



WALMART SITE PLAN 10-42A

WALMART, SITE PLAN 10-42A

Public Hearing at the request of Walmart Stores East LP, Inc. for a recommendation to City Council regarding the Special Land Use Permit, Preliminary Site Plan and Stormwater Management Plan. The subject property is located in Section 14, at the northwest corner of Eleven Mile Road and Town Center Drive, in the TC, Town Center District. The subject property is approximately 12.8 acres and the applicant is proposing to demolish portions of the Novi Town Center and construct an approximately 149,000 square foot Walmart store to include an open air area for the sale of plant material and garden supplies.

Required Action

Recommend approval or denial of the Special Land Use Permit and Preliminary Site Plan and approval or denial of the Stormwater Management Plan

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended <i>(provided the applicant adjusts the site layout to correct areas where variances are not supported.)</i>	11/22/10	<ul style="list-style-type: none"> • Variance required for outdoor storage (not supported by staff). • Variance required to allow open air business use projection into front yard (not supported by staff). • Variance required for height of open air business screening (not supported by staff). • Building setback reductions required (supported by staff). • Parking setback variances required (supported by staff). • Variance required for loading zone location (supported by staff). • Loading zone required for bulk materials pick-up area. • Variance required for trash compactor location (supported by staff). • Zoning Ordinance interpretation required for open space requirements. • Variance required for maximum illumination at property line (supported by staff). • Issues to address at the time of Final Site Plan submittal.
Engineering	Approval recommended	11/23/10	<ul style="list-style-type: none"> • Issues to address at the time of Final Site Plan submittal.

Traffic	Approval recommended	11/15/10	<ul style="list-style-type: none"> • Applicant should discuss lack of turn restrictions at the access drive at the southwest corner of proposed store. • Issues to address at the time of Final Site Plan submittal.
Landscape	Approval recommended	11/23/10	<ul style="list-style-type: none"> • Issues to address at the time of Final Site Plan submittal.
Facade	Approval not recommended	11/23/10	<ul style="list-style-type: none"> • Sec. 9 Waiver supported for overage of metal and use of non-copper colored standing seam roofs. • Design in substantial non-compliance with Section 1602.7 and 2520.13 with respect to massing and compatibility with surrounding architecture.
Fire	Approval recommended	11/23/10	<ul style="list-style-type: none"> • Issues to address at the time of Final Site Plan submittal.

Approval- Special Land Use

In the matter of the request of Walmart, SP 10-42A, motion to **recommend approval** of the Special Land Use permit, subject to the following:

- a. Planning Commission finding under Section 2516.2.c for the Special Land Use permit:
That, relative to other feasible uses of the site,
 - The proposed use will not cause any detrimental impact on existing thoroughfares *(due to the fact that the proposed outdoor garden center totals less than 6% of the total square footage of the store and is accessory to the main use).*
 - The proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood *(due to the fact that the proposed garden center will not generate a substantial amount of noise or adverse impacts.)*
 - The proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use.
 - The proposed use will promote the use of land in a socially and economically desirable manner.
 - The proposed use is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located *(as noted in the staff review letters and provided the applicant provides screening per Zoning Ordinance requirements and the proposed garden center does not project into the front yard); and*
- b. Compliance with all conditions and requirements listed in the staff and consultant review letters.
- c. *(Insert specific considerations here)*

(This motion is made because the plan is otherwise in compliance with Article 16, Article 24 and Article 25 and all other applicable provisions of the Zoning Ordinance.)

Denial- Special Land Use

In the matter of the request of Walmart, SP 10-42A, motion to **recommend denial** of the Special Land Use permit, *(because it does not meet the following standards of the ordinance for approval of a Special Land Use permit...)*

Please note: where **-OR-** is provided, one option or the other should be selected.

Approval – Preliminary Site Plan

In the matter of Walmart, SP 10-42A, motion to **recommend approval** of the Preliminary Site Plan, subject to the following:

- a. With regard to the recycle area,
 - the applicant should relocate the recycle area inside the building, or otherwise bring this area into conformance with ordinance standards; *(Staff Recommendation)*
 - OR-**
 - the Zoning Board of Appeals granting a variance to allow outside storage;
- b. With regard to the open air business use,
 - the applicant should adjust the site layout so that the open air business use no longer projects into the front yard; *(Staff Recommendation)*
 - OR-**
 - the Zoning Board of Appeals granting a variance to allow the open air business use to project into the front yard;
- c. With regard to the masonry screen wall for the open air business use,
 - the applicant should raise the height of the masonry portion of the garden center screen wall to a height of 6 feet; *(Staff Recommendation)*
 - OR-**
 - the Zoning Board of Appeals granting a variance to allow a four foot masonry screen wall instead of the required six foot masonry screen wall.
- d. A permitted reduction of the interior side yard (north) building setback to 0 feet because
 - 1.) A reduction in setback, or waiver of a setback altogether, will not impair the health, safety or general welfare of the City as related to the use of the premise or adjacent premises;
 - 2.) Waiver of the setback along a common parcel line between two premises would result in a more desirable relationship between a proposed building and an existing building; and
 - 3.) The adherence to a minimum required setback would result in the establishment of nonusable land area that could create maintenance problems.
- e. The Zoning Board of Appeals granting variances for the lack of parking setbacks in all yards;
- f. The Zoning Board of Appeals granting a variance for the eastern loading zone location;
- g. The applicant providing a loading zone for the bulk materials pick-up area as indicated in their response letter and the Zoning Board of Appeals granting a variance for the southern loading zone location;
- h. The Zoning Board of Appeals granting a variance for the location of the trash compactor;
- i. With regard to open space,
 - the applicant providing additional open space; *(Staff Recommendation)*
 - OR-**
 - a Planning Commission finding that adequate open space exists to meet the minimum open space requirement of 15% for the entire Novi Town Center even though the Walmart site has less than 15% open space;
- j. With regard to the light levels,
 - the applicant should adjust the light levels to meet minimum to average ratio light level requirements; *(Staff Recommendation)*
 - OR-**

- the Zoning Board of Appeals granting a variance to allow the applicant to exceed the required minimum to average ratio;
- k. The Zoning Board of Appeals granting a variance for the property line illumination levels;
- l. The City Council granting a Section 9 waiver for the use of non-copper colored standing seam metal roofs and the overage of metal;
- m. With regard to the use of EIFS and Phenolic Panels,
 - the applicant using brick of the colors indicated on the sample board in lieu of all Phenolic Panels and EIFS other than cornices; (*Staff Recommendation*)
 - OR-**
 - The City Council granting a Section 9 waiver for the overage of EIFS and the use of Phenolic Panels;
- n. The applicant adjusting the building design to be compatible with the surrounding architecture including extending the upper EIFS cornice across the entire west facade; and
- o. Compliance with all conditions and requirements listed in the staff and consultant review letters.
- p. (*additional conditions here if any*)

(This motion is made because the plan is otherwise in compliance with Article 16, Article 24 and Article 25 and all other applicable provisions of the Zoning Ordinance, and any additional reasons here, if any....)

Denial - Preliminary Site Plan

In the matter of Walmart, SP 10-42A motion to **recommend denial** of the Preliminary Site Plan, (*because it is not in compliance with the following sections of the Zoning Ordinance....*)

Approval – Storm Water Management Plan

In the matter of Walmart, SP 10-42A, motion to **approve** the Storm Water Management Plan, subject to:

- a. City Council approval of the requested Special Land Use Permit and Preliminary Site Plan; and
- b. The conditions and items listed in the staff and consultant review letters being addressed on the Final Site Plan.
- c. *(additional conditions here if any)*

(For the reasons that the plan is otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

Denial – Storm Water Management Plan

In the matter of Walmart, SP 10-42A, motion to **deny** the Storm Water Management Plan ...because the plan is not in compliance with Chapter 11 of the Code of Ordinances.

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

November 22, 2010

Planning Review of Preliminary Site Plan

Walmart
SP10-42A

Petitioner

Walmart Stores East LP, Inc.

Review Type

Revised Preliminary Site Plan

Property Characteristics

- Site Location: North of Eleven Mile Road, West of Town Center Drive (Section 14)
- Site Zoning: TC, Town Center
- Adjoining Zoning: North: TC; South (across Eleven Mile Road): TC; East (across Town Center Drive): OSC, Office Service Commercial; West: TC
- Current Site Use: Existing Former Mervyn's Store
- Adjoining Uses: North: various retail; South (across Eleven Mile Road): various retail and office; East (across Town Center Drive): office; West: various retail
- School District: Novi Community School District
- Site Size: 12.8 acres
- Plan Date: 09/14/10

Project Summary

Walmart is proposing to demolish the existing former Mervyn's store at the Novi Town Center (on the northwest corner of Eleven Mile Road and Town Center Drive) in order to construct a 149,854 square foot Walmart store. A separate parcel, totaling approximately 12.8 acres, would be split off from the larger Novi Town Center parcel. The store is also proposed to include an open air garden center. Parking, loading zones, etc. would also be included as part of the construction.

Since the project is in the TC, Town Center District and the development exceeds 5 acres, the plan will need to be forwarded to the Planning Commission for review and recommendation to the City Council. A public hearing will be held for the open air business use at the Planning Commission meeting. The Zoning Board of Appeals will need to consider any variances following the review by the City Council.

Recommendation

Approval of the Preliminary Site Plan and Special Land Use Permit is recommended. However, the plans as submitted would require a number of variances that cannot be supported by planning staff. Staff recommends the applicant revise those areas of the plan identified by staff in the "Ordinance Requirements" section of this letter.

Special Land Use Considerations

In the TC District open air business uses fall under the Special Land Use requirements (Section 1602). The open air business use is located on the south side of the building.

Section 2516.2.c of the Zoning Ordinance outlines specific factors the Planning Commission and City Council shall consider in the review of the Special Land Use Permit request:

- Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress,

acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service.

- Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area.
- Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats.
- Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood.
- Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use.
- Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner.
- Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located.

Ordinance Requirements

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 16 (TC and TC-1 Town Center Districts), Article 24 (Schedule of Regulations), Article 25 (General Provisions) and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed by the applicant.

1. Outside Storage: The plans indicate an area for bale and pallet recycling. This is considered outside storage and is not permitted in the TC District. **The applicant should relocate the recycle area inside the building, or otherwise bring this area into conformance with ordinance standards.** The applicant has indicated they will seek a variance for outside storage. Staff will not be able to forward a favorable recommendation for a variance from this requirement to the Zoning Board of Appeals.
2. Open Air Business: An open air business use must be located in the side or rear yard. A portion of the open air garden center projects into the front (western) yard. **The applicant should adjust the site layout so that the open air business use no longer projects into the front yard.** The applicant has indicated they will seek a variance from the Zoning Board of Appeals for this deficiency.
3. Open Air Business Screening: An open air business use must be screened with a solid masonry screen wall equal to a height of 6' with decorative fencing above that height to a height equal to 1' taller than the material to be screened. The application materials indicate a 4' masonry screen wall with decorative fencing above. No screening details have been provided in the plan. **The applicant should provide screening details in the plan, indicate the height of the material to be stored and raise the height of the masonry portion of the screen wall to a minimum of 6'.** The applicant has indicated they will seek a variance from the Zoning Board of Appeals, and should be prepared to demonstrate practical difficulty or hardship. The orientation of the bulk pick-up area is somewhat awkward for customers entering and exiting the area to pick up materials with their vehicles. The applicant should consider orienting the entrance to the pick-up area to the east and providing an area for vehicles to turn around after loading their materials. This orientation would also provide better screening from the adjacent 11 Mile Road.
4. Building Setback: Due to the proposed parcel split, the interior side (north) yard building setback is proposed to be 0' (10' is required.) **The applicant will seek a setback reduction from the City Council.** In the TC District, the City Council may reduce building setbacks if the

- conditions listed in Section 1602.4 are met. Please refer to the planning review chart for specific conditions. Staff supports this reduction.
5. Parking Setbacks: Due to the proposed parcel split, all parking setbacks are proposed to be 0'. (20' is required on all sides.) **The applicant will seek variances from the Zoning Board of Appeals.** Staff will support these variance requests.
 6. Architecture: Architecture and development amenities in the Town Center District should complement the existing architecture in the Novi Town Center. **The applicant should consider replacing the blue bollards and other bright blue features along the front of the store with a more muted tone to better compliment the existing Novi Town Center.**
 7. Loading Space: Per the Zoning Ordinance, loading space must be located in the rear yard. The applicant has proposed loading space in the exterior side (eastern) yard. **The applicant will seek a variance from the Zoning Board of Appeals for the eastern loading zone location.** Staff supports this variance request. **The applicant should also indicate the square footage of the eastern loading zone and provide a detail of the loading zone screen wall.** The applicant has indicated a commercial vehicle will deliver and unload materials near the bulk materials pick-up area but no designated loading zone has been provided in this location. **The applicant should provide a striped loading zone near the bulk materials pick-up area. If the applicant elects not to provide a loading zone in the bulk materials pick-up area, deliveries will need to be limited to the designated striped loading area in the eastern yard. If a loading area is provided in the southern yard a variance from the Zoning Board of Appeals will be required. Staff would not support loading/unloading outside of a designated loading/unloading zone.**
 8. Trash Compactor: All accessory structures must be located in the rear yard and screened per the standards of Chapter 21 of the City Code. The trash compactor is proposed to be located in the exterior side (eastern) yard. **The applicant will seek a variance from the Zoning Board of Appeals for the trash compactor location and should provide screening details in the next plan submittal.** Staff would support this variance.
 9. Required Open Space: A minimum of 15% open space is required in the Town Center District. The Novi Town Center as an entire development would meet this requirement. Approximately 11.9% open space has been provided on the Walmart site. **This would be an interpretation of Zoning Ordinance requirements. Staff would recommend the applicant provide additional open space to meet minimum ordinance requirements. The applicant could consider eliminating a portion of the parking on the Walmart site to allow for additional open space and landscaping.**
 10. Lighting Plan: **The applicant should provide the hours of operation on the lighting plan. Manufacturer's specifications have not been provided for all light fixtures. The applicant should provide details for fixtures labeled 11, 11A, 11B, 100, 101 and 103.**
 11. Lighting Plan – Required Conditions: The average light level of the surface being lit to the lowest light of the surface shall not exceed 4:1. The area identified as main lot appears to exceed this ratio. **The applicant should adjust the site lighting to meet ordinance requirements.** Alternately, the applicant could seek a variance from the Zoning Board of Appeals.
 12. Maximum Illumination: Maximum illumination at the property line cannot exceed 1 foot candle. This is exceeded in a number of instances. **The applicant should seek a variance from the Zoning Board of Appeals.**
 13. Façade / Architectural Plans: **The elevations and referenced architectural plans should be included with the next plan submittal.** Consistent with the standards of the Zoning Ordinance and the Town Center Design Guidelines, staff and consultants previously discussed with the applicant at the pre-application and subsequent meetings developing a façade that would be complimentary to and an extension of the existing Novi Town Center Development. **The applicant should alter the façade to conform to the standards of the Façade Ordinance and the Town Center Design Guidelines.** Please see the accompanying review letter from the City's Façade Consultant with regard to the proposed building elevations.

14. Parcel Split: A property combination or split has been proposed. The applicant must create this parcel prior to Stamping Set approval. Plans will not be stamped until the parcel is created.
15. Site Plan Checklist: Please provide the required information from the Site Plan Checklist:
 - a. Hazardous Chemical Survey is to be filled out at time of Final Site Plan.
16. Right of Way: On the Preliminary Site Plan, graphically depict and provide notes for "Existing Right of Way" and "Planned Right of Way". Staff suggests dedicating "Planned Right of Way" to the City.
17. Consistency Across Plans: Please make sure there is consistency on plan submittal:
 - a. The site layout on subsequent site plan submittals showing both the Walmart and Building X.1 should be consistent across all plan sets.
 - b. Many missing details from the Preliminary Site Plan: i.e., screen walls. Please provide details with next submittal.
18. Additional Items: The applicant has indicated there may be a composting area on the site. **Any compost areas should be clearly identified on the plan.**

Response Letter

A letter from either the applicant or the applicant's representative addressing comments in this and other review letters is required prior to appearing before the Planning Commission. **The applicant should provide an 8.5"x11" size site plan in color (if available) for inclusion in the Planning Commission packets.** In addition, a response letter highlighting changes to the plan is requested with the next set of plans submitted.

Pre-Construction Meeting

Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled. If you have questions regarding the Pre-Con or to schedule a Pre-Con, please contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] in the Community Development Department.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.347.0586 or kkapelanski@cityofnovi.org.



Kristen Kapelanski, AICP, Planner
248-347-0586 or kkapelanski@cityofnovi.org

PLANNING REVIEW SUMMARY CHART

Project Name: SP10-42A Walmart
Plan Date: 09-14-10

Item	Required	Proposed	Meets Requirements?	Comments
Master Plan	Town Center Commercial	No change proposed.	Yes	
Zoning	TC, Town Center	No change proposed.	Yes	
Uses permitted (Section 160.1)	Principal Uses permitted: <ul style="list-style-type: none"> • B-1 & B-2 Uses • Office Uses • Public and Quasi-public • Indoor Recreation • Hotels • Outdoor Restaurants • Banks (Drive through not principle) • Residential Dwellings • Day Care Centers • Microbreweries & Brewpubs Special Uses permitted: <ul style="list-style-type: none"> • Open air business • Outdoor sales of plants and produce 	General retail Open air business	Yes/No	Special Land Use permit required for open air business use. Outside storage is not permitted in the Town Center District. The applicant should relocate the proposed bale and pallet recycle area or seek a variance from the Zoning Board of Appeals. The applicant has indicated they will seek a variance.
Open Air Business Use (Section 1602.1.a)	Must be located in designated side or rear yard.	Exterior (southern) side yard and projecting into front (western) yard	No	Applicant should adjust the site layout so that the open air business use does not project into the front yard or seek a variance from the Zoning Board of Appeals. The applicant has indicated they will seek a variance.

Item	Required	Proposed	Meets Requirements?	Comments
				Please see the traffic review letter for additional comments regarding the configuration of the access drive near this location.
	Screening with a solid masonry screen wall equal to a minimum height of 6' with decorative fencing above (or other suitable material) with a height equal to 1' taller than the material to be offered for sale.	Application materials indicate a 4' masonry wall with decorative metal fencing but no screening details provided in the plans.	No	Applicant should provide screening that complies with the Ordinance or seek a variance from the Zoning Board of Appeals. The applicant has indicated they will seek a variance. Applicant should provide a detail of the proposed screening in the plan set.
	Accessible from adjacent building or sidewalk adjacent to the building	Accessible from adjacent building and sidewalk	Yes	
	Bulk pick-up areas shall be screened from adjacent parcels to achieve a minimum opacity of 90% in summer and 80% in winter.	Bulk pick-up area to be screened with a brick and pier fence and landscaping.	Yes	Applicant should consider orienting the entrance to the bagged materials pick-up area to the east and providing a turn-around area for customers exiting.
	Noise Impact Statement required.	Noise impacts addressed in the correspondence regarding the open air garden center.	Yes	
Building Height (Sections 1602.2 & 2406)	5 stories and 65 feet	30 feet	Yes	
Building	Front (west): 50'	Front (west): Approx.	No	Applicant should seek a

Item	Required	Proposed	Meets Requirements?	Comments
<p>Setbacks Section 1602.4</p>	<p>Interior Side (north): 10' Exterior Side (south): 50' Exterior Side (east): 50'</p>	<p>640 Interior Side (north): 0' Exterior Side (south): 106' Exterior Side (east): 50' (to future ROW)</p>		<p>setback reduction from the City Council. Setbacks may be reduced by City Council proving three conditions are met: (a) That a reduction in setback, or waiver of a setback altogether, will not impair the health, safety or general welfare of the City as related to the use of the premises or adjacent premise; (b) That waiver of the setback along a common parcel line between two premises would result in a more desirable relationship between a proposed building and an existing building; and (c) The adherence to a minimum required setback would result in the establishment of nonusable land area that could create maintenance problems.</p>
<p>Parking Setbacks Sections 2400.3 1602.5</p>	<p>Front (west): 20' Interior Side (north): 20' Exterior Side (south): 20' Exterior Side (east): 20'</p>	<p>Front (west): 0' Interior Side (north): 0' Exterior Side (south): 0' Exterior Side (east): 0'</p>	<p>No</p>	<p>Due to the proposed parcel split, all parking setbacks are deficient. The applicant will seek variances from the Zoning Board of Appeals.</p>
<p>Architecture / Pedestrian Orientation Section 1602.7</p>	<p>Proposed uses, through innovative architecture, shall create a significant pedestrian orientation in keeping with the intent</p>	<p>Pedestrian plaza and planters proposed.</p>	<p>Yes</p>	<p>Applicant should consider replacing the blue bollards and other bright blue features along the front of the</p>

Item	Required	Proposed	Meets Requirements?	Comments
	<p>and purpose of these districts.</p> <p>Architectural amenities shall include pedestrian walkways, brick or other approved decorative paving, coordinated pedestrian scale lighting, benches, trash receptacles, small scale landscape treatments, and major architectural features at entranceways and focal points of the development (e.g., arch, gateway, bell tower, fountain).</p> <p>Architectural design and facade material are to be complimentary to existing or proposed buildings within the site and the surrounding area. It is not intended that contrasts in architectural design and use of facade materials is to be discouraged, but care shall be taken so that any such contrasts will not be so out of character with existing building designs and facade materials so as to create an adverse effect on the stability and value of the surrounding area.</p>			<p>store with a more muted tone to complement the existing Novi Town Center.</p> <p>Please see the façade review letter for additional information relating to architectural design.</p>
<p>Sidewalks Sections 1602.11 and</p>	<p>Direct pedestrian access shall be provided between all buildings</p>	<p>Concrete sidewalks proposed throughout site.</p>	<p>Yes</p>	

Item	Required	Proposed	Meets Requirements?	Comments
Master Plan for Land Use Section 2501	and uses within a development and between a development and adjacent areas.			
Development Amenities Section 2502	All sites shall provide development amenities in the form of exterior lighting, paved activity nodes, street/sidewalk furniture, safety paths, screening walls and planters in accordance with the Town Center Design and Development Study/Technical Reference which is made a part of this Ordinance.	Bike racks, trash receptacles, benches, pedestrian plaza and planters proposed.	Yes	
Signs Section 2510	Exterior Signage is not regulated by the Planning Division or Planning Commission.			<p>Please contact Jeannie Niland (248.735.5678).</p> <p>Applicant should develop a wayfinding signage program for the Town Center to direct drivers and pedestrians to stores.</p>
Exterior Lighting Section 2511	Photometric plan and exterior lighting details needed at final site plan.	Photometric plan submitted.	Refer to Lighting Review Chart.	
Parking Section 2505	Number of off-street spaces regulated by use in Section 2505.	2,762 spaces for entire center	Yes	
Parking Space Dimensions Section 2506	9' x 19' parking space dimensions and 24' wide drives.	9' x 19' with 24' wide drive	Yes	The applicant may reduce parking space lengths to 17' with a 2' overhang into the adjacent landscape area if a 4" curb is

Item	Required	Proposed	Meets Requirements?	Comments
Barrier Free Spaces (Barrier Free Code)	38 spaces required for entire center.	21 additional barrier free spaces provided near proposed Walmart 46 barrier free spaces provided for entire center	Yes	provided.
Barrier Free Space Dimensions (Barrier Free Code)	8' wide with a 5' wide access aisle (8' wide access aisle for van accessible)	Barrier free spaces sized appropriately.	Yes	
Barrier Free Signs (Barrier Free Design Graphics Manual)	One barrier free sign is required per space.	One sign provided for each barrier free space.	Yes	

Item	Required	Proposed	Meets Requirements?	Comments
<p>Loading Section 2507</p>	<p>Unloading space shall be provided in the rear yard at a ratio of ten (10) square feet for each front foot of building.</p> <p>467' x 10 = 4,670 sq. ft. of loading required</p>	<p>Loading space proposed in the exterior side (eastern) yard.</p> <p>Applicant has indicated a commercial vehicle will deliver and unload materials near the bulk materials pick-up area. No striped loading zone near the bulk materials pick-up area has been provided.</p>	<p>No</p>	<p>Applicant will seek a variance from the Zoning Board of Appeals for the location of the eastern loading zone.</p> <p>Applicant should clearly indicate the area to be included in the loading space so that loading space calculations can be verified.</p> <p>Applicant should provide a detail of the loading zone screen wall on the next submittal.</p> <p>Applicant should provide a striped loading zone near the bulk materials pick-up area. Any loading zones located in the exterior side (southern) yard will require a variance from the Zoning Board of Appeals. If the applicant elects not to provide a loading zone for that area, deliveries will need to be limited to the designated striped loading zone or the applicant will need to seek a variance from the Zoning Board of Appeals for loading and unloading outside of a designated area.</p> <p>Applicant should consider orienting the entrance to the bagged</p>

Item	Required	Proposed	Meets Requirements?	Comments
				<p>materials pick-up area to the east and providing a turn-around area for customers exiting.</p> <p>Applicant should clearly show all proposed mechanical equipment in and around proposed Walmart site as well as provided screening. If all mechanical equipment will be housed on the roof, a note indicating such shall be provided.</p>
<p>Loading Space Screening Sec 2-302A</p>	<p>In the TC District, view of loading and waiting areas must be shielded from rights of way and adjacent properties.</p>	<p>Loading space proposed in the exterior side (eastern) yard to be screened with proposed landscaping.</p>	<p>Yes</p>	
<p>Accessory Structure Setback-Dumpster Sec 2-303</p>	<p>Accessory structures should be setback a minimum of 10 feet from any building unless structurally attached to the building and setback the same as parking from all property lines; in addition, the structure must be in the rear yard.</p>	<p>Trash compactor proposed in the exterior side (eastern) yard attached to building and setback 55'.</p>	<p>No</p>	<p>Applicant should relocate the trash compactor to comply with the Ordinance or seek a variance from the Zoning Board of Appeals for the location of the trash compactor. The applicant has indicated they will seek a variance.</p>
<p>Dumpster Ch 10-2-143 Sec 2-143</p>	<p>Screening of not less than 5 feet on 3 sides of dumpster required, interior bumpers or posts must also be shown. Enclosure to match building materials and be at least one foot taller than height of refuse bin.</p>	<p>Screening details not provided.</p>	<p>No</p>	<p>Applicant should provide dumpster screening details to comply with the Ordinance.</p>

Item	Required	Proposed	Meets Requirements?	Comments
Required Open Space (Sec. 1602.8)	Minimum 15% open space required	11.9% open space on proposed Walmart site (Over 15% provided for entire Town Center development)	Yes/No	Staff recommends the applicant provide additional open space to meet the minimum requirements.

Lighting Review Summary Chart

Walmart

SP 10-42A

Item	Required	Meets Requirements?	Comments
Intent (Section 2511.1)	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties, reduce unnecessary transmission of light into the night sky	Yes	
Lighting plan (Section 2511.2.a.1)	Site plan showing location of all existing and proposed buildings, landscaping, streets, drives, parking areas and exterior lighting fixtures	No	Manufacturer's specifications have not been provided for all light fixtures. Specifically, specifications for fixtures identified as 11, 11A, 11B, 100, 101 and 103 have not been provided.
Lighting Plan (Section 2511.2.a.2)	Specifications for all proposed and existing lighting fixtures including: Photometric data Fixture height Mounting & design Glare control devices Type and color rendition of lamps Hours of operation Photometric plan	No	Applicant should provide hours of operation for all light fixtures.
Required conditions (Section 2511.3.a)	Height not to exceed maximum height of zoning district or 25 feet where adjacent to residential districts or uses.	Yes	39' mounting height proposed.
Required Notes (Section 2511.3.b)	<ul style="list-style-type: none"> - Electrical service to light fixtures shall be placed underground - No flashing light shall be permitted - Only necessary lighting for security purposes and limited operations shall be permitted after a site's hours of operation. 	Yes	

Item	Required	Meets Requirements?	Comments
Required conditions (Section 2511.3.e)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1.	No	The average minimum ratio for the entire site should be no greater than 4:1. The area identified as main lot appears to exceed this ratio. The applicant should adjust the site lighting so that it falls within the ordinance standards.
Required conditions (Section 2511.3.f)	Use of true color rendering lamps such as metal halide is preferred over high and low pressure sodium lamps.	Yes	Metal halide proposed.
Minimum Illumination (Section 2511.3.k)	<ul style="list-style-type: none"> - Parking areas- 0.2 min - Loading and unloading areas- 0.4 min - Walkways- 0.2 min - Building entrances, frequent use- 1.0 min - Building entrances, infrequent use- 0.2 min 	Yes	
Maximum Illumination adjacent to Non-Residential (Section 2511.3.k)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	No	There are a number of instances where lighting at the property line exceeds 1 foot candle. The applicant should adjust light levels to meet Ordinance requirements or seek a variance from the Zoning Board of Appeals. The applicant has indicated they will seek a variance.
Cut off Angles (Section 2511.3.1(2))	All cut off angles of fixtures must be 90 degrees when adjacent to residential districts	Yes	Property not adjacent to a residential district.

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

November 23, 2010

Engineering Review

Walmart Supercenter Store
SP10-42A

Petitioner

Wal-Mart Stores, Inc.

Review Type

Revised Preliminary Site Plan

Property Characteristics

- Site Location: NW Corner of Town Center Drive and Eleven Mile Road
- Site Size: 12.8 acres
- Plan Date: September 14, 2010

Project Summary

- Construction of an approximately 149,854 square-foot commercial building and associated parking. Site access would be provided by three (3) drive approaches off of Eleven Mile Road, two (2) approaches off of Ingersol Drive, one (1) approach off of Town Center Drive as well as an internal connection to Novi Town Center.
- Water service would be provided by an 8-inch connection from the existing 12-inch water main along the east side of Town Center Drive and the existing 8-inch stub coming off of Ingersol Drive. A 3-inch domestic lead and a 8-inch fire lead would be provided to serve the building, along with three (3) additional hydrants.
- Sanitary sewer service would be provided by extending the existing 8-inch sewer from the north side of the site. There two proposed leads, one on the north and east sides of the proposed building.
- Storm water would be collected by two storm sewer collection systems that will each connect to the existing storm sewer at Novi Town Center. A bank full storm water volume will be detained onsite prior to discharging into Bishop Creek and later detained at the Bishop Regional Detention Basin for the 100-year storm.

Recommendation

Approval of the Revised Preliminary Site Plan and Preliminary Storm Water Management Plan is recommended.

Comments:

The Revised Preliminary Site Plan meets the general requirements of Chapter 11, the Storm Water Management Ordinance and the Engineering Design Manual with the following items to be addressed at the time of Final Site Plan submittal (further engineering detail will be required at the time of the final site plan submittal):

Additional Comments (to be addressed prior to the Final Site Plan submittal):

General

1. It is noted in the applicant's Engineering response letter that none of the previous review comments were addressed in this submittal since the prior review was approved with conditions. Below is the list of Preliminary Site Plan review comments that need to be addressed prior to Final Site Plan submittal.
2. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
3. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal.
4. Town Center Drive is classified as a non-residential collector road. The City of Novi master planned right-of-way width for non-residential collector roads is 70-feet (35-foot half right-of-way). Consider dedicating the additional right-of-way width to the City as part of the site plan. As an alternate option, consider providing a highway easement in lieu of dedicating right-of-way to the City.
5. The Non-domestic User Survey form shall be submitted to the City so it can be forwarded to Oakland County. This form was included in the original site plan package.
6. Provide a minimum of two ties to established section or quarter section corners.
7. Provide a traffic control sign table listing the quantities of each sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.
8. Provide a traffic control plan for the proposed road work activity (City roads).
9. Maintain a minimum of 10-foot horizontal separation between public utilities and other fixed objects. There is a stretch of water main along the east side of the building that currently does not comply. If it is not feasible, please explain.
10. Provide a note that compacted sand backfill shall be provided for all utilities within the influence of paved areas, and illustrate on the profiles.
11. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
12. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
13. Label all pipe materials on the plan.
14. Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Department for review.
15. Soils boring(s) were requested in the area of proposed underground storm water detention per the Pre-Application Meeting comments dated July 7, 2009. The possibility of a high ground water elevation is a concern. All underground detention systems must be built above ground water elevation.

Water Main

16. The water leads into the building show four (4) valves, three (3) of which appear to be gate wells, are shown on top of or near the proposed storm water detention system. Please provide invert elevations on the next submittal.
17. Note that a tapping sleeve, valve and well will be provided at the connection to the existing water main. This is not provided at the connection to the west.
18. A 20-foot water main easement (10-foot off centerline of the pipe and past hydrants) is required for all proposed water main 8-inches in diameter or larger. Show this on the plan.
19. Water main profiles are required for all water main 8-inches in diameter or larger.
20. Three (3) sealed sets of revised utility plans along with the MDNRE permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Department for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

Sanitary Sewer

21. Provide a sanitary sewer basis of design for the development on the utility plan sheet.
22. Sanitary sewer profiles are required at the time of Final Site Plan submission.
23. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
24. Provide a note on the Utility Plan and sanitary profile stating the sanitary lead will be buried at least 5 feet deep where under the influence of pavement.
25. Provide a testing bulkhead immediately upstream of the sanitary connection point. Additionally, provide a temporary 1-foot deep sump in the first sanitary structure proposed upstream of the connection point, and provide a secondary watertight bulkhead in the downstream side of this structure.
26. A 20-foot sanitary sewer easement (10-foot off centerline of the pipe) is required for all proposed sanitary sewer 8-inches in diameter or larger. Show this on the plan.
27. Provide a sanitary sewer monitoring manhole, unique to this site, within a dedicated access easement or within the road right-of-way. If not in the right-of-way, provide a 20-foot wide access easement to the monitoring manhole from the right-of-way (rather than a public sanitary sewer easement).
28. Five (5) sealed sets of revised utility plans along with the MDNRE permit application (11/07 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist should be submitted to the Engineering Department for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets. Also, the MDNRE can be contacted for an expedited review by their office.

Storm Sewer

29. An easement is required over the storm sewer accepting and conveying off-site drainage. This includes any offsite easements over existing sewer conveying water

- from the proposed site to the discharge point. Show all proposed easements on the plan.
30. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
 31. No more than 0.011 cfs/sq. in. of opening can be directed to any single catch basin. Given a 160 sq.in. opening in a catch basin cover, that only allows for ~0.5 acres to be directed to any single catch basin. Currently CB#1 and CB#2 are accepting well over 1 acre of drainage each.

Storm Water Management Plan

32. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
33. Bank full storage volume is required for any impacted paved areas, including mill and overlay. The current volumes do not include storm water detention for the mill and overlay areas. Please include additional required volume in the next submittal.
34. Provide calculations verifying the post-development runoff rate directed to the proposed receiving drainage course does not exceed the pre-development runoff rate for the site.
35. Provide supporting calculations for the runoff coefficient determination.
36. Provide a detail for the proposed outlet structure and restriction method on the plan. Be sure a secondary overflow is provided.
37. Provide the overland routing that would occur in the event the underground system cannot accept flow. This route shall be directed to a recognized drainage course or drainage system.
38. Provide a soil boring in the vicinity of the proposed underground detention system to determine bearing capacity and the high water elevation of the groundwater table.
39. Provide critical elevations (low water, first flush, bank full, and pavement elevation) of the detention system on the underground detention system cross-section. Ensure there is at least 1 ft. of freeboard between the 100-year elevation and the subgrade elevation under the pavement.
40. Provide an isolator row in the underground detention system in addition to the swirl concentrator chamber. Contact the Engineering Department for further information.
41. Provide a table or note addressing the required bedding depth vs. bearing capacity of the underlying soils in the vicinity of the underground detention system per the manufacturer's specifications.
42. Provide a note on the plans stating the City's inspecting engineers shall verify the bearing capacity of the native soils to verify an adequate bedding depth is provided.
43. Indicate the assumed porosity of the aggregate. The volume calculations shall consider only 85-percent of that volume as available for storage to account for sediment accumulation in the aggregate.
44. Provide a note on the underground detention detail that aggregate porosity will be tested, and results provided to the City's inspecting engineers.

45. The underground storage system shall include 4-foot diameter manholes at one end of each row as well as at each bend for maintenance access.
46. Provide inspection ports throughout the underground detention system at the midpoint of a couple storage rows, and one in the center of the header and footer. Two inspection ports should be located along the isolator row.
47. All surface drainage (not including rooftop drainage) shall be pretreated **PRIOR** to being detained in an underground system. Also, pretreatment is required prior to discharging any storm water to the west. There is currently no pretreatment proposed to the west.
48. The proposed KSI pretreatment structure is **NOT** an approved structure by the City of Novi Engineering Department.
49. Provide manufacturers details and sizing calculations for the pretreatment structure(s) within the plans. Provide drainage area and runoff coefficient calculations specific to the area tributary to each treatment structure. The treated flow rate should be based on the 1-year storm event intensity (~1.6 In/Hr). Higher flows shall be bypassed.
50. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures shall be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
51. Provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.

Paving & Grading

52. Provide a detailed cross-section(s), including material thicknesses, for all proposed pavement. Make sure all pavement cross-sections comply with City of Novi Design and Construction Standards. All pavements within the City of Novi public right-of-way shall match the adjacent road cross-section.
53. Provide the standard Type 'M' approach at the Town Center Drive driveway/intersection and any other proposed approach conveying storm water across it.
54. Upgrade all ramps (all four corners) at the Town Center Drive and Eleven Mile Road intersection to comply with ADA standards.
55. Detectable warning plates are required at all barrier free ramps in the public right-of-way or hazardous vehicular crossings. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps. Provide the MDOT standard detail (R-28-F) for detectable surfaces. This includes the Eleven Mile Road and Town Center Drive intersection (all 4 corners) as well as the main entrance off of Eleven Mile Road near the southwest corner of the proposed building.
56. Label specific ramp locations on the plans where the detectible warning surface is to be installed.
57. Specify the product proposed and provide a detail for the detectable warning surface for barrier free ramps. The product shall be the concrete-embedded detectable

- warning plates, or equal, and shall be approved by the Engineering Department. Stamped concrete will not be acceptable.
58. Provide ramp details at all proposed ramp locations on the plan. Make sure all ramps comply with ADA barrier free requirements.
 59. Verify the slopes along the ingress/egress routing to the building from the barrier-free stalls comply with Michigan Barrier-Free regulations.
 60. Provide additional spot grades as necessary to demonstrate that a minimum 5-percent slope away from the building is provided for a minimum distance of ten feet around the perimeter of the building.
 61. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
 62. The City of Novi standard curb height is 6-inches or 4-inches adjacent to a 17-foot stall with a two (2) foot overhang.
 63. The City standards curb and gutter detail is 24-inches wide. The proposed curb width throughout the proposed site plan specifies 18-inch curb and gutter. Please revise plan.
 64. The right-of-way sidewalk shall continue through the drive approach. If like materials are used for each, the sidewalk shall be striped through the approach. The sidewalk shall be increased to 6-inches thick along the crossing or match the proposed cross-section if the approach is concrete. The thickness of the sidewalk shall be increased to 6 inches across the drive approach. Provide additional spot grades as necessary to verify the maximum 2-percent cross-slope is maintained along the walk.

Off-Site Easements

65. A storm water easement is required along all storm sewers conveying drainage through the Novi Town Center site or from the proposed site to the discharge point.

The following must be submitted at the time of Final Site Plan submittal:

66. A letter from either the applicant or the applicant's engineer must be submitted with the Final Site Plan highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved.
67. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. **The cost estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving, right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).

The following must be submitted at the time of Stamping Set submittal:

68. A draft copy of the maintenance agreement for the storm water facilities, as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department with the Final Site Plan. Once the form of the agreement

is approved, this agreement must be approved by City Council and shall be recorded in the office of the Oakland County Register of Deeds.

69. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department.
70. A draft copy of the 20-foot wide easement for the sanitary sewer to be constructed on the site must be submitted to the Community Development Department.
71. A 20-foot wide easement where storm sewer being conveyed through the proposed site as well as an easement from Novi Town Center for the storm water being conveyed through their site must be shown on the Exhibit B drawings of the Master Deed.
72. Executed copies of any required off-site utility easements must be submitted to the Community Development Department.

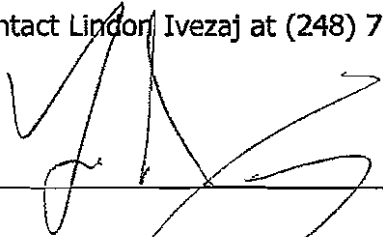
The following must be addressed prior to construction:

73. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting. Once determined, a grading permit fee must be paid to the City Treasurer's Office.
74. An NPDES permit must be obtained from the MDNRE because the site is over 5 acres in size. The MDNRE requires an approved plan to be submitted with the Notice of Coverage.
75. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department (248-347-0430) for forms and information.
76. A permit for work within the right-of-way of Town Center Drive must be obtained from the City of Novi. The application is available from the City Engineering Department and should be filed at the time of Final Site Plan submittal. Please contact the Engineering Department at 248-347-0454 for further information.
77. A permit for water main construction must be obtained from the MDNRE. This permit application must be submitted through the City Engineer after the water main plans have been approved.
78. A permit for sanitary sewer construction must be obtained from the MDNRE. This permit application must be submitted through the City Engineer after the sanitary sewer plans have been approved.
79. Construction Inspection Fees to be determined once the construction cost estimate is submitted must be paid prior to the pre-construction meeting.
80. A storm water performance guarantee, equal to 1.5 times the amount required to complete storm water management and facilities as specified in the Storm Water Management Ordinance, must be posted at the Treasurer's Office.
81. An incomplete site work performance guarantee for this development will be calculated (equal to 1.5 times the amount required to complete the site

improvements, excluding the storm water facilities) as specified in the Performance Guarantee Ordinance. This guarantee will be posted prior to TCO, at which time it may be reduced based on percentage of construction completed.

82. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted at the Treasurer's Office.

Please contact Lindon Ivezaj at (248) 735-5694 with any questions.

A handwritten signature in black ink, appearing to read 'Lindon Ivezaj', is written over a horizontal line. The signature is stylized and somewhat cursive.

cc: Ben Croy, Engineering
Brian Coburn, Engineering
Kristen Kapelanski, Community Development Department
Tina Glenn, Water & Sewer Dept.

TRAFFIC REVIEW

November 15, 2010

Barbara McBeth, AICP
Deputy Director of Community Development
City of Novi
45175 W. Ten Mile Rd.
Novi, MI 48375



**SUBJECT: Wal-Mart Supercenter Store #5893-00, SP#10-42A, Traffic Review
of Revised Preliminary Site Plan and Traffic Impact Study**

Dear Ms. McBeth:

At your request, we have reviewed the above and offer the following recommendation and supporting comments.

Recommendation

We recommend approval of both the preliminary site plan and traffic impact study, subject to the various issues shown below in **bold** being satisfactorily addressed in subsequent submittals.

Project Description

What is the applicant proposing?

1. The applicant, Wal-Mart Stores East, LP, Inc. (Mark Bemis), proposes to build a 149,854-s.f. discount superstore on the northwest corner of Eleven Mile Road and Town Center Drive, within the Novi Town Center (see attached site plan).

Traffic Study

Was a study submitted and was it acceptable?

2. The traffic impact study, prepared for the applicant by CESO, Inc. and dated September 2010, is generally acceptable. We have the following comments:
 - a. **Existing Traffic Volumes** – As we requested, manual traffic counts were made by CESO (in June 2010) within three critical time periods of the week, resulting in the identification of the following peak hours for analysis: weekday mid-day (12:15-1:15 p.m.), weekday p.m. (4:45-5:45), and Saturday (3:00-4:00 p.m.). Also, since Birchler Arroyo counted somewhat higher volumes at 11 Mile and Town Center in October 2009, alternative analyses were performed at that location using those higher volumes.
 - b. **Future Background Traffic** – The existing traffic volumes were increased by 1% per year for two years to forecast future background traffic in the hypothetical absence of both the Wal-Mart Superstore and the new Town Center land uses assumed to occupy only in conjunction with Wal-Mart. It is important to note that forecasted future trips for the reoccupation of the now-vacant Town Center spaces – which will

survive planned demolition – are not included in background traffic, only “opening day” traffic.

The future new Town Center uses were assumed to include 123,055 s.f. of specialty retail space, two average-size (6,000-s.f.) high-turnover restaurants, and one average-size (9,000-s.f.) quality restaurant. Graphics within the report suggest that new trips generated by those uses have been assumed to be distributed as follows: 40% to the strip center directly north of the proposed Wal-Mart; 20% to newly renovated Building I (in the parking lot adjacent to Crescent Blvd.); 15% to Building J (across the parking lot directly south of Building I, and directly west of newly renovated and still-vacant Building G); 20% to Building N (at the bend between Ingersol Drive and 11 Mile Road); and 5% to the outlot building on the northwest corner of Grand River and Town Center Drive.

- c. Trip Generation – All numbers appearing in the attached trip generation table were reviewed and approved by Birchler Arroyo in advance of the study’s submission. Note that the forecast includes the assumed other new Town Center uses in addition to the proposed Wal-Mart.
- d. Trip Distribution – The study’s trip distribution models for the Wal-Mart and for the other new Town Center (or “shopping center”) uses were reviewed and approved by Birchler Arroyo in advance of the study’s submission. Note that pass-by trips are appropriately modeled differently than new (or primary) trips.
- e. Traffic Assignments – The application of the trip distribution percentages to the trip generation subtotals in the trip generation table was presumably done correctly. It should be noted that as many as seven vehicles per hour were observed cutting through the restaurant site from Grand River to 11 Mile Road (Figure 1, attached) – without a significant existing traffic generator located next to the latter – but the study chose not to assume any such cut-through traffic once the Wal-Mart is built nearby.
- f. Capacity Analyses – Although the text of the report states that these analyses were done using *Synchro 7* software, a comparison of the results summary tables to the separately bound appendices (containing software printouts) shows that non-signalized intersections and driveways were actually analyzed using *HCS+, Version 5.2*. The use of *HCS+* at those locations is acceptable; however, it would be best to avoid confusion by omitting the corresponding *Synchro* printouts, which do not actually display any level-of-service results.

The results of the capacity analyses have been summarized in a very detailed fashion in a series of report tables. While these tables facilitate comparisons between different peak hours at a given location or for a given traffic movement, they do not readily facilitate comparisons for a given location between the existing, background, and opening-day traffic scenarios. Of greatest interest would be comparisons between background and opening day, which speak directly to the impacts of the proposed Wal-Mart and associated Town Center redevelopment.

To more directly address site traffic impacts, Birchler Arroyo prepared Tables 1, 2, and 3 (attached) for the weekday mid-day peak hour, weekday p.m. peak hour, and

Saturday peak hour, respectively. These tables address only the three signalized intersections within the study area, and include specific movements only where a level of service of E or F is predicted for one or more of the peak hours. Key findings revealed by Tables 1-3 are as follows:

- With few exceptions, congestion is and will remain greatest at the Novi-Grand River intersection.
 - In general, conditions during the weekday p.m. peak hour are and will remain worse than in the other two peak hours evaluated.
 - Absent any mitigation, the impacts of adding new traffic generated by Wal-Mart and the reoccupation of currently vacant Town Center stores would be significant:
 - At the intersection of Novi, Crescent, and Fonda, overall average intersection delay would approximately double in all three analysis hours (e.g., in the weekday p.m. peak hour, rising from 40.9 sec to 85.4 sec).
 - At Novi and Grand River, overall average intersection delay would remain essentially unchanged in the weekday midday peak hour, increase only 4% in the weekday p.m. peak hour, and increase 12% in the Saturday peak hour.
 - At the intersection of Grand River, Town Center, and Market, overall average intersection delay would double in the weekday midday peak hour, but not change significantly in the other two analysis hours.
 - With intersection-specific mitigation – consisting of signal timing changes and the addition of a right-turn overlap (green arrow) on the westbound Grand River approach to Novi Road (allowing westbound right turns to move simultaneously with southbound left turns) – overall average intersection delays on opening day can potentially be less than predicted for the background traffic scenario (and generally less than experienced currently).
 - Even with the recommended changes in signal operation, the level of service at Novi and Grand River would remain F in the weekday p.m. and Saturday peak hours, with overall average delays on opening day of about 100 sec. These results are primarily due to the very heavy forecasted turning movements; for example, in the Saturday peak hour, as many as 597 southbound right turns (sharing a lane with through traffic), 357 southbound left turns, 534 eastbound left turns, and 338 westbound right turns.
- g. Fonda Drive (Crescent Blvd.) Extension – CESO evaluated the potential effectiveness of extending Fonda Drive (Crescent Blvd.) to an intersection with Grand River west of Novi Road. Assuming that the extension would reduce the southbound right-turn volume and eastbound left-turn volume at Novi and Grand River by 50%, the overall level of service at that intersection could be improved to an E (with delays of 55.0-61.7 sec). At the same time, the LOS at Novi and Crescent would remain (or improve to) a C relative to signal re-timing alone (with delays of 28.0-30.5 sec).

- h. Queuing Analyses – 95th-percentile queues were predicted for all locations and conditions. Of greatest interest are the queues predicted for the westbound Grand River approach to Novi Road (relevant to the feasibility of entering the site via the west driveway on Grand River, some 500 ft east of Novi Road) and on the eastbound 11 Mile approach to Town Center (relevant to the proposed addition of a 150-ft long eastbound left-turn lane on that approach):
- On opening day, the 95th-percentile westbound right-turn queue on Grand River is predicted by *Synchro* to be 709 ft long in the weekday p.m. peak hour and 611 ft long in the Saturday peak hour, even with implementation of the recommended right-turn overlap. Hence, customers during the busiest traffic times will have challenges turning left into the site via the west driveway on Grand River.
 - On opening day, the 95th-percentile eastbound left-turn queue on 11 Mile is predicted to be only one vehicle. The proposed 150-ft-long left-turn lane will therefore be more than adequate for the queuing of small vehicles, but is needed to minimize the impacts of large trucks exiting the nearby truck access drive.
- i. Recommended Mitigation – The applicant’s traffic study recommends the following:
- At all three signalized intersections evaluated, the maximum cycle length should be increased to 150 sec from the current 130-140 sec, and the signal phasing should be revised per the *Synchro* summary sheets in study Appendix E. This will require changes in signal hardware as well as programming; for example, to add the westbound right-turn overlap (green arrow).
 - The applicant’s November 8, 2010 resubmittal letter states that the traffic study (including the above recommendations) was forwarded to RCOC and “at this time, the Road Commission had no major concerns...”. However, the email chain attached to the letter goes only as far as saying that the study (including *Synchro* files) was forwarded to “relevant staff within RCOC for comment,” with no indication that any subsequent comments had been returned to the applicant. **The applicant should expound upon the latest feedback received from RCOC, as well as the expected means of implementing the recommended signal hardware and signal timing improvements.**
 - The west leg of 11 Mile Road at Town Center Drive should be widened to add a 150-ft long left-turn lane introduced by a 125-ft long taper.
 - The private portion of Ingersol Drive, from Crowe to the southerly site access on Ingersol, should be restriped to add a two-way left-turn lane.
 - Fonda Drive (Crescent Blvd.) should be extended to an intersection with Grand River west of Novi Road. The applicant is not volunteering to help fund this improvement, since traffic conditions at Novi and Grand River already warrant such mitigation.

Trip Generation

How much traffic would the proposed development generate?

3. See the attached trip generation summary, appearing in the CESO report as Table 5. Wal-Mart and the other new Town Center uses are predicted to generate nearly 1,000 new one-way vehicle trips in each of the two busiest hours (weekday mid-day and Saturday).

Vehicular Access Locations

Do the proposed driveway locations meet City spacing standards?

4. Not applicable, since all site access drives are located on private roads or service drives. As a matter of possible interest, however, the closest driveway spacing is between the two customer drives on the private section of 11 Mile, which at about 210 ft, is double the minimum spacing permitted by the City on a 25-mph street.

Vehicular Access Improvements

Will there be any improvements to the abutting road(s) at the proposed driveway(s)?

5. The west leg of 11 Mile at Town Center will be widened, all on the north side, to provide a 150-ft-long eastbound left-turn lane. The new left-turn lane will be offset an acceptable 3 ft north of the opposing (westbound) left-turn lane, but this is acceptable given the fact that the intersection is about 100 ft wide east to west. Westbound through traffic will follow a comfortable 160-ft long taper.
6. Existing Ingersol Drive along the west end of the site will be re-stripped to provide a two-way left-turn lane.

Driveway Design and Control

Are the driveways acceptably designed and signed?

7. The pre-application site plan showed the proposed access drive near the southwest corner of the Wal-Mart store as a right-in/right-out driveway, with a very short throat (the first parking aisle north of 11 Mile would have been directly accessible). We saw no need for prohibiting exiting left turns here if the throat is lengthened as now proposed; however, entering left turns still appeared appropriate given the lack of a left-turn lane on this section of 11 Mile. Our proposed redesign of this area of the site is illustrated in Figure 2 (attached).

The site plan now proposed lacks the raised separator between entering and exiting traffic that we had recommended at this location. As a result, vehicles westbound in the internal driveway paralleling 11 Mile (primarily customers departing the garden center loading area) would be able to turn left from a location less than 20 ft north of 11 Mile. Such movements could surprise drivers both exiting and entering the main driveway (especially those entering from the east, who would be less likely to notice an impending conflict, given the parallel, same-direction movement and intervening screening wall). Such movements could also be delayed in the process of exiting the site, and potentially block both entering and exiting traffic for short periods of time. **The Planning Commission should have the applicant discuss these concerns and justify the proposed lack of turn restrictions.**

8. The entering radius at the west drive on 11 Mile appears to be only about 10 ft, but the applicant has stated that it is, in fact, "over 25 ft." **This existing curb return should be redrawn more accurately to reflect its actual size.** Also, along the exiting side of this driveway, there are still two signs shown, with the northernmost sign only 23 ft in advance of the proposed new STOP sign. This could still impair a full view of that STOP sign, and **the northerly (unidentified) sign should be relocated to the east side of the driveway, offset to the west of the STOP sign, or simply eliminated.**
9. Although the large "canoe" island along Ingersol at the west end of the site already exists, the operation of nearby Wal-Mart will likely increase the amount of traffic using the two access drives at either end of the island. To improve the performance of these drives given the additional traffic, **the radius of the two internal corners of the island (i.e., next to or across the parking aisle from the north-south STOP signs) should be increased to 15 ft from the existing 5 ft.** The applicant has indicated that **"these changes will be made on the GWE set of plans at final plan submittal."** Given their relevance to the proposed Wal-Mart improvements, however, the requested changes should also appear on Wal-Mart's final site plan, with a note indicating that their implementation will be "by others."
10. Access to the Wal-Mart parking lot, near the northwest corner of the proposed store, will occur at a curved intersection into which several parking spaces in front of proposed Building X (or X.1) will back. While this intersection has been improved since the pre-application concept, **we still have concerns about backing drivers not seeing or otherwise anticipating approaching traffic, especially northbound traffic coming around the bend with high-profile vans parked in the adjacent spaces.** We recommend that the Planning Commission discuss with the applicant and the Town Center management the feasibility of (1) shifting the two handicapped spaces to the north so as to share an access aisle aligned with the pedestrian crossing, (2) deleting the two regular spaces in the intersection, and/or (3) controlling the intersection with all-way STOP signs. **Given their relevance to the proposed Wal-Mart improvements, the change(s) selected should also appear on Wal-Mart's final site plan, with a note indicating that their implementation will be "by others."**

Pedestrian Access

Are pedestrians safely and reasonably accommodated?

11. Safe pedestrian access to and from the east side of Town Center Drive will not exist without additional improvements. **In the process of modifying the existing sidewalks on the northwest corner of 11 Mile and Town Center, a ramped sidewalk stub should be provided to the curb of 11 Mile, at a location suitable for a crosswalk to a corresponding ramp on the east side of the road.** We understand that the City Engineering Division is expecting the applicant to also construct the east-west ramp required on the intersection's northeast corner, stripe the crosswalk between the two new ramps, and relocate the southbound stop bar if necessary. **All of these features should be shown on the final site plan, regardless of who funds the their implementation.**

Parking and Circulation

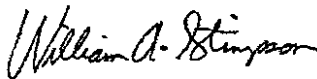
Are parking spaces appropriately designed, marked, and signed? Can vehicles safely and conveniently maneuver through the site?

12. Westbound drivers in the south internal service drive, stopping at the proposed stop bar at the southwest corner of the garden center enclosure, will be unable to see southbound pedestrians and bicyclists about to enter the crosswalk only 2 ft west of that stop bar. **The stop bar should be set back the MMUTCD-minimum of 4 ft in advance of the crosswalk, and the garden center enclosure should be set back (or at least angled at 45 degrees) to provide a clear view to a stopped driver 10 ft east of the stop bar. A larger-scale inset of this area should be provided to ensure proper design and construction of this critical area.**
13. City policy requires site plan conformance with the *Michigan Manual of Uniform Traffic Control Devices*. Hence, **the final site plan should show that all regular (customer as well as associate) parking spaces will be marked in white** (see MMUTCD Section 3B.18). While this would differ from the yellow used elsewhere in the Novi Town Center, we believe that the Wal-Mart parking lot is sufficiently large and separated from other Town Center parking so as to justify adherence to current policy and standards.
14. In response to the preceding comment, which also appeared in our September review, the applicant has stated that with the use of a single color, "employee parking stalls will be difficult to distinguish from customer parking." We respectively suggest that other, less subtle means could be employed to convey the intended message to employees, such as a parking lot diagram posted on employee bulletin boards.
15. **The final site plan should also:**
 - (a) **Specify 24-inch (MMUTCD-minimum) STOP signs.**
 - (b) **Include a Signing Quantities summary table.**

Sincerely,
BIRCHLER ARROYO ASSOCIATES, INC.



Rodney L. Arroyo, AICP
Vice President



William A. Stimpson, P.E.
Director of Traffic Engineering

Attachments:

- 8½ x 11 version of site plan
- Untitled trip generation table
- Problematic traffic movements, BA Tables 1-3
- Unsignalized access routes from Grand River, BA Figure 1
- BA pre-application conceptual design, Figure 2

ITE TRIP GENERATION		SIZE (SQ. FT.)	TRIP ENDS									
ITE CODE	DESCRIPTION		Weekday						Saturday			
			Mid Day Peak (inbound/ outbound)		P.M. Peak (inbound/ outbound)		ADT (inbound/ outbound)		Saturday Peak (inbound/ outbound)		ADT (inbound/ outbound)	
931	Quality Sit-Down Restaurant	9,000	41	9	45	22	405	405	57	40	425	425
	Internal Trip Reduction - 10%	---	4	1	5	2	40	40	6	4	42	42
	Restaurant Driveway Volumes Less Internal Trip Reduction	---	37	8	41	20	364	364	52	36	382	382
	Pass-by Trip Reduction (40% Weekday, 35% Saturday)	---	15	3	16	8	unk	unk	18	13	unk	unk
932	High-Turnover Restaurant	12,000	84	78	79	55	763	763	89	80	950	950
	Internal Trip Reduction - 10%	---	8	8	8	5	76	76	9	8	95	95
	Restaurant Driveway Volumes Less Internal Trip Reduction	---	76	70	71	49	687	687	81	72	855	855
	Pass-by Trip Reduction (40% Weekday, 35% Saturday)	---	30	28	28	20	unk	unk	28	25	unk	unk
814	Specialty Retail Center	123,055	345	374	139	177	2,727	2,727	212	269	2,587	2,587
	Internal Trip Reduction - 10%	---	35	37	14	18	273	273	21	27	259	259
	Shopping Center Driveway Volumes Less Internal Trip Reduction	---	311	337	125	160	2,454	2,454	191	242	2,328	2,328
	Pass-by Trip Reduction (37% Weekday, 37% Saturday)	---	115	125	46	59	unk	unk	69	87	unk	unk
813	Stand-Alone Discount Superstore	149,854	339	352	339	352	3,568	3,568	362	362	4,068	4,068
	Internal Trip Reduction - 10%	---	34	35	34	35	357	357	36	36	407	407
	Superstore Driveway Volumes Less Internal Trip Reduction	---	305	317	305	317	3,212	3,212	325	325	3,661	3,661
	Pass-by Trip Reduction (24% Weekday, 19% Saturday)	---	73	76	73	76	unk	unk	62	62	unk	unk
	Total Driveway Volumes	---	729	732	542	546	6,717	6,717	648	676	7,226	7,226
	Total Pass-by Trip Reduction	---	233	232	164	163	unk	unk	177	187	unk	unk
	TOTAL NEW TRIPS	---	495	500	378	383	6,717	6,717	471	489	7,226	7,226
			995		761		13,434		961		14,453	

Table 1. Problematic Traffic Movements in Weekday Mid-Day Peak Hour

Approach	Movement ¹	Future Background Traffic				Opening Day Traffic			
		Unmitigated		Mitigated		Unmitigated		Mitigated	
		Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS
Novi Rd & Crescent Blvd / Fonda St									
Overall		35.9	D	-	-	72.2	E	38.6	D
EB	L	44.2	D	-	-	55.9	E	77.0	E
	T	41.4	D	-	-	52.0	D	70.7	E
WB	T+L	41.3	D	-	-	54.8	D	67.6	E
NB	L	43.5	D	-	-	54.4	D	75.6	E
	T	66.1	E	-	-	180.9	F	54.2	D
SB	L	38.5	D	-	-	45.0	D	64.1	E
Novi Rd & Grand River Ave									
Overall		75.0	F	*	*	75.6	E	59.1	E
EB	L	113.8	F	*	*	201.7	F	88.7	F
	T+R	47.0	D	*	*	52.8	D	67.6	E
WB	L	68.4	E	*	*	69.1	E	27.5	C
	T	54.0	D	*	*	56.9	E	38.0	D
	R	177.8	F	*	*	87.1	F	71.0	E
NB	L	80.6	F	*	*	80.1	F	110.4	F
	T+R	36.5	D	*	*	38.0	D	62.4	F
SB	L	217.7	F	*	*	213.9	F	85.7	F
	T+R	36.9	D	*	*	39.0	D	38.8	D
Grand River Ave & Town Center Dr / Market St									
Overall		47.1	D	38.0	D	94.3	F	41.7	D
EB	L	55.2	E	44.9	D	50.9	D	52.8	D
WB	L	55.6	E	45.1	D	50.7	D	82.1	F
	T	44.7	D	33.6	C	36.9	D	59.4	E
NB	L	75.8	E	56.4	E	66.1	E	82.5	E
SB	L	246.6	F	144.0	F	> 200	F	56.6	E

¹ L = left, T = through, and R = right.

² Average control delay per vehicle, in seconds.

- No mitigation needed (intersection LOS of D or better).

* Mitigation needed but not evaluated, at least in the form of improvements at this intersection.

Table 2. Problematic Traffic Movements in Weekday PM Peak Hour

Approach	Movement ¹	Future Background Traffic				Opening Day Traffic			
		Unmitigated		Mitigated		Unmitigated		Mitigated	
		Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS
Novi Rd & Crescent Blvd / Fonda St									
Overall		40.9	D	-	-	85.4	F	79.7	E
EB	L	47.9	D	-	-	54.3	D	79.9	E
	T	42.4	D	-	-	48.0	D	68.2	E
WB	T+L	44.5	D	-	-	47.4	D	72.2	E
NB	L	46.0	D	-	-	52.4	D	75.5	E
	T	77.1	E	-	-	212.9	F	27.2	C
SB	L	41.4	D	-	-	43.5	D	68.3	E
Novi Rd & Grand River Ave									
Overall		119.5	F	*	*	124.4	F	100.6	F
EB	L	> 250	F	*	*	> 200	F	202.9	F
	T+R	46.6	D	*	*	83.7	F	52.6	D
WB	L	88.0	F	*	*	70.1	E	72.0	E
	T	45.6	D	*	*	123.2	F	44.9	D
	R	68.8	E	*	*	> 200	F	134.4	F
NB	L	95.3	F	*	*	86.3	F	214.8	F
	T+R	51.8	D	*	*	45.3	D	71.3	E
SB	L	200.9	F	*	*	177.0	F	118.4	F
	T+R	144.4	F	*	*	123.4	F	120.8	F
Grand River Ave & Town Center Dr / Market St									
Overall		65.0	E	36.9	D	58.2	E	47.7	D
EB	L	58.8	E	51.2	D	53.7	D	80.4	F
WB	L	58.8	E	51.2	D	52.8	D	78.3	E
	T	95.1	F	34.8	C	35.6	D	52.8	D
NB	L	76.8	E	63.3	E	66.1	E	84.0	F
SB	L	190.2	F	123.4	F	> 200	F	67.0	E

¹ L = left, T = through, and R = right.

² Average control delay per vehicle, in seconds.

- No mitigation needed (Intersection LOS of D or better).

* Mitigation needed but not evaluated, at least in the form of improvements at this intersection.

Table 3. Problematic Traffic Movements in Saturday Peak Hour

Approach	Movement ¹	Future Background Traffic				Opening Day Traffic			
		Unmitigated		Mitigated		Unmitigated		Mitigated	
		Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS
Novi Rd & Crescent Blvd / Fonda St									
Overall:		27.6	C	-	-	52.4	D	26.5	C
EB	L	41.3	D	-	-	51.6	D	77.4	E
	T	38.3	D	-	-	47.6	D	69.7	E
WB	T+L	39.6	D	-	-	46.6	D	71.4	E
NB	L	40.2	D	-	-	50.2	D	77.5	E
	T	44.0	D	-	-	117.1	F	19.3	B
SB	L	37.0	D	-	-	43.3	D	68.1	E
Novi Rd & Grand River Ave									
Overall:		115.2	F	*	*	129.1	F	97.3	F
EB	L	> 250	F	*	*	> 200	F	183.7	F
	T+R	44.3	D	*	*	49.1	D	42.1	D
WB	L	67.8	E	*	*	68.6	E	83.9	F
	T	54.1	D	*	*	56.0	E	61.3	E
	R	164.5	F	*	*	165.7	F	148.8	F
NB	L	68.9	E	*	*	68.8	E	142.5	F
	T+R	37.9	D	*	*	40.3	D	92.7	F
SB	L	> 250	F	*	*	> 200	F	176.9	F
	T+R	38.0	D	*	*	43.2	D	59.6	E
Grand River Ave & Town Center Dr / Market St									
Overall:		35.0	D	32.6	C	35.5	D	32.5	C
EB	L	52.8	D	43.1	D	48.1	D	79.1	E
WB	L	52.6	D	43.1	D	47.3	D	42.5	D
	T	44.5	D	32.6	C	34.7	C	31.8	C
NB	L	76.1	E	55.4	E	63.3	E	60.0	E
SB	L	98.9	F	64.8	E	120.6	F	88.4	F

¹ L = left, T = through, and R = right.

² Average control delay per vehicle, in seconds.

- No mitigation needed (Intersection LOS of D or better).

* Mitigation needed but not evaluated, at least in the form of improvements at this intersection.

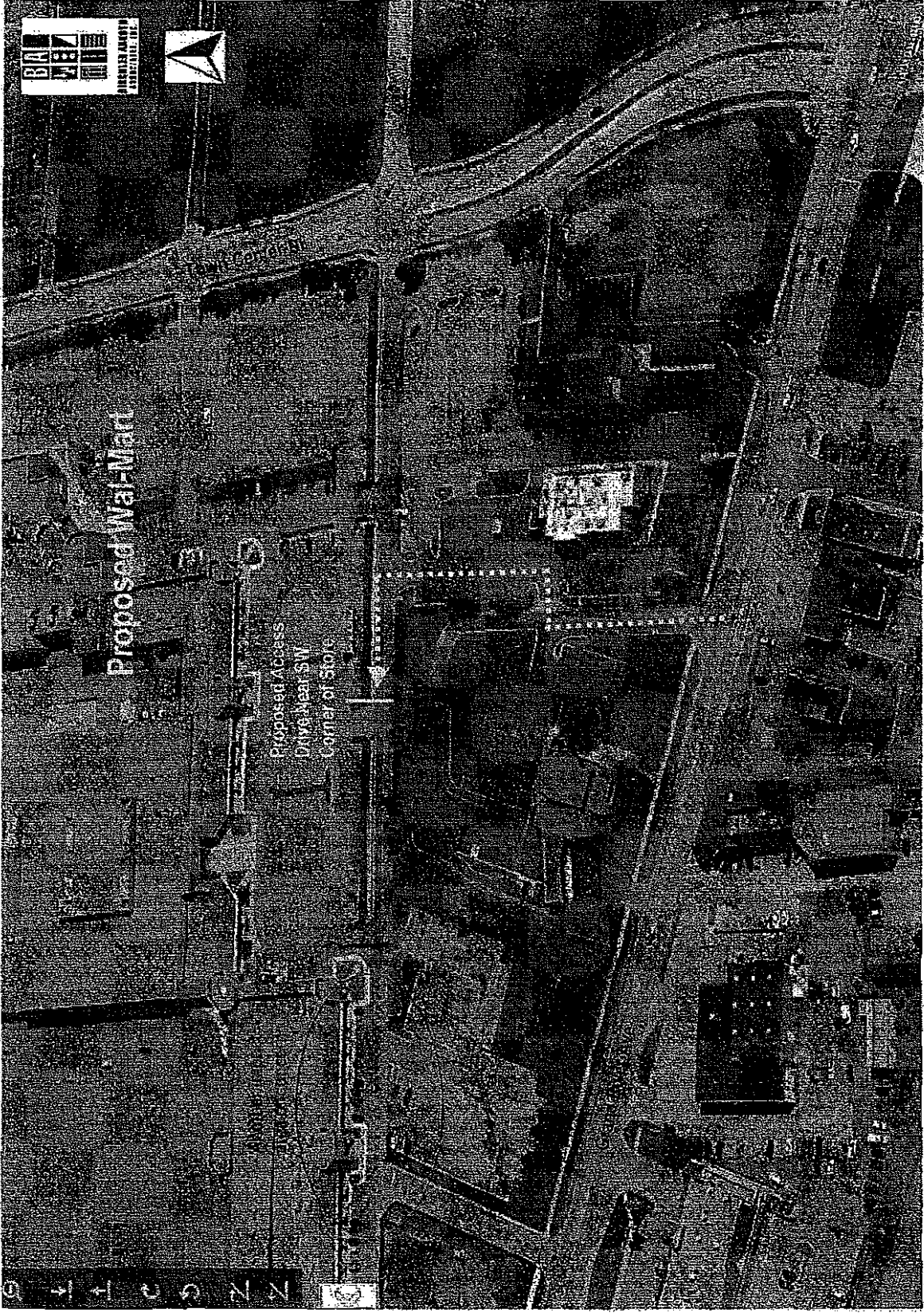


Figure 1. Unsignalized Access Routes from Grand River



BIRCHLER ARROYO
ASSOCIATES, INC.

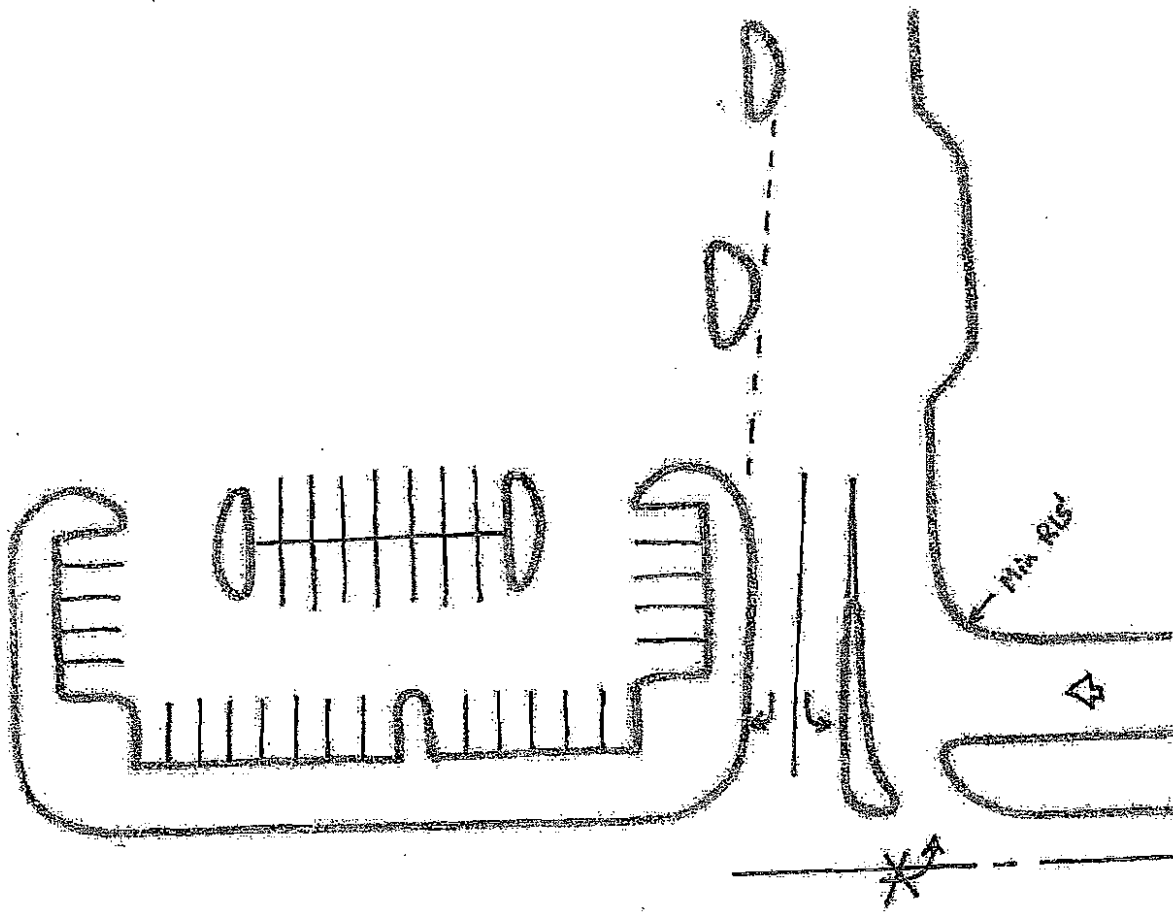


Figure 2. Birchler Arroyo Pre-Application Conceptual Design for Portion of Site Near Southwest Corner of Proposed Wal-Mart Store

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT
November 23, 2010
Revised Preliminary Landscape Review
Walmart SP#10-42A

Petitioner

Walmart Stores East LP, Inc.

Review Type

Revised Preliminary Site Plan

Property Characteristics

- Site Location: North of Eleven Mile Road, West of Town Center Drive (Section 14)
- Site Zoning: TC, Town Center
- Adjoining Zoning: North: TC; South (across Eleven Mile Road): TC; East (across Town Center Drive): OSC, Office Service Commercial; West: TC
- Current Site Use: Existing Former Mervyn's Store
- Adjoining Uses: North: various retail; South (across Eleven Mile Road): various retail and office; East (across Town Center Drive): office; West: various retail
- School District: Novi Community School District
- Site Size: 12.8 acres
- Plan Date: 10/08/10

Recommendation

Approval of the Revised Preliminary Site Plan for SP#10-42A Walmart is recommended. The Applicant should address the concerns as noted below upon subsequent submittals.

Ordinance Considerations

Adjacent to Residential – Buffer (Sec. 2509.3.a.)

1. The project site is not adjacent to residential properties.

Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Sec. 2509.3.b.)

1. Three of the project property boundaries abut right of ways. A 20' wide greenbelt is required along the roadsides at each of these locations. The Applicant has provided for this requirement.
2. The Applicant has proposed metal fencing with brick piers to match existing fencing in the Town Center. The fencing is proposed at the southerly side of the proposed building. The brick piers will match the building materials.
3. A canopy deciduous or large evergreen tree will be required at one per 25 L.F. for each of the road frontages. Existing healthy trees that will be preserved count toward the requirement. Shrubs and perennials have been included for additional buffering and seasonal interest.

Street Tree Requirements (Sec. 2509.3.b.)

1. Street trees have been provided as required.

Interior Parking Landscape (Sec. 2509.3.c.)

1. The Applicant is required to have 15,889 SF of interior parking landscape area and has provided a total of 24, 859 SF thereby exceeding the requirement.
2. A total of 212 interior landscape trees are required. The Applicant has proposed that 29 existing mature trees be preserved. Additional trees have been added to meet the Interior Parking Lot Canopy Tree requirements. On the current plans the Applicant has underreported the number of trees that can be counted toward this requirement. Please address this concern and correct the proposed tree numbers on subsequent submittals.
3. The proposed parking lot islands meet the minimum width and area as required. Please note that all islands must be irrigated.
4. The requirement for a maximum of 15 contiguous parking spaces has been met.

Building Foundation Landscape (Sec. 2509.3.d.)

1. A 4' wide landscape bed is required along all building foundations with the exception of access points. The Applicant has responded to prior staff requests and has installed additional raised planter beds at the front of the store.
2. A total area of 8' wide multiplied by the length of building foundations is required as foundation landscape area. The Applicant has provided for this requirement in the vicinity of the proposed building.
3. *Staff recommends that the Applicant consider the inclusion of small landscape beds directly adjacent to the easterly building foundation. Small beds would allow for the installation of appropriate upright or vining plants that would serve to soften this large wall face and help alleviate architectural massing issues as raised in the façade review.*

Loading Zone Screening

1. Loading zones must be adequately screened to the height of any stored material. The Applicant has included additional plantings that will adequately screen the loading area.
2. The Applicant has now included tall evergreen shrubs along the southerly side of the building in order to adequately screen the outdoor storage / loading area.

Town Center District (Article 16)

1. The Town Center District is intended to promote pedestrian accessibility. Amenities such as decorative walkways, coordinated pedestrian scale lighting, benches, trash receptacles, small scale landscape treatments and bike racks are strongly encouraged. The Applicant has provided raised planters, benches and has included a pedestrian feature at the southeast corner of the site. Bike racks will be provided near the store entries.

Plant List (LDM)

1. A Plant List has been provided per the requirements of the ordinance.

2. Costs for mulch and irrigation have been provided.

Planting Details & Notations (LDM)

1. The Planting Details and Notations meet the requirements of the ordinance.

Irrigation (Sec. 2509 3.f.(6)(b))

1. All landscape areas are required to be irrigated. Please provide an Irrigation Plan and cost estimate with subsequent submittals.

Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and not intended to substitute for any Ordinance. For the landscape requirements, see the Zoning Ordinance landscape section on 2509, Landscape Design Manual and the appropriate items in the applicable zoning classification.



Reviewed by: David R. Beschke, RLA ASLA

Landscape Review Summary Chart

Date: November 23, 2010

Project Name: Walmart
 Project Location: Novi Town Center
 Sp #: 10-42A
 Plan Date: 10/08/10
 Review Type: Revised Preliminary Landscape Plan
 Status: **Approval is recommended.**

Item	Required	Proposed	Meets Requirement	Comments
Name, address and telephone number of the owner and developer or association. (LDM 2.a.)	Yes	Yes	Yes	Include on plan sheets.
Name, Address and telephone number of RLA (LDM 2.b.)	Yes	Yes	Yes	Include on plan sheets.
Legal description or boundary line survey. (LDM 2.c.)	Yes	Yes	Yes	Include on plan sheets.
Project Name and Address (LDM 2.d.)	Yes	Yes	Yes	Include on plan sheets.
A landscape plan 1"-20' minimum. Proper North. (LDM 2.e.)	Yes	Yes	Yes	Larger scale drawings provided for review.
Consistent Plans throughout set.	Yes	Yes	Yes	
Proposed topography. 2' contour minimum (LDM 2.e.(1))	Yes	Yes	Yes	
Existing plant material. (LDM 2.e.(2))	Yes	Yes	Yes	Show location type and size. Label to be saved or removed. Plan shall state if none exists.
Proposed plant material. (LDM 2.e.(3))	Yes	Yes	Yes	Identify all, including perennials.
Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W. (LDM 2.e.(4))	Yes	Yes	Yes	
Existing and proposed overhead and underground utilities, including hydrants. (LDM 2.e.(4))	Yes	Yes	Yes	Utilities shown on landscape plan.
Clear Zone (LDM 2.3.(5) - 2513)	Yes	Yes	Yes	Clear vision zones are shown.
Zoning (LDM 2.f.)	Yes	Yes	Yes	Include all adjacent zoning.
Sealed by LA. (LDM 2.g.)	Yes	Yes	Yes	Requires original signature.
Plant List (LDM 2.h.) - Include all cost estimates.				
Quantities	Yes	Yes	Yes	
Sizes	Yes	Yes	Yes	Canopy trees must be 3" in caliper. Sub-Canopy trees must be 2.5" in caliper.
Root	Yes	Yes	Yes	
Type and amount of mulch	Yes	Yes	Yes	Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate.

Item	Required	Proposed	Meets Requirement	Comments
Type and amount of lawn	Yes	Yes	Yes	Include in cost estimate.
Acceptable species	Yes	Yes	Yes	Per the Landscape Design Manual.
Diversity	Yes	Yes	Yes	Max. 20% Genus, 15% Species.
Planting Details/Info (LDM 2.i.) – Utilize City of Novi Standard Details.				
Deciduous Tree	Yes	Yes	Yes	
Evergreen Tree	Yes	Yes	Yes	
Shrub	Yes	Yes	Yes	
Perennial/ Ground Cover	Yes	Yes	Yes	
Transformers (LDM 1.e.5.)	Yes	Yes	Yes	Show locations and provide 24" clear of plantings on all sides.
Cross-Section of Berms (LDM 2.j.)	Yes	NO	NO	Provide all proposed dimensions.
ROW Plantings (LDM 1)	Yes	Yes	Yes	Include required calculations.
Walls (LDM 2.k.)	Yes	Yes	Yes	Fence with brick piers provided to control pedestrian access.
Landscape Notations – Utilize City of Novi Standard Notes.				
Installation date (LDM 2.l.)	Yes	Yes	Yes	Provide intended date.
Statement of intent (LDM 2.m.)	Yes	Yes	Yes	Include statement of intent to install and guarantee all materials for 2 years.
Plant source (LDM 2.n.)	Yes	Yes	Yes	Indicate Northern grown nursery stock.
Miss Dig Note (800) 482-7171	Yes	Yes	Yes	All plan sheets.
Mulch type.	Yes	Yes	Yes	Natural color, shredded hardwood mulch.
2 yr. Guarantee	Yes	Yes	Yes	
Approval of substitutions.	Yes	Yes	Yes	City must approve any substitutions in writing prior to installation.
Tree stakes guys.	Yes	Yes	Yes	No wire, hose or plastic. Fabric.
Maintenance	Yes	Yes	Yes	Include a minimum of one cultivation in June, July and August for the 2-year warranty period.
Car Parking (Landscape) Setback (2400)	Yes	Yes	Yes	
Parking Area Landscape Calculations (LDM 2.o.)				
A. For : OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district	Yes	Yes	Yes	A = 121,609 x 10% = 12,161 sf
B. For : OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district	Yes	Yes	Yes	B = 50,000 x 5% = 2,500 sf
C. For : OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC,	NA	Yes	Yes	C = 125,031 x 1% = 1,250 sf

Item	Required	Proposed	Meets Requirement	Comments
Special Land Use or non-residential use in any R district				
A. For: I-1 and I-2 Landscape area required due to # of parking spaces	NA			A = 7% x = SF
B. For: I-1 and I-2 Landscape area required due to vehicular use area	NA			B = 2% x = SF
C. For: I-1 and I-2 Landscape area required due to vehicular use area	NA			C = 0.5% x = SF
Total A, B and C above = Total interior parking lot landscaping requirement	Yes	Yes	Yes	15,911 SF required and provided.
Parking lot tree requirement	Yes	Yes	Yes	Applicant shows deficiency. However multiple eligible trees have not been attributed to the allowable total. Meets requirements.
Perimeter greenspace Plantings	Yes	Yes	Yes	Perimeter trees provided at 1 per 35 LF.
Parking Lot Plants				
Max. 15 contiguous space limit	Yes	Yes	Yes	
Parking Land Banked	NA			
Interior Landscape requirements (LDM.2.p.)	Yes	Yes	Yes	
Snow Deposit (LDM.2.q.)	Yes	Yes	No	Depict adequate areas on plan or state how snow removal will be handled.
Soil Type (LDM.2.r.)	Yes	Yes	Yes	Per USDA or borings.
Irrigation plan (LDM 2.s.)	Yes	Yes	No	Provide irrigation plan with final site plan.
Cost Estimate (LDM 2.t.)	Yes	Yes	Yes	Include final estimate of irrigation system at Final Site Plan submittal.
Residential Adjacent to Non-residential				
Berm requirements met (2509.3.a.)	NA			
Planting requirements met (LDM 1.a.)	NA			
Adjacent to Public Rights-of-Way				
Berm requirements met (2509.3.b.)	Yes	Yes	Yes	Existing berms will remain and/or be enhanced as grades allow.
Planting requirements met (2509.3.b.- LDM 1.b.)	Yes	Yes	Yes	
Street tree requirements met (2509.3.b)	NA			
Detention Basin Plantings (LDM 1.d.(3))	NA			

Item	Required	Proposed	Meets Requirement	Comments
Subdivision requirements				
R.O.W. and Street Trees (2509.3.f - LDM 1.d))	NA			
Single Family	NA			
40 wide non-access greenbelt				
Street Trees				
Islands and boulevards				
Multi family	NA			
Condo Trees				
Street trees				
Foundations plantings				
Non-Residential	NA			
Interior street trees				
Evergreen shrubs				
Subcanopy trees				
Plant massing				
Basin plantings	NA			
Loading Zone Screening (2507)	Yes	Yes	Yes	Additional detail and plantings has been added to meet requirements.
Landscape Wall or Berm for OST loading zone screening (2302.A)	NA			
Wildlife Habitat Area (Wildlife Habitat Master Plan Map)	NA			
Subdivision Ordinance Appendix C - ROW Buffer Non-Access Greenbelt (402.B3, 403.F)	NA			
Subdivision Natural Features (403.C) Man-made Bodies of Water (403.D) Open Space Areas (403.E)	NA			

Financial Requirements Review

To be completed at time of Final Site Plan Review.

Item	Amount	Verified	Adjustment	Comments
Full Landscape Cost Estimate	\$ 138,920			Includes street trees. Does not include irrigation costs.
Final Landscape Review Fee	\$ 2,083.80			1.5% of full cost estimate Any adjustments to the fee must be paid in full prior to stamping set submittal.

Financial Requirements (Bonds & Inspections)

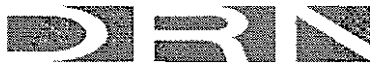
Item	Required	Amount	Verified	Comments
Landscape Cost Estimate	YES	\$ 238,920		Does not include street trees. Includes irrigation (estimated).
Landscape Financial Guaranty	YES	\$ 358,380 (150%)		This financial guarantee is based upon 150% of the verified cost estimate. For Commercial, this letter of credit is due prior to the issuance of a Temporary Certificate of Occupancy. For Residential this is letter of credit is due prior to pre-construction meeting.
Landscape Inspection Fee (Development Review Fee Schedule 3/15/99)	YES	\$ 14,355		For projects up to \$250,000, this fee is \$500 or 6 % of the amount of the Landscape cost estimate, whichever is greater. This cash or check is due prior to the Pre-Construction meeting.
Landscape Administration Fee (Development Review Fee Schedule 3/15/99)	YES	\$ 2,150.28		This fee is 15% of the Landscape Inspection Fee. This cash or check is due prior to the Pre-Construction meeting.
Transformer Financial Guarantee	YES	(To be verified).		\$500 per transformer if not included above. For Commercial this letter of credit is due prior to the issuance of a Temporary Certificate of Occupancy. For Residential this is letter of credit is due prior to pre-construction meeting.
Street Tree Financial Guaranty	NO	\$		\$400 per tree – Contact City Forester for Details
Street Tree Inspection Fee	NO	\$		6% of the Street Tree Bond as listed above. – Contact City Forester for Details
Street tree Maintenance Fee	No	\$		\$25 per trees – Contact City Forester for Details
Landscape Maintenance Bond	YES	\$ 23,892		10% of verified cost estimate due prior to release of Financial Guaranty (initial permit received after October 2004)

NOTES:

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 2509, Landscape Design Manual and the appropriate items under the applicable zoning classification.
2. NA means not applicable.
3. Critical items that must be addressed are in bold.
4. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.
5. For any further questions, please contact:

David R. Beschke, RLA
City of Novi Landscape Architect
45175 W. Ten Mile Road
Novi, Michigan 48375-3024
(248) 735-5621
(248) 735-5600 fax
dbeschke@cityofnovi.org

FACADE REVIEW



November 23, 2010

City of Novi Planning Department
 45175 W. 10 Mile Rd.
 Novi, MI 48375-3024

Re: **FACADE ORDINANCE - Revised Preliminary Site Plan Approval**
Walmart Supercenter (at Novi Town Center) SP10-42A, ZCM10-005
 Façade Region: 1 Zoning District: TC Building Size: 149,854 S.F.

Dear Ms. McBeth;

The following is the Façade Review for Revised Preliminary Site Plan Application for the above referenced project based on the drawings dated September 13, 2010. The percentages of materials proposed are as shown on the table below. The maximum (and minimum) percentages allowed by the Schedule Regulating Façade Materials of Ordinance Section 2520 are shown in the right hand column. Materials in non-compliance with the façade chart are highlighted in bold. This project is located in the TC District and is therefore subject to additional Façade requirements of Sections 1602.7 and 1602.9 of the Zoning Ordinance.

	WEST (Front)	EAST (Rear)	NORTH (Left)	SOUTH (Right)	Ordinance Maximum (Minimum)
Brick (Glen Gery "Golden Dawn" & "Autumn Red")	49%	93%	86%	82%	100% (30% MIN) (Note 1)
EIFS	26%	6%	8%	7%	25%
Phenolic (Trespa) Panels	17%	0%	0%	0%	0%
Standing Seam Metal	0%	0%	3%	3%	25% (Note 2)
Metal - Louvered Awnings, Canopies, Wrought Iron, etc.	5%	1%	3%	8%	0%
Copings & Sills (Stone?)	3%	0%	0%	0%	100%
Note 1 - Façades in TC and TC-1 Districts must be "primarily brick and stone" per Section 1602.9.					
Note 2 - Color must be copper or copper colored paint in TC District per Section 2520, Note 3.					

Since our previous review letter dated 10/7/10 the applicant has made significant revisions to the facades as follows; Concrete "C" Brick has been changed to clay brick matching that used on other Town Center buildings, additional clearstory glass has been added in lieu of EIFS at the arched entranceways, the "Walmart blue" accent band on the building has been eliminated (note the blue bollards and site amenities remain), the color of the projecting entrance-canopy structure has been changed from white to aluminum to match the adjacent window frames, and decorative EIFS cornices have been added to a significant portion of the building.

Section 2520 - As shown above, the percentage of Phenolic Panels and EIFS on the front (west) facade and Metal on all facades exceed the maximum percentages allowed by the Facade Chart. Also, the Ordinance requires that standing seam metal roofs be copper colored. A Section 9 waiver would be required for these deviations.

Section 2520.13 This section of the Ordinance addresses context and requires that proposed buildings be compatible with existing buildings in the neighboring area with respect to percentages of materials and overall aesthetic quality. This section requires that buildings have similar percentages of brick, stone, limestone, granite or marble, and states that "equal treatment of massing, composition, proportions, and attention to detail, especially with respect to the front entrance" is required. The proposed Walmart facade is composed of multiple geometric massing elements that seem purposely intended to produce the overall visual effect of separate edifices. While the change to matching colored brick will mitigate the sharply contrasting design to some extent the overall geometric composition of the proposed building contrasts sharply with existing buildings in the Novi Town Center who's recently remodeled facades exhibit a cohesive and consistent geometric pattern. With respect to massing the Walmart design has little or no consistency with other buildings in the surrounding area. Considering that the Walmart building is proposed to be physically connected to and will share a common storefront with the Town Center Building X.1, this sharp contrast in overall architectural treatment appears to be in direct conflict with this section.

Section 1602.7 - This section requires that facade materials be complimentary to existing or proposed buildings within the site and the surrounding area, and that when contrasting design or materials are used it will not be so out of character with existing building designs and facade materials so as to create an adverse effect on the stability and value of the surrounding area. The design appears to be in conflict with this section for the same reasons as stated above.

Section 1602.9 - Section 1602.9 of the Ordinance requires that facades "shall be primarily of brick or stone." The proposed design includes significant percentages of materials other than brick and stone, most significantly Phenolic Panels and EIFS. The design does not otherwise meet the specific conditions set forth in Section 1602.9.a-d, for the use of materials other than brick and stone for reasons stated herein. It is recommended that brick be considered for all EIFS areas other than cornices to bring the design into compliance with this section.

Front (west) Facade - Phenolic Panels are not specifically listed in the Facade Chart. Assuming a concealed fastener system is used, their appearance will be equivalent to Flat Metal Panels. Therefore, the allowable percentage for Flat Metal Panels (0%) was used for this review. The Phenolic Panels are used only adjacent to the "Walmart" sign and are not used elsewhere on the building. This together with the arched parapet directly above the sign gives the appearance that it designed as a component of the sign. Section 2520.2 of the Ordinance specifically states that "the use of facade materials to form a background or component in a sign or to increase the visual presence of the building for the purpose of advertising shall be deemed inconsistent with this Section." The use of the Phenolic Panels appears to be in direct conflict with this section. It is recommended that Brick be used in lieu of the Phenolic Panels, and that the EIFS cornice be extended across this area. This will disassociate the area with the sign achieving compliance with Section 2520.2, and at the same time bringing the overall west facade into closer compliance with the facade chart.

East Facade Service Areas - The east facade is highly visible from Town Center Drive as well as the businesses located to the east. Existing plantings along Town Center Drive are proposed to be supplemented with additional plant material. This will screen the east facade however additional foundation plantings should also be considered. If foundation plantings are not feasible than additional articulation of the east facade via architectural features such as brick pilasters and/or variations in brick color should be considered. The interior areas of the truck wells and compactor enclosures will also be highly visible, particularly to northbound traffic on Town Center Drive. The applicant should consider adding gates and/or strategically placed plantings to prevent direct lines of sight from Town Center Drive into the truck well and compactor areas.

Garden Center - The garden center appears to be screened by nicely designed walls consisting of wrought iron grillage atop a masonry wall. The applicant should clarify that the height of the screen wall is adequate with respect to the height of storage racks within this area. The height should be approximately equal to the height of storage racks located in the garden area.

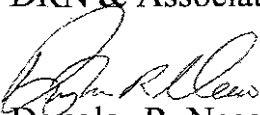
Pick-up / Loading Area - It appears that the loading area is open to view from the south and may contain storage racks. If so, this area should also be screened in similar fashion to the above referenced garden center and east facade. Alternately, the applicant should consider rotating the access direction 90 degrees towards the east to eliminate direct line of sight into the loading area.

Mechanical Equipment Screening - Ground mounted mechanical equipment appears to be screened by a nicely designed open-coursed masonry wall. If rooftop equipment is utilized it must be concealed with matching materials. A notation is made that painted "decorative block" is used at the compressor area, however the extent and location of this material is not clearly indicated on the drawings. It is assumed the material is used only behind the mechanical equipment screens. The applicant should clarify the use of decorative block and that the height of the screening is adequate to conceal the equipment within.

Recommendation: Is our recommendation that the design is in substantial compliance with Section 1602.9 and 2520 of the Ordinance, contingent upon the use of Brick of the colors indicated on the sample board in lieu of all Phenolic Panels and EIFS other than cornices and extending the upper EIFS cornice across the entire west facade. A waiver as described in section 2520.9 for the overage of Metal on all facades and the use of non copper colored standing seam roofs is recommended based on the fact that the louvered awnings, canopies, and wrought iron fences enhance the design and are consistent with the intent and purpose of the Facade Ordinance.

It is our recommendation that the design remains in substantial non-compliance with Sections 1602.7 and 2520.13 with respect to massing, and compatibility with adjacent and surrounding architecture. We would like to point out that while the proposed building represents an example of Walmart's "new prototype", it also represents a significant movement toward "brand-specific architecture" as compared to other designs used by Walmart in the recent past. While it is not our intent to pass judgment on the design quality of the new prototype, or to debate the pros and cons of brand-specific architecture, it should be noted that due to its unique design and repetitive use throughout the country the building will forever be recognizable as a Walmart building. In the off-chance that the buildings tenant was to change they would have to accept an ex-Walmart building. Similarly, if Walmart develops a different prototype or opts to return to its non-branded designs in the future, the Novi building will become a dated design. For this reason we believe that brand-neutral designs such as those used recently in several nearby communities would be much more desirable. Such designs would also be much more consistent with the requirements of Ordinance Sections 2520.13 and 1602.7, and should therefore be strongly considered for this project.

Sincerely,
DRN & Associates, Architects PC


Douglas R. Necci, AIA

FIRE REVIEW



November 23, 2010

TO: Barbara McBeth, Deputy Director of Community Development, City of Novi

RE: Walmart Store, Novi Town Center

SP#: 10-42A, Revised Preliminary Site Plan

CITY COUNCIL

Mayor
David B. Landry

Mayor Pro Tem
Bob Gatt

Terry K. Margolis

Andrew Mutch

Kathy Crawford

Dave Staudt

Justin Fischer

City Manager
Clay J. Pearson

Director of Public Safety
David Molloy

Director of Fire and EMS
Jeffrey Johnson

Project Description:

Demolition of existing retail buildings in order to build a new 150,000 S.F. big box retail building. Project to include parking lot construction, engineering, and landscape.

Comments:

1. Fire lanes shall be designated and properly marked in accordance with city ordinance. Sheet 3 of 12 indicates fire lanes with pavement markings. However, 'No Parking' signs are not shown on the plan. The Legend on page 3 of 12 indicates note 'B' as No Parking Fire Lane signs, however, there are no tags 'B' on the plans. Fire lanes shall be designated on the west, south, and east sides of the building in accordance with the fire prevention code and shall be designated with signs in accordance with this ordinance.
2. Hydrant spacing around proposed building shall not exceed 500' hose laying distance. Relocate the proposed hydrant at the north front store entrance 130' to the north in the parking island at the project line between this project and the X.1 project.
3. The Fire Department Connection shall be located on the front side of the building, in an approved accessible location, within 100' of a hydrant. This shall be shown on the Utility Plan sheet.
4. The control valve on the 8" fire protection water main shall be in a well or it shall be a monitored post indicator valve.
5. A complete hazardous materials survey and inventory shall be provided to the fire department. The forms in the preliminary site plan application are blank.

Recommendation:

This plan is **Recommended for Approval** with the above comments being corrected on the next plan submittal.

Sincerely,

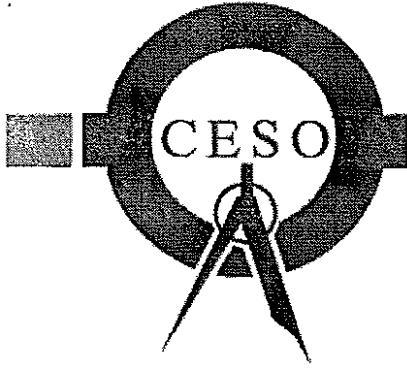
Michael W. Evans
Fire Marshal

cc: file

Novi Fire Department
42975 Grand River Ave.
Novi, Michigan 48375
248.349-2162
248.349-1724 fax

cityofnovi.org

APPLICANT RESPONSE LETTER



December 1, 2010

Ms. Barbara McBeth, AICP
Deputy Director of Community Development
City of Novi
45175 W. Ten Mile Rd.
Novi, MI 48375

Re: Walmart Supercenter Store #5893-00, SP #10-42, Second Review of Preliminary Site Plan

Dear Ms. McBeth,

CESO received your plan review report dated November 22, 2010 and would like to offer the following in response:

PLANNING REVIEW COMMENTS:

1. Outside Storage: The plans indicate an area for bale and pallet recycling. This is considered outside storage and is not permitted in the TC District. The applicant should relocate the recycle area inside the building, or otherwise bring this area into conformance with ordinance standards. The applicant has indicated they will seek a variance for outdoor storage. Staff will not be able to forward a favorable recommendation for a variance from this requirement to the Zoning Board of Appeals.

Response: CESO will be requesting a variance.

2. Open Air Business: An open air business use must be located in the side or rear yard. A portion of the open air garden center projects into the front (western) yard. The applicant should adjust the site layout so that the open air business use no longer projects into the front yard. The applicant has indicated they will seek a variance from the Zoning Board of Appeals for this deficiency.

Response: CESO will be requesting a variance.

3. Open Air Business Screening: An open air business use must be screened with a solid masonry screen wall equal to a height of 6' with decorative fencing above that height to a height equal to 1' taller than the material to be screened. The application materials indicate a 4' masonry screen wall with decorative fencing above. No screening details have been provided in the plan. The applicant should provide screening details in the plan, indicate the height of the material to be stored and raise the height of the masonry portion of the screen wall to a minimum of 6'. The applicant has indicated they will seek a variance from the Zoning Board of Appeals, and be prepared to demonstrate practical difficulty or

hardship. The orientation of the bulk pickup area is somewhat awkward for customers entering and exiting the area to pickup materials with their vehicles. The applicant should consider orienting the entrance to the pickup area to the east and providing an area for vehicles to turn around after loading their materials. This orientation would also provide better screening from the adjacent 11 Mile Road.

Response: CESO will be requesting a variance.

4. Building Setback: Due to the proposed parcel split, the interior side (north) yard building setback is proposed to be 0' (10' is required.) The applicant will seek a setback reduction from the City Council. In the TC District, the City Council may reduce building setbacks if the conditions listed in Section 1602.4 are met. Please refer to the planning review chart for specific conditions. Staff supports this reduction.

Response: CESO will be requesting a setback reduction from the City Council.

5. Parking Setbacks: Due to the proposed parcel split, all parking setbacks are proposed to be 0' (20' is required on all sides s.) The applicant will seek variances from the Zoning Board of Appeals. Staff will support these variance requests.

Response: CESO will be requesting a variance for parking setbacks.

6. Architecture: Architecture and development amenities in the Town Center District should complement the existing architecture in the Novi Town Center. The applicant should consider replacing the blue bollards and other bright blue features along the front of the store with a more muted tone to better complement the existing Novi Town Center.

Response: The blue accent bands, bollards and site amenities are part of the Walmart Brand.

7. Loading Space: Per the Zoning Ordinance, loading space must be located in the rear yard. The applicant has proposed loading space in the exterior side (eastern) yard. The applicant will seek a variance from the Zoning Board of Appeals for the eastern loading zone location. Staff supports this variance request. The applicant should also indicate the square footage of the eastern loading zone and provide a detail of the loading zone screen wall. The applicant has indicated a commercial vehicle will deliver and unload materials near the bulk materials pickup area but no designated loading zone has been provided in this location. The applicant should provide a striped loading zone near the bulk materials pick-up area. If the applicant elects not to provide a loading zone in the bulk materials pick-up area, deliveries will need to be limited to the designated striped loading area in the eastern yard. If a loading area is provided in the southern yard, a variance from the Zoning Board of Appeals will be required. Staff would not support loading/unloading outside of a designated loading/unloading zone.

Response: A striped designated loading zone area will be provided in the southern yard area as requested and will be shown on the final plan submittal set.

8. Trash Compactor: All accessory structures must be located in the rear yard and screened per the standards of Chapter 21 of the City Code. The trash compactor is proposed to be located in the exterior side (eastern) yard. The applicant will seek a variance from the Zoning Board of Appeals for the trash compactor location and should provide screening details in the next plan submittal. Staff will support this variance.

Response: CESO will be requesting a variance for the trash compactor location.

9. Required Open Space: A minimum of 15% open space is required in the Town Center District. The Novi Town Center as an entire development would meet this requirement. Approximately 11.9% open space has been provided on the Walmart site. This would be an interpretation of Zoning Ordinance requirements. Staff would recommend the applicant provide additional open space to meet minimum ordinance requirements. The applicant could consider eliminating a portion of the parking on the Walmart site to allow for additional open space and landscaping.

Response: The Walmart parking lot is already at or below their required number of parking spaces. Typically, Walmart requires a parking ratio of 5 spaces per 1,000 square feet of building area. The parking area was previously reduced in an effort to best accommodate the City's interior landscaped island requirement.

10. Lighting Plan: The applicant should provide the hours of operation on the lighting plan. Manufacturer's specifications have not been provided for all light fixtures. The applicant should provide details for fixtures labeled 11, 11 A, 11 B, 100, 101 and 103.

Response: The lights will be in operation from dusk until dawn. Details are attached to this letter for light fixtures 11, 11A, 11B, 100, 101, and 103 as requested. These light fixture details are labeled on each cut sheet.

11. Lighting Plan - Required Conditions: The average light level of the surface being lit to the lowest light of the surface shall not exceed 4:1. The area identified as main lot appears to exceed this ratio. The applicant should adjust the site lighting to meet ordinance requirements. Alternately, the applicant could seek a variance from the Zoning Board of Appeals.

Response: Walmart will be requesting a variance for the slightly higher light level.

12. Maximum Illumination: Maximum illumination at the property line cannot exceed 1 foot candle. This is exceeded in a number of instances. The applicant should seek a variance from the Zoning Board of Appeals.

Response: CESO will be requesting a variance for the maximum illumination at the property lines.

13. Façade/Architectural Plans: The elevations and referenced architectural plans should be included with the next plan submittal. Consistent with the standards of the Zoning Ordinance and the Town Center Design Guidelines, staff and consultants previously discussed with the applicant at the pre-application and concept meetings developing a façade that would be complimentary to and an extension of the existing Novi Town Center Development. The applicant should alter the façade to conform to the standards of the Façade Ordinance and the Town Center Design Guidelines. Please see the accompanying review letter from the City's Façade Consultant with regard to the proposed building elevations.

Response: Benham has provided revised elevations responding to the Design Review comments for the appearance to the building. Some of the more significant changes are the replacement of all Quik Brik product with structural clay brick in a color to match the main building material of the center. Cornices to match the existing center cornice have been added to the main building walls and front building protrusions as well. Additionally, the vestibules have been revised to be an all glass construction and more glass has been added to the lower front building pieces attached to the entrances. Pedestrian scale site lighting has been added along the front of the building to match that of the center. Benches have been revised to benches with backs.

14. Parcel Split: A property combination or split has been proposed. The applicant must create this parcel prior to Stamping Set approval. Plans will not be stamped until the parcel is created.

Response: Comment noted. Parcel split is currently being prepared.

15. Site Plan Checklist: Please provide the required information from the Site Plan Checklist:
a. Hazardous Chemical Survey is to be filled out at time of Final Site Plan.

Response: Hazardous chemical survey will be provided at the time of final site plan submittal.

16. Right-of-Way: On the Preliminary Site Plan, graphically depict and provide notes for "Existing Right-of-Way" and "Planned Right-of-Way". Staff suggests dedicating "Planned Right-of-Way" to the City.

Response: As discussed in the 10-27-10 meeting with City staff, Walmart has no issues dedicating additional right-of-way but is requesting a letter from the City indicating that this dedication will not affect green space requirement, setbacks, and landscaping requirements should Town Center Drive be widened in the future. At this time, the proposed right-of-way is not shown on the plans. City staff was also going to look into the possibility of accepting this additional area as an easement.

17. Consistency Across Plans: Please make sure there is consistency on plan submittal:
- The site layout on subsequent site plan submittals showing both the Walmart and Building X.1 should be consistent across all plan sets.

Response: Comment noted.

18. Additional Items: The applicant has indicated there may be a composting area on the site. Any compost areas should be clearly identified on the plan.

Response: Composting area is identified on plans next to the Bale and Pallet storage area. This area will be more clearly defined on the final plan submittal set.

ENGINEERING REVIEW COMMENTS:

The preliminary engineering plan has been approved. CESO will address comments numbered 1-82 prior to the Final Site Plan Submittal.

TRAFFIC REVIEW COMMENTS:

1. *Recommended Mitigation* - The applicant's traffic study recommends the following:

The applicant's November 8, 2010 resubmittal letter states that the traffic study (including the above recommendations) was forwarded to RCOC and "at this time, the Road Commission had no major concerns ... ". However, the email chain attached to the letter goes only as far as saying that the study (including Synchro files) was forwarded to "relevant staff within RCOC for comment," with no indication that any subsequent comments had been returned to the applicant. The applicant should expound upon the latest feedback received from RCOC, as well as the expected means of implementing the recommended signal hardware and signal timing improvements.

Response: Based on recent discussions with Rachel Jones from the RCOC, the staff is finalizing their review and at this time sees no major issues with the submitted traffic impact

study. The signal hardware and timing improvements will be implemented as part of a signal plan submittal to the RCOC.

2. Driveway Design and Control

- A. The entering radius at the west drive on Il Mile appears to be only about 10 ft. but the applicant has stated that it is, in fact "over 25 ft." This existing curb return should be redrawn more accurately to reflect its actual size. Also, along the exiting side of this driveway, there are still two signs shown, with the northernmost sign only 23 ft in advance of the proposed new STOP sign. This could still impair a full view of that STOP sign, and the northerly (unidentified) sign should be relocated to the east side of the driveway, offset to the west of the STOP sign, or simply eliminated.

Response: The requested modifications will be provided in the final plan submittal.

- B. Although the large "canoe" island along Ingersol at the west end of the site already exists, the operation of nearby Wal-Mart will likely increase the amount of traffic using the two access drives at either end of the island. To improve the performance of these drives given the additional traffic, the radius of the two internal corners of the island (i.e., next to or across the parking aisle from the north-south STOP signs) should be increased to 15 ft from the existing 5 ft. The applicant has indicated that "these changes will be made on the GWE set of plans at final plan submittal." Given their relevance to the proposed Wal-Mart improvements, however, the requested changes should also appear on Wal-Mart's final site plan, with a note indicating that their implementation will be "by others."

Response: This note will be provided in the final plan submittal.

- C. Access to the Wal-Mart parking lot, near the northwest corner of the proposed store, will occur at a curved intersection into which several parking spaces in front of proposed Building X (or X.1) will back. While this intersection has been improved since the pre-application concept, we still have concerns about backing drivers not seeing or otherwise anticipating approaching traffic, especially northbound traffic coming around the bend with high-profile vans parked in the adjacent spaces. We recommend that the Planning Commission discuss with the applicant and the Town Center management the feasibility of (1) shifting the two handicapped spaces to the north so as to share an access aisle aligned with the pedestrian crossing, (2) deleting the two regular spaces in the intersection, and/or (3) controlling the intersection with all-way STOP signs. Given their relevance to the proposed Wal-Mart improvements, the change(s) selected should also appear on Wal-Mart's final site plan, with a note indicating that their implementation will be "by others."

Response: The requested modifications will be provided in the final plan submittal.

- D. Westbound drivers in the south internal service drive, stopping at the proposed stop bar at the southwest corner of the garden center enclosure, will be unable to see southbound pedestrians and bicyclists about to enter the crosswalk only 2 ft west of that stop bar. The stop bar should be set back the MMJTCD-minimum of 4 ft in advance of the crosswalk, and the garden center enclosure should be set back (or at least angled at 45 degrees) to provide a clear view to a stopped driver 10 ft east of the stop bar. A larger-scale inset of this area should be provided to ensure proper design and construction of this critical area.

Response: A larger scale inset of this area in question will be provided in the final plan submittal.

- E. In response to the preceding comment, which also appeared in our September review, the applicant has stated that with the use of a single color, "employee parking stalls will be difficult to distinguish from customer parking." We respectfully suggest that other, less subtle means could be employed to convey the intended message to employees, such as a parking lot diagram posted on employee bulletin boards.

Response: Striping will be shown as requested by City staff in the final plan submittal.

LANDSCAPING REVIEW COMMENTS:

1. Interior Parking Landscape (Sec. 2509.3.c.)

- A. A total of 212 interior landscape trees are required. The Applicant has proposed that 29 existing mature trees be preserved. Additional trees have been added to meet the Interior Parking Lot Canopy Tree requirements. On the current plans the Applicant has underreported the number of trees that can be counted toward this requirement. Please address this concern and correct the proposed tree numbers on subsequent submittals.

Response: The underreported number of trees will be more clearly identified on the final plan set.

2. Building Foundation Landscape (Sec. 2509.3.d.)

- A. Staff recommends that the Applicant consider the inclusion of small landscape beds directly adjacent to the easterly building foundation. Small beds would allow for the installation of appropriate upright or vining plants that would serve to soften this large wall face and help alleviate architectural massing issues as raised in the façade review.

Response: Additional landscaped beds were added to the easterly building foundation between the preliminary plan submittal and the site plan submittal. Additional areas will be reviewed during final plan submittal but the east building foundation (or rear) is limited in space.

FIRE REVIEW COMMENTS:

1. Fire lanes shall be designated and properly marked in accordance with city ordinance. Sheet 3 of 12 indicates fire lanes with pavement markings. However, 'No Parking' signs are not shown on the plan. The Legend on page 3 of 12 indicates note 'B' as No Parking Fire Lane signs, however, there are no tags 'B' on the plans. Fire lanes shall be designated on the west, south, and east sides of the building in accordance with the fire prevention code and shall be designated with signs in accordance with this ordinance.

Response: Fire lanes will be designated in accordance with city ordinance in the final plan submittal.

2. Hydrant spacing around proposed building shall not exceed 500' hose laying distance. Relocate the proposed hydrant at the north front store entrance 130' to the north in the parking island at the project line between this project and the X.1 building.

Response: GWE is adding an additional fire hydrant in front of building X.1 for final plan submittal.

3. The Fire Department Connection shall be located on the front side of the building in an approved accessible location, within 100' of a hydrant. This shall be shown on the Utility Plan sheet.

Response: This relocation will be reviewed and responded to for final plan submittal.

4. The control valve on the 8" fire protection water main shall be in a well or it shall be a monitored post indicator valve.

Response: Control valve on the 8" fire protection water main will be located in a well as requested and will be shown in more detail during final plan submittal.

5. A complete hazardous materials survey and inventory shall be provided to the fire department. The forms in the preliminary site plan application are blank.

Response: Hazardous materials survey and inventory will be provided to fire department in the final plan submittal.

FACADE REVIEW COMMENTS:

	WEST (Front)	EAST (Rear)	NORTH (Left)	SOUTH (Right)	Ordinance Maximum (Minimum)
Brick (Glen Gery "Golden Dawn" & "Autumn Red")	49%	93%	86%	82%	100% (30% MIN) (Note 1)
Stone	3%	0%	0%	0%	100%
EIFS	26%	6%	8%	7%	25%
Phenolic (Trespa) Panels	17%	0%	0%	0%	0%
Standing Seam Metal	0%	0%	3%	3%	25% (Note 2)
Metal – Louvered Awnings, Canopies, Wrought Iron, etc.	5%	1%	3%	8%	0%
Note 1 – Facades in TC and TC-1 Districts must be "primarily brick and stone" per Section 1602.9					
Note 2 – Color must be copper or copper colored paint in TC District per Section 2520, Note 3.					

1. Section 2520 – As shown above, the percentage of Concrete "C" Brick, Phenolic Panels, and Metal exceeds the maximum percentages allowed by the Façade Chart and the percentage of Brick is below the minimum percentage required by the Façade Chart. A Section 9 waiver would be required for these deviations.

Response: This appears to be an old comment. There is no Concrete "C" Brick on this project. A Section 9 waiver will be requested for the Phenolic Panels and the metal used on this project.

2. Section 1602.7 - This section requires that facade materials be complimentary to existing or proposed buildings within the site and surrounding area, and that when contrasting design or materials are used it will not be so out of character with existing building designs and facade materials so as to create an adverse effect on the stability and value of the surrounding. The design appears to be in conflict with this section for the same reasons as stated above.

Response: This also appears to be an old comment. The main building materials (brick) are the same as what is being used on the rest of the shopping center. The EIFS cornice is also



the same as what is being used on the rest of the shopping center. The major material that is different from the rest of the shopping center is the Phenolic Panel system.

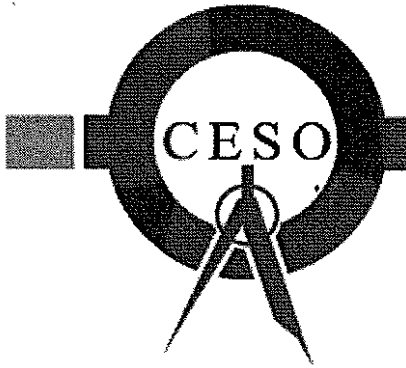
3. Section 1602.9 - Section 1602.9 of the Ordinance requires that facades "shall be primarily of brick or stone." The proposed design includes significant percentages of materials other than brick and stone, most significantly Phenolic Panels and EIFS. The design does not otherwise meet the specific conditions set forth in Section 1602.9.a-d, for the use of materials other than brick and stone for reasons stated herein. It is recommended that brick be considered for all EIFS areas other than cornices to bring the design into compliance with this section.

Response: The majority of the building is entirely brick. The EIFS is used on the front elevation primarily in the areas of the entrances to accent the building entrances. The Phenolic Panel system is integral part of the Walmart Brand statement and is the only material that is not reflected elsewhere in the development.

4. Front (west) Facade - Phenolic Panels are not specifically listed in the Façade Chart. Assuming a concealed fastener system is used, their appearance will be equivalent to Flat Metal Panels. Therefore, the allowable percentage for Flat Metal Panels (0%) was used for this review. The Phenolic Panels are used only adjacent to the "Walmart" sign and are not used elsewhere on the building. This together with the arched parapet directly above the sign gives the appearance that it designed as a component of the sign. Section 2520.2 of the Ordinance specifically states that "the use of facade materials to form a background or component in a sign or to increase the visual presence of the building for the purpose of advertising shall be deemed inconsistent with this Section." The use of the Phenolic Panels appears to be in direct conflict with this section. It is recommended that Brick be used in lieu of the Phenolic Panels, and that the EIFS cornice be extended across this area. This will disassociate the area with the sign achieving compliance with Section 2520.2, and at the same time bringing the overall west facade into closer compliance with the facade chart.

Response: Phenolic Panels are a new technology and are not specifically excluded in the Design Ordinance. While they do provide a background for the main building sign, the presence of these panels and the wall shape mimics the shape used for the entrances. Both are an integral part of the Walmart Brand statement. Since the Panels are not specifically excluded by the Design Ordinance, Benham believes it is not a correct interpretation to list them as metal panels of which 0% is allowed.

5. East Facade Service Areas - The east facade is highly visible from Town Center Drive as well as the businesses located to the east. Existing plantings along Town Center Drive are proposed to be supplemented with additional plant material. This will screen the east facade however additional



foundation plantings should also be considered. If foundation plantings are not feasible than additional articulation of the east facade via architectural features such as brick pilasters and/or variations in brick color should be considered. The interior areas of the truck wells and compactor enclosures will also be highly visible, particularly to northbound traffic on Town Center Drive. The applicant should consider adding gates and/or strategically placed plantings to prevent direct lines of sight from Town Center Drive into the truck well and compactor areas.

Response: Additional landscaping has been added to islands on the east side of the building to provide additional screening of the bulk goods loading area and the truck docks. Ten Snowdrift Crabapple trees have been added to the SE corner of the building to break up the previously blank brick wall.

6. Mechanical Equipment Screening - Ground mounted mechanical equipment appears to be screened by a nicely designed open-coursed masonry wall. If rooftop equipment is utilized it must be concealed with matching materials. A notation is made that painted "decorative block" is used at the compressor area, however the extent and location of this material is not clearly indicated on the drawings. It is assumed the material is used only behind the mechanical equipment screens. The applicant should clarify the use of decorative block and that the height of the screening is adequate to conceal the equipment within.

Response: All rooftop mechanical equipment will be screened by the parapet design. The decorative block used on the ground mounted screen is inset into the brick wall. It is required in order to supply adequate makeup air to the condenser units located behind the screen wall.

Thank you in advance for reviewing the attached revised plans and please contact CESO with any questions or concerns.

Sincerely,
CESO, Inc.

Robert E. Matko, P.E., P.S.
Project Manager

Special Use Criteria Response

(1) Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, accel/decel lanes off-street parking, off-street loading/unloading, travel times and thoroughfare level of service.

Response: The Site is zoned TC and, therefore, its feasible uses are restricted to those uses permitted in the City's Ordinance for TC zoned property. Walmart's proposed use is consistent with the current and future of use of the Site as a retail shopping center. The proposed uses considered "special uses" on the Site consist of an "open air business" as specified in Section 1602.1 of the City's Ordinance and will be comprised of an outside garden center area and bulk material pick up area that will be enclosed by brick walls with pilasters and, above that, by ornamental wrought iron fencing. The proposed outside garden center area is approximately 5,150 s.f. and the bulk material pickup area is approximately 2,300 s.f. The garden center area includes typical lawn and garden merchandise including small plants, fertilizers, garden tools, etc. and the bulk material pick up area includes mulch goods, bagged top soil, brick pavers, etc. The bulk material area operation begins with a customer picking out their item and writing the item number and quantity on a tag. The customer then takes the tag and quantity to the cashier and pays for the item(s). The cashier then hands the customer a receipt. The customer then backs their vehicle into the pickup area and loads their vehicle. Once complete, the customer then exits forward either left or right from the pickup area. The garden center and bulk material area are very small relative to the overall development. The total area subject to the requirements of Section 1602.1.a. is 7,450 s.f. To put this in perspective, it is only ___% of the total site and only ___ % of the total floor space of the total enclosed building area proposed by Walmart. Therefore, it is not reasonably expected that the proposed uses subject to Section 1602.1.a will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, accel/decel lanes off-street parking, off-street loading/unloading, travel times and thoroughfare level of service

(2) Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal, and police and fire protection to serve existing and planned uses in the area.

Response: It is not reasonably expected that the proposed uses subject to Section 1602.1.a will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal, and police and fire protection to serve existing and planned uses in the area. The primary reasoning for this conclusion is based on the relatively small size and lack of intensive uses of such proposed uses.

(3) Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats.

Response: There will be no adverse impacts to natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats resulting from the proposed uses under Section 1602.1.a. of the Ordinance.

(4) Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood.

Response: The proposed uses under Section 1602.1.a. of the Ordinance are compatible with the adjacent uses of the land because the Site is adjacent to retail, office and businesses. There are no surrounding neighborhoods adjacent to the Site.

(5) Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use.

Response: The City's Master Plan for Land Use specifies that this Site shall be used for retail and shopping. The proposed uses under Section 1602.1.a. of the Ordinance are compatible with this statement in the City's Master Plan for Land Use.

(6) Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner.

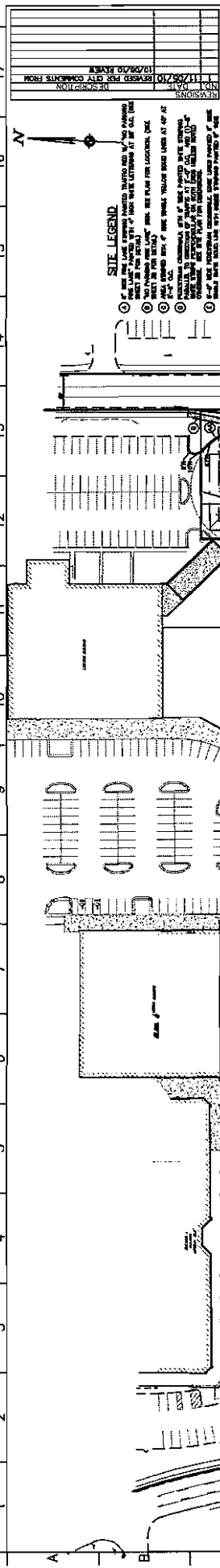
Response: The proposed uses under Section 1602.1.a. of the Ordinance will promote the use of land in a socially and economically desirable manner because the land is currently situated among a retail shopping center and related uses. The Site's general use will not change from its most recent uses approved by the City.

(7) Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located

Response: The proposed uses under Section 1602.1.a. of the Ordinance are subject to review under the special land use criteria and are in harmony with its purposes as previously stated herein. All site design regulations applicable to the proposed uses under Section 1602.1.a. of the Ordinance will be met.

REDUCED SITE PLAN

17
16
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1



WALMART PARCEL
12.80± ACRES
C-149N
149,854± S.F.
F.F.E. = 918,70

PROPOSED BLDG. X
N 624'00" E 100'00"
N 624'00" E 100'00"
N 624'00" E 100'00"

WALMART SUPERCENTER - STORE #5893-00
Save money. Live better.
CITY OF MOH - SECTION 14
OAKLAND COUNTY, MICHIGAN

LAYOUT PLAN

PRELIMINARY

1/4 MILE RD.
TOWN CENTER DRIVE
INGERSON DRIVE
NOVI ROAD
CROWE DRIVE

REASONS FOR REVISIONS

NO.	DATE	REVISION
1	11/25/2010	10/26/10 REVISED COMMENTS FROM
2	11/25/2010	10/26/10 REVISED COMMENTS FROM

DATE: 11/25/10
DRAWN: RLM
CHECKED: RLM
SCALE: AS SHOWN
SHEET NO. 3 OF 12

PROJECT INFORMATION

CLIENT: WALMART STORE #5893-00
PROJECT NO.: 1000
JOB NO.: 2008
DESIGN: RLM
DATE: 11/25/10
SCALE: AS SHOWN
SHEET NO. 3 OF 12

GRAPHIC SCALE (IN FEET)
1 inch = 50 ft

SITE LEGEND

1. ALL NEW CONSTRUCTION SHALL BE CONFORMANT WITH THE LATEST EDITION OF THE IBC AND ALL APPLICABLE LOCAL ORDINANCES.
2. ALL EXISTING STRUCTURES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.
3. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.
4. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.
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9. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.
10. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.

PARKING SUMMARY

MAJOR ANCHOR SITE (WALMART)	GLA (S.F.)	GLA (S.F.)	GLA (S.F.)	GLA (S.F.)
BUILDING AREA	149,854 S.F.	149,854 S.F.	459,893 S.F.	477,134 S.F.
PARKING PROVIDED	+ 843 SPACES	+ 2,731 SPACES		
PARKING RATIO PROVIDED	648/149,854 = 4.357 SPACES/1,000 S.F. GLA	2,703/459,893 = 5.878 SPACES/1,000 S.F. GLA		
PARKING RATIO REQUIRED PER ORDINANCE	5.0 SPACES/1,000 S.F. GLA	5.0 SPACES/1,000 S.F. GLA		
REMAINDER OF SHOPPING CENTER	GLA (S.F.)	GLA (S.F.)	GLA (S.F.)	GLA (S.F.)
BUILDING AREA	310,139 S.F.	317,480 S.F.		
PARKING PROVIDED	+ 2,055 SPACES	+ 2,740 SPACES		
PARKING RATIO PROVIDED	2,055/310,139 = 6.628 SPACES/1,000 S.F. GLA	2,740/317,480 = 8.631 SPACES/1,000 S.F. GLA		
PARKING RATIO REQUIRED PER ORDINANCE	4.0 SPACES/1,000 S.F. GLA	4.0 SPACES/1,000 S.F. GLA		

CROSS ACCESS AND PARKING AGREEMENTS SHALL BE PROVIDED BETWEEN WALMART AND THE REMAINDER OF THE NOV TOWN CENTER PARCEL.

ASSOCIATE PARKING
OFFICE WITH COMPARTMENT CURB

CAUTION: DIG
ALL UTILITIES SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. CONTRACTOR SHALL VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. ANY UNEXPECTED UTILITIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE IBC AND ALL APPLICABLE LOCAL ORDINANCES.
2. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.
3. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.
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10. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND REPAIRS MADE AS NECESSARY TO MAINTAIN THEM IN GOOD REPAIR.

COMMUNITY IMPACT STATEMENT

COMMUNITY IMPACT STATEMENT

For

**WAL-MART DEVELOPMENT
(LOCATED IN NOVI TOWN CENTER)**

On

**ELEVEN MILE ROAD & TOWN CENTER DRIVE
CITY OF NOVI,
OAKLAND COUNTY, MICHIGAN**

Prepared for:

**Sam Walton Development Complex
Wal-Mart Stores, Inc.**

2001 S.E. 10th Street
Bentonville, AR 72716-0550
(479) 273-4000

Prepared by:

CESO, Inc.

8164 Executive Court
Lansing, MI 48917



(517) 622-3000

NOVEMBER 2010

I. Table of Contents

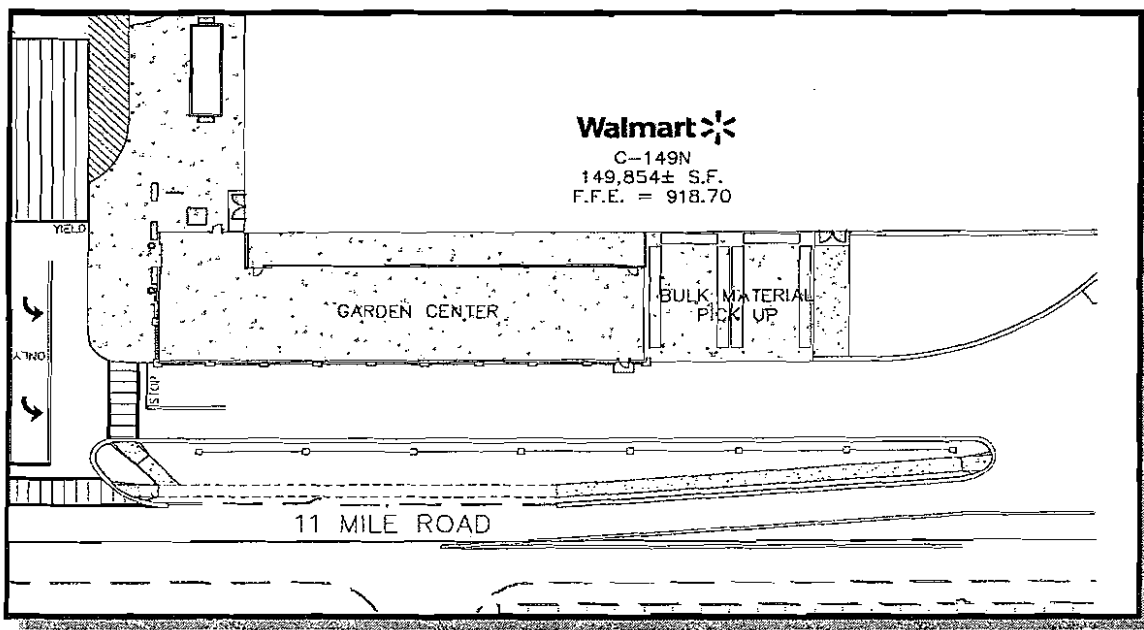
Section	Page
I. Table of Contents.....	I
1. Introduction.....	1
1.1. Description of Outdoor Garden Center and Bulk Material Pick Up Area.....	1
1.2. Site Information.....	2
2. Maps and Written Description of the Project Site.....	3
3. Impact on Public Utilities and Services.....	5
3.1. Expected Annual Number of Police Responses.....	5
3.2. Expected Annual Number of Fire Responses.....	5
3.3. Anticipated Number of Employees.....	5
3.4. Compliance with City Performance Standards.....	5
3.5. Estimated Number of Sewer and Water Taps, Peak Hour Demand.....	5
Min/Max Operating Pressures for Water System	
4. Impact on Surrounding Land Uses	6
5. Relationship of Wal-Mart Development with Surrounding Uses.....	6
6. Description of Proposed Land Use.....	6
7. Description of Environmental Factors and Impacts.....	7
7.1. Natural On-Site Features.....	7
7.2. Storm Water Plan.....	7
7.3. Natural Features Modified or Removed or Removed by Storm Water Plan....	8
7.4. Storage and Handling of Hazardous or Toxic Materials on Site.....	8
7.5. Underground Storage Tanks.....	9
7.6. Environmental or Contamination History of the Site.....	9
7.7. Wildlife Impact.....	9
8. Social Impacts.....	9
8.1. Existing Use or Occupants that will be Replaced or Moved.....	9
8.2. Traffic Impact.....	10
8.3. Site Amenities.....	10
8.4. Will the Proposed Development Increase the Permanent Population.....	12
of the City?	

1. Introduction

This Community Impact Statement (CIS) was prepared to meet the requirements of Section 6 of the City of the City of Novi's Site Plan Manual (the "Manual"). The TC zoning district regulations permit all retail uses of the property (Sections 1601.1 and 1601.2 of the Ordinance). The recent amendment to the TC District permits "open air business" as a principal use subject to "special conditions" (Section 1602 of the Ordinance). The special conditions are listed in the recent amendment (1602) as: (i) the requirements of Section 2516.2(c) for special land uses; (ii) a public hearing in accordance with Section 3006; and, (iii) the conditions listed in Section 1602.1.a. The City requires that persons applying for site plan approval follow the Manual and under Section 6 of the Manual, a CIS is required for all non-residential projects over 10 acres in size "if a special land use". The proposed use subject to the conditions of Section 1602.1.a. is only 7,450 s.f. and, therefore, does not squarely fall under the Manual's requirement of over 10 acres for a special use. City staff requested that this CIS be submitted to the City by Walmart despite the relatively small size of the proposed "special land use". Walmart is providing this CIS as an accommodation to the City's request without waiving any of its objections to such a requirement.

1.1. Description of Outdoor Garden Center and Bulk Material Pick Up Area

The proposed open air business use associated with the proposed Walmart development consists of an outside garden center area and bulk material pick up area that will be enclosed by brick walls with pilasters and, above that, by ornamental wrought iron fencing. The proposed outside garden center area is approximately 5,150 s.f. and the bulk material pickup area is approximately 2,300 s.f. The garden center area includes typical lawn and garden merchandise including small plants, fertilizers, garden tools, etc. and the bulk material pick up area includes mulch goods, bagged top soil, brick pavers, etc.



OPEN AIR BUSINESS

The bulk material area operation begins with a customer picking out their item and writing the item number and quantity on a tag. The customer then takes the tag and quantity to the cashier and pays for the item(s). The cashier then hands the customer a receipt. The customer then backs their vehicle into the pickup area and loads their vehicle. Once complete, the customer then exits forward either left or right from the pickup area.

The garden center and bulk material area are very small relative to the overall development. The total area subject to the requirements of Section 1602.1.a. is 7,450 s.f. To put this in perspective, it less than 0.5% of the total site and only 4.97% of the total floor space of the total enclosed building area proposed by Walmart.

1.2. Site Information

This CIS focuses on providing information regarding the uses subject to Section 1602.1.a. associated with the proposed development of a 149,854 s.f. Walmart Supercenter. i.e. the garden center and proposed bulk material area. The overall Walmart development will consist of a retail sales.

Site Location: The site is located on the north side of Eleven Mile Road, west of Town Center Drive within the Novi Town Center located in the City of Novi, Oakland County, Michigan. The location of the garden center and bulk storage area subject to Section 1602.1.a. is depicted on the diagram above and is proposed to be situated on the Northeast corner of the proposed building.

Site Access: Access to the proposed uses subject to Section 1602.1.a, as well as the proposed Walmart store in the Novi Town Center Redevelopment, is proposed via two (2) existing access driveways on Ingersol Drive (Walmart North and South Driveways), three (3) existing access driveways on Eleven Mile Road (Walmart East, Middle, and West Driveways), one (1) existing driveway on Town Center Drive that will continue to service trucks, and two (2) internal driveways (internal driveway from the north along store fronts, and a west internal driveway that parallels Ingersol Drive). The East Walmart Driveway on Eleven Mile Road will actually shift further to the west as far as possible from the Town Center Drive & Eleven Mile Road.

Adjacent Land Use: Adjacent land uses consist of retail in the Novi Town Center development and adjacent office and restaurant uses to the south and west. No residential use is located near the proposed uses subject to Section 1602.1.a.

Existing Site Land Use: The site is currently zoned TC (Town Center) and consists of an 75,000 s.f. building formerly housing a Mervyn's store that will be demolished as part of the Walmart development.

2. Maps and Written Description of the Project Site

LEGAL DESCRIPTION OF SUBJECT PARCEL
WAL-MART PARCEL
(PART OF PARCEL ID. NUMBER 22-14-351-062)

A PART OF THE SOUTHWEST QUARTER (1/4) OF SECTION 14 AND A PART OF THE NORTHWEST QUARTER (1/4) OF SECTION 23, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SECTION 14 SAID CORNER ALSO BEING THE NORTHWEST CORNER OF SECTION 23, THENCE NORTH 87 DEGREES 28 MINUTES 51 SECOND EAST, 54.00 FEET ALONG THE SOUTH LINE OF SECTION 14 TO A POINT ON THE EAST RIGHT OF WAY LINE OF NOVI ROAD (VARIABLE WIDTH); THENCE THE FOLLOWING THREE COURSES BEING ALONG SAID EAST AND SOUTH RIGHT OF WAY LINE;

- (1) NORTH 02 DEGREES 40 MINUTES 33 SECONDS WEST, 66.98 FEET; AND
- (2) NORTH 87 DEGREES 29 MINUTES 51 SECONDS EAST, 6.00 FEET; AND
- (3) NORTH 02 DEGREES 40 MINUTES 33 SECONDS WEST, 177.73 FEET;

THENCE NORTH 86 DEGREES 52 MINUTES 49 SECONDS EAST, 269.99 FEET; THENCE NORTH 02 DEGREES 40 MINUTES 33 SECONDS WEST, 87.91 FEET; THENCE NORTH 86 DEGREES 04 MINUTES 47 SECONDS EAST, 48.02 FEET; THENCE NORTH 02 DEGREES 40 MINUTES 33 SECONDS WEST, 149.32 FEET TO A POINT ON THE SOUTH LINE OF CROWE DRIVE (VARIABLE WIDTH); THENCE NORTH 87 DEGREES 19 MINUTES 27 SECONDS EAST, 41.14 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF INGERSOL DRIVE (40 FEET WIDE); THENCE THE FOLLOWING THREE (3) COURSES BEING ALONG SAID EAST LINE

- (1) ALONG A CURVE TO THE LEFT 188.48 FEET SAID CURVE HAVING A RADIUS OF 1020.00 FEET, A CENTRAL ANGLE OF 10 DEGREES 35 MINUTES 14 SECONDS, AND A LONG CHORD BEARING OF NORTH 08 DEGREES 12 MINUTES 39 SECONDS WEST, 188.21 FEET; AND
- (2) ALONG A CURVE TO THE LEFT 276.93 FEET SAID CURVE HAVING A RADIUS OF 720.00 FEET, A CENTRAL ANGLE OF 22 DEGREES 02 MINUTES 14 SECONDS, AND A LONG CHORD BEARING OF NORTH 24 DEGREES 31 MINUTES 23 SECONDS WEST, 275.22 FEET; AND
- (3) NORTH 04 DEGREES 00 MINUTES 03 SECONDS EAST, 48.39 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF CRESCENT BOULEVARD (77 FEET WIDE);

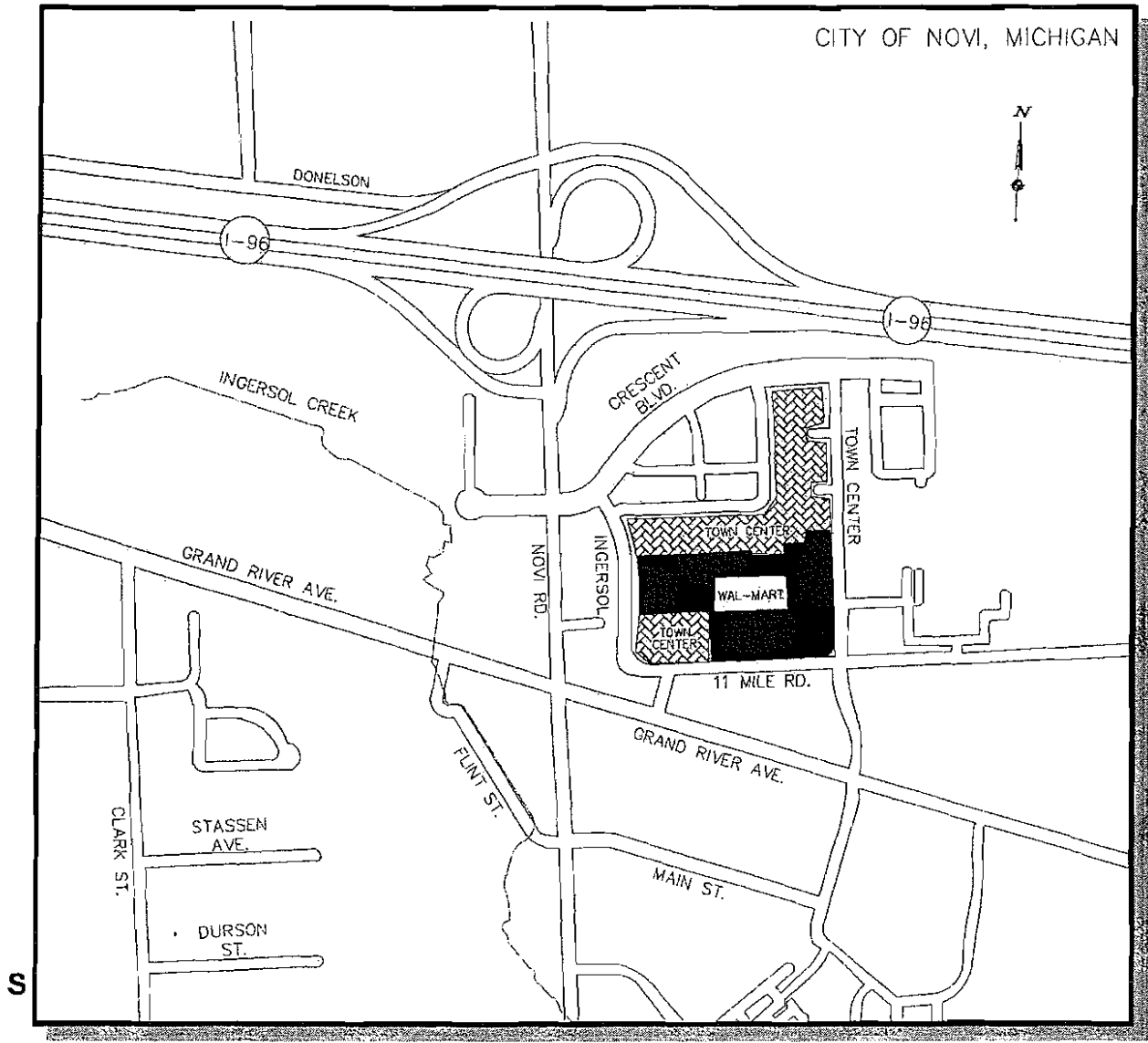
THENCE THE FOLLOWING FOUR (4) COURSES BEING ALONG SAID SOUTHERLY LINE

- (1) ALONG A CURVE TO THE LEFT 45.61 FEET SAID CURVE HAVING A RADIUS OF 330.50 FEET, A CENTRAL ANGLE OF 07 DEGREES 54 MINUTES 23 SECONDS, AND A LONG CHORD BEARING OF NORTH 39 DEGREES 41 MINUTES 02 SECONDS EAST, 45.57 FEET AND
- (2) NORTH 35 DEGREES 49 MINUTES 27 SECONDS EAST, 151.76 FEET; AND
- (3) ALONG A CURVE TO THE RIGHT 1044.01 FEET SAID CURVE HAVING A RADIUS OF 1161.50 FEET, A CENTRAL ANGLE OF 51 DEGREES 30 MINUTES 00 SECONDS AND A LONG CHORD BEARING OF NORTH 61 DEGREES 34 MINUTES 27 SECONDS EAST, 1009.22 FEET; AND
- (4) NORTH 87 DEGREES 19 MINUTES 27 SECONDS EAST, 206.26 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF TOWN CENTER DRIVE (VARIABLE WIDTH);

THENCE SOUTH 47 DEGREES 40 MINUTES 33 SECONDS EAST, 53.74 FEET; THENCE SOUTH 02 DEGREES 40 MINUTES 33 SECONDS EAST 840.01 FEET TO, THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID WESTERLY LINE THE FOLLOWING THREE (3) COURSES;

- (1) SOUTH 2 DEGREES 40 MINUTES 33 SECONDS EAST, 464.95 FEET; AND
- (2) SOUTH 2 DEGREES 28 MINUTES 01 SECONDS WEST, 50.20 FEET; AND
- (3) SOUTH 2 DEGREES 40 MINUTES 33 SECONDS EAST, 134.59 FEET;

THENCE SOUTH 42 DEGREES 19 MINUTES 27 SECONDS WEST, 39.60 FEET; THENCE SOUTH 87 DEGREES 19 MINUTES 27 SECONDS WEST, 10.92 FEET; THENCE SOUTH 2 DEGREES 22 MINUTES 58 SECONDS WEST, 15.60 FEET; THENCE SOUTH 87 DEGREES 19 MINUTES 27 SECONDS WEST, 656.59 FEET; THENCE NORTH 2 DEGREES 40 MINUTES 33 SECONDS WEST, 278.98 FEET; THENCE SOUTH 87 DEGREES 19 MINUTES 27 SECONDS WEST, 392.75 FEET; THENCE NORTH ZERO (0) DEGREES 10 MINUTES 03 SECONDS EAST, 48.21 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT 227.70 FEET SAID CURVE HAVING A RADIUS OF 1123.90 FEET, A CENTRAL ANGLE OF 11 DEGREES 36 MINUTES 28 SECONDS, AND A LONG CHORD BEARING OF NORTH 2 DEGREES 10 MINUTES 42 SECONDS WEST, 227.31 FEET; THENCE NORTH 6 DEGREES 45 MINUTES 56 SECONDS WEST, 48.17 FEET; THENCE NORTH 87 DEGREES 19 MINUTES 27 SECONDS EAST, 638.49 FEET; THENCE SOUTH 2 DEGREES 40 MINUTES 33 SECONDS EAST, 27.99 FEET; THENCE NORTH 87 DEGREES 19 MINUTES 27 SECONDS EAST, 53.77 FEET; SOUTH 2 DEGREES 40 MINUTES 33 SECONDS EAST, 0.67 FEET; THENCE NORTH 87 DEGREES 19 MINUTES 26 SECONDS EAST, 129.02 FEET; THENCE NORTH 2 DEGREES 40 MINUTES 33 SECONDS WEST, 60.00 FEET; THENCE NORTH 87 DEGREES 19 MINUTES 27 SECONDS EAST, 127.45 FEET; THENCE NORTH 2 DEGREES 40 MINUTES 33 SECONDS WEST, 59.26 FEET; THENCE NORTH 87 DEGREES 19 MINUTES 27 SECONDS EAST, 144.46 FEET TO THE POINT OF BEGINNING AND CONTAINING 12.804 ACRES.



SITE VICINITY MAP

3. Impact on Public Utilities and Services

3.1. Expected Annual Number of Police Responses

The proposed uses subject to Section 1602.1.a. are not reasonably expected to increase the annual number of police responses historically experienced at the Mall nor will they increase those responses typically associated with the proposed Walmart development. For the entire Walmart development, Walmart estimates that demands for Police services will be identical to existing commercial developments within the Novi Town Center.

3.2. Expected Annual Number of Fire Responses

The proposed uses subject to Section 1602.1.a. are not reasonably expected to increase the annual number of Fire responses historically experienced at the Mall nor will they increase those responses typically associated with the proposed Walmart development. For the entire Walmart development, Walmart estimates that demands for Fire services will be identical to existing commercial developments within the Novi Town Center.

3.3. Anticipated Number of Employees

Once the store is ready to open, approximately 275 people will be employed to maintain the daily functions of the facility. Within the proposed uses subject to Section 1602.1.a., it is anticipated that approximately 5 employees will be primarily responsible for those areas.

3.4. Compliance with City of Novi Performance Standards

The proposed Walmart development will conform to the City of Novi Performance Standards as outlined in section 2519 of the Zoning Ordinance. In addition, the project will conform with the City of Novi Noise levels as outlined in Table A of section 2519.

3.5. Estimate Number of Sewer and Water Taps, Peak Hour Demand, Min/Max Operating Pressures for Water System

Estimated Number of Sewer Taps for the proposed uses subject to Section 1602.1.a.: Two (2) sanitary sewer taps are proposed for this development located at the rear and north sides of the proposed building.

Estimated Number of Water Taps for the proposed uses subject to Section 1602.1.a.: One (1) water tap is proposed for this development located at the rear of the proposed building.

Peak Hour Water Demand:

Peak Hour Demand is the term used to identify maximum volume of water used within the City of Novi over a one-hour period during a given year. The peak water demand for the proposed uses

subject to Section 1602.1.a. are not reasonably expected to increase the peak water demand historically experienced at the Mall nor will it increase those demands typically associated with the proposed Walmart development.

For the overall Walmart development, including for the proposed uses subject to Section 1602.1.a., it is estimated that:

Min/Max Operating Pressure for Water System: *Fire Sprinkler Supply Required: 2000 gpm @ 41 psig. Fire Sprinkler Supply as designed: 2000 gpm @ 48.2 psig. Domestic Supply Required: 130 gpm @ 45 psig. Domestic Supply as designed: 130 gpm @ 53.5 psig. Fire Hydrant Supply Required: 4000 gpm @ 20 psig. Fire Hydrant Supply as designed: 4465 gpm @ 20 psig.*

4. Impact on Surrounding Land Uses

The proposed uses subject to Section 1602.1.a. will have no differential impacts on surrounding land uses because of its small size and isolated location. The entire Walmart development is not anticipated to have an impact on the surrounding land uses since it will be replacing a former Mervyn's development and other small strip retail development. To ensure that any potential impacts are not realized by the adjacent development, new landscaping will be placed around the existing landscaping on the south and east sides of the proposed development. In addition, a four (4) foot high fence with brick pilasters will be installed along the south side of the site. Most of the existing trees along the south and east sides of the development will remain to the extent possible. Other improvements include screened trash compactors. Also, the truck docks will be truck wells that will slope downward to help with noise reduction and will also be screened. In addition, Walmart prepared a traffic impact study which has been approved by the City.

5. Relationship of Wal-Mart Development with Surrounding Uses

The proposed uses subject to Section 1602.1.a. will be located within the existing Novi Town Center where primary uses currently consist of retail and restaurant development. The proposed uses subject to Section 1602.1.a. will be designed with elevations and materials matching the proposed Walmart building elevations and materials will match closely to the rest of the Town Center development. Specific themes (i.e. color, landscaping, amenities, etc.) will be followed. In addition, the Walmart development will abut up to the existing Town Center development (0' setback).

6. Description of Proposed Land Use

The proposed open air business use associated with the proposed Walmart development consists of an outside garden center area and bulk material pick up area that will be enclosed by brick walls with pilasters and, above that, by ornamental wrought iron fencing. The proposed outside garden center area is approximately 5,150 s.f. and the bulk material pickup area is approximately 2,300 s.f. The garden center area includes typical lawn and garden merchandise including small plants,

fertilizers, garden tools, etc. and the bulk material pick up area includes mulch goods, bagged top soil, brick pavers, etc.

The bulk material area operation begins with a customer picking out their item and writing the item number and quantity on a tag. The customer then takes the tag and quantity to the cashier and pays for the item(s). The cashier then hands the customer a receipt. The customer then backs their vehicle into the pickup area and loads their vehicle. Once complete, the customer then exits forward either left or right from the pickup area.

The site is currently zoned TC (Town Center) that will support a 149,854 square foot Walmart Supercenter development. A Walmart Supercenter contains a retail and grocery component along with a garden center and bulk material pick up area.

7. Description of Environmental Factors and Impacts

7.1. Natural On-Site Features

The site currently contains a former building once used by a Mervyn's store and associated parking lot that will be demolished as part of the Walmart construction. The site currently contains a landscaped berm and several mature trees along the south and east sides of the site that will mostly remain in place. In addition, a few boulder walls exist on the east side of the site will remain.

7.2. Storm Water Plan

Storm water for the proposed uses subject to Section 1602.1.a. will be collected in interior catch basins and shunted to the main storm water system for the development. The storm water collected within the proposed uses subject to Section 1602.1.a. will be insignificant in volume as compared with the overall development.

Storm water for the entire Walmart development will be collected in a series of catch basins located throughout the parking lot area and along the site internal driveways. From there, pipe systems will convey the storm water to a pre-treatment underground storage unit. A pre-treatment storage unit will help trap sand, grit, floating debris, and total suspended solids.

After pre-treatment, storm water will enter an underground detention system. The underground detention system will be placed below the parking area in front of the proposed building. The underground detention system is designed to store bankfull conditions. From there, the system will outlet to the north and ultimately end up in the City of Novi's regional detention basin. The portion of the site to the west discharges into a separate system that ultimately leads to the City's regional basin (Bishop Creek near Eleven Mile Road). In order to accommodate for this storm water, the on-site underground storage system was increased to store the proper volume of storm water for the entire site.

7.3. Natural Features Modified or Removed by Storm Water Plan

Walmart follows very strict guidelines to assure that soil erosion and sedimentation issues will be controlled on-site during and throughout construction. Storm Water Pollution Prevention Plans or SWP3 plans have been prepared by CESO and will be reviewed and approved by the local SESC agency for permit. The Storm Water Pollution Prevention Plan (SWPPP) includes, but is not limited to, Specification Section 02370 (which includes the SWPPP) with appendices, the Erosion and Sedimentation Control Plan (Phase I and Phase II Site maps) included in the Construction Drawings with the Detail Sheet, the Notice of Coverage, Permit Authorization, General Permit, Notice of Termination, all records of inspections and activities which are created during the course of the project, and other documents as may be included by reference to the SWP3.

The SWP3 intends to control water-borne and liquid pollutant discharges by some combination of interception, sedimentation, filtration, and containment. The Walmart General Contractor and subcontractors implementing the SWP3 must remain alert to the need to periodically refine and update the SWP3 in order to accomplish the intended goals. The General Contractor is ultimately responsible for all site conditions and permit compliance.

Purpose

A major goal of pollution prevention efforts during project construction is to control soil and pollutants that originate on the site and prevent them from flowing to surface waters. The purpose of this SWP3 is to provide guidelines for achieving that goal. A successful pollution prevention program also relies upon careful inspection and adjustments during the construction process in order to enhance its effectiveness.

The SWP3 must be implemented before construction begins on the site. It primarily addresses the impact of storm rainfall and runoff on areas of the ground surface disturbed during the construction process. In addition, there are recommendations for controlling other sources of pollution that could accompany the major construction activities. This SWP3 will terminate when disturbed areas are stabilized, permanent erosion and sedimentation controls are installed, temporary erosion and sedimentation controls are removed, construction activities covered herein have ceased, and a completed Notice of Termination (NOT) is transmitted to the governing agency.

By implementing the SWP3, natural on-site features will not be impacted during construction.

7.4. Storage and Handling of Hazardous or Toxic Materials on Site

No hazardous materials are planned or will be used for the proposed uses subject to Section 1602.1.a.

7.5. Underground Storage Tanks

There are no underground storage tanks proposed or which will be used within the proposed uses subject to Section 1602.1.a.

The only underground storage tank(s) proposed for this overall development are two (2) grease interceptors located directly north of the building. Grease interceptors are located approximately 8 to 9 feet below the surface and intercept most greases and solids before they enter a wastewater disposal system. Both traps would be emptied periodically based on a timed schedule.

7.6. Environmental or Contamination History of the Site

The sites prior use included a Mervyn's Department Store and Novi Town Center small strip shopping with associated parking lot. No contamination of the site was found during CESO's investigation. Prior history of the site (as late as mid to late 1970's) shows that the eastern portion of site used to be an orchard. CESO is currently in the process of completing an environmental Phase I report that will review past history in detail.

7.7. Wildlife Impact

No existing wildlife is associated with the existing site and will not be impacted with the Walmart construction operations.

8. Social Impacts

8.1. Existing Use or Occupants that will be Replaced or Moved

There will be no existing uses or occupants that will be replaced or moved as a result of the proposed uses subject to Section 1602.1.a. because the site is vacant.

To accommodate the Walmart construction and that of its adjacent owner, the following improvements will be removed from the general area:

- (1) 75,000 sf Ex. Mervyn's Store
- (2) 35,342 sf Novi Town Center 8 Movie Theatre
- (3) 3,200 sf Pita Café Restaurant
- (4) 5,962 sf One Salon Hair Salon
- (5) 820 sf Vacant
- (6) 908 sf Vacant
- (7) 1,524 sf Vacant
- (8) 1,803 sf Vacant
- (9) 1,786 sf NNDJ Jewlery
- (10) 1,553 sf Vacant

- (11) 1,235 sf Armed Forces
- (12) 4,029 sf Diamon Jim Brady's Jewlery
- (13) 2,360 sf Vacant

135,522 sf of demolition/removal to accommodate the 149,854 sf Walmart Supercenter development.

8.2. Traffic Impact

The proposed uses subject to Section 1602.1.a. are not reasonably expected to increase the traffic historically experienced at the Mall nor will measurably increase traffic typically associated with the proposed Walmart development.

A traffic study was prepared at the City of Novi's request in connection with Walmart's application for site plan approval and subsequently reviewed and approved with minor comments by the City of Novi's Traffic Engineering Consultant.

Based on the results of the traffic study and with recommended improvements, the Novi Town Center redevelopment will not significantly degrade the existing level of service at each study intersection. In addition, the traffic study showed that the internal street network will accommodate the proposed Town Center redevelopment additional volumes.

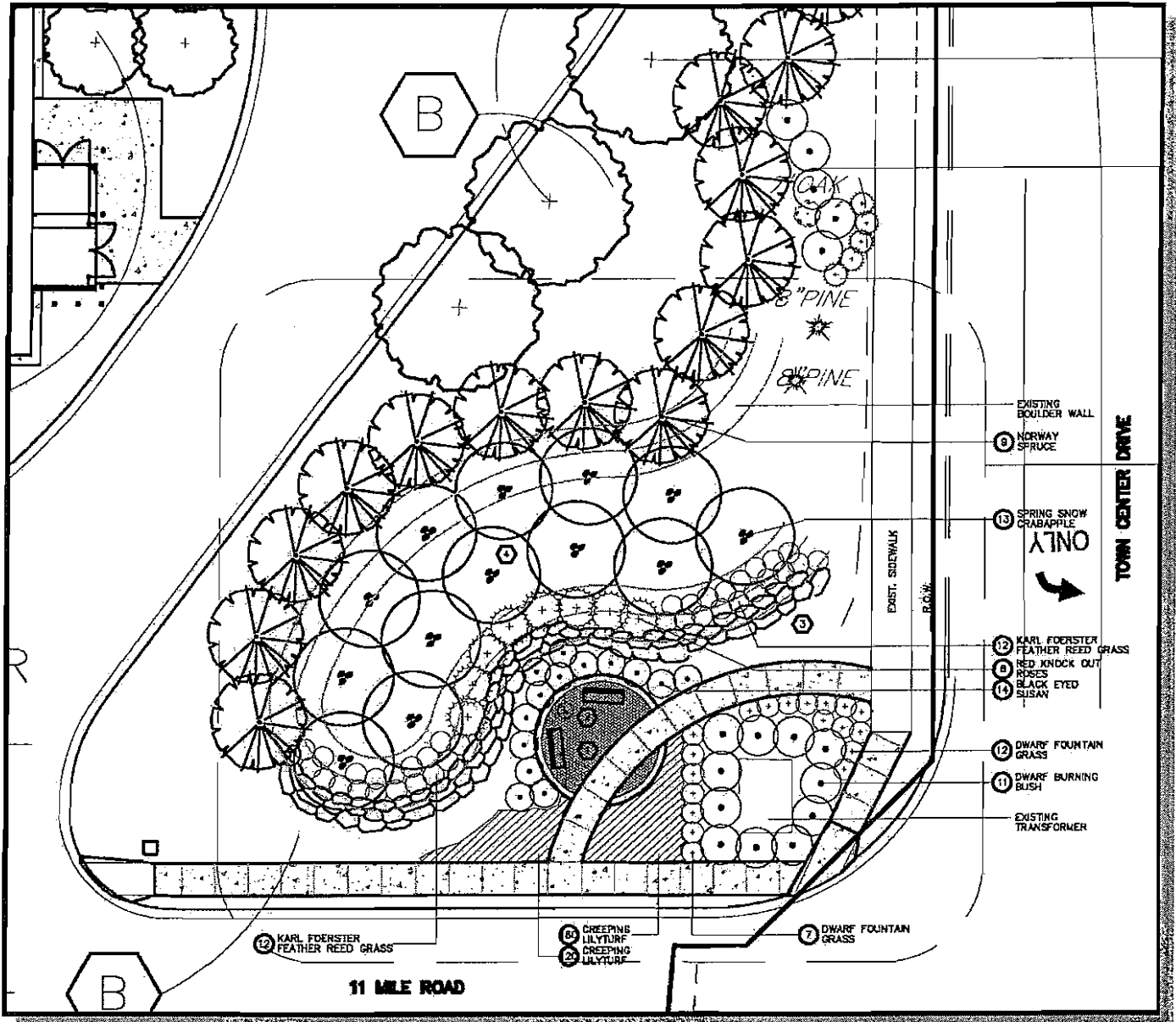
8.3. Site Amenities

There will be no site amenities directly associated with the proposed uses subject to Section 1602.1.a.

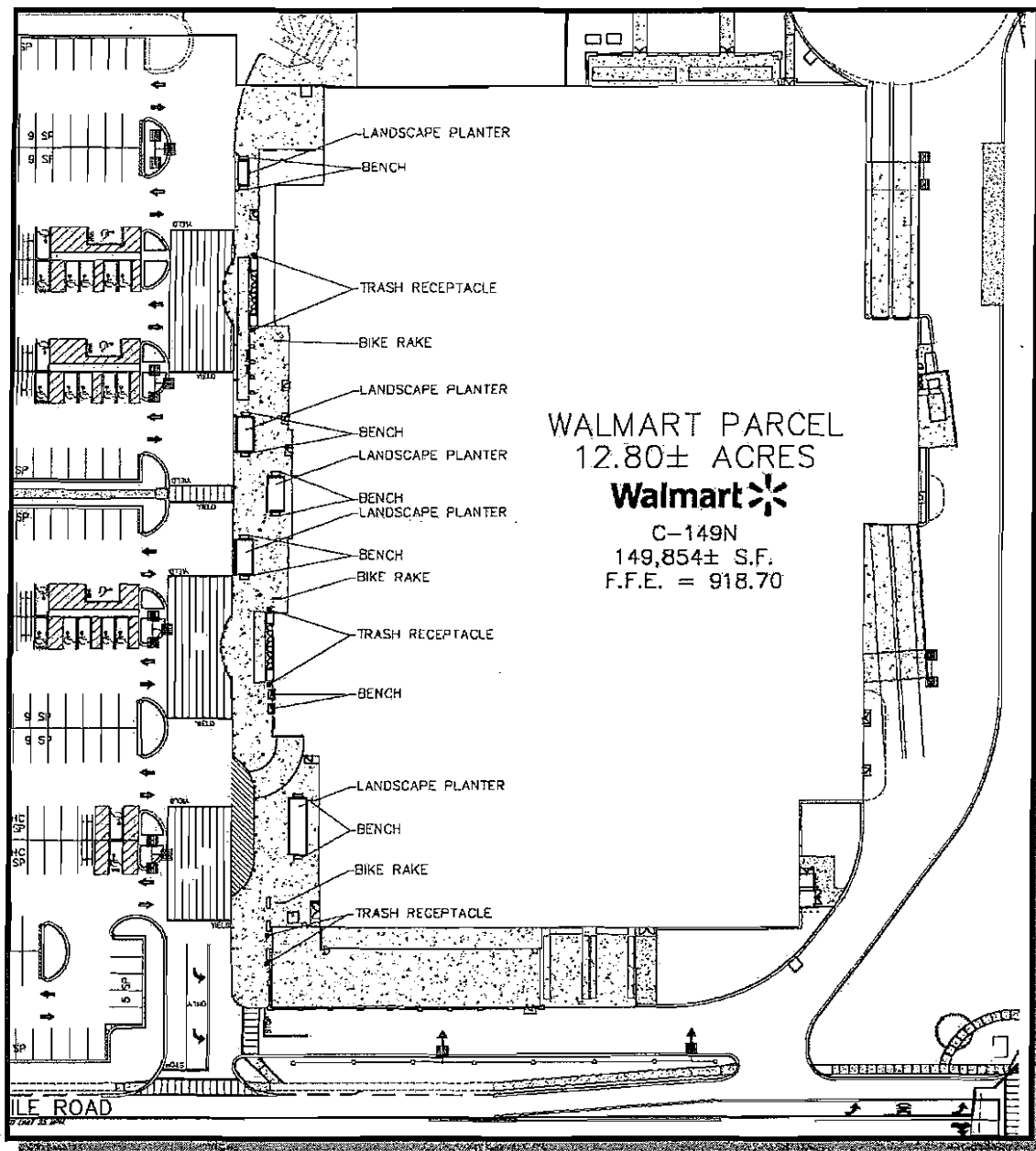
Several site amenities are proposed for the Walmart development that include the following:

- Bike racks and trash receptacles along the front of the store.
- Planters along the front of the store.
- Benches placed along the front of the store.
- Sidewalks that connect the Walmart development to the Novi Town Center, Eleven Mile Road, and Town Center Drive.
- Pedestrian plaza located at the corner of Eleven Mile Road and Town Center Drive. This amenity was designed to closely match the existing amenity at the southeast corner of Novi Road & Crescent Boulevard. The pedestrian plaza will have benches, sidewalk connectivity, extensive landscaping, and a boulder retaining wall.

The following illustration shows the Pedestrian Plaza amenity located at the intersection of Eleven Mile Road & Town Center Drive.



The following illustration shows the amenities along the front of the Walmart store.



8.4. Will the Proposed Development Increase the Permanent Population of the City?

No. The proposed uses subject to Section 1602.1.a. will not increase the permanent population of the City.

Likewise, the proposed Walmart development will not increase the permanent population of the City of Novi. The 149,854 sf Walmart development will basically replace 135,522 sf of existing retail space that will be demolished. Walmart typically tries to hire their employees from within the local area population and because of unemployment rates in the area, it is not anticipated that future employees will need to relocate into the City.

TRAFFIC IMPACT STATEMENT – EXCERPT

TRAFFIC IMPACT STUDY

NOVI TOWN CENTER REDEVELOPMENT CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

Prepared for:

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SEPTEMBER 2010



Introduction

CESO prepared this traffic study on behalf of its client, Walmart Stores, Inc. This traffic study was prepared at the City of Novi's request in connection with Walmart's application for site plan approval. Walmart intends to demolish an existing retail structure within the existing Novi Town Center Mall (the "Mall") and replace it with a new retail building. The City of Novi also requested that this traffic study be prepared in connection with the plan of the Mall's owner, Novi Town Center Investors, LLC, to demolish existing retail structures within the existing Mall and replace them with new retail buildings.

The City's Zoning Ordinance does not require an off-site traffic study as a condition of site plan approval for the proposed development. The proposed development is actually a partial redevelopment of the existing Mall. The proposed development will result in a reduction of usable square footage at the Mall and a reduction in the number of parking spaces at the Mall. There will be no new public or private roads constructed. Access to major roadways remains the same. The general nature of the use of the Mall as a retail center will remain unchanged. There will be no new net traffic generated by the proposed development as compared with the current traffic capacity of the Mall. In fact, this traffic study concludes that the traffic situation will be improved after the proposed development is completed and after its recommendations are followed. Therefore, the traffic study is presented as an accommodation to the City's request and to explore on-site vehicular traffic circulation in a cooperative manner.

The impact of the Mall's traffic has been previously evaluated and approved by the City. The Mall was developed after the City's review and approval of a traffic study dated November 1985 in which the Mall's potential traffic impacts were analyzed. As a result, the City has approved the Mall's impact on the existing traffic and has presumably taken into account the Mall's impact on traffic when the City approved other developments near the Mall since that time. The existing traffic conditions are the result of the growth of Novi as a whole since the initial development of the Mall and require regional improvements to resolve (i.e. widening of Grand River Avenue, and Crescent Boulevard Extension) that are beyond the scope or responsibility of Walmart or of the owner.

This study is limited by the current traffic problems around the Mall generated by the on-going construction to improve vehicular access to I-696 and the surrounding major roads including Novi Road and Grand River Avenue. Further, this study does not evaluate regional issues associated with larger traffic issues in the area.

1. Summary of Findings and Recommendations

The following summary of findings and recommendations was developed based on the traffic impact study performed for the proposed development located in the City of Novi, Oakland County, Michigan referred to in the traffic study as the "Novi Town Center Redevelopment".

1.1 Summary of Findings

1. This study focused on evaluating the current and future traffic conditions on Novi Road, Grand River Avenue, Town Center Drive, and several internal Novi Town Center intersections under three (3) different traffic scenarios. Both Novi Road and Grand River Avenue are under the jurisdiction of the Road Commission for Oakland County (RCOC).

The three (3) traffic scenarios are:

Existing Traffic Scenario – Represents current traffic conditions.



Background (Year 2012) Traffic Scenario – Represents traffic conditions that would exist on the roadway system during year 2012 without the proposed Novi Town Center Redevelopment.

Opening Day (Year 2012) Traffic Scenario – Represents traffic conditions that would exist during year 2012 with the Novi Town Center Redevelopment. The Opening Day (Year 2012) traffic scenario includes the following development:

- 149,854 s.f. Walmart Supercenter
 - 123,055 s.f. Retail Space
 - 12,000 s.f. High Turnover Restaurant
 - 9,000 s.f. Quality Sit-Down Restaurant
2. Access to the Mall will remain unchanged from the current access driveways upon completion of the Novi Town Center Redevelopment (Novi Rd. & Crescent Blvd./Fonda St., Novi Rd. & Crowe Drive, Grand River Ave. & West Driveway, and Grand River Ave. & Town Center Dr.).

Access to the proposed Walmart store in the Novi Town Center Redevelopment is proposed via two (2) existing access driveways on Ingersol Drive (Walmart North and South Driveways), three (3) existing access driveways on Eleven Mile Road (Walmart East, Middle, and West Driveways), one (1) existing driveway on Town Center Drive that will continue to service trucks, and two (2) internal driveways (internal driveway from the north along store fronts, and a west internal driveway that parallels Ingersol Drive). The East Wal-Mart Driveway on Eleven Mile Road will actually shift further to the west as far as possible from the Town Center Drive & Eleven Mile Road intersection.

Existing Traffic Scenario

3. Traffic counts (manual) were conducted by CESO at the following intersections on Tuesday, June 22, Wednesday, June 23rd, Thursday, June 24th, and Saturday, June 26th, 2010 at the following study locations:
- Novi Road & Crescent Blvd./Fonda St.
 - Novi Road & Crowe Blvd.
 - Novi Road & Grand River Ave.
 - Grand River Ave. & West Access Driveway
 - Grand River Ave. & East Access Driveway
 - Grand River Ave. & Town Center Drive
 - 11 Mile Road & Town Center Drive
 - 11 Mile Road & East Access Driveway
 - 11 Mile Road & West Access Driveway
 - Town Center Drive & South Driveway
 - Town Center Drive & North Driveway
 - Town Center Drive & Crescent Blvd.
 - Crescent Blvd. & Ingersol Drive
 - Ingersol Drive & Crowe Blvd



The traffic counts shown in the report were compared with a traffic impact study performed by TetraTech dated April 2006 for a retail development located within the Town Center. Through volumes on Novi Road and Grand River Avenue were compared. The following is a summary of this comparison:

Intersection	April 2006 Traffic Count		June 2010 Traffic Count	
	NB Through	SB Through	NB Through	SB Through
Novi Road & Crescent Blvd./Fonda St.	1,384	1,161	1,436	1,503
Novi Road & Grand River Ave.	842	592	791	703
	EB Through	WB Through	EB Through	WB Through
Grand River Ave. & Town Center Drive	480	862	544	875

In reviewing the above table, the northbound through volume on Novi Road is similar in comparing the 2006 count to the 2010 count but the **southbound through volume increases by approximately 26%**. Typically, one would reasonably expect increase of one (1) to two (2) percent per year for this area. The increased volume is likely temporary. The increase in southbound through traffic on Novi Road is likely related to the construction on the I-696 ramps and the closure of them. Vehicles are significantly rerouted onto major thoroughfares in the City as a result of the construction. As instructed by the City, this report includes these conditions in the analysis of the existing conditions.

According to the count data, the Weekday Mid-Day Peak Hour occurs between 12:15 p.m. to 1:15 p.m., the Weekday PM Peak Hour occurs between 4:45 p.m. to 5:45 p.m., and the Saturday Peak Hour occurs between 3:00 p.m. and 4:00 p.m.

- Under the Existing Traffic Scenario, the following Levels of Service were obtained for the site driveways and key study intersections.

Existing Traffic Scenario

INTERSECTION	CONTROL	APPROACH	LEVEL OF SERVICE (LOS)		
			WEEKDAY PEAK HOUR		SATURDAY PEAK HOUR
			MID-DAY PEAK HOUR	PM PEAK HOUR	
Novi Road & Crescent Blvd./Fonda St.	Signalized	EBL	D (44.0)	D (47.4)	D (41.1)
		EBT	D (41.1)	D (42.0)	D (38.1)
		EBR	B (17.5)	B (18.6)	B (16.4)
		WBT	D (41.1)	D (44.8)	D (39.4)
		WBR	A (7.2)	A (8.7)	A (7.8)
		NBL	D (43.3)	D (45.6)	D (40.1)
		NBT	E (59.4)	E (66.8)	D (40.8)
		NBR	A (8.4)	B (10.1)	A (7.3)
		SBL	D (38.5)	D (41.0)	D (36.9)
		SBT	B (15.8)	B (17.8)	B (15.8)
		SBR	A (8.0)	A (8.2)	A (7.6)
OVERALL		C (33.4)	D (37.1)	C (26.4)	

C – Level of Service

(33.4) – Delay (seconds/vehicle)

* - Delay > 250 seconds/vehicle



Existing Traffic Scenario (Continued)

INTERSECTION	CONTROL	APPROACH	LEVEL OF SERVICE (LOS)		
			WEEKDAY PEAK HOUR		SATURDAY PEAK HOUR
			MID-DAY PEAK HOUR	PM PEAK HOUR	
Novi Road & Crowe Blvd.	Stop Sign	NBL	B (10.4)	B (12.2)	B (10.7)
		SBL	B (12.9)	B (11.9)	B (10.9)
		WBLTR	C (15.6)	D (28.6)	C (21.8)
		EBLTR	E (39.9)	F (200.4)	F (54.1)
Novi Road & Grand River Ave.	Signalized	EBL	F (109.3)	F (*)	F (*)
		EBT	D (46.6)	D (46.3)	D (44.0)
		WBL	E (68.3)	F (86.7)	E (67.7)
		WBT	D (53.7)	D (45.5)	D (53.8)
		WBR	F (169.3)	E (67.4)	F (156.4)
		NBL	E (79.7)	F (93.1)	E (68.8)
		NBT	D (36.2)	D (50.5)	D (37.6)
		SBL	F (208.5)	F (190.3)	F (*)
		SBT	D (36.2)	F (132.4)	D (36.9)
	OVERALL	E (72.9)	F (113.5)	F (111.5)	
Grand River Ave. & West Access Driveway	Stop Sign	EBL	B (10.9)	B (13.1)	B (10.6)
		SBLR	D (34.6)	E (43.2)	D (27.5)
Grand River Ave. & East Access Driveway	Stop Sign	EBL	B (11.1)	B (12.8)	B (10.0)
		SBLR	C (22.0)	D (30.7)	B (14.9)
Grand River Ave. & Town Center Drive	Signalized	EBL	E (55.1)	E (58.7)	D (52.6)
		EBT	C (25.5)	C (23.9)	C (22.9)
		WBL	E (55.4)	E (58.7)	D (52.6)
		WBT	D (42.9)	F (87.7)	D (42.5)
		WBR	B (15.6)	B (17.0)	B (15.4)
		NBL	E (74.9)	E (77.9)	E (75.3)
		NBT	C (32.9)	C (33.5)	C (31.4)
		NBR	A (8.2)	B (10.7)	B (11.8)
		SBL	F (235.2)	F (184.0)	F (96.0)
		SBT	C (32.6)	C (33.5)	C (31.5)
	OVERALL	D (45.7)	E (61.4)	D (36.9)	
11 Mile Road & Town Center Drive	Stop Sign	EBLTR	B (11.88)	A (9.71)	A (8.20)
		WBL	B (10.00)	B (10.09)	A (8.58)
		WBTR	B (10.58)	B (11.46)	A (8.17)
		NBL	B (10.06)	A (9.95)	A (8.73)
		NBT	B (11.01)	B (10.63)	A (8.34)
		SBL	B (11.04)	A (9.89)	A (8.63)
		SBTR	B (10.54)	B (10.49)	A (8.61)
11 Mile Road & Town Center Drive (Birchler Arroyo Volumes)	Stop Sign	EBLTR	B (12.75)	B (10.83)	A (9.72)
		WBL	B (10.62)	B (12.00)	A (9.22)
		WBTR	B (12.34)	B (11.51)	A (9.12)
		NBL	B (10.54)	B (10.35)	A (9.58)
		NBT	B (11.39)	B (13.22)	A (9.44)
		SBL	B (11.30)	B (10.58)	A (9.17)
		SBTR	B (13.67)	B (11.62)	B (10.30)
11 Mile Road & East Access Driveway	Stop Sign	WBLT	A (7.7)	A (7.5)	A (7.4)
		NBLR	B (10.4)	A (9.8)	A (9.1)

C – Level of Service

(33.4) – Delay (seconds/vehicle)

* - Delay > 250 seconds/vehicle



Existing Traffic Scenario (Continued)

INTERSECTION	CONTROL	APPROACH	LEVEL OF SERVICE (LOS)		
			WEEKDAY PEAK HOUR		SATURDAY PEAK HOUR
			MID-DAY PEAK HOUR	PM PEAK HOUR	
11 Mile Road & West Access Driveway	Stop Sign	WBLT	A (7.8)	A (7.7)	A (7.6)
		NBLR	B (11.1)	B (10.8)	A (10.0)
Town Center Drive & South Driveway	Stop Sign	NBL	A (7.6)	A (7.5)	A (7.5)
		SBL	A (7.5)	A (7.7)	A (7.5)
		WBLTR	B (10.0)	B (10.4)	A (10.0)
Town Center Drive & North Driveway	Stop Sign	EBLTR	B (10.0)	A (9.8)	A (9.7)
		NBL	A (7.5)	A (7.5)	A (7.8)
Town Center Drive & Crescent Blvd.	Stop Sign	EBLR	A (9.7)	A (9.8)	A (9.9)
		EBT	A (7.89)	A (8.34)	A (9.17)
Town Center Drive & Crescent Blvd.	Stop Sign	EBTR	A (8.49)	A (9.06)	B (11.58)
		WBL	A (8.50)	A (8.92)	A (9.34)
		WBT	A (8.13)	A (8.59)	A (8.68)
		NBL	A (9.42)	B (11.54)	A (9.74)
		NBR	A (6.86)	A (6.95)	A (8.27)
Crescent Blvd. & Ingersol Drive	Stop Sign	WBL	C (14.5)	C (21.7)	C (16.7)
		WBT	B (13.9)	C (20.6)	B (13.3)
		EBT	B (10.9)	B (11.7)	B (11.6)
		EBTR	B (11.3)	B (13.3)	B (12.3)
Ingersol Drive & Crowe Blvd.	Stop Sign	NBLT	A (7.9)	A (7.6)	A (7.6)
		EBLR	B (11.3)	B (10.2)	B (10.1)
Novi Road & Grand River Ave.	Signalized	EBL	F (109.3)	F (*)	F (*)
		EBT	D (46.6)	D (46.3)	D (44.0)
		WBL	E (68.3)	F (86.7)	E (67.7)
		WBT	D (53.7)	D (45.5)	D (53.8)
		WBR	F (169.3)	E (67.4)	F (156.4)
		NBL	E (79.7)	F (93.1)	E (68.8)
		NBT	D (36.2)	D (50.5)	D (37.6)
		SBL	F (208.5)	F (190.3)	F (*)
		SBT	D (36.2)	F (132.4)	D (36.9)
		OVERALL	E (72.9)	F (113.5)	F (111.5)

C – Level of Service

(33.4) – Delay (seconds/vehicle)

* - Delay > 250 seconds/vehicle

Background (Year 2012) Traffic Scenario

- The Background (Year 2012) traffic scenario included increasing the Existing Weekday & Saturday Peak Hour traffic volumes at the study locations by a one (1.0) percent growth rate for two (2) years to arrive at year 2012 traffic volumes. Please note, that the growth rate is added to the temporary and existing conditions affected by construction and, therefore, will probably not reflect actual conditions in 2012.
- Under the Background (Year 2012), traffic conditions, the following Levels of Service were obtained for the key study intersections.



Background (Year 2012) Traffic Scenario

INTERSECTION	CONTROL	APPROACH	LEVEL OF SERVICE (LOS)		
			WEEKDAY PEAK HOUR		SATURDAY PEAK HOUR
			MID-DAY PEAK HOUR	PM PEAK HOUR	
Novi Road & Crescent Blvd./Fonda St.	Signalized	EBL	D (44.2)	D (47.9)	D (41.3)
		EBT	D (41.4)	D (42.4)	D (38.3)
		EBR	B (17.4)	B (18.6)	B (16.2)
		WBT	D (41.3)	D (44.5)	D (39.6)
		WBR	A (7.2)	A (8.5)	A (7.8)
		NBL	D (43.5)	D (46.0)	D (40.2)
		NBT	E (66.1)	E (77.1)	D (44.0)
		NBR	A (8.7)	B (10.4)	A (7.6)
		SBL	D (38.5)	D (41.4)	D (37.0)
		SBT	B (16.0)	B (18.5)	B (16.1)
		SBR	A (8.2)	A (8.4)	A (7.8)
OVERALL	D (35.8)	D (40.9)	C (27.6)		
Novi Road & Crowe Blvd.	Stop Sign	NBL	B (10.6)	B (12.6)	B (10.9)
		SBL	B (13.2)	B (12.2)	B (11.1)
		WBLTR	C (16.6)	D (33.5)	C (24.0)
		EBLTR	E (45.4)	F (*)	F (62.7)
Novi Road & Grand River Ave.	Signalized	EBL	F (113.8)	F (*)	F (*)
		EBT	D (47.0)	D (46.6)	D (44.3)
		WBL	E (68.4)	F (88.0)	E (67.8)
		WBT	E (54.0)	D (45.6)	D (54.1)
		WBR	F (177.8)	E (68.8)	F (164.5)
		NBL	F (80.6)	F (95.3)	E (68.9)
		NBT	D (36.5)	D (51.8)	D (37.9)
		SBL	F (217.7)	F (200.9)	F (*)
		SBT	D (36.9)	F (144.4)	D (38.0)
OVERALL	F (75.0)	F (119.5)	F (115.2)		
Grand River Ave. & West Access Driveway	Stop Sign	EBLT	B (11.1) [A (9.5)]	B (13.4) [B (10.3)]	B (10.7) [A (8.8)]
		SBLR	E (39.0) [C (17.8)]	E (47.7) [B (12.0)]	D (29.4) [B (11.5)]
Grand River Ave. & East Access Driveway	Stop Sign	EBLT	B (11.3) [A (9.4)]	B (13.1) [A (10.0)]	B (10.1) [A (9.3)]
		SBLR	C (23.1) [C (16.1)]	D (32.8) [C (15.4)]	C (15.3) [B (12.9)]
Grand River Ave. & Town Center Drive	Signalized	EBL	E (55.2) [D (44.9)]	E (58.8) [D (51.2)]	D (52.8) [D (43.1)]
		EBT	C (25.7) [C (34.3)]	C (24.0) [C (28.7)]	C (23.1) [C (30.2)]
		WBL	E (55.6) [D (45.1)]	E (58.8) [D (51.2)]	D (52.6) [D (43.1)]
		WBT	D (44.7) [C (33.6)]	F (95.1) [C (34.8)]	D (44.5) [C (32.6)]
		WBR	B (15.7) [B (12.9)]	B (17.1) [B (15.5)]	B (15.4) [B (13.5)]
		NBL	E (75.8) [E (56.4)]	E (78.8) [E (63.3)]	E (76.1) [E (55.4)]
		NBT	C (33.0) [C (25.0)]	C (33.5) [C (28.1)]	C (31.4) [C (24.4)]
		NBR	A (8.2) [A (7.0)]	B (10.7) [A (9.8)]	B (11.8) [A (9.9)]
		SBL	F (246.6) [F (144.0)]	F (190.2) [F (123.4)]	F (98.9) [E (64.8)]
		SBT	C (32.7) [C (24.9)]	C (33.6) [C (28.0)]	C (31.5) [C (24.0)]
		SBR	A (6.9) [A (5.8)]	A (7.4) [A (6.8)]	B (10.3) [A (8.6)]
OVERALL	D (47.1) [D (38.0)]	E (65.0) [D (35.9)]	D (38.0) [C (32.6)]		

D – Level of Service (35.8) – Delay (seconds/vehicle) * - Delay > 250 seconds/vehicle [] – With Recommended Improvements



Background (Year 2012) Traffic Scenario (Continued)

INTERSECTION	CONTROL	APPROACH	LEVEL OF SERVICE (LOS)		
			WEEKDAY PEAK HOUR		SATURDAY PEAK HOUR
			MID-DAY PEAK HOUR	PM PEAK HOUR	
11 Mile Road & Town Center Drive	Stop Sign	EBLTR	B (12.06)	A (9.79)	A (8.23)
		WBL	B (10.07)	B (10.13)	A (8.60)
		WBTR	B (10.72)	B (11.67)	A (8.21)
		NBL	B (10.13)	B (10.01)	A (8.75)
		NBT	B (11.13)	B (10.75)	A (8.37)
		SBL	B (11.16)	A (9.95)	A (8.65)
		SBTR	B (10.68)	B (10.58)	A (8.65)
11 Mile Road & Town Center Drive (Birchler Arroyo Volumes)	Stop Sign	EBLTR	B (13.04)	B (10.97)	A (9.80)
		WBL	B (10.72)	B (12.16)	A (9.26)
		WBTR	B (12.64)	B (11.71)	A (9.20)
		NBL	B (10.64)	B (10.43)	A (9.64)
		NBT	B (11.61)	B (13.49)	A (9.52)
		SBL	B (11.46)	B (10.67)	A (9.22)
		SBTR	B (14.02)	B (11.79)	B (10.43)
11 Mile Road & East Access Driveway	Stop Sign	WBLT	A (7.7)	A (7.5)	A (7.4)
		NBLR	B (10.4)	A (9.8)	A (9.1)
11 Mile Road & West Access Driveway	Stop Sign	WBLT	A (7.8)	A (7.7)	A (7.6)
		NBLR	B (11.1)	B (10.8)	B (10.0)
Town Center Drive & South Driveway	Stop Sign	NBL	A (7.6)	A (7.5)	A (7.5)
		SBLTR	A (7.5)	A (7.7)	A (7.5)
		WBLTR	A (10.0)	B (10.4)	B (10.0)
		EBLTR	B (10.0)	A (9.9)	A (9.8)
Town Center Drive & North Driveway	Stop Sign	NBLT	A (7.5)	A (7.5)	A (7.8)
		EBLR	A (9.8)	A (9.8)	B (10.0)
Town Center Drive & Crescent Blvd.	Stop Sign	EBT	A (7.91)	A (8.36)	A (9.23)
		EBTR	A (8.54)	A (9.15)	B (11.79)
		WBL	A (8.51)	A (8.95)	A (9.40)
		WBT	A (8.15)	A (8.62)	A (8.72)
		NBL	A (9.48)	B (11.72)	A (9.82)
		NBR	A (6.87)	A (6.97)	A (8.32)
Crescent Blvd. & Ingersol Drive	Stop Sign	WBL	B (14.8)	C (22.5)	C (17.1)
		WBT	B (14.1)	C (21.5)	B (13.4)
		EBT	B (10.9)	B (11.8)	B (11.7)
		EBTR	B (11.4)	B (13.5)	B (12.4)
Ingersol Drive & Crowe Drive	Stop Sign	NBL	A (7.9)	A (7.6)	A (7.6)
		EBLR	B (11.4)	B (10.3)	B (10.2)

D – Level of Service (35.8) – Delay (seconds/vehicle) * - Delay > 250 seconds/vehicle [] – With Recommended Improvements



Opening Day (Year 2012) Traffic Scenario

7. The Opening Day (Year 2012) traffic scenario included adding the Novi Town Center Redevelopment generated traffic volumes (less internal and pass-by trips) to the Background (Year 2012) traffic volumes. Please note that in doing so, this study assumes that the Novi Town Center Redevelopment is a new development generating new traffic. This assumption may result in double counting the traffic volume generated from the portion of the Mall in which the Novi Town Center Redevelopment is located because the areas of the Novi Town Center Redevelopment were already included in the City's evaluation of the Mall's impact to traffic in a traffic study prepared for the initial development over twenty-five (25) years ago. The Novi Town Center Redevelopment is actually a partial redevelopment of the existing Mall. The Novi Town Center Redevelopment will result in a reduction of usable square footage at the Mall and a reduction in the number of parking spaces at the Mall. There will be no new public or private roads constructed. Access to major roadways remains the same. The general nature of the use of the Mall as a retail center will remain unchanged. There will be no new net traffic generated by the Novi Town Center Redevelopment as compared with the current traffic capacity of the Mall.
8. According to the Institute of Transportation Engineers' (ITE) Trip Generation, 8th Edition, the Novi Town Center Redevelopment under Opening Day conditions is assumed to generate 13,434 trips per day on a typical weekday (6,717 inbound and 6,717 outbound) and 14,453 trips per day on a typical Saturday (7,226 inbound and 7,226 outbound), of which 1,461 trips will be generated during the Weekday Mid-Day Peak Hour (729 inbound and 732 outbound), 1,088 trips will be generated during the Weekday PM Peak Hour (542 inbound and 546 outbound), and 1,324 trips will be generated during the Saturday Peak Hour (648 inbound and 676 outbound). These numbers include a ten (10) percent internal trip reduction applied to all generated Town Center traffic volumes. Please note that this results in a potential "double counting" scenario as described above.
9. According to the ITE Trip Generation, 8th Edition, pass-by-trip reduction may be applied to the Opening Day development. With pass-by-trip reduction, 995 new trips will be generated during the Weekday Mid-Day Peak Hour (495 inbound and 500 outbound), 761 trips will be generated during the Weekday PM Peak Hour (378 inbound and 383 outbound), and 961 trips will be generated during the Saturday Peak Hour (471 inbound and 489 outbound). Please note that this results in a potential "double counting" scenario as described above.
10. An analysis of existing traffic volumes indicates that the Novi Town Center Redevelopment-generated traffic is assumed to approach and depart the area in the following manner under the Opening Day (Year 2012) traffic scenario:

Route	Primary Trip Distribution Approach/Departure			Pass-By Trip Distribution Approach/Departure		
	Mid-Day Peak	P.M. Peak	Saturday Peak	Mid-Day Peak	P.M. Peak	Saturday Peak
To/From the NORTH on Novi Road	37%	37%	37%	37%	37%	37%
To/From the SOUTH on Novi Road	18%	18%	18%	18%	18%	18%
To/From the WEST on Grand River Ave.	21%	21%	21%	21%	21%	21%
To/From the EAST on Grand River Ave.	17%	17%	17%	17%	17%	17%
To/From the EAST on 11 Mile Road	4%	4%	4%	4%	4%	4%
To/From the SOUTH on Town Center Blvd.	3%	3%	3%	3%	3%	3%



11. Under the Opening Day (Year 2012) traffic scenario, the following Levels of Service were calculated based on the above assumptions for the study intersections and key site driveways.

Opening Day (Year 2012) Traffic Scenario

INTERSECTION	CONTROL	APPROACH	LEVEL OF SERVICE (LOS)		
			WEEKDAY PEAK HOUR		SATURDAY PEAK HOUR
			MID-DAY PEAK HOUR	PM PEAK HOUR	
Novi Road & Crescent Blvd./Fonda St.	Signalized	EBL	E (55.9) [E (77.0)]	D (54.3) [E (79.9)]	D (51.6) [E (77.4)]
		EBT	D (52.0) [E (70.7)]	D (48.0) [E (68.2)]	D (47.6) [E (69.7)]
		EBR	C (20.4) [C(25.2)]	C (20.7) [C (25.3)]	B (19.2) [C (25.3)]
		WBT	D (54.8) [E (67.6)]	D (47.4) [E (72.2)]	D (46.6) [E (71.4)]
		WBR	A (6.9) [A (5.9)]	A (6.3) [A (7.5)]	A (5.7) [A (6.7)]
		NBL	D (54.4) [E (75.6)]	D (52.4) [E (75.5)]	D (50.2) [E (77.5)]
		NBT	F (180.9) [D (54.2)]	F (212.9) [C (27.2)]	F (117.1) [B (19.3)]
		NBR	B (10.1) [A (6.3)]	B (19.4) [A (7.3)]	B (16.3) [A (5.6)]
		SBL	D (45.0) [E (64.1)]	D (43.5) [E (68.3)]	D (43.3) [E (68.1)]
		SBT	C (20.8) [C (21.0)]	C (22.5) [B (19.8)]	B (19.2) [B (16.8)]
		SBR	A (9.4) [A (9.4)]	A (9.7) [A (8.8)]	A (8.8) [A (7.9)]
	OVERALL	E (72.2) [D (38.6)]	F (85.4) [C (29.7)]	D (52.4) [C (26.5)]	
Novi Road & Crowe Blvd.	Stop Sign	NBL	B (11.4)	B (14.3)	B (11.1)
		SBL	B (10.9)	B (13.3)	B (11.0)
		WBLTR	F (*)	F (*)	F (*)
		EBLTR	F (61.1)	F (*)	F (108.1)
Novi Road & Grand River Ave.	Signalized	EBL	F (201.7) [F (88.7)]	F (*) [F (202.9)]	F (*) [F (183.7)]
		EBT	D (52.8) [E (67.6)]	F (83.7) [D (52.6)]	D (49.1) [D (42.1)]
		WBL	E (69.1) [C (27.5)]	E (70.1) [E (72.0)]	E (68.6) [F (83.9)]
		WBT	E (56.9) [D (38.0)]	F (123.2) [D (44.9)]	E (56.0) [E (61.3)]
		WBR	F (87.1) [E (71.0)]	F (*) [F (134.4)]	F (165.7) [F (148.8)]
		NBL	F (80.1) [F (110.4)]	F (86.3) [F (214.8)]	E (68.8) [F (142.5)]
		NBT	D (38.0) [F (62.4)]	D (45.3) [E (71.3)]	D (40.3) [E (92.7)]
		SBL	F (213.9) [F (85.7)]	F (177.0) [F (118.4)]	F (*) [F (176.9)]
SBT	D (39.0) [D (38.8)]	F (123.4) [F (120.8)]	D (43.2) [E (59.6)]		
	OVERALL	E (75.6) [E (59.1)]	F (124.4) [F (100.6)]	F (129.1) [F (97.3)]	
Grand River Ave. & West Access Driveway	Stop Sign	EBL	A (9.8)	B (10.7)	A (9.7)
		SBLR	E (40.5)	C (23.9)	C (19.8)
Grand River Ave. & East Access Driveway	Stop Sign	EBL	A (9.5)	A (10.0)	A (8.9)
		SBLR	C (16.8)	C (16.6)	B (13.1)
Grand River Ave. & Town Center Drive	Signalized	EBL	D (50.9) [D (52.8)]	D (53.7) [F (80.4)]	D (48.1) [E (79.1)]
		EBT	C (28.4) [C (21.8)]	C (24.0) [D (42.5)]	C (26.3) [C (24.7)]
		WBL	D (50.7) [F (82.1)]	D (52.8) [E (78.3)]	D (47.3) [D(42.5)]
		WBT	D (36.9) [E (59.4)]	D (35.6) [D (52.8)]	C (34.7) [C (31.8)]
		WBR	B (14.7) [C (25.6)]	B (15.5) [C (22.2)]	B (13.9) [A (7.7)]
		NBL	E (66.1) [E (82.5)]	E (66.1) [F (84.0)]	E (63.3) [E (60.0)]
		NBT	C (29.9) [D (49.6)]	C (32.4) [D (48.5)]	C (27.5) [C (22.6)]
		NBR	A (7.9) [B (11.2)]	B (10.8) [B (14.5)]	B (11.0) [A (9.3)]
		SBL	F (*) [E (56.6)]	F (*) [E (67.0)]	F (120.6) [F (88.4)]
		SBT	C (29.7) [C (30.4)]	C (32.3) [C (34.7)]	C (27.6) [C (22.1)]
		SBR	A (7.0) [A (6.0)]	A (7.1) [A (6.4)]	A (7.4) [A (6.2)]
	OVERALL	F (94.3) [D (41.7)]	E (58.2) [D (47.7)]	D (35.5) [C (32.5)]	

D – Level of Service (35.6) – Delay (seconds/vehicle) * - Delay > 200.00 seconds/vehicle [] – With Recommended Improvements



Opening Day (Year 2012) Traffic Scenario (Continued)

INTERSECTION	CONTROL	APPROACH	LEVEL OF SERVICE (LOS)		
			WEEKDAY PEAK HOUR		SATURDAY PEAK HOUR
			MID-DAY PEAK HOUR	PM PEAK HOUR	
11 Mile Road & Town Center Drive	Stop Sign	EBLTR	D (28.67) [C (22.81)]	C (15.74) [B (14.65)]	B (11.63) [B (10.98)]
		EBL	[B (10.41)]	[B (10.05)]	[A (9.26)]
		WBL	B (11.65) [B (11.17)]	B (11.51) [B (11.26)]	A (9.50) [A (9.42)]
		WBTR	B (14.36) [B (13.41)]	C (15.61) [B (14.95)]	B (9.74) [A (9.63)]
		NBL	C (16.23) [C (15.20)]	C (14.45) [B (13.88)]	B (12.29) [B (12.06)]
		NBT	B (13.65) [B (12.42)]	B (12.49) [B (12.05)]	A (9.38) [A (9.25)]
		NBL	B (13.61) [B (12.84)]	B (11.32) [B (10.98)]	B (9.72) [A (9.58)]
11 Mile Road & Town Center Drive (Birchler Arroyo Volumes)	Stop Sign	EBLTR	E (38.26) [D (27.41)]	C (20.76) [C (14.65)]	C (16.20) [B (14.82)]
		EBL	[B (11.20)]	[B (10.61)]	[A (9.91)]
		WBL	B (12.75) [B (12.12)]	B (14.53) [B (13.77)]	B (10.39) [B (10.91)]
		WBTR	C (19.00) [C (17.16)]	C (19.91) [B (14.44)]	B (11.26) [B (10.97)]
		NBL	C (18.31) [C (16.66)]	C (16.33) [B (14.78)]	B (14.81) [B (14.27)]
		NBT	B (14.63) [B (13.51)]	C (17.76) [C (15.69)]	B (11.08) [B (10.78)]
		NBL	B (14.22) [B (13.30)]	B (12.71) [B (11.81)]	B (10.56) [B (10.31)]
11 Mile Road & East Access Driveway	Stop Sign	WBLT	A (8.1)	A (7.7)	A (7.7)
		NBLR	B (12.5)	B (11.0)	B (10.4)
11 Mile Road & West Access Driveway	Stop Sign	WBLT	A (8.9)	A (8.0)	A (8.0)
		NBLR	C (24.3)	B (13.3)	B (12.4)
Town Center Drive & South Driveway	Stop Sign	NBL	A (7.7)	A (7.5)	A (7.6)
		SBLTR	A (7.5)	A (7.7)	A (7.6)
		WBLTR	B (10.3)	B (10.6)	B (10.6)
		EBLTR	B (10.7)	B (10.5)	B (10.6)
Town Center Drive & North Driveway	Stop Sign	NBLT	A (7.6)	A (7.5)	A (7.9)
		EBLR	A (9.9)	A (9.9)	B (10.1)
Town Center Drive & Crescent Blvd.	Stop Sign	EBT	A (8.02)	A (8.41)	A (9.31)
		EBTR	A (8.68)	A (9.31)	B (12.19)
		WBL	A (8.64)	A (9.01)	A (9.48)
		WBT	A (8.31)	A (8.68)	A (8.60)
		NBL	B (10.05)	B (12.13)	B (10.09)
		NBR	A (6.88)	A (6.99)	A (8.36)
Crescent Blvd. & Ingersol Drive	Stop Sign	WBL	F (56.6)	E (38.3)	F (104.0)
		WBT	E (46.1)	E (43.1)	D (28.3)
		EBT	C (15.2)	B (14.6)	C (16.9)
		EBTR	D (27.2)	C (20.7)	D (34.2)
Ingersol Drive & Crowe Drive	Stop Sign	NBL	A (9.3)	A (8.2)	A (8.5)
		EBLR	F (108.8)	C (19.7)	C (24.4)
11 Mile Road & Walmart West Driveway	Stop Sign	EBLT	A (7.9)	A (7.8)	A (7.7)
		SBLR	B (14.2)	B (11.9)	B (11.3)
11 Mile Road & Walmart East Driveway	Stop Sign	EBLT	A (8.0)	A (7.9)	A (7.8)
		SBLR	C (15.1)	B (12.3)	B (12.3)
Walmart East Driveway & Internal North Driveway	Stop Sign	NBLT	A (7.4)	A (7.3)	A (7.3)
		EBLR	A (8.9)	A (8.8)	A (8.7)
Walmart East Driveway & Internal Middle Driveway	Stop Sign	NBLT	A (7.4)	A (7.3)	A (7.4)
		EBLR	A (9.3)	A (9.0)	A (9.3)

D – Level of Service (35.6) – Delay (seconds/vehicle) * - Delay > 200.00 seconds/vehicle [] – With Recommended Improvements



12. Based on the results of this analysis and despite the nature of the Novi Town Center Redevelopment, it may be seen that **with the recommended improvements**, the Novi Town Center Redevelopment can be accommodated without adversely impacting the current overall levels of service (LOS) of the key study intersections during the Opening Day (Year 2012) traffic scenario. Furthermore, the internal site access system will operate in a safe and efficient manner.

1.2 Summary of Recommendations

Based on the results of this analysis, the following recommendations are made for the Novi Town Center Redevelopment based on Existing, Background (Year 2012), and Opening Day (Year 2012) traffic scenarios.

Roadway Improvements

Existing

This study is not an analysis of regional issues associated with traffic near the Mall. Therefore, no recommendations are provided regarding the existing traffic conditions. We understand that the City and the County are considering widening the north side of Grand River Avenue approximately twelve (12) feet in width for construction of an additional westbound through lane from Town Center Drive west to Novi Road. This improvement will add an additional through lane at Grand River Avenue & Town Center Drive, Grand River Avenue & East Drive, and Grand River Avenue & West Drive.

Background (Year 2012) ~ Responsibility of the Road Commission for Oakland County/City of Novi

Grand River Avenue

This study is not an analysis of regional issues associated with traffic near the Mall. Therefore, no recommendations are provided regarding the traffic conditions in 2012 which may exist without the existence of the Novi Town Center Redevelopment. We understand that the City and the County are considering widening the north side of Grand River Avenue approximately twelve (12) feet in width for construction of an additional westbound through lane from Town Center Drive west to Novi Road. This improvement will add an additional through lane at Grand River Avenue & Town Center Drive, Grand River Avenue & East Drive, and Grand River Avenue & West Drive.

Opening Day (Year 2012) ~ Proposed Responsibility of Walmart and the Mall Owner

Novi Road & Crescent Boulevard/Fonda Street

Revise the cycle length from 130/140 seconds to 150 seconds. In addition, revise the phasing splits as outlined in the Synchro summary sheets contained in Appendix E of the report.

Novi Road & Grand River Avenue

Revise the cycle length from 130/140 seconds to 150 seconds. In addition, revise the phasing splits as outlined in the Synchro summary sheets contained in Appendix E of the report.

Grand River Avenue & Town Center Drive

Revise the cycle length from 130/140 seconds to 150 seconds. In addition, revise the phasing splits as outlined in the Synchro summary sheets contained in Appendix E of the report.



Eleven Mile Road & Walmart East Driveway

Widen the west leg of Eleven Mile Road on the north side for the construction of a twelve (12) foot wide eastbound to northbound left-turn lane. This improvement will align the intersection with the left-turn lane on the east leg of Eleven Mile Road. The left-turn lane is proposed to be 125 feet in length with a taper length of 125 feet (based on a speed limit of 25 mph ~ WS2/60). This turn lane shall be designed according to the City of Novi Engineering Design Standards.

The Walmart East Driveway is proposed to be a forty (40) foot wide full access driveway with an exclusive southbound to westbound right-turn lane, an exclusive southbound to eastbound left-turn lane, and one (1) inbound lane. In addition, a "canoe" shaped island has been added to increase the "throat" length that will provide eighty (80) foot outbound lane lengths. The Walmart East Driveway shall be designed according to the City of Novi Engineering Design Standards.

Eleven Mile Road & Walmart West Driveway

Walmart West Driveway is proposed to be a thirty (30) foot wide full access driveway with one (1) shared outbound left-right lane and one (1) inbound lane. In addition, a "canoe" shaped island has been added that will help reduce traffic from the Walmart parking lot onto the West Driveway. The Walmart West Driveway shall be designed according to the City of Novi Engineering Design Standards.

Ingersol Drive

Re-stripe Ingersol Drive from Crowe Drive south to "Building N" access driveway in order to provide a center left-turn lane.

Town Center Drive & South Driveway

This access driveway is existing and will primarily serve as a truck access serving the Walmart development and the existing TJ Maxx. Modifications to this driveway include: forty (40) feet driveway width, inbound and outbound taper lengths to accommodate WB-67 trucks, and sidewalk crossing markings.

Future Improvements ~ Responsibility of the City of Novi

Crescent Boulevard Extension

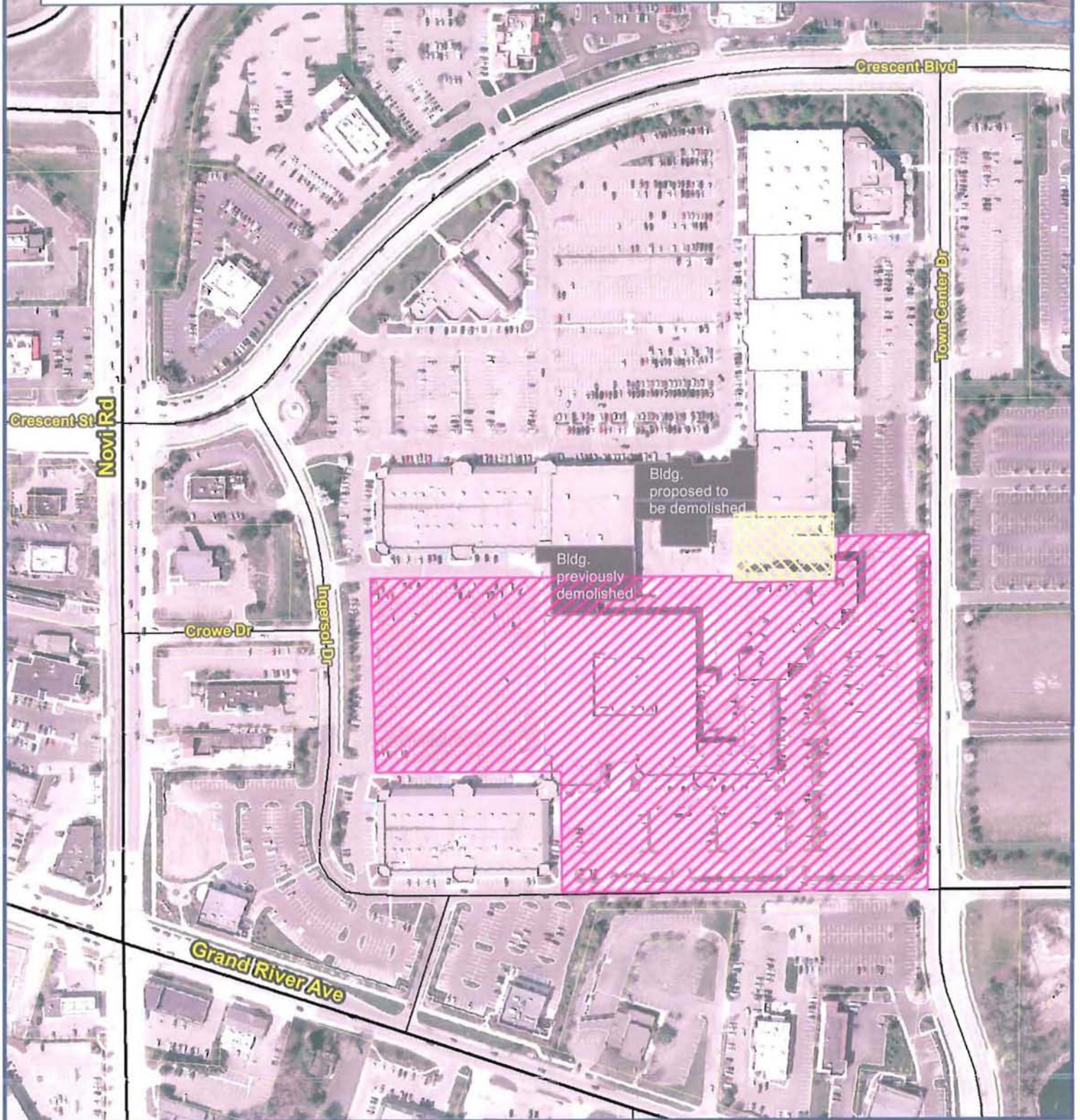
Extend Crescent Boulevard from Novi Road west to Grand River Avenue. This extension will improve the current and future operating conditions of both the Novi Road & Crescent Boulevard/Fonda Street intersection and the Novi Road & Grand River Avenue intersection.

The Opening Day (Year 2012) conceptual roadway improvements are illustrated on Figure 25 of the report.

The full Traffic Impact Statement is available at the Community Development Department. Please contact Kristen Kapelanski at 248-347-0586 or kkapelanski@cityofnovi.org if you are interested in reviewing the full document.

Walmart SP10-42A and Novi Town Center Building X.1 SP10-41A

Location



Map Author: Kristen Kapelanski
 Date: November 30, 2010
 Project: Walmart SP10-42A and
 Bldg. X.1 SP10-41A
 Version #: 1.0

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

Map Legend

-  Bldg. X.1 Project Area (Approx.)
-  Walmart Project Area (Approx.)



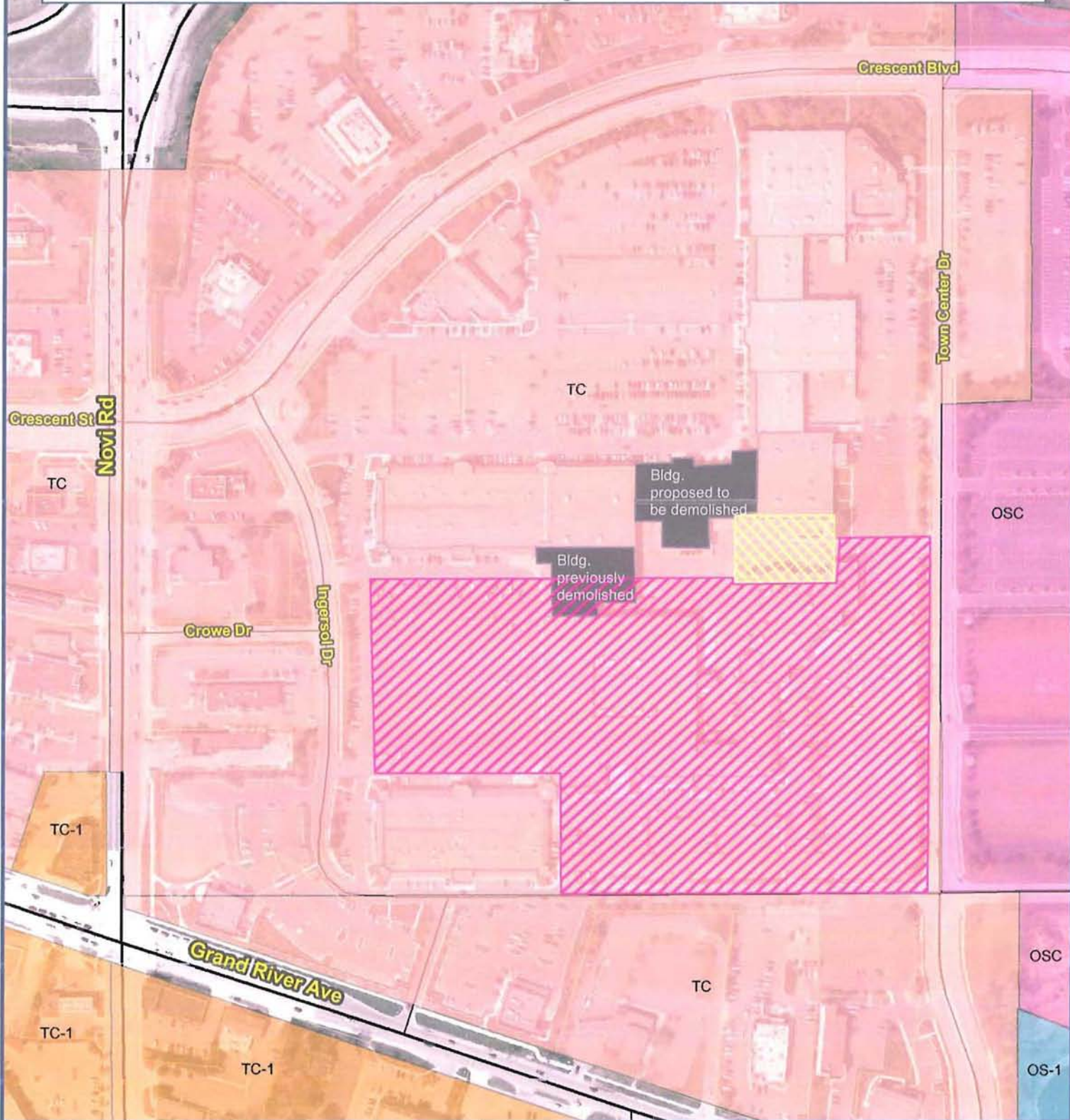
City of Novi
 Department Division
 45175 W Ten Mile Rd
 Novi, MI 48375
 cityofnovi.org



1 inch = 266 feet

Walmart SP10-42A and Novi Town Center Building X.1 SP10-41A

Zoning



Map Author: Kristen Kapelanski
 Date: November 30, 2010
 Project: Walmart SP10-42A and
 Bldg. X.1 SP10-41A
 Version #: 1.0

MAP INTERPRETATION NOTICE

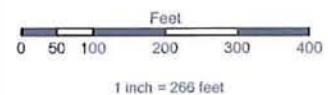
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Map Legend

- Bldg. X.1 Project Area (Approx.)
- Walmart Project Area (Approx.)
- OS-1: Office Service District
- OSC: Office Service Commercial
- TC: Town Center District
- TC-1: Town Center -1 District

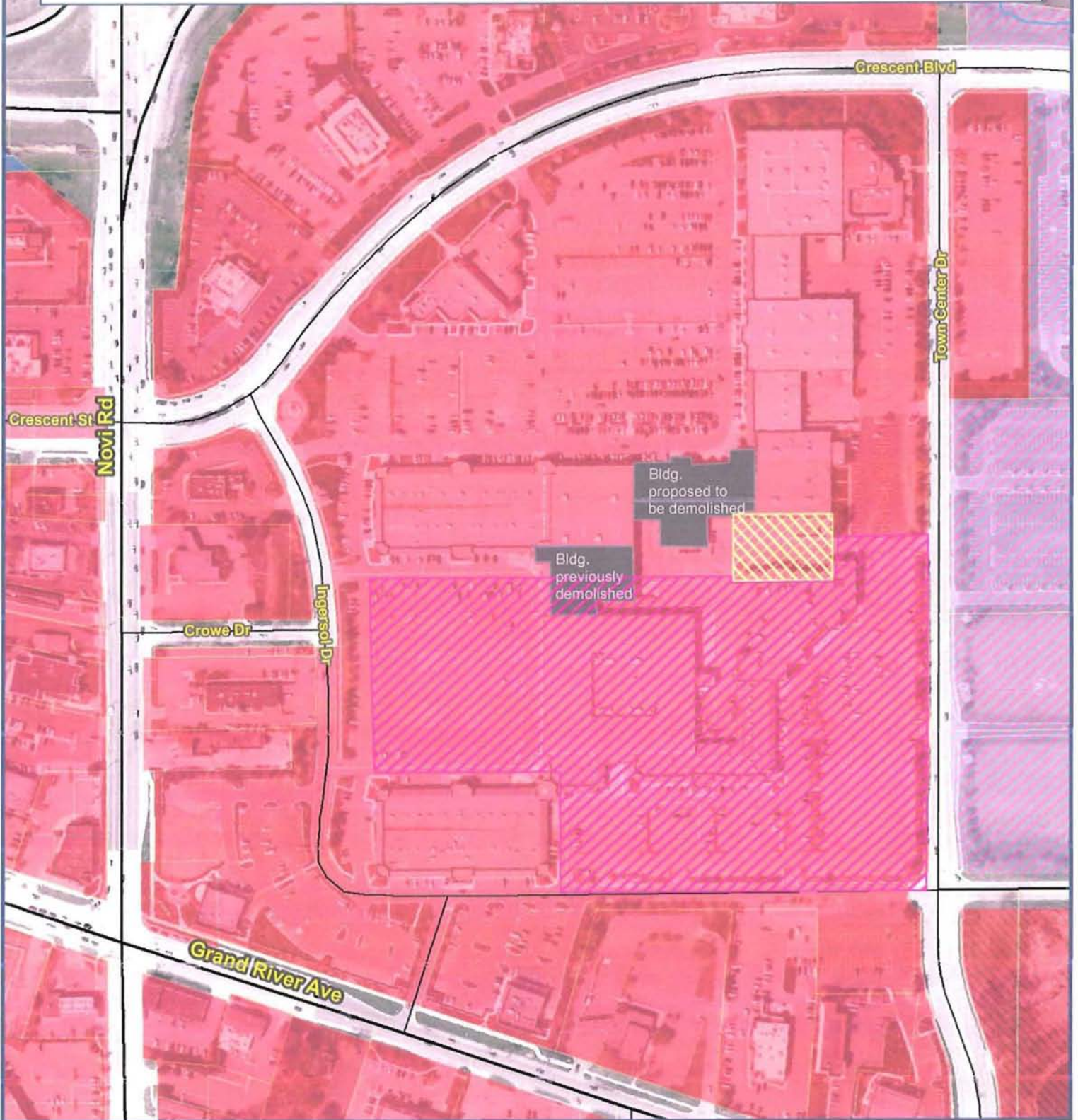


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Walmart SP10-42A and Novi Town Center Building X.1 SP10-41A

Future Land Use



Map Author: Kristen Kapelanski
 Date: November 30, 2010
 Project: Walmart SP10-42A and
 Bldg. X.1 SP10-41A
 Version #: 1.0

MAP INTERPRETATION NOTICE

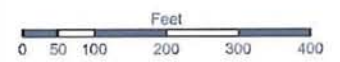
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Map Legend

-  Bldg. X.1 Project Area (Approx.)
-  Walmart Project Area (Approx.)
-  Office Research Development Technology
-  Office Commercial
-  TC Commercial
-  TC Gateway



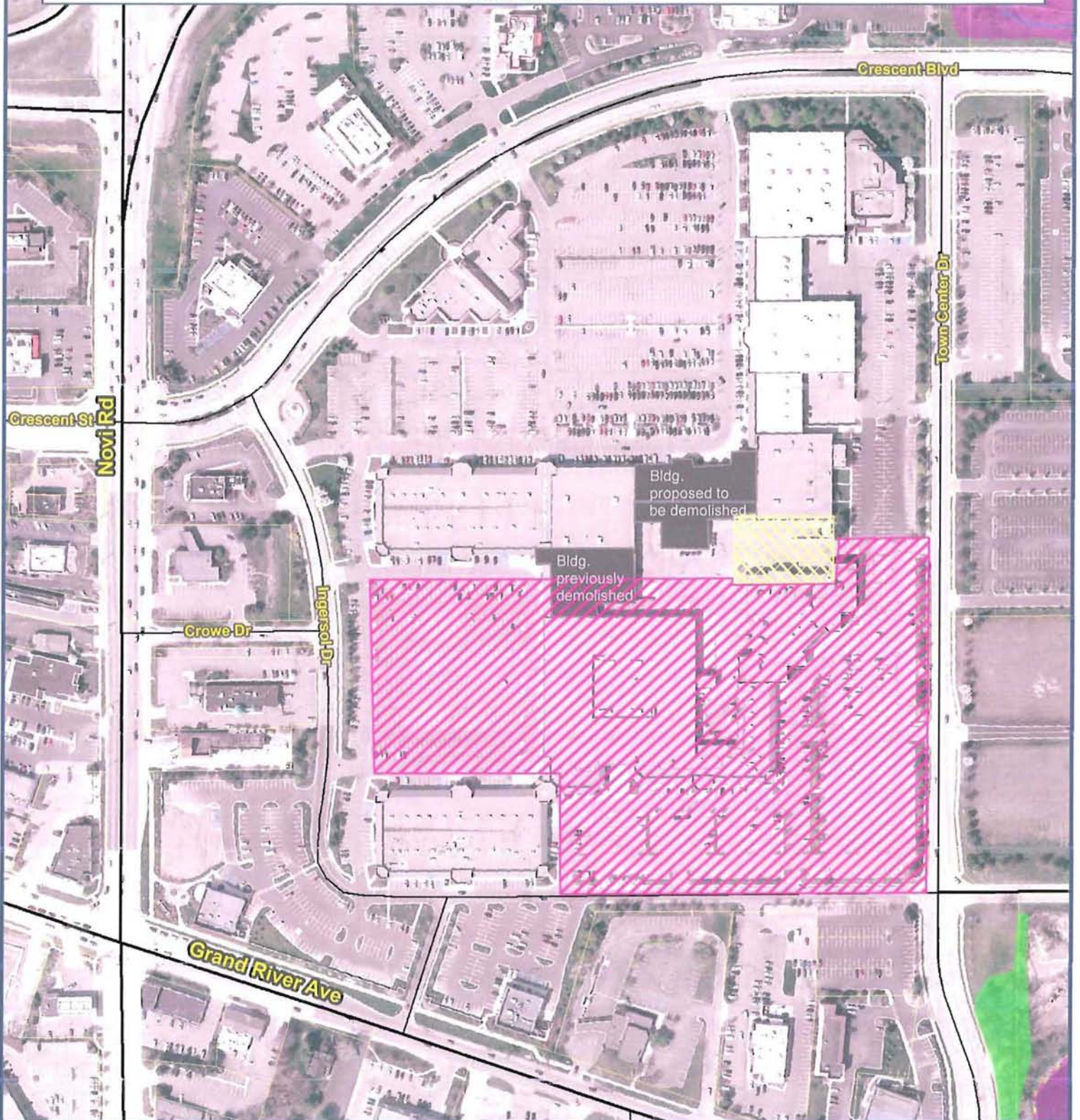
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1 inch = 266 feet

Walmart SP10-42A and Novi Town Center Building X.1 SP10-41A

Natural Features



Map Author: Kristen Kapelanski
 Date: November 30, 2010
 Project: Walmart SP10-42A and
 Bldg. X.1 SP10-41A
 Version #: 1.0

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Map Legend

-  Bldg. X.1 Project Area (Approx.)
-  Walmart Project Area (Approx.)
-  Wetland Areas
-  Woodlands



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