May 18, 2010

Mr. Neil Neilsen Bethel Assembly of God 1202 North Maple Avenue Rapid City, SD 57701

Re: PRD Amendment Drainage Issue

Dear Mr. Neilsen:

At the May 6 Planning Commission meeting the property owner of 1317 Herman Street, Mr. Dave Marrs, spoke to the commission regarding the drainage easement granted to the church property. This easement allows an underground 12" pipe along the property line between 1317 and 1321 Herman Street. The pipe conveys storm water from the church site to the west curb line in Herman Street. The easement document (copy enclosed) requires that the church "maintain" the drainage pipe.

On May 18 I inspected the 12" pipe alignment through the Marrs property, and inspected the metering pond and associated improvement on the church property. My comments are as follows:

- The top of the 12" pipe is exposed in the front yard area of 1317 Herman Street. Pipe joint is deflected and open at top.
- The outlet headwall and sidewalk channel structure at the Herman Street gutter connection appears to be in good condition.
- I did not observe any other defects in the underground pipe through the side or rear yard areas of 1317 Herman Street.
- The inlet of the 12" pipe on the church property is obstructed with concrete and soil debris. It is not clear that pipe can function properly.
- The end of the outlet pipe from the detention storage pond is also obstructed with debris. It is not obvious if this pipe is working properly during runoff events.
- The outlet structure of the detention storage pond is a gated 12" CMP pipe. The sluice gate is in a locked and closed position. CETEC's original report and plans for this structure (February 2006) called for fixing the gate in a partially open position to provide controlled low flow release from the detention pond during intense storm events. This work has not been completed.

RECEIVED

MAY 2 0 2010

Rapid City Growth Management Department

> 1560 Concourse Drive Rapid City, SD \$7703



10PD033

Mr. Neil Neilsen Bethel Assembly of God May 18, 2010 Page 2.

It is my opinion that the overall detention storage pond system and outlet piping should be upgraded to provide proper function and to comply with your easement maintenancc obligations. The obstructed inlet of the 12" pipe to Herman Street could result in overland flow through the side yards of 1316 and 1321 Herman Street properties rather that pipe flow as intended.

My recommended improvements are as follows:

- 1. Construct the detention pond outlet modifications per the original plans.
- 2. Uncover the outlet pipe of the detention pond and the inlet pipe of the 12" Herman Street outfall. Remove debris and shape pipe end areas to assure free flow conditions.
- 3. Remove and re-lay the exposed 12" RCP in the yard area of 1317 Herman Street. Provide at least 6" soil cover and restore grass by seeding or sodding. Coordinate with the homeowner on this work.

Please contact me if you have any questions on these issues.

Sincerely,

CETEC Engineering Services, Inc.

ung Greg Wiefenge, P.E.

Project Manager

GW/mlr

Enclosure

cc: Karley Halsted, City of Rapid City



The Republic of the second second

BASEMENT

en grangagerenner ne e dierst ausen.

600x 49 MAGE 7056

10PD033

STEVEN D. KENNEDY AND MICHELLE F. KENNEDY, husband and wife, öf 1317 Herman Street, Rapid City, South Dakota, 57701 ("Grantors"), for themselves and for their heirs, successors, grantees and assigns, in consideration of One Thousand Seven Hundred Fifty Dollars (\$1,750.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and in consideration of the agreements herein contained, grant unto BETHEL TEMPLE ASSEMBLY OF GOD, a South Dakota non-profit corporation, of 1202 N. Maple, Rapid City, South Dakota, 57701 ("Grantes"), ite successors, grantees, and assigne, a three foot (3') wide easement across the north three feet of the following described real property:

> Lot Nine (9) in Blook Seven (7) of Knollwood Heights No. 2 Subdivision in the City of Rapid City, Pennington County, South Dakota,

for the purpose of installing, operating, maintaining, and replacing an underground drainage pipe that will drain water onto Herman Street from the Grantee's property described as follows:

> Lot One (1) of Lot C One (C1) and Lot C Two (C2) of Marshall Heights Tract in the City of Rapid City, Pennington County, South Dakota, as shown by the Plat recorded in Book ? of Plats on Page 118, including one-half of the vacated Marshall Boulevard adjoining said Lot C Two (C2).

The Grantee shall repair and maintain maid underground pipe and shall hold said Grantors harmless for any damages which may occur as a result of the underground drainage pipe provided

27098

* <u>\$</u>

that such damage is not caused by the Grantors, their heirs, successors, grantees, assignces, or invitees.

The Grantee of meants and agrees that all work made upon Grantors' property shall be made in a workmanlike manner and that, as nearly as reasonably possible, the surface of the ground will be returned to the condition in which it existed prior to the granting of this easement. This easement shall include the right to enter upon the property and otherwise do these things reasonably necessary to effectuate its purpose. The Granter will be notified by the Grantee, or its agent, at least ten (10) days prior to the commencement of any work on the property.

Grantore, their successors, grantses, and assigns, agree not ' to buj'J, create or construct or permit to be built, oreated or constructed any obstruction, building, engineering works or other structures upon, over, or under the easement described abc/e. Grantors reserve the right to use and enjoy the easement property provided that such enjoyment does not interfere with the drainage pipe or the exercise by the Grantee of its rights under easements hereby granted.

Dated this 5-14 day of October, 1990.

- 2 -

1<u>0PD033</u>



Fremory 01, 2008 10 4/2 D1 4/3. Drawing: Figure 2.Dram (Fild) (\\maxshiften\Qetects & proposale(\defects & proposale()) Bether Assembler of OOD Expansion\Draming()



FIGURE 4 PROPOSED SLUICE GATE MODIFICATION

cetec



METER POND OUTLET GATE (CLOSED)



12" PIPE INLET AREA (PIPE NOT VISIBLE, MAY BE OBSTRUCTED)



OUTLET STRUCTURE TO HERMAN STREET



REAR YARD AREA 1317 HERMAN STREET (NO PROBLEM APPARENT)

10PD033



OPEN JOINT IN 12" PIPE 1317 HERMAN STREET



EXPOSED 12" PIPE AT 1317 HERMAN STREET

May 14, 2010

City of Rapid City Growth Management 300 6th Street Rapid City, SD 57701-2726

Re: Bethel Assembly of God Church Expansion 1202 North Maple Avenue

Gentlemen:

CETEC Engineering analyzed site drainage for the Bethel Church property in 2006. The results of the analysis are presented in the report entitled "Drainage Report for Bethel Assembly of God Church Expansion, 1202 N. Maple Ave.", CETEC Engineering Services, Inc., Amendment No. 1, February 1, 2006.

The church has applied for a major amendment to the previously approved PRD for the expansion project. Changes included in the proposed amendment are the addition of a preschool playground, sidewalk alterations and grading alterations. The grading alterations included re-contouring around the playground and placement of from one to three feet of fill north of the building expansion site. The filled area is generally east of the north parking lot, but does not encroach on the on-site drainage detention pond storage area.

We reviewed the site development changes relative to the original drainage report. We have concluded that the changes do not significantly affect the findings and conclusions of the report. Drainage sub-basin boundaries and sizes are unchanged. The pervious and non-pervious areas within the sub-basins are slightly changed, but do not make any material difference regarding calculated runoff rates or detention storage needs.

Sincerely,

CETEC Engineering Services, Inc.

Greg Wierenga, P.E.

Project Manager

GW/sjf

Enclosures

cc: Neil Neilsen, Bethel Assembly of God



RECEIVED

MAY 1 4 2010

Rapid City Growth Management Department

> 1560 Concourse Drive Rapid Ciry, SD 57703

www.cetecengineering.com

09200.00/5/14/2010

605.341.7800
605.341.7864