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DATE: August 11, 2026

Benton County Board of Commissioners
4500 SW Research Way
2nd Floor
Corvallis, Oregon 97333

Re: LU-25-067: CUP-Church, Northside Church Rebuttal to Opposition Testimony

Dear Members of the Board of Commissioners,

My name is Brian Vandetta and I am the Civil Engineer and Land Surveyor representing the Northside Church for their proposed development at 4500 Powers Avenue NW in Albany, Oregon. I am writing this letter to rebut opposition testimony heard at the August 4, 2026 appeal hearing and make engineering related clarifications for NW Powers Avenue.

The following identifies the topic of the opponent testimony and my rebuttal responses.

Projected Daily Sewage Flow:

1. Testimony was given at the hearing that raised a concern regarding my calculations dated May 28, 2026 due to the upper level mezzanine of the building not expressly being included in them.

Rebuttal Response:

The onsite septic system is sized per the Oregon Administrative Rule 340-071 Onsite Wastewater Systems. Projected Daily Sewage flows are typically performed by one of two scenarios.

Scenario 1 is based on the church's anticipated operations and projected attendance, while Scenario 2 is based on the number of seats in the church sanctuary and also applies the building code maximum occupant loads for accessory uses to provide a conservative comparison. Although the upper-level mezzanine was not reflected in the original projected attendance calculations, the revised analysis demonstrates that including the mezzanine does not change the overall conclusions regarding the adequacy of the approved area for a septic disposal system.

Scenario #1: The Projected Daily Flows are based on an engineer's study to determine the projected number of people contributing for a full day or an 8 hour shift and then multiplying that number of people by the appropriate gallons per day in OAR 340-071-0220 Table 2.

Scenario #2: The Projected Daily Flows are based on an engineer's study that determines the number of people contributing for a full day or an 8 hour shift based on number of seats in the church sanctuary and on building code maximum occupant load numbers allowed and then multiplying that number of people by the appropriate gallons per day in OAR 340-071-0220 Table 2.

Due to the Northside Church having a history of operation to create data that support the number of people currently attending their services, children's ministry and youth group meetings, I performed my previous calculations dated May 28, 2026 based on Scenario #1. The calculations performed had no correlation to overall building square footage, but rather on projected numbers of people attending. So the omission of the upper level square footage does not affect the submitted calculations and they are accurate for Scenario #1.

2. The opposition testimony raised a concern that my previously submitted calculations were not based on building code maximum occupant load numbers.

Rebuttal Response:

Below is a calculation based on Scenario #2 for a comparison.

OAR 340-071-0220 establishes wastewater design flows for churches based on the number of seats provided (5 gallons per day per seat). The rule does not increase the design flow based on the number of worship services conducted. Accordingly, the calculation is based on the church's 500-seat capacity, consistent with the Oregon Administrative Rules.

Northside Church is designed currently with 500 seats. OAR 340-071-0220, Table 2 states that for a church use the daily sewage flow is 5 gpd per seat.

$$\text{Church Sewage Flow} = 500 \text{ seats} \times 5 \text{ gpd/seat} = 2,500 \text{ gpd}$$

In addition to the primary church use they will also have children's ministry classes on the ground level during church session and youth group on the upper level potentially the evening of church. Both church associated uses will have calculated daily sewage flows in addition to the daily sewage flow based on the number of church seats. Their daily sewage flow will be added to the church sewage flow since they may occur on the same day.

The maximum occupant loads established by the Oregon Structural Specialty Code were used as a conservative estimate of anticipated daily sewage flows for the additional uses in response to opposition testimony. The children's ministry area has a peak occupancy allowed by the building

code of 90 people. OAR 340-071-0220, Table 2 states that for church uses(children’s ministry) use the daily sewage flow is 5 gpd per person.

$$\begin{aligned}\text{Children’s Ministry Peak Daily Sewage Flow} &= 90 \text{ max occupant load} \times 5 \text{ gpd} \\ &= 450 \text{ gpd}\end{aligned}$$

The youth group area has a peak occupancy allowed by the building code of 313 people. OAR 340-071-0220, Table 2 states that for church uses (youth groups) use the daily sewage flow is 5 gpd per person.

$$\begin{aligned}\text{Youth Group Peak Daily Sewage Flow} &= 313 \text{ max occupant load} \times 5 \text{ gpd} \\ &= 1,565 \text{ gpd}\end{aligned}$$

$$\begin{aligned}\text{Total Peak Daily Sewage Flow} &= 2,500 \text{ gpd} + 450 \text{ gpd} + 1,565 \text{ gpd} \\ \text{Based on Maximum Occupant Load} &= \boxed{4,515 \text{ gpd}}\end{aligned}$$

The approved Onsite Septic Site Evaluation 138-23-000125-EVAL was based on a design flow of 5,175 gpd. Based on the projected operations calculations dated May 28, 2026, the estimated daily sewage flow is 4,200 gpd. Based on the conservative maximum occupant scenario, the estimated peak sewage flow is 4,515 gpd. Both scenarios remain below the approved design capacity per Benton County Environmental Health Division approval for case 138-23-000125-EVAL.

The max occupant load is based on preliminary Oregon Structural Specialty Code analysis performed by our project team architectural firm. This number does not represent anticipated attendance or expected simultaneous occupancy. The maximum occupancy for the building space identified in the Oregon Structural Specialty Code is intended to establish life-safety and egress requirements. They do not represent the expected simultaneous occupancy of every room within the building. They were used solely as a conservative comparison in response to the concerns raised during the appeal hearing.

3. Testimony was given at the hearing that raised a concern with the replacement septic disposal area requiring removal of trees and that it was not illustrated on the “PROPOSED SITE PLAN”.

Rebuttal Response:

The submitted “PROPOSED SITE PLAN” illustrated that the initial disposal field would be installed in an existing clearing that did not contain existing trees. This was strategically done to avoid tree removal. The overall area approved by the Benton County Septic Site Evaluation 138-23-000125-

EVAL as suitable for septic effluent disposal was 2.12 acres ±. The initial installation disposal field layout occupies 0.33 acres±. The remaining area for replacement disposal field installation is 1.79 acres ± or 5.4 times the amount of space needed for the initial disposal field layout.

Although the replacement disposal field was not illustrated on the proposed site plan, it was evaluated and approved as part of the Benton County Septic Site Evaluation. The replacement field may be located anywhere within the approved reserve area, allowing its final location to minimize impacts to existing trees.

The Revised Proposed Site Plan does include a potential layout for the future replacement disposal field. This would likely not be installed for 20 plus years. As you will see on said Revised Proposed Site Plan the illustration includes the removal of (7) fir trees to accommodate the potential layout for the future replacement disposal field.

The installation of the initial disposal field is not planned to remove any trees as shown.

Onsite Parking Required:

4. Testimony was given regarding the discrepancy of building square footage between the proposed Site Plan and the preliminary floor plans. The testimony identified that the omission of the upper level mezzanine created a deficiency in the required number of parking spaces onsite.

Rebuttal Response:

The project team acknowledges that the earlier submitted material did not consistently characterize the building's gross floor area between the architectural drawings, narrative, traffic study and proposed site plan. The lower level of the building is 18,909 sf and the upper level is 9,648 sf for a total gross building size of 28,557 sf.

The Benton County Development Code required parking for a church building is 1 parking space per each 100 sf of gross building size or 1 parking space per 8 seats, whichever is greater. In this case the 28,557 sf size governs and results in the following calculated required vehicle parking spaces.

28,557 sf x 1 vehicle space/100 sf ➔ 286 parking spaces

The Benton County Development Code required parking for a dwelling (parsonage dwelling) is 2 vehicular parking spaces per dwelling. The parsonage contains a 2-car garage and 2 paved vehicular parking spaces in front of the garage.

A Revised Proposed Site Plan has been submitted to illustrate providing 286 vehicular parking stalls for the church use and 4 vehicular parking spaces for the parsonage.

Street Widening to NW Powers Ave.:

5. There was testimony by an opponent suggesting that the entire length of NW Powers Ave. from Oak Grove Dr. to Scenic Dr. should be widened to the 24 feet paved width with 2 feet gravel shoulders.

Rebuttal Response:

The proposed condition of approval P-12 included constructing street widening of NW Powers Ave. from a point approximately 50 feet west of the west property line to Scenic Dr. Street widening as conditioned has been evaluated against the existing constraints such as existing right of way widths, topography, existing structures and existing environmental conditions. The conclusion drawn was that the condition can be met without acquiring additional right of way if County staff allowed for some minor concession of their standards such as shoulder width, ditch fore slope and/or ditch back slope. A preliminary cost budget including design, permitting, wetland mitigation work and construction has been calculated for this portion of roadway widening to be \$500,094.10. Extrapolating this budget to the entire roadway length from Oak Grove Dr. to Scenic Dr. equates to an approximate budget of \$980,184.44. This extrapolated budget does not include necessary right of way acquisitions. The majority of the right of way from the west property line of the subject property to Oak Grove Dr. is 40 feet in width. The County Transportation System Plan requires 50 feet of right of way for the primary local road. The lack of right of way together with the topography, existing structures and existing environmental conditions does not allow the widening of NW Powers Ave. to be achieved going west to Oak Grove Dr.

Conclusions:

The calculated peak Projected Daily Sewage Flow utilizing the most conservative Scenario #2 (argued by opponents) at 4,515 gpd is slightly higher than the previously calculated peak Projected Daily Sewage Flow utilizing Scenario #1 of 4,200 gpd. The most conservative 4,515 gpd is still well below the Benton County Environmental Health approved 5,175 gpd for the site.

There is ample space approved by the Benton County Septic Evaluation approval for the replacement disposal field to be installed without removing a significant number of existing trees. The Revised Proposed Site Plan has been updated to include the layout of the potential replacement disposal areas which resulted in the removal of (7)-seven fir trees.

The required amount of onsite parking with the addition of the mezzanine space is slightly higher than the 260 vehicular parking spaces originally proposed. The Revised Proposed Site Plan has been updated to include the Benton County Development Code required 286 vehicular parking spaces based on the gross church building size of 28,557 square feet.

Distributing the church use over two services is not expected to change the required number of vehicular parking stalls or the required peak projected daily sewage flow calculated in this memo.

The street widening of NW Powers Ave. as conditioned in proposed condition of approval P-12 includes from a point approximately 50 feet west of the west property line and going east to Scenic Dr. This segment of widening can be accomplished as conditioned. Adding a requirement to construct the widening going west to Oak Grove Dr. is physically not feasible due to the existing right of way widths being insufficient.

Respectfully,



RENEWAL JUNE 30, 2028

Brian Vandetta PE, PLS
Udell Engineering & Land Surveying LLC