

Highway Department Facility Study

3-Phased Study Approach

Phase 1 | Identifying Issues

Review the Highway Department's existing building use and yard operations and generate a current and emerging need space program.

Phase 2 | Current Building & Site Assessment

Evaluate the existing building and yard deficiencies in meeting the needs identified in Phase 1.

Phase 3 | Design Scenarios & Cost / Benefit Analysis

Generation of an extensive list of potential development options on each of the candidate site and related costs; enabling the county to make an informed decision on the most appropriate path for the future facility.

Study History: In October of 2011, the Jefferson County Highway Department retained Bray Associates Architects, Inc to conduct a thorough facility and site analysis focused on the feasibility of the renovation of the current facility or the possibility of constructing a new facility on various new sites.



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Highway Department Facility Study

Phase 1 | Needs Assessment

Existing Facility Analysis

1. General Comment
 - a. Piecemeal layout and outdated facilities lack functional efficiency
2. Department Administration
 - a. Office area inefficiently dispersed among different buildings and levels
 - b. Evolved building layout with inadequate way finding / signage
3. Vehicle Maintenance:
 - a. Building shell poorly insulated and past its normal life expectancy.
 - b. Inefficient layout and inadequate height for vehicle lifts
4. Vehicle Storage
 - a. Building shell poorly insulated and past its normal life expectancy.
 - b. Inefficient shop and sign space

Summary: Within the 75 year old facility safety, maintenance and programmatic challenges are currently experienced in all areas



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Highway Department Facility Study

Community Growth



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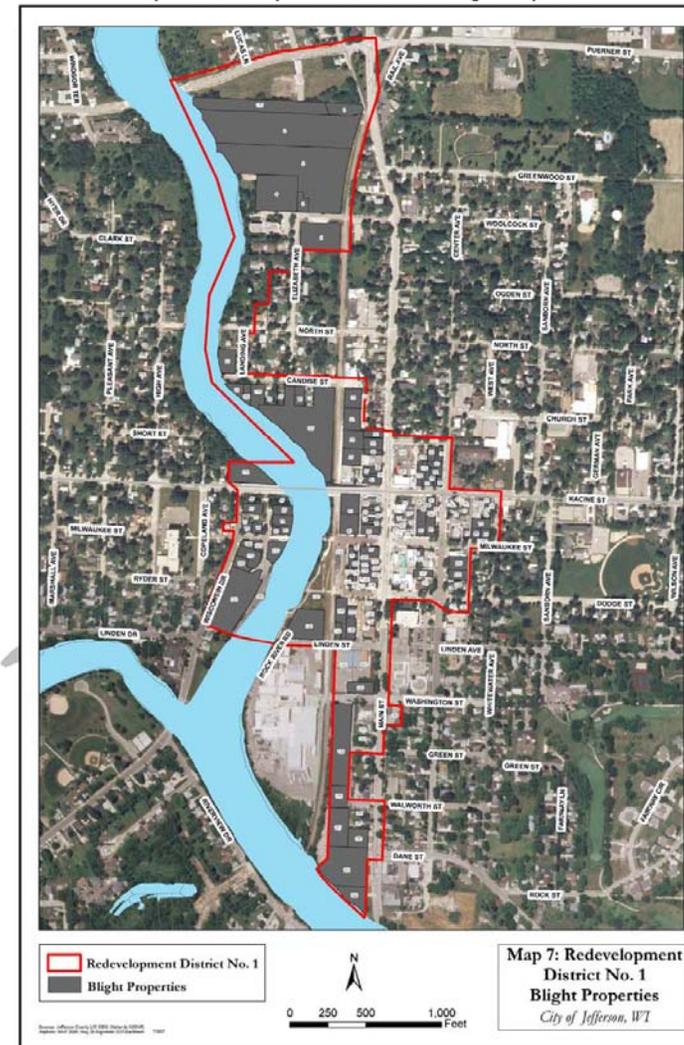
Phase 2 | Site Assessment

Existing Site Analysis

1. Total of 15 acres with 3 acres of residential screening and unusable wetland drainage
2. Site originally located on the outskirts of the City directly adjacent to Highway 26
 - a. City has grown to surround the existing site
 - b. New bypass added several miles through the City to each trip
3. No room for expansion – building or yard
4. Highway Department site identified as “blight” in City’s redevelopment plan
5. Highway Department use does not fit with City’s redevelopment plan

Summary: The current highway department does not fit into the City of Jefferson’s redevelopment plan.

Map 7: Redevelopment District No. 1 Blight Properties



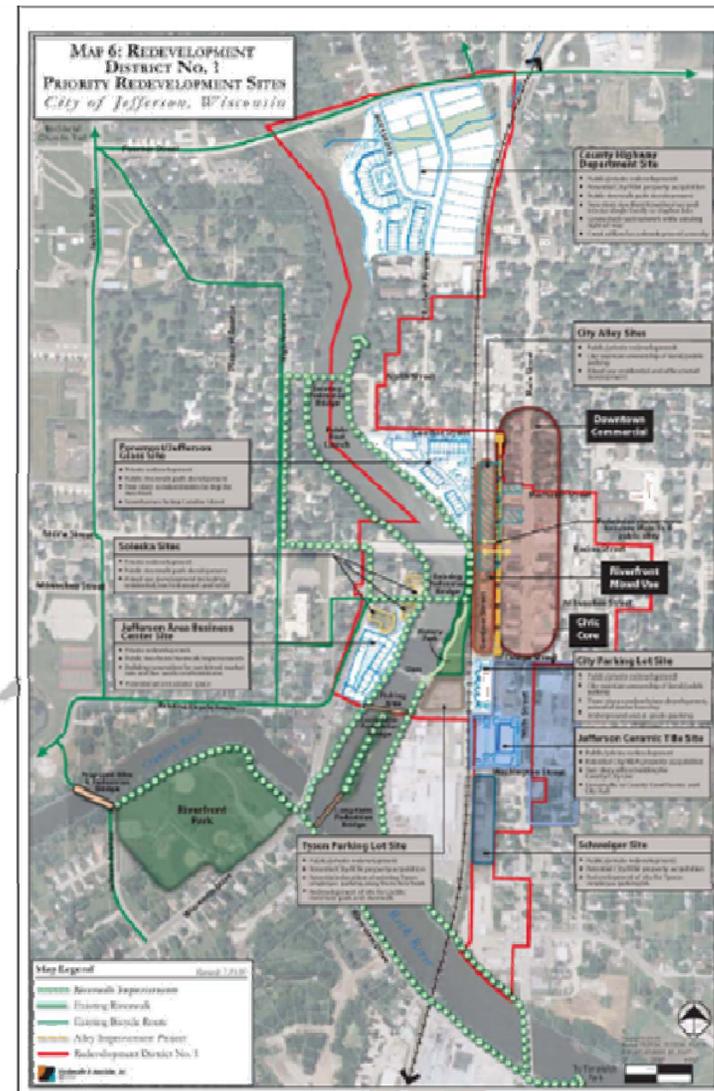
Highway Department Facility Study

Phase 2 | Site Assessment

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Summary: The current highway department does not fit into the City of Jefferson’s redevelopment plan.



Highway Department Facility Study

Conceptual Floor Plan

Building Features

1. 104,000 square foot conditioned building
2. 16,000 square feet of attached cold storage
3. Efficient plan with limited circulation space
4. Maximizes efficient vehicle storage and maintenance
5. Does not include Sheriff's Department maintenance bay
6. Maintains ability for future addition of vehicle storage, maintenance or administration space

Deviations from Prior Plan

1. Cold storage attached to building for structural and operational efficiency
2. Office area utilizes open work areas with increased flexibility in lieu of traditional offices
3. Eliminated dedicated EOC and provides flexible collaboration space to function as EOC

Summary: This conceptual floor plan was used as a template for test fits on all candidate sites considered for new construction.



Highway Department Facility Study

Phase 3 | Design Scenarios

Site A | Junction Road

Site B-1 | Puerner Street New

Site B-2 | Puerner Street Remodel

Site C | County Farm

Site E | Briggs & Stratton

Site F | Schweiger Furniture



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site A | Junction Road

Site B-1 | Puerner Street New

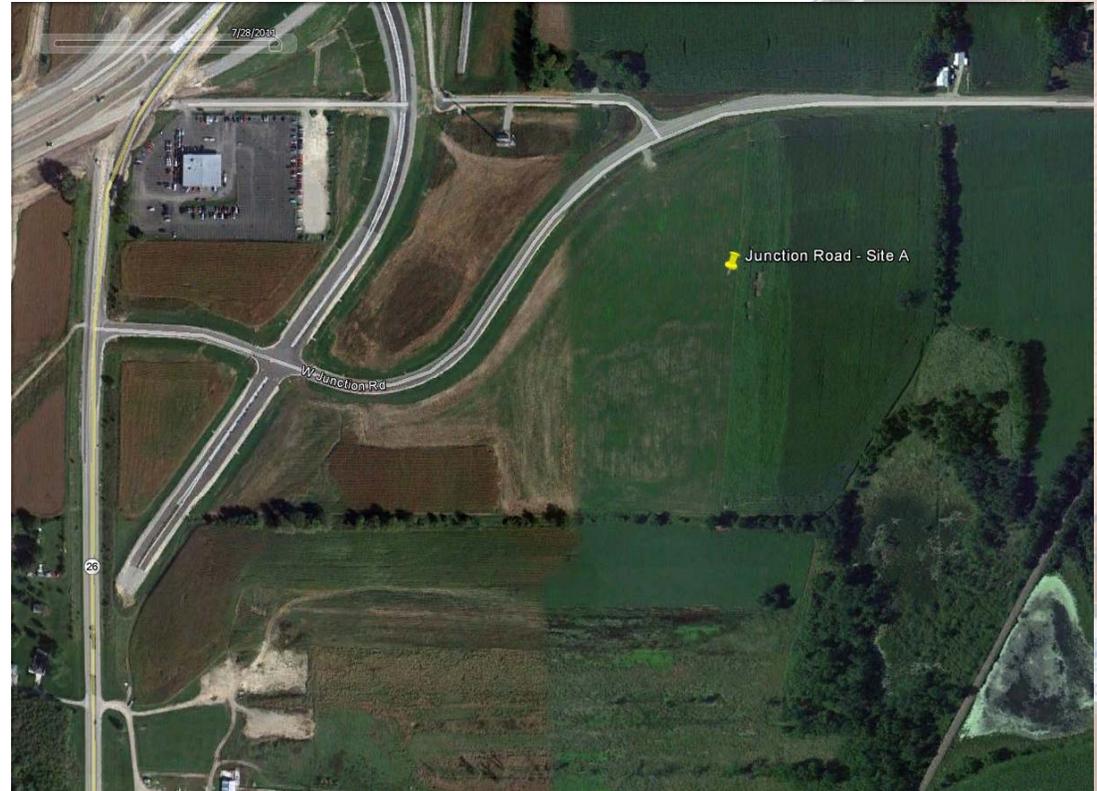
Site B-2 | Puerner Street Remodel

Site C | County Farm

Site E | Briggs & Stratton

Site F | Schweiger Furniture

The Highway Department proposes constructing a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department at Junction Road near Hwy 26. This site is located close to the highway 26 bypass and provides easy access to the highway. The site provides all the necessary building and yard space with the possibility of expansion if needed in the future.



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Highway Department Facility Study

Phase 3 | Design Scenarios

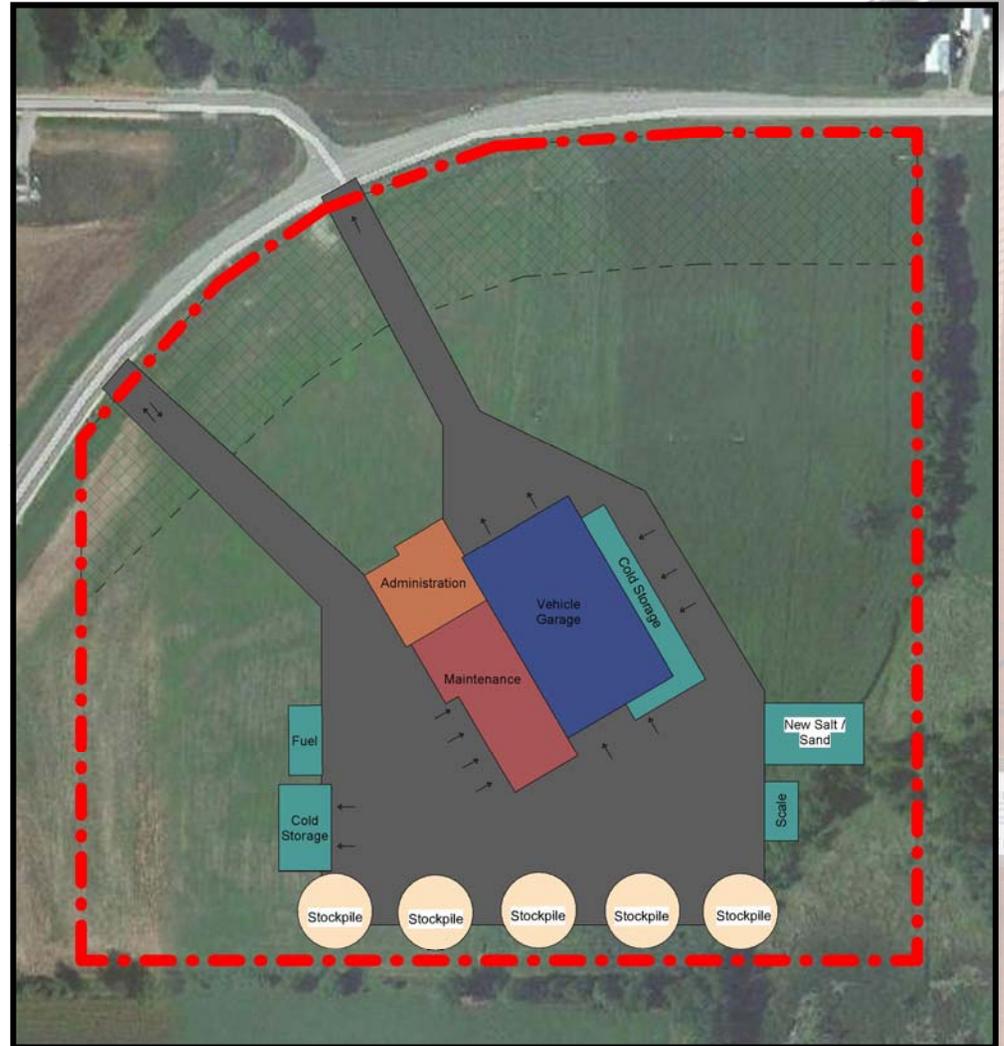
Site A: Junction Road

Positives

1. Close proximity and easy access to highway 26
2. Greenfield development - no contamination concerns.
3. Possible commercial frontage development.
4. Room for future expansion if needed.
5. Removes the majority of truck traffic from city limits.
6. Site meets 40 acre target.

Challenges

1. Negotiating utility extension costs with City of Jefferson.
2. Land purchase and willingness of current owner to sell property.
3. Utilizes 40 acres of agriculture land.



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site A: Junction Road

New Construction

Office / Administration	16,382 sf = \$2,133,800
Vehicle Storage	59,270 sf = \$4,815,700
Vehicle Maintenance	28,634 sf = \$2,412,300
Storage & Misc. Equip.	14,610 sf = \$1,210,900
General Cond. / Conting. / Soft Costs	\$1,476,200

Site Construction

Earthwork	40 acres @ \$383,100
Site Improvements	40 acres @ \$609,300
Specialties	40 acres @ \$829,000
Purchase & Improvements	40 acres @ \$1,741,700
Contingency	\$91,100

Total Option Cost Estimate **\$15,703,100**

Site A: Junction Road

The Highway Department proposes constructing a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department at Junction Road near Hwy 26.



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site A | Junction Road

Site B-1 | Puerner Street New

Site B-2 | Puerner Street Remodel

Site C | County Farm

Site E | Briggs & Stratton

Site F | Schweiger Furniture

The Highway Department proposes constructing a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department on the existing Highway Department site. The yard area will be reorganized to avoid the flood plain, but will still be insufficient for completely modern and efficient yard operations.



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Highway Department Facility Study

Phase 3 | Design Scenarios

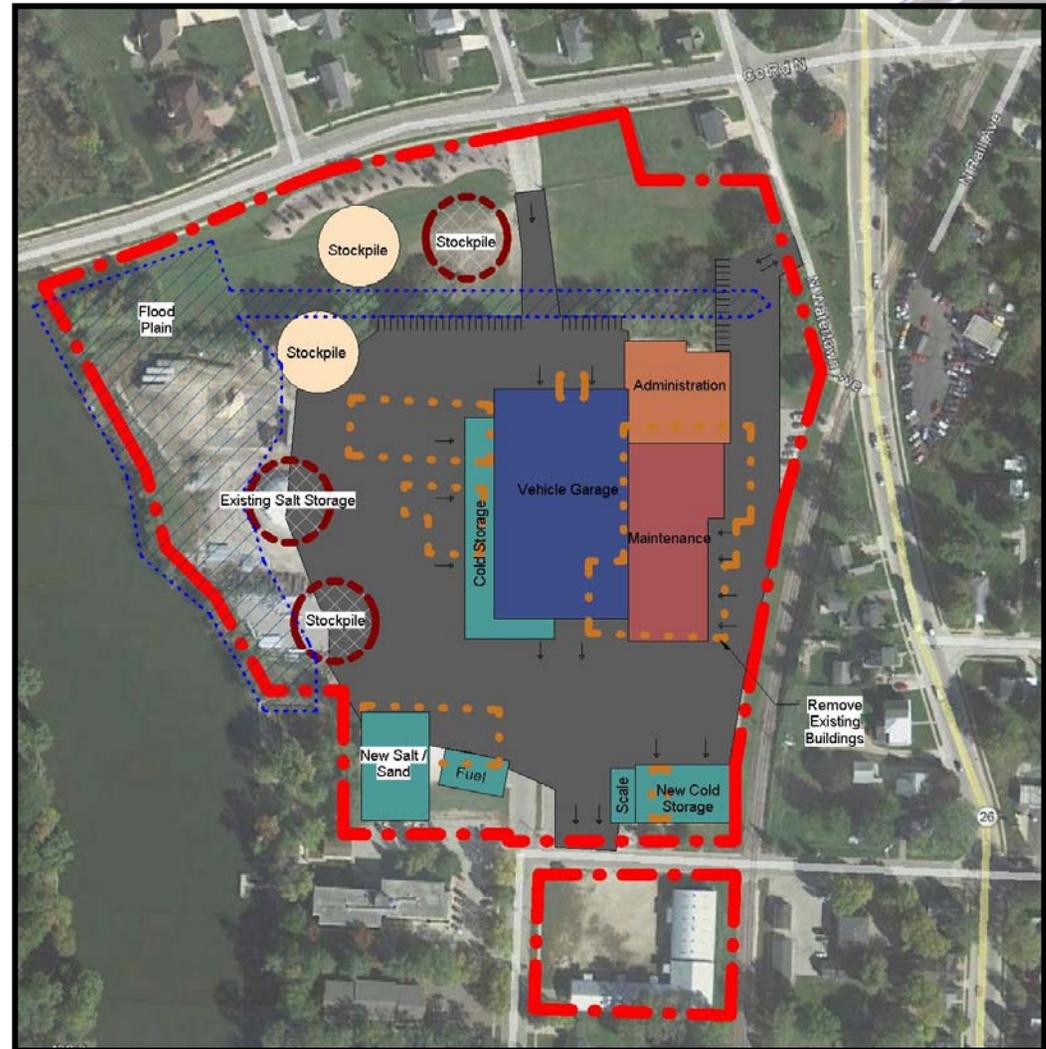
Site B-1: Puerner Street New

Positives

1. Site is already under County control with no purchase concerns.

Challenges

1. Uncertain soils and water table for new construction.
2. Expensive relocation of major underground utilities.
3. Larger distance from highway and heavy truck traffic through the City of Jefferson.
4. Site cannot accommodate proper yard functions and there is no possibility of future expansion.
5. Temporary facilities are needed during construction.
6. Site cannot accommodate 40 acre target size.
7. Highway Department does not fit with city's redevelopment plan.
8. Floodplain reduces useful site area by an additional 3 acres.
9. Construction near river brings DNR permitting concerns.
10. Adjacency to residential neighborhoods.



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site B-1: Puerner Street New

New Construction

Office / Administration	16,382 sf = \$2,133,800
Vehicle Storage	59,270 sf = \$4,815,700
Vehicle Maintenance	28,634 sf = \$2,412,300
Storage & Misc. Equip.	14,610 sf = \$1,210,900
General Cond. / Conting. / Soft Costs	\$1,476,200

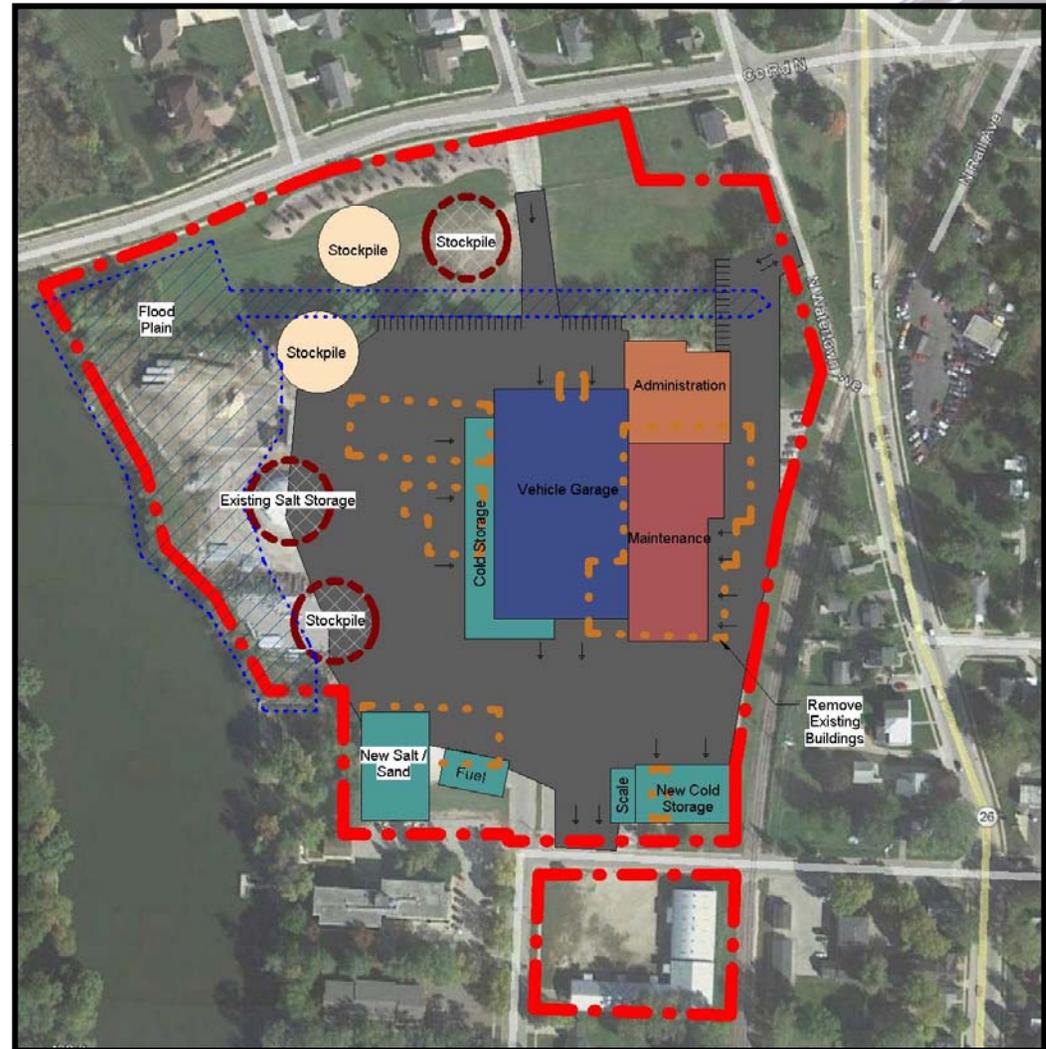
Site Construction

Earthwork	12 acres @ \$117,700
Site Improvements	12 acres @ \$272,500
Specialties	12 acres @ \$589,000
Purchase & Improvements	12 acres @ \$1,511,600
Contingency	\$49,000

Total Option Cost Estimate \$14,588,700

Site B-1: Puerner Street

The Highway Department proposes constructing a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department on the existing Highway Department site



Highway Department Facility Study

Phase 3 | Design Scenarios

Site A | Junction Road

Site B-1 | Puerner Street New

Site B-2 | Puerner Street Remodel

Site C | County Farm

Site E | Briggs & Stratton

Site F | Schweiger Furniture

The Highway Department proposes constructing a new storage building and renovating the existing maintenance facilities to house the administrative, maintenance, and site operational needs of the Highway Department on the existing Highway Department site. The yard area will be reorganized to avoid the flood plain, but will still be insufficient for completely modern and efficient yard operations.



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Highway Department Facility Study

Phase 3 | Design Scenarios

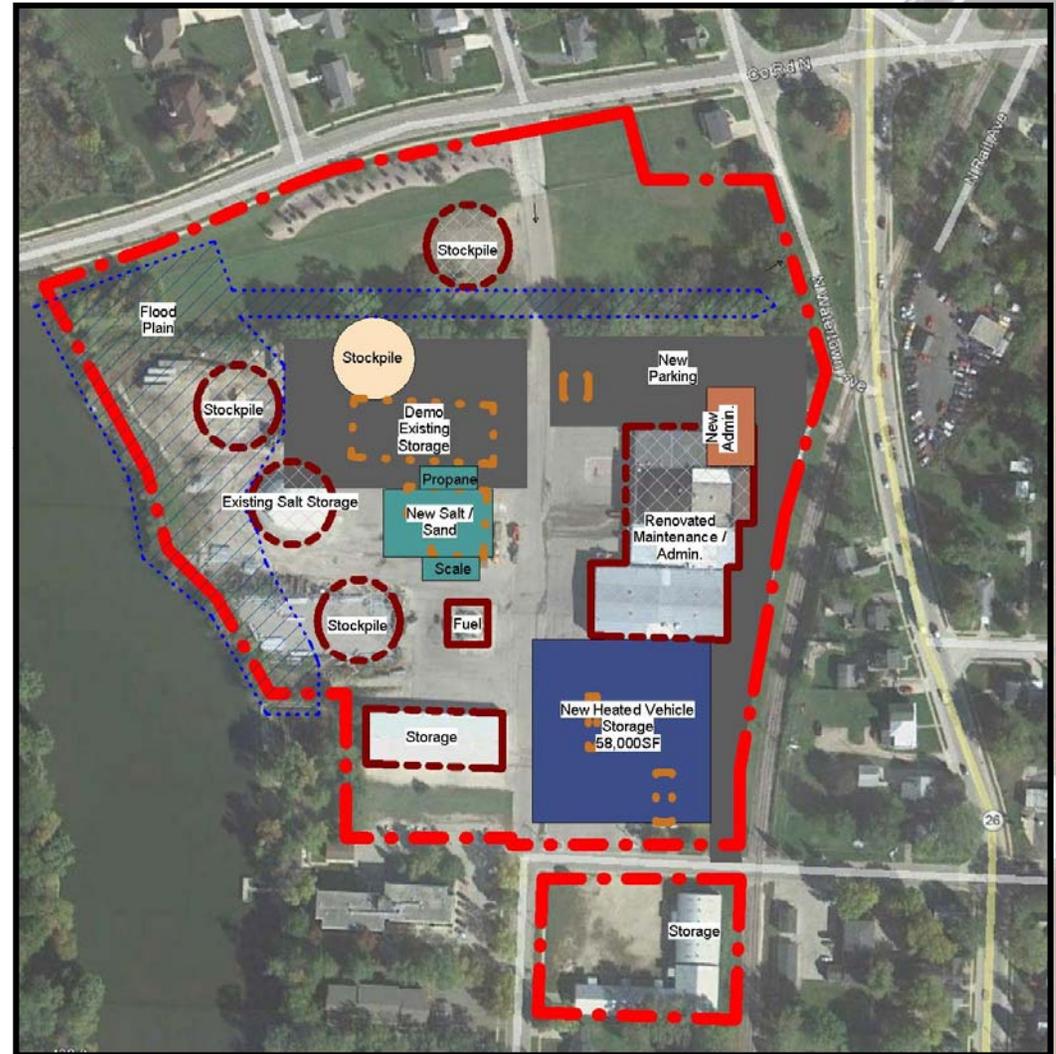
Site B-2: Puerner Street Remodel

Positives

1. Site is already under County control with no purchase concerns.
2. Reduced need for temporary facilities.
3. Fewer underground utilities disturbed.

Challenges

1. Uncertain soils and water table for new construction.
2. Larger distance from highway and heavy truck traffic through the City of Jefferson.
3. Site cannot accommodate proper yard functions and there is no possibility of future expansion.
4. Temporary facilities are needed during construction.
5. Site cannot accommodate 40 acre target size.
6. Dept does not fit with city's redevelopment plan.
7. Floodplain reduces useful site area by an additional 3 acres.
8. Construction near river brings DNR permitting concerns.
9. Adjacency to residential neighborhoods.



Highway Department Facility Study

Phase 3 | Design Scenarios

Site A | Junction Road

Site B-1 | Puerner Street New

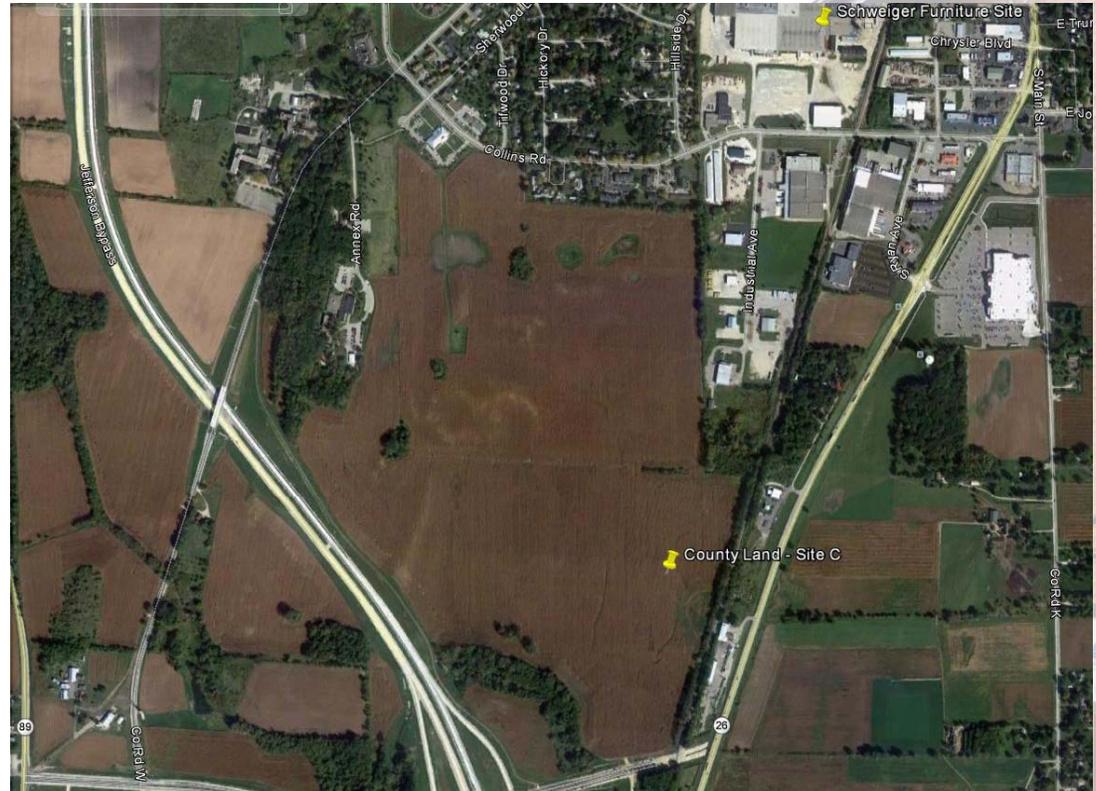
Site B-2 | Puerner Street Remodel

Site C | County Farm

Site E | Briggs & Stratton

Site F | Schweiger Furniture

The Highway Department proposes constructing a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department on the County Farm land near the Hwy 26 bypass.



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site C: County Farm

Positives

1. Close proximity and easy access to highway 26.
2. Greenfield development - no contamination concerns.
3. Possible commercial frontage development.
4. Room for future expansion if needed.
5. Removes the majority of truck traffic from city limits.
6. Site is already under county control with no purchase concerns.
7. Site meets 40 acre target size.
8. Potential for shared county resources due to proximity to other County Departments

Challenges

1. Master planning other uses of the County Farm.
2. Negotiating utility extension costs with City of Jefferson.
3. Utilizes 40 acres of agricultural land



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site C: County Farm

New Construction

Office / Administration	16,382 sf = \$2,133,800
Vehicle Storage	59,270 sf = \$4,815,700
Vehicle Maintenance	28,634 sf = \$2,412,300
Storage & Misc. Equip.	14,610 sf = \$1,210,900
General Cond. / Conting. / Soft Costs	\$1,476,200

Site Construction

Earthwork	40 acres @ \$363,100
Site Improvements	40 acres @ \$559,300
Specialties	40 acres @ \$829,000
Purchase & Improvements	40 acres @ (\$311,300)
Contingency	\$87,600

Total Option Cost Estimate \$13,576,600

Site C: County Farm

The Highway Department proposes constructing a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department on the County Farm land near the Hwy 26 bypass.



Joint County Committee Review



Highway Department Facility Study

Phase 3 | Design Scenarios

Site A | Junction Road

Site B-1 | Puerner Street New

Site B-2 | Puerner Street Remodel

Site C | County Farm

Site E | Briggs & Stratton

Site F | Schweiger Furniture

The Highway Department proposes renovating the existing Briggs and Stratton facility to house the administrative, maintenance, and site operational needs of the Highway Department.



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Highway Department Facility Study

Phase 3 | Design Scenarios

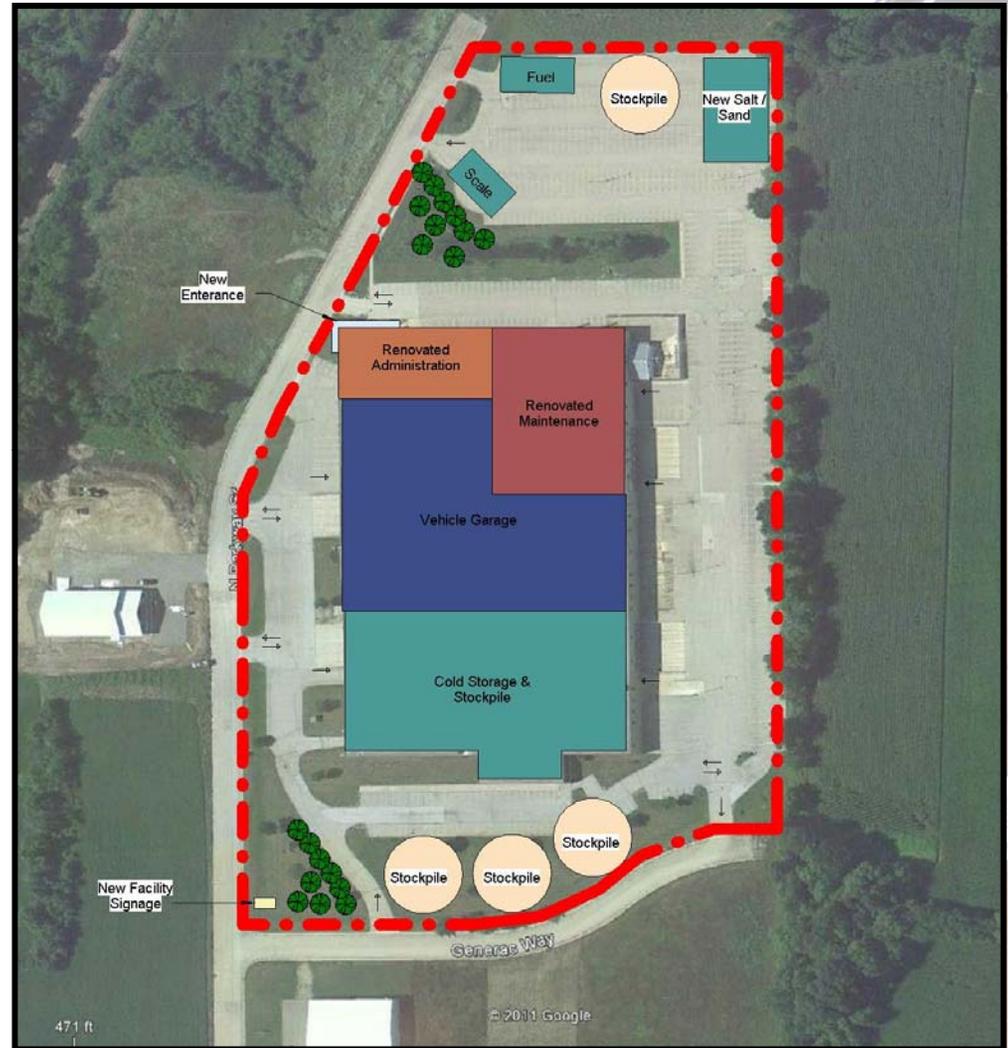
Site E: Briggs & Stratton

Positives

1. Existing facility is in good condition.
2. Minimal site work.
3. Room for future expansion on adjacent parcels if needed.

Challenges

1. Existing building is 60% larger than programmed new construction.
2. Existing short span structural layout leads to inefficient space layout.
3. Limited ceiling height in maintenance areas.
4. Larger distance from highway and heavy truck traffic through the City of Jefferson.
5. Existing building floor not engineered or drained for heavy truck traffic.
6. Site does not meet 40 acre target without additional land purchase
7. Site removes functional industrial site.



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site E: Briggs & Stratton

Renovation

Office / Administration	16,000 sf = \$1,095,200
Vehicle Storage	80,000 sf = \$4,580,000
Vehicle Maintenance	40,000 sf = \$3,090,000
Storage & Misc. Equip.	122,000 sf = \$495,000
General Cond. / Conting. / Soft Costs	\$1,345,000

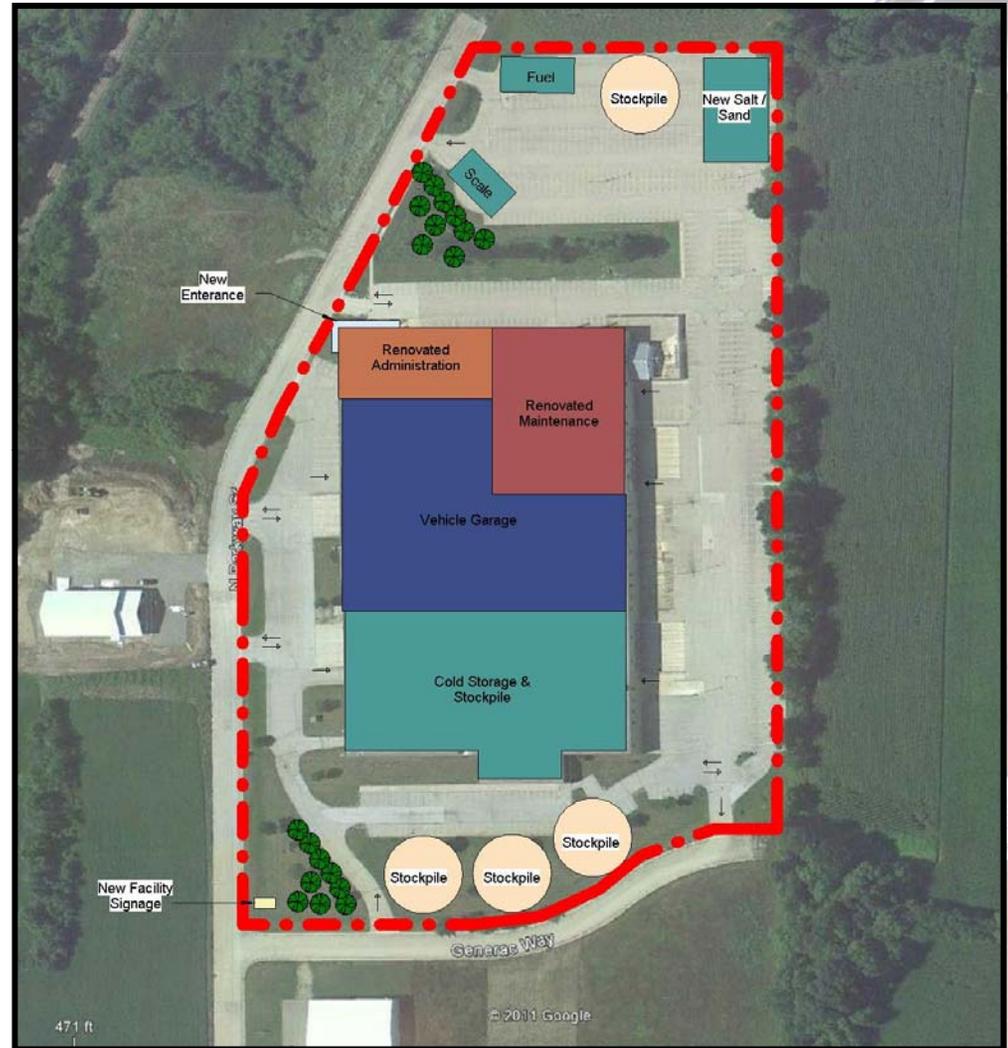
Site Construction

Earthwork	25 acres @ \$139,600
Site Improvements	25 acres @ \$195,000
Specialties	25 acres @ \$829,000
Purchase & Improvements	25 acres @ \$5,358,800
Contingency	\$58,200

Total Option Cost Estimate \$17,185,800

Site E: Briggs & Stratton

The Highway Department proposes renovating the existing Briggs and Stratton facility to house the administrative, maintenance, and site operational needs of the Highway Department.



Joint County Committee Review

Highway Department Facility Study

Phase 3 | Design Scenarios

Site A | Junction Road

Site B-1 | Puerner Street New

Site B-2 | Puerner Street Remodel

Site C | County Farm

Site E | Briggs & Stratton

Site F | Schweiger Furniture

The Highway Department proposes to subdivide the Schweiger Furniture site, demolish the least desirable portion of the existing building, and construct a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department.



Joint County Committee Review



Highway Department Facility Study

Phase 3 | Design Scenarios

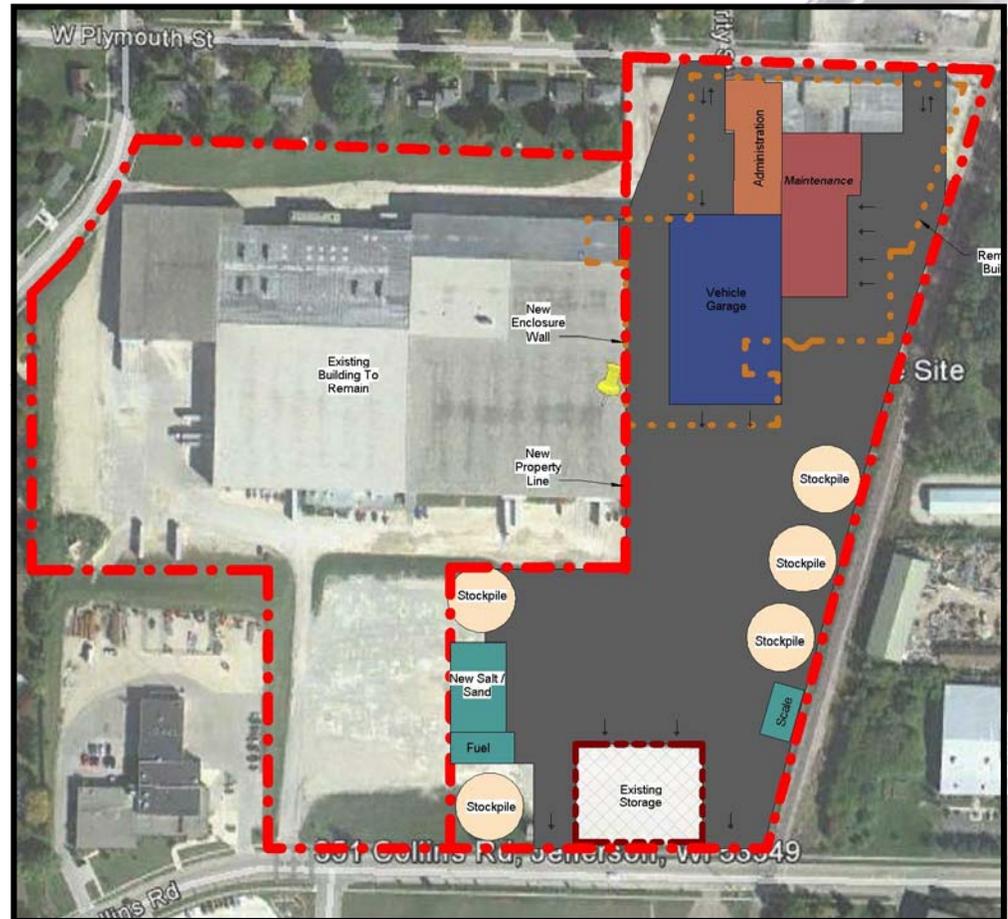
Site F: Schweiger Furniture

Positives

1. Cold storage building can be reused.

Challenges

1. Site is restricted by similar urban developments as the current location.
2. Land purchase and willingness of current owner to divide and sell property.
3. Unknown soil conditions and possible brownfield concerns.
4. Site does not meet 40 acre target.
5. Site removes functional industrial site.
6. Larger distance from highway and heavy truck traffic through the City of Jefferson.



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Highway Department Facility Study

Phase 3 | Design Scenarios

Site F: Schweiger Furniture

New Construction

Office / Administration	16,382 sf = \$2,133,800
Vehicle Storage	59,270 sf = \$4,815,700
Vehicle Maintenance	28,634 sf = \$2,412,300
Storage & Misc. Equip.	14,610 sf = \$1,210,900
General Cond. / Conting. / Soft Costs	\$1,476,200

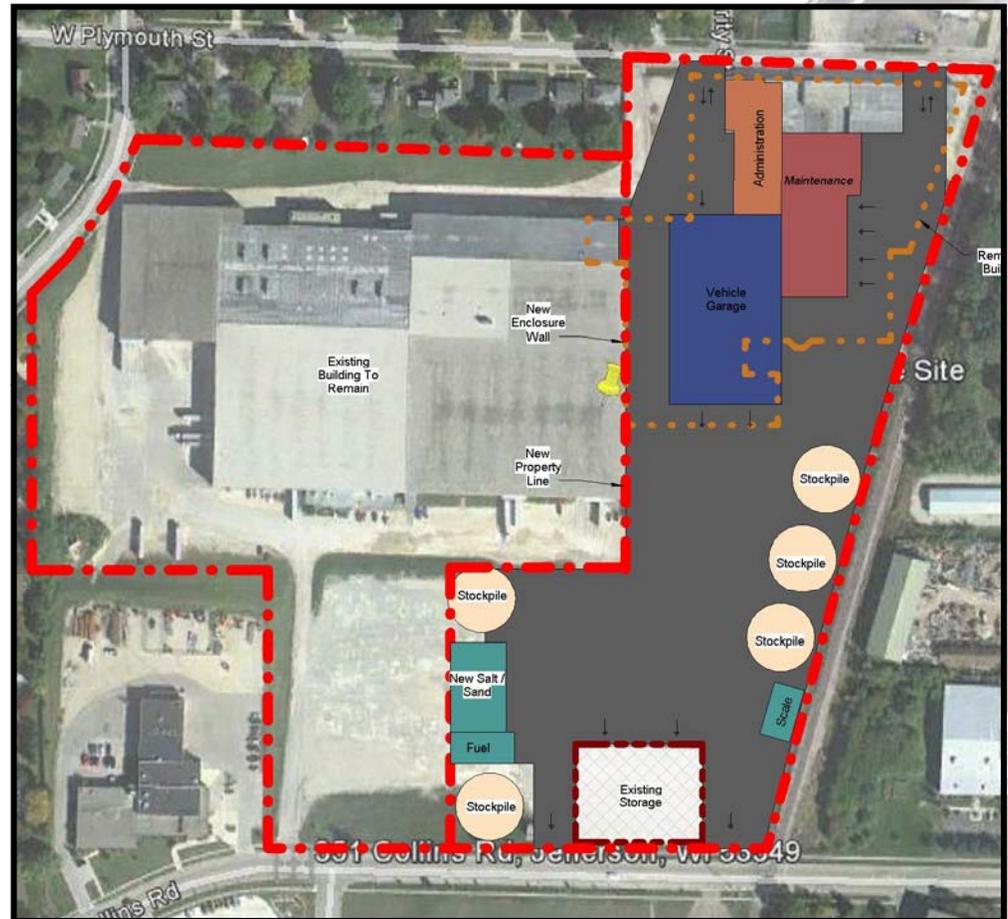
Site Construction

Earthwork	33 acres @ \$159,600
Site Improvements	33 acres @ \$338,000
Specialties	33 acres @ \$829,000
Purchase & Improvements	33 acres @ \$2,516,900
Contingency	\$66,300

Total Option Cost Estimate \$15,958,700

Site F: Schweiger Furniture

The Highway Department proposes to subdivide the Schweiger Furniture site, demolish the least desirable portion of the existing building, and construct a new building to house the administrative, maintenance, storage, and site operational needs of the Highway Department.



Highway Department Facility Study

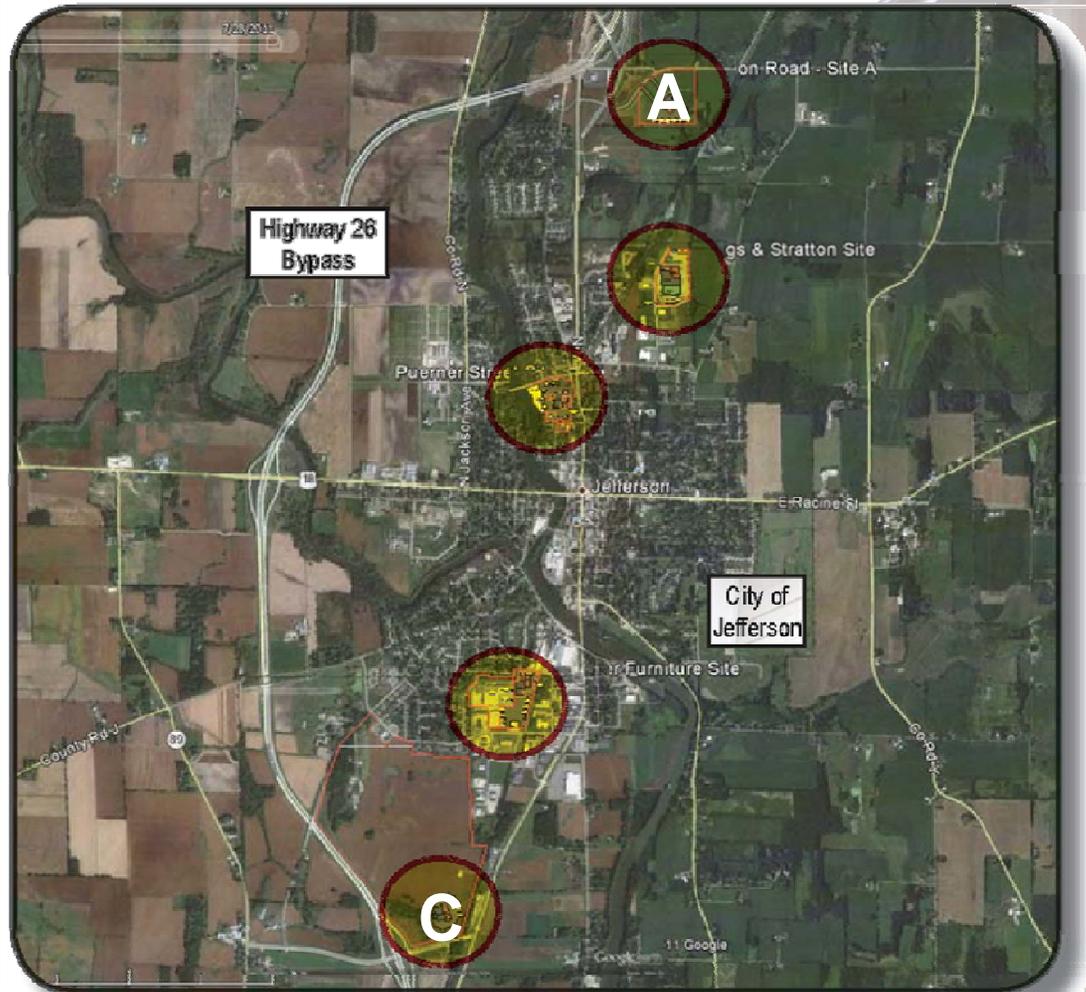
Recommendations

Proceed with acquisition of one of two new sites under consideration

- A. Junction Road
- C. County Farm

Considerations / Rationale

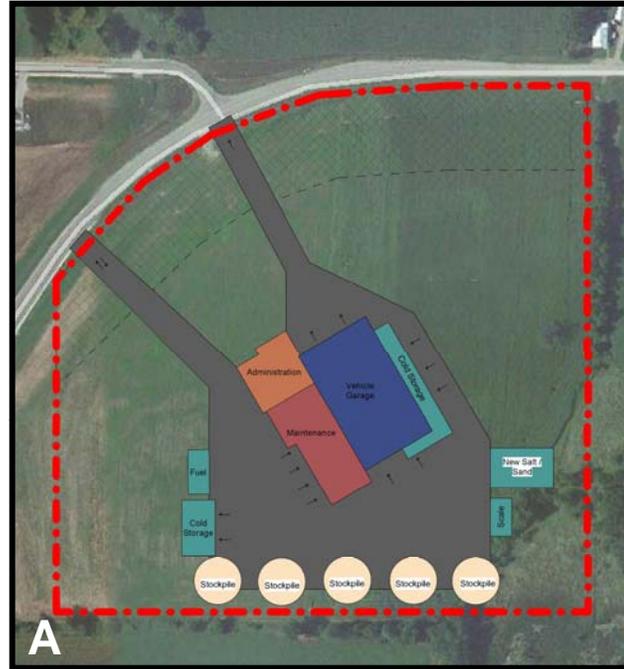
1. Detailed conversation related to utility extension cost needs to occur for sites A and C
2. Discussion with Site A land owner to determine interest in sale
3. Further evaluation of Site C master plan to determine suitability of Highway Department use and final location of 40 acre parcel
4. Commitment to further exploration of two new sites allows County to proceed with more detailed analysis



Highway Department Facility Study

Next Steps

1. Joint Committee recommendation to County Board to pursue 1 of 2 new sites for Highway Department Main Facility
2. Direction to staff to further investigate availability and cost of Junction Road site
3. Issue architectural/engineering request for proposal for design of new facility and site
4. Develop project schedule to meet 2013 budget cycle with a target bid timeframe of late 4th quarter 2012 / early 1st quarter 2013

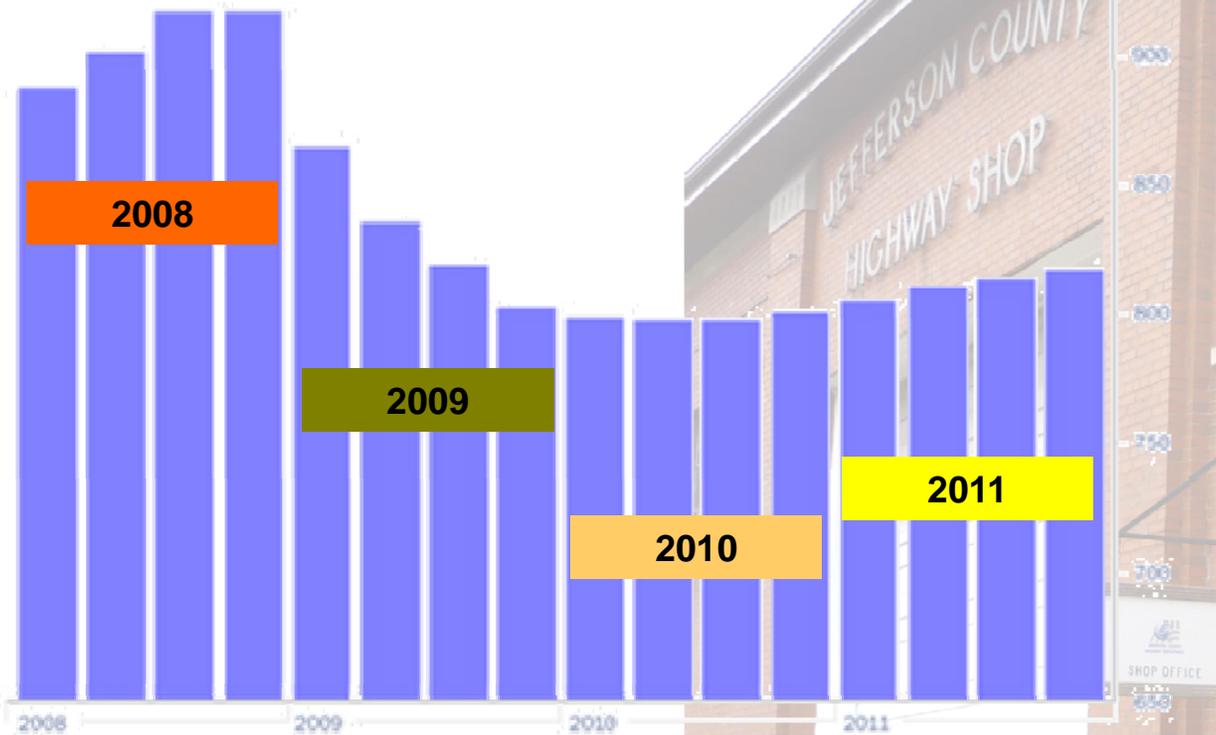


Highway Department Facility Study

Anticipated Construction Cost Increases

“Commodity and material prices, although stable, are putting slight upward pressure on construction prices. There are some indications of material price increases in the first part of 2012. However, price increases predicted by producers have not materialized.”

Karl F. Almstead
Vice President



Source: Turner Construction Company

<http://www.turnerconstruction.com/cost-index>

The Turner Building Cost Index measures costs in the non-residential building construction market in the United States. The Turner Building Cost Index of 818 reflects a 0.49% increase from the Third Quarter 2011 and 2.01% yearly increase from the Fourth Quarter 2010.