PARE
CORPORATION

MEMORANDUM

DATE: November 6, 2022
Revised November 8, 2022

TO: Jean Bubon, AICP, Town Planner

CC: file

FROM: John P. Shevlin, P.E.

Re: Engineering Review Services
Interstate Towing- Site Plan Approval &
Notice of Intent Application
698 Main Stret
Sturbridge, Massachusetts
(Pare Project No.: 22193.00)

On behalf of the Planning Board ("Board") and Conservation Commission ("Commission") which are currently considering a Site Plan Approval application and Notice of Intent application for Wrecker, LLC, an affiliate of Interstate Towing Inc., Pare Corporation (Pare) has completed our review of the Site Plan Approval application and Notice of Intent application. The applicant is proposing a 7,000 square foot building for the purpose of operating Interstate Towing on an existing abandoned lot located at 698 Main Street, Sturbridge, MA.

Pare has been provided the following information for review:

- Site Plan entitled "Proposed Interstate Towing Facility #698 Main Street, Sturbridge, MA prepared for Wrecker LLC-1660 Westover Road Chicopee, MA". Plans prepared by CMG 67 Hall Road, Sturbridge, MA. Plans dated October 11, 2022.
- Traffic Assessment dated August 11, 2022 prepared by McMahon Associates.
- CMG Project Narrative Summary Letter & CMG Sewerage Flow Estimate Calculation Letter, dated October 11, 2022.
- Site Plan Application Form, Site Plan Checklist & Property Deed, dated October 11, 2022.
- Certified Abutter's List, dated September 12, 2022.
- Externally Illuminated Ground Sign with Stone Base Detail, undated.
- Stormwater Report dated October 11, 2022 prepared by CMG Environmental Services, Inc.

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Pare offers the following pertaining to this submission.

<u>PLANS</u>

1. *Sheet C-1- Title Sheet:* On Index of Drawings, revise the Sheet Name for Sheet Nos. L1-0 and L2-0. Change "Landscape Plan" to "Planting Plan".

2. *Sheet N-1.0: General Notes-*

a. Revise note numbers. Note 1 is duplicated.
b. Note 15 - A traffic control plan for work on Route 20 will be necessary for MassDOT review.
c. Note 16: Change the wording on the reference to the 'Manual on Uniform Traffic Control Devices'.

3. *Sheet C-1.0 Site Layout Plan –*
   a. It is understood that the retaining walls are to be designed by others but a detail indicating the type of wall finish should be identified. In particular the wall in the front of the site.
   b. Detail of business sign is included in the application. Should detail be added to the plans?
   c. It is understood thatit has been discussed and agreed that the dumpster will not be screened.
   d. Provide details on chain link fence and slide gate. Will fence include slats?
   e. It is understood that tow truck parking will be primarily inside the building.
   f. Provide more dimensions for pavement edge layout.
   g. Total parking spaces are identified as '13 HC Spaces'. Clarify 'HC'.
   h. Could improvements be made to the boat ramp access to better define the driveways/roadways and movements in this area?

4. *Sheet C-2.0 Grading & Drainage Plan-*
   a. Provide a detail for the proposed Water Quality Units This is identified in Stormwater Report as the Hydroworks Water Quality Unit.
   b. Is a detail needed for a typical catch basin?
   c. Is there a need for the "Slab Top Deep Sump Catch Basin Detail'?
   d. Callouts on the plan do not match callouts on the "4,500 Gal. Oil Grit Seperator Detail". (pipe type (HDPE vs. RCP); rim elevation; inverts,)
   e. Callouts on the plan do not match callouts on the "Cross-Sectional Detail of Stormwater Bypass Structures" Detail. (pipe sizes, WQ numbering, DMH labelling, pipe slope between DMH-1 and Oil/Dirt Seperator; inverts,)
   f. Provide a detail for the trench drain with concrete apron.
   g. Trench drain is called out to tie into DMH-5. The drain manhole is labelled as DMH-2.
   h. WQ-2 indicates Invert from DMH-5. Should be DMH-2.

5. *Sheet C-3.0 Utility Plan-*
   a. Clarify in legend the pipe material for the sewer and water services.
   b. Plan calls for 2" PL water service and 6" DI fire service. Detail calls for Type K water service.

6. *Sheet C-4.0 – Erosion & Sediment Control Plan-*
   a, Provide proposed catch basin protection detail.
   b. Identify on legend of the plans the locations of the 12" Erosion Control Straw Wattle with Silt Fence Backing.

7. *Sheet C-4.1-Erosion & Sediment Control Detail*
   a. Construction Exit Detail should be revised to match Sturbridge DPW standard detail (i.e. 75 feet X 24 feet and 12" deep).

8. *Sheet C-5.0- Construction Details*
   a. 'Cross-Sectional Detail of Stormwater Bypass Structures' does not match plans. (see 4.f above)

b. Underground Infiltration Chamber Detail-number of rows and units do not match Sheet C-4.0.
c. Sturbridge DPW standard details should be used for manholes and catch basins.
d. 4500 Gal. Oil Grit Separation Detail does not match plans. (Finish grade is different, Inlet & Outlet Pipe Types are different, Inlet and Outlet Inverts are different)
e. Detail for Proposed Stormwater Basin Detail should indicate 8" HDPE pipe.
f. Riprap dimensions on the Proposed Stormwater Basin Detail and the Flared End Detail do not match.

9. *Sheet C-5.1- Construction Details*
   a. How is MDC Trap going to be vented?
   b. Verify pipe type for sewer. Detail does not match plan.

10. *Sheet A-1: Building Floor Plan-*
    a. Utilities should be shown where entering the building.

TRAFFIC ASESSMENT

The applicant has prepared a Traffic Assessment report and not a full detailed Traffic Impact Analysis Report. This assessment report evaluates existing and projected traffic operations at the proposed site driveway as well as a safety analysis associated with the development. Based on the 'limited' number of trips anticipated from the proposed use, Pare is in agreement with the level of detail that the applicant has submitted pertaining to traffic. Based on the letter report provided, the following comments are being made:

1. The applicant states that the "assessment is based on the Site Layout Plan prepared by CMG Engineering, Inc., dated July 18, 2022." The latest plans are dated October 11, 2022. It does not appear that anything on the site plan has changed that would affect the assessment report but the applicant should confirm.

2. The study area consisted of the vicinity around the proposed site, including the driveway and Route 20 (Main Street). Based on our field review of the area, the operations of the surrounding intersections and the volumes of traffic anticipated to be generated from the development, the extents reviewed are acceptable.

3. Table 1: ATR Data does not match traffic data information provided in the appendix. The actual count data numbers are slightly smaller. The difference should not have any impact on the assessment.

4. The study uses LUC 942 for an Automobile Care Center since this is probably the best match within ITE Trip Generation. Counts at a similar could have been obtained but based on the size of the facility and the number of employees, the trips shown in Table 3 seem reasonable.

5. The trips in Figures 6 and 7 do not match the trips identified to be generated in Table 3.

6. The future build operations indicate that the proposed intersection will operate at a good level of service (worse case LOC C with 18 seconds delay).

7. Clearing of vegetation should be maintained for good site lines.

8. With the use proposed for this site, towing, vehicles will be slower pulling in and out of the site. Also, the % of heavy vehicles on the roadway is high. With these two factors, I would agree to add signage alerting Route 20 traffic of the truck traffic entering/exiting the site.

9. Conclusion- This site will not generate a significant amount of traffic. The biggest issue is safety as far as vehicles entering/exiting the site. The area does not have a significant history of crashes in the area. It is recommended that site lines be maximized so approaching cars and cars leaving the site have enough vision to safely travel in the area.

STORMWATER MANAGEMENT REPORT

1. *Project Description*- The applicant does a good job with the Project Description.

2. *Hydrologic Calculation Methodology* – The information and analyses factors included in this section are correct.

3. *Flood Plain Data, Soils & Topography, On-Site Soil Testing, and Existing Conditions*-This information appears correct.

4. *Proposed Conditions-*

    - Subcatchment 1A - Please detail and call out on the plans the Hydroworks Water Quality Unit.
    - Subcatchment 1C – States "Stormwater runoff will flow via sheet flow". Cape Cod Berm is proposed along parking lot.
    - Subcatchment 2A- Revise 'southeast to southwest'.

5. *Appendix A- MA-DEP Stormwater Checklist-*
    - States that a Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan is in Stormwater Report. Please clarify.
    - An inspection and maintenance schedule for erosion and sedimentation controls along with a log form should be included.
    - Provide operations and maintenance budget

    STANDARDS

- *Standard No. 1: No new stormwater (e.g.) outfalls may discharge untreated stormwater directly to or cause erosion in wetlands or waters in Commonwealth.*

  Met. The design includes most of the stormwater discharges through water quality treatment BMPs including deep sump catch basins with hoods, Hydrostorm Water Quality Units, oil-grit separators, underground infiltration chambers, and a stormwater basins. No untreated stormwater discharge will be directed to the wetlands.

- *Standard No. 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.*

Met. The proposed design indicates that there will be no increase to off-site peak flow rates will not increase.

- *Standard No. 3; Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook..*

  Met. Recharge volumes through the use of underground infiltration chambers and a stormwater infiltration basin to meet the required recharge. Also, BMP's are included in the design to treat stormwater runoff associated with the LUHPPL's prior to discharging into the infiltration systems.

- *Standard 4: Stormwater management systems shall be designed to remove 80% of the annual post-construction load of Total Suspended Solids (TSS). The Standard is met when:*
  a. *Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained;*
  b. *Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and*
  c. *Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.*

  Met: The applicant has provided data that indicates that with the proposed design achieves 96% TSS removal.

  Also, an acceptable Stormwater Management System Long-Term Operation & Maintenance Plan has been provided. One item that needs to be included is the Hydroworks Hydrostorm Operations & Maintenance Manual.

- *Standard 5: For land uses with higher pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses with the higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMP's determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, Sections 26-53 and the regulations promulgated thereunder at 314 CMR 3.0, 314 CMR 4.00 and 314 CMR 5.00.*

  Met. The site design includes a 4500 gallon oil-grit separator to achieve TSS removal and provide oil storage in case of a spill and the design incorporates increased stormwater volumes as required in the LUHPPL areas.

- *Standard 6: Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook.*

  The site does not appear to discharge within a Zone II or Interim Wellhead Protection Area.

- *Standard 7: A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standards 2 & 3 and the pretreatment and structural best management practice requirements of Standard 4, 5 and 6. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.*

  NA. Agreed that this is should be considered as a new development and will meet all applicable Stormwater Management Standards.

- *Standard 8: A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.*

  Met: Erosion and Sedimentation Control Plans and Details have been provided in the plan set. Also, as noted by the applicant an EPA-NPDES Stormwater General Permit will be necessary due to the amount of disturbance prior to construction. This permit will require a Stormwater Pollution Prevention Plan.

- *Standard 9: A long-term Operation and Maintenance Plan shall be developed and implemented to ensure stormwater management systems function as designed.*

  See 9. Below.

- *Standard 10: All illicit discharges to the stormwater management are prohibited.*

  Met: The applicant has included an Illicit Discharge Compliance Statement for the Site Stormwater Management System in the Long-Term Operation and Maintenance Plan.

6. *Appendix E- Post Development Drainage Calculations*
   - Some of the items in the routing diagram do not replicate the design on plans. CMG should revise as necessary.

7. *Appendix F- Additional Stormwater Calculations*
   - Additional stormwater calculations appear accurate.

8. *Appendix G- Hydrostorm Manufacturers Design Report*
   - No information provided.

9. *Appendix H – Stormwater Management System Long-Term Operation & Maintenance (O&M) Plan –*
   - The Plan should include the following:
     - provisions for storing materials and waste products
     - vehicle washing controls
     - provisions for solid waste management
     - restrictions for road salt/sand
     - training for staff regarding implementation of Long-Term Pollution Prevention Plan

We are available to discuss our initial comments at the November Planning Board and Conservation Commission meetings. After hearing/receiving responses, Pare will complete our review. In the meantime, if you have any questions please feel free to contact me.

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