

## CITY OF WASILLA

290 E. HERNING AVE. WASILLA, ALASKA 99687 PHONE: (907) 373-9050 FAX: (907) 373-0788

### COUNCIL MEMORANDUM NO. 90-38

FROM: Deputy Administrator

DATE: May 10, 1990

RE: North Country Estates

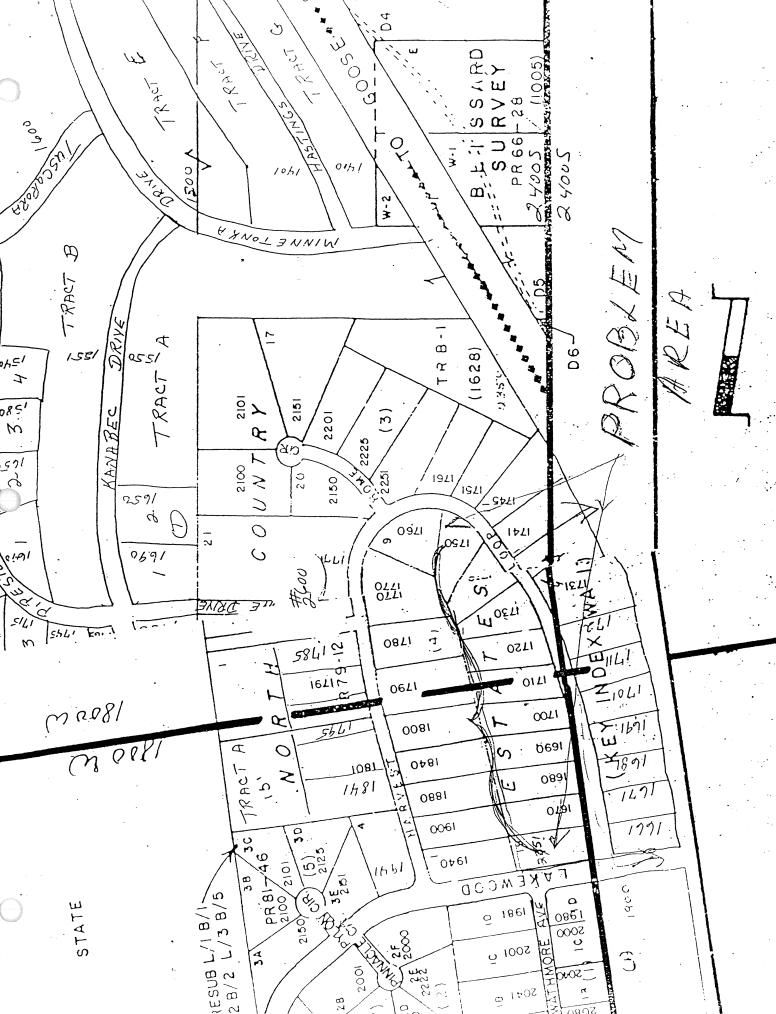
On May 7, 1990, the owners of five residences in North Country Estates who are experiencing flooding/septic problems met at City Hall. Representatives of the City, Mat-Su Borough, Department of Environmental Conservation, Division of Emergency Services and the American Red Cross were present.

The situation does not meet the criteria for a public emergency but does present a health and sanitation problem. None of the apparent potential remedies are affordable to the property owners and at this time, do not qualify for public funds or assistance.

The City Engineer will be prepared to discuss alternatives or a proposed solution. Council will be requested to determine if they wish to commit additional engineering and/or construction funds to the project.

Robert E. Harris

Deputy Administrator



| Name                | # Lot/Blk | Daylight<br>Basement? | Flooded From<br>Walls or<br>Plumbing<br>(Which) | Septic<br>Malfunction<br>Ves/Ws | Mound<br>Septic<br>System?<br>'Yes/Wo | Mtg.<br>Holder  |
|---------------------|-----------|-----------------------|---|---------------------------------|---------------------------------------|-----------------|
| 11 1.07 1.10        | /7 - //   | 520                   | Mostly<br>Foth plambing                         |                                 | no                                    | A HIFC          |
| Charles J. Costello | 7-8/      |                       | 2 / S//p(u)                                     | 40                              | Xes                                   | AHFC            |
| Cina Plandle        | 13-4      | , y es                | Pu-bix 5  | Yes                             | 705                                   | VA/AHFC         |
| hack Dud ley        | 7-0       | 46)                   | hidmulg   | No                              | No                                    | NBA (JA         |
| William Barnett     | 12-41     | 20                    | o lombing                                       | Dlumbing malls kes              | 20                                    | Catered Cartere |
| 1                   | 9.4       | 25                    | WA115/FOUND                                     | WALLS Foundation Not Pet        | MO                                    | MKFC            |
|                     |           |                       | _   |                                 |                                       |                 |
|                     |           | <i>y</i>              |   |                                 |                                       |                 |
|                     |           |                       |   |                                 |                                       |                 |
|                     |           |                       |   |                                 |                                       |                 |
|                     |           |                       |   |                                 |                                       |                 |
|                     |           |                       |   |                                 |                                       |                 |
|                     |           |                       |   |                                 |                                       |                 |



# Gilfilian Engineering, Inc.

Mail: P.O. Box 871868, Wasilla, Alaska 99687 (907) 376-3005 FAX (907) 373-5686 3111 'C' Street, Suite 200, Anchorage, Alaska 99503 (907) 562-2021

#### ON-SITE INSPECTION NOTES

# North Country Estates May 8, 1990

#### BLOCK 4

#### Lot 9:

Found uneven ground surface around soil absorption system monitoring tube with 2 large depressions. Hand dug trench around uphill side of dwelling leads to septic tank/absorption system area. General surface drainage is to septic system area. No gutter, basement window has boxed in affair which protrudes just enough to allow roof drainage to pour in.

#### Lot 10:

Found Depression along deep trench. Dwelling has no gutters along one side.

#### Lot 11:

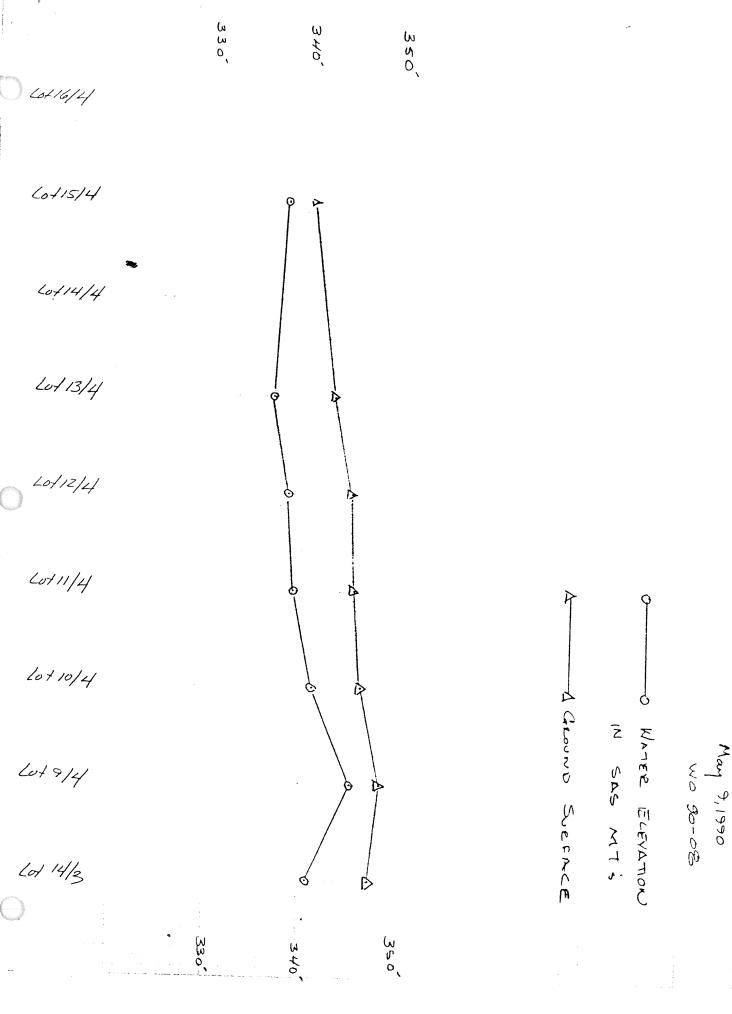
Much higher ground, all slopes to septic/house. Septic tank is in depression. Slope to dwelling from septic side ponds against dwelling. No gutters, slope under eaves is toward house. Extremely poor ground surface drainage around house.

#### Lot 12:

Appears to have been recently (maybe last fall) installed or repaired due to presence of loose, gravelly topsoil fill over deep trench. Generally, surface drainage is to deep trench/septic tank and dwelling. No gutters except small portion of roof. Natural Depression (major area) at deep trench monitoring tube and at edge of earth fill around deep trench monitoring tube.

#### Lot 13:

Deep depression along deep trench from deep trench monitoring tube toward septic tank, over 1/2 of the length of trench. General surface drainage is toward deep trench and house. No gutters, slope toward house into depression by sewer line cleanout. Depression 10' from septic tank appears to be stumps from lot clearing. Water in hole is 24 to 30" inches below ground surface. House is split level with garage partially below grade. Lawn area slopes towards driveway which drains toward garage.



NORTH COUNTRY ESTATES



# CITY OF WASILLA

290 E. HERNING AVE. WASILLA, ALASKA 99687 PHONE: 373-9050

## MEMORANDUM

TO: Bob Harris

Administrative Assistant

FROM: C. Peter Curtis

City Engineer Assistant

DATE: May 1, 1990

SUBJECT: North Country Estates

Drainage and Sewage Improvements

Statement of Probable Construction Cost

W.O.#G90-08

We have reviewed the lots which have been impacted by high seasonal groundwater and on-lot soil absorption system failures due to the high groundwater. We have also completed a "preliminary" construction statement on several different scenarios which may help to relieve these problems. None of the scenarios can be accomplished easily and most would require total community participation in order to make the improvements feasible. We have broken these scenarios down into what we have called Drainage Correction and Wastewater/Disposal Systems with each scenario having a sub-category specified as either a area wide or individual lot improvement.

# Approach No. 1: Drainage and Corrective Alternatives

Senario No. 1: Area Wide Improvements

This scenario includes the construction of one (1) large curtain drain to be located somewhere on the north side of each of the effected lots draining those lots to a drainage ditch to be acquired through lot 12 or 13, Block 3 North Country Estates. This scenario has some risk involved with the potential contaminated effluent draining into the curtain drain, effectiveness of the drain with respect to dewatering characteristic, and maintenance of the drain. It would also require permanent easements through the effected lots.

| Construction E<br>Engineering<br>Contingency | Estimate | \$130,000<br>\$ 26,000<br>\$ 19,500 |
|--|----------|-------------------------------------|
|--|----------|-------------------------------------|

Total Estimate Budget \$175,500

North Country Estates Bob Harris May 1, 1990

Scenario No. 2: Area Wide Improvements "B"

This concept includes the development of a community collection and disposal system located within the boundaries of the subdivision. This concept would allow the subdivision property owners greater input in the development of this facility. However, it would also require the community to take full responsibility of the maintenance and operation of the facility. Again, this concept does not include the cost to connect to this community system. It only includes those costs for the off-lot development of the collection system and the disposal site.

| Construction | Estimate, | (off-lot) | \$: | 200,000 |
|--------------|-----------|-----------|-----|---------|
| Engineering  |           |           | \$  | 40,000  |
| Contingency  |           |           | \$  | 36,000  |

Total Estimated Budget \$ 276,000

### Scenario No. 3: Individual Lot Improvements

This concept involves the design and construction of a raised mound soil absorption system (SAS) on each of the effected lots. This concept will allow for the property owner to develop his own individual (SAS) and to provide his own operation/maintenance practice. Although this concept is much more economically feasible, it does not provide the community with any long-term solutions to their problem.

| Construction Estimate On-Site | \$12,500/lot |
|-------------------------------|--------------|
| Engineering                   | \$2,500/lot  |
| Contingency                   | \$2,250/lot  |

Total Estimated Budget \$17,250/lot

These on-lot costs may be used in estimating the cost to connect into one of the previously described community wastewater disposal systems.