



MARLBORO TOWNSHIP ZONING BOARD

Tennent Road Wash & Lube, LLC

Preliminary & Final Major Site Plan

March 20, 2020

TECHNICAL ENGINEERING REVIEW #1

A. General

- 1. Revise sheet 4 to show the connection, line work and pipe material for the proposed 2" dia. water service throughout the site.
- 2. Revise the callout for PROP. 8"X2" WET TAP on sheet 4 to read DRY TAP as wet taps are not permitted by Marlboro Township Water Utility Division.
- 3. Revise sheet 10 to eliminate the wet tap connection detail, and include detail for dry tap.
- 4. Revise the plans to include the required detectable warning pad at the 5 foot concrete walkway opposite the handicap parking stall.
- 5. Provide a detail for the proposed handicap ramp at the 5 foot concrete walkway opposite the handicap parking stall.
- 6. Revise the detail for mountable Belgian block curb on sheet 9 to note 4,500 psi concrete required.
- 7. Provide a detail for the proposed wall/building mounted signage.
- 8. Provide specific details for each headwall B-3 and B-1 and label the proposed pipe size, material, and invert.
- 9. Revise the masonry block wall detail to include the required safety barrier in accordance with Township Ordinance Section § 220-35D(24)(g)[5]. The barrier is required where the height of the wall exceeds 30 inches.

B. Site Grading

- 1. Provide spot grades at the building corners, and at the trash enclosure corners.
- 2. Provide proposed retaining wall design report and certification in accordance with Township Ordinance Section § 220-35D(24)(h).



Marlboro Township Zoning Board
Re: Tennent Road Wash & Lube LLC (ZB# 18-6670)

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C. Stormwater Management

- 1. Clarify whether access paths or depressed curb will be provided to perform maintenance on the surface basins.
- Clarify whether the trench drain will be routed into the proposed stormwater management system as same is currently shown not connected to anything.
- 3. Clarify whether the proposed Flexstorm inlet filter system with replaceable geotextile bag is typical or practical considering future maintenance, and the outdated Device Testing Report for same (2009).
- 4. Label each proposed surface detention basin to avoid confusion during construction.
- 5. Provide details for each surface detention basin and individually label the water surface elevation for the Water Quality Design Storm and the 2-, 10-, and 100-year storms. The Seasonal High Water Table and bottom of basin elevations must also be labeled.
- 6. Revise the outlet structure detail label as it currently reads DETAIL OUTLET STRUCTURE.
- 7. Revise both the headwall detail and outlet structure detail to include the required ¾" clean stone bedding.
- 8. Provide an Operations & Maintenance Manual for the proposed stormwater management system. Same shall include owner name, owner phone number, and costs associated to maintaining the system.
- 9. Provide calculations to confirm the two basins can fully empty within 72 hours.
- 10. Provide confirmation that the outlet structure trash rack is designed to withstand a perpendicular live loading of 300 lbs/sf.

D. Landscaping

- Revise the plans to provide shade trees along Tennent Road. Currently, the Applicant
 has proposed CC (Redbud) trees along the frontage; however, a larger shade tree
 species should be provided as no overhead wires are present along this side of the
 road.
- 2. Shift all proposed shrubs located along the drive-through area to be further back from the curb, to reduce damage from vehicles, snow removal and de-icing salts.



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- 3. Revise the plans to ensure all proposed trees to be provided within the property lines.
- 4. Revise the plans to exclude FP (Patmore Green Ash) and provide a different species in its place. Patmore Green Ash is no longer commercially available due to the Emerald Ash Borer, an invasive beetle that kills its host ash tree.
- 5. Revise the plans to exclude TO (Emerald Green Arborvitae) and RR (Knock-Out Shrub Rose) and provide a different species in their place that is more deer resistant. Both TO and RR are browsed on by deer.
- 6. Revise the plans to exclude RS (Scintillation Rhododendron) and provide a different shrub that requires full sun in its place. RS requires partial shade and will not perform well.
- 7. Revise the 'Planting Schedule', sheet 7 of 13, to indicate a China Boy Holly to be planted as a pollinator for proposed IM (China Girl Holly). Currently, the plans indicate a China Girl to be planted as a pollinator for China Girl.
- 8. Revise the plans to provide a shade tree in the planting area at the southeastern corner of the proposed building. Currently, an ornamental tree has been proposed.
- 9. Revise the plans to shift the location for proposed PP (Colorado Spruce) further south, to provide more growing space. Also, our office recommends replacing PP with Green Giant Western Arborvitae since they have a more columnar growth form when compared to the spruce's wide spreading canopy.
- 10. Revise the plans to exclude the proposed JC (Armstrong Juniper) and in its place provide Seagreen Juniper, since JC is not a commercially available shrub.
- 11. Revise the plans to exclude CC (Redbud) located within the median at the driveway due to its low branch habit, and provide European Hornbeam in its place.
- 12. Revise the plans to provide a greater variety for proposed shrubs along the eastern property line. Currently, seventy (70) proposed VN (Brandywine Viburnum) have been proposed along the property line.
- 13. Revise the plans to indicate mulch bed lines on the plans, to prevent confusion during construction.
- 14. Revise the plans to provide general landscape notes, to include, but not limited to, handling, quality, watering, etc., for further review.



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15. Revise the plans to indicate the disposition of open areas, i.e., lawn, mulch, stone, etc., to prevent confusion during construction.

16. Revise the 'Deciduous and Coniferous Tree Planting Detail', sheet 7 of 13, to indicate only two (2) tree stakes are needed. Also, indicate rigid, plastic, open mesh trunk protection for the irreparable damage from buck rub. A detail of same should also be provided.

E. Lighting

- 1. Revise the proposed lighting plan/footcandles to provide the average lighting level of 0.5 horizontal footcandle throughout the parking area in accordance with Township Ordinance Section 220-97E(6) as current proposed footcandles exceed the required average level.
- 2. Revise the plans to ensure proposed lights do not spill over property lines. Currently, it appears light levels over 0.30 footcandles are depicted onto Tennent Road as well as over the western property line.
- 3. Revise the plans to provide a data summary chart to indicate the average, minimum and maximum footcandles provided throughout the pavement surface.
- 4. Revise the plans to indicate hours of operation for proposed light fixtures.
- 5. Revise the plans to provide manufacturer's catalog cuts for proposed light poles with full ordering information, to prevent confusion during construction.
- 6. Revise the plans to clarify the detail labeled 'Street Light Fixture & Pole', sheet 8 of 13, to indicate pole mounted light fixture as it does not appear any street lights are proposed.
- 7. Revise the plans to provide isolux pattern on the plans.

F. Woodland Management

 Revise the plans to provide tree replacement calculations in accordance with Section 337-19C. The Applicant may deduct all proposed trees on the plans that meet the minimum size (except for required street trees) from the required replacement calculations. If a deficit exists, monetary calculations should be provided to indicate the Applicant's contribution to the Tree Fund.



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- 2. Revise the plans to graphically depict and specifically label tree protection fencing, in accordance with Section 337-16.
- 3. Revise the 'Sequence of Construction', sheet 13 of 13, to indicate the timing of fence installation and removal, to prevent confusion during construction.

G. ADA

- 1. We defer compliance with ADA requirements to the Construction Code Official. At a minimum, our office offers the following comments:
 - a. Revise the plans to graphically depict the current preferred standards which outline all access aisles to be five (5) feet wide with standard stalls eight (8) feet wide and van accessible stalls eleven (11) feet wide. The 'Barrier-Free Parking Stall Markings' detail, sheet 10 of 13, should depict same.
 - b. Revise the 'Concrete Sidewalk Detail', sheet 10 of 13, to indicate a broom finish for the proposed sidewalk, to ensure a slip resistant wearing surface, in accordance with ADA requirements.

H. Environmental

- 1. The Applicant should submit an EIR in accordance with the Environmental impact report requirements found at Ordinance § 220-159, where the report should be commensurate with the intensity of development.
- 2. Under Ordinance § 220-137D(18) (Plat design standards for subdivisions and site plans), groundwater monitoring needs to be performed over a twelve week period, where the results of the monitoring are to be included in a report to the Township. We recognize, however, that the Applicant's engineer has evaluated a series of soil profile pits to determine the depth to the seasonal high water table and soil permeability. We are recommending, however, that two subsurface assessments (borings or soil profile pits) be assessed for each proposed basin, in order to comply with Appendix E of the NJDEP stormwater BMP manual. With the submission of the additional information, the data will meet the intent of the Ordinance, however, the Applicant should still indicate whether or not a waiver is requested from the Ordinance.
- 3. The Applicant needs to submit a Site Investigation and Soil Sampling report in accordance with Ordinance § 220-159.1, as we note that a review of historic aerial photography reveals past agricultural use.



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4. A note should be added to the plans that states any imported fill needs to meet the definition of Clean Fill, pursuant to the Technical Requirements for Site Remediation (as found at NJAC 7:26E-1.8).