

**VILLAGE OF SPARTA  
PLANNING COMMISSION  
Regular Meeting  
October 14, 2024 @ 7:00 PM  
75 N. Union St. (Sparta Civic Center)**

- 1) CALL TO ORDER
- 2) PLEDGE OF ALLEGIANCE
- 3) ROLL CALL
- 4) ADDITIONS OR CORRECTIONS TO THE BUSINESS & CONSENT AGENDA  
Consent Agenda:
  - a. Approve Regular Planning Commission Meeting Minutes of August 5, 2024
- 5) APPROVAL OF CONSENT & BUSINESS AGENDA
- 6) PUBLIC COMMENT ON AGENDA ITEMS
- 7) PUBLIC HEARING –
  - a. Ord. 24-07 An ordinance to amend – Chapter 82 Zoning: Zoning Map
- 8) NEW BUSINESS –
  - a. Ord. 24-07 An ordinance to amend – Chapter 82 Zoning: Zoning Map
  - b. Site Plan Review- 745 S. State Street Armock
- 9) UNFINISHED BUSINESS –
  - a. None.
- 10) PUBLIC COMMENT
- 11) VILLAGE MANAGER REPORT
- 12) COMMISSION COMMENT
- 13) ADJOURNMENT



**VILLAGE OF SPARTA  
PLANNING COMMISSION  
Regular Meeting  
August 5, 2024, 7:00pm  
75 N. Union St. (Sparta Civic Center)**

**Present:** Chairperson Emilie Henry, Commissioners Bob Liscombe, Jon Braybrook, Robert Carlstrom, Rose Frederick, Gary Moody, Christina Owens, and Robert Whalen.

**Absent:** None.

**Also present:** Village Manager Jim Lower, DPW Director Bill Hunter, Fire Chief Dan Olney, and Village Clerk Katy Shelton.

- 1) **Call to order:** The meeting was called to order at 7:00pm.
- 2) **Pledge of Allegiance:** The Pledge of Allegiance was recited.
- 3) **Roll call:** Formal roll call was taken. Those in attendance/absent are noted above.
- 4) **Additions or corrections to the business and consent agenda:**
  - a. Approve Regular Planning Commission Meeting Minutes of July 8, 2024. Commissioner Moody noted an error on those minutes in which he was mistakenly listed as “absent” when he was in fact present.
- 5) **Approval of consent and business agenda:** With the above correction, motion by Whalen with a second by Carlstrom to approve. Motion passed unanimously.
- 6) **Public comment on agenda items:** This will be covered under the “public hearing” item.
- 7) **Public hearing:**
  - a. **Special Land Use Application 200 Maple Street Chemical Mixing and Storage:**

Public hearing opened at 7:02pm. Kassra Darehshori, 2011 Devenwood Lane, Grand Rapids, the owner of Aaltoll LLC, spoke and described his business and its history. He said that his company is a contract chemical manufacturing company that produces energy and

water based curable adhesives, coatings, and inks for use in graphic arts and industrial applications. He said that he has made significant investments to revitalize the building at 200 Maple St for its use as a manufacturing facility and office space. (This is the former Federal-Mogul building.) He said that his company shares the space with Cascade Die Coating, which uses the other half of the building.

Commissioners then asked Mr Darehshori several questions regarding the operations of the company as well as questions relating to the fire that occurred there on May 21, 2024. The main concern of the Commission was that Aal Toll started operations without getting the appropriate prior approvals and inspections from the Village. Therefore, when the Fire Department came on scene to fight the fire, they had no knowledge of what sorts of chemicals they might be encountering. Commissioners also asked about the status of fire suppression equipment.

Terry Brandt, from parent company Aalchem in Pennsylvania, discussed some of the chemicals that the company uses. He also spoke about giving that information to the Fire Departments that were on site as well as the Kent County Emergency Management office and the Hazardous Materials Team from the Grand Rapids Fire Department.

Sparta Fire Chief Dan Olney then gave his report to the Commission about the night of the fire as well as his thoughts on the chemicals that are used at that location. In particular, he compared the amount of chemicals stored there with chemicals stored at other Sparta businesses. He emphasized that the main cause of the black plumes of smoke and noxious vapors was from the roof of the building melting – not from the burning of any of the stored chemicals. He said that it was determined that neither an evacuation nor a shelter in place order was needed. He said it was also determined that all of the product involved was contained to the building and did not make its way to any storm drain or natural waterway.

Several residents asked about the registered letters that were sent out regarding Aal Toll. Jack Draper, 355 Martindale St, Sparta, said that his business received a letter, but other residents did not. The Village Manager responded that it's a state law that everyone within 300' of the proposed business received a registered letter.

There were other questions regarding who Aal Toll's customers were and if they were shipping things overseas. It was mentioned by several people that it appeared as if Aal Toll had ignored local regulations and "cut the corners" when they began operations at that location. There was a lot of concern expressed about the possibility of future fires.

Mr Darehshori admitted that his company had made mistakes in the past but said he wouldn't do that in the future. He also denied cutting any corners.

Robert Barber, 77 E. Division, Sparta, said that he owned a small business in the village. He said that **everyone** needs to play by the rules. If you need to get proper zoning, you get proper zoning. If you need to get the proper permit, you get the proper permit. He asked Mr Darehshori how he could let fire fighters enter that burning building without having advance notice of the chemicals that were contained within it.

Jackson Morris, 349 Fairlane, Sparta, said that he felt the company didn't disclose adequate information about the chemicals they had on site until they were forced to by the fire. He said that Mr Darehshori was an experienced businessman and knew fully well the proper way to conduct his business. He also asked if the groundwater had been contaminated in any way. He then questioned that if the fire had not occurred, at what point would the company have alerted the Village as to the nature of the chemicals being stored at their facility.

William Lewis, 126 Ida Red, Sparta, asked what caused the fire. He also asked about the mixing of chemicals at a different location by this company.

Tom Peoples, 179 Alma St, Sparta, asked why the company didn't submit the proper paperwork before they started the processes which caused the fire.

Shawn Ornlín, 20598 \_\_\_\_\_, Sparta, asked if the pits were still open at the location. Mr Darehshori said that they were and were in an area of the building that would need to be demolished.

Ricky Johnson, 129 Centennial, Sparta, said that the night of the fire he had to pack up his family and move to another location due to the smoke and noxious smells. He said that it wasn't until 5-8 days later that he was able to get any good information as to what kind of

chemicals were involved in the fire. He said that Mr Darehshori had bought a really old building and didn't tell the Village what sorts of chemicals they were using and storing there. He also said that he didn't think there should be businesses such as these in such close proximity to residential neighborhoods.

Dan Olney, 200 10 Mile Rd, Sparta, is the Sparta Fire Chief. He said that the business obviously didn't give proper notification to the Village before they started operations. He said that the Village released information on the day after the fire regarding what chemicals were involved. He reiterated that the black cloud seen during/after the fire was due to the melting of the insulation and rubber roofing in and on the building – and not due to chemicals.

Robert Bearsma, 372 Fairlane Dr, wanted to know how much water was needed to put out the fire.

Jackson Morris, who spoke earlier, asked if the company has received any compliance fines. Jeff Carnate from All Chem, said that they have not received any OSHA violations. He said that the only incident that has ever occurred was when one of their customers improperly dumped one of their drums. After the drum was found, the company had to change some of the labeling on their drums. It was agreed that once the drums leave their possession, that the company has no control over what their customers do with them.

Public hearing closed at 8:27pm. Regular meeting resumed after a short break.

## **8. New Business:**

**a. Special Land Use Application – 200 Maple St. Chemical Mixing and Storage:** Village Manager Lower gave a precis of this request and what it involves. He said that the Village had received a special land use request for this location from Aal Toll to operate a chemical production, blending and storage operation. If approved, this application would only account for a portion of the building since Cascade Die Casting is leasing the other portion for light manufacturing.

He said that he first had to determine what special land use (if any) this use falls under because it is not specifically mentioned in the Village ordinance. He decided that the closest option is in Section 82-253(7): metal plating, buffing, and polishing, subject to appropriate measure to

control the types of process to prevent noxious result and/or nuisances requirements.

He then said that there are both specific requirements in the ordinance related to the specific special land use being requested, but also a set of general standards that need to be met before an approval can be recommended to the Village Council from the Planning Commission.

The **specific** requirement of a minimum of a two acre lot size **has** been met. The specific requirement that main and accessory buildings shall be set back at least 100' from all property lines and a minimum of 200' from adjacent residential uses **has not** been met. There is a specific requirement regarding outside storage. The submitted proposal does not appear to be proposing any outside storage, although the Village needs to confirm this with the applicant. Two other requirements are not applicable to this business.

There are also several general standards applicable to all special land uses. The first refers to the Village of Sparta Master Plan and the second has to do with the outside appearance of the building and property. Both of those standards **have been** met. The third standard refers to ensuring that the necessary public facilities, such as storm water drainage, fire protection, sanitary sewer disposal, et al, be adequate to serve the proposed project. The Village Manager said that the site will need fire suppression in order to meet this requirement. He also stated that the applicant would need to work with the Village to ensure that no chemicals enter the Village water, waste water, or stormwater system.

The fourth requirement states that the "proposed use shall not be hazardous or disturbing to neighboring uses or cause any conflict to the existing use and quiet enjoyment of surrounding property." The fifth requirement states that the "proposed use shall not involve activities, processes, materials and equipment, and conditions of operation that will be detrimental to any person, property, or the general welfare by reason of excessive traffic, noise, smoke, fumes, glare, or odors."

He said that in light of the recent fire and potentially dangerous nature of the proposed use, the Planning Commission and ultimately the Village Council will need to determine whether these last two requirements have been met.

The Commissioners and the Village Manager then spent some time discussing this application. The Village Manager said that this issue was on the agenda for the next Village Council meeting on August 12<sup>th</sup>. Commissioners Liscombe and Moody discussed creating a new zoning classification for this type of business and potentially allowing it to move forward. Commissioner Carlstrom said that the fire at this location scared him and made him not be able to trust the company. Commissioner Whalen said that the company didn't do the right thing from the beginning. Although he said he was very much "pro business", he could not vote to move forward with this application, noting that the company did not meet several of the above requirements.

Motion by Moody with a second by Liscombe to create a separate zoning category for this business and to move forward. Roll call vote as follows: Moody, Braybrook, Liscombe, and Frederick voted for this motion. Whalen, Carlstrom, Owens, and Henry voted against this motion. The motion failed since it was a tie vote.

Motion by Whalen with a second by Owens to deny this application. Roll call vote as follows: Whalen, Carlstrom, Owens, and Henry voted to deny this application. Frederick, Liscombe, Moody, and Braybrook voted to approve this application. The motion failed since it was a tie vote.

This issue will be revisited at the next Village Council meeting on August 12<sup>th</sup>.

- b. **Site Plan Review: 260 W Division St. Sparta Village Complex:** The Village Manager discussed the site plans. He said that the next steps include getting building permits, putting the project out to bid, selecting a contractor, and deciding on the bond amount. He anticipates breaking ground next March or April 2025. Motion to approve the site plan made by Moody with a second by Frederick. Motion passed 7:1 with Liscombe dissenting.

**9. Unfinished business:**

- a. None.

**10. Public comment:**

- a. None.

**11. Village Manager Report:** Village Manager Lower thanked the Commission for their work on the Aal Toll application. He said that the



Village followed the statutory requirement regarding sending registered letters to people within 300 yards of the business. He said that this issue will go to the Village Council with **no** recommendation from the Planning Commission since the vote to approve ended in a tie. He said there were lots of projects coming up in the next year. He specifically mentioned the DNR grand applications, a playground by the new Sowing Seeds day care facility, the kayak boat launch by the Rogue River, the new Village Complex, and the Sparta Town Square Project with the railroad depot relocation and parking lot resurfacing. He said that a new wastewater superintendent had been hired and has already started work. Commissioner Whalen thanked Commissioner Carlstrom for his help in bringing this employee to Sparta.

#### **12. Commissioners Comment:**

Commissioner Whalen said that Commissioner Carlstrom would be a write in candidate for the Village Council this November due to a problem with his nominating petition. He urged everyone to write him in on their ballot stating that no one has been more integral to the successful work of the Council than Carlstrom has. He said that Carlstrom is particularly suited to that role due to his professional background.

Commissioner Moody asked what the cost of the new Village Complex was estimated to be. The Village Manager said it was in the neighborhood of \$2,500,000. He anticipates obtaining a bond of \$1,500,000. He said that the building currently housing the Village offices will bring in money once it is sold. It was mentioned that the cost to rehabilitate the current offices was approximately \$1,000,000, so selling that building and building a new facility made fiscal sense.

**13. Adjournment:** Meeting was adjourned by Chairman Henry at 9:37pm.

Submitted by Katy Shelton, Village Clerk.





#.7a & 8a  
Village of Sparta Planning  
Commission  
October 7, 2024

## **ACTION MEMO**

### **Staff Communication**

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**DATE:** October 7, 2024  
**TO:** Planning Commission Chair and Planning Commission Members  
**FROM:** James A. Lower Village Manager  
**RE:** Ord. 24-07 An ordinance to amend – Chapter 82 Zoning: Zoning Map

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### **SUMMARY OF REQUEST:**

92 N. State Street is being sold to Habitat for Humanity to build a house. As part of the sale, they need the parcel rezoned from B-Business to RH- Residential High Density.

15 E. Averill Street has split zoning. It appears at one time this was multiple parcels. They have since been combined but the zoning was never unified. This needs to be corrected so that the parcel can be developed into it's highest and best use.

### **STAFF RECOMMENDATION:**

Staff recommends the following motion: Motion to recommend adoption of Ord. 24-07 to the Sparta Village Council.



VILLAGE COUNCIL  
VILLAGE OF SPARTA  
KENT COUNTY, MICHIGAN

At a regular meeting of the Village Council of the Village of Sparta, held at the Sparta Civic Center, located at 75 N. Union Street, Sparta, Michigan 49345 on Monday October 7, 2024, at 7 PM the following Ordinance was offered by Council Member \_\_\_\_\_ and seconded by Council Member \_\_\_\_\_

**ORDINANCE NO. 24-07**

AN ORDINANCE TO AMEND THE VILLAGE OF SPARTA ZONING ORDINANCE AND ZONING MAP, CHAPTER 82, ARTICLE III, DIVISION 2, SECTION 82-152 OF THE VILLAGE OF SPARTA CODE OF ORDINANCES

THE VILLAGE OF SPARTA (the “Village”) ORDAINS:

**Section 1. Amendment.** That Chapter 82, Article III, Division 2, Section 82-152 of the Village of Sparta Code of Ordinances is amended as follows:

The Zoning Ordinance and Zoning Map of the Village of Sparta, Kent County, Michigan, the map being incorporated by reference in the Zoning Ordinance for the Village of Sparta pursuant to Section 82-152, are hereby amended so that the parcels of lands shall be rezoned as follows:

92 N. State Street Sparta, Michigan 49345, identified as parcel identifications number is 41-05-14-351-019, is changed from B-Business to RH-Residential High Density.

15 E. Averill Street Sparta, Michigan 49345, identified as parcel identifications number is 41-05-23-151-033, is changed such that the entire parcel is zoned B-Business. Previously part of the parcel was zoned RM- Resident Medium Density.

**Section 2. Effective Date.** This amendment to the Village of Sparta Zoning Ordinance and Zoning Map shall become effective upon the expiration of seven (7) days after the ordinance/ordinance amendment or Notice of Adoption appears in the newspaper as provided by law.

The vote to approve this rezoning ordinance/ordinance amendment was as follows:

YEAS:

NAYS:

ABSTAIN/ABSENT:

ORDINANCE DECLAIRED ADOPED

I, Katy Shelton, the Clerk of the Village of Sparta, attests that the foregoing is a true and accurate copy of an ordinance adopted by the Village Council of the Village of Sparta at a regularly scheduled meeting held on October 7, 2024, which meeting was held in accordance with State Law.

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Katy Shelton, Village Clerk

Introduced: \_\_\_\_\_  
Public Hearing: \_\_\_\_\_  
Adopted: \_\_\_\_\_  
Published: \_\_\_\_\_  
Effective: \_\_\_\_\_

**MEMO**  
**Staff Communication**

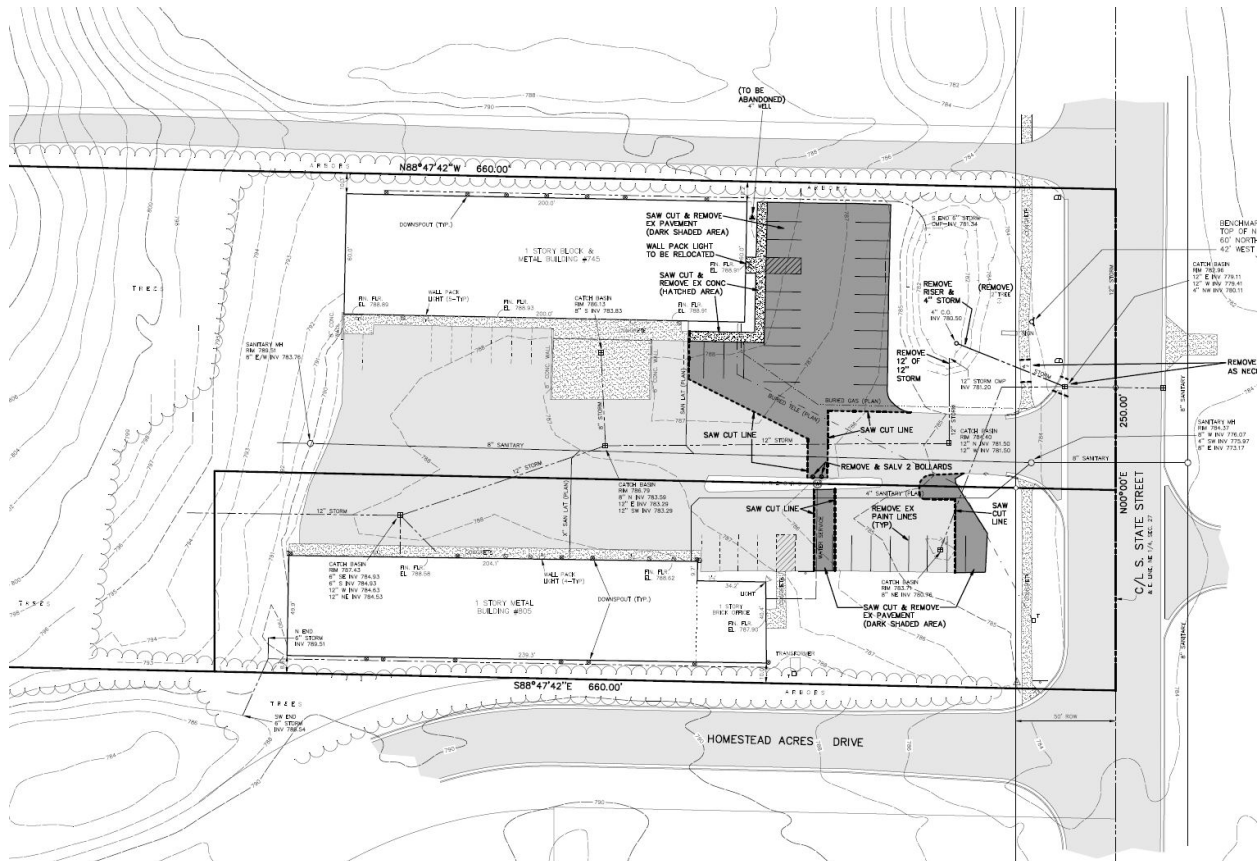
**DATE:** October 7, 2024  
**TO:** Planning Commission Chair and Planning Commission Members  
**FROM:** James A. Lower, Village Manager  
**RE:** Site Plan Review Report – 745 S. State Street, Sparta, MI 49345

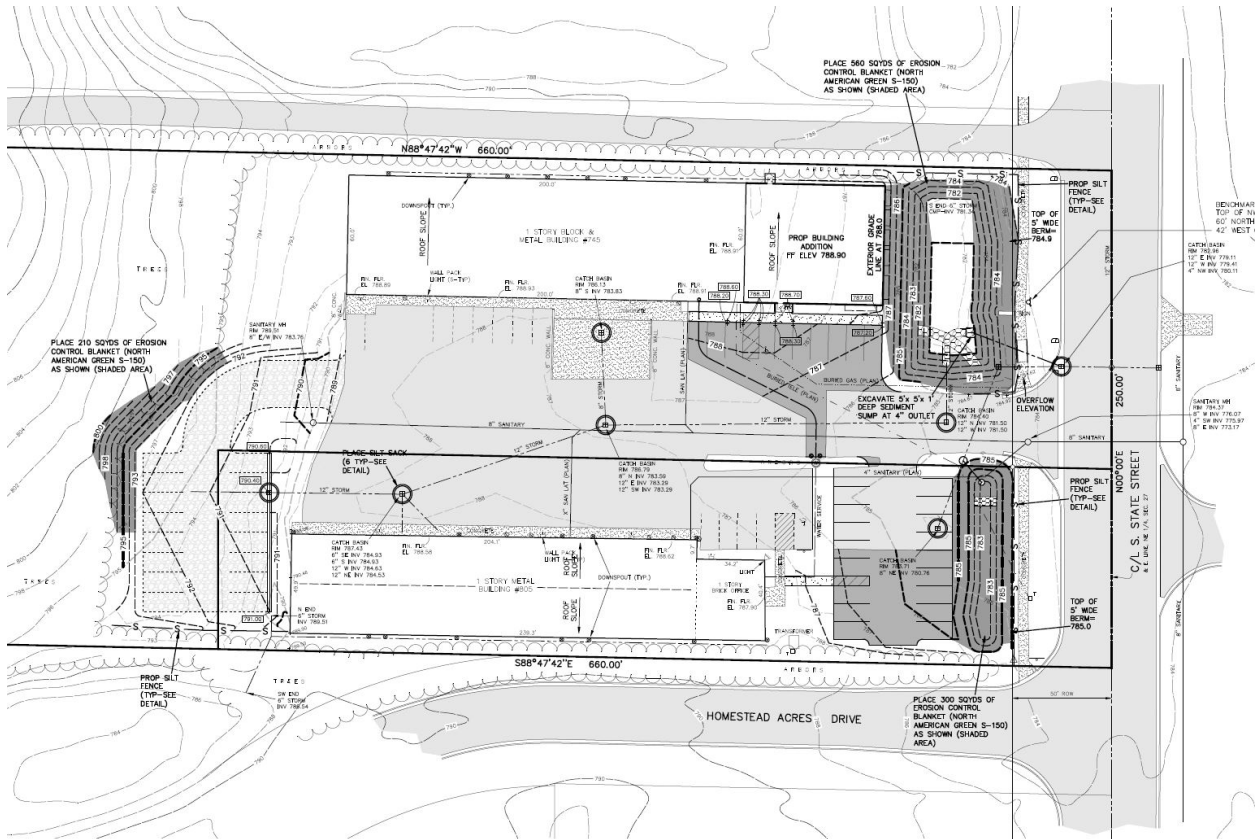
**General Information**

The proposed site plan involves the demolishing of the existing parking lot on the east side of the building and the construction of a 60' by 70' expansion to that building. The plan will also reconfigure the parking for the site. The addition will be primarily used as office space.

**Notes:**

Overview of additions (Drawings will be on the projector at the meeting)





**Site Location:**

745 S. State Street Sparta, MI 49345. This property is just to the North of Homestead Acres Drive. The building is on the Norhside of the side.

**Current Zoning:**

B- Business

**Surrounding Land Uses and Zoning:**

- North: B- Business
- East: Township Property
- West: Township Property
- South: B- Business

**Applicable Regulations:**

The building and property require site plan review and a storm water management plan.

**Master Plan:**

The site plan and zoning of the area match the goals of our master plan.



**Staff Comments and Proposed Conditions:**

We received the revised stormwater plan late in the day on Thursday. As such our engineering team is still reviewing the plan. We will need to finish the stormwater review before final approval can be given.

The proposed site plan changes are very straight forward and simple in nature.

**Staff Recommendation**

Staff recommends a motion to approve the site plan as presented contingent upon staff signoff on the stormwater & architectural plan.

The Planning Commission will meet **October 7, 2024 at 7:00 PM**. If you have any questions or concerns about this report or you are unable to attend the meeting, please contact me [villagemanager@spartami.org](mailto:villagemanager@spartami.org).





September 5, 2024

Mr. Jim Lower  
Sparta City Manager  
156 E Division  
Sparta, MI 49345

Re: Armock – 745 South State Street

Dear Jim,

Please find enclosed the following items in application for site plan approval.

1. Application
2. \$20 check
3. Site plans (sheet 1-3) - PDF copy emailed
4. Detention basin calculations
5. Project narrative

Please place this request on the October 7, Planning Commission agenda.

If you have any questions or comments, please don't hesitate to contact me.

Sincerely,

  
Doug Stalsonburg

cc: Kevin Vreugdenhil  
Kevin Koster

P:/projects/2024/241659/document/letters/L241659



# VILLAGE OF SPARTA PLANNING COMMISSION APPLICATION

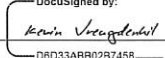


Visit our website at [www.spartami.org](http://www.spartami.org)

<input type="checkbox"/> Rezoning: From _____ to _____	<input type="checkbox"/> Zoning Ordinance Amendment
<input type="checkbox"/> Special Land Use Permit: Specify Use: _____	<input checked="" type="checkbox"/> Site Plan Review

**Applicant Name:** First Companies, Inc.  
**Street Address:** 6355 East Paris Ave SE  
**City:** Caledonia **State:** MI **Zipcode:** 49316  
**Phone Number(s):** 616-915-2916 **E-mail:** kevin.vreugdenhil@firstcompanies.com

- I hereby attest that all information on this application is, to the best of my knowledge, true and accurate.
- Additionally, I hereby grant permission for the Village of Sparta Zoning Administrator to enter upon the above mentioned property (or as described in the attachment) for the purposes of gathering information related to this application.
- Furthermore, I hereby acknowledge that in review of this application, the Village of Sparta may require the services of the Village Planner, Village Engineer, and/or the Village Attorney to insure that the requested item(s) for review in this application is compliant to the current zoning laws and policies of the Village of Sparta. I, as the applicant, acknowledge that any costs incurred by the Village of Sparta as they relate to the review of this application by any of the Village's consultants listed above are my responsibility to reimburse and agree to repay the Village of Sparta for any and all costs incurred to it in the review of this application.

**Signature:**  **Date:** 8/28/2024  
Digital Signatures Accepted  
**Applicant is the:**  Owner  Lessee  Optionee  Contractor/Architect

**Property Owner's Name** (if different from applicant): Greg Armock  
**Street Address:** 745 South State St. NW  
**City:** Sparta **State:** MI **Zipcode:** 49345  
**Phone Number(s):** 616-887-0328 **E-mail:** -

**Signature:**  **Date:** 8/28/2024  
Digital Signatures Accepted

**Project Location or Address:** 745 South State St. NW  
**Property is:**  Residential  Commercial  Industrial **Property zoned:** L-1

**THIS APPLICATION WILL NOT BE CONSIDERED COMPLETED, AND THEREBY NOT PRESENTABLE TO THE PLANNING COMMISSION, UNLESS ALL ITEMS LISTED BELOW HAVE BEEN PROVIDED:**

- If application is for a Special Use Permit, a description of the property or properties in question on this application and a site plan as required by the Village's Zoning Ordinance must be attached to this form. Evidence must be provided to show that the proposed use meets all general and specific special land use standards required by the Ordinance.
- If application is for a rezoning, a description of the property or properties in question on this application must be attached to this form. Please explain in detail the request and the reason(s) why you are seeking the rezoning.
- If application is for a Zoning Ordinance (text) amendment, please explain in detail the request and the reason(s) why you are seeking the amendment.

**TO BE COMPLETED BY VILLAGE**

Date application and fee received: \_\_\_\_\_ Staff Initials: \_\_\_\_\_ Receipt #: \_\_\_\_\_

Application is:  APPROVED  DENIED

Explanation: \_\_\_\_\_

PC Meeting Date: \_\_\_\_\_ City Council Meeting Date (if app.): \_\_\_\_\_

Zoning Administrator: \_\_\_\_\_ Date: \_\_\_\_\_

## Armock Expansion Storm Water Management Summary

### Background Information

The project proposes to demolish the existing parking lot east of the building and to construct a new expansion onto said building. The site has an existing detention pond that will be updated to match the previously proposed design.

The Village of Sparta standards were followed for the design and the design results are discussed in the following sections.

### Proposed Storm Sewer Design (10-Year)

There is no proposed storm sewer in this design.

### Proposed Pond and Water Quality Design

On a redevelopment site, the normal Village of Sparta standard for detention is to design a detention pond for the 25-year volume with a release rate of 0.13 cfs/ac and an overflow sized for the 10-year storm event. These standards apply for increased impervious area. Additionally, 80% of all total suspended solids (TSS) must be removed for water quality for all new impervious area and the increase in runoff from the 2-year storm shall be retained onsite for channel protection for increased impervious area. If retention is not feasible due to poor soil infiltration rates, the alternate method of extended stormwater detention may be used where the water must be detained for 72 hours. Since this is a redevelopment, detention, channel protection, and water quality have to be provided for the increased impervious area only. The existing detention pond and outlet are being modified so the detention pond can meet the previously designed required volume.

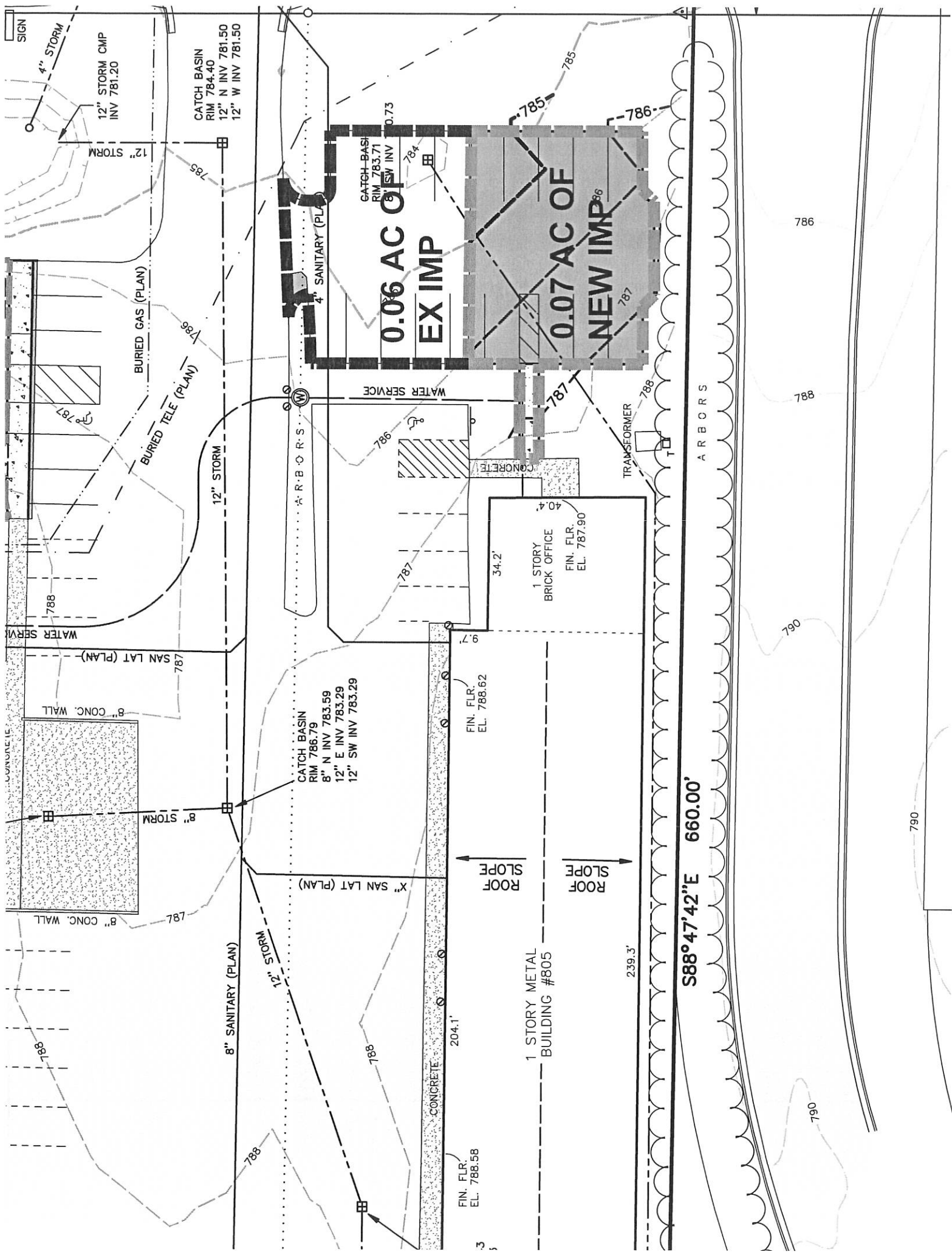
The southerly parking lot that is to be expanded currently does not drain to the pond as the existing storm sewer in that parking lot bypasses the detention pond. Given the small amount of impervious area and impracticality of discharging to the pond only water quality is provided. The normal standard for Village of Sparta is to provide 80% TSS removal; however, given the layout of the site, the proposed water quality design evaluates the site in an alternate manner. There is a single catch basin in the parking lot that connects to a manhole with an outlet to the Village of Sparta's stormwater system. Two LGROW spreadsheets have been included. One showing the requirements for the impacted area and the other showing TSS removal for the parking lot draining to the existing basin. The impacted area generates a water quality volume of 249 cubic feet and the required 80% TSS removal/treatment is 199 cubic feet. The entire parking lot generates a water quality runoff volume of 462 cubic feet. The design utilizes outlet pipe hoods which can easily be installed in existing catch basins. These hoods provide a TSS removal efficiency of 50%. Applying the 50% factor to the entire southerly parking lot, the effective water quality volume provided is 231 cubic feet per LGROW. This value is greater than the required TSS removal for the impacted area and meets the standard for providing water quality for the impacted area.

Please reference the attached calculations for more information.

Jeff Van Laar, P.E.

September 5, 2024

241659E Storm Water Management Summary



S88°47'42"E 660.00'

1 STORY METAL BUILDING #805

1 STORY BRICK OFFICE

0.06 AC OF EX IMP

0.07 AC OF NEW IMP

8" SANITARY (PLAN)

X" SAN LAT (PLAN)

8" STORM

12" STORM

BURIED TELE (PLAN)

BURIED GAS (PLAN)

12" STORM

12" STORM CMP INV 781.20

SIGN

FIN. FLR. EL. 788.58

FIN. FLR. EL. 788.62

FIN. FLR. EL. 787.90

CATCH BASIN RIM 786.79

8" N INV 783.59

12" E INV 783.29

12" SW INV 783.29

WATER SERVICE

ARBORS

ARBORS

TRANSFORMER

ROOF SLOPE

ROOF SLOPE

239.3'

CONCRETE

204.1'

9.7'

788

787

787

787

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# LGROW Design Spreadsheet

## Kent County Drain Commissioner



Version 3.5

### Instructions

- 1) After opening the spreadsheet you will need to enable the use of an embedded macro. Look for security warning above and click "Enable Content."
- 2) Data is entered in yellow cells. Green cells allow selection of items from pulldown menus or buttons.
- 3) To clear all input data entered in a worksheet, click the Clear Worksheet button at the top of the page (or press Ctrl-character) and hit the delete key.
- 4) Comments are indicated by red triangles in cells. Further direction is provided in the LGROW Design Spreadsheet Tutorial.
- 5) The spreadsheet can be used to model a single discharge point from the site including structural BMPs in series or parallel.

### Project Description

Development Name	Armock - Expansion	Design Firm	Exxel Engineering, Inc.
Address/Location	745 S. State Street, Sparta, MI 49345	Engineer	Tyler Sprague
Developer/Owner	Armock Mechanical	Date	9/4/2024

Run

	Select if Yes	Notes
Drainage District	<input type="checkbox"/>	
Watershed Policy	<input type="checkbox"/>	
Redevelopment/Addition	<input type="checkbox"/>	
MS4	<input type="checkbox"/>	
Hotspot	<input type="checkbox"/>	
Coldwater Stream	<input type="checkbox"/>	

### Sensitive Areas

Description	Notes

### Channel Protection Volume Basis

Pre-development Land Use Definition	Existing	Notes
Not Required	<input type="checkbox"/>	
Provided Offsite	<input type="checkbox"/>	
Alternative Approach	<input type="checkbox"/>	

### Subcatchment Connectivity

Number of Subcatchments

Subcatchment Name	Downstream Subcatchment	Subcatchment Description
Sub1	none	Drainage Area from Parking Lot expansion



**Subcatchment Hydrology Summary**

Subcatchment Name	Existing			Developed		
	Area [ac]	% Impervious	Average CN	Area [ac]	% Impervious	Average CN
Sub1	0.07	0%	69	0.07	100%	98
Site Totals and Averages:	0.07	0%	69	0.07	100%	98

**Channel Protection Volume from Structural BMPs**

Subcatchment Name	Channel Protection Volume [cft]			
	Required	Upstream	Credited	Unmet
Sub1	478	0	0	478
Total	478		0	

Percent of Channel Protection Volume met by Onsite Retention	0
Required Extended Detention Volume [cft]	478
Required Extended Detention Release Rate [cfs]	0.004
1-year Existing Peak Discharge [cfs]	0.02

**Water Quality Volume and TSS Removal**

Subcatchment Name	Water Quality Volume [cft]	Volume Met	TSS			
			Generated	Upstream	Total	Removed
Sub1	249	Yes	249	0	249	124
Total	249	Yes	249			124
TSS Removal Efficiency [%]						50
80% TSS removal met?						No





**Sub1: Drainage Area from Parking Lot expansion**

**Runoff**

[Click here for documentation](#)

Existing Land Use	HSG	Area	Units	Curve Number	
				Existing	Pre-settlement
Open spaces (grass cover) - fair	B	0.07	acre	69	58
		0.07	acre	69	58

Developed Land Use	HSG	Area	Units	Curve Number	Notes
DIST: Impervious (paved parking lot, roof, driveway, etc.)	B	0.07	acre	98	
Notes:		0.07	acre	98	

**Subcatchment Runoff Volume for Developed Land Use**

Rainfall Frequency	1-year	2-year	10-year	25-year	100-year
Volume from this Subcatchment [cft]	506	592	898	1,124	1,533

**Channel Protection Volume**

[Click here for documentation](#)

**Required Channel Protection Volume**

Is Channel Protection Volume required? If no, provide reason.

2-year Runoff Volumes [cft]

Required this Subcatchment [cft]

Developed Pre-developed

Unmet from Upstream Subcatchments [cft]

Required Channel Protection Volume [cft]

**Structural BMPs used to meet Channel Protection Volume**

Structural BMP	A Infiltration Area [sqft]	V Storage Volume [cft]	i Design Infiltration Rate [in/hr]	Drain Time [hr]	Volume Retained [cft]
				N.A.	
				N.A.	
				N.A.	
				N.A.	
Totals		0			0

Credited Channel Protection Volume

Notes:

Percentage of Channel Protection Volume Met by Retention

0%

**Water Quality Volume**

[Click here for documentation](#)

Sum of Directly Connected Impervious Area [ac]

Paved [ac] Pitched Roofs [ac] Flat Roofs/Unpaved [ac]

Sum of Directly Connected Disturbed Pervious Area [ac]

Required Volume this Subcatchment [cft]

Volume from Upstream Subcatchments [cft]

Water Quality Volume to be Treated [cft]

TSS Generated this Subcatchment

TSS from Upstream Subcatchments

TSS to be Treated

**TSS Accounting**

BMPs Used in Treatment Train	Treated Water Volume [cft]	TSS Removal Efficiency			TSS Removed
		Tabulated	Third-Party	Effective	
PASS: Water Quality Device	248	--	50	50	124
					0
					0
					0
					0
Released Water Volume [cft]	249				Total TSS Removed 124
Water Quality Volume met?	Yes				TSS Remaining 125
					TSS Removal Efficiency [%] 50

Notes:

80% removal would equate to 199 cft. See Separate spreadsheet for total water to be treated.



# LGROW Design Spreadsheet

## Kent County Drain Commissioner



### Version 3.5

#### Instructions

- 1) After opening the spreadsheet you will need to enable the use of an embedded macro. Look for security warning above and click "Enable Content."
- 2) Data is entered in yellow cells. Green cells allow selection of items from pulldown menus or buttons.
- 3) To clear all input data entered in a worksheet, click the Clear Worksheet button at the top of the page (or press Ctrl+character) and hit the delete key.
- 4) Comments are indicated by red triangles in cells. Further direction is provided in the LGROW Design Spreadsheet Tutorial.
- 5) The spreadsheet can be used to model a single discharge point from the site including structural BMPs in series or parallel.

### Project Description

Development Name	Armock - South Parking Lot Expansion	Design Firm	Exxel Engineering, Inc.
Address/Location	745 S. State Street, Sparta, MI 49345	Engineer	Tyler Sprague
Developer/Owner	Armock Mechanical	Date	9/4/2024
Run			

	Select if Yes	Notes
Drainage District	<input type="checkbox"/>	
Watershed Policy	<input type="checkbox"/>	
Redevelopment/Addition	<input type="checkbox"/>	
MS4	<input type="checkbox"/>	
Hotspot	<input type="checkbox"/>	
Coldwater Stream	<input type="checkbox"/>	

### Sensitive Areas

Description	Notes

### Channel Protection Volume Basis

Pre-development Land Use Definition	Existing	Notes
Not Required	<input type="checkbox"/>	
Provided Offsite	<input type="checkbox"/>	
Alternative Approach	<input type="checkbox"/>	

### Subcatchment Connectivity

Number of Subcatchments

Subcatchment Name	Downstream Subcatchment	Subcatchment Description
Sub1	none	Drainge Area from Entire South Parking Lot expansion



**Subcatchment Hydrology Summary**

Subcatchment Name	Existing			Developed		
	Area [ac]	% Impervious	Average CN	Area [ac]	% Impervious	Average CN
Sub1	0.13	0%	69	0.13	100%	98
Site Totals and Averages:	0.13	0%	69	0.13	100%	98

**Channel Protection Volume from Structural BMPs**

Subcatchment Name	Channel Protection Volume [cft]			
	Required	Upstream	Credited	Unmet
Sub1	888	0	0	888
Total	888		0	

Percent of Channel Protection Volume met by Onsite Retention	0
Required Extended Detention Volume [cft]	888
Required Extended Detention Release Rate [cfs]	0.007
1-year Existing Peak Discharge [cfs]	0.03

**Water Quality Volume and TSS Removal**

Subcatchment Name	Water Quality Volume [cft]	Volume Met	TSS			
			Generated	Upstream	Total	Removed
Sub1	462	Yes	462	0	462	231
Total	462	Yes	462			231

TSS Removal Efficiency [%]	50
80% TSS removal met?	No



**Armock Mechanical**  
**Project Narrative**

The applicant Greg Armock, desires to construct a 60' x 70' addition to his existing building at 745 S State Road. The addition will primarily be office space for current employees. The addition will be located where there is now a parking lot. The spaces lost will be replaced by reconfiguring spaces along the South side of the addition and adding to the existing parking lot in front of 805 S State Street. There is also an 18 space parking lot proposed for service vehicles behind the 805 building, also owned by the applicant. No new landscaping is proposed and wall packs will be added to the addition to illuminate the site, similar to what is currently being done.



September 23, 2024  
2230265

Mr. James Lower  
Village of Sparta  
156 East Division Street  
Sparta, MI 49345

RE: 745 S. State Street – Site plan submittal

Dear James:

At the request of the Village, Prein&Newhof has reviewed the proposal by Exxel Engineering Inc. for site improvements at 745/805 S. State Street. The combined sites are 3.50 acres, and it anticipated that it will be zoned B-Business District. The existing site is currently occupied by a mechanical contracting facility.

We have reviewed the site plan submitted on September 5<sup>th</sup>, 2024 based on current Village Ordinances and offer the following comments:

1. **Proposed Use:** The proposed use of the property should be in accordance with the Business District Zoning in which the building will likely be located.
  - a. Per Sec 82-252 paragraph (37) Manufacturing and repair of electric or neon signs, light sheet metal products, including heating and ventilating equipment, cornices, eaves and the like is a permitted use.

2. **Setbacks.** Per Sec. 82-254 the proposed building setback must be 35 feet for the front yard and 10 feet for the side yards, 25 feet when abutting a residential district.

The existing buildings meets the front setback requirements however the southern existing building does not meet the 25-foot side yard setback requirement that abuts Homestead acres.

3. **Access and vehicular circulation.** The site has an existing access drive off S. State Street.

As no changes to the existing drive approach are being proposed no additional review was required.

4. **Pedestrian circulation.** The site has frontage along S. State Street. There is existing sidewalk along the frontage. If there are changes to the sidewalk, review of ADA compatibility will be required.

**5. Parking.** Parking shall be in accordance with Sec. 82-467 and 82-469

Warehousing or wholesale establishments require 1 parking spots for each 1,700 square feet of GFA, this is coupled with the requirement for 1 space for each 200 sq. ft of office space. The 40 parking stalls shown on the plans is 1 stall short of the 41 spaces required per Village ordinance. This is noted on the SLP page of the drawings.

**6. Dumpster.** Sec. 82-274 requires that dumpsters shall be visually screened from adjacent properties, public and private roadways, or other public areas.

If a new dumpster is added, then a review will be required.

**7. Lighting.** Exterior lightning requirements shall be in accordance with Sec. 82-122 and 82-274.

As no photometric plan been submitted, if additional exterior lighting is proposed, then a review will be required.

**8. Screening.** Parking lot screening requirements may be found in Sec. 82-468.

The parking lot maintains a 10-foot green space between the right-of way and the parking lot along with trees at the SW corner.

**9. Architecture.** Building information shall in accordance with Sec. 82-254 of the Village ordinance.

As no architecture plan has been submitted, additional review will be required when information is available.

**10. Landscaping** Landscaping shall be in accordance with Sec 82-274 and chapter 78 Article IV of the Village ordinance.

The Village ordinance (Chapter 78) has landscaping requirements for areas abutting residential districts, Frontage Landscaping and Landscaping for Parking Areas.

As no changes to the existing landscaping are being proposed no additional review was required.

**11. Signage.** Any signage must be in accordance with Chapter 82 Article VII. Any proposed signage will require review.

As no signage plan has been submitted, if additional signage is proposed, then a review will be required.

**12. Open Storage.** For areas zoned B-Business District Open Storage must adhere to the requirements of 82-254 paragraph (11).

As no outdoor storage plan has been submitted or shown on the plans, no additional review will be required.



**13. Maximum Lot Coverage.** Both the Village and Prein&Newhof agree that the maximum lot coverage is in reference to the structure coverage and not the impervious surface.

Per 82-254 the max allowable coverage in the Business District is 70%. The building coverage on these combined lots is 18.2%

**14. Parcel Combination.** The Village should confirm that it is the intention to combine lots 745 and 805 S. State Street.

**15. Storm Water Review.**

1. Detention and water quality is required for the added gravel parking area at the West side of the site (runoff is being increased due to the surface change from grass to gravel). Please provide calculations. Much of the added gravel parking area is currently being shown to drain to the existing Homestead Acres basin to the South. It should be demonstrated that the existing Homestead Acres basin has the capacity to handle the added runoff. Is there an agreement in place with Homestead Acres that allows the discharge of runoff to the Homestead Acres basin?
2. Only water quality is provided for the expanded parking area at the South end of the site. This does not meet Sparta standards, as detention is required for this added impervious area in addition to water quality treatment. Please provide detention storage for this added impervious area.
3. An outlet pipe hood (18R SNOUT by BMP, Inc.) is specified to provide water quality for the expanded South parking lot. The specified snout requires a 36" minimum sump, but the depth of the existing sump has not been provided. Please provide verification that the existing sump meets the 36" minimum requirement.
4. Please provide basin outlet and overflow calculations. It should be verified that the revised basin design meets the required discharge of 0.13 cfs/acre. The basin also does provide 1 foot of freeboard from the overflow elevation to the top of berm.

<b>POND DATA :</b>	
<b>CAPACITY REQUIRED</b>	<b>= 10,000 CUFT</b>
<b>CAPACITY (784 TO 780.42)</b>	<b>= 10,161 CUFT</b>
<b>CAPACITY PROVIDED (784.62 TO 780.42)</b>	<b>= 13,050 CUFT</b>
<b>TOP OF BERM</b>	<b>= 784.9</b>
<b>OVERFLOW ELEVATION</b>	<b>= 784.62</b>

If you have any questions or require additional information, please feel free to contact us.

Sincerely,

**Prein&Newhof**



Kevin Koster, P.E.