



February 9, 2022

City of Northville

Department of Public Works
215 W Main St,
Northville, MI 48167

Attn: Mr. Michael Domine, DPS Director

Re: The Downs - Preliminary Site Plan, Additional Items, Engineering aspects
OHM Job No. 0152-21-1020

Dear Mr. Domine,

On behalf of the City of Northville, we had previously reviewed the Preliminary Site Plan and TIS as submitted by Seiber Keast Lehner, and dated December 5, 2021, and revised plans dated January 20, 2022, for the above-referenced project. After the initial preliminary site plan meeting with the Planning Commission held on February 2, 2022, we were asked to review several additional items. Our supplemental comments are below:

Preliminary Site Plan Additional Item Engineering Comments

- 1. Transfer of Griswold parcels and future ROW.** Griswold between Cady and Beal is currently located within three parcels, each owned by the City. Each parcel has a different width but a common Easterly boundary line, from south to north (57x 144, 75x 134, 73 x 194). We would recommend that these parcels be converted into a City public Right of Way having a width of 60 ft from the existing easterly property line. The City parcel remaining width could be exchanged with the Applicant for small sections of their property to make abutting adjacent streets a 50 ft ROW (Cady) or 60 ft ROW (Beal and Griswold) width. Details could be resolved during the final site plan process, but we anticipate dedicated Rights of Way to be on Cady (+/-5 ft x 260 ft), Griswold (3 ft x 130 ft), and Beal (North 5ft x 104 ft, South 5 ft x 288 ft). There are no existing public utilities within the portion of the two parcels the City would exchange with the Applicant. Making these parcel revisions and dedications will clean up these oddities in the parcel fabric and provide a consistent right of way widths moving forward. The proposed development along Griswold falls within the Cady Overlay District and therefore is not required to meet a prescribed setback from the property line, so these changes to the property line along Griswold should not impact the available buildable area.
- 2. Site groundwater elevation in the lower portion of the development impacting proposed housing unit types.** We have reviewed the McDowell Geotechnical report dated March 16, 2018, and compared that to the currently proposed finish grade elevations for the building units in this area of the development. We supplemented the similar comparison prepared by Don Webb and submitted to the PC in the Feb 2 PC agenda package. Based on current information provided, it appears there is a very little vertical separation between the proposed FG minus a 12 ft basement excavation depth



(10 ft basement, 1 ft footing, 1 ft separation from GW) and the observed groundwater elevation, as documented during the soil boring activity of March 8th and 12th, 2018. This supports the applicants proposed housing unit type to multi-family with no basement where exiting ground water depth is shallow relative to existing surface. Groundwater elevations are variable but typically they are at higher elevations in the early spring and late fall. Given the timing of observation, the groundwater elevation in March should be suitable for this assessment, although we recommend that the Applicant's Geotechnical Consultant install piezometers in this southern area to allow for further tracking of the seasonality and variability of the groundwater elevation.

Additionally, we were notified that the Applicant's Engineer has completed a preliminary import fill calculation and we understand the site currently requires a considerable amount of imported fill material be placed. Currently they are proposing 8-9 ft of fill depth for the single family homes along the south side of Fairbrook. The Applicant's Engineer may choose to expand on the effort and cost for importing fill to the Planning Commission. A few other concerns to note related to constructing basement footings near the groundwater table are as follows:

- Having a groundwater table too close to the basement footing elevation may cause sump pumps to run more frequently than normal and during storm events they may not be able to keep up with precipitation percolating through the granular soils backfilled against the foundation.
 - Raising the FG's south of Fairbrook would require additional fill material and will result in steeper slopes adjacent to the River Park. This may be problematic but will be looked at more closely during final site plan review.
 - Groundwater suppression systems exist but are costly to construct and have a high maintenance cost as they tend to buildup mineral deposits within the collection system, which could ultimately become an HOA long term maintenance responsibility, or the responsibility of the homeowner. We recommend these systems be avoided if possible.
3. **Site soil contamination concerns.** OHM Advisors recommends that the contaminated soils remediation plan be reviewed by the Brownfield Redevelopment Authority as it relates to the Tax Increment Funding (TIF) eligibility. Additionally, and if desired by the City, a geotechnical consultant that specializes in soil contamination and remediation could be secured to provide a further review of the report, although we are of the opinion that SME, Inc could provide necessary guidance regarding remediation of contaminated soils on this site as the process moves ahead, in coordination with City, Brownfield Redevelopment Authority, and OHM.
 4. **Rouge River daylighting permitting and construction timeline.** OHM has reviewed the proposed timeline prepared by SKL in the memo dated January 20, 2022, regarding river daylighting permitting and construction. The permitting process involves several government agencies; the City of Northville, EGLE, FEMA, and Wayne County, and although it is hard to predict their relative workloads and permit review response time, the proposed project timeline appears reasonable, 85 weeks for permitting and 6 months for construction. Construction activities within the flow line of the river may be restricted between April and July in observation of the fish spawning season.
 5. **Engineering review of proposed grading.** OHM had originally requested sufficient grading be provided in the preliminary site plans, PSP Item #3, so that a cursory review could be done ahead of the final site plan, but this is contingent on land use. Therefore, we recommend delaying the timeline for receipt of additional detailed grading until the final site plan submittal, once land use is more defined and grading data provided by Applicant's Engineer would be more comprehensive.



6. **Phasing of construction as it relates to utilities.** The PSP phasing indicates a north and south split between the utility construction, and within the south phase, east and west split about Center Street. This phasing of the utilities will become more defined once final site plans are submitted. The currently proposed phasing appears reasonable. The Applicant is expected to participate in the cost for replacement of water mains along, Cady, Beal, and River Street and in the extension of the water main along Griswold between Main and Beal.

Should you have any questions regarding our review comments outlined above, please do not hesitate to contact Nicholas at (734) 466-4538 or via email at nicholas.bayley@ohm-advisors.com.

Sincerely,
OHM Advisors

Nicholas Bayley, PE
Client Representative

George Tsakoff, PE
Principal

Attachment: OHM modified Don Webb Groundwater Elevation Graph, and excerpts of the 2018 McDowell Soils Investigations Report

cc: Patrick Sullivan, City Manager, via email
Sally Elmiger, CWA, City of Northville Planner, via email
Dianne Massa, City Clerk, via email

Brent Strong, City Chief Building Official, via email
Matthew Samhat, City Fire Marshall, via email
Stephen Dearing, OHM, via email

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