

HALO News

From Home And Landowners Organization, Inc.

October 2010

Candidate Forum

HALO held another successful Candidate Forum instead of our regular October meeting. Held at O'Malleys on the Green, a crowd of over 150 enjoyed asking questions to the candidates that want to represent the Hillside. Lively discussion, good food and friends - that's the formula for a HALO Forum!

Thank you to all who helped create this exciting event, from the residents who asked such timely questions to the people who brought cookies and appetizers. Thanks also to Lori Davey for the mailing and to O'Malley's on the Green and to Great Harvest Bakery for the wonderful treats. Special thanks to the Hillside Community Councils for pitching in funds for this regular event, and Chris Hamre, our fearless moderator, who kept the candidates focused and the audience on the edge of their seats.

What's Happening in your Neighborhood?

Is there something important going on in your LRSA, Community Council, or homeowner's association? Do you have information that would be of interest to Hillside? Let us know!

Email halonewslettereditor@gmail.com with your items of interest!

You and Your Water Well

The keys to our Hillside lifestyle are our onsite utilities (ie., water well and septic system). Without them, we would be forced to use public utilities, and these would mandate smaller lot sizes, and therefore increased density, because of the costs of sewer and water construction per living unit. Yet, I have found that most Hillside residents know little about these most important facilities upon which they are so reliant for comfortable living. So, I'm going to start a series on water wells--their construction and maintenance and troubleshooting the causes of common problems. This month we'll start with construction basics and definitions will be covered next month.

Construction:

- A national standard for the size of a domestic water well is 6" and most drill tools are sized for this.
- Because of the many boulders associated with our glacial terrain here in Alaska, 6" steel casing is used; actually the casing is 6 5/8" OD and normally the wall thickness is 0.25" so the ID is actually 6 1/8" but it is known as 6" casing.
- The casing is advanced into an unconsolidated water-bearing formation (ie., sand and/or gravel) or seated into bedrock.
- If bedrock is encountered (as it is in many of the Hillside wells above Hillside Drive and a few below), "open hole" is drilled below the casing until enough water is encountered in fractures to complete the well.
- Normally it is not necessary to case or line the openhole because the rock will stand open on it's own.
- The main method of drilling is "air rotary" using a tricone drill bit which is hung on drillpipe and rotated, thereby drilling up the earth. The drilled materials (drill cuttings) are then blown (circulated) out of the hole with high pressure air. Water and/or drill mud can also be used as a circulating medium but this is rarely done in Alaska because of freezeup and well development issues on low yield wells.
- In conjunction with the air rotary drilling, a casing hammer is used to simultaneously advance (drive) the casing.
- The sequence then becomes---drill a few feet ahead of the casing, pull the bit back and drive the casing. This is known as the "drill and drive" method.
- This sequence is repeated over and over until a water bearing formation is encountered and developed.
- When bedrock is encountered, as explained above, the casing is seated (driven) into it. Then openhole (ie, no casing) is drilled--usually with a downhole air percussion tool known as a downhole drill (DHD). Interestingly, a very large DHD was used to drill the 2000 foot hole which rescued the Chilean miners.
- Another effective but slow method of drilling water wells is known as cabletool drilling wherein a bit and heavy stem are suspended by cable downhole and drill with a reciprocal movement up and down in approximately 30" strokes pounding the earth and pulverizing it.
- With this method, the casing is also advanced/driven with the weight of the same tools driving on the top of the casing and is the cabletool variation of the drill and drive method.
- Currently, no one in the Muni uses a cabletool for drilling although they are used for well development and rehabilitation.

The Municipality of Anchorage has a very good and thorough set of construction standards for water wells. These are contained in paragraph 15.55 of the municipal code and can be accessed by going online to "www.muni.org/onsite".

Next month, we'll cover definitions and parameters of water wells. If anyone has a question about water wells please email the HALO website or this newsletter and we'll get you an answer. If the question and answer are important to the overall understanding of water wells on the hillside, we'll print them here.

by Wayne Westberg, HALO President, HDP CAC member

You and Your Septic System

by Ted Moore, P.E.
Flattop Technical Services

Note: The following is an updated version of an article that first appeared in the April, 1988 HALO Newsletter. In this issue we describe conventional septic tank and soil absorption systems, which are the most commonly-used solution to on-site wastewater disposal on the Hillside. Subsequent articles will discuss (1) Septic system maintenance and troubleshooting common problems, as well as “the dreaded upgrade”, (2) Advanced treatment wastewater systems, (3) Neighborhood cluster wastewater systems, (4) Municipal and State regulations governing on-site wastewater disposal, and (5) Certificates of On-Site Approval (COSA).

Hillside residents are fiercely protective of their semi-rural lifestyle that comes with large lot zoning. In addition to our quiet neighborhoods and relatively undisturbed natural environment, we have access to most of the urban amenities that Anchorage offers. One notable exception, however, is the lack of access to public sewer and water, which means that individual homeowners must assume the responsibility of providing for their own water supply and wastewater disposal on-site. The costs of installing public sewers to transport wastewater to the municipal treatment plant are simply too high for owners of large lots with their long street frontage to be able to afford. While a number of subdivisions and smaller groupings of homes have been banded together to provide community water systems on the Hillside at a reasonable cost, this has almost invariably not happened with wastewater disposal.

The only cost-effective solution to wastewater disposal available to most hillside residents is individual on-lot septic systems. In theory, on-site septic systems provide a higher level of treatment than many centralized facilities, but a range of potential problems can limit their effectiveness. This article provides an overview of the types of conventional septic systems that are found on the Hillside.

In olden times (back before the 60's, that is) when the original homesteaders tired of running outdoors to use their pit privies, most simply installed a cesspool consisting of a junk car or log crib buried in the ground. Wastewater flowing from their toilets, showers and kitchens was piped directly into the cesspool and from there the liquid portion percolated into the ground. These were cheap to install, often effective if surrounded by porous soils, and usually a good way to contaminate the groundwater because there was no way to ensure that pathogens received any treatment before entering the groundwater. But with the nearest neighbor a quarter mile away, who cared – the natural environment was big enough to be able to handle pollution on this scale. Or was it?

As subdivisions were developed (often reducing lot sizes down to 1.25 acres or smaller) something better was needed. That “something” was the conventional septic system consisting of a watertight septic tank to receive wastewater and hold it for about a day - allowing much of the solids to settle out and many of the pathogens to die - before discharging the clarified effluent to a soil absorption system. To this day, the vast majority of on-site wastewater disposal systems on the Hillside consist of these two components. Of course, there are a number of permutations, some of which work better than others in different applications, but all feature these two basic components. The Municipal Development Services Department

regulates wastewater disposal in Anchorage and a permit is required before any system is installed or modified. Systems must be designed and installed in accordance with Municipal code which contains numerous requirements regarding sizing and materials as well as vertical and horizontal separations from groundwater and surface water and wells, etc. These design requirements will be discussed in a subsequent article.

Septic Tanks:

Most septic tanks sold in Anchorage are fabricated of steel with a bituminous coating to inhibit rust. The size depends on the number of bedrooms – typically 1000 or 1250 gallons for a 3 or 4 bedroom home. Septic tanks have two compartments to promote better separation of solids before the effluent flows on into the soil absorption system. Interestingly, steel tanks are not allowed in most of the rest of the country because they tend to rust out within 15 – 20 years and then allow untreated sewage to leach directly into the groundwater. Is our situation really any different?? Fiberglass and concrete tanks have both been tried in Anchorage in the past; unfortunately the original fiberglass model used here had structural design problems allowing it to collapse, and some of the concrete tanks leaked and/or suffered from poor quality concrete. Nowadays, good-quality tanks made of high-density polyethylene and fiberglass are available (at a slightly higher cost). Theoretically, these should last indefinitely, but many contractors still don't like them because they demand more careful bedding and backfill to avoid puncture. The biggest inherent drawback of a concrete septic tank is that it is too heavy for most small backhoes to lift, necessitating either a large excavator or a boom truck; as a result concrete septic tanks are not presently marketed in Anchorage.

Soil Absorption Systems:

The basic function of a soil absorption system is to distribute septic tank effluent over a large enough area that it can be absorbed into the native soil without backing up into the septic tank or coming out onto the surface of the ground. The theory is that once septic tank effluent percolates through unsaturated soil for even a short distance most harmful constituents are adequately treated or removed. In fact, a properly functioning soil absorption system downstream of a septic tank provides a significantly higher level of treatment than Anchorage's municipal wastewater treatment plant... and it doesn't pollute Cook Inlet! The trick is to ensure that on-site soil absorption systems function properly.

Conventional soil absorption systems come in several types. The oldest design is called a **seepage pit** and consists of a log crib or perforated concrete rings constructed in the center of a large excavation, which is then backfilled with gravel. Septic tank effluent is piped into the crib structure and percolates out through its sidewalls and gravel into the surrounding native soil. While this type of system is no longer being installed in Anchorage, many old seepage pits continue to function well in the Hillside up to this day.

The type of soil absorption system most frequently being installed in Alaska is called a soil absorption **trench**. In essence it is a narrow trench dug by a backhoe along a contour of the land and backfilled with washed gravel. Septic tank effluent is distributed throughout the length of the trench by means of a perforated pipe buried near the top of the gravel, and then percolates laterally through the trench sidewalls into the native soil. This type of system is very cost-effective to construct and works very well in many situations.

When shallow groundwater or impermeable soils or bedrock precludes installation of a

trench, a **bed** system must be installed. A bed system consists of a thin layer of washed gravel containing a network of perforated distribution pipes constructed over a level surface of native soil or imported sand. Unlike in a trench where the primary absorption occurs in a horizontal direction, in a bed the primary direction of absorption is vertically downward into the receiving soil. Experience has shown that bed systems tend to clog up faster than trench systems.

Permutations of the bed concept include a soil absorption **mound**, which is nothing more than a bed constructed on an elevated surface built up with imported sand. Because they are elevated, mounds usually require that a lift station be incorporated to pump effluent up from the septic tank up into the distribution pipe network. Depending on topography, lift stations may be necessary with other types of soil absorption systems as well.

Another permutation of a bed is called a **five-foot wide drainfield**; this incorporates one or more long thin beds that are designed primarily to allow absorption through the bottom, but if soil conditions permit, additional gravel depth may be installed to create some sidewall area for soil absorption as well. Thus, this functions as a hybrid absorption system, somewhere between a trench and a bed, with some of the advantages and disadvantages of each.

As mentioned earlier, subsequent articles will discuss: (1) Septic system maintenance, troubleshooting common problems, and “the dreaded septic upgrade”, (2) Advanced treatment wastewater systems, (3) Neighborhood cluster wastewater systems, and (4) Municipal and State regulations governing on-site wastewater disposal, and (5) Certificates of On-Site Approval (COSA).

Ted Moore is a local civil engineer who specializes in septic system design, construction and testing.

Hillside Road, Drainage and Trail Service Area

HRDTSA could be the acronym for “hard to say.”

Actually, though, HRDTSA is an important recommendation in the Hillside District Plan. This proposed new road, drainage and trails service area is to be organized and run by Hillside so HALO has taken on the task of getting things started. It is up to Hillside to make this happen and to work with the Muni to keep it on track.

HALO President Wayne Westberg has appointed a committee to begin this process. Members volunteering for this task are John Weddleton (Chair), Lori Davey, Chris Hamre, Mike Kenny, Wayne Westberg, Robin Holm and John Reese.

Do you have expertise in roads or drainage? Are you a frequent trail user that would like to contribute? Would you like to participate? Contact Chair John Weddleton at john@weddleton.com

Submitted by John Weddleton, Hillside District Plan CAC member and Planning & Zoning Commission member.

When is a Public Hearing NOT a Public Hearing?

The Muni website announced the meeting as a Public Hearing on Sept. 13, and one of those familiar "Public Hearing" blue signs with the case number was placed on the property. The online notice reminded the Community Council that their comments were due by Sept 3 to be included in the packet. The evening of the Public Hearing, the Planning & Zoning Commissioners were handed packets that contained the online comments made between Sept 3rd and Sept 13th. But there was no Public Hearing!

What happened? The case on the proposed new Chugach Electric Abbott Loop Substation was opened as a Public Hearing on August 9th. Those in attendance believed that the case had been continued to address changes requested by the Planning & Zoning Commission. This belief was supported by the new online and posted Public Notices of a Public Hearing and the continued acceptance of Public Comments. Community belief was that they would be allowed to offer testimony on the changed circumstances.

Those in the audience were stunned to hear the Chair open the case and immediately announce that the Public Hearing was closed.

According to Commissioner John Weddleton, requests for more information by the Commission led to a postponement of the deliberation portion of the meeting only.

HOCC members immediately fired off emails with attached photo evidence of the multiple official notices of Public Hearing. With this evidence in hand, Commissioner Weddleton gave intent to call for Reconsideration at the Commission's next meeting on October 11. That motion would have allowed the Commission to reopen the Public Hearing portion of the case. At that meeting, the Commission voted down this Motion 4 to 2.

Although they admitted there were obvious errors, the Commission stated that incorrect Public Hearing notices had been made in the past. The precedent had been set to ignore the official Public Notices of Public Hearings. There was a mistake somewhere, but that did not mean that the Commission had to actually hold a Public Hearing. Since no one had ever complained before, they also argued, there was no reason they could not do the same thing again.

Following discussion, the Chair berated the public for their lack of attention. **It is the responsibility of the public to search out the information and verify it for themselves**, the Chair stated, and **if incorrect information is posted by the Planning Dept, it is the responsibility of the public to find that out in advance**. The Planning Department assured the Chair that the computer program used was not able to show an individual case as "closed to public testimony". (This was later proven false to the Boards & Commissions Director). They did not discuss the problematic acceptance of written comments if the opportunity for public input had indeed passed.

The point of this? The public - you - must take the responsibility for ensuring the accuracy of official public notices. Do not automatically believe what is published. Make phone calls, and verify it for yourself. If there has been any mistake, the Muni is not at fault. You, the public, are held responsible for believing the inaccurate information the Muni has published.

submitted by Katie Nolan, Huffman/O'Malley Community Council

Upcoming HALO Meeting

It's too bad if you were one of those who missed to Oct. Forum. It was WELL-attended. Watch for the next HALO Candidate forum before the Spring Municipal Election.

Put the next HALO meeting on your calendar now! It will be on Thursday, November 4th, and we will have a lot of business to discuss! HALO always meets the first Thursday monthly, at 7 pm. @ Holy Spirit Center, always have timely discussions and items of interest for all residents. Guests are always welcome to attend, join in the discussion, and nibble on cookies.

HALO News

Yes, that's the name we've temporarily assigned this newsletter. Boooooorrring, huh?

Have you got a better idea? Let us know, please. Email halonewslettereditor@gmail.com with your suggestions!

Welcome New Members!

HALO is a place where all Hillside can come together and guide our future. While we are made up of representatives from most of the area Community Councils, we are in a unique place that separates us from the Municipal government. Besides our successful Candidate events, we address the broad issues that affect each and every resident.

Guests are always welcome to attend our monthly Board meetings, and we encourage you to participate whether or not you and your neighborhood are facing a particular issue. Our elected officials often join us or we teleconference during the session when we have particular concerns.

We especially thank our newest members for joining this unique organization. Especially in today's climate it is valuable for us to be informed and work together.

Join Your Friends and Neighbors at HALO

Are you a HALO member? Dues are only \$10 a year. HALO meets on first Thursday of each month, at 7 pm, at the Holy Spirit Retreat, on the southwest corner of Hillside and O'Malley. Our elected representatives often join us and it is the perfect place to learn about

what is going on with and in your community. All meetings are open to the public, and every effort is made to announce any change in date, time or location.

HALO is a non-profit, grass roots organization formed in 1969 (before the merger of the City of Anchorage and the Greater Anchorage Borough) for the purpose of advocating for rural neighborhoods in Southeast Anchorage. Residents outside of the HALO area also join to support our goals and share in our activities.

HALO's boundaries encompass part or all of eight Community Councils: Abbott Loop, Basher, Bear Valley, Glen Alps, Hillside-East, Huffman/O'Malley, Mid-Hillside and Rabbit Creek. While we work closely with these councils, HALO maintains a separate identity from the Municipal government. We urge memberships in both your local Community Council and HALO.

Name _____ Phone (home)

Phone (alternate, optional) _____

Mailing

Address _____

Property Address, Subdivision & Approximate Acreage:

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E-Mail

Address _____

_____ New Member _____ Renewal

_____ I would be interested in serving as a board member

_____ I would be willing to work with a committee

Dues Enclosed _____ \$10 per year

Donation to Legal Fund _____ (optional)

Print and send to: HALO, P.O. Box 110096, Anchorage, AK 99511

(Email addresses are invaluable for timely notification. All information remains confidential!)