



Addendum No. 2

Innovation Well and Army Aviation Well Drilling, Construction, Development and Testing

PWP Bid No. WA-2015-235
July 27, 2015

The following information, clarifications, changes and modifications are by reference incorporated into the bid documents for the above referenced project. Any work item or contract provision not changed or modified will remain in full force and effect. The bid date and time and construction schedule remain the same.

QUESTIONS AND RESPONSES

Question No. 1: The work schedule says we can work days only and no weekends. In past projects working in City limits we have been able to request working 24 hrs a day 7 days a week for the drilling, construction, and test pumping parts of the project. When drilling water wells the best practice is to not stop work once the drilling begins until the well is constructed as the longer the well sits open the higher the risk the well could cave in. In addition to the drilling the specs call for a 72 hours continuous pump test which means we will certainly need to be on site during this 72 hour period with a test engine running. Is it allowed for us to work 24 hrs a day 7 days a week during the drilling, construction, and pumping phases?

Response to Question No. 1: The Contract Work hours for this project are 7:00 a.m. to 5:30 p.m. Monday through Friday, holidays excluded per section 2.09 of the General Conditions. Work hours may be extended during the actual well drilling and construction phases to reduce the possibility of borehole cave-in. Work outside these hours, including regular work, overtime work, or night work shall be subject to the approval of the Project Representative. Work beyond these hours may also require noise abatement, lighting restrictions, or other additional restrictions to reduce impacts to residents.

Question No. 2: Both wells call for a submersible pump and Whisperwatt genset for the test pumping. Is a Vertical Turbine pump with a right angle gear head and a quiet power source acceptable?

Response to Question No. 2: Question 2: is related to Question 1: The contractor must meet the noise (and lighting) restrictions/requirements by the City of Reno and Washoe County throughout the working and test pumping hours. The contractor may use equipment other than a submersible pump and Whisperwatt generator if all City and County noise and lightning requirements are met.

Question No. 3: Will TMWA secure discharge permits for both these locations?

Response to Question No. 3: TMWA, not the contractor, will obtain a temporary discharge permit for each drilling site.

Question No. 4: On the Bid Schedule References section it asks for a TMWA Project Category and says it will be in the Supplemental Conditions but I am unable to locate a supplemental conditions or a breakdown of Project Category. Please advise at your convenience.

Response to Question No. 4: The TMWA project category is “Wells”.

Question No. 5: If possible I would like to request well logs for these locations showing the lithology please.

Response to Question No. 5:

The lithologic log for a test hole drilled for the Innovation well project is attached. This test hole was drilled approximately 100 feet north of the Innovation drill location on the adjacent Capurro-Quilici ranch property. Note that the log is referred to as the “Capurro Ranch Test Well”.

The driller’s report for the Airy Air Guard well is attached. This well is approximately 50 feet from the Army Aviation drill location.



1355 Capital Boulevard, Reno, Nevada 89502

www.tmwa.com

P.O. Box 30013, Reno, Nevada 89520-3013

Innovation Well and Army Aviation Well Drilling, Construction, Development and Testing

END OF ADDENDUM #2

*Truckee Meadows Water Authority is a not-for-profit, community-owned water utility,
overseen by elected officials and citizen appointees from Reno, Sparks and Washoe County.*

Borehole Log: Capurro Ranch		OWNER: Truckee Meadows Water Authority (TMWA)	
Project: Capurro Test Well	Driller: Randy Criner	DATE	TIME
Location: Corner of Innovation and Longley Lane, Reno, Nevada		Start: 4/29/2004	17:00
Type: Test Well	Rig: GEFCO Star30KDH	Finish: 4/30/2004	12:40
Coordinates: N39.46498 E119.77052		Bits: 9-7/8" tricone (pilot hole), 12-1/4" tricone (reaming pass)	
Elevation: 4450' msl (appx.)		Drilling Method: Direct Rotary	
Total Depth: 310'		Fluid: Water with Bentonite Mud.	
Drilling Contractor: WD Corp. Zamora, CA		Geophysical Log: Yes	
Comments:			



Depth in feet bgs	Penetration		Alteration	Rig Response (1 to 5)	Samples		Material	Circulation Mud Parameters	Fines		Clastics		Well Casing Graphic	Lithology Graphic	Description
	Start/Stop time	Penetration Rate, in feet/hr.			Sieve Sample Intervals	Water Quality Sample			Clay %	Silt %	Fine Sand %	Other Sand %			
4/29/04															
10															0 - 20' Gravelly Sand; subrounded to angular gravel of volcanic origin in fine to coarse sand.
20															
4/30/04	7:39			2					55	10	5	30			20 - 32' Sandy Clay; fine to medium sand in reddish-brown to tan plastic clay.
30	7:46 7:46	86													
40	7:58 8:05	50		3					50	20	10	20			32 - 44' Gravelly Clay; angular to subrounded gravel in tan plastic clay.
50	8:10 8:10	120		2					40	30	20	10			44 - 58' Gravelly Sand and Clay; interbedded angular to subrounded volcanic derived gravel, fine to coarse sand and reddish-brown to tan plastic clay.
60	8:15 8:20	120		2					70	20	10				58 - 74' Sandy Clay; brown, tan, fine to medium sand in tan plastic clay.
70	8:30 8:30	60													74 - 76' Sand; brown, fine to coarse sand.
80	8:36 8:42	100		2					75	10	5	10			76 - 98' Sandy Clay; brown, tan, fine to medium sand in tan plastic clay.
90	8:51 8:51	67													
100	9:00 9:07	67													
110	9:15 9:15	75		2	1					60	35	5			98 - 116' Sand; tan, fine to coarse volcanic derived sand. Some angular to subrounded gravels.

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	Start/Stop time	Penetration Rate, in feet/hr.			Sieve Sample Intervals	Water Quality Sample	Material	Circulation Mud Parameters	Clay %	Silt %	Fine Sand %	Other Sand %			
120	9:20	120		2	2				95	tr	tr	5			116 - 122' Gravelly Clay; subangular to subrounded volcanic derived gravel in tan plastic clay.
	9:29														
130	9:35	100			3										
	9:35														
140	9:43	75		2	4				20	50	10	20			122 - 150' Gravelly Sand and Clay; interbedded angular to subrounded volcanic derived gravel, fine to coarse sand and reddish-brown to tan plastic clay.
	9:53														
150	9:59	100			5										
	9:59			4					15	30	25	30			150 - 158' Gravelly Sand; angular to subrounded gravel in fine to coarse sand.
160	10:07	75		4					30	40	20	10			158 - 164' Clayey Sand; tan plastic clay in fine to medium sand.
	10:13				6										
170	10:19	100		1						60	40				164 - 176' Sand; fine to coarse sand of volcanic origin. Medium sand is the predominant grain size.
	10:19				7										
180	10:27	75							70	5	5	20			176 - 188' Gravelly Clay; subangular to subrounded volcanic derived gravel in tan plastic clay.
	10:31			1	8										
190	10:40	67								60	20	20			188 - 198' Gravelly Sand; subangular to subrounded volcanic derived gravel in fine to coarse sand.
	10:40			1	9										
200	10:44	150													
	10:50														
210	10:56	100		1					60	15	10	15			198 - 222' Gravelly Clay; subangular to subrounded volcanic derived gravel in tan plastic clay.
	10:56														
220	11:05	67													
	11:10														
230	11:19	67		0	10				tr	60	20	20			222 - 230' Gravelly Sand; angular to subrounded gravel in fine to coarse sand.

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240	11:19			2	11			80	20	tr	tr			230 - 238' Silty Clay; tan silt in tan plastic clay. Rare subangular to subrounded gravels.
	11:28	67												
250	11:36			2	12					60	30	10		238 - 250' Sand; tan, fine to coarse volcanic derived sand. Rare angular to subrounded volcanic gravels.
	11:40	150												
260	11:40				13			80	20	tr	tr	tr		250 - 258' Silty Clay; tan silt in tan plastic clay. Rare subangular to subrounded gravels.
	11:50	60									60	30	10	
270	11:54			1	13									
	12:00	100		2					80	20	tr	tr	tr	
280	12:00				14									
	12:08	75												
290	12:09		oxide	2	14					60	30	10		280 - 290' Sand; reddish-brown fine to coarse sand. Occasional angular to subrounded gravels of volcanic origin. Abundant reddish-brown oxide stain.
	12:20	55												
300	12:20			2				80	20					290 - 300' Silty Clay; tan silt in tan plastic clay.
	12:27	86												
310	12:34													300 - 304' Sand; tan to reddish-brown, fine to coarse sand.
	12:40	100		2										304 - 310' Clay; charcoal grey to blue-grey plastic clay.

AIR GUARD WELL

35496

477 WELL #1
478

DIVISION OF WATER RESOURCES

10319

OFFICE USE ONLY

Log No. 519
Permit No. 24788-2057
Basin LAMMAN VAL

WELL DRILLERS REPORT

Please complete this form in its entirety

1. OWNER RENO STEAD DEVELOPMENT ADDRESS Building 1202
RENO STEAD AIRPORT, RENO, NEV 89506

2. LOCATION CENTER of NW 1/4 Sec 18 T. 21 N. R. 19 E. WAB Co. County

3. TYPE OF WORK: New Well Recondition
Deepen Other
4. PROPOSED USE: Domestic Irrigation Test
Municipal Industrial Stock
5. TYPE WELL: Cable Rotary
Other

6. LITHOLOGIC LOG table with columns: Material, Water Strata, From, To, Thickness. Includes entries like SANDY CLAY, SAND, DRY CLAY, SAND TO 1/16" (NOT USED), CLAY, SAND TO 1/8" (NOT USED), SAND 1/16" W/ CLAY LENS, SAND - 1/2 1/8" (NOT USED), SANDY CLAY, SAND 1/2 1/8", SANDY CLAY, SAND 1/2 1/8", SANDY CLAY, CLAY, SAND 8 P GRAVEL, CLAY, SAND COARSE, SANDY CLAY, SAND 8 P GRAVEL, CLAY, SAND 8 P GRAVEL.

SEE ELECT LOG -

8. WELL CONSTRUCTION
Diameter hole 2.2 inches Total depth 840 feet
Casing record KAI-WELL
Weight per foot 25# Thickness 3/16"
Diameter From To
2.0 inches SURFACE feet 50 feet
1.2 3/4 inches SURFACE feet 310 feet
1.0 3/4 inches 310 feet 840 feet
Surface seal: Yes No Type CASE & CEMENT
Depth of seal 50 feet
Gravel packed: Yes No
Gravel packed from SURFACE feet to 840 feet
Perforations:
Type perforation LOWER FULL FLO
Size perforation 3/16" x 2 7/8 96 PER FOOT
From 310 feet to 358 feet
From 406 feet to 478 feet
From 550 feet to 694 feet
From 792 feet to 790 feet
From 814 feet to 838 feet

9. WATER LEVEL
Static water level 44 Feet below land surface 490
Flow _____ G.P.M. _____
Water temperature 68 ° F. Quality GOOD

Date started OCT 1 1968
Date completed NOV 1 1968

7. WELL TEST DATA table with columns: Pump RPM, G.P.M., Draw Down, After Hours Pump. Data: 800 G.P.M., 16 Draw Down, 10 After Hours Pump; 1200 G.P.M., 25 Draw Down, 14 After Hours Pump.

10. DRILLERS CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge. BURT'S DRILLING Co
Name K.O. BURT JR.
Address 2050 Valley Rim Rd. CALIF.
Nevada contractor's license number 6589
Nevada driller's license number 351

BAILER TEST
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

Signed K.O. Burt Jr.
Date Nov 21 68