

cityofnovi.org

Main Street Novi SP 06-38C

Main Street Novi, SP06-38C

Consideration of the request of Triangle Development, LLC, for recommendation to the City Council for revised Preliminary Site Plan and revised Phasing Plan approval. The subject property is located in Section 23, south of Grand River Avenue, east of Novi Road, in the TC-1, Town Center District. The subject property is approximately 20 acres and the applicant is proposing to construct a mixed-use development on the vacant land to the north and south of the existing Main Street.

Required Action

Recommend approval/denial of the revised Preliminary Site Plan and revised Phasing Plan

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	07/08/08	<ul style="list-style-type: none"> • Building separation waiver required for Building 400 (Phase 2). • Minor items to be addressed at the time of Final Site Plan submittal.
Landscaping	Approval recommended	07/08/08	
Traffic – Shared Parking Study	Approval not recommended	07/07/08	<ul style="list-style-type: none"> • 15 spaces along Main Street are being "double-counted." • Study should account for both reserved (resident only) and open (shared commercial/residential) parking. • Site layout should be reconfigured to allow for underground parking at this time. • Reduction in parking estimates should be justified. • Minor items to be addressed at the time of Final Site Plan submittal.
Traffic – Preliminary Site Plan	Approval not recommended	06/16/08	<ul style="list-style-type: none"> • Applicant should adjust the parking lot layout to minimize entry points. • Proposed medical office building should be relocated to the west. • Minor items to be addressed at the time of Final Site Plan submittal.
Engineering	Approval recommended	06/09/08	Minor items to be addressed at the time of Final Site Plan submittal.
Fire	Approval recommended	06/16/08	Minor items to be addressed at the time of Final Site Plan submittal.

Motions

Approval – Preliminary Site Plan

In the matter of Main Street Novi, SP 06-38C, motion to **recommend approval** the revised Preliminary Site Plan, subject to the following:

- a. City Council reaffirming all previous waivers associated with the original Preliminary Site Plan approval;
- b. City Council waiver for a reduction in building separation between Building 400 and the existing Main Street building;
- c. Applicant indicating that future parking deficiencies will be addressed and buildings re-sized if necessary as future phases on the south side of Main Street are brought forward for Final Site Plan approval;
- d. The 75,000 square feet of residential space Triangle Development intends to move from the north side of Main Street to the south side has not been documented on the plans and would require further reviews and approvals;
- e. The conditions and items listed in the staff and consultant review letters being addressed on the Final Site Plan; and
- f. *(additional conditions here if any)*

for the following reasons... *((because a reduction in building setback will not impair the health, safety or general welfare of the City as related to the use of the premise or adjacent premise, that waiver of the building setbacks along a common parcel line between two premises would result in a more desirable relationship between a proposed building and an existing building, that adherence to a minimum required building setback would result in the establishment of nonusable land area that could create maintenance problems and the plan is otherwise in compliance with Article 16, Article 24 and Article 25 of the Zoning Ordinance and all other applicable provisions of the Ordinance.))*

Approval – Phasing Plan

In the matter of Main Street Novi, SP 06-38C, motion to **recommend approval** the revised Phasing Plan, subject to:

- a. The conditions and items listed in the staff and consultant review letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

for the following reasons...*(because it otherwise in compliance with Article 16, Article 24 and Article 25 of the Zoning Ordinance and all other applicable provisions of the Ordinance.*

Denial - Preliminary Site Plan

In the matter of Main Street Novi, SP 06-38C, motion to **recommend denial** the revised Preliminary Site Plan, for the following reasons...*(because it is not in compliance with the Ordinance.)*

Denial - Phasing Plan

In the matter of Main Street Novi, SP 06-38C, motion to **recommend denial** the revised Phasing Plan, for the following reasons...*(because it is not in compliance with the Ordinance.)*

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

July 8, 2008

Planning Review

MainStreet Novi

SP #06-38C

Petitioner

Triangle Development (Dave Nona)

Review Type

Revised Preliminary Site Plan and Revised Phasing Plan

Property Characteristics

- Site Location: South of Grand River Avenue, east of Novi Road, along the north and south sides of Main Street
- Site Zoning: TC-1, Town Center
- Adjoining Zoning: North and West: TC-1; South: I-2, General Industrial; East: RM-2, High Density, Mid Rise Multiple Family
- Adjoining Uses: North: Retail buildings fronting onto Grand River Avenue, West: Retail buildings fronting onto Novi Road; South: Industrial buildings along Trans-X Drive; East: Main Street Village apartments
- School District: Novi Community School District
- Site Size: 20 acres
- Plan Date: 05/30/08

Project Summary

The applicant is proposing to construct a mixed-use development on the vacant land to the north and south of the existing Main Street. The development will consist of 401 dwelling units, 70,000 square feet of medical office space, 50,000 square feet of general office space, 88,000 square feet of retail space, and 30,000 square feet of restaurant space. Phase 1 is proposed to include the roads and utilities north of Main Street, the medical office building (which includes a small amount of restaurant and retail space), and a surface parking lot. There is no residential component to Phase 1.

The proposed MainStreet Novi development was approved previously by the City Council after receiving a positive recommendation from the Planning Commission. Additionally, a number of required variances were granted by the Zoning Board of Appeals. Relevant motions are included later in this review letter.

Due to the current economic conditions, the applicant has decided to revise the plans for the proposed development. These changes include substantial alteration of Phase 1 with minor alterations to Phase 2 and some slight adjustments to the proposed phasing plan. The changes are as follows:

1. Building 700, the proposed parking garage has been removed and replaced with a surface parking lot. This was previously part of Phase 1.
2. Building 600, a proposed 3-story office/retail building has been shifted to the west and is part of Phase 4.
3. Building 500, a 5-story office/retail building, has been removed.
4. The footprint of Building 400 (Phase 2) has been altered and it has been changed from a 1-story building to a 2-story building. The use has also been changed from strictly retail to retail/nightclub. This coincides with the Phase 2 Final Site Plan currently in for revised Final Site Plan review.

These changes trigger the need for a new round of reviews from staff, the Planning Commission and City Council. This review letter assumes that all improvements on the south side of Main Street are identical to those shown on the original submittal and as approved on the Preliminary Site Plan, including building size, height, square footage, number of residential units, mix of land uses, etc. While the applicant has indicated that 75,000 square feet of residential space that has been removed from the north side of Main Street will be relocated to the south side of Main Street, **the applicant has not provided** any revised site plans, floor plans or building elevations showing how or where that space can be accommodated.

Recommendation

Approval of the revised Preliminary Site Plan and revised Phasing Plan ***can be recommended at this time***. Although the proposed changes create questions as to whether the phases south of Main Street will have adequate parking if developed with the mix of uses as originally approved, the Community Development Department feels that the applicant can address those deficiencies in future phases. Should the applicant not be able to address the deficient parking, the square footage of future phases may need to be reduced so that adequate parking can be provided. Please see the traffic review letter for additional information regarding the shared parking study.

City Council and Planning Commission Review

Per Section 1602.1 of the ordinance, for sites over five acres in size Preliminary Site Plan approval, including the approval of any proposed phasing plans shall be by the City Council after a recommendation from the Planning Commission. Therefore, the revised Preliminary Site Plan and Phasing Plan for MainStreet Novi will be heard by both the Planning Commission and City Council. Final site plan approvals of each phase individually will be administrative.

Review Standards

This project was reviewed for compliance with the City of Novi Zoning Ordinance, Article 16 (Town Center), Article 24 (Schedule of Regulations), Article 25 (General Provisions), and any other areas of the ordinance, as noted. **Please see the attached charts for all ordinance requirements and deficiencies.**

Planning Commission Review of Preliminary Site Plan

The Planning Commission reviewed the Preliminary Site Plan for the MainStreet Novi site on September 27, 2006 and recommended approval to the City Council with the following motion:

In the matter of the request of Triangle Development for Main Street Novi, SP06-38, motion to recommend approval to the City Council for the Preliminary Site Plan, subject to: 1) A City Council Waiver of specific setback requirements along Main Street, with no more than 15 feet of pavement between curb

and building; 2) City Council approval of Paul Bunyan/Sixth Gate road vacation or redesign to accommodate setbacks in this area; 3) A Zoning Board of Appeals Variance to allow pavement within ten feet of walls with openings throughout the site; 4) A Zoning Board of Appeals Variance for reduced size of loading zones throughout the site; 5) A Zoning Board of Appeals Variance for lack of 45 degree building orientation throughout the site; 6) A Zoning Board of Appeals Variance to allow parking for residential buildings greater than 300 feet from building; 7) A Planning Commission Waiver to allow additional height on brick screen walls adjacent to neighboring properties and right-of-way; 8) A Planning Commission Waiver to eliminate parking lot landscaping for parking structures and below ground parking, with no reduction in requirements for above ground parking lots; **9) The Applicant redesigning the Building 800 vicinity to meet building setback requirements and avoid left turn interlocks;** **10) The Applicant redesigning the plan to eliminate all parking spaces that back into intersections or pedestrian facilities;** 11) A City Council Finding under Section 1602.9 for use of EIFS, Cast Stone, Vinyl Siding, and red colored standing seam metal; 12) A Planning Commission Waiver to allow tree plantings in non-standard locations throughout the site; 13) A Planning Commission Waiver to allow parking spaces in excess of 15 without a landscaped island; 14) A Planning Commission Waiver to allow reduced building foundation plantings, with other planting types provided; 15) A Planning Commission Waiver to eliminate the four feet of greenspace adjacent to the building foundations at the locations currently shown on the plans with the Applicant utilizing the alternative landscaping design discussed at the meeting (e.g., aboveground planters, etc.); **16) The Applicant redesigning the plan to eliminate parallel parking spaces along Main Street south of the 800 Building;** **17) The Applicant redesigning the plan to incorporate the previously approved Main Street Court plans and maintain access to Trans-X Drive;** **18) The Applicant redesigning the plan to meet minimum parking standards from the Shared Parking Study and incorporating the Main Street Court property into the Shared Parking Study;** **19) The Applicant working with the City to correct the traffic circle concerns, as the experts deems fit;** 20) The Applicant receiving MDEQ approval for proposed wetland fill to occur prior to Final Site Plan approval for wetland fill activities on the site; 21) A City Council Variance to allow turf pavers, as indicated in Applicant's response letter; 22) The Applicant continuing to work on their design to eliminate the need for a City Council Design and Construction Standards Variance to eliminate parking lot end islands in parking structure and underground parking; 23) The Coordination of building design with Main Street Court is preferred over Applicant seeking a Zoning Board of Appeals Variance for lack of exterior building setback for Building 1300; and 24) All conditions listed in the Staff and Consultant review letters; for the reason that the plan meets the intent of the Master Plan for Land Use. *Motion carried 6-0.*

The Planning Commission outlined a number of items that needed to be addressed, shown in **bold** type above. Among these, the applicant has made redesigns to the plans to accommodate numbers 9, 10, 16, 18 (discussed further below), and 19. The only remaining item is number 18, which involves a future phase. When that phase is reviewed, this item will need to be addressed. Until that time, this area is not being approved for any modification.

On November 13, 2006, the City Council reviewed the plans and made the following motion, to approve the Preliminary Site Plan:

Moved by Nagy, seconded by Capello; CARRIED UNANIMOUSLY: To approve the request of Triangle Main Street, LLC. For Main Street Novi SP06-38, subject to 1) City Council waiver to modify building setbacks along Main Street, with no more than 15 feet of pavement between curb and building, 2) City Council finding under Section 1602.9 that proposed facades and materials being used meet the intent of TC zoning district bearing in mind hardy plank, 3) City Council acceptance of Shared Parking Study, incorporating Main Street Court parcel, with the applicant providing cross access and shared parking agreement over the Main Street Novi site at Final Site Plan, 4) City Council acceptance of applicant's proposed off-site mitigation, to be located on the south site of the Twelve Oaks Mall lake, 5) All Zoning Board of Appeals variances being granted or plans being modified to meet ordinance requirements,

6) Vacation of Paul Bunyan Street at the northwest corner of the site, adjacent to Novi Road, **7) Applicant redesign of intersections to remove traffic circles, or redesign to meet satisfaction of city's traffic engineer, with details to be reviewed at the time of Final Site Plan review,** 8) Resolution of all remaining issues listed in the staff and consultant review letters at the time of Final Site Plan review. 9) To take Depot Street out and continue additional park land and continue Division Street around to the Market Street. The city wholeheartedly supports this as a community amenity.

As noted above in **bold**, the applicant needed to address one item specifically in a redesign for Phase 1, the traffic circles on the site. They have been removed and standard intersections have been included. Aside from that issue, the applicant still will need to work out wetland mitigation issues in the future, when a permit for the wetland impacts is actually requested.

Both motions referenced vacating the Paul Bunyan right-of-way, which was located along the northern edge of the proposed project, perpendicular to Novi Road and north of the existing Main Street. The applicant petitioned the City Council to vacate the road, a request that was denied. The applicant then requested the Planning Commission and City Council remove the vacation requirement from their Preliminary Site Plan approval motions, which both boards were willing to do.

On May 1, 2007, the City Council reviewed the plans and made the following motion, for modifications to the Preliminary Site Plan approval:

To approve the request of Triangle Development for Main Street SP06-38 for revision to the Preliminary Site Plan approval granted November 13, 2006 subject to the following recommendations of the Planning Commission: 1) All comments of the City Council's approval of November 13, 2006 approval remaining in effect, with the removal of the condition of to vacate Paul Bunyan, 2) City Council building setback waiver for the 700 and 800 buildings, with respect to the Paul Bunyan right-of-way, 3) Zoning Board of Appeals variance for lack of parking lot setback along the Paul Bunyan right-of-way, 4) Zoning Board of Appeals variance to allow a dumpster enclosure in the front yard, along Paul Bunyan right-of-way, 5) License Agreements being developed for all fixed objects and non-standard parking in the Paul Bunyan right-of-way, 6) Applicant providing additional right-of-way for Paul Bunyan along its southern length and the eastern edge, 7) Applicant providing two curb cuts to the properties to the north, 8) All the conditions and comments in the staff and consultant review letters. Also, shared parking for both the north and the south side property owners.

The applicant has addressed and altered the plans as necessary to conform with all of the conditions of the modified Preliminary Site Plan approval.

Zoning Board of Appeals Variances

There are a number of variances that the applicant needed to request from the Zoning Board of Appeals. Most of these were the result of the denial of the Paul Bunyan vacation. Variances for the MainStreet project were granted on January 9, 2007 and August 7, 2007.

In summary, for Phase I, the following variances were granted by the Zoning Board of Appeals.

1. Lack of parking setback along Novi Road
2. Lack of loading zone space
3. Lack of building setback for medical office building and parking structure along Paul Bunyan right-of-way
4. Lack of parking lot setback along Paul Bunyan right-of-way
5. Lack of screen wall along Paul Bunyan right-of-way

6. Loading zone location in the front yard
7. Size of sidewalks adjacent to Main Street and Paul Bunyan

In addition, a Design and Construction Standards waiver for the on-street parking was granted by City Council on August 27, 2007.

Phasing Plan for the Overall Development

The applicant has provided a revised phasing plan to coincide with the changes proposed for Phase 1 of the development. The original phasing plan was recommended for approval by the Planning Commission on October 10, 2007, where they made the following motion:

In the matter of Main Street Novi Phasing Plan, SP06-38B, motion to recommend approval to the City Council of the Phasing Plan subject to the conditions and items listed in the Staff and Consultant review letters being addressed on the Final Site Plan for the reason that the plan is otherwise in compliance with all applicable provisions of the Zoning Ordinance. *Motion carried 6-0.*

The original phasing plan was approved by City Council on October 22, 2007, where they made the following motion:

To approve the request of Triangle Main Street, LLC, for Phasing Plan approval for SP06-38B, a mixed-use development on 20 acres of vacant land on the north and south sides of Main Street. Preliminary Site Plan approval was previously granted by the City Council, and the applicant now seeks approval of the phasing plan only. The subject property is located in Section 23, south of Grand River Avenue, east of Novi Road, along the north and south side of Main Street. Also, that the Final Preliminary Site Plan be returned to Council for Phase 5 to rework that corner, and that it be returned to Council for Final Site Plan approval.

Given the changes that have been proposed, the phasing plan had to be updated to reflect these alterations. The updated phasing plan is summarized below.

- Phase 1: The roads and utilities north of Main Street, the medical office building, which includes a small amount of restaurant and retail space (Building #800), and an approximately 309 space surface parking lot.
- Phase 2: The two story retail building (Building #400) at the northeast corner of Sixth Gate and Main Street.
- Phase 3: The proposed park at the southeast corner of Depot Street and Division Street.
- Phase 4: The three story office/retail building (Building #600) at the northwest corner of Sixth Gate Road and Main Street.
- Phase 5: The roads and utilities between Main Street and the future Division Street, retail/residential building (Building #900) at the southwest corner of Main Street and Union Street.
- Phase 6: The five story retail/residential building (Building #1000) at the southwest corner of Sixth Gate and Division Street.
- Phase 7: The five story retail/residential building at the southeast corner of Sixth Gate and Division Street, and the portion of Sixth Gate between Main Street and Division Street.
- Phase 8: The roads and utilities south of Division Street, five and one-half story residential building (Building #1200A and Building #1200B) on the southeast corner of Division Street and Sixth Gate.

- Phase 9: The five story residential building (Building #1300) on the southwest corner of Division Street and Sixth Gate.
- Phase 10: The five story residential building (Building #1400A and Building #1400B) on the east side of Sixth Gate.

General Site Plan Comments for Phase 1

Staff has completed a review of the Final Site Plan for Phase 1 of the proposed development. There are some minor comments for the applicant to address and these comments will be included in the Final Site Plan review letter for Phase 1 and are to be addressed in the Stamping Set submittal.

Parking on Site

The applicant is proposing both off-street parking lots and on-street parking as parking solutions for the project. For the first phase, two surface lots are proposed along with on-street parking. Overall, the first phase has slightly more parking than is required by ordinance.

With the removal of the parking structure, there is a net loss of approximately 180 parking spaces, which had originally been provided for the shared needs of all of the uses proposed on the plan. The applicant does note that there is a reduction of about 45,000 square feet of office and retail use on the site, and the relocation of 75,000 square feet of residential land uses from the first phases to subsequent phases. Adequate parking appears to be shown for the uses proposed on the north side of Main Street. However, there appears to be an overall parking deficiency for the entire site occurring during the peak hour. There are also additional concerns related to the number of spaces that can be counted. Please see the attached Traffic Engineering Review letters for additional comment.

The applicant indicates that additional parking can be accommodated, if needed, within the phases on the south side of Main Street, but the plans do not reflect any revision to show whether additional parking will be needed, or whether additional parking can be accommodated. **At this time, the applicant is asked to indicate that measures will be taken to insure that adequate parking will be provided in future phases or building size will be reduced so that adequate parking is available for all future phases.**

Relocated Building 600

Building 600 has been shifted to the east, to a location where building 500 was originally proposed. The applicant has indicated that parking can be provided under this building; however, the plan does not provide detail for driveway locations for getting to the under-building parking areas. If underground parking is proposed for Phase 4 of the plan, revised floor plans and elevations will be needed along with a revised site plan. Additional approval from the Planning Commission and City Council may be necessary.

Shifting 75,000 square feet of residential

The applicant has indicated that 75,000 square feet of residential land uses can be shifted from the north side of Main Street to subsequent phases on the south side of Main Street. The plans have not been revised to reflect these changes, and if approved by the City Council, the plans on the south side of Main Street would reflect approval of the mix of land uses and square footages documented by the floor plans and building elevations submitted with the original

preliminary site plan. The applicant may submit revisions to the plans at a later time for review and consideration of this additional residential space.

Previously Approved Main Street and Main Street Court Plan (Division Street Area)

The originally approved Main Street plans indicated a substantial amount of parking shared between the Main Street Court building and the overall Main Street development. As part of the Preliminary Site Plan review and approval, the applicant was required to modify the plans to show maintained access between the MainStreet and Main Street Court site. Although not shown on this plan, the applicant will, in the future, need to address this issue. The Planning Division strongly encourages the applicant to continue working with the neighboring property owners to resolve this situation, prior to the south half of the project being submitted for review, so as to avoid future delays in construction.

Roadways Throughout the Site

Currently, Paul Bunyan and Main Street are both public roadways. Other roadways are proposed throughout the site with the proposed construction. These additional roadways do not take into account a possible 60-foot right-of-way and therefore are not technically built to public standards. They are 28-feet wide, with parking and sidewalks generally on both sides of the roadway. *These roadways are designed appropriately for traveling and parking, but are not eligible for dedication to the public.*

Open Space Throughout the Site

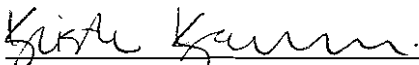
There are two open space requirements for buildings in the TC-1 district. First, a minimum of 200 square feet of usable open space is required for all residential units in the project, which can include balconies with direct access to specific units. This issue will need to be addressed when the applicant proposes the first residential phase. Secondly, the TC districts require that a minimum of 15% of the site be dedicated to open space in some form. As currently drawn, the plans indicate, 5.9% of the developed portion of the site will be maintained in open space. Additionally, the remaining approximately 15 acres will be undeveloped and left as open space. As future phases develop, the applicant will need to maintain the 15% overall for the open space on the site.

Town Center Amenities

The Town Center districts require certain amenities to create the character anticipated in the ordinance. Please see the landscape review letter for additional comment regarding these amenities.

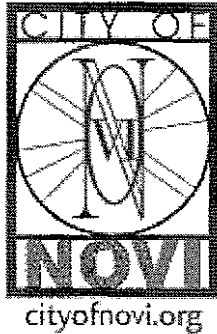
Response Letter

The applicant is asked to provide a response letter to the Planning Division, responding to all issues raised in each review letter prior to this matter being heard by the Planning Commission and City Council. Please contact the Planning Division with any questions about this review or any of the other reviews for the project, or if you do not receive a complete package of review letters. *(Letters needed: Planning, Engineering, Landscaping, Traffic, Façade, and Fire)*



Planning Review by Kristen Kapelanski (248) 347-0586 or kkapelanski@cityofnovi.org

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT
June 30, 2008
Revised Preliminary Landscape Review
Main Street Phase 1 SP06-38C

Petitioner

Triangle Main Street LLC

Review Type

Revised Preliminary Landscape

Property Characteristics

- Site Location: Novi Road
- Site Zoning: TC-1 – Town Center
- Site Use(s): Medical Office / Parking Structure (Phase 1)
- Plan Date: 6/27/08

Recommendation

Approval of 06-38C Revised Preliminary Landscape Plan for Main Street Novi Phase 1 is recommended. The Applicant must address the Ordinance requirements and landscape concerns as listed below prior to acceptance off the Final Stamping Set.

Adjacent to Public Rights-of-Way (Sec. 2509.3.b.)

1. The overall Preliminary Site Plan Approval called out plantings in several locations that would need to be installed with future phases. The inclusion of plantings in and around directly adjacent future buildings and infrastructure would not be sensible at this time as these plantings would be endangered by future construction. As such, the Applicant has noted through correspondence and on the site plans specific plantings that will be installed during future phases. As this was part of the overall site approval and was discussed and waivers granted as necessary through the City Council, these future plantings are acceptable.
2. Paul Bunyan is partially public and partially private. The Applicant has added additional street trees along this route in response to staff comment and previous discussion by the Planning Commission and City Council.

Parking Landscaping (Sec. 2509.3.c.)

1. Interior Landscape Island Areas have been delineated on the site plan and per the intent and direction voiced by the City Council. Adequate area for Building 800 has been provided.
2. The Ordinance requires that no more than 15 contiguous parking spaces be provided without an interior landscape island. Due to the nature of the project, the City Council allowed a measure of leniency in these regards and granted the necessary waivers. The Applicant has indicated there are 6 areas site wide that would exceed the 15 space limit.
3. Snow storage areas have been noted on the plans.

Street Tree Plantings (Sec 2509.3.b.)

1. Flexibility for alternate placements for Street Trees was approved by the City Council. The Applicant has stated that twenty Canopy Street Trees will be planted in future phases. Staff asks that those trees be specifically called out on future phase submittals to assure installation and to be able to verify plant counts project-wide. Please note that Street Trees will be required for all proposed future interior roadways.

Perimeter Greenspace Canopy Trees (Sec 2509.3.b.)

1. The Ordinance requires a minimum of one canopy tree per 35 linear feet around parking lot perimeters. The issue was discussed at City Council and relief was granted in certain situations, i.e. where underground parking garages prohibit planting. Please continue to meet this requirement on future phase submittals.

Foundation Landscape Plantings (Sec. 2509.3.d.)

1. Foundation Plantings meet the spirit of the Preliminary Site Plan Approval. As future phased buildings are proposed, all foundations will be individually considered.

Irrigation (LDM)

1. An irrigation plan and cost estimate has been provided.

Clear Zones (Sec. 2513)

1. Please show all vehicular clear zones at all intersections and parking lot entry points, measured from the right-of-ways and curb lines on each side of the road/access. No plantings or built elements over 2' in height may be located within these zones. The Applicant must demonstrate that all clear vision zones have been safely maintained. See Section 2513 – Corner Clearance of the Ordinance for details.

General Landscape Comments

The following are comments and suggestions for improvements that may be beneficial and would be continued justification for the variety of landscape waivers granted:

1. Inclusion of areas for annual plantings is encouraged throughout the site.
2. The Applicant is encouraged to consider installation of large, at-grade planting containers in areas where large expanses of sidewalk are proposed as discussed with the City Council. This may be more applicable in future phases.
3. The Applicant is asked to consider a retrofit of street side planters along the existing development on Main Street. This would compliment the proposed planters and streetscape and may be more applicable to future phases.

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 landscape requirements, see the Zoning Ordinance landscape section 2509, Landscape Design Manual and the appropriate items in the applicable zoning classification.

Reviewed by: David R. Beschke, RLA

TRAFFIC REVIEWS
Shared Parking Study

July 7, 2008

Ms. Barbara E. McBeth
Deputy Director Community Development
45175 West Ten Mile Road
Novi, MI 48375-3024



Re: Main Street Overall – Revised Shared Parking Study – 2nd Review
SP No. 06-38C
OHM Job No. 163-06-488

As requested, we have reviewed the revised shared parking analysis for the proposed Main Street Novi development. The updated study for all buildings was prepared by Midwestern Consulting and is dated June 23, 2008. Further, MCI provided a letter dated July 2, 2008 reacting to concerns expressed by OHM. We offer the following comments.

OHM RECOMMENDATION

We do not recommend approval of the revised shared parking study at this time. The study should be revised in accordance with the comments below, and be resubmitted for review.

DISCUSSION

1. **Parking Count:** The site plan and parking study is predicated on the provision of 1326 parking stalls, some of which are considered on-street parking and the balance are in off-street lots. Of these, 414 are intended to be reserved for residential use. There are two points of contention:
 - a. **Main Street Parking** – The report indicates that 15 spaces of on-street parking between Sixth Gate Road and Potomac / Town Center Drive are included in the parking totals. However, these spaces have previously been allocated to satisfy the shared parking needs for other (existing) portions of the downtown development. Counting these spaces in the total would be ‘double-counting’ parking spaces, and would result in a shortage of parking. Although the 15 spaces are located alongside the frontage owned by this developer, their sheer proximity does not automatically permit these spaces to count towards the Main Street parking total.

At a June 20th meeting held at the City between representatives of the developer and staff, we had thought it was agreed that the on-street parking along both sides of Main Street between Sixth Gate Road and Potomac/Town Center Drive were to be excluded from these parking calculations. Therefore, 15 spaces should be removed from the ‘available shared parking’ total, and the study should be updated accordingly.

- b. **Reserved Parking** – The study needs to account for both reserved (resident only) and open (shared between commercial and residential use) parking. We do not believe that the study handles this dichotomy correctly. In the attached spreadsheet, please note the method we believe arrives at the correct answer. The demand for residential parking is calculated by time of day. This is compared to the amount of reserved parking stalls, to resolve when there will be an overflow demand from the residents on the available open parking. This overflow residential demand is added to the commercial time of day demands to identify if the total open parking is sufficient. By this method, and accounting for the 15 spaces in dispute (see item 1.b. above), we believe a significant shortfall is possible.

2. Underground Parking: We note that the parking calculations and shared parking study note the potential for underground parking for Building #500. Since the plans currently do not show any access to the underground parking at Building #500, portions of the site will need to be redesigned. This will likely require elimination of several parking spaces, re-grading of the parking lot, and possible relocation of a nearby driveway (opposite Union Street). Because the entire surface parking lot (north of Main Street) is to be constructed in Phase 1, it is likely that the re-design for Phase 4 will result in portions of this parking lot being demolished and reconstructed. Consequently, during the Phase 4 construction, a significant portion of the parking lot will not be available for shared use.

As such, we believe that it would be prudent to reconfigure the site layout to allow for underground parking below Building #500 at this time. If underground parking will not be provided, references to it should be removed from the Shared Parking Study.

3. Parking Reduction: It appears that the parking estimates for the medical office building were reduced by 20%, and a 10% reduction was applied to the general office building. However, there is no discussion or mention of why this reduction was used, other than the multiplier shown in the first row of Table 3. Please revise the study to justify this reduction, or to remove it altogether.
4. Retail vs. Restaurant Split: We note that the revised shared parking study indicates a 60/40 split of retail to restaurant space, and that the original study assumed a 65/35 split. We presume that the site plan will reflect the same 60/40 split as the traffic study does. If the proposed retail/restaurant space changes, we expect that the shared parking analysis will be updated accordingly.

If you have any concerns or questions, please feel free to contact us at 734-522-6711.

Sincerely,
Orchard, Hiltz & McCliment, Inc.



Stephen B. Dearing, P.E., PTOE.
Manager of Traffic Engineering



Sara A. Merrill
Traffic Engineer

Novi Main Street

Hour Beginning	Resident Demand As %	Resident Parking Demand	Resident Overflow Demand
6:00 AM	92%	483	69
7:00 AM	84%	441	27
8:00 AM	80%	420	6
9:00 AM	75%	394	0
10:00 AM	71%	373	0
11:00 AM	66%	347	0
12:00 PM	61%	320	0
1:00 PM	66%	347	0
2:00 PM	66%	347	0
3:00 PM	66%	347	0
4:00 PM	71%	373	0
5:00 PM	81%	425	11
6:00 PM	88%	462	48
7:00 PM	97%	509	95
8:00 PM	98%	515	101
9:00 PM	99%	520	106
10:00 PM	100%	525	111
11:00 PM	98%	515	101
12:00 AM	96%	504	90

Hour Beginning	Night Club	Office / Retail / Rest.	MOB / Retail / Rest.	Retail / Rest.	Retail / Rest.	Retail / Rest.	Resident Overflow Demand (See below)	Total Parking Demand	Parking Excess/ (Shortfall)
	400	500	800	900	1000	1100			
6:00 AM	0	6	0	0	0	0	69	75	822
7:00 AM	0	59	57	3	8	6	27	160	737
8:00 AM	0	92	184	5	11	11	6	309	588
9:00 AM	5	122	322	22	49	49	0	569	328
10:00 AM	5	127	382	25	53	53	0	645	252
11:00 AM	5	146	391	43	94	94	0	773	124
12:00 PM	5	148	353	56	122	121	0	805	92
1:00 PM	5	126	315	46	100	100	0	692	205
2:00 PM	5	138	342	49	106	106	0	746	151
3:00 PM	5	133	376	42	91	91	0	738	159
4:00 PM	10	120	357	41	89	89	0	706	191
5:00 PM	19	120	302	70	154	154	11	830	67
6:00 PM	138	133	44	87	211	191	48	852	45
7:00 PM	257	95	44	87	190	190	95	958	(61)
8:00 PM	366	51	24	47	102	102	101	793	104
9:00 PM	475	37	17	34	74	74	106	817	80
10:00 PM	475	0	0	0	0	0	111	586	311
11:00 PM	475	0	0	0	0	0	101	576	321
12:00 AM	475	0	0	0	0	0	90	565	332

Assumptions:

- 1 Total parking provided: 1326 spaces (same as MCI), less 15 on-street under dispute = 1301 spaces
- 2 Of total parking, 414 is reserved to residential, subject to time of day demand, but not sharing with office, retail, etc. So only 897 parking stalls available for shared parking.
- 3 Top table calculates residential parking demand not satisfied by reserved parking; overflow would seek shared parking
- 4 Second table shows parking for buildings # 900, #1000, #1100 restated to eliminate residential demands. Numbers shown for these buildings are just for retail / restaurant.

June 18, 2008

Ms. Barbara E. McBeth
Deputy Director Community Development
45175 West Ten Mile Road
Novi, MI 48375-3024



Re: Main Street Overall – Revised Shared Parking Study – 1st Review
SP No. 06-38C
OHM Job No. 163-06-488

As requested, we have reviewed the revised shared parking analysis for the proposed Main Street Novi development. The study was prepared by Midwestern Consulting and was dated May 28, 2008. At this time, we offer the following comments:

OHM RECOMMENDATION

At this time, we do not recommend approval of the revised shared parking study.

While the original study addressed parking requirements for the entire development, the revised study only addresses parking demand for the buildings in Phase 1 & 2. Once subsequent phases are constructed, there will be a significant parking shortage. Therefore, the study and accompanying master site plan should be revised in accordance with the comments below, and should be resubmitted for review.

DISCUSSION

1. **Parking Requirements:** The original traffic impact and shared parking study for the Main Street development was dated July 10, 2006, and was prepared by Reid, Cool, & Michalski, Inc. The original study provided a detailed analysis for the number of required parking spaces for each building, individually, per hour. Tables were also provided showing the parking demand for each building per hour, given the proposed land use(s). The study then summed the parking demand for each hour, and determined the overall parking requirements based on the peak demand.

While the revised study was conducted using the same methodology, it only evaluated proposed Phase 1 & 2 buildings (#400, 500, & 800); it neglected an analysis for the entire development. The revised study determined that 553 spaces would be necessary for just these three buildings, and indicated that 554 spaces would be provided (including parking on Main Street).

Based on the calculated parking requirements, this leaves essentially no additional parking during during peak hours. Since the original study assumed that patrons of the remaining buildings would also be able to utilize these parking spaces, it is likely that there would be insufficient parking for each subsequent building. While the proposed residential buildings may have adequate parking, we believe that the proposed Retail/Residential buildings will not have enough parking.

The parking study should include an analysis of the hourly requirements and percent utilization for all proposed buildings, regardless of the phase in which they will be constructed. The minimum parking requirement should then be the determined using the greatest hourly total, based on all buildings.


2. An option may be to allow the first two phases to proceed, using the proposed surface parking lot, while requiring each subsequent phase to be completely self-sufficient in terms of parking. This would require a parking study for each future phase, and would likely result in significant modifications to the proposed building sizes and footprints proposed in order to provide adequate parking. It would also significantly diminish the benefits of utilizing shared parking, since future phases consist mostly of Retail/Residential developments, whereby the residential portions have 'private' parking that will not be shared with retail patrons.


Without a substantial redesign of the Main Street development, it may not be possible to adequately address the parking needs for the entire site. Therefore, we have serious reservations about proceeding with such a significant unresolved issue.

3. Underground Parking: The shared parking study indicates a potential for parking underneath Building #500. However, the site layout in this vicinity does not show access to an underground lot, and the plans do not provide any indication of the number of additional spaces that will be available. The parking lot and adjacent areas need to be reconfigured to provide adequate access in/out of the proposed underground parking, and the plans & study should be modified to either provide additional information or to remove mention of the underground parking.
4. Main Street Parking: The report indicates that the 554 spaces provided include on-street parking along Main Street. It is our belief that portions of the on-street parking in this area had previously been allocated for shared parking for other (existing) portions of the development. Counting these spaces in the total would be 'double-counting' spaces, and would result in a shortage of parking for the entire development. Please clarify which parking spaces were included in this count, and verify that these spaces do not count towards the parking requirements of the existing development(s).
5. Terminology: Page 4 of the report indicates that the "minimum parking" required would be (552, 553, 514 spaces). Please consider revising the phrasing to indicate that these values are the calculated peak parking demand, as minimum parking implies that there may be a significant shortage if only 554 spaces are provided.
6. Land Use Codes: The ITE Parking Characteristics tables, shown on Page 3, should contain the associated ITE land use codes for each respective column. Without these codes, we cannot verify whether the parking characteristics used are accurate.

If you have any concerns or questions, please feel free to contact us at 734-522-6711.

Sincerely,
Orchard, Hiltz & McCliment, Inc.


Stephen B. Dearing, P.E., PTOE.
Manager of Traffic Engineering


Sara A. Merrill
Traffic Engineer

TRAFFIC REVIEW
Preliminary Site Plan

June 16, 2008

Ms. Barbara E. McBeth
Deputy Director Community Development
45175 West Ten Mile Road
Novi, MI 48375-3024



Re: Main Street Overall – Revised Preliminary/Phasing – 1st Review
SP No. 06-38C
OHM Job No. 163-06-485

As requested, we have reviewed the overall site plan modifications for the proposed Main Street Novi development. The plans were prepared by Summa Engineering & Associates, Inc. and were dated May 30, 2008. At this time, we offer the following comments:

OHM RECOMMENDATION

At this time, we do not recommend approval of the preliminary site plan. There are significant concerns that should be addressed prior to resubmittal.

DEVELOPMENT BACKGROUND

- The site is currently zoned as TC-1 (Town Center District).
- The site is comprised of a mixed-use urban development.
- The site size is approximately 20 acres.
- Land uses include medical office, general office, restaurant, retail, and residential.

ROADWAY NETWORK

The site is located on the southeast quadrant of Grand River Avenue and Novi Road. Grand River Avenue and Novi Road are arterial routes under the jurisdiction of the Road Commission of Oakland County (RCOC). Both currently have a posted speed limit of 40 mph in the vicinity of the proposed project. Main Street is currently a local road with a posted speed limit of 25 mph, and falls under the jurisdiction of the City of Novi. The developer has proposed two access points off of Novi Road.

SITE PLAN COMMENTS

1. Parking Lot Layout: The unusual Phase 1 layout only made sense with the previously proposed multistory parking structure. In the absence of the structure, the parking lot should be redesigned to minimize entry points and provide additional parking.

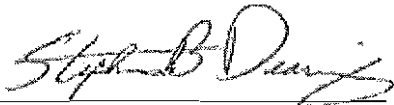
By incorporating the proposed extension of Paul Bunyon into the parking lot (thereby eliminating on-street parking and converting the proposed road into a parking lot), and providing 1-way aisles with angle parking throughout, we believe that 10 rows of parking could be obtained (instead of the 9 rows currently shown). This reconfiguration would also help to minimize entry points into the parking lot, thereby reducing 'cut-through' traffic.

We recommend eliminating the entry point into the parking lot on the east side of Building #800. The intersection at Paul Bunyon & Sixth Gate could also be eliminated, by extending the parking lot as described. The sidewalk currently shown on the south side of Paul Bunyon could remain (sandwiched in between adjacent parking aisles), or could be eliminated (since pedestrians would be able to utilize the walk along the northerly property line).

2. Building 800: The proposed medical office building, #800, should be relocated to the west. In the current configuration, the driveways (both on Main Street and on Paul Bunyon) are located too close to the intersections with Novi Road. The parking lot should be shifted to the east side of the building, providing additional distance between Novi Road and the parking lot driveways.
3. Phase 3 Construction: We note that Phase 3 is a proposed community park, located on the east side of the development at the SW corner of Main Street and Potomac/Town Center Drive. However, there appears to be minimal parking in the immediate area, and the only route available for construction traffic would be from the north.
4. Zig-Zag (Phase 2): There appears to be a 'zig-zag' along the north side of Building #400. This area should be evaluated for ADA-compliance, and revised to minimize or eliminate the zig-zag if possible.
5. Construction Limits: The plans do not clearly distinguish the limits of construction for Phases 3 & 5. We presume that Phase 3 will be limited to the proposed park, but the dashed lines could be interpreted to indicate that portions of Main Street will also be reconstructed with this phase. Please correct the phase perimeter markings around the park, future Depot Street, and Main Street in this area.
6. Street Names: All street names should be clearly labeled. Along the east side of the development, on Sheet G-1, several streets are not labeled. Additionally, we note several minor spelling/typographical errors (such as 'Futute Division Street' and 'Phaseing Plan') that should be corrected accordingly.

If you have any concerns or questions, please feel free to contact us at 734-522-6711.

Sincerely,
Orchard, Hiltz & McCliment, Inc.



Stephen B. Dearing, P.E., PTOE.
Manager of Traffic Engineering



Sara A. Merrill
Traffic Engineer

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

June 9, 2008

Engineering Review

Main Street Novi

SP #06-38C

Petitioner

Triangle Development

Review Type

Revised Preliminary Site Plan/Phasing Plan

Property Characteristics

- Site Location: Northeast corner of Main Street and Novi Road.
- Site Size: 20 acres
- Plan Date: May 30, 2008

Project Summary

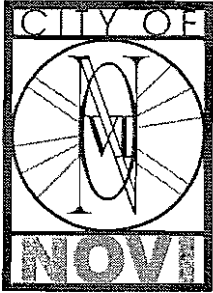
- Phasing Plan for the proposed ten-phase Main Street Novi development.
- The Phasing Plan was previously approved under SP06-38B, which included a parking deck, a different building layout and an additional private street, Union Street.
- All site plan related comments have been addressed in the Revised Final Site Plan review, SP07-44C, being reviewed concurrently with this plan.

Recommendation

Approval of the Revised Preliminary Site Plan/Phasing Plan is recommended.

cc: Rob Hayes, City Engineer
Kristen Kapalanski, Planning Dept

FIRE REVIEW



248.349-2162
248.349-1724 fax

cityofnovi.org

CITY COUNCIL

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Jeffrey Johnson

June 16, 2008

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

RE: Main Street Novi, SP06-38C, Revised Phasing Plan,
Revised Preliminary Site Plan
Fire Department Review

Dear Ms. McBeth,

The above phasing plan has been reviewed and it is **Recommended for Approval.**

Sincerely,

Michael W. Evans
Fire Marshal

cc: file

SHARED PARKING STUDIES



MIDWESTERN
CONSULTING

Civil, Environmental and Transportation
Engineers, Planners, Surveyors,
Landscape Architects

July 2, 2008

Mr. Dave Nona
Triangle Mainstreet LLC
30403 W. Thirteen Mile Road
Farmington Hills, MI 48334

RE: Novi Main Street Development
Shared Parking Addendum
All Buildings

Dear Mr. Nona:

The City of Novi's traffic consultant, Mr. Stephen Dearing, P.E. of OHM, has raised three issues regarding our June 23rd shared parking analysis that includes all of the buildings in the Novi Main Street development. The three concerns and our responses are below:

- 1. The City's traffic consultant indicated that of the total parking available, 24 parking spaces along both sides of Main Street between Market and 6th Gate Streets should be removed from the shared parking analysis as these spaces are currently being used by the existing building at the corner of Main Street and Market Street.*

Of the spaces referenced in the June 23rd shared parking analysis for the buildings on the north side of Main Street, 15 of the 24 on-street parking spaces between Market and 6th Gate were used in the shared parking analysis. The 9 remaining spaces were directly in front of the existing building and were excluded from the parking inventory.

Triangle Mainstreet LLC has indicated that the 15 Main Street parking spaces are alongside the frontage of the property they own and therefore should logically be included in the shared parking analysis regardless of whether or not vehicles are commonly parked there today due to the existing building.

It should be noted that even if the 15 parking spaces are excluded from the available parking of 553 spaces, the resulting count of 538 spaces would only be 3 spaces less than the 541 spaces required by the shared parking analysis for the buildings on the north side of Main Street.

It should further be noted that the required spaces are based on certain assumptions relating to the size of future building #500 and the mix of restaurant and retail uses in the buildings. When the final plans for Building #500 are established, adequate parking spaces will be provided based on the final size and uses of the building.



2. *The City's traffic consultant has asked to see a revised analysis of the parking required assuming that 414 parking spaces are reserved for residential use and therefore not part of the shared parking analysis.*

The revisions to the shared parking analysis are based upon the following equations:

- Buildings affected: #900, #1000, #1100, #1200s, #1300, #1400s
- The maximum required parking for the residential portion of the site is $350 \text{ units} \times 1.5 \text{ spaces per unit} = 525 \text{ spaces}$
- The ratio of reserved spaces to maximum spaces required by ordinance is $414 \text{ spaces} / 525 \text{ spaces} = 78.86\%$
- The number of residential units that would require 100% occupancy is $78.86\% \times 350 \text{ units} = 276 \text{ units}$
- The number of residential units that would utilize shared parking spaces is $350 \text{ units} - 276 \text{ units} = 74 \text{ units}$
- The required number of residential parking spaces for any given hour is $[78.86\% \times (\# \text{ of units in building}) \times 100\%] + [21.14\% \times (\# \text{ of units in building}) \times (\text{corresponding \% for the hour shown in ULI Time of Day Table})]$

The revised peak parking demand is recalculated to be 1338 spaces at 7:00 PM on a weekday and 1263 spaces on a weekend. The total parking provided for the Novi Main Street development, 1326 spaces (553+359+414), includes the 15 parking spaces that the City of Novi contends are unusable for this analysis.

As calculated, the peak demand would exceed the parking provided by 12 spaces during the week, or by 27 spaces if the City contests the logical use of the 15 parking spaces along Novi Main Street which front the Novi Main Street property.

However, according to the information garnered by the client regarding the Night Club site in Building #400, weekday use is not expected to exceed 800 patrons, 84% of the summer Saturday night peak of 950 used in the shared parking analysis. The ULI shared parking publication shows a similar difference in the weekday and weekend base parking ratios. Assuming that the weekday peak parking demand for the nightclub at 7:00 PM is factored by 0.84, the calculated peak demand of 1338 can be reduced by 41 spaces ($0.84 \times 257 = 41$). Therefore, even on the busiest summer Friday nights, the weekday peak parking demand would only be 1297 spaces ($1338 - 41$). **The parking provided, 1326 spaces, thus exceeds the demand even if the 15 contested spaces are excluded for both weekdays and weekends.**



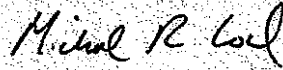
3. *The City's traffic consultant raised a concern that the developer correctly calculates the net parking gain, as some surface parking may be lost, if underground parking is ever provided for building #500.*

It is understood that any changes to the parking available on site will be correctly calculated.

The recalculated sheets for each affected building and the totals summary sheet are attached to this addendum. If you have any questions, please do not hesitate to contact me.

Sincerely,

Midwestern Consulting



Michael R. Cool, P.E.
Project Manager

Cc: Mr. Stephen Dearing, P.E. - OHM
Ms. Kristen Kapelanski - City of Novi
Attach. (7)



Shared Parking Analysis - Novi Main Street Development - All Buildings (Residential with 414 Reserved)

Building #	Medical Office GLA	General Office GLA	Retail + Restaurants GLA	Retail Only GLA	Restaurants Only GLA	Night Club Occupants	Residential Units
400	0	0	0	0	0	950	0
500	0	22,410	12,300	7,380	4,920	0	0
800	64,815	0	5,740	3,444	2,296	0	0
900	0	0	10,168	6,101	4,067	0	36
1000	0	0	22,222	13,333	8,889	0	66
1100	0	0	22,181	13,309	8,872	0	66
1200 (a+b)	0	0	0	0	0	0	86
1300	0	0	0	0	0	0	32
1400 (a+b)	0	0	0	0	0	0	64
Totals	64,815	22,410	72,611	43,567	29,044	950	350

Totals with Captive Market Reduction Factor Applied to Retail & Restaurant

Weekday Time	Building 400 as NClub	Building 500	Building 800	Building 900	Building 1000	Building 1100	Buildings 1200	Building 1300	Buildings 1400	Totals
6:00 AM	0	6	0	53	97	97	127	47	94	522
7:00 AM	0	59	57	55	101	101	125	46	93	636
8:00 AM	0	92	184	56	104	104	123	46	92	802
9:00 AM	5	122	322	71	138	138	122	45	91	1,054
10:00 AM	5	127	382	72	140	140	121	45	90	1,123
11:00 AM	5	146	391	89	176	176	120	45	89	1,236
12:00 PM	5	148	353	100	200	200	118	44	88	1,257
1:00 PM	5	126	315	91	182	182	120	45	89	1,155
2:00 PM	5	138	342	94	187	187	120	45	89	1,206
3:00 PM	5	133	376	88	174	174	120	45	89	1,203
4:00 PM	10	120	357	87	172	172	121	45	90	1,174
5:00 PM	19	120	302	115	233	233	124	46	92	1,284
6:00 PM	138	113	44	131	268	268	126	47	93	1,229
7:00 PM	257	95	44	132	270	270	128	48	95	1,338
8:00 PM	366	51	24	96	180	190	128	48	96	1,188
9:00 PM	475	37	17	84	165	165	129	48	96	1,216
10:00 PM	475	0	0	54	99	99	129	48	96	1,000
11:00 PM	475	0	0	54	99	99	129	48	96	998
12:00 AM	475	0	0	54	98	98	128	48	95	996
Highest	475	148	391	132	270	270	129	48	96	1,338

Weekend Time	Building 400 as NClub	Building 500	Building 800	Building 900	Building 1000	Building 1100	Buildings 1200	Building 1300	Buildings 1400	Totals
6:00 AM	0	5	0	53	97	97	127	47	94	521
7:00 AM	0	50	44	52	96	96	125	46	93	602
8:00 AM	0	78	144	52	95	95	123	46	92	724
9:00 AM	5	90	249	53	98	98	122	45	91	852
10:00 AM	5	120	309	75	146	146	121	45	90	1,059
11:00 AM	5	131	315	85	168	168	120	45	89	1,124
12:00 PM	5	135	285	96	192	192	118	44	88	1,155
1:00 PM	5	129	261	100	200	200	120	45	89	1,148
2:00 PM	5	134	282	98	196	196	120	45	89	1,163
3:00 PM	5	131	309	94	187	187	120	45	89	1,166
4:00 PM	10	132	299	103	208	208	121	45	90	1,216
5:00 PM	19	109	247	109	220	220	124	46	92	1,186
6:00 PM	138	102	40	124	252	252	126	47	93	1,174
7:00 PM	257	63	30	106	213	213	128	48	95	1,152
8:00 PM	366	63	30	106	213	213	128	48	96	1,263
9:00 PM	475	18	9	69	132	132	129	48	96	1,107
10:00 PM	475	5	2	58	108	108	129	48	96	1,030
11:00 PM	475	0	0	54	99	99	129	48	96	998
12:00 AM	475	0	0	54	98	98	128	48	95	996
Highest	475	135	315	124	252	252	129	48	96	1,263

Building #900

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	12,400	10,168	
Retail Space	7,440	6,101	31
Restaurant Space	4,960	4,067	58
Bar/Nightclub	0	0	0
Residential		36	54

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	53	53	53
7:00 AM	3	0	0	0	0	52	55	55
8:00 AM	5	0	0	0	0	52	57	56
9:00 AM	19	3	0	0	0	51	74	71
10:00 AM	20	5	0	0	0	51	75	72
11:00 AM	28	15	0	0	0	50	93	89
12:00 PM	27	29	0	0	0	50	105	100
1:00 PM	26	20	0	0	0	50	96	91
2:00 PM	31	18	0	0	0	50	99	94
3:00 PM	29	13	0	0	0	50	92	88
4:00 PM	26	15	0	0	0	51	91	87
5:00 PM	28	42	0	0	0	52	122	115
6:00 PM	29	58	0	0	0	53	140	131
7:00 PM	29	58	0	0	0	54	141	132
8:00 PM	0	47	0	0	0	54	100	96
9:00 PM	0	34	0	0	0	54	88	84
10:00 PM	0	0	0	0	0	54	54	54
11:00 PM	0	0	0	0	0	54	54	54
12:00 AM	0	0	0	0	0	54	54	54

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	53	53	53
7:00 AM	0	0	0	0	0	52	52	52
8:00 AM	0	0	0	0	0	52	52	52
9:00 AM	0	2	0	0	0	51	53	53
10:00 AM	24	3	0	0	0	51	78	75
11:00 AM	29	10	0	0	0	50	89	85
12:00 PM	31	21	0	0	0	50	101	96
1:00 PM	28	27	0	0	0	50	105	100
2:00 PM	29	24	0	0	0	50	103	98
3:00 PM	29	20	0	0	0	50	99	94
4:00 PM	27	32	0	0	0	51	109	103
5:00 PM	25	39	0	0	0	52	116	109
6:00 PM	21	58	0	0	0	53	132	124
7:00 PM	0	58	0	0	0	54	112	108
8:00 PM	0	58	0	0	0	54	112	108
9:00 PM	0	17	0	0	0	54	71	69
10:00 PM	0	5	0	0	0	54	59	58
11:00 PM	0	0	0	0	0	54	54	54
12:00 AM	0	0	0	0	0	54	54	54

Building #1000

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	27,100	22,222	
Retail Space	16,280	13,333	67
Restaurant Space	10,840	8,889	127
Bar/Nightclub	0	0	0
Residential		66	99

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	97	97	97
7:00 AM	6	0	0	0	0	96	102	101
8:00 AM	11	0	0	0	0	95	105	104
9:00 AM	41	8	0	0	0	94	143	138
10:00 AM	43	10	0	0	0	93	148	140
11:00 AM	61	33	0	0	0	92	186	176
12:00 PM	58	64	0	0	0	91	212	200
1:00 PM	56	44	0	0	0	92	192	182
2:00 PM	67	39	0	0	0	92	198	187
3:00 PM	63	28	0	0	0	92	183	174
4:00 PM	57	32	0	0	0	93	181	172
5:00 PM	61	93	0	0	0	95	249	233
6:00 PM	64	127	0	0	0	96	288	268
7:00 PM	63	127	0	0	0	98	289	270
8:00 PM	0	102	0	0	0	99	200	190
9:00 PM	0	74	0	0	0	99	173	165
10:00 PM	0	0	0	0	0	99	99	99
11:00 PM	0	0	0	0	0	99	99	99
12:00 AM	0	0	0	0	0	98	98	98

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	97	97	97
7:00 AM	0	0	0	0	0	96	96	96
8:00 AM	0	0	0	0	0	95	95	95
9:00 AM	0	5	0	0	0	94	99	98
10:00 AM	52	8	0	0	0	93	152	146
11:00 AM	63	22	0	0	0	92	176	168
12:00 PM	67	46	0	0	0	91	203	192
1:00 PM	62	58	0	0	0	92	212	200
2:00 PM	63	52	0	0	0	92	207	196
3:00 PM	63	43	0	0	0	92	198	187
4:00 PM	58	70	0	0	0	93	221	208
5:00 PM	54	85	0	0	0	95	234	220
6:00 PM	46	127	0	0	0	96	270	252
7:00 PM	0	127	0	0	0	98	226	213
8:00 PM	0	127	0	0	0	99	226	213
9:00 PM	0	37	0	0	0	99	136	132
10:00 PM	0	10	0	0	0	99	109	108
11:00 PM	0	0	0	0	0	99	99	99
12:00 AM	0	0	0	0	0	98	98	98

Building #1100

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	27,050	22,181	
Retail Space	16,230	13,309	67
Restaurant Space	10,820	8,872	127
Bar/Nightclub	0	0	0
Residential		60	99

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	97	97	97
7:00 AM	6	0	0	0	0	96	102	101
8:00 AM	11	0	0	0	0	95	105	104
9:00 AM	41	8	0	0	0	94	143	138
10:00 AM	43	10	0	0	0	93	146	140
11:00 AM	61	33	0	0	0	92	185	176
12:00 PM	58	63	0	0	0	91	212	200
1:00 PM	56	44	0	0	0	92	192	182
2:00 PM	67	39	0	0	0	92	198	187
3:00 PM	63	28	0	0	0	92	183	174
4:00 PM	57	32	0	0	0	93	181	172
5:00 PM	61	93	0	0	0	95	248	233
6:00 PM	64	127	0	0	0	96	287	268
7:00 PM	68	127	0	0	0	98	289	270
8:00 PM	0	102	0	0	0	99	200	190
9:00 PM	0	74	0	0	0	99	172	165
10:00 PM	0	0	0	0	0	99	99	99
11:00 PM	0	0	0	0	0	99	99	99
12:00 AM	0	0	0	0	0	98	98	98

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	97	97	97
7:00 AM	0	0	0	0	0	96	96	96
8:00 AM	0	0	0	0	0	95	95	95
9:00 AM	0	5	0	0	0	94	99	98
10:00 AM	52	8	0	0	0	93	152	146
11:00 AM	63	22	0	0	0	92	176	168
12:00 PM	67	46	0	0	0	91	203	192
1:00 PM	62	58	0	0	0	92	212	200
2:00 PM	63	52	0	0	0	92	207	196
3:00 PM	63	43	0	0	0	92	198	187
4:00 PM	58	70	0	0	0	93	221	208
5:00 PM	54	85	0	0	0	95	234	220
6:00 PM	46	127	0	0	0	96	269	252
7:00 PM	0	127	0	0	0	98	225	213
8:00 PM	0	127	0	0	0	99	225	213
9:00 PM	0	37	0	0	0	99	136	132
10:00 PM	0	10	0	0	0	99	109	108
11:00 PM	0	0	0	0	0	99	99	99
12:00 AM	0	0	0	0	0	98	98	98

Buildings #1200a & #1200b

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	0	0	0
Residential		86	129

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	127	127	127
7:00 AM	0	0	0	0	0	125	125	125
8:00 AM	0	0	0	0	0	123	123	123
9:00 AM	0	0	0	0	0	122	122	122
10:00 AM	0	0	0	0	0	121	121	121
11:00 AM	0	0	0	0	0	120	120	120
12:00 PM	0	0	0	0	0	118	118	118
1:00 PM	0	0	0	0	0	120	120	120
2:00 PM	0	0	0	0	0	120	120	120
3:00 PM	0	0	0	0	0	120	120	120
4:00 PM	0	0	0	0	0	121	121	121
5:00 PM	0	0	0	0	0	124	124	124
6:00 PM	0	0	0	0	0	126	126	126
7:00 PM	0	0	0	0	0	128	128	128
8:00 PM	0	0	0	0	0	128	128	128
9:00 PM	0	0	0	0	0	129	129	129
10:00 PM	0	0	0	0	0	129	129	129
11:00 PM	0	0	0	0	0	129	129	129
12:00 AM	0	0	0	0	0	128	128	128

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	127	127	127
7:00 AM	0	0	0	0	0	125	125	125
8:00 AM	0	0	0	0	0	123	123	123
9:00 AM	0	0	0	0	0	122	122	122
10:00 AM	0	0	0	0	0	121	121	121
11:00 AM	0	0	0	0	0	120	120	120
12:00 PM	0	0	0	0	0	118	118	118
1:00 PM	0	0	0	0	0	120	120	120
2:00 PM	0	0	0	0	0	120	120	120
3:00 PM	0	0	0	0	0	120	120	120
4:00 PM	0	0	0	0	0	121	121	121
5:00 PM	0	0	0	0	0	124	124	124
6:00 PM	0	0	0	0	0	126	126	126
7:00 PM	0	0	0	0	0	128	128	128
8:00 PM	0	0	0	0	0	128	128	128
9:00 PM	0	0	0	0	0	129	129	129
10:00 PM	0	0	0	0	0	129	129	129
11:00 PM	0	0	0	0	0	129	129	129
12:00 AM	0	0	0	0	0	128	128	128

Building #1300

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	0	0	0
Residential		32	48

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	47	47	47
7:00 AM	0	0	0	0	0	46	46	46
8:00 AM	0	0	0	0	0	46	46	46
9:00 AM	0	0	0	0	0	45	45	45
10:00 AM	0	0	0	0	0	45	45	45
11:00 AM	0	0	0	0	0	45	45	45
12:00 PM	0	0	0	0	0	44	44	44
1:00 PM	0	0	0	0	0	45	45	45
2:00 PM	0	0	0	0	0	45	45	45
3:00 PM	0	0	0	0	0	45	45	45
4:00 PM	0	0	0	0	0	45	45	45
5:00 PM	0	0	0	0	0	46	46	46
6:00 PM	0	0	0	0	0	47	47	47
7:00 PM	0	0	0	0	0	48	48	48
8:00 PM	0	0	0	0	0	48	48	48
9:00 PM	0	0	0	0	0	48	48	48
10:00 PM	0	0	0	0	0	48	48	48
11:00 PM	0	0	0	0	0	48	48	48
12:00 AM	0	0	0	0	0	48	48	48

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	47	47	47
7:00 AM	0	0	0	0	0	46	46	46
8:00 AM	0	0	0	0	0	46	46	46
9:00 AM	0	0	0	0	0	45	45	45
10:00 AM	0	0	0	0	0	45	45	45
11:00 AM	0	0	0	0	0	45	45	45
12:00 PM	0	0	0	0	0	44	44	44
1:00 PM	0	0	0	0	0	45	45	45
2:00 PM	0	0	0	0	0	45	45	45
3:00 PM	0	0	0	0	0	45	45	45
4:00 PM	0	0	0	0	0	45	45	45
5:00 PM	0	0	0	0	0	46	46	46
6:00 PM	0	0	0	0	0	47	47	47
7:00 PM	0	0	0	0	0	48	48	48
8:00 PM	0	0	0	0	0	48	48	48
9:00 PM	0	0	0	0	0	48	48	48
10:00 PM	0	0	0	0	0	48	48	48
11:00 PM	0	0	0	0	0	48	48	48
12:00 AM	0	0	0	0	0	48	48	48

Buildings #1400a & #1400b

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	0	0	0
Residential		64	96

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	94	94	94
7:00 AM	0	0	0	0	0	93	93	93
8:00 AM	0	0	0	0	0	92	92	92
9:00 AM	0	0	0	0	0	91	91	91
10:00 AM	0	0	0	0	0	90	90	90
11:00 AM	0	0	0	0	0	89	89	89
12:00 PM	0	0	0	0	0	88	88	88
1:00 PM	0	0	0	0	0	89	89	89
2:00 PM	0	0	0	0	0	89	89	89
3:00 PM	0	0	0	0	0	89	89	89
4:00 PM	0	0	0	0	0	90	90	90
5:00 PM	0	0	0	0	0	92	92	92
6:00 PM	0	0	0	0	0	93	93	93
7:00 PM	0	0	0	0	0	95	95	95
8:00 PM	0	0	0	0	0	96	96	96
9:00 PM	0	0	0	0	0	96	96	96
10:00 PM	0	0	0	0	0	96	96	96
11:00 PM	0	0	0	0	0	96	96	96
12:00 AM	0	0	0	0	0	95	95	95

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	94	94	94
7:00 AM	0	0	0	0	0	93	93	93
8:00 AM	0	0	0	0	0	92	92	92
9:00 AM	0	0	0	0	0	91	91	91
10:00 AM	0	0	0	0	0	90	90	90
11:00 AM	0	0	0	0	0	89	89	89
12:00 PM	0	0	0	0	0	88	88	88
1:00 PM	0	0	0	0	0	89	89	89
2:00 PM	0	0	0	0	0	89	89	89
3:00 PM	0	0	0	0	0	89	89	89
4:00 PM	0	0	0	0	0	90	90	90
5:00 PM	0	0	0	0	0	92	92	92
6:00 PM	0	0	0	0	0	93	93	93
7:00 PM	0	0	0	0	0	95	95	95
8:00 PM	0	0	0	0	0	96	96	96
9:00 PM	0	0	0	0	0	96	96	96
10:00 PM	0	0	0	0	0	96	96	96
11:00 PM	0	0	0	0	0	96	96	96
12:00 AM	0	0	0	0	0	95	95	95



MIDWESTERN CONSULTING

Civil, Environmental and Transportation
Engineers, Planners, Surveyors,
Landscape Architects

June 23, 2008

Mr. Dave Nona
Triangle Mainstreet LLC
30403 W. Thirteen Mile Road
Farmington Hills, MI 48334

RE: Novi Main Street Development
Shared Parking Analysis
All Buildings

Dear Mr. Nona:

As requested we have reviewed the changes to the proposed phasing and parking availability for all buildings within the Novi Main Street development. The revised parking analysis will be based upon the following assumptions:

- This updated parking analysis shall be based upon the methodology used for the shared parking analysis performed previously by Reid, Cool & Michalski, Inc. for the Novi Main Street Development
- This analysis will include all the buildings within the Novi Main Street Development, buildings #400, #500, #800, #900, #1000, #1100, #1200a, #1200b, #1300, #1400a, and #1400b.
- The parking deck has been removed and all parking for medical, office, retail, and restaurants shall be located in surface lots and adjacent street parking. Additional secured parking will be provided for the residential buildings.
- The estimated number of available surface parking spaces for this shared parking analysis will be 553 spaces on the north side of Main Street, 359 spaces on the south side of Main Street, and 414 reserved spaces for the residential portions of the site. The total available parking is 1326 spaces. Additional below grade parking spaces can be made available below building #500.
- The land use per building is listed below:
 - Building #400
 - 14,260 GSF of Night Club (maximum estimated occupancy of 950 on Saturday nights)
 - Building #500
 - 27,000 GSF of General Office
 - 9,000 GSF of Retail
 - 6,000 GSF of Restaurant
 - Building #800 (following elimination of basement level)
 - 74,500 GSF of Medical Office
 - 4,200 GSF of Retail
 - 2,800 GSF of Restaurant



- Building #900
 - 7,440 GSF of Retail
 - 4,960 GSF of Restaurant
 - 36 Units of Residential
- Building #1000
 - 16,260 GSF of Restaurant
 - 10,840 GSF of Retail
 - 66 Units of Residential
- Building #1100
 - 16,230 GSF of Restaurant
 - 10,820 GSF of Retail
 - 66 Units of Residential
- Buildings #1200a & 1200b
 - 86 Units of Residential
- Building #1300
 - 32 Units of Residential
- Building #1400a & 1400b
 - 64 Units of Residential
- 50% of the Residential Units are 1 bedroom units, 50% are 2 bedroom units
- GSF to GLA calculation factors
 - Medical Office - 0.87
 - General Office – 0.83
 - Retail & Restaurant - 0.82

The Institute of Transportation Engineer's (ITE) Parking Generation Manual, 3rd Edition provides parking characteristics for the various land uses contained in this portion of the Novi Main Street Development. The Urban Land Institute's Shared Parking, 2nd Edition, provides additional information regarding parking characteristics and recommended methodologies for performing a shared parking analysis.

As the ITE Parking Generation Manual details, some land uses peak during the day while others will peak in the evening or on the weekends. Hence, two or more land uses that share parking can provide a smaller but adequate amount of parking spaces compared to the amount of parking required by ordinance if each individual land use is added together.

The parking rates are based upon the gross leasable area (GLA) rather than the gross square footages (GSF) of the various land uses. These sizes are shown in Table 1 as well as the City of Novi parking requirements per land use.

It should be noted that the City of Novi parking requirements for a bar/night club appear to be based on occupancy at the rate of 1 car space per 2 people. It is our opinion that this requirement is too conservative. The Urban Land Institute's Shared Parking 2nd Edition publication recommends the base parking ratio of a nightclub to be 17.5 spaces per 1000 GLA for patrons and 1.5 spaces per 1000 GLA for employees, or 223 spaces

(19.0 x 11,693 GLA / 1000). Furthermore, other communities such as the City of Royal Oak require 1 parking space per 3 people of occupancy.

Table 1 – Land Use Summary and Ordinance Requirements

Land Use	Novi Ordinance Requirements	Factor	Size (GLA)	Parking Required
Medical Office	5.7 spaces per 1,000 GLA	0.0057	64,815	369
General Office	4.5 spaces per 1,000 GLA	0.0045	22,410	101
General Retail	5.0 spaces per 1,000 GLA	0.0050	43,567	218
Restaurants	14.3 spaces per 1,000 GLA	0.0143	29,044	415
Bar / Nightclub	1 space per 2 occupants	0.5000	950	475
Residential	0.5 * (1/unit) + 0.5 * (2/unit)	1.5000	350	525
Parking Required without Sharing				2,103

For the shared parking analysis, each land use is factored by a time of day percentage based upon the parking data contained in the ITE Parking Generation Manual, 3rd Edition or in the ULI Shared Parking 2nd edition publication. Tables 2 and 3 show the time of day percentages for a typical weekday and a typical weekend day.

Table 2 – ITE Weekday Parking Characteristics

Weekday Time	ITE 820 Retail	ITE 932 Restaurant	ITE 720 Medical Office	ITE 701 General Office	ULI Table 2-5 Night Club / Bar *	ULI Table 2-5 Residential*
6:00 AM	0%	0%	0%	6%	0%	92%
7:00 AM	9%	0%	15%	56%	0%	84%
8:00 AM	16%	0%	49%	86%	0%	80%
9:00 AM	62%	6%	84%	97%	1%	76%
10:00 AM	84%	8%	100%	100%	1%	71%
11:00 AM	91%	26%	100%	98%	1%	66%
12:00 PM	87%	50%	88%	87%	1%	61%
1:00 PM	84%	35%	79%	75%	1%	66%
2:00 PM	100%	31%	86%	84%	1%	66%
3:00 PM	95%	22%	96%	87%	1%	66%
4:00 PM	85%	25%	91%	75%	2%	71%
5:00 PM	91%	73%	72%	43%	4%	81%
6:00 PM	96%	100%	0%	18%	29%	88%
7:00 PM	95%	100%	0%	0%	54%	97%
8:00 PM	0%	80%	0%	0%	77%	98%
9:00 PM	0%	58%	0%	0%	100%	99%
10:00 PM	0%	0%	0%	0%	100%	100%
11:00 PM	0%	0%	0%	0%	100%	98%
12:00 AM	0%	0%	0%	0%	100%	96%

*combination of two variables, see attached spreadsheets for more details

Table 3 -- ITE Weekend Parking Characteristics

Weekend Time	ITE 820 Retail	ITE 932 Restaurant	Wkday * 80% Medical Office	Wkday * 90% General Office	ULI Table 2-5 Night Club / Bar *	ULI Table 2-5 Residential*
6:00 AM	0%	0%	0%	5%	0%	92%
7:00 AM	0%	0%	12%	50%	0%	84%
8:00 AM	0%	0%	39%	77%	0%	80%
9:00 AM	0%	4%	67%	87%	1%	75%
10:00 AM	78%	6%	80%	90%	1%	71%
11:00 AM	94%	17%	80%	88%	1%	66%
12:00 PM	100%	36%	70%	78%	1%	61%
1:00 PM	93%	46%	63%	68%	1%	66%
2:00 PM	95%	41%	69%	76%	1%	66%
3:00 PM	94%	34%	77%	78%	1%	66%
4:00 PM	87%	55%	73%	68%	2%	71%
5:00 PM	81%	67%	58%	39%	4%	81%
6:00 PM	69%	100%	0%	16%	29%	88%
7:00 PM	0%	100%	0%	0%	54%	97%
8:00 PM	0%	100%	0%	0%	77%	98%
9:00 PM	0%	29%	0%	0%	100%	99%
10:00 PM	0%	8%	0%	0%	100%	100%
11:00 PM	0%	0%	0%	0%	100%	98%
12:00 AM	0%	0%	0%	0%	100%	96%

*combination of two variables, see attached spreadsheets for more details

The methodology of this shared parking analysis, utilized by Reid, Cool & Michalski, Inc. for the original traffic study for this development, begins by applying the parking required by the Novi Ordinances per land use to the time of day tables for both a typical weekday and a weekend. The parking per land use is then totaled for each hour of the day. A factor of 0.90 is applied to the spaces required for retail and restaurant space to accommodate for the captive market effect or linked trip factor. The resulting highest hourly total is the parking that would be required for the shared parking methodology.

The attached spreadsheets include a summary sheet with the shared parking requirements and a sheet for each of the buildings. Building #400 parking requirements are based upon the 1 parking space per 2 persons of occupancy for an estimated maximum of 950 occupants. Based on the attached letter from the proprietor of the proposed night club, the peak capacity of the 950 patrons is expected on Saturday nights during the summer only. On Friday nights, the peak occupancy is expected to be no more than 800 patrons.

Per the results from our calculations, the peak parking demand during the week would occur around 7:00 PM and would be about 1,327 spaces. However, given the estimations provided by the night club proprietors for weekday versus weekend operations, it is very likely that the maximum peak demand on a weekday would be less than the 1,327 spaces calculated on the basis of the 950 patron maximum occupancy. Serious consideration should be given to calculating the maximum weekday parking

demand on the basis of the weekday expected maximum occupancy of 800 rather than the Saturday peak of 950. If recalculated on this basis, the peak weekday parking demand would only be 1,287 spaces. On weekends, the peak parking demand would occur around 8:00 PM on Saturday night and would be 1,255 spaces.

As mentioned previously, the Main Street Development will have 553 spaces north of Main Street, 359 spaces south of Main Street and 414 reserved spaces for residential for a total of 1326 on site spaces.

It should be noted that the percentage of retail to restaurant space was assumed to be a 60%/40% split, which would require more parking than the 65%/35% split assumed in the July 6th, 2006 Reid, Cool & Michalski, Inc.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Midwestern Consulting

A handwritten signature in black ink that reads "Michael R. Cool". The signature is written in a cursive style with a large initial "M" and a stylized "R".

Michael R. Cool, P.E.
Project Manager

Attach. (12)

Shared Parking Analysis - Novi Main Street Development - All Buildings

Building #	Medical Office GLA	General Office GLA	Retail + Restaurants GLA	Retail Only GLA	Restaurants Only GLA	Night Club Occupants	Residential Units
400	0	0	0	0	0	950	0
500	0	22,410	12,300	7,380	4,920	0	0
800	64,815	0	5,740	3,444	2,296	0	0
900	0	0	10,168	6,101	4,067	0	38
1000	0	0	22,222	13,333	8,889	0	66
1100	0	0	22,181	13,309	8,872	0	66
1200 (a+b)	0	0	0	0	0	0	66
1300	0	0	0	0	0	0	32
1400 (a+b)	0	0	0	0	0	0	64
Totals	64,815	22,410	72,611	43,567	29,044	950	350

Totals with Captive Market Reduction Factor Applied to Retail & Restaurant

Weekday Time	Building 400 as NClub	Building 500	Building 800	Building 900	Building 1000	Building 1100	Buildings 1200	Building 1300	Buildings 1400	Totals
6:00 AM	0	6	0	50	91	91	119	44	88	488
7:00 AM	0	59	57	48	68	88	108	40	80	568
8:00 AM	0	92	184	47	89	89	103	38	77	718
9:00 AM	5	122	322	61	118	118	97	36	72	951
10:00 AM	5	127	382	60	117	117	91	34	68	1,001
11:00 AM	5	146	391	74	150	149	85	32	63	1,095
12:00 PM	5	148	353	83	170	170	79	29	59	1,097
1:00 PM	5	126	315	77	156	156	85	32	63	1,014
2:00 PM	5	138	342	79	161	161	85	32	63	1,065
3:00 PM	5	133	376	73	147	147	85	32	63	1,062
4:00 PM	10	120	357	75	149	149	91	34	68	1,052
5:00 PM	19	120	302	107	219	218	105	39	78	1,207
6:00 PM	138	113	44	128	259	258	113	42	84	1,178
7:00 PM	257	95	44	131	268	267	125	47	93	1,327
8:00 PM	366	51	24	95	189	189	127	47	94	1,180
9:00 PM	475	37	17	84	164	164	128	48	95	1,212
10:00 PM	475	0	0	54	99	99	129	48	96	1,000
11:00 PM	475	0	0	53	97	97	127	47	94	991
12:00 AM	475	0	0	52	95	95	124	46	92	979
Highest	475	148	391	131	268	267	129	48	96	1,327

Weekend Time	Building 400 as NClub	Building 500	Building 800	Building 900	Building 1000	Building 1100	Buildings 1200	Building 1300	Buildings 1400	Totals
6:00 AM	0	5	0	50	91	91	119	44	88	487
7:00 AM	0	50	44	46	83	83	109	40	81	537
8:00 AM	0	78	144	43	79	79	103	38	77	640
9:00 AM	5	90	249	43	79	79	97	36	72	749
10:00 AM	5	120	309	63	123	123	91	34	68	937
11:00 AM	5	131	315	70	141	141	85	32	63	983
12:00 PM	5	135	286	79	162	162	79	29	59	995
1:00 PM	5	129	261	85	174	174	85	32	63	1,007
2:00 PM	5	134	282	83	169	169	85	32	63	1,022
3:00 PM	5	131	309	79	161	160	85	32	63	1,025
4:00 PM	10	132	299	91	185	185	91	34	68	1,094
5:00 PM	19	109	247	101	206	206	105	39	78	1,109
6:00 PM	138	102	40	119	242	242	113	42	84	1,123
7:00 PM	257	63	30	105	211	210	125	47	93	1,141
8:00 PM	366	63	30	105	212	211	127	47	94	1,255
9:00 PM	475	18	9	69	131	131	128	48	95	1,104
10:00 PM	475	5	2	58	108	108	129	48	96	1,030
11:00 PM	475	0	0	53	97	97	127	47	94	991
12:00 AM	475	0	0	52	95	95	124	46	92	979
Highest	475	135	315	119	242	242	129	48	96	1,255

ITE Recommended Time of Day Percentages

Weekday Time	ITE 820 Retail	ITE 932 Restaurant	ITE 720 Medical Office	ITE 701 General Office	ULI Table 2-5 Night Club / Bar *	ULI Table 2-5 Residential*
6:00 AM	0%	0%	0%	6%	0%	92%
7:00 AM	9%	0%	15%	56%	0%	84%
8:00 AM	16%	0%	49%	88%	0%	80%
9:00 AM	62%	8%	84%	97%	1%	75%
10:00 AM	64%	8%	100%	100%	1%	71%
11:00 AM	91%	26%	100%	98%	1%	66%
12:00 PM	87%	50%	88%	87%	1%	61%
1:00 PM	84%	35%	79%	75%	1%	68%
2:00 PM	100%	31%	86%	84%	1%	66%
3:00 PM	95%	22%	98%	87%	1%	66%
4:00 PM	85%	25%	91%	75%	2%	71%
5:00 PM	91%	73%	72%	43%	4%	81%
6:00 PM	98%	100%	0%	18%	29%	88%
7:00 PM	95%	100%	0%	0%	54%	97%
8:00 PM	0%	80%	0%	0%	77%	98%
9:00 PM	0%	58%	0%	0%	100%	99%
10:00 PM	0%	0%	0%	0%	100%	100%
11:00 PM	0%	0%	0%	0%	100%	98%
12:00 AM	0%	0%	0%	0%	100%	96%

* employee and patron (or residents and visitors) percentages combined, see following page

Weekend Time	ITE 820 Retail	ITE 932 Restaurant	Wkday * 80% Medical Office	Wkday * 90% General Office	ULI Table 2-5 Night Club / Bar *	ULI Table 2-5 Residential*
8:00 AM	0%	0%	0%	5%	0%	92%
7:00 AM	0%	0%	12%	50%	0%	84%
8:00 AM	0%	0%	39%	77%	0%	80%
9:00 AM	0%	4%	67%	87%	1%	75%
10:00 AM	78%	6%	80%	90%	1%	71%
11:00 AM	94%	17%	80%	86%	1%	66%
12:00 PM	100%	38%	70%	76%	1%	81%
1:00 PM	93%	46%	63%	68%	1%	86%
2:00 PM	95%	41%	69%	76%	1%	66%
3:00 PM	94%	34%	77%	76%	1%	66%
4:00 PM	87%	55%	73%	68%	2%	71%
5:00 PM	81%	67%	58%	35%	4%	61%
6:00 PM	88%	100%	0%	16%	29%	69%
7:00 PM	0%	100%	0%	0%	54%	97%
8:00 PM	0%	100%	0%	0%	77%	98%
9:00 PM	0%	29%	0%	0%	100%	99%
10:00 PM	0%	8%	0%	0%	100%	100%
11:00 PM	0%	0%	0%	0%	100%	98%
12:00 AM	0%	0%	0%	0%	100%	96%

* employee and patron (or residents and visitors) percentages combined, see following page

Weekday Time	Employee Night Club / Bar	Patron Night Club / Bar	Combined Night Club / Bar
6:00 AM	0%	0%	0%
7:00 AM	0%	0%	0%
8:00 AM	0%	0%	0%
9:00 AM	5%	0%	0%
10:00 AM	5%	0%	0%
11:00 AM	5%	0%	0%
12:00 PM	5%	0%	0%
1:00 PM	10%	0%	1%
2:00 PM	10%	0%	1%
3:00 PM	10%	0%	1%
4:00 PM	20%	0%	2%
5:00 PM	45%	0%	3%
6:00 PM	70%	25%	28%
7:00 PM	100%	50%	54%
8:00 PM	100%	75%	77%
9:00 PM	100%	100%	100%
10:00 PM	100%	100%	100%
11:00 PM	100%	100%	100%
12:00 AM	100%	100%	100%

Employee to Patron Ratio
1.25
Employees
15.25
Patrons

Weekday Time	Visitor Residential	Resident Residential	Combined Residential
6:00 AM	0%	100%	92%
7:00 AM	10%	90%	84%
8:00 AM	20%	85%	80%
9:00 AM	20%	80%	75%
10:00 AM	20%	75%	71%
11:00 AM	20%	70%	68%
12:00 PM	20%	65%	61%
1:00 PM	20%	70%	68%
2:00 PM	20%	70%	68%
3:00 PM	20%	70%	66%
4:00 PM	20%	75%	71%
5:00 PM	40%	85%	81%
6:00 PM	60%	90%	88%
7:00 PM	100%	97%	97%
8:00 PM	100%	98%	98%
9:00 PM	100%	98%	98%
10:00 PM	100%	100%	100%
11:00 PM	80%	100%	98%
12:00 AM	50%	100%	96%

Visitor to Resident Ratio
0.15
Visitors
1.7
Residents

Weekend Time	Employee Night Club / Bar	Patron Night Club / Bar	Combined Night Club / Bar
6:00 AM	0%	0%	0%
7:00 AM	0%	0%	0%
8:00 AM	0%	0%	0%
9:00 AM	5%	0%	0%
10:00 AM	5%	0%	0%
11:00 AM	5%	0%	0%
12:00 PM	5%	0%	0%
1:00 PM	10%	0%	1%
2:00 PM	10%	0%	1%
3:00 PM	10%	0%	1%
4:00 PM	20%	0%	2%
5:00 PM	45%	0%	4%
6:00 PM	70%	25%	29%
7:00 PM	100%	50%	54%
8:00 PM	100%	75%	77%
9:00 PM	100%	100%	100%
10:00 PM	100%	100%	100%
11:00 PM	100%	100%	100%
12:00 AM	100%	100%	100%

Employee to Patron Ratio
1.5
Employees
17.5
Patrons

Weekend Time	Visitor Residential	Resident Residential	Combined Residential
6:00 AM	0%	100%	92%
7:00 AM	20%	90%	84%
8:00 AM	20%	85%	80%
9:00 AM	20%	80%	75%
10:00 AM	20%	75%	71%
11:00 AM	20%	70%	68%
12:00 PM	20%	65%	61%
1:00 PM	20%	70%	68%
2:00 PM	20%	70%	68%
3:00 PM	20%	70%	68%
4:00 PM	20%	75%	71%
5:00 PM	40%	85%	81%
6:00 PM	60%	90%	88%
7:00 PM	100%	97%	97%
8:00 PM	100%	98%	98%
9:00 PM	100%	98%	98%
10:00 PM	100%	100%	100%
11:00 PM	80%	100%	98%
12:00 AM	50%	100%	96%

Employee to Patron Ratio
0.15
Visitors
1.7
Residents

Building #400 (as Night Club)

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	0	660	475
Residential	0	0	0

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	5	0	5	5
10:00 AM	0	0	0	0	5	0	5	5
11:00 AM	0	0	0	0	5	0	5	5
12:00 PM	0	0	0	0	5	0	5	5
1:00 PM	0	0	0	0	5	0	5	5
2:00 PM	0	0	0	0	5	0	5	5
3:00 PM	0	0	0	0	5	0	5	5
4:00 PM	0	0	0	0	10	0	10	10
5:00 PM	0	0	0	0	19	0	19	19
6:00 PM	0	0	0	0	138	0	138	138
7:00 PM	0	0	0	0	257	0	257	257
8:00 PM	0	0	0	0	366	0	366	366
9:00 PM	0	0	0	0	475	0	475	475
10:00 PM	0	0	0	0	475	0	475	475
11:00 PM	0	0	0	0	475	0	475	475
12:00 AM	0	0	0	0	475	0	475	475

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	5	0	5	5
10:00 AM	0	0	0	0	5	0	5	5
11:00 AM	0	0	0	0	5	0	5	5
12:00 PM	0	0	0	0	5	0	5	5
1:00 PM	0	0	0	0	5	0	5	5
2:00 PM	0	0	0	0	5	0	5	5
3:00 PM	0	0	0	0	5	0	5	5
4:00 PM	0	0	0	0	10	0	10	10
5:00 PM	0	0	0	0	19	0	19	19
6:00 PM	0	0	0	0	138	0	138	138
7:00 PM	0	0	0	0	257	0	257	257
8:00 PM	0	0	0	0	366	0	366	366
9:00 PM	0	0	0	0	475	0	475	475
10:00 PM	0	0	0	0	475	0	475	475
11:00 PM	0	0	0	0	475	0	475	475
12:00 AM	0	0	0	0	475	0	475	475

Building #900

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	12,400	10,168	
Retail Space	7,440	8,101	31
Restaurant Space	4,960	4,067	58
Bar/Nightclub	0	0	0
Residential		36	54

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	50	50	50
7:00 AM	3	0	0	0	0	46	48	48
8:00 AM	5	0	0	0	0	43	48	47
9:00 AM	19	3	0	0	0	41	63	61
10:00 AM	20	5	0	0	0	38	62	60
11:00 AM	28	15	0	0	0	36	78	74
12:00 PM	27	29	0	0	0	33	89	83
1:00 PM	28	20	0	0	0	36	82	77
2:00 PM	31	18	0	0	0	36	84	79
3:00 PM	29	13	0	0	0	36	77	73
4:00 PM	28	15	0	0	0	38	79	75
5:00 PM	28	42	0	0	0	44	114	107
6:00 PM	29	58	0	0	0	47	135	126
7:00 PM	29	58	0	0	0	53	140	131
8:00 PM	0	47	0	0	0	53	100	95
9:00 PM	0	34	0	0	0	54	87	84
10:00 PM	0	0	0	0	0	54	54	54
11:00 PM	0	0	0	0	0	53	53	53
12:00 AM	0	0	0	0	0	52	52	52

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	50	50	50
7:00 AM	0	0	0	0	0	46	46	46
8:00 AM	0	0	0	0	0	43	43	43
9:00 AM	0	2	0	0	0	41	43	43
10:00 AM	24	3	0	0	0	38	65	63
11:00 AM	29	10	0	0	0	36	74	70
12:00 PM	31	21	0	0	0	33	85	79
1:00 PM	28	27	0	0	0	36	91	85
2:00 PM	29	24	0	0	0	36	88	83
3:00 PM	29	20	0	0	0	36	84	79
4:00 PM	27	32	0	0	0	38	97	91
5:00 PM	25	39	0	0	0	44	108	101
6:00 PM	21	58	0	0	0	47	126	119
7:00 PM	0	58	0	0	0	53	111	105
8:00 PM	0	58	0	0	0	53	111	105
9:00 PM	0	17	0	0	0	54	70	69
10:00 PM	0	5	0	0	0	54	59	58
11:00 PM	0	0	0	0	0	53	53	53
12:00 AM	0	0	0	0	0	52	52	52

Building #1000

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	27,100	22,222	
Retail Space	16,280	13,353	67
Restaurant Space	10,840	8,869	127
Bar/Nightclub	0	0	0
Residential		66	59

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	91	91	91
7:00 AM	6	0	0	0	0	83	89	88
8:00 AM	11	0	0	0	0	79	90	89
9:00 AM	41	3	0	0	0	74	123	118
10:00 AM	43	10	0	0	0	70	123	117
11:00 AM	61	33	0	0	0	65	159	150
12:00 PM	59	64	0	0	0	61	182	170
1:00 PM	56	44	0	0	0	65	166	156
2:00 PM	67	39	0	0	0	65	171	161
3:00 PM	63	28	0	0	0	65	157	147
4:00 PM	57	32	0	0	0	70	158	149
5:00 PM	61	93	0	0	0	81	234	219
6:00 PM	64	127	0	0	0	87	278	259
7:00 PM	63	127	0	0	0	96	287	268
8:00 PM	0	102	0	0	0	97	199	189
9:00 PM	0	74	0	0	0	98	172	164
10:00 PM	0	0	0	0	0	99	99	99
11:00 PM	0	0	0	0	0	97	97	97
12:00 AM	0	0	0	0	0	95	95	95

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	91	91	91
7:00 AM	0	0	0	0	0	83	83	83
8:00 AM	0	0	0	0	0	79	79	79
9:00 AM	0	5	0	0	0	74	79	79
10:00 AM	52	8	0	0	0	70	129	123
11:00 AM	63	22	0	0	0	65	150	141
12:00 PM	67	46	0	0	0	61	173	162
1:00 PM	62	58	0	0	0	65	186	174
2:00 PM	63	52	0	0	0	65	181	169
3:00 PM	63	43	0	0	0	65	171	161
4:00 PM	58	70	0	0	0	70	198	185
5:00 PM	54	85	0	0	0	81	220	206
6:00 PM	46	127	0	0	0	87	260	242
7:00 PM	0	127	0	0	0	96	223	211
8:00 PM	0	127	0	0	0	97	224	212
9:00 PM	0	37	0	0	0	98	135	131
10:00 PM	0	10	0	0	0	99	109	103
11:00 PM	0	0	0	0	0	97	97	97
12:00 AM	0	0	0	0	0	95	95	95

Building #1100

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	27,050	22,181	
Retail Space	16,230	13,209	67
Restaurant Space	10,820	8,872	127
Bar/Nightclub	0	0	0
Residential		66	99

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	91	91	91
7:00 AM	6	0	0	0	0	83	89	83
8:00 AM	11	0	0	0	0	79	90	89
9:00 AM	41	8	0	0	0	74	123	118
10:00 AM	43	10	0	0	0	70	123	117
11:00 AM	61	23	0	0	0	65	159	149
12:00 PM	59	23	0	0	0	81	162	170
1:00 PM	56	44	0	0	0	85	166	156
2:00 PM	67	39	0	0	0	85	171	161
3:00 PM	63	28	0	0	0	65	156	147
4:00 PM	57	32	0	0	0	70	158	149
5:00 PM	81	93	0	0	0	81	234	218
6:00 PM	64	127	0	0	0	87	277	258
7:00 PM	63	127	0	0	0	98	286	267
8:00 PM	0	102	0	0	0	97	199	189
9:00 PM	0	74	0	0	0	98	172	164
10:00 PM	0	0	0	0	0	99	99	99
11:00 PM	0	0	0	0	0	97	97	97
12:00 AM	0	0	0	0	0	95	95	95

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	91	91	91
7:00 AM	0	0	0	0	0	83	83	83
8:00 AM	0	0	0	0	0	79	79	79
9:00 AM	0	5	0	0	0	74	79	79
10:00 AM	52	8	0	0	0	70	129	123
11:00 AM	63	22	0	0	0	66	149	141
12:00 PM	87	46	0	0	0	61	173	162
1:00 PM	62	58	0	0	0	65	186	174
2:00 PM	63	52	0	0	0	65	181	169
3:00 PM	63	43	0	0	0	65	171	160
4:00 PM	58	70	0	0	0	70	193	185
5:00 PM	54	35	0	0	0	81	219	206
6:00 PM	46	127	0	0	0	87	259	242
7:00 PM	0	127	0	0	0	96	223	210
8:00 PM	0	127	0	0	0	97	224	211
9:00 PM	0	37	0	0	0	98	135	131
10:00 PM	0	10	0	0	0	99	109	103
11:00 PM	0	0	0	0	0	97	97	97
12:00 AM	0	0	0	0	0	95	95	95

Buildings #1200a & #1200b

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	0	0	0
Residential		86	129

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	119	119	119
7:00 AM	0	0	0	0	0	108	108	108
8:00 AM	0	0	0	0	0	103	103	103
9:00 AM	0	0	0	0	0	97	97	97
10:00 AM	0	0	0	0	0	91	91	91
11:00 AM	0	0	0	0	0	85	85	85
12:00 PM	0	0	0	0	0	79	79	79
1:00 PM	0	0	0	0	0	85	85	85
2:00 PM	0	0	0	0	0	85	85	85
3:00 PM	0	0	0	0	0	85	85	85
4:00 PM	0	0	0	0	0	91	91	91
5:00 PM	0	0	0	0	0	106	106	106
6:00 PM	0	0	0	0	0	113	113	113
7:00 PM	0	0	0	0	0	125	125	125
8:00 PM	0	0	0	0	0	127	127	127
9:00 PM	0	0	0	0	0	128	128	128
10:00 PM	0	0	0	0	0	129	129	129
11:00 PM	0	0	0	0	0	127	127	127
12:00 AM	0	0	0	0	0	124	124	124

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	119	119	119
7:00 AM	0	0	0	0	0	109	109	109
8:00 AM	0	0	0	0	0	103	103	103
9:00 AM	0	0	0	0	0	97	97	97
10:00 AM	0	0	0	0	0	91	91	91
11:00 AM	0	0	0	0	0	85	85	85
12:00 PM	0	0	0	0	0	79	79	79
1:00 PM	0	0	0	0	0	85	85	85
2:00 PM	0	0	0	0	0	85	85	85
3:00 PM	0	0	0	0	0	85	85	85
4:00 PM	0	0	0	0	0	91	91	91
5:00 PM	0	0	0	0	0	106	106	106
6:00 PM	0	0	0	0	0	113	113	113
7:00 PM	0	0	0	0	0	125	125	125
8:00 PM	0	0	0	0	0	127	127	127
9:00 PM	0	0	0	0	0	128	128	128
10:00 PM	0	0	0	0	0	129	129	129
11:00 PM	0	0	0	0	0	127	127	127
12:00 AM	0	0	0	0	0	124	124	124

Building #1300

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	0	0	0
Residential		32	48

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	44	44	44
7:00 AM	0	0	0	0	0	40	40	40
8:00 AM	0	0	0	0	0	38	38	38
9:00 AM	0	0	0	0	0	36	36	36
10:00 AM	0	0	0	0	0	34	34	34
11:00 AM	0	0	0	0	0	32	32	32
12:00 PM	0	0	0	0	0	29	29	29
1:00 PM	0	0	0	0	0	32	32	32
2:00 PM	0	0	0	0	0	32	32	32
3:00 PM	0	0	0	0	0	32	32	32
4:00 PM	0	0	0	0	0	34	34	34
5:00 PM	0	0	0	0	0	39	39	39
6:00 PM	0	0	0	0	0	42	42	42
7:00 PM	0	0	0	0	0	47	47	47
8:00 PM	0	0	0	0	0	47	47	47
9:00 PM	0	0	0	0	0	48	48	48
10:00 PM	0	0	0	0	0	48	48	48
11:00 PM	0	0	0	0	0	47	47	47
12:00 AM	0	0	0	0	0	46	46	46

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	44	44	44
7:00 AM	0	0	0	0	0	40	40	40
8:00 AM	0	0	0	0	0	38	38	38
9:00 AM	0	0	0	0	0	36	36	36
10:00 AM	0	0	0	0	0	34	34	34
11:00 AM	0	0	0	0	0	32	32	32
12:00 PM	0	0	0	0	0	29	29	29
1:00 PM	0	0	0	0	0	32	32	32
2:00 PM	0	0	0	0	0	32	32	32
3:00 PM	0	0	0	0	0	32	32	32
4:00 PM	0	0	0	0	0	34	34	34
5:00 PM	0	0	0	0	0	39	39	39
6:00 PM	0	0	0	0	0	42	42	42
7:00 PM	0	0	0	0	0	47	47	47
8:00 PM	0	0	0	0	0	47	47	47
9:00 PM	0	0	0	0	0	48	48	48
10:00 PM	0	0	0	0	0	48	48	48
11:00 PM	0	0	0	0	0	47	47	47
12:00 AM	0	0	0	0	0	46	46	46

Buildings #14C0a & #14C0b

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	0	0	0
Residential		64	96

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	88	88	88
7:00 AM	0	0	0	0	0	80	80	80
8:00 AM	0	0	0	0	0	77	77	77
9:00 AM	0	0	0	0	0	72	72	72
10:00 AM	0	0	0	0	0	68	68	68
11:00 AM	0	0	0	0	0	63	63	63
12:00 PM	0	0	0	0	0	59	59	59
1:00 PM	0	0	0	0	0	63	63	63
2:00 PM	0	0	0	0	0	63	63	63
3:00 PM	0	0	0	0	0	63	63	63
4:00 PM	0	0	0	0	0	68	68	68
5:00 PM	0	0	0	0	0	78	78	78
6:00 PM	0	0	0	0	0	84	84	84
7:00 PM	0	0	0	0	0	93	93	93
8:00 PM	0	0	0	0	0	94	94	94
9:00 PM	0	0	0	0	0	95	95	95
10:00 PM	0	0	0	0	0	96	96	96
11:00 PM	0	0	0	0	0	94	94	94
12:00 AM	0	0	0	0	0	92	92	92

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Residential	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	88	88	88
7:00 AM	0	0	0	0	0	81	81	81
8:00 AM	0	0	0	0	0	77	77	77
9:00 AM	0	0	0	0	0	72	72	72
10:00 AM	0	0	0	0	0	68	68	68
11:00 AM	0	0	0	0	0	63	63	63
12:00 PM	0	0	0	0	0	59	59	59
1:00 PM	0	0	0	0	0	63	63	63
2:00 PM	0	0	0	0	0	63	63	63
3:00 PM	0	0	0	0	0	63	63	63
4:00 PM	0	0	0	0	0	68	68	68
5:00 PM	0	0	0	0	0	78	78	78
6:00 PM	0	0	0	0	0	84	84	84
7:00 PM	0	0	0	0	0	93	93	93
8:00 PM	0	0	0	0	0	94	94	94
9:00 PM	0	0	0	0	0	95	95	95
10:00 PM	0	0	0	0	0	96	96	96
11:00 PM	0	0	0	0	0	94	94	94
12:00 AM	0	0	0	0	0	92	92	92



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June 23, 2008
(Revised)

Mr. Dave Nona
Triangle Mainstreet LLC
30403 W. Thirteen Mile Road
Farmington Hills, MI 48334

RE: Novi Main Street Development
Shared Parking Analysis
Proposed Buildings #800, #500, & #400

Dear Mr. Nona:

As requested we have reviewed the changes to the proposed phasing and parking availability for the Novi Main Street development. The revised parking analysis will be based upon the following assumptions:

- This updated parking analysis shall be based upon the methodology used for the shared parking analysis performed previously by Reid, Cool & Michalski, Inc. for the Novi Main Street Development
- This analysis will focus only on the parking for the buildings on the north side of Main Street, buildings #800, #500, and #400.
- The parking deck has been removed and all parking shall be located in surface lots, adjacent street parking, or in the underground parking lot below building #500 (if needed).
- The estimated number of available surface parking spaces for this shared parking analysis will be 553 spaces. Additional below grade parking spaces can be made available below building #500.
- The land use per building is listed below:
 - Building #400
 - 14,260 GSF of Night Club (Maximum Estimated Occupancy of 950 on Saturday nights)
 - Building #500
 - 27,000 GSF of General Office
 - 15,000 GSF, 60% Retail and 40% Restaurant Space
 - Building #800 (following elimination of basement level)
 - 74,500 GSF of Medical Office
 - 7,000 GSF, 60% Retail and 40% Restaurant Space
- GSF to GLA calculation factors
 - Medical Office - 0.87
 - General Office - 0.83
 - Retail & Restaurant - 0.82



The Institute of Transportation Engineer’s (ITE) Parking Generation Manual, 3rd Edition provides parking characteristics for the various land uses contained in this portion of the Novi Main Street Development. The Urban Land Institute’s Shared Parking, 2nd Edition, provides additional information regarding parking characteristics and recommended methodologies for performing a shared parking analysis.

As the ITE Parking Generation Manual details, some land uses peak during the day while others will peak in the evening or on the weekends. Hence, two or more land uses that share parking can provide a smaller but adequate amount of parking spaces compared to the amount of parking required by ordinance if each individual land use is added together.

The parking rates are based upon the gross leasable area (GLA) rather than the gross square footages (GSF) of the various land uses. These sizes are shown in Table 1 as well as the City of Novi parking requirements per land use.

It should be noted that the City of Novi parking requirements for a bar/night club appear to be based on occupancy at the rate of 1 car space per 2 people. It is our opinion that this requirement is too conservative. The Urban Land Institute’s Shared Parking 2nd Edition publication recommends the base parking ratio of a nightclub to be 17.5 spaces per 1000 GLA for patrons and 1.5 spaces per 1000 GLA for employees, or 223 spaces (19.0 x 11,693 GLA / 1000). Furthermore, other communities such as the City of Royal Oak require 1 parking space per 3 people of occupancy.

Table 1 ~ Land Use Summary and Ordinance Requirements

Land Use	Novi Ordinance Requirements	Factor	Size (GLA)	Parking Required
Medical Office	5.7 spaces per 1,000 GLA	0.0057	64,815	369
General Office	4.5 spaces per 1,000 GLA	0.0045	22,410	101
General Retail	5.0 spaces per 1,000 GLA	0.0050	10,824	54
Restaurants	14.3 spaces per 1,000 GLA	0.0143	7,216	103
Bar / Nightclub	1 space per 2 occupants	0.5000	950	475
Parking Required without Sharing				1,103



For the shared parking analysis, each land use is factored by a time of day percentage based upon the parking data contained in the ITE Parking Generation Manual, 3rd Edition or in the ULI Shared Parking 2nd edition publication. Tables 2 and 3 show the time of day percentages for a typical weekday and a typical weekend day.

Table 2 – ITE Weekday Parking Characteristics

Weekday Time	ITE 820 Retail	ITE 932 Restaurant	ITE 720 Medical Office	ITE 701 General Office	ULI Table 2-5 Night Club / Bar *
6:00 AM	0%	0%	0%	6%	0%
7:00 AM	9%	0%	15%	56%	0%
8:00 AM	16%	0%	49%	86%	0%
9:00 AM	62%	6%	84%	97%	1%
10:00 AM	64%	8%	100%	100%	1%
11:00 AM	91%	26%	100%	98%	1%
12:00 PM	87%	50%	88%	87%	1%
1:00 PM	84%	35%	79%	75%	1%
2:00 PM	100%	31%	88%	84%	1%
3:00 PM	95%	22%	86%	87%	1%
4:00 PM	85%	25%	91%	75%	2%
5:00 PM	91%	73%	72%	43%	4%
6:00 PM	96%	100%	8%	18%	28%
7:00 PM	95%	100%	0%	0%	54%
8:00 PM	0%	80%	0%	0%	77%
9:00 PM	0%	56%	0%	0%	100%
10:00 PM	0%	0%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

*combination of two variables, see attachments for further detail

Table 3 – ITE Weekend Parking Characteristics

Weekend Time	ITE 820 Retail	ITE 932 Restaurant	Wkday * 60% Medical Office	Wkday * 90% General Office	ULI Table 2-5 Night Club / Bar *
6:00 AM	0%	0%	0%	5%	0%
7:00 AM	0%	0%	12%	50%	0%
8:00 AM	0%	0%	39%	77%	0%
9:00 AM	0%	4%	67%	87%	1%
10:00 AM	78%	6%	80%	90%	1%
11:00 AM	94%	17%	80%	88%	1%
12:00 PM	100%	36%	70%	78%	1%
1:00 PM	93%	46%	63%	68%	1%
2:00 PM	95%	41%	69%	76%	1%
3:00 PM	94%	34%	77%	78%	1%
4:00 PM	87%	55%	73%	68%	2%
5:00 PM	81%	67%	58%	39%	4%
6:00 PM	69%	100%	0%	16%	29%
7:00 PM	0%	100%	0%	0%	54%
8:00 PM	0%	100%	0%	0%	77%
9:00 PM	0%	29%	0%	0%	100%
10:00 PM	0%	8%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

*combination of two variables, see attachments for further detail

The methodology of this shared parking analysis, utilized by Reid, Cool & Michalski, Inc. for the original traffic study for this development, begins by applying the parking required by the Novi Ordinances per land use to the time of day tables for both a typical weekday and a weekend. The parking per land use is then totaled for each hour of the day. A factor of 0.90 is applied to the spaces required for retail and restaurant space to accommodate for the captive market effect or linked trip factor. The resulting highest hourly total is the parking that would be required for the shared parking methodology.

The attached spreadsheets include a summary sheet with the shared parking requirements and a sheet for each of the three buildings. Building #400 parking requirements are based upon the 1 parking space per 2 persons of occupancy for an estimated maximum of 950 occupants.



Per the results from our calculations, the peak parking demand during the week would occur around 11:00 AM and would be about 541 spaces, and again at 9:00 PM and would be about 529 spaces. However, we understand that the proprietor of the night club has indicated that the night club would only be operational during the week on Thursday and Friday evenings and with a reduced capacity compared with the maximum capacity of 950 on a Saturday summer evening. On weekends, the peak parking demand would also occur around 9:00 PM on Saturday night and would be 502 spaces.

The portion of development north of Main Street is currently estimated to have about 553 parking spaces including street parking on Main Street. It is understood that additional below grade parking spaces can be provided below building #500 if needed when the design of building #500 is finalized.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Midwestern Consulting



Michael R. Cool, P.E.
Project Manager

Attach. (6)

Shared Parking Analysis - Novi Main Street Development - Buildings #400, #500, & #800

Building #	Medical Office GLA	General Office GLA	Retail + Restaurants GLA	Retail Only GLA	Restaurants Only GLA	Night Club Occupants
400	0	0	0	0	0	950
500	0	22,410	12,300	7,380	4,920	0
800	64,815	0	5,740	3,444	2,298	0
Totals	64,815	22,410	18,040	10,824	7,216	950

Totals with Captive Market Reduction Factor Applied to Retail & Restaurant

Weekday Times	Building 400 as NClub	Building 500	Building 800	Totals
6:00 AM	0	8	0	8
7:00 AM	0	59	57	116
8:00 AM	0	92	184	276
9:00 AM	5	122	322	449
10:00 AM	5	127	382	514
11:00 AM	5	146	391	541
12:00 PM	5	148	353	506
1:00 PM	5	126	315	446
2:00 PM	5	138	342	485
3:00 PM	5	133	376	514
4:00 PM	10	120	357	486
5:00 PM	19	120	302	440
6:00 PM	138	113	44	296
7:00 PM	257	95	44	396
8:00 PM	366	51	24	440
9:00 PM	475	37	17	529
10:00 PM	475	0	0	475
11:00 PM	475	0	0	475
12:00 AM	475	0	0	475
Highest	475	148	391	541

Weekend Time	Building 400 as NClub	Building 500	Building 800	Totals
6:00 AM	0	5	0	5
7:00 AM	0	50	44	95
8:00 AM	0	78	144	222
9:00 AM	5	90	249	344
10:00 AM	5	120	309	435
11:00 AM	5	131	315	451
12:00 PM	5	135	285	424
1:00 PM	5	129	261	394
2:00 PM	5	134	282	421
3:00 PM	5	131	309	445
4:00 PM	10	132	299	441
5:00 PM	19	109	247	374
6:00 PM	138	102	40	280
7:00 PM	257	63	30	349
8:00 PM	366	63	30	459
9:00 PM	475	18	9	502
10:00 PM	475	5	2	482
11:00 PM	475	0	0	475
12:00 AM	475	0	0	475
Highest	475	135	315	502

ITE Recommended Time of Day Percentages

Weekday Time	ITE 820 Retail	ITE 932 Restaurant	ITE 720 Medical Office	ITE 701 General Office	ULI Table 2-5 Night Club / Bar *
6:00 AM	0%	0%	0%	6%	0%
7:00 AM	9%	0%	15%	56%	0%
8:00 AM	16%	0%	49%	86%	0%
9:00 AM	62%	6%	84%	97%	1%
10:00 AM	64%	8%	100%	100%	1%
11:00 AM	91%	26%	100%	98%	1%
12:00 PM	87%	50%	88%	87%	1%
1:00 PM	84%	35%	79%	75%	1%
2:00 PM	100%	31%	86%	84%	1%
3:00 PM	95%	22%	96%	87%	1%
4:00 PM	85%	25%	91%	75%	2%
5:00 PM	91%	73%	72%	43%	4%
6:00 PM	96%	100%	0%	18%	29%
7:00 PM	95%	100%	0%	0%	54%
8:00 PM	0%	80%	0%	0%	77%
9:00 PM	0%	58%	0%	0%	100%
10:00 PM	0%	0%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

* employee and patron percentages combined, see following page

Weekend Time	ITE 820 Retail	ITE 932 Restaurant	Wkday * 80% Medical Office	Wkday * 90% General Office	ULI Table 2-5 Night Club / Bar *
6:00 AM	0%	0%	0%	5%	0%
7:00 AM	0%	0%	12%	50%	0%
8:00 AM	0%	0%	39%	77%	0%
9:00 AM	0%	4%	67%	87%	1%
10:00 AM	78%	6%	80%	90%	1%
11:00 AM	94%	17%	80%	88%	1%
12:00 PM	100%	36%	70%	78%	1%
1:00 PM	93%	46%	63%	68%	1%
2:00 PM	95%	41%	69%	76%	1%
3:00 PM	94%	34%	77%	78%	1%
4:00 PM	87%	55%	73%	68%	2%
5:00 PM	81%	67%	58%	39%	4%
6:00 PM	69%	100%	0%	16%	29%
7:00 PM	0%	100%	0%	0%	54%
8:00 PM	0%	100%	0%	0%	77%
9:00 PM	0%	29%	0%	0%	100%
10:00 PM	0%	8%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

* employee and patron percentages combined, see following page

Weekday Time	Employee Night Club / Bar	Patron Night Club / Bar	Combined Night Club / Bar
6:00 AM	0%	0%	0%
7:00 AM	0%	0%	0%
8:00 AM	0%	0%	0%
9:00 AM	5%	0%	0%
10:00 AM	5%	0%	0%
11:00 AM	5%	0%	0%
12:00 PM	5%	0%	0%
1:00 PM	10%	0%	1%
2:00 PM	10%	0%	1%
3:00 PM	10%	0%	1%
4:00 PM	20%	0%	2%
5:00 PM	45%	0%	3%
6:00 PM	70%	25%	28%
7:00 PM	100%	50%	54%
8:00 PM	100%	75%	77%
9:00 PM	100%	100%	100%
10:00 PM	100%	100%	100%
11:00 PM	100%	100%	100%
12:00 AM	100%	100%	100%

Employee to Patron Ratio
1.25
Employees
15.25
Patrons

Weekend Time	Employee Night Club / Bar	Patron Night Club / Bar	Combined Night Club / Bar
6:00 AM	0%	0%	0%
7:00 AM	0%	0%	0%
8:00 AM	0%	0%	0%
9:00 AM	5%	0%	0%
10:00 AM	5%	0%	0%
11:00 AM	5%	0%	0%
12:00 PM	5%	0%	0%
1:00 PM	10%	0%	1%
2:00 PM	10%	0%	1%
3:00 PM	10%	0%	1%
4:00 PM	20%	0%	2%
5:00 PM	45%	0%	4%
6:00 PM	70%	25%	29%
7:00 PM	100%	50%	54%
8:00 PM	100%	75%	77%
9:00 PM	100%	100%	100%
10:00 PM	100%	100%	100%
11:00 PM	100%	100%	100%
12:00 AM	100%	100%	100%

Employee to Patron Ratio
1.5
Employees
17.5
Patrons

Building #400 (as Night Club)

Land Use	GSF	G/A	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	950	950	475

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	5	5	5
10:00 AM	0	0	0	0	5	5	5
11:00 AM	0	0	0	0	5	5	5
12:00 PM	0	0	0	0	5	5	5
1:00 PM	0	0	0	0	5	5	5
2:00 PM	0	0	0	0	5	5	5
3:00 PM	0	0	0	0	5	5	5
4:00 PM	0	0	0	0	10	10	10
5:00 PM	0	0	0	0	19	19	19
6:00 PM	0	0	0	0	138	138	138
7:00 PM	0	0	0	0	257	257	257
8:00 PM	0	0	0	0	366	366	366
9:00 PM	0	0	0	0	475	475	475
10:00 PM	0	0	0	0	475	475	475
11:00 PM	0	0	0	0	475	475	475
12:00 AM	0	0	0	0	475	475	475

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	5	5	5
10:00 AM	0	0	0	0	5	5	5
11:00 AM	0	0	0	0	5	5	5
12:00 PM	0	0	0	0	5	5	5
1:00 PM	0	0	0	0	5	5	5
2:00 PM	0	0	0	0	5	5	5
3:00 PM	0	0	0	0	5	5	5
4:00 PM	0	0	0	0	10	10	10
5:00 PM	0	0	0	0	19	19	19
6:00 PM	0	0	0	0	138	138	138
7:00 PM	0	0	0	0	257	257	257
8:00 PM	0	0	0	0	366	366	366
9:00 PM	0	0	0	0	475	475	475
10:00 PM	0	0	0	0	475	475	475
11:00 PM	0	0	0	0	475	475	475
12:00 AM	0	0	0	0	475	475	475

Building #500

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	27,000	22,410	101
Retail Plus Restaurants	15,000	12,300	
Retail Space	9,000	7,350	37
Restaurant Space	6,000	4,950	70
Bar/Nightclub	0	0	0

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	6	0	6	6
7:00 AM	3	0	0	56	0	60	59
8:00 AM	6	0	0	87	0	93	92
9:00 AM	23	4	0	98	0	125	122
10:00 AM	24	6	0	101	0	130	127
11:00 AM	34	18	0	99	0	151	146
12:00 PM	32	35	0	88	0	155	148
1:00 PM	31	25	0	76	0	131	126
2:00 PM	37	22	0	85	0	143	138
3:00 PM	35	15	0	88	0	138	133
4:00 PM	31	18	0	78	0	125	120
5:00 PM	34	51	0	43	0	128	120
6:00 PM	35	70	0	18	0	124	113
7:00 PM	35	70	0	0	0	105	95
8:00 PM	0	58	0	0	0	58	51
9:00 PM	0	41	0	0	0	41	37
10:00 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	5	0	5	5
7:00 AM	0	0	0	50	0	50	50
8:00 AM	0	0	0	78	0	78	78
9:00 AM	0	3	0	88	0	91	90
10:00 AM	29	4	0	91	0	124	120
11:00 AM	35	12	0	89	0	135	131
12:00 PM	37	25	0	79	0	141	135
1:00 PM	34	32	0	68	0	135	129
2:00 PM	35	29	0	77	0	141	134
3:00 PM	35	24	0	73	0	137	131
4:00 PM	32	39	0	69	0	139	132
5:00 PM	30	47	0	39	0	116	109
6:00 PM	25	70	0	16	0	112	102
7:00 PM	0	70	0	0	0	70	63
8:00 PM	0	70	0	0	0	70	63
9:00 PM	0	20	0	0	0	20	18
10:00 PM	0	6	0	0	0	6	5
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0

Building #800

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	74,500	24,815	359
General Office	0	0	0
Retail Plus Restaurants	7,000	5,740	
Retail Space	4,200	3,444	17
Restaurant Space	2,800	2,296	33
Bar/Nightclub	0	0	0

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0
7:00 AM	2	0	55	0	0	57	57
8:00 AM	3	0	181	0	0	184	184
9:00 AM	11	2	310	0	0	323	322
10:00 AM	11	3	389	0	0	383	382
11:00 AM	18	8	359	0	0	394	391
12:00 PM	15	16	325	0	0	357	353
1:00 PM	14	11	292	0	0	318	315
2:00 PM	17	10	318	0	0	345	342
3:00 PM	16	7	355	0	0	378	376
4:00 PM	15	8	336	0	0	359	357
5:00 PM	16	24	286	0	0	306	302
6:00 PM	17	33	0	0	0	49	44
7:00 PM	16	33	0	0	0	49	44
8:00 PM	0	26	0	0	0	26	24
9:00 PM	0	19	0	0	0	19	17
10:00 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0
7:00 AM	0	0	44	0	0	44	44
8:00 AM	0	0	144	0	0	144	144
9:00 AM	0	1	248	0	0	249	249
10:00 AM	13	2	296	0	0	311	309
11:00 AM	16	6	296	0	0	317	315
12:00 PM	17	12	259	0	0	288	285
1:00 PM	16	15	233	0	0	264	261
2:00 PM	16	13	256	0	0	285	282
3:00 PM	16	11	284	0	0	312	309
4:00 PM	15	18	270	0	0	303	299
5:00 PM	14	22	214	0	0	250	247
6:00 PM	12	33	0	0	0	45	40
7:00 PM	0	33	0	0	0	33	30
8:00 PM	0	33	0	0	0	33	30
9:00 PM	0	10	0	0	0	10	9
10:00 PM	0	3	0	0	0	3	2
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0



MIDWESTERN CONSULTING

Civil, Environmental and Transportation
Engineers, Planners, Surveyors,
Landscape Architects

May 28, 2008

Mr. Dave Nona
Triangle Mainstreet LLC
30403 W. Thirteen Mile Road
Farmington Hills, MI 48334

RE: Novi Main Street Development
Shared Parking Analysis
Proposed Buildings #800, #500, & #400

Dear Mr. Nona:

As requested we have reviewed the changes to the proposed phasing and parking availability for the Novi Main Street development. The revised parking analysis will be based upon the following assumptions:

- This updated parking analysis shall be based upon the methodology used for the shared parking analysis performed previously by Reid, Cool & Michalski, Inc. for the Novi Main Street Development
- This analysis will focus only on the parking for the buildings on the north side of Main Street, buildings #800, #500, and #400.
- The parking deck has been removed and all parking shall be located in surface lots, adjacent street parking, or in the underground parking lot below building #500 (if needed).
- The estimated number of available surface parking spaces for this shared parking analysis will be 554 spaces. Additional below grade parking spaces can be made available below building #500.
- The land use per building is listed below:
 - Building #400
 - 14,260 GSF of Night Club (Maximum Estimated Occupancy of 950)
 - Building #500
 - 27,000 GSF of General Office
 - 15,000 GSF, 60% Retail and 40% Restaurant Space
 - Building #800
 - 70,000 GSF of Medical Office
 - 16,880 GSF, 60% Retail and 40% Restaurant Space
- GSF to GLA calculation factors
 - Medical Office - 0.87
 - General Office - 0.83
 - Retail & Restaurant - 0.82



The Institute of Transportation Engineer's (ITE) Parking Generation Manual, 3rd Edition provides parking characteristics for the various land uses contained in this portion of the Novi Main Street Development. The Urban Land Institute's Shared Parking, 2nd Edition, provides additional information regarding parking characteristics and recommended methodologies for performing a shared parking analysis.

As the ITE Parking Generation Manual details, some land uses peak during the day while others will peak in the evening or on the weekends. Hence, two or more land uses that share parking can provide a smaller but adequate amount of parking spaces compared to the amount of parking required by ordinance if each individual land use is added together.

The parking rates are based upon the gross leasable area (GLA) rather than the gross square footages (GSF) of the various land uses. These sizes are shown in Table 1 as well as the City of Novi parking requirements per land use.

It should be noted that the City of Novi parking requirements for a bar/night club appear to be based on occupancy at the rate of 1 car space per 2 people. It is our opinion that this requirement is too conservative. The Urban Land Institute's Shared Parking 2nd Edition publication recommends the base parking ratio of a nightclub to be 17.5 spaces per 1000 GLA for patrons and 1.5 spaces per 1000 GLA for employees, or 223 spaces (19.0 x 11,693 GLA / 1000). Furthermore, other communities such as the City of Royal Oak require 1 parking space per 3 people of occupancy.

Table 1 – Land Use Summary and Ordinance Requirements

Land Use	Novi Ordinance Requirements	Factor	Size (GLA)	Parking Required
Medical Office	5.7 spaces per 1,000 GLA	0.0057	61,218	349
General Office	4.5 spaces per 1,000 GLA	0.0045	22,410	101
General Retail	5.0 spaces per 1,000 GLA	0.0050	15,685	78
Restaurants	14.3 spaces per 1,000 GLA	0.0143	10,455	150
Bar / Nightclub	1 space per 2 occupants	0.5000	950	475

Parking Required without Sharing 1,153



For the shared parking analysis, each land use is factored by a time of day percentage based upon the parking data contained in the ITE Parking Generation Manual, 3rd Edition. Tables 2 and 3 show the time of day percentages for a typical weekday and a typical weekend day.

Table 2 – ITE Weekday Parking Characteristics

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar
6:00 AM	0%	0%	0%	6%	0%
7:00 AM	9%	0%	15%	56%	0%
8:00 AM	16%	0%	49%	86%	0%
9:00 AM	82%	8%	84%	97%	1%
10:00 AM	84%	8%	100%	100%	1%
11:00 AM	91%	28%	100%	98%	1%
12:00 PM	87%	50%	88%	87%	1%
1:00 PM	84%	35%	79%	75%	1%
2:00 PM	100%	31%	86%	84%	1%
3:00 PM	95%	22%	96%	87%	1%
4:00 PM	85%	25%	91%	75%	2%
5:00 PM	91%	73%	72%	43%	4%
6:00 PM	96%	100%	0%	18%	29%
7:00 PM	95%	100%	0%	0%	54%
8:00 PM	0%	80%	0%	0%	77%
9:00 PM	0%	58%	0%	0%	100%
10:00 PM	0%	0%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

Table 3 – ITE Weekend Parking Characteristics

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar
6:00 AM	0%	0%	0%	5%	0%
7:00 AM	0%	0%	12%	50%	0%
8:00 AM	0%	0%	39%	77%	0%
9:00 AM	0%	4%	67%	87%	1%
10:00 AM	78%	6%	80%	98%	1%
11:00 AM	94%	17%	80%	88%	1%
12:00 PM	100%	36%	70%	78%	1%
1:00 PM	93%	46%	63%	68%	1%
2:00 PM	95%	41%	68%	76%	1%
3:00 PM	84%	34%	77%	78%	1%
4:00 PM	87%	55%	73%	68%	2%
5:00 PM	81%	67%	58%	39%	4%
6:00 PM	69%	100%	0%	16%	29%
7:00 PM	0%	100%	0%	0%	54%
8:00 PM	0%	100%	0%	0%	77%
9:00 PM	0%	29%	0%	0%	100%
10:00 PM	0%	8%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

The methodology of this shared parking analysis, utilized by Reid, Cool & Michalski, Inc. for the original traffic study for this development, begins by applying the parking required by the Novi Ordinances per land use to the time of day tables for both a typical weekday and a weekend. The parking per land use is then totaled for each hour of the day. A factor of 0.90 is applied to the spaces required for retail and restaurant space to accommodate for the captive market effect or linked trip factor. The resulting highest hourly total is the parking that would be required for the shared parking methodology.

The attached spreadsheets include a summary sheet with the shared parking requirements and a sheet for each of the three buildings. Building #400 parking requirements are based upon the 1 parking space per 2 persons of occupancy for an estimated maximum of 950 occupants.



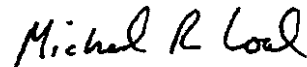
Per the results from our calculations, the minimum parking required during the week would occur around 11:00 AM and would be about 552 spaces, and again at 9:00 PM and would be about 553 spaces. However, we understand that the proprietor of the night club has indicated that the night club would only be operational during the week on Thursday and Friday evenings and with a reduced capacity compared with the maximum capacity of 950 on a Saturday summer evening. On weekends, the minimum parking required would also occur around 9:00 PM on Saturday night and would be 514 spaces.

The portion of development north of Main Street is currently estimated to have about 554 parking spaces including street parking on Main Street. It is understood that additional below grade parking spaces can be provided below building #500 if needed when the design of building #500 is finalized.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Midwestern Consulting



Michael R. Cool, P.E.
Project Manager

Attach. (6)



Shared Parking Analysis - Novi Main Street Development - Buildings #400, #500, & #800

Building #	Medical Office GLA	General Office GLA	Retail + Restaurants GLA	Retail Only GLA	Restaurants Only GLA	Night Club Occupants
400	0	0	0	0	0	950
500	0	22,410	12,300	7,380	4,920	0
800	61,218	0	13,842	8,305	5,537	0
Totals	61,218	22,410	26,142	15,685	10,457	950

Totals with Captive Market Reduction Factor Applied to Retail & Restaurant

Weekday Time	Building 400 as NClub	Building 500	Building 800	Totals
6:00 AM	0	6	0	6
7:00 AM	0	59	56	115
8:00 AM	0	92	177	269
9:00 AM	5	122	321	448
10:00 AM	5	127	379	510
11:00 AM	5	146	401	552
12:00 PM	5	148	375	528
1:00 PM	5	126	332	462
2:00 PM	5	138	360	502
3:00 PM	5	133	386	524
4:00 PM	10	120	367	496
5:00 PM	19	120	337	476
6:00 PM	138	113	107	358
7:00 PM	257	95	107	458
8:00 PM	366	51	57	473
9:00 PM	475	37	41	553
10:00 PM	475	0	0	475
11:00 PM	475	0	0	475
12:00 AM	475	0	0	475
Highest	475	148	401	553

Weekend Time	Building 400 as NClub	Building 500	Building 800	Totals
6:00 AM	0	5	0	5
7:00 AM	0	50	42	92
8:00 AM	0	78	136	214
9:00 AM	5	90	237	332
10:00 AM	5	120	313	438
11:00 AM	5	131	326	462
12:00 PM	5	135	307	447
1:00 PM	5	129	287	421
2:00 PM	5	134	305	444
3:00 PM	5	131	328	464
4:00 PM	10	132	326	468
5:00 PM	19	109	280	408
6:00 PM	138	102	97	337
7:00 PM	257	63	71	391
8:00 PM	366	63	71	500
9:00 PM	475	18	21	514
10:00 PM	475	5	6	486
11:00 PM	475	0	0	475
12:00 AM	475	0	0	475
Highest	475	135	328	514

Building #400 (as Night Club)

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	0	0	0
Retail Plus Restaurants	0	0	
Retail Space	0	0	0
Restaurant Space	0	0	0
Bar/Nightclub	600	600	300

Weekday		Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	3	3	3
10:00 AM	0	0	0	0	0	3	3	3
11:00 AM	0	0	0	0	0	3	3	3
12:00 PM	0	0	0	0	0	3	3	3
1:00 PM	0	0	0	0	0	3	3	3
2:00 PM	0	0	0	0	0	3	3	3
3:00 PM	0	0	0	0	0	3	3	3
4:00 PM	0	0	0	0	0	6	6	6
5:00 PM	0	0	0	0	0	12	12	12
6:00 PM	0	0	0	0	0	87	87	87
7:00 PM	0	0	0	0	0	162	162	162
8:00 PM	0	0	0	0	0	231	231	231
9:00 PM	0	0	0	0	0	300	300	300
10:00 PM	0	0	0	0	0	300	300	300
11:00 PM	0	0	0	0	0	300	300	300
12:00 AM	0	0	0	0	0	300	300	300

Weekend		Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	3	3	3
10:00 AM	0	0	0	0	0	3	3	3
11:00 AM	0	0	0	0	0	3	3	3
12:00 PM	0	0	0	0	0	3	3	3
1:00 PM	0	0	0	0	0	3	3	3
2:00 PM	0	0	0	0	0	3	3	3
3:00 PM	0	0	0	0	0	3	3	3
4:00 PM	0	0	0	0	0	6	6	6
5:00 PM	0	0	0	0	0	12	12	12
6:00 PM	0	0	0	0	0	87	87	87
7:00 PM	0	0	0	0	0	162	162	162
8:00 PM	0	0	0	0	0	231	231	231
9:00 PM	0	0	0	0	0	300	300	300
10:00 PM	0	0	0	0	0	300	300	300
11:00 PM	0	0	0	0	0	300	300	300
12:00 AM	0	0	0	0	0	300	300	300

Building #500

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	0	0	0
General Office	27,000	22,410	101
Retail Plus Restaurants	15,000	12,300	
Retail Space	9,000	7,380	37
Restaurant Space	6,000	4,920	70
Bar/Nightclub	0	0	0

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	6	0	6	6
7:00 AM	3	0	0	56	0	60	59
8:00 AM	6	0	0	87	0	93	92
9:00 AM	23	4	0	98	0	125	122
10:00 AM	24	6	0	101	0	130	127
11:00 AM	34	18	0	99	0	151	146
12:00 PM	32	35	0	88	0	155	148
1:00 PM	31	25	0	76	0	131	126
2:00 PM	37	22	0	85	0	143	138
3:00 PM	35	15	0	88	0	138	133
4:00 PM	31	18	0	76	0	125	120
5:00 PM	34	51	0	43	0	128	120
6:00 PM	35	70	0	18	0	124	113
7:00 PM	35	70	0	0	0	105	95
8:00 PM	0	56	0	0	0	56	51
9:00 PM	0	41	0	0	0	41	37
10:00 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	5	0	5	5
7:00 AM	0	0	0	50	0	50	50
8:00 AM	0	0	0	78	0	78	78
9:00 AM	0	3	0	88	0	91	90
10:00 AM	29	4	0	91	0	124	120
11:00 AM	35	12	0	89	0	135	131
12:00 PM	37	25	0	79	0	141	135
1:00 PM	34	32	0	69	0	135	129
2:00 PM	35	29	0	77	0	141	134
3:00 PM	35	24	0	79	0	137	131
4:00 PM	32	39	0	69	0	139	132
5:00 PM	30	47	0	39	0	118	109
6:00 PM	25	70	0	16	0	112	102
7:00 PM	0	70	0	0	0	70	63
8:00 PM	0	70	0	0	0	70	63
9:00 PM	0	20	0	0	0	20	18
10:00 PM	0	6	0	0	0	6	5
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0

Building #800

Land Use	GSF	GLA	Max Parking by Ordinance
Medical Office	70,000	61,218	349
General Office	0	0	0
Retail Plus Restaurants	16,880	13,842	
Retail Space	10,128	8,305	42
Restaurant Space	6,752	5,537	79
Bar/Nightclub	0	0	0

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0
7:00 AM	4	0	52	0	0	56	56
8:00 AM	7	0	171	0	0	178	177
9:00 AM	26	5	293	0	0	324	321
10:00 AM	27	6	349	0	0	382	379
11:00 AM	38	21	349	0	0	407	401
12:00 PM	36	40	307	0	0	383	375
1:00 PM	35	28	276	0	0	338	332
2:00 PM	42	25	300	0	0	366	360
3:00 PM	39	17	335	0	0	392	386
4:00 PM	35	20	318	0	0	373	367
5:00 PM	38	58	251	0	0	347	337
6:00 PM	40	79	0	0	0	119	107
7:00 PM	39	79	0	0	0	119	107
8:00 PM	0	63	0	0	0	63	57
9:00 PM	0	46	0	0	0	46	41
10:00 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar	Total Spaces Required	Total with Captive Effect
6:00 AM	0	0	0	0	0	0	0
7:00 AM	0	0	42	0	0	42	42
8:00 AM	0	0	136	0	0	136	136
9:00 AM	0	3	234	0	0	237	237
10:00 AM	32	5	279	0	0	316	313
11:00 AM	39	13	279	0	0	332	326
12:00 PM	42	29	244	0	0	314	307
1:00 PM	39	36	220	0	0	295	287
2:00 PM	39	32	241	0	0	313	305
3:00 PM	39	27	269	0	0	335	328
4:00 PM	36	44	255	0	0	334	326
5:00 PM	34	53	202	0	0	289	280
6:00 PM	29	79	0	0	0	108	97
7:00 PM	0	79	0	0	0	79	71
8:00 PM	0	79	0	0	0	79	71
9:00 PM	0	23	0	0	0	23	21
10:00 PM	0	6	0	0	0	6	6
11:00 PM	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0

ITE Recommended Time of Day Percentages

Weekday Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar
6:00 AM	0%	0%	0%	6%	0%
7:00 AM	9%	0%	15%	56%	0%
8:00 AM	16%	0%	49%	86%	0%
9:00 AM	62%	6%	84%	97%	1%
10:00 AM	64%	8%	100%	100%	1%
11:00 AM	91%	26%	100%	98%	1%
12:00 PM	87%	50%	88%	87%	1%
1:00 PM	84%	35%	79%	75%	1%
2:00 PM	100%	31%	86%	84%	1%
3:00 PM	95%	22%	96%	87%	1%
4:00 PM	85%	25%	91%	75%	2%
5:00 PM	91%	73%	72%	43%	4%
6:00 PM	96%	100%	0%	18%	29%
7:00 PM	95%	100%	0%	0%	54%
8:00 PM	0%	80%	0%	0%	77%
9:00 PM	0%	58%	0%	0%	100%
10:00 PM	0%	0%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

Weekend Time	Retail	Restaurant	Medical Office	General Office	Night Club / Bar
6:00 AM	0%	0%	0%	5%	0%
7:00 AM	0%	0%	12%	50%	0%
8:00 AM	0%	0%	39%	77%	0%
9:00 AM	0%	4%	67%	87%	1%
10:00 AM	78%	6%	80%	90%	1%
11:00 AM	94%	17%	80%	88%	1%
12:00 PM	100%	36%	70%	78%	1%
1:00 PM	93%	46%	63%	68%	1%
2:00 PM	95%	41%	69%	76%	1%
3:00 PM	94%	34%	77%	78%	1%
4:00 PM	87%	55%	73%	68%	2%
5:00 PM	81%	67%	58%	39%	4%
6:00 PM	69%	100%	0%	16%	29%
7:00 PM	0%	100%	0%	0%	54%
8:00 PM	0%	100%	0%	0%	77%
9:00 PM	0%	29%	0%	0%	100%
10:00 PM	0%	8%	0%	0%	100%
11:00 PM	0%	0%	0%	0%	100%
12:00 AM	0%	0%	0%	0%	100%

Weekday Time	Employee Night Club / Bar	Patron Night Club / Bar	Combined Night Club / Bar
6:00 AM	0%	0%	0%
7:00 AM	0%	0%	0%
8:00 AM	0%	0%	0%
9:00 AM	5%	0%	0%
10:00 AM	5%	0%	0%
11:00 AM	5%	0%	0%
12:00 PM	5%	0%	0%
1:00 PM	10%	0%	1%
2:00 PM	10%	0%	1%
3:00 PM	10%	0%	1%
4:00 PM	20%	0%	2%
5:00 PM	45%	0%	3%
6:00 PM	70%	25%	28%
7:00 PM	100%	50%	54%
8:00 PM	100%	75%	77%
9:00 PM	100%	100%	100%
10:00 PM	100%	100%	100%
11:00 PM	100%	100%	100%
12:00 AM	100%	100%	100%

Employee to Patron Ratio
1.25
Employees
15.25
Patrons

Weekend Time	Employee Night Club / Bar	Patron Night Club / Bar	Combined Night Club / Bar
6:00 AM	0%	0%	0%
7:00 AM	0%	0%	0%
8:00 AM	0%	0%	0%
9:00 AM	5%	0%	0%
10:00 AM	5%	0%	0%
11:00 AM	5%	0%	0%
12:00 PM	5%	0%	0%
1:00 PM	10%	0%	1%
2:00 PM	10%	0%	1%
3:00 PM	10%	0%	1%
4:00 PM	20%	0%	2%
5:00 PM	45%	0%	4%
6:00 PM	70%	25%	29%
7:00 PM	100%	50%	54%
8:00 PM	100%	75%	77%
9:00 PM	100%	100%	100%
10:00 PM	100%	100%	100%
11:00 PM	100%	100%	100%
12:00 AM	100%	100%	100%

Employee to Patron Ratio
1.5
Employees
17.5
Patrons

APPLICANT RESPONSE LETTER(S)

July 10, 2008

Ms. Kristen Kapelanski
City Planner
City of Novi
45175 W. Ten Mile Road
Novi, MI 48375



**RE: Response Letter – Novi Main Street
Phase I, SP# 06-38C**

Ms. Kapelanski:

As requested, we are providing a response letter to your Plan review Center report dated July 8, 2008.

PLANNING REVIEW RESPONSE

Parking on Site

1. At this time, the applicant is asked to indicate that measures will be taken to insure that adequate parking will be provided in future phases or building size will be reduced so that adequate parking is available for all phases.

Response: Based on the extensive parking analyses performed on the site it is our opinion that we meet the parking requirements for all phases of proposed development on the site. As with all phased projects that are implemented over time, we will return to the Planning Commission with each phase and indicate that the parking and building sizes are adequate and that as each phase is built the parking supports it. Triangle Development does reserve the right to include the 75,000sf of residential (51 units) removed from the revised Phase One plan in future phases with the understanding that all parking requirements shall be met in order to gain required approvals.

235 East Main Street
Suite 105
Northville, MI 48167
TEL 248-596-0920
FAX 248-596-0930

ENGINEERING REVIEW RESPONSE

No response necessary

151 South Rose Street
Suite 920
Kalamazoo, MI 49007
TEL 269-382-4443
FAX 269-382-4540

OHM REVIEW RESPONSE

Review Letter One

Response: We do not believe a response to this letter is necessary as the plans were discussed with OHM and the Planning Department and revised to accommodate. The second letter is considered current. Please see attached Midwestern Consulting Response Letter Dated July 2, 2008

30 East Mulberry Street
Suite A
Lebanon, OH 45036
TEL 513-834-2345
FAX 513-834-2809

Review Letter Two

Response: Please see attached Midwestern Consulting Response Letter Dated July 8, 2008

10 West Streetsboro Street
Suite 204
Hudson, OH 44236
TEL 330-528-3342
FAX 330-342-5699

FIRE DEPARTMENT REVIEW RESPONSE

No response necessary

LANDSCAPE REVIEW RESPONSE

Clear Zones (Sec. 2513)

1. Please show all vehicular clear zones at all intersections and parking lot entry points, measured from the right-of-ways and curb lines on each side of the

road/access. No plantings or built elements over 2' in height may be located within these zones. The Applicant must demonstrate that all clear vision zones have been safely maintained. See Section 2513 – Corner Clearance of the Ordinance for details.

Response: Clear vision zones shall be added to all the appropriate locations.

Regards,



A handwritten signature in black ink that reads "Courtney Piotrowski Miller". The signature is written in a cursive, flowing style.

Courtney Piotrowski Miller, RLA, ASLA
Principal Landscape Architect

235 East Main Street
Suite 105
Northville, MI 48167
TEL 248-596-0020
FAX 248-596-0930

151 South Rose Street
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Landscape Architects

July 8, 2008

Mr. Dave Nona
Triangle Mainstreet LLC
30403 W. Thirteen Mile Road
Farmington Hills, MI 48334

RE: Novi Main Street Development
Response to OHM review of Shared Parking Addendum

Dear Mr. Nona:

The City of Novi's traffic consultant, Mr. Stephen Dearing, P.E. of OHM, has raised further concerns regarding our June 23rd shared parking analysis and our July 2nd addendum to that analysis which includes all of the buildings in the Novi Main Street development. The points of discussion and our responses are below:

1. 15 of the 24 parking spaces located along Main Street between Market Street and 6th Gate, which have been included in the parking count for the Novi Main Street Development parking analysis, should be excluded from the analysis since vehicles commonly park due to the existing portion of the downtown development.

As stated in our July 2nd addendum, the client has indicated that the removal of the 15 parking spaces from the total inventory allotted to the Novi Main Street Development is not called for as these 15 parking spaces are located alongside the frontage of the property that they own.

The decision to count or discount the 15 contested parking spaces in any future analysis should be an issue resolved by the planning commission. Even after discounting the 15 parking spaces, the shared parking analysis indicates that there would be a shortage of only 3 parking spaces when buildings #800, #400, and #500 are fully operational. Since building #500 has not been fully planned yet, the shortage of 3 spaces can be made up when this building is designed.

2. Mr. Stephen Dearing, P.E. of OHM has put together a quick parking analysis table to illustrate a shortage of 61 parking spaces due to the overflow parking of the residential portion of the site.

There are two significant problems with the short analysis provided by OHM. The first is that the analysis shown in the OHM response letter does not take into account the discount factor of 0.9 that was applied to the retail and restaurant portions of the site in buildings #900, #1000, and #1100 to represent the captive market effect or linked trip factor. This factor was used in the Reid, Cool & Michalski, Inc. original parking study, the June 23rd parking study update, and the subsequent July 2nd addendum. This factor



was also used in a parking study that was done for the existing buildings in the downtown development area.

The second problem with the analysis provided by OHM is that if a residential space is considered reserved it is always considered fully occupied no matter the time of day.

The table in the OHM response letter applies the weekday 7:00 PM - 97% time of day factor to all 525 parking spaces needed by the residential or a demand of 509 spaces. 509 spaces minus the 414 reserved spaces equal 95 which is the overflow demand. This implies however that visitors and residents who do not own a reserved parking space would be allowed to park in the reserved spaces until such time as they are full.

If a space is reserved it needs to be counted as 100% occupied through out the day. Since only a portion of the spaces are reserved (78.86%), the 97% time of day factor should only be applied to the 21.14% of the total 525 parking spaces that would be needed for a stand alone residential development. Thus the 7:00 residential parking demand on site would be 414 reserved spaces plus 111 spaces ($21.14\% \times 525 \times 97\%$) for a total residential demand of 515 spaces, and not the 509 spaces indicated by OHM.

While the method employed by OHM illustrates the shared parking excess/shortfall for each hour of day, the parking demand for buildings #900, #1000, and #1100 and the resulting total parking demand is incorrectly calculated in the OHM letter.

Furthermore the calculations for residential demand within their response letter yields the same end result that was calculated for the original Reid, Cool & Michalski, Inc. parking analysis and the June 23rd parking analysis update. Based upon a review of those studies, OHM had requested that the 414 reserved residential parking spaces be removed from the shared parking analysis. This was done correctly in our July 2nd parking addendum. The difference is fairly insignificant at 6 spaces with our July 2nd parking addendum yielding the more conservative peak parking demand.

As stated previously in this letter and in detail in our July 2nd addendum, it is our opinion that the Novi Main Street development has planned for sufficient parking.

3. The site should be designed to accommodate for underground parking in building #500 at this time. Reference to underground parking should be removed from any analysis provided to the City if underground parking will be not be constructed.

The client has indicated that the final plan for building #500 is not ready at this time. Based upon the preliminary plans for building #500 used in the shared parking analysis (i.e. 27,000 GSF of office, 9,000 GSF of retail, and 6000 GSF of restaurant), the analysis indicates that there would be a shortage of only 3 spaces when buildings #800, #400, and #500 are operational.

This shortage can be made up by slightly reducing the size of building #500 (by less than 1,000 square feet). On this basis, underground parking would not be required. Underground parking will only be provided if it is needed to accommodate the final size and uses of the building

4. The parking estimates for medical office and general office were reduced by 10% and 20% in Table 3 without discussion.

These reductions are only applied to the weekend demand calculations. The ITE Parking Generation Manual does not give enough data to provide weekend time of day tables for office and medical office uses. There are statements in the description of each land use in the Manual that report limited observations of 10% less parking demand on Saturdays for general office buildings and between 18%-25% less parking demand for medical office relative to weekdays. Therefore we have made the assumption that the time of day tables for the weekend days would be factored by 90% for office and by 80% for medical office.

5. If the ratio of Retail to Restaurant use split changes, any subsequent parking analysis should take that ratio into account.

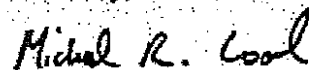
The ratio of 60%/40% is an estimate provided by the client. If that estimate changes, the parking analysis will reflect those changes as done for the latest submittals.

In summary, it is our opinion that our July 2nd 2008 addendum to our shared parking analysis adequately and accurately illustrates the shortage of 12 parking spaces at 7:00 PM on a weekday based on the maximum use of a 950 patron night club in building #400 on a weekday night

According to information provided by the client and supporting data within the ULI's Shared Parking publication, this is a shortage that is **not likely to occur ever** if the site is developed as currently planned. A re-evaluation of the night club use in the July 2nd addendum based upon actual anticipated weekday use and ULI data **clearly indicates a surplus of available parking**, even without accounting for the 15 contested parking spaces or any additional parking gained by an underground lot in building #500.

If you have any questions please do not hesitate to contact me.

Sincerely,



Michael R. Cool, P.E.
Midwestern Consulting

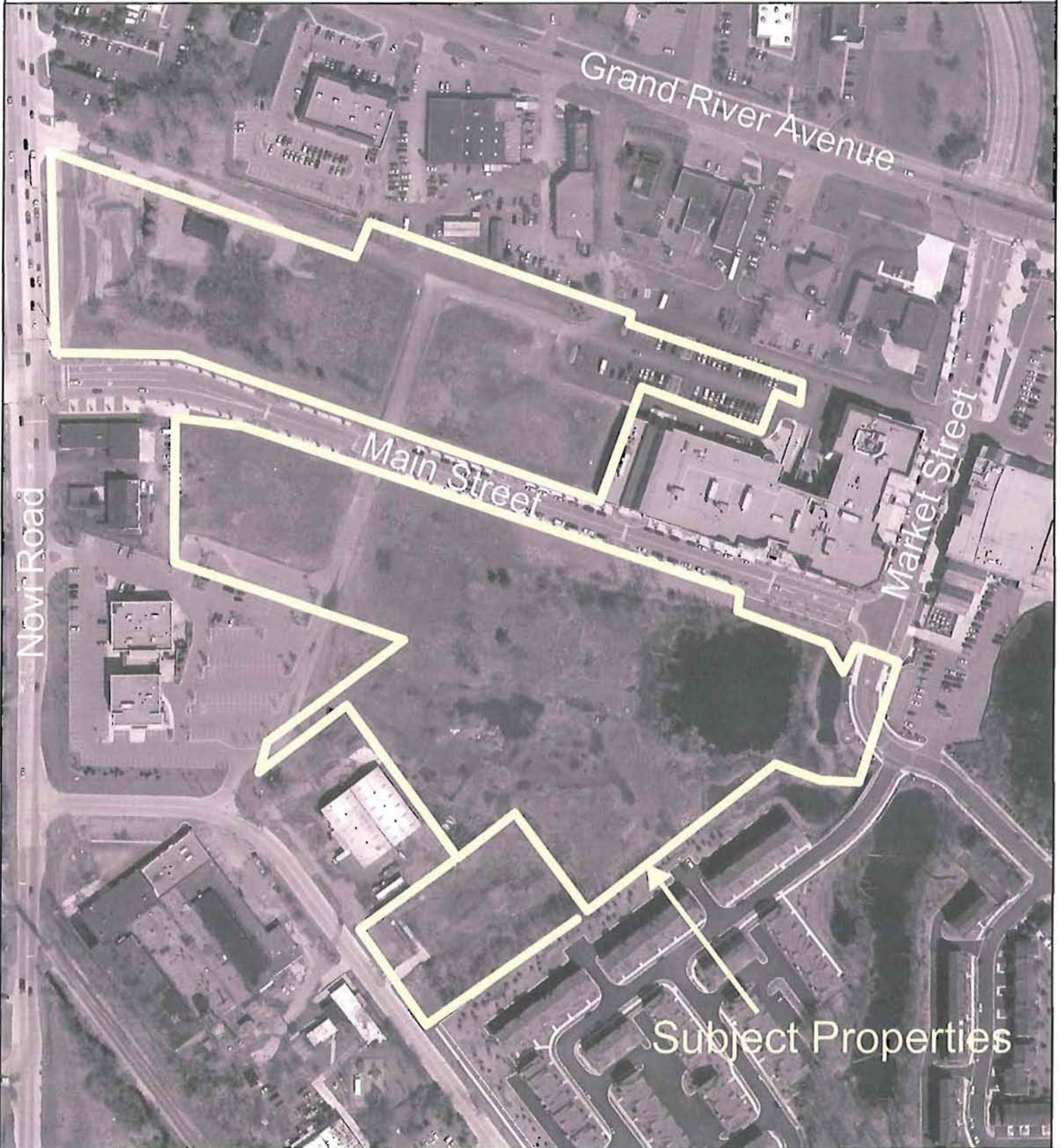
Cc. Mr. Stephen Dearing, P.E – OHM
Ms. Kristen Kapelanski – City of Novi



MAPS

Location/Air Photo
Zoning
Future Land Use
Natural Features

MainStreet Novi
Location



Subject Properties



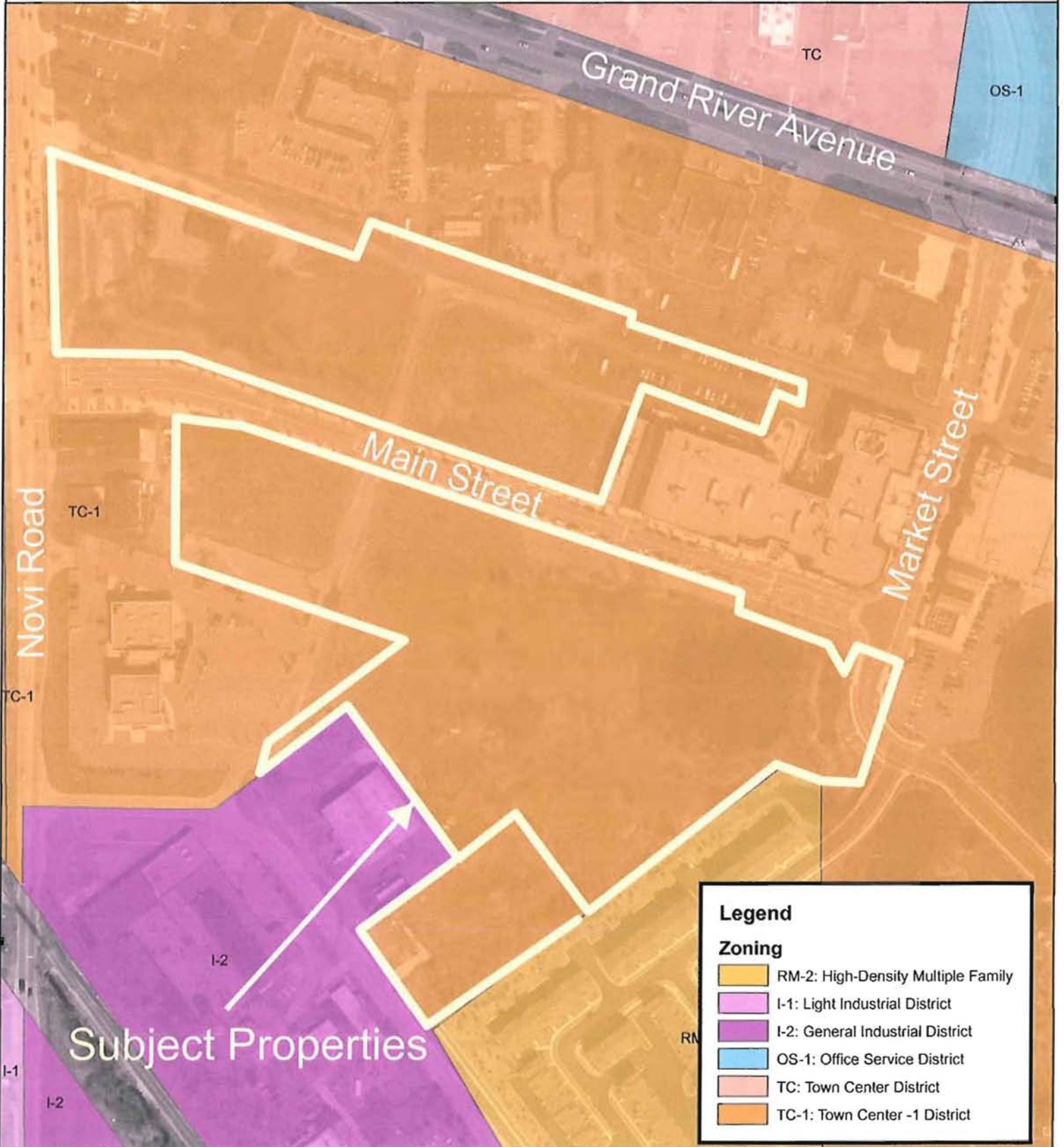
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PLAN REVIEW CENTER
NOVI CITY HALL/CIVIC CENTER
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NOVI, MI 48375-3024
(248) 347-3279
WWW.CI.NOVI.MI.US
MAP AUTHOR: KRISTEN KAPELANSKI



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MainStreet Novi

Zoning



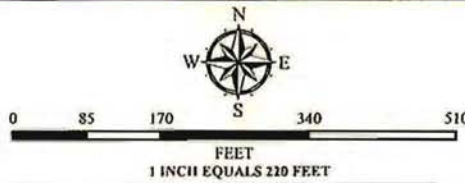
Legend

Zoning

- RM-2: High-Density Multiple Family
- I-1: Light Industrial District
- I-2: General Industrial District
- OS-1: Office Service District
- TC: Town Center District
- TC-1: Town Center -1 District



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 MAP AUTHOR: KRISTEN KAPELANSKI



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MainStreet Novi

Future Land Use



Subject Properties

Legend

- TC COMMERCIAL
- LIGHT INDUSTRIAL
- PUBLIC



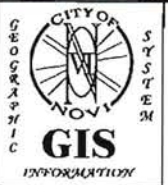
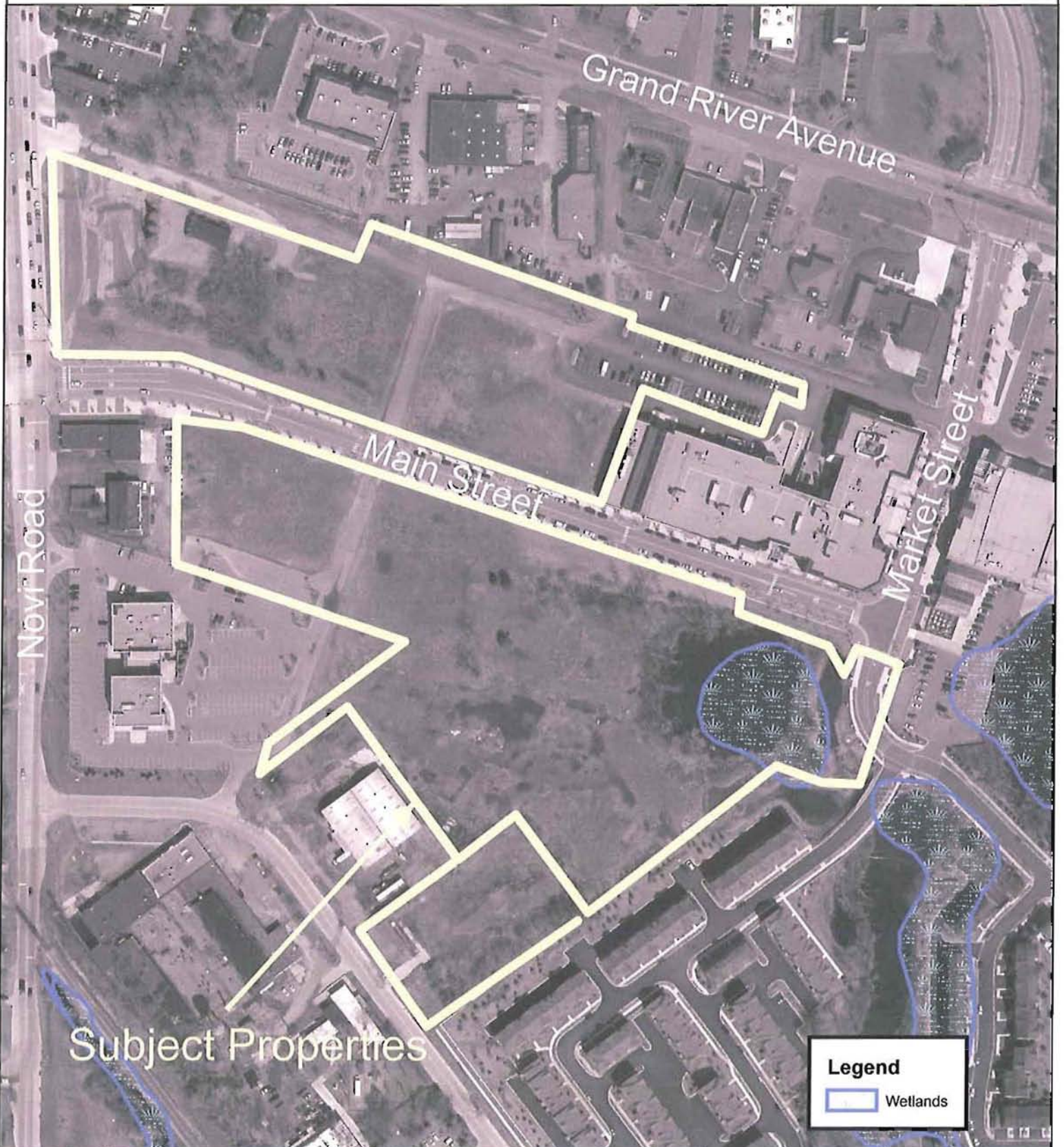
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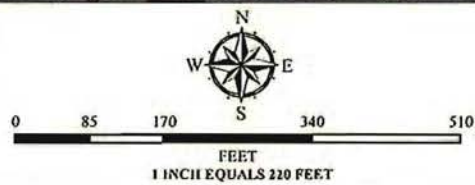
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MainStreet Novi

Wetlands



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REDUCED SITE PLAN



Summa Engineering & Associates, Inc.
 30005 Northcross Highway
 Suite 200A
 Farmington Hills, MI 48334
 Tel: 248-332-4800
 Fax: 248-332-4803

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OWNER:
 FRANCHISE
 MAINSTREET L.L.C.
 20403 TRISTEN WALK ROAD
 FARMINGTON HILLS, MI 48334
 248-332-9333

PROJECT:
 NOWI MAIN STREET
 MAIN STREET
 OAKLAND COUNTY

DESIGNED BY:
 D. J. JONES
 DATE: 10/20/12
 SCALE: 1" = 60'

PROJECT NO.:
 12-007

DATE:
 10/20/12

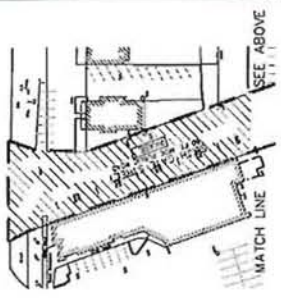
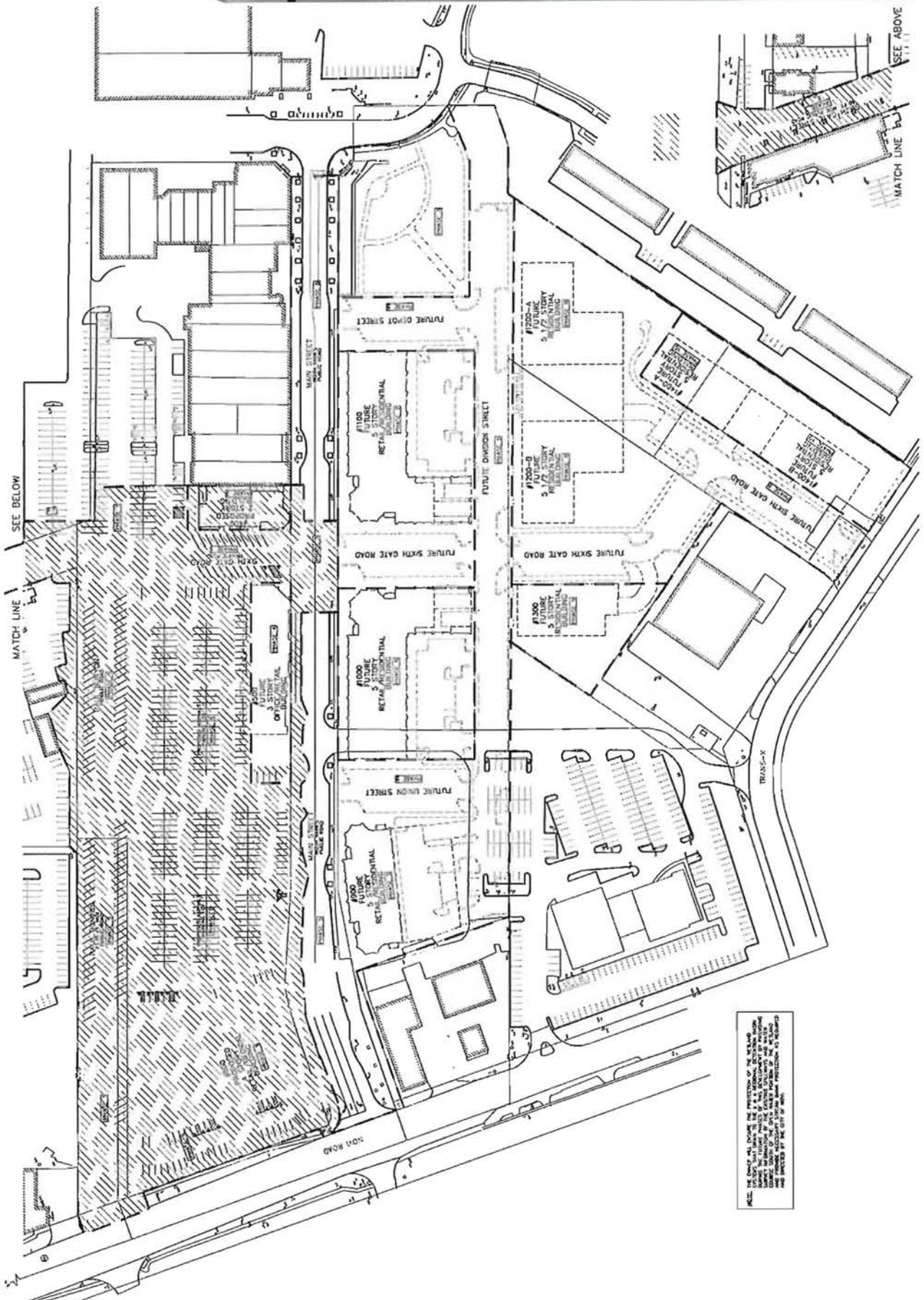
PROJECT NAME:
 NOWI MAIN STREET

PROJECT NO.:
 12-007

DATE:
 10/20/12

PROJECT NAME:
 NOWI MAIN STREET

PROJECT NO.:
 12-007



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G-1

Plans available for viewing at the
Community Development Department.