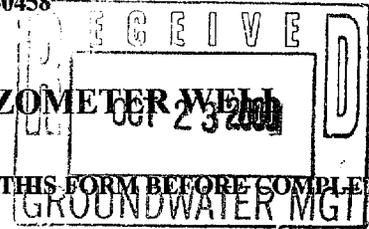


**ARIZONA DEPARTMENT OF WATER RESOURCES
GROUNDWATER MANAGEMENT SUPPORT SECTION**

MAIL TO: P.O. BOX 458, PHOENIX, ARIZONA 85001-0458
PHONE (602) 417-2470



NOTICE OF INTENTION TO DRILL MONITOR/PIEZOMETER WELL

PLEASE READ GENERAL INSTRUCTIONS AND CONDITIONS ON REVERSE SIDE OF THIS FORM BEFORE COMPLETING.

Section 445-596, Arizona Revised Statutes provide: Prior to drilling a monitor or piezometer well, a Notice of Intention to Drill shall be filed with the Department.

1. Well/land Location:

13 N/S 13 E/W 35
Township Range Section
SE 1/4 SW 1/4 NW 1/4
10 Acre 40 Acre 160 Acre

2. Position location of the well on the land:

Latitude 32 ° 15 ' 28 "
Longitude 110 ° 59 ' 26 "

3. County: Pima

4. Owner of the well:

Quality Paving & Utility Co Name
2626 E. 82nd Street
Suite 300 Mailing
Address
Bloomington MN 55425
City State Zip
Telephone No. (612) 854-5097

5. Lessee of the land of wellsite:

Name _____
Mailing Address _____
City State Zip _____
Telephone No. _____

6. Owner of the Land of Wellsite:

Peter Douglas
Name
1100 N. Wilmot, #200
Mailing Address
Tucson AZ 85712
City State Zip
Telephone No. (520) 748-7100

7. Consulting firm:

URS Dames & Moore Name
Brian Andersen
Contact Person
Telephone No. (520) 529-1141

8. Purpose of well drilled pursuant to this notice:

Monitor
Piezometer _____

9. If for deepening or modifying, list well registration number:

55- _____

10. Will this proposed well be associated with a permit: Yes _____ No
If yes, Permit No. _____

11. Construction will start:
July 10 2000
Month Day Year

12. Period well will remain in use:
Approx. 10 years Months/Years

13. For monitoring wells, is pump equipment to be installed?

Yes _____ No

(a) If yes, design pump capacity: _____

(b) What use will be made of the water: _____

VARIANCE GRANTED

SPECIAL REQUIREMENTS

FOR DEPARTMENT USE ONLY	
File No. D(313)35 bcd	Filed _____
10/23/04 By [signature]	Input _____ By _____
DUPLICATE	
Mailed 11/21/04	By [signature]
Registration 55-594041	
AMA/INA Tucson	
WS 09	S/B 16

14. Drilling Firm:

WDC Exploration Name
7940 S. Kolb Road
Mailing Address
Tucson AZ 85706
City State Zip
(520) 574-2904
Telephone No. 161 DWR
License Number 102-188-A-04 ROC
License Category

15. Proposed method of abandonment of well after project is completed: Grout/drill out top 20 ft., backfill with native soil, pursuant to R12-15-816.

16. Is this well to monitor existing contamination? Yes Potential contamination _____. Please explain: Part of remedial system for corrective action plan
 I state that this Notice is filed in compliance with Rule A.A.C. R12-15-809 and R12-15-816(F), and is complete and correct to the best of my knowledge and belief and that I understand the conditions set forth on the reverse side of this form.

[Signature] Land Owner [] Lessee of Wellsite, Title Date Typed or Printed Name and Title
Peter H Douglas president

17. If construction plans have been coordinated with Arizona Department of Environmental Quality, who is the agency contact? _____

If construction plans have been coordinated with Arizona Department of Water Resources, who is the agency contact? _____

18. WELL CONSTRUCTION PLAN:

- a) Drilling method (mud rotary, hollow-stem auger, etc.) Hollow Stem Auger
- b) Borehole diameters: (id) 8 1/2" bhr inches from 0 feet to 50 feet.
inches from _____ feet to _____ feet.
- c) Casing materials (PVC, steel, hollow-stem auger, etc.)
material sch. 40 PVC diameter 2 inches from 0 feet to 48 feet. material
diameter _____ inches from _____ feet to _____ feet.
- d) Method of sealing at reductions not applicable
- e) Annular seal materials (cement, grout, etc.); method of placement (tremie, circulated): 25' Concrete + Portland Cement bhr
material Bentonite pellets method tremie from 50 feet to 48 feet.
material Bentonite pellets method tremie from 27 feet to 25 feet.
- f) Filter packs (state, material):
material #8-12 silica sand from 48 feet to 27 feet.
material _____ from _____ feet to _____ feet.
- g) Perforations or screen specifications:
Type 0.002 inch slotted PVC from 48 feet to 28 feet
Type _____ from _____ feet to _____ feet
- h) Method of well development (bail, air lift, surge) swab, surge & bail
- i) Will surface or conductor casing extend above grade?: Yes _____ No X

19. Include detailed construction diagram showing expected water depth in feet below land surface, and details of vault, if specified.

GENERAL INSTRUCTIONS

1. Please submit two original notices, with original signatures, and a check or money order (no cash) in the amount of \$10.00, to P.O. Box 458, Phoenix, Arizona 85001-0458 or hand deliver to 500 North 3rd Street, Phoenix, Arizona .

CONDITIONS

- 1. If an individual other than the land owner or lessee, signs this notice, an original letter of authorization from the land owner/lessee, stating that the individual has permission to sign this specific Notice on their behalf, shall accompany the Notice of Intention to Drill a Monitor/Piezometer Well form.
- 2. Construction and abandonment standards for all wells shall be in accordance with A.A.C. R12-15-811 and R12-15-816.
- 3. Drilling of the well shall be completed within one year after the date of Notice.
- 4. A Well Driller Report is required within thirty days of completion of drilling. A Completion Report, is required to be filed with the Department within thirty days after installation of pump equipment for monitor wells.
- 5. Pump equipment may not be installed on a well drilled for piezometer purposes. If a monitor well is pumped, pumping is limited to the maximum amount required for monitor purposes, but in no case may exceed 35 gallons per minute and an annual volume of 10 acre feet total.
- 6. A.A.C. Rule R12-15-811.H.2, requires that: "A monitor well shall be identified as such on the vault cover or at the top of the steel casing. Identification information will include well registration number."
- 7. Special construction standards required pursuant to A.A.C. Rule R12-15-821: _____

**ARIZONA DEPARTMENT OF WATER RESOURCES
GROUNDWATER MANAGEMENT SUPPORT SECTION
500 North Third Street
Phoenix, Arizona 85004**

VARIANCE GRANTED

THIS AUTHORIZATION SHALL BE IN POSSESSION OF THE DRILLER DURING ALL DRILL OPERATIONS

WELL REGISTRATION NO: 55-584041

AUTHORIZED DRILLER: WATER DEVELOPMENT CORP. DBA WDC EXPLORATION LICENSE NO: 161

NOTICE OF INTENTION TO DRILL A MONITOR WELL(S) HAS BEEN FILED WITH THE DEPARTMENT BY:

WELL OWNER: QUALITY PAVING & UTILITY COMPANY 2626 E 82RD ST #300 BLOOMINGTON, MN 55426

The well(s) is/are to be located in the:

SE ¼ of the SW ¼ of the NW ¼ Section 35 Township 13 SOUTH Range 13 EAST

No. of wells in this project: 1

THIS AUTHORIZATION EXPIRES AT MIDNIGHT ON THE 22ND DAY OF OCTOBER, 2001

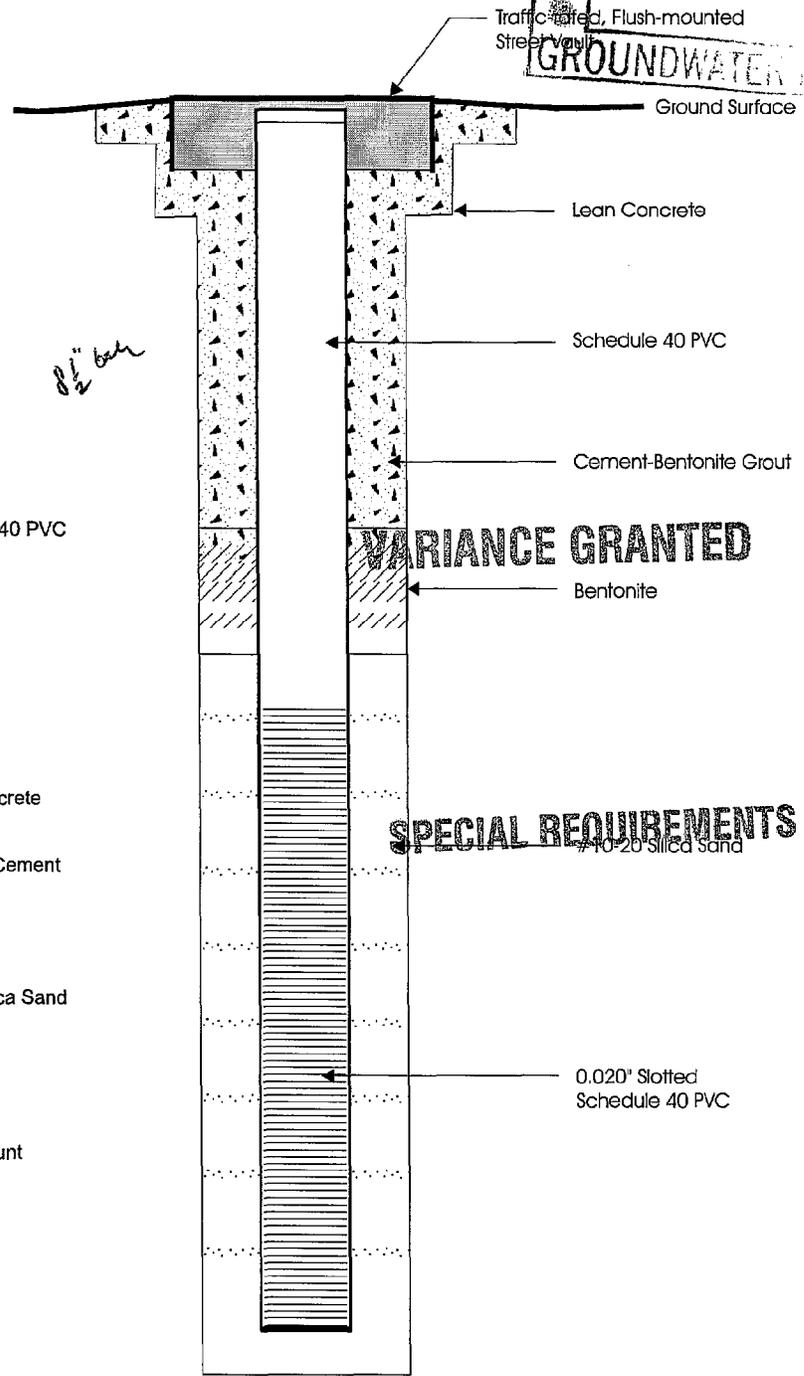
ARD

GROUNDWATER MANAGEMENT SUPPORT

**THE DRILLER MUST FILE A LOG OF THE WELL
WITHIN 30 DAYS OF COMPLETION OF DRILLING**



RECORDED
OCT 23 1997
GROUNDWATER MGT



WELL BORING:

Total Depth 50'
 Diameter 6"
 Drilling Method HSA

8 1/2" back

WELL CONSTRUCTION:

Casing length 48'
 Material Schedule 40 PVC
 Diameter 2"
 Depth to Top of Perforations 28'
 Perforated Length 20'
 Perforated From 28'
 Perforated To 48'
 Perforated Type Slotted
 Perforation Size 0.020"
 Surface Seal 0 to 5'
 Seal Material Lean Concrete
 Backfill 5' to 25'
 Backfill Material Portland Cement
 Seal 25' to 27'
 Seal Material Bentonite
 Gravel Pack 27' to 48'
 Pack Material #8-12 Silica Sand
 Bottom Seal 48'-50'
 Seal Material Bentonite

VARIANCE GRANTED

SPECIAL REQUIREMENTS

NOT TO SCALE

WELL SCHEMATIC OF PROPOSED 2" MONITOR WELLS
 1230 West Glenn Street
 Quality Paving & Utility Company

Figure 12

083QUALITYFIGURE12.CDR 38295-001-033/12-97



Dames & Moore

RECEIVED
OCT 23 2000
GROUNDWATER MGMT

WELL BORING:

Total Depth 50'
 Diameter 4" *11/64"*
 Drilling Method HSA

WELL CONSTRUCTION:

Casing length 48'
 Material Schedule 40 PVC
 Diameter 4"

Depth to Top of Perforations 13'

Perforated Length 35'
 Perforated From 13'
 Perforated To 48'
 Perforated Type Slotted
 Perforation Size 0.020"

Surface Seal 0 to 5'
 Seal Material Lean Concrete

Backfill 5' to 10'
 Backfill Material Portland Cement

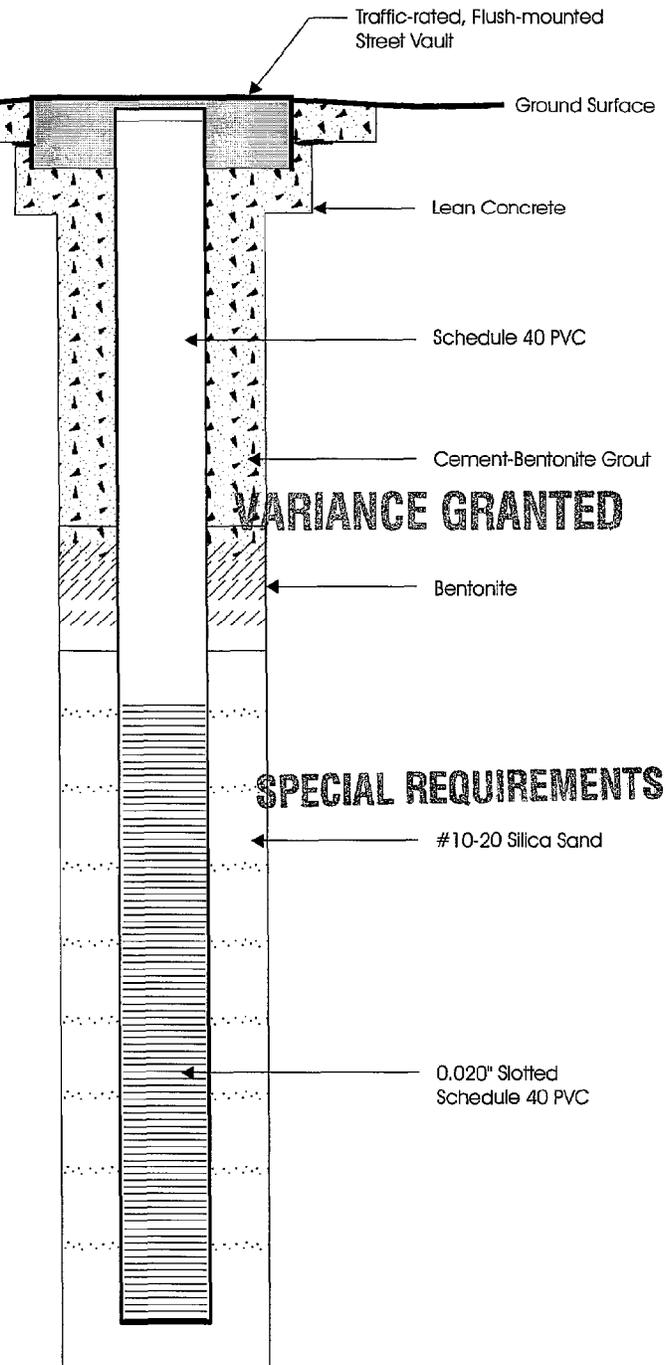
Seal 10' to 12'
 Seal Material Bentonite

Gravel Pack 12' to 48'
 Pack Material #8-12 Silica Sand

Bottom Seal 48'-50'
 Seal Material Bentonite

SURFACE CONSTRUCTION:

Casing Height Flush Mount
 Protective Casing Diameter 12"



VARIANCE GRANTED

SPECIAL REQUIREMENTS

NOT TO SCALE

WELL SCHEMATIC OF PROPOSED 4" MONITOR WELL
1230 West Glenn Street
Quality Paving & Utility Company

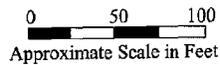
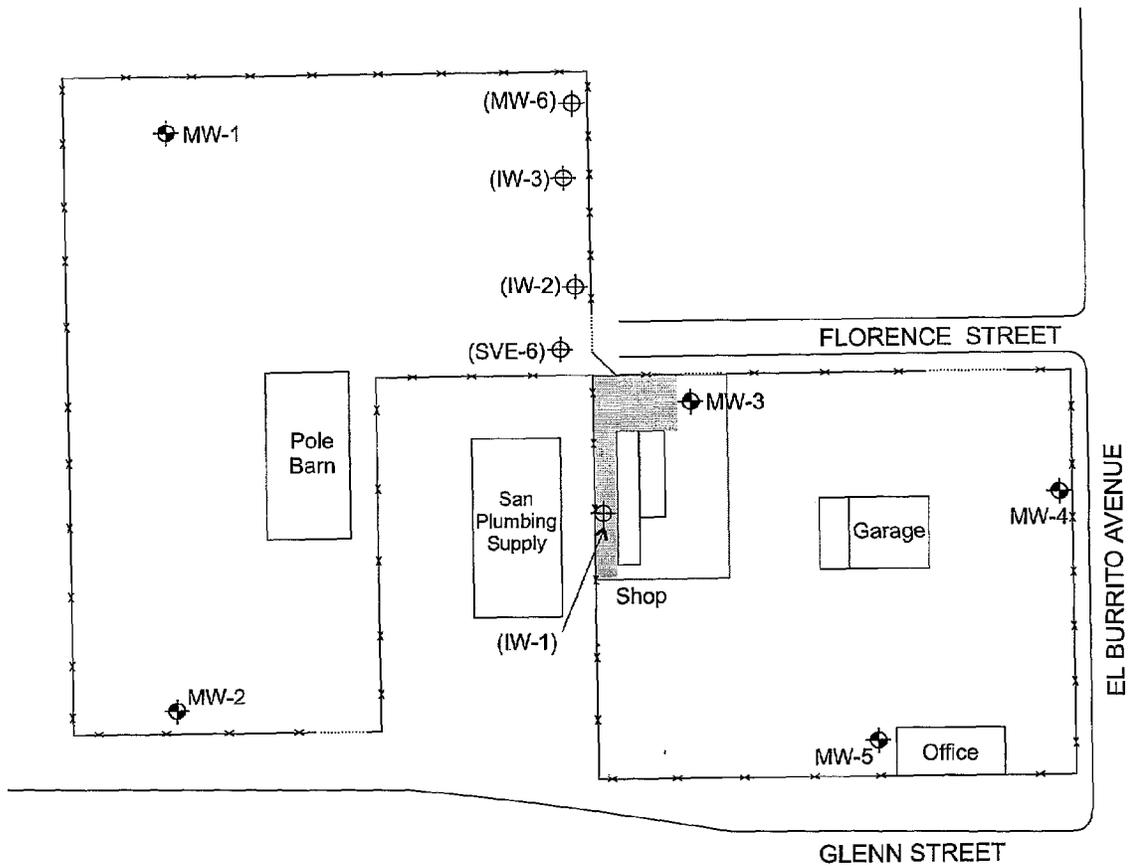
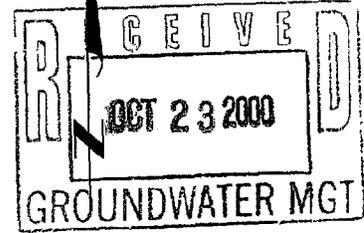
033QUALITYFIGURE12.CDR 38296-001-033/12-97



Dames & Moore

KEY:

- x—x— Fence
- ⊕ Existing Monitor Well
- ⊕ Proposed Monitor or Remediation Well
- ▨ Remediation Equipment Area



REMEDIAL SYSTEM LOCATION
1230 West Glenn Street
Former Quality Paving & Utility Company

Proj\38296\004\Remedial_Location.CDR 38296-004-058/0-00

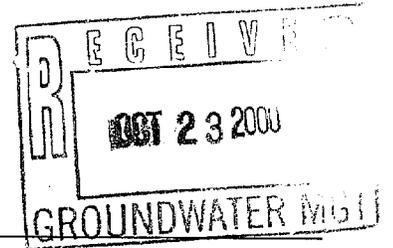


Dames & Moore



WDC Exploration

Environmental, Mineral, Water and Geotechnical Drilling Services



October 18, 2000

Hydrology Division
Arizona Department of Water Resources
500 North 3rd Street
Phoenix, Arizona 85004

Attn: Mr. Jim Johnson

Reference: Request for Variance
Groundwater Monitoring Wells, Dames & Moore

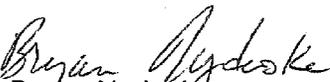
Dear Mr. Johnson,

WDC Exploration respectfully requests variance of Arizona Administrative Code R12-15-811, "Minimum Well Construction Requirements," Subsection B, Item 1, on construction of 4 groundwater monitoring well in Tucson, AZ.

1. 4 wells will be constructed with 2" schedule 80 PVC rather than the required 20' of steel casing at the top of the well.
2. 4 wells will be constructed with flush, traffic rated boxes rather than the required above grade completion.

Thank you for considering this request for variance. We look forward to your response. Should you have any questions please contact me at 1-800-914-7506.

Respectfully,
WDC Exploration


Bryan Nydoske
Arizona District Manager

ARIZONA DEPARTMENT OF WATER RESOURCES

Hydrology Division

500 North Third Street, Phoenix, Arizona 85004

Telephone 602 417-2448

Fax 602 417-2425



October 31, 2000

JANE DEE HULL
Governor

RITA PEARSON
MAGUIRE
Director

WDC Exploration
7940 South Kolb Road
Tucson, Arizona 85706

ATTN: Bryan Nydoske

**RE: Variance for Construction of Four Monitor Wells
Registration Numbers 55-584037 through 55-584039 and 55-584041**

Dear Mr. Nydoske:

The Arizona Department of Water Resources received your request dated October 30, 2000 for a construction variance for four monitor wells to be located in Pima County. The purpose of these wells will be to evaluate existing groundwater contamination.

The Arizona Department of Water Resources approves this request for the following variance:

- Thermoplastic casings with watertight caps may be used in lieu of steel (R12-15-811.B.1).

The following *special requirements* are conditions for this variance (R12-15-821.):

- The casings shall comply with ASTM Standard Guide D5092, Section 6.5.
- The wells shall be constructed per the "Variance Granted" Notice of Intention to Drill.
- The wells shall be abandoned (decommissioned) per A.A.C. R12-15-816.

If you have any questions, please contact Bruce Hammett of my staff at 602-417-2400 extension 7301.

Sincerely,

A handwritten signature in cursive script, appearing to read "Frank Corkhill".

Frank Corkhill
Technical Support Section Supervisor

ARIZONA DEPARTMENT OF WATER RESOURCES

Hydrology Division

500 North Third Street, Phoenix, Arizona 85004
Telephone 602 417-2448
Fax 602 417-2425



October 25, 2000

JANE DEE HULL
Governor

RITA PEARSON
MAGUIRE
Director

Mr. Peter Douglas
1100 North Wilmot, #200
Tucson, Arizona 85712

**Re: Notice of Intent to Drill Five Monitor Wells
Registration Number 55-584037 through 55-584041**

Dear Mr. Douglas:

The Arizona Department of Water Resources received your request dated October 23, 2000 for construction of five monitor wells to be located in Pima County.

The Department has reviewed the above referenced application to determine if the applications meet the substantive requirements of A.R.S. §45-596(D) and A.A.C. R12-15-820. Pursuant to A.R.S. §41-1075, the Department has determined that additional information is required and is being requested through WDC Exploration.

The following information must be submitted before the Department can complete its review.

- Submitted variance request to use PVC in the surface seal is for four wells, not five.
- The well construction plans and well diagrams do not agree on borehole diameter or casing dimensions. The plans also do not specify seal materials in the surface seal.
- If the surface seals are to be five feet (?), then a variance request must be submitted with the reason for the reduced size.

Failure to submit the information requested within 62 days may result in the denial of the application. The Department's substantive review time frame is suspended until all of the requested information is provided.

If you have any questions, please contact Bruce Hammett of my staff at 602-417-2400 extension 7301.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank Corkhill".

Frank Corkhill
Technical Support Section Supervisor

ARIZONA DEPARTMENT OF WATER RESOURCES

500 North 3rd Street, Phoenix, Arizona 85004

Telephone (602) 417-2470

Fax (602) 417-2422



JANE DEE HULL
Governor

RITA PEARSON MAGUIRE
Director

November 02, 2000

QUALITY PAVING & UTILITY COMPANY
2626 E 82RD ST #300
BLOOMINGTON, MN 55426

Registration No. 55-584041
File No. D(13-13) 35 BCD

Dear Well Owner:

Enclosed for your records is an annotated copy of the Notice of Intention to Drill a well. This is returned to you as evidence of compliance with A.R.S. §45-596. A drilling card has been mailed to your designated driller. Prior to drilling he must have it in his possession.

Since this well is being drilled as a Monitor well, or for Cathodic Protection, Grounding, Geotechnical or Piezometer purposes, our standard driller report form is also being furnished to the driller. He is required to complete it and return it to the Department within 30 days after the completion of the well. A Completion Report form is being furnished for monitor wells where pump installation is authorized. This must be completed within thirty days of installation as required by A.R.S. §45-600.

A Change of Well Information form is enclosed for your future use. If you deem it necessary to change the location of the proposed well, please notify the Department on the enclosed form. A properly amended Drilling Card will then be issued and must be in possession of the driller before drilling begins. During the drilling of a new well, if it is determined that it must be abandoned, then a Well Abandonment Completion Report must be submitted per R12-15-816.F.

Per A.R.S. §45-593, the person to whom a well is registered shall notify this Department of a change of ownership of the well and/or information pertaining to the physical characteristics of the well, in order to keep the well registration file current and accurate.

Sincerely,

A handwritten signature in cursive script that reads "Toni Bergeman".

Toni Bergeman
Water Resource Technician
Groundwater Management Support Section

Enclosures

VARIANCE CHECKLIST - HYDROLOGY

DATE RECEIVED 10/23/00 POTENTIAL REG. Nº 55- _____
 DATE TO HYDRO 10/24/00
 DATE TO GMSS 1-1-00 55-584039 THRU 55-584041

FRONT OF N.O.I COMPLETE/CORRECT: YES _____ NO _____

VARIANCE (?) LETTER RECEIVED YES _____ NO
 WELL DIAGRAM (?) RECEIVED YES NO _____
 SITE PLAN (?) RECEIVED YES _____ NO _____

TYPE AND NUMBER OF WELLS:

<u>5</u>	MONITOR	_____	CATHODIC PROTECTION
_____	PIEZOMETER	_____	GROUNDING
_____	GEOTECHNICAL	_____	HEAT PUMP
_____	MINERAL EXPLORATION	_____	
_____	WATER PRODUCTION	_____	OTHER _____

DESCRIBE TYPE OF WELL

VARIANCE:

_____ REQUIRED	_____ GRANTED
_____ NOT REQUIRED	_____ NOT GRANTED
	_____ LETTER ISSUED

ATTENTION!!! NOTICE OF INTENT TEAM:

_____ HARD COPY OF LETTER TO FOLLOW
 _____ CALL FOR PICKUP

COMMENTS:

Clock stopped - 10-26
NOI's modified with authority
Separate variance letter for 55-584040

20