

**Case No. SP-51-02**  
**Landmark Auto Parts**  
Staff Report for the May 6, 2002 Development Review Committee Meeting

---

*Summary Facts:*

**Applicant:** Michael Baust, Rickmond Engineering  
**Land Owner:** Landmark Auto Parts

**Proposed Use:** 51,390 square foot office and warehouse for a regional auto parts distributor

**Location:** 1720 Endeavor Drive, James River Commerce Center  
**Tax Map/Parcel:** (59-2)(1-52)

**Primary Service Area:** Inside  
**Parcel Size:** 12.62 Acres

**Existing Zoning:** M-1, Limited Business/Industrial  
**Comprehensive Plan:** Mixed Use and Conservation Area

**Reason for DRC review:** The proposed warehouse exceeds the 30,000 square foot threshold, thus triggering automatic review.

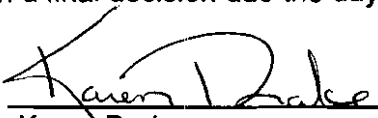
**Staff Contact:** Karen Drake Phone: 253-6685

Staff Recommendation:

Staff recommends preliminary approval contingent on the attached agency comments being addressed.

Additionally according to Section 24-35 (3) of the James City County Zoning Ordinance, "Sidewalks shall be provided along all existing public roads abutting property to be developed." If constructed, this sidewalk would be 161 feet long, divided by the 24' wide entrance driveway and not connect to another sidewalk as the James River Commerce Park is just beginning to develop with no other finalized developments. Staff recommends that in lieu of constructing the sidewalk at this time that a contribution is made to the James City County Sidewalk Capital Improvement Program fund at \$40 per foot of sidewalk or \$6440 prior to final site plan approval. Thus the sidewalk can be installed at a later date and designed to benefit this project in conjunction with the Commerce Park.

As this site plan is expedited and at the time of writing, the applicant is confirming if his client prefers to construct the sidewalk or donate the \$6440, with a final decision due the day of the DRC meeting. Staff is willing to support either choice.

  
\_\_\_\_\_  
Karen Drake  
Planner

**Attachments:**

- 1.) Site Plan (provided at the meeting)
- 2.) Agency Review Comments

**Agency Review Comments for  
SP-51-02 Landmark Auto Parts**

Planning:

1. As discussed when the plans were submitted:
  - a. On the cover sheet, correct the statistical information to include the amount of open space and the amount to be dedicated to James City County.
  - b. Detail on the site plan where future expansion of the warehouse will occur.
2. Note that the attached sign permit application must be submitted for the proposed entrance sign and approved independently of this site plan.
3. The proposed landscaping plan is in accordance with the James City County Zoning Ordinance. However, please note that there are covenants governing the James River Commerce Center and it is the owner's responsibility to obtain the necessary approvals from the Design Review Board.
4. Include a catalog cutout of the proposed lighting pole.
5. Please provide documentation that an archaeological study has been conducted for the proposed site and no historical sites of importance have been located on the proposed site.
6. The front, side and rear building setbacks are correct if the warehouse does not exceed 35 feet in height. However it is noted on the cover sheet that the maximum height of the warehouse is 60 feet, the permitted height allowed without obtaining a height limitation waiver. In accordance with Section 24-415 and 24-416 of the James City County zoning ordinance, "The minimum setback of any portion of a structure which is in excess of 35 feet in height shall be increased one foot for each two feet of the structure's height in excess of 35 feet." Therefore the building setback line must be increased by 12.5 around the entire property making the front building setback line at 65.5 feet and the side and rear setback lines at 32.5 feet. Please make the change accordingly or provide documentation of the final building height so the building setback line can be accurately noted on the site plan.
7. In accordance with Section 24-35 of the James City County Ordinance, "sidewalks shall be provided along existing public roads abutting property to be developed" and "shall be built to VDOT standards and located within the VDOT right of way when they are to be publicly maintained." Please show the location of the sidewalk accordingly or submit a letter requesting that the DRC approve a contribution of \$40 per foot of sidewalk due prior to final site plan approval so that the sidewalk can be retrofitted at a later date.
8. Document how the 32 required parking spaces were derived to verify that Section 24-59(c) of the Zoning Ordinance is being fulfilled, "Industries, warehouse and wholesale establishments not selling directly to the public shall provided a minimum of one parking space per two employees on the largest shift."

County Engineer:

1. Site inspection reveals existing channel erosion under pre-development soils and vegetative cover. Therefore outfall channel is not adequate for post development flows. Please address in the next resubmittal.
2. Clearing for future expansion should only occur at this time, not with the submitted site plan.

Environmental:

1. Please see the attached memorandum, dated May 2, 2002

Fire Department:

1. The plans are approved as submitted.

Health Department:

1. The plans are approved as submitted

JCSA:

1. Please see the attached memorandum, dated May 3, 2002.

**Agency Review Comments for  
SP-51-02 Landmark Auto Parts  
Page 2**

**Newport News Waterworks**

1. Comments will be forwarded when available.

**VDOT:**

1. The site entrance does not meet VDOT standards. See VDOT design manual for proper intersection design.
2. Provide a stop bar and sign for the entrance.
3. Provide sight distance information for the entrance.
4. Provide a detail showing how the entrance drainage will be accommodated.

**ENVIRONMENTAL DIVISION REVIEW COMMENTS**  
**LANDMARK AUTO PARTS (JAMES RIVER COMMERCE PARK)**  
**COUNTY PLAN NO. SP - 051 - 02**  
*May 2, 2002*

**General Comments:**

1. A Land Disturbing Permit and Siltation Agreement, with surety, are required for this project.
2. A Standard Inspection / Maintenance agreement is required to be executed with the County due to the proposed stormwater conveyance systems and Stormwater Management/BMP facility associated with this project.
3. Record Drawing and Construction Certification. The stormwater management/BMP facility as proposed for this project will require submission, review and approval of a record drawing (as-built) and construction certification prior to release of the posted bond/surety. Provide notes on the plan accordingly to ensure this activity is adequately coordinated and performed before, during and following construction in accordance with current County guidelines.
4. Responsible Land-Disturber Notification. Provide the name of an individual who will be in charge of and responsible for carrying out the land-disturbing activity. Permits or plans without this information are deemed incomplete and not approved until proper notification is received.
5. Site Tabulation. Provide a proposed total impervious cover figure (or percent) in the site tabulation on the cover sheet for the project. The single value should be a combined figure for building and paved area as shown.
6. VPDES. It appears uses at the site (ie. vehicle maintenance area) may warrant the need for a General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater Associated with Industrial Activity. It is the owners responsibility to register and comply (if necessary) with current requirements of the Virginia Department of Environmental Quality and 9 VAC 25-151-10 et seq. Contact the Tidewater Regional Office of the DEQ at (757) 518-2000 or the Central Office at (804) 698-4000 for further information.

**Floodplain:**

7. FEMA Special Flood Hazard Areas. Show the limits of Zone AE Special Flood Hazard areas on all plan sheets as applicable. Based on the referenced FEMA FIRM panel it appears Zone AE may be present on the site in the southwest corner along the unnamed tributary to Grices Run.

**Chesapeake Bay Preservation:**

8. Environmental Inventory. Although Sheet C2 shows 25 percent slope and wetland information, an environmental inventory is needed that shows all components as listed under Section 23-10(2) of the Chesapeake Bay Preservation ordinance. An inventory should list

the components and state whether or not they are present on the site and whether or not site development will impact these features.

9. RPA Signs. Include a note on the plan requiring installation of signs to identify the landward limit of the RPA. Refer to Section 23-9(c) of the Chapter 23 Chesapeake Bay Preservation ordinance.

**Erosion & Sediment Control Plan:**

10. Design Checklist. Please provide a standard James City County Erosion and Sediment Control and Stormwater Management Design Plan Checklist, specific to this project.
11. Temporary Stockpile Areas. Show any temporary soil stockpile, staging and equipment storage areas (with required erosion and sediment controls) or indicate on the plans that none are anticipated for the project site.
12. Limit of Work. Distinctly label the proposed tree line on Sheet C2 as limit of work (clearing and grading) for the project. The limit of work should also contain utility connections and installation of erosion and sediment controls.
13. Soils Map. Provide a soils map to accompany soil descriptions as provided in the design report.
14. E&SC Plan. The primary drainage outfall for the site is a natural channel situated in the southwest corner of the site. Directly downstream of this natural channel is RPA and delineated wetland. The Phase I erosion and sediment control plan on Sheet C2 shows use of perimeter silt fence along the limit of clearing as the primary protection measure for this area. Silt fence placement as shown is perpendicular to the contour along slopes ranging from 10 to 20 percent and the silt fence is shown crossing the natural channel where a significant amount of concentrated flow will be present during all phases of land development. Use of silt fence in this manner is inconsistent with the provisions of Minimum Standard & Specification 3.05 of the VESCH. Therefore, alternative structural controls are necessary in this corner of the site. It is suggested that during Phase I, a temporary diversion dike be used across the middle portion of the site (in a north to south direction) to divert as much disturbed area drainage associated with clearing and grubbing operations to the proposed sediment basin. In conjunction, a temporary sediment trap should be utilized in the southwest corner of the site, near the proposed outfall of the 24-inch HDPE barrel from the pond. This measure will control less than 2 acres of drainage. Perimeter temporary diversion dikes should be utilized along limits of clearing to convey disturbed area drainage from this portion of the site to the sediment trap. The diversions and sediment trap needs to go in before or simultaneously with site clearing operations. Use of the diversion across the site to the sediment basin (future BMP) will limit the drainage area and keep the size of the sediment trap in the corner to a minimum. Silt fence can then be effectively used along the northwest corner, the north limit of work and the northeast corner of the site (as shown) to handle overland runoff associated with disturbed areas.
15. Sequence of Construction. Add the following to Step 12 of the sequence of construction on Sheet C4 A and convert temporary sediment basin to final BMP configuration.
16. Outlet Protection. Specify riprap class and thickness, pad dimensions and amount of stone

to be used in accordance with requirements of the VESCH, Minimum Standards 3.18 and 3.19 at the outfall end of the barrel from the BMP. Also, add outlet protection to the outfall end of the 30-inch RCP into the pretreatment sediment forebay.

17. Temporary Sediment Basin. The Sediment Basin Detail on Sheet C9 needs to show the 5" diameter flexible tubing for the dewatering orifice consistent with the sediment basin design data sheet. Dewatering orifice configuration shall meet the requirements of Minimum Standard & Spec 3.14 of the VESCH.
18. Slope Stabilization. Label the intended slope of the fill along the west side of the warehouse (2H:1V, etc.) as shown on grading plan Sheet C4. If this slope is steeper than 3H:1V, then erosion control matting is required. Provide keys and symbols in accordance with the VESCH, if matting is required.
19. Rock Check Dam. For the Phase I erosion and sediment control plan, add a rock check dam (CD) in the natural stream channel in the southwest corner of the site. This will provide interim control during construction of the sediment trap (if used), the sediment basin and during installation of the storm drain outlet barrel from the BMP. Once the site is stabilized, the check dam can be removed and rock used for outlet protection purposes.

#### **Stormwater Management / Drainage:**

20. Development Plan/Drainage. The plan needs to reflect the intent of the 180 ft. wide strip to the west of the proposed warehouse. This area is shown to be cleared; however, there is no permanent feature or structure situated within this area. The inset map provided in the design report shows this area inclusive as impervious area associated with the site. If it is intended to be a next phase of development, label as such on plan sheets as applicable and show permanent seeding keys and symbols in accordance with the VESCH on grading plan Sheet C4. *(Note: Based on the design report, impervious area to the pond is greater than that shown on the site tabulation. If the future area is developed, this area will need to drain to the pond as indicated in the design report. Ensure the onsite storm drainage system is of proper capacity and is of sufficient depth to accept drainage from this potential future area and proper connection can be made to the storm drain system without conflict.)*
21. Trailer Loading Area. Investigate the possibility of directing drainage from the uncontrolled AACO@ drain at the trailer loading area to MH-1 (top El. 38.5) and into the onsite storm system which leads to the BMP. Provide a spot elevation for the bottom of the bay (or top of trench grate) on Sheet C4. If the drain is necessary to be uncontrolled due to depth problems, show invert out elevation for the drain at the outfall.
22. Drainage Maps. The pre- and postdevelopment drainage area inset maps as provided in the design report need to show offsite area consistent with the inset map provided to show drainage area for the onsite storm drainage system. It appears there is offsite area from the parcel to the east of the site (near the Endeavor Drive cul-de-sac; subarea DA-6).
23. Open Space. Provide an inset map showing the delineation of natural open space point credit areas to correspond with values used in the natural open space portion of the BMP point calculation worksheet. For the 0.10 points per 1 percent portion, 0.743 acres of RPA was used. For the 0.15 points per 1 percent method, 4.385 acres adjacent to RPA was

used. The inset map should show a clear representation of these areas corresponding to the values shown in the worksheet. Also, plan sheet C3 conflicts with the BMP worksheet, as the open space note shows 9.48 acres to be dedicated as open space, yet the worksheet show 5.13 acres.

24. **Open Space Credit.** Provide conservation easements for all Natural Open Space areas claimed in the BMP worksheet. Normally this is required prior to issuance of a land-disturbing permit.
25. **BMP Worksheet.** There appears to be a discrepancy in the calculation for the structural component of the BMP worksheet. To obtain 4.39 weighted points for the wet pond, the fraction of site served by the BMP must be 54.9 percent. To serve 54.9 percent, 6.93 acres must drain to the BMP. This does not appear to be the case. Based on addition of subareas DA-1, DA-3, DA-4, DA-5 and DA-6 there is only 2.58 acres draining to the BMP. Provide a breakdown for the numerator portion of the  $A_{fraction}$  of site served by BMP@ in the point worksheet.
26. **BMP Design.** Label intended graded sideslopes of the interior portion of the basin (3H:1V, etc.).
27. **Pond Benches.** Address safety and aquatic pond bench requirements for wet ponds 4 ft. or greater in depth. A safety bench extending 15 ft. outward from the normal pool is required. An aquatic bench extending up to 15 ft. inward from the normal shoreline with a maximum depth of 12 inches below the normal pool is also required. Safety bench requirements may be waived, if pond sideslopes are 4H:1V or flatter. Normal recommended bench widths are 10 to 12 feet.
28. **Pond Landscaping.** Provide a landscaping plan with details as necessary to address landscaping and stabilization in and around the BMP. Indicate any special plantings, vegetation, seeding, mulching, sequences of construction or stabilization methods required to support the deep water, shallow water, shoreline fringe, riparian fringe, floodplain terrace, upland zones and aquatic benches associated with the County type A-2 wet pond facility. Refer to Minimum Standard 3.05 of the VSMH.
29. **Principal Spillway.** The DI-1 grate top unit as proposed for the principal spillway structure is generally not acceptable for use due to clogging and maintenance problems. Use of a larger bar unit such as a VDOT DI-7 grate is preferred; however, beehive, convex, basket type, inverted DI-5 type or similar applications, such as HDPE trash racks per Technical Bulletin # 7 of the VaDCR can be considered on a case-by-case basis. Provide appropriate riser, grate and bar details as applicable.
30. **BMP Hydraulics.** As there is a bypass drainage area (which includes an uncontrolled AACO@ drain at the trailer loading area) between the BMP and the barrel outfall (ie. point of analyses), MS-19 procedure would still apply. Provide the 2-year postdevelopment pond routing as it was not included in the design report. Postdevelopment routing at the analyses point (combined BMP with bypass) should not exceed pre-development conditions for the 2-year event.
31. **BMP Hydraulics.** The design report shows 270 ft. length of 24-inch RCP pipe used for the BMP outlet storm drain barrel. The plans show 300 ft. length from the BMP to the outfall. Ensure 30 ft. more of pipe length will not affect BMP hydraulics as offered in the design

report.

32. **Token Emergency Spillway.** If the principal spillway is to be used as the primary control for the 100-year event, use of a token emergency spillway is necessary as a secondary emergency release mechanism. The token spillway can be set above the design 100-year WSEL as to not impact pond hydraulics and can be simple in nature such as minimum 8 ft. width with 2H:1V side slopes. Use of a token spillway, as such, can reduce the freeboard requirement to 1 foot, if necessary for design.
33. **Overflow.** Ensure grading is such that should there be any overflow from the BMP or the token spillway, it is not directed onto Endeavor Drive or the adjacent parcel to the south, but is kept onsite and directed toward the natural outfall channel located in the southwest corner.
34. **Pond Riser.** Since the riser is greater than 4 ft. in depth, steps are required for access.
35. **Pond Barrel.** There is a conflict between plan Sheet C5 and the BMP detail on Sheet C9. The plan sheet shows use of corrugated polyethylene pipe and the detail sheet shows use of reinforced concrete pipe. Concrete is preferred; however, for this case, corrugated polyethylene can be used if proper evidence of structural and hydraulic design is offered. For either case, water-tight joints are required. Also, provide IS-1 inlet shaping at the MH-1 structure along the outlet barrel (Top El. 36.0).
36. **Pond Drain/Valve.** Provide a pond drain and valve system that is capable of completely or partially draining the entire facility within 24 hours for future maintenance purposes. Include specifications for valve size, type and materials and supporting hardware. Normally valves, extension handles, mounting hardware, etc. are installed within the interior of the riser structure so it is not normally inundated and can be accessed for inspection and operated in a safe manner.
37. **WSEL.** The water surface elevation of the BMP for the 1-year storm event, as shown at the bottom right hand corner of Sheet C4, is incorrect. This elevation is for the 10-year design.
38. **Maintenance Plan.** Provide a maintenance plan for the stormwater management/BMP facility. Section 23-10(4) of the Chesapeake Bay Preservation Ordinance requires stormwater management plans to include a long-term schedule for inspection and maintenance of stormwater management/BMP facilities. The plan should be specific for a wet pond facility and include a long-term clean out elevation or depth.
39. **Channel Adequacy.** As there is bypass and uncontrolled drainage between the BMP and the point of analyses outfall, adequacy computations are necessary for the natural channel between the AACO@ drain outfall and the BMP barrel outfall. Adequacy computations are required to verify that the natural channel is adequate for erosion resistance for the 2-year frequency storm.
40. **Storm Drain Computations.** The storm drain pipe summary table in the design report shows 7.52 cfs for Pipe 4 to Pipe 3 which is to MH-1 (Top El. 38.5 ) near the tractor trailer loading area. Based on the drainage map, this value matches discharge for entire drainage area DA-1. Firstly, describe if it is possible for all the building drainage to be directed to this



structure. Secondly, there needs to be some advance planning for the potential of additional drainage from the expansion area (west of the main building) to this structure. Refer to Item 2.6 of the JCC Environmental Division, Stormwater Drainage Conveyance Systems (Non-BMP related), General Design and Construction Guidelines.

41. RCP Pipe. Indicate class of RCP to be used for all onsite storm pipe segments, especially the outfall barrel from the pond (if concrete is used) and the pipe segment which crosses the access road into the facility.
42. Entrance Culvert. Ensure an culvert is not necessary across the site entrance.
43. HDPE Pipe. It appears the 24-inch outfall barrel from the BMP will be excessive deep in some areas. If corrugated polyethylene pipe is used, ensure structural design of the pipe is adequate to resist pipe deflection, buckling, bending stress, etc. Refer to requirements of the Corrugated Polyethylene Pipe Association and ASTM D2321. Provide a full length profile of the barrel on Sheet C9 from the BMP to the natural channel. Show distinct installation (bedding and backfill) details for the pipe with full consideration of the potential for seepage along the barrel from the pond and indicate specific pipe material type and class required to meet design requirements.
44. Vehicle Maintenance Area. Due to operations in this area, evaluate the need for a shutoff mechanism at the DI-3B inlet (Top El. 35.75) or the downstream 18-inch storm pipe as part of a spill prevention plan to minimize the risk of a spill or contact runoff from entering the BMP.
45. Geotechnical. Provide information (preliminary soil evaluations, logs, test results, reports, etc.) as necessary to substantiate that existing soils beneath the wet pond facility are adequate to sustain a permanent pool as intended for water quality purposes. *(Note: Sheet C9 indicates reference to a geotechnical report by Schnabel Engineering dated July 28<sup>th</sup> 2000 . A copy of this report was not attached to the site plan application.)*



## MEMORANDUM

---

Date: April 3, 2002  
To: Karen Drake, Planner  
From: Danny W. Poe, P.E., Chief Engineer - Wastewater  
Subject: SP-51-02, landmark Auto Parts

We reviewed the site plan for the above project you forwarded on 4/26/02 and noted the following comments. We may have additional comments when a revised plan incorporating these comments is submitted.

1. This project shall be required to comply with the new JCSA Water and Sewer Standards adopted April 25, 2002. These newest standards incorporate the HRPDC Regional Standards for construction materials and construction specifications.

### Sheet C5

2. The plans and grinder pump calculations must be reviewed and approved by the Department of Health, Division of Wastewater.

3. The water system must be reviewed and approved by the Newport News Waterworks Department, since the water systems in the Robert's District belong to Newport News. The utility easement should be dedicated to NNWW. Newport News may not want JCSA's Detector Check assembly detail referenced.

4. Note the size of the existing water main in Endeavor Drive.

5. Indicate how the connection to the existing water main is proposed to be made. A gate valve on the water main at the right of way line is typically not desired; instead it should be located immediately at the connection to the main (NNWW will have to confirm their preference).

6. JCC Fire Department must approve the fire demand and supply calculations.

### Sheet C13

7. Revise the notes to reflect the new verbiage found in the April 2002 JCSA Standards, page 5-1. References to water system may be struck.

Miscellaneous

8. The Sewer Data Sheet should include about 5 feet of 2" force main in the piping system description block.

9. The grinder pump calculations must account for losses and static head all the way to the HRSD main. A pressure letter is required from HRSD to properly assess the range of head conditions that may be encountered. On page 9 of the calculations, the design and operating points incorrectly designate the head in feet, when psig is actually indicated. Appendix C indicates that sheet C13 is included; the copy I have included C7. I realize that the E-One pump has a steep pump curve and will accommodate a significant head, but I am concerned that someone may look at the calculations and decide to select a different pump in the future that will meet the design point calculated, but will not be able to pump against the true head, which must be considered all the way to HRSD.

Please call me at 253-6810 if you have any questions or require any additional information.

DWP/

**AGENDA**

**DEVELOPMENT REVIEW COMMITTEE**  
***Call Meeting To Review An Expedited Site Plan***

**May 6, 2002**

6:30 p.m.

JAMES CITY COUNTY GOVERNMENT COMPLEX

Conference Room, Building C

---

1. Roll Call
2. Case
  - A. SP-51-02 Landmark Auto Parts
3. Adjournment