

STATE OF NEVADA
 PUBLIC UTILITIES COMMISSION OF NEVADA
 9075 W. Diablo Drive
 Suite 250
 Las Vegas, Nevada 89148-7674

LV02426

RECEIPT

RECEIVED FROM:

Date 7/27/15

Bullen Law, LLC
 9101 W Sahara Ste 105-L6
 Las Vegas, NV 89117-5772

AMOUNT: \$

two hundred dollars AND zero /100 DOLLARS

How Paid:	Cash	Check	Money Order	Draft
		1023		

Type of Receipt	Filing Fee	TDD	Copy Service	RAIL	Mill Assessment	Other
	X					

Account	Paid in Full		On Account	
		X		
Amount of Account	\$	200.	00	
Account Paid	\$	200.	00	
Balance Due	\$	ϕ		

MEMO

New Filing

Received by [Signature]

hand-delivered

RECEIVED
PUBLIC UTILITIES COMMISSION
OF NEVADA LAS VEGAS

15 JUL 27 AM 10:11

BULLEN LAW, LLC

**9101 W. Sahara Ave., Ste. 105-L6
Las Vegas, NV 89117**

**Linda M. Bullen
702-279-4040
linda@bullenlaw.com**

Via Hand Delivery

July 27, 2015

Ms. Trisha Osborne
Assistant Commission Secretary
Public Utilities Commission of Nevada
9075 W. Diablo Drive, Suite 250
Las Vegas, Nevada 89148

Re: Notice and Application of Playa Solar, LLC For A Utility Environmental Protection Act Permit to Construct a Water Pipeline and Ancillary Facilities and Request for Expedited Treatment

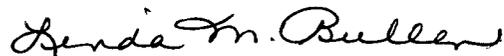
Dear Ms. Osborne:

Please find the enclosed Notice and Application of Playa Solar, LLC ("Playa Solar") to the Public Utilities Commission of Nevada (the "Commission") For A Utility Environmental Protection Act ("UEPA") Permit to Construct a Water Pipeline and Ancillary Facilities and Request for Expedited Treatment.

Playa Solar respectfully requests that the Commission accept this Notice and Application under the UEPA as complying with the applicable statutory and regulatory requirements.

If you have any questions about this filing, please do not hesitate to contact me directly at (702)-279-4040.

Best Regards,



Linda M. Bullen
Bullen Law, LLC
Attorney for Playa Solar, LLC

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Notice and Application of Playa Solar LLC under the provisions of the Utility Environmental Protection Act, for a permit to construct a 1.7 mile water pipeline from a well located within the Apex Industrial Park to the Playa Solar Project on BLM land and ancillary facilities located approximately 20 miles northeast of Las Vegas in Clark County, Nevada.

Docket No. 15-

**NOTICE AND APPLICATION OF PLAYA SOLAR, LLC FOR A
UTILITY ENVIRONMENTAL PROTECTION ACT PERMIT TO CONSTRUCT
A WATER PIPELINE AND ANCILLARY FACILITIES AND
REQUEST FOR EXPEDITED TREATMENT**

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LIST OF EXHIBITS

- A. Site Location Maps
- B. Regional Map
- C. Legal Descriptions
- D. Facility Plans
- E. Scaled Diagrams
- F-1. Environmental Assessment Playa Solar Project Well and Pipeline (Draft)

- F-2. Environmental Assessment Harry Allen Solar Energy Center Project (Portions)
- F-3. Dry Lake Solar Energy Center Project (Portions)
- F-4. Dry Lake Solar Energy Zone Biological Opinion (Portions)
- G. Public Notice
- H. Proof of Publication
- I. Proof of Service to County Clerk, Nevada State Clearinghouse and Other Agencies

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BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Notice and Application of Playa Solar LLC under the provisions of the Utility Environmental Protection Act, for a permit to construct a 1.7 mile water pipeline from a well located within the Apex Industrial Park to the Playa Solar Project on BLM land and ancillary facilities located approximately 20 miles northeast of Las Vegas in Clark County, Nevada.

Docket No. 15-

NOTICE AND APPLICATION OF PLAYA SOLAR, LLC FOR A UTILITY ENVIRONMENTAL PROTECTION ACT PERMIT TO CONSTRUCT A WATER PIPELINE AND ANCILLARY FACILITIES AND REQUEST FOR EXPEDITED TREATMENT

Pursuant to NRS 704.870(2)(a) and (b), Playa Solar, LLC ("Playa Solar" or the "Company") files with the Public Utilities Commission of Nevada (the "Commission") this Notice and Application ("Notice and Application") for a Permit to Construct ("PTC") a water pipeline and ancillary facilities including a tortoise fence and well under the Utility Environmental Protection Act ("UEPA").

I. INTRODUCTION

On December 11, 2014, Playa Solar filed an Application in Docket 14-09001 seeking a UEPA PTC for a 200 megawatt alternating current ("MW/ac") photovoltaic ("PV") solar electric generating facility on approximately 1711 acres of BLM-administered federal land on Parcels Two, Three and Four of the Bureau of Land Management's ("BLM's") Dry Lake Solar Energy Zone ("Dry Lake SEZ"), located in Clark County, Nevada, approximately 20 miles northeast of Las Vegas the "Project"). The Commission approved Playa Solar's Application in Docket 14-09001 on June 10, 2015.

The majority of the water supply for the Project will be from a well to be constructed by Playa Solar on private land within the Apex Industrial Park. Water will be transmitted to the Project via an approximately 1.7 mile pipeline. The pipeline will be constructed by Playa Solar and ownership of the pipeline will transfer after construction to the

1 City of North Las Vegas. Desert tortoise fencing, totaling approximately one mile in length,
2 will be constructed as an ancillary facility to the pipeline. The water pipeline and ancillary
3 facilities, including the well and tortoise fence, are the subject of this Notice and Application.

4 Water for dust control during construction of the solar field for the Project is one of the
5 primary purposes of the pipeline, although it will also supply the nominal amount of water
6 needed for Project operations. Construction of the solar field is scheduled to commence in the
7 fourth quarter of 2015, which means that the pipeline must be operational prior to this time in
8 order to be available to provide dust control water during construction. Likewise, tortoise must
9 be cleared in the Fall 2015 tortoise clearance season in order to maintain the Project's
10 construction schedule. The tortoise fence must be constructed prior to tortoise clearance tortoise
11 season, which begins September 1. Accordingly, Playa Solar requests that this Notice and
12 Application be given expedited treatment by the Commission.

13 **A. GENERAL ALLEGATIONS**

- 14 1. Playa Solar is a wholly owned subsidiary of First Solar, Inc.
- 15 2. Playa Solar was formed for the purpose of developing and constructing the Playa
16 Solar Facility and all associated facilities.
- 17 3. Playa Solar's principal place of business and mailing address is 135 Main Street,
18 Suite 600, San Francisco, CA, 94105; telephone number (415) 935-2500.

19 All correspondence related to this Application should be sent to the following counsel:

20 Linda M. Bullen
21 Bullen Law, LLC
22 9101 W. Sahara Ave., Ste. 105-L6
23 Las Vegas, NV 89117
24 linda@bullenlaw.com
25 702-279-4040

26 **B. LEGAL AUTHORITY**

27 UEPA establishes a two-step application procedure for facilities subject to federal
28 permitting and environmental review that are built in Nevada. First, if a federal agency is
required to conduct an environmental analysis of a proposed utility facility, the project proponent
is required to file a Notice of the federal filing with the Commission. See NRS 704.870(2)(a)(1)

1 and (2). Subsequently, the project proponent must file an application with the Commission for a
2 permit to construct the proposed facility. See NRS 704.870(2)(b).

3 Pursuant to the National Environmental Policy Act ("NEPA"), 42 U.S.C. 4321 *et seq.*, a
4 thorough review and analysis of the environmental conditions associated with the Project was
5 conducted by the Bureau of Land Management ("BLM"), a federal agency, in conjunction with
6 other federal and state agencies. That EA was submitted to the Commission in Docket No. 14-
7 09001 on December 15, 2014. Subsequent to the filing of the EA in Docket No. 14-09001, the
8 location of the well and pipeline was changed, resulting in the need for additional environmental
9 review of the locations. The new locations are the subject of the EA submitted herewith as
10 Exhibit F-1.

11 Environmental review of the tortoise fence is contained in the EAs entitled *Harry Allen*
12 *Solar Project, DOI-BLM-NV-S010-2014-0125-EA, December 2014* ("Harry Allen EA")¹, and
13 *Dry Lake Solar Energy Center Project, DOI-BLM-NV-S010-2014-0126-EA, December 2014*
14 *("Dry Lake EA")*², relevant portions of which are attached hereto as Exhibits F-2 (Harry Allen
15 EA) and F-3 (Dry Lake EA). The tortoise fencing requirements for all solar projects in the Dry
16 Lake SEZ are embodied in the *FINAL-Project-level Formal Consultations for Four Solar Energy*
17 *Projects in the Dry Lake Solar Energy Zone, Clark County Nevada, May 1, 2015* ("Biological
18 Opinion")³, relevant portions of which are included in Exhibit F-4 hereto.

19 Playa Solar requests that the Commission accept this Notice and Application as
20 complying with the statutory and regulatory requirements set forth above and approve its request
21 for a PTC the pipeline and tortoise fence pursuant to NRS 704.870.

22 C. ALLEGATIONS OF MATERIAL FACT

23 The well, pipeline and tortoise fence will be located on both private land and federal land
24

25 ¹ The Harry Allen EA was submitted to the Commission in its entirety in Docket No. 14-
09002 on January 15, 2015.

26 ² The Dry Lake EA was submitted to the Commission in its entirety in Docket 14-08003
27 on June 15, 2015.

28 ³ The Biological Opinion was submitted to the Commission in its entirety in Docket 14-
09001 on May 28, 2015.

1 managed by the BLM in Clark County, Nevada. *See* Exhibit A, Site Location Map.

2 **D. RESPONSES TO REQUIRED DISCLOSURES**

3 The information required by NAC 703.423 is provided below.

4 **1. A description of the location of the proposed utility facility. (NAC 703.423(1))**

- 5 (a) A general description of the location of the proposed utility facility, including a
6 regional map that identifies the location of the proposed utility facility.

7 The well, pipeline and tortoise fence will be located on private land and federal land
8 managed by the BLM approximately 20 miles northeast of Las Vegas. *See* Exhibit A, Site
9 Location Map. A regional map showing the location of the pipeline and tortoise fence is
10 attached as Exhibit B.

- 11
12 (b) A legal description of the site of the proposed utility facility, with the exception of
13 electric lines, gas transmission lines, and water and wastewater lines, for which
14 only a detailed description of the site is required.

15 Legal descriptions of the pipeline and tortoise fence are attached as Exhibit C. (Pipeline:
16 Exhibit C-1; Tortoise Fence: C-2).

- 17 (c) Appropriately scaled site plan drawings of the proposed utility facility, vicinity
18 maps and routing maps.

19 A facility plan for the Proposed Facility is attached as Exhibit D. (Pipeline: Exhibit D-1;
20 Tortoise Fence: D-2). Scaled diagrams are attached as Exhibit E (Pipeline: Exhibit E-1; Tortoise
21 Fence: E-2).

22 **2. A general description of the proposed utility facility. (NAC 703.423(2))**

- 23 (a) The size and nature of the proposed utility facility.

24 The pipeline will be approximately 1.7 miles in length and will begin at a new well to be
25 constructed by Playa Solar on private property within the Apex Industrial Park. The pipeline
26 will travel northeast within an existing utility easement on the southeast side of Apex Power
27 Parkway (approximately 0.33 miles in length). The existing utility easement is significantly
28 degraded from previous clearing. The proposed pipeline intersects with the Nevada Department
of Transportation ("NDOT") Highway 93 Bureau of Land Management ("BLM") right-of-way

1 ("ROW"). The remainder of the pipeline route is located on public lands administered BLM.
2 Upon entering the Highway 93 ROW, the pipeline will cross below Highway 93 and turn
3 southeast for approximately 1.33 miles remaining inside the NDOT Highway 93 ROW. Roughly
4 0.69 miles of that length will parallel a new desert tortoise fence to be constructed by Playa Solar
5 along the northeast edge of the NDOT Highway 93 ROW. The final 0.64-miles of the pipeline
6 will overlap a portion of the Dry Lake SEZ Parcel 1 which is also located within Highway 93
7 ROW. This portion of the pipeline is within the proposed area of disturbance analyzed for the
8 Harry Allen Solar Energy Center Project. The total temporary disturbance area for the pipeline
9 is approximately 6.1 acres (1.3-acres private land and 4.8-acres public land).

10 The pipeline will be constructed using PVC and/or ductile iron pipe, 12-16 inches in
11 diameter. The pipe will be buried a minimum of 5 feet deep measured to the top of the pipe.
12 Construction will require clearing along the ROW and excavation then backfill of the water
13 pipeline trench.

14 During construction of the pipeline, the ROW will be accessed from the unsurfaced road
15 that intersects with Highway 93. Pipeline construction activities along the ROW shall implement
16 a drive and crush strategy to minimize impacts to the roots of desert shrubs.

17 The tortoise fence will be constructed in two parts, as shown on Exhibit D-2. One
18 section, running on the east side of Highway 93 is approximately 3,500 feet in length and the
19 other section, north of the Harry Allen Substation, will be 500 to 1,500 feet in length, depending
20 upon the final design of the fence.

21 (b) The natural resources that will be used during the construction and operation of
22 the proposed utility facility.

23 The Company anticipates minimal uses of natural resources during construction and
24 operation of the pipeline and tortoise fence. The only natural resources the Company anticipates
25 using are those incorporated into construction materials (e.g. steel and petroleum products).

26 (c) Layout diagrams of the proposed utility facility and its associated equipment.

27 Layout diagrams of the pipeline and tortoise fence are attached as Exhibit D. (Pipeline:
28 Exhibit D-1; Tortoise Fence: D-2).

1 (d) Scaled diagrams of the structures at the proposed utility facility.

2 Scaled diagrams of the pipeline and tortoise fence are attached as Exhibit E. (Pipeline:
3 Exhibit E-1; Tortoise Fence: E-2).

4 (e) A statement concerning whether the proposed utility facility is an electric
5 generating plant or the associated facilities of an electric generating plant that uses
6 renewable energy as its primary source of energy to generate electricity.

7 The pipeline and tortoise fence are not an electric generating plant, but are associated
8 with an electric generating plant that uses renewable energy as its primary source of energy to
9 generate electricity.

10 **3. A copy and summary of any studies which have been made of the environmental**
11 **impact of the proposed utility facility as required by subsection 1 of NRS 704.870.**
12 **(NAC 703.423(3))**

13 The BLM has conducted environmental reviews of the pipeline and tortoise fence, and
14 those reviews are contained in the EA for the well and pipeline (Exhibit F-1) and EAs for the
15 tortoise fence (Exhibits F-2 and F-3) hereto.

16 **4. A description of any reasonable alternate locations for the proposed utility facility, a**
17 **description of the comparative merits or detriments of each location submitted, and**
18 **a statement of the reasons why the location is best suited for the proposed utility**
19 **facility, as required by subsection 1 of NRS 704.870. (NAC 703.423(4))**

20 The selected location is best suited for the pipeline because it runs along a
21 private road and Highway 93, both areas of previous disturbance and creates the least
22 environmental impact between the location selected for the well and the Project boundary. The
23 City of North Las Vegas, which will ultimately own the pipeline, is in agreement with the
24 selected location for the pipeline. The location of the tortoise fence location is necessary to
25 separate the tortoise translocation area from the solar facilities under development in the Dry
26 Lake SEZ.

27 **5. A copy of the public notice of the application and proof of publication of the public**
28 **notice, as required by subsection 4 of NRS 704.870. (NAC 703.423(5))**

A summary of this Notice and Application has appeared in the newspaper published and
distributed in the area where the pipeline and tortoise fence are planned, pursuant to NRS
704.870(4)(b) and NAC 703.423(5). See Exhibit G. A copy of the Notice and Application has

1 been filed with the clerk of the local government in the area in which the pipeline and tortoise
2 fence to be located pursuant to NRS 704.870(4)(a). *See* Exhibit H.

3 **6. Proof that a copy of the application or amended application has been submitted to**
4 **the Nevada State Clearinghouse within the Department of Administration to enable**
5 **agency review and comment. (NAC 703.423(6))**

6 A copy of the Notice and Application has been submitted to the Nevada State
7 Clearinghouse within the Nevada Department of Administration. *See* Exhibit H.

8 **7. An explanation of the nature of the probable effect on the environment. (NAC**
9 **703.423(7))**

10 (a) A reference to any studies described in subsection 3, if applicable.

11 Detailed environmental analysis of the well and pipeline is contained in the EA
12 conducted for the well and pipeline, *see* Exhibit F-1, and for the tortoise fence in Exhibits F-2
13 and F-3.

14 (b) An environmental statement that includes:

15 (1) The name, qualifications, professions and contact information of each
16 person with primary responsibility for the preparation of the
17 environmental statement.

18 A list of preparers and reviewers is included at Section 5.0 of the well and pipeline EA.
19 *See* Exhibit F-1.

20 (2) The name, qualifications, professions and contact information of each
21 person who has provided comments or input in the preparation of the
22 environmental statement.

23 A description of the consultation and coordination process, as well as a list of
24 commenters and agencies that participated and coordinated in the preparation of the EA is
25 included in Section 4.0 of Exhibit F-1.

26 (3) A bibliography of materials used in the preparation of the environmental
27 statement.

28 A bibliography of reference materials used in preparing the EA is contained in the
Section 6.0 of the EA. *See* Exhibit F-1.

(4) A description of:

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(I) The environmental characteristics of the Proposed Facility area existing at the time the application or amended application is filed with the Commission.

See Section 3 of the EA, Exhibit F-1.

(II) The environmental impacts that the construction and operation of the proposed utility facility will have on the area before mitigation.

See Section 3 of the EA, Exhibit F-1.

(III) The environmental impacts that the construction and operation of the proposed utility facility will have on the area after mitigation.

See Section 2 of the EA, Exhibit F-1.

8. An explanation of the extent to which the proposed utility facility is needed to ensure reliable utility service to customers in this State. (NAC 703.423(8))

Pursuant to NRS 704.890(1)(b), the pipeline and tortoise fence are exempt from NAC 703.423(8).

9. An explanation of how the need for the proposed utility facility as described in subsection 8 balances any adverse effects on the environment as described in subsection 7. (NAC 703.423(9))

The pipeline and tortoise fence will not have significant unmitigated adverse impacts on the environment.

10. An explanation of how the proposed utility facility represents the minimum adverse effect on the environment. (NAC 703.423(10))

(a) The state of available technology.

The pipeline and fence will be designed, constructed and operated to meet all applicable regulatory requirements and to avoid, minimize and mitigate the adverse effect on the environment.

(b) The nature of various alternatives.

The pipeline EA analyzed a full range of alternatives. See Section 2 of Exhibit F-1.

(c) The economics of various alternatives.

The pipeline and tortoise fence as proposed represent the minimum adverse effect on the environment that is economically viable.

11. **An explanation of how the location of the proposed utility facility conforms to applicable state and local laws and regulations. (NAC 703.423 (11))**

(a) All permits, licenses and approvals the applicant has obtained, including copies thereof.

The EA for the pipeline was finalized by the BLM's consultant in July 2015.⁴ See Exhibit F-1. The Harry Allen and Dry Lake EAs were finalized in December 2014. The remaining permits detailed below are anticipated to be obtained on or before the date indicated.

(b) All permits, licenses and approvals the applicant is in the process of obtaining to commence construction of the proposed utility facility. The applicant must provide an estimated timeline for obtaining these permits, licenses and approvals.

Permit/Authorization	Approving Agency	Date Obtained or Anticipated Date To Obtain
Decision Record (Pipeline EA)	U.S. Dept. of the Interior; Bureau of Land Management	Q 3 2015
Right of Way Grant	U.S. Dept. of the Interior; Bureau of Land Management	Q 3 2015
Amendment to Endangered Species Act Section 7 Biological Opinion/Incidental Take Statement	U.S. Dept. of the Interior; Fish & Wildlife Service	Q 3 2015
Special Purpose Permit	Nevada Department of Wildlife	Q 3 2015
Temporary Permit for Working in Waterways	Nevada Division of Environmental Protection	Q 3 2015
Temporary Groundwater Discharge Permit	Nevada Division of Environmental Protection	Q 3 2015
Encroachment Permit	Nevada Department of Transportation	Q 3 2015
Dust Control Permit	Clark County Department of Air Quality	Q 3 2015
Special Use Permit	Clark County Board of County Commissioners	Q 3 2015
Building Permit	Clark County Building Department	Q 3 2015

12. **Explanation of how the proposed utility facility will serve the public interest. (NAC 703.423(12))**

(a) The economic benefits that the proposed utility facility will bring to the applicant and this State.

⁴ Approval of the EA by the BLM is anticipated in August 2015.

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5. Grants Playa Solar such other and further relief as the Commission may find reasonable and appropriate under the circumstances.

Respectfully submitted on July 27, 2015.

Playa Solar, LLC

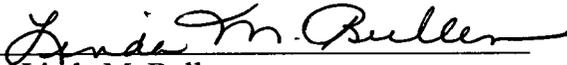
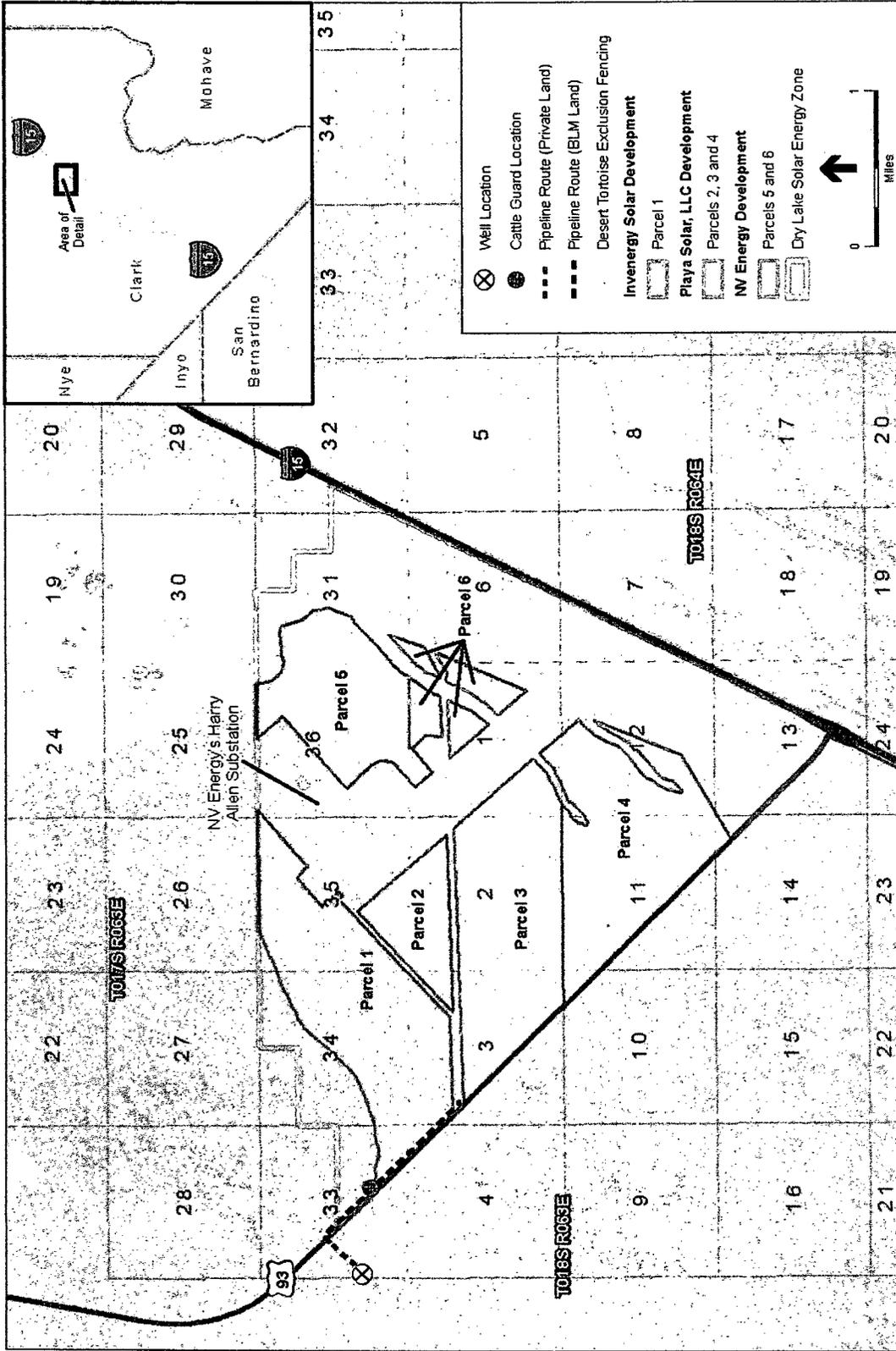
By: 
Linda M. Bullen
Bullen Law, LLC
9101 W. Sahara Ave., Ste. 105-L6
Las Vegas, NV 90117

EXHIBIT C
LEGAL DESCRIPTIONS

EXHIBIT A
SITE LOCATION MAPS

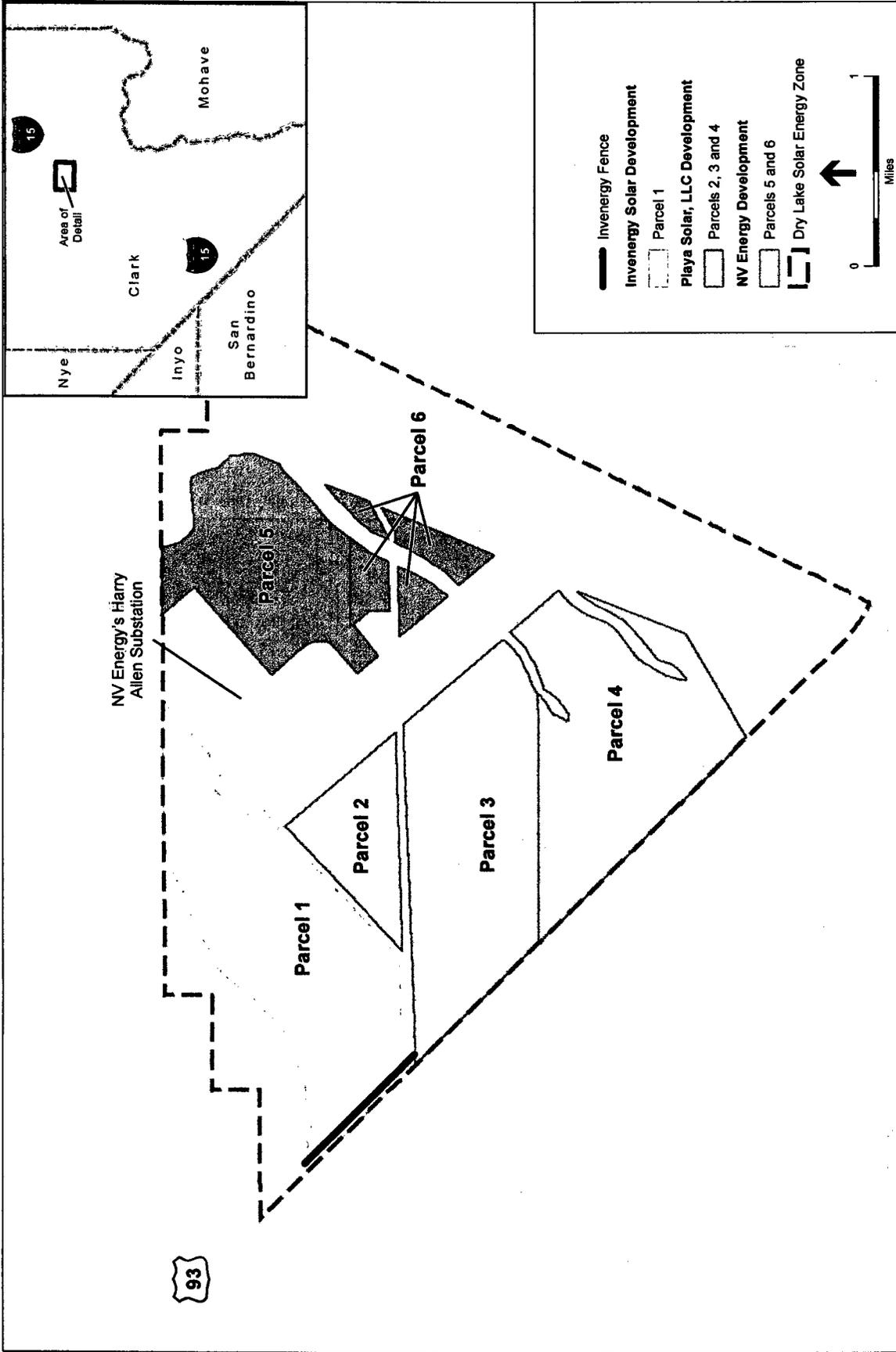
Project Location



SOURCE ESRI Imagery

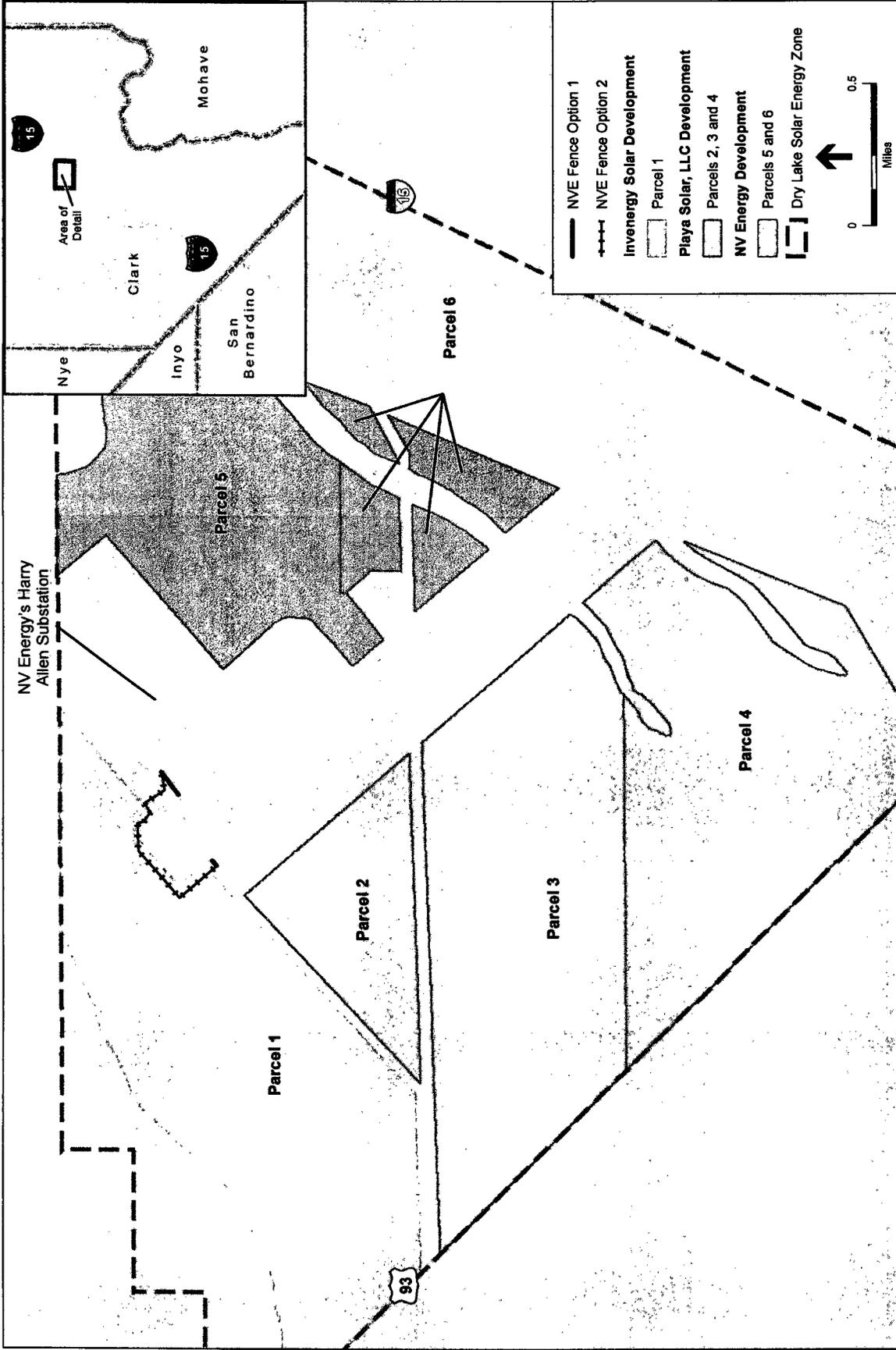
Playa Solar Well and Pipeline Project

Project Location Map



SOURCE: ESRI Imagery

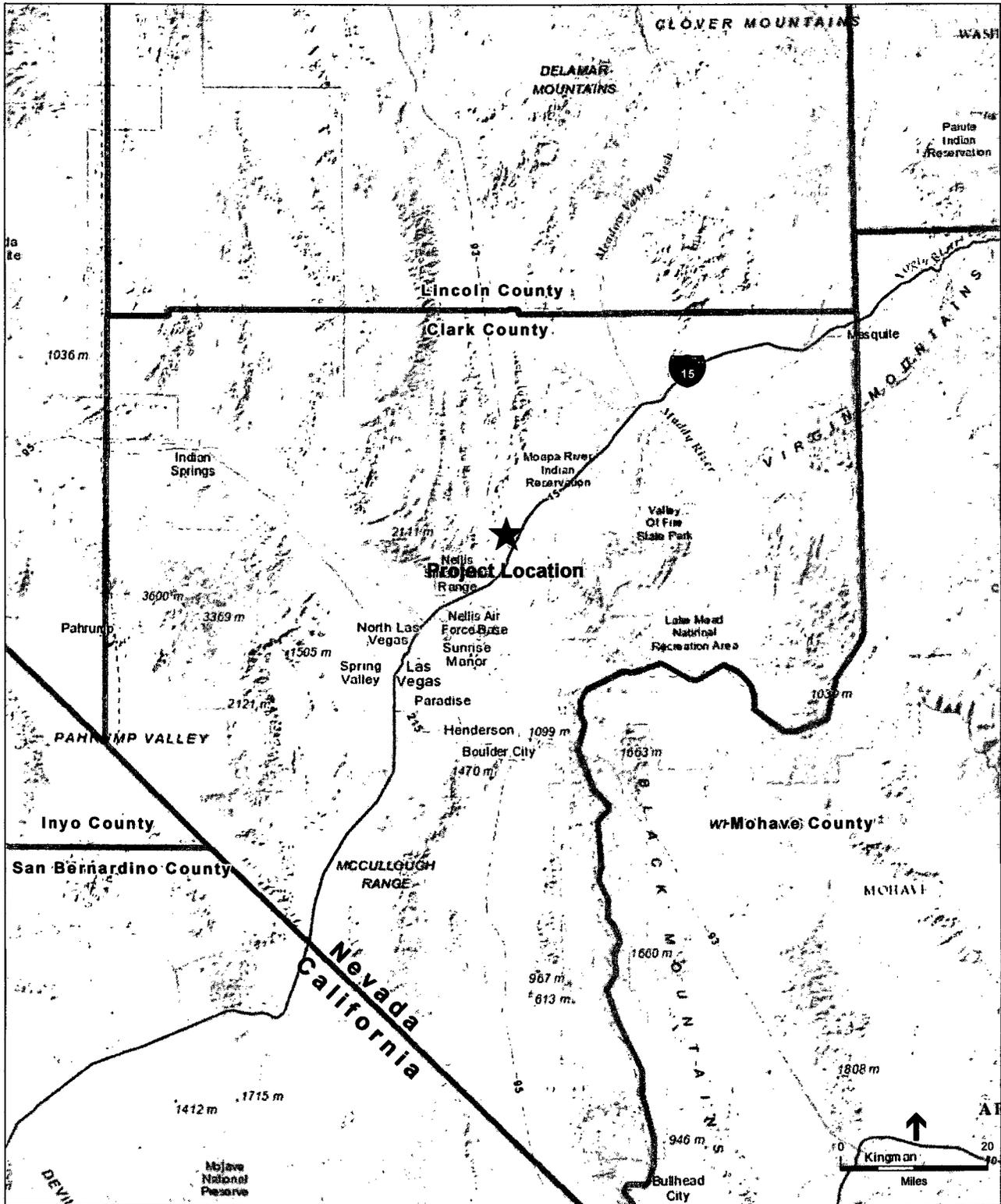
Invenery Fence Location



SOURCE: ESRI Imagery

NV Energy Fence Location

EXHIBIT B
REGIONAL MAP



SOURCE: ESRI

Regional Map

EXHIBIT C-1
PIPELINE LEGAL DESCRIPTIONS

**LEGAL DESCRIPTION
30' WIDE WATER LINE EASEMENT**

LYING WITHIN APEX INDUSTRIAL PARK, RECORDED IN BOOK 95 OF PLATS, PAGE 36, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA, ALSO LYING WITHIN A PORTION OF SECTION 33 OF TOWNSHIP 17 SOUTH, RANGE 63 EAST M.D.M., CLARK COUNTY, NEVADA, BEING DESCRIBES AS FOLLOWS:

COMMENCING AT THE SECTION CORNER COMMON TO SAID SECTIONS 3, 4 AND 33; THENCE ALONG THE SOUTH LINE OF SAID SECTION 33, NORTH 89°46'16" WEST, A DISTANCE OF 5272.58 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 33; THENCE NORTH 24°57'25" EAST, A DISTANCE OF 2,884.11 FEET TO THE SOUTHWESTERLY RIGHT OF WAY LINE OF STATE HIGHWAY 93, BLM GRANT N60522 (TOTAL WIDTH 400 FEET), BEING THE POINT OF BEGINNING;

THENCE DEPARTING SAID RIGHT OF WAY LINE SOUTH 45°28'52" WEST, A DISTANCE OF 705.16 FEET TO A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 2,450.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 17°31'03", A DISTANCE OF 749.06 FEET TO A NON TANGENT POINT ON SAID CURVE, A RADIAL LINE TO SAID POINT BEARS NORTH 62°02'11" WEST; THENCE LEAVING SAID CURVE, NORTH 61°20'06" WEST, A DISTANCE OF 100.00 TO NON TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 2,550.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 61°20'06" WEST; THENCE SOUTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 1°34'24", A DISTANCE OF 70.02 FEET; THENCE LEAVING SAID CURVE; NORTH 61°20'06" WEST, A DISTANCE OF 101.96 FEET; THENCE NORTH 28°39'54" EAST 100.00 FEET; THENCE SOUTH 61°20'06" EAST, A DISTANCE OF 169.99 FEET TO A NON TANGENT CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 2,480.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 61°20'05" WEST; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 16°48'57", A DISTANCE OF 727.86 FEET; THENCE NORTH 45°28'52" EAST, A DISTANCE OF 705.16 FEET TO SAID RIGHT OF WAY LINE OF STATE HIGHWAY 93; THENCE SOUTH 44°31'08" EAST, A DISTANCE OF 30.00 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 55,924 SQUARE FEET, MORE OR LESS.

BASIS OF BEARING:

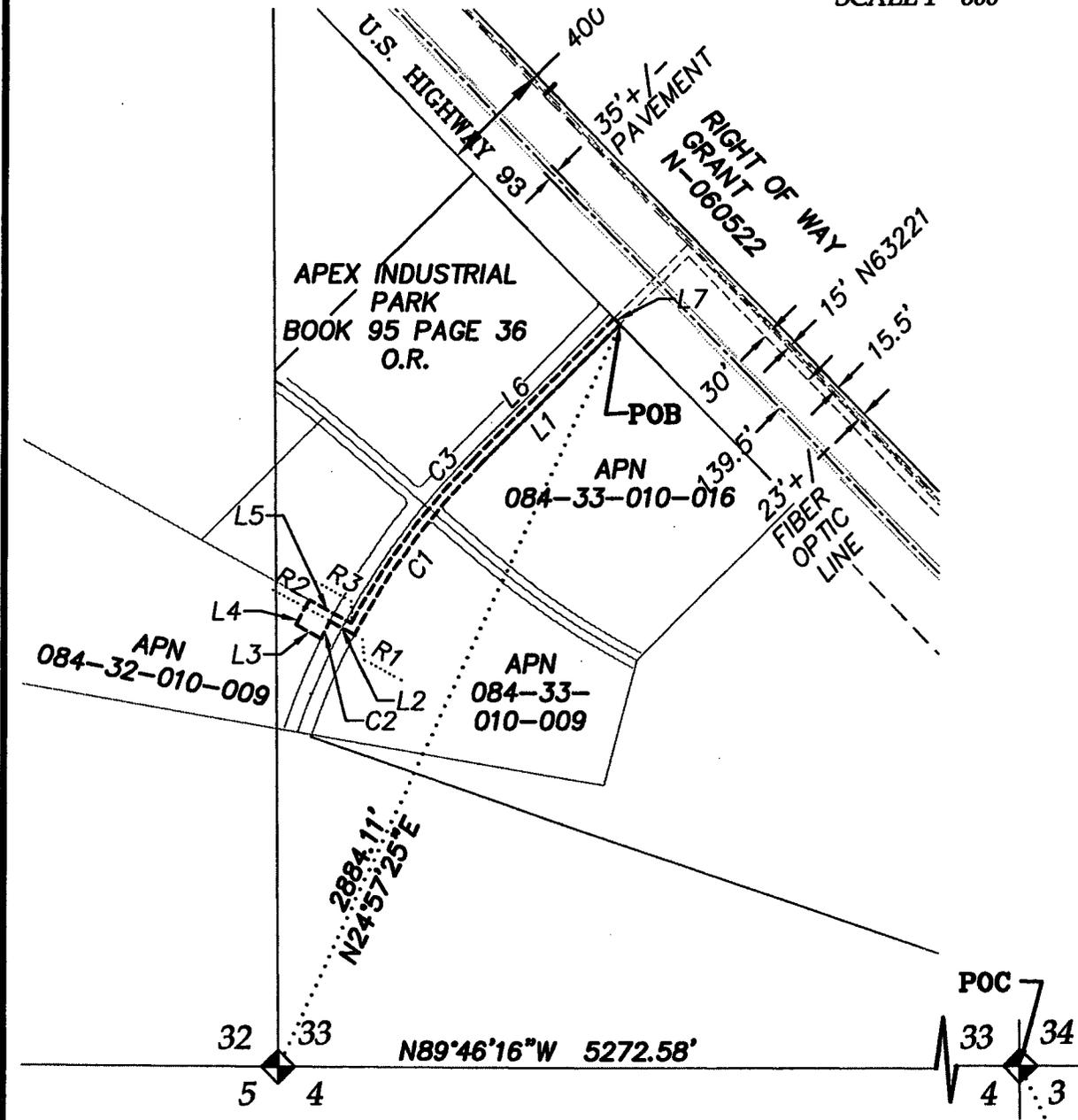
NORTH 89°46'16" WEST, BEING THE SOUTH LINE OF SECTION 33, TOWNSHIP 17 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON THAT CERTAIN RECORD OF SURVEY RECORDED JUNE 10, 1997, IN FILE 89, PAGE 56 OF SURVEYS, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA.

PURPOSE:	30' WATER LINE EASEMENT
PREPARED BY:	JAMES TODD STOVALL 6030 SO. JONES BLVD. #100 LAS VEGAS, NEVADA 89118
JOB NAME:	DRY LAKE
JOB NUMBER:	FRT-13-024
FILE NAME:	7-21-15 WATERLINE.DOC
DATE PREPARED	JULY 21, 2015



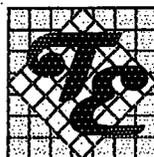


SCALE 1"=600'



SHEET 2 OF 3

PLAYA SOLAR SITE &
30' WATER LINE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION



TANEY ENGINEERING

6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

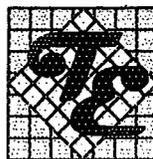
LINE TABLE		
LINE NO.	BEARINGS	LENGHT
L1	S45°28'52"W	705.16'
L2	N61°20'06"W	100.00'
L3	N61°20'06"W	101.96'
L4	N28°39'54"E	100.00'
L5	S61°20'06"E	169.99'
L6	N45°28'52"E	705.16'
L7	S44°31'08"E	30.00'

RADIAL BEARINGS	
RADIAL NO.	BEARINGS
R1	N62°02'11"W
R2	N62°00'34"W
R3	N61°20'05"W

CURVE TABLE				
CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT
C1	17°31'03"	2450.01'	749.06'	377.47'
C2	1°34'24"	2550.00'	70.02'	35.01'
C3	16°48'57"	2480.00'	727.86'	366.56'

SHEET 3 OF 3

**PLAYA SOLAR SITE &
30' WATER LINE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION**



TANEY ENGINEERING
6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

**LEGAL DESCRIPTION
30' WIDE WATER LINE EASEMENT**

LYING WITHIN A PORTION OF SECTIONS 3 AND 4 OF TOWNSHIP 18 SOUTH, RANGE 63 EAST, AND SECTION 33 OF TOWNSHIP 17 SOUTH, RANGE 63 EAST M.D.M., CLARK COUNTY, NEVADA, BEING DESCRIBES AS FOLLOWS:

COMMENCING AT THE SECTION CORNER COMMON TO SAID SECTIONS 3, 4 AND 33; THENCE SOUTH 25°29'45" EAST, A DISTANCE OF 1974.95 FEET TO A POINT ON THE NORTHEASTERLY LINE OF RIGHT OF WAY OF STATE HIGHWAY 93, BLM GRANT N60522 (TOTAL WIDTH 400 FEET), BEING THE **POINT OF BEGINNING**;

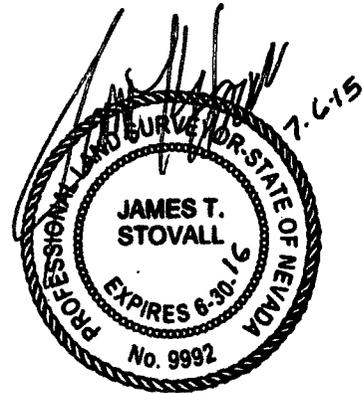
THENCE ALONG SAID RIGHT OF WAY LINE, SOUTH 44°31'08" EAST, A DISTANCE OF 40.87 FEET; THENCE LEAVING SAID RIGHT OF WAY LINE, SOUTH 88°15'03" WEST, A DISTANCE OF 82.42 FEET; THENCE NORTH 44°31'08" WEST, A DISTANCE OF 6,574.88 FEET ON A LINE 60.50 FEET SOUTHWESTERLY OF AND PARALLEL WITH THE SAID RIGHT OF WAY LINE; THENCE SOUTH 45°28'52" WEST, A DISTANCE OF 339.50 FEET TO THE SOUTHWESTERLY LINE OF SAID RIGHT OF WAY AND THE NORTHEASTERLY LINE OF APEX INDUSTRIAL PARKS, RECORDED IN BOOK 95, PAGE 36 OF PLATS, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA; THENCE ALONG SAID SOUTHWESTERLY LINE, NORTH 44°31'08" WEST, A DISTANCE OF 30.00 FEET; THENCE LEAVING SAID RIGHT OF WAY LINE NORTH 45°28'52" EAST, A DISTANCE OF 269.50 FEET TO THE SOUTHWESTERLY LINE OF A 15 FOOT FIBER OPTIC EASEMENT, BLM RIGHT OF WAY GRANT N63221; THENCE ALONG SAID LINE, SOUTH 44°31'08" EAST, A DISTANCE OF 6,591.76 FEET; THENCE LEAVING SAID LINE NORTH 88°15'03" EAST, A DISTANCE OF 41.55 FEET TO THE POINT OF BEGINNING;

THE ABOVE DESCRIBED PARCEL CONTAINS 4.82 ACRES, MORE OR LESS.

BASIS OF BEARING:

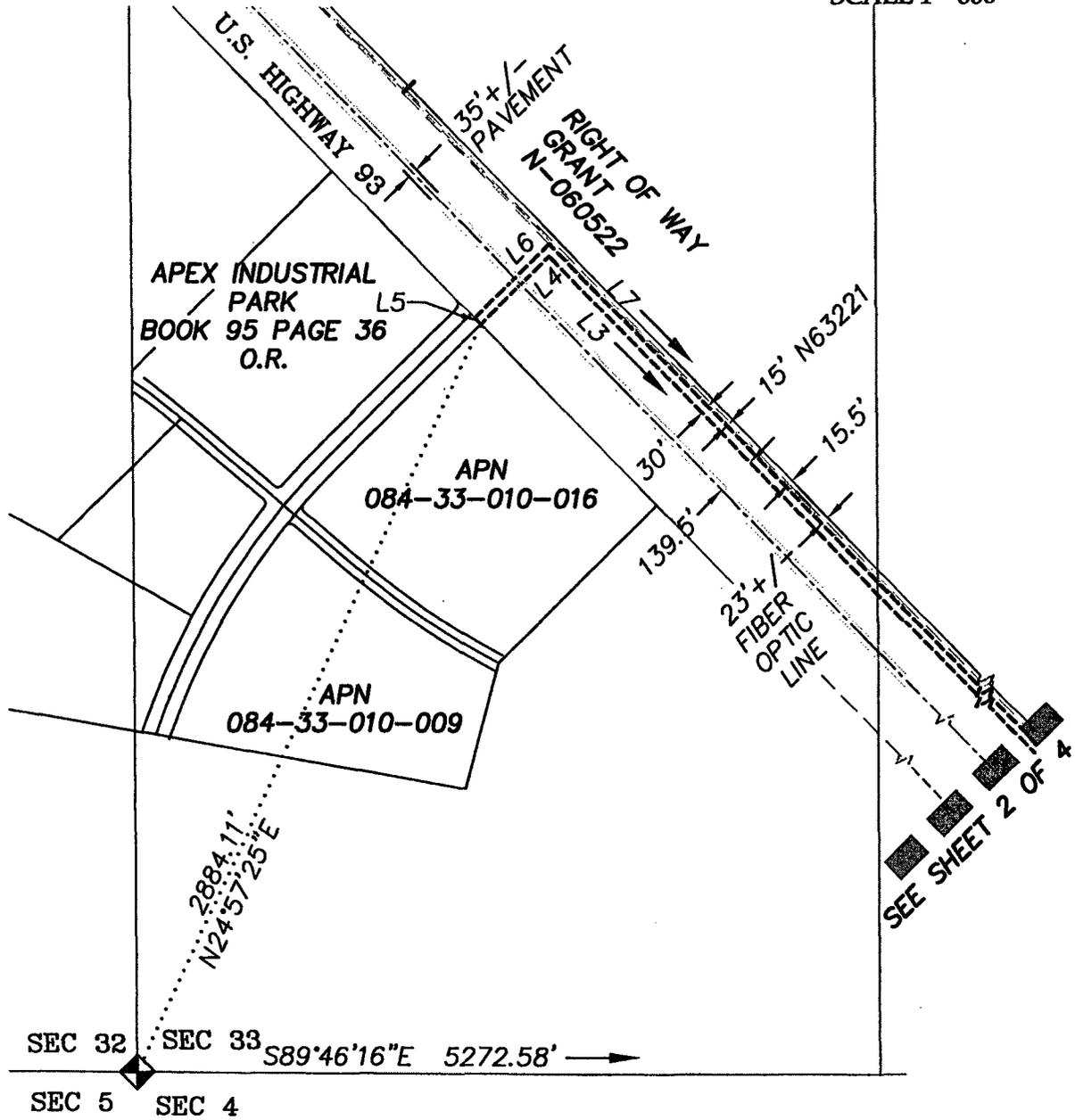
NORTH 89°38'02" EAST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 4) OF SECTION 1, TOWNSHIP 18 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON THAT CERTAIN RECORD OF SURVEY RECORDED JUNE 10, 1997, IN FILE 89, PAGE 56 OF SURVEYS, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA.

PURPOSE:	30' WATER LINE EASEMENT
PREPARED BY:	JAMES TODD STOVALL 6030 SO. JONES BLVD. #100 LAS VEGAS, NEVADA 89118
JOB NAME:	DRY LAKE
JOB NUMBER:	FRT-13-024
FILE NAME:	7-06-15 WATERLINE.DOC
DATE PREPARED	JULY 6, 2015



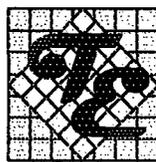

NORTH

SCALE 1"=600'

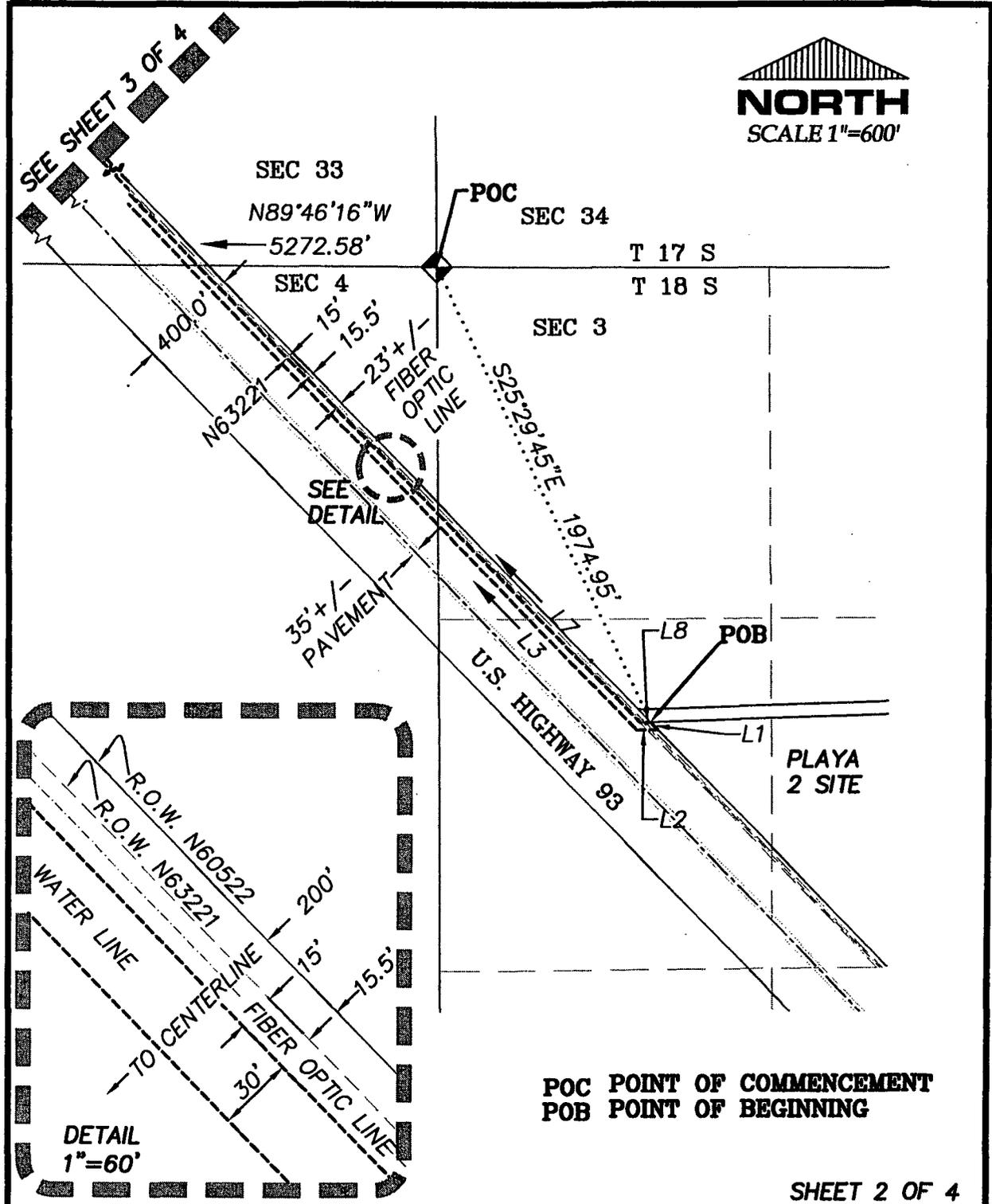


SHEET 3 OF 4

PLAYA SOLAR SITE &
30' WATER LINE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION



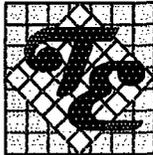
TANEY **E**NGINEERING
6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233



POC POINT OF COMMENCEMENT
POB POINT OF BEGINNING

SHEET 2 OF 4

PLAYA SOLAR SITE &
 30' WATER LINE EASEMENT
 TO ACCOMPANY
 LEGAL DESCRIPTION



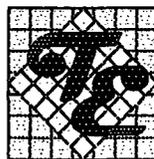
TANEY ENGINEERING
 6030 S. JONES BLVD. #100
 LAS VEGAS, NV 89118
 (702) 362-8844 FAX:(702) 362-5233

LINE TABLE

LINE NO.	BEARINGS	LENGHT
L1	S44°31'08"E'	40.87'
L2	S88°15'03"W'	82.42'
L3	N44°31'08"W'	6574.88'
L4	S45°28'52"W'	339.50'
L5	N44°31'08"W'	30.00'
L6	N45°28'52"E'	369.50'
L7	S44°31'08"E'	6591.76'
L8	N88°15'03"E'	41.55'

SHEET 4 OF 4

**PLAYA SOLAR SITE &
30' WATER LINE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION**



TANEY ENGINEERING

6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

EXHIBIT C-2
TORTOISE FENCE LEGAL DESCRIPTIONS

**LEGAL DESCRIPTION
EXHIBIT A
TORTOISE FENCE EASEMENT**

LYING WITHIN A PORTION OF SECTIONS 3 AND 4 OF TOWNSHIP 18 SOUTH, RANGE 63 EAST, AND SECTIONS 34 AND 35 OF TOWNSHIP 17 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA, BEING DESCRIBES AS FOLLOWS;

COMMENCING AT THE SECTION CORNER COMMON TO SECTION 34 AND 33 OF TOWNSHIP 17 SOUTH, RANGE 63 EAST AND SECTIONS 3 AND 4 OF TOWNSHIP 18 SOUTH, RANGE 63 EAST, M.D.M.; THENCE SOUTH 25°52'29" EAST, A DISTANCE OF 2,013.61 FEET TO A POINT ON THE NORTHEASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 93, SAID POINT BEING THE **POINT OF BEGINNING**;

THENCE LEAVING SAID RIGHT OF WAY LINE SOUTH 88°15'03" WEST, A DISTANCE OF 34.06 FEET;

THENCE NORTH 44°31'08" WEST, A DISTANCE OF 4,191.49 FEET ALONG A LINE PARALLEL WITH SAID RIGHT OF WAY LINE;

THENCE NORTH 45°28'52" EAST, A DISTANCE OF 25.00 FEET TO THE SAID RIGHT OF WAY LINE;

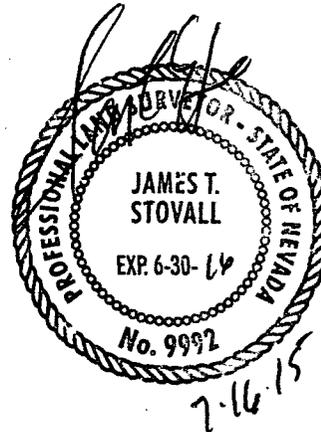
THENCE LEAVING SAID LINE NORTH 45°28'52" EAST, A DISTANCE OF 25.00 FEET;

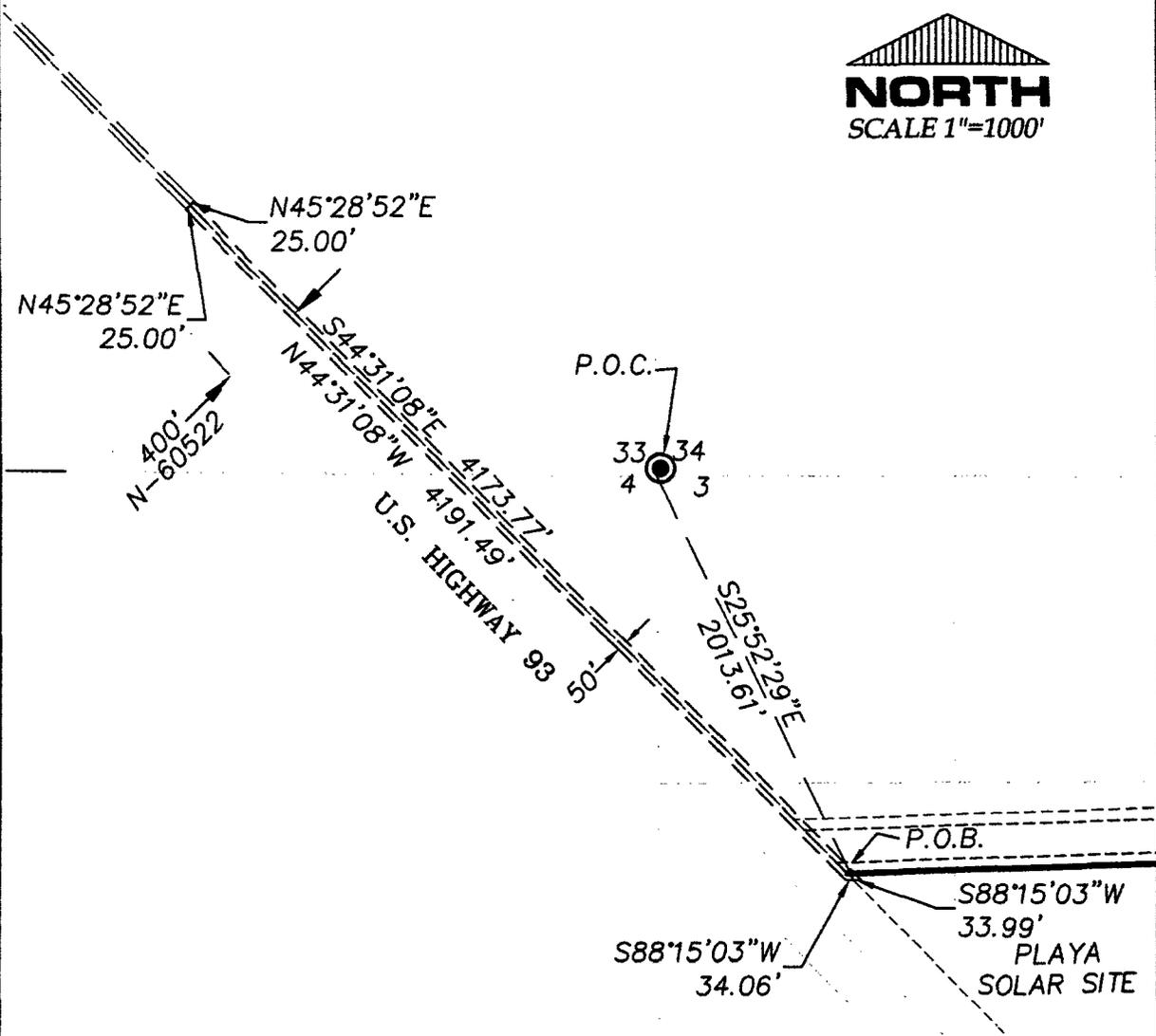
THENCE SOUTH 44°31'08" EAST, A DISTANCE OF 4,173.77 FEET ON A LINE PARALLEL WITH THE SAID RIGHT OF WAY LINE;

THENCE SOUTH 88°15'03" WEST, A DISTANCE OF 33.99 FEET TO **THE POINT OF BEGINNING**;

THE ABOVE DESCRIBED PARCEL CONTAINS 4.84 ACRES.

PURPOSE:	TORTOISE FENCE EASEMENT
PREPARED BY:	JAMES TODD STOVALL 6030 SO. JONES BLVD. #100 LAS VEGAS, NEVADA 89118
JOB NAME:	PLAYA SOLAR SITE
JOB NUMBER:	FRT-13-024
FILE NAME:	7-16-15 TORTISE ALONG HWY 93

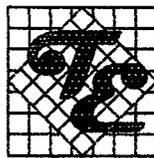




P.O.B. POINT OF BEGINNING
P.O.C. POINT OF COMMENCEMENT

DATE PREPARED;
4/16/15

PLAYA SOLAR SITE &
TORTOISE FENCE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION



TANEY ENGINEERING
6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

**LEGAL DESCRIPTION
TORTOISE FENCE EASEMENT
ALTERNATIVE 1**

LOCATED WITHIN SECTION 35, TOWNSHIP 17 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS;

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER (SE 1/4) OF SAID SECTION 35; THENCE ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER (SE 1/4); THENCE DEPARTING SAID LINE SOUTH 89°32'38" WEST, A DISTANCE OF 16.36 TO THE POINT OF BEGINNING;

THENCE NORTH 47°44'58" WEST, A DISTANCE OF 179.13 FEET;
THENCE SOUTH 39°37'15" EAST, A DISTANCE OF 30.03 FEET TO POINT "A";
THENCE SOUTH 47°44'58" WEST, A DISTANCE OF 177.75 FEET, TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED AREA CONTAINS 5,353 SQUARE FEET +/-.

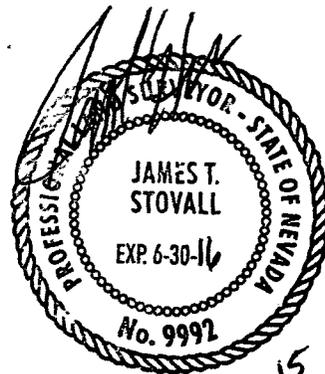
TOGETHER WITH THE FOLLOWING DESCRIBED AREA;

COMMENCING AT SAID POINT "A"; THENCE NORTH 59°48'14" EAST, A DISTANCE OF 1243.22 FEET TO THE POINT OF BEGINNING;

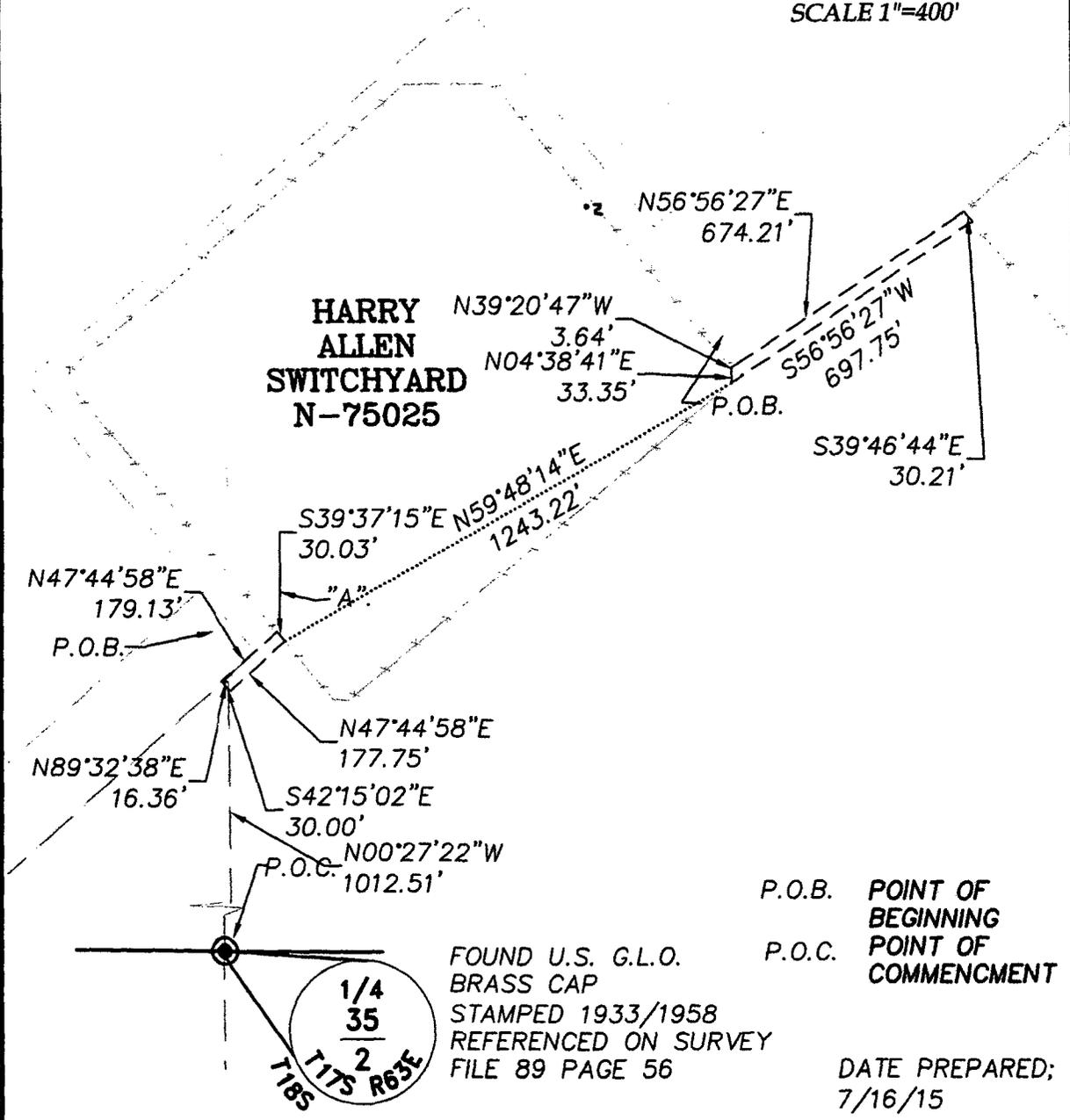
THENCE NORTH 4°38'41" EAST, A DISTANCE OF 33.35 FEET;
THENCE NORTH 39°20'47" WEST, A DISTANCE OF 3.64 FEET;
THENCE NORTH 56°56'27" EAST, A DISTANCE OF 674.21 FEET;
THENCE SOUTH 39°46'44" EAST, A DISTANCE OF 697.75 FEET, TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED AREA CONTAINS 20,537 SQUARE FEET.

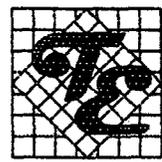
PURPOSE:	TORTOISE FENCE EASEMENT ALT 1
PREPARED BY:	JAMES TODD STOVALL 6030 SO. JONES BLVD. #100 LAS VEGAS, NEVADA 89118
JOB NAME:	DRY LAKE
JOB NUMBER:	FRT-13-024
FILE NAME:	7-16-15 TORT FENCE ALT 1



SEC 35
T.17S., R.63 E.



PLAYA SOLAR SITE &
TORTOISE FENCE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION



TANEY ENGINEERING
6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

**LEGAL DESCRIPTION
TORTOISE FENCE EASEMENT
ALTERNATIVE 2**

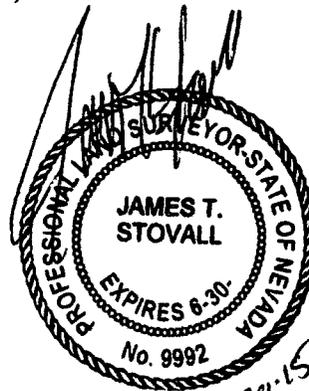
LOCATED WITHIN SECTION 35, TOWNSHIP 17 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY NEVADA, MORE PARTICULARLY DESCRIBED AS FOLLOWS;

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER (SE 1/4) OF SAID SECTION 35; THENCE ALONG THE WEST LINE OF SAID SOUTHEAST QUARTER (SE 1/4); THENCE DEPARTING SAID LINE SOUTH 89°32'38" WEST, A DISTANCE OF 16.36 TO THE POINT OF BEGINNING;

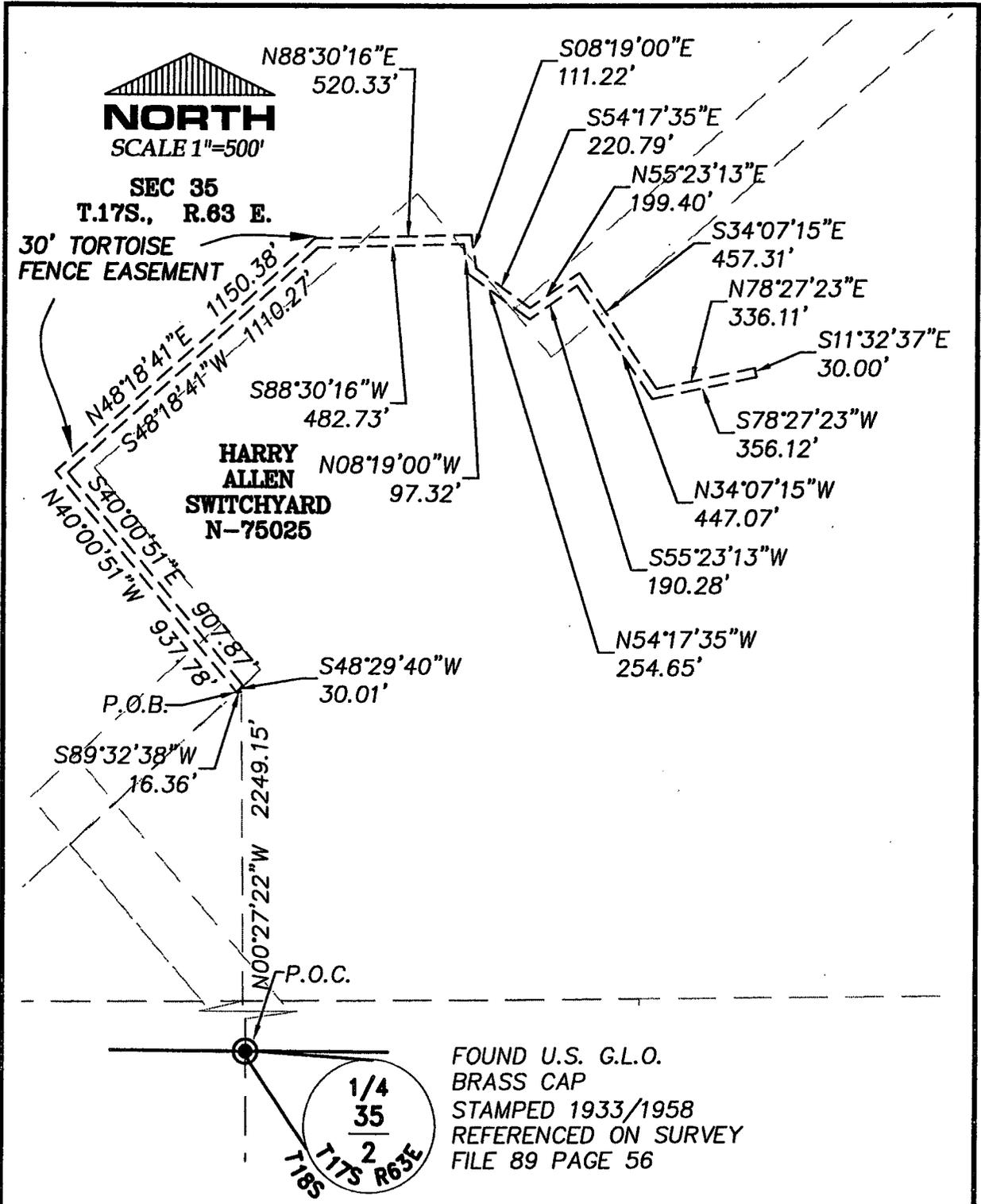
THENCE NORTH 40°00'51" WEST, A DISTANCE OF 937.78 FEET;
 THENCE NORTH 48°18'41" EAST, A DISTANCE OF 1150.38 FEET;
 THENCE NORTH 88°30'16" EAST, A DISTANCE OF 520.33 FEET;
 THENCE SOUTH 08°19'00" EAST, A DISTANCE OF 111.22 FEET;
 THENCE SOUTH 54°17'35" EAST, A DISTANCE OF 220.79 FEET;
 THENCE NORTH 55°23'13" EAST, A DISTANCE OF 199.40 FEET;
 THENCE SOUTH 34°07'15" EAST, A DISTANCE OF 457.31 FEET;
 THENCE NORTH 78°27'23" EAST, A DISTANCE OF 336.11 FEET;
 THENCE SOUTH 11°32'37" EAST, A DISTANCE OF 30.00 FEET;
 THENCE SOUTH 78°27'23" WEST, A DISTANCE OF 356.12 FEET;
 THENCE NORTH 34°07'15" WEST, A DISTANCE OF 447.07 FEET;
 THENCE SOUTH 55°23'13" WEST, A DISTANCE OF 190.28 FEET;
 THENCE NORTH 54°17'35" WEST, A DISTANCE OF 254.65 FEET;
 THENCE NORTH 08°19'00" WEST, A DISTANCE OF 97.32 FEET;
 THENCE SOUTH 88°30'16" WEST, A DISTANCE OF 482.73 FEET;
 THENCE SOUTH 48°18'41" WEST, A DISTANCE OF 1110.27 FEET;
 THENCE SOUTH 40°00'51" EAST, A DISTANCE OF 907.87 FEET;
 THENCE SOUTH 48°29'40" WEST, A DISTANCE OF 30.01 FEET;
 TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED AREA CONTAINS 2.68 ACRES +/-.

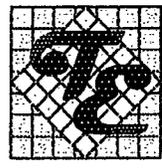
PURPOSE:	TORTOISE FENCE EASEMENT ALT 2
PREPARED BY:	JAMES TODD STOVALL 6030 SO. JONES BLVD. #100 LAS VEGAS, NEVADA 89118
JOB NAME:	DRY LAKE
JOB NUMBER:	FRT-13-024
FILE NAME:	2-23-15 SITE DESC.DOC



7-20-15



PLAYA SOLAR SITE &
TORTOISE FENCE EASEMENT
ALTERNATIVE - 2
TO ACCOMPANY
LEGAL DESCRIPTION



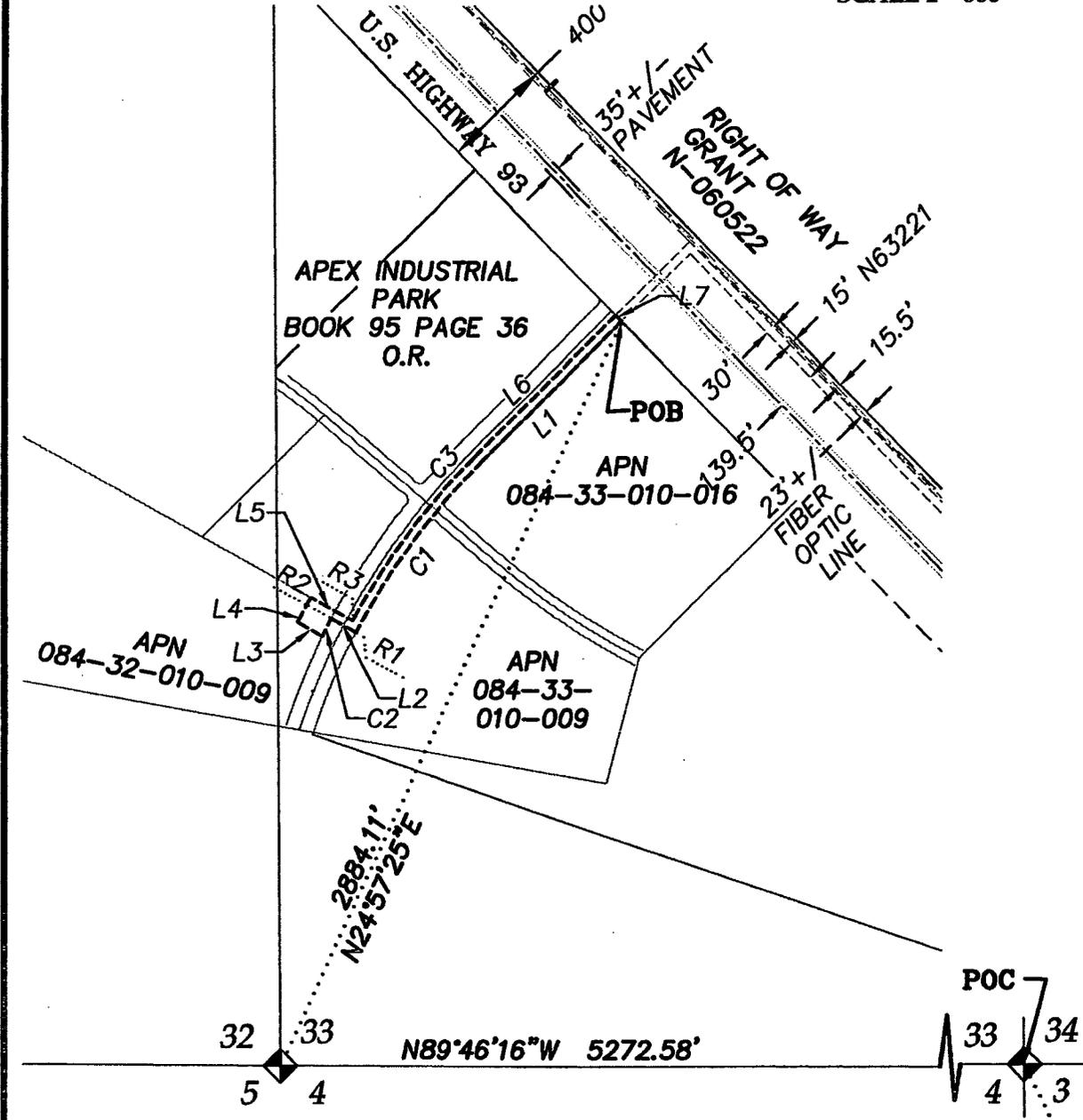
TANEY ENGINEERING
6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

EXHIBIT D
FACILITY PLANS

EXHIBIT D-1
PIPELINE FACILITY PLANS

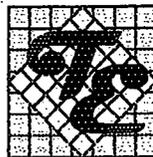


SCALE 1"=600'



SHEET 2 OF 3

PLAYA SOLAR SITE &
30' WATER LINE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION

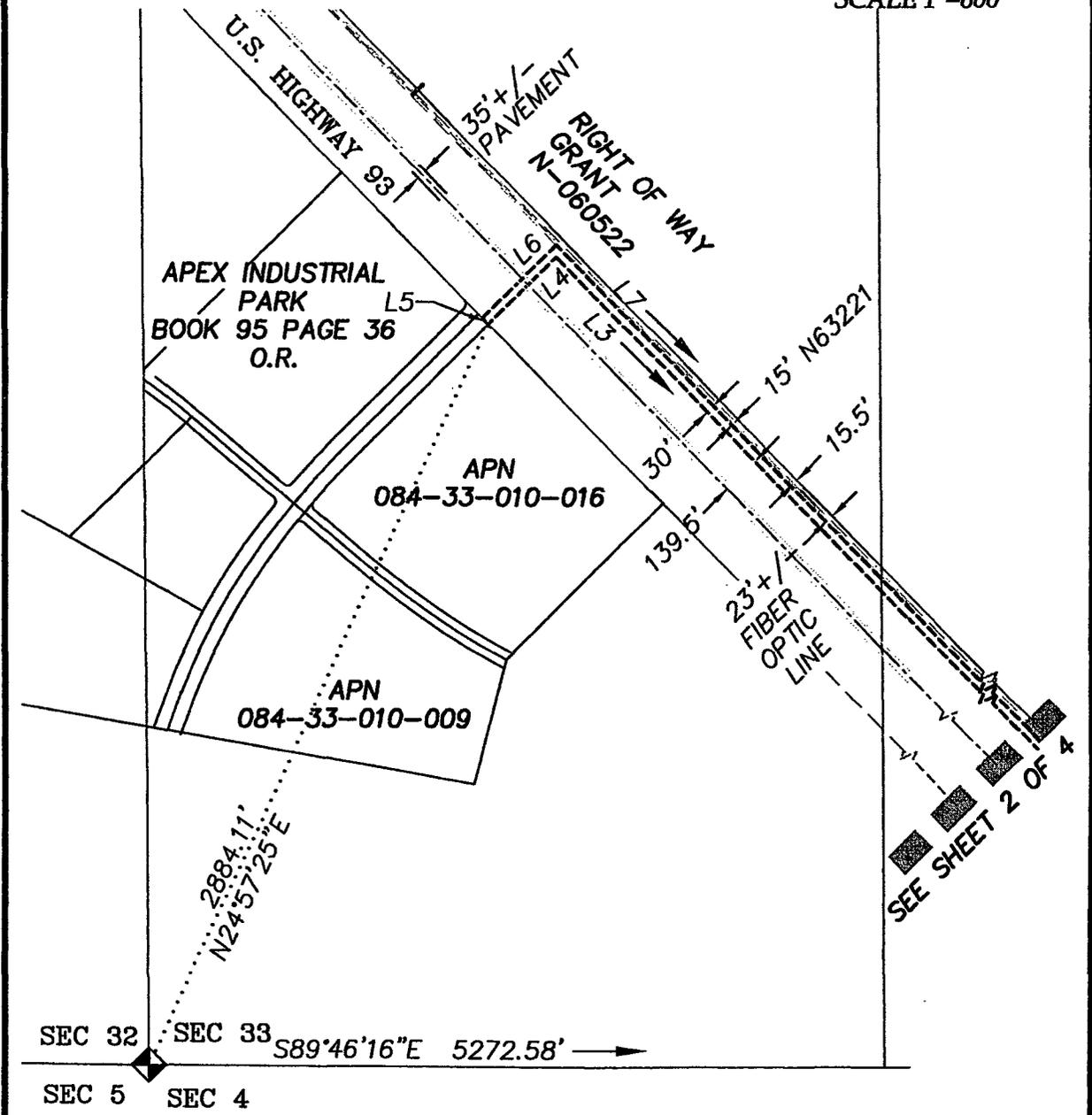


TANEY ENGINEERING

6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

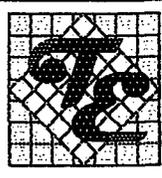


SCALE 1"=600'



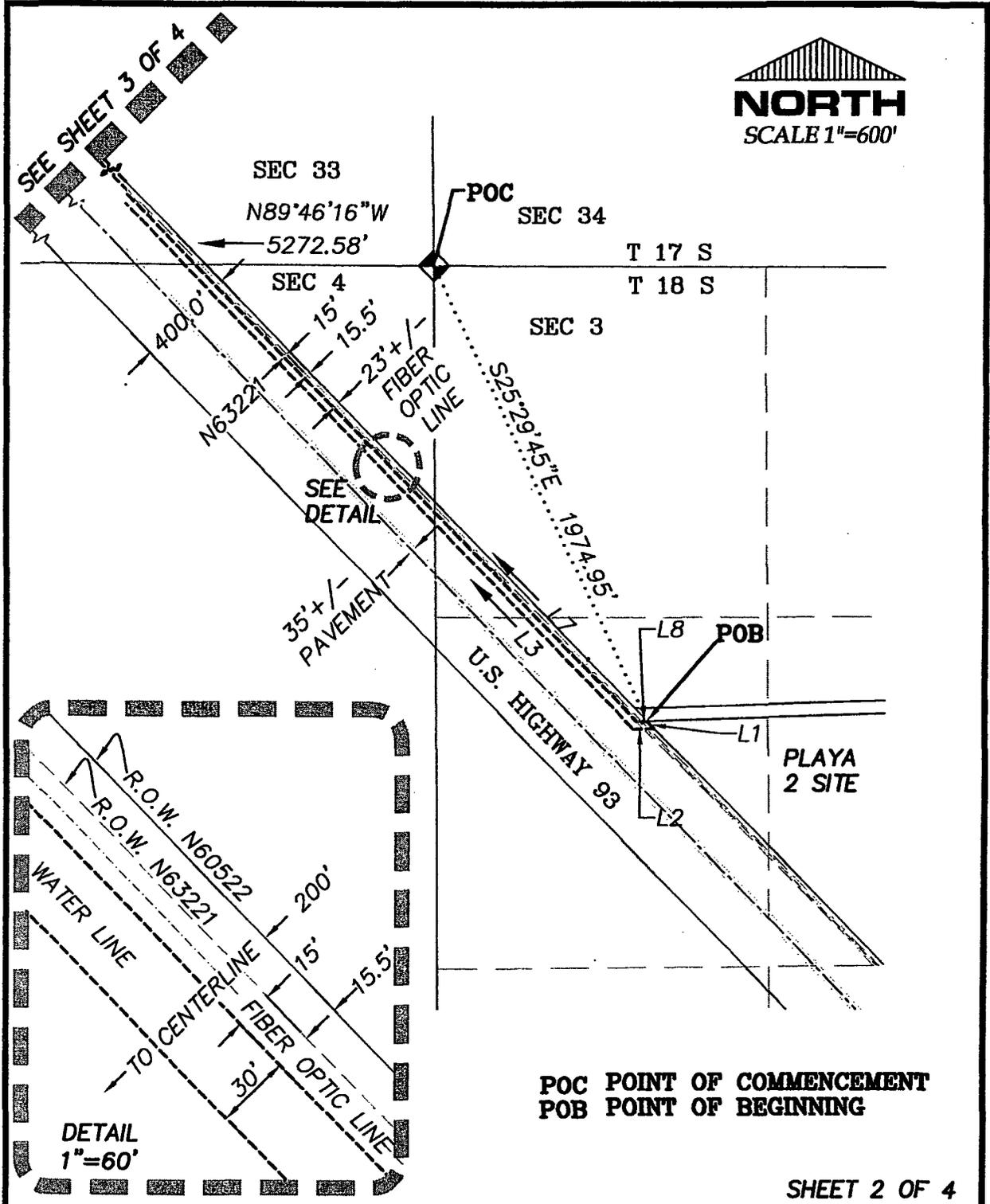
SHEET 3 OF 4

PLAYA SOLAR SITE &
30' WATER LINE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION



TANEY ENGINEERING
6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX:(702) 362-5233

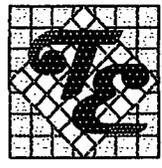
NORTH
SCALE 1"=600'



POC POINT OF COMMENCEMENT
POB POINT OF BEGINNING

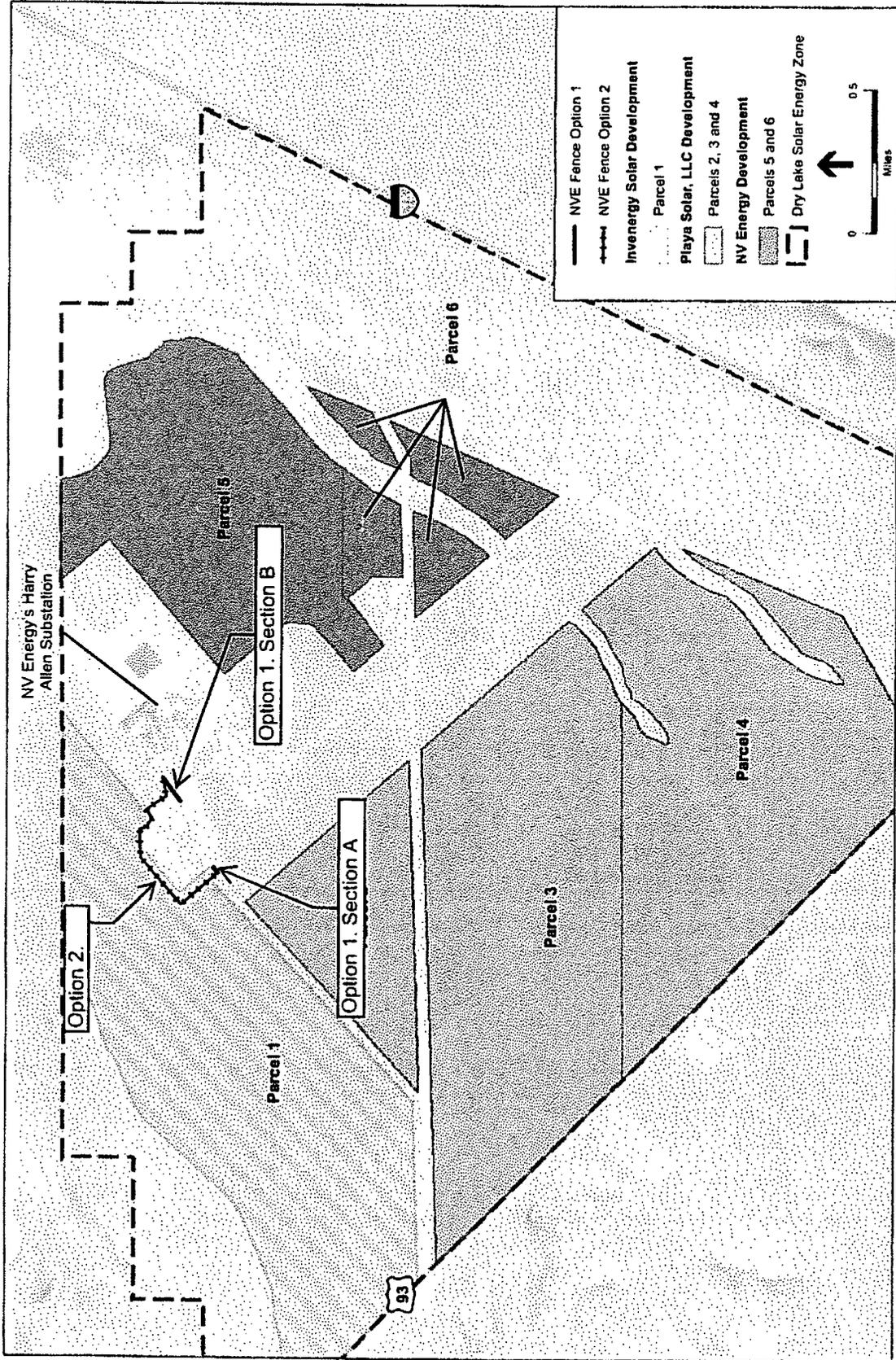
SHEET 2 OF 4

PLAYA SOLAR SITE &
30' WATER LINE EASEMENT
TO ACCOMPANY
LEGAL DESCRIPTION



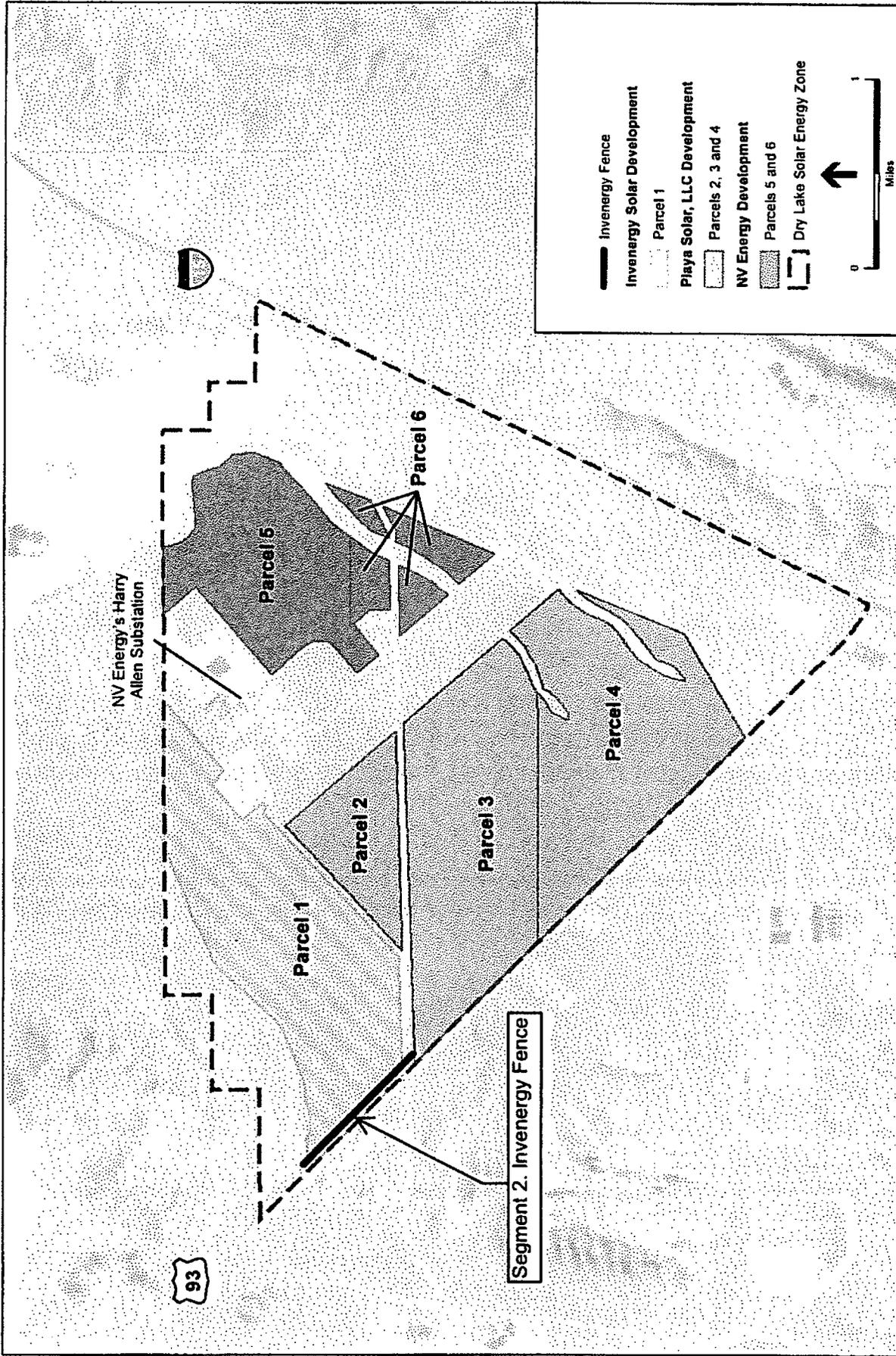
TANEY **E**NGINEERING
6030 S. JONES BLVD. #100
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

EXHIBIT D-2
TORTOISE FENCE FACILITY PLANS



SOURCE: ESRI Imagery

Playa Solar



SOURCE: ESRI Imagery

Playa Solar - D.140515

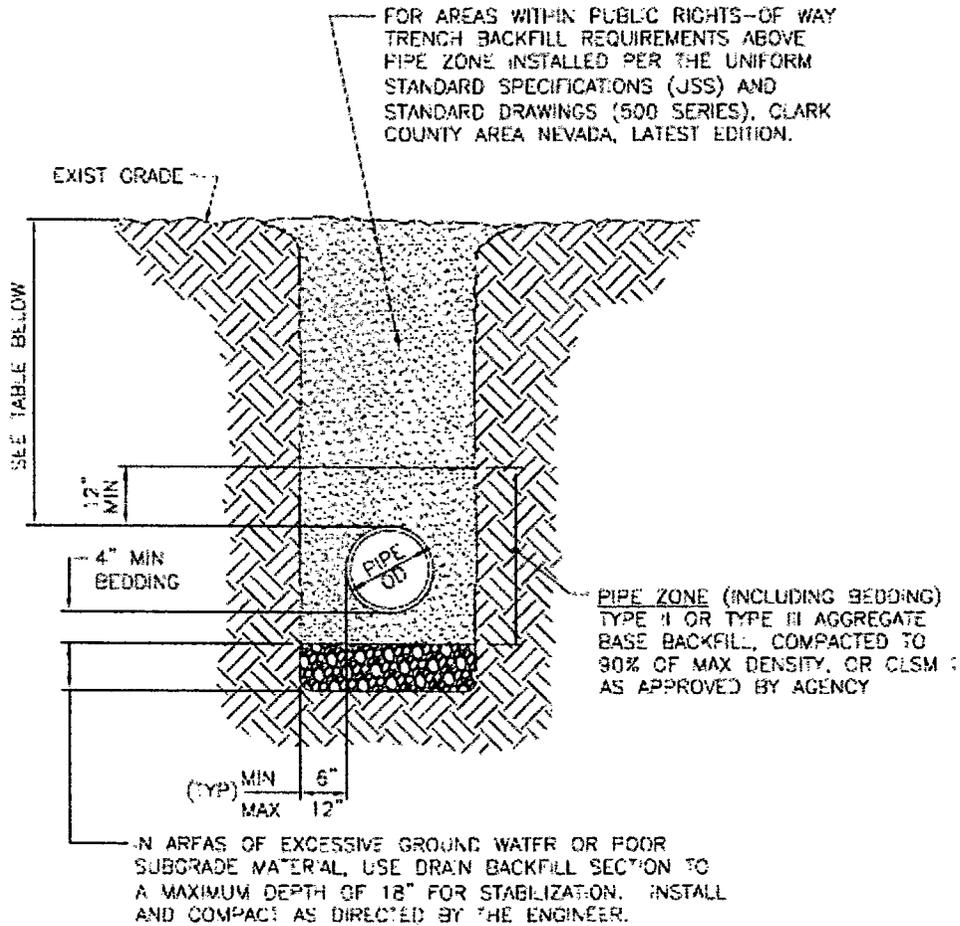
Figure 2
Segment 2. Invenery
Fence Location

EXHIBIT E
SCALED DIAGRAMS

EXHIBIT E-1
PIPELINE SCALED DIAGRAM

Pipeline and Trench Detail

UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS



NOTES:

1. FOR TRENCH SECTION NOTES SEE UDACS PLATE 19.
2. THE AGENCY MAY REQUIRE AN ADDITIONAL TWO (2) FEET OF COVER IN ADDITION TO THE COVER SPECIFIED BELOW FOR PIPES SIXTEEN (16) INCHES AND GREATER IN RIGHT-OF-WAY WITHOUT AN ESTABLISHED STREET GRADE.

PIPE DIAMETER (INCHES)	MINIMUM DEPTH OF COVER (INCHES)
TWELVE (12) AND SMALLER	SIXTY (60)
SIXTEEN (16) AND GREATER	SEVENTY-TWO (72) MINIMUM

07/24 Pgs 12/31/06 P:\UDACS\Section 5 - Standards\Section 5 - Standards\Drawings\UDACS-16.dwg

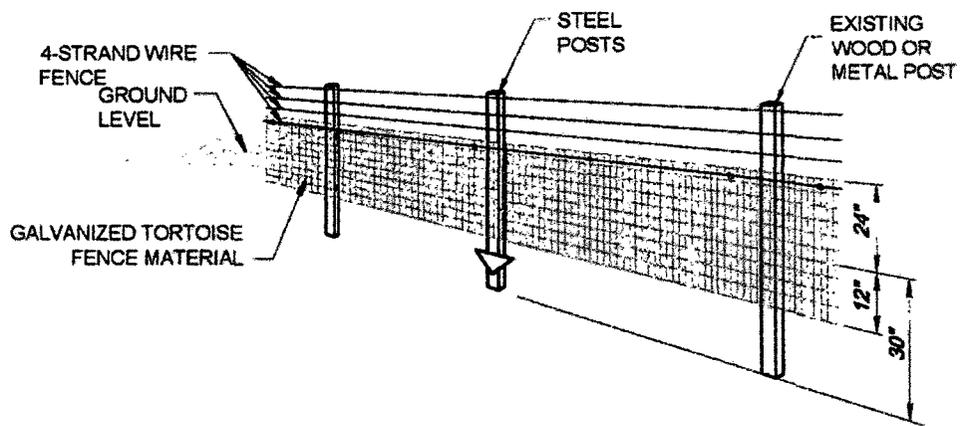
NOT
TO
SCALE

FILE NAME:
UDACS-16
DRAWN BY:
SDM
CHECKED BY:
SPM

TRENCH SECTION BACKFILL SPECIFICATION
UNIMPROVED AREAS

UDACS PLATE NO.
16
SHEET 1 OF 1

EXHIBIT E-2
TORTOISE FENCE SCALED DIAGRAM



PERMANENT TORTOISE FENCE

EXHIBIT F-1

**ENVIRONMENTAL ASSESSMENT PLAYA SOLAR
WELL AND PIPELINE (DRAFT)**

**U.S. Department of the Interior
Bureau of Land Management**

**Environmental Assessment DOI-BLM-NV-EA
July 2015**

Playa Solar Project Well and Pipeline

ENVIRONMENTAL ASSESSMENT

File Number:

APPLICANT
Playa Solar, LLC

BLM Mission Statement

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

**U.S. Bureau of Land Management
Southern Nevada District Office
Las Vegas Field Office
4701 North Torrey Pines Drive
Las Vegas, Nevada 89130
Phone: (702) 515-5000
Fax: (702) 515-5023**

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1.0 PURPOSE AND NEED

1.1 Introduction

The Las Vegas Field Office of the U. S. Bureau of Land Management (BLM) has prepared this environmental assessment (EA) to disclose and analyze the environmental consequences associated with the installation of a groundwater well and pipeline in Clark County, Nevada (the Proposed Action), as proposed by Playa Solar, LLC (Applicant). This EA will assist the BLM in project planning and ensure compliance with the National Environmental Policy Act (NEPA) of 1969 and the Federal Land Policy and Management Act (FLPMA) of 1976.

Through the preparation of this EA, the BLM shall determine if the Proposed Action causes any significant impacts. Should no significant impacts be identified, the BLM may issue a Finding of No Significant Impact (FONSI).

1.2 Background

The groundwater well and pipeline are related to the Playa Solar Project, and are located on both private land and federal public lands managed by BLM. Playa Solar, LLC (Applicant or Playa Solar) applied for and received a right of way (ROW) grant to construct, operate, maintain, and decommission the Playa Solar Project on parcels 2, 3, and 4 of the Dry Lake Solar Energy Zone (SEZ). The Playa Solar Project will produce 200 MW of electricity from a photovoltaic power generating facility. The Playa Solar Project was evaluated by the BLM through an EA, and a Finding of No New Significant Impact (FONNSI) and Decision Record issued on June 1, 2015. The Proposed Action addressed in this EA involves a new location for the groundwater well and associated pipeline route to supply water to the Playa Solar Project.

With regard to the Proposed Action, three potential alternative locations for the groundwater well and pipeline route were previously evaluated in the EA for the Playa Solar Project. Since publication of the EA, a new location for the groundwater well and pipeline has been identified based on commercial discussions between Playa Solar, LLC and the owner of the private land where the groundwater well and majority of the pipeline facilities are located. The new well location and pipeline route on the west side of Highway 93 are located on private land owned by Apex Holding Company (approximately 0.33 miles). The pipeline route east of Highway 93 would be located on BLM-administered land (approximately 1.33 miles) (see Figure 1). The EA for the Playa Solar Project also evaluated an alternative under which all or a portion of the project's water needs would be trucked to the site from water sources in the Las Vegas Metropolitan Area.

1.3 Purpose and Need for Action and Decision to be Made

In accordance with Section 103(c) of the FLPMA, public lands are to be managed for multiple uses that take into account the long-term needs of future generations for renewable and non-renewable resources. Taking into account the BLM's multiple use mandate, the purpose and need for the Proposed Action is to respond to a FLPMA ROW application submitted by the Applicant for a 30-foot wide ROW to design, construct, and maintain a water pipeline on approximately 1.33 miles of public lands administered by the BLM.

This EA is intended to serve as the necessary NEPA documentation for the Proposed Action and the identification of any mitigation measures necessary to reduce potential environmental impacts. In accordance with the FLPMA, the regulations found at 43 Code of Federal Regulations (CFR) 2800, applicable land use plan(s) and other applicable federal laws and policies, the BLM will make a decision to approve or deny this ROW application, wholly or in part, as analyzed in this EA with incorporation of prior BLM NEPA analyses.

1.4 Resource Management Plan and Regulatory Conformance

The Proposed Action is partially located on federal public lands managed by the BLM's Southern Nevada District Office under the October 1998 Las Vegas Resource Management Plan (RMP)/Environmental Impact Statement (EIS) and ROD, as amended (BLM 1998).

The principles of multiple-use management for the BLM are established through FLPMA. The current BLM Las Vegas RMP is consistent with FLPMA and guides the decisions for the BLM.¹ The Proposed Action is in conformance with the management objectives and direction of the 1998 BLM Las Vegas RMP/EIS as amended (BLM 1998).

This EA complies with the Council on Environmental Quality regulations for implementation of NEPA (40 CFR 1500–1508), the Department of the Interior's Implementation of NEPA Regulations at 43 CFR 46, and BLM's NEPA Handbook (H-1790-1) (BLM 2008). In addition, the Proposed Action would be consistent with other officially approved federal, state, and local plans, policies, and programs and with applicable federal regulations, policies and laws.

¹ On Friday, October 10, 2014, the BLM issued a Notice of Availability of the Las Vegas and Pahrump Field Offices Draft RMP and Draft EIS, Nevada (79 *Federal Register* 61334-01). Following the conclusion of the public participation process for the proposed RMP revision and issuance of a Final EIS, the RMP revision will replace the existing Las Vegas RMP.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

The Applicant's purpose for the Proposed Action is to secure the necessary authorization(s) to design, construct, and maintain a groundwater well and pipeline to supply water to the Playa Solar Project.

The proposed well and pipeline site is located in Sections 3,4 and 33 of Township 17S, Range 63E, Mount Diablo Meridian, Clark County, Nevada (see Figure 1).

The proposed water pipeline would begin at a new well to be constructed by a contractor to the Applicant on private property within the Apex Industrial Park. The pipeline will utilize an existing utility easement on the southeast side of Apex Power Parkway and be located within a degraded area adjoining the road, up to the point where it intersects with the Nevada Department of Transportation (NDOT) Highway 93 ROW (N63221). At the junction with the Highway 93 ROW, the pipeline will cross below Highway 93 and enter onto federal public land administered by the BLM.

After it crosses Highway 93 and enters land administered by BLM, the water pipeline will turn southeast for approximately 1.33-miles to its termination at the Playa Solar Project boundary. The proposed 1.33 mile water pipeline ROW on federal public land would be located entirely within the existing NDOT Highway 93 ROW grant (N63221). The northeast boundary of the proposed pipeline ROW would coincide with the southwest boundary of an existing fiber optic line ROW (N60522). A portion of the proposed pipeline ROW, approximately 0.64 miles, would overlap a portion of Dry Lake SEZ Parcel 1 that is also located within the NDOT ROW and subject to a ROW grant held by Invenergy Solar Development, LLC ("Invenergy"). Invenergy has provided its consent in writing to joint use of the relevant area by the Applicant. Near the termination of the proposed pipeline ROW, it would turn northeast and the pipeline would cross under the existing fiber optic line. The proposed pipeline ROW termination point is the Playa Solar Project boundary.

The proposed ROW of BLM-administered land is 30-foot wide and approximately 1.33 miles long, for a total of 4.84-acres.

The water pipeline would be constructed using PVC and/or ductile iron pipe and be 12-16 inches in diameter. The pipeline will be buried a minimum of 5-ft deep measured to the top of the pipe. See Figure 2 for pipeline and trench detail.

The water pipeline crossing under Highway 93 will use the "bore and jack" construction method so as not to disrupt traffic flow. This construction method will require an entrance pit located on the southwest side of Highway 93 where a boring machine can be placed on grade with the bore profile. A similar exit pit will be required on the northeast side of Highway 93. A casing pipe is typically jacked through the bore hole to keep it from collapsing. The proposed water pipe is then fed through the casing.

During construction of the water pipeline, the area would be accessed from a proposed temporary unsurfaced road to be constructed within the proposed ROW on the northeast side of

Highway 93 at the intersection with Apex Power Parkway. Vehicles and equipment would move from this access road and remain within the proposed ROW along the entire length of the pipeline. Up to 200 feet of the existing Kern River pipeline access road would be used for construction access at the termination of the water pipeline and for operation access to a water metering station (permission is being sought by the Applicant for use of this road). An access plan would be provided to the pipeline contractor.

The design specifications for the well remain the same as those analyzed in the Playa Solar Project EA. The well pad is estimated to be 50 feet x 50 feet in size. The water well would be drilled to a depth of up to 800 feet using a truck-mounted drilling rig with supporting equipment for water supply and drilling fluid management. Estimated well depth is based on existing groundwater basin information and actual depth may vary. No change in the amount of water needed for the Project or groundwater basin for the withdrawal is anticipated. The Project would involve the withdrawal of up to 1,350 acre-feet of water over an approximately 18-month period for construction-related activities and approximately 5 acre-feet per year (afy) for operations.

Prior to construction commencement, a licensed professional land surveyor would conduct a land survey of the area to stake/flag the ROW boundaries and establish the pipeline location. There would be minimal permanent disturbance to vegetation from construction of the pipeline. Site preparation would include some vegetation clearing and trimming along the ROW on either side of the pipeline centerline, but most vegetation removal would occur within the narrow (approximately 2-3-foot wide) pipeline trench location. Pipeline construction activities shall implement a drive and crush strategy to minimize impacts to the roots of desert shrubs rather than grading. The construction contractor would be responsible for identifying and securing the rights to a permitted water source(s) for dust control during construction. It is anticipated that less than one acre-foot of water will be used for dust control during well and pipeline installation and would be brought in by truck from an offsite location.

Construction is expected to take up to a month between late 2015 and early 2016, depending on ROW authorization and related permit approvals. Construction techniques would include trenching, bore and jacking, waterline installation, and backfilling of the trench per Uniform Design Standards for Water Distribution Systems (UDACS).

Construction would involve a peak workforce of up to 10 personnel including laborers, and supervisory personnel. Construction would generally occur between daylight hours, Monday through Friday, and is anticipated to commence in late 2015.

The well and pipeline will adhere to all Terms/Conditions/Stipulations identified in the Playa Solar Project Decision Record (May 27, 2015). This includes the Solar Programmatic Environmental Impact Statement (PEIS) design features, Solar Regional Mitigation Strategy for the Dry Lake SEZ, Project-specific Mitigation Measures, and Reasonable and Prudent Measures included in the Project-specific Biological Opinion. The well and pipeline will also adhere to all Project management plans including:

- Bird and Bat Conservation Strategy
- Decommissioning and Site Reclamation Plan
- Desert Tortoise Translocation Plan

- Dust Abatement Plan
- Spill Prevention and Emergency Response Plan
- Hazardous Materials and Waste Management Plan
- Health and Safety Program
- Groundwater Monitoring and Reporting Plan
- Fire Management Plan
- Lighting Management Plan
- Integrated Weed Management Plan
- Raven Management Plan
- Site Rehabilitation and Restoration Plan
- Stormwater Pollution Prevention Plan
- Site Drainage Plan
- Traffic Management Plan
- Surface Water Quality Management Plan
- Worker Education and Awareness Plan (WEAP)

2.1.1 Applicant Proposed Measures

The Applicant proposes the following Applicant Proposed Measures (APMs) to avoid and minimize potential adverse impacts associated with the pipeline ROW to be located on BLM-administered lands.

Applicant Proposed Measures

Biological Resources

Vegetation

Adverse effects on vegetation disturbance during construction would be minimized as follows:

- Prohibit vehicle operation off BLM designated routes by construction workers, including construction work and employee access, except where access is authorized by the BLM in the ROW grant.
 - Vegetation disturbance including its removal would be minimized wherever possible. Access road construction activities shall implement drive and crush to minimize impacts to the roots of desert shrubs rather than grading. Grading and grubbing of vegetative cover outside the trench area would be avoided and all vehicular traffic would travel only on access routes authorized in the ROW grant.
 - To prevent the spread of weed species into new habitats, off road construction equipment would be free of dirt and mud that could contain weed seeds, roots, or rhizomes. Delivery vehicles that would travel on unimproved access roads would be inspected to ensure it is free of any dirt or mud. If dirt and/or mud is visible in the tires and/or undercarriage, each vehicle would not be allowed entry but told to leave and have the vehicle washed, with special attention being paid to axles, frame, cross members, motor mounts, underneath steps, running boards, and front bumper/brush guard.
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Applicant Proposed Measures

Wildlife

- Compensation for habitat modifications per coordination with responsible resource agencies.
- Any required project habitat compensation for special-status species would be satisfied by the Applicant.
- Construction activities and vehicle operation would be conducted to minimize potential impacts or disturbance of wildlife.
- Speed limits along the ROW and access roads would be limited to 15 mph. In addition, construction and maintenance employees would exercise caution when traveling to and from the project site on designated routes on BLM lands to reduce the potential for wildlife mortality.
- Prohibit vehicle operation off BLM designated routes by all project personnel except where authorized by the BLM.
- On BLM lands, the minimum number and types of vehicles and equipment would be limited to those necessary for project construction.
- Conduct pre-construction surveys prior to project initiation
- Pre-construction clearance surveys would be conducted by qualified biologists for sensitive wildlife.
- For the protection of migratory birds during the breeding season, appropriate mitigation measures would be followed.
- Implement conservation measures to decrease the likelihood of take of special status wildlife species and impacts to critical habitat.
- Flag or otherwise mark the outer boundaries of the project construction areas where necessary to define the limit of work activities.
- Minimize habitat degradation by limiting travel to existing roads and surface disturbance to previously disturbed areas.
- Implement Worker Environmental Awareness Program (WEAP) training for all project personnel.
- Employ BLM-approved biologists to monitor construction activities within the ROW. These monitors would have the authority to halt construction activities when wildlife would be adversely affected. The biological monitors would alert take appropriate actions to ensure impacts to wildlife are avoided. Pulling, staging, and equipment storage sites where construction activities would be intense and extended overtime, may be temporarily fenced to keep wildlife from entering these zones.

Waters of the U.S.

- The ROW crosses several ephemeral drainages. These drainages are upstream of drainages that have been previously evaluated and determined not to be Waters of the United States (ESA, Dec 2015; USACE, Jan 2015). The Applicant will obtain a Nevada Division of Environmental Protection Working in Waterways Permit for crossings of ephemeral drainages as required by NDEP.
-

Applicant Proposed Measures

Air Quality

The following mitigation measures would be implemented during the construction of the Proposed Action to reduce the exhaust emissions of CO, NOX, VOC, SOX, and PM10:

- Construction vehicles would have 1996 and newer model engines and be in good working condition.
 - The following mitigation measures would be implemented for the Proposed Project to reduce fugitive dust emissions (including PM10):
 - Water would be applied to unstabilized surfaces of disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface.
 - Water would be used in such quantities to control dust on areas with extensive traffic including unpaved access roads.
 - Vehicle speeds on unpaved roadways would be restricted to 15 mph.
 - Construction, operation, and maintenance activities would be restricted when the soil is too wet to adequately support construction or maintenance equipment (i.e., when heavy equipment creates ruts in excess of 4 inches deep over a distance of 100 feet or more in wet or saturated soils). Where the soil is deemed too wet, one or more of the following measures would apply:
 - Construction and maintenance vehicles would be rerouted around wet areas onto existing roads that do not cross sensitive resource areas.
 - Construction would be suspended during wet weather conditions if damage to soils could occur.
 - Monitoring of the erosion control measures would continue until reclamation efforts are considered complete and successful. Measures to be implemented during the Proposed Project construction and reclamation are listed below.
 - These measures would minimize the effects of grading, excavation, soil compaction, and other surface disturbances in all Project areas. Schedules and specifications for these features would be part of the final construction plan.
 - Confine all vehicular traffic associated with construction to areas
 - Limit disturbance and removal of soils and vegetation to the minimum area necessary for access and construction.
 - Adhere to construction methodology
 - Replace excavated materials in disturbed areas and minimize the time between excavation and backfilling.
-

2.2 No Action Alternative

Under the No Action Alternative, the Applicant's ROW application to construct the Proposed Action would not be approved and the Applicant would truck water to the site from water sources in the Las Vegas Metropolitan Area as contemplated in the EA for the Playa Solar Project. Impacts associated with trucking water to the site would include, but are not limited to traffic, noise, and air quality impacts (see Playa Solar EA for more information).

2.3 Alternatives Considered But Eliminated From Detailed Analysis

As discussed above, three potential alternative locations for the groundwater well and pipeline route were evaluated in the EA for the Playa Solar Project. These alternatives were eliminated from further consideration based on further discussion with the private landowner, which rendered those alternatives infeasible based on either commercial or practical siting

considerations. The Proposed Action makes use of existing areas of disturbance to the extent possible. The proposed 1.33 mile water pipeline ROW on public land would be located entirely within the existing NDOT Highway 93 ROW. The northeast boundary of the proposed pipeline ROW would coincide with the southwest boundary of an existing fiber optic line ROW. A portion of the proposed pipeline ROW, approximately 0.64 miles, would overlap a portion of Parcel 1 of the Dry Lake SEZ and be encompassed within the area of disturbance for Invenenergy's proposed solar project.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter presents the potentially affected existing environment within the impact area and potential environmental consequences of the Proposed Action. Impacts are defined as modifications to the existing environment brought about by implementing an action. Impacts can be beneficial or adverse, can result from the action directly or indirectly, and can be long-term, short-term, or cumulative in nature. Direct impacts are attributable to implementation of an action that affects a specific resource and generally occur at the same time and place. Indirect impacts can result from one resource affecting another or can occur later in time or removed in location but can be reasonably expected to occur. Long-term impacts are those that would substantially remain for many years or for the life of the project. Short-term impacts result in changes to the environment that are stabilized or mitigated rapidly and without long-term effects.

Table 1 Supplemental Authorities and Other Relevant Resources

Supplemental Authority*	Not Present†	Present/ Not Affected	Present/ May Be Affected	Rationale
Air Quality			X	Ensure dust control permit is obtained from the Clark County Department of Air Quality for all soil-disturbing activities of 0.25 acre or greater, in the aggregate and all permit stipulations are in compliance for the duration of the Proposed Action.
Area of Critical Environmental Concern	X			Not present.
Cultural Resources	X			A Class III survey has been performed for the Proposed Action area. No resources eligible for the National Register of Historic Places are known to be present (NDOT 2013; <u>need info from Stan Plum</u>).
Environmental Justice	X			There are no environmental justice communities near the Proposed Action area.
Farmlands, Prime or Unique	X			Not present.
Floodplains	X			The Proposed Action area is located outside of Federal Emergency Management Agency–designated floodplains.
Migratory Birds		X		Migratory birds may be present on or otherwise utilize and pass through the Proposed Action area.

Table 1 Supplemental Authorities and Other Relevant Resources

Supplemental Authority*	Not Present [†]	Present/ Not Affected	Present/ May Be Affected	Rationale
Native American Religious Concerns	X			Prior consultations have already been completed with the Moapa Band of Paiutes, the Las Vegas Paiute Tribe, the Chemehuevi Indian Tribe, and the Paiute Indian Tribe of Utah for the utility-scale solar projects adjacent to the Proposed Action area.
Noxious Weeds/Invasive Non-native Species		X		The Proposed Action has minimal potential for the introduction of spreading, infestations, or establishing new invasive species/noxious weeds.
Threatened, Endangered, and Special-status Species			X	Special-status and T&E listed wildlife and plant species have the potential to be present in the Proposed Action area.
Water Resources/Quality (drinking/surface/ground)	X			The 5 acre-feet of water would be brought in from offsite and would result in no additional drawdown of groundwater supplies in the hydrographic basin.
Wetland/Riparian Zones		X		The ROW crosses several ephemeral drainages. These drainages are upstream of drainages that have been previously evaluated and determined not to be Waters of the United States (ESA, Dec 2015; USACE, Jan 2015). The Applicant will obtain a Nevada Division of Environmental Protection Working in Waterways Permit.
Wild and Scenic Rivers	X			Not present.
Wilderness	X			Not present.

* See H-1790-1 (BLM 2008), Appendix 1, Supplemental Authorities to Be Considered.

3.1 Cumulative Scenario

Council on Environmental Quality regulations for implementing NEPA define cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions ("RFA") regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7).

A number of past, present and reasonably foreseeable future actions are or will occur in the vicinity of the Proposed Action, including utility-scale solar projects in the Dry Lake SEZ, which is contiguous to the Proposed Action. As appropriate, this EA relies on the cumulative scenario information contained in the BLM’s Solar Programmatic Environmental Impact Statement (BLM 2012) and the individual NEPA documents prepared for the three solar projects proposed in the Dry Lake SEZ (BLM 2014).

3.2 Air Resources

During construction activities there would be an increase in particulate levels, but this would be limited to the immediate disturbance area associated with construction and would decrease quickly with distance. Emissions from construction-related equipment and vehicles would be temporary and may result in unavoidable but short-term impacts. The primary means for limiting dust (i.e., particulate matter) during construction will be compliance with the conditions of Clark County Dust Control Permit. These measures include limiting vehicle speeds and the use of water for dust control; no additional mitigation measures to address impacts to air quality are recommended.

Under the No Action Alternative, the ROW would be denied and air quality in the area would continue to be subject to existing conditions.

3.3 Wildlife

3.3.1 General Wildlife

The Proposed Action area occurs within typical habitat for desert wildlife species in Nevada. Wildlife species in the general area include small mammals, birds, and reptiles. No habitat for fish and amphibians occurs in or near the Proposed Action area. These general wildlife species and their habitats are common and widely distributed throughout the Dry Lake Valley. Desert ecosystems typically exhibit a low diversity of wildlife species relative to mountain or forest ecosystems.

3.3.2 Special-Status Wildlife Species

Special-status wildlife species include BLM Sensitive species and State-listed species protected under NRS 501.110. According to these species lists, there is potential for 45 special-status wildlife species to be present and/or utilize a portion of the Proposed Action area. Specific APMs for the protection of special-status species include pre-construction surveys for special-status species and construction monitoring by qualified biologists.

The Applicant would comply with all local, state, and federal laws that require or otherwise contain mitigation measures that afford protection for general wildlife, special-status species, and federally listed species. Pre-construction biological surveys and monitoring of construction activities by a qualified biologist will ensure the avoidance of impacts to special-status species during construction.

Under the No Action Alternative, the ROW would be denied and special-status wildlife species and habitat would continue to be subject to existing conditions.

3.3.3 Migratory Birds

Almost all the bird species that have potential to occur within or pass through the Proposed Action area are considered to be migratory birds, as per the federal Migratory Bird Treaty Act (MBTA) of 1918. The US Fish and Wildlife Service (USFWS) defines a migratory bird as any species or family of birds that live, reproduce, or migrate within or across international borders at

some point during their annual life cycle. Because the Proposed Action involves only a very small portion of the overall available habitat for the representative migratory bird species potentially within or passing through the Proposed Action area, the impacts to migratory birds would be minimal to non-existent.

Burrowing owl surveys were conducted on the pipeline route in February and May 2015 and no active burrowing owl burrows were observed (ESA 2015). Burrowing owl activity in the vicinity of the construction activity will be monitored by a qualified biologist to ensure protection of this species during construction.

The cumulative impacts area of analysis for migratory birds is defined as the Proposed Action area and a 10-mile radius around the Proposed Action. Because of its small geographic footprint and the nature of the Proposed Action which is limited to a well and underground water pipeline, it would result in negligible, if any, increase to the cumulative impacts on migratory birds, including the potential loss of habitat.

Under the No Action Alternative, the ROW would be denied and migratory birds would continue to be subject to existing conditions.

3.3.4 Threatened, Endangered, and Candidate Wildlife Species

Threatened and endangered species are placed on a federal list by the USFWS and receive protection under the Endangered Species Act of 1973, as amended. According to the Information, Planning and Conservation (IPaC) support tool created by the USFWS, four threatened and endangered species (three birds and one reptile) have potential to occur in the vicinity of the Proposed Action area: the endangered southwestern willow flycatcher, the endangered Yuma clapper rail, the threatened yellow-billed cuckoo, and the threatened Mojave desert tortoise.

The southwestern willow flycatcher, the Yuma clapper rail, and the yellow-billed cuckoo are riparian birds that require surface water and riparian vegetation species for successful population survival. No riparian habitat exists in or near the Proposed Action area. In addition, the Proposed Action area is not within any path that would connect aquatic features.

Suitable habitat for the desert tortoise does occur within the Proposed Action area. USFWS protocol-level surveys for desert tortoise were conducted along the newly proposed pipeline route and well site, including a 100 meter buffer. Surveys were conducted by Environmental Science Associates east of Highway 93 on February 21 and west of Highway 93 on May 22, 2015 (ESA 2015). In fall of 2014, Powers Engineering (Powers) and SWCA Environmental Consultants (SWCA) conducted surveys of Parcel 1 of the SEZ (BLM and Ironwood 2015).

No live desert tortoise or sign thereof was found during the 2015 surveys. Three inactive desert burrows were identified in Parcel 1 during the fall 2014 survey, however, according to Ironwood, no desert tortoises have been identified within the survey area to date. Coyote burrows and scat were observed within and adjacent to the survey area, and common ravens were observed regularly flying over the survey area. Both common raven and coyote are known desert tortoise predators.

Based on these survey findings, desert tortoise do not occupy the new well and pipeline location and, thus, desert tortoise would not be impacted by the installation and operation of the well and pipeline in the proposed new location. Playa Solar LLC would ensure avoidance of impacts to desert tortoise associated with the well and pipeline construction by following the measures described in the Biological Opinion for Four Solar Energy Projects in the Dry Lake Solar Energy Zone (2015) and Desert Tortoise Translocation Plan (2015), which include minimizing and avoiding impacts to tortoises by conducting pre-construction surveys, installing exclusion fence (temporary or permanent), moving tortoises out of the construction area, monitoring construction, and providing a Worker Environmental Awareness Training.

Pre-construction surveys for desert tortoise and monitoring of the well and pipeline installation by an authorized desert tortoise biologist would ensure that impacts to desert tortoise are avoided during construction. If a desert tortoise is present that may be harmed by construction, the desert tortoise will be allowed to move a safe distance away. Alternatively, an authorized biologist may move the desert tortoise to a safe location in accordance with the conditions of the BLM's Biological Opinion for the Dry Lake SEZ projects (USFWS 2015).

The cumulative impacts area of analysis for desert tortoise is defined as the Northeastern Mojave Recovery Unit. Desert tortoise are not expected to be impacted by the Proposed Action and therefore would not contribute to cumulative impacts to this species. Pre-construction surveys for desert tortoise and monitoring of the well and pipeline installation by an authorized desert tortoise biologist would ensure that impacts to desert tortoise are avoided during construction.

Under the No Action Alternative, the ROW would be denied and desert tortoise would continue to be subject to existing conditions.

3.4 Vegetation Excluding Federally Listed Species

Vegetation cover within the Proposed Action area is made up of Sonora-Mojave creosote-white bursage desert scrub with scattered Mojave yucca, and already disturbed and partially developed land with little vegetation. There are no federally listed plant species that occur within the Proposed Action area.

The construction of the well and pipeline would result in the minimal removal of vegetation only in the narrow trenching strip where the pipeline would be buried and the well pad. The Applicant would employ APMs to minimize vegetation loss including the use of a drive and crush strategy within the construction work area to minimize impacts to plant root systems.

The cumulative impacts area of analysis for vegetation is defined as lands administered by the BLM Las Vegas and Pahrump Field Offices. The Proposed Action area is located within the creosote bush-dominated basins ecoregion, where Sonora-Mojave creosote-white bursage desert scrub is the predominant cover type within the Dry Lake Valley. When combined with other actions in the cumulative scenario, the Proposed Action would result in an incremental addition to current declines in the quality and quantity of native vegetation in the area, however the limited area to be disturbed, approximately 4.0 acres, to construct the well and pipeline would not contribute significantly to cumulative loss of vegetation communities in the Las Vegas and Pahrump Field Offices boundaries.

Under the No Action Alternative, the ROW would be denied and vegetation would continue to be managed consistent with the objectives of the BLM Las Vegas RMP.

3.4.1 Special-Status Plant Species

Special-status plant species that are protected in the State of Nevada or listed as a sensitive species by the BLM are known to occur on or in the vicinity of the Dry Lake Valley surrounding the Proposed Action area. The Proposed Action may result in the direct loss of individual plants and potentially suitable habitat for rosy two-tone penstemon. Nearby populations of other BLM sensitive plant species, including three-corner milkvetch and Beaver Dam breadroot, may also be indirectly impacted if the Proposed Action leads to the introduction and spread of invasive species.

The Applicant will employ APMs for the protection of special-status plant species including a pre-construction survey by qualified biologists. The construction of the well and pipeline would result in the minimal removal of vegetation only in the narrow trenching strip where the pipeline would be buried and the well pad. Further, the Applicant would employ APMs to minimize vegetation loss including the use of a drive and crush strategy within the construction work area to minimize impacts to plant root systems. Methods to control dust are described in Section 3.2; methods to address noxious and invasive weeds are discussed in Section 3.5.

The cumulative impacts area of analysis for special-status plant species is defined as lands administered by the BLM Las Vegas and Pahrump Field Offices. Minimization of vegetation disturbance, avoiding introduction of invasive weed species, and dust minimization are all APMs that would reduce or eliminate the potential for cumulative impacts to special-status plant species from the Proposed Action. When combined with other actions in the cumulative scenario, the Proposed Action would result in minor if any impacts to special status plant species and therefore would not contribute significantly to cumulative impacts to special status plant species in the Las Vegas and Pahrump Field Offices boundaries.

Under the No Action Alternative, the ROW would be denied and special status plants would continue to be managed consistent with the objectives of the BLM Las Vegas RMP and BLM Manual 6840.

3.5 Noxious and Invasive Weeds

Southern Nevada lands are impacted by the presence of noxious and invasive, non-native vegetation (i.e., weeds). The Dry Lake Valley was inventoried for weeds in 2014, and populations of red brome were observed along roadsides and in water collection areas. Existing ROW corridors in the Dry Lake Valley are known to have populations of both Malta star-thistle and Sahara mustard which are listed as noxious weeds in Nevada. Bare ground resulting from vegetation removal provides an opportunity for non-native invasive weed species to colonize the Proposed Action area. Vehicles can introduce and/or spread weeds by disbursing weed seed along roadways. Seed heads of non-native weed species can also imbed in the tires and undercarriage of vehicles and equipment when traveling from offsite areas onto the Proposed Action site.

The Applicant proposes to implement standard BMPs during well and pipeline construction to minimize the potential for the dispersal or increased abundance of noxious and invasive weeds. Further, implementation of APMs that minimize ground and vegetation disturbance in the temporary construction area, reduce dust, and avoid introduction of invasive species would adequately address the potential spread of noxious and/or invasive species. Impacts from noxious weeds and invasive species associated with the Proposed Action would be negligible. No additional mitigation measures have been identified.

The cumulative impacts area of analysis for noxious weeds and invasive species is defined as lands administered by the BLM Las Vegas and Pahrump Field Offices. Because of the size and nature of the Proposed Action (less than 4.0 acres) and the proposed APMs that will be employed to address noxious and invasive weeds, the Proposed Action would result in negligible cumulative impacts on native vegetation communities, including the potential to spread noxious or invasive weeds.

Under the No Action Alternative, the ROW would be denied and invasive species and noxious weeds would continue to be managed consistent with the objectives of the BLM Las Vegas RMP.

3.6 Soils

Soils within the Proposed Action area are very gravelly and stony loams of the Colorock–Tonopah and the Bard-Tonopah association. Impacts on soil resources would occur mainly as a result of ground-disturbing activities during construction of the well and pipeline. APMs to be employed by the Applicant during construction to reduce impacts to soils include minimization of ground disturbance in the construction work areas. Because of the size and nature of the well and pipeline construction (less than 4.0 acres), the Proposed Action would have an insignificant impact on soils locally and cumulatively in the Dry Lake Valley.

Under the No Action Alternative, the ROW would be denied and soil resources would not be directly or indirectly impacted.

4.0 COORDINATION

As described in the Record of Decision for the BLM's Solar Programmatic Environmental Impact Statement (BLM 2012), extensive coordination, consultation, and public involvement specific to solar energy development in SEZs occurred as part of the NEPA process for the Western Solar Program, including the Dry Lake SEZ. Projects proposed in the Dry Lake SEZ also went through individual NEPA analysis that included public involvement and coordination (BLM 2014). This outreach included consideration of the actions necessary to support desert tortoise translocation associated with development in the Dry Lake SEZ. The process used to involve the public included the direct mail of letters to Tribes; federal, state, and local agencies; private landowners, and other interested parties. A public comment period was offered between December 9, 2014 and January 7, 2015 and a public open house was held during that time.

As part of the public involvement process for the Playa Solar Project EA, it was disclosed to the public and agencies that the project included an offsite groundwater well and pipeline west of Highway 93 connecting to a temporary water storage pond on the project site. Since the old and new well and pipeline locations are on private land, the landowners to be impacted are aware of the proposed relocation. Playa Solar, LLC has also been in contact with the Nevada Department of Transportation regarding the road crossing and their Highway 93 ROW (consent is being sought); the USFWS regarding any potential impacts to desert tortoise; InvEnergy regarding the location of the pipeline on their parcel (consent is being sought); and the Nevada Public Utilities Commission regarding the Utility Environmental Protection Act permit.

5.0 LIST OF PREPARERS

This EA was developed by the BLM Las Vegas Field Office with assistance from First Solar and Environmental Science Associates (ESA).

Name	Responsible for the Following Section(s) of this Document
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Shannon Stewart, ESA	All
William Chilson, First Solar	All

6.0 REFERENCES

- BLM, 2015. Playa Solar Project (Parcels 2, 3 & 4) Decision Record. May 27, 2015.
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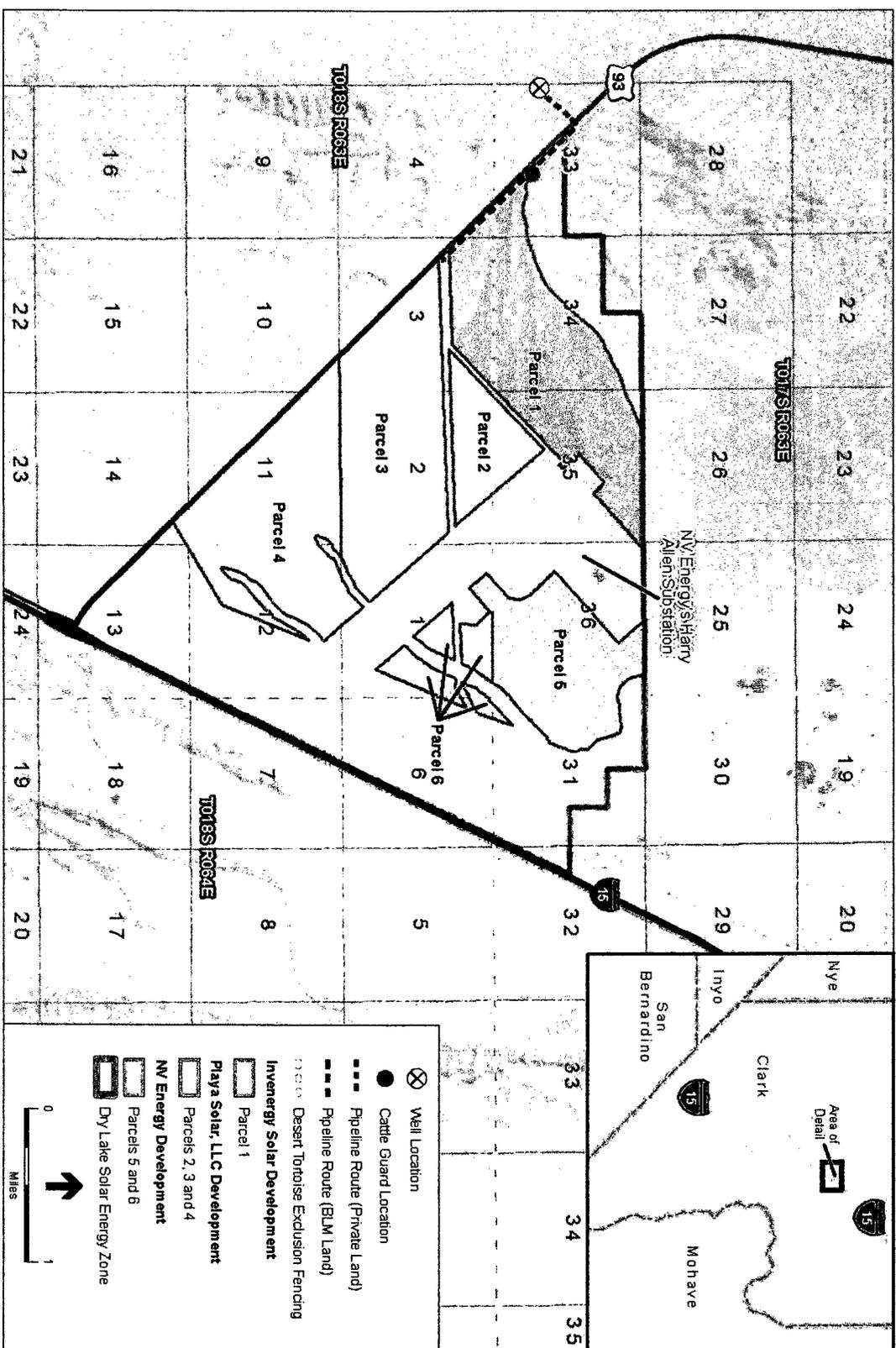
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Figure 1 – Project Location



SOURCE: ESRI Imagery

Playa Solar Well and Pipeline Project - D.140515

Figure 1
Project Location Map

Figure 2 – Pipeline and Trench Detail

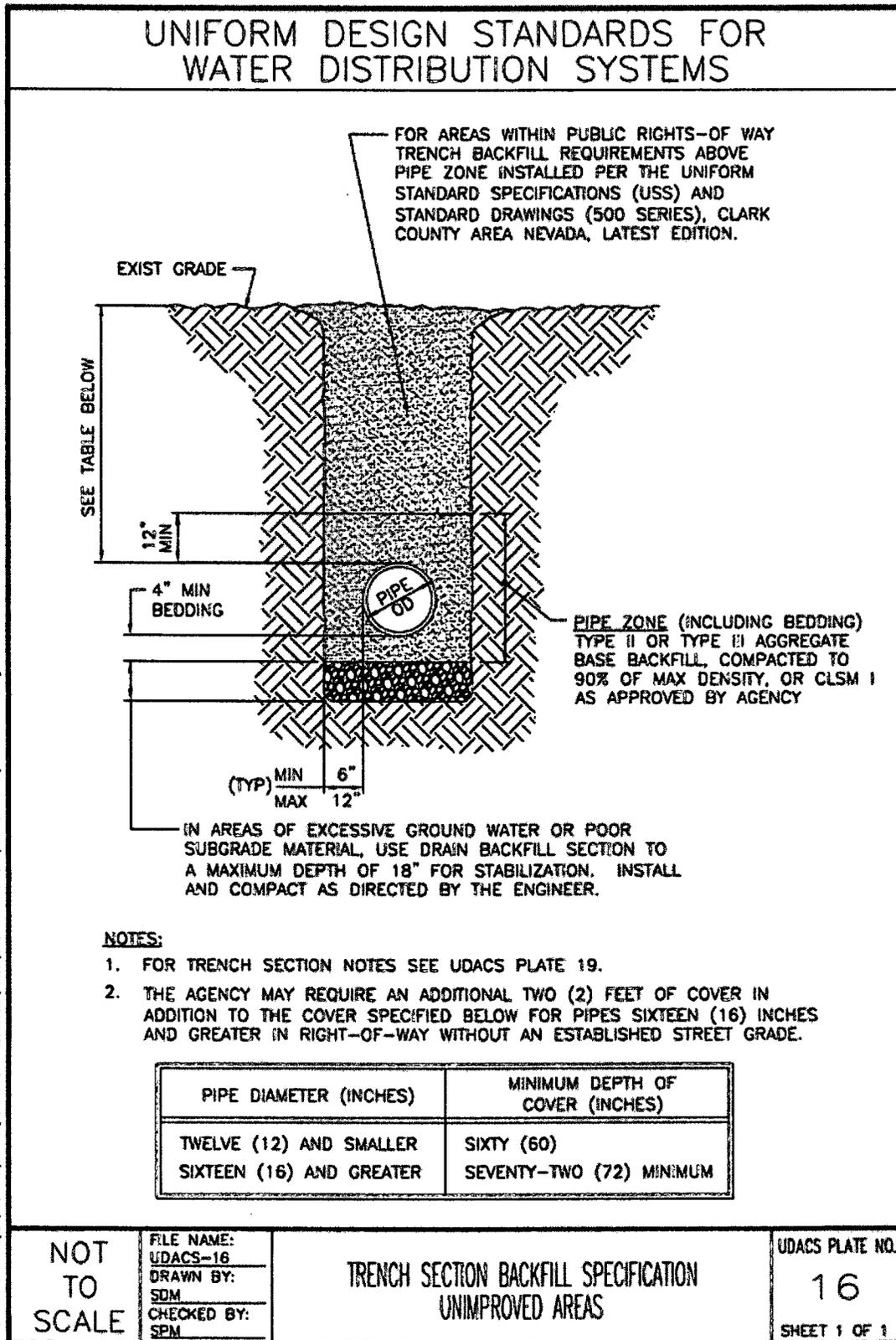


EXHIBIT F-2

**ENVIRONMENTAL ASSESSMENT HARRY ALLEN
SOLAR ENERGY CENTER PROJECT (PORTIONS)**

U.S. Department of the Interior Bureau of Land Management

Environmental Assessment DOI-BLM-NV-S010-2014-0125-EA
December 2014

Harry Allen Solar Energy Center Project

ENVIRONMENTAL ASSESSMENT

File Number: N-93321

APPLICANT

Invenergy Solar Development, LLC

GENERAL LOCATION

Near Apex, Nevada
North of U.S. Route 93

U.S. Bureau of Land Management
Southern Nevada District Office
Las Vegas Field Office
4701 North Torrey Pines Drive
Las Vegas, Nevada 89130
Phone: 702-515-5000
Fax: 702-515-5023



general public during the construction and operational phases of the Project. The health and safety program would be developed, implemented, and administered by the EPC.

2.2.6.6 COMMUNICATION SYSTEM

Coordination with NV Energy prior to construction would be required to determine the specific requirements for the NV Energy communication system (including fiber counts and types). Communications with NV Energy during the operations phase of the Project would be done using a primary and secondary fiber-optic cable, which would either be buried or would be integrated with the gen-tie line and would be 3,575 feet long. There would also be a SCADA system that would allow Invenergy Solar on-site and remote personnel to operate the Project.

2.2.7 Decommissioning and Site Reclamation

At the end of the useful life of the Project, or upon the expiration or termination of the ROW grant, whichever comes first, the solar panels and all ancillary equipment and facilities (including control enclosure, portable toilets, collector substation, and gen-tie line) would be removed from the site. Any support structures would be demolished and all debris would be removed. Foundations for the solar modules and collector substation facilities would be removed to 3 feet below ground surface. After removal of all equipment and structures, the ground and roads would be smoothed to original slopes and contours by disking and planted with a seed and plant mix as approved by the BLM. A final Facility Decommissioning Plan would be developed consistent with BLM policy and objectives at that time, as approved by the BLM. The BMPs and stipulations that have been developed for construction activities would be applied to similar activities during decommissioning.

2.2.8 Permits and Approvals

Table 3 provides a list of federal, state, and local permits, authorizations, or consultations that may be required for the Proposed Action.

Table 3. Permits, Certifications, and Authorizations

Authorization	Status	Statutory Reference	Permit or Authorization Trigger
Federal			
BLM ROW	Submitted ROW application in July 2014.	Federal Land Policy and Management Act of 1976 (Public Law [PL] 94-579; 43 USC 1761–1771; 43 CFR 2800); NEPA (PL 91-190, 42 USC 4321–4347, January 1, 1970, as amended by PL 94-52, July 3, 1975; PL 94-83, August 9, 1975; and PL 97-258, 4[b], September 13, 1982)	Federal land, federal permit
BLM National Historic Preservation Act Compliance	Completed as part of the Solar PEIS.	National Historic Preservation Act (36 CFR 800)	Cultural resources on federal land that are eligible for listing on the National Register of Historic Places
Endangered Species Act	Desert tortoise is present; surveys will be conducted during the fall survey period.	Endangered Species Act (PL 93-205, as amended by PL 100-478 [16 USC 1531, et seq.])	Section 7 consultation

3.7.5.2 SENSITIVE SPECIES

3.7.5.2.1 Proposed Action

3.7.5.2.1.1 Solar PEIS Summary

The potential impacts to general wildlife that may result from the construction and operations of a typical solar PV are described in section 11.3.12.2 of the Final Solar PEIS and the impacts from this project would be consistent with those detailed. Because this EA tiers to the PEIS, a brief summary of those impacts to sensitive wildlife that are relevant to the Proposed Action is presented below. A summary of the related design features for sensitive wildlife that have been fully analyzed in the PEIS is provided in section 3.7.4.2 above. The impacts and design features analyzed and described in the PEIS are incorporated into this document.

Impacts on sensitive species could occur during all phases of development (construction, operation, maintenance, and decommissioning and reclamation) of a utility-scale solar energy project. Construction and operation activities could result in short- or long-term impacts on individuals and their habitats, especially if these activities are sited in areas where sensitive species are known to or could occur. Direct impacts would result from habitat destruction or modification. Indirect impacts could result from groundwater withdrawals, surface water and sediment runoff from disturbed areas, fugitive dust generated by project activities, accidental spills, harassment, and lighting (BLM 2010: 11.3-174 – 199; BLM and DOE 2012: 11.3-51 - 59).

3.7.5.2.1.2 Direct and Indirect Effects

The type of impacts to sensitive wildlife species and suitable habitat are consistent with those described in Section 3.7.5.2.1.1 above. Specific to the Proposed Action, 717 acres of wildlife habitat would be permanently impacted and 8 acres of wildlife habitat would be temporarily impacted. This loss of habitat is consistent with the habitat loss described in the PEIS.

Direct impacts include the possibility of sensitive species being crushed by vehicles or equipment, and increased local predation rates due to increased human activity. The amount of traffic, use of unfenced access roads, and presence of small animals create the possibility that individual sensitive species would be accidentally crushed by Project activity. This risk would be minimized by performing tortoise clearance surveys, installation of tortoise-proof fencing, and having monitors present during activities that may result in injuries to individual animals.

Indirect effects from noise and vibration associated with construction activities could cause some individual animals to abandon the project area. This would temporarily expose them to an increased risk of predation as they move away from the project area.

3.7.5.2.1.3 Mitigation Measures

Although application of the proposed design features would reduce impacts to sensitive wildlife, disturbance of 717 acres of habitat as a result of the Proposed Action would remain in the long term. During development of the Dry Lake SEZ SRMS, cumulative impacts to sensitive wildlife were identified as an unavoidable impact which cannot be mitigated on-site. Wildlife habitat is an ecosystem service provided by native vegetation. Impacts and mitigation for vegetation will also benefit general wildlife and sensitive wildlife. To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. The BLM will decide as part of the decision record for this Project if fees will be collected, and if so, the amount of those fees. Off-site mitigation may include restoration of native vegetation and site protection activities proposed as part of the SRMS and would benefit wildlife because

they would also protect and restore habitat and reverse effects of habitat fragmentation. Off-site mitigation actions funded to offset those impacts may require additional NEPA analysis by the BLM prior to implementation.

Additionally, the measures from the Project-specific BO would be followed. These features are primarily designed to address impacts to federally listed species; however, many of them also benefit other sensitive wildlife species including burrowing owls (*Athene cunicularia*), Gila monster (*Heloderma suspectum*), and chuckwalla. Any remaining impacts to sensitive bird and bat species would be addressed through a Project-specific BBBS and Monitoring Plan that includes a robust systematic monitoring and adaptive management plan to assist in avoiding and minimizing impacts.

3.7.5.2.1.4 Cumulative Effects

The cumulative impacts area of analysis for sensitive species is defined as the Dry Lake SEZ and a 50-mile (80-km) radius around the SEZ. Section 11.3.22.4.10 of the Draft Solar PEIS (BLM and DOE 2010:11.3-356) analyzes the cumulative impacts to sensitive species. No additional cumulative impacts are expected.

The Proposed Action, in conjunction with other projects, would result in cumulative impacts to sensitive wildlife species, including the potential loss of habitat. The combined effects of the reasonably foreseeable future actions have the potential to remove potential habitat and to increase risk of mortality of individual animals within the cumulative impacts area.

It is assumed that all reasonable foreseeable future development on BLM lands in the SEZ and cumulative impacts area of analysis would be subject to the same design features and mitigation measures which reduce the potential cumulative impacts to sensitive wildlife.

3.7.5.3 NO ACTION

3.7.5.3.1 Direct and Indirect Effects

Under the No Action Alternative, the Project ROW would be denied and special-status wildlife and habitat would not be directly or indirectly impacted by the Project. Because the project area is located within the Dry Lake SEZ, the land would remain available for future solar energy development and it is possible that some form of solar development could occur in this location if the Proposed Action were not authorized.

Specific locations of activity, necessary equipment, and other sources ground disturbance are not available, and so it is only possible at this time to provide a general analysis of potential future solar development that could occur in the project area. If the Proposed Action was not constructed, a different PV project could be constructed and presumably would result in impacts to sensitive species similar to those described under the Proposed Action.

3.7.5.3.2 Cumulative Effects

Because the No Action Alternative would result in no direct or indirect impacts related to sensitive species, there would be no cumulative impacts associated with the No Action Alternative. If the BLM authorized some form of solar development in this location in the future, the cumulative impacts to sensitive species from that development would likely be similar or greater than those described in the Proposed Action section above.

EXHIBIT F-3

**ENVIRONMENTAL ASSESSMENT DRY LAKE SOLAR
ENERGY CENTER PROJECT (PORTIONS)**

U.S. Department of the Interior Bureau of Land Management

Environmental Assessment DOI-BLM-NV-S010-2014-0126-EA
December 2014

Dry Lake Solar Energy Center Project

ENVIRONMENTAL ASSESSMENT

File Number: N-93337

APPLICANT

Nevada Power Company d/b/a NV Energy

GENERAL LOCATION

Near Apex, Nevada
North of U.S. Route 93

**U.S. Bureau of Land Management
Southern Nevada District Office
Las Vegas Field Office
4701 North Torrey Pines Drive
Las Vegas, Nevada 89130
Phone: (702) 515-5000
Fax: (702) 515-5023**



2.2 Proposed Action

NV Energy's purpose for the Proposed Action to design, construct, operate, maintain, and decommission a new 130-MW, commercial-scale solar energy generation station, and all associated facilities, on public land designated as Parcels 5 and 6 within the Dry Lake SEZ. A third-party firm(s) would design and construct the components of this new facility for NV Energy. The commercial operation date for the Proposed Action is December 2016.

2.2.1 Overview

The Applicant proposes to construct, operate, maintain, and decommission the Project, consisting of up to a 130-MW alternating current (MWac) solar PV power generating facility on approximately 661 acres of BLM-administered land located within Parcels 5 and 6 of the Dry Lake SEZ in Clark County, Nevada. Project components include on-site facilities, off-site facilities, and temporary facilities needed to construct the Project. The major on-site facilities comprise solar array blocks of PV modules, a substation, and operation and maintenance (O&M) facilities. The off-site facilities include an approximate 2,000-foot, 230-kilovolt (kV) generation tie transmission line (gen-tie line), access road, and electric distribution and communication lines. Temporary facilities, which would be removed at the end of the construction period, include mobilization, laydown, and construction areas and would be located within the 661-acre project area. Power produced by the Project would be conveyed to the Nevada Power bulk transmission system via the gen-tie line, which would interconnect to NV Energy's existing Harry Allen Substation.

2.2.2 Project Location and Existing Land Use

The Project is located approximately 23 miles (37 km) northeast of the City of Las Vegas and south and approximately 8 miles (13 km) south and east of the Moapa River Indian Reservation in an unincorporated area of Clark County, Nevada. U.S. 93 is located on the western boundary of the Project and I-15 is located less than 2 miles (3 km) east of the Project. The NV Energy Harry Allen Substation and an NV Energy high-voltage transmission line are located immediately adjacent to the Project's southern boundary (Figure 2).

All lands for the proposed facilities are federal lands administered by the BLM under the Las Vegas RMP (BLM 1998). The Project is located within the boundaries of the Dry Lake SEZ (Parcels 5 and 6), identified through an amendment to the Las Vegas RMP by the ROD for the Solar PEIS (BLM 2012b). Existing uses of the site are managed by the BLM in accordance with the Las Vegas RMP.

The Project site is located in portions of Section 36, Township 17 South, Range 63 East; Section 31, Township 17 South, Range 64 East; Section 1, Township 18 South, Range 63 East; and Section 6, Township 18 South, Range 64 East; all Mount Diablo Meridian, Clark County, Nevada.

2.2.3 Key Project Elements

The Project would include the following key elements:

- A solar facility consisting of:
 - solar panels (monocrystalline modules using single-axis trackers);
 - 1,200-square foot O&M building, and/or a control enclosure within solar facility;
 - interior access roads and a perimeter road;
 - collection system and power conversion stations;
 - on-site collector substation;
 - Project security fencing; and

- desert tortoise exclusion fencing.
- An approximately 3,800-foot-long, single-circuit, 230-kV gen-tie line to connect the on-site collector substation to the NV Energy Harry Allen Substation;
- Fiber-optic communications installed underground, or on overhead line along the Project gen-tie line; and
- Drainage control structures.

Project construction would also require the following temporary facilities which would be located within 660-acre solar facility footprint:

- a construction mobilization and laydown area within the solar facility footprint; and
- temporary generators to provide construction power.

2.2.4 Dry Lake Solar Energy Center Facilities

Within the 660-acre project area boundary, the Project would have short-term land disturbance effects during construction and long-term land disturbance effects during operations (Table 1). Any disturbed area that is not needed for operations would be reclaimed. The Project would generate up to 130 MW of electricity using multiple arrays of fixed-tilt or single-axis tracking solar panels connected to electrical infrastructure and transmitted via a gen-tie line to the interconnection point. Solar panels generate electricity using the photoelectric effect, whereby the cells that compose the panel receive the sun’s radiation in the form of photons and release electrons into the conduction band. The capture of these free electrons produces an electrical current that can be collected and supplied to the electrical power grid. Table 1 provides a summary of project components and associated short-term and long-term disturbance.

Table 1. Summary of Permanent and Temporary Disturbance for the Project

Disturbance Type	Acres of Disturbance	Notes
Long-Term Disturbance		
Solar Facility	660.00	130-W PV solar facility
Communication Line	0	Installed along gen-tie line
Substation	0	Located inside solar facility
Gen-tie Line Access Road	1.10	24-foot width along 2,000-foot length of gen-tie line located outside solar facility
Gen-tie Line Pole Pads	0.01	3-foot radius permanent footprint on 7 poles with 15 footprints (3 dead end, 2 H-frames, 2 tangent structures)
Total	661.11 (rounded to 661)	
Short-Term Disturbance		
Laydown area	0	Located inside solar facility
Pole construction area	6.44	200 × 200 feet per pole area (7 poles)
Pull sites	25.71	200 × 700 feet per pull site (8 pull sites)
Total	32.15 (rounded to 32)	

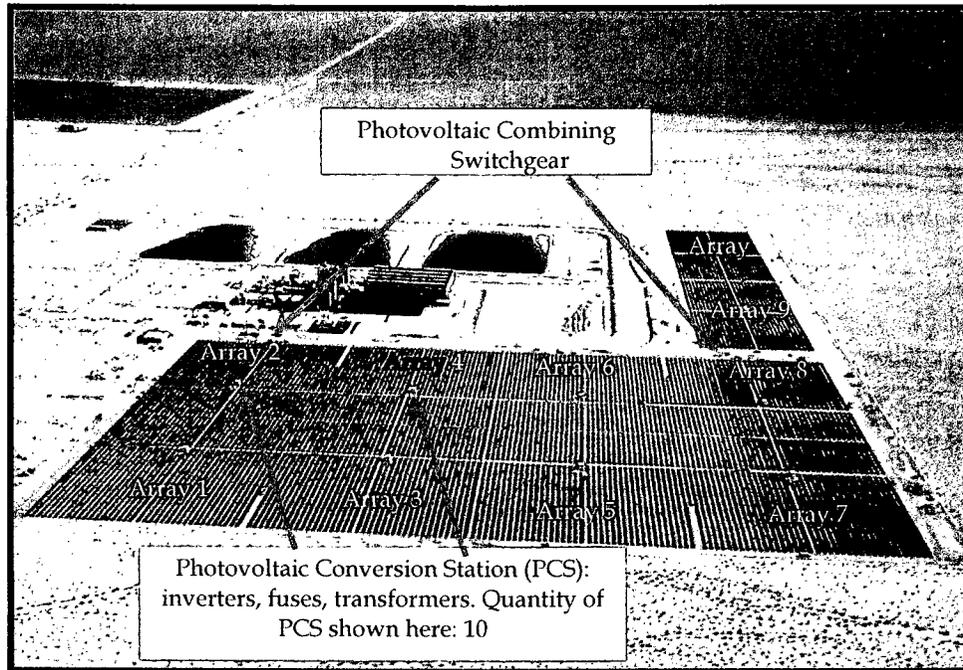


Figure 4. Example of 10 solar arrays adjacent to conventional natural gas generation plant.

2.2.4.2 TELECOMMUNICATIONS

As required, the Project is anticipated to have two telecommunication pathways between the solar generation plant and NV Energy's Harry Allen Substation. Typically the primary telecommunication pathway would be via an overhead fiber-optic line installed on the gen-tie electrical line system, and the secondary pathway would be via microwave. As part of the interconnection application process and studies, the exact pathway routes and mechanisms will be determined in the final design.

The Project would connect to NV Energy's communications system at the existing Harry Allen Generation Station. During construction, the construction contractor and NV Energy would install communication lines via underground conduit to facilitate telemetering of data collected at the approximately 35-foot tall meteorological station(s). In addition, a Supervisory Control and Data Acquisition System (SCADA) connected to the substation via fiber-optic cable would provide remote communication capability and production metering would be installed within each solar array. The SCADA system allows for controlling and monitoring the facility as a whole from a central host computer or a remote personal computer. The SCADA system transmits critical information from the facility via fiber optics to a central control server located in the O&M building and to all other locations as required.

2.2.4.3 SITE SECURITY AND FENCING

The Project would be protected by a perimeter chain-link security fence with barbed wire along the top and tortoise-proof fencing along the bottom. Access would be controlled by electronic and or keyed gates with tortoise guards. The layout of the Project would allow vehicular travel between PV modules and around the perimeter of the plant for internal site access, operation, and maintenance. Approved tortoise fencing would also be installed adjacent to or outside the security fence to prevent desert tortoise from entering the project area.

- installation of underground cables;
- construction of underground feeder lines;
- design and construction of Project collector substation;
- commissioning of modules and inverters; and
- commencement of commercial operation.

On-site communications during the construction phase would be accomplished with cellular telephones and two-way radios. Air horns may also be used for emergency communications as necessary.

2.2.5.3 GEOTECHNICAL INVESTIGATION

To develop a geological profile of the area underlying the Project site, the applicant would conduct a geotechnical investigation prior to construction to determine the engineering characteristics of local soils and geology. In addition, it would allow the identification of site-specific construction issues and to inform final design and necessary BMPs. Disturbance associated with vehicle travel and drilling activities in support of the geotechnical investigations would occur on land in the project area identified for long-term disturbance.

2.2.5.4 SURVEYING AND STAKING

Prior to construction commencement, a licensed professional land surveyor would conduct a land survey of the Project to stake/flag the ROW boundaries, work areas (permanent and short-term use), cut-and-fill zones, access roads, structures, and offsets. Survey and staking would continue through the initial construction stages as the site is graded and prepared for facility installation, to mark locations of foundations, piers, gen-tie structures, and other site structures as necessary for construction. Staking/flagging would be maintained until final cleanup and/or reclamation is complete, after which all survey staking would be removed. Staking/flagging would include the use of wood lathe, colored flagging, steel nails with whiskers, capped rebar stakes, and/or other typical materials. No paint or permanent discoloring agents would be applied to rocks or vegetation to indicate survey or construction activity limits.

2.2.5.5 CLEARANCE SURVEYS AND FENCING

Tortoise exclusion fencing would be installed around the 660-acre solar facility footprint prior to desert tortoise clearance surveys being conducted. In addition, plant salvage and geotechnical investigations may occur prior to desert tortoise clearance surveys being completed. Tortoise guards would be installed at project access locations. It is anticipated that these activities would occur under a limited Notice to Proceed and would require authorized desert tortoise biologists and monitors to be present. No additional construction activities would begin until 100% clearance surveys for desert tortoise are completed. Desert tortoises will be relocated from the Project in accordance with an approved Desert Tortoise Translocation Plan for the Dry Lake SEZ. Following installation of the desert tortoise exclusion fence around the 660-acre solar facility project area, an Authorized Biologist will supervise the performance of a full-clearance survey of the fenced area, in accordance with current USFWS clearance survey protocol. Tortoise would be relocated to a translocation area identified in the approved Translocation Plan.

2.2.5.6 VEGETATION REMOVAL AND TREATMENT

There would be permanent and temporary disturbance to vegetation from construction of the Project. This includes detailed construction surveys, mobilization of construction staff, and grading. Site preparation would include vegetation clearing, grubbing, and contour smoothing would occur where necessary to allow for equipment access and stormwater management. Cactus and yucca present within the permanent

9. The Applicant's Environmental Services Team will ensure the utilization of desert tortoise biologists who are authorized by the USFWS and permitted by the Nevada Department of Wildlife, in accordance with the Biological Opinion issued for the project. Desert tortoise monitors may also be used, as deemed appropriate and qualified by the Applicant's Environmental Services Team.
10. The Applicant's Environmental Services Team will ensure that desert tortoise protection and exclusionary measures are incorporated into the planning, design, and construction of the Project and maintained over the life of the Project during O&M and decommissioning activities such that the access road(s) and facilities maintain 100% exclusion from entry by desert tortoise. Such measures include: permanent desert tortoise exclusionary fencing, per USFWS specifications, along the project perimeter security fencing, with shade shelters as necessary; permanent desert tortoise guards installed at all vehicular gates; and permanent exclusionary devices (e.g., concrete threshold, steel plates, exclusionary fencing) at all non-vehicular (e.g., personnel emergency exit) gates.
11. The Applicant's Environmental Services Team will determine the quantity and type of resource monitors (e.g., Authorized Biologists, tortoise monitors, avian biologists, botanists, archaeologists, etc.) to contract and utilize over the life of the project during construction, O&M, and decommissioning activities. This determination will be relative to the scope and extent of the activity needing coverage, compliance requirements of all permits, time of year, seasonal weather patterns, observed and anticipated wildlife activity levels (e.g., desert tortoise, migratory birds), and other factors as deemed appropriate by the Applicant to ensure permit compliance.
12. The Applicant's Environmental Services Team will ensure that all environmental compliance measures implemented over the life of the Project during construction, O&M, and decommissioning activities are in accordance with all Project permit compliance requirements and the most current agency protocols.
13. The Applicant's Environmental Services Team will be responsible for the oversight, tracking, management, and report submittals of Project biological data collected over the life of the Project during construction, O&M, and decommissioning activities in accordance with the reporting requirements of the Biological Opinion and any other authorizing documents.
14. The Applicant's Environmental Services and Property Services Teams will be the main points of contact between the BLM and the Applicant for all oversight and coordination of the Project, as authorized by BLM, over the life of the Project during construction, O&M, and decommissioning activities.
15. The Applicant's Environmental Services Team will be the main point of contact for Adaptive Management coordination with BLM, and other pertinent regulatory agency(s) as necessary, relative to the mitigation and protective measures for listed and protected species (i.e., desert tortoise, migratory birds) within the authorized limits of the Project over the life of the Project during construction, O&M, and decommissioning activities.

EXHIBIT F-4

**DRY LAKE SOLAR ENERGY ZONE
BIOLOGICAL OPINION (PORTIONS)**



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Southern Nevada Fish and Wildlife Office
4701 North Torrey Pines Drive
Las Vegas, Nevada 89130
Ph: (702) 515-5230 ~ Fax: (702) 515-5231

May 1, 2015

File Nos. 84320-2015-F-0139, 84320-2015-F-0161
84320-2015-F-0162, 84320-2015-F-0163,
84320-2012-F-0200, 84320-2015-I-0140,
and 1-5-05-FW-536, Tier 7

Memorandum

To: Assistant Field Manager of Natural Resources, Las Vegas Field Office, Bureau of Land Management, Las Vegas, Nevada

From: Field Supervisor, Southern Nevada Fish and Wildlife Office, Las Vegas, Nevada

Subject: FINAL- Project-level Formal Consultations for Four Solar Energy Projects in the Dry Lake Solar Energy Zone, Clark County, Nevada

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinions for four solar projects in the Dry Lake Solar Energy Zone (Attachment) based on our review of the Bureau of Land Management's (BLM) proposed issuance of right-of-way grants and their effects on the federally threatened desert tortoise (*Gopherus agassizii*), in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act; 16 U.S.C. 1531 et seq.).

Three of the four formal consultations (project-level biological opinions) are tiered to the Programmatic Biological Opinion for the BLM's Western Solar Energy Program (File No. 84320-2012-F-0200). The fourth project, NV Energy Dry Lake Solar Energy Center at Harry Allen (File No. 84320-2015-F-0162), does not meet the minimum size requirement for a Solar Energy Zone project and will not be tiered to the Solar Energy Programmatic Biological Opinion.

The Playa Solar Project will also be tiered to the Programmatic Biological Opinion (File No. 1-5-05-FW-536, Tier 7) for the Muddy River Memorandum of Agreement to address adverse effects to the Moapa dace (*Moapa coriacea*), a fish listed as endangered under the Act, that may result from groundwater withdrawal required for project pre-construction, construction, operation, and maintenance activities. The other three projects will not withdraw groundwater from the hydrographic basin that supports habitat for the Moapa dace and therefore, not tiered to the Programmatic Biological Opinion for groundwater withdrawal. Each proposed project involves pre-construction, construction, operation, maintenance, and decommissioning of a photovoltaic

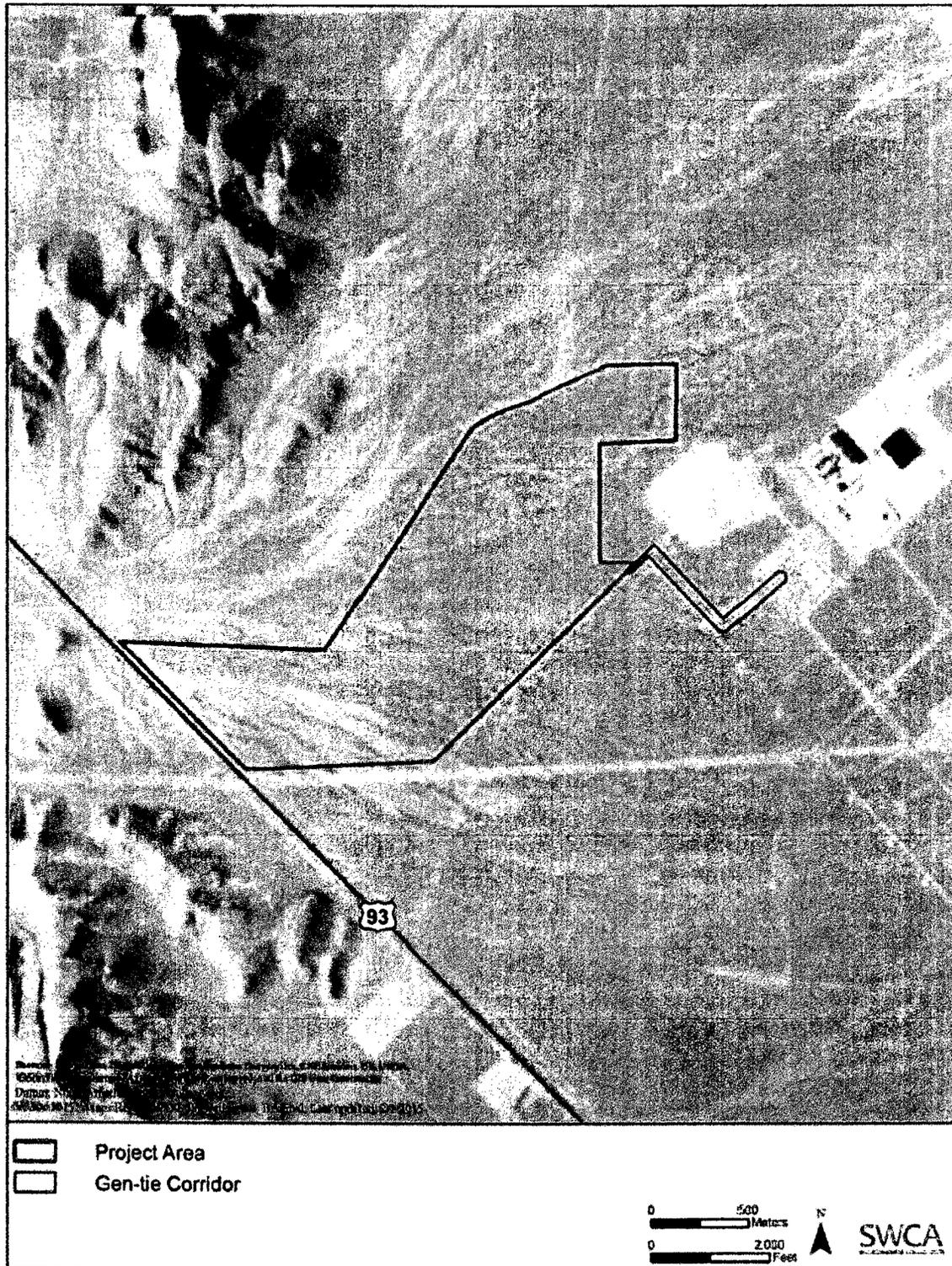


Figure 8. Harry Allen Solar Energy Project

Table 4 – Proposed distribution for sampling 30 juvenile tortoises based on point estimates.

Project	Point estimate	% of total	# juveniles
NV Energy	7	11%	3
Invenergy	29	43%	13
First Solar	31	46%	14
TOTAL	67	100 %	30

All individuals will receive a final health assessment (visual only, no venipuncture/sample collection) at the time of translocation. Any tortoise which does not pass the health algorithm (USFWS 2013) at the time of translocation (e.g. showing severe injury or severe clinical signs of disease) would be transported to an agency approved quarantine facility (Section 5.6) and the project proponent(s) will begin coordination with the agencies as to that individual’s final disposition.

5.5 Translocation of Known Individuals

The first translocation phase of the Project will include known, transmittered individuals and juvenile tortoises from within one, two, or all three solar project sites. Known tortoises will be translocated from the project site(s) after health assessments, approval of final TRP, and provided tortoises in the known cohort pass visual health assessment on day of translocation (Section 5.4).

Translocation will follow installation of an exclusionary tortoise fence around the northern boundary and part of NV Energy fence and Highway 93, as determined in coordination with the applicants and the agencies. Translocation will occur to specific locations outlined in the approved TRP and disposition plans, whether submitted together or as separate TRPs for each proponent, based on construction and translocation timing considerations. The density of tortoises within the Recipient site is variable, with some higher-density areas located in the southern portion of the Recipient site. Tortoises may be translocated into these regions in an effort to maintain them within their activity area (home range), or they may be translocated farther north (e.g. if timing of project development, exclusion fencing, or other reason precludes within-home range translocation). Specific considerations to be included will be based on construction schedule of proponents and will determine the best disposition timing of tortoises at time of translocation. Decisions related to performing health assessments, venipuncture and sample collection, transmittering, and translocation, of all individuals are outlined in Table 2.

5.6 Quarantine Facilities

Tortoises may be held *in* – or *ex-situ* (e.g. if temperatures do not allow for translocation, or if tortoises do not pass the health assessment) for a maximum of 12 months. Enclosure design,

EXHIBIT G
PUBLIC NOTICE

**BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA
APPLICATION FOR A PERMIT TO CONSTRUCT A UTILITY FACILITY
PURSUANT TO THE UTILITY ENVIRONMENTAL PROTECTION ACT**

Playa Solar, LLC (“Playa Solar”) is submitting to the Public Utilities Commission of Nevada (the “Commission”), pursuant to the Utility Environmental Protection Act (“UEPA”), a Notice and Application (the “Notice and Application”) and Expedited Treatment for a permit to construct a utility facility under Nevada Revised Statutes (“NRS”) Sections 704.820 to 704.900 and Nevada Administrative Code (“NAC”) Sections 703.415 to 703.427. Playa Solar proposes to construct an approximately 1.7 mile water pipeline on privately owned land within the Apex Industrial Park and federal land managed by the U.S. Bureau of Land Management (“BLM”) and ancillary facilities including a water well within the Apex Industrial Park and approximately one mile of tortoise fence on BLM land approximately 20 miles north of Las Vegas in Clark County, Nevada (the “Proposed Facility”).

The contents of the Notice and Application will include, but are not limited to:

1. The name, address and telephone number of the person who filed the application with the appropriate federal agency.
2. The date on which the application was filed with the appropriate federal agency.
3. A general description of the location of the proposed utility facility.
4. A general description of the proposed utility facility.
5. A summary of any studies which have been made of the environmental impact of the facility.
6. A description of any reasonable alternate location(s) for the proposed facility, a description of the comparative merits or detriments of each location submitted, and a statement of the reasons why the primary proposed location is best suited for the facility.
7. Proof that a copy of the Notice and Application has been submitted to the Nevada State Clearinghouse within the State Department of Conservation and Natural Resources.
8. Proof that a public notice of the Notice and Application was given to persons residing in the municipalities entitled to receive notice by the publication of a summary of the application in newspapers published and distributed in the area in which the utility facility is proposed to be located.
9. Proof of compliance with the Nevada Department of Wildlife Energy Cost Recovery Fund Program.

A copy of the Notice and Application will be available on the Commission’s website following the filing of the Notice and Application by Playa Solar. Additional information about the UEPA process and a person’s right to participate in the process can be found in NRS and NAC Chapters 703 and 704.

EXHIBIT H
PROOF OF PUBLICATION

Affidavit of Publication

STATE OF NEVADA)
COUNTY OF CLARK) SS:

**BULLEN LAW LLC
STE 105-L6
9101 W SAHARA AVE
LAS VEGAS NV 89117**

**Account # 124204
Ad Number 0000579967**

Eileen Gallagher, being 1st duly sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal and the Las Vegas Sun, daily newspapers regularly issued, published and circulated in the City of Las Vegas, County of Clark, State of Nevada, and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal and / or Las Vegas Sun in 1 edition(s) of said newspaper issued from 07/24/2015 to 07/24/2015, on the following days:

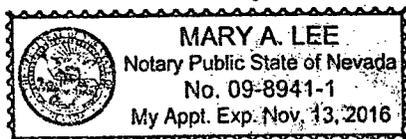
07 / 24 / 15

Eileen Gallagher

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 24th day of July, 2015

Notary *Mary Lee*



BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

APPLICATION FOR A PERMIT TO CONSTRUCT A UTILITY FACILITY PURSUANT TO THE UTILITY ENVIRONMENTAL PROTECTION ACT

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PUB: July 24, 2015
LV Review-Journal

EXHIBIT I

**PROOF OF SERVICE TO COUNTY CLERK, NEVADA
STATE CLEARINGHOUSE AND OTHER AGENCIES**

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CERTIFICATE OF SERVICE

I hereby certify that on July 27, 2015, a true and correct copy of the Notice and Application Of Playa Solar, LLC For A Utility Environmental Protection Act Permit To Construct A Water Pipeline And Ancillary Facilities was served as indicated below to the following parties:

Via Hand Delivery to:

Public Utilities Commission of Nevada
9075 W. Diablo Drive, Suite 250
Las Vegas, Nevada 89148
Attn: Tammy Cordova
Staff Counsel

Via U.S. Mail to:

Office of the Attorney General
Bureau of Consumer Protection
10791 W. Twain Ave., Suite 100
Las Vegas, NV 89135
Attn: Eric Witkoski
Chief Deputy Attorney General
and Consumer Advocate

Nevada Department of Conservation and
Natural Resources
901 South Stewart Street, Suite 1003
Carson City, Nevada 89701
Attn: Leo Drozdoff
Director

Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, NV 89701-5249
Attn: David Emme
Administrator

Dated July 27, 2015

Via Electronic Mail to:

Nevada State Clearinghouse
Nevada Division of State Lands
901 South Stewart Street, Suite 5003
Carson City, NV 89701-5246
Attn: Skip Canfield
nevadaclearinghouse@lands.nv.gov

Public Utilities Commission of Nevada
1150 E. William Street
Carson City, Nevada 89701-3109
Attn: Louise Uttinger
uttinger@puc.nv.gov

Public Utilities Commission of Nevada
1150 E. William Street
Carson City, Nevada 89701-3109
Attn: Staff Counsel Support
pucn.sc@puc.nv.gov

Clark County Clerk
Regional Justice Center
200 Lewis Ave
Las Vegas, NV 89101
Attn: Lynn Goya
clerkem@ClarkCountyNV.gov



Linda M. Bullen