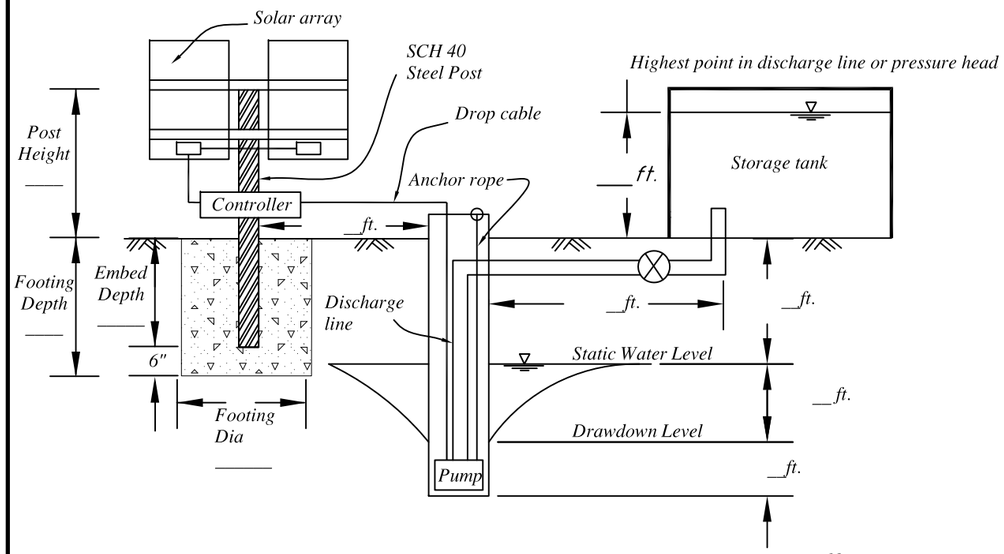
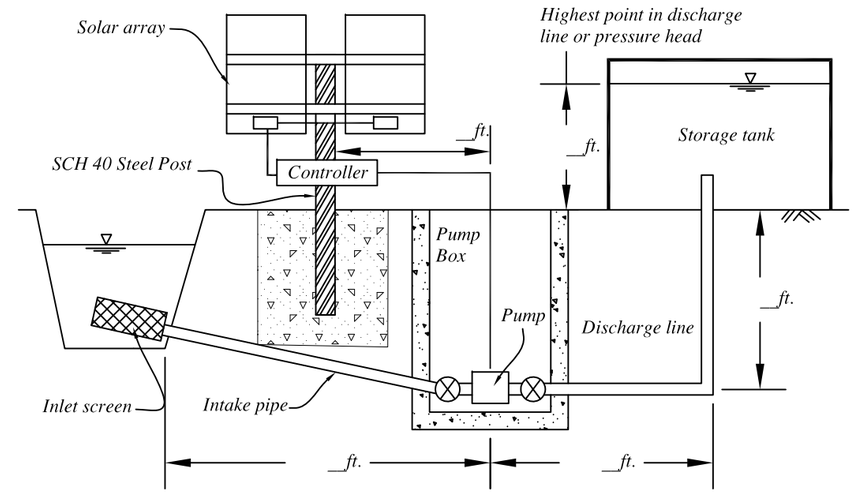


Typical Well Installation

N.T.S



Typical Surface Installation

N.T.S

Notes:
1. Post heights shown in Table are above ground heights
2. Mounting post shall be SCH 40 steel per ASTM A53
3. Where required, use a fence to protect solar pnels from vandalism and livestock traffic..
4. Construction of concrete footing shall be per AZ construction specifications CS-AZ-32. Concrete material shall be per MS-AZ-530

Note: If the actual layout varies significantly from the details shown, provide accurate details on a new drawing.

Water Quality at Source (optional)

☐	Very Good:	Water contains no abrasive particles, and/or TDS < 50 ppm.
☐	Good:	Water may contain small amounts of silt, and/or TDS < 100 ppm.
☐	Fair:	Water may contain small amounts of silt, sand, or rust, and/or TDS < 200 ppm.
☐	Poor:	Water may contain moderate amounts of silt, sand, or rust, and/or TDS = 200-800 ppm.
☐	Very Poor:	Water regularly contains silt, sand, or rust, and/or TDS > 800 ppm.

Comments: _____

Water Pumping Data

Static Water Depth: _____ft. (Distance from ground to water surface when not pumping).

Drawdown Level: _____ft., at ____GPM. (Depth water drops when pumping).

Discharge Head: _____ft. (Dist. from ground surface to highest water surface in discharge line)
(Use either Discharge Level or Pressure Head, but not both)

Pressure Head: _____ft. (Tank pressure in psi. x 2.31)

Losses: _____ft. (Minor and friction losses in discharge line)

Total Dynamic Head: 0 _____ft. (Sum of values above).

Total Designed Head: _____ft.

Flow Rate: _____

Pump Type: _____

Horsepower Rating: _____

Note: To be provided by manufacturer as an As-Built

Water Source Informaton							
Subsurface				Surface			
Well		Spring			Stream	Canal	Pond
Depth (ft.)		Yield (gpm)		Flow Rate			
Max. Yield (gpm)		Collection Box Data		Seasonal or Perennial			
Casing I.D. (in.)		Depth (ft.)		Depth			
Well Test (Y or N)		Volume (gal.)					
Date of Test		Covered (Y or N)					

Note: Concrete volume quantities shown in the table below are approximate.

MOUNTING POST SELECTION TABLE

Post Ht. (ft)	Max. Panel Area (sq.ft)	Post Dia. (in)	Footing Dia. (in)	Post Embed Depth (in)	Post Footing Depth (in)	Approximate Concrete Volume (CF)
4	13.9	4	31"	36"	42"	18
4	27.8	4	40"	36"	42"	30
4	41.7	4	46"	36"	42"	40
4	55.6	4	50"	36"	42"	48
6	13.9	4	34"	36"	42"	22
6	27.8	4	44"	36"	42"	37
6	41.7	4	50"	36"	42"	48
6	55.6	6	55"	36"	42"	58
8	13.9	4	36"	36"	42"	25
8	27.8	4	43"	48"	54"	45
8	41.7	6	50"	48"	54"	61
8	55.6	6	55"	48"	54"	74
10	13.9	4	33"	60"	66"	33
10	27.8	6	42"	60"	66"	53
10	41.7	6	50"	60"	66"	75
10	55.6	6	54"	60"	66"	88

Pump As-Built

Manufacturer _____

Model _____

HP _____

Pump Requirements (Design)

Total Dynamic Head _____#.

Design Flow Rate _____/gpm

REVISIONS

DATE	APPROVED	TITLE	JAA

Date
Designed
Drawn T. Kolling 12/13
Checked
Approved

Arizona Drawing Template
533 – Pumping Plant
Photovoltaic
Field Office
County, Arizona

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

Drawing No.
AZ533E_02_10

Sheet of