



November 9, 2018

Planning Commission
Charter Township of Van Buren
46425 Tyler Road
Belleville, Michigan 48111

Subject: VBT-18-021; Project Pancake – Phase 2/Michigan Avenue; Final Site Plan Review #5; Revised Site Plans Dated October 26, 2018.

Dear Commissioners:

The applicant, ACS Michigan proposes to build a 2-story 63,574-square foot research and development facility building and associated site improvements. The 75-acre site is located on the south side of Michigan Avenue, bound by single family residential neighborhoods to the east and Conrail railroad to the south, and is commonly referred to as the “Harold Smith Farm” parcel. The applicant received preliminary site plan approval from the Planning Commission on September 26, 2018, subject to several conditions:

We have reviewed the revised site plan for compliance with the conditions of preliminary site plan approval and offer the following comments (any items that require changes or additional information are underlined):

COMMENTS

1. **Delineation with pavement striping lanes for ingress and egress off Michigan Avenue.** This condition has been partly met. The applicant’s response letter dated 10/26/18 (hereinafter referred to as “the applicant’s response letter”) states that lane markings are shown on Sheet C-03A. However, the sheet includes only signage identifying right turn in and out of the site and refers to sheets OS 02 and 03 for pavement markings. A note on this sheet also refers to Sheet C 06A for pavement markings; however the information is on none of those sheets. Sheets OS 02 and 03 indicate a barely visible right arrow on one lane with no notations. The plan must include clear demarcation of the 2 lanes, with one inbound and the other outbound. This can be achieved administratively as a condition of final site plan approval.

2. **Details of the proposed cantilever gate at the main access drive entrance, including its operation.** This condition has not been met. The applicant’s response letter states: “Final details of gate operation is being resolved with SRD and will be submitted when known.” Sheet C 06A includes detail for “6’ high decorative fence exhibits.” The applicant must clarify if this is the proposed fence. Section 7.205(B)(4) of the Zoning Ordinance allows for decorative stockade fence, which is subjective for a security fence for an industrial use. However, the final review of this gate/fence can be achieved administratively as a condition of final site plan approval. Also, while the plans refer to a “screen fence,” it is unclear on Sheet C 06A includes a detail of the screen fence. If this fence is the solid metal stockade fence on Sheet C 06A, it may be approved. However, Section 7.205(B)(4) of the Zoning Ordinance does not permit chain link or other non-decorative fence in a front yard.

3. **Details of proposed signage be included, including along the access drive at the fork to the vehicle evaluation area.** This condition has not been met. The applicant’s response letter refers to sheet C 03A for the information; however, there is no signage shown or labeled anywhere on the plan This can be achieved

administratively as a condition of final site plan approval, provided all signage complies with the Zoning Ordinance.

4. **Installation of a sidewalk along the site's Michigan Avenue frontage.** This condition can be met. After the September 26, 2018 Planning Commission meeting, we met with the applicants to discuss this requirement. The applicant has proposed to construct the required sidewalk along the Michigan Avenue frontage extending from the main access drive east towards Cemetery Road, at such time when the Township installs (or causes to install) its portion of the sidewalk on the adjacent property to the east. We agree with this proposal at this time, as constructing a sidewalk west of the driveway along the Michigan Avenue frontage will terminate at the railroad tracks. At the same time, the Township should reserve the right to require the construction of the sidewalk along the Michigan Avenue frontage. Therefore, we recommend that the requirements of Section 9.107 of the Zoning Ordinance be included in a Development Agreement as a condition of approval, including a provision that the Township may require the applicant to construct the required sidewalk along Michigan Avenue at such time when the Township installs or causes to install its portion of sidewalk on the adjacent property to the east. The revised site plan notes the location of a "future sidewalk" and the applicant's letter states that an agreement will be prepared. We recommend that a note be added that the Township reserves the right to require the construction of the sidewalk along the entire Michigan Avenue frontage even though a future sidewalk is not illustrated west of the driveway. We believe the Development Agreement can be reviewed and approved administratively as a condition of final site plan approval. If the applicant does not want to be required to construct a sidewalk west of the driveway at any time in the future, the applicant may apply for a variance by showing a practical difficulty with the requirement.
5. **Notation that all of the test vehicles in the east parking area shall be fully operable and not junk or dismantled vehicles.** This condition has been met. The required noted has been added to sheet C 03A.
6. **Detail of the roof mounted mechanical equipment screen wall details.** This condition has been met. The roof mounted mechanical equipment is shown on sheet A-103, placed centrally on the roof, and concealed from view by the building parapet and screen walls around it. The details of the screen wall and parapet are noted on Sheet A-531.
7. **Notation of a specific watering schedule for plantings on the berm along the site's Michigan Avenue frontage.** This condition has been met. The Planning Commission waived the installation of an automatic irrigation system along the site's entire frontage (though an automatic irrigation system is installed at and around the entrance frontage), but required a landscape maintenance agreement that guarantees the plantings and required a watering schedule. Sheet L-11 notes that the plants will be kept in a living condition by the contractor for a period of 2 years, and the Zoning Ordinance requires replacement of any dead trees. Sheet L-11 of the plan also notes that if rain water is insufficient, the plants will be hand watered.
8. **Details of proposed decorative fence at main entrance drive.** This condition can be met. Sheet C 06A includes detail of a "decorative fence" detail and exhibit. The applicant must clarify if this is the intended "screen fence" at the main access drive and in other areas of the site. Section 7.205(B)(4) of the Zoning Ordinance allows for decorative stockade fence in a front yard. The fence proposed appears to be opaque with grey vertical panels reinforced/framed with steel.
9. **Details of proposed trash enclosure to be constructed of masonry.** This condition can be met. Sheet C 06A includes details of a proposed split face block dual dumpster enclosure with steel reinforced wooden



gates. The plan indicates bollards inside the enclosure placed behind the units. The Zoning Ordinance requires bollards on the outside to protect the gates, so we recommend that bollards be included outside of the gate or that the gate posts be designed to be as durable as a bollard.

10. Reduction in light pole height to comply with maximum permitted height of 35' from grade to top of fixture. This condition has been met. The revised detail on Sheet E02 notes the height from grade to the top of the pole light fixtures as 35 feet, as permitted by the Zoning Ordinance with Planning Commission approval. The detail notes that the light pole at the entrance will have a camera, bracket, and extended pole with an additional height of 3'-4'. We recommend that the light pole be lowered so that the top of the structure (including the camera) does not exceed 35 feet in height.

11. Details of proposed ground mounted signage to determine compliance with Zoning Ordinance requirements for area, height, setbacks, and design. This condition has not been met. The applicant had previously stated that such detail would be provided with final site plan submission. At this time, the applicant's response letter notes that the details will be provided once they have been resolved and will be submitted for separate approval. This can be achieved administratively as a condition of final site plan approval, provided all signage complies with the Zoning Ordinance.

12. Other.

- a. **Chillers and Prefabricated Cold Soak Chamber.** The site plan submitted at this time indicates two "chillers" on the south side of the proposed building in the area marked future building expansion, which were previously not shown on any plans and not approved by the Planning Commission. Because these 2 chillers as well as the prefabricated cold soak chamber are behind the building and within the evergreen berm enclosure, we recommend that they be approved as proposed provided that the architectural details of the chillers are included on the plans and that they meet the Zoning Ordinance requirements for height.
- b. **Front Yard Fence.** Section 7.205(B)(4) of the Zoning Ordinance requires that any fence located in the front yard be ornamental/decorative, which excludes chain link or other non-decorative fence in a front yard. A 6-foot high black aluminum fence is proposed along the frontage of Michigan Avenue except for the area east of the driveway. Vinyl coated chain link fence is proposed east of the front parking lot. We recommend that the vinyl coated chain link fence from the east of the parking lot to the northeast corner of the detention pond be replaced with 6-foot high black aluminum fence, which will comply with Section 7.205(B)(4). The remainder of the fence on the east and south sides of the lot may be vinyl coated chain link because they are in the rear.

RECOMMENDATION

While some of the conditions of preliminary site plan review have not yet been included on the plans, they are relatively minor and can be included administratively as conditions of final site plan approval. The applicant's response letter refers to the plans for some details which are not shown, so these details must also be included on the plans. For some other items, the applicant had previously stated that information will be provided at the time of final plan submission. If the Planning Commission is satisfied including these items for administrative approval after final site plan review, we recommend the following conditions of approval:

1. The pavement markings must be included on the sheets as required, including clear demarcation of the two lanes, with one inbound and the other outbound.
2. The applicant must clarify the details of the proposed gate, which must meet the requirements of Section 7.205(B)(4) of the Zoning Ordinance.



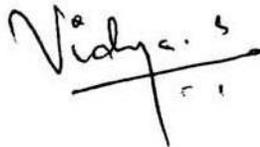
3. That signage be reviewed administratively, provided all signage complies with the Zoning Ordinance.
4. That the sidewalk requirements of Section 9.107 of the Zoning Ordinance be included in a Development Agreement, including a provision that the Township may require the applicant to construct the required sidewalk along Michigan Avenue at such time when the Township installs or causes to install its portion of sidewalk on the adjacent property to the east. Also, a note must be added to the plans that the Township reserves the right to require the construction of the sidewalk along the entire Michigan Avenue frontage even though a future sidewalk is not illustrated west of the driveway. We recommend that the Development Agreement be reviewed and approved administratively, subject to approval by the Township Attorney.
5. The applicant must clarify if the “decorative fence” on Sheet C 06A is the intended “screen fence” at the main access drive and in other areas of the site.
6. That bollards be included outside of the dumpster gate or that the gate posts be designed to be as durable as a bollard.
7. That any light pole be lowered so that the top of the structure (including the camera) does not exceed 35 feet in height.
8. That that screening of the 2 chillers and the prefabricated cold soak chamber be approved, as they are located are behind the building and within the evergreen berm enclosure. This is subject to the condition that the architectural details of the chillers be included on the plans and that they meet the Zoning Ordinance requirements for height.
9. That the vinyl coated chain link fence from the east of the parking lot to the northeast corner of the detention pond be replaced with 6-foot high black aluminum fence, which will comply with Section 7.205(B)(4).

Respectfully submitted,

McKENNA



Patrick J. Sloan, AICP
Senior Principal Planner



Vidya Krishnan
Senior Planner

c: Ron Akers, Van Buren Township Director of Planning & Economic Development
Matt Best, Van Buren Township Director of Public Services
David Potter, FTCH, Township Engineers
David McNally, Van Buren Township Fire Marshal





MCKENNA

November 8, 2018

Planning Commission
Charter Township of Van Buren
46425 Tyler Road
Belleville, Michigan 48111

**Subject: VBT-18-028; Neapco – 6703 Haggerty Road; Preliminary Site Plan Review #2
Revised Site Plans Dated November 2, 2018.**

Dear Commissioners:

The applicant, Neapco Development proposes to construct a 72,630 square foot light industrial and warehouse building on a vacant 4.95 acres site located on the east side of Haggerty Road, north of Ecorse Road. We have reviewed the site plan based on Zoning Ordinance standards and sound planning and design principles. Our comments are as follows (items requiring changes or additional information are underlined):

COMMENTS

- 1. Zoning and Use.** The site is zoned M-1 Light Industrial District. The applicant notes that the proposed use is light industrial and warehousing. Warehousing uses are permitted by right per Section 3.115(A) of the Zoning Ordinance. Light Manufacturing and processing uses are also permitted by right. Sheet C-0.0 notes that 43,000 sq. ft. of the building will be used for light industrial use and 29,630 sq. ft. will be used for warehouse use (material storage of purchase parts, work in process, and finished goods material). The light manufacturing and processing uses will include forming of steel tubes, laser welding of automotive components, light assembly, and final balancing. There will be no machining or milling of components.
- 2. Required Information.** The site plan at this time includes all of the site plan information required per Section 12.203 of the Zoning Ordinance.
- 3. Lot.** The subject site has multiple parcels of land with five (5) different tax identifications numbers. The sheets include a combined legal description for the entire site. The parcels must be combined and a single tax parcel ID noted, which can be a condition of approval.
- 4. Dimensional Requirements.** The M-1 district requires a minimum front yard setback of 50 feet, a minimum side yard setback of 40 feet, and a minimum rear yard setback of 40 feet. The overhang on the northwest corner of the building is shown extending into the front yard setbacks. Per Section 7.118, architectural features may extend or project into a required front yard or rear yard not more than three (3) feet. The overhang is shown as a 3-foot encroachment, so it is permitted.

The parking lot is located 11.51 feet from the northern side lot line, and Section 4.102(P) of the Zoning Ordinance permits a parking lot to be located in a required side yard setback. The parking lot is located 2.28 feet from the rear lot line, and Section 9.101(A) permits a parking lot to be located in a required rear yard setback.

HEADQUARTERS

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The maximum lot coverage (i.e., buildings and roofed structures) in the M-1 district is 35%, and the applicant calculates the lot coverage at 33.7%.

The maximum building height in the M-1 district is 30 feet, and the proposed building height to the roof is 29 feet-4 inches. There is a 2-foot high parapet around some areas of the building and 7-foot high metal panels around the rooftop mechanical equipment. Section 7.103 of the Zoning Ordinance permits parapet walls and equipment screens to exceed the maximum height by no more than 15 feet, so the height requirements of the Zoning Ordinance are met.

5. Access and Circulation.

- a. **Location of Curb Cuts.** The site plan proposes four (4) curbs cuts – two (2) off Haggerty Road on the northwest and southwest sides of the site and two (2) onto the adjacent property to the east on the southeast and northeast sides. Both access drives off Haggerty are designed with a width of 30 feet each, while the southeast and northeast access drives are 24 feet wide. Lanes of ingress and egress must be striped on the pavement. Per the truck circulation diagram submitted, trucks will turn onto the internal drive of the adjacent property to the east via a cross access easement agreements. A copy of the agreement(s) must be submitted for review.
- b. **Cross Access.** The site plan indicates a cross access with the property to the east.
- c. **Sidewalks.** The site plan indicates a 5-foot wide concrete sidewalk along the site's Haggerty Road frontage, which connect to existing sidewalks on the north and south sides. Section 9.107 of the Zoning Ordinance also requires interior sidewalks within the development to provide circulation between the parking areas and the right-of-way; the parking areas and the building entrance(s); and adjacent development(s) where practical. The plan proposes 8-foot wide concrete sidewalks on the north and south sides of the building. The plan also proposes sidewalks on the east side of the building from the doors to the driveway. Sidewalks are proposed at the doors on the east side of the building. Finally, sidewalks are proposed between the Haggerty Road sidewalks and the sidewalks on the north and south sides of the building.

6. Parking and Loading.

- a. **Space Dimensions.** Parking spaces are dimensioned at 9.5 feet wide by 18 feet long. The spaces overhang an 8-foot wide sidewalk on the north side of the building and a 12-foot wide greenbelt along the north property line and meet the Ordinance standards. All aisles are 24 feet wide as required. Per Section 9.104 (C), all parking spaces shall be clearly striped with four (4) inch wide double lines, twenty-four (24) inches apart, to facilitate movement and to help maintain an orderly parking arrangement. We recommend that lines be shown on revised plans as a condition of approval.
- b. **Number of Parking Spaces.** The minimum number of parking spaces for light industrial uses is five (5), plus either one (1) per each 550 square feet gross floor area or one (1) per each employee at peak shift, whichever is greater. The minimum number of parking spaces for warehouse uses is five (5) plus one (1) per 1,750 square feet of gross floor area plus one (1) per 350 useable square feet of office, sales, or similar space. Per the notes on Sheet C-2.1, the parking required for the light industrial portion is 83 spaces (based on floor area and 40 employees at the peak shift), with an



additional 22 spaces required for the warehouse use, for a total requirement of 105 spaces. The site plan proposes a total of 105 parking spaces, including six (6) handicap accessible spaces.

- c. Barrier Free Spaces.** Six (6) barrier free spaces are provided, which is sufficient for a parking lot with 105 spaces.
 - d. Loading.** Section 9.105 requires three (3) usable loading spaces plus one (1) space for each 50,000 square feet in excess of 50,000 square feet each 10' x 50' in area. The 72,630 square feet building will require a total of 4 loading spaces. The site plan notes that 4 loading spaces are provided on the south side of the building, with the loading area being 45 feet wide by 75 feet deep. Although there are only 3 overhead dock doors shown on the southeast corner of the building, the area is capable of parking 4 loading vehicles.
- 7. Landscaping and Screening.** The applicant has submitted a detailed landscape plan with detailed colocations and notes. Our comments on individual landscaping requirements are reflected in the following comments:
- a. Frontage Landscaping.** Section 10.103(A) requires a site's public road frontage (exclusive of driveway openings) to be landscaped with 1 deciduous or evergreen tree per 40 lineal feet of frontage + 1 ornamental tree per 100 lineal feet of frontage + 8 shrubs per 40 lineal feet of frontage. With a frontage of 934.5 feet on Haggerty Road (minus 60 feet for driveway), the total plantings required for Haggerty Road frontage are: 22 deciduous or evergreen + 9 ornamental + 175 shrubs. The landscape plan notes that the required trees and shrubs are proposed along with 1 existing tree along the frontage. Along the frontage, we counted a total of 1 existing tree to be preserved, 9 ornamental trees proposed, 21 proposed frontage trees (19 deciduous and 2 evergreen), and 175 shrubs planted in frontage shrub beds.
 - b. Parking Lot Landscaping.** Section 10.103(B)(1) requires all parking lots to be landscape and screened from adjoining public or private rights-of-way. The Zoning Ordinance recommends a combination of landscaping, berm, and screen wall to achieve this goal. The landscape plan indicates a 10-foot wide buffer on the north and south ends of the site to buffer the parking. Sheet L-1.0 states that a hedge will be planted on the north and south sides with a mix of Yew and Viburnum shrubs.

Interior parking lot landscaping. Section 10.103(B)(2) requires the provision of landscaping within islands in a parking lot. At a minimum, interior landscaping must account for a minimum of 5% of all paved parking areas, each interior landscaped area must be at least 360 sq. ft., and 1 tree per 300 sq. ft. of interior landscape area is required, including 1 tree per landscape island. The plans calculate the pavement area to be 47,820 sq. ft., which requires 2,391 sq. ft. of landscape area and 8 trees. There are several landscape islands, all of which are at least 360 sq. ft. and contain at least 1 tree.
 - c. Loading Area Landscaping.** The loading area is screened by the building and the greenbelt along the south side of the parking lot.
 - d. Display Area Buffering.** This requirement is not applicable.



- e. Greenbelt Buffering.** The site abuts M-1 zoning to the north, south and east. Section 10.103(a) requires a 10-foot wide greenbelt planted with 1 tree per 30 lineal feet. The landscape plan notes that existing trees along the east and north property lines meet this requirement; however, the trees being counted towards this requirement are located outside the applicant's property lines. Also, the buffer on the east side is 2.28 feet. The Planning Commission has the discretion to modify the setback and screening standards by determining if the existing and proposed screening is adequate or needs to be substituted with additional plantings. We recommend approval of this modification.
- f. Specific Landscaping Requirements for Zoning Districts.** There is no specific landscaping requirement for parcels in the M-1 District.
- g. Open Space Landscaping.** The Ordinance requires 1 tree per 3,000 square feet of open space area not occupied by buildings or parking. There are 8 trees proposed to meet this standard, which include ground cover.
- h. Other Requirements.** Underground irrigation is required, and Sheet L-1.0 states that this will be included during construction.
- i. Detention Pond Landscaping.** Section 10.103(K) required landscaping around the detention pond. The landscape plan includes calculations to demonstrate conformance. It is our understanding that Wayne County has jurisdiction over the landscaping around detention ponds. The proposed plan should be submitted to the County for its approval.
- 8. Tree Removal Permit.** A tree removal permit is required if the applicant proposes to remove any trees of 5" caliper or larger. Per a tree survey on Sheet L-1.0 there are a total of 30 protected trees removed that require replacement. There are 13 deciduous trees (3" caliper) and 12 evergreen trees (8 feet high) proposed. Because the evergreen trees are 8 feet instead of the required height of 6 feet, each 8-foot high evergreen trees counts as 1.5 replacement trees. Therefore, the 12 evergreen trees count as 18 replacement trees. Therefore, this standard is met.
- 9. Stormwater Pond.** The site plan indicates a proposed detention pond on the south side of the site. Storm water detention calculations are subject to review and approval by the Township Engineer. The location of any mechanical equipment for operation of the pond must be noted on the plan with screening.
- 10. Lighting.** The plan submitted includes a site lighting plan. Several single and dual-head light poles are proposed at the access drives and within the parking lot areas. Typical fixture detail indicates a flat lens box design fixture that is downward directed. Proposed pole height is 25 feet from grade to top of fixture and meets ordinance standards. The plan also indicates wall mounted light fixtures on the east and south sides of the building. The west side of the building facing Haggerty Road is almost entirely unlit. The sidewalk that is on Neapco's property is sufficiently illuminated. While the Zoning Ordinance limits light intensity and trespass onto adjacent properties, some illumination is provided along the west side of the site for safety along the public right-of-way.
- 11. Architecture and Building Details.** The applicant has submitted detailed elevations and an artistic rendering for the proposed building which is to be constructed of concrete panels in three different colors. The main body of the building is to be constructed of light beige panels while the northwest, southwest



corner, and middle will have darker brown panels with an accent band in blue across the entire façade. The façade mass is broken up by creating jogs in the wall and adding narrow banding of vertical elements in different color panels. The roof is prefinished metal and the rooftop mechanical units are screened by metal panels. There are windows along the front of the façade, and many window areas concentrated at the entrance at the northwest corner.

12. **Dumpster.** The site plan indicates two (2) new dumpster enclosures placed side-by-side at an angle, along the east property line. Typical enclosure details have been noted and indicate a masonry block enclosure to match the color of the building with steel reinforced wooden gates. Bollards are noted on Sheet C-6.1 to protect the gates. The enclosures are screened from view of Haggerty Road by the building, and a few existing trees provide some screening on the east side.
13. **Signs.** The site plan indicates a proposed monument sign along the site's Haggerty Road frontage, near the northwest access drive. No other details have been provided at this time. Section 11.108(D) regulates various signs permitted on the subject site as follows:
 - a. **Wall Signs.** The Zoning Ordinance allows 3 square feet of wall sign area per linear foot of building frontage, not to exceed 200 square feet. If the wall sign is known by the applicant, we recommend that it be added to the plans.
 - b. **Monument Sign.** The Zoning Ordinance allows for 1 monument sign, not to exceed 18 feet in height, with a maximum area of 64 square feet and a minimum setback of 10 feet. The proposed sign is shown at a setback of 11 feet, and Sheet C-2.1 notes that the sign will be 56 sq. ft. If the design is known, we recommend that it be added to the plans.

RECOMMENDATION

The site plan includes most of the required details required by the Zoning Ordinance. Any items that are either missing or require additional information can be included at final site plan review. Therefore, we recommend that the Planning Commission approve the preliminary site plan, subject to the following conditions:

1. The parcels must be combined and a single tax parcel ID noted.
2. Lanes of ingress and egress must be striped on the pavement.
3. The cross access agreement(s) must be submitted for review.
4. The double striped parking lines must be shown on the plans.
5. That the Planning Commission approve a modification to the greenbelt standards of Section 10.103(a) to allow the existing trees along the east and north property lines (located on the adjacent lots) to meet this requirement.
6. The location of any mechanical equipment for operation of the pond must be noted on the plan with screening.
7. If the wall sign is known by the applicant, we recommend that it be added to the plans.
8. If the design is of the monument sign is known, we recommend that it be added to the plans.

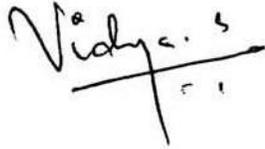


Respectfully submitted,

McKENNA



Patrick J. Sloan, AICP
Senior Principal Planner



Vidya Krishnan
Senior Planner

c: Ron Akers, Van Buren Township Director of Planning & Economic Development
Matt Best, Van Buren Township Director of Public Services
David Potter, FTCH, Township Engineers
David McNally, Van Buren Township Fire Marshal



David C. McNally II
Fire Marshal
O: 734-699-8900 ext. 9416

Van Buren Fire Department
46425 Tyler Rd
Van Buren Twp., MI 48111



11-5-2018

Director of Building and Planning
46425 Tyler Road
Belleville, MI 48111

Re: Neapco Development
East side of Haggerty, North of Ecorse
(No physical address yet assigned)

To Whom it may concern:

I have reviewed a set of plans drawn by Cunningham Limp 28970 Cabot Drive Suite 100 Novi, Michigan 48377. These were received 11-5-2018 for the above referenced project. All NFPA guidelines adopted by the Township of Van Buren were used in referencing this project.

Project Overview:

The submitted preliminary site plans are for a new construction of a 72,630 ft. warehouse.

1. The Fire Department Connection will be a 4" Storz with a 30-degree downturn. Adding fire lane to West side of building will allow for FDC to stay where proposed.
2. A red sign with white lettering saying (FDC) and below that (150PSI) will be mounted 8ft. above the FDC.
3. Knox boxes shall be mounted at the entrance of every suite and at all fire pump rooms. Knox box can be ordered on line at www.knoxbox.com. Do not mount until location has been verified with Fire Marshal.
4. Two-Way Radio Communication Enhancement Systems are required for all new construction, unless after finished construction the occupant can prove through a signal test with the AHJ that it is not needed. **NFPA 1 2012 11.10.1** In all new and existing buildings, minimum radio signal strength for fire department communications shall be maintained at a level determined by the AHJ. I have attached the requirements for the above required equipment regulated by the State of Michigan.

Our Mission: The members of the Van Buren Fire Department shall work together in a professional and caring way to protect life and property from the adverse effects of fire, trauma, illness and dangerous conditions. Our services will be provided in a fair, honest, and ethical manner with the highest respect and dignity to all.

5. Fire hydrants shall be marked with an approved flag where required by fire department NFPA 1.18.5.7.2
6. ~~Fire Department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150ft from fire department access roads as measured by an approved route around the exterior of the building or facility.~~ NFPA 1 2012 18.2.3.2.2
7. ~~Multiple Access Roads More than one fire department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, or other factors that could limit access. A proposed cross access with property owner to the East was mentioned for the South drive, we would like to see the same for the North drive as well.~~ NFPA 1 2012 18.2.3.3
8. ~~There are no exit doors on the West side of the building. Please explain.~~
9. **Fire Hydrant on North West drive will be moved closer to building and FDC but no further off driveway**, per phone conversation with architect.

With information provided, I can approve with exceptions the progression of the project with the site plans submitted.

The fire department requires involvement in the continuing plan review, inspection, and Certificate of Occupancy process and will require various inspections during the construction phases and immediately prior to opening to verify compliance with the appropriate codes. One set of as built construction drawings, schedules, and details, as it relates to construction, fire protection and response, will be required, as well as a **digital cad layout** of the building by this department prior to our final C of O inspection.

Review and approval by the Authority Having Jurisdiction shall not relieve the applicant of the responsibility of compliance with these codes.

Respectfully submitted,

David McInally
 Van Buren Fire Department
 Fire Marshal



November 9, 2018
FTCH Project No. 181273
VBT Project No. 18-021

Mr. Jim Taylor, Director of Water and Sewer
Van Buren Township
46425 Tyler Road
Van Buren Township, MI 48311

Re: Project Pancake – Phase 2 Engineering Plan Review & Final Site Plan Review
Van Buren Township, Michigan

Dear Mr. Taylor:

At the request of Van Buren Township (Township), Fishbeck, Thompson, Carr & Huber, Inc. (FTCH) has completed the first review of the Engineering Site Plans, dated October 26, 2018, for the proposed Subaru Research and Development Project, formerly known as Project Pancake – Phase 2. The preliminary plans were approved at the September 26, 2018, Planning Commission Meeting.

The proposed project is part of a multi-phased construction project. The overall proposed project entails constructing a Research and Development Facility which includes a 2-story 63,574-square-foot building, multiple parking lots with a combined 204 spaces, a separate paved low speed vehicle evaluation area, and room for future building and evaluation area expansion. The proposed site utility layout includes a 12-inch water main which crosses Michigan Avenue (US-12) northwest of the site and ties into the existing 8-inch system to the east at Cross Street; a proposed 10-inch sanitary system extension; and an underground storm sewer system to convey building, parking lot, and site surface runoff to a proposed detention basin system, with no permanent pool.

Phase 1 Review Compliance

The following items were listed as part of the Phase 1 review.

Comments:

1. Regarding the requirement from the Federal Aviation Administration (FAA) for “No Permanent Pools” within the vicinity of the airport, correspondence has been received indicating the Wayne County Airport Authority (WCAA) requirement for the dry basin (August 30, 2018).
2. Regarding land balancing operations and a truck haul route, HRC has applied to and obtained approval from the Michigan Department of Transportation (MDOT) for both the temporary and permanent connection to Michigan Avenue (October 10, 2018). The provided permit (Permit #82061-056322-18-101018) shows an effective date of October 10, 2018, through November 1, 2018. Has this permit been extended or updated?

Phase 2 Review Compliance

Following is a summary of our Phase 2 review comments for plans dated October 26, 2018.

General

The following items are general requirements established as part of the Township's *Engineering Standards Manual*, which the applicant must include as part of the Engineering plans.

1. Indicate and label all existing and proposed easements.



2. Soil borings indicating the ground water elevations have been provided in accordance with the Report of Geotechnical Investigation letter dated August 16, 2018, from G2 Consulting Group. Groundwater was observed at elevations ranging from 704 to 706 feet within the proposed detention basin area, indicating that standing water should be anticipated. Per our conversation with HRC on November 8, 2018, the underground drains within the basin will address the shallow groundwater concerns and the geotechnical recommendations in the Stormwater Detention Basin Design section of the Geotechnical Report. The applicant will be responsible for any standing water or soil stabilization problems that may arise due to groundwater within the basin.
3. Applicant must clearly label side slopes of detention basin and confirm the detention basin slopes are stable under groundwater flow conditions.
4. Show and label underground utilities (existing to remain and proposed) on grading plans and all other sheets that have potential earth disturbance. The lines can be weighted differently or shaded to be less prominent, but the plans must show underground features anywhere that excavation and earth disturbance is anticipated. If the applicant plans to provide a separate PDF for review from the Final Site Plan documents showing this information, the PDF must be provided prior to final site plan approval.
5. Plan sheets must be correctly numbered according to the plan index on the title sheet:
 - a. Sheet C-30A was placed between Sheets C-26 and C-27. If this is intentional, Sheet 30A must be re-numbered.
 - b. Plans must include only one TS-01 sheet.
 - c. Plans must include only one C-23 sheet.
 - d. Sheets E-04 and FC-01 are missing from the plan set.
6. Plans must indicate whether the proposed building will have a basement.
7. All hatches must be labeled (wetland area and proposed grass pavers).
8. Rear/side yard and front yard setbacks are shown on plans as 40 and 50 feet, respectively, but called out as 47 and 57 feet in the side note (Sheets C-28 through C-35).
9. Scale and north arrow must be shown on all plan view sheets (Sheet C-25).
10. Linework and text on Sheets OS-02 and OS-03 must be clearly shown.
11. A quantity list itemizing all proposed public sanitary sewer, storm sewer, and water main construction must appear on each sheet showing such construction. A quantity list showing the total quantities of construction for the entire project must also be provided.

Water Main Service

Existing:

The Township water main records indicate an existing asbestos cement (AC) 8-inch water main running east to west along Cross Street on the east side of the property. In addition, there is a 12-inch Township water main located northwest of the property, on the north side of Michigan Avenue (US-12) at Old Michigan Avenue.

Proposed:

The applicant's plan shows a proposed 12-inch water main loop connection to the existing 12-inch water main near Old Michigan Avenue. The proposed 12-inch main then extends southeasterly, crosses Michigan Avenue (US-12), and enters the proposed site near the proposed main driveway entrance, then tees into an 8-inch line and a 12-inch line. The 8-inch line extends along the west side of the proposed building and connects to a proposed fire hydrant. The 12-inch line continues around the north and east sides of the proposed building, connecting to onsite fire hydrants and the building service taps, continuing to the east side of the property where it ties into the existing 8-inch water main on Cross Street.



Comments:

1. Indicate connection type to the existing mains: tee (cut-in or tapping sleeve) or direct connection with reducer.
2. Label proposed water main material, where encasement begins and ends, and any other items associated with the water main construction (plan and profile), including building water service lead and fire lead sizes (Sheet C-11). Label all existing water main sizes and clearly indicate removal limits for any existing pipe and features to be removed.
3. We have reviewed the fire hydrant and water valve locations with the fire department and have the following additions and adjustments:
 - a. Add gate valve near Station 100+30 (Sheet C-11).
 - b. Add gate valve near Station 21+40 (Sheet C-11).
 - c. Near the point of connection to the 8-inch water main, move gate valve from Station 28+30 (approximately) to the west side of the road and then reduce to 8-inch (Sheet C-09).
4. The following note must be included on the plan view for the water main connection: "Connection to the existing water main shall not occur until all required hydrostatic and bacteriological testing has been successfully completed and accepted by the township engineer."
5. Final water main easements must be executed prior to scheduling the Preconstruction Meeting.
6. The applicant has indicated the buildings located at and adjacent to 50015 Michigan Avenue are both currently serviced by an onsite well and will not be connected to the proposed water main system.
7. Applicant must take note that a future building expansion will most likely include a requirement to loop the 8-inch water main around the future development.

Site Drainage, Storm Sewer, and Storm Water Storage

Existing:

Existing topography shows drainage flowing predominately north toward the center and north side of the property, into a regulated Michigan Department of Environmental Quality wetland. The wetland discharges into the enclosed existing 8-inch Denton Drain, which flows easterly and is a former Wayne County legally-established county drain established in the early 1900s, and recently vacated over the subject property.

Proposed:

The applicant's proposed plan indicates a combination of overland flow through swales, earthen berms, and open-ended culverts; an underground storm drainage collection system that intercepts flow from paved areas; and a detention basin system that collects all flow through a forebay. A new pipe run is proposed to replace the former drain, known as the Denton Drain, from the wetland, which outlets into the proposed detention basin system. The culvert and storm sewer sizes within the proposed drainage system range from 12-inch to 36-inch Reinforced Concrete Pipe (RCP). The overall detention for the site is controlled by a single 48-inch riser with a restricted 10-inch outlet. The outlet connects and discharges into the existing 12-inch storm system (enclosed Denton Drain) that also collects runoff from Cemetery Road.

Comments:

1. The restricted discharge from the proposed detention basin is to be connected and discharged into the existing 12-inch Denton Drain. The applicant has investigated and received approval from the Wayne County Drain Commissioner to connect and discharge into the Denton Drain.
2. The Denton Drain easement has been successfully vacated in its current alignment and location over the subject property. The drain was abandoned by Wayne County at the Drain Commissioner's meeting on September 5, 2018.
3. Clarify the swale centerline label near the vehicle evaluation area (Sheets C-08, C-13, etc.).



4. Clarify the storm drain calculations for the wetland inlet (Sheet IN-10) and the end section near the vehicle evaluation area (Sheet ES-32). The areas contributing to these locations have been shown as reduced in the storm drain calculations, but the contributing areas have remained the same on the drainage area maps (Sheets C-21 and C-22). Per our phone conversation with HRC on November 8, 2018, flow into these end sections is designed to be restricted per a request from Wayne County. Applicant must include a note on the storm drain calculation sheets (C-23) to justify the use of adjusted areas and include language that future expansion storm runoff must be routed away from the wetland area.
5. All culverts must be identified and labeled, including those underneath the proposed berm.
6. Minimum pipe slope for a 15-inch storm sewer pipe is 0.23% (Sheet C-16).
7. Catch Basin 13-A should be labeled (Sheet C-08).
8. Catch Basin CB-5 is sized too small for the angle. Either an 11-foot manhole or a new configuration will be needed (Sheet C-11).
9. Duplicate profiles should be removed (MH-2 to CB-17, Sheets C-16 & C-17).
10. Clarify proposed detention basin stand pipe label, currently shown as SP-35, SP-37, and SP-39 on Sheets C-25 and C-26. Clarify stand pipe diameter, which is labeled 36-inch on Sheet C-25 and 48-inch on Sheet C-26.
11. The applicant must indicate predevelopment overland flow routes and post development overland flow routes and show that post development flow route is consistently directed toward existing developments east of the subject property.
12. The applicant must include an armored overflow weir system downstream of Stand pipe SP-37, that will safely convey stormwater discharges in excess of the detention basin storage elevation to the predevelopment downstream overland flow route.

Sanitary Sewer

Existing:

The existing property is serviced by a 10-inch gravity sewer which extends westerly from Cross Street and terminates at the applicant's noted structure as MH-1. The Smith Farm building is currently serviced via two 6-inch sanitary service leads.

Proposed:

The applicant's proposed plan is to tie into the existing 10-inch sewer onsite, via a sanitary sewer system consisting of a 10-inch PVC pipe discharging from the north side of the proposed building.

The proposed sanitary sewer service lead is shown to tap directly into the existing sanitary manhole, noted as MH-1, in the northeast corner of the property, where flow then heads easterly to the Cross Street sanitary sewer main. No additional improvements to the onsite sanitary line are shown on the plans.

Comments:

1. All service leads must be connected via a wye connection to the proposed sanitary sewer downstream of the final upstream manhole. No direct connection of a sanitary sewer service lead directly to a sanitary manhole will be permitted. Applicant must extend sewer and move MH-5, or shift building connection point.
2. Plans must include a note to verify depth and location of sewer tie-in in the field.
3. The existing 10-inch sanitary sewer line between MH-7 and MH-A (inclusive) will remain a public sewer. The proposed 10-inch sanitary sewer from existing MH-A (shown as MH-1) to proposed MH-5 will be a private sewer, exclusive of MH-A (shown as MH-1) and will not require an easement, per the Township.



Paving and Grading

1. Grading plans need to show proposed flow arrows with slopes and have proposed contours to clearly indicate the drainage patterns in paved areas, along gutter lines, and ADA ramp areas.

Soil Erosion and Sedimentation Control (SESC)

1. An SESC Plan is provided in accordance with the Township's *Engineering Standards Manual*, Chapter II, Plan Requirements, Paragraph D, SESC Plan Requirements, and in accordance with Wayne County SESC standards. A permit has been acquired from the Wayne County SESC County Enforcing Agency (CEA) and was issued October 5, 2018.

Recommendation

We are recommending the Planning Commission grant Project Pancake – Phase 2 Engineering Site Plan and Final Site Plan approval, subject to the review comments noted above and in the marked-up Project Pancake plans, and in accordance with the Township's *Engineering Standards Manual*. All comments must be addressed and resubmitted for final approval in an Issued-For-Construction plan set prior to the scheduling of the Preconstruction Meeting.

If you have any questions regarding this project, please contact me at 248.324.4791 or dpotter@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

A handwritten signature in black ink, appearing to read 'David L. Potter', is written over a light blue horizontal line.

David L. Potter, PE, CSI-CCCA

A handwritten signature in black ink, appearing to read 'Paul J. Kammer', is written over a light blue horizontal line.

Paul J. Kammer, PE

nac

Attachments

By email

- cc: Mr. Ron Akers – Township
Mr. Gary Tressel – HRC
Mr. Stephen Clayton – FTCH

David C. McNally II
Fire Marshal
O: 734-699-8900 ext. 9416

Van Buren Fire Department
46425 Tyler Rd
Van Buren Twp. MI 48111



November 1st 2018

Department Building and Planning
46425 Tyler Road
Belleville, MI 48111

Re: Project Pancake

18-021

To whom it may concern:

I have reviewed a set of plans dated June of 2018 and is labeled preliminary site plan approval, by Hubbell, Roth & Clark, INC 555 Hulet Drive Bloomfield Hills, MI

Project Overview:

The proposal is to build unknown vehicle testing facility. The plan set was reviewed for Fire and Life Safety using the township adopted fire code NFPA 1 and NFPA 101 2012 editions.

Again, please note that **all** applicable **NFPA** codes and standards apply as adopted by the Township of Van Buren.

- ~~1. Van Buren Fire Department apparatus require a **65ft** outside wheel turning radius. Turning radius of a fire department access road shall be as approved by the AHJ. **Proposed hammer head turn is not big enough for fire apparatus.**~~

~~Per phone message from Melissa Coatta on 9-20-18, enough room will be addressed at final engineering review.~~

NFPA 1 18.2.3.4.3.1

- ~~2. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first floor of the building is located not more than 150 ft. from fire department access roads as measured by an approved route around the exterior of the building or facility.~~

NFPA 1 18.2.3.2.2

- ~~3. Dead end fire department access roads in excess of 150ft. in length shall be provided with approved provisions for fire apparatus to turn around. Loop access between parking lots is~~

Our Mission: The members of the Van Buren Fire Department shall work together in a professional and caring way to protect life and property from the adverse effects of fire, trauma, illness and dangerous conditions. Our services will be provided in a fair, honest, and ethical manner with the highest respect and dignity to all.

~~requested to accommodate requirements and provide access to current and future buildings proposed.~~

NFPA 1 18.2.3.4.4

Per phone message from Melissa Coatta on 9-20-18 berm will be removed when future building is built.

- ~~4. Sliding gate access, how does the company plan on allowing access to fire department?~~
- ~~5. Building construction and use is needed to identify, suppression requirements and subsequent placement of hydrants and fire department connections. FDC connection shown on plans and placement ok with AHJ.~~
- ~~6. How will fire department have access to future vehicle evaluation area listed on plans?~~
- ~~7. Vehicle evaluation area building, use and construction, will determine hydrant and FDC locations around that building as well.~~
FDC will be placed within 50ft of hydrant on South side of building per phone call on 9-6-2018
- ~~8. Two-Way Radio Communication Enhancement Systems are required for all new construction, unless after finished construction the occupant can prove through a signal test with the AHJ that it is not needed. NFPA 1 2012 11.10.1 In all new and existing buildings, minimum radio signal strength for fire department communications shall be maintained at a level determined by the AHJ. I have attached the requirements for the above required equipment regulated by the State of Michigan.~~

NFPA 72.24.5.2.2.3

Plans are approved

If you have any questions about this plan review report, please feel free to contact me

Respectfully submitted,

David C McInally
Fire Marshal
Van Buren Fire Department



November 9, 2018
FTCH Project Number 181554
VBT Project Number 18-028

Ms. Carol Thompson
Planning Commission Chairperson
Van Buren Township
46425 Tyler Road
Van Buren Township, MI 48311

Re: Neapco Development
6601 Haggerty Road
Preliminary Plan – Review No. 1

Dear Ms. Thompson:

At the request of Van Buren Township (VBT), Fishbeck, Thompson, Carr & Huber, Inc. (FTCH) has reviewed the Site Plan dated November 2, 2018, submitted to VBT for the preliminary plan approval for the proposed Neapco Development project located at 6601 Haggerty Road.

This proposed project entails: construction of a 72,630-square-foot building; construction of a 105-space bituminous pavement parking lot; installation of two drive approaches to Haggerty Road and two drive approaches onto the adjacent property (6735 Haggerty Road); construction of storm sewer improvements including a storm sewer pipe network, a proposed pre-treatment storm water structure, and a storm water detention basin – which will connect to and discharge into the existing storm sewer system along Haggerty Road; construction of underground utilities including sanitary sewer and water; and other various landscaping and site plan improvements.

We have attached a summary of our review comments below:

General

The following items are general requirements established as part of the *Engineering Standards Manual, Charter Township of Van Buren (April 2014)*. The applicant must include the following items as part of the construction plans.

1. The plans indicate that the three separate parcels making up the proposed property have been combined and the applicant has provided data verifying combination (parcel ID: 83-002-99-0026-706; dated 6/23/2016). Applicant should remove the note on the plans stating, “A proposed parcel split and combination will be required for subject parcel”.
2. Grading plans need to indicate proposed flow arrows and have proposed contours to clearly indicate the overland flow route.
3. An overall drainage area map must be provided indicating all areas tributary to the proposed storm water system. Each area shall include the area “A” and weighted “C” values contributing to that individual system inlet.
4. Provide a list of private utility contacts with facilities within the project limits including individual contact information.

Water Main Service

Existing: The Township Geographic Information System (GIS) records indicate an existing 12-inch water main running north-south along the west side of Haggerty Road and running north-south along the west side of the adjacent 6735 Haggerty Road property.

Proposed: The applicant's proposed plan shows an 8-inch water main loop with two connections to the existing 12-inch water main running north-south near the proposed east property line. Connections are shown near both of the driveways connecting to the 6735 Haggerty Road property. The proposed water main loops around the proposed building and feeds two fire hydrants and the service leads into the building; a 6-inch fire lead and a 4-inch domestic service lead. A separate fire hydrant and lead are proposed on the east side of the property connecting to the existing 12-inch water main.

Comments:

1. Final gate valve locations must be approved by the VBT Water and Sewer Department. The applicant may need to add an additional valve in order to isolate either side of the service connection.
2. Plans indicate a proposed easement for the existing water main running north-south near the east property line and has noted on the plans where separate water easements will be required at the proposed water mains located on the adjacent property.

Sanitary Sewer

Existing: The Township GIS records indicate there is an existing 21-inch Reinforced Concrete Pipe (RCP) gravity-fed sanitary sewer pipeline running north-south along the east side of Haggerty Road. There is also an existing 10-inch sanitary sewer pipeline running north-south along the west side of the adjacent property (6735 Haggerty Road). Both sanitary sewer pipelines are indicated on the Township GIS to flow to the south.

Proposed: The applicant is proposing to construct a 6-inch sanitary sewer lead from the proposed building connecting via a blind wye tap to the existing 21-inch sanitary sewer running north-south along Haggerty Road.

Comments:

1. Applicant shall submit all work to calculate REUs as part of the basis of design.
2. Proposed tap shall be labeled as a wye connection.
3. The locations of the clean-outs shall be shown on the drawings.

Storm Sewer

Existing: Site Plan topography indicates the proposed project area (mostly earth and grass) drains east and west into the existing storm drain inlets and ditches along Haggerty Road and the existing property to the east (6735 Haggerty Road). The existing storm drain system for 6735 Haggerty Road drains into an existing drainage basin on the north side of the property, which discharges into Bell Drain to the north, a Wayne County drain.

Soil borings indicate no ground water was present at time of drilling. The referenced Geotechnical report dated October 13, 2007, has been provided to FTCH on November 7, 2018, subsequent to the application submittal for preliminary site plan approval.

Ms. Carol Thompson, Chairperson

Page 3

November 9, 2018

Proposed: The applicant is proposing to capture storm water runoff from the site by roof drain leads, and storm drain inlets through an underground storm system and route the runoff into a water quality pre-treatment structure (Vortechs 11000) prior to discharging into a proposed onsite detention basin. The applicant is proposing to install an outlet control/overflow structure as part of the proposed detention basin, which discharges into the existing 18-inch storm sewer pipe running north-south along the east side of Haggerty Road. The applicant has included storm water calculations indicating the storm water detention basin has been sized utilizing Wayne County's maximum allowable release rate of 0.15 CFS/Ac for a 100-yr design.

Comments:

1. Applicant must submit and obtain storm water and right-of-way (ROW) approval from Wayne County prior to VBT granting final site plan approval.
2. Detention Basin calculations must show that the system has capacity for a 100-year storm, providing a maximum allowable discharge rate of 0.10 CFS/Ac (Van Buren Township requirement).

Recommendation

At this time, the proposed site plans indicate feasibility and we are recommending the Planning Commission grant preliminary site plan approval, subject to the comments listed above and in accordance with the VBT *Engineering Standards Manual*.

If you have any questions regarding this project, please contact me at 248.324.4791 or dpotter@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.



David L. Potter, PE



Paul J. Kammer, PE

ag2

By email

cc: Mr. Ron Akers – Director Planning and Economic Development
Mr. Matthew Best – Deputy Director Planning and Economic Development
Mr. James Taylor – Director of Public Works
Mr. Stephan Clayton, PE, FTCH