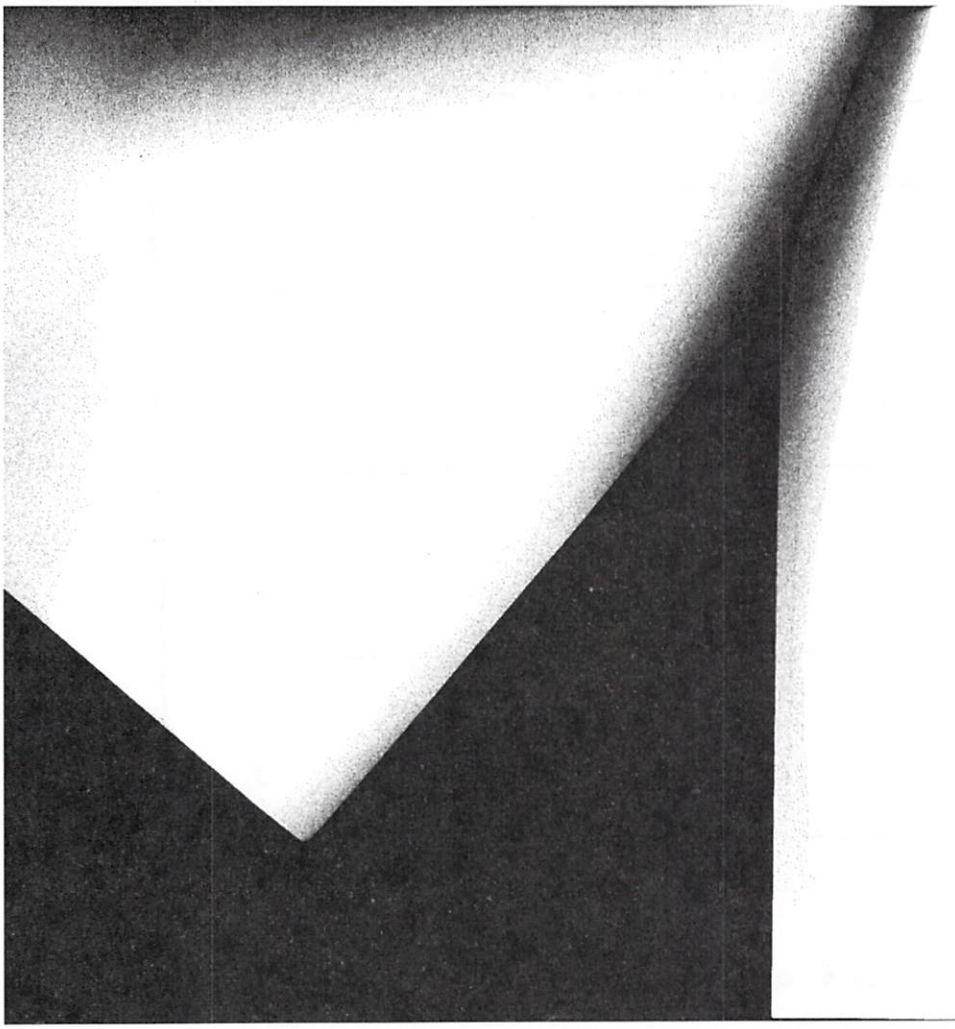
077783



169811-10 Benton County Nature Center
5/25/11- DFB

Water Usage

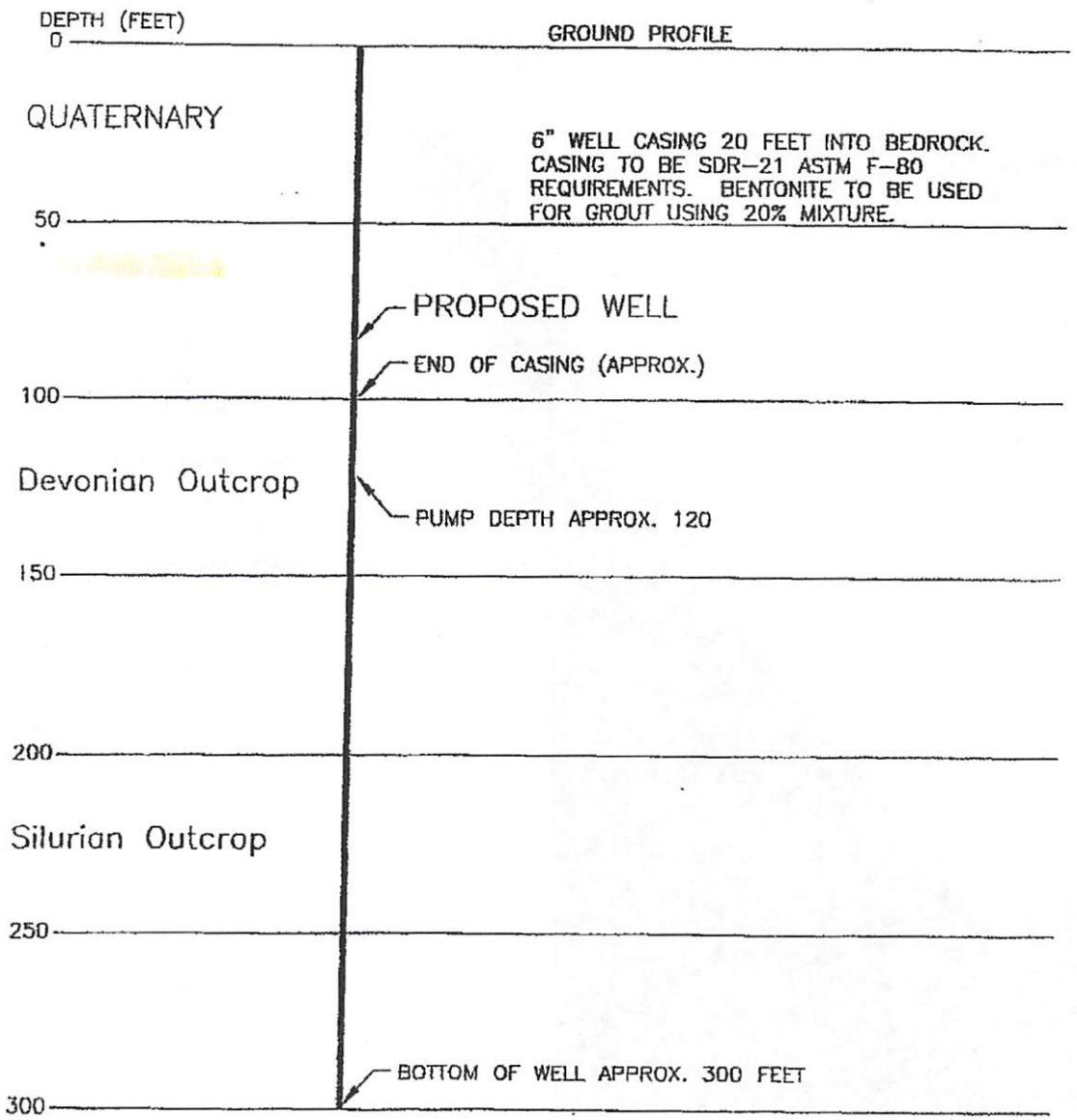
Park - 13 gallons a day per guest
25 guest/ day
13 gpd x 25 guests/day = 325 gpd

Pump size = 325 gpd x 10 = 3,250 gpd

8 hours of operation = 1 day

3250 gpd/8hr 1 hr/60 min = 6.77 gal per min.

6.77 gal. Per min. x 1.5 multiplier = 10.16 gal per min. required



Project No. 169811-10

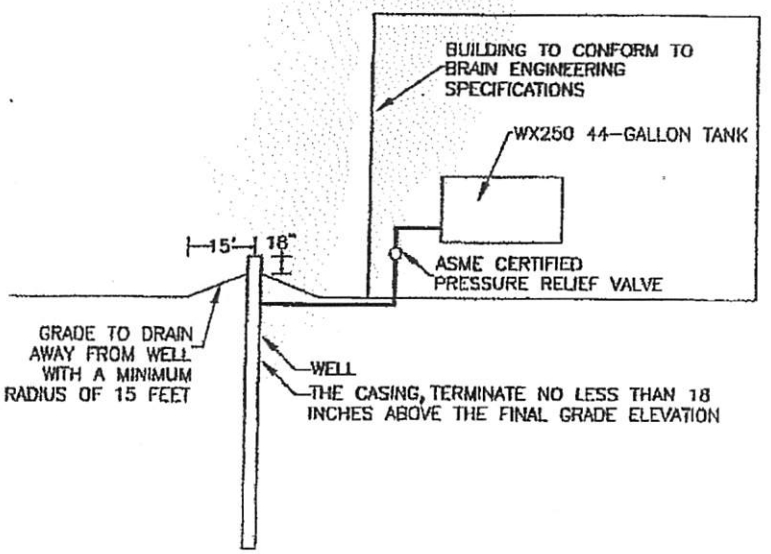
BRAIN ENGINEERING, INC.

Drawing Title:

WELL CROSS SECTION

BENTON COUNTY NATURE CENTER

WELL SCHEMATIC



NOTES:
1. DRAWING NOT TO SCALE.
2. CONSTRUCTION TO CONFORM TO BRAIN ENGINEERING SPECIFICATIONS.

File Name: K:\Proj\169811-10\169811-10.DWG

Project No. 169811-10

BRAIN ENGINEERING, INC.
CIVIL | LAND DEVELOPMENT | SURVEYING | TRANSPORTATION

Drawing Title:

WELL SCHEMATIC

BENTON COUNTY NATURE CENTER

board permit #6

WELL PROJECT– 169811-10

BENTON COUNTY CONSERVATION JULY 25 /2011
(NATURE CENTER)

(ITEM : 1) WELL PERMIT STATE } owner **$**
(ITEM : 2) WELL NPDES PERMIT **$**

(ITEM : 3) DISCHARGE PLAN & CONTAINMENT $

(ITEM : 4) WELL 300 FT.

Temporary Surface hole casing 20-40' linear feet "Starter hole"

12.25" - HOLE DRILLED FROM 0' TO 25'
25' - @ $ $

20' → 12" casing place in 10 3/4 - to set casing 180' linear feet

10" - TEMPERARY CASINGS INSTALLED
0 - 25' $

10" - HOLE DRILLED FROM 25' TO 124'
99' - @ $ $

6-5/8" - SCH .40 WELL STEEL CASING (.258 WALL)
~~126'~~ 181' **- @ $ $** 180' 6" open hole

6" - HOLE DRILLED INTO BEDROCK
176' - @ $ $

5" - PVC SCH.40 LINER 120' TO 300' PERF. WHERE NEEDED "open hole"
180' - @ $ $

may not be needed

(ITEM: 5) "cement grout" $ per bag
GROUTING - FULL LENGTH OF CASING
SET - UP & LABOR $
MATERIALS -

QUAUNITY - 16 - BAGS - BENTONITE $
10 - BAGS - NEAT CEMENT $
10 - QUWICK GEL $

(ITEM : 6) PLUMBNESS TEST Lump sum $

(ITEM: 7) TEST PUMPING WELL & REPORT $

(ITEM: 8) PRESSURE SYSTEM
1 - 1HP. GOULDS 13GS 2-W PUMP
140' - 1-1/4" PVC DROP PIPE
6 - 1-1/4" BRASS COUPLINGS
155' - 10/2 WG FLAT PUMP CABLE
152' - ¼" POLY PIPE - WATER MEASURER
1 - DRAWDOWN GAUGE & BLOCK
1 - 7W MONITOR WATER TIGHT WELL CAP & VENT
1 - 6PS67BN MONITOR PITLESS ADAPTER
1 - 1-1/4" P.E.P. COMPRESSION FITTING
180' - 1-1/4" 160# PURE CORE WATER PIPE
170' BACKHOE & TRENCHING
1 - 1-1/4" CHECK VALVE
1 - 1-1/4" TANK TEE
1 - 40/60 PRESSURE SWITCH
ALL FITTINGS (BRASS) FOR HOOK-UP IN BASEMENT
INSTALLATION LABOR
USING OLD PRESSURE TANK
NO ELECTRIC HOOK-UP

2 hr pump test ↓ Lump sum
Disenfect well $ Lump sum
Water sample Test
30 days to get report back
Lump Sum
Sch 80
1 gal
10/3 with ground wire
410' wire ↓ Linear ft
Lump Sum
Bucket from hoop to well
1" back valve
Liner feet
gravel expen costly
don't need stainless clamps
"All" fittings brass
Square D + liquid gauge ↓ Lump sum
Standard System
GW 350 - 1000 - 1100
pump - grundfos goulds
stainless
- 1 hp pump
control box / electrical
↓ Lump sum

(ITEM : 9) DRILLER'S LOG REPORT (SECTION GENERAL - D)	$
(ITEM : 10) GEOLOGICAL FORMATION SAMPLES	$
(ITEM : 11) WELL DISINFECTION	$
(ITEM : 12) WATER TEST	$
(ITEM : 13) OLD WELL ABANDONMENT	$
TOTAL	$

Mobilization Log → Lumpsum

Addendum #1
Benton County Conservation – Public Improvement
Public Well at the Nature Center
Benton County, Iowa
Project # 10062
5-10-2012

The information contained in this addendum modifies, supplements, or replaces information contained in the Drawings and Specifications, as applicable, and is hereby made a part of the Contract Documents.

Acknowledge receipt of this addendum by placing the appropriate Addenda number below the blank for the base bid on the Proposal Form.

GENERAL INFORMATION:

There were some items submitted in the preliminary submittal to the State of Iowa for permitting purposes that are now included into the Construction Documents by way of this Addendum:

- Water Usage
- Well Cross Section
- Well Schematic

All items allowed by this Addendum are subject to full provisions of original contract documents including all modifications thereto, and shall be warranted as substitutions conforming to contract documents as provided by General Conditions.

END OF ADDENDUM #1

