, R2E





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Project SKUNK CREEK
PANEL DIAGRAMS

Job No. ____ Sht. ____ of ____
Calc. ____ Chk ____ Rchk ____
Date ____ Date ____ Date ____

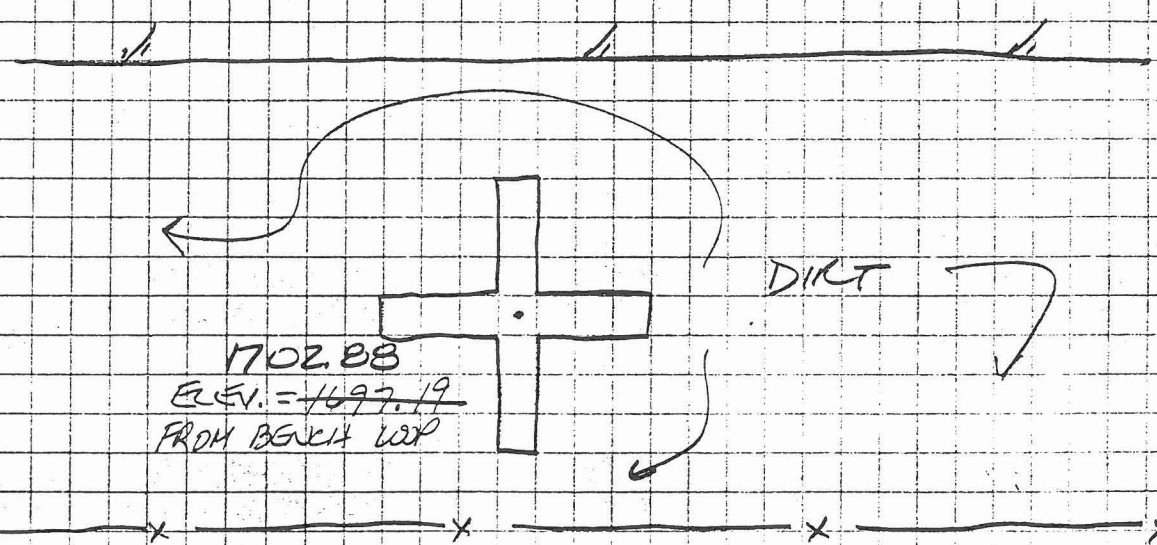
PT. NO. 1014

LATITUDE 33-47-52
LONGITUDE 112-07-00

PAPER 12-1-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
SOUTH SIDE OF CAREFREE HWY.

SKETCH



SEC 2 & 11
T5N, R2E

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Job No. ____ Sht. ____ of ____

Project SKUNK CREEK
PANEL DIAGRAMS

Date ____ Chk. ____ B'chk. ____
Date ____ Date ____

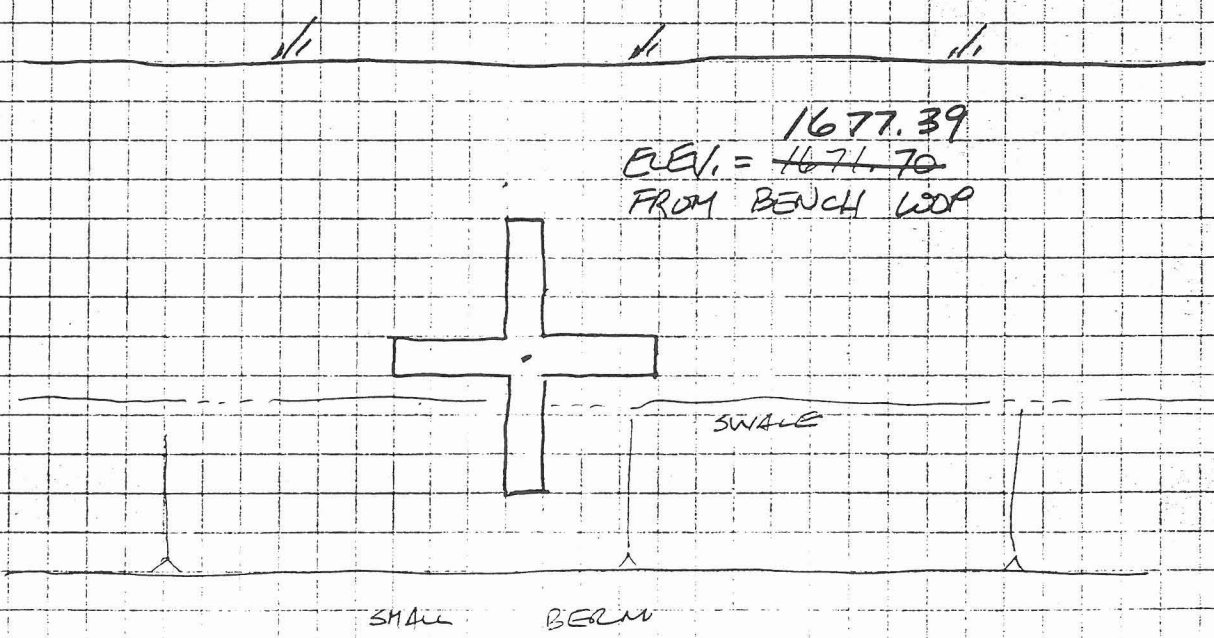
PT. NO. 1013

LATITUDE 33-47-52
LONGITUDE 112-07-33

PAPER 12-1-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
SOUTH SIDE OF CAREFREE HWY

SKETCH CAREFREE HWY.



SEC 2 & 11
T5N, R2E

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Job No. _____ Sht. _____ of _____

Project SKUNK CREEK PANEL DIAGRAMS

Calc. _____ Chk. _____ B'chk. _____

Date _____ Date _____ Date _____

PT. NO. 1012

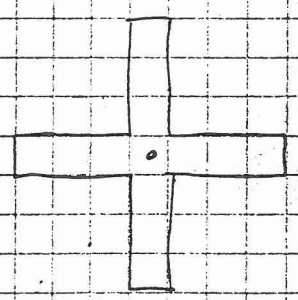
LATITUDE 33-48-16
LONGITUDE 112-07-14

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 2
T5N, R2E



NO LANDMARKS
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Job No. ____ Sht. ____ of ____
Calc. ____ Chk ____ Bchk. ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

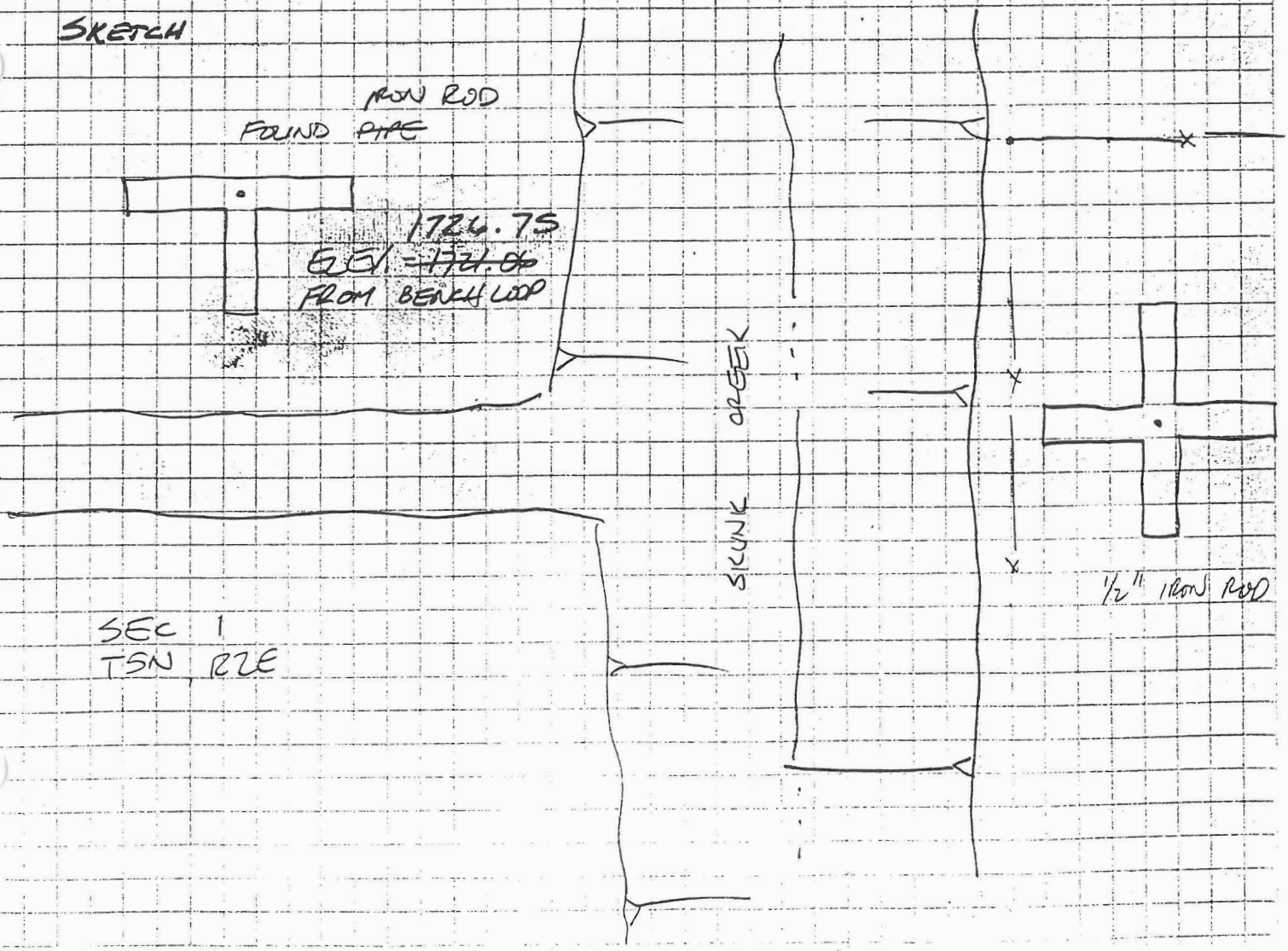
PT. NO. 1011

LATITUDE 33-48-48
LONGITUDE 112-07-00

PAPER 11-24-95 & 12-1-95 8' LEGS & 6' LEGS
PAINTED ____

DESCRIPTION: FOUND PIPE
1/2 IRON ROD SET

SKETCH



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Project SKUNK CREEK
PANEL DIAGRAMS

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ B'chk. ____
Date ____ Date ____ Date ____

PT. NO. 1010

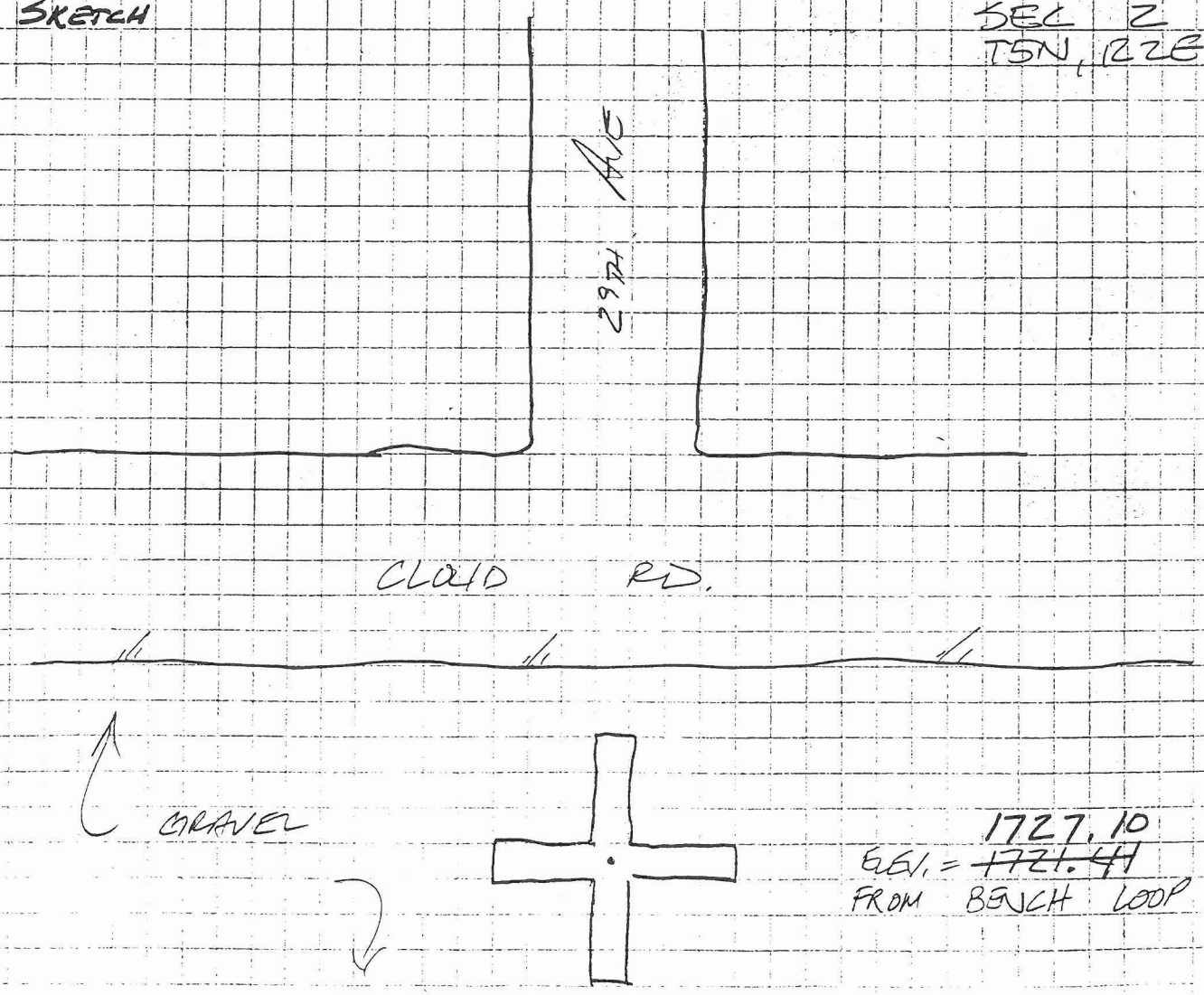
LATITUDE 33-48-48
LONGITUDE 112-07-16

PAPER 11-24-95
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
SOUTH SIDE OF CLOUD RD.

SKETCH

SEC 2
T5N, R2E



ELEV. = 1727.10
~~1721.41~~
FROM BENCH LOOP

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Project SKUNK CREEK
PANEL DIAGRAMS

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ Chk. ____
Date ____ Date ____ Date ____

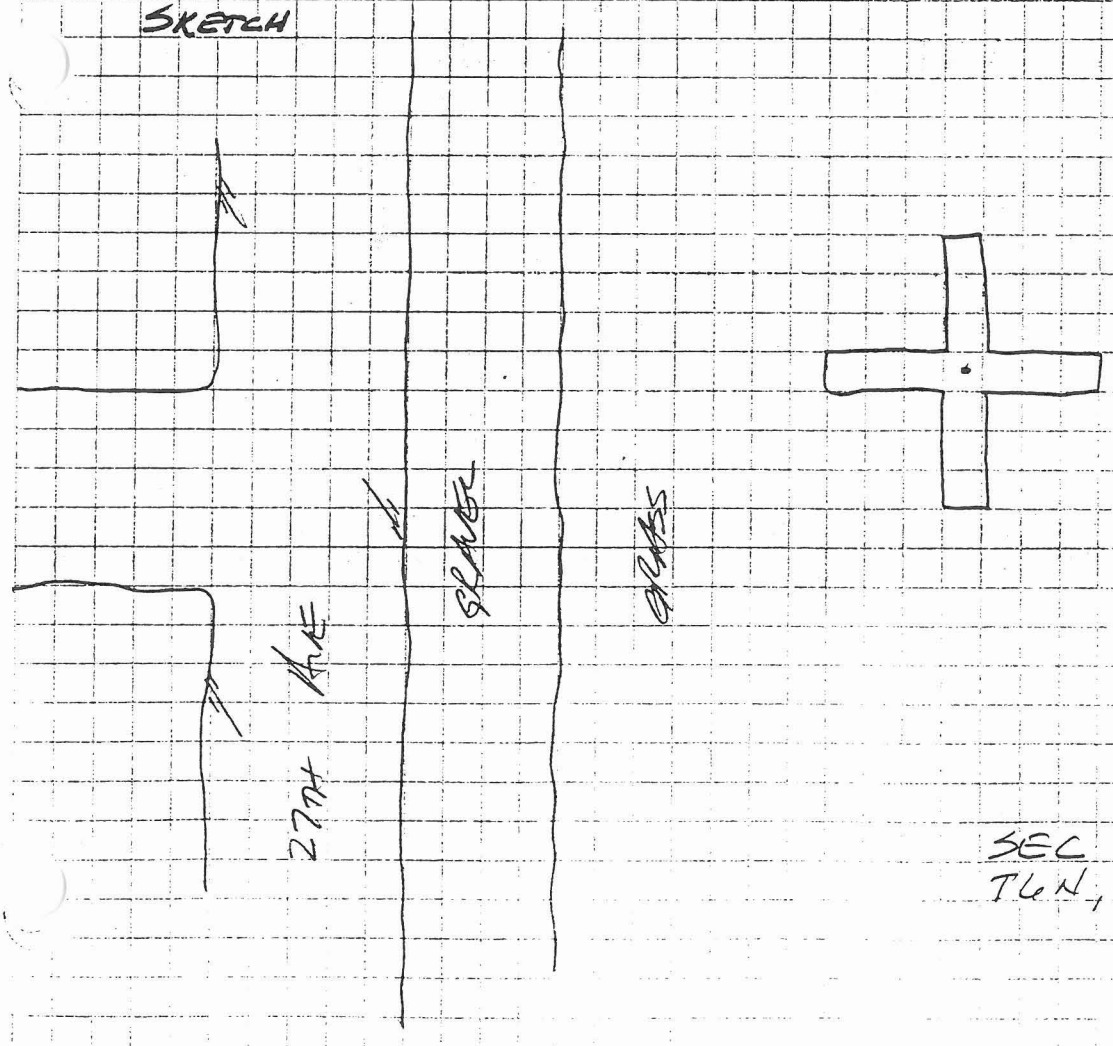
PT. NO. 1009

LATITUDE 33-49-08
LONGITUDE 112-07-03

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: SET 1/2" IRON ROD
EAST SIDE OF 27TH AVE

SKETCH



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Project SKUNK CREEK
PANEL DIAGRAMS

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ B'chk ____
Date ____ Date ____ Date ____

PT. NO. 1008

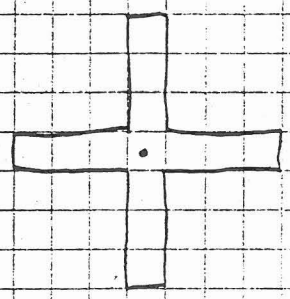
LATITUDE 33-49-26
LONGITUDE 112-06-33

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: SET 1/2" IRON ROD

SKETCH

SEC 36
T6N, R2E



NO LANDMARKS
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Job No. Sht Of
Project SKUNK CREEK PANEL DIAGRAMS
Calc. Chk. Rev.
Date Date Date

PT. NO. 1007

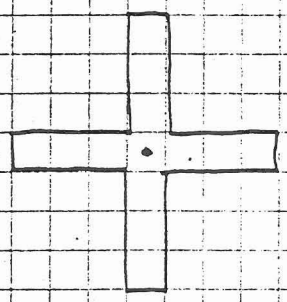
LATITUDE 33-49-28
LONGITUDE 112-06-44

PAPER 11-24-95 6' LEGS
PAINTED

DESCRIPTION: 1/2" IRON ROD SET

SKETCH

SEC 36
T6N, R2E



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Job No. ____ Sht ____ of ____

Project: SKUNK CREEK
PANEL DIAGRAMS

Calc. ____ Chk ____ B'chk. ____

Date ____ Date ____ Date ____

PT. NO. 1006

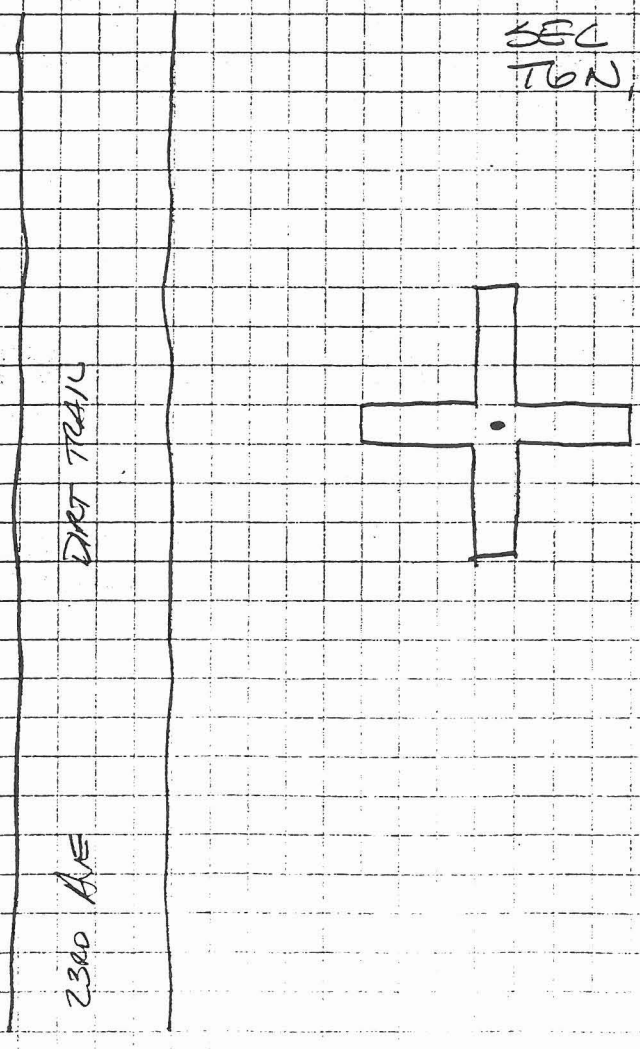
LATITUDE 33-49-51
LONGITUDE 112-06-28

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION:
1/2" IRON ROD SET
EAST SIDE OF 23RD AVE

SKETCH

SEC 25
T6N, R2E



ELEV. = ~~1792.23~~ 1797.92
FROM BENCH LOOP

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Job No. _____ Sht. _____ of _____

Project SKUNK CREEK PANEL DIAGRAMS

Calc. _____ Chk. _____ B'chk. _____

Date _____ Date _____ Date _____

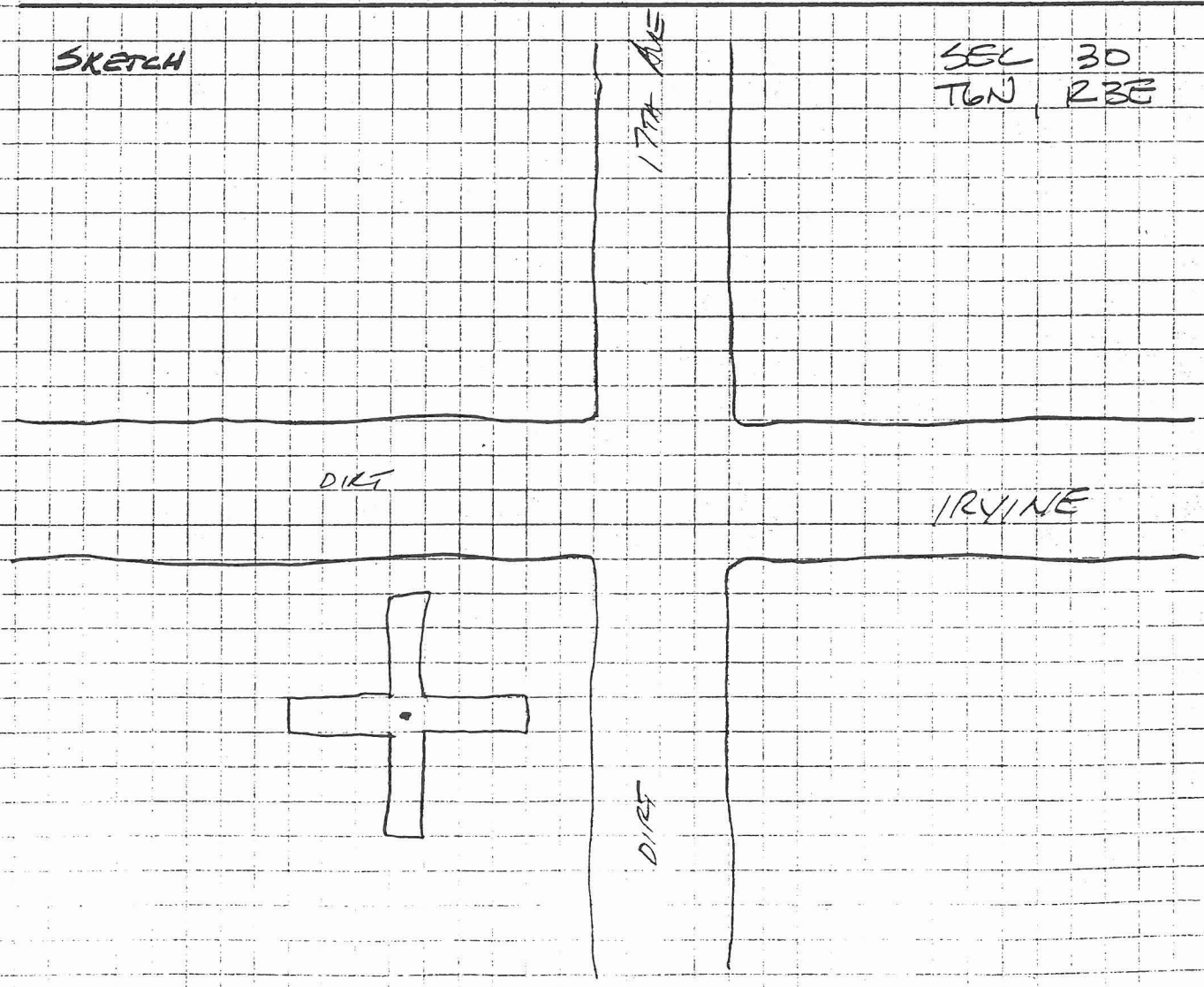
PT. NO. 1005

LATITUDE 33-50-10
LONGITUDE 112-05-42

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
SW CORNER OF 17TH AVE & IRVINE

SKETCH



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Job No. _____ Sht. _____ of _____

Project SKUNK CREEK
PANEL DIAGRAMS

Calc. _____ Chk. _____ Bchk. _____

Date _____ Date _____ Date _____

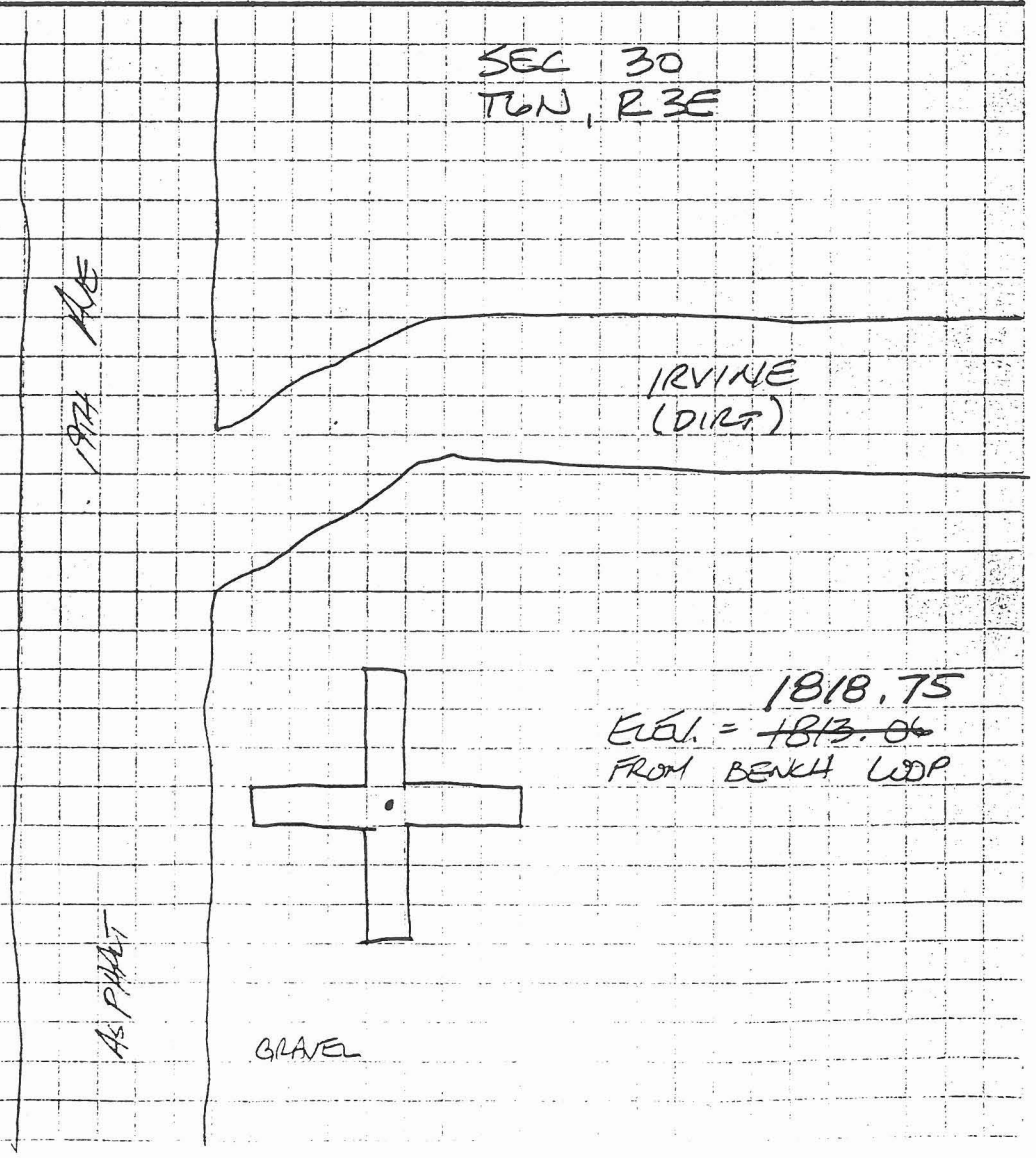
PT. NO. 1004

LATITUDE 33-50-09
LONGITUDE 112-05-57

PAPER 11-25-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
SE CORNER OF IRVINE & 19TH AVE

SKETCH



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Job No. ____ Sht ____ of ____
Calc. ____ Chk. ____ Bk/Pk ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 1003

LATITUDE 33-50-15
LONGITUDE 112-06-08

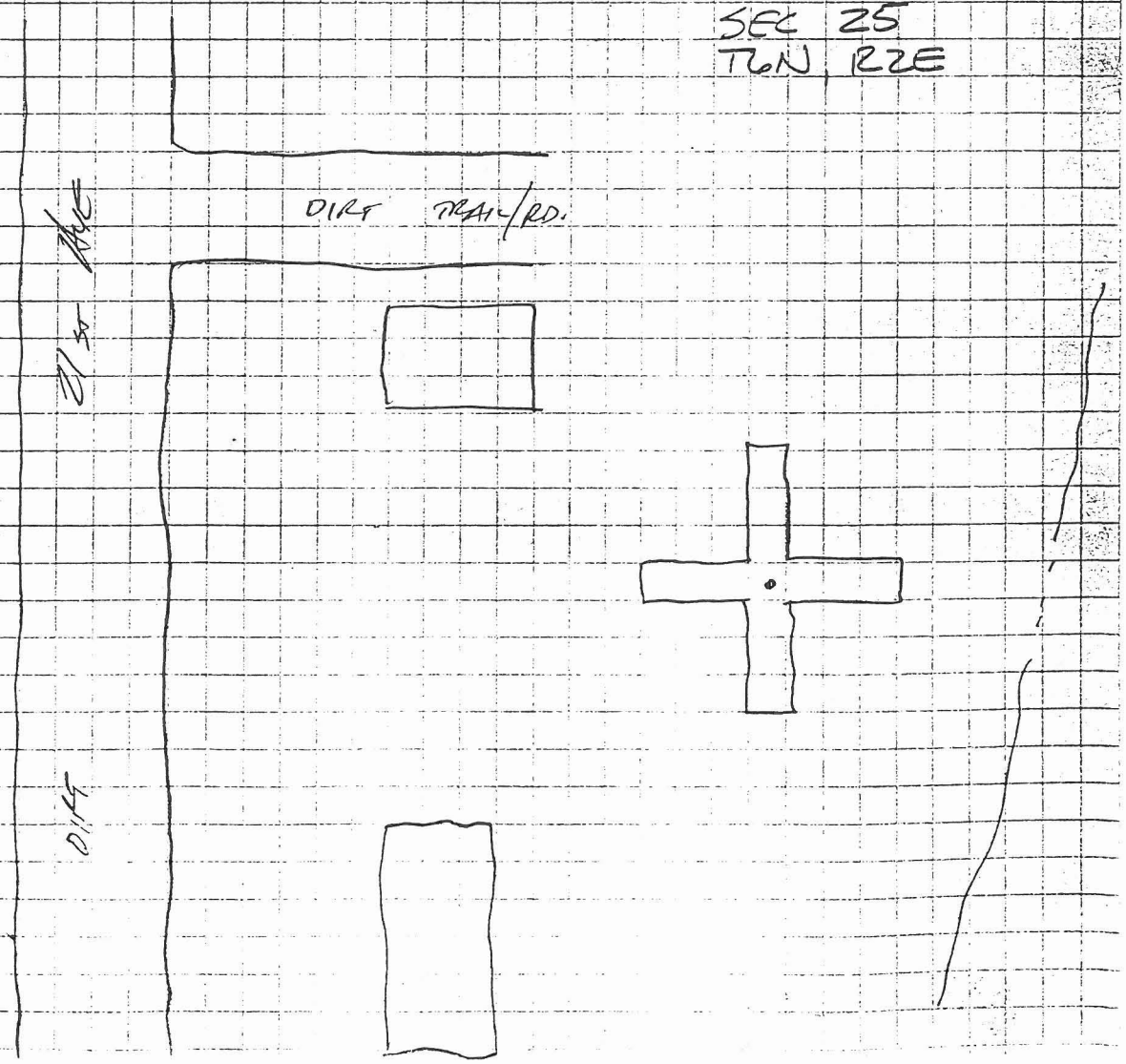
PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION:

1/2" IRON ROD SET
BEHIND HOUSES, WEST SIDE
SKUNK CREEK

SKETCH

SEC 25
T6N, R2E



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Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ Bkchk. ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 1002

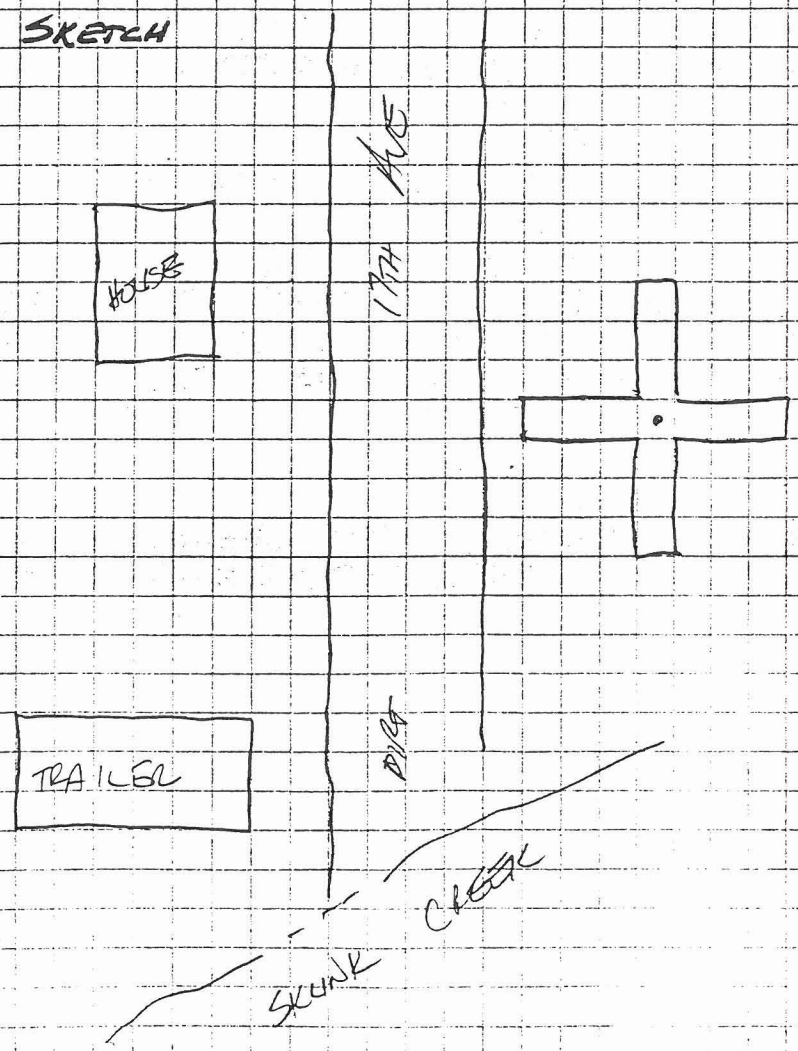
LATITUDE 33-50-27
LONGITUDE 112-05-42

PAPER 11-24-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
EAST SIDE 17TH AVE

SKETCH

SEC 30
T6N, R3E



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Job No. ____ Sht ____ of ____
Date ____ Chk ____ Dbnk ____
Scale ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

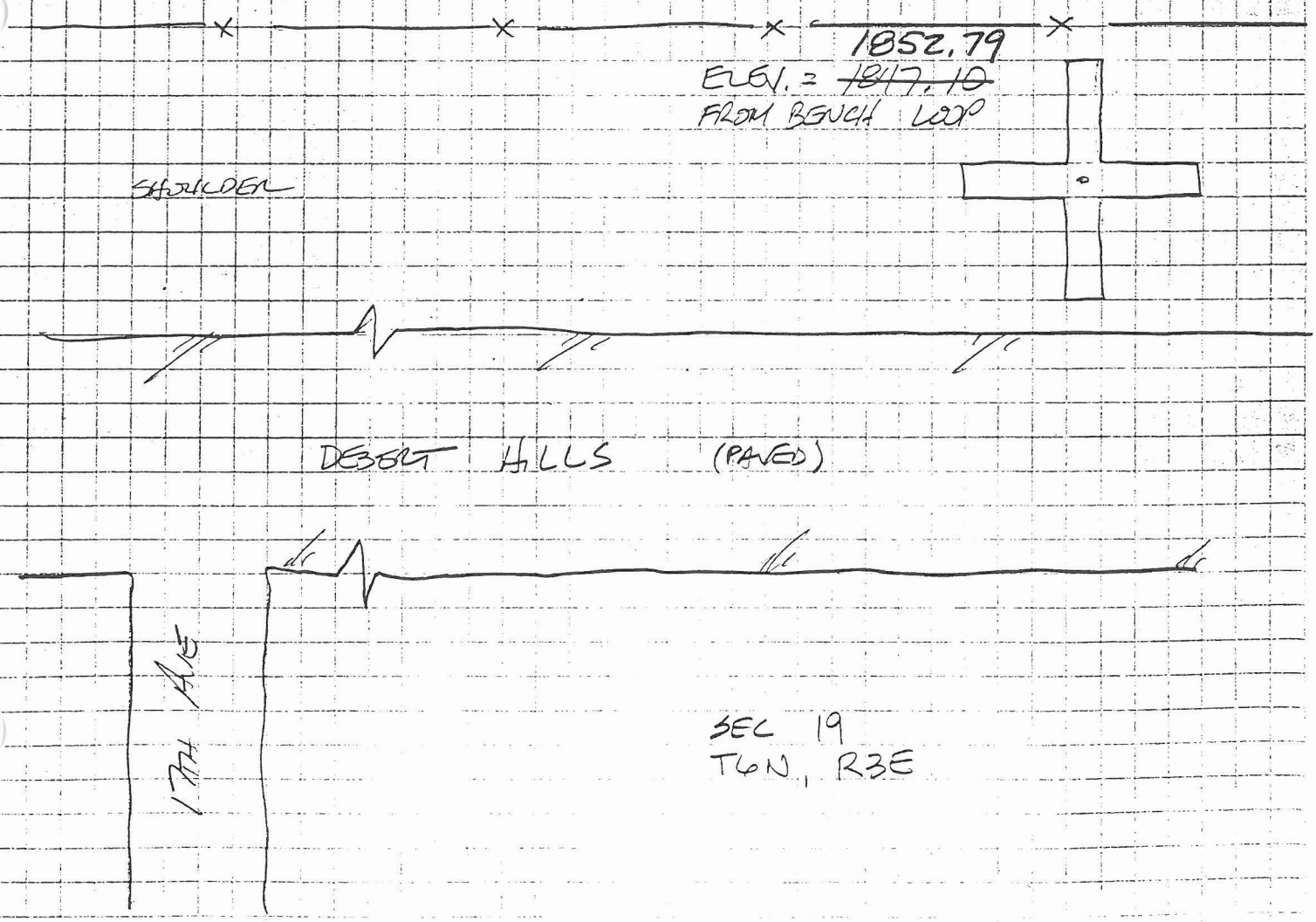
PT. NO. 1001

LATITUDE 33-50-36
LONGITUDE 112-05-34

PAPER 11-25-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2 IRON ROD SET
NORTH SIDE OF DESERT HILLS

SKETCH



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Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No. Sheet of
Project SKUNK CREEK
PANEL DIAGRAMS
By Date

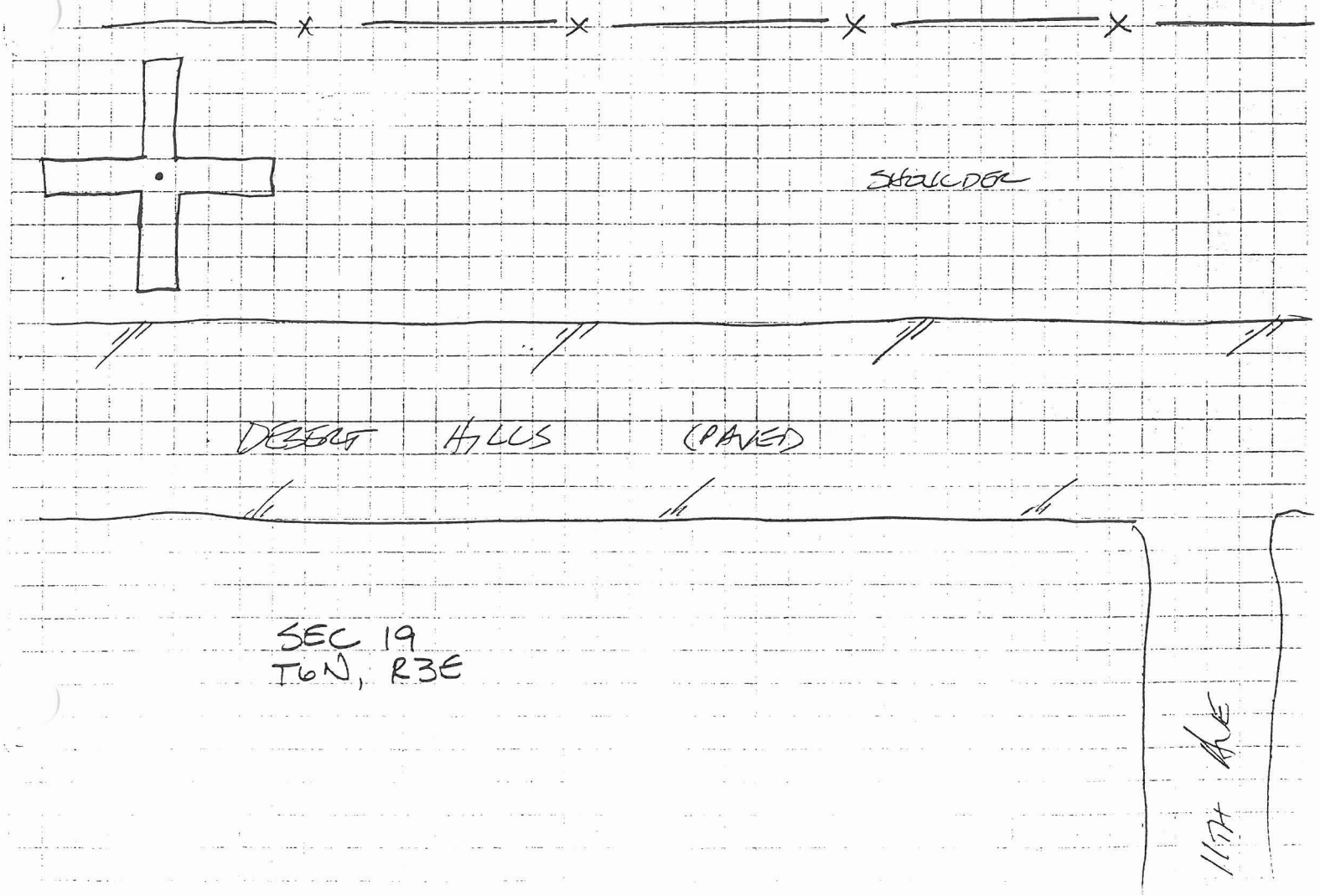
PT. NO. 1000

LATITUDE 33-50-34
LONGITUDE 112-05-14

PAPER 11-25-95 6' LEGS
PAINTED ___

DESCRIPTION: 1/2" IRON ROD SET
NORTH SIDE DESERT HILLS

SKETCH



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3500 N. Central, Suite 200
Phoenix, Arizona 85012
Phone: (602) 230-7508
Fax: (602) 264-0568

SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 2014

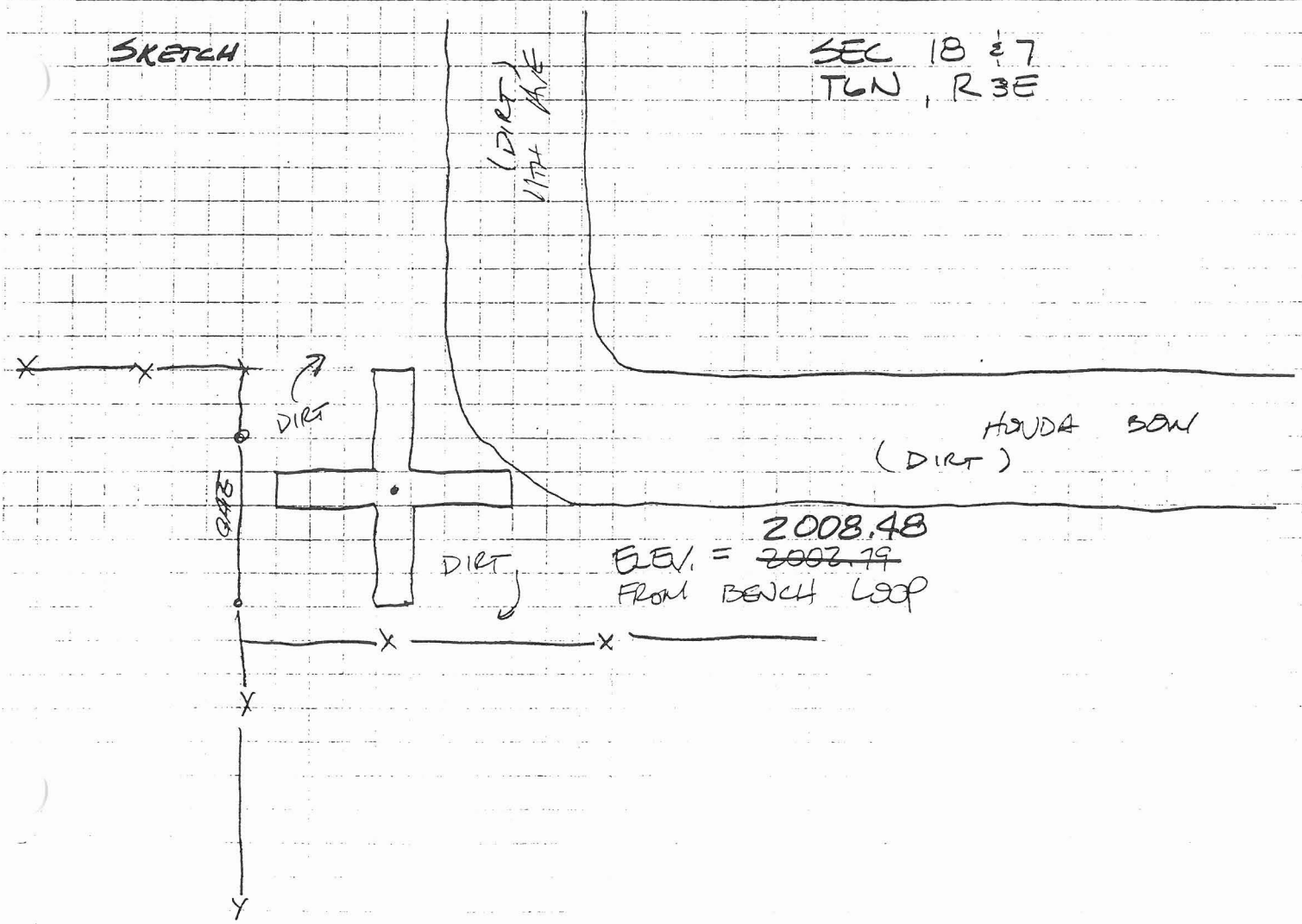
LATITUDE 33-52-18
LONGITUDE 112-05-10

PAPER 11-25-95 6' LEGS
PAINTED ___

DESCRIPTION: 1/2" IRON ROD SET
WEST END OF HONDA BOW

SKETCH

SEC 18 & 7
T6N, R3E



Collins/Piña Consulting Engineers, inc.

3102 N. Central, Suite 200
Phoenix, AZ 85012
(602) 264-7606
FAX (602) 264-0566

Project SKUNK CREEK
PANEL DIAGRAMS

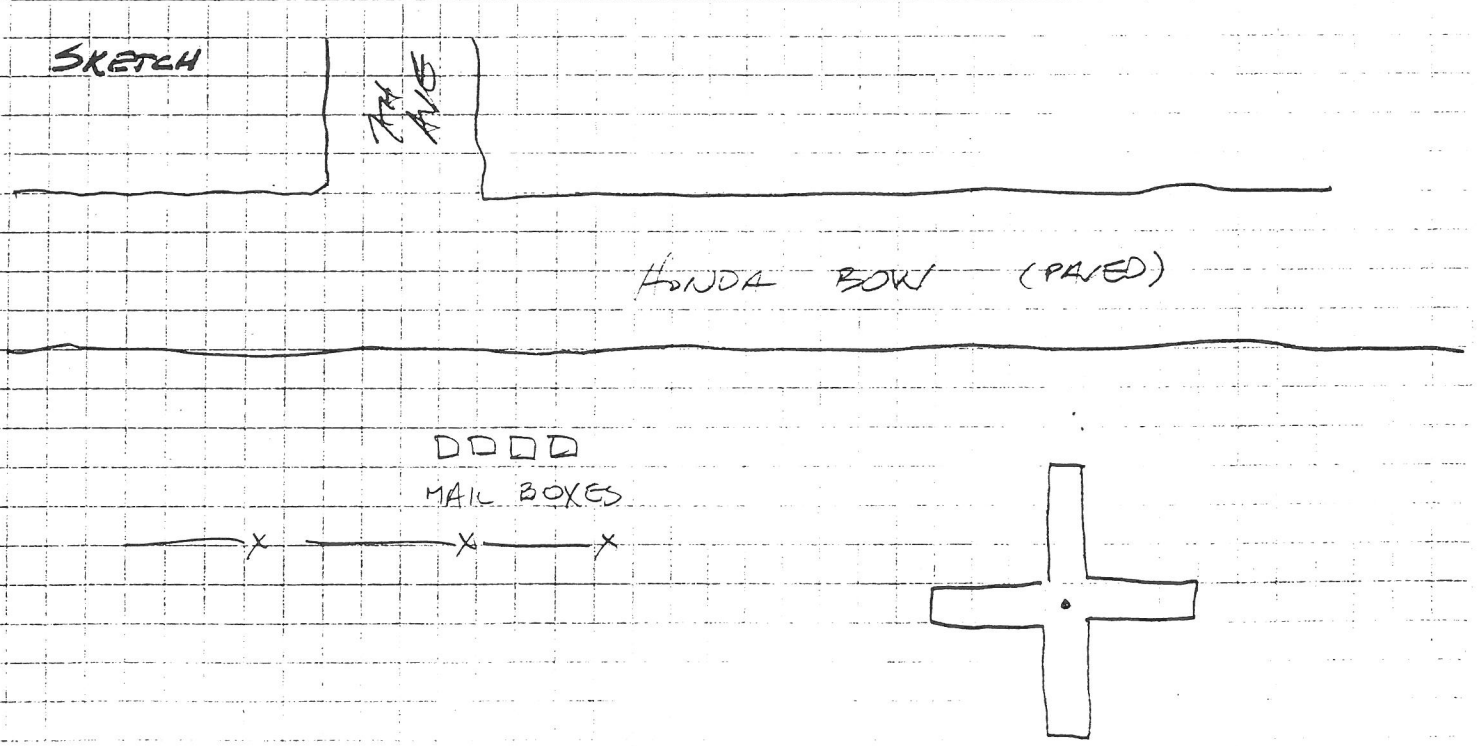
PT. NO. 2013

LATITUDE 33-52-18
LONGITUDE 112-04-55

PAPER 12-1-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
SOUTH SIDE HONDA BOW

SKETCH



SEC 17
T6N, R3E

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Phone (602) 623-7960
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Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ B'chk. ____
Date ____ Date ____ Date ____

Project: SKUNK CREEK
PANEL DIAGRAMS

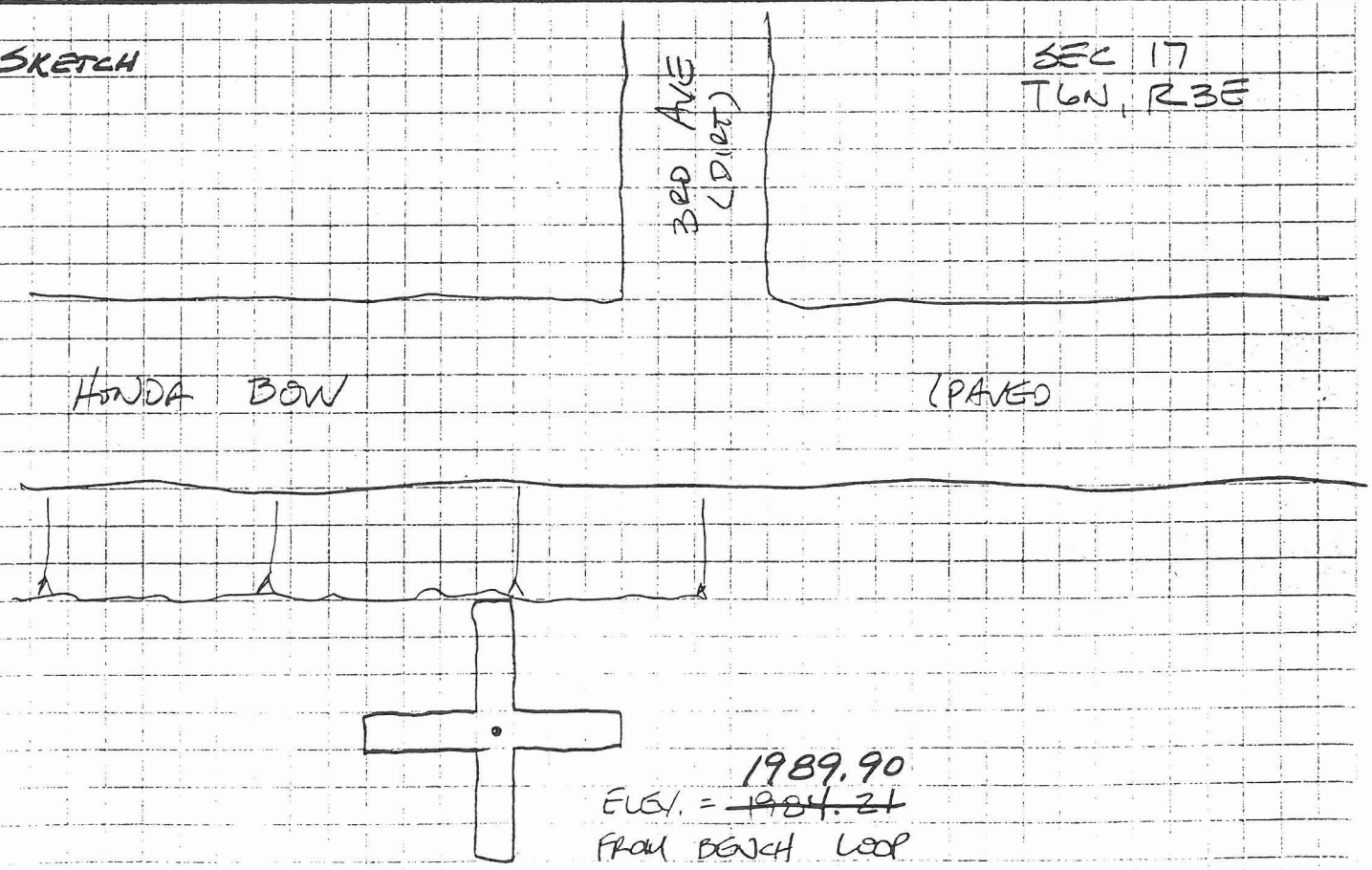
PT. NO. 2012

LATITUDE 33-52-18 } SCALED
LONGITUDE 112-04-39

PAPER 11-25-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2 IRON ROD SET
SOUTH SIDE HONDA BOW

SKETCH



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Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ B'che ____
Date ____ Date ____ Date ____

Project: SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 2011

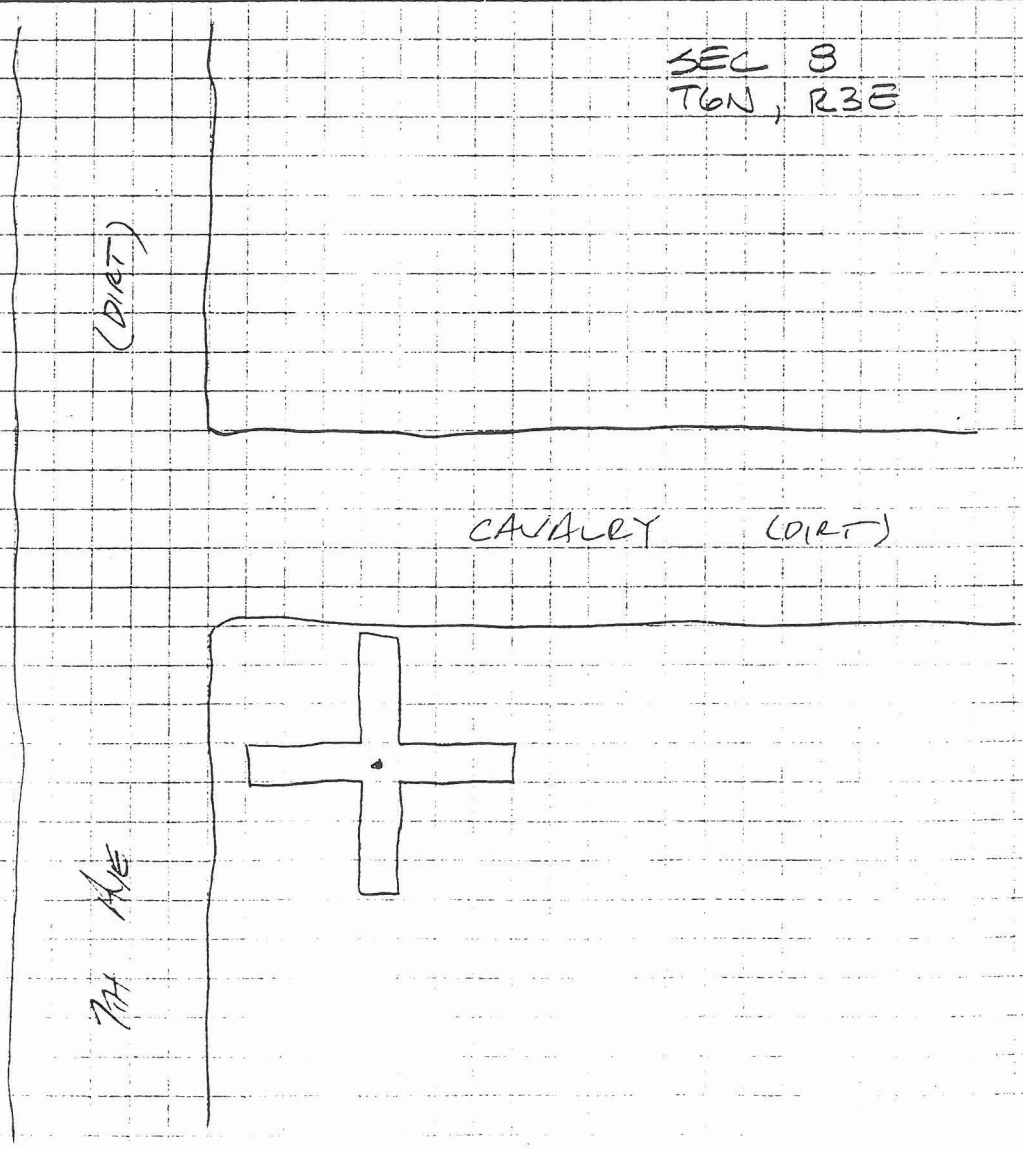
LATITUDE 33-52-44
LONGITUDE 112-04-55

PAPER 11-25-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
SE CORNER OF CAVALRY & 7TH AVE

SKETCH

SEC 8
T6N, R3E



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Phone (602) 623-7960
FAX (602) 864-5278

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Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No. ___ Ch. ___ Of ___
Date ___ Chk. ___ Sh. ___
Dwg. ___ Date ___ Date ___

Project SKUNK CREEK
PANEL DIAGRAMS

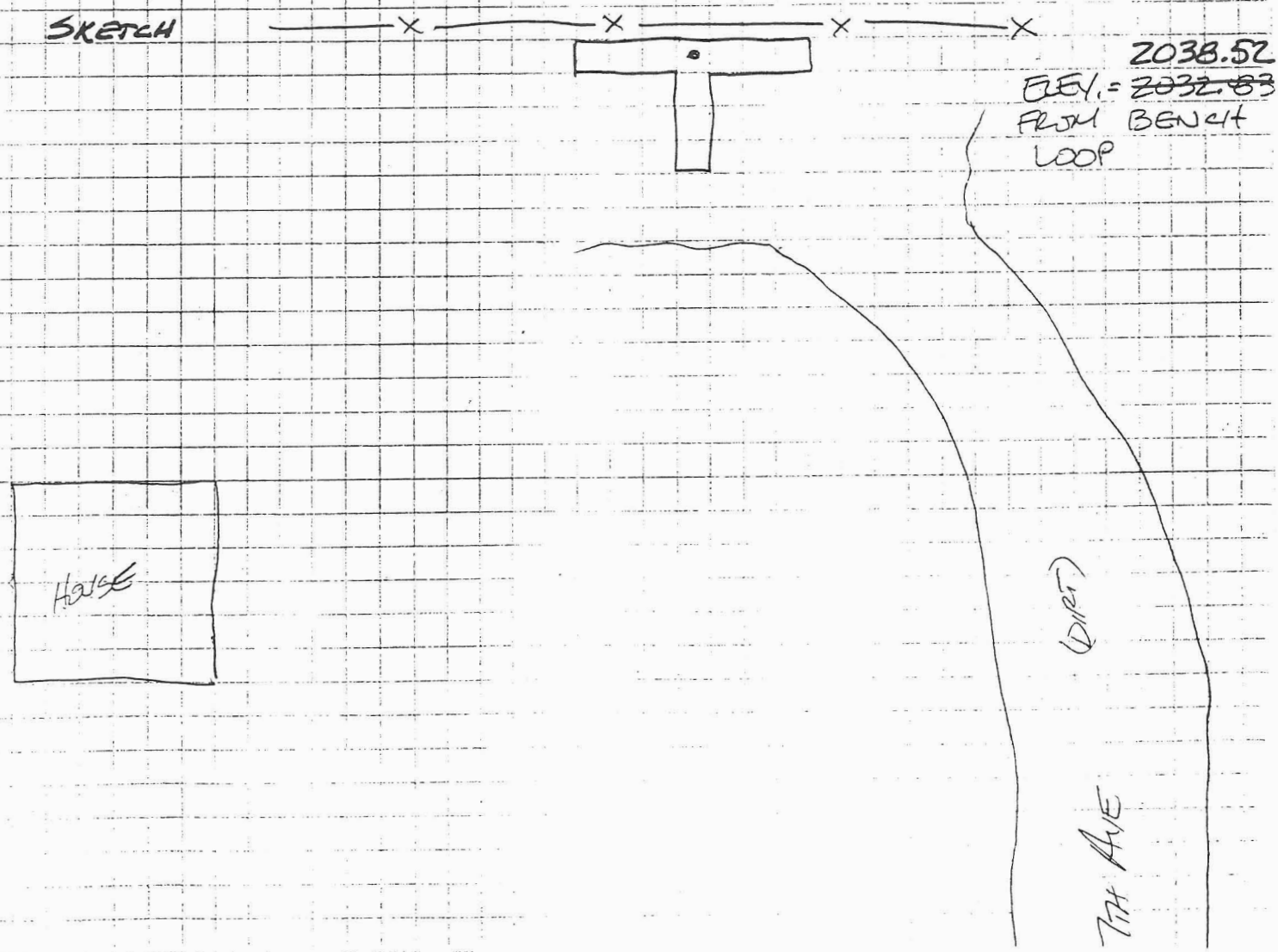
PT. NO. 2010

LATITUDE 33-53-10
LONGITUDE 112-04-55

PAPER 11-25-95 6' LEGS
PAINTED ___

DESCRIPTION: GLO BRASS CAP
SECTION CORNER
6, 5, 7, 8
T6N, R3E

SKETCH



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Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No. Sh. of
Calc. Chk. Elev.
Date Date

Project: SKUNK CREEK
PANEL DIAGRAMS

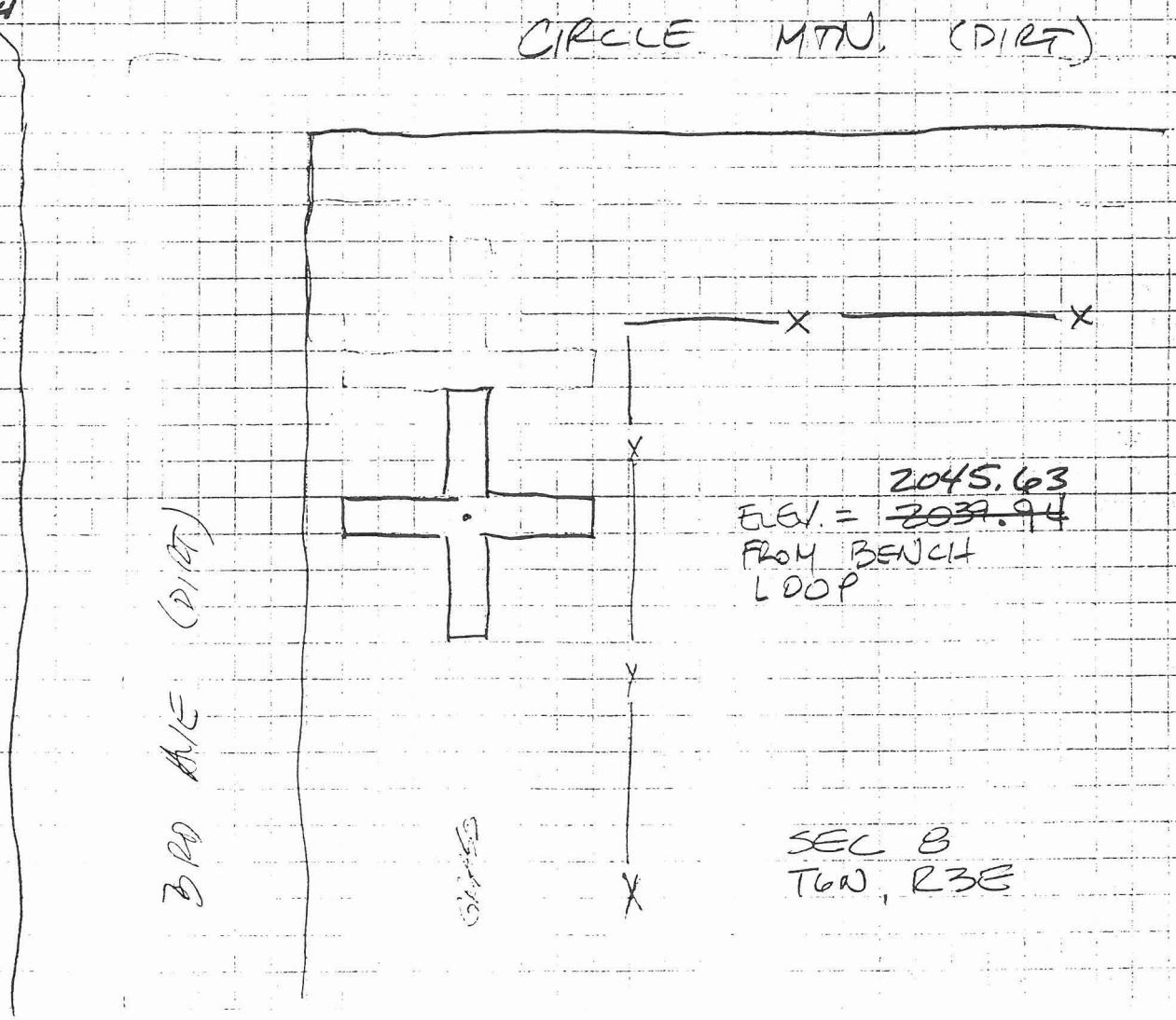
PT. NO. 2009

LATITUDE 33-53-10
LONGITUDE 112-04-39

PAPER 11-25-95 4' LEGS
PAINTED

DESCRIPTION: 1/2 IRON ROD SET
SE CORNER OF 3RD AVE &
CIRCLE MTN.

SKETCH



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Phone (602) 623-7960
FAX (602) 884-5278

3900 N. Central, Suite 200
Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No.
Calc.
Date

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 2008

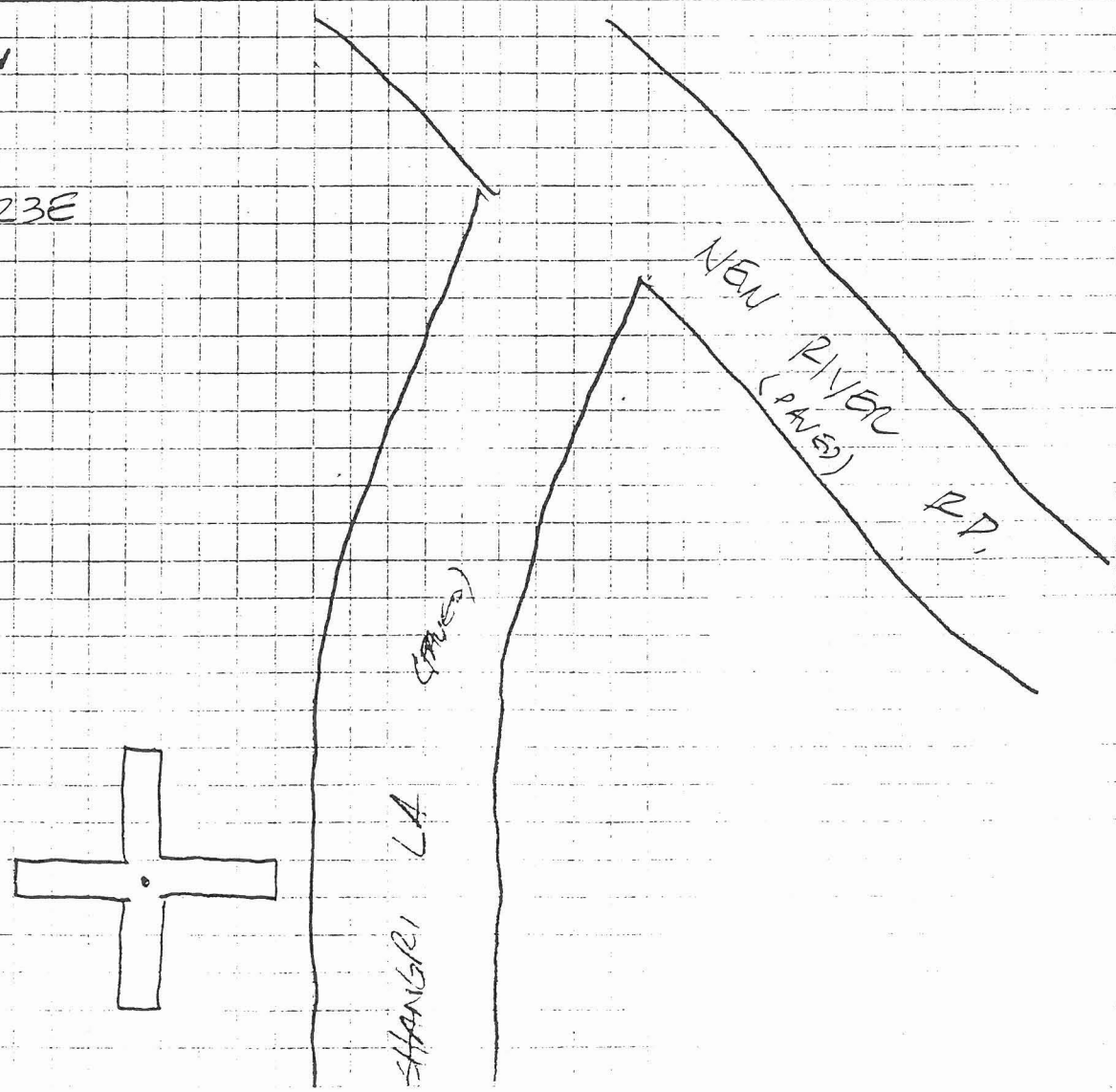
LATITUDE 33-53-35
LONGITUDE 112-04-35

PAPER 11-25-95 6' LEGS
PAINTED

DESCRIPTION: 1/2" IRON ROD SET
WEST SIDE OF SHANGRI LA

SKETCH

SEC 5
T6N, R3E



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FAX (602) 264-0568

Job No. Sht. of
Calc. Chk. Rev.
Date Date Date

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 2007

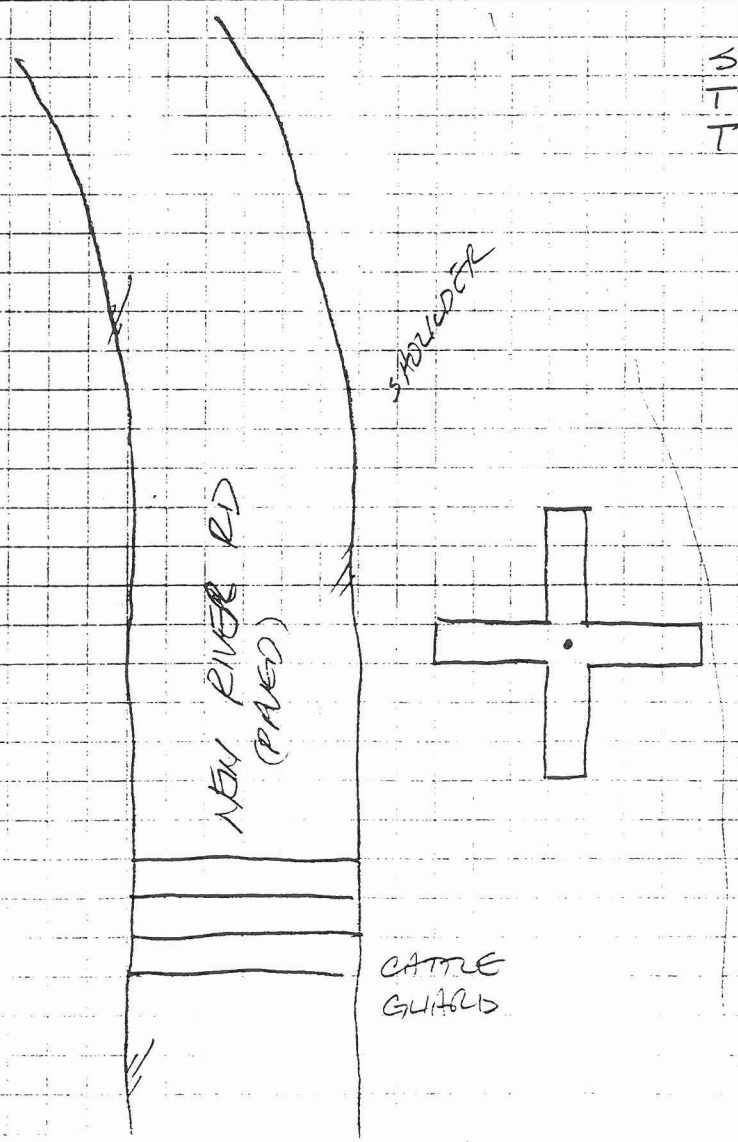
LATITUDE 33-54-01
LONGITUDE 112-04-39

PAPER 11-25-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
EAST SIDE NEW RIVER RD.

SKETCH

SEC 32 & 5
T7N, R3E
T6N, R3E



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FAX (602) 264-0568

Job No. ____ Sht. ____ of ____
Calc. ____ Chk. ____ B'che ____
Date ____ Date ____ Date ____

Project SKUNK CREEK
PANEL DIAGRAMS

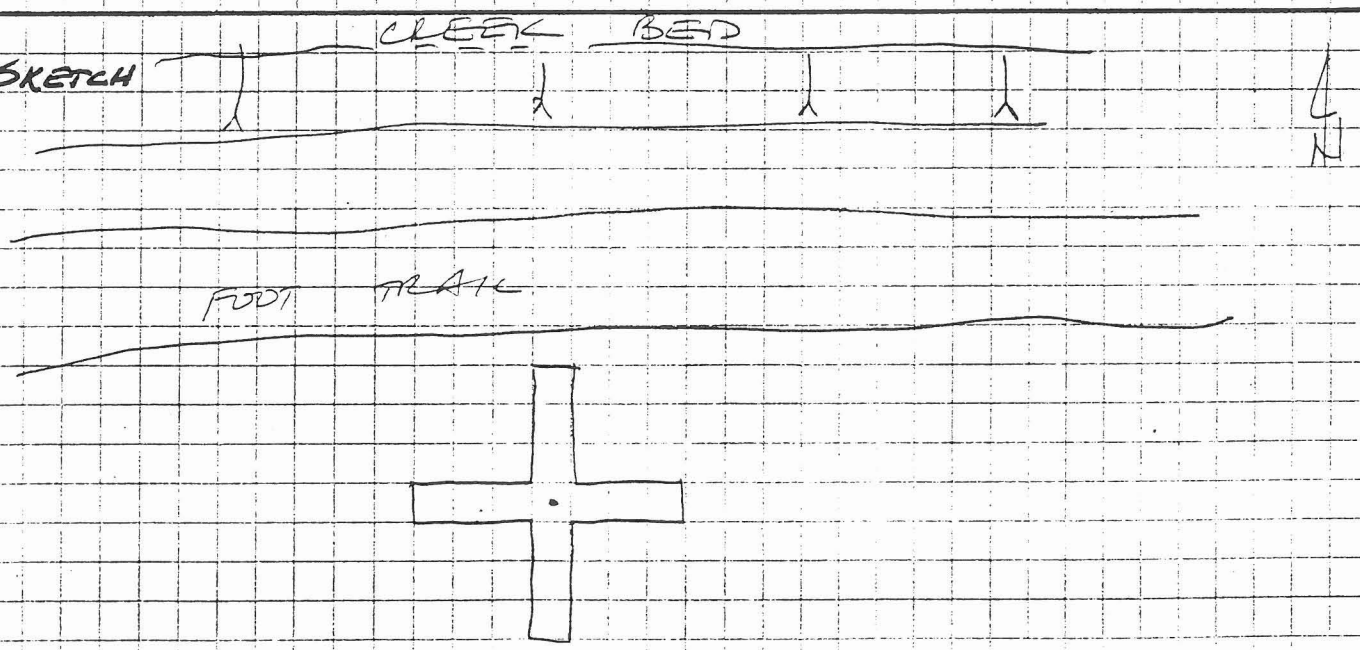
PT. NO. 2006

LATITUDE 33-54-01
LONGITUDE 112-05-00

PAPER 12-1-95 5½-6' LEGS
PAINTED ____

DESCRIPTION: 16OD NAIL SET

SKETCH



SEC 31 & 6
T7N, R3E
T6N, R3E

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[illegible] East 9th Street
Tucson, Arizona 85705
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Phoenix, Arizona 85012
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Job No. Sht. of
Calc. By Date
Chk. By Date

Project SKUNK CREEK
PANEL DIAGRAMS

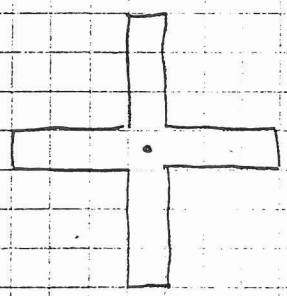
PT. NO. 2005

LATITUDE 33-54-06
LONGITUDE 112-05-59

PAPER 12-1-95 5½-6' LEGS
PAINTED

DESCRIPTION: ½" IRON ROD SET

SKETCH



NO LANDMARKS

SE CORNER
SECT. 36
T6N, R2E

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Phone (602) 264-7505
FAX (602) 264-0568

Job No. ____ Sht ____ of ____
Calc. ____ Ck'd ____ Rev. ____
Date ____ Date ____ Date ____

Project: SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 2004

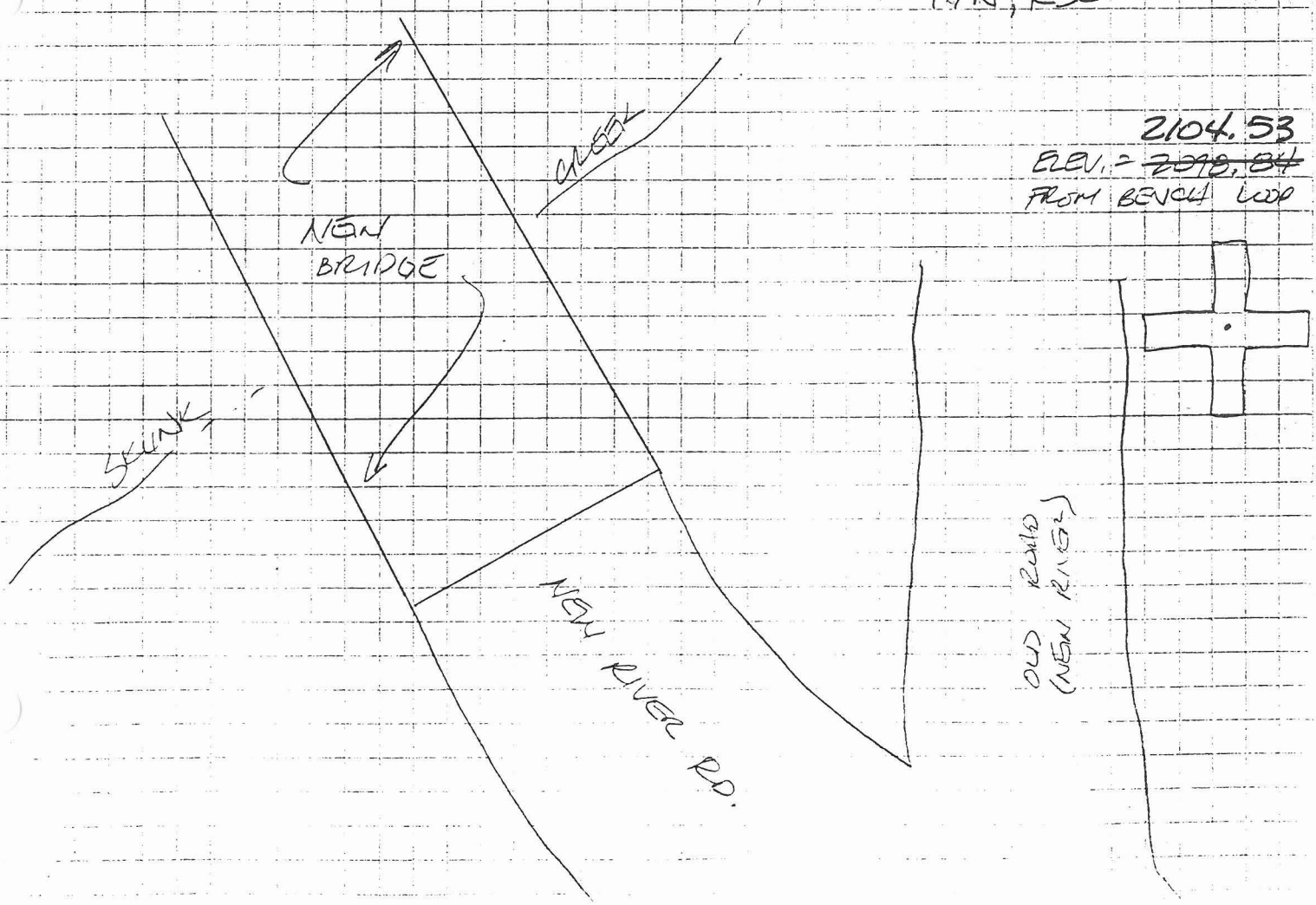
LATITUDE 33-54-24
LONGITUDE 112-04-56

PAPER 11-25-95 6' LEGS
PAINTED ____

DESCRIPTION: 1/2" IRON ROD SET
E. SIDE OF NEW RIVER RD.

SKETCH

SEC 31
T7N, R3E



2104.53
ELEV. = ~~2098.84~~
FROM BENCH LOOP

Collins/Piña Consulting Engineers, Inc.

630 East 9th Street
Tucson, Arizona 85705
Phone (602) 623-7959
FAX (602) 884-5278

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Phoenix, Arizona 85012
Phone (602) 264-7505
FAX (602) 264-0568

Job No. Sht.
Project SKUNK CREEK PANEL DIAGRAMS
Calc. Chk.
Date Date

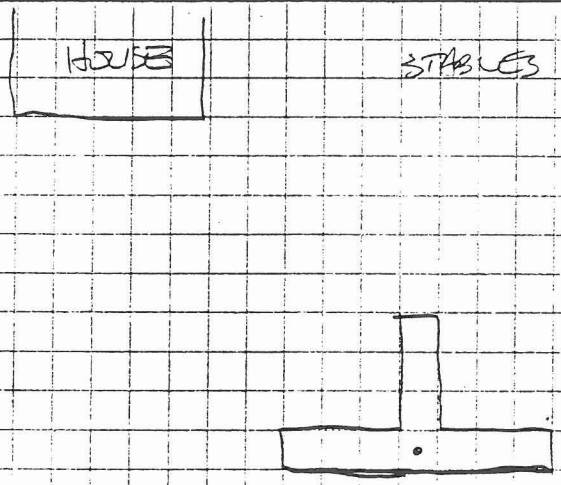
PT. NO. 2003

LATITUDE 33-54-26
LONGITUDE 112-05-26

PAPER 12-1-95 6' LEGS
PAINTED

DESCRIPTION:

SKETCH



SEC 31
T7N, R3E

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Phone (602) 264-7505
FAX (602) 264-0568

Job No. ____ Sht. ____ of ____

Project SKUNK CREEK PANEL DIAGRAMS

Calc. ____ Chk. ____ Shtd. ____

Date ____ Date ____ Date ____

PT. NO. 2002

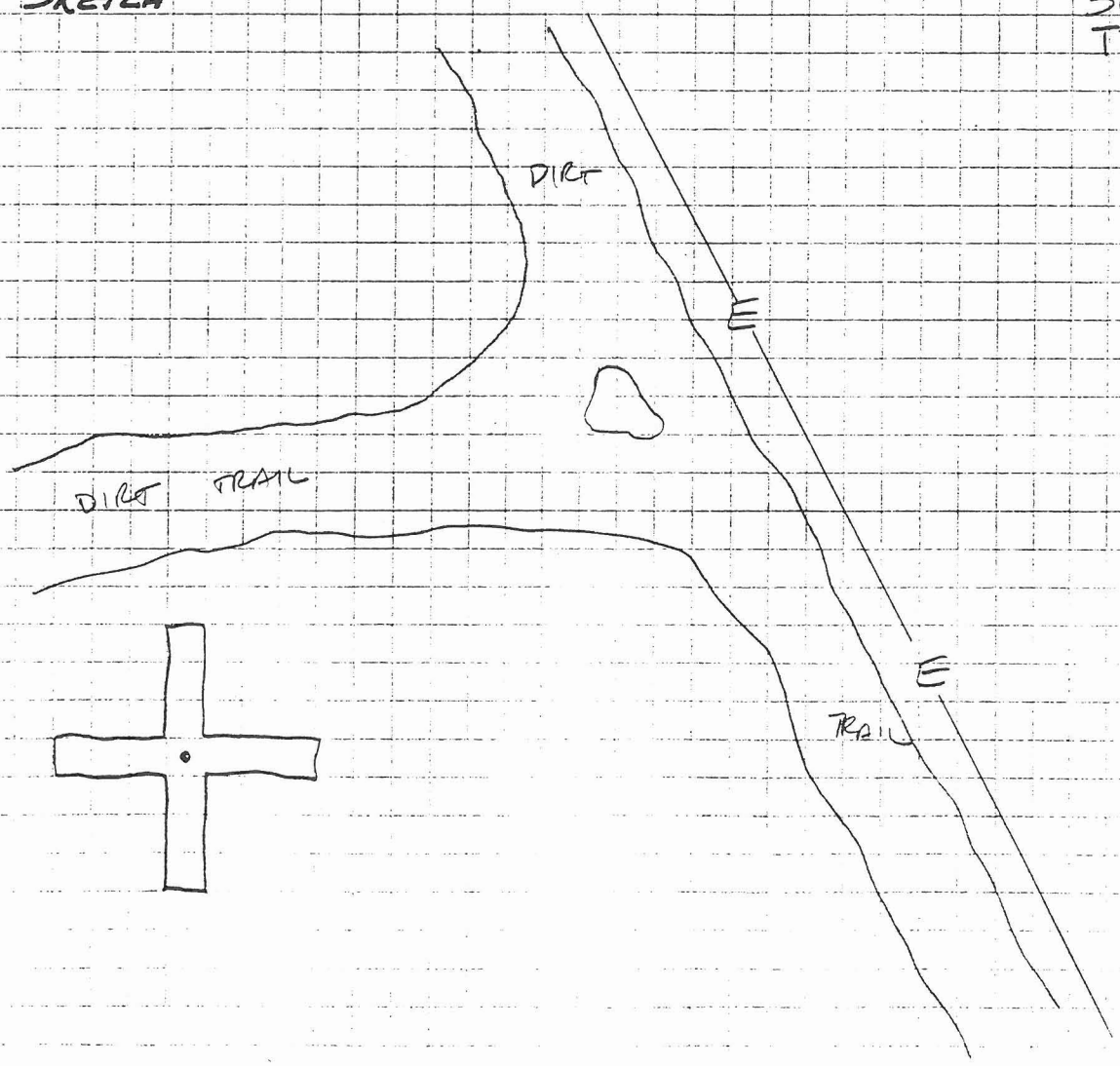
LATITUDE 33-54-42
LONGITUDE 112-05-59

PAPER 12-1-95 4½'-5' LEGS
PAINTED ____

DESCRIPTION: ½" IRON ROD SET

SKETCH

SEC 36
T7N, R2E



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Job No. Sht.
Calc. Chk
Date Date

Project SKUNK CREEK
PANEL DIAGRAMS

PT. NO. 2001

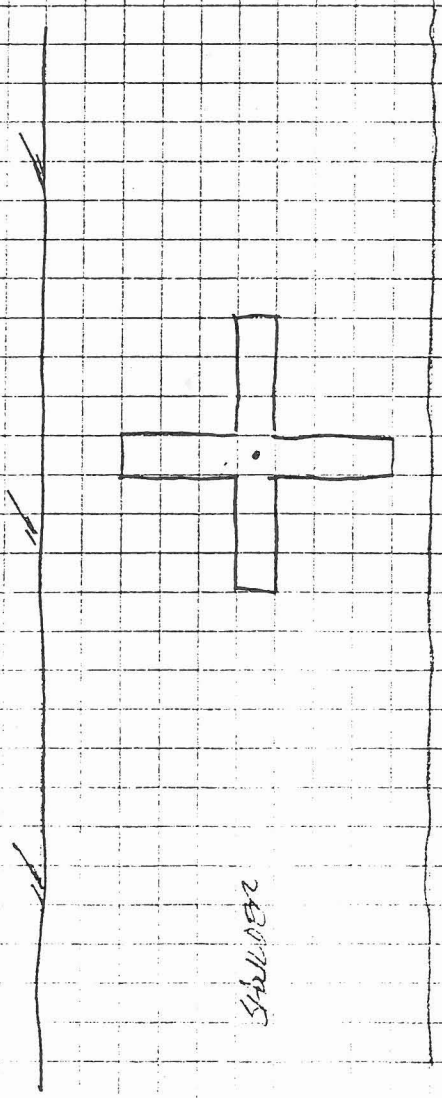
LATITUDE 33-54-55
LONGITUDE 112-05-16

PAPER 11-25-95 6' LEGS
PAINTED

DESCRIPTION: 1/2" IRON ROD SET
E. SIDE OF NEW PAVED RD.

SKETCH

SEC 30
T7N, R3E



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Project SKUNK CREEK
PANEL DIAGRAMS

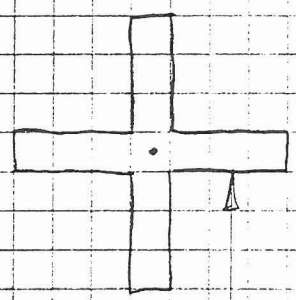
PT. NO. 2000

LATITUDE 33-54-58
LONGITUDE 112-04-55

PAPER 12-1-95
PAINTED

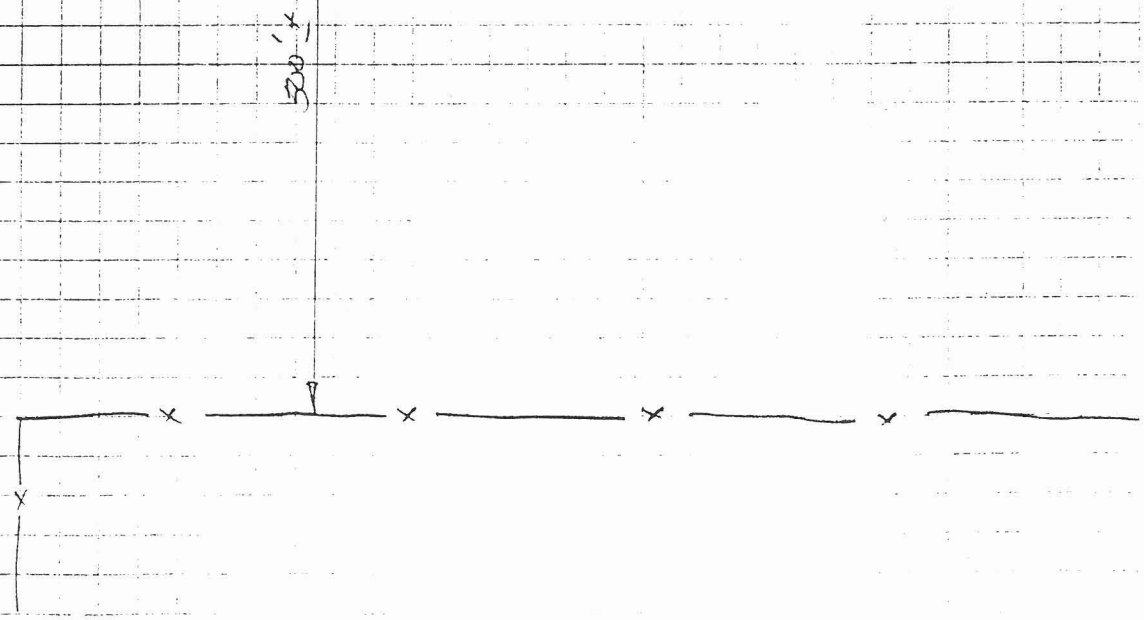
DESCRIPTION: 1/2" IRON ROD ~~SET~~

SKETCH



ELEV. = 2169.27 ~~2153.08~~
FROM BENCH LOOPS

SEC 29
T7N, R3E



STATE PLANE COORDINATES

Collins/Piña
Consulting Engineers, Inc.

PANEL (TARGET) COORDINATES

PT ,NORTHING , EASTING , ELEV. ,DESCRIPTOR

1000, 1034166.668, 647977.842, 1863.130, PANEL
1001, 1034170.290, 646300.454, 1852.435, PANEL
1002, 1033398.326, 645626.229, 1845.030, PANEL
1003, 1032372.999, 643614.792, 1826.310, PANEL
1004, 1031449.335, 644310.519, 1818.381, PANEL
1005, 1031504.152, 645526.540, 1842.274, PANEL
1006, 1030016.111, 641695.302, 1797.550, PANEL
1007, 1027527.368, 640444.191, 1768.544, PANEL
1008, 1027325.469, 641575.868, 1771.180, PANEL
1009, 1025512.152, 639075.259, 1750.010, PANEL
1010, 1023342.740, 637664.207, 1726.823, PANEL
1011, 1023382.839, 638962.203, 1726.485, PANEL
1012, 1020444.581, 638064.356, 1703.057, PANEL
1013, 1018044.658, 636159.049, 1677.198, PANEL
1014, 1018047.040, 639131.716, 1702.664, PANEL
1015, 1015293.718, 637436.514, 1653.470, PANEL
1016, 1012491.224, 636522.816, 1624.694, PANEL
1017, 1012657.509, 638363.896, 1629.332, PANEL
1018, 1009741.558, 637233.898, 1605.041, PANEL
1019, 1007293.197, 636311.336, 1584.745, PANEL
1020, 1007367.262, 637816.701, 1584.970, PANEL
1021, 1004794.813, 637119.340, 1562.229, PANEL
1022, 1002061.229, 636319.050, 1544.234, PANEL
1023, 1002183.990, 639070.207, 1543.122, PANEL
1024, 998924.225, 639697.535, 1516.185, PANEL
1025, 999152.319, 636644.683, 1521.043, PANEL

2000, 1060916.439, 649838.146, 2169.250, PANEL
2001, 1060367.763, 648050.713, 2150.465, PANEL
2002, 1059310.149, 644409.991, 2207.230, PANEL
2003, 1057649.984, 647282.513, 2117.594, PANEL
2004, 1057607.133, 649505.819, 2104.453, PANEL
2005, 1055603.238, 644469.509, 2212.410, PANEL
2006, 1055245.037, 649351.690, 2100.519, PANEL
2007, 1055122.488, 651104.757, 2088.744, PANEL
2008, 1052455.436, 651178.347, 2045.240, PANEL
2009, 1049944.611, 650963.888, 2045.467, PANEL
2010, 1050016.708, 649622.893, 2037.144, PANEL
2011, 1047334.413, 649630.180, 2000.784, PANEL
2012, 1044684.252, 650920.210, 1989.650, PANEL
2013, 1044698.829, 649729.520, 1966.527, PANEL
2014, 1044730.518, 648283.376, 2008.183, PANEL
1011A, 1023328.467, 639146.438, 1732.252, EXTRA PANEL

MAPPING VERIFICATION COORDINATES

Collins / Piña
Consulting Engineers, Inc.

VERIFICATION CROSS SECTIONS FOR MAPPING ACCURACY

PT# NORTHING EASTING ELEV. DESC.

3000, 1002194.333, 639265.651, 1542.4, G
3001, 1002217.811, 639101.986, 1542.9, G
3002, 1002218.000, 638827.490, 1542.5, G
3003, 1002214.104, 638453.851, 1538.8, G
3004, 1002216.327, 638169.226, 1539.4, G
3005, 1002214.868, 637836.025, 1542.1, G
3006, 1002213.697, 637663.847, 1537.7, G
3007, 1002213.819, 637618.959, 1534.2, G
3008, 1002211.351, 637580.773, 1537.7, G
3009, 1002210.588, 637472.904, 1539.8, G
3010, 1002206.383, 637439.277, 1533.6, G
3011, 1002209.185, 637402.630, 1539.0, G
3012, 1002208.666, 637261.945, 1540.1, G
3013, 1002208.303, 637215.925, 1536.3, G
3014, 1002209.939, 637116.765, 1540.9, G
3015, 1002208.734, 637066.659, 1534.5, G
3016, 1002207.649, 637036.004, 1539.6, G
3017, 1002207.595, 636966.904, 1542.0, G
3018, 1002209.292, 636719.015, 1544.1, G
3019, 1002206.351, 636448.005, 1545.0, G
3021, 1002205.294, 636391.443, 1544.6, G

3022, 1007334.198, 638311.197, 1583.9, G
3023, 1007340.670, 638116.201, 1584.6, G
3024, 1007357.467, 637902.521, 1584.7, G
3025, 1007378.158, 637715.109, 1584.8, G
3026, 1007443.806, 637349.115, 1584.5, G
3027, 1007471.017, 637226.767, 1586.5, G
3028, 1007453.172, 637158.125, 1581.9, G
3029, 1007482.789, 637072.437, 1583.2, G
3030, 1007387.891, 636772.612, 1588.0, G
3031, 1007362.722, 636614.630, 1586.3, G
3032, 1007310.395, 636409.253, 1584.0, G
3033, 1007302.301, 636181.031, 1585.0, G
3034, 1007295.909, 635971.623, 1585.0, G
3035, 1007335.699, 636734.332, 1581.2, G
3036, 1007340.040, 636757.789, 1578.1, G
3037, 1007383.049, 636838.962, 1578.4, G
3038, 1007395.294, 636934.265, 1578.0, G
3039, 1007441.214, 637151.668, 1582.0, G

3040, 1012642.690, 638648.116, 1628.9, G
3041, 1012644.967, 638457.715, 1630.0, G
3042, 1012657.776, 638134.400, 1629.5, G
3043, 1012663.178, 637881.639, 1626.8, G
3044, 1012634.368, 637579.078, 1628.2, G
3045, 1012577.026, 637271.036, 1630.9, G
3046, 1012543.127, 636963.940, 1628.0, G
3047, 1012533.673, 636830.241, 1624.9, G
3048, 1012503.897, 636683.071, 1618.9, G
3049, 1012491.801, 636537.860, 1624.2, G
3050, 1012493.312, 636438.939, 1624.2, G
3051, 1012473.456, 636372.355, 1620.7, G
3052, 1012421.640, 636249.313, 1616.3, G
3053, 1012408.336, 636174.861, 1627.0, G

3054, 1018062.329, 635914.404, 1679.8, G
3055, 1018064.133, 636157.153, 1679.0, G
3056, 1018063.044, 636549.182, 1681.6, G
3057, 1018026.414, 636791.295, 1670.6, G
3058, 1018072.134, 637481.240, 1683.3, G
3059, 1018070.724, 637732.193, 1683.4, G
3060, 1018073.122, 638154.356, 1689.1, G
3061, 1018078.051, 638646.168, 1695.7, G
3062, 1018077.037, 639137.583, 1703.0, G
3063, 1018080.425, 639459.744, 1707.3, G

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3065, 1023375.275, 639161.777, 1730.5, G
3066, 1023376.669, 639090.569, 1726.9, G
3067, 1023371.317, 639049.121, 1728.5, G
3068, 1023366.390, 639002.613, 1722.3, G
3069, 1023377.769, 638922.039, 1728.0, G
3070, 1023373.571, 638852.461, 1730.7, G
3071, 1023375.468, 638706.776, 1729.9, G
3072, 1023374.211, 638485.437, 1723.1, G
3073, 1023373.946, 638452.044, 1726.2, G
3074, 1023396.729, 638312.685, 1729.1, EP STRIPE
3075, 1023364.105, 638143.125, 1729.0, EP STRIPE
3076, 1023356.127, 637938.496, 1727.8, EP STRIPE
3077, 1023353.337, 637663.776, 1727.3, EP STRIPE
3078, 1023349.901, 637408.940, 1728.9, EP STRIPE

3079, 1034158.862, 648182.061, 1869.7, EP
3080, 1034158.666, 647995.670, 1863.7, EP
3081, 1034158.666, 647995.682, 1863.8, EP

3082, 1034159.135, 647523.520, 1856.6, EP
3084, 1034160.094, 647362.326, 1852.6, EP
3085, 1034162.593, 646928.717, 1852.4, EP
3086, 1034159.764, 646735.343, 1846.0, PVMT
3087, 1034162.034, 646507.942, 1850.7, EP
3088, 1034161.226, 646131.406, 1856.6, EP
3089, 1034161.929, 645953.582, 1858.2, EP

3092, 1028715.424, 642849.186, 1806.5, G
3093, 1028724.822, 642696.928, 1803.5, G
3094, 1028711.990, 642462.247, 1786.4, G
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3096, 1028711.715, 641988.951, 1781.0, G
3097, 1028719.510, 641668.026, 1774.1, FLOWLINE
3099, 1028727.648, 641410.116, 1783.3, G
3100, 1028730.349, 641167.574, 1781.4, G
3101, 1028728.471, 640863.037, 1780.1, G

3102, 1044708.174, 650921.966, 1984.9, G
3103, 1044707.707, 650657.632, 1985.5, G
3104, 1044709.276, 650409.132, 1974.7, G
3105, 1044712.670, 650135.747, 1972.2, G
3106, 1044716.794, 649729.406, 1967.5, G
3107, 1044754.097, 649550.266, 1965.9, EP
3108, 1044752.018, 649243.350, 1966.0, G
3109, 1044742.522, 649101.777, 1957.1, FL
3110, 1044737.400, 648863.223, 1967.9, G
3111, 1044728.844, 648677.606, 1980.2, G
3112, 1044724.172, 648552.079, 1991.0, G
3113, 1044717.941, 648284.523, 2007.8, G

3115, 1049349.623, 650822.903, 2029.9, G
3116, 1049351.436, 650610.576, 2030.6, G
3117, 1049356.555, 650334.114, 2024.8, G
3118, 1049366.230, 650092.599, 2016.3, G
3119, 1049371.730, 650000.399, 2012.0, G
3120, 1049370.178, 649833.777, 2014.2, G
3121, 1049363.697, 649707.501, 2006.8, FL
3122, 1049360.486, 649614.121, 2012.2, G
3123, 1049367.654, 649438.882, 2021.5, G
3124, 1049378.734, 649279.938, 2039.5, G

3125, 1054913.500, 651162.314, 2088.7, G
3126, 1054911.569, 651136.377, 2087.2, EP
3127, 1054907.373, 651108.780, 2086.7, EP

Section 3

RAW GPS DATA

Collins/Piña
Consulting Engineers, Inc.

```
SC        V03     (C) Copyright Trimble Navigation Ltd, 1991.
            Serial no 0000        Dec-19-95 12:41
            Angle : Degrees       Dist : Feet            Press : Inch Hg
            Temp : Fahrenht       Coord : N-E-Elv        H.obs : Right

JOB         Job ID SKUNK CREEK

NOTE   TS   Jan-14-80 12:57

NOTE        MONTGOMERY WATSON

NOTE        Dist units: International Feet

NOTE   BA   Start base

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TS   Jan-14-80 13:33

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height  4.530              Measuremt Uncorrected

GPSREF BA   Point ID    1023    Lat  33-45'17.20674"N Lng  112-07'01.83997"W
            Mthd Autonomous      Elv  1312.953

NOTE   TS   Jan-14-80 13:44

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

NOTE        Dist units: International feet

GPSANT SI   Antenna height  4.530              Measuremt True vertical

GPSREF SI   Point ID    1023    Lat  33-45'17.20674"N Lng  112-07'01.83997"W
            Mthd Autonomous      Elv  1312.996

GPSANT TP   Antenna height 6.400               Measuremt Uncorrected
```

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GPSVEC TP   Point ID     1024    Lat  33-44'44.96770"N Lng  112-06'54.33530"W
                                 Elv  1288.024         Code <No text>
            Mthd Phase differntl H.Pr 0.025            V.Pr 0.042

NOTE   TS   Jan-14-80 14:05

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 6.400              Measuremt Uncorrected

GPSVEC TP   Point ID     4000    Lat  33-43'32.66512"N Lng  112-07'08.68616"W
                                 Elv  1240.307         Code SKUNK
            Mthd Phase differntl H.Pr 0.025            V.Pr 0.039

NOTE   TS   Jan-14-80 14:24

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TS   Jan-14-80 14:37

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TS   Jan-14-80 15:27

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 6.400              Measuremt Uncorrected

GPSVEC TP   Point ID     1022    Lat  33-45'15.93806"N Lng  112-07'34.42307"W
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                                Elv  1316.086          Code <No text>
          Mthd Phase differntl H.Pr 0.035             V.Pr 0.047

 )TE   TS   Jan-14-80 15:39

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 6.400               Measuremt Uncorrected

GPSVEC TP   Point ID     1025    Lat  33-44'47.16481"N Lng  112-07'30.49648"W
                                 Elv  1292.790         Code <No text>
            Mthd Phase differntl H.Pr 0.027             V.Pr 0.043

NOTE   TS   Jan-14-80 16:15

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

 JRVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     3000    Lat  33-45'17.31283"N Lng  112-06'59.52528"W
                                 Elv  1312.682         Code <No text>
            Mthd Phase differntl H.Pr 0.028             V.Pr 0.057

GPSVEC TP   Point ID     3001    Lat  33-45'17.54197"N Lng  112-07'01.46435"W
                                 Elv  1313.197         Code G
            Mthd Phase differntl H.Pr 0.019             V.Pr 0.039

GPSVEC TP   Point ID     3002    Lat  33-45'17.53855"N Lng  112-07'04.71562"W
                                 Elv  1312.720         Code G
            Mthd Phase differntl H.Pr 0.029             V.Pr 0.058

GPSVEC TP   Point ID     3003    Lat  33-45'17.49276"N Lng  112-07'09.14110"W
                                 Elv  1309.028         Code G
            Mthd Phase differntl H.Pr 0.020             V.Pr 0.042

GPSVEC TP   Point ID     3004    Lat  33-45'17.50921"N Lng  112-07'12.51239"W
                                 Elv  1309.646         Code G
            Mthd Phase differntl H.Pr 0.022             V.Pr 0.045

 PSVEC TP   Point ID     3005    Lat  33-45'17.48826"N Lng  112-07'16.45896"W
                                 Elv  1312.326         Code G
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            Mthd Phase differntl H.Pr 0.024            V.Pr 0.049

NOTE   TS   Jan-14-80 16:26

GPSVEC TP   Point ID     3006    Lat  33-45'17.47328"N Lng  112-07'18.49829"W
                                 Elv  1307.909         Code G
            Mthd Phase differntl H.Pr 0.024            V.Pr 0.050

GPSVEC TP   Point ID     3007    Lat  33-45'17.47361"N Lng  112-07'19.02997"W
                                 Elv  1304.384         Code G
            Mthd Phase differntl H.Pr 0.026            V.Pr 0.054

GPSVEC TP   Point ID     3008    Lat  33-45'17.44844"N Lng  112-07'19.48220"W
                                 Elv  1307.937         Code G
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.056

GPSVEC TP   Point ID     3009    Lat  33-45'17.43876"N Lng  112-07'20.75984"W
                                 Elv  1309.980         Code G
            Mthd Phase differntl H.Pr 0.029            V.Pr 0.061

GPSVEC TP   Point ID     3010    Lat  33-45'17.39650"N Lng  112-07'21.15804"W
                                 Elv  1303.775         Code G
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.038

GPSVEC TP   Point ID     3011    Lat  33-45'17.42350"N Lng  112-07'21.59216"W
                                 Elv  1309.211         Code G
            Mthd Phase differntl H.Pr 0.021            V.Pr 0.044

GPSVEC TP   Point ID     3012    Lat  33-45'17.41558"N Lng  112-07'23.25850"W
                                 Elv  1310.293         Code G
            Mthd Phase differntl H.Pr 0.012            V.Pr 0.037

GPSVEC TP   Point ID     3013    Lat  33-45'17.41108"N Lng  112-07'23.80357"W
                                 Elv  1306.531         Code G
            Mthd Phase differntl H.Pr 0.019            V.Pr 0.040

GPSVEC TP   Point ID     3014    Lat  33-45'17.42530"N Lng  112-07'24.97811"W
                                 Elv  1311.107         Code G
            Mthd Phase differntl H.Pr 0.029            V.Pr 0.061

GPSVEC TP   Point ID     3015    Lat  33-45'17.41237"N Lng  112-07'25.57157"W
                                 Elv  1304.698         Code G
            Mthd Phase differntl H.Pr 0.026            V.Pr 0.054

GPSVEC TP   Point ID     3016    Lat  33-45'17.40103"N Lng  112-07'25.93463"W
                                 Elv  1309.778         Code G
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.062

GPSVEC TP   Point ID     3017    Lat  33-45'17.39912"N Lng  112-07'26.75309"W
                                 Elv  1312.193         Code G
            Mthd Phase differntl H.Pr 0.015            V.Pr 0.031

GPSVEC TP   Point ID     3018    Lat  33-45'17.41097"N Lng  112-07'29.68925"W
                                 Elv  1314.274         Code G
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.064

NOTE   TS   Jan-14-80 16:36
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GPSVEC TP   Point ID     3019    Lat  33-45'17.37644"N Lng  112-07'32.89915"W
                                 Elv  1315.143         Code G
            Mthd Phase differntl H.Pr 0.016            V.Pr 0.054

GPSVEC TP   Point ID     3020    Lat  33-45'17.03236"N Lng  112-07'32.87161"W
                                 Elv  1314.155         Code 614360 ROW
            Mthd Phase differntl H.Pr 0.015            V.Pr 0.049

GPSVEC TP   Point ID     3021    Lat  33-45'17.36485"N Lng  112-07'33.56908"W
                                 Elv  1314.769         Code G
            Mthd Phase differntl H.Pr 0.012            V.Pr 0.040

NOTE   SI   Init lost

NOTE   TS   Jan-14-80 16:58

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

 PSVEC TP   Point ID     4001    Lat  33-45'43.38709"N Lng  112-07'02.13280"W
                                 Elv  1333.099         Code QUARTER SEC 24
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.050

NOTE   TS   Jan-14-80 17:09

GPSVEC TP   Point ID     1021    Lat  33-45'42.99919"N Lng  112-07'25.00907"W
                                 Elv  1332.516         Code <No text>
            Mthd Phase differntl H.Pr 0.016            V.Pr 0.038

NOTE   TS   Jan-14-80 17:34

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     3022    Lat  33-46'08.14642"N Lng  112-07'10.95020"W
                                 Elv  1354.321         Code G
            Mthd Phase differntl H.Pr 0.032            V.Pr 0.045
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GPSVEC TP   Point ID     3023    Lat  33-46'08.20664"N Lng  112-07'13.26036"W
                                 Elv  1355.008         Code G
            Mthd Phase differntl H.Pr 0.040            V.Pr 0.055

GPSVEC TP   Point ID     3024    Lat  33-46'08.36864"N Lng  112-07'15.79210"W
                                 Elv  1355.162         Code G
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.039

GPSVEC TP   Point ID     1020    Lat  33-46'08.46386"N Lng  112-07'16.80899"W
                                 Elv  1355.384         Code G
            Mthd Phase differntl H.Pr 0.036            V.Pr 0.050

GPSVEC TP   Point ID     3025    Lat  33-46'08.56967"N Lng  112-07'18.01276"W
                                 Elv  1355.164         Code G
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.042

NOTE   TS   Jan-14-80 17:44

GPSVEC TP   Point ID     3026    Lat  33-46'09.21194"N Lng  112-07'22.35004"W
                                 Elv  1354.869         Code G
            Mthd Phase differntl H.Pr 0.042            V.Pr 0.045

GPSVEC TP   Point ID     3027    Lat  33-46'09.47874"N Lng  112-07'23.80008"W
                                 Elv  1356.935         Code G
            Mthd Phase differntl H.Pr 0.049            V.Pr 0.053

GPSVEC TP   Point ID     3028    Lat  33-46'09.30083"N Lng  112-07'24.61282"W
                                 Elv  1352.322         Code G
            Mthd Phase differntl H.Pr 0.049            V.Pr 0.053

GPSVEC TP   Point ID     3029    Lat  33-46'09.59214"N Lng  112-07'25.62863"W
                                 Elv  1353.564         Code G
            Mthd Phase differntl H.Pr 0.047            V.Pr 0.050

NOTE   TS   Jan-14-80 17:59

NOTE   SI   Init lost

NOTE   SI   Init gained:  On the fly

GPSVEC TP   Point ID     3030    Lat  33-46'08.64728"N Lng  112-07'29.17823"W
                                 Elv  1358.341         Code G
            Mthd Phase differntl H.Pr 0.045            V.Pr 0.050

GPSVEC TP   Point ID     3031    Lat  33-46'08.39510"N Lng  112-07'31.04915"W
                                 Elv  1356.657         Code G
            Mthd Phase differntl H.Pr 0.042            V.Pr 0.047

GPSVEC TP   Point ID     3032    Lat  33-46'07.87328"N Lng  112-07'33.48088"W
                                 Elv  1354.345         Code G
            Mthd Phase differntl H.Pr 0.049            V.Pr 0.054

GPSVEC TP   Point ID     1019    Lat  33-46'07.70117"N Lng  112-07'34.64044"W
                                 Elv  1355.106         Code G
            Mthd Phase differntl H.Pr 0.045            V.Pr 0.050

GPSVEC TP   Point ID     3033    Lat  33-46'07.78861"N Lng  112-07'36.18430"W
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                                Elv  1355.326          Code G
            Mthd Phase differntl H.Pr 0.034            V.Pr 0.039

 ›TE    TS   Jan-14-80 18:10

GPSVEC TP   Point ID     3034    Lat  33-46'07.72115"N Lng  112-07'38.66488"W
                                 Elv  1355.347         Code G
            Mthd Phase differntl H.Pr 0.042            V.Pr 0.047

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     3035    Lat  33-46'08.13014"N Lng  112-07'29.63046"W
                                 Elv  1351.601         Code G
            Mthd Phase differntl H.Pr 0.040            V.Pr 0.058

GPSVEC TP   Point ID     3036    Lat  33-46'08.17356"N Lng  112-07'29.35268"W
                                 Elv  1348.487         Code G
            Mthd Phase differntl H.Pr 0.038            V.Pr 0.056

 ›TE    TS   Jan-14-80 18:20

GPSVEC TP   Point ID     3037    Lat  33-46'08.60070"N Lng  112-07'28.39210"W
                                 Elv  1348.815         Code G
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.045

GPSVEC TP   Point ID     3038    Lat  33-46'08.72375"N Lng  112-07'27.26339"W
                                 Elv  1348.336         Code G
            Mthd Phase differntl H.Pr 0.041            V.Pr 0.061

GPSVEC TP   Point ID     3039    Lat  33-46'09.18239"N Lng  112-07'24.68903"W
                                 Elv  1352.349         Code G
            Mthd Phase differntl H.Pr 0.040            V.Pr 0.061

NOTE   TS   Jan-14-80 18:43

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

 ›SANT TP   Antenna height 4.700              Measuremt Uncorrected
```

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GPSVEC TP   Point ID     1018    Lat  33-46'31.94278"N Lng  112-07'23.76952"W
                                 Elv  1375.530         Code <No text>
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.056

NOTE   TS   Jan-14-80 19:01

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     3040    Lat  33-47'00.67322"N Lng  112-07'07.08215"W
                                 Elv  1399.565         Code G
            Mthd Phase differntl H.Pr 0.032            V.Pr 0.056

GPSVEC TP   Point ID     3041    Lat  33-47'00.69205"N Lng  112-07'09.33816"W
                                 Elv  1400.662         Code G
            Mthd Phase differntl H.Pr 0.032            V.Pr 0.056

GPSVEC TP   Point ID     1017    Lat  33-47'00.81431"N Lng  112-07'10.45006"W
                                 Elv  1399.975         Code <No text>
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.048

GPSVEC TP   Point ID     3042    Lat  33-47'00.81247"N Lng  112-07'13.16924"W
                                 Elv  1400.085         Code G
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.048

GPSVEC TP   Point ID     3043    Lat  33-47'00.86096"N Lng  112-07'16.16419"W
                                 Elv  1397.448         Code G
            Mthd Phase differntl H.Pr 0.034            V.Pr 0.061

GPSVEC TP   Point ID     3044    Lat  33-47'00.56998"N Lng  112-07'19.74839"W
                                 Elv  1398.831         Code G
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.054

GPSVEC TP   Point ID     3045    Lat  33-46'59.99657"N Lng  112-07'23.39684"W
                                 Elv  1401.489         Code G
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.051

NOTE   TS   Jan-14-80 19:12

GPSVEC TP   Point ID     3046    Lat  33-46'59.65507"N Lng  112-07'27.03464"W
                                 Elv  1398.543         Code G
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.056

GPSVEC TP   Point ID     3047    Lat  33-46'59.55888"N Lng  112-07'28.61854"W
                                 Elv  1395.484         Code G
            Mthd Phase differntl H.Pr 0.033            V.Pr 0.062

GPSVEC TP   Point ID     3048    Lat  33-46'59.26134"N Lng  112-07'30.36155"W
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                                    Elv  1389.476          Code G
            Mthd Phase differntl H.Pr 0.033             V.Pr 0.062

 PSVEC TP   Point ID     3049     Lat  33-46'59.13876"N Lng  112-07'32.08177"W
                                    Elv  1394.735          Code G
            Mthd Phase differntl H.Pr 0.025             V.Pr 0.048

GPSVEC TP   Point ID     1016     Lat  33-46'59.13275"N Lng  112-07'32.26001"W
                                    Elv  1395.269          Code <No text>
            Mthd Phase differntl H.Pr 0.025             V.Pr 0.047

GPSVEC TP   Point ID     3050     Lat  33-46'59.15172"N Lng  112-07'33.25386"W
                                    Elv  1394.732          Code G
            Mthd Phase differntl H.Pr 0.029             V.Pr 0.055

GPSVEC TP   Point ID     3051     Lat  33-46'58.95394"N Lng  112-07'34.04230"W
                                    Elv  1391.265          Code G
            Mthd Phase differntl H.Pr 0.024             V.Pr 0.045

GPSVEC TP   Point ID     3052     Lat  33-46'58.43881"N Lng  112-07'35.49889"W
                                    Elv  1386.841          Code G
            Mthd Phase differntl H.Pr 0.027             V.Pr 0.051

GPSVEC TP   Point ID     3053     Lat  33-46'58.30568"N Lng  112-07'36.38071"W
                                    Elv  1397.529          Code G
            Mthd Phase differntl H.Pr 0.033             V.Pr 0.062

NOTE   TS   Jan-14-80 19:49

 TE    TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     1015     Lat  33-47'26.87773"N Lng  112-07'21.50054"W
                                    Elv  1424.187          Code <No text>
            Mthd Phase differntl H.Pr 0.020             V.Pr 0.032

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

 PSANT TP   Antenna height 4.700              Measuremt Uncorrected
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GPSVEC TP   Point ID    1015A    Lat  33-47'26.87777"N Lng  112-07'21.50062"W
                                 Elv  1424.213         Code <No text>
            Mthd Phase differntl H.Pr 0.026            V.Pr 0.040

NOTE   TS   Jan-15-80 10:36

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 4.710               Measuremt Uncorrected

GPSREF BA   Point ID    1015A    Lat  33-47'26.87777"N Lng  112-07'21.50062"W
            Mthd Autonomous      Elv  1423.978

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   BA   Start base

NOTE   TS   Jan-15-80 10:46

QUIP   BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

NOTE   TS   Jan-15-80 10:57

GPSANT SI   Antenna height 4.669               Measuremt True vertical

GPSREF SI   Point ID    1015A    Lat  33-47'26.87777"N Lng  112-07'21.50062"W
            Mthd Autonomous      Elv  1423.976

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID    1017A    Lat  33-47'00.81438"N Lng  112-07'10.44966"W
                                 Elv  1399.972         Code <No text>
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.031

NOTE   TS   Jan-15-80 11:11
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NOTE   TP   Start rover

 QUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID     4002    Lat  33-47'04.39782"N Lng  112-07'58.59264"W
                                 Elv  1405.174         Code CAL BASE A
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.033

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

  SVEC TP   Point ID     4003    Lat  33-46'59.60392"N Lng  112-07'57.58136"W
                                 Elv  1401.895         Code CAL BASE B
            Mthd Phase differntl H.Pr 0.022            V.Pr 0.034

NOTE   TS   Jan-15-80 11:26

GPSVEC TP   Point ID     4004    Lat  33-46'59.60392"N Lng  112-07'57.58126"W
                                 Elv  1401.873         Code CAL BASE B
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.043

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID     4005    Lat  33-46'38.82860"N Lng  112-07'53.20092"W
                                 Elv  1384.503         Code CAL BASE C
            Mthd Phase differntl H.Pr 0.023            V.Pr 0.038

  TE   TS   Jan-15-80 11:53
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NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     1013    Lat  33-47'54.06889"N Lng  112-07'36.70432"W
                                 Elv  1447.983         Code <No text>
            Mthd Phase differntl H.Pr 0.019            V.Pr 0.035

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     1014    Lat  33-47'54.15108"N Lng  112-07'01.47680"W
                                 Elv  1473.548         Code <No text>
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.051

NOTE   TS   Jan-15-80 12:18

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     1012    Lat  33-48'17.85064"N Lng  112-07'14.18182"W
                                 Elv  1474.001         Code <No text>
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.034

NOTE   TS   Jan-15-80 12:46

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000
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SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID     1010    Lat  33-48'46.51592"N Lng  112-07'18.99260"W
                                 Elv  1497.869         Code <No text>
            Mthd Phase differntl H.Pr 0.024            V.Pr 0.039

GPSVEC TP   Point ID    1010A    Lat  33-48'46.51592"N Lng  112-07'18.99264"W
                                 Elv  1497.874         Code <No text>
            Mthd Phase differntl H.Pr 0.029            V.Pr 0.046

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

 RVEY TP    Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

NOTE   TS   Jan-15-80 12:57

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID       21    Lat  33-48'46.49134"N Lng  112-07'50.32574"W
                                 Elv  1490.202         Code CLOUD-33RD
            Mthd Phase differntl H.Pr 0.036            V.Pr 0.057

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   TS   Jan-15-80 13:07

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

  SVEC TP   Point ID     3054    Lat  33-47'54.23878"N Lng  112-07'39.60390"W
                                 Elv  1450.553         Code <No text>
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            Mthd Phase differntl H.Pr 0.039            V.Pr 0.064

GPSVEC TP   Point ID     3055    Lat  33-47'54.26153"N Lng  112-07'36.72725"W
                                 Elv  1449.745         Code G
            Mthd Phase differntl H.Pr 0.031            V.Pr 0.052

GPSVEC TP   Point ID     3056    Lat  33-47'54.25865"N Lng  112-07'32.08148"W
                                 Elv  1452.377         Code G
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.050

GPSVEC TP   Point ID     3057    Lat  33-47'53.90110"N Lng  112-07'29.21146"W
                                 Elv  1441.414         Code G
            Mthd Phase differntl H.Pr 0.036            V.Pr 0.059

GPSVEC TP   Point ID     3058    Lat  33-47'54.36715"N Lng  112-07'21.03636"W
                                 Elv  1454.162         Code G
            Mthd Phase differntl H.Pr 0.038            V.Pr 0.062

NOTE   TS   Jan-15-80 13:17

GPSVEC TP   Point ID     3059    Lat  33-47'54.35815"N Lng  112-07'18.06240"W
                                 Elv  1454.280         Code G
            Mthd Phase differntl H.Pr 0.025            V.Pr 0.041

GPSVEC TP   Point ID     3060    Lat  33-47'54.39016"N Lng  112-07'13.05962"W
                                 Elv  1459.905         Code G
            Mthd Phase differntl H.Pr 0.035            V.Pr 0.057

GPSVEC TP   Point ID     3061    Lat  33-47'54.44851"N Lng  112-07'07.23151"W
                                 Elv  1466.608         Code G
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.050

GPSVEC TP   Point ID     3062    Lat  33-47'54.44797"N Lng  112-07'01.40797"W
                                 Elv  1473.861         Code G
            Mthd Phase differntl H.Pr 0.038            V.Pr 0.063

GPSVEC TP   Point ID     3063    Lat  33-47'54.48768"N Lng  112-06'57.59028"W
                                 Elv  1478.178         Code G
            Mthd Phase differntl H.Pr 0.031            V.Pr 0.053

NOTE   TS   Jan-15-80 14:25

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 5.000               Measuremt Uncorrected

GPSREF BA   Point ID    1010A    Lat  33-48'46.51592"N Lng  112-07'18.99264"W
            Mthd Autonomous      Elv  1497.933

NOTE   TP   Start rover

 QUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
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            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

.OTE   TS   Jan-15-80 15:02

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT SI   Antenna height 4.964               Measuremt True vertical

GPSREF SI   Point ID    1010A    Lat  33-48'46.51592"N Lng  112-07'18.99264"W
            Mthd Autonomous      Elv  1497.933

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     4006    Lat  33-48'46.92420"N Lng  112-07'04.77671"W
                                 Elv  1502.709         Code GLO SEC2 SEC1
            Mthd Phase differntl H.Pr 0.039            V.Pr 0.044

GPSVEC TP   Point ID     1011    Lat  33-48'46.93799"N Lng  112-07'03.60905"W
                                 Elv  1497.576         Code <No text>
            Mthd Phase differntl H.Pr 0.040            V.Pr 0.046

NOTE   SI   Init lost

NOTE   TS   Jan-15-80 15:12

NOTE   SI   Init gained:  On the fly

GPSVEC TP   Point ID     3064    Lat  33-48'46.73563"N Lng  112-07'00.74597"W
                                 Elv  1512.955         Code G
            Mthd Phase differntl H.Pr 0.042            V.Pr 0.051

GPSVEC TP   Point ID     3065    Lat  33-48'46.86700"N Lng  112-07'01.24342"W
                                 Elv  1501.604         Code G
            Mthd Phase differntl H.Pr 0.025            V.Pr 0.030

GPSVEC TP   Point ID     3066    Lat  33-48'46.87942"N Lng  112-07'02.08744"W
                                 Elv  1497.970         Code G
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.034

GPSVEC TP   Point ID     3067    Lat  33-48'46.82567"N Lng  112-07'02.57858"W
                                 Elv  1499.589         Code G
            Mthd Phase differntl H.Pr 0.044            V.Pr 0.054

GPSVEC TP   Point ID     3068    Lat  33-48'46.77602"N Lng  112-07'03.12971"W
                                 Elv  1493.436         Code G
            Mthd Phase differntl H.Pr 0.039            V.Pr 0.048
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GPSVEC TP   Point ID     3069    Lat  33-48'46.88705"N Lng  112-07'04.08497"W
                                 Elv  1499.065         Code G
            Mthd Phase differntl H.Pr 0.034            V.Pr 0.042

GPSVEC TP   Point ID     3070    Lat  33-48'46.84417"N Lng  112-07'04.90955"W
                                 Elv  1501.754         Code G
            Mthd Phase differntl H.Pr 0.046            V.Pr 0.059

GPSVEC TP   Point ID     3071    Lat  33-48'46.86012"N Lng  112-07'06.63632"W
                                 Elv  1500.976         Code G
            Mthd Phase differntl H.Pr 0.036            V.Pr 0.045

GPSVEC TP   Point ID     3072    Lat  33-48'46.84338"N Lng  112-07'09.25972"W
                                 Elv  1494.172         Code G
            Mthd Phase differntl H.Pr 0.022            V.Pr 0.027

GPSVEC TP   Point ID     3073    Lat  33-48'46.84010"N Lng  112-07'09.65550"W
                                 Elv  1497.231         Code G
            Mthd Phase differntl H.Pr 0.037            V.Pr 0.049

GPSVEC TP   Point ID     3074    Lat  33-48'47.06280"N Lng  112-07'11.30779"W
                                 Elv  1500.124         Code EP STRIPE
            Mthd Phase differntl H.Pr 0.034            V.Pr 0.044

GPSVEC TP   Point ID     3075    Lat  33-48'46.73671"N Lng  112-07'13.31674"W
                                 Elv  1500.043         Code EP STRIPE
            Mthd Phase differntl H.Pr 0.041            V.Pr 0.053

GPSVEC TP   Point ID     4007    Lat  33-48'46.84255"N Lng  112-07'13.30874"W
                                 Elv  1499.976         Code TP 25 MCDOT
            Mthd Phase differntl H.Pr 0.041            V.Pr 0.053

NOTE   TS   Jan-15-80 15:23

GPSVEC TP   Point ID     3076    Lat  33-48'46.65377"N Lng  112-07'15.74191"W
                                 Elv  1498.888         Code EP STRIPE
            Mthd Phase differntl H.Pr 0.029            V.Pr 0.038

GPSVEC TP   Point ID     3077    Lat  33-48'46.62076"N Lng  112-07'18.99797"W
                                 Elv  1498.355         Code EP STRIPE
            Mthd Phase differntl H.Pr 0.039            V.Pr 0.052

GPSVEC TP   Point ID     3078    Lat  33-48'46.58173"N Lng  112-07'22.01833"W
                                 Elv  1499.907         Code EP STRIPE
            Mthd Phase differntl H.Pr 0.043            V.Pr 0.058

NOTE   TS   Jan-15-80 15:35

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly
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GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID    1010B    Lat  33-48'46.40368"N Lng  112-07'01.42414"W
                                 Elv  1503.347         Code EXTRA PANEL
            Mthd Phase differntl H.Pr 0.036            V.Pr 0.057

GPSVEC TP   Point ID    1010C    Lat  33-48'46.40360"N Lng  112-07'01.42414"W
                                 Elv  1503.348         Code EXTRA PANEL
            Mthd Phase differntl H.Pr 0.034            V.Pr 0.056

NOTE   TS   Jan-15-80 15:47

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     1009    Lat  33-49'08.00666"N Lng  112-07'02.31823"W
                                 Elv  1521.190         Code <No text>
            Mthd Phase differntl H.Pr 0.032            V.Pr 0.052

NOTE   TS   Jan-15-80 16:01

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     1007    Lat  33-49'27.97043"N Lng  112-06'46.13735"W
                                 Elv  1539.850         Code <No text>
            Mthd Phase differntl H.Pr 0.029            V.Pr 0.054

NOTE   TS   Jan-15-80 16:22

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

URVEY TP    Elevation mask 13                  PDOP mask 6.000
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```
NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     1008    Lat  33-49'25.99406"N Lng  112-06'32.71788"W
                                 Elv  1542.516         Code <No text>
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.038

NOTE   TS   Jan-15-80 16:43

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     4008    Lat  33-49'39.91969"N Lng  112-06'00.72389"W
                                 Elv  1583.107         Code T6N R2ER3E SEC31
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.059

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000
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NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     1004    Lat  33-50'06.84316"N Lng  112-06'00.38840"W
                                 Elv  1589.972         Code <No text>
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.052

NOTE   TS   Jan-15-80 16:58

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                   Serial    00013199
            Antenna   Compact L1/L2             Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                   PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     1005    Lat  33-50'07.40670"N Lng  112-05'45.97289"W
                                 Elv  1613.907         Code <No text>
            Mthd Phase differntl H.Pr 0.024            V.Pr 0.062

NOTE   TP   Start rover

 QUIP  TP   Receiver  4000SSi                   Serial    00013199
            Antenna   Compact L1/L2             Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                   PDOP mask 6.000

NOTE   TS   Jan-15-80 17:08

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     1000    Lat  33-50'33.78977"N Lng  112-05'16.96376"W
                                 Elv  1634.951         Code <No text>
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.039

GPSVEC TP   Point ID     3079    Lat  33-50'33.71590"N Lng  112-05'14.54226"W
                                 Elv  1641.548         Code EP
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.051

GPSVEC TP   Point ID     3080    Lat  33-50'33.71089"N Lng  112-05'16.75223"W
                                 Elv  1635.567         Code EP
            Mthd Phase differntl H.Pr 0.023            V.Pr 0.042

NOTE   TS   Jan-15-80 17:18

 PSVEC TP   Point ID     3081    Lat  33-50'33.71089"N Lng  112-05'16.75208"W
                                 Elv  1635.582         Code EP
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            Mthd Phase differntl H.Pr 0.030            V.Pr 0.053

GPSVEC TP   Point ID     3082    Lat  33-50'33.70772"N Lng  112-05'22.35034"W
                                 Elv  1628.385         Code EP
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.047

GPSVEC TP   Point ID     3084    Lat  33-50'33.71453"N Lng  112-05'24.26158"W
                                 Elv  1624.436         Code EP
            Mthd Phase differntl H.Pr 0.041            V.Pr 0.063

GPSVEC TP   Point ID     3085    Lat  33-50'33.73199"N Lng  112-05'29.40277"W
                                 Elv  1624.202         Code EP
            Mthd Phase differntl H.Pr 0.031            V.Pr 0.047

GPSVEC TP   Point ID     3086    Lat  33-50'33.70074"N Lng  112-05'31.69547"W
                                 Elv  1617.791         Code PVMT
            Mthd Phase differntl H.Pr 0.038            V.Pr 0.051

GPSVEC TP   Point ID     3087    Lat  33-50'33.71935"N Lng  112-05'34.39172"W
                                 Elv  1622.426         Code EP
            Mthd Phase differntl H.Pr 0.038            V.Pr 0.059

GPSVEC TP   Point ID     3088    Lat  33-50'33.70495"N Lng  112-05'38.85616"W
                                 Elv  1628.408         Code EP
            Mthd Phase differntl H.Pr 0.047            V.Pr 0.053

GPSVEC TP   Point ID     3089    Lat  33-50'33.70888"N Lng  112-05'40.96457"W
                                 Elv  1629.985         Code EP
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.041

GPSVEC TP   Point ID     1001    Lat  33-50'33.79751"N Lng  112-05'36.85200"W
                                 Elv  1624.200         Code <No text>
            Mthd Phase differntl H.Pr 0.031            V.Pr 0.046

NOTE   TS   Jan-15-80 17:34

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TS   Jan-15-80 17:51

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected
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GPSVEC TP   Point ID     1002    Lat  33-50'26.14852"N Lng  112-05'44.83010"W
                                 Elv  1616.743         Code <No text>
            Mthd Phase differntl H.Pr 0.033            V.Pr 0.036

NOTE   TS   Jan-15-80 18:15

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

NOTE   SI   Init lost

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     1003    Lat  33-50'15.96912"N Lng  112-06'08.65642"W
                                 Elv  1597.915         Code <No text>
            Mthd Phase differntl H.Pr 0.026            V.Pr 0.042

NOTE   TS   Jan-15-80 18:36

 OTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     4010    Lat  33-49'39.91696"N Lng  112-07'03.19735"W
                                 Elv  1559.124         Code J RANCH 27 MCDOT
            Mthd Phase differntl H.Pr 0.030            V.Pr 0.055

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TS   Jan-15-80 18:48

 OTE   SI   Init gained:  On the fly
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GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     1006    Lat  33-49'52.61628"N Lng  112-06'31.36162"W
                                 Elv  1568.997         Code <No text>
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.043

NOTE   TS   Jan-16-80 11:36

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 5.250                Measuremt Uncorrected

GPSREF BA   Point ID     1001    Lat  33-50'33.79751"N Lng  112-05'36.85200"W
            Mthd Autonomous      Elv  1624.512

NOTE   TS   Jan-16-80 11:54

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                   PDOP mask 6.000

 )TE   SI   Init gained:  On the fly

GPSANT SI   Antenna height 5.217                Measuremt True vertical

GPSREF SI   Point ID     1001    Lat  33-50'33.79751"N Lng  112-05'36.85200"W
            Mthd Autonomous      Elv  1624.512

GPSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     5000    Lat  33-50'33.83038"N Lng  112-05'37.14472"W
                                 Elv  1624.765         Code BOGUS
            Mthd Phase differntl H.Pr 0.035            V.Pr 0.063

NOTE   TS   Jan-16-80 12:13

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                   PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

-PSANT TP   Antenna height 4.700                Measuremt Uncorrected

GPSVEC TP   Point ID     3092    Lat  33-49'39.76896"N Lng  112-06'17.65408"W
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                                    Elv  1577.964          Code G
            Mthd Phase differntl H.Pr 0.031             V.Pr 0.054

GPSVEC TP   Point ID     3093    Lat  33-49'39.85918"N Lng  112-06'19.45922"W
                                    Elv  1574.953          Code G
            Mthd Phase differntl H.Pr 0.035             V.Pr 0.059

GPSVEC TP   Point ID     3094    Lat  33-49'39.72796"N Lng  112-06'22.24098"W
                                    Elv  1557.803          Code G
            Mthd Phase differntl H.Pr 0.036             V.Pr 0.062

GPSVEC TP   Point ID     3095    Lat  33-49'39.84442"N Lng  112-06'24.85339"W
                                    Elv  1553.576          Code G
            Mthd Phase differntl H.Pr 0.038             V.Pr 0.063

NOTE   TS   Jan-16-80 12:24

GPSVEC TP   Point ID     3096    Lat  33-49'39.71658"N Lng  112-06'27.85169"W
                                    Elv  1552.439          Code G
            Mthd Phase differntl H.Pr 0.036             V.Pr 0.059

GPSVEC TP   Point ID     3097    Lat  33-49'39.78779"N Lng  112-06'31.65628"W
                                    Elv  1545.512          Code FLOWLINE
            Mthd Phase differntl H.Pr 0.022             V.Pr 0.036

GPSVEC TP   Point ID     3098    Lat  33-49'39.89928"N Lng  112-06'31.97671"W
                                    Elv  1551.742          Code QTR 25-36 1.25-
            Mthd Phase differntl H.Pr 0.037             V.Pr 0.059

GPSVEC TP   Point ID     3099    Lat  33-49'39.86353"N Lng  112-06'34.71386"W
                                    Elv  1554.696          Code G
            Mthd Phase differntl H.Pr 0.030             V.Pr 0.048

GPSVEC TP   Point ID     3100    Lat  33-49'39.88574"N Lng  112-06'37.58915"W
                                    Elv  1552.798          Code G
            Mthd Phase differntl H.Pr 0.038             V.Pr 0.060

NOTE   TS   Jan-16-80 12:36

GPSVEC TP   Point ID     3101    Lat  33-49'39.86148"N Lng  112-06'41.19926"W
                                    Elv  1551.445          Code G
            Mthd Phase differntl H.Pr 0.038             V.Pr 0.062

NOTE   TS   Jan-16-80 12:59

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
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                Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP       Elevation mask 13                 PDOP mask 6.000

NOTE   SI       Init gained:  On the fly

GPSANT TP       Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP       Point ID     1000A    Lat  33-50'33.79042"N Lng  112-05'16.96358"W
                                      Elv  1634.981         Code PANEL
                Mthd Phase differntl H.Pr 0.027            V.Pr 0.044

NOTE   TS       Jan-16-80 14:31

NOTE   TP       Start rover

EQUIP  TP       Receiver  4000SSi                 Serial    00013199
                Antenna   Compact L1/L2           Serial
                Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP       Elevation mask 13                 PDOP mask 6.000

NOTE   TS       Jan-16-80 14:42

NOTE   TP       Start rover

EQUIP  TP       Receiver  4000SSi                 Serial    00013199
                Antenna   Compact L1/L2           Serial
                Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP       Elevation mask 13                 PDOP mask 6.000

NOTE   SI       Init gained:  On the fly

NOTE   TS       Jan-16-80 14:53

GPSANT TP       Antenna height 8.200              Measuremt Uncorrected

GPSVEC TP       Point ID      2014    Lat  33-52'18.30842"N Lng  112-05'13.54873"W
                                      Elv  1783.936         Code PANEL
                Mthd Phase differntl H.Pr 0.046            V.Pr 0.050

NOTE   TP       Start rover

EQUIP  TP       Receiver  4000SSi                 Serial    00013199
                Antenna   Compact L1/L2           Serial
                Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP       Elevation mask 13                 PDOP mask 6.000

NOTE   TS       Jan-16-80 15:05

NOTE   SI       Init gained:  On the fly

GPSANT TP       Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP       Point ID      2013    Lat  33-52'18.01830"N Lng  112-04'56.39592"W
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                                Elv  1738.827          Code PANEL
          Mthd Phase differntl H.Pr 0.034             V.Pr 0.041

'OTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     2012    Lat  33-52'17.89284"N Lng  112-04'42.27330"W
                                Elv  1761.988          Code PANEL
            Mthd Phase differntl H.Pr 0.045             V.Pr 0.056

NOTE   TS   Jan-16-80 15:18

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

 )TE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     2011    Lat  33-52'44.09184"N Lng  112-04'57.62464"W
                                Elv  1773.185          Code PANEL
            Mthd Phase differntl H.Pr 0.045             V.Pr 0.059

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

 'SANT TP   Antenna height 4.700               Measuremt Uncorrected
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GPSVEC TP   Point ID     2009    Lat  33-53'09.93682"N Lng  112-04'41.85336"W
                                 Elv  1818.017         Code PANEL
            Mthd Phase differntl H.Pr 0.044            V.Pr 0.061

NOTE   TS   Jan-16-80 15:33

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 8.200              Measuremt Uncorrected

GPSVEC TP   Point ID     2010    Lat  33-53'10.62895"N Lng  112-04'57.76248"W
                                 Elv  1814.352         Code PANEL
            Mthd Phase differntl H.Pr 0.040            V.Pr 0.062

GPSVEC TP   Point ID    2010A    Lat  33-53'10.62956"N Lng  112-04'57.76273"W
                                 Elv  1814.364         Code PANEL
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.042

NOTE   TS   Jan-16-80 16:30

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TS   Jan-16-80 17:47

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                 Serial    00013200
            Antenna   Compact L1/L2 w G/P     Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 5.230              Measuremt Uncorrected

GPSREF BA   Point ID     2009    Lat  33-53'09.93682"N Lng  112-04'41.85336"W
            Mthd Autonomous      Elv  1818.308         Code PANEL

NOTE   TS   Jan-16-80 18:03

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000
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```
SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT SI   Antenna height 5.197                 Measuremt True vertical

GPSREF SI   Point ID     2009    Lat  33-53'09.93682"N Lng  112-04'41.85336"W
            Mthd Autonomous      Elv  1818.309         Code PANEL

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID    2012A    Lat  33-52'17.89226"N Lng  112-04'42.27341"W
                                 Elv  1762.021         Code PANEL
            Mthd Phase differntl H.Pr 0.041            V.Pr 0.059

GPSVEC TP   Point ID     3102    Lat  33-52'18.12954"N Lng  112-04'42.25292"W
                                 Elv  1757.242         Code G
            Mthd Phase differntl H.Pr 0.040            V.Pr 0.059

GPSVEC TP   Point ID     3103    Lat  33-52'18.12079"N Lng  112-04'45.38809"W
                                 Elv  1757.798         Code G
            Mthd Phase differntl H.Pr 0.044            V.Pr 0.066

GPSVEC TP   Point ID     3104    Lat  33-52'18.13242"N Lng  112-04'48.33548"W
                                 Elv  1747.066         Code G
            Mthd Phase differntl H.Pr 0.041            V.Pr 0.061

GPSVEC TP   Point ID     3105    Lat  33-52'18.16169"N Lng  112-04'51.57808"W
                                 Elv  1744.561         Code G
            Mthd Phase differntl H.Pr 0.033            V.Pr 0.050

NOTE   TS   Jan-16-80 18:14

GPSVEC TP   Point ID     3106    Lat  33-52'18.19603"N Lng  112-04'56.39761"W
                                 Elv  1739.804         Code G
            Mthd Phase differntl H.Pr 0.035            V.Pr 0.052

GPSVEC TP   Point ID     3107    Lat  33-52'18.56222"N Lng  112-04'58.52305"W
                                 Elv  1738.238         Code EP
            Mthd Phase differntl H.Pr 0.023            V.Pr 0.034

GPSVEC TP   Point ID    3107A    Lat  33-52'18.56248"N Lng  112-04'58.52377"W
                                 Elv  1738.251         Code EP
            Mthd Phase differntl H.Pr 0.019            V.Pr 0.029

GPSVEC TP   Point ID     3108    Lat  33-52'18.53674"N Lng  112-05'02.16323"W
                                 Elv  1738.304         Code G
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.037

GPSVEC TP   Point ID     3109    Lat  33-52'18.44051"N Lng  112-05'03.84220"W
                                 Elv  1729.332         Code FL
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.031

GPSVEC TP   Point ID     3110    Lat  33-52'18.38597"N Lng  112-05'06.67151"W
                                 Elv  1740.163         Code G
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.032
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GPSVEC TP   Point ID     3111    Lat  33-52'18.29831"N Lng  112-05'08.87287"W
                                 Elv  1752.511         Code G
            Mthd Phase differntl H.Pr 0.022            V.Pr 0.034

GPSVEC TP   Point ID     3112    Lat  33-52'18.25003"N Lng  112-05'10.36162"W
                                 Elv  1763.267         Code G
            Mthd Phase differntl H.Pr 0.021            V.Pr 0.048

GPSVEC TP   Point ID     3113    Lat  33-52'18.18401"N Lng  112-05'13.53487"W
                                 Elv  1780.080         Code G
            Mthd Phase differntl H.Pr 0.037            V.Pr 0.059

NOTE   TS   Jan-16-80 18:40

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     2008    Lat  33-53'34.78092"N Lng  112-04'39.35597"W
                                 Elv  1817.897         Code PANEL
            Mthd Phase differntl H.Pr 0.023            V.Pr 0.036

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     2007    Lat  33-54'01.16615"N Lng  112-04'40.27865"W
                                 Elv  1861.505         Code PANEL
            Mthd Phase differntl H.Pr 0.035            V.Pr 0.057

NOTE   TS   Jan-16-80 18:53

NOTE   TP   Start rover
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EQUIP   TP   Receiver  4000SSi                    Serial    00013199
             Antenna   Compact L1/L2              Serial
             Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP    Elevation mask 13                    PDOP mask 6.000

NOTE    SI   Init gained:  On the fly

GPSANT TP    Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP    Point ID     2004    Lat  33-54'25.72261"N Lng  112-04'59.29720"W
                                  Elv  1877.261         Code PANEL
             Mthd Phase differntl H.Pr 0.021            V.Pr 0.037

NOTE    TS   Jan-16-80 19:07

NOTE    TP   Start rover

EQUIP   TP   Receiver  4000SSi                    Serial    00013199
             Antenna   Compact L1/L2              Serial
             Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP    Elevation mask 13                    PDOP mask 6.000

NOTE    SI   Init gained:  On the fly

GPSANT TP    Antenna height 4.700                 Measuremt Uncorrected

 PSVEC TP    Point ID     3115    Lat  33-53'04.04812"N Lng  112-04'43.51469"W
                                  Elv  1802.427         Code G
             Mthd Phase differntl H.Pr 0.028            V.Pr 0.054

GPSVEC TP    Point ID     3116    Lat  33-53'04.06273"N Lng  112-04'46.03343"W
                                  Elv  1803.084         Code G
             Mthd Phase differntl H.Pr 0.024            V.Pr 0.044

GPSVEC TP    Point ID     3117    Lat  33-53'04.10903"N Lng  112-04'49.31303"W
                                  Elv  1797.333         Code G
             Mthd Phase differntl H.Pr 0.033            V.Pr 0.061

GPSVEC TP    Point ID     3118    Lat  33-53'04.20094"N Lng  112-04'52.17816"W
                                  Elv  1788.754         Code G
             Mthd Phase differntl H.Pr 0.036            V.Pr 0.065

GPSVEC TP    Point ID     3119    Lat  33-53'04.25389"N Lng  112-04'53.27198"W
                                  Elv  1784.509         Code G
             Mthd Phase differntl H.Pr 0.026            V.Pr 0.048

GPSVEC TP    Point ID     3120    Lat  33-53'04.23589"N Lng  112-04'55.24849"W
                                  Elv  1786.724         Code G
             Mthd Phase differntl H.Pr 0.033            V.Pr 0.061

GPSVEC TP    Point ID     3121    Lat  33-53'04.16976"N Lng  112-04'56.74631"W
                                  Elv  1779.306         Code FL
             Mthd Phase differntl H.Pr 0.030            V.Pr 0.056
```

```
GPSVEC TP   Point ID     3122    Lat  33-53'04.13650"N Lng  112-04'57.85396"W
                                 Elv  1784.640         Code G
            Mthd Phase differntl H.Pr 0.031            V.Pr 0.057

GPSVEC TP   Point ID     3123    Lat  33-53'04.20461"N Lng  112-04'59.93285"W
                                 Elv  1793.959         Code G
            Mthd Phase differntl H.Pr 0.034            V.Pr 0.065

GPSVEC TP   Point ID     3124    Lat  33-53'04.31167"N Lng  112-05'01.81853"W
                                 Elv  1811.954         Code G
            Mthd Phase differntl H.Pr 0.034            V.Pr 0.063

NOTE   TS   Jan-17-80 11:34

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 5.190               Measuremt Uncorrected

GPSREF BA   Point ID     2004    Lat  33-54'25.72261"N Lng  112-04'59.29720"W
            Mthd Autonomous      Elv  1877.512         Code PANEL

NOTE   TS   Jan-17-80 11:53

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

NOTE   TS   Jan-17-80 12:03

GPSANT SI   Antenna height 5.154               Measuremt True vertical

GPSREF SI   Point ID     2004    Lat  33-54'25.72261"N Lng  112-04'59.29720"W
            Mthd Autonomous      Elv  1877.510         Code PANEL

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     2001    Lat  33-54'53.01104"N Lng  112-05'16.61744"W
                                 Elv  1923.334         Code PANEL
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.050
```

```
NOTE   TS   Jan-17-80 12:21

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TS   Jan-17-80 12:38

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     1026    Lat  33-54'02.59769"N Lng  112-04'57.43254"W
                                 Elv  1860.719         Code GLO SE SEC 31
            Mthd Phase differntl H.Pr 0.026            V.Pr 0.041

GPSVEC TP   Point ID     4011    Lat  33-54'02.59747"N Lng  112-04'57.43236"W
                                 Elv  1860.726         Code GLO SE SEC 31
            Mthd Phase differntl H.Pr 0.037            V.Pr 0.059

NOTE   TS   Jan-17-80 12:53

NOTE   TP   Start rover

 QUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID    2007A    Lat  33-54'01.16644"N Lng  112-04'40.27811"W
                                 Elv  1861.422         Code PANEL
            Mthd Phase differntl H.Pr 0.026            V.Pr 0.044

NOTE   TS   Jan-17-80 16:43

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TP   Start rover

 QUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
```

```
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     2002    Lat  33-54'42.48544"N Lng  112-05'59.79800"W
                                 Elv  1979.937         Code PANEL
            Mthd Phase differntl H.Pr 0.021            V.Pr 0.061

NOTE   TS   Jan-17-80 17:09

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TS   Jan-17-80 17:25

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TS   Jan-17-80 17:40

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     2005    Lat  33-54'05.81242"N Lng  112-05'59.01335"W
                                 Elv  1984.971         Code PANEL
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.031
```

```
NOTE   TS   Jan-17-80 18:41

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID     2006    Lat  33-54'02.35087"N Lng  112-05'01.08046"W
                                 Elv  1873.227         Code PANEL
            Mthd Phase differntl H.Pr 0.021           V.Pr 0.035

NOTE   TS   Jan-17-80 19:02

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

NOTE   SI   High RMS

NOTE   SI   Init lost

NOTE   SI   RMS OK

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID     4012    Lat  33-54'54.78145"N Lng  112-04'57.47318"W
                                 Elv  1931.678         Code GLO SE SEC 30
            Mthd Phase differntl H.Pr 0.023           V.Pr 0.043

NOTE   TS   Jan-17-80 19:13

GPSVEC TP   Point ID     2000    Lat  33-54'58.46832"N Lng  112-04'55.41719"W
                                 Elv  1942.201         Code PANEL
            Mthd Phase differntl H.Pr 0.026           V.Pr 0.048

NOTE   TS   Jan-17-80 19:39

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
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```
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

.OTE   SI   Init gained:  On the fly

NOTE   TS   Jan-17-80 19:52

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     2003    Lat  33-54'26.11012"N Lng  112-05'25.67879"W
                                 Elv  1890.329         Code PANEL
            Mthd Phase differntl H.Pr 0.022            V.Pr 0.032

NOTE   TS   Jan-18-80 15:49

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                 Serial    00013200
            Antenna   Compact L1/L2 w G/P     Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 5.040              Measuremt Uncorrected

GPSREF BA   Point ID     2001    Lat  33-54'53.01104"N Lng  112-05'16.61744"W
            Mthd Autonomous      Elv  1923.433         Code PANEL

NOTE   TS   Jan-18-80 16:01

 )TE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT SI   Antenna height 5.003              Measuremt True vertical

GPSREF SI   Point ID     2001    Lat  33-54'53.01104"N Lng  112-05'16.61744"W
            Mthd Autonomous      Elv  1923.433         Code PANEL

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected

GPSVEC TP   Point ID     3125    Lat  33-53'59.09942"N Lng  112-04'39.59188"W
                                 Elv  1861.464         Code G
            Mthd Phase differntl H.Pr 0.028            V.Pr 0.057
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```
GPSVEC TP   Point ID     3126    Lat  33-53'59.07991"N Lng  112-04'39.89957"W
                                 Elv  1859.914         Code EP
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.041

GPSVEC TP   Point ID     3127    Lat  33-53'59.03797"N Lng  112-04'40.22692"W
                                 Elv  1859.463         Code EP
            Mthd Phase differntl H.Pr 0.029            V.Pr 0.060

GPSVEC TP   Point ID     3128    Lat  33-53'58.73759"N Lng  112-04'42.23615"W
                                 Elv  1850.093         Code G
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.035

GPSVEC TP   Point ID     3129    Lat  33-53'58.53602"N Lng  112-04'43.67507"W
                                 Elv  1841.362         Code G
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.041

GPSVEC TP   Point ID     3130    Lat  33-53'58.37280"N Lng  112-04'44.72767"W
                                 Elv  1832.856         Code FL
            Mthd Phase differntl H.Pr 0.019            V.Pr 0.039

GPSVEC TP   Point ID     3131    Lat  33-53'58.10003"N Lng  112-04'46.61281"W
                                 Elv  1837.317         Code G
            Mthd Phase differntl H.Pr 0.022            V.Pr 0.046

GPSVEC TP   Point ID     3132    Lat  33-53'57.95635"N Lng  112-04'47.68831"W
                                 Elv  1838.317         Code G
            Mthd Phase differntl H.Pr 0.019            V.Pr 0.039

 PSVEC TP   Point ID     3133    Lat  33-53'57.75785"N Lng  112-04'49.35252"W
                                 Elv  1838.673         Code G
            Mthd Phase differntl H.Pr 0.027            V.Pr 0.055

NOTE   TS   Jan-18-80 16:17

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID    2004A    Lat  33-54'25.72304"N Lng  112-04'59.29684"W
                                 Elv  1877.480         Code PANEL
            Mthd Phase differntl H.Pr 0.011            V.Pr 0.038

GPSVEC TP   Point ID     3134    Lat  33-54'25.16918"N Lng  112-04'59.47928"W
                                 Elv  1877.216         Code G
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.061

 )TE   TS   Jan-18-80 16:27
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GPSVEC TP   Point ID     3135    Lat  33-54'25.62739"N Lng  112-05'00.18096"W
                                 Elv  1877.541         Code G
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.060

GPSVEC TP   Point ID     3136    Lat  33-54'25.97108"N Lng  112-05'00.71185"W
                                 Elv  1873.360         Code G
            Mthd Phase differntl H.Pr 0.015            V.Pr 0.052

GPSVEC TP   Point ID     3137    Lat  33-54'26.63309"N Lng  112-05'01.86432"W
                                 Elv  1872.913         Code G
            Mthd Phase differntl H.Pr 0.015            V.Pr 0.054

NOTE   SI   Init lost

NOTE   SI   Init gained:  On the fly

GPSVEC TP   Point ID     3138    Lat  33-54'26.16023"N Lng  112-05'03.28758"W
                                 Elv  1870.876         Code G
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.062

GPSVEC TP   Point ID     3139    Lat  33-54'26.11822"N Lng  112-05'03.48256"W
                                 Elv  1878.028         Code G
            Mthd Phase differntl H.Pr 0.012            V.Pr 0.041

GPSVEC TP   Point ID     3140    Lat  33-54'26.06036"N Lng  112-05'04.53797"W
                                 Elv  1877.435         Code G
            Mthd Phase differntl H.Pr 0.013            V.Pr 0.045

GPSVEC TP   Point ID     3141    Lat  33-54'26.10032"N Lng  112-05'05.66696"W
                                 Elv  1877.210         Code G
            Mthd Phase differntl H.Pr 0.017            V.Pr 0.058

GPSVEC TP   Point ID     3142    Lat  33-54'25.87777"N Lng  112-05'07.13339"W
                                 Elv  1875.911         Code G
            Mthd Phase differntl H.Pr 0.019            V.Pr 0.064

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   TS   Jan-18-80 17:08

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                 Serial    00013199
            Antenna   Compact L1/L2           Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                 PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

GPSANT TP   Antenna height 4.700              Measuremt Uncorrected
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GPSVEC TP   Point ID     4030    Lat  33-55'06.30779"N Lng  112-07'51.34001"W
                                 Elv  1802.355         Code C PT 40D
            Mthd Phase differntl H.Pr 0.036            V.Pr 0.056

NOTE   TS   Jan-18-80 17:33

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 5.100               Measuremt Uncorrected

GPSREF BA   Point ID     4030    Lat  33-55'06.30779"N Lng  112-07'51.34001"W
            Mthd Autonomous      Elv  1802.514         Code C PT 40D

NOTE   TS   Jan-18-80 17:49

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                  Serial    00013199
            Antenna   Compact L1/L2            Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                  PDOP mask 6.000

NOTE   TS   Jan-18-80 18:01

NOTE   SI   Init gained:  On the fly

GPSANT SI   Antenna height 5.066               Measuremt True vertical

GPSREF SI   Point ID     4030    Lat  33-55'06.30779"N Lng  112-07'51.34001"W
            Mthd Autonomous      Elv  1802.515         Code C PT 40D

GPSANT TP   Antenna height 4.700               Measuremt Uncorrected

GPSVEC TP   Point ID     4031    Lat  33-56'43.90980"N Lng  112-08'17.10769"W
                                 Elv  1934.112         Code C PT 40D
            Mthd Phase differntl H.Pr 0.023            V.Pr 0.033

NOTE   TS   Jan-18-80 18:37

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                  Serial    00013200
            Antenna   Compact L1/L2 w G/P      Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 5.280               Measuremt Uncorrected

GPSREF BA   Point ID     4031    Lat  33-56'43.90980"N Lng  112-08'17.10769"W
            Mthd Autonomous      Elv  1934.454         Code C PT 40D

NOTE   TS   Jan-18-80 18:48
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NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SI   Init gained:  On the fly

NOTE   SI   Init lost

NOTE   TS   Jan-18-80 19:04

NOTE   SI   Init gained:  On the fly

GPSANT SI   Antenna height 5.246                 Measuremt True vertical

GPSREF SI   Point ID     4031    Lat  33-56'43.90980"N Lng  112-08'17.10769"W
            Mthd Autonomous      Elv  1934.453         Code C PT 40D

GPSANT TP   Antenna height 4.700                 Measuremt Uncorrected

GPSVEC TP   Point ID     4032    Lat  33-58'13.74247"N Lng  112-08'00.46111"W
                                 Elv  2389.955         Code NGS CARL
            Mthd Phase differntl H.Pr 0.035            V.Pr 0.064

NOTE   TS   Dec-19-95 07:08

NOTE   BA   Start base

NOTE   BA   Start base

EQUIP  BA   Receiver  4000SSi                    Serial    00013200
            Antenna   Compact L1/L2 w G/P        Serial
            Radius  0.76575       V.Const  0.02264    Tape adj  0.00000

GPSANT BA   Antenna height 4.890                 Measuremt Uncorrected

GPSREF BA   Point ID     1017    Lat  33-47'00.81431"N Lng  112-07'10.45006"W
            Mthd Autonomous      Elv  1399.922         Code PANEL

NOTE   TS   Dec-19-95 07:20

NOTE   TP   Start rover

EQUIP  TP   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP   Elevation mask 13                    PDOP mask 6.000

NOTE   SO   Start rover

EQUIP  SO   Receiver  4000SSi                    Serial    00013199
            Antenna   Compact L1/L2              Serial
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```
            Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY SO   Elevation mask 13                  PDOP mask 6.000

..OTE  SI   Init gained:  On the fly

GPSANT SI   Antenna height 4.852               Measuremt True vertical

GPSREF SI   Point ID     1017    Lat  33-47'00.81431"N Lng  112-07'10.45006"W
            Mthd Autonomous      Elv  1399.922         Code PANEL

GPSANT TP   Antenna height 6.000               Measuremt Uncorrected

GPSVEC TP   Point ID     1015R   Lat  33-47'26.87795"N Lng  112-07'21.50101"W
                                 Elv  1425.619         Code PANEL
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.031

NOTE   TS   Dec-19-95 07:43

NOTE   SI   Init lost

NOTE   SI   Init gained:  On the fly

NOTE   TS   Dec-19-95 07:58

GPSVEC TP   Point ID     1014R   Lat  33-47'54.15119"N Lng  112-07'01.47774"W
                                 Elv  1474.872         Code PANEL
            Mthd Phase differntl H.Pr 0.018            V.Pr 0.034

 'SVEC TP   Point ID     1014R   Lat  33-47'54.15130"N Lng  112-07'01.47752"W
                                 Elv  1474.871         Code PANEL
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.035

GPSVEC TP   Point ID     1013R   Lat  33-47'54.06875"N Lng  112-07'36.70439"W
                                 Elv  1449.347         Code PANEL
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.035

NOTE   TS   Dec-19-95 08:11

GPSVEC TP   Point ID      6000   Lat  33-47'54.69155"N Lng  112-07'49.99562"W
                                 Elv  1450.586         Code TBM 33RD CAREFRE
            Mthd Phase differntl H.Pr 0.038            V.Pr 0.065

NOTE   SI   High RMS

NOTE   SI   Init lost

NOTE   SI   RMS OK

NOTE   SI   Init gained:  On the fly

GPSVEC TP   Point ID      6001   Lat  33-47'54.69187"N Lng  112-07'49.99624"W
                                 Elv  1450.599         Code TBM 33RD CAREFRE
            Mthd Phase differntl H.Pr 0.020            V.Pr 0.034

 ,TE   TS   Dec-19-95 08:34
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NOTE    SI    Init lost

NOTE    SI    Init gained:  On the fly

GPSVEC  TP    Point ID     1016R     Lat  33-46'59.13286"N Lng  112-07'32.26033"W
                                     Elv  1396.638         Code PANEL
              Mthd Phase differntl H.Pr 0.019             V.Pr 0.031

NOTE    TS    Dec-19-95 08:56

NOTE    TP    Start rover

EQUIP   TP    Receiver  4000SSi                   Serial    00013199
              Antenna   Compact L1/L2             Serial
              Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY  TP    Elevation mask 13                   PDOP mask 6.000

NOTE    SI    Init gained:  On the fly

GPSANT  TP    Antenna height 6.000                Measuremt Uncorrected

GPSVEC  TP    Point ID     1018R     Lat  33-46'31.94332"N Lng  112-07'23.77009"W
                                     Elv  1376.901         Code PANEL
              Mthd Phase differntl H.Pr 0.020             V.Pr 0.033

NOTE    TS    Dec-19-95 09:13

NOTE    TP    Start rover

EQUIP   TP    Receiver  4000SSi                   Serial    00013199
              Antenna   Compact L1/L2             Serial
              Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY  TP    Elevation mask 13                   PDOP mask 6.000

NOTE    TS    Dec-19-95 09:24

NOTE    TP    Start rover

EQUIP   TP    Receiver  4000SSi                   Serial    00013199
              Antenna   Compact L1/L2             Serial
              Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY  TP    Elevation mask 13                   PDOP mask 6.000

NOTE    SI    Init gained:  On the fly

GPSANT  TP    Antenna height 6.000                Measuremt Uncorrected

GPSVEC  TP    Point ID     1023R     Lat  33-45'17.20710"N Lng  112-07'01.84058"W
                                     Elv  1314.801         Code PANEL
              Mthd Phase differntl H.Pr 0.020             V.Pr 0.035

NOTE    TS    Dec-19-95 10:19

NOTE    TP    Start rover
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```
EQUIP   TP   Receiver  4000SSi                    Serial    00013199
             Antenna   Compact L1/L2              Serial
             Radius  0.00000       V.Const  0.20505    Tape adj  0.00000

SURVEY TP    Elevation mask 13                    PDOP mask 6.000

NOTE    TS   Dec-19-95 10:48

NOTE    SI   Init gained:  On the fly

GPSANT TP    Antenna height 6.000                 Measuremt Uncorrected

GPSVEC TP    Point ID      6003     Lat  33-45'52.82147"N Lng  112-07'40.43071"W
                                    Elv  1347.916         Code TBM 109800
             Mthd Phase differntl H.Pr 0.022             V.Pr 0.026

NOTE    SI   Init lost
```

* END OF REPORT *

FIELD NOTES

Collins/Piña
Consulting Engineers, Inc.

11-20-95 JOB#3643

VALENZUELA.M SKUNK CREEK

GONZALEZ.M

	STA	BS+	HI	FS−	EL	ADJ EL
3½" B.C B.M	B.C. 3½" A.C3"	4.13			1468.80	1468.8000
01	54+85.75			5.30	1467.63	1467.6301
		6.26				
02	40.D NAIL			3.24	1470.65	1470.6502
		6.36				
03	40.D.NAIL			3.48	1473.53	1473.5303
		6.46				
04	40 D NAIL			3.97	1476.02	1476.0204
		6.125				
05	40.D NAIL			2.86	1479.285	1479.2855
		6.125				
06	40D NAIL			2.78	1482.63	1482.6306
		5.92				
07	40 D NAIL			2.55	1486.00	1486.0007
		5.62				
08	3" B.C 987+54.83			5.765	1485.855	1485.8558
		8.77				
09	40D NAIL			2.42	1492.205	1492.2059
		5.945				
010	3" B.C 994+40.91			4.60	1493.55	1493.551
		7.175				
011	40D NAIL			3.34	1497.385	1497.3861
		8.27				
012	40 D NAIL			1.95	1503.705	1503.7062
		6.53				

DESCRIPTION

3½" B.C IN CONC U.S. CAST & GEODETIC SURVEY "SKUNK" 1947 B.M. SKUNK EL= 1468.80

3" A.C ARIZONA HWY DEPT 1964 SET IN CONC N.B. R/W HWY 17 NORTH 0.2 ABOVE NATURAL GROUND

40 D NAIL E. FRONTAGE RD N.B HWY 17. 1.± E. EP

40 D NAIL 200 N. OF SPORTSMAN'S GUN CLUB E. FRONTAGE RD

40 D NAIL E. FRONTAGE RD. N.B. HWY 17. 1.± E. EP

40 D NAIL

40 D NAIL

40 D NAIL

3" B.C SET IN CONC ARIZON HWY DEPT STA 987+54.83 N.B HWY 17. 0.4± ABOVE NATURAL GROUND.

40 D NAIL

3" B.C SET IN CONC ARIZONA HWY DEPT N.B. HWY 17 STA 994+40.91 0.4± ABOVE NATURAL GROUND

40 D NAIL

40 D NAIL

	STA	B.S +	HI	FS −	EL	ADJ EL	DESCRIPTION
	3" B.C						
⊙13	1007+79.03			4.765	1505.47	1505.4713	3" B.C ARIZONA HWY DEPT 1964 SET IN CONC N.B. HWY 17 STA 1007+79.03 SET IN CONC 0.1± ABOVE NATURAL GROUND
		8.475					
⊙14	40 D NAIL			4.16	1509.785	1509.7864	40 D NAIL
		6.985					
⊙15	40D NAIL			4.00	1512.77	1512.7715	40 D NAIL
		6.88					
⊙16	40 D NAIL			3.96	1515.69	1515.6916	40 D NAIL
		7.34					
⊙17	40D NAIL			3.67	1519.36	1519.3617	40 D NAIL
		7.26					
⊙18	40 D NAIL			3.125	1523.495	1523.4968	40 D NAIL
		5.725					
	3" B.C						
⊙19	1034+62.66			6.315	1522.905	1522.9069	3" B.C ARIZONA HWY DEPT SET IN CONC N.B HWY 17 STA 1034+62.66 0.5± ABOVE NATURAL GROUND
		8.79					
	3" B.C						
⊙20	1039+00.00			4.97	1526.725	1526.7270	3" B.C ARIZONA HWY DEPT SET IN CONC 0.3± ABOVE NATURAL GROUND. N.B. HWY 17 STA 1039+00.00
		8.73					
⊙21	40 D NAIL			3.61	1531.845	1531.8471	40 D NAIL
		7.68					
⊙22	40 D NAIL			3.70	1535.825	1535.8272	40 D NAIL
		6.95					
⊙23	40 D NAIL			2.76	1540.015	1540.0173	40 D NAIL
		6.82					
⊙24	40 D NAIL			2.91	1543.925	1543.9274	40 D NAIL
		5.57					
B.M#	3" B.C						
⊙25	1061+43.60			5.44	1544.055	1544.0575	3" B.C ARIZONA HWY DEPT SET IN CONC. N.B. HWY 17. STA R.O.S.L. 1061+43.60. 0.3± ABOVE NATURAL GROUND ERM
		5.355					
⊙24=26				5.48	1543.93	1543.9326	
		3.16					
⊙23=27				7.075	1540.015	1540.0177	
		3.245					
⊙22=28				7.425	1535.835	1535.8378	
		3.41					

	STA	B.S+	HI	F.S.-	EL	ADJ EL	DESCRIPTION
@21=29				7.395	1531.85	1531.8529	
		3.84					
@20=30				8.96	1526.73	1526.7330	
		4.30					
@19=31				8.11	1522.92	1522.9231	
		6.58					
@18=32				6.00	1523.50	1523.5032	
		3.26					
@17=33				7.41	1519.35	1519.3533	
		3.42					
@16=34				7.08	1515.69	1515.6934	
		3.75					
@15=35				6.67	1512.77	1512.7735	
		3.70					
@14=36				6.68	1509.79	1509.7936	
		3.90					
@13=37				8.22	1505.47	1505.4737	
		4.24					
@12=38				6.00	1503.71	1503.7138	
		1.65					
@11=39				7.97	1497.39	1497.3939	
		3.665					
@10=40				7.50	1493.555	1493.5590	
		5.06					
@9=41				6.405	1492.21	1492.2141	
		2.65					
@8=42				9.005	1485.855	1485.8592	
		6.085					
@7=43				5.94	1486.00	1486.43	
		3.71					
@6=44				7.08	1482.63	1482.6344	
		3.78					

	STA	B.S+	HI	F.S-	EL	ADJ.EL
05=45				7.13	1479.28	1479.2845
		3.87				
04=46				7.135	1476.015	1476.0196
		4.035				
03=47				6.525	1473.525	1473.5297
		2.92				
02=48				5.80	1470.645	1470.6498
		3.84				
01=49				6.86	1467.625	1467.6299
		5.35				
B.M=50				4.18	1468.795	1468.8000
	-0	.0050	UNDER			

DESCRIPTION

3½" B.C. IN CONC U.S. COAST & GEODETIC SURVEY "SKUNK" 1947 B.M SKUNK. EL= 1468.80

11-21-95 JOB # 3643

VALENZUELA. M SKUNK CREEK

GONZALEZ. M

	STA	BS+	HI	FS.-	EL	ADJ EL
	1061+43.60 B.M. B.C	7.08			1544.0575	1544.0575
01	#1022 1/2" REBAR			6.85	1544.2875	1544.2875 1544.2869
		8.01				
02	40 D NAIL			5.37	1546.9275	1546.9268
		7.815				
03	40 D NAIL			3.35	1551.3925	1551.3906
		6.72				
04	40 D NAIL			3.82	1554.2925	1554.2900
		6.835				
05	40 D NAIL			3.33	1557.7975	1557.7944
		6.46				
06	40 D NAIL			3.005	1561.2525	1561.2488
		8.43				
07	40 D NAIL			1.73	1567.9525	1567.9481
		8.55				
08	40 D NAIL			3.31	1573.1925	1573.1875
		6.465				
09	3" B.C 1098+00			3.31	1576.3475	1576.3419
		6.17				
010	40 D NAIL			3.13	1579.3875	1579.3813
		7.36				
011	40 D NAIL			4.08	1582.6675	1582.6606
		7.525				
012	40 D NAIL			3.34	1586.8525	1586.8450
		5.915				
013	3" B.C 1150+20.45			4.45	1588.3175	1588.3094

DESCRIPTION

B.M. EL = 14

3" B.C. RAW HWY 17 N.E. SIDE IN CONC P.O.S.L STA 1061+43.60 N.B. 0.3± ABOVE NATURAL GROUND ERM

1/2" REBAR #1022 ± ℄ OF MIDIAN FOR N.B. BOUND HWY 17

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

3" B.C RAW HWY 17 N.B IN CONC 0.2± ABOVE NATURAL GROUND POT N.B. STA 1098+00

40 D NAIL

40 D NAIL

40 D NAIL

3" B.C SET IN CONC 0.3± ABOVE NATURAL GROUND STA N.B P.O.S.L 1150+20.45 RAW HWY 17 N.B

	STA	BSt	HI	FS -	EL	ADJ EL	DESCRIPTION
		6.23					
014	40 D NAIL			2.40	1592.1475	1592.1388	40 D NAIL
		7.19					
015	3" B.C 1124+00			2.52	1596.8175	1596.8081	3" B.C. SET IN CONC 0.3± ABOVE NATURAL GROUND, STA N.B P.O.T. 1124+00 R/W N.B HWY 17.
		7.085					
016	40 D NAIL			3.61	1600.2925	1600.2825	40 D NAIL
		8.16					
017	40 D NAIL			3.705	1604.7475	1604.7369	40 D NAIL
		7.14					
018	40 D NAIL			3.075	1608.8125	1608.8013	40 D NAIL
		8.18					
019	40 D NAIL			3.53	1613.4625	1613.4506	40 D NAIL
		6.745					
020	3" B.C 1149+00			3.20	1617.0075	1616.9950	3" B.C. SET IN CONC 0.3± ABOVE NATURAL GROUND STA N.B. POT 1149+00 R/W N.B HWY 17.
		7.075					
021	40 D NAIL			3.47	1620.6125	1620.5994	40 D NAIL
		7.41					
022	40 D NAIL			2.87	1625.1525	1625.1388	40 D NAIL
		7.35					
023	40 D NAIL			3.275	1629.2275	1629.2131	40 D NAIL
		8.235					
024	3" B.C 1168+90.15			3.305	1634.1575	1634.1425	3" B.C. SET IN CONC 0.3± ABOVE NATURAL GROUND STA N.B P.O.S.L 1168+90.15 R/W N.B. HWY 17.
		6.80					
025	40 D NAIL			3.62	1637.3375	1637.3219	40 D NAIL
		5.84					
026	3" B.C 1176+00			4.75	1638.4275	1638.4113	3" B.C SET IN CONC 0.4± ABOVE NATURAL GROUND STA N.B. POT 1176+00 RW N.B. HWY 17
		5.655					
027	40 D NAIL			5.54	1638.5425	1638.5256	40 D NAIL
		8.56					
028	40 D NAIL			2.645	1644.4575	1644.4400	40 D NAIL
		8.245					
029	40 D NAIL			5.09	1647.6125	1647.5944	40 D NAIL

	STA	B.S +	HI	F.S. -	EL	ADJ EL	DESCRIPTION
		7.26					
⊙30	40 D NAIL			0.56	1654.3125	1654.2938	40 D NAIL
		8.22					
⊙31	40 D NAIL			4.16	1658.3725	1658.3531	40 D NAIL
		6.40					
B.M ⊙32	3" B.C 1204+86.18			3.34	1661.4325	1661.4125	3" B.C SET IN CONC 0.1' ABOVE NATURAL GROUND STA N.B PGT 1204+86.18 A/W N.B HWY 17
		3.26					
⊙31=33	40 D NAIL			6.32	1658.3725	1658.3519	
		4.43					
⊙30=34	40 D NAIL			8.49	1654.3125	1654.2913	
		0.57					
⊙29=35	40 D NAIL			7.26	1647.6225	1647.6006	
		5.08					
⊙28=36	40 D NAIL			8.24	1644.4625	1644.4400	
		2.47					
⊙27=37	40 D NAIL			8.38	1638.5525	1638.5294	
		5.475					
⊙26=38	3" B.C 1176+00			5.59	1638.4375	1638.4138	
		4.92					
⊙25=39	40 D NAIL			6.01	1637.3475	1637.3231	
		3.61					
⊙24=40	3" B.C 1168+90.15			6.795	1634.1625	1634.1375	
		3.19					
⊙23=41	40 D NAIL			8.12	1629.2325	1629.2069	
		3.06					
⊙22=42	40 D NAIL			7.14	1625.1525	1625.1263	
		2.62					
⊙21=43	40 D NAIL			7.155	1620.6175	1620.5906	
		3.39					
⊙20=44	3" B.C 1149+00			7.00	1617.0075	1616.9800	
		2.975					
⊙19=45	40 D NAIL			6.515	1613.4675	1613.4394	

	STA	B.S+	HI	F.S−	EL	ADJ EL	DESCRIPTION
		3.54					
⊙18 = 46	40 D NAIL			8.18	1608.8275	1608.7988	
		2.895					
⊙17 = 47	40 D NAIL			6.96	1604.7625	1604.7331	
		3.70					
⊙16 = 48	40 D NAIL			8.16	1600.3025	1600.2725	
		3.695					
⊙15 = 49	3" B.C 1124+00			7.16	1596.8375	1596.8069	
		2.49					
⊙14 = 50	40 D NAIL			7.16	1592.1675	1592.1363	
		2.20					
⊙13 = 51	3" B.C 1150+20.45			6.03	1588.3375	1588.3056	
		4.26					
⊙12 = 52	40 D NAIL			5.73	1586.8675	1586.8350	
		3.22					
⊙11 = 53	40 D NAIL			7.405	1582.6825	1582.6494	
		4.10					
⊙10 = 54	40 D NAIL			7.37	1579.4125	1579.3788	
		3.065					
⊙9 = 55	3" B.C 1098+00			6.10	1576.3775	1576.3431	
		3.815					
⊙8 = 56	40 D NAIL			6.975	1573.2175	1573.1825	
		3.35					
⊙7 = 57	40 D NAIL			8.595	1567.9725	1567.9363	
		1.94					
⊙6 = 58	40 D NAIL			8.64	1561.2725	1561.2363	
		3.175					
⊙5 = 59	40 D NAIL			6.63	1557.8175	1557.7806	
		3.54					
⊙4 = 60	40 D NAIL			7.05	1554.3075	1554.2700	
		3.88					
⊙3 = 61	40 D NAIL			6.78	1551.4075	1551.3694	

	STA	B.S +	HI	F.S −	EL	ADJ EL	DESCRIPTION
		3.41					
⊙2 = 62	40 D NAIL			7.865	1546.9525	1546.9138	
		6.225					
⊙1 = 63	#022 ½" REBAR			8.85	1544.3275	1544.2875 ~~1544.2881~~	
		6.94					
BM-64:	1061+43.60 B.M. 3" B.C			7.17	1544.0975	1544.0575	
		+ 0.0400 OVER					

11-21-95 JOB # 3643

VALENZUELA. M SKUNK CREEK

GONZALEZ. M

	STA	BS+	HI	FS-	EL	ADJ EL
B.M B.C	1204+86.18	6.305			1661.4125	
Q1	40 D NAIL			3.54	1664.1775	1664.1777
		8.33				
Q2	40 D NAIL			4.25	1668.2575	1668.2579
		7.055				
Q3 T.B.M	X-CUT TOP OF HW			2.315	1672.9975	1673.0075 ~~1672.9981~~
		4.715				
Q4	40 D NAIL			4.71	1673.0025	1673.0033
		6.295				
Q5	40 D NAIL			5.51	1673.7825	1673.7835
		5.10				
Q6	1/2" REBAR			7.19	1671.6975	1671.7019 ~~1671.6987~~
		7.65				
Q7	40 D NAIL			2.77	1676.5775	1676.5788
		9.50				
Q8	X-MARK			1.68	1684.3975	1684.3990
		2.275				
B.M Q9	3" AC B.M			3.72	1682.9525	1682.9550 ~~1682.9542~~
		0.37				
Q10	40 D NAIL			4.90	1678.4225	1678.4244
		9.09				
Q11	40 D NAIL			2.07	1685.4425	1685.4446
		9.01				
Q12	40 D NAIL			2.16	1692.2925	1692.2948
		8.22				
B.M Q13	1/2" REBAR			3.33	1697.1825	1697.1850

12-21-95 KW
SEE PAGE 52
FOR CONVERSION/TRANSLATION

DESCRIPTION

3" B.C. SET IN CONC 0.1± ABOVE NATURAL GROUND STA N.B P.O.T 1204+86.18 R/W N.B HWY 17

40 D NAIL

40 D NAIL

X-CUT TOP OF HEADWALL @ N.E COR OF CAREFREE HWY & 33RD AVE. 0.5± ABOVE NATURAL GROUND

40 D NAIL

40 D NAIL

1/2" REBAR #1013 45' ± S. FROM & TO CAREFREE HWY

40 D NAIL

X-MARK TOP OF BARRIER TO BRIDGE. @ SOUTH

3" AC SET ON TOP OF N.E CONC ABUTMENT TO SKUNK CREEK @ CAREFREE HWY A.D.O.T HIGHWAY DIV 1689-66

40 D NAIL

40 D NAIL

40 D NAIL

1/2" REBAR #1014 60± S. FROM & TO CAREFREE HWY

	STA	B.S+	HI	F.S-	EL	ADJ EL	DESCRIPTION
		3.22					
⊙12=14	40 D NAIL			8.11	1692.2925	1692.2952	
		2.185					
⊙11=15	40 D NAIL			9.035	1685.4425	1685.4454	
		1.75					
⊙10=16	40 D NAIL			8.765	1678.4275	1678.3306	
		5.00					
⊙9=17	3" AC B.M			0.475	1682.9525	1682.9550 ~~1682.9558~~	3" AC SET ON TOP OF NE. COR CONC ABUTMENT TO SKUNK CREEK @ CARFREE HWY A.D.OT. HWY DIV. 1689-66
		3.67					
⊙8=18	x-MARK			2.23	1684.3925	1684.3960	
		1.51					
⊙7=19	40 D NAIL			9.32	1676.5825	1676.5862	
		3.07					
⊙6=20	1/2" REBAR			7.95	1671.7025	1671.7019 ~~1671.7063~~	1/2" REBAR #1017
		7.34					
⊙5=21	40 D NAIL			5.245	1673.7975	1673.8015	
		5.51					
⊙4=22	40 D NAIL			6.29	1673.0175	1673.0217	
		4.74					
⊙3=23	T.B.M			4.745	1673.0125	1673.0075 ~~1673.0167~~	X-CUT TOP OF HEADWALL
		2.345					
⊙2=24	40 D NAIL			7.09	1668.2675	1668.2721	
		4.36					
⊙1=25	40 D NAIL			8.45	1664.1775	1664.1823	
		3.71					
3" B.C BM=26	1204+86.18			6.48	1661.4075	1661.4125	

-0.0050 UNDER

11-22-95
VALENZUELA M
GONZALEZ.M

JOB# 3643
SKUNK CREEK

	STA	BS+	HI	FS-	EL	ADJ.EL
T.B.M	X-CUT	8.195			1673.0075	1673.0075
01	40 D NAIL			3.11	1678.0925	1678.0915
		6.69				
02	40 D NAIL			3.72	1681.0625	1681.0606
		7.09				
03	40 D NAIL			4.14	1684.0125	1684.0097
		6.97				
04	40 D NAIL			3.665	1687.3175	1687.3138
		6.415				
05	40 D NAIL			6.31	1687.4225	1687.4179
		7.44				
06	40 D NAIL			4.345	1690.5175	1690.5120
		3.805				
07	40 D NAIL			6.58	1687.7425	1687.7361
		10.385				
08	40 D NAIL			3.01	1695.1175	1695.1102
		12.86				
09	40 D NAIL			0.315	1707.6625	1707.6543
		9.12				
010				6.60	1710.1825	1710.1734
		10.89				
011	40 D NAIL			1.12	1719.9525	1719.9425
		10.57				
012	40 D NAIL			3.03	1727.4925	1727.4815
		2.375				

DESCRIPTION

X-CUT TOP OF HEADWALL @ NE COR OF CAREFREE HWY & 33 RD AVE. 0.2' ABOVE NATURAL GROUND

SET 40 D NAIL ± @ E.EP TO 33 RD AVE

SET 40 D NAIL

SET 40 D NAIL

SET 40 D NAIL

SET 40 D NAIL ± @ S.EP TO CLOUD RD.

	STA	B.S+	HI	FS-	EL	ADJ. EL	DESCRIPTION
⊙13	40 D NAIL			2.64	1727.2275	1727.2156	SET 40 D NAIL ± @ S. EP. TO CLOUD RD
		8.14					
⊙14	40 D NAIL			7.65	1727.7175	1727.7047	
		1.26					
⊙15	40 D NAIL			4.92	1724.0575	1724.0438	
		3.995					
⊙16	1/2" REBAR			6.62	1721.4325	1721.4149 ~~1721.4179~~	1/2" REBAR #1010 ±9' FROM S. EP TO CLOUD RD
		6.56					
⊙17				4.45	1723.5425	1723.5270	
		4.98					
⊙18	T.B.M 240 D. NAILS			2.335	1726.1875	1726.1674 ~~1726.1714~~	SET 2 40 D NAILS BRIDGED @ END OF GUARD RAIL ON S. SIDE CLOUD RD. @ BACK OF 8"x8" WOOD POST FOR GUARD RAIL.
		0.27 ~~0.24~~					
⊙19	40 D NAIL			5.965 ~~5.925~~	4975 1720.5025	1720.4752	
		9.06 ~~9.135~~					
⊙20	40 D NAIL			4.97 ~~4.905~~	5875 1724.7325	1724.5643	
		5.135 ~~5.08~~					
⊙21	2 1/2" B.C W.C. SEC COR			3.51 ~~3.595~~	2075 1726.2175	1726.1874 ~~1726.1884~~	2 1/2" B.C ± 0.8 ABOVE GROUND T6N, R2E, SEC 35 SEC 2 SEC 1 W.C T5N, R2E 1733 U.S. GENERAL LAND OFFICE SURVEY
		1.49 ~~1.65~~					
⊙22	1/2" REBAR			6.615 ~~6.77~~	0825 1721.0975	1721.0625	1/2" REBAR #1011
		6.51 ~~6.76~~					
⊙21=23	2 1/2" B.C W.C. SEC. COR			1.385 ~~1.64~~	2075 1726.2175	1726.1874 ~~1726.1865~~	
		3.52 ~~3.96~~					
⊙20=24				5.145 ~~5.045~~	1724.5825 ~~1725.1925~~	1724.5626	
		4.845 ~~4.90~~					
⊙19=25				8.93 ~~9.13~~	4975 1720.9025	1720.4747	
		5.96 ~~5.91~~					
⊙18=26				0.27 ~~0.225~~	1875 1726.5875	1726.1674 ~~1726.1638~~	
		2.52					
⊙17=27				5.17	5375 1723.9375	1723.5129	
		3.88					
⊙16=28	1/2" REBAR			5.98	4375 1721.8375	1721.4149 ~~1721.4170~~	
		6.815					

	STA	B.S+	HI	F.S−	EL	ADJ. EL	DESCRIPTION
G ⊙15=29				4.18	1724.~~4725~~ 0725	1724.0461	
		5.13					
G ⊙14=30				1.465	1728.~~1975~~ 1727.7375	1727.7002	
		7.805					
G ⊙13=31				8.29	1727.~~6525~~ 2525	1727.2243	
		2.88					
G ⊙12=32				2.62	1727.~~9125~~ 5125	1727.4834	
		2.735					
G ⊙11=33				10.28	1720.~~3675~~ 1719.9675	1719.9375	
		2.175					
G ⊙10=34				11.94	1710.~~6025~~ 2025	1710.1715	
		6.42					
G ⊙9=35				8.94	1708.~~0825~~ 1707.6825	1707.6506	
		0.28					
G ⊙8=36				12.82	1695.~~5425~~ 425	1695.1097	
		2.555					
G ⊙7=37				9.935	1688.~~1625~~ 1687.7625	1687.7288	
		6.80					
G ⊙6=38				4.02	1690.~~9425~~ 5425	1690.5079	
		4.045					
G ⊙5=39				7.13	1687.~~8575~~ 4575	1687.4220	
		6.31					
G ⊙4=40				6.42	1687.~~7475~~ 3475	1687.3111	
		3.82					
G ⊙3=41				7.12	1684.~~4475~~ 0475	1684.0102	
		3.995					
G ⊙2=42				6.94	1681.~~5025~~ 1025	1681.0643	
		3.485					
G ⊙1=43				6.45	1678.~~5575~~ 1375	1678.0984	
		3.53					
G ~~=44~~ T.B.M	x-CUT HEADWALL			8.62	1673.~~4475~~ 0475	1673.0075	
		+ 0.0400 ~~to 44~~	OVER				

11-27-95 JOB # 3643

VALENZUELA, M SKUNK CREEK

GONZALEZ, M

	STA	B.S. +	HI	F.S. −	EL	ADJ EL
⊙18	T.B.M. 2 40 D NAILS	4.94			1726.1674	1726.1674
⊙1	40 D NAIL			2.315	1728.7924	1728.7896
		7.35				
⊙2	40 D NAIL			3.20	1732.9424	1732.9312
		5.21				
⊙3	40 D NAIL			3.26	1734.8924	1734.8840
		8.25				
⊙4				2.94	1740.2024	1740.1912
		7.86				
⊙5	1/2" REBAR			3.455	1744.6074	1744.5923 ~~1744.5935~~
		7.48				
⊙6	40 D NAIL			2.49	1749.5974	1749.5807
		8.865				
⊙7	40 D NAIL			3.135	1755.3274	1755.3079
		7.54				
⊙8	40 D NAIL			2.03	1760.8374	1760.8151
		8.47				
⊙9				2.57	1766.7374	1766.7124
		2.48				
⊙8=10	40 D NAIL			8.37	1760.8474	1760.8196
		2.32				
⊙7=11	40 D NAIL			7.83	1755.3374	1755.3068
		2.42				
⊙6=12	40 D NAIL			8.14	1749.6174	1749.5840
		2.65				
⊙5=13	1/2" REBAR			7.64	1749.6274	1744.5923 ~~1744.5912~~
		3.28				
⊙4=14	40 D NAIL			7.68	1740.2274	1740.1885
		2.80				

SET 2 40 D NAILS BRIDGED @ END OF GUARD RAIL ON S. SIDE CROWD RD @ BACK FACE OF 8"x8" WOOD FOR GUARD POST

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

1/2" REBAR # 1009

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

	STA	B.S. +	HI	F/S −	EL	ADJ EL	DESCRIPTION
03=15	40 D NAIL			8.10	1734.9274	1734.8857	
		3.36					
02=16	40 D NAIL			5.30	1732.9874	1732.9429	
		2.74					
01=17	40 D NAIL			6.89	1728.8374	1728.7901	
		1.94					
T.B.M= 18	T.B.M 2.40 D NAILS BRIDGED			4.56	1726.2174	1726.1674	
		+0.05	OVER				

11-28-75 JOB# 3643
VALENZUELA, M SKUNK CREEK
GONZALEZ.

	STA	B.S.+	HI	F.S.-	EL	ADJ EL
T.B.M.09		9.42			1766.7124	1766.7124
01	40 D NAIL			0.46	1775.6724	
		9.92				
02	40 D NAIL			4.54	1781.0524	
		6.77				
03	40 D NAIL			6.02	1781.8024	
		4.565				
04	40 D NAIL			8.605	1777.7624	
		3.17				
05	40 D NAIL			4.985	1775.9474	
		5.28				
06	40 D NAIL			6.505	1774.7224	
		5.76				
07	40 D NAIL			2.98	1777.5024	
		6.885				
08	40 D NAIL			3.045	1781.3424	
		7.865				
09	40 D NAIL			2.03	1787.1774	
		7.74				
010	1/2" REBAR #1006			2.70	1792.2174	1792.2349
		7.07				
011	40 D NAIL			2.19	1797.0974	
		9.47				
012	40 D NAIL			1.42	1805.1474	
		9.545				
013	40 D NAIL			2.10	1812.5924	
		8.01 ~~7.84~~				
014	40 D NAIL			1.48 ~~3.10~~	1819.1224	

DESCRIPTION

40 D NAIL ON E. SIDE OF 27TH AVE. ± @ EP
40 D NAIL " " " " " " " " " "
40 D NAIL
40 D NAIL ± N. EDGE OF RD. TO JOY RANCH RD
40 D NAIL
40 D NAIL
40 D NAIL
40 D NAIL N.W. COR'R ± TO JOY RANCH & 23RD AVE
40 D NAIL ± W. E. OF RD TO 23RD AVE
40 D NAIL
1/2" REBAR #1006
40 D NAIL
40 D NAIL
40 D NAIL N. ± 125' OF IRVIN RD. ON 23RD AVE
40 D NAIL

	STA	B.S +	HI	F.S. −	EL	ADJ EL	DESCRIPTION
		8.025					
Ø15	40 D NAIL			3.605	1823.5424		40 D NAIL
		7.14					
Ø16	40 NAIL			3.95	1826.7324		40 D NAIL
		6.975					
Ø17	40 D NAIL			3.49	1830.2174		40 D NAIL
		7.84					
Ø18	40 D NAIL			3.005	1835.0524		40 D NAIL ON N. EP ± TO DESERT HILLS ¼ ± 30' E. OF 23RD AVE
		8.595					
Ø19	40 D NAIL			5.47	1838.1774		40 D NAIL ± N EP TO DESERT HILLS DR
		7.57					
Ø20	40 D NAIL			3.885	1841.8624		40 D NAIL
		6.84					
Ø21	40 D NAIL			4.185	1844.5174	1844.5274	40 D NAIL N. EP ± 400' E. OF 21ST AVE GATE @ N. R/W. BARB WIRE. @ CURVE
		7.09					
Ø22	40 D NAIL			4.32	1847.2874		40 D NAIL
		7.745					
Ø23	40 D NAIL			4.055	1850.9174	1850.9824	40 D NAIL N. EP TO DESERT HILLS DR ¼ E ± 35' FROM 19TH AVE
		5.48					
Ø24	40 D NAIL			6.10	1850.3574		40 D NAIL
		6.985					
Ø25	40 D NAIL			3.76	1853.5824		40 D NAIL
		5.65					
Ø26	40 D NAIL			5.62	1853.6124		40 D NAIL
		3.76					
Ø27	1/2" REBAR # 1001			10.25	1847.1224	1847.0974	1/2" REBAR # 1001
		9.78					
Ø26=28	40 D NAIL			3.295	1853.6074		
		5.38					
Ø25=29	40 D NAIL			5.41	1853.5774		
		3.535					
Ø24=30	40 D NAIL			6.75	1850.3624		

	STA	B.S+	HI	F.S.-	EL	ADJEL	DESCRIPTION
		5.87					
Q23=31	40D NAIL			5.245	1850.9874	1850.9824	
		3.77					
Q22=32	40D NAIL			7.455	1847.3024		
		4.13					
Q21=33	40D NAIL			6.895	1844.5374	1844.5274	
		4.02 ~~4.205~~					
Q20=34	40D NAIL			6.67 ~~6.85~~	1841.8874		
		3.48 ~~3.53~~					
Q19=35	40D NAIL			7.16 ~~7.21~~	1838.2074		
		5.38 ~~5.46~~					
Q18=36	40D NAIL			8.50 ~~8.28~~	1835.0874		
		3.23 ~~2.83~~					
Q17=37	40D NAIL			8.06 ~~7.66~~	1830.2574		
		3.35 ~~3.105~~					
Q16=38	40D NAIL			6.83 ~~6.58~~	1826.7774		
		3.80 ~~3.94~~					
Q15=39	40D NAIL			6.995 ~~7.18~~	1823.5024		
		3.185 ~~3.29~~					
Q14=40	40D NAIL			7.60 ~~7.79~~	1819.1674		
		1.39 ~~1.64~~					
Q13=41	40D NAIL			7.93 ~~8.18~~	1812.6774		
		1.48 ~~1.25~~					
Q12=42	40D NAIL			8.92 ~~8.69~~	1805.1874		
		2.33 ~~1.555~~					
Q11=43	40D NAIL			10.385 ~~9.595~~	1797.1324		
		2.15					
Q10=44	1/2" REBAR #1006			7.03	1792.2524	1792.2349	1/2" REBAR #1006
		3.215					
Q9=45	40D NAIL			8.27	1787.1974		
		2.07					
Q8=46	40D NAIL			7.90	1781.3674		

	STA	B.S+	HI	F.S-	EL	ADJ EL	DESCRIPTION
		3.57					
Q7=47	40 D NAIL			7.405	1777.5324		
		3.15					
Q6=48	40 D NAIL			5.925	1774.7574		
		6.445					
Q5=49	40 D NAIL			5.22	1775.9824		
		5.20					
Q4=50	40 D NAIL			3.385	1777.7974		
		8.535					
Q3=51	40 D NAIL			4.50	1781.8324		
		6.075					
Q2=52	40 D NAIL			6.82	1781.0874		
		4.17					
Q1=53	40 D NAIL			9.545	1775.7124		
		0.21					
T.B.M.09 =54	T.B.M.09 40 D NAIL			9.16	1766.7624	1766.7124	
		+0.05 OVER					

11-29-95 JOB# 3643

VALENZUELA, M SKUNK CREEK

GONZALEZ, M

	STA	B.S+	HI	F.S-	EL	ADJ.EL
T.B.M023	40D NAIL	1.86			1850.9824	1850.9824
01	40 D NAIL			8.615	1844.2274	
		0.525				
02	40 D NAIL			10.495	1834.2574	
		0.915				
03	40 D NAIL			13.84	1821.3324	
		0.52				
04	40 D NAIL			8.04	1813.8124	
		4.12				
05	40 D NAIL			7.90	1810.0324	
		6.505				
06	1/2 REBAR #1004			3.47	1813.0674	1813.0624
		3.415				
05=7	40 D NAIL			6.45	1810.0324	
		7.795				
04=8	40 D NAIL			4.015	1813.8124	
		8.135				
03=9	40 D NAIL			0.61	1821.3374	
		14.085				
02=10	40 D NAIL			1.16	1834.2624	
		10.96				
01=11	40 D NAIL			0.99	1844.2324	
		8.825				
T.B.M023 =12	40 D NAIL			2.065	1850.9924	1850.9824

+0.01 OVER

DESCRIPTION

40 D NAIL

40 D NAIL ± E. ROP TO 19TH AVE

40 D NAIL

40 D. NAIL

1/2" REBAR #1004 ON E. SIDE OF 19TH AVE BETWEEN DESERT HILLS DR & JOY RANCH RD.

1/2" REBAR #1004 ON E SIDE OF 19TH AVE BETWEEN DESERT HILLS DR & JOY RANCH RD

11-30-95 JOB # 3643
VALENZUELA. M SKUNK CREEK
GONZALEZ. M

T.B.M 021	STA	B.S+	HI	F.S-	EL	ADJ. EL	DESCRIPTION
	40 D NAIL	8.135			1844.5274	1844.5274	40 D NAIL N. ED ± 400' E OF 21 ST AVE GATE @ N. R.W. BARBWIRE
01	40 D NAIL			4.20	1848.4624		40 D NAIL
		7.63					
02	40 D NAIL			2.85	1853.2424		40 D NAIL
		9.10					
03	40 D NAIL			1.12	1861.2224		40 D NAIL
		7.70					
04	40 D NAIL			2.285	1866.6374		40 D NAIL
		8.525					
05	40 D NAIL			3.34	1871.8224		40 D NAIL
		6.70					
06	40 D NAIL			3.24	1875.2824		40 D NAIL
		8.455					
07	40 D NAIL			5.355	1878.3824		40 D NAIL
		8.19					
08	40 D NAIL			3.58	1882.9924		40 D NAIL
		8.245					
09	40 D NAIL			0.47	1890.7674		40 D NAIL
		8.88					
010	40 D NAIL			1.97	1897.6774		40 D NAIL
		8.805					
011	40 D NAIL			0.34	1906.1424		40 D NAIL
		11.89					
012	40 D NAIL			1.08	1916.9524		40 D NAIL
		6.56					
013	40 D NAIL			2.66	1920.8524		40 D NAIL
		6.68					
014	40 D NAIL			2.175	1925.3574		40 D NAIL

:	STA	B.S. +	HI	F.S. −	EL	ADJ. EL	DESCRIPTION
		8.38					
015	40 D NAIL			5.905	1927.8224		40 D NAIL
		4.20					
016	40 D NAIL			9.76	1922.2624		40 D NAIL
		3.25					
017	40 D NAIL			0.43	1925.0324		40 D NAIL
		3.92					
018	40 D NAIL			7.20	1921.8024		40 D NAIL
		4.375					
019	40 D NAIL			4.97	1921.2074		40 D NAIL
		5.97					
020	40 D NAIL			5.02	1922.1574		40 D NAIL
		6.53					
021	40 D NAIL			4.23	1924.4574		40 D NAIL
		7.24					
022	40 D NAIL			3.065	1928.6324		40 D NAIL
		5.235					
023	40 D NAIL			3.01	1930.8574		40 D NAIL
		8.64					
024	40 D NAIL			1.555	1937.9424		40 D NAIL
		9.15					
025	40 D NAIL			2.99	1944.1024		40 D NAIL
		8.035					
026	40 D NAIL			1.945	1950.1924		40 D NAIL
		10.04					
027	40 D NAIL			0.305	1959.9274		40 D NAIL
		10.275					
028	40 D NAIL			0.39	1969.8124		40 D NAIL
		12.57					
029	40 D NAIL			4.60	1977.7824		40 D NAIL
		10.985					
030	40 D NAIL			0.69	1988.0774		40 D NAIL
		14.255					

	STA	BS+	HI	FS−	EL	ADJ.EL
⊙31	40 D NAIL			4.67	1997.6674	
		11.42				
B.M ⊙32	1/2" REBAR #2014			6.26	2002.8274	2002.7924
		6.18				
⊙31=33	40D NAIL			11.335	1997.6674	
		4.75				
⊙30=34	40 D NAIL			14.335	1988.0824	
		0.68				
⊙29=35	40 D NAIL			10.97	1977.7924	
		4.24				
⊙28=36	40 D NAIL			12.21	1969.8224	
		0.465				
⊙27=37	40 D NAIL			10.35	1959.9374	
		0.275				
⊙26=38	40 D NAIL			10.00	1950.2124	
		2.015				
⊙25=39	40 D NAIL			8.10	1944.1274	
		3.10				
⊙24=40	40 D NAIL			9.265	1937.9624	
		1.92				
⊙23=41	40 D NAIL			9.01	1930.8724	
		3.315				
⊙22=42	40 D NAIL			5.545	1928.6424	
		3.08				
⊙21=43	40 D NAIL			7.25	1924.4724	
		4.195				
⊙20=44	40 D NAIL			6.495	1922.1724	
		5.275				
⊙19=45	40 D NAIL			6.23	1921.2174	
		5.155				
⊙18=46	40 D NAIL			4.55	1921.8224	
		6.905				

DESCRIPTION
40 D NAIL
1/2" REBAR #2014

	STA	B.St	HI	ES.-	EL	ADJ. EL	
@ 17=47	40D NAIL			3.625	1925.1024		xxx
		0.64					
@16=48	40 D NAIL			3.46	1922.2824		
		9.96					
@15=49	40 D NAIL			4.40	1927.8424		
		5.89					
@ 14=50	40 D NAIL			8.36	1925.3724		
		2.37					
@13=51	40 D NAIL			6.875	1920.8674		
		2.575					
@12=52	40 D NAIL			6.47	1916.9724		
		1.245					
@11=53	40 D NAIL			12.055	1906.1624		
		1.70					
@10=54	40 D NAIL			10.165	1897.6974		
		1.54					
@9=55	40 D NAIL			8.445	1890.7924		
		1.13					
@8=56	40 D NAIL			8.91	1893.0124		
		4.745					
@7=57	40D NAIL			9.35	1878.4074		
		5.245					
@6=58	40 D NAIL			8.34	1875.3124		
		3.295					
@5=59	40 D NAIL			6.75	1871.8574		
		3.035					
@4=60	40 D NAIL			8.215	1866.6774		
		2.20					
@3=61	40 D NAIL			7.61	1861.2674		
		0.65					
@2=62	40 D NAIL			8.62	1853.2974		
		3.10					
@1=63	40 D NAIL			7.88	1848.5174		

	STA	B.S+	HI	F.S.−	EL	ADJ. EL	DESCRIPTION
T.B.M	40D NAIL	3.92					
021=64	40D NAIL			7.85	1844.5874	1844.5274	
		+0.06 OVER					

11-30-95 JOB # 3643
VALENZUELA, M SKUNK CREEK
GONZALEZ, M

	STA	B.S+	HI	FS-	EL	ADJ. E
1/2" REBAR T.B.M	#2014	0.22			2002.7924	2002.7924
01	40 D NAIL			8.935	1994.0774	
		0.79				
02	40 D NAIL			10.625	1984.2424	
		0.085				
03	40 D NAIL			11.39	1972.9374	
		0.81				
04	40 D NAIL			11.42	1962.3274	
		0.705				
05	40 D NAIL			10.38	1952.6524	
		13.35				
06	40 D NAIL			5.30	1960.7024	
		6.97				
07	40 D NAIL			1.95	1965.7224	
		7.265				
08	40 D NAIL			0.12	1972.8674	
		18.45				
09	1/2" REBAR #2012			7.11	1984.2074	1984.2099
		6.68				
08=10	40 D NAIL			18.025	1972.8624	
		0.195				
07=11	40 D NAIL			7.34	1965.7174	
		1.885				
06=12	40 D NAIL			6.925	1960.6774	
		5.35				
05=13	40 D NAIL			13.395	1952.6324	
		10.33				
04=14	40 D NAIL			0.65	1962.3124	

DESCRIPTION
1/2" REBAR #2014
40 D NAIL S.ER @ HONDA BOW
40 D NAIL
40 D NAIL
40 D NAIL
40 D NAIL
40 D NAIL
40 D NAIL ± E.P @ HONDA BOW
40 D NAIL
1/2" REBAR #2012

	STA	BS+	HI	FS-	EL	ADJ. EL
		11.00				
Q3=15	40 D NAIL			0.385	1972.9274	
		11.65				
Q2=16	40 D NAIL			0.34	1984.2374	
		10.58				
Q1=17	40 D NAIL			0.75	1994.0674	
		9.10				
T.B.M(18) 1/2" REBAR 1/2" REBAR #2014				0.138	2002.7874	2002.7924
		-0.005 UNDER				

12-4-95 JOB #3643
VALENZUELA.M SKUNK CREEK
GONZALEZ.M

	STA	BS+	HI	FS.-	EL	ADJ. EL
1/2" REBAR T.B.M	#2012	3.79 ✓			1984.2099	1984.2099 1985.2873
01	40 D NAIL			2.91 ✓	1985.0899	~~1985.0895~~
		3.43 ✓				
02	40 D NAIL			11.40 ✓	1977.1199	
		1.69 ✓				
03	40 D NAIL			3.11 ✓	1975.6999	
		20.46 ✓				
04	40 D NAIL			0.445 ✓	1995.7149	
		11.045 ✓				
05	40 D NAIL			0.48 ✓	2006.2799	
		16.61 ✓				
06	40 D NAIL			0.37 ✓	2022.5199	
		9.645 ✓				
07	40 D NAIL			2.27 ✓	2029.5949	
		0.35				
08	40 D NAIL			13.14	2016.8849	
		6.575				
09	40 D NAIL			3.47	2019.9099	
		6.72				
010	40 D NAIL			3.01	2023.6199	2023.5877 ~~2023.6122~~
		16.57				
011	1/2 REBAR #2009			0.23	2039.9599	2039.9374
		10.47				
012	40 D NAIL			1.74	2048.6899	
		5.96				
013	40 D NAIL			5.45	2049.1999	
		2.41				
014	40 D NAIL			5.97	2045.6399	

DESCRIPTION

1/2" REBAR #2012 S. OF S. E/P ±30' TO HONDA BOW RD & 3RD AVE.

40 D NAIL ± IN EDGE OF DIRT RD 3RD AVE

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

1/2" REBAR #2009

40 D NAIL

40 D NAIL

40 D NAIL

	STA	B.S.+	HI	F.S.−	EL	ADJ.EL
		6.175				
015	COTTON SPINDLE			4.11	2047.6549	2047.6499
		4.01				
014=16	40D NAIL			6.08	2045.5849	
		6.255				
013=17	40 D NAIL			2.695	2049.1449	
		5.53				
012=18	40 D NAIL			6.035	2048.6399	
		1.52				
011=19	1/2" REBAR #2009			10.245	2039.9149	2039.9374
		0.885				
010=20	40 D NAIL			17.23	2023.5699	2023.5877 ~~2023.5632~~
		3.40				
09=21	40 D NAIL			7.105	2019.8649	
		3.25				
08=22	40 D NAIL			6.34	2016.7749	
		13.95				
07=23	40 D NAIL			1.165	2029.5599	
		2.735				
06=24	40 D NAIL			9.81	2022.4849	
		0.135				
05=25	40 D NAIL			16.37	2006.2499	
		0.505				
04=26	40 D NAIL			11.07	1995.6849	
		0.09				
03=27	40 D NAIL			20.10	1975.6749	
		3.25				
02=28	40 D NAIL			1.805	1977.1199	
		11.52				
01=29				3.545	1985.0949	1985.0873 ~~1985.0852~~
		3.43				
1/2" REBAR T.B. N(30)	09 #2012			4.305	1984.2199	1984.2099
			+0.01	OVER		

DESCRIPTION

COTTON SPINDLE ±E&E TO CIRCLE MNT RD & NEW RIVER HWY

1/2" REBAR #2009 @ S.E COR OF 3RD AVE & CIRCLE MOUNTAIN RD.

1/2" REBAR #2012

12-5-95 JOB #3643

VALENZUELA.M SKUNK CREEK

GONZALEZ.M

TB.M	STA	B.S.+	HI	F.S.-	EL	ADJ.EL
Q 15	COTTON SPINDLE	10.755			2047.6499	2047.6499
Q1	40 D NAIL			0.33	2058.0749	
		7.02				
Q2	40 D NAIL			3.09	2062.0049	
		7.59				
Q3	40 D NAIL			4.62	2064.9749	
		0.89				
Q4	40 D NAIL			0.36	2065.5049	
		7.95				
Q5	40 D NAIL			10.12	2063.3349	
		0.40				
Q6	40 D NAIL			11.23	2052.5049	
		2.51				
Q7	40 D NAIL			9.82	2045.1949	
		9.18				
Q8	40 D NAIL			2.69	2051.6849	
		8.90				
Q9	40 D NAIL			8.88	2059.7049	
		13.05				
Q10	40 D NAIL			0.48	2072.2749	
		10.42				
Q11	40 D NAIL			1.54	2081.1549	
		6.06				
Q12	1/2 REBAR #2007			4.14	2083.0749	2083.0749 ~~2083.0749~~
		4.105 ~~4.105~~				
Q13	40 D NAIL			12.22 ~~12.82~~	2074.9599	
		2.885				
Q14	40 D NAIL			1.47	2076.3749	
		10.15				

DESCRIPTION

COTTON SPINDLE @ INTERSECTION OF NEW RIVER RD & MOUNTAIN CIRCLE

40 D NAIL E.SIDE E.P. NEW RIVER RD

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

1/2" REBAR #2007

40 D NAIL

40 D NAIL

	STA	B.S.it	HT	F.S-	EL	ADJ.EL	DESCRIPTION
Q15	40 D NAIL			6.72	2079.8049		40 D NAIL W. SIDE E.P. NEW RIVER RD
		7.73					
Q16	40 D NAIL			2.165	2085.3699		40 D NAIL E. SIDE E.P. # NEW RIVER RD
		11.40					
Q17	40 D NAIL			0.455	2096.3149		40 D NAIL
		10.56					
Q18	40 D NAIL			4.54	2102.3349	2102.3424	40 D NAIL
		4.435					
Q17=19	40 D NAIL			10.46	2096.3099		
		0.33					
Q16=20	40 D NAIL			11.27	2085.3699		
		2.215					
Q15=21	40 D NAIL			7.785	2079.7999		
		6.71					
Q14=22	40 D NAIL			10.14	2076.3699		
		1.46					
Q13=23	40 D NAIL			2.885	2074.9449		
*		12.16					
		12.04		4.05		2083.0749	
Q12=24	1/2" REBAR #2007			4.025	2083.0549	2083.0649	1/2" REBAR #2007
		4.415					
Q11=25	40 D NAIL			6.33	2081.1399		
		1.62					
Q10=26	40 D NAIL			10.50	2072.2899		
		0.61					
Q9=27	40 D NAIL			13.185	2059.6849		
		0.83					
Q8=28	40 D NAIL			8.85	2051.6649		
		2.69					
Q7=29	40 D NAIL			9.175	2045.1799		
		9.90					
Q6=30	40 D NAIL			2.60	2052.4799		
		11.27					
Q5=31	40 D NAIL			0.435	2063.3149		

	STA	B.S +	HI	F.S -	EL	ADJ.EL
		10.93				
Q 4=32	40 D NAIL			8.76	2065.4849	
		0.415				
Q3=33	40D NAIL			0.945	2069.9549	
		5.585				
Q2=34	40 D NAIL			8.56	2061.9799	
		3.18				
Q1=35	40D NAIL			7.105	2058.0349	
		0.41				
T.B.M Q15=36	COTTON SPINDLE			10.83	2047.6349	2047.6499
		-0.015	UNDER			

DESCRIPTION

12-5-95 TOB#3643
VALENZUELA, M SKUNK CREEK
GONZALEZ, M

	STA	B.S+	HI	F.S-	EL	ADJ. EL	DESCRIPTION
T.B.M Q18	40 D NAIL	6.13			2102.3424	2102.3424	40 D NAIL
				2.65	2105.8224	2105.8224	2½" B.C MARICOPA COUNTY HWY DEPT @ SKUNK CREEK BRIDGE, ON TOP OF W. BARRIOR WALL, 21.9± FROM S. END OF BARRIOR WALL
T.B.M Q18	40 D NAIL	2.595					
				6.075	2102.3424	2102.3424	40 D NAIL

	STA	B.S+	HI	F.S-	EL	ADJ. EL	DESCRIPTION
T.B.M Q18	40 D NAIL	3.115			2102.3424	2102.3424	T.B.M Q18 40 D NAIL
Q1	40 D NAIL			2.645	2102.8124		40 D NAIL ON E. EPI
		7.275					
Q2	40 D NAIL			1.55	2108.5374		40 D NAIL
		8.845					
Q3	40 D NAIL			2.80	2114.5824		40 D NAIL
		8.18					
Q4	40 D NAIL			1.30	2121.4624		40 D NAIL
		16.80					
Q5	40 D NAIL			0.17	2138.0924		40 D NAIL
		11.36					
Q6	40 D NAIL			1.47	2147.9824		40 D NAIL
		8.66					
Q7	G.L.O			3.56	2153.0824	2153.0799 ~~2153.0824~~	U.S. GENERAL LAND OFFICE SURVEY T1N, R8E SEC30, SEC29 SEC31 SEC32, 19FT. 1.2± ABOVE GROUND 2½" BRASS CAP
		11.575					
Q8	40 D NAIL			2.07	2162.5874		40 D NAIL
		6.47					
Q9	½" REBAR #2000			5.48	2163.5774	2163.5774	½" REBAR #2000
		5.455					
Q8=10	40 D NAIL			6.445	2162.5874		
		2.12					
Q7=11	G.L.O			11.63	2153.0774	2153.0799 ~~2153.0774~~	
		3.58					

	STA	B.S+	HI	F.S-	EL	ADJ. EL
06=12	40 D NAIL			8.67	2147.9874	
		1.43				
05=13	40 D NAIL			11.32	2138.0974	
		0.26				
04=14	40 D NAIL			16.88	2121.4774	
		1.23				
03=15	40 D NAIL			8.115	2114.5924	
		2.795				
02=16	40 D NAIL			8.84	2108.5474	
		1.59				
01=17	40 D NAIL			7.32	2102.8174	
		2.675				
T.B.M 018=18	40 D NAIL			3.15	2102.3424	2102.3424
			(FLAT)			

	STA	B.S+	HI	F.S-	EL	ADJ. EL
T.B.M 018	40 D NAIL	3.48			2102.3424	2102.3424
01	1/2 REBAR #2004			6.985	2098.8374	2098.8374
		6.885				
02	T.B.M 09 40 D NAIL			3.38	2102.3424	2102.3424

DESCRIPTION

DESCRIPTION

40 D NAIL 018

1/2 REBAR #2004

12-5-95 JOB#3643
VALENZUELA, M SKUNK CREEK
GONSALEZ, M

	STA	B.S.T	HI	FS.-	EL	ADJ.EL
T.B.M ⊙10	40 D NAIL	7.17			2023.5877	2023.5877
⊙1	40 D NAIL			6.93	2023.8277	
		0.36				
⊙2	40 D NAIL			16.42	2007.7677	
		6.32				
⊙3	40 D NAIL			6.615	2007.4727	
		13.10				
⊙4	40 D NAIL			1.06	2019.5127	
		13.605				
⊙5	#2010 4/0			0.30	2032.8177	2032.8302
		0.23				
⊙4=6	40 D NAIL			13.545	2019.5027	
		0.94				
⊙3=7	40 D NAIL			12.99	2007.4527	
		6.61				
⊙2=8	40 D NAIL			6.315	2007.7477	
		17.08				
⊙1=9	40 D NAIL			1.02	2023.8077	
		7.055				
T.B.M ⊙10=10	40 D NAIL			7.30	2023.8627	2023.5877
			-0.025	UNDER		

DESCRIPTION

40 D NAIL REFER TO PG. 37 FOR EL
40 D NAIL

40 D NAIL

40 D NAIL

40 D NAIL

U.S. GENERAL LAND OFFICE SURVEY T6N, R3E, SEC6, SEC5, SEC7, SEC8,
1.2' ABOVE GROUND 2½" BRASS CAP

12-5-95

VALENZUELA.M JOB# 3643

GONZALEZ.M SKUNK CREEK

	STA	BS+	HI	FS-	EL	ADJ.EL
T.B.M						
01	40D NAIL	2.55			1985.0873	1985.0873
01	40D NAIL			13.39	1974.2473	
		1.04				
02	V-CUT			6.86	1968.4273	1968.4273
		6.845				
01	40D NAIL			1.025	1974.2473	
		13.54				
T.B.M						
01	40D NAIL			2.70	1985.0873	1985.0873

DESCRIPTION

40 D NAIL REFER TO PAGE 37 FOR EL

V-CUT @ N.W CONC FOOTER TO TRANSMISSION POWER LINE. LOCATED IN A NORTH EASTERLY DIRECTION FROM INTERSECTION OF HONDA BOW RD/3RD AVE

12-21-95 DOUBLE CHECKS

A. WITZELL

P. O'TOOLE #3643

SKUNK CREEK

STA	BS	HI	FS	ELEV.	
				1673.0075	
	8.06	1681.0675			
⊙1			2.97	1678.09 ~~1677~~	
				1661.4125	
	7.33	1668.74			
⊙1			3.47	1665.27	
	8.10	1673.37			
⊙2			2.27	1671.10	
	8.07	1679.17			
⊙3			3.40	1675.77	
	6.35	1682.12			
TBM			3.42	1678.70	
	3.34	1682.04			
⊙4			6.31 ~~6.73~~	1675.73 ~~1675.31~~	
	3.43	1679.16			
⊙5			8.05	1671.11	
	2.18	1673.29			
⊙6			7.99	1665.30	
	3.56	1668.86			
			7.45	1661.41	1661.41

DESCRIPTION

X-CUT IN TOP OF HEADWALL @ 33RD & CREEFICEE

40D NAIL ✓

1204786.18 TBM

X-CUT IN TOP OF HEADWALL @ 33RD & CREEFICEE

BC 1204786.18

TIES TO FCD BM'S (GRM'S)

STA	BS	HI	FS	ELEV.
				1850.98
	5.12			
BM			4.28	1851.82
	4.37			
			5.22	1850.97

CONVERSIONS

TEM X-CUT @ 3340 ; CALEFRES
FIRST LOOP 1673.01
VERIFY LOOP 1678.70

ADD 5.69 TO PAGE 11 ELEVATIONS AT 03 AND THEREAFTER.

TP 023 PAGE 22

G.L.O. BC @ NW CORNER OF SEC 30 1857.45

TP 023

ELEVATION REFERENCE MARKS

Collins / Piña
Consulting Engineers, Inc.

ERM's

ERM No.	Description
ERM 1	3" Aluminum Cap, Arizona Highway Department, set in conc., North Bound Frontage Road, Highway 17, Sta. P.O.S.L. 1061+43.60, 0.3'± above natural ground, east side of frontage road. Elev. = 1544.06
ERM 2	3" Aluminum Cap, Arizona Highway Department, set in conc., North Bound Highway 17 at R/W fence, Sta. NB P.O.T. 1098+00.00, 0.2'± above natural ground. Elev. = 1576.34
ERM 3	3" Aluminum Cap, Arizona Highway Department, set in conc., North Bound Highway 17 at R/W fence, Sta. NB P.O.S.L. 1150+20.45, 0.3'± above natural ground. Elev. = 1588.31
ERM 4	3" Aluminum Cap, Arizona Highway Department, set in conc., North Bound Highway 17 at R/W fence, Sta. NB P.O.T. 1204+86.18, 0.1' ± above natural ground. Elev. = 1661.41
ERM 5	3" Aluminum Cap set on top of east end of north concrete abutment to Skunk Creek bridge (Carefree Highway), stamped A.D.O.T. Highway Div. 1689-66. Elev. = 1688.65
ERM 6	2 1/2" Brass Cap, 1933 USGLO Survey, T6N, R2E, Sec 35, Sec 2, Sec 1, W.C., T5N, R2E, 0.8± above natural ground. Elev. = 1731.88
ERM 8	2 1/2" Brass Cap, U.S.G.L.O., NW Corner of Section 30, T6N, R2E, Desert Hills and 19th Ave., north side of Desert Hills. Elev. = 1857.45 (From F.C.D.)
ERM 9	"V" cut in northwest concrete footer of electric transmission power line tower, located north easterly from intersection of Honda Bow Rd. and 3rd Ave. Elev. = 1974.12
ERM 10	2 1/2" Brass Cap, U.S.G.L.O., T6N, R3E, Section 6, Section 5, Section 7, Section 8, 1.2'± above natural ground. Elev. = 2038.52
ERM 11	2 1/2" Brass Cap, Maricopa County Highway Department at New Skunk Creek Bridge on top of West Barrier Wall, 21.9± from south end of barrier wall. Elev. = 2111.51
ERM 12	2 1/2" Brass Cap, U.S.G.L.O., T7N, R3E, Section 30, Section 29, Section 31, Section 32, 1.2± above natural ground. Elev. = 2158.77

COLLINS/PIÑA

Memo

To: Cortney Brand

From: Art Witzell

CC:

Date: June 4, 1997

Re: ERM's for Skunk Creek

Dear Cortney,

Below you will find the list of ERM's that I have coordinate values for. I did find our copy of the topographic maps prepared by Kenny Aerial. If the Flood Control District needs values for the other ERM's not listed, I will have to go back into the field and get them. Please let me know ASAP if the County requires this. Thanks.

ERM 1) N 1002171.563

E 636450.602

ERM 2) N 1005790.235

E 635819.477

ERM 5) N 1018114.562

E 637261.578

ERM 6) N 1023381.638

E 638863.684

ERM 7) GLO BRASS CAP, SOUTH ¼ CORNER OF SECTION 25

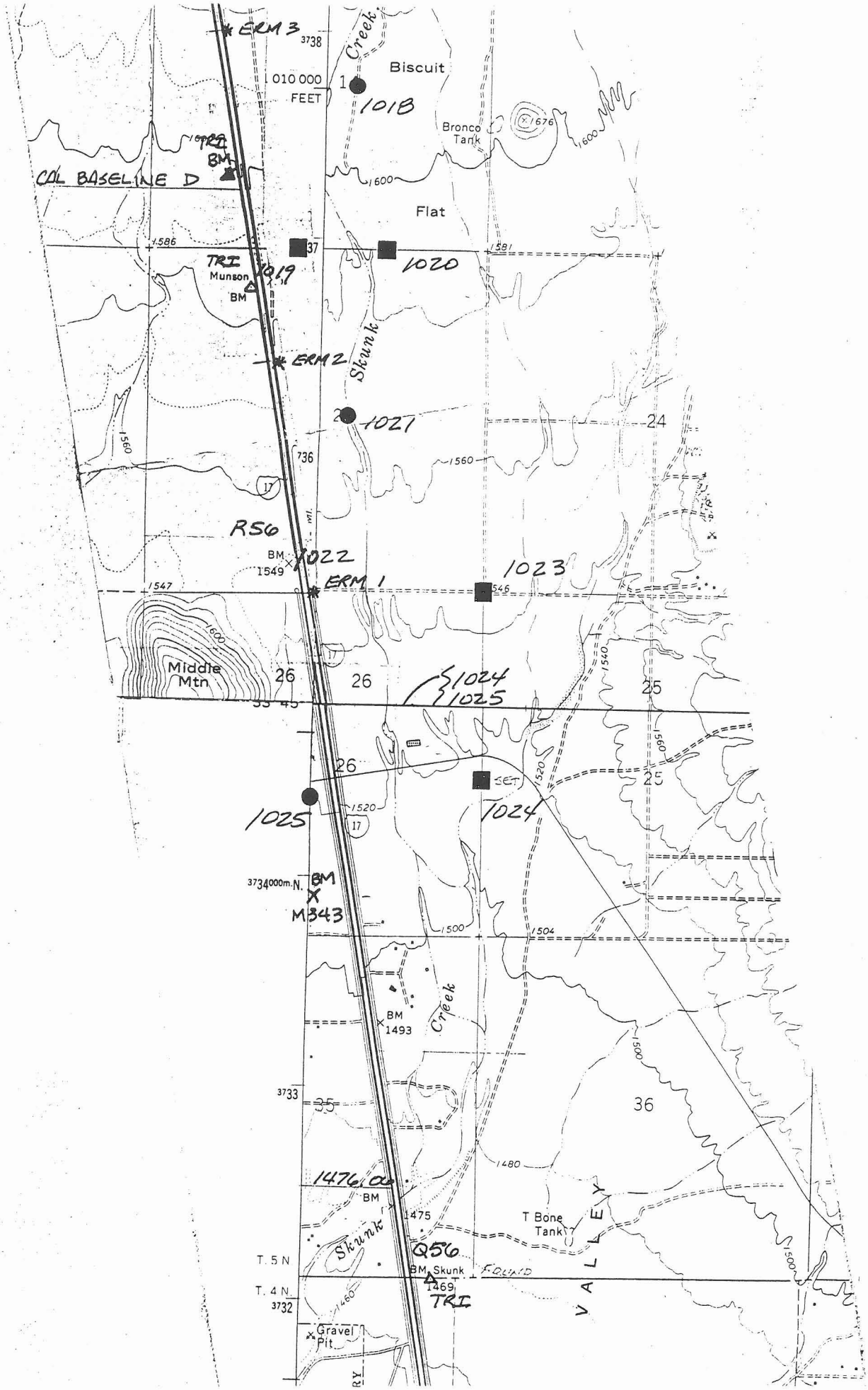
N 1028730.829

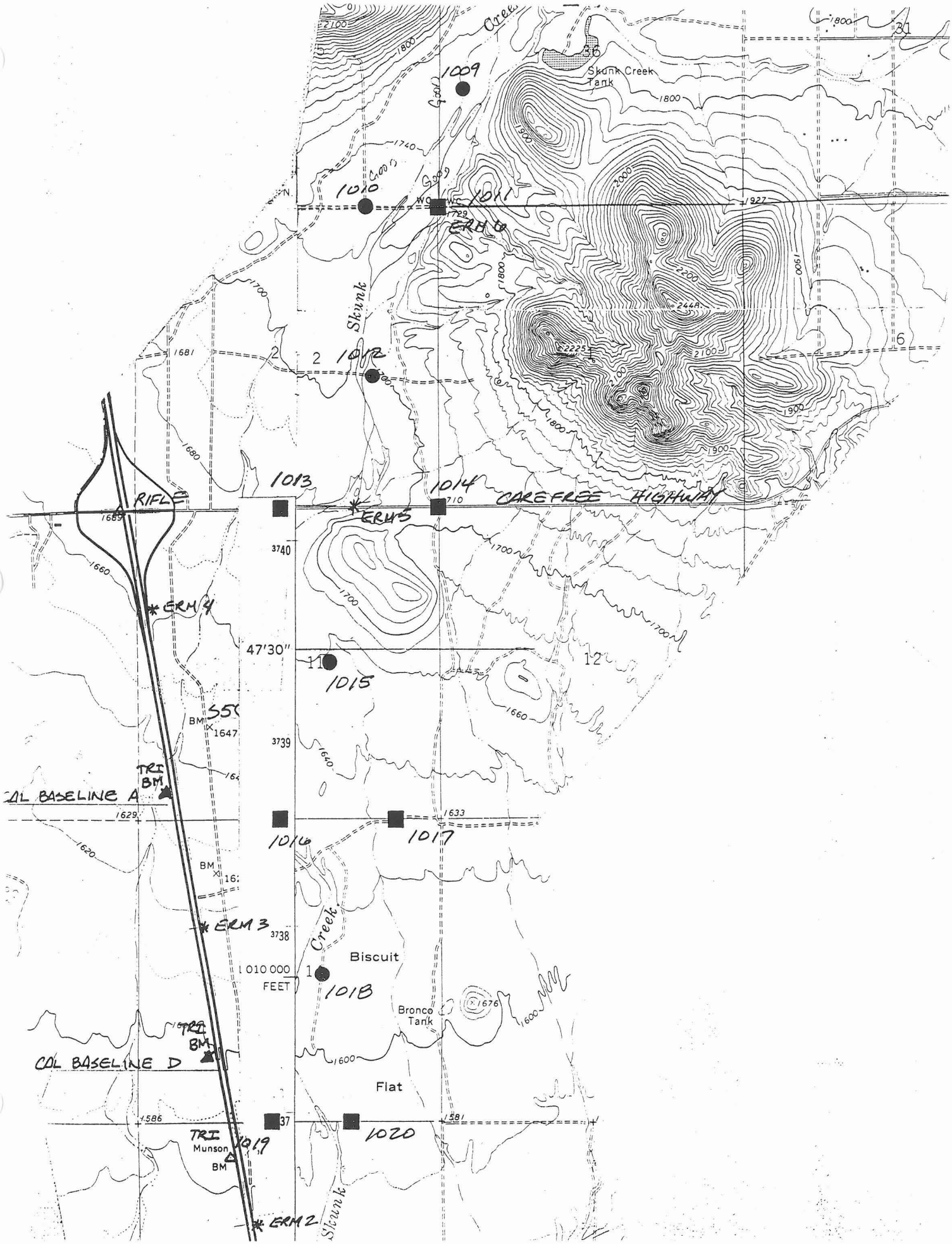
E 641641.017

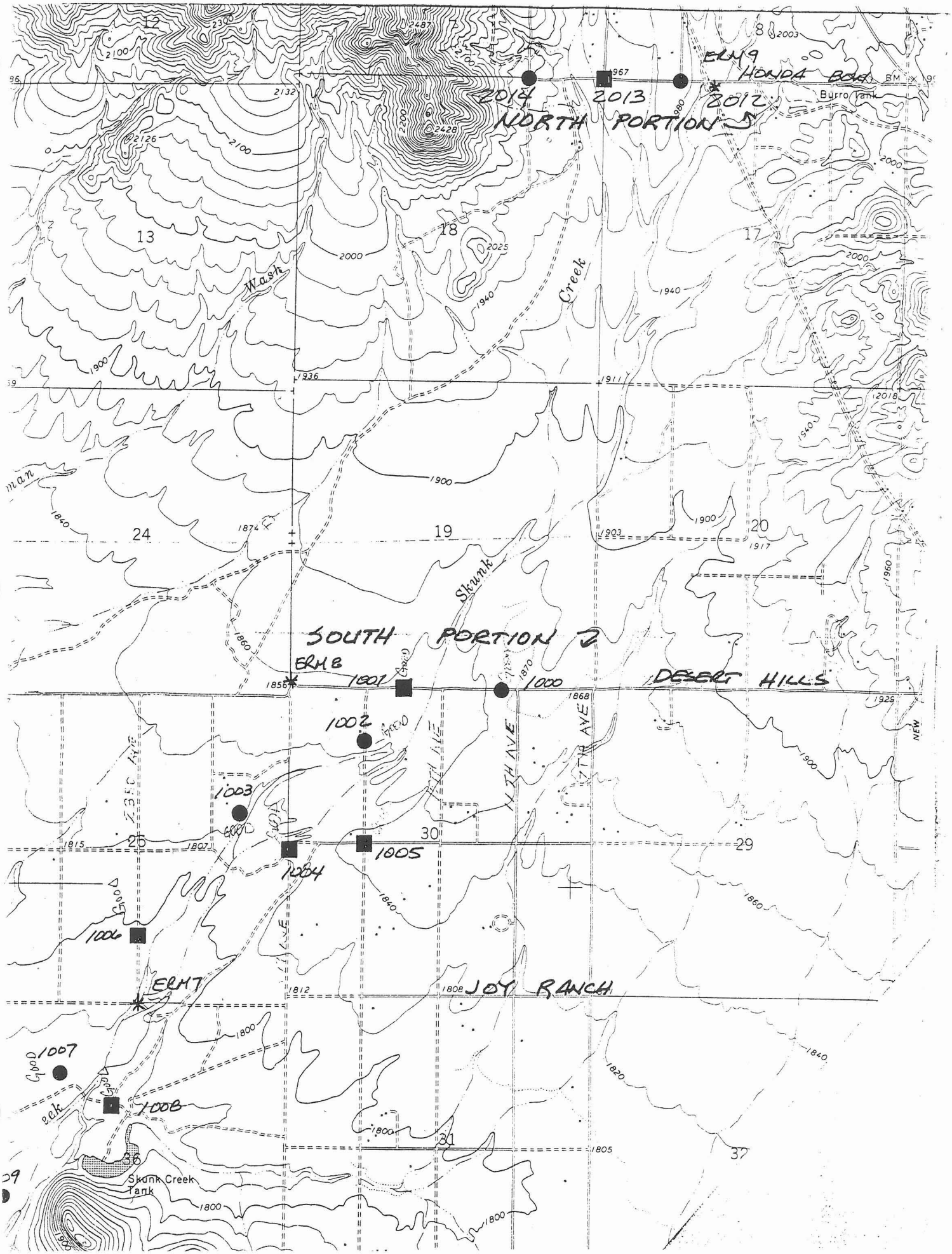
ERM 8)	N	1034184.649
	E	644296.379
ERM 10)	N	1050016.708
	E	649622.893
ERM 11)	N	1057415.340
	E	649320.675
ERM 12)	N	1060544.061
	E	649664.288

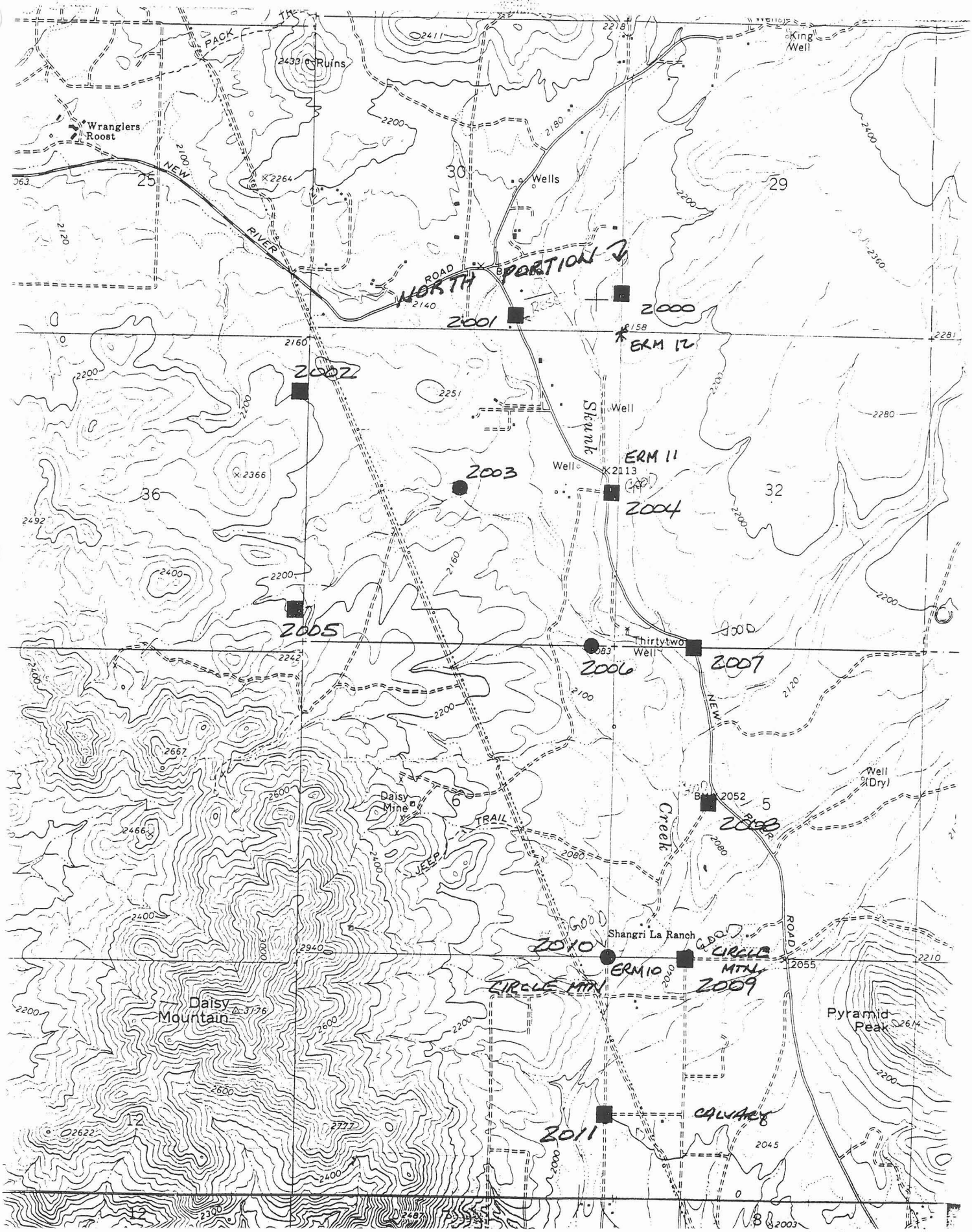
Please call me at 264-7505 if you have any questions.

Art Witzell


ERM 3
3738
010 000
FEET
Biscuit
Creek
1018
Bronco
Tank
1676
1600
TRI
BM
COL BASELINE D
Flat
1586
37
1581
TRI
Munson
BM
1019
1020
ERM 2
Skunk
1027
24
1560
736
17
R56
BM
1549
1022
ERM 1
1547
546
1023
Middle
Mtn
26
1024
1025
25
1540
1520
SET
1024
1025
3734000m.N.
BM
M343
1500
1504
BM
1493
Creek
3733
35
36
1480
1476.0
BM
1475
T Bone
Tank
Skunk
Q56
T. 5 N
BM Skunk
1469
FOUND
T. 4 N.
3732
TRI
VALLEY
Gravel
Pit


Skunk Creek Tank
1009
1010
1011
ERM 6
Skunk
1012
1013
1014
RIFLE
CAREFREE HIGHWAY
ERM 5
ERM 4
47'30"
1015
TRI BM
COL BASELINE A
1016
1017
ERM 3
Creek
Biscuit
1 010 000 FEET
1018
Bronco Tank
TRI BM
COL BASELINE D
Flat
1020
TRI Munson BM
1019
ERM 2
Skunk


ERM9
HONDA BOX
2014
2013
2012
NORTH PORTION
Burro Tank
Wash
Creek
Skunk
SOUTH PORTION
ERM8
1001
1000
DESERT HILLS
1002
1003
1004
1005
1006
ERM7
JOY RANCH
1007
1008
Skunk Creek Tank
7TH AVE
8TH AVE
NEW


PACK
Ruins
King Well
Wranglers Roost
NEW
RIVER
ROAD
Wells
NORTH PORTION
2000
2001
ERM 12
2002
Well
Sicuk
ERM 11
2003
Well
2004
2005
Thirtytwo Well
2006
2007
NEW
Well (Dry)
Daisy Mine
TRAIL
JEEP
Creek
2008
ROAD
Shangri La Ranch
2010
ERM10
CIRCLE MTN
2009
Daisy Mountain
Pyramid Peak
CALVARY
2011
25
30
29
36
32
6
5
12
8

Section 4

NGS STATION SHEETS

Collins/Piña
Consulting Engineers, Inc.

ROAD,
DV0126'THENCE 0.3 MILES NORTH ALONG THE NEW BLACK CANYON ROAD. AT THE LARGE
DV0126'BRIDGE OVER THE SKUNK RIVER, 16.2 FEET WEST OF THE CENTER LINE OF THE
DV0126'NEW BLACK CANYON ROAD, SET ON TOP AND IN THE CENTER OF THE WEST
DV0126'CONCRETE WHEEL GUARD OF THE BRIDGE, 0.8 FOOT WEST OF THE EAST EDGE OF
DV0126'THE CONCRETE WHEEL GUARD AND 1.2 FEET HIGHER THAN THE ROAD.
DV0126
DV0126 STATION RECOVERY (1970)
DV0126
DV0126'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1970
DV0126'MARK NOT FOUND.
DV0126
DV0126 STATION RECOVERY (1977)
DV0126
DV0126'RECOVERY NOTE BY LOCAL ENGINEER (INDIVIDUAL OR FIRM) 1977
DV0126'RECOVERED IN GOOD CONDITION.
1 National Geodetic Survey, Retrieval Date = MARCH 17, 1994
DV1992
****
DV1992 DESIGNATION - CAL BASELINE A
DV1992 PID - DV1992
DV1992 STATE/COUNTY- AZ/MARICOPA
DV1992 USGS QUAD - BISCUIT FLAT, SECTION 11, T5N, R2E
DV1992
DV1992 HORZ DATUM - NAD 83 (1992)
DV1992 VERT DATUM - NGVD 29
DV1992
DV1992 POSITION - 33 47 04.12092(N) 112 07 58.42155(W) ADJUSTED
DV1992 92 minus 83 +00.00520 -00.00396 ADJUSTED
DV1992 83 minus 27 - +00.13378 +02.55570 ADJUSTED
DV1992
DV1992 HEIGHT - 498.3 (meters) 1635. (feet) VERT ANGLE
DV1992 88 minus 29 - +0.6 VERTCON
DV1992
****
DV1992 HORZ ORDER - SECOND
DV1992
DV1992.The horizontal position was established by classical geodetic methods
DV1992.and adjusted by the National Geodetic Survey in August 1993.
DV1992
DV1992.The orthometric height was determined by vertical angle observations.

DV1992
DV1992.The Laplace correction was computed from DEFLEC93 derived deflections.
DV1992
DV1992.The geoid height was determined by GEOID93.
DV1992
DV1992; North East Scale Converg.
DV1992;SPC AZ C - 308,771.460 193,335.479 0.99990494 -0 07 12.9 MT
DV1992;UTM 12 - 3,738,836.409 395,113.507 0.99973562 -0 37 48.1 MT
DV1992
DV1992: Primary Azimuth Mark Grid Az
DV1992:SPC AZ C - RIFLE 349 52 09.7
DV1992:UTM 12 - RIFLE 350 22 44.9
DV1992
DV1992|----------|
DV1992| Pid Reference Object Distance Geod. AZ |
DV1992| dddmmss.s |
DV1992| CAL BASELINE A RM 1 20.120 METERS 21501 |
DV1992| CAL BASELINE A RM 2 20.114 METERS 30500 |
DV1992| DV1993 RIFLE APPROX. 1.6 KM 3494456.8 |
DV1992|----------|
DV1992
DV1992_STATION MARK IS A TRIANGULATION STATION DISK
DV1992_WITH SETTING: SET IN TOP OF CONCRETE MONUMENT (ROUND)
DV1992_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DV1992+STABILITY: SURFACE MOTION
DV1992
DV1992 HISTORY - Year Condition Recov. By
DV1992 HISTORY - 1975 STATION MONUMENTED NATIONAL GEODETIC SURVEY
DV1992 HISTORY - 1978 AZ DEPT OF TRANSP
DV1992
DV1992 STATION DESCRIPTION
DV1992
DV1992'DESCRIBED BY ARIZONA DEPARTMENT OF TRANSPORTATION 1978 (TT)
DV1992'THE STATION IS LOCATED ABOUT 10 MILES NORTH OF PHOENIX ALONG
DV1992'THE WEST SIDE OF INTERSTATE HWY. 17.
DV1992'
DV1992'THE STATION IS A STANDARD N.G.S. TRIANGULATION STATION DISK,
DV1992'STAMPED A 1975, SET IN THE TOP OF A ROUND CONCRETE MONUMENT
DV1992'PROJECTING ABOUT 5 INCHES. THE STATION IS 173 FEET NORTHWEST
DV1992'OF MILE POST 223, 51 FEET EAST OF R/W FENCE, 50.8 FEET WEST OF
DV1992'CENTERLINE OF SOUTHBOUND LANE OF I-17 AND 1.3 FEET WEST OF A
DV1992'METAL WITNESS POST.
DV1992'
DV1992'REFERENCE MARK 1 IS A STANDARD N.G.S. DISK SET IN A ROUND

DV1992'CONCRETE MONUMENT STAMPED A NO 1 1975.
DV1992'
DV1992'REFERENCE MARK 2 IS A STANDARD N.G.S. DISK STAMPED A NO 2 1975
DV1992'SET IN TOP OF A ROUND CONCRETE MONUMENT.
DV1992'
DV1992'TO REACH THE STATION FROM THE JUNCTION OF STATE ROUTE 74 AND
DV1992'I-17 (CAREFREE INTERCHANGE), 11 MILES NORTH OF PHOENIX, GO
DV1992'SOUTH ON I-17 FOR 1.0 MILES TO THE STATION ON THE RIGHT. THIS
DV1992'STATION IS THE NORTHERN MOST STATION OF THE PHOENIX
CALIBRATED
DV1992'BASELINE ESTABLISHED BY NGS IN 1975.
DV1992'
DV1992'HEIGHT OF LIGHT ABOVE STATION MARK 1.5 METERS.
DV1992'
1 National Geodetic Survey, Retrieval Date = MARCH 17, 1994
DV1991
****
DV1991 DESIGNATION - CAL BASELINE D
DV1991 PID - DV1991
DV1991 STATE/COUNTY- AZ/MARICOPA
DV1991 USGS QUAD - BISCUIT FLAT, SECTION 14, T5N, R2E
DV1991
DV1991 HORZ DATUM - NAD 83 (1992)
DV1991 VERT DATUM - NGVD 29
DV1991
DV1991 POSITION - 33 46 19.37711(N) 112 07 48.98570(W) ADJUSTED
DV1991 92 minus 83 +00.00519 -00.00396 ADJUSTED
DV1991 83 minus 27 - +00.13359 +02.55510 ADJUSTED
DV1991
DV1991 HEIGHT - 487.0 (meters) 1598. (feet) VERT ANGLE
DV1991 88 minus 29 - +0.6 VERTCON
DV1991
****
DV1991 HORZ ORDER - SECOND
DV1991
DV1991.The horizontal position was established by classical geodetic methods
DV1991.and adjusted by the National Geodetic Survey in August 1993.
DV1991
DV1991.The orthometric height was determined by vertical angle observations.
DV1991
DV1991.The Laplace correction was computed from DEFLEC93 derived deflections.
DV1991
DV1991.The geoid height was determined by GEOID93.
DV1991
DV1991; North East Scale Converg.

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DV1991;SPC AZ C   -   307,392.502   193,575.355 0.99990482    -0 07 07.5  MT
DV1991;UTM  12    - 3,737,455.605   395,341.067 0.99973503    -0 37 42.1  MT
DV1991
DV1991:            Primary Azimuth Mark                Grid Az
DV1991:SPC AZ C   -  CAL BASELINE A                     350 07 54.8
DV1991:UTM  12    -  CAL BASELINE A                     350 38 29.4
DV1991
DV1991|-----------------------------------------------------------------|
DV1991| Pid     Reference Object                Distance     Geod. AZ  |
DV1991|                                         dddmmss.s |
DV1991| DV0132 MUNSON                            APPROX. 0.5 KM 1713401.8 |
DV1991|       CAL BASELINE D RM 1                 20.116 METERS 21501     |
DV1991|       CAL BASELINE D RM 2                 20.111 METERS 30501     |
DV1991| DV1992 CAL BASELINE A                     APPROX. 1.4 KM 3500047.3 |
DV1991|-----------------------------------------------------------------|
DV1991
DV1991_STATION MARK IS A TRIANGULATION STATION DISK
DV1991_WITH SETTING: SET IN TOP OF CONCRETE MONUMENT (ROUND)
DV1991_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DV1991+STABILITY: SURFACE MOTION
DV1991
DV1991  HISTORY    - Year Condition          Recov. By
DV1991  HISTORY    - 1975 STATION MONUMENTED   NATIONAL GEODETIC
SURVEY
DV1991  HISTORY    - 1978                    AZ DEPT OF TRANSP
DV1991
DV1991                    STATION DESCRIPTION
DV1991
DV1991'DESCRIBED BY ARIZONA DEPARTMENT OF TRANSPORTATION 1978 (TT )
DV1991'THE STATION IS LOCATED ABOUT 9.75 MILES NORTH OF PHOENIX ALONG
DV1991'THE WEST SIDE OF INTERSTATE HWY. 17.
DV1991'
DV1991'THE STATION IS A STANDARD NGS TRIANGULATION STATION DISK,
DV1991'STAMPED D 1975 AND IS SET IN A ROUND CONCRETE MONUMENT
PROJECTING
DV1991'ABOUT 5 INCHES.  THE STATION IS ABOUT 50 FEET WEST OF SOUTH
DV1991'BOUND LANE I-17 AND MARKED WITH A METAL WITNESS POST.
DV1991'
DV1991'REFERENCE MARK 1 IS A STANDARD NGS DISK STAMPED D NO 1 1975
DV1991'AND IS SET IN A ROUND CONCRETE MONUMENT.
DV1991'
DV1991'REFERENCE MARK 2 IS A STANDARD NGS DISK STAMPED D NO 2 1975
DV1991'AND IS SET IN A ROUND CONCRETE MONUMENT.
DV1991'
DV1991'TO REACH THE STATION FROM THE JUNCTION OF STATE ROUTE 74 AND
```

DV0134'RECOVERED IN GOOD CONDITION.
DV0134
DV0134 STATION RECOVERY (1977)
DV0134
DV0134'RECOVERY NOTE BY LOCAL ENGINEER (INDIVIDUAL OR FIRM) 1977
DV0134'RECOVERED IN GOOD CONDITION.
1 National Geodetic Survey, Retrieval Date = MARCH 17, 1994
DV0122
****
DV0122 DESIGNATION - SKUNK
DV0122 PID - DV0122
DV0122 STATE/COUNTY- AZ/MARICOPA
DV0122 USGS QUAD - UNION HILLS, SECTION 35 & 2, T5N, R2E
DV0122
DV0122 HORZ DATUM - NAD 83 (1992)
DV0122 VERT DATUM - NGVD 29
DV0122
DV0122 POSITION - 33 43 32.39095(N) 112 07 08.51535(W) ADJUSTED
DV0122 92 minus 83 +00.00464 -00.00601 ADJUSTED
DV0122 83 minus 27 - +00.13531 +02.55336 ADJUSTED
DV0122
DV0122 HEIGHT - 447.692 (meters) 1468.80 (feet) ADJ UNCHK
DV0122 88 minus 29 - +0.62 VERTCON
DV0122
****
DV0122 HORZ ORDER - SECOND
DV0122 VERT ORDER - FIRST CLASS 2
DV0122
DV0122.The horizontal position was established by classical geodetic methods
DV0122.and adjusted by the National Geodetic Survey in August 1993.
DV0122
DV0122.The orthometric height was key entered from printed documents
DV0122.and not key verified.
DV0122
DV0122.The Laplace correction was computed from DEFLEC93 derived deflections.
DV0122
DV0122.The geoid height was determined by GEOID93.
DV0122
DV0122; North East Scale Converg.
DV0122;SPC AZ C - 302,245.973 194,606.493 0.99990433 -0 06 44.5 MT
DV0122;UTM 12 - 3,732,300.995 396,326.248 0.99973250 -0 37 16.9 MT
DV0122
DV0122: Primary Azimuth Mark Grid Az
DV0122:SPC AZ C - PYRAMID PK RESET 292 35 09.0
DV0122:UTM 12 - PYRAMID PK RESET 293 05 41.4

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DV0122
DV0122|-------------------------------------------------------------------|
DV0122| Pid    Reference Object                Distance     Geod. AZ  |
DV0122|                                         dddmmss.s |
DV0122| DV0123 SKUNK RM 1                     20.092 METERS 09118     |
DV0122| DV0121 SKUNK AZ MK                                  2002300.4 |
DV0122| DV2029 PYRAMID PK RESET                APPROX. 6.2 KM 2922824.5 |
DV0122| DV0125 Q 56                         168.574 METERS 35020     |
DV0122| DV0124 SKUNK RM 2                     14.533 METERS 35602     |
DV0122|-------------------------------------------------------------------|
DV0122
DV0122_STATION MARK IS A TRIANGULATION STATION DISK
DV0122_WITH SETTING: SET IN TOP OF SQUARE CONCRETE MONUMENT
DV0122_THE MARK IS STAMPED: SKUNK 1947
DV0122_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DV0122+STABILITY: SURFACE MOTION
DV0122
DV0122  HISTORY    - Year Condition          Recov. By
DV0122  HISTORY    - 1947 STATION MONUMENTED   COAST AND GEODETIC
SURVEY
DV0122  HISTORY    - 1959 GOOD               COAST AND GEODETIC SURVEY
DV0122  HISTORY    - 1970 GOOD               NATIONAL GEODETIC SURVEY
DV0122  HISTORY    - 1972 GOOD               AZ HIGHWAY DEPT
DV0122  HISTORY    - 1977 GOOD               LOCAL ENGINEER
DV0122  HISTORY    - 1982 GOOD               AZ DEPT OF TRANSP
DV0122  HISTORY    - 1986 GOOD               AZ DEPT OF TRANSP
DV0122
DV0122                  STATION DESCRIPTION
DV0122
DV0122'DESCRIBED BY COAST AND GEODETIC SURVEY 1947 (DHK)
DV0122'LOCATED ON THE EAST SIDE OF STATE HIGHWAY 69.  ABOUT 19 MILES
DV0122'NORTH OF PHOENIX AND 14 MILES NORTH-NORTHEAST OF GLENDALE.
DV0122'IT IS 44 FEET WEST OF A FENCE CORNER, 52.5 FEET EAST OF THE
DV0122'CENTER LINE OF THE HIGHWAY, 115.5 FEET SOUTHEAST OF A CATTLE
DV0122'GUARD AND 5.7 FEET SOUTH OF A WITNESS POST.  IT IS STAMPED
DV0122'SKUNK 1947 AND PROJECTS 2 INCHES.
DV0122'
DV0122'REFERENCE MARK NO. 1 IS 2.5 FEET SOUTH OF AN EAST AND WEST
DV0122'FENCE LINE.  IT IS STAMPED SKUNK NO 1 1947 AND PROJECTS 3
DV0122'INCHES.
DV0122'
DV0122'REFERENCE MARK NO. 2 IS 75 FEET SOUTHEAST OF A CATTLE GUARD,
DV0122'50 FEET EAST OF THE CENTER LINE OF THE HIGHWAY AND 5.5 FEET
WEST
DV0122'OF A NORTH AND SOUTH FENCE LINE.  IT IS STAMPED SKUNK NO 2
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DV0122'1947 AND PROJECTS 3 INCHES.
DV0122'
DV0122'BENCH MARK Q56 IS A STANDARD USC AND GS DISK SET IN A CONCRETE
DV0122'POST PROJECTING 5 INCHES. IT IS 24.5 FEET EAST OF THE CENTER
DV0122'LINE OF THE HIGHWAY AND 45 FEET SOUTH OF A SIDE ROAD. IT IS
DV0122'STAMPED Q 56 1934.
DV0122'
DV0122'THE AZIMUTH MARK IS LOCATED 0.45 MILE SOUTH-SOUTHWEST OF THE
DV0122'STATION. 39.5 FEET WEST OF THE CENTER LINE OF THE HIGHWAY.
DV0122'IT IS STAMPED SKUNK 1947 AND PROJECTS 4 INCHES.
DV0122'
DV0122'TO REACH THE STATION FROM THE SANTA FE RAILROAD DEPOT IN
DV0122'GLENDALE, GO SOUTHEAST ON U.S. HIGHWAYS 60, 70, AND 89 FOR 2.6
DV0122'MILES TO THEIR JUNCTION WITH STATE HIGHWAY 69. TURN LEFT
DV0122'AND FOLLOW HIGHWAY 69 FOR 4.6 MILES TO THE ARIZONA CANAL.
DV0122'CONTINUE ON HIGHWAY FOR 10.55 MILES TO A CROSSROAD. CONTINUE
DV0122'STRAIGHT AHEAD 0.15 MILE TO THE STATION ON THE RIGHT.
DV0122'
DV0122
DV0122 STATION RECOVERY (1959)
DV0122
DV0122'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1959 (SLH)
DV0122'ALL MARKS WERE RECOVERED AS DESCRIBED AND IN GOOD
CONDITION.
DV0122'A NEW WITNESS POST WAS SET, MEASUREMENTS TO THE MARKS ARE AS
DV0122'FOLLOWS--
DV0122'
DV0122'WITNESS POST TO--STATION MARK 29.5 FEET WEST
DV0122'
DV0122'R.M. 1 40.0 FEET EAST
DV0122'
DV0122'R.M. 2 55.1 FEET NORTHWEST
DV0122'
DV0122'THE OLD ROAD HAS BEEN RELOCATED AND THE STATION IS NOW
REACHED
DV0122'FROM THE JUNCTION OF CAMELBACK ROAD AND BLACK CANYON
HIGHWAY
DV0122'IN PHOENIX BY GOING NORTH ON ARIZONA STATE HIGHWAY 69 FOR 14.3
DV0122'MILES TO A GRADED ROAD ON THE RIGHT. THIS IS 0.1 MILE SOUTH
DV0122'OF THE BRIDGE OVER SKUNK CREEK. TURN RIGHT THROUGH A CATTLE
DV0122'GUARD AND GO EAST FOR 0.1 MILE TO A TRACK ROAD RIGHT, TURN
DV0122'RIGHT AND GO 0.05 MILE SOUTHWEST TO AN EAST-WEST FENCE AND
DV0122'THE STATION.
DV0122'
DV0122'TO REACH THE AZIMUTH MARK FROM THE STATION, RETURN TO THE

DV0122'CATTLE-GUARD, TURN LEFT AND GO SOUTH ON ARIZONA STATE HIGHWAY
DV0122'69 FOR 0.35 MILE TO A GRADED ROAD ON THE RIGHT, TURN RIGHT AND
DV0122'FOLLOW THE ROAD SOUTHWESTERLY FOR 0.15 MILE TO THE AZIMUTH
DV0122'MARK ON THE RIGHT, 40 FEET WEST OF THE CENTER OF THE DIRT ROAD.
DV0122'
DV0122
DV0122 STATION RECOVERY (1970)
DV0122
DV0122'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1970 (LFS)
DV0122'ALL MARKS WERE RECOVERED AND FOUND IN GOOD CONDITION. THE
DV0122'1959 DESCRIPTION IS ADEQUATE.
DV0122'
DV0122
DV0122 STATION RECOVERY (1972)
DV0122
DV0122'RECOVERY NOTE BY ARIZONA HIGHWAY DEPARTMENT (NOW AZDT) 1972
DV0122'GENERAL LOCATION PHX TO PARKER
DV0122'
DV0122'TO REACH AS PER USC AND GS DESCRIPTION AND RECOVERY NOTES
DV0122'
DV0122'STATION MARK STD. USC AND GS B.C.
DV0122'
DV0122'REFERENCE MARKS GOOD
DV0122'
DV0122
DV0122 STATION RECOVERY (1977)
DV0122
DV0122'RECOVERY NOTE BY LOCAL ENGINEER (INDIVIDUAL OR FIRM) 1977 (FB)
DV0122'SKUNK 1947 RECOVERED GOOD.
DV0122'
DV0122'SKUNK NO. 1 1947 RECOVERED GOOD.
DV0122'
DV0122'SKUNK NO. 2 1947 RECOVERED GOOD.
DV0122'
DV0122'DISTANCE AND DIRECTION FROM NEAREST TOWN--6 MILES NORTH OF PHOENIX,
DV0122'ARIZ.
DV0122'
DV0122
DV0122 STATION RECOVERY (1982)
DV0122
DV0122'RECOVERY NOTE BY ARIZONA DEPARTMENT OF TRANSPORTATION 1982 (GH)

DV0122'THE STATION MARK, REFERENCE MARKS AND THE AZIMUTH MARK WERE RECOVERED
DV0122'AS DESCRIBED IN 1959. A NEW ROUTE TO THE STATION FOLLOWS.
DV0122'
DV0122'TO REACH THE STATION FROM INTERSTATE HIGHWAY 17 AND HAPPY VALLEY ROAD
DV0122'TRAFFIC INTERCHANGE IN NORTHERN PHOENIX TRAVEL NORTH ALONG THE EAST
DV0122'FRONTAGE ROAD FOR 0.9 MILE TO THE STATION 220 FEET TO THE RIGHT AND BY
DV0122'A FENCE LINE.
DV0122'
DV0122'TO REACH THE AZIMUTH MARK FROM INTERSTATE HIGHWAY 17 AND HAPPY VALLEY
DV0122'ROAD, TRAVEL NORTH ALONG THE WEST FRONTAGE ROAD FOR 0.7 MILE TO A
DV0122'CATTLE GUARD AND A ROAD LEFT. TURN LEFT CROSSING THE CATTLE GUARD AND
DV0122'BEAR LEFT FOR 0.1 MILE TO THE MARK ON THE RIGHT.
DV0122'
DV0122
DV0122 STATION RECOVERY (1986)
DV0122
DV0122'RECOVERY NOTE BY ARIZONA DEPARTMENT OF TRANSPORTATION 1986 (ART)
DV0122'THE STATION MARK, REFERENCE MARKS AND THE AZIMUTH MARK WERE RECOVERED
DV0122'AS DESCRIBED AND FOUND IN GOOD CONDITION. THE AZIMUTH MARK IS
DV0122'OBSTRUCTED FROM THE STATION BY SMALL TREES. A NEW ROUTE TO THE
DV0122'STATION FOLLOWS.
DV0122'
DV0122'TO REACH THE STATION FROM THE INTERSECTION OF INTERSTATE HIGHWAY 17
DV0122'AND HAPPY VALLEY ROAD IN NORTHERN PHOENIX, TRAVEL EAST ALONG HAPPY
DV0122'VALLEY ROAD FOR 0.15 MILE TO A DIRT ROAD ON THE LEFT WHICH IS JUST
DV0122'EAST OF THE FRONTAGE ROAD. TURN LEFT AND TRAVEL NORTH ALONG DIRT ROAD
DV0122'WHICH PARALLELS THE FREEWAY FOR ABOUT 1 MILE TO AN EAST WEST FENCE
DV0122'AND THE STATION ON THE LEFT AT THE SOUTH SIDE OF THE FENCE LINE. THE

DV0122'STATION CAN ALSO BE REACHED BY DRIVING NORTH 1 MILE ALONG THE FRONTAGE
DV0122'ROAD TO THE EAST-WEST FENCE LINE AND WALKING EAST ALONG THE SOUTH SIDE
DV0122'OF THE FENCE FOR ABOUT 150 FEET.
DV0122'
1 National Geodetic Survey, Retrieval Date = MARCH 17, 1994
DV0121
****
DV0121 DESIGNATION - SKUNK AZ MK
DV0121 PID - DV0121
DV0121 STATE/COUNTY- AZ/MARICOPA
DV0121 USGS QUAD - UNION HILLS
DV0121
DV0121 HORZ DATUM - NAD 83
DV0121 VERT DATUM - NGVD 29
DV0121
DV0121 POSITION - 33 43 15. (N) 112 07 15. (W) SCALED
DV0121 83 minus 27 - +00. +03. NADCON
DV0121
DV0121 HEIGHT - 444.360 (meters) 1457.87 (feet) ADJ UNCHK
DV0121 88 minus 29 - +0.61 VERTCON
DV0121
****
DV0121 VERT ORDER - FIRST CLASS 2
DV0121
DV0121.The horizontal coordinates were scaled from a topographic map and have
DV0121.an estimated accuracy of +/- 6 seconds.
DV0121
DV0121.The orthometric height was key entered from printed documents
DV0121.and not key verified.
DV0121
DV0121.The geoid height was determined by GEOID93.
DV0121
DV0121_STATION MARK IS AN AZIMUTH MARK DISK
DV0121_WITH SETTING: SET IN TOP OF CONCRETE MONUMENT (ROUND)
DV0121_THE MARK IS STAMPED: SKUNK 1947
DV0121_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DV0121+STABILITY: SURFACE MOTION
DV0121
DV0121 HISTORY - Year Condition Recov. By
DV0121 HISTORY - 1947 STATION MONUMENTED COAST AND GEODETIC SURVEY
DV0121 HISTORY - 1970 GOOD NATIONAL GEODETIC SURVEY
DV0121

DV0121 STATION DESCRIPTION
DV0121
DV0121'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
DV0121'ABOUT 13 1/2 MILES SOUTH ALONG INTERSTATE HIGHWAY 17 FROM THE BRIDGE
DV0121'OVER NEW RIVER TO HAPPY VALLEY ROAD. EXIT WEST AND TAKE THE WEST
DV0121'FRONTAGE ROAD NORTH FOR 0.7 MILE, TURN LEFT CROSSING A CATTLE GUARD
DV0121'AND TAKE THE LEFT FORK SOUTHWEST FOR 0.15 MILE TO THE MARK ON THE
DV0121'RIGHT. 37 FEET WEST OF THE CENTER OF THE GRAVELED ROAD, 2 FEET WEST
DV0121'OF THE WITNESS POST AND ABOUT 2 FEET HIGHER THAN THE ROAD. THE MARK
DV0121'IS SET IN THE TOP OF A 12 INCH CONCRETE MONUMENT WHICH PROJECTS ABOUT
DV0121'6 INCHES.
1 National Geodetic Survey, Retrieval Date = MARCH 17, 1994
DV0124
****
DV0124 DESIGNATION - SKUNK RM 2
DV0124 PID - DV0124
DV0124 STATE/COUNTY- AZ/MARICOPA
DV0124 USGS QUAD - UNION HILLS
DV0124
DV0124 HORZ DATUM - NAD 83
DV0124 VERT DATUM - NGVD 29
DV0124
DV0124 POSITION - 33 43 32. (N) 112 07 07. (W) SCALED
DV0124 83 minus 27 - +00. +03. NADCON
DV0124
DV0124 HEIGHT - 447.717 (meters) 1468.88 (feet) ADJ UNCHK
DV0124 88 minus 29 - +0.62 VERTCON
DV0124
****
DV0124 VERT ORDER - FIRST CLASS 2
DV0124
DV0124.The horizontal coordinates were scaled from a topographic map and have
DV0124.an estimated accuracy of +/- 6 seconds.
DV0124
DV0124.The orthometric height was key entered from printed documents
DV0124.and not key verified.
DV0124
DV0124.The geoid height was determined by GEOID93.

DV0124
DV0124_STATION MARK IS A BENCH MARK DISK
DV0124_WITH SETTING: SET IN A LIGHT STRUCTURE
DV0124_THE MARK IS STAMPED: SKUNK NO 2 1947
DV0124_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
DV0124
DV0124 HISTORY - Year Condition Recov. By
DV0124 HISTORY - 1947 STATION MONUMENTED COAST AND GEODETIC SURVEY
DV0124 HISTORY - 1970 GOOD NATIONAL GEODETIC SURVEY
DV0124
DV0124 STATION DESCRIPTION
DV0124
DV0124'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
DV0124'12.6 MILES SOUTH ALONG INTERSTATE HIGHWAY 17 FROM THE BRIDGE OVER NEW
DV0124'RIVER OR 0.2 MILE SOUTH OF THE BRIDGE OVER SKUNK RIVER. 75 FEET
DV0124'SOUTHEAST OF A CATTLE GUARD, 50 FEET EAST OF THE CENTER OF THE OLD
DV0124'ROAD AND 6 FEET WEST OF A FENCE LINE. THE MARK IS SET IN THE TOP OF A
DV0124'12 INCH CONCRETE MONUMENT WHICH PROJECTS ABOUT 2 INCHES. IT IS ABOUT
DV0124'200 FEET EAST OF THE EAST FRONTAGE ROAD.
1 National Geodetic Survey, Retrieval Date = MARCH 17, 1994
DV0123
****
DV0123 DESIGNATION - SKUNK RM 1
DV0123 PID - DV0123
DV0123 STATE/COUNTY- AZ/MARICOPA
DV0123 USGS QUAD - UNION HILLS
DV0123
DV0123 HORZ DATUM - NAD 83
DV0123 VERT DATUM - NGVD 29
DV0123
DV0123 POSITION - 33 43 32. (N) 112 07 07. (W) SCALED
DV0123 83 minus 27 - +00. +03. NADCON
DV0123
DV0123 HEIGHT - 447.650 (meters) 1468.66 (feet) ADJ UNCHK
DV0123 88 minus 29 - +0.62 VERTCON
DV0123
****
DV0123 VERT ORDER - FIRST CLASS 2
DV0123
DV0123.The horizontal coordinates were scaled from a topographic map and have

DV0123.an estimated accuracy of +/- 6 seconds.
DV0123
DV0123.The orthometric height was key entered from printed documents
DV0123.and not key verified.
DV0123
DV0123.The geoid height was determined by GEOID93.
DV0123
DV0123_STATION MARK IS A BENCH MARK DISK
DV0123_WITH SETTING: SET IN A LIGHT STRUCTURE
DV0123_THE MARK IS STAMPED: SKUNK NO 1 1947
DV0123_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
DV0123
DV0123 HISTORY - Year Condition Recov. By
DV0123 HISTORY - 1947 STATION MONUMENTED COAST AND GEODETIC SURVEY
DV0123 HISTORY - 1970 GOOD NATIONAL GEODETIC SURVEY
DV0123
DV0123 STATION DESCRIPTION
DV0123
DV0123'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
DV0123'12.6 MILES SOUTH ALONG INTERSTATE HIGHWAY 17 FROM THE BRIDGE OVER NEW
DV0123'RIVER OR 0.2 MILE SOUTH OF THE HIGHWAY BRIDGE OVER SKUNK RIVER. 66
DV0123'FEET EAST OF THE STATION AND 2 1/2 FEET SOUTH OF A FENCE LINE. THE
DV0123'MARK IS SET IN THE TOP OF A 12 INCH CONCRETE MONUMENT WHICH PROJECTS
DV0123'ABOUT 2 INCHES. IT IS ABOUT 200 FEET EAST OF THE EAST FRONTAGE ROAD.
1 National Geodetic Survey, Retrieval Date = MARCH 17, 1994
DV0135
****
DV0135 DESIGNATION - T 56
DV0135 PID - DV0135
DV0135 STATE/COUNTY- AZ/MARICOPA
DV0135 USGS QUAD - BISCUIT FLAT, SECTION 3, T5N, R2E
DV0135
DV0135 HORZ DATUM - NAD 83
DV0135 VERT DATUM - NGVD 29
DV0135
DV0135 POSITION - 33 48 42. (N) 112 08 09. (W) SCALED
DV0135 83 minus 27 - +00. +03. NADCON
DV0135
DV0135 HEIGHT - 520.625 (meters) 1708.08 (feet) ADJ UNCHK

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 DV1999
*********************************************************************
 DV1999  DESIGNATION -  CARL
 DV1999  PID         -  DV1999
 DV1999  STATE/COUNTY-  AZ/MARICOPA
 DV1999  USGS QUAD   -  NEW RIVER
 DV1999
 DV1999  HORZ DATUM  -  NAD 83 (1992)
 DV1999  VERT DATUM  -  NGVD 29
 DV1999
 DV1999  POSITION    -  33 58 13.46080(N)    112 08 00.29234(W)     ADJUSTED
 DV1999  92 minus 83        +00.00516             -00.00323        ADJUSTED
 DV1999  83 minus 27 -      +00.12534             +02.57207        ADJUSTED
 DV1999
 DV1999  HEIGHT      -      797.6    (meters)     2617.     (feet)  VERT ANGLE
 DV1999  88 minus 29 -       +0.6                                   VERTCON
 DV1999
*********************************************************************
 DV1999  HORZ ORDER  -  SECOND
 DV1999
 DV1999.The horizontal position was established by classical geodetic methods
 DV1999.and adjusted by the National Geodetic Survey in August 1993.
 DV1999
 DV1999.The orthometric height was determined by vertical angle observations.
 DV1999
 DV1999.The Laplace correction was computed from DEFLEC93 derived deflections.
 DV1999
 DV1999.The geoid height was determined by GEOID93.
 DV1999
 DV1999;                     North         East       Scale          Converg.
 DV1999;SPC AZ C    -    329,392.693   193,330.838 0.99990494     -0 07 16.0
MT
 DV1999;UTM  12     -  3,759,453.366   395,292.754 0.99973515     -0 38 00.1
MT
 DV1999
 DV1999:                 Primary Azimuth Mark                     Grid Az
 DV1999:SPC AZ C    -    BUD                                      188 37 57.6
 DV1999:UTM  12     -    BUD                                      189 08 41.7
 DV1999
 DV1999|-------------------------------------------------------------------|
 DV1999| Pid     Reference Object                    Distance      Geod. AZ |
 DV1999|                                                           dddmmss.s |
 DV1999| DV0157 BUD                                APPROX. 4.1 KM 1883041.6 |
 DV1999|        CARL RM 1                            5.643 METERS 21656     |
 DV1999|        CARL RM 2                            9.005 METERS 28710     |
 DV1999|-------------------------------------------------------------------|
 DV1999
 DV1999  HISTORY     - Year Condition            Recov. By
 DV1999  HISTORY     - 1959 STATION MONUMENTED   COAST AND GEODETIC SURVEY
 DV1999  HISTORY     - 1967 GOOD                 US ARMY MAP SERVICE (NOW DMA)
 DV1999
 DV1999                          STATION DESCRIPTION
 DV1999
 DV1999'DESCRIBED BY COAST AND GEODETIC SURVEY 1959 (RCM)
 DV1999'THE STATION IS LOCATED ON THE SUMMIT OF A SHARP, OUTSTANDING
 DV1999'PEAK THAT IS ABOUT 7 MILES SOUTH OF BLACK CANYON, 0.5 MILE
 DV1999'WEST OF NEW RIVER AND 0.3 MILE WEST OF STATE HIGHWAY 69.
 DV1999'
 DV1999'TO REACH THE STATION FROM THE POST OFFICE IN BLACK CANYON,
 DV1999'GO SOUTH ON STATE HIGHWAY 69 FOR 7.4 MILES TO A SIDE ROAD
 DV1999'RIGHT, TURN RIGHT, WEST, PASS THROUGH A WIRE GATE AND GO 0.05
 DV1999'MILE TO A CROSSROAD.  CONTINUE STRAIGHT AHEAD ON THE TRACK
 DV1999'ROAD FOR 0.3 MILE, HERE TURN RIGHT AND GO NORTH ACROSS
 DV1999'COUNTRY AS FAR AS POSSIBLE TO THE END OF TRUCK TRAVEL.  FROM
 DV1999'HERE PACK NORTH UPHILL FOR ABOUT 15 MINUTES TO THE HIGHEST
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DV1999'POINT OF THE MOUNTAIN AND THE STATION.
DV1999'
DV1999'THE STATION MARK, STAMPED CARL 1958, IS A STANDARD DISK
DV1999'CEMENTED IN A DRILL HOLE IN A BOULDER THAT PROJECTS 5 INCHES
DV1999'AND IS ON THE HIGHEST POINT OF THE HILL.
DV1999'
DV1999'REFERENCE MARK NO. 1, STAMPED CARL NO 1 1958, IS A STANDARD
DV1999'DISK CEMENTED IN A DRILL HOLE IN A BOULDER THAT PROJECTS
DV1999'12 INCHES AND IS ABOUT 4 FEET LOWER THAN THE STATION ON THE
DV1999'SOUTH SLOPE OF THE HILL.
DV1999'
DV1999'REFERENCE MARK NO. 2, STAMPED CARL NO 2 1958, IS A STANDARD
DV1999'DISK CEMENTED IN A DRILL HOLE IN A BOULDER THAT PROJECTS 7
DV1999'INCHES AND IS ABOUT 1 FOOT LOWER THAN THE STATION ON THE WEST
DV1999'SLOPE OF THE HILL.
DV1999'
DV1999'STATION BUD CAN BE USED FOR AN AZIMUTH MARK. (SEE DESCRIPTION
DV1999'THEREOF).
DV1999'
DV1999
DV1999 STATION RECOVERY (1967)
DV1999
DV1999'RECOVERY NOTE BY US ARMY MAP SERVICE (NOW DMA) 1967 (MGJ)
DV1999'THE STATION MARK, R.M. NO. 1 AND R.M. NO. 2 RECOVERED AS
DV1999'DESCRIBED AND IN GOOD CONDITION.
DV1999'
DV1999'R.M. NO. 1, PUB DIST. = 18.51 FT., CHECK DIST = 18.4 FT.
DV1999'
DV1999'R.M. NO. 2, PUB. DIST. = 29.54 FT., CHECK DIST. = 29.5 FT.
DV1999'