FINAL

ENVIRONMENTAL IMPACT REPORT

FOR THE

SACRED HEART SCHOOLS MASTER PLAN EIR

STATE CLEARINGHOUSE #2009112052

LEAD AGENCY:

THE TOWN OF ATHERTON
91 ASHFIELD ROAD
ATHERTON, CA 94027

ATTN: NEAL J. MARTIN, TOWN PLANNER

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

JUNE 2010

SACRED HEART SCHOOLS MASTER PLAN PROJECT

FINAL ENVIRONMENTAL IMPACT REPORT

PREPARED FOR:
Town of Atherton
Attn: Neal Martin
91 Ashfield Road
Atherton, CA 94027

APPLICANT:
Sacred Heart Schools
150 Valparaiso Avenue
Atherton, CA 94027

PREPARED BY:
Christopher A. Joseph & Associates
115 Sansome Street, Suite 1002
San Francisco, CA 94104

June 2010
SCH#2009112052

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I. INTRODUCTION

In accordance with Section 15088 of the State of California Environmental Quality act (CEQA) Guidelines, the Town of Atherton (Town), as the lead agency, has evaluated the comments received on the Draft Environmental Impact Report (DEIR) (State Clearinghouse No. 2009112052) for the Sacred Heart Schools Master Plan and has prepared responses to the comments received. The responses to the comments, which are included in this volume of the DEIR, together with the DEIR, comprise the Final EIR for use by the Town in their review of the e Sacred Heart Schools Master Plan.

The Draft EIR was distributed for a 45-day public review period by the Town on April 13th, 2010. The comment period on the Draft EIR ended on June 2nd, 2010. A Draft EIR Public Review Meeting was held on May 26th, 2010 at the Town of Atherton Planning Commission for the purpose of soliciting comments.

This Response to Comments document is organized into four sections:

- **Section I – Introduction**
- **Section II – List of Commentors:** Provides a list of the agencies, organizations, and individuals that commented on the Draft EIR.
- **Section III – Responses to Comments:** Includes a copy of all letters received and provides responses to comments included in those letters. These explain the Draft EIR analysis, support the Draft EIR conclusions, or provide information or corrections, as appropriate. For reading ease, this section is organized with the responses to each letter immediately following the letter.
- **Section IV – Revisions to the Draft EIR:** Includes an addendum listing refinements and clarifications, which have been incorporated into the text of the Draft EIR.

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II. LIST OF COMMENTERS

WRITTEN COMMENTS

The Draft EIR comment period extended from April 13th, 2010 to June 2nd, 2010. Written comments were received from the following agencies and private parties:

Table II-1
Comments Received on the Sacred Heart Schools Park Master Plan Draft EIR

Author Code	Date of Correspondence	Commenter
Public Agencies		
MP	May 28, 2010	City of Menlo Park
SCH	May 28, 2010	Governor's Office of Planning and Research, State Clearinghouse and Planning Unit
Private Parties		
SHS-Memo	April 26, 2010	Sacred Heart Schools
SHS-BT	May 25, 2010	Sacred Heart Schools, Board of Trustees
SHS-SD	May 25, 2010	Sacred Heart Schools, Sandy Dubinsky

ORAL COMMENTS

A Draft EIR Public Review Meeting was held on May 26th, 2010 at the Town of Atherton Planning Commission for the purpose of soliciting comments. No oral comments were received regarding the analysis in the Draft EIR.

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III. RESPONSES TO COMMENTS

A. INTRODUCTION

This section contains responses to all written comments received on the Draft EIR. The Lead Agency received a total of five comment letters on the Draft EIR during the 45-day public comment period. Each comment letter has been assigned an author code, and individual comments within the letter have been bracketed and numbered.

The Draft EIR was distributed for a 45-day public review period by the Town of Atherton on April 13th, 2010. The comment period on the Draft EIR ended on June 2nd, 2010. The Town provided the Draft EIR on its website and in hardcopy format at the following places:

Town of Atherton
91 Ashfield Road
Atherton, CA 94027

Town of Atherton Permit Center
83 Dinkelspiel (Station) Lane
Atherton, CA 94027

Atherton Library
2 Dinkelspiel (Station) Lane
Atherton, CA 94027

The Town used several methods to elicit comments on the Draft EIR including sending copies of the Draft EIR to the State Clearinghouse for distribution to State agencies and posting of a Notice of Availability for the Draft EIR at the San Mateo County Clerk's Office with information on where to view the Draft EIR and submit comments. Additionally, a Draft EIR Public Review Meeting was held on May 26th, 2010 at a Town of Atherton Planning Commission meeting for the purpose of soliciting comments.

B. COMMENTS AND RESPONSES

The comment letters, oral comments, and responses are provided on the following pages.

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06-02-10A08:58 RCVD

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

May 28, 2010

Neal Martin
City of Atherton
91 Ashfield Road
Atherton, CA 94027

Subject: Sacred Heart Schools Master Plan Project
SCH#: 2009112052

Dear Neal Martin:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on May 27, 2010, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

SCH-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Acting Director, State Clearinghouse

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STATE CLEARINGHOUSE (SCH)

Response to SCH-1

The comment letter acknowledges receipt and distribution of the Draft EIR and the Town's compliance with State Clearinghouse review requirements for the Project.

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Building
TEL 650.330.6704
FAX 650.327.5403

City Clerk
TEL 650.330.6620
FAX 650.328.7935

City Council
TEL 650.330.6630
FAX 650.328.7935

City Manager's Office
TEL 650.330.6610
FAX 650.328.7935

Community Services
TEL 650.330.2200
FAX 650.324.1721

Engineering
TEL 650.330.6740
FAX 650.327.5497

Environmental
TEL 650.330.6763
FAX 650.327.5497

Finance
TEL 650.330.6640
FAX 650.327.5391

Housing & Redevelopment
TEL 650.330.6706
FAX 650.327.1759

Library
TEL 650.330.2500
FAX 650.327.7030

Maintenance
TEL 650.330.6780
FAX 650.327.1953

Personnel
TEL 650.330.6670
FAX 650.327.5382

Planning
TEL 650.330.6702
FAX 650.327.1653

Police
TEL 650.330.6300
FAX 650.327.4314

Transportation
TEL 650.330.6770
FAX 650.327.5497

CITY OF MENLO PARK

701 LAUREL STREET, MENLO PARK, CA 94025-3483
www.menlopark.org

May 28, 2010

Neil Martin
Town Planner
Town of Atherton
91 Ashfield Road
Atherton, CA 94027

Dear Mr. Martin,

The City of Menlo Park would like to take this opportunity to provide comments on the Draft Environmental Impact Report (DEIR) for the Sacred Heart School Master Plan Project.

The City of Menlo Park supports improvements to the schools, but has a few comments related to the current information provided. Menlo Park would like to engage in an open dialogue regarding the Sacred Heart School Master Plan and move forward to resolve all concerns related to the project. The following items should be considered thoroughly as the project proceeds forward: MP-1

- The DEIR should clearly indicate whether the mitigation measures for Johnson Street and Valparaiso Avenue within Menlo Park are feasible. The mitigation measures should be offered to the City of Menlo Park for a decision on whether to implement. MP-2

- An encroachment permit will be required from the City prior to construction activities in the public right of way. Any proposed improvements within the City's right-of-way would need approval from the City of Menlo Park. MP-3

The City of Menlo Park would like continued cooperation to work on the issues described above as well as a response from the Town of Atherton.

Sincerely,

Chip Taylor
Transportation Manager

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CITY OF MENLO PARK (MP)

Response to MP-1

This introductory comment relates to support of schools and a request for dialogue on the Sacred Heart Schools Master Plan and future projects associated with it. The comment does not contain any comments relevant to the Draft EIR and no further response is required.

Response to MP-2

All mitigation measures listed in the Draft EIR are feasible measures. The Town of Atherton has requested a meeting with the City of Menlo Park to discuss the proposed mitigation measures located within Menlo Park boundaries, including their feasibility and desirability.

Response to MP-3

The Town of Atherton would apply for all permits required by the City of Menlo Park for implementation of mitigation measures. The comment does not contain any comments relevant to the Draft EIR and no further response is required.

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Sacred Heart Schools submits the following minor clarifications and technical revisions regarding the Project Description contained in the Sacred Heart Schools Master Plan Project Draft Environmental Impacts Report ("Draft EIR"). We respectfully request that the Town incorporate these minor clarifications into the Final EIR. SHS-Memo-1

1. Summary Revisions
    a. Pg II-3- executive summary; states 3 alternatives then lists 4. SHS-Memo-2
2. Project Description Revisions
    a. Figure III-8 view 10 states Sigall Hall, but the building should be referenced as the "Morey Building" SHS-Memo-3
    b. Pg III-11 identifies the relocation of Prep athletic fields as part of IS/MND. The EIR should be revised to clarify that the IS/MND did not cover the relocation of the Prep athletic fields. SHS-Memo-4
    c. Pg III-12 states 99,000 sq. ft added to SJSH. The Draft EIR correctly identifies the project components, however we note that the Draft EIR project description also included all new construction on campus not just SJSH. Accordingly, the 99,000 square foot reference overstates the amount of actual proposed building construction and should be replaced with 80,555 square feet. SHS-Memo-5
    d. Pg III-14 there is a typo "33 areas" should read "33 acres" SHS-Memo-6
    e. Pg III-17 We note that the Draft EIR contains several minor inaccuracies in the proposed building square footages when compared to the proposed Master Plan Update attached as Appendix A to the Draft EIR. Table III-1 indicates that the Demolished SF is 64,394 square feet. The total square footage for building demolition would be 92,234 not 64394. Additionally, the sq footage of Sigall- should read 21,000 in both columns; The Castle under demolished column should be 1,000; new construction (SF) should read 127, 055. SHS-Memo-7
    f. Pg III-18 Phase two includes restroom/concession stand- this was moved to Phase one SHS-Memo-8
    g. PG IV.G-5 Alejandra is mistakenly called Alexandra Avenue SHS-Memo-9
    h. Pg IV.G-31 and 32. The Draft EIR correctly notes that the number of new students associated with the proposed buildings would be 116 students. Nonetheless, it is important to clarify that SHS has agreed to cap the number of new students at 114 students. The 114 student increase is referenced correctly throughout the Draft EIR. SHS-Memo-10
    i. Table II-1, pg II-13- states 5 olives to be transplanted- only 3 are indicated. SHS-Memo-11
    j. Table IVG-8 pg IV G-32 the total of new students is incorrect it should read 114. [see comment revision above.] SHS-Memo-12
    k. APPENDIX
        i. Table C1.2- Nibbi Brothers should read Pfau Architecture SHS-Memo-13

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SACRED HEART SCHOOLS MEMO (SHS-MEMO)

Response to SHS-MEMO-1

This introductory comment requests that the Town incorporate minor clarifications into the Final EIR. The comment does not contain any comments relevant to the Draft EIR and no further response is required.

Response to SHS-MEMO-2

The comment notes that page II-3 incorrectly states that three alternatives to the Project were analyzed. Therefore, page II-3 is revised as follows:

~~Three~~ Four alternatives were analyzed that would feasibly attain most of the basic project objectives, but would avoid or substantially lessen some of the significant effects of the Project. These alternatives include the following:

Response to SHS-MEMO-3

Figure III-8 has been revised to as follows:

View 10: View of ~~Sigall Hall~~ Morey Building from Elena Avenue Parking Area.

Response to SHS-MEMO-4

The comment states that the January 2, 2008 Science and Student Life Building Project Initial Study/Mitigated Negative Declaration (IS/MND) included the relocation of the Preparatory School Athletic Field. The IS/MND included the removal of the existing softball field, not the Preparatory School Athletic Field. Therefore, page III-12 has been revised as follows:

An Initial Study/Mitigated Negative Declaration (IS/MND) was certified for the Science and Student Life Building Project on January 2, 2008. The IS/MND also analyzed the impacts of the demolition of the Morey Building; Quadrangle landscaping improvements; renovations to the Sigall Building and McGanney Sports Center; relocation of the ~~Preparatory School Athletic Field~~ existing softball field; and new and updated sewer, water, and other utility lines.

Response to SHS-MEMO-5

The comment is correct. Building construction would be 80,555 sf for the St. Joseph's campus.

Page III-12 is revised as follows:

Building Construction. The Project proposes the construction of an approximately 21,400 square-foot two-story Lower School and an approximately 30,850 square-foot two-story Middle School (including a one-story addition for administrative offices and Chapel) for the St. Joseph's campus. The St. Joseph's

campus would be relocated from its existing location along Emilie Avenue and moved closer to Park Lane and closer to the middle of the campus. A new approximately6,360 square-foot Library, 21,900 square-foot St. Joseph's Assembly Hall and Performing Arts classrooms, Graduation Court, and Entry Court would be constructed as part of this complex. These buildings would all be one story. Building square footage constructed on the St. Joseph's campus would total approximately ~~99,000~~ 80,555 square feet.

Response to SHS-MEMO-6

The comment points out a typographic error on page III-14, where 33 areas is states instead of 33 acres.

Page III-14 is revised as follows:

Stormwater retention devices, including the use of bioswales and underground retention tanks, would be installed throughout the campus. Impervious surfaces on the site currently total 33 ~~areas~~ acres or approximately 46 percent of the Project site.

Response to SHS-MEMO-7

The comment notes some inaccuracies in Table III-1 on page III-17. The comment notes that Demolished SF should be shown as a total of 92,234. However, although the square footage of Morey was listed in the table under Demolished SF, its demolition was covered in the 2008 IS/MND and was the square footage was not included in the calculations of demolition that would occur under the Project. Additional text has been added to the Footnote 2 to clarify. Additionally, Table III-1 does include other errors that are corrected below.

Page III-17, Table III-1 is revised as follows:

Table III-1
Sacred Heart Schools Campus
Existing and Proposed Square Footage

Building	*Existing (SF)*	*Demolished (SF)*	*New Construction (SF))*	*Proposed (SF)*
Main	68,008	—		68,008
Gym - McGanney	27,840	27,840	40,000[1]	40,000
Sigall	21,000	—		21,000
Morey	17,950	17,950[2]		—
Gate House	2,600	2,600	3,500[3]	3,500
The Castle	1,000	1,000		—
Maintenance	1,000	—		1,000

Table III-1
Sacred Heart Schools Campus
Existing and Proposed Square Footage

Barn–Grounds Shop	2,400	—		2,400
Montessori	7,480	—		7,480
Foley Center	5,840	5,840		—
St. Joseph's #400	4,225	4,225		—
St. Joseph's #300	7,796	7,796		—
St. Joseph's #100	~~1~~7,028	~~1~~7,028		—
St. Joseph's #200	7,955	7,955		—
Speiker Pavilion	31,465	—		31,465
Campbell Center	28,000	—		28,000
Aquatic Center	2,000	—		2,000
Field House	7,700	—		7,700
Science & Student Life	44,100	—		44,100
St. Joseph's Lower	—	—	21,424	21,424
St. Joseph's Middle	—	—	30,853	30,853
Library	—	—	6,363	6,363
St. Joseph's Lower Assembly Hall/Performing Arts	—	—	21,915	21,915
Concession/Restrooms	—	—	3,000	3,000
Total	**305,387**	**64,~~394~~ 284**	**99,215**	**340,208**

[a] *Footnote:*
[1] 12,610 square feet of new constructino.
[2] Morey Hall demolition previously analyzed in Science and Student Life Building IS/MND, January 2, 2008 and therefore the square footage is not considered as part of the demolition totals.
[3] 900 square feet of new construction.

Source: Sacred Heart Schools, 2010.

Response to SHS-MEMO-8

The comment states that the restroom and concession stand component was moved from Phase One to Phase Two.

Page III-18 is revised as follows:

The Project would be constructed in two phases. Phase One would occur from 2010 through 2012 and would include the St. Joseph's campus improvements, realignment of sports fields, roadway and entry improvements, parking facilities, the changing areas/restrooms/concession stand and storage, and landscaping and pedestrian improvements. The St. Joseph's campus improvements would be constructed in a single phase over approximately 15 to 18 months. Buildings 300 and 400 and Foley Center would be demolished at the start of the St. Joseph's phase of the Project. The 100 and 200 building will be

demolished once the new Lower School building is completed. Temporary classrooms will be used during the building phase.

Phase Two would occur from 2012 to 2014 and would include the construction of the McGanney Sports Center replacement (including a Practice Gym~~, the changing areas/restrooms/concession stand and storage,~~ and renovations to the maintenance shop area. Renovations to the maintenance shop area would be to create a new central delivery point and would include a new access roadway.

Response to SHS-MEMO-9

The comment points out a typographic error on page IV.G-5 where Alejandra Avenue is mistakenly called Alexandra Avenue.

Page IV.G-5 is revised as follows:

Emilie Avenue is a two-lane north-south street extending between Valparaiso Avenue and ~~Alexandra~~ Alejandra Avenue.

Response to SHS-MEMO-10

Comment noted. A total student cap of 1,196 students has been utilized for analysis purposes.

Response to SHS-MEMO-11

The commenter notes a discrepancy in Table II-1, pg II-13 that states 5 olives are to be transplanted but that only three are indicated on the plan.

Three olives have been evaluated for their potential to be trans-located during project implementation. It is the intent of the Landscape Architect to transplant at least 2 more mature olives on site during project implementation. There are several mature olives on site that may be impacted during project build out but not all of them have been evaluated for their potential to be relocated. As indicated in the response to Bio Comment -2 above, the disposition of all site trees will be submitted to the Town prior to commencement of project implementation.

No modifications to the EIR are necessary.

Response to SHS-MEMO-12

Comment noted. A total student cap of 1,196 students has been utilized for analysis purposes.

Response to SHS-MEMO-13

Appendix Table C1.2 incorrectly states that the architect for the Field House is Nibbi Brothers and should be revised as Pfau Architecture.

Appendix Table C1.2 is revised as follows:

Field House	7700	2007	~~Nibbi Brothers~~ Pfau Architecture	Locker rooms, bathrooms, bleachers on top

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SACRED HEART SCHOOLS

ATHERTON

May 25, 2010

Mr. Neal Martin
Town Planner
Town of Atherton
91 Ashfield Road
Atherton, CA 94027

Dear Mr. Martin,

Since 1898, Sacred Heart Schools, Atherton (SHS) has provided an exceptional education to thousands of children in San Francisco Bay Area Peninsula. This historic and treasured school within the Atherton/Menlo Park community has been through a perpetual evolution throughout its 100-year history – from a small convent school for girls, to the dynamic and diverse coed campus it is today. Moving forward, as we plan for our next 100 years, Sacred Heart Schools will continue to evolve while remaining true to our heritage, committed to excellence, and preserving the beauty and historical nature this school represents within the community.

As guardians of this treasured landmark, we, the Board of Trustees (BOT) for Sacred Heart Schools, are committed to preserving and maintaining the rural nature of the schools' 63-acre campus. As the schools expand and transform to meet the needs of the future for our students, it will be our priority to respect and maintain the natural integrity of the land as much as possible. It is with this desire that the Board will work to ensure that the mitigation measures that have been recommended in the Environmental Impact Report with regards to Air Quality, Noise and Biological Resources will be adhered to. In regard to the Traffic Mitigations, the school has already met with Town representatives and is working towards a decision that should be mutually acceptable to Sacred Heart Schools and the Town in order to mitigate project-generated traffic impacts to a less-than-significant level. SHS-BT-1

Sustainability and eco-friendly practices are important to the schools' administration. These subjects are taught and employed throughout the campus and is in concert with SHS' *Goals and Criteria* -- to teach respect for creation and prepare our students to be stewards of the earth's resources. This commitment to respect the earth and nature has led to the building of the environmentally-friendly and state-of-the-art Michael J. Homer Science and Student Life Center. The Homer Center is the first in the country to receive certification as a Platinum-level Leadership in Energy and Environmental Design (LEED) for Schools - the highest LEED rating a school building can receive from the U.S. Green Building Council (USGBC).

In addition, SHS supports sustainability through its own 10,000-square-foot organic garden on campus. It is the first school in San Mateo County to be approved by the Department of Environmental Health Services Division to use fruits and vegetables from its garden for preparation and food service in its school cafeteria. Response has been positive from the town of Atherton in SHS' commitment to employ green practices on campus.

150 Valparaiso Avenue • Atherton, California 94027
Phone (650)322-1928 • Fax (650)322-7151 • www.shschools.org

It is our aspiration to celebrate the beauty, charm and historical nature of Sacred Heart Schools with the community today and for the future. We foster an open partnership and collaborate with the surrounding community on issues and concerns based on integrity and trust. We strongly believe in "doing the right thing" for all involved. We hope to build upon the core community element of SHS and strengthen the bonds even further with our neighbors and friends to embrace the schools' development.

SHS-BT-1

The BOT supports building the new Lower and Middle Schools campus. The new campus will enhance and uphold the schools' commitment to providing the best possible education for its students to set them up for success in the 21st century.

Sincerely,

Anne Holloway
Chair
Board of Trustees
Sacred Heart Schools
Atherton Resident

Maryan Ackley
Board of Trustees
Sacred Heart Schools
Atherton Resident

Maude Brezinski
Board of Trustees
Sacred Heart Schools

Richard A. Dioli
Board of Trustees
Sacred Heart Schools

Elizabeth Dunlevie
Past Chair
Board of Trustees
Sacred Heart Schools
Atherton Resident

Susanne Sutherland
Board of Trustees
Sacred Heart Schools

Mindy Rogers
Past Chair
Board of Trustees
Sacred Heart Schools
Atherton Resident

Steve Rudolph
Board of Trustees
Sacred Heart Schools

Michael Wishart
Board of Trustees
Sacred Heart Schools

SACRED HEART SCHOOLS, BOARD OF TRUSTEES (SHS-BT)

Response to SHS-BT-1

This letter was submitted by the Sacred Heart Schools Board of Trustees describing their support of the project, commitment to implementing the mitigation measures, and commitment to sustainable operations. The comment does not contain any comments relevant to the Draft EIR and no further response is required.

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SACRED HEART SCHOOLS

ATHERTON

May 25, 2010

Mr. Neal J. Martin, Town Planner
The Town of Atherton
91 Ashfield Road
Atherton, CA 94072

Re: Sacred Heart Schools Master Plan Draft EIR (SCH #2009112052)

Dear Neal:

Thank you for the opportunity to offer our comments regarding the Draft Environmental Impact Report for the Sacred Heart Schools Master Plan (SCH # 2009112052) ("Draft EIR"). On behalf of Sacred Heart Schools, I wish to extend the Schools' appreciation to the Town of Atherton ("Town") and its consultants for the preparation of the environmental document for our proposed Master Plan Project. The Town has conducted a thorough analysis of the project, and we appreciate the information and analysis contained in the document.

SHS-SD-1

To assist you in your deliberations regarding the EIR, Sacred Heart Schools Master Plan and associated entitlements, we offer the following comments to clarify and amplify the analysis contained in the Draft EIR. Our comments supplement our memorandum dated April 26, 2010, which included a list of items related to the Project Description that required further clarification and minor revisions to maintain consistency with our Master Plan submittal.

Summary

SHS-SD-2

Please update the summary to reflect any adjustments to the environmental topic sections that are revised in response to our comments below.

Project Description

SHS-SD-3

We offer the following comments regarding the Project Description for the Town's consideration.

Pages III - 20-21, Table III-3. We request that the discussion regarding the list of discretionary permits and approvals further clarify that some of the permits or approvals indicated in Table III-3 are not, in fact, discretionary. For example, the approval of sewer hook-ups and fire-suppression systems and the SWPPP would be considered ministerial and handled as matter of compliance with standard public works conditions of approvals prior to issuance of building permits. Because these permits simply would require plan check or sign-off by the applicable official, rather than some form of discretionary decision-making, we request that Table III-3 be revised to provide further clarification in order to minimize any questions regarding the nature of any future decisions about the project. SHS-SD-3

Geology/Soils

Page IV. A-5, Geology/Soil, Second Para. The 4th sentence of the second paragraph indicates that a Geotechnical Report was prepared for the St. Joseph's School buildings and would be prepared for any future structures on the site. The sixth sentence of this paragraph also states a Geotechnical Report would be prepared for all future facilities and structures constructed for the Project. Please clarify what is meant by "future structures." Does this mean that a geotechnical report will be needed for installation of fences or signs, for example? SHS-SD-4

Biological Resources

Page IV.D.-24, Mitigation Measure BIO-1. Sacred Heart Schools understands the need for mitigation measures to reduce potential impacts to raptors and nesting habitat. Nonetheless, the 300 foot distance appears to extend beyond the boundaries of the Project Site and into the neighbors' yards. Consequently, we request that the Town clarify that the 300-foot distance (for raptors) would apply only to activities on the Sacred Heart Schools property that occur during the active nesting period of March through August. Also, please confirm our understanding that Mitigation Measure BIO-1 would allow the School to proceed with construction activities during the nesting season and within the 300-foot distance. In the event that the School is unable to defer construction until after the active raptor nesting season, the School may proceed with such activities, provided that the young have fledged in accordance with Mitigation Measure BIO-1. Additionally, please confirm that Sacred Heart Schools may select the qualified biologist. SHS-SD-5

Page IV. D-25, Impact BIO-5: For purposes of consistency with the Master Plan, we note the following minor revisions regarding the tree impact estimates: SHS-SD-6

"The removal of and or encroachment on ~~21~~ 16 Heritage trees, 6 of these trees are oaks, and ~~101~~ 94 ornamentals site wide would constitute a potentially significant impact. In addition, buildout of the Master Plan would involve the removal of and/or encroachment on additional trees including Heritage trees." SHS-SD-6

Page IV.D-28, Mitigation Measure BIO-5. The Draft EIR indicates that the Mitigation Planting Program will mitigate near-term significant impacts to a less than significant level. We believe it is important to clarify that the Mitigation Planting Program will address the near-term and long-term impacts due to tree removal given the significant tree replacement measures included in the Mitigation Planting Program. We also request that the EIR clarify that the proposed number of trees to be replaced is 45 Heritage trees and 111 ornamental trees for the Lower and Middle School project. For the West Fields phase, 19 trees will be planted; of these 19 trees, 2 trees will be Valley Oaks. SHS-SD-7

Transportation/Traffic

Page IV.G-14, Vehicle Queuing. We were unable to locate Appendix Table B. Is this table found in the traffic appendix? SHS-SD-8

Figure IV.G-15, Please note that Figure IV.G-15 should be revised to clarify that the entrance from Park Lane is ONE WAY inward. The exit "I" is ONE WAY outbound. There should not be any exiting traffic counted at "A" in these figures. SHS-SD-9

Page IV.G-16, Vehicle Queuing. We were unable to locate Appendix X. Is this data found in the traffic appendix? SHS-SD-10

Page IV.G-19, Traffic. Please clarify the reason for a gap between 2014 and 2030 conditions if the maximum student enrollment would be projected to occur in 2014. Is the 2030 analysis also intended to cover cumulative conditions? SHS-SD-11

Page IV.G-20, Traffic. Please clarify if a 1 percent per year growth rate was applied for 5 years and the horizon year of the near term analysis is 2014, was the 5 years of 1% growth applied effective from 2009 or from 2014. If from 2009, is there a period of 2 years in which the background growth was then overestimated? SHS-SD-12

Page IV.G-24, Traffic Volumes. Please clarify the intent of the 5th sentence of the paragraph regarding traffic volumes, as we are unclear as to the nature of the condition that would constitute "the reality of the local street system." SHS-SD-13

Pg IV.G-31 and 32. The Draft EIR correctly notes that the number of new students associated with the proposed buildings would be 116 students. Nonetheless, it is important to clarify that SHS has agreed to cap the number of new students at 114 students for a maximum enrollment of 1,196 students. The 114-student increase is referenced correctly throughout the Draft EIR. SHS-SD-14

Pg IV. G -31 through 34: The Draft EIR discussion appears to ignore the addition of the Park Lane entrance and that approximately 50% of the lower and middle school traffic would be redirected to this new entrance. Also, the Draft EIR discussion on page G-31 stating that "there are no significant changes planned as part of the MP that would alter travel mode for students accessing the campus" should be clarified. In fact, the new entrance along Park Lane would be available, unless this comment refers to SHP student drivers only. SHS-SD-15

Page IV.G-33, Table IV.G-8. Please clarify the source of the enrollment numbers as the numbers should be consistent with the Project Description enrollment projections. If for purposes of the Draft EIR, maximum enrollment of 1,196 (addition of 114 students) was used and attainable by 2014- ALL traffic increases for 2030 should be predicted to be generated by other projects/ events. SHS-SD-16

Also, did the traffic analysis include any reduction in vehicular trip generation due to alternative forms of transportation (e.g., pedestrian or bicycle or carpools) as reflected in the SHS Traffic Management Plan which is attached hereto as **Exhibit A** and incorporated by reference in our comments.

Page IV.G-46 through IV.G-61, Traffic Impacts and Mitigation Measures. We appreciate the thorough traffic impact analysis contained in the Draft EIR. Nonetheless, Sacred Heart Schools is concerned about the number and extent of the mitigation measures recommended in the Draft EIR for purposes of mitigating not only the Project's contribution to significant impacts but the impacts associated with other existing and approved background traffic. SHS-SD-17

As the Town is aware, the California Environmental Quality Act (Pub. Resources Code 21000 *et seq.*) ("CEQA") and CEQA Guidelines Section 15126.4 require that mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-

binding instruments. Mitigation measures also must be consistent with all applicable constitutional requirements, including the following:

a) There must be an essential nexus (i.e. connection) between the mitigation measure and a legitimate governmental interest. (Nollan v. California Coastal Commission, 483 U.S. 825 (1987)); and

b) The mitigation measure must be roughly proportional to the impacts of the project. (Dolan v. City of Tigard, 512 U.S. 374 (1994)). Where the mitigation is an ad hoc exaction, it must be "roughly proportional" to the impacts of the project. (Ehrlich v. City of Culver City (1996) 12 Cal. 4th 854).

SHS-SD-17

From our review of the traffic mitigation measures, it appears that the mitigation measures needed to offset the Project's significant impact would be the mitigation measures described in "Alternative A" for each of the identified mitigation measures. We understand that Alternative A for each identified intersection represents the Project's proportionate share of the recommended mitigation in order to fully offset the project's contribution to significant impacts. We recommend that a clarifying sentence be provided at the bottom of page IVG-34 stating that Alternative A designated for each location represents the mitigation measure necessary to mitigate to a less-than-significant level the Project's significant impact to that intersection. This would assist the reader in understanding that Sacred Heart Schools is not required to implement all of the alternatives or a combination of the alternatives at each intersection.

Page IV.G-33, Table IV.G-11; Page IV.G-51. Table IV.G-11 summarizes the mitigation measure alternatives discussed on pages IV.G-49 through 51 and pages IV.G-52 through 60 for each of the 4 intersections impacted by Project traffic under 2014 and 2030 conditions. Specifically, the Draft EIR recommends 4 alternative mitigation measures for the Elena/ Valparaiso intersection, including Alternative D which involves conversion of the intersection from a stop-signed controlled operation to a signalized intersection, in conjunction with a left-turn deceleration lane on the eastbound Valparaiso Avenue approach.

SHS-SD-18

Based on further analysis conducted by Sacred Heart Schools' traffic engineer, DKS, attached as **Exhibit B** and incorporated herein by reference, installation of the signal at the Elena/Valparaiso intersection under Alternative D will obviate the need for any additional mitigation measures at the Emilie/Valparaiso intersection under 2014 and 2030 conditions. Thus, signalization of the Elena/Valparaiso intersection would both mitigate that intersection as discussed in Alternative D (page IV.G-51) and redirect enough peak hour trips from the

Emilie/Valparaiso intersection to the Elena/Valparaiso intersection. With the reduction in trips at Emilie/Valparaiso, the Project would not result in a significant intersection impact thereby eliminating the need for additional intersection improvements at the Emilie/Valparaiso intersection discussed under Mitigation Measure 1A (page IV.G-46), Mitigation Measure 2A (IV.G-52) and Mitigation Measure 5.A (page IV.G-60).

Additionally, the existing geometry at the intersection of Elena Avenue and Valparaiso would accommodate conversion of the intersection from a stop-sign to a signal-controlled intersection without the need for additional geometric modifications or alignments. Thus, we request that Alternative D discussed on page IV.G-51 in the Draft EIR be further modified to eliminate the need for a left-turn deceleration lane on the Valparaiso Avenue intersection approach. Consequently, the Town should revise Alternative D for the Elena/Valparaiso intersection mitigation to include only signalization of the intersection as signalization would be feasible and reduce the potentially significant traffic impacts at this intersection to a less-than-significant level.

SHS-SD-18

In summary, based on the analysis contained in **Exhibit B**, Sacred Heart Schools respectfully requests that the Town revise Alternative D as described on page IV.G-51 and IV.G-58 for the Valparaiso/Elena intersection to provide only for signalization at this intersection and eliminate the left-turn deceleration lane. By eliminating the modifications to the intersection geometry, potential secondary impacts also would be eliminated at this location. Additionally, Alternative D for the Elena/Valparaiso intersection would eliminate the need for any of the alternative intersection mitigation measures at the Emilie/Valparaiso intersection (see e.g., IV.G-47 and IV.G-52). Impacts under this alternative mitigation would remain less-than-significant for both the Elena/Valparaiso and Emilie/Valparaiso intersections. We would be interested in further discussing our findings with you and the Public Works Director to determine a feasible approach to mitigating Project-generated impacts at both locations.

Page IV.G-62, Impact TRAF-7: Construction Traffic Impacts (also see, Page II-23): The Draft EIR limits Project-related truck traffic to the hours of 8:30 a.m. to 3:00 pm. Monday through Friday. This 2.5-hour reduction in truck traffic per day would extend the timeframe necessary to complete certain phases of construction. Accordingly, we respectfully request that the Town revise the Draft EIR truck traffic hours to be consistent with the Town's authorized hours of work which are Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. To manage construction traffic during these hours, the school will advise contractors to not enter or exit the campus during pick up and drop off periods.

SHS-SD-19

Page IV.G-63, Impact TRAF-7: Construction Traffic Impacts. In order to maintain consistency with the Project Description and the Master Plan, the second bullet pertaining to Total Truck or Oversize Vehicle Trips should be revised to clarify that the Project would generate:

- 725 to 775 trucks over the course of each of the two Project phases (demolished building off haul, grading off haul of the soils, Project delivery and removal of portable classrooms, concrete and material delivery). SHS-SD-20

All of the construction truck traffic proposed in Phase One will occur in Phase One before construction begins in Phase Two.

Chapter VI, Alternatives to the Proposed Project

The Draft EIR states that the purpose of the alternatives analysis is to assess a range of reasonable alternatives to the proposed project that would feasibly attain most of the basic project objectives while substantially lessening any of the significant impacts of the project. In accordance with CEQA, the Draft EIR alternatives analysis also evaluates the comparative merits of each alternative (14 Cal. Code § 15126.6).

Based on Sacred Heart Schools' careful review of the alternatives evaluated in the Draft EIR, none of the alternatives to the proposed Project would be feasible in terms of site suitability, economic viability, availability of infrastructure, and consistency with other plans or regulatory requirements. Moreover, these alternatives would not achieve most of the basic objectives of the Project for the specific reasons indicated below. SHS-SD-21

Alternative 1 would not meet the project objectives because it would result in a greater traffic impact on neighboring streets. As you know, Sacred Heart Schools has worked with the neighborhood for the past year in designing project entrances and exits and on-site circulation in order to minimize adverse impacts to the neighborhood streets. Alternative 1 would not achieve a reduction in neighborhood traffic impacts due to the circulation system design and because the enrollment projections would be greater.

Alternative 2 does not meet the project objectives because it would not provide a safe and secure environment. Moreover, it would disperse traffic with a greater impact to neighboring streets as with Alternative 1, in part, as a result of the higher enrollment. Additionally the quality of education will be negatively impacted by outdated facilities. This would not deliver the best

possible student experience and would not allow the proper improvement for even the most basic change as lighting and ventilation. Accordingly, Alternative 2 would not achieve basic project objectives.

Alternative 3 also would not meet the project objectives from the perspective of a safe and secure environment. This alternative would result in 7 free standing buildings (including Spieker Pavilion and the Preschool) on the lower school/middle school campus instead of the 6 free standing buildings that would be designed to provide for an integrated, functioning campus. This would not deliver the best possible student experience and would not allow the proper improvement for even the most basic change as lighting and ventilation. Accordingly, Alternative 3 would not achieve basic project objectives.

SHS-SD-21

Alternative 4 also does not meet the project objectives to allow Sacred Heart Schools to increase the enrollment for flexibility and quality of education as has been a goal publicly stated for the past 10 years. Moreover, Alternative 4 does not meet the educational objectives of the school as provided by the programs and curriculum offerings in the Middle School. Consequently, Alternative 4 would not achieve basic project objectives.

For these reasons, the Project is the only alternative that is feasible and achieves the basic project objectives. We respectfully request that the Town reject the alternatives considered in the Draft EIR and find that the Project would be the environmentally preferable alternative.

We appreciate the Town's consideration of our comments on the Draft EIR and look forward to completion of the Final EIR. Please feel free to contact us if you have any questions or need further information regarding our comments on the Draft EIR.

Sincerely yours,

Sandy Dubinsky

Sandy Dubinsky

cc: Rich Dioli
Anne Holloway
Mark Spencer
Alicia Guerra

Attachment A

SHS Transportation Management Memo

Attachment A

DKS Associates
TRANSPORTATION SOLUTIONS

MEMORANDUM

TO:	Sacred Heart School- Atherton, CA	
FROM:	Mark Spencer, DKS Associates	
DATE:	4-30-2010	
SUBJECT:	Sacred Heart Schools	P08032-000
	Transportation Demand Management Program	

SACRED HEART SCHOOLS TRANSPORTATION MANAGEMENT PROGRAM

The purpose of this memo is to summarize the current and planned transportation management program elements of the Sacred Heart School campus. Sacred Heart endeavors to be a responsible and cooperative partner in the community, and is committed to continuing their investment in transportation management and solutions.

1.0 BACKGROUND

This report provides information regarding the transportation management program undertaken by Sacred Heart School located at 150 Valparaiso Avenue, Atherton, California.

The school campus is spread over a 64-acre campus with eight classroom buildings and several recreation centers spread throughout the campus. A total of more than 1,080 students are enrolled in this school. The campus consists of three categories (divisions): a Montessori pre-school with an enrollment of approximately 120 students; an elementary school with 420 students approximately; and a preparatory high school with approximately 540 students.

This campus is bounded by four streets: Park Lane on northwest side; Emilie Avenue on northeast side; Valparaiso Avenue on southeast side; and Elena Avenue on southwest side of campus. Vehicular access to the school is provided from a total of eight driveways, with three on Emilie Avenue; one on Valparaiso Avenue; three on Elena Avenue; and one on Park Lane. All intersections surrounding the school campus are unsignalized.

The campus location and the surrounding roadway network are illustrated in **Figure 1**.

1000 Broadway
Suite 450
Oakland, CA 94607

(510) 763-2061
(510) 268-1739 fax
www.dksassociates.com

Figure 1: Sacred Heart School Campus

The surrounding neighborhood is a residential community. Park Lane, Emilie Avenue and Elena Avenue are residential streets that already carry well over 1,000 vehicles per day.

2.0 CURRENT TRANSPORTATION MANAGEMENT PROGRAM

Drop-offs and Pick-ups

Due to high student volumes, SHS generates a high traffic volume during morning drop-offs and afternoon pick-ups. To reduce traffic volumes, the school authorities adopted a strategy to stagger the school start timings for different grade levels which reduced vehicular volume concentration. **Table 1** below shows the school timings for the three student categories.

For efficient management of traffic during pick-up and drop-off period, school administration has provided certain guidelines for parents to ensure safety of everyone and avoid unnecessary delay. These guidelines include:

- To follow designated drop-off and pick-up times.
- Follow the directions of teachers at the preschool building.
- Follow directions of traffic personnel present during drop off and pick up at LS/MS.
- All parents are educated about the school traffic policies through a handbook that is distributed at the beginning of each school year. The information is also provided on the SHS website.

Table 1: SHS Drop-off and Pick-up Time Schedule

Grade Level	Drop-off Location	Drop-Off Time	Pick-up Location	Pick-up Time
Pre and K Only	Preschool	8:00 - 8:15	Preschool	11:20-11:30 3:00- 3:10
Pre or K and 1-8	Main and Preschool	7:50-8:00	Preschool	3:15-3:25
1-4 only (No child above Grade 4)	Circle Lot (Left turn exit only)	7:45-8:00	Circle Lot	3:15-3:25
1-8 Only (One child Grade 5 or above)	Main Lot	7:40-7:55	Main Lot	3:15 (1-5) 3:30 (6-8)

To provide sufficient drop-off/ pickup space, the school had redesigned the drop-off/ pick-up location off of Emilie Ave. At the circle lot off of Emilie Avenue, to mitigate congestion the school has adopted a strategy by which vehicles are permitted to take a right turn only on to Emilie Ave, thereby removing a conflict point and also reducing the delay (queuing of vehicles) caused by left turning vehicles.

Parking Policies

Besides employees, various parking facilities are provided for seniors and juniors and extended to sophomores upon availability of parking space. Any vehicle to be parked on the school campus requires registration and parking permit every year. This permit is mandatory for all faculty, staff, and students (juniors and seniors). Their vehicles must be parked in the designated color coded parking spots; yellow for faculty/staff; red for seniors; and blue for juniors. These policies will ensure that no additional vehicles enter into the campus and create a parking problem. Sacred Heart enforces parking policies regularly throughout the school year.

Parking Lot Locations:

The Sigall parking lot is allotted only to seniors. The Morey and the Satellite Tennis Court parking lots are shared by seniors and juniors. Separate parking spaces are provided for visitors at various locations near the main-building. By staggering the parking lots throughout the campus, the concentration of vehicles on a particular street is reduced. Sacred Heart also provides parking for community events on weekends for functions held both on and off their campus.

Mass Transportation:

Sacred Heart provides a courtesy shuttle for commuters who use Caltrain. Shuttle services are provided during morning and afternoon schedules. This service not only provides regular transportation to public transportation commuters, but also reduces the number of vehicle trips to the campus. Currently there are 7-9 vans in service. Sacred Heart also provides school vehicles for field trips, athletic events, and other school-sponsored activities.

Summary:

Sacred Heart currently has a comprehensive transportation management program that includes engineering, enforcement and educational elements. Although the staff and financial resources committed to transportation management are significant, the school recognizes that traffic congestion and safety remain key concerns among the community.

3.0 FUTURE TRANSPORTATION ENHANCEMENTS

Traffic Committee:

A Traffic Committee has been formed with representatives from the public, parents, students, faculty, administration and a technical consultant.

Transportation Management Measures:

SHS is considering additional transportation management measures to further reduce school related traffic in the future. These additional elements include physical items, enforcement (policies, regulatory items, and programs that reduce individual auto travel) and education (for parents, students and staff).

Attachment B to DKS Memo:

Traffix Analysis

DKS *Associates*
TRANSPORTATION SOLUTIONS

MEMORANDUM

TO:	Sandy Dubinsky, Sacred Heart School Alicia Guerra, Briscoe, Ivester, & Bazel, LLP	
FROM:	Mark Spencer, DKS Associates Paul Stanis, DKS Associates	
DATE:	May 25, 2010	
SUBJECT:	Sacred Heart School Master Plan EIR – Emile Ave/Valparaiso Ave Impact Sensitivity Analysis	P 08032-000

This memo discusses the traffic pattern effects of converting the intersection of Elena Avenue and Valparaiso Avenue from a stop-controlled intersection to a signalized intersection. The Draft *Sacred Heart School Master Plan Environmental Impact Report recommends* signalization of Elena Avenue and Valparaiso Avenue as Alternative D in the list of mitigation measures for this intersection. Signalization of this intersection would mitigate the impact due to project-related traffic to a less-than-significant level. The Draft EIR also identifies a second potential impact at the intersection of Emilie Avenue and Valparaiso Avenue due to project-generated traffic. Signalization of the Elena/Valparaiso Avenue intersection would also mitigate the project-generated traffic impacts at the Emilie/Valparaiso Avenue intersection as further discussed below.

Installation of the traffic signal at Elena Avenue and Valparaiso Avenue, would result in the redistribution of background and project-related traffic to this intersection and away from unsignalized intersections in the project vicinity, specifically Emilie Avenue and Valparaiso Avenue. DKS performed a sensitivity analysis to determine the amount of traffic that would need to be attracted to the signalized intersection of Elena Avenue and Valparaiso Avenue from Emilie Avenue and Valparaiso Avenue for both AM and Mid Afternoon Peak Hours in order for the impact at Emilie and Valparaiso Avenues to be mitigated to a less than significant level and thus, eliminate the need for mitigation at the Emilie and Valparaiso Avenues intersection.

For the AM Peak Hour, 8 vehicle trips due to the project-related increment would have be shifted from Emilie Avenue and Valparaiso Avenue to Elena and Valparaiso Avenues for the impact at the latter intersection to be less than significant. Additionally, the rerouting of these 8 trips would not increase the amount of traffic at other study intersections to a level that would result in any new potentially significant impacts. For the Mid Afternoon Peak Hour, 6 trips would need to be attracted to Elena and Valparaiso Avenues from Emilie Avenue and Valparaiso Avenue for the project to generate a less-than-significant impact at Emilie and Valparaiso Avenues . Rerouting these 6 trips would not increase the amount of traffic at other study intersections to a level that would result in any new potentially significant impacts. Attachment A to this memo shows the corresponding TRAFFIX worksheets.

Additionally, the existing geometry at the intersection of Elena Avenue and Valparaiso would accommodate conversion of the intersection from a stop-sign to a signal-controlled intersection without the need for additional geometric modifications or alignments. Thus, Alternative D identified in the Draft EIR could be further modified to eliminate the need for a left-turn deceleration lane on the Valparaiso Avenue intersection approach.

Scenario Report

Scenario:	Project
Command:	Default Command
Volume:	Project
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Valparaiso/Emilie (AM Project 2030

Average Delay (sec/veh): 106.1 Worst Case Level Of Service:

Street Name:	Emilie						Valparaiso					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0	0	0	0	0	0	0	1	0	0
Volume Module:												
Base Vol:	80	829	0	0	614	60						
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	80	829	0	0	614	60						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.60	0.90	1.00	0.74	0.86	1.00						
PHF Volume:	133	921	0	0	714	60						
Reduct Vol:	0	0	0	0	0	0						
FinalVolume:	133	921	0	0	714	60						
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:												
Cnflict Vol:	801	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	831	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap.:	812	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	0.16	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:												
2Way95thQ:	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	77	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	[illegible]	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	[illegible]	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			[illegible]			xxxxxx		
ApproachLOS:	*			*			[illegible]			*		

Note: Queue reported is the number of cars per lane.

Attachment B

Attachment B .

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Project               Mon May 24, 2010 13:40:29                  Page 3-1
---------------------------------------------------------------------------
---------------------------------------------------------------------------
                 Level Of Service Computation Report
        2000 HCM Unsignalized Method (Base Volume Alternative)
***************************************************************************
Intersection #2 Valparaiso Ave Driveway[AM Project 2030 Base]
***************************************************************************
Average Delay (sec/veh):       3.1      Worst Case Level Of Service: F[ 99.6]
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include           Include          Include          Include
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
------------|----------------||----------------||----------------||----------------|
Volume Module:AM
Base Vol:        0  897    70    50  615     0     0     0     0     8     0    18
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:     0  897    70    50  615     0     0     0     0     8     0    18
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:      1.00 0.84  0.41  0.43 0.86  1.00  1.00  1.00  1.00  0.35  1.00  0.67
PHF Volume:      0 1068   171   116  715     0     0     0     0    23     0    27
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0 1068   171   116  715     0     0     0     0    23     0    27
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4   6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5   4.0   3.3
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1248 xxxx xxxxx  xxxx xxxx xxxxx  2110  2110  1162
Potent Cap.: xxxx xxxx xxxxx   565 xxxx xxxxx  xxxx xxxx xxxxx    57    52   240
Move Cap.:   xxxx xxxx xxxxx   561 xxxx xxxxx  xxxx xxxx xxxxx    47    40   238
Volume/Cap:  xxxx xxxx  xxxx  0.21 xxxx  xxxx  xxxx xxxx  xxxx  0.49  0.00  0.11
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.8 xxxx xxxxx  xxxx xxxx xxxxx  xxxx  xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  13.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  xxxx xxxxx
LOS by Move:     *    *     *     B    *     *     *    *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx    83 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.8 xxxx xxxxx xxxxx xxxx xxxxx xxxxx   2.7 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx  13.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  99.6 xxxxx
Shared LOS:      *    *     *     B    *     *     *    *     *     *     F     *
ApproachDel:     xxxxxx           xxxxxx           xxxxxx            99.6
ApproachLOS:        *                *                *                 F
***************************************************************************
Note: Queue reported is the number of cars per lane.
***************************************************************************
```



```
Project               Mon May 24, 2010 13:[illegible]                  Page [illegible]
---------------------------------------------------------------------------
---------------------------------------------------------------------------
                 Level Of Service Computation Report
        2000 HCM Unsignalized Method (Base Volume Alternative)
***************************************************************************
Intersection #3 Valparaiso/San Mateo [AM Project 2030 Base]
***************************************************************************
Average Delay (sec/veh):       4.1      Worst Case Level Of Service: [illegible]
***************************************************************************
Street Name:                  Elena                          Valparaiso
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include           Include          Include          Include
Lanes:        0  0  0  1  0    0  [illegible]  0  [illegible]    [illegible]    [illegible]
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:        0  905    30    30  540     0  [illegible]
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  [illegible]
Initial Bse:     0  905    30    30  540     0  [illegible]
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  [illegible]
PHF Adj:      1.00 0.87  0.67  0.64 0.86  1.00  [illegible] 1.00 [illegible]
PHF Volume:      0 1040    45    47  628     0  [illegible]
Reduct Vol:      0    0     0     0    0     0  [illegible]
FinalVolume:     0 1040    45    47  628     0     0  [illegible]
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx  [illegible]
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx  [illegible]
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1095 xxxx xxxxx  xxxx xxxx xxxxx  [illegible]
Potent Cap.: xxxx xxxx xxxxx   645 xxxx xxxxx  xxxx xxxx xxxxx  [illegible]
Move Cap.:   xxxx xxxx xxxxx   640 xxxx xxxxx  xxxx xxxx xxxxx  [illegible]   [illegible]8
Volume/Cap:  xxxx xxxx  xxxx  0.07 xxxx  xxxx  xxxx xxxx  xxxx  [illegible]
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx  xxxx  xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  11.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  xxxx xxxxx
LOS by Move:     *    *     *     B    *     *     *    *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx [illegible] xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx [illegible] xxxxx
Shrd ConDel:xxxxx xxxx xxxxx  11.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx [illegible] xxxxx
Shared LOS:      *    *     *     B    *     *     *    *     *     *  [illegible]     *
ApproachDel:     xxxxxx           xxxxxx           xxxxxx          [illegible]
ApproachLOS:        *                *                *             [illegible]
***************************************************************************
Note: Queue reported is the number of cars per lane.
***************************************************************************
```

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Valparaiso/Elena [AM Project 2030 Base]

Average Delay (sec/veh): 220.4 Worst Case Level Of Service: F[1612.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0 0 0	0	0 0	1 0	0	0 1!	0 0	0	0 0	0 0 0
Volume Module:												
Base Vol:	160	785	0	0	483	76	150	0	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	785	0	0	483	76	150	0	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.60	0.86	1.00	1.00	0.88	0.57	0.84	1.00	0.70	1.00	1.00	1.00
PHF Volume:	267	913	0	0	549	133	179	0	114	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	267	913	0	0	549	133	179	0	114	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	690	xxxx	xxxxx	xxxx	xxxx	xxxxx	2070	2070	624	xxxx	xxxx	xxxxx
Potent Cap.:	914	xxxx	xxxxx	xxxx	xxxx	xxxxx	60	55	489	xxxx	xxxx	xxxxx
Move Cap.:	908	xxxx	xxxxx	xxxx	xxxx	xxxxx	44	36	486	xxxx	xxxx	xxxxx
Volume/Cap:	0.29	xxxx	xxxx	xxxx	xxxx	xxxx	4.07	0.00	0.24	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	68	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	1.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	31.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1612	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			1612.0			xxxxxx		
ApproachLOS:	*			*			F			*		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Park/ Emilie Ave [AM Project 2030 Base]

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: [illegible]

Approach:	North Bound			South Bound			[illegible]			[illegible]		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			[illegible]			[illegible]		
Rights:	Include			Include			[illegible]			[illegible]		
Lanes:	0	0	1! 0	0	0	0 0	0	0	1	[illegible]		
Volume Module:	AM											
Base Vol:	74	0	103	0	0	0	0	27	6	[illegible]		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]		
Initial Bse:	74	0	103	0	0	0	0	[illegible]	154	[illegible]		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]		
PHF Adj:	0.70	1.00	0.70	1.00	1.00	1.00	1.00	[illegible]	0.70	[illegible]		
PHF Volume:	106	0	147	0	0	0	0	[illegible]	234	[illegible]		
Reduct Vol:	0	0	0	0	0	0	0	[illegible]	0	[illegible]		
FinalVolume:	106	0	147	0	0	0	0	18	234	[illegible]		
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Capacity Module:												
Cnflict Vol:	752	752	299	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Potent Cap.:	381	341	746	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1154	xxxx	xxxxx
Move Cap.:	326	277	746	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Volume/Cap:	0.32	0.00	0.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	[illegible]		
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
LOS by Move:	*	*	*	*	*	*	*	*	*	[illegible]		
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			[illegible]		
Shared Cap.:	xxxx	484	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	3.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Shrd ConDel:	xxxxx	20.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Shared LOS:	*	C	*	*	*	*	*	*	*	[illegible]		
ApproachDel:	20.3			xxxxxx			xxxxxx			[illegible]		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

Attachment B

Attachment B

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----------------------------------------------------------------------------
----------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM 4-Way Stop Method (Base Volume Alternative)
****************************************************************************
Intersection #6 Park Ln/ Elena Ave [AM Project 2030 Base]
****************************************************************************
Cycle (sec):            100              Critical Vol./Cap.(X):        0.945
Loss Time (sec):          0 (Y+R=4.0 sec) Average Delay (sec/veh):      29.4
Optimal Cycle:            0              Level Of Service:                D
****************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:         Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
------------|----------------||----------------||----------------||----------------|
Volume Module:AM
Base Vol:      23    44    39   84    80    60   88   283    65   28   119    53
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:   23    44    39   84    80    60   88   283    65   28   119    53
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     0.70  0.70  0.70 0.70  0.70  0.70 0.70  0.80  0.70 0.70  0.80  0.70
PHF Volume:    33    63    56  120   114    86  126   354    93   40   149    76
Reduct Vol:     0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   33    63    56  120   114    86  126   354    93   40   149    76
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
FinalVolume:   33    63    56  120   114    86  126   354    93   40   149    76
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Adjustment:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:       0.22  0.41  0.37 0.37  0.36  0.27 0.22  0.62  0.16 0.15  0.56  0.29
Final Sat.:   103   197   175  197   188   141  133   374    98   80   299   152
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.32  0.32  0.32 0.61  0.61  0.61 0.95  0.95  0.95 0.50  0.50  0.50
Crit Moves:        ****             ****             ****             ****
Delay/Veh:   12.8  12.8  12.8 18.3  18.3  18.3 46.8  46.8  46.8 14.9  14.9  14.9
Delay Adj:   1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
AdjDel/Veh:  12.8  12.8  12.8 18.3  18.3  18.3 46.8  46.9  46.8 14.9  14.9  14.9
LOS by Move:    B     B     B    C     C     C    E     E     E    B     B     B
ApproachDel:       12.8             18.3             46.8             14.9
Delay Adj:         1.00             1.00             1.00             1.00
ApprAdjDel:        12.8             18.3             46.8             14.9
LOS by Appr:          B                C                E                B
AllWayAvgQ:   0.4   0.4   0.4  1.3   1.3   1.3  6.4   6.4   6.4  0.8   0.8   0.8
****************************************************************************
Note: Queue reported is the number of cars per lane.
****************************************************************************
```



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Project              Mon May 24, 2010 13:40:29                    Page 8-[illegible]
----------------------------------------------------------------------------
----------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Unsignalized Method (Base Volume Alternative)
****************************************************************************
Intersection #1 Valparaiso/Emilie [AM Project] AM Project 2030 [illegible]
****************************************************************************
Average Delay (sec/veh):     111.[illegible]     Worst Case Level Of Service: F[illegible]
****************************************************************************
Street Name:                 Emilie                        Valparaiso
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Uncontrolled     Uncontrolled       Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:         0  1  0  0  0    0  0  0  1  0    [illegible]      [illegible]
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:      69   835     0    0   624    68  12[illegible] [illegible]
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00  [illegible]
Initial Bse:   69   835     0    0   624    68  12[illegible] [illegible]
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00  [illegible]
PHF Adj:     0.60  0.90  1.00 0.74  0.86  1.00  [illegible]
PHF Volume:   115   928     0    0   726    [illegible]8  [illegible]
Reduct Vol:     0     0     0    0     0     0  [illegible]
FinalVolume:  115   928     0    0   726    [illegible]  8[illegible]
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:  4.1  xxxx xxxxx xxxxx xxxx xxxxx  [illegible]   xxxxx xxxx xxxxx
FollowUpTim:  2.2  xxxx xxxxx xxxxx xxxx xxxxx  [illegible]   xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:  821  xxxx xxxxx  xxxx xxxx xxxxx  [illegible]   xxxx  xxxx xxxxx
Potent Cap.:  817  xxxx xxxxx  xxxx xxxx xxxxx  [illegible]   xxxx  xxxx xxxxx
Move Cap.:    799  xxxx xxxxx  xxxx xxxx xxxxx  [illegible]   xxxx  xxxx xxxxx
Volume/Cap:  0.14  xxxx  xxxx  xxxx xxxx  xxxx  [illegible]   xxxx  xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ5thQ:    0.[illegible] xxxx xxxxx  xxxx xxxx xxxxx  [illegible]   xxxx  xxxx xxxxx
Control Del: 10.[illegible] xxxx xxxxx xxxxx xxxx xxxxx xxxxx [illegible] xxxxx xxxx xxxxx
LOS by Move:    B     *     *    *     *     *    *     *     *    *     *     *
Movement:      LT  - LTR -  RT   LT  - LTR -  RT   LT  - [illegible]   [illegible]
Shared Cap.:  xxxx xxxx xxxxx  xxxx xxxx xxxxx  [illegible] xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.5  xxxx xxxxx xxxxx xxxx xxxxx xxxxx [illegible] xxxxx xxxxx xxxx xxxxx
Shrd ConDel: 10.3  xxxx xxxxx xxxxx xxxx xxxxx xxxxx 103[illegible] xxxxx xxxxx xxxx xxxxx
Shared LOS:     B     *     *    *     *     *    *     *     *    *     *     *
ApproachDel:      xxxxxx           xxxxxx          [illegible]        xxxxxx
ApproachLOS:         *                *                [illegible]        *
****************************************************************************
Note: Queue reported is the number of cars per lane.
****************************************************************************
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Valparaiso Ave Driveway [AM Project 2030 Base + Incr]

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: F[97.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 1	0	0	0 0	0	0	0 0 0	0	0	1! 0
Volume Module:AM												
Base Vol:	0	892	70	50	612	0	0	0	0	8	0	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	892	70	50	612	0	0	0	0	8	0	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	0.84	0.41	0.43	0.86	1.00	1.00	1.00	1.00	0.35	1.00	0.67
PHF Volume:	0	1062	171	116	712	0	0	0	0	23	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1062	171	116	712	0	0	0	0	23	0	27
Critical Gap Module:												
Critical Gp:xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1242	xxxx	xxxxx	xxxx	xxxx	xxxxx	2100	2100	1156
Potent Cap.:	xxxx	xxxx	xxxxx	568	xxxx	xxxxx	xxxx	xxxx	xxxxx	58	52	242
Move Cap.:	xxxx	xxxx	xxxxx	563	xxxx	xxxxx	xxxx	xxxx	xxxxx	48	41	240
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	xxxx	xxxx	xxxx	xxxx	0.48	0.00	0.11
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:xxxxx	xxxx	xxxxx		13.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	84	xxxxx
SharedQueue:xxxxx	xxxx	xxxxx		0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.7	xxxxx
Shrd ConDel:xxxxx	xxxx	xxxxx		13.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	97.3	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			97.3		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Valparaiso/San Mateo [AM Project 2030 Base + Incr]

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: [illegible]

Street Name:	Elena						Valparaiso					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 1	0	1	0 0	0	0	0 0	0	0	1! 0
Volume Module:												
Base Vol:	0	897	30	31	530	0	[illegible]					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]					
Initial Bse:	0	897	30	31	530	0	[illegible]					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]					
PHF Adj:	1.00	0.87	0.67	0.64	0.86	1.00	[illegible]					
PHF Volume:	0	1031	45	48	616	0	[illegible]					
Reduct Vol:	0	0	0	0	0	0	[illegible]					
FinalVolume:	0	1031	45	48	616	0	[illegible]					
Critical Gap Module:												
Critical Gp:xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
FollowUpTim:xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1086	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Potent Cap.:	xxxx	xxxx	xxxxx	650	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Move Cap.:	xxxx	xxxx	xxxxx	645	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Volume/Cap:	xxxx	xxxx	xxxx	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	[illegible]		
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Control Del:xxxxx	xxxx	xxxxx		11.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
LOS by Move:	*	*	*	B	*	*	*	*	*	[illegible]		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	[illegible]		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
SharedQueue:xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Shrd ConDel:xxxxx	xxxx	xxxxx		11.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Shared LOS:	*	*	*	B	*	*	*	*	*	[illegible]		
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			[illegible]		
ApproachLOS:	*			*			*			[illegible]		

Note: Queue reported is the number of cars per lane.

Attachment B

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Valparaiso/Elena [AM Project 2030 Base Incl]

Average Delay (sec/veh): 306.1 Worst Case Level Of Service: F[2090.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0	0	0	1	0	0	1!	0	0	0	0	0	0
Volume Module:												
Base Vol:	192	777	0	0	473	76	150	0	101	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	192	777	0	0	473	76	150	0	101	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.60	0.86	1.00	1.00	0.88	0.57	0.84	1.00	0.70	1.00	1.00	1.00
PHF Volume:	320	903	0	0	538	133	179	0	144	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	320	903	0	0	538	133	179	0	144	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	679	xxxx	xxxxx	xxxx	xxxx	xxxxx	2156	2156	612	xxxx	xxxx	xxxxx
Potent Cap.:	923	xxxx	xxxxx	xxxx	xxxx	xxxxx	53	48	497	xxxx	xxxx	xxxxx
Move Cap.:	917	xxxx	xxxxx	xxxx	xxxx	xxxxx	35	28	493	xxxx	xxxx	xxxxx
Volume/Cap:	0.35	xxxx	xxxx	xxxx	xxxx	xxxx	5.05	0.00	0.29	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	60	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	1.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	36.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	11.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2091	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			2090.9			xxxxxx		
ApproachLOS:	*			*			F			*		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Park/ Emilie Ave [AM Project 2030 Base Incl]

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: C[16.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1!	0	0	0	0	0	0	0	0	1	0
Volume Module:AM												
Base Vol:	74	0	103	0	0	0	0	27	164	136	5	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	0	103	0	0	0	0	27	164	136	5	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	1.00	0.90	1.00	1.00	1.00	1.00	0.75	0.79	0.79	0.71	1.00
PHF Volume:	106	0	147	0	0	0	0	36	204	171	7	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	106	0	147	0	0	0	0	36	204	171	7	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	752	752	299	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	171	xxxx	xxxxx
Potent Cap.:	381	341	746	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1394	xxxx	xxxxx
Move Cap.:	326	277	746	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1394	xxxx	xxxxx
Volume/Cap:	0.32	0.00	0.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.1	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	484	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	3.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Shrd ConDel:	xxxxx	20.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	A	*	*
ApproachDel:	20.3			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

Attachment B

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Park Ln/ Elena Ave [AM Project 2030 Base + Incr]

Cycle (sec):	100	Critical Vol./Cap.(X):	1.048
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	43.3
Optimal Cycle:	0	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:AM												
Base Vol:	23	50	43	109	90	68	98	296	65	29	123	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	50	43	109	90	68	98	296	65	29	123	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	0.70	0.70	0.75	0.73	0.73	0.73	0.80	0.70	0.70	0.80	0.75
PHF Volume:	33	71	61	145	123	93	134	370	93	41	154	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	71	61	145	123	93	134	370	93	41	154	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	71	61	145	123	93	134	370	93	41	154	103
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.43	0.37	0.40	0.34	0.26	0.22	0.62	0.16	0.14	0.52	0.34
Final Sat.:	90	195	167	205	174	132	128	353	89	71	264	176
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.37	0.71	0.71	0.71	1.05	1.05	1.05	0.58	0.58	0.58
Crit Moves:		****			****			****			****	
Delay/Veh:	14.2	14.2	14.2	24.0	24.0	24.0	75.8	75.8	75.8	18.0	18.0	18.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	14.2	24.0	24.0	24.0	75.8	75.8	75.8	18.0	18.0	18.0
LOS by Move:	B	B	B	C	C	C	F	F	F	C	C	C
ApproachDel:		14.2			24.0			75.8			18.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.2			24.0			75.8			18.0	
LOS by Appr:		B			C			F			C	
AllWayAvgQ:	0.5	0.5	0.5	2.0	2.0	2.0	10.5	10.5	10.5	1.2	1.2	1.2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Valparaiso/Emilie [AM Project 2030 Base + Incr + Diversion]

Average Delay (sec/veh):	98.6	Worst Case Level Of Service:	[illegible]

Street Name:	Emilie									Valparaiso					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Lanes:	0	1	0	0	0	0	0	1	0	[illegible]					
Volume Module:															
Base Vol:	69	843	0	0	624	68	114	0	2	0	0	0			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	69	843	0	0	624	68	114	0	2	0	0	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.60	0.90	1.00	0.74	0.86	1.00	0.[illegible]	1.00	0.25	1.00	1.00	1.00			
PHF Volume:	115	937	0	0	726	68	170	0	8	0	0	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	115	937	0	0	726	68	170	0	8	0	0	0			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx			
Capacity Module:															
Cnflict Vol:	827	xxxx	xxxxx	xxxx	xxxx	xxxxx	1953	[illegible]	[illegible]	xxxx	xxxx	xxxxx			
Potent Cap.:	817	xxxx	xxxxx	xxxx	xxxx	xxxxx	71	63	39[illegible]	xxxx	xxxx	xxxxx			
Move Cap.:	799	xxxx	xxxxx	xxxx	xxxx	xxxxx	61	51	80	xxxx	xxxx	xxxxx			
Volume/Cap:	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	2.77	0.00	0.10	xxxx	xxxx	xxxx			
Level Of Service Module:															
2Way95thQ:	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*			
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	[illegible]	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.[illegible]	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	[illegible]	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	B	*	*	*	*	*	*	[illegible]	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx			[illegible]			xxxxxx					
ApproachLOS:	*			*			*			*					

Note: Queue reported is the number of cars per lane.

Attachment B

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Valparaiso Ave Driveway[AM Project 2030 Base + Incr + Diversion]

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: F[99.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 1	0	0	0 0	0	0	0 0	0	0	1! 0
Volume Module:AM												
Base Vol:	0	900	70	50	612	0	0	0	0	8	0	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	900	70	50	612	0	0	0	0	8	0	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	0.84	0.41	0.43	0.86	1.00	1.00	1.00	1.00	0.35	1.00	0.67
PHF Volume:	0	1071	171	116	712	0	0	0	0	23	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1071	171	116	712	0	0	0	0	23	0	27
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1251	xxxx	xxxxx	xxxx	xxxx	xxxxx	2110	2110	1166
Potent Cap.:	xxxx	xxxx	xxxxx	563	xxxx	xxxxx	xxxx	xxxx	xxxxx	57	52	238
Move Cap.:	xxxx	xxxx	xxxxx	559	xxxx	xxxxx	xxxx	xxxx	xxxxx	47	40	237
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	xxxx	xxxx	xxxx	xxxx	0.49	0.00	0.11
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	13.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	83	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.7	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	13.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	99.9	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			99.9		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Valparaiso/San Mateo [AM Project 2030 Base + Incr + Diversion]

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: [illegible]

Street Name:	Elena									Valparaiso		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 [illegible]	0	[illegible]	0	0	0	[illegible]	0	0	1! 0
Volume Module:												
Base Vol:	0	905	[illegible]	31	530	0	[illegible]			[illegible]		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]	[illegible]		
Initial Bse:	0	905	30	31	530	0	[illegible]			[illegible]		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]	[illegible]		
PHF Adj:	1.00	0.87	0.67	0.64	0.86	1.00	1.00	1.00	[illegible]	[illegible]		
PHF Volume:	0	1040	45	48	616	0	[illegible]			[illegible]		
Reduct Vol:	0	0	0	0	0	0	[illegible]			[illegible]		
FinalVolume:	0	1040	45	48	616	0	0	[illegible]		[illegible]		
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1095	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Potent Cap.:	xxxx	xxxx	xxxxx	645	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Move Cap.:	xxxx	xxxx	xxxxx	640	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Volume/Cap:	xxxx	xxxx	xxxx	0.08	xxxx	xxxx	xxxx	xxxx	xxx	[illegible]		
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Control Del:	xxxxx	xxxx	xxxxx	11.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
LOS by Move:	*	*	*	B	*	*	*	*	*	[illegible]		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	[illegible]		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Shrd ConDel:	xxxxx	xxxx	xxxxx	11.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Shared LOS:	*	*	*	B	*	*	*	*	*	[illegible]		
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			[illegible]		
ApproachLOS:	*			*			*			[illegible]		

Note: Queue reported is the number of cars per lane.

Attachment B

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Valparaiso/Elena [AM Project 2030 Base + Incr + Diversion]

Cycle (sec): 100 Critical Vol./Cap.(X): 1.000
Loss Time (sec): 2 (Y+R 4.0 sec) Average Delay (sec/veh): 31.3
Optimal Cycle: 180 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	15	0	0	40	40	25	25	25	0	0	0
Lanes:	0	1	0	0	0	1	0	0	1	0	0	0
Volume Module:												
Base Vol:	192	777	0	0	473	76	158	0	101	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	192	777	0	0	473	76	158	0	101	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.60	0.86	1.00	1.00	0.88	0.57	0.84	1.00	0.70	1.00	1.00	1.00
PHF Volume:	320	903	0	0	538	133	188	0	144	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	320	903	0	0	538	133	188	0	144	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	320	903	0	0	538	133	188	0	144	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.99	1.00	1.00	0.97	0.97	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.26	0.74	0.00	0.00	0.80	0.20	0.57	0.00	0.43	0.00	0.00	0.00
Final Sat.:	466	1385	0	0	1481	367	983	0	754	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.69	0.65	0.00	0.00	0.36	0.36	0.19	0.00	0.19	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.73	0.73	0.00	0.00	0.40	0.40	0.25	0.00	0.25	0.00	0.00	0.00
Volume/Cap:	0.94	0.89	0.00	0.00	0.91	0.91	0.77	0.00	0.77	0.00	0.00	0.00
Uniform Del:	17.2	10.5	0.0	0.0	28.3	28.3	34.8	0.0	34.8	0.0	0.0	0.0
IncremntDel:	13.6	7.9	0.0	0.0	14.9	14.9	7.9	0.0	7.9	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	30.8	18.4	0.0	0.0	43.2	43.2	42.7	0.0	42.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.8	18.4	0.0	0.0	43.2	43.2	42.7	0.0	42.7	0.0	0.0	0.0
LOS by Move:	C	B	A	A	D	D	D	A	D	A	A	A
HCM2kAvgQ:	38	33	0	0	23	23	11	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Park/ Emilie Ave [AM Project 2030 Base + Incr + Diversion]

Average Delay (sec/veh): 7.3 Worst Case Level Of Service: C (22.1)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1!	0	0	0	0	0	1	0	0	0
Volume Module: AM												
Base Vol:	74	0	103	0	0	0	0	120	17	13	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	0	103	0	0	0	0	120	17	13	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	1.00	0.70	1.00	1.00	1.00	1.00	0.78	0.70	0.70	0.25	1.00
PHF Volume:	106	0	147	0	0	0	0	154	24	19	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	106	0	147	0	0	0	0	154	24	19	0	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	748	748	294	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	417	xxxx	xxxxx
Potent Cap.:	383	343	750	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1152	xxxx	xxxxx
Move Cap.:	327	279	750	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1152	xxxx	xxxxx
Volume/Cap:	0.32	0.00	0.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	487	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	2.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.6	xxxx	xxxxx
Shrd ConDel.:	xxxxx	20.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	A	*	*
ApproachDel:	20.1			xxxxxx			xxxxxx			xxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Park Ln/ Elena Ave [AM Project 2030 Base + Incr + Diversion]

Cycle (sec): 100 Critical Vol./Cap.(X): 1.057
Lost Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 44.8
Optimal Cycle: 0 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:AM												
Base Vol:	23	50	43	117	90	68	98	296	65	29	123	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	50	43	117	90	68	98	296	65	29	123	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	0.70	0.70	0.75	0.73	0.73	0.73	0.80	0.70	0.70	0.80	0.75
PHF Volume:	33	71	61	156	123	93	134	370	93	41	154	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	71	61	156	123	93	134	370	93	41	154	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	71	61	156	123	93	134	370	93	41	154	103
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.43	0.37	0.42	0.33	0.25	0.22	0.62	0.16	0.14	0.52	0.34
Final Sat.:	89	193	166	214	169	128	127	350	88	71	262	175
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.37	0.73	0.73	0.73	1.06	1.06	1.06	0.59	0.59	0.59
Crit Moves:	****				****			****			****	
Delay/Veh:	14.3	14.3	14.3	25.3	25.3	25.3	78.7	78.7	78.7	18.3	18.3	18.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.3	14.3	14.3	25.3	25.3	25.3	78.7	78.7	78.7	18.3	18.3	18.3
LOS by Move:	B	B	B	D	D	D	F	F	F	C	C	C
ApproachDel:		14.3			25.3			78.7			18.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.3			25.3			78.7			18.3	
LOS by Appr:		B			D			F			C	
AllWayAvgQ:	0.5	0.5	0.5	2.2	2.2	2.2	10.9	10.9	10.9	1.2	1.2	1.2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Valparaiso/Emilie [MD Project 2030 Base]

Average Delay (sec/veh): 60.7 Worst Case Level Of Service: [illegible]

Street Name:	Emilie						Valparaiso					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include					
Lanes:	0	1	0	0	1	0	0	1!	0	0	1!	0
Volume Module:												
Base Vol:	65	635	0	0	758	130	100	0	60	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	635	0	0	758	130	100	0	60	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.82	1.00	1.00	0.93	0.79	0.74	1.00	0.[illegible]	1.00	1.00	1.00
PHF Volume:	68	774	0	0	815	165	135	0	81	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	68	774	0	0	815	165	135	0	81	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1000	xxxx	xxxxx	xxxx	xxxx	xxxxx	929	843	3[illegible]	xxxx	xxxx	xxxxx
Potent Cap.:	700	xxxx	xxxxx	xxxx	xxxx	xxxxx	85	5[illegible]	63	xxxx	xxxx	xxxxx
Move Cap.:	689	xxxx	xxxxx	xxxx	xxxx	xxxxx	77	[illegible]	[illegible]	xxxx	xxxx	xxxxx
Volume/Cap:	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	1.[illegible]	1.00	1.[illegible]	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx[illegible]	xxxx	xxxx	xxxxx
Control Del:	10.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	TR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	[illegible]	xxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1[illegible]	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	[illegible]	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			[illegible].6			xxxxxx		
ApproachLOS:	*			*			[illegible]			*		

Note: Queue reported is the number of cars per lane.

Attachment B

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Valparaiso Ave Driveway [MD Project 2030 Base]

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: F[50.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 1 0	0	1	0 0 0	0	0	0 0 0	0	0	1! 0 0
Volume Module:AM												
Base Vol:	0	670	38	50	773	0	0	0	0	11	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	670	38	50	773	0	0	0	0	11	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	0.61	0.73	0.77	0.90	1.00	1.00	1.00	1.00	0.92	1.00	0.91
PHF Volume:	0	1098	52	65	859	0	0	0	0	12	0	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1098	52	65	859	0	0	0	0	12	0	36
Critical Gap Module:												
Critical Gp:xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1159	xxxx	xxxxx	xxxx	xxxx	xxxxx	2122	2122	1133
Potent Cap.:	xxxx	xxxx	xxxxx	610	xxxx	xxxxx	xxxx	xxxx	xxxxx	56	51	249
Move Cap.:	xxxx	xxxx	xxxxx	605	xxxx	xxxxx	xxxx	xxxx	xxxxx	51	45	247
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	0.24	0.00	0.15
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:xxxxx	xxxx	xxxxx		11.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	126	xxxxx
SharedQueue:xxxxx	xxxx	xxxxx		0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.6	xxxxx
Shrd ConDel:xxxxx	xxxx	xxxxx		11.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	50.2	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				50.2	
ApproachLOS:	*			*			*				F	

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Valparaiso/San Mateo [MD Project 2030 Base]

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: [illegible]

Street Name:	Elena											
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 [illegible] 0	0	1	0 0 0	0	0	0 0 0	0	0	1! 0 0
Volume Module:												
Base Vol:	0	675	20	25	747	0	[illegible]					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]					
Initial Bse:	0	675	20	25	747	0	0	[illegible]	0	[illegible]		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]					
PHF Adj:	1.00	0.83	0.75	0.71	0.89	1.00	[illegible]					
PHF Volume:	0	813	27	35	839	0	0	0	0	57	[illegible]	
Reduct Vol:	0	0	0	0	0	0	0	0	[illegible]	[illegible]	0	[illegible]
FinalVolume:	0	813	27	35	839	0	0	0	[illegible]	[illegible]	[illegible]	
Critical Gap Module:												
Critical Gp:xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
FollowUpTim:xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	850	xxxx	xxxxx	xxxx	xxxx	xxxxx	1746	[illegible]	
Potent Cap.:	xxxx	xxxx	xxxxx	[illegible]	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Move Cap.:	xxxx	xxxx	xxxxx	790	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	[illegible]		
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	[illegible]	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:xxxxx	xxxx	xxxxx		[illegible]	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	[illegible]	xxxxx
SharedQueue:xxxxx	xxxx	xxxxx		[illegible]	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	[illegible]	xxxxx
Shrd ConDel:xxxxx	xxxx	xxxxx		[illegible]	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	[illegible]	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				[illegible]	
ApproachLOS:	*			*			*					

Note: Queue reported is the number of cars per lane.

Attachment B

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Valparaiso/Elena (MD Project 2030 Base)

Average Delay (sec/veh): 85.2 Worst Case Level Of Service: F(652.9)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0	0 0	0	1 0	0 0	1!	0 0	0 0	0	0 0
Volume Module:												
Base Vol:	103	590	0	0	641	150	95	0	95	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	590	0	0	641	150	95	0	95	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.64	0.83	1.00	1.00	0.83	0.80	0.86	1.00	0.59	1.00	1.00	1.00
PHF Volume:	161	711	0	0	772	188	110	0	161	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	161	711	0	0	772	188	110	0	161	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	968	xxxx	xxxxx	xxxx	xxxx	xxxxx	1907	1907	874	xxxx	xxxx	xxxxx
Potent Cap.:	720	xxxx	xxxxx	xxxx	xxxx	xxxxx	76	69	352	xxxx	xxxx	xxxxx
Move Cap.:	715	xxxx	xxxxx	xxxx	xxxx	xxxxx	61	52	350	xxxx	xxxx	xxxxx
Volume/Cap:	0.23	xxxx	xxxx	xxxx	xxxx	xxxx	1.80	0.00	0.46	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.9	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	120	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	23.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	653	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			652.9			xxxxxx		
ApproachLOS:	*			*			F			*		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Park/ Emilie Ave (MD Project 2030 Base)

Average Delay (sec/veh): 6.1 Worst Case Level Of Service: [illegible]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1!	0 0	0 0	0	0 0	0	1	0	0	1	0
Volume Module:AM												
Base Vol:	65	0	90	0	0	0	0	107	6	15	11	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	0	90	0	0	0	0	107	6	15	11	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	1.00	0.70	1.00	1.00	1.00	1.00	0.70	0.75	1.00	0.71	1.00
PHF Volume:	93	0	129	0	0	0	0	153	8	15	15	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	93	0	129	0	0	0	0	153	8	15	15	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	688	668	212	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	xxxx	xxxxx
Potent Cap.:	415	382	833	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	740	xxxx	xxxxx
Move Cap.:	369	334	819	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	734	xxxx	xxxxx
Volume/Cap:	0.25	0.00	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	542	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	2.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	16.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	A	*	*
ApproachDel:	16.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

Attachment B

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Park Ln/ Elena Ave [MD Project 2030 Base]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.9
Optimal Cycle:	0	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:AM												
Base Vol:	33	28	25	45	65	71	54	110	23	43	197	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	28	25	45	65	71	54	110	23	43	197	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	0.70	0.70	0.80	0.80	0.80	0.80	0.75	0.70	0.70	0.70	0.70
PHF Volume:	47	40	36	56	81	89	68	147	33	61	281	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	40	36	56	81	89	68	147	33	61	281	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	40	36	56	81	89	68	147	33	61	281	61
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.38	0.33	0.29	0.25	0.36	0.39	0.27	0.60	0.13	0.15	0.70	0.15
Final Sat.:	208	177	158	147	213	232	170	369	83	102	466	102
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.38	0.38	0.38	0.40	0.40	0.40	0.60	0.60	0.60
Crit Moves:		****			****			****			****	
Delay/Veh:	10.3	10.3	10.3	11.5	11.5	11.5	11.6	11.6	11.6	15.1	15.1	15.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.3	10.3	10.3	11.5	11.5	11.5	11.6	11.6	11.6	15.1	15.1	15.1
LOS by Move:	B	B	B	B	B	B	B	B	B	C	C	C
ApproachDel:		10.3			11.5			11.6			15.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.3			11.5			11.6			15.1	
LOS by Appr:		B			B			B			C	
AllWayAvgQ:	0.2	0.2	0.2	0.5	0.5	0.5	0.6	0.6	0.6	1.3	1.3	1.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Valparaiso/Emilie [MD Project 2030 Base Incr]

Average Delay (sec/veh):	63.7	Worst Case Level Of Service:	[illegible]

Street Name:	Emilie									Valpara		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0	0	0	0	0	0	1	0	0	[illegible]
Volume Module:												
Base Vol:	49	636	0	0	759	141	113	0	51	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	636	0	0	759	141	113	0	51	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.82	1.00	1.00	0.93	0.79	0.74	1.00	0.74	1.00	1.00	1.00
PHF Volume:	52	776	0	0	816	178	153	0	69	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	52	776	0	0	816	178	153	0	69	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1015	xxxx	xxxxx	xxxx	xxxx	xxxxx	1804	824	92	xxxx	xxxx	xxxxx
Potent Cap.:	691	xxxx	xxxxx	xxxx	xxxx	xxxxx	88	378	973	xxxx	xxxx	xxxxx
Move Cap.:	680	xxxx	xxxxx	xxxx	xxxx	xxxxx	82	370	923	xxxx	xxxx	xxxxx
Volume/Cap:	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	1.87	0.00	0.71	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	106	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			58.6			xxxxxx		
ApproachLOS:	*			*			F			*		

Note: Queue reported is the number of cars per lane.

Attachment B

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Valparaiso Ave Driveway [MD Project 2030 Base + Incr]

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: F[47.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1	0 0
Volume Module:AM												
Base Vol:	0	655	38	50	760	0	0	0	0	11	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	655	38	50	760	0	0	0	0	11	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	0.61	0.73	0.77	0.90	1.00	1.00	1.00	1.00	0.92	1.00	0.91
PHF Volume:	0	1074	52	65	844	0	0	0	0	12	0	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1074	52	65	844	0	0	0	0	12	0	36
Critical Gap Module:												
Critical Gp:xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	
FollowUpTim:xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1135	xxxx	xxxxx	xxxx	xxxx	xxxxx	2083	2083	1109
Potent Cap.:	xxxx	xxxx	xxxxx	623	xxxx	xxxxx	xxxx	xxxx	xxxxx	59	54	257
Move Cap.:	xxxx	xxxx	xxxxx	618	xxxx	xxxxx	xxxx	xxxx	xxxxx	54	48	255
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	0.22	0.00	0.14
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	132	xxxxx
SharedQueue:xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.5	xxxxx	
Shrd ConDel:xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	47.0	xxxxx	
Shared LOS:	*	*	*	B	*	*	*	*	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			47.0		
ApproachLOS:	*			*			*			E		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Valparaiso/San Mateo [MD Project 2030 Base + Incr]

Average Delay (sec/veh): 4.7 Worst Case Level Of Service: [illegible]

Street Name:	Elena							Valparaiso				
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	1 0	0 1	0	0 0	0 0	0	0 0	0 0	1	0 0
Volume Module:												
Base Vol:	0	659	20	25	733	0	0	0	0	23	0	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	659	20	25	733	0	0	0	0	23	0	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	0.83	0.75	0.71	0.89	1.00	1.00	1.00	1.00	0.82	1.00	0.75
PHF Volume:	0	794	27	35	824	0	0	0	0	28	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	794	27	35	824	0	0	0	0	28	0	39
Critical Gap Module:												
Critical Gp:xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	
FollowUpTim:xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	831	xxxx	xxxxx	xxxx	xxxx	xxxxx	1311	1311	811
Potent Cap.:	xxxx	xxxx	xxxxx	810	xxxx	xxxxx	xxxx	xxxx	xxxxx	160	142	349
Move Cap.:	xxxx	xxxx	xxxxx	803	xxxx	xxxxx	xxxx	xxxx	xxxxx	97	87	376
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.29	0.00	0.10
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	138	xxxxx
SharedQueue:xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	3.3	xxxxx	
Shrd ConDel:xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	51.4	xxxxx	
Shared LOS:	*	*	*	A	*	*	*	*	*	F	*	
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			51.4		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Attachment B

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Valparaiso/Elena [MD Project 2030 Base + Incr]

Average Delay (sec/veh): 113.5 Worst Case Level Of Service: F[783.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0 0 0	0	0 0	1 0	0	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	126	574	0	0	627	150	95	0	116	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	574	0	0	627	150	95	0	116	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.64	0.83	1.00	1.00	0.83	0.80	0.86	1.00	0.59	1.00	1.00	1.00
PHF Volume:	197	692	0	0	755	188	110	0	197	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	197	692	0	0	755	188	110	0	197	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	951	xxxx	xxxxx	xxxx	xxxx	xxxxx	1942	1942	857	xxxx	xxxx	xxxxx
Potent Cap.:	731	xxxx	xxxxx	xxxx	xxxx	xxxxx	72	66	360	xxxx	xxxx	xxxxx
Move Cap.:	726	xxxx	xxxxx	xxxx	xxxx	xxxxx	55	45	357	xxxx	xxxx	xxxxx
Volume/Cap:	0.27	xxxx	xxxx	xxxx	xxxx	xxxx	2.01	0.00	0.55	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	120	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	1.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	27.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	11.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	783	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			783.0			xxxxxx		
ApproachLOS:	*			*			F			*		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Park/ Emilie Ave [MD Project 2030 Base + Incr]

Average Delay (sec/veh): 8.3 Worst Case Level Of Service: F[53.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrol			Uncontrol		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	0 0 0	0	0	0 0	0	1	0 0
Volume Module:	AM											
Base Vol:	107	0	96	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	0	96	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	1.00	0.70	1.00	1.00	1.00	1.00	0.70	0.70	0.70	0.70	0.70
PHF Volume:	153	0	137	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	153	0	137	0	0	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	615	595	195	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	591	xxxx	xxxxx
Potent Cap.:	458	420	851	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	432	xxxx	xxxxx
Move Cap.:	409	369	837	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	326	xxxx	xxxxx
Volume/Cap:	0.37	0.00	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	15.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	14.1	xxxx	xxxxx
LOS by Move:	C	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	539	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	8.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	A	*	*
ApproachDel:	19.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

Attachment B

Attachment B

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Project               Mon May 24, 2010 13:40:30                 Page 31-1
---------------------------------------------------------------------------
---------------------------------------------------------------------------
                  Level Of Service Computation Report
         2000 HCM 4-Way Stop Method (Base Volume Alternative)
***************************************************************************
Intersection #6 Park Ln/ Elena Ave [MD Project 2030 Base + Incr]
***************************************************************************
Cycle (sec):           100            Critical Vol./Cap.(X):        0.671
Loss Time (sec):         0 (Y+R=4.0 sec) Average Delay (sec/veh):    14.5
Optimal Cycle:           0            Level Of Service:                 B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        0  0  1! 0  0   0  0  1! 0  0   0  0  1! 0  0   0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:AM
Base Vol:     33    30    25   65    68    76   60   111    23   43   198    66
Growth Adj: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:  33    30    25   65    68    76   60   111    23   43   198    66
User Adj:   1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:    0.70  0.70  0.70 0.80  0.80  0.80 0.80  0.75  0.70 0.70  0.70  0.70
PHF Volume:   47    43    36   81    85    95   75   148    33   61   283    94
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:  47    43    36   81    85    95   75   148    33   61   283    94
PCE Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
FinalVolume:  47    43    36   81    85    95   75   148    33   61   283    94
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:      0.38  0.34  0.28 0.31  0.33  0.36 0.29  0.58  0.13 0.14  0.65  0.21
Final Sat.:  192   174   145  178   187   209  174   343    76   91   421   140
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.25  0.25  0.25 0.46  0.46  0.46 0.43  0.43  0.43 0.67  0.67  0.67
Crit Moves: ****                    ****              ****             ****
Delay/Veh:  10.8  10.8  10.8 12.9  12.9  12.9 12.5  12.5  12.5 17.6  17.6  17.6
Delay Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
AdjDel/Veh: 10.8  10.8  10.8 12.9  12.9  12.9 12.5  12.5  12.5 17.6  17.6  17.6
LOS by Move:   B     B     B    B     B     B    B     B     B    C     C     C
ApproachDel:      10.8             12.9             12.5             17.6
Delay Adj:        1.00             1.00             1.00             1.00
ApprAdjDel:       10.8             12.9             12.5             17.6
LOS by Appr:         B                B                B                C
AllWayAvgQ:  0.2   0.2   0.2  0.7   0.7   0.7  0.6   0.6   0.6  1.7   1.7   1.7
***************************************************************************
Note: Queue reported is the number of cars per lane.
***************************************************************************
```



```
Project               Mon May 24, 2010 13:40:30                 Page [illegible]
---------------------------------------------------------------------------
---------------------------------------------------------------------------
                  Level Of Service Computation Report
         2000 HCM Unsignalized Method (Base Volume Alternative)
***************************************************************************
Intersection #[illegible] Valparaiso/Emilie [MD Project 2030 Base + Incr [illegible]
***************************************************************************
Average Delay (sec/veh):     57.[illegible]     Worst Case Level Of Service: [illegible]
***************************************************************************
Street Name:               Emilie                          Valparaiso
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Lanes:        0  1  0  0  0   0  0  [illegible]  1  0   0  0  1! 0  0   [illegible]
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     49   642     0    0   759   141   10  [illegible]  [illegible]  [illegible]  [illegible]     0
Growth Adj: 1.00  1.00  1.00 1.00  1.00  1.00 [illegible]
Initial Bse:  49   642     0    0   759   141  107  [illegible]  [illegible]  [illegible]     0  [illegible]
User Adj:   1.00  1.00  1.00 1.00  1.00  1.00 [illegible]
PHF Adj:    0.95  0.82  1.00 1.00  0.93  0.79 0.74  1.00  0.74 [illegible]
PHF Volume:   52   783     0    0   816   178  145     0  [illegible]    0  [illegible]
Reduct Vol:    0     0     0    0     0     0 [illegible]
FinalVolume:  52   783     0    0   816   178  145  [illegible]
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1  xxxx xxxxx xxxxx xxxx xxxxx  [illegible]  xxxxx xxxx xxxxx
FollowUpTim:  2.2  xxxx xxxxx xxxxx xxxx xxxxx  [illegible]  4.0 [illegible]  xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1015 xxxx xxxxx  xxxx xxxx xxxxx [illegible]  831 [illegible]  xxxx xxxx xxxxx
Potent Cap.:  691 xxxx xxxxx  xxxx xxxx xxxxx   [illegible]  [illegible]  [illegible]  xxxx xxxx xxxxx
Move Cap.:    680 xxxx xxxxx  xxxx xxxx xxxxx   81  [illegible]  [illegible]  xxxx xxxx xxxxx
Volume/Cap:  0.08 xxxx  xxxx  xxxx xxxx  xxxx [illegible]  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2WayQ95thQ:   0.2 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 10.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    B    *     *    *     *     *    *     *     *    *     *     *
Movement:       LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  107 xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx [illegible] xxxxx xxxxx xxxx xxxxx
Shrd ConDel: 10.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx [illegible]  xxxxx xxxxx xxxx xxxxx
Shared LOS:     B    *     *    *     *     *    *  [illegible]     *    *     *     *
ApproachDel:     xxxxxx           xxxxxx           [illegible]           xxxxxx
ApproachLOS:        *                *                [illegible]                *
***************************************************************************
Note: Queue reported is the number of cars per lane.
***************************************************************************
```

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Valparaiso Ave Driveway[MD Project 2030 Base + Incr + Diversion]

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: E[47.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 1!	0	0 1	0 0	0	0 0	0 0 0	0	0 1!	0 0
Volume Module:AM												
Base Vol:	0	655	38	50	760	0	0	0	0	11	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	655	38	50	760	0	0	0	0	11	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	0.61	0.73	0.77	0.90	1.00	1.00	1.00	1.00	0.92	1.00	0.91
PHF Volume:	0	1074	52	65	844	0	0	0	0	12	0	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1074	52	65	844	0	0	0	0	12	0	36
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	135	xxxx	xxxxx	xxxx	xxxx	xxxxx	2083	2083	1109
Potent Cap.:	xxxx	xxxx	xxxxx	623	xxxx	xxxxx	xxxx	xxxx	xxxxx	59	54	257
Move Cap.:	xxxx	xxxx	xxxxx	618	xxxx	xxxxx	xxxx	xxxx	xxxxx	54	48	255
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	0.22	0.00	0.14
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	132	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.5	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	47.0	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				47.0	
ApproachLOS:	*			*			*				E	

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alterna[illegible])

Intersection #3 Valparaiso/San Mateo [MD Project 2030 Base [illegible]

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: [illegible]

Street Name:	Elena											
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0 1!	0	0 1	0 0	0	0 0	0 0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	0	665	20	25	733	0	[illegible]					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]					
Initial Bse:	0	665	20	25	733	0	[illegible]					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]					
PHF Adj:	1.00	0.83	0.75	0.71	0.89	1.00	[illegible]					
PHF Volume:	0	801	27	35	824	0	[illegible]					
Reduct Vol:	0	0	0	0	0	0	[illegible]					
FinalVolume:	0	801	27	35	824	0	[illegible]					
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	[illegible]		
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	838	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Potent Cap.:	xxxx	xxxx	xxxxx	805	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Move Cap.:	xxxx	xxxx	xxxxx	799	xxxx	xxxxx	xxxx	xxxx	xxxxx	[illegible]		
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	[illegible]		
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	[illegible]	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	[illegible]	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	[illegible]	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				[illegible]	
ApproachLOS:	*			*			*				[illegible]	

Note: Queue reported is the number of cars per lane.

Attachment B

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Valparaiso/Elena MD Project 2030 Base + Incr + Diversion

Cycle (sec):	100	Critical Vol./Cap.(X):	1.000
Loss Time (sec):	2 (Y+R=4.0 sec)	Average Delay (sec/veh):	25.9
Optimal Cycle:	180	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	8	0	55	55	55	30	30	30	0	0	0
Lanes:	0	1	0 0 0	0	0	0 1 0	0	0	1! 0 0	0	0	0 0 0
Volume Module:												
Base Vol:	126	574	0	0	627	150	101	0	116	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	574	0	0	627	150	101	0	116	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.64	0.83	1.00	1.00	0.83	0.80	0.86	1.00	0.59	1.00	1.00	1.00
PHF Volume:	197	692	0	0	755	188	117	0	197	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	692	0	0	755	188	117	0	197	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	197	692	0	0	755	188	117	0	197	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.99	1.00	1.00	0.97	0.97	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.22	0.78	0.00	0.00	0.80	0.20	0.37	0.00	0.63	0.00	0.00	0.00
Final Sat.:	358	1463	0	0	1481	368	638	0	1069	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.55	0.47	0.00	0.00	0.51	0.51	0.18	0.00	0.18	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.68	0.68	0.00	0.00	0.55	0.55	0.30	0.00	0.30	0.00	0.00	0.00
Volume/Cap:	0.82	0.70	0.00	0.00	0.93	0.93	0.61	0.00	0.61	0.00	0.00	0.00
Uniform Del:	20.2	9.7	0.0	0.0	20.7	20.7	30.0	0.0	30.0	0.0	0.0	0.0
IncrementDel:	4.9	1.7	0.0	0.0	14.0	14.0	2.2	0.0	2.2	0.0	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	25.1	11.4	0.0	0.0	34.7	34.7	32.2	0.0	32.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.1	11.4	0.0	0.0	34.7	34.7	32.2	0.0	32.2	0.0	0.0	0.0
LOS by Move:	C	B	A	A	C	C	C	A	C	A	A	A
HCM2kAvgQ:	22	17	0	0	31	31	9	0	9	0	0	0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Park/ Emilie Ave (MD Project 2030 Base + Incr + Diversion)

Average Delay (sec/veh):	8.2	Worst Case Level Of Service:	F (50.0)

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	0 0 0	0	0	0 1 0	0	0	0 0 0
Volume Module:	AM											
Base Vol:	107	0	96	0	0	0	0	63	113	103	86	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	0	96	0	0	0	0	63	113	103	86	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	1.00	0.70	1.00	1.00	1.00	1.00	0.70	0.70	0.70	0.70	1.00
PHF Volume:	153	0	137	0	0	0	0	90	161	147	123	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	153	0	137	0	0	0	0	90	161	147	123	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	611	591	191	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	250	xxxx	xxxxx
Potent Cap.:	461	477	856	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1328	xxxx	xxxxx
Move Cap.:	411	371	842	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1328	xxxx	xxxxx
Volume/Cap:	0.37	0.00	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	542	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	3.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	A	*	*
ApproachDel:	19.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #6 Park Ln/ Elena Ave [MD Project 2030 Base + Incr + Diversion]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.6
Optimal Cycle:	0	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:AM												
Base Vol:	33	30	25	71	68	76	60	111	23	43	198	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	30	25	71	68	76	60	111	23	43	198	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.70	0.70	0.70	0.80	0.80	0.80	0.80	0.75	0.70	0.70	0.70	0.70
PHF Volume:	47	43	36	89	85	95	75	148	33	61	283	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	43	36	89	85	95	75	148	33	61	283	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	43	36	89	85	95	75	148	33	61	283	94
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.38	0.34	0.28	0.33	0.32	0.35	0.29	0.58	0.13	0.14	0.65	0.21
Final Sat.:	191	173	144	189	181	202	173	341	76	91	419	140
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.25	0.47	0.47	0.47	0.43	0.43	0.43	0.68	0.68	0.68
Crit Moves:	****				****			****			****	
Delay/Veh:	10.8	10.8	10.8	13.2	13.2	13.2	12.5	12.5	12.5	17.9	17.9	17.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.8	10.8	10.8	13.2	13.2	13.2	12.5	12.5	12.5	17.9	17.9	17.9
LOS by Move:	B	B	B	B	B	B	B	B	B	C	C	C
ApproachDel:		10.8			13.2			12.5			17.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.8			13.2			12.5			17.9	
LOS by Appr:		B			B			B			C	
AllWayAvgQ:	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.3	0.7	0.7	0.7

Note: Queue reported is the number of cars per lane.

Attachment B

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SACRED HEART SCHOOLS, SANDY DUBINSKY (SHS-SD)

Response to SHS-SD-1

This introductory comment acknowledges the thorough analysis prepared for the Project and refers to a previous memorandum submitted by SHS on the Draft EIR. The comment does not contain any comments relevant to the Draft EIR and no further response is required.

Response to SHS-SD-2

Table II-1, Summary of Impacts and Mitigation Measures will be revised to reflect any changes made to mitigation measures in response to comments.

Response to SHS-SD-3

The comment states that some approvals listed in Table III-3, Project Approvals are not in fact discretionary, but could be considered ministerial and handled as a matter of compliance.

In addition to discretionary approvals by the Town for the Project, the Project may rely on other agency approvals and/or permits as listed in Table III-3, Project Approvals. To clarify the intent of Table III-3, page III-20 of the EIR is revised as follows:

A list of the required approvals, permits, and discretionary actions ~~permits and approvals~~ that may be required is shown in Table III-3.

Response to SHS-SD-4

Future structures that would require a Geotechnical Report include structures suitable for human occupation or use and would not include the installation of fences, signs, or other installations that common sense would dictate do not pose a hazard to humans from underlying geological conditions requiring engineering.

Response to SHS-SD-5

The comment expresses concern over the extent of the required 300 ft. buffer around nesting raptors and seeks clarification of Mitigation Measure BIO-1 found on Page IV.D.-24.

The Migratory Bird Treaty Act protects all breeding bird and it is illegal to disrupt a nesting bird, nest or egg. The buffers from nests are designated by CDFG and are typically 100' for most birds and 300' for raptors. If work is to be done during the breeding season, pre-construction nesting bird surveys are required within 300 feet of disturbance areas. Surveys are done with binoculars and generally do not entail trespassing on neighboring properties. If active nests are found on or within 300 feet of proposed disturbance, all activities in the vicinity of the nest must be delayed until the young have fledged. No work can be done within the designated buffer zone of any active nest (e.g. 100' or 300' or as designated

by CDFG for certain species). The applicant may hire any qualified biologist with experience performing pre-construction nesting bird surveys and regulatory agency consultation.

The mitigation measure stands as submitted, pursuant to the Migratory Bird Treaty Act and the laws of the State of California, regulated by CDFG. No modifications to the EIR are necessary.

Response to SHS-SD-6

The comment requests that the tree impact estimates reflect those of the Master Plan and requests changes to the document.

As requested, the tree impact estimates on Page IV.D.-25 have been changed to reflect the Master Plan. It should be noted that tree impacts may change as project planning advances. The applicant is required to submit a final report to the Town reflecting any changes in tree impacts due to project implementation.

Page IV.D-25 has been revised as follows:

The development of the site would involve impacts to heritage trees on site which are protected under the Town of Atherton Heritage Tree Ordinance (Chapter 8.10) including Valley oaks (*Quercus lobata*) which are components of Valley Oak Woodland, a protected Sensitive Community. The removal of and or encroachment on ~~21~~ 16 Heritage trees, 6 of these trees are oaks, and ~~101~~ 94 ornamentals site wide would constitute a potentially significant impact. In addition, buildout of the Master Plan would involve the removal of and/or encroachment on additional trees including Heritage trees. This would be a ***significant*** impact.

Response to SHS-SD-7

The comment requests that the DEIR clarify that both near-term and long-term impacts to trees are addressed in the Mitigation Planting Program. In addition, the comment requests modification of the number of trees to be replaced in each project area.

As requested, the language on Page IV.D.-28 has been modified to reflect the intent of the Mitigation Planting Program. Tree replacement numbers have been modified to reflect the requested changes.

Page IV.D-28 has been revised as follows:

Mitigation Planting Program

In addition to the above listed mitigations, Project landscape architects have developed a Mitigation Planting Program to mitigate the near-term and long-term loss of site trees due to implementation of the Project as follows:

The St. Joseph's portion of the Project is proposing ~~47~~ 45 replacement trees for impacts to ~~21~~ 16 Heritage trees. All Heritage oaks shall be replaced with 48" boxed coast live oak (*Quercus agrifolia*) at a 1:1

replacement ratio. All other species of Heritage trees shall be replaced with 15 gallon Q. agrifolia at a 3:1 replacement ratio in accordance with the Town of Atherton Heritage Tree Ordinance (Chapter 8.10). For the 41 additional ornamental trees that shall be impacted, ~~101~~111 replacement plantings are planned (see Planting plans for sizes, species and locations).

The West Fields portion of the Project is proposing no impacts to Heritage trees. For the 58 ornamental trees that will be impacted, ~~17~~ 19 24" box California sycamore (*Platanus racemosa*) and 2 valley oak (*Quercus lobata*) replacement plantings are planned. In addition, 5 mature fruiting olive (*Olea europaea*) would be relocated (see Planting plans for sized, species and locations).

As discussed above, prior to mitigation, the proposed impact to as many as ~~21~~16 Heritage trees and ~~101~~ 94 ornamentals site wide would constitute a potentially significant impact.

Response to SHS-SD-8

Page IV.G-14. Appendix Table B was incorrectly referenced. It should be Appendix J. The reference has been changed. This appendix sheet is attached.

Page IV.G-14 is revised as follows:

3. There were significant vehicle queues on both the Emilie and Elena avenue approaches to Valparaiso Avenue (see Appendix Table ~~B~~J).

Response to SHS-SD-9

Figure IV.G-15. It is noted that the entrance from Park Lane is a one-way inbound driveway. All outbound traffic shown at this driveway would be added to the outbound only driveway. This would not produce any change in findings. Figure IV.G-15 has been revised.

Response to SHS-SD-10

Page IV.G-16. Appendix X was incorrectly referenced. It should be Appendix J. The reference has been changed in the text and the appendix sheet is attached.

Page IV.G-16 is revised as follows:

Please see Appendix ~~B~~J for the warrant criteria chart.

Response to SHS-SD-11

Page IV.G-19. At Town of Atherton request, both a near and long term horizon were evaluated for traffic purposes. The near term horizon of 2014 was selected because it would be the first year after project completion. The long term horizon selected for cumulative analysis was 2030, as this is the year of available traffic modeling projections from the San Mateo City/County Association of Governments.

Response to SHS-SD-12

Page IV.G-20. The 1 percent per year growth was applied to year 2009 volumes to a year 2014 horizon. There is no two-year period of overestimation of future traffic growth.

Response to SHS-SD-13

Page IV.G-24. Long term horizon (year 2030) C/CAG traffic modeling projections have been developed for all major streets in Atherton and Menlo Park, but only a representative sampling of minor streets. The projected traffic for a minor street (included in the model) is reflective of not only the traffic on that one street, but also of the traffic that would be expected on all other nearby parallel streets that are not included in the model. The phrase "the reality of the local street system" is in reference to the fact that there are many more local streets than just those included in the traffic model.

Response to SHS-SD-14

Pages IV.G-31 and 32. Comment noted. A total student cap of 1,196 students has been utilized for analysis purposes.

Response to SHS-SD-15

Pages IV.G-31 through 34. The term "travel mode" refers to the form of transport to/from the campus (i.e. auto, school bus, walk, bike, etc.). The master plan is not proposing any changes that would significantly shift the percentage of students being driven by parents to increased school bus service, walking or biking. Travel mode does not refer to the regional or subregional distribution or redistribution of parent traffic from old driveways to new driveways.

Response to SHS-SD-16

Page IV.G-33, Table IV.G-8. SHS staff was asked at the beginning of the project whether there would be any significant change in travel mode for new students or for the campus in general due to the proposed project (i.e. more busing, carpools, etc.). The response was that there would be no significant change. Therefore, the net increase in students was projected to generate traffic at the same rate as the existing student body. This was the same assumption and approach utilized in several recent traffic studies conducted directly for Sacred Heart Schools. A maximum enrollment of 1,196 students was utilized for all evaluation.

Response to SHS-SD-17

Pages IV.G-46 through IV.G-61. While the mitigation measures described as Alternative A designated for each location represents the mitigation measure necessary to mitigate to a less-than-significant level the Project's significant impact to that intersection, it may be in the applicant's and/or Town's interest to choose another alternative or combination of alternatives. Further, it may be in the applicant's or Town's interest to choose alternatives that may result sharing the cost of implementing the selected alternative(s).

Response to SHS-SD-18

Page IV.G-33, Table IV.G-11, Page IV.G.-51. No peer review has been conducted of the DKS analysis showing no new impacts at the Valparaiso/Emilie intersection if a signal is provided at the Elena intersection.

A signalized Valparaiso Avenue/Elena Avenue intersection will operate with much greater safety for drivers (and school children) making left turn movements from Valparaiso Avenue to Elena Avenue if a left turn lane is provided on the Valparaiso Avenue intersection approach. Without a left turn deceleration lane, there will be a greater probability for rear end accidents as well as greater danger for bike riders in the bike lane adjacent to the travel lane. Some through traffic will (illegally) pull into the bike lane to pass (on the right) a vehicle waiting to make a left turn. While the level of service analysis provided by the applicant's traffic engineer does show the intersection operating at an acceptable level without a left turn deceleration lane on the Valparaiso approach, this simplified analysis does not take into account the realities of increased safety factors due to the exclusion of the left turn lane. The primary beneficiary of the left turn deceleration lane would be the Sacred Heart Schools' parents and students.

Response to SHS-SD-19

Page IV.G-62 Impact Traf-7. If the school can guarantee that there will be no construction-related traffic on the local roadway system during the AM and mid afternoon peak hours of school traffic, the requested change would be acceptable. However, the school will need to do more than just "advise" their contractors when construction traffic should not be on the local system. A firm traffic management plan with precise timeframes when no construction traffic is permitted on the local system should be prepared and submitted to the Town for approval.

Response to SHS-SD-20

Page IV.G-63 Impact Traf-7. Comment noted. This change would not result in any additional impacts or needed mitigations.

Response to SHS-SD-21

This comment correctly states that an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives focuses on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The alternatives analyzed in the Draft EIR were chosen for their ability to reduce or avoid impacts resulting from the Project to trees, noise, and traffic. However, as noted in the Draft EIR, none of the alternatives would reduce or eliminate all of the significant impacts of the Project. Alternative 2, the No Project/No Build Alternative would result in incrementally fewer impacts to aesthetics, biological resources, and noise. However, it would also allow a maximum enrollment of 1,250 students as proposed by the April 2008 SHS Master Plan, which would result in increased impacts to air quality and traffic. Alternative 4, the Reduced Enrollment Alternative would have similar impacts to aesthetics, biological resources, and noise as the Project, but would reduce vehicle trips, which would incrementally reduce impacts to air quality and traffic due to the reduction in students. However, even this incremental reduction in trips would result in similar impacts to traffic as under the Project and require implementation of similar mitigation measures. All of the Projects impacts would be reduced to a level of less than significance and there are no significant and unavoidable impacts resulting from the Project that an alternative would eliminate.

CEQA requires that a public agency must use its available powers to require mitigation measure to reduce impacts from a project. The Town of Atherton will require that mitigation measures as recommended in the Draft EIR be adopted for the Project. In addition, the Town will make findings in accordance with CEQA that all feasible mitigation measures have been incorporated into the Project. Therefore, the actions of the Town would be consistent with CEQA in approving and adopting the Project.

IV. REVISIONS TO THE DRAFT EIR

This section presents corrections and clarifications that have been made to the text of the Draft EIR. These changes include revisions resulting from specific responses to comments and staff-initiated text changes to correct non-substantive errors. The text revisions are organized by section and page number as they appear in the Draft EIR. Text deleted from the Draft EIR is shown in ~~strikethrough~~, and new text is underlined.

Executive Summary

Page II-3 of the Draft EIR is revised as follows:

~~Three~~ Four alternatives were analyzed that would feasibly attain most of the basic project objectives, but would avoid or substantially lessen some of the significant effects of the Project. These alternatives include the following:

Page II-13 of the Draft EIR is revised as follows:

Mitigation Planting Program

In addition to the above listed mitigations, Project landscape architects have developed a Mitigation Planting Program to mitigate the near-term and long-term loss of site trees due to implementation of the Project as follows:

The St. Joseph's portion of the Project is proposing ~~47~~ 45 replacement trees for impacts to ~~21~~ 16 Heritage trees. All Heritage oaks shall be replaced with 48" boxed coast live oak (Quercus agrifolia) at a 1:1 replacement ratio. All other species of Heritage trees shall be replaced with 15 gallon Q. agrifolia at a 3:1 replacement ratio in accordance with the Town of Atherton Heritage Tree Ordinance (Chapter 8.10). For the 41 additional ornamental trees that shall be impacted, ~~101~~ 111 replacement plantings are planned (see Planting plans for sizes, species and locations).

The West Fields portion of the Project is proposing no impacts to Heritage trees. For the 58 ornamental trees that will be impacted, ~~17~~ 19 24" box California sycamore (Platanus racemosa) and 2 valley oak (Quercus lobata) replacement plantings are planned. In addition, 5 mature fruiting olive (Olea europaea) would be relocated (see Planting plans for sized, species and locations).

As discussed above, prior to mitigation, the proposed impact to as many as ~~21~~16 Heritage trees and ~~101~~ 94 ornamentals site wide would constitute a potentially significant impact.

Project Description

Figure III-8 has been revised to as:

View 10: View of ~~Sigall Hall~~ Morey Building from Elena Avenue Parking Area.

Page III-20 of the Draft EIR is revised as follows:

A list of the required approvals, permits, and discretionary actions ~~permits and approvals~~ that may be required is shown in Table III-3.

Page III-12 has been revised as follows:

An Initial Study/Mitigated Negative Declaration (IS/MND) was certified for the Science and Student Life Building Project on January 2, 2008. The IS/MND also analyzed the impacts of the demolition of the Morey Building; Quadrangle landscaping improvements; renovations to the Sigall Building and McGanney Sports Center; relocation of the ~~Preparatory School Athletic Field~~ existing softball field; and new and updated sewer, water, and other utility lines.

Page III-12 is revised as follows:

Building Construction. The Project proposes the construction of an approximately 21,400 square-foot two-story Lower School and an approximately 30,850 square-foot two-story Middle School (including a one-story addition for administrative offices and Chapel) for the St. Joseph's campus. The St. Joseph's campus would be relocated from its existing location along Emilie Avenue and moved closer to Park Lane and closer to the middle of the campus. A new approximately6,360 square-foot Library, 21,900 square-foot St. Joseph's Assembly Hall and Performing Arts classrooms, Graduation Court, and Entry Court would be constructed as part of this complex. These buildings would all be one story. Building square footage constructed on the St. Joseph's campus would total approximately ~~99,000~~ 80,555 square feet.

Page III-14 is revised as follows:

Stormwater retention devices, including the use of bioswales and underground retention tanks, would be installed throughout the campus. Impervious surfaces on the site currently total 33 ~~areas~~ acres or approximately 46 percent of the Project site.

Page III-17, Table III-1 is revised as follows:

Table III-1
Sacred Heart Schools Campus
Existing and Proposed Square Footage

Building	Existing (SF)	Demolished (SF)	New Construction (SF))	Proposed (SF)
Main	68,008	—		68,008
Gym - McGanney	27,840	27,840	40,000[1]	40,000
Sigall	21,000	—		21,000
Morey	17,950	17,950[2]		—
Gate House	2,600	2,600	3,500[3]	3,500
The Castle	1,000	1,000		—
Maintenance	1,000	—		1,000
Barn–Grounds Shop	2,400	—		2,400
Montessori	7,480	—		7,480
Foley Center	5,840	5,840		—
St. Joseph's #400	4,225	4,225		—
St. Joseph's #300	7,796	7,796		—
St. Joseph's #100	~~1~~7,028	~~1~~7,028		—
St. Joseph's #200	7,955	7,955		—
Speiker Pavilion	31,465	—		31,465
Campbell Center	28,000	—		28,000
Aquatic Center	2,000	—		2,000
Field House	7,700	—		7,700
Science & Student Life	44,100	—		44,100
St. Joseph's Lower	—	—	21,424	21,424
St. Joseph's Middle	—	—	30,853	30,853
Library	—	—	6,363	6,363
St. Joseph's Lower Assembly Hall/Performing Arts	—	—	21,915	21,915
Concession/Restrooms	—	—	3,000	3,000
Total	**305,387**	**64,~~394~~ 284**	**99,215**	**340,208**

[a] *Footnote:*
[1] 12,610 square feet of new constructino.
[2] Morey Hall demolition previously analyzed in Science and Student Life Building IS/MND, January 2, 2008 and therefore the square footage is not considered as part of the demolition totals.
[3] 900 square feet of new construction.

Source: Sacred Heart Schools, 2010.

Page III-18 is revised as follows:

The Project would be constructed in two phases. Phase One would occur from 2010 through 2012 and would include the St. Joseph's campus improvements, realignment of sports fields, roadway and entry improvements, parking facilities, the changing areas/restrooms/concession stand and storage, and landscaping and pedestrian improvements. The St. Joseph's campus improvements would be constructed in a single phase over approximately 15 to 18 months. Buildings 300 and 400 and Foley Center would be demolished at the start of the St. Joseph's phase of the Project. The 100 and 200 building will be demolished once the new Lower School building is completed. Temporary classrooms will be used during the building phase.

Phase Two would occur from 2012 to 2014 and would include the construction of the McGanney Sports Center replacement (including a Practice Gym), the changing areas/restrooms/concession stand and storage, and renovations to the maintenance shop area. Renovations to the maintenance shop area would be to create a new central delivery point and would include a new access roadway.

Section IV.D, Biological Resources

Page IV.D-25 has been revised as follows:

The development of the site would involve impacts to heritage trees on site which are protected under the Town of Atherton Heritage Tree Ordinance (Chapter 8.10) including Valley oaks (*Quercus lobata*) which are components of Valley Oak Woodland, a protected Sensitive Community. The removal of and or encroachment on 21 16 Heritage trees, 6 of these trees are oaks, and 101 94 ornamentals site wide would constitute a potentially significant impact. In addition, buildout of the Master Plan would involve the removal of and/or encroachment on additional trees including Heritage trees. This would be a ***significant*** impact.

Page IV.D-28 has been revised as follows:

Mitigation Planting Program

In addition to the above listed mitigations, Project landscape architects have developed a Mitigation Planting Program to mitigate the near-term and long-term loss of site trees due to implementation of the Project as follows:

The St. Joseph's portion of the Project is proposing 47 45 replacement trees for impacts to 21 16 Heritage trees. All Heritage oaks shall be replaced with 48" boxed coast live oak (Quercus agrifolia) at a 1:1 replacement ratio. All other species of Heritage trees shall be replaced with 15 gallon Q. agrifolia at a 3:1 replacement ratio in accordance with the Town of Atherton Heritage Tree Ordinance (Chapter 8.10). For the 41 additional ornamental trees that shall be impacted, 101 111 replacement plantings are planned (see Planting plans for sizes, species and locations).

The West Fields portion of the Project is proposing no impacts to Heritage trees. For the 58 ornamental trees that will be impacted, ~~17~~ 19 24" box California sycamore (Platanus racemosa) and 2 valley oak (Quercus lobata) replacement plantings are planned. In addition, 5 mature fruiting olive (Olea europaea) would be relocated (see Planting plans for sized, species and locations).

As discussed above, prior to mitigation, the proposed impact to as many as ~~21~~16 Heritage trees and ~~101~~ 94 ornamentals site wide would constitute a potentially significant impact.

Section IV.G, Traffic

Page IV.G-5 is revised as follows:

Emilie Avenue is a two-lane north-south street extending between Valparaiso Avenue and ~~Alexandra~~ Alejandra Avenue.

Page IV.G-14 is revised as follows:

3. There were significant vehicle queues on both the Emilie and Elena avenue approaches to Valparaiso Avenue (see Appendix Table ~~B~~J).

Page IV.G-16 is revised as follows:

Please see Appendix ~~B~~J for the warrant criteria chart.

Appendix

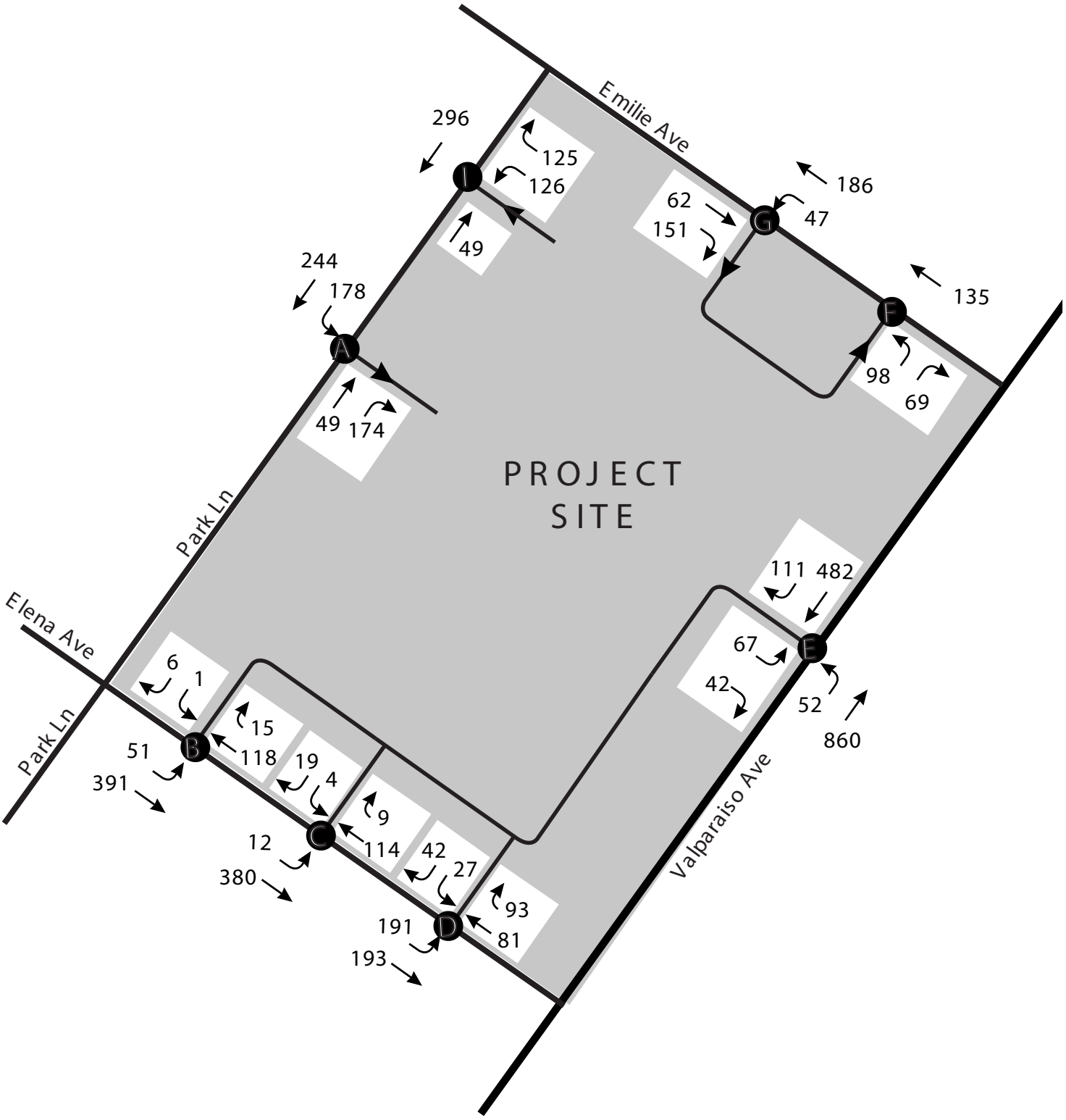
Appendix Table C1.2 is revised as follows:

Field House	7700	2007	~~Nibbi Brothers~~ Pfau Architecture	Locker rooms, bathrooms, bleachers on top

View 9: Cemetery, Near Center of Campus Looking Northwest.

View 10: View of ~~Sigall Hall~~ Morey Building from Elena Avenue Parking Area.

Source: Christopher A. Joseph & Associates, 2010.

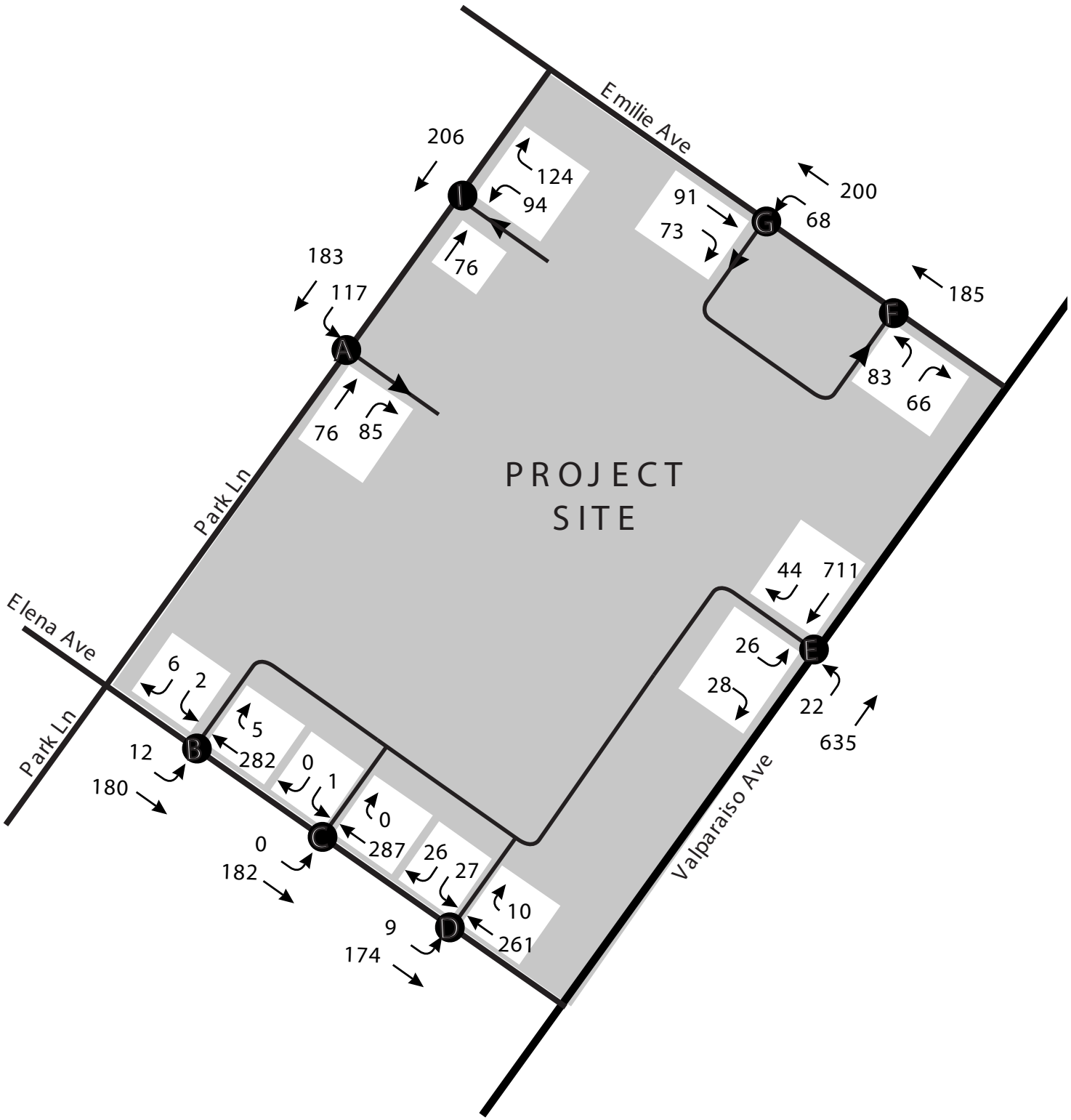


Source: Crane Transportation Group, 2010.

Not to Scale

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.G-15
Year 2014 AM Peak Hour
Base Case + Project Driveway Volumes

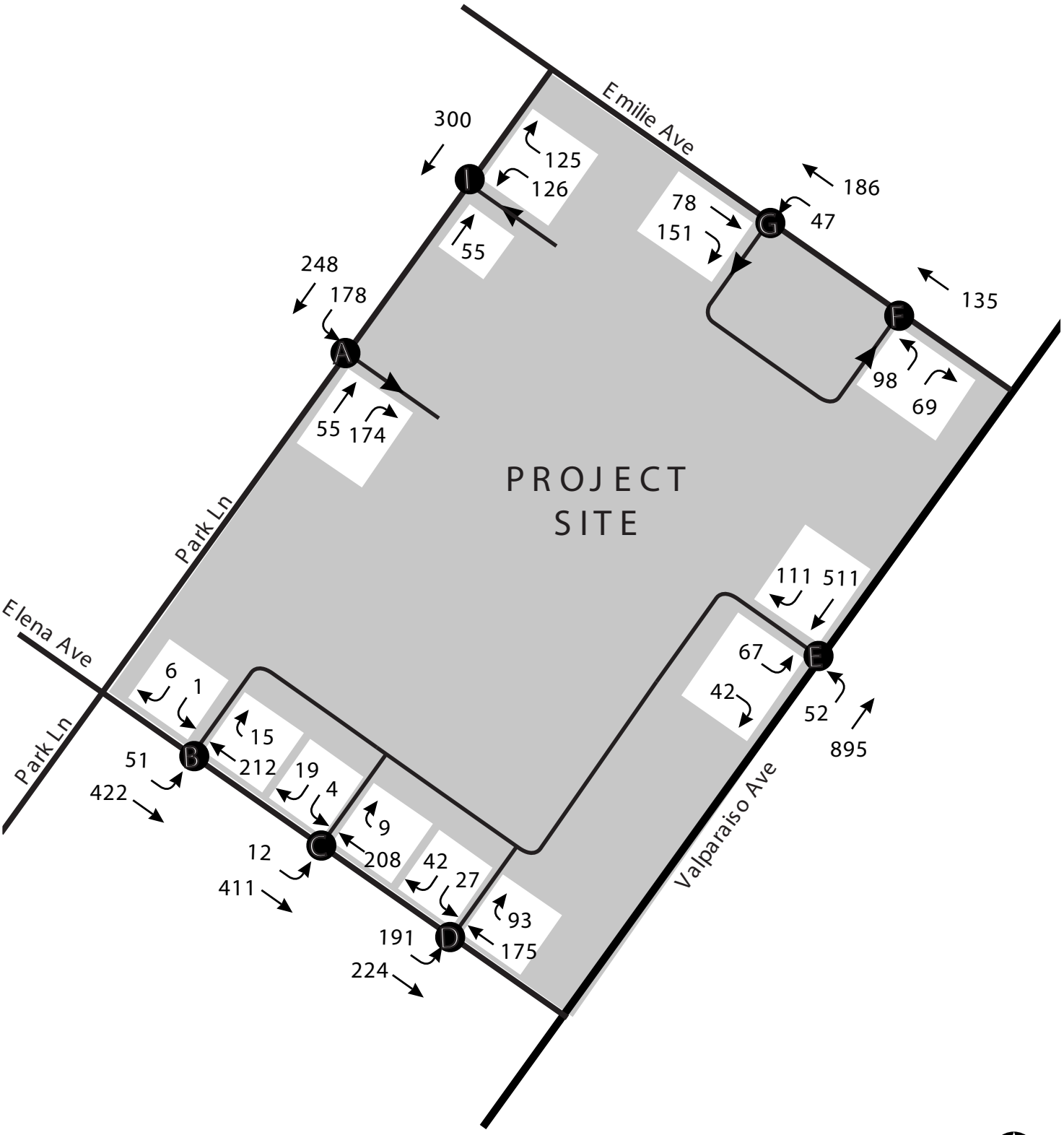


Source: Crane Transportation Group, 2010.

Not to Scale

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.G-16
Year 2014 Mid Afternoon (Post School) Peak Hour
Base Case + Project Driveway Volumes

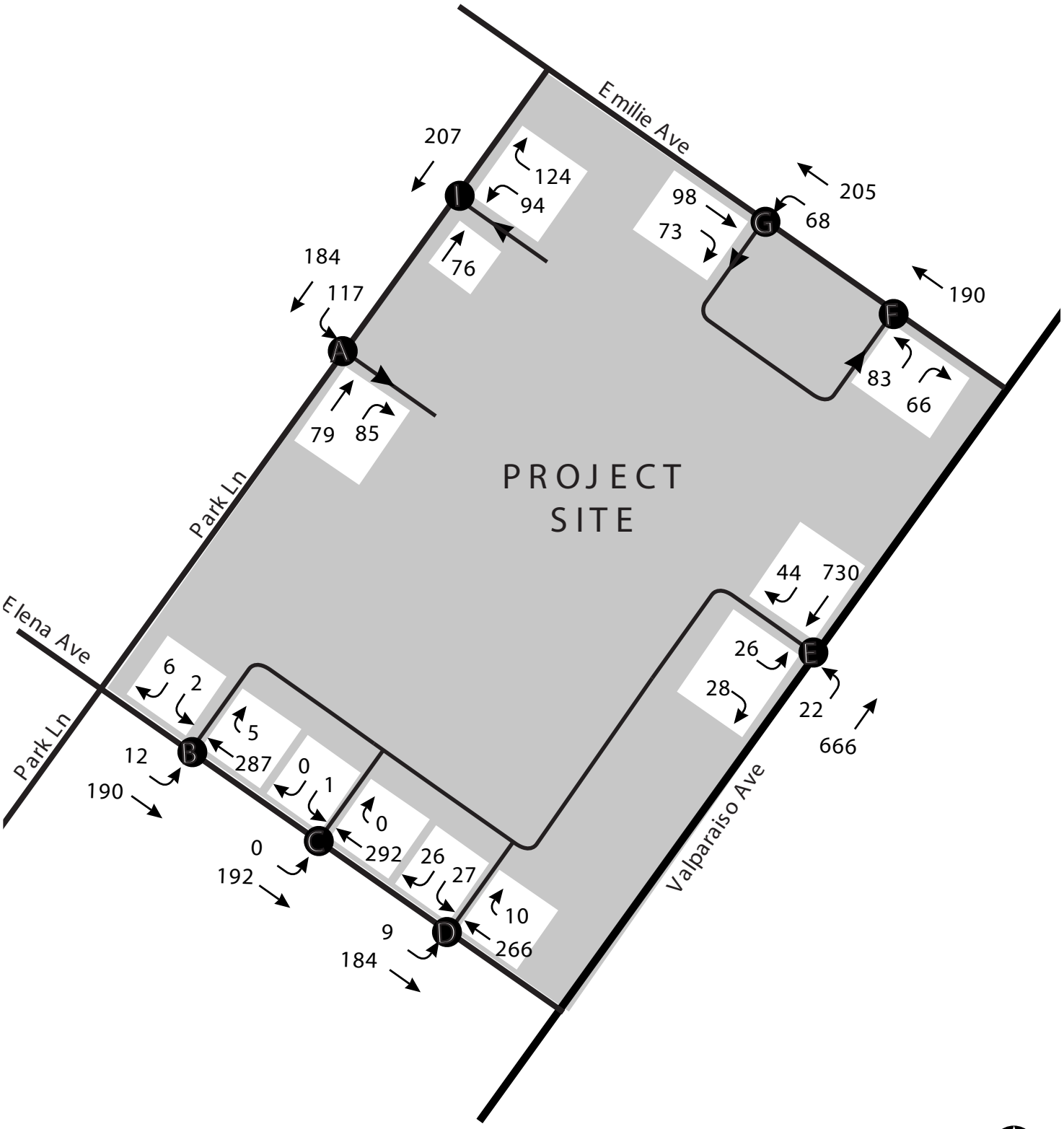


Source: Crane Transportation Group, 2010.

Not to Scale

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.G-19
Year 2030 AM Peak Hour
Base Case + Project Driveway Volumes



Source: Crane Transportation Group, 2010.

Not to Scale

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.G-20
Year 2030 Mid Afternoon (Post School) Peak Hour
Base Case + Project Driveway Volumes