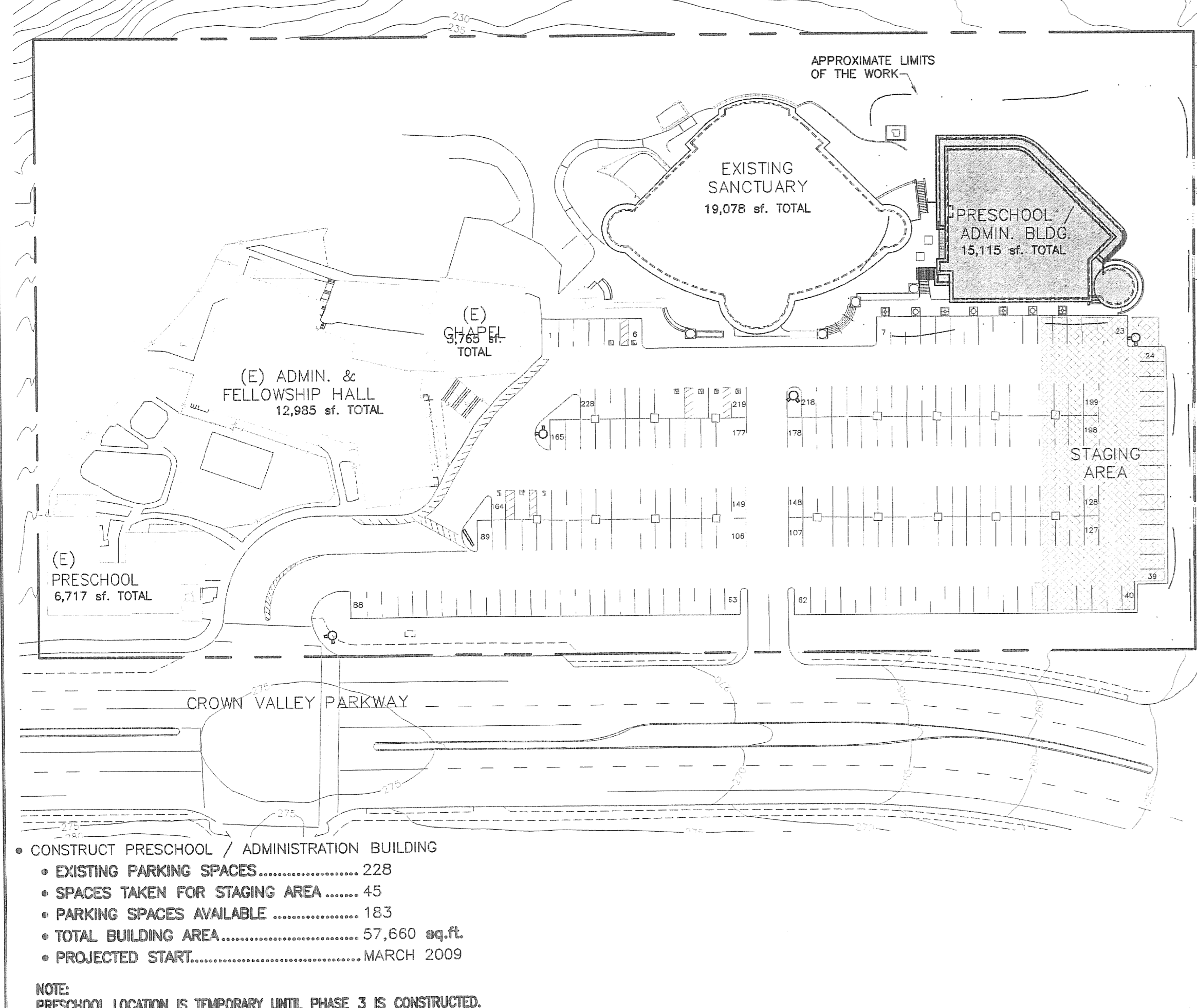
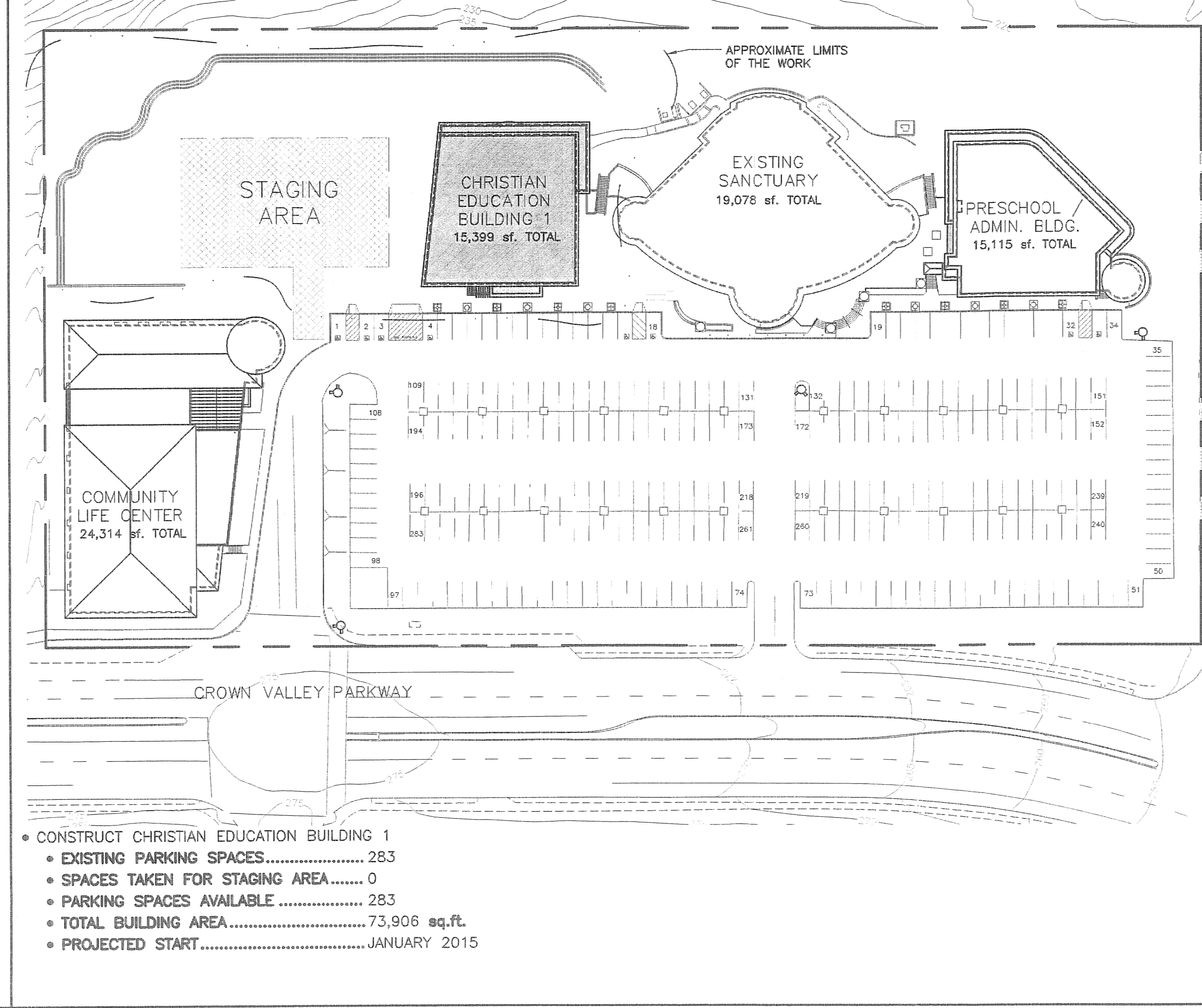


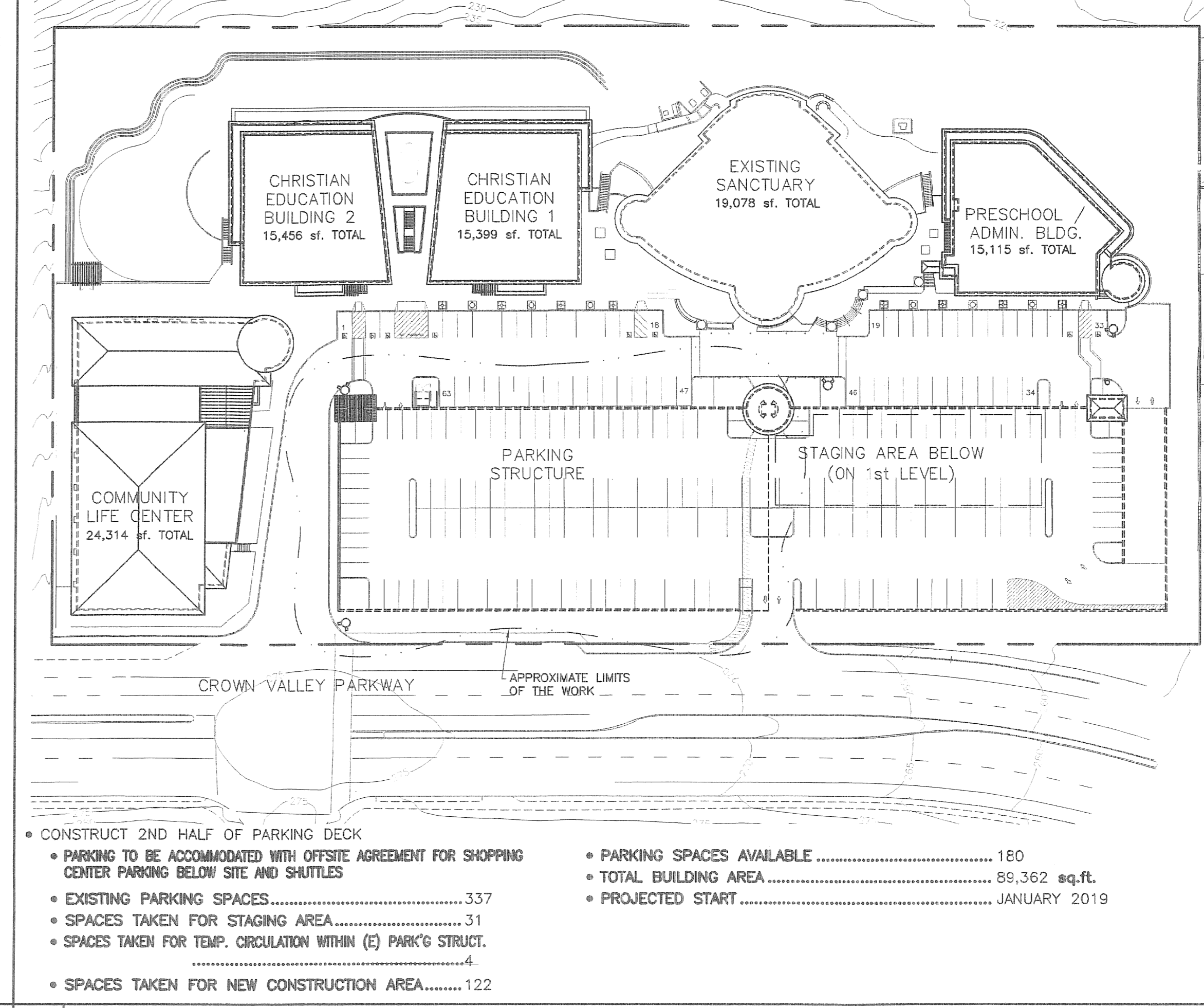
SOUTH SHORES CHURCH PHASING PLAN S.R. 154421



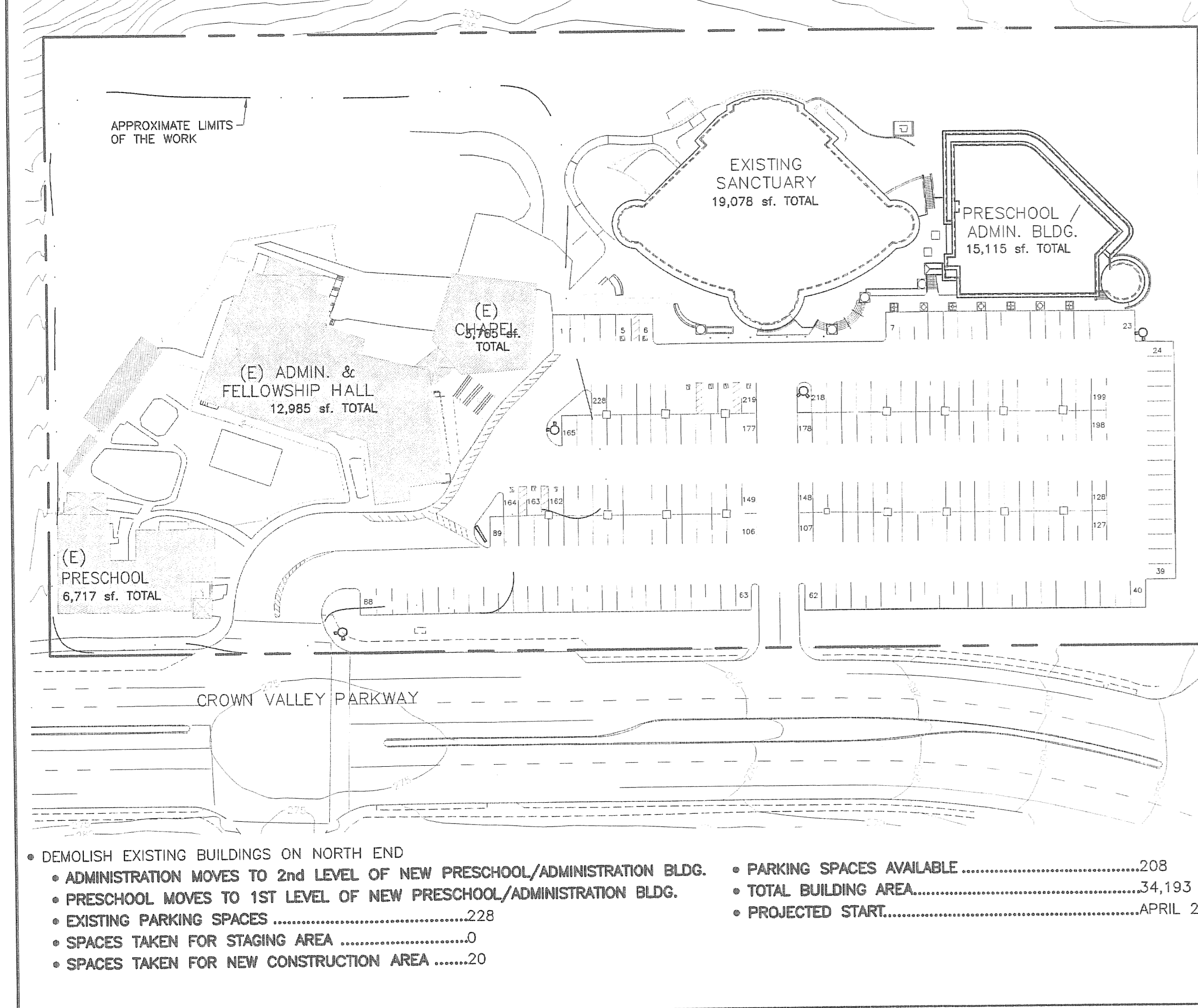
1 Construct New Preschool / Administration Bldg. - Phase 1A 1" = 60'



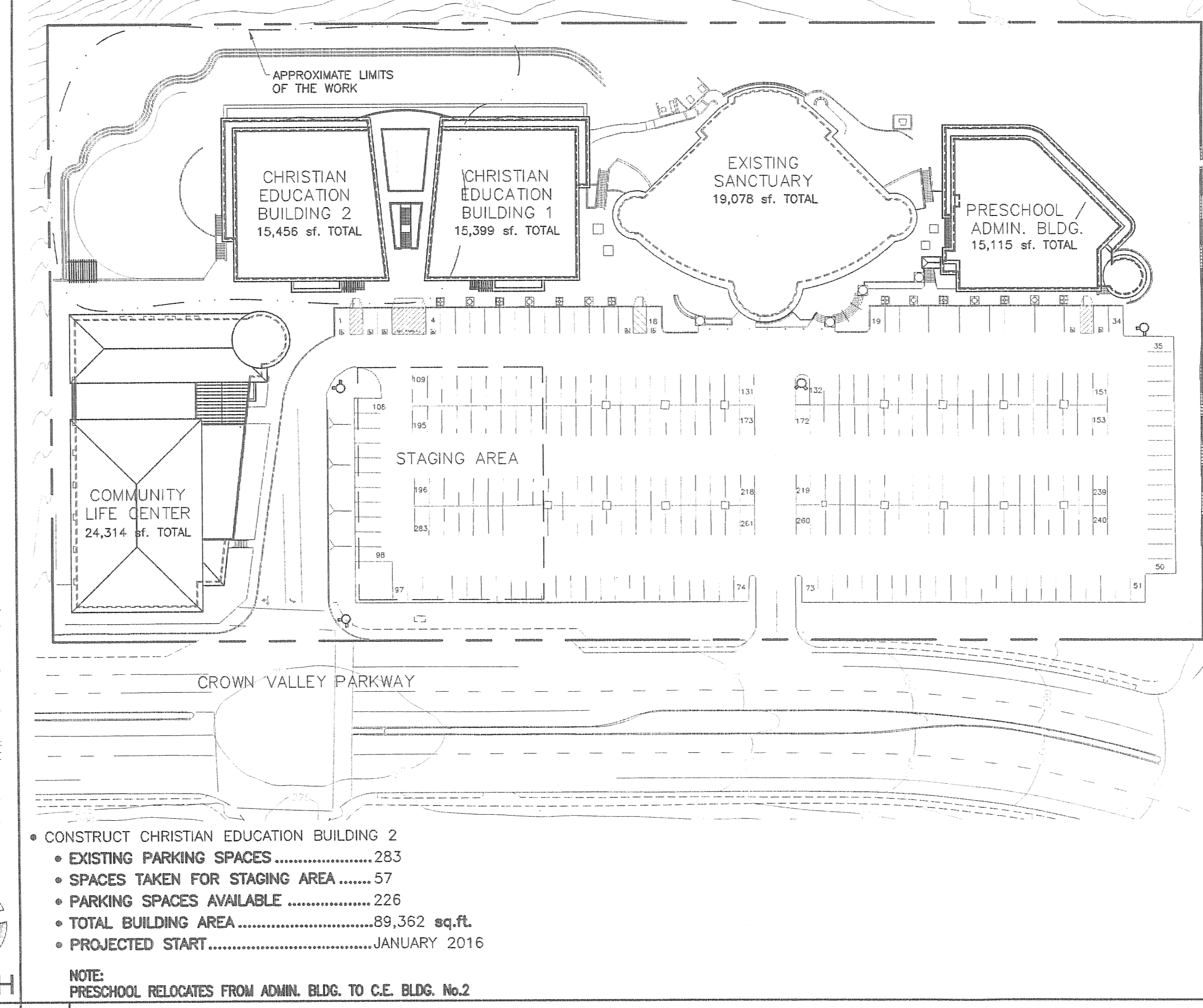
4 Construct New Christian Education Bldg. 1 - Phase 2 1" = 60'



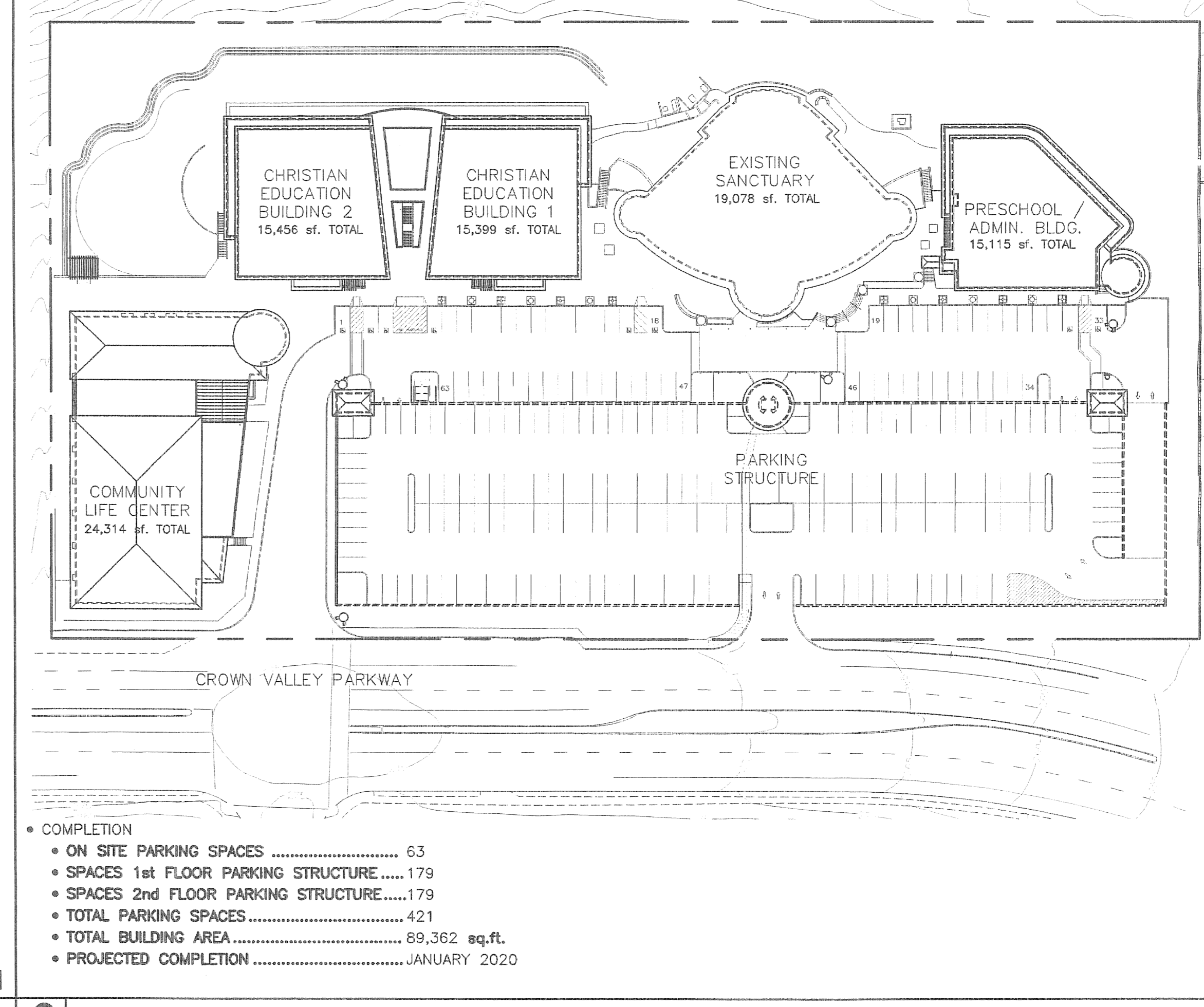
7 Construct North Half of Parking Structure - Phase 5 1" = 60'



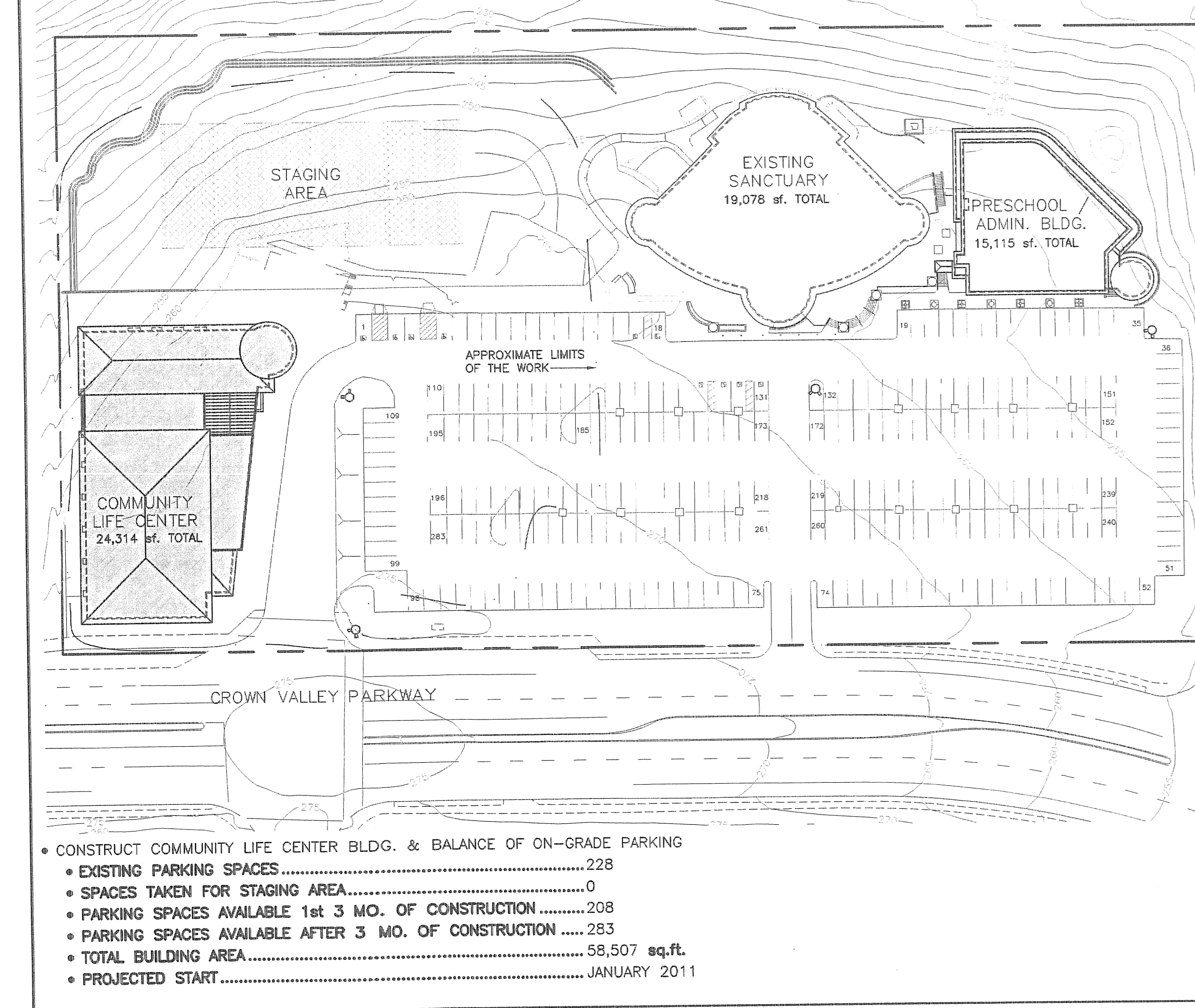
2 Demolition of Existing Buildings - Phase 1B 1" = 60'



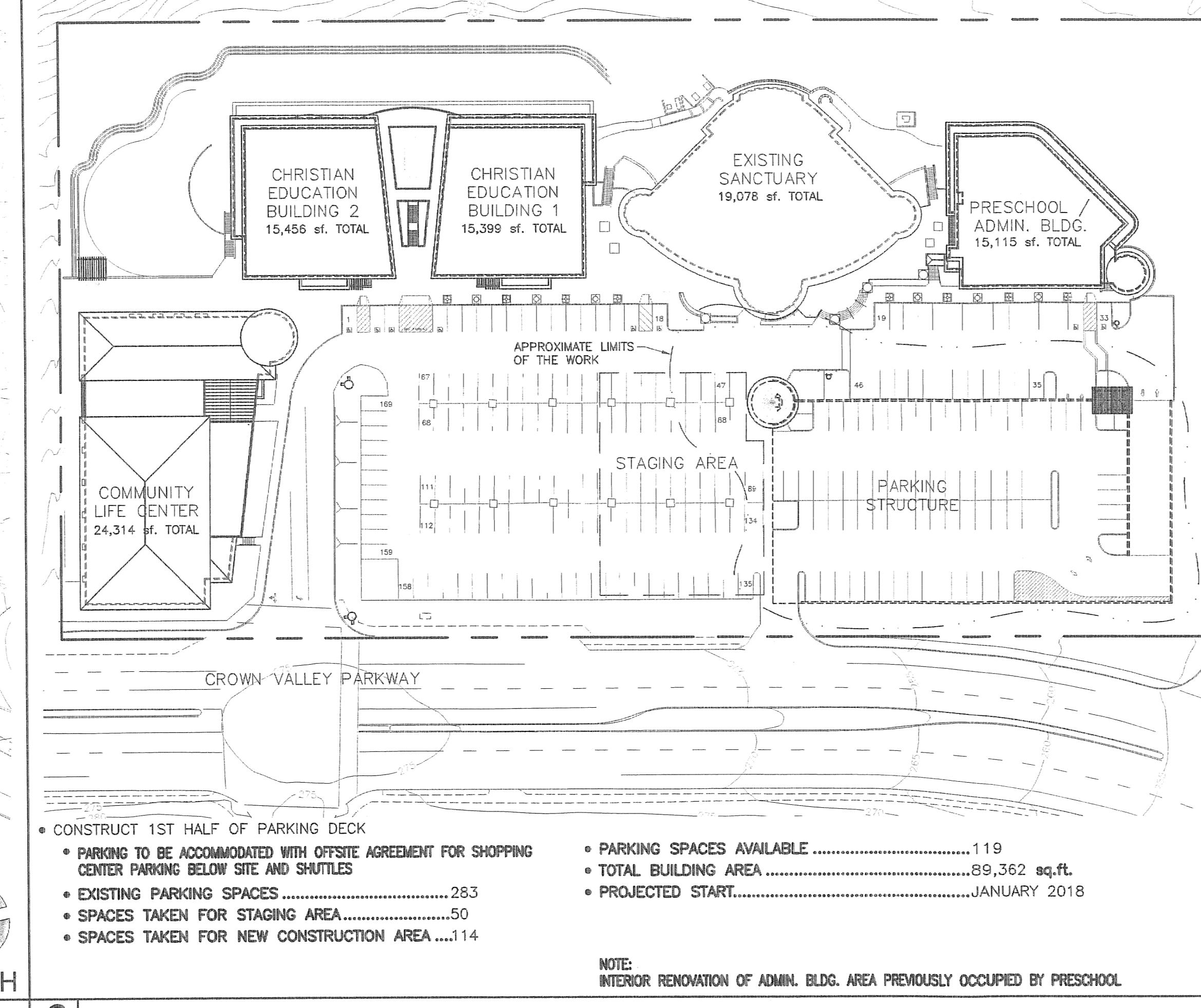
5 Construct New Christian Education Bldg. 2 - Phase 3 1" = 60'



8 Master Plan - Completion 1" = 60'



3 Construct New Community Life Center Bldg. - Phase 1C 1" = 60'



6 Construct South Half of Parking Structure - Phase 4 1" = 60'

SCALE: 1" = 60'-0"

0 30' 60' 90' 120'

NORTH

DESIGNED BY: **firesafe**

302 N. EL CAMINO REAL SUITE 202
SAN CLEMENTE, CA 92672
PH: (949) 240-5911 FAX: (949) 240-8291
WWW.FIRESAFEPLANNING.COM

CIVIL ENGINEER:
ADAMS-STREETER
CIVIL ENGINEERS, INC.
16 CORPORATE PARK
IRVINE, CA 92614
PH: (949) 474-2330 FAX: (949) 474-0251
CONTACT: RANDAL STREETER, PRINCIPAL

FIRE MASTER AND PHASING PLAN
S.R. 154421

PREPARED FOR:
SOUTH SHORES CHURCH
32712 CROWN VALLEY PARKWAY
DANA POINT, CA 92629
PH: (949) 496-6331 FAX: (949) 496-3020
CONTACT: G.G. KOHLHASEN

SHEET
2
OF 2

ORANGE COUNTY
FIRE AUTHORITY

DEMOLITION PLANS TO BE SUBMITTED TO
OCFA AT A FUTURE DATE. NOT A PART OF
THIS REVIEW.

SOUTH SHORES CHURCH - SOUTH SHORES CHURCH - FIRE MASTER PLAN - S.R. 154421



LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614

949.553.0666 TEL
949.553.8076 FAX

BERKELEY
CARLSBAD
FORT COLLINS

FRESNO
PALM SPRINGS
PT. RICHMOND

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO

October 2, 2013

Mr. Lynn Koehmstedt
Chief of Police Services
City of Dana Point, Sheriff's Department
33282 Golden Lantern
Dana Point, CA 92629

Subject: South Shores Church Master Plan Environmental Impact Report

Dear Mr. Koehmstedt:

This letter has been sent to you as part of an environmental review process being conducted pursuant to the California Environmental Quality Act (CEQA). The City of Dana Point (City) has determined that preparation of an Environmental Impact Report (EIR) is necessary to adequately analyze the environmental effects of the South Shores Church Master Plan project (proposed project). The City is the Lead Agency, and LSA Associates, Inc. (LSA) has been retained by the City to prepare the environmental analysis required for the proposed project.

The proposed project site is located at 32712 Crown Valley Parkway and is adjacent to the intersection of Crown Valley Parkway and Sea Island Drive within the City of Dana Point. The project site is bordered on the west by Crown Valley Parkway and residential uses beyond; on the north and south by residential uses; and on the east by an undeveloped slope and the Monarch Beach Golf Links beyond. The project site is semi-rectangular in shape and comprises approximately 6 acres of land developed with South Shores Church facilities. Existing conditions on site include 42,545 square feet (sf) of building space, including a Sanctuary, Chapel, Administration and Fellowship Hall, Preschool, and associated parking. The proposed project includes demolition of approximately 23,467 sf of building area, including the existing Chapel, Administration and Fellowship Hall, and Preschool, and construction of approximately 70,284 sf of new building area, including a new Preschool and Administration Building, two Christian Education Buildings, and a Community Life Center, for a total of 89,362 sf of building area at the completion of the Master Plan. Additionally, the proposed project includes a two-level partially subterranean parking structure. All construction would occur within the existing property boundaries and in several phases over a 10-year timeframe.

LSA is seeking information on how the proposed project would affect the Orange County Sheriff's Department ability to provide services to the project site and whether the proposed project would require new or expanded facilities. To assist with this effort, a questionnaire has been enclosed with specific questions relating to services near the project area. It would be helpful to the analysis for us to receive a response by October 18, 2013. Please email your response to janet.cutler@lsa-assoc.com.

If you have any questions or comments on the questionnaire, please contact me at (949) 553-0666. Thank you for your time and assistance.

Sincerely,

LSA ASSOCIATES, INC.

Janet Cutler

Janet Cutler
Assistant Environmental Planner

Attachments: Project Location
Police Protection Questionnaire

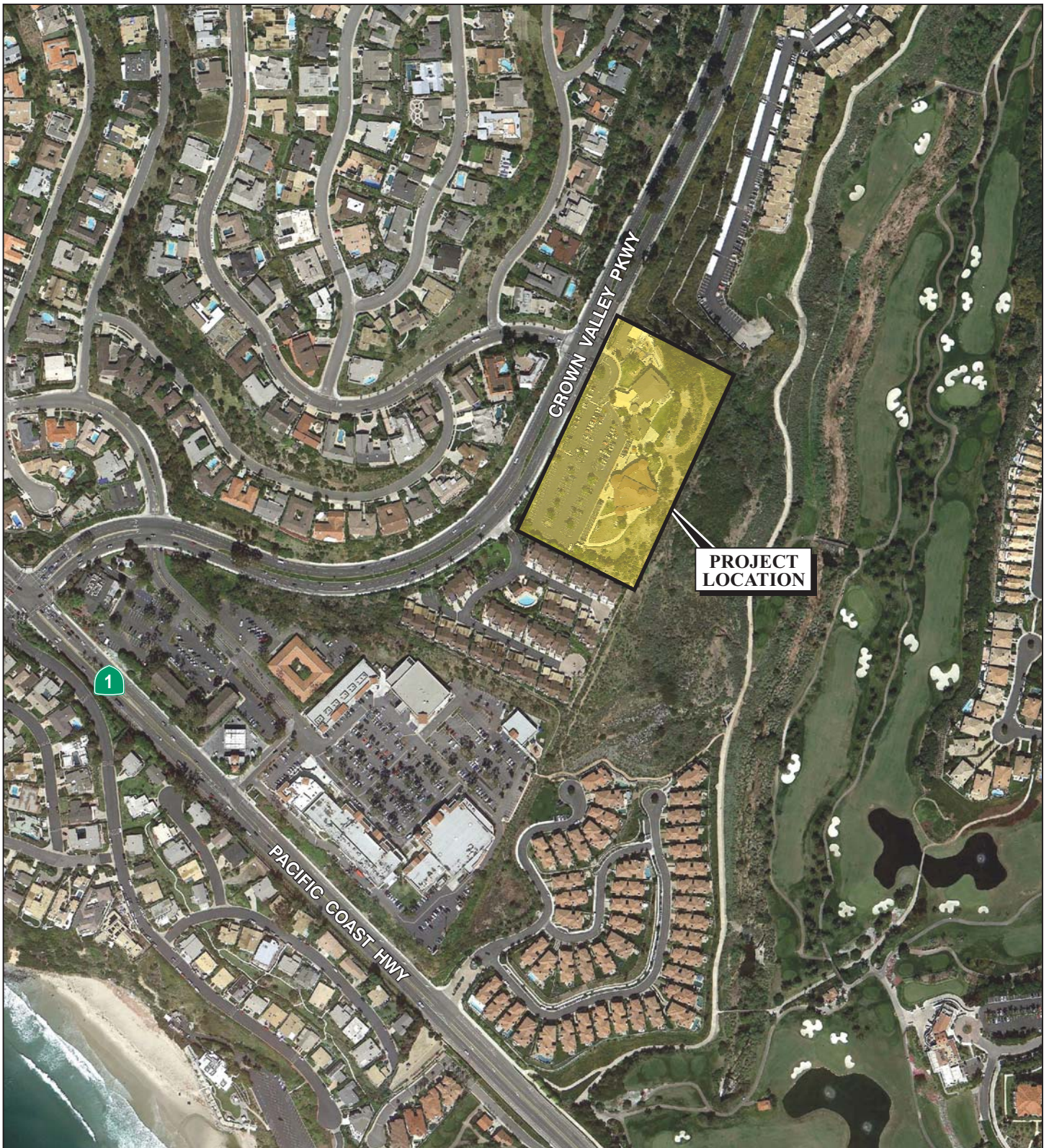


FIGURE 3.2

L S A



SOURCE: Bing Maps

I:\DPC0902\GVAerial-Project Vicinity.cdr (8/20/13)

South Shores Church Master Plan
Project Vicinity

POLICE PROTECTION

For your convenience, we have provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. We would very much appreciate a response by **October 18, 2013**. Please return the completed questionnaire via email to janet.cutler@lsa-assoc.com.

1. Please evaluate the following statement for accuracy. If any of the information contained in the text below is incorrect or should be updated, please indicate the needed revisions below.

In addition to patrolling the unincorporated areas of Orange County, the Orange County Sheriff's Department (department) contracts with 12 cities in Orange County to serve as those cities' police departments. Police services for the City are provided by the department. The department is a large, multi-faceted law enforcement agency served by approximately 3,800 sworn and professional staff members and over 800 reserve personnel.¹ The core services provided by the department are: public protection, including patrol of land, harbors and coastline, homeland security, court and airport security, and emergency communications.

The City is divided into three distinct Community Service Unit (CSU) Districts and the project site is located in CSU District 1. Each CSU District is assigned a deputy to assist the community with their specific concerns. According to the City's General Plan Conservation/Open Space Element, Table PF-1, Traffic and Public Facility Performance Criteria, the City uses an emergency response goal of having one Deputy at the scene of an emergency call within 5 minutes, 50 percent of the time, to all emergency calls within 8 minutes, and response to non-emergency calls to be 15 minutes or less, 75 percent of the time.²

¹ Orange County Sheriff Department: <http://ocsd.org/about> (accessed October 1, 2013)

² City of Dana Point General Plan, Conservation/Open Space Element, Table PF-1. July 9, 1991.

- 5. Please provide any additional comments or questions you would like to see addressed in the environmental analysis for this project.**

Prepared by: _____

Title: _____

Date: _____

Phone: _____

POLICE PROTECTION

For your convenience, we have provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. We would very much appreciate a response by **October 18, 2013**. Please return the completed questionnaire via email to janet.cutler@lsa-assoc.com.

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Answer: The statement is accurate.

¹ Orange County Sheriff Department: <http://ocsd.org/about> (accessed October 1, 2013)

² City of Dana Point General Plan, Conservation/Open Space Element, Table PF-1. July 9, 1991.

- 2. Are there any current plans for expansion of Sheriff Department facilities, services, or staff or to construct a new facility? If yes, please explain.**

Answer: No.

- 3. Because the proposed project includes construction of an additional 70,284 sf of new building area, it is anticipated that the proposed project would result in an increase in the demand on Sheriff services within the City. No residential units are proposed as part of the project. Would the project substantially increase response times or create a substantial increase in demand for staff, facilities, equipment, or police or other emergency services (e.g., as a result of potential increase call volume)?**

Answer: No.

- 4. Based on the proposed project description, will the Police Department be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?**

Answer: Yes.

5. Please provide any additional comments or questions you would like to see addressed in the environmental analysis for this project.

Answer: None.

Prepared by: Lieutenant Lynn Koehmstedt

Title: Chief of Police Services

Date: October 2nd, 2013

Phone: 949-283-0918

September 14, 2010

Mr. Mark Levy
Chief of Police Services
City of Dana Point, Sheriff's Department
33282 Golden Lantern
Dana Point, CA 92629

Subject: South Shores Church Master Plan Environmental Impact Report

Dear Mr. Levy:

This letter has been sent to you as part of an environmental review process being conducted pursuant to the California Environmental Quality Act (CEQA). The City of Dana Point (City) has determined that preparation of an Environmental Impact Report (EIR) is necessary to adequately analyze the environmental effects of the proposed project. The City is the Lead Agency, and LSA Associates, Inc. (LSA) has been retained by the City to prepare the environmental analysis required for the proposed project.

The proposed project site is located at 32712 Crown Valley Parkway and is adjacent to the intersection of Crown Valley Parkway and Sea Island Drive within the City of Dana Point. The project site is bordered on the west by Crown Valley Parkway and residential uses beyond; on the north and south by residential uses; and on the east by an undeveloped slope and the Monarch Beach Golf Links beyond. The project site is semirectangular in shape and comprises approximately 6 acres of land developed with South Shores Church facilities. Existing conditions on site include 42,545 square feet (sf) of building space, including a Sanctuary, Chapel, Administration and Fellowship Hall, Preschool, and associated parking. The proposed project includes demolition of approximately 23,467 sf of building area, including the existing Chapel, Administration and Fellowship Hall, and Preschool, and construction of approximately 70,284 sf of new building area, including a new Preschool and Administration Building, two Christian Education Buildings, and a Community Life Center, for a total of 89,362 sf of building area at the completion of the Master Plan. Additionally, the proposed project includes a two-level partially subterranean parking structure. All construction would occur within the existing property boundaries and in several phases over a 10-year timeframe.

LSA is seeking information on how the proposed project would affect the Orange County Sheriff's Department's ability to provide services and whether the project would require new or expanded facilities. To assist with this effort, a questionnaire has been enclosed with specific questions relating to services near the project area. It would be helpful to the analysis for us to receive a response by September 30, 2010. Please fax your response to Erin Razban at (949) 553-8076 or email them to erin.razban@lsa-assoc.com. In addition, please mail the originals to: Erin Razban, LSA Associates, Inc., 20 Executive Park, Suite 200, Irvine, CA 92614-4731.

If you have any questions or comments on the questionnaire, please contact me at (949) 553-0666.
Thank you for your time and assistance.

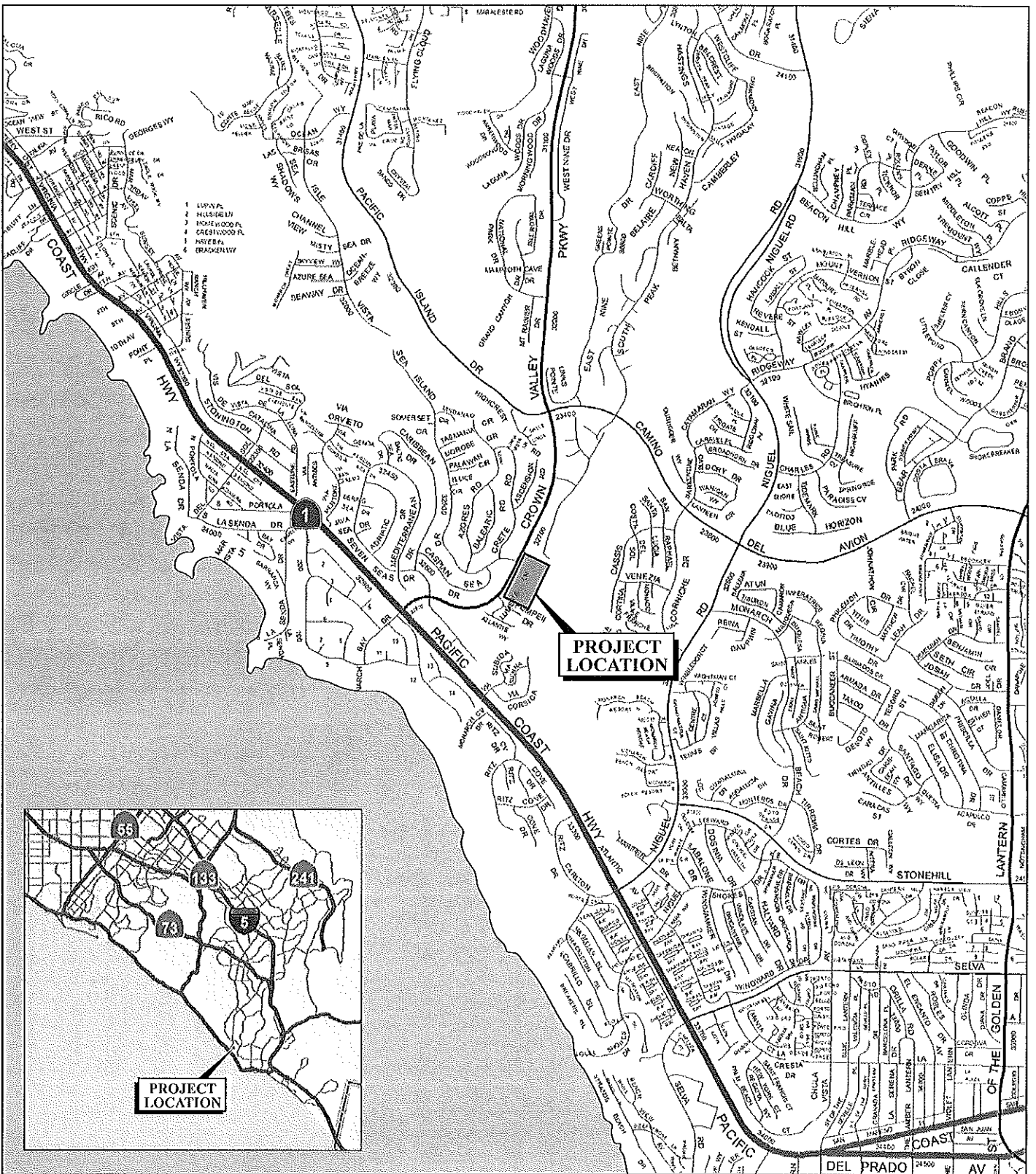
Sincerely,

LSA ASSOCIATES, INC.



Erin Razban
Senior Planner, Assistant Project Manager

Attachments: Figure 1, Project Location
Orange County Sheriff's Department Questionnaire

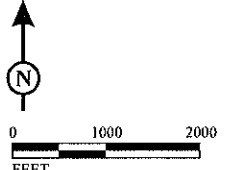


PROJECT LOCATION

PROJECT LOCATION

LSA

FIGURE 1



South Shores Church Master Plan
Project Location

POLICE PROTECTION

For your convenience, we have provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. We would very much appreciate a response by September 30, 2010. Please return the completed questionnaire via fax to Erin Razban at (949) 553-8076 or email them to erin.razban@lsa-assoc.com. In addition, please mail the originals to: Erin Razban, LSA Associates, Inc., 20 Executive Park, Suite 200, Irvine, CA 92614-4731.

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In addition to patrolling the unincorporated areas of Orange County, the Orange County Sheriff's Department (department) contracts with 12 cities in Orange County to serve as those cities' police departments. Police services for the City are provided by the department. The department is a large, multi-faceted law enforcement agency composed of approximately 4,000 staff members and over 800 reserve personnel.¹ The core services provided by the department are: public protection, including patrol of land, harbors and coastline, homeland security, court and airport security, and emergency communications.

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¹ Orange County Sheriff Department: <http://egov.ocgov.com/ocgov/Sheriff-Coroner/About%20OCSD> (accessed July 19, 2010)

² City of Dana Point General Plan, Conservation/Open Space Element, Table PF-1. July 9, 1991.

- 2. Are there any current plans for expansion of Sheriff Department facilities, services, or staff or to construct a new facility? If yes, please explain.**

- 3. Because the proposed project includes construction of an additional 70,284 sf of new building area, it is anticipated that the proposed project would result in an increase in the demand on Sheriff services within the City. No residential units are proposed as part of the project. Would the project substantially increase response times or create a substantial increase in demand for staff, facilities, equipment, or police or other emergency services (e.g., as a result of potential increase call volume)?**

- 4. Based on the proposed project description, will the Police Department be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?**

5. Please provide any additional comments or questions you would like to see addressed in the environmental analysis for this project.

Prepared by: _____

Title: _____

Date: _____

Phone: _____



LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614

949.553.0666 TEL
949.553.8076 FAX

BERKELEY
CARLSBAD
FORT COLLINS

FRESNO
PALM SPRINGS
POINT RICHMOND

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO
S. SAN FRANCISCO

July 27, 2010

Mr. Mike Sciortino
San Diego Gas & Electric
P.O. Box 129831
San Diego, CA 92113-9831

Subject: South Shores Church Master Plan Environmental Impact Report

Dear Mr. Sciortino:

This letter has been sent to you as part of an environmental review process being conducted pursuant to the California Environmental Quality Act (CEQA). The City of Dana Point (City) has determined that preparation of an Environmental Impact Report (EIR) is necessary to adequately analyze the environmental effects of the proposed project. The City is the Lead Agency, and LSA Associates, Inc. (LSA) has been retained by the City to prepare the environmental analysis required for the proposed project.

The proposed project site is located at 32712 Crown Valley Parkway and is adjacent to the intersection of Crown Valley Parkway and Sea Island Drive within the City of Dana Point. The project site is bordered on the west by Crown Valley Parkway and residential uses beyond; on the north and south by residential uses; and on the east by an undeveloped slope and the Monarch Beach Golf Links beyond. The project site is semirectangular in shape and comprises approximately 6 acres of land developed with South Shores Church facilities. Existing conditions on site include 42,545 square feet (sf) of building space, including a Sanctuary, Chapel, Administration and Fellowship Hall, Preschool, and associated parking. The proposed project includes demolition of approximately 23,467 sf of building area, including the existing Chapel, Administration and Fellowship Hall, and Preschool, and construction of approximately 70,284 sf of new building area, including a new Preschool and Administration Building, two Christian Education Buildings, and a Community Life Center, for a total of 89,362 sf of building area at the completion of the Master Plan. Additionally, the proposed project includes a two-level partially subterranean parking structure. All construction would occur within the existing property boundaries and in several phases over a 10-year timeframe.

LSA is seeking information on how the proposed project would affect San Diego Gas & Electric's ability to provide services and whether the project would require new or expanded facilities. To assist with this effort, a questionnaire has been enclosed with specific questions relating to services near the project area. It would be helpful to the analysis for us to receive a response by August 17, 2010. Please fax your response to Erin Razban at (949) 553-8076 or email them to erin.razban@lsa-assoc.com. In addition, please mail the originals to: Erin Razban, LSA Associates, Inc., 20 Executive Park, Suite 200, Irvine, CA 92614-4731.

If you have any questions or comments on the questionnaire, please contact me at (949) 553-0666.
Thank you for your time and assistance.

Sincerely,

LSA ASSOCIATES, INC.



Erin Razban
Senior Planner, Assistant Project Manager

Attachments: Figure 1, Project Location
Natural Gas Questionnaire
Electricity Questionnaire

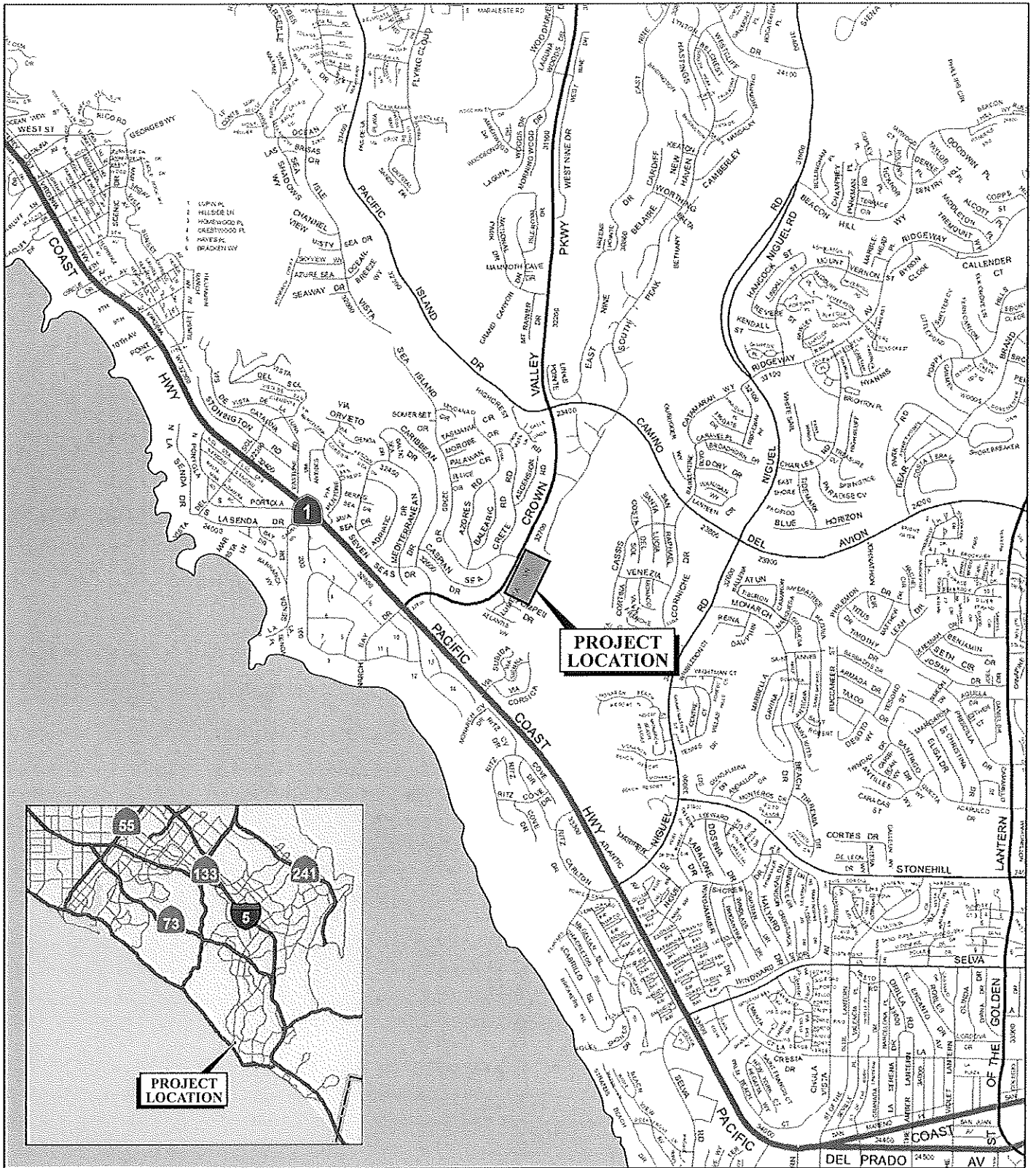
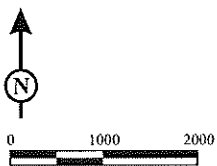


FIGURE 1

LSA



SOURCE: The Thomas Guide

I:\DPC0902\G\Location.cdr (12/17/09)

South Shores Church Master Plan
Project Location

NATURAL GAS QUESTIONNAIRE

For your convenience, LSA has provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. Please fax your responses to Erin Razban at (949) 553-8076 or mail originals to: LSA Associates, Inc., Attn: Erin Razban, 20 Executive Park, Suite 200, Irvine, CA 92614. We would appreciate a response by August 17, 2010. If you prefer to email, my email address is Erin.Razban@lsa-assoc.com.

1. What are the locations, types, and capacities of gas utilities serving the area, and how near capacity are they now operating?

2. Are there any current plans for expansion of gas utilities? If yes, please describe briefly.

3. Will the proposed project create a need to expand existing facilities/staff, construct a new facility, or otherwise adversely impact the types of service you provide? Please explain.

4. Based on the information provided, will SDG&E be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?

5. Please provide any additional information that may be helpful in preparing an environmental analysis of the proposed project.

Prepared by: _____

Title: _____

Date: _____

Phone: _____

ELECTRICITY QUESTIONNAIRE

For your convenience, LSA has provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. Please fax your responses to Erin Razban at (949) 553-8076 or mail originals to: LSA Associates, Inc., Attn: Erin Razban, 20 Executive Park, Suite 200, Irvine, CA 92614. We would appreciate a response by August 17, 2010. If you prefer to email, my email address is Erin.Razban@lsa-assoc.com.

1. What are the locations, types, and capacities of electrical utilities serving the area, and how near capacity are they now operating?

2. Are there any current plans for expansion of electrical utilities? If yes, please describe briefly.

3. Will the proposed project create a need to expand existing facilities/staff, construct a new facility, or otherwise adversely impact the types of service you provide? Please explain.

4. Based on the information provided, will Southern California Edison be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?

5. Please provide any additional information that may be helpful in preparing an environmental analysis of the proposed project.

Prepared by: _____
Title: _____
Date: _____
Phone: _____

ELECTRICITY QUESTIONNAIRE

For your convenience, LSA has provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. Please fax your responses to Erin Razban at (949) 553-8076 or mail originals to: LSA Associates, Inc., Attn: Erin Razban, 20 Executive Park, Suite 200, Irvine, CA 92614. We would appreciate a response by August 17, 2010. If you prefer to email, my email address is Erin.Razban@lsa-assoc.com.

1. What are the locations, types, and capacities of electrical utilities serving the area, and how near capacity are they now operating?

See Attached Drawings

2. Are there any current plans for expansion of electrical utilities? If yes, please describe briefly.

NO

3. Will the proposed project create a need to expand existing facilities/staff, construct a new facility, or otherwise adversely impact the types of service you provide? Please explain.

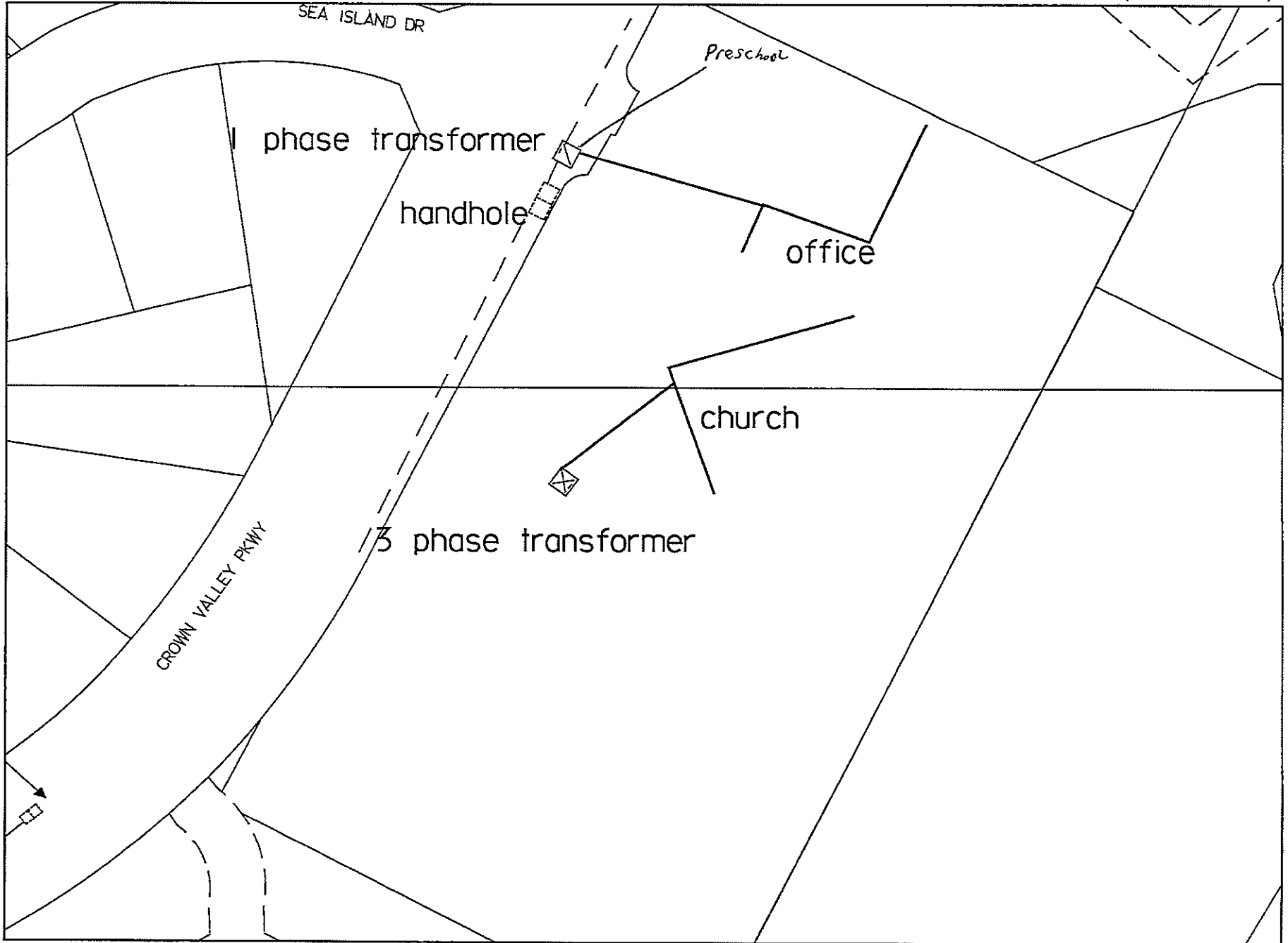
Depends on project submitted - (Size of Panel, Voltage, Load, etc...)

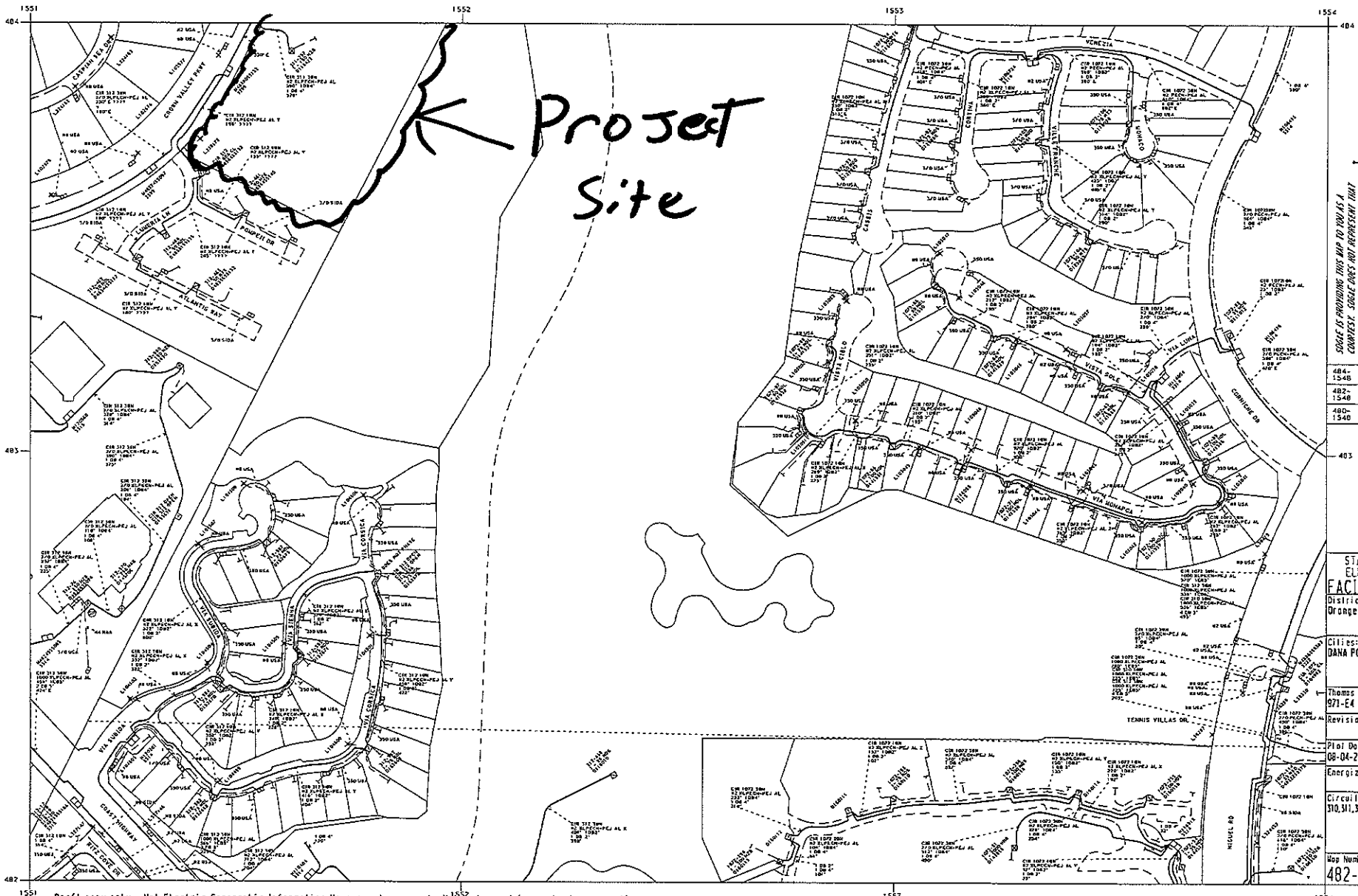
4. Based on the information provided, will ^{SDSE} ~~Southern California Edison~~ be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?

Existing structures should be adequate but will not know until Loads Are Submitted

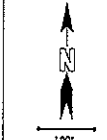
5. Please provide any additional information that may be helpful in preparing an environmental analysis of the proposed project.

Prepared by: _____
Title: _____
Date: _____
Phone: _____





Project Site



SCALE OF DRAWING THIS MAP TO YOU AS A COMPLETELY SUGGESTIONARY REPRESENTATION THAT THE INFORMATION CONTAINED HEREIN IS ACCURATE. SOURCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. YOU ARE SOLELY RESPONSIBLE FOR SELECTING THIS MAP TO USE AND YOU ARE SOLELY RESPONSIBLE FOR ANY CONSEQUENCES RESULTING FROM YOUR USE.

484-1548	480-1551	484-1554
482-1548		482-1554
480-1548	480-1551	480-1554

STANDARD ELECTRIC FACILITY MAP
District:
Orange County

Cities:
DANA POINT

Thomas Brothers:
871-E4

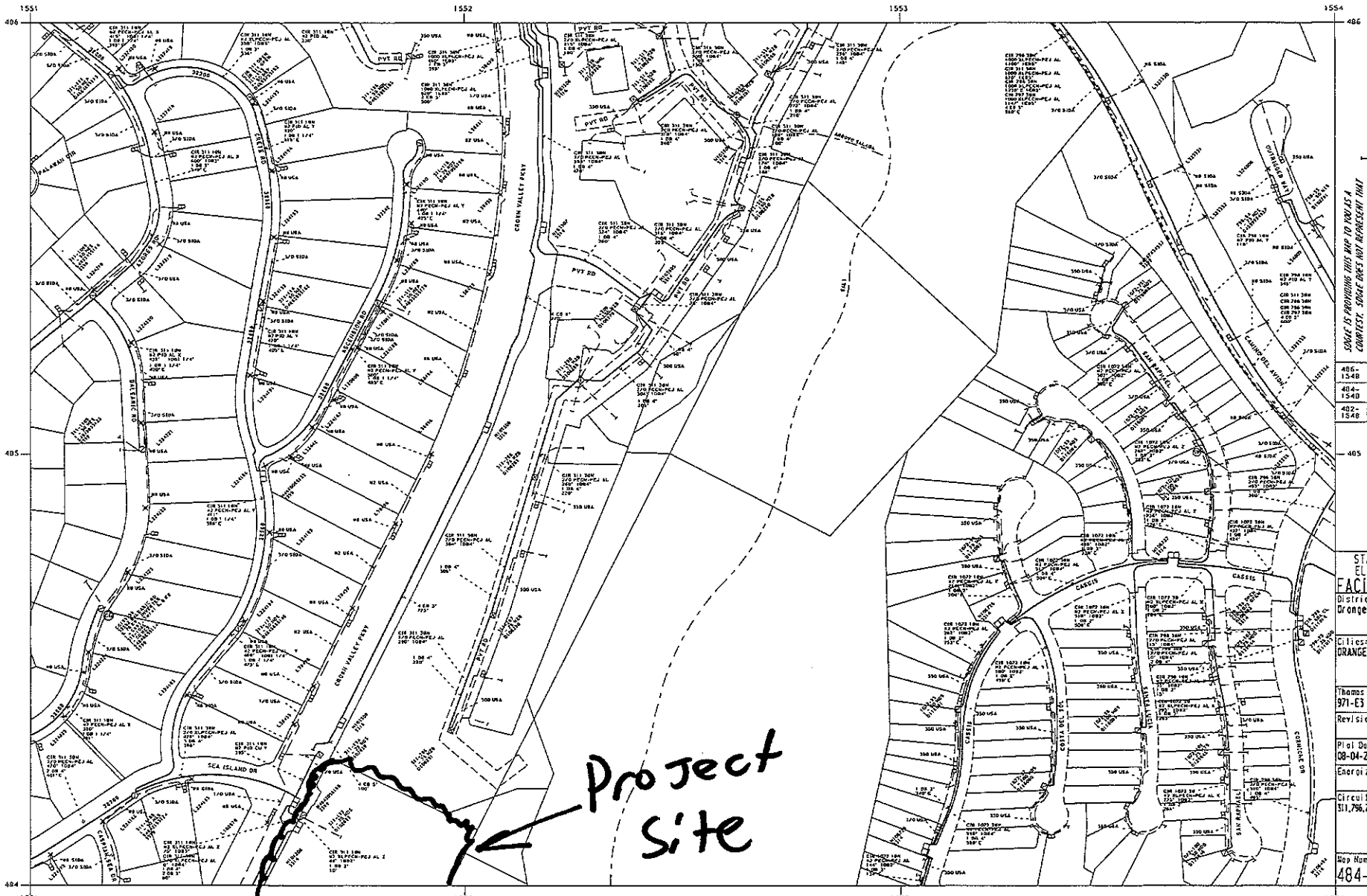
Revision Date:

Plot Date:
08-04-2010

Energized by:

Circuit:
310,311,312,1072

Map Number:
482-1551



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486-1548	488-1551	486-1554
484-1540		484-1554
482-1548	482-1551	482-1554

STANDARD ELECTRIC FACILITY MAP
 District: Orange County

Cities: ORANGE COUNTY

Thomas Brothers: 971-E3
 Revision Date:

Plot Date: 08-04-2010
 Energized by:

Circuit: 11,796,797,798,1072

Map Number: 484-1551

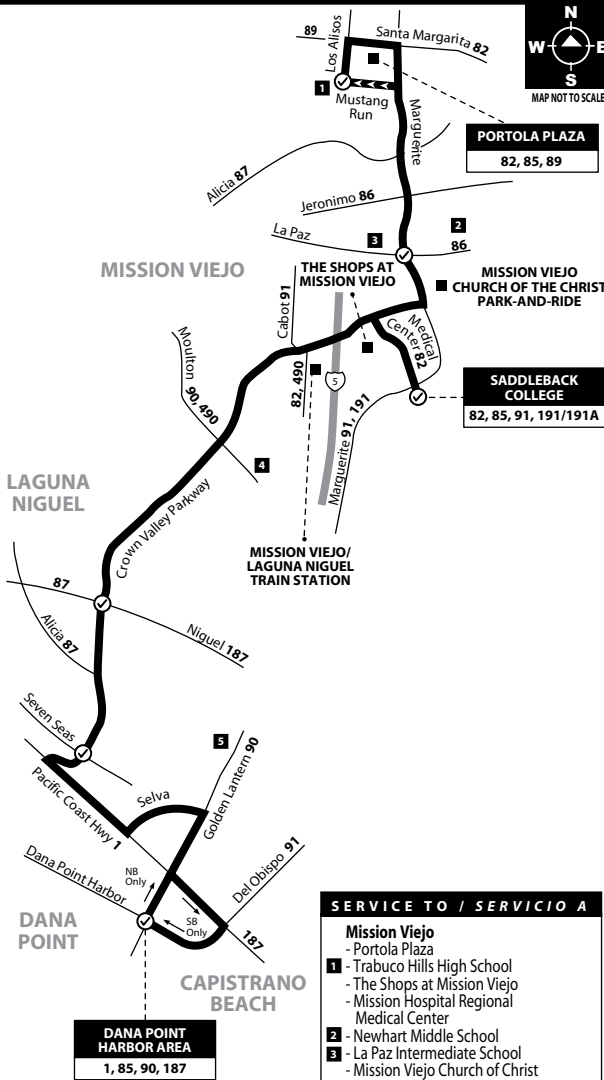
Project Site

Route 85

Mission Viejo to Dana Point via Marguerite Pkwy / Crown Valley Pkwy

NOTE: No Sunday service.

NOTA: No hay servicio los domingos.



- SERVICE TO / SERVICIO A**
- Mission Viejo**
- Portola Plaza
 - 1** - Trabuco Hills High School
 - The Shops at Mission Viejo
 - Mission Hospital Regional Medical Center
 - 2** - Newhart Middle School
 - 3** - La Paz Intermediate School
 - Mission Viejo Church of Christ Park-and-Ride
 - Saddleback College
 - Mission Viejo/Laguna Niguel (Metrolink Station)
 - Vista Del Lago Park
 - Lake Mission Viejo
 - Aurora Park
 - Casta Del Sol Golf Course
 - Recreation Center
 - City Hall
 - Library
 - Children's Hospital at Mission
- Laguna Niguel**
- Harbor Justice Center - Laguna Niguel
 - Crown Valley Community Park
 - 4** - Niguel Hills Middle School
- Dana Point**
- Dana Point Harbor
 - Doheny State Beach
 - Monarch Bay
 - Salt Creek Beach
 - Monarch Beach Golf Links
 - Sea Terrace Community Park
 - Library
 - Ritz Carlton
 - Lantern Bay County Park
 - 5** - Dana Hills High School

MONDAY - FRIDAY: Northbound TO: Mission Viejo

Golden Lantern & Dana Point Harbor	Crown Valley & Seven Seas	Crown Valley & Niguel	Saddleback College	Marguerite & La Paz	Los Alisos & Mustang Run
5:41	5:49	5:54	6:05	6:16	6:28
6:08	6:18	6:25	6:40	6:56	7:08
6:43	6:53	7:00	7:15	7:31	7:43
7:18	7:28	7:35	7:50	8:06	8:18
7:51	8:02	8:09	8:25	8:38	8:53
8:26	8:37	8:44	9:00	9:13	9:28
9:01	9:12	9:19	9:35	9:48	10:03
9:36	9:47	9:54	10:10	10:23	10:38
10:11	10:22	10:29	10:45	10:58	11:13
10:48	10:57	11:04	11:20	11:33	11:47
11:23	11:32	11:39	11:55	12:08	12:22
11:58	12:07	12:14	12:30	12:43	12:57
12:29	12:40	12:48	1:05	1:18	1:32
1:04	1:15	1:23	1:40	1:53	2:07
1:39	1:50	1:58	2:15	2:28	2:42
2:12	2:25	2:33	2:50	3:06	3:20
2:47	3:00	3:08	3:25	3:41	3:55
3:22	3:35	3:43	4:00	4:16	4:30
4:02	4:14	4:21	4:35	4:51	5:06
4:37	4:49	4:56	5:10	5:26	5:41
5:12	5:24	5:31	5:45	6:01	6:17
6:00	6:09	6:16	6:30	6:41	6:55
7:00	7:09	7:16	7:30	7:41	7:55
8:00	8:09	8:16	8:30	8:41	8:55

Route 085/041210

NOTE: No Sunday service.

NOTA: No hay servicio los domingos.

Mission Viejo to Dana Point
via Marguerite Pkwy / Crown Valley Pkwy

Route 85

MONDAY - FRIDAY: Southbound
TO: Dana Point

Los Alisos & Mustang Run	Marguerite & La Paz	Saddleback College	Crown Valley & Niguel	Crown Valley & Seven Seas	Golden Lantern & Dana Point Harbor
5:44	5:52	6:01	6:14	6:21	6:35
6:11	6:24	6:36	6:52	6:59	7:14
6:46	6:59	7:11	7:27	7:34	7:49
7:21	7:34	7:46	8:02	8:09	8:24
7:56	8:09	8:21	8:37	8:44	8:59
8:31	8:44	8:56	9:12	9:19	9:34
9:06	9:16	9:31	9:47	9:54	10:07
9:41	9:51	10:06	10:22	10:29	10:42
10:16	10:26	10:41	10:57	11:04	11:17
10:54	11:04	11:16	11:33	11:39	11:54
11:29	11:39	11:51	12:08	12:14	12:29
12:04	12:14	12:26	12:43	12:49	1:04
12:39	12:49	1:01	1:18	1:24	1:39
1:14	1:24	1:36	1:53	1:59	2:14
1:49	1:59	2:11	2:28	2:34	2:49
2:24	2:34	2:46	3:03	3:09	3:24
2:56	3:08	3:21	3:38	3:44	3:59
3:31	3:43	3:56	4:13	4:19	4:34
4:06	4:18	4:31	4:48	4:54	5:09
4:41	4:53	5:06	5:23	5:29	5:44
5:20	5:30	5:41	5:58	6:04	6:20
5:55	6:05	6:16	6:33	6:39	6:55
6:30	6:40	6:51	7:08	7:14	7:30
7:16	7:26	7:36	7:50	7:57	8:15
8:19	8:27	8:36	8:47	8:53	9:06
9:19	9:27	9:36	9:47	9:53	10:06

SATURDAY: Northbound
TO: Mission Viejo

Golden Lantern & Dana Point Harbor	Crown Valley & Seven Seas	Crown Valley & Niguel	Saddleback College	Marguerite & La Paz	Los Alisos & Mustang Run
7:01	7:10	7:17	7:30	7:41	7:51
8:31	8:40	8:47	9:00	9:11	9:21
9:58	10:09	10:16	10:30	10:42	10:53
11:28	11:39	11:46	12:00	12:12	12:23
12:58	1:09	1:16	1:30	1:42	1:53
2:28	2:39	2:46	3:00	3:12	3:23
3:58	4:09	4:16	4:30	4:42	4:53
5:28	5:39	5:46	6:00	6:12	6:23
7:03	7:14	7:21	7:35	7:47	7:58

SATURDAY: Southbound
TO: Dana Point

Los Alisos & Mustang Run	Marguerite & La Paz	Saddleback College	Crown Valley & Niguel	Crown Valley & Seven Seas	Golden Lantern & Dana Point Harbor
6:54	7:05	7:15	7:28	7:35	7:50
8:24	8:35	8:45	8:58	9:05	9:20
9:54	10:05	10:15	10:28	10:35	10:50
11:24	11:35	11:45	11:58	12:05	12:20
12:54	1:05	1:15	1:28	1:35	1:50
2:24	2:35	2:45	2:58	3:05	3:20
3:54	4:05	4:15	4:28	4:35	4:50
5:24	5:35	5:45	5:58	6:05	6:20
6:54	7:05	7:15	7:28	7:35	7:50

Erin Razban

From: Carolyn Mamaradlo [cmamaradlo@octa.net]
Sent: Tuesday, August 10, 2010 10:28 AM
To: Erin Razban
Subject: South Shores Church Master Plan EIR

Hi Erin,

Below are OCTA's responses to the questionnaire sent to us July 21, 2010.

Answer to Q1:

Route 85 provides 50 weekday trips and 18 Saturday trips to the project area. Route 85 does not have Sunday service. Route 85 is the only fixed route service serving the project area. Route 85 uses standard 40-foot bus which, depends on configuration, has 37 to 47 seats and with standees can carries 57 to 77 passengers. According to OCTA's recent load study, maximum load on Route 85 is 31 and 26 on weekday and Saturday respectively. Therefore, Route 85 is at half of its capacity.

Answer to Q2:

The presence of high traffic volumes and/or on-street parking generally impact bicycle safety. It is recommended that these two elements be considered when analyzing adverse effects of the proposed project. The City would have the best knowledge of any specific issues in the project area.

Answer to Q3:

For regional projects and major investment studies, OCTA employs OCTAM. OCTAM uses a 4-step methodology that uses travel surveys to develop trip generation rates.

Answer to Q4:

Based on Route 85's current ridership and its trend, it is not likely that the proposed project will create a public transportation need that requires service expansion. Maximum daily boardings at the bus stops (Stop ID: 1521 and 1524) by the project area is 3. Unless the construction would cause a complete closure of Crown Valley Parkway between Pacific Island Dr and Pacific Coast Highway, realignment of Route 85 is not necessary. However, if this happens, the 1.1 miles segment with six bus stops will not be served as the only feasible detour for Route 85 will be on Camino Del Avion and Niguel Road. Riders who use these bus stops will have to walk half-a-mile or less to an alternative bus stop.

Answer to Q5:

Yes, OCTA is and will be able to provide adequate services to the proposed project.

 Carolyn Mamaradlo
 Associate Transportation Analyst
 Strategic Planning
Orange County Transportation Authority
 (714) 560-5748

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9/13/2010



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BERKELEY
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POINT RICHMOND

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO
S. SAN FRANCISCO

July 22, 2010

Mr. John Arnau, CEQA & Habitat Program Manager
Orange County Waste & Recycling
300 North Flower Street, Suite 400
Santa Ana, California 92703

Subject: South Shores Church Master Plan Environmental Impact Report

Dear Mr. Arnau:

This letter has been sent to you as part of an environmental review process being conducted pursuant to the California Environmental Quality Act (CEQA). The City of Dana Point (City) has determined that preparation of an Environmental Impact Report (EIR) is necessary to adequately analyze the environmental effects of the proposed project. The City is the Lead Agency, and LSA Associates, Inc. (LSA) has been retained by the City to prepare the environmental analysis required for the proposed project.

The proposed project site is located at 32712 Crown Valley Parkway and is adjacent to the intersection of Crown Valley Parkway and Sea Island Drive within the City of Dana Point. The project site is bordered on the west by Crown Valley Parkway and residential uses beyond; on the north and south by residential uses; and on the east by an undeveloped slope and the Monarch Beach Golf Links beyond. The project site is semirectangular in shape and comprises approximately 6 acres of land developed with South Shores Church facilities. Existing conditions on site include 42,545 square feet (sf) of building space, including a Sanctuary, Chapel, Administration and Fellowship Hall, Preschool, and associated parking. The proposed project includes demolition of approximately 23,467 sf of building area, including the existing Chapel, Administration and Fellowship Hall, and Preschool, and construction of approximately 70,284 sf of new building area, including a new Preschool and Administration Building, two Christian Education Buildings, and a Community Life Center, for a total of 89,362 sf of building area at the completion of the Master Plan. Additionally, the proposed project includes a two-level partially subterranean parking structure. All construction would occur within the existing property boundaries and in several phases over a 10-year timeframe.

LSA is seeking information on how the proposed project would affect Orange County Waste & Recycling's ability to provide services and whether the project would require new or expanded facilities. To assist with this effort, a questionnaire has been enclosed with specific questions relating to services near the project area. It would be helpful to the analysis for us to receive a response by August 13, 2010. Please fax your response to Erin Razban at (949) 553-8076 or email them to erin.razban@lsa-assoc.com. In addition, please mail the originals to: Erin Razban, LSA Associates, Inc., 20 Executive Park, Suite 200, Irvine, CA 92614-4731.

If you have any questions or comments on the questionnaire, please contact me at (949) 553-0666.
Thank you for your time and assistance.

Sincerely,

LSA ASSOCIATES, INC.



Erin Razban
Senior Planner, Assistant Project Manager

Attachments: Figure 1, Project Location
Landfill Questionnaire

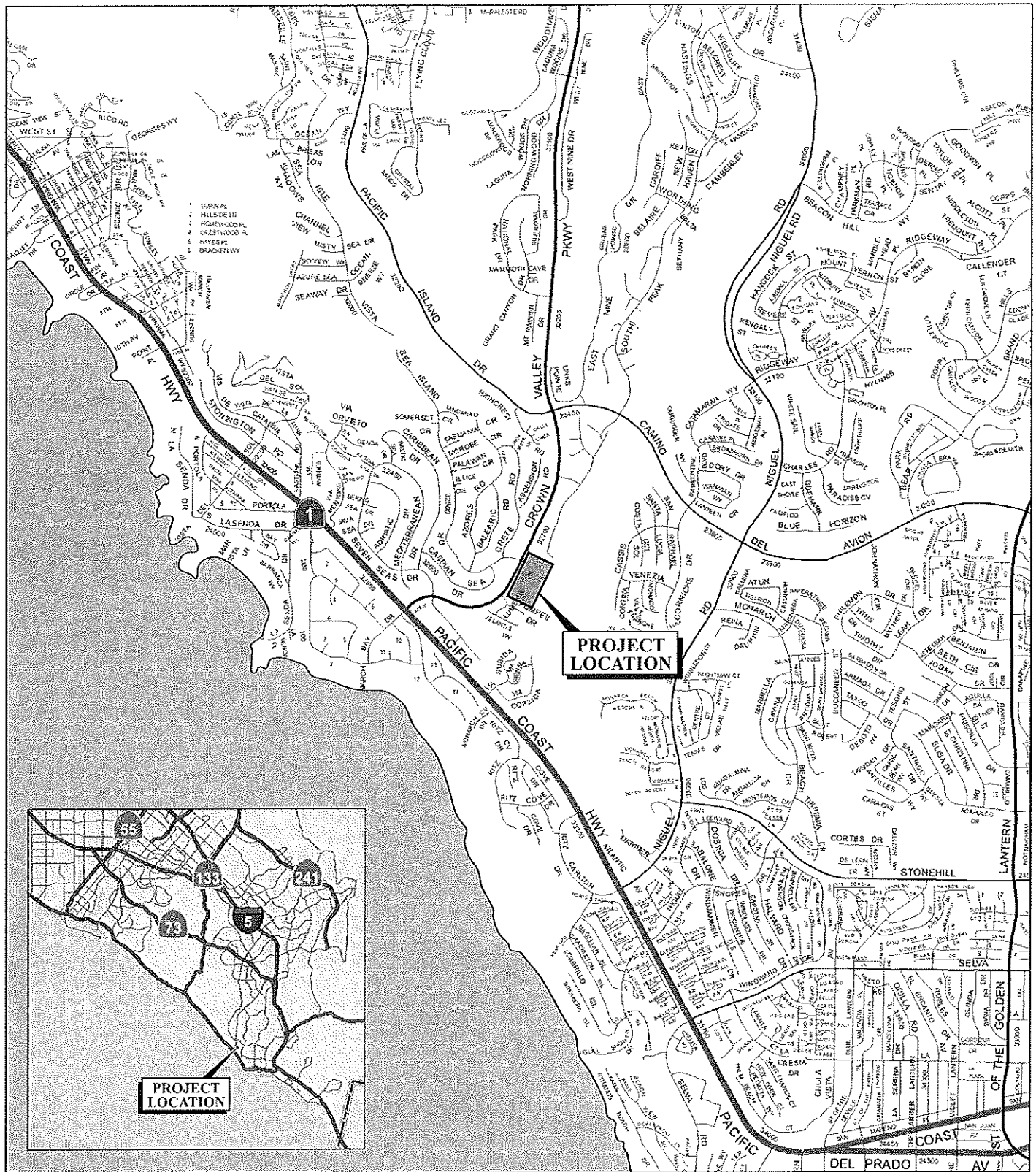
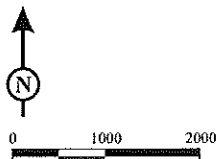


FIGURE 1

LSA



SOURCE: The Thomas Guide

E:\DPC0902\G\Location.cdr (12/17/09)

South Shores Church Master Plan
Project Location

LANDFILL CAPACITY

For your convenience, we have provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. We would very much appreciate a response by August 13, 2010. Please fax your responses to Erin Razban at (949) 553-8076 or if you prefer to email, my email address is Erin.Razban@lsa-assoc.com. If you prefer to respond via telephone, we can accommodate your request.

1. Please evaluate the following statement and indicate any changes that should be made in the space below.

The project site is located within the Orange County Waste & Recycling (OCWR) Department's service area. OCWR administers the countywide Integrated Waste Management Plan. OCWR owns and operated 3 active landfills and 4 household hazardous waste collection centers and monitors 12 closed landfills. All three landfills are permitted as Class III landfills. Class III landfills accept all types of nonhazardous municipal solid waste for disposal; however, no hazardous or liquid waste can be accepted.

The Prima Deshecha Landfill is the closest OCWR landfill to the proposed project site (approximately 10 miles) and would be expected to provide waste disposal for the proposed project once operational. The Prima Deshecha Landfill, which is permitted to receive a daily maximum of no more than 4,000 tons of solid waste per day, is approximately 1,530 acres with 699 acres permitted for refuse disposal. The landfill opened in 1976 and is scheduled to close in approximately 2067. A General Development Plan is being prepared for Prima Deshecha Landfill which indicated end use as a regional park.

The Prima Deshecha Landfill is subject to regular inspections from the California Integrated Waste Management Board (CIWMB) and the Board's Local Enforcement Agency (LEA), the California Regional Water Quality Control Board (RWQCB), and the South Coast Air Quality Management District (SCAQMD) to ensure compliance with applicable regulations.

In 1989, the California Integrated Waste Management Act (Assembly Bill [AB] 939) was passed, which mandated a 25 percent reduction of waste being disposed of in the landfill system by 1995 and a 50 percent reduction by 2000. In response to AB 939, the CIWMB was established to monitor compliance with waste reduction requirements. According to the CIWMB, all counties within the State are required to have an approved Countywide Integrated Waste Management Plan (CIWMP), which outlines methods for waste diversion and demonstrating sufficient solid waste disposal capacity for a minimum of 15 years. In compliance with AB 939, the County prepared a CIWMP, which is kept current, demonstrating the required 15-year disposal capacity and allowing disposal of a maximum daily imported waste stream of 1,000 tons per day (tpd). Imported tonnage varies depending on demand. It is limited by the solid waste facility permit for each site. For the 2006 reporting year (the last reporting year available), data showed that the City was a 54 percent diversion rate.¹

¹ California Integrated Waste Management Board Website:
<http://www.calrecycle.ca.gov/profiles/Juris/JurProfile2.asp?RG=C&JURID=118&JUR=Dana+Point> (accessed July 21, 2010).

2. As provided in Table A, does the Orange County Waste & Recycling agree with the generation factors below, which will be used in the environmental document to determine the amount of refuse generated per proposed land use? If not, please suggest generation factors to be used and adjust units as necessary.

Table A: Estimated Solid Waste Generation

Land Use	Area	Generation Factor	Listed Waste Generation Source Category	Estimated Solid Waste Generation (lbs per day)
Existing Facilities				
Sanctuary	19,078 sf	0.007 lbs/sf/day	Public/institutional	133.6
Chapel	3,765 sf	0.007 lbs/sf/day	Public/institutional	26.4
Administration and Fellowship Hall	12,985 sf	0.006 lbs/sf/day	Office	77.91
Preschool	6,717 sf	0.007 lbs/sf/day	School	47.0
Parking	288 spaces	None available	n/a	n/a
Total Existing Facilities				284.91
Proposed Facilities				
Sanctuary	19,078	0.007 lbs/sf/day	Public/institutional	133.6
Preschool/Administration Building	15,115	0.007 lbs/sf/day	School	105.8
Community Life Center	24,314	0.006 lbs/sf/day	Office	145.9
Christian Education Building 1	15,399	0.007 lbs/sf/day	School	107.8
Christian Education Building 2	14,456	0.007 lbs/sf/day	School	101.2
Total Proposed Facilities				594.3
Difference Between Existing and Proposed				+309.39

Source: California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Institutions: <http://www.ciwmb.ca.gov/wastechar/WasteGenRates/Institution.htm> (accessed July 22, 2010).
sf = square feet

3. Will the proposed project create a need to expand existing facilities/staff, construct a new facility, or otherwise adversely impact the types of service you provide? Please explain.

4. Based on the information provided, will the Orange County Waste and Recycling be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?

Prepared by: _____

Title: _____

Date: _____

Phone: _____

Erin Razban

From: Arnau, John [OCWR] [John.Arnau@ocwr.ocgov.com]
Sent: Monday, July 26, 2010 1:56 PM
To: Erin Razban
Subject: RE: South Shores Church Master Plan Project in the City of Dana Point

Erin, in response to your solid waste questionnaire in preparation for the Draft EIR for the South Shores Master Plan Project in the City of Dana Point, I have the following responses:

1. No recommended changes to existing narrative.
2. Solid waste generation rates look good – again, no recommended changes.
3. The proposed project will not result in the need to expand any existing solid waste landfill facilities in Orange County or create the need to permit and built any new solid waste landfill facilities in Orange County. As stated in the narrative, the project will be served by the Prima Deshecha Landfill, which is not scheduled to close until approximately 2067.
4. The Orange County solid waste landfill system will be able to adequately serve the proposed project, as indicated in Response #3 above. In compliance with AB 939, OC Waste & Recycling maintains more than 15-years of solid waste landfill capacity for all of Orange County. As such, the proposed project would not result in any significant impacts to solid waste landfill capacity, either on a project-specific or cumulative basis. Therefore, no mitigation would be required.

For information on any required City of Dana Point waste diversion/recycling programs that should be incorporated into either the construction/demolition phase of the project or after buildout (and therefore possibly included in the Draft EIR), please call the Recycling Coordinator for the City of Dana Point – Jennifer Anderson at (949) 248-3571.

Please let me know if you have any questions or if you require any additional information.

John J. Arnau, CEQA & Habitat Program Manager

OC Waste & Recycling
300 N. Flower Street, Suite 400
Santa Ana, CA 92703
Phone: (714) 834-4107
Email: john.arnau@ocwr.ocgov.com

From: Erin Razban [mailto:Erin.Razban@lsa-assoc.com]
Sent: Thursday, July 22, 2010 4:05 PM
To: Arnau, John [OCWR]
Subject: South Shores Church Master Plan Project in the City of Dana Point

Dear Mr. Arnau,
Please find the attached letter and questionnaire regarding the South Shores Church Master Plan Draft EIR. Please contact me if you have any questions.

Sincerely,

Erin Razban
Senior Environmental Planner
LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614
(949) 553-0666

7/26/2010

JUL 28 2010

RECEIVED
IRVINE

POTABLE WATER QUESTIONNAIRE

For your convenience, LSA has provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. Please fax your responses to Erin Razban at (949) 553-8076 or mail originals to: LSA Associates, Inc., Attn: Erin Razban, 20 Executive Park, Suite 200, Irvine, CA 92614. We would appreciate a response by August 10, 2010. If you prefer to email, my email address is Erin.Razban@lsa-assoc.com.

1. Where are the water mains serving the project site located and what is their size?

8" PVC within parking lot to 6" to 4" depending on where the demands are to originate.

2. Are the water facilities serving the area currently operating within capacity?

Yes however, we would want to see estimated demands for water + sewer

3. Does SCWD use a consumption factor for "Church Facility" or "Community Facility" uses? If so, please provide the consumption factor so we can estimate the existing water consumption on the project site.

See the attached consumption report

4. Are there any current plans for expansion of water facilities? If yes, please briefly describe.

No

5. Will the proposed project create a need to expand existing facilities/staff, construct a new facility, or otherwise adversely impact the types of service you provide? Please explain.

It is possible that new water and sewer mains would be required depending upon increased water and sewer demands.

6. Will the proposed project require relocation or realignment of the water lines? Please provide a schematic or drawing showing present location(s) of the water lines in relation to the proposed project and required relocations/realignments, if any.

Will need to see layout and footing of church before a determination can be made as-built is provided per attached

7. Based on the information provided, will SCWD be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?

SCWD will require fire flows from OCTFA requirements. Submit anticipated demands for further consideration.

8. Please provide any additional information that may be helpful in preparing an environmental analysis of the proposed project.

Prepared by:

LANA REMINGTON

Title:

PERMIT SPECIALIST

Date:

7/27/10

Phone:

949 499-4555 x3177

Table 5-3. Sewer Unit Generation Rates

Land Use	Return-to-Sewer Rate	Unit Generation Rate
Single-Family Residential	65%	280 gpd/DU
Medium-Density Residential	65%	260 gpd/DU
Multi-Family Residential	65%	175 gpd/DU
Rec/Public Use Facilities	90%	1,000 gpd/ac
Hotel / Motel	85%	75 gpd/room
Commercial / Office	65%	1,800 gpd/ac
School	65%	1,000 gpd/ac

Note: Estimated based on water billing records, limited temporary sewer meters and sewer lift station meter data.

5.3.1 Historic and Existing Flows

As presented in Chapter 4, existing water demands for the District were determined by analyzing actual water meter records for the past 5 years. However, during this process it was discovered that the billing data for years 2002 through 2004 was not reliable on a parcel by parcel basis as it was developed under a software system no longer used by the District. Moreover, a new accounting software program was implemented during 2005 and it was discovered that the data was incomplete for modeling purposes. Therefore, the 2006 data was used as the baseline for determining existing sewer flows, for use in the model, via a return-to-sewer methodology. The District reports an existing sewer flow 4.0 mgd.

5.3.2 Buildout/Ultimeate Forecast

Ultimate or build-out sewer flow estimates were developed for the sewer system based upon known development projects and the historical growth pattern within the District, as presented in Chapter 2. Table 5-4 summarizes the buildout sewer flow estimates within the District by major proposed development. These future flows represent an increase of approximately 5 percent. Although new development and redevelopment are important to consider in future capacity needs, the District's sewer capacity needs will largely be driven by its peaked sewer flows typically seen during the influx of large weekend transient population.

5.4 Wastewater System Hydraulic Model

As part of this Master Plan, the District has authorized the selection and preparation of a new GIS-based hydraulic computer model to analyze the existing capacity in the sewer collection system. The new model will be turned over to the District to be used as planning tools on future sewer system capacity needs. As part of the scope of services, PBS&J conducted a model selection workshop. It was recommended that the District utilize the InfoSewer dynamic modeling software by MWHSoft for its sewer system model. This section describes the development of the new hydraulic model.

Table 4-7. Existing Consumption by Land Use

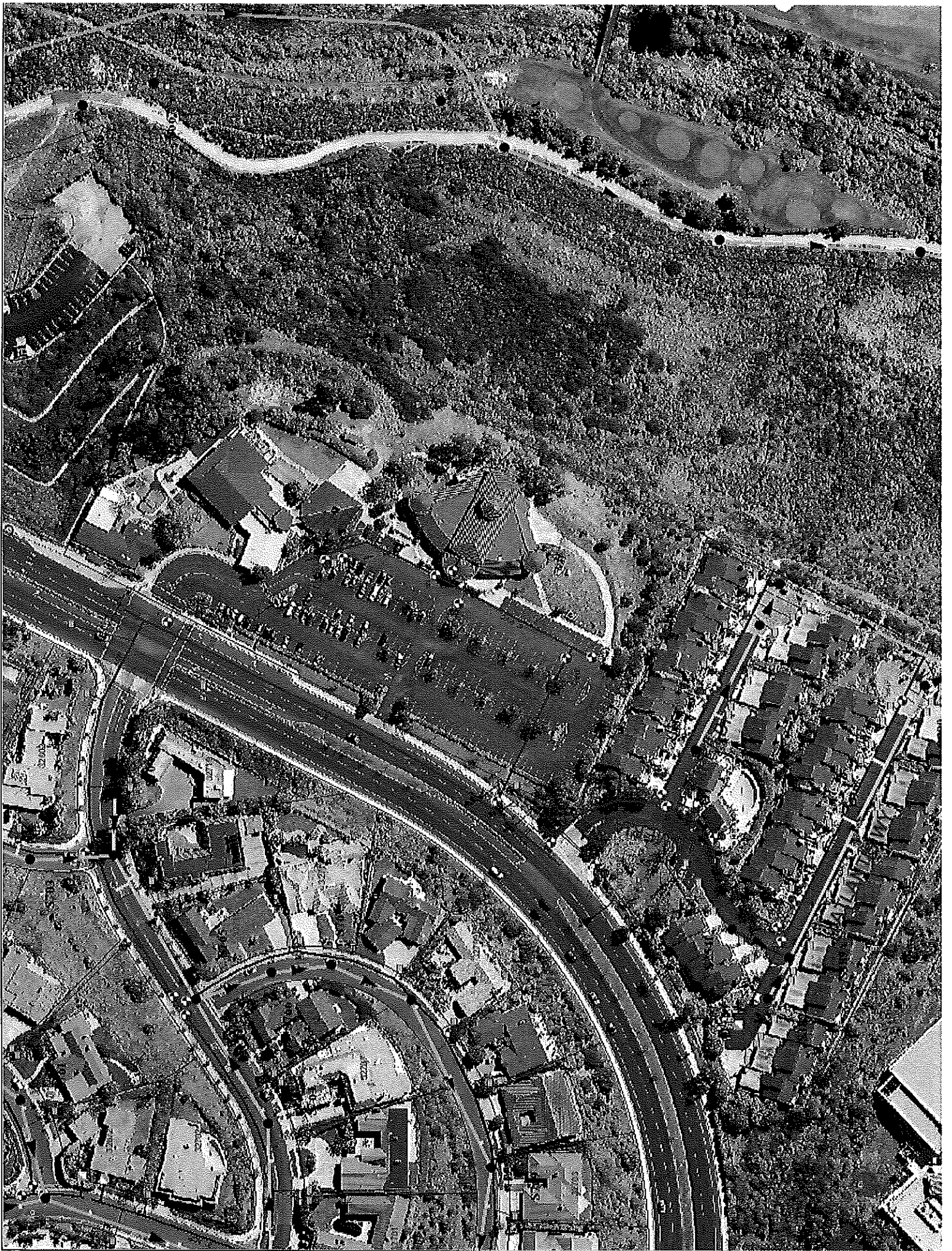
Land Use	Average Annual Demand (gpm)
Single Family Residential	2,075
Hotels	566
Irrigation	559
Multi-Family Residential	449
Medium-Density Residential	342
Commercial/Office	282
Other	235
Recreation/Public Use Facilities	95
Hospital	94
Restaurant	74
Total (GPM)	4,771
Total (MGD)	6.87

Table 4-8. Unit Demands

Land Use	Unit Demands	
	Water	Recycled Water
Single-Family Residential	450 gpd/DU	0% @ 2.5 AFY/ac
Medium-Density Residential	400 gpd/DU	0% @ 2.5 AFY/ac
Multi-Family Residential	300 gpd/DU	10% @ 2.5 AFY/ac
Rec/Public Use Facilities/Park	1,200 gpd/ac	10% @ 2.5 AFY/ac
Hotel/Motel	95 gpd/room	10% @ 2.5 AFY/ac
Commercial/Office	2,500 gpd/ac	15% @ 2.5 AFY/ac
School	2,500 gpd/ac	50% @ 2.5 AFY/ac
Landscaping/Irrigation	2,500 gpd/ac	100% @ 2.5 AFY/ac
Hospital	4,200 gpd/ac	10% @ 2.5 AFY/ac
Restaurant	2,500 gpd/ac	10% @ 2.5 AFY/ac

4.3.4 Buildout/Ultimate Demands

Ultimate or build-out water demands were developed for the water system based upon known development projects and the historical growth pattern within the District, as presented in Chapter 2. Table 4-9 summarizes the build out water demands within the District by major proposed development. These future demands represent an increase of approximately 5 percent. Although important to consider in future water planning needs, the District's water distribution and storage needs are still largely driven by the existing demand, fire flow requirements, and system reliability needs.





LSA ASSOCIATES, INC.
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BERKELEY
CARLSBAD
FORT COLLINS

FRESNO
PALM SPRINGS
PT. RICHMOND

RIVERSIDE
ROCKLIN
SAN LUIS OBISPO

October 2, 2013

Lana Remington
South Coast Water District
P.O. Box 30205
Laguna Niguel, CA 92607-0205

Subject: South Shores Church Master Plan Environmental Impact Report

Dear Ms. Remington:

This letter has been sent to you as part of an environmental review process being conducted pursuant to the California Environmental Quality Act (CEQA). The City of Dana Point (City) has determined that preparation of an Environmental Impact Report (EIR) is necessary to adequately analyze the environmental effects of the South Shores Church Master Plan (proposed project). The City is the Lead Agency, and LSA Associates, Inc. (LSA) has been retained by the City to prepare the environmental analysis required for the proposed project.

The proposed project site is located at 32712 Crown Valley Parkway and is adjacent to the intersection of Crown Valley Parkway and Sea Island Drive within the City of Dana Point. The project site is bordered on the west by Crown Valley Parkway and residential uses beyond; on the north and south by residential uses; and on the east by an undeveloped slope and the Monarch Beach Golf Links beyond. The project site is semi-rectangular in shape and comprises approximately 6 acres of land developed with South Shores Church facilities. Existing conditions on site include 42,545 square feet (sf) of building space, including a Sanctuary, Chapel, Administration and Fellowship Hall, Preschool, and associated parking. The proposed project includes demolition of approximately 23,467 sf of building area, including the existing Chapel, Administration and Fellowship Hall, and Preschool, and construction of approximately 70,284 sf of new building area, including a new Preschool and Administration Building, two Christian Education Buildings, and a Community Life Center, for a total of 89,362 sf of building area at the completion of the Master Plan. Additionally, the proposed project includes a two-level partially subterranean parking structure. All construction would occur within the existing property boundaries and in several phases over a 10-year timeframe.

LSA is seeking information on how the proposed project would affect the South Coast Water District's ability to provide services and whether the project would require new or expanded facilities. To assist with this effort, a questionnaire has been enclosed with specific questions relating to services near the project area. It would be helpful to the analysis for us to receive a response by October 18, 2013. Please email your response to janet.cutler@lsa-assoc.com.

If you have any questions or comments on the questionnaire, please contact me at (949) 553-0666. Thank you for your time and assistance.

Sincerely,

LSA ASSOCIATES, INC.

Janet Cutler

Janet Cutler
Assistant Environmental Planner

Attachments: Project Location
Wastewater Questionnaire

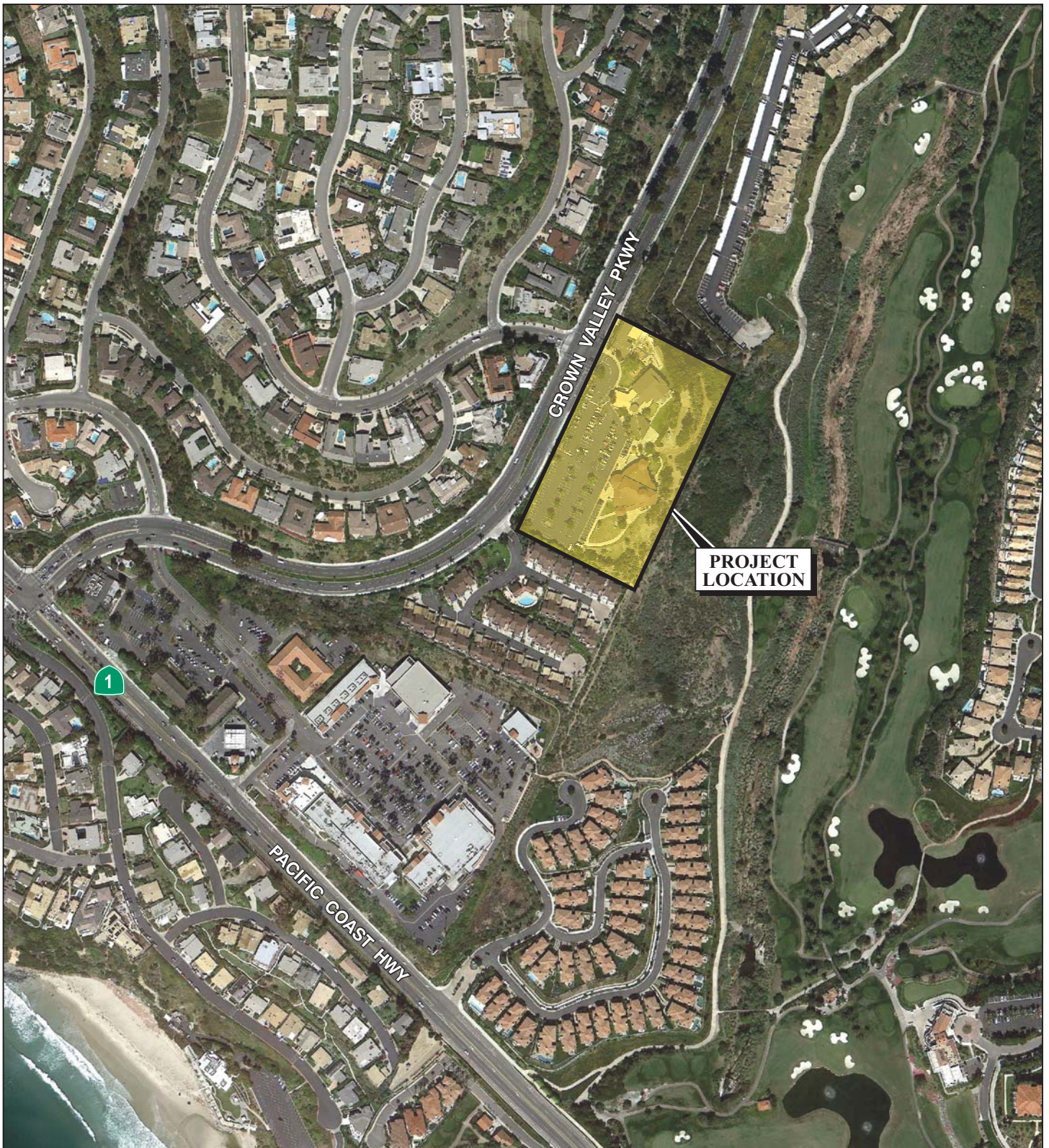


FIGURE 3.2

LSA



SOURCE: Bing Maps

I:\DPC0902\GVAerial-Project Vicinity.cdr (8/20/13)

South Shores Church Master Plan
Project Vicinity

WASTEWATER QUESTIONNAIRE

For your convenience, LSA has provided space below for your answers. If you choose to answer these questions in the form of a letter, please number your responses to correspond to the questions. Please email your responses janet.cutler@lsa-assoc.com. We would appreciate a response by **October 18, 2013**.

1. What are the locations, types, and capacities of SCWD wastewater facilities and how near capacity are they now operating?

2. Are there any current plans for expansion of SCWD wastewater facilities? If yes, please briefly describe.

3. Will the proposed project create a need to expand existing sewer lines, construct a new facility, or otherwise adversely impact the types of service you provide? Please explain.

4. Will the proposed project require relocation or realignment of the sewer lines? Will the present location of the sewer lines require realignment of the proposed project? If you answer yes to either of these questions, please provide a schematic or drawing showing present location(s) of the service/utility in relation to the proposed project and required relocations/realignments.

5. Based on the information provided, will SCWD be able to adequately serve the proposed project? If not, can you recommend any measures for mitigating project impacts that might be incorporated into the project?

6. Please provide any additional information that may be helpful in preparing an environmental analysis of the proposed project.

Prepared by: _____
Title: _____
Date: _____
Phone: _____

Janet Cutler

From: Lana Remington <lremington@scwd.org>
Sent: Wednesday, October 02, 2013 2:58 PM
To: Janet Cutler
Subject: RE: LSA Environmental Review - Wastewater Questionnaire

Janet,

I had our Director of Engineering look over your information and based upon this he is unable to answer your questions. He would need to see peak flow information and also a set of plans showing what is being proposed. Please call me with any questions you might have regarding my response.

Cordially,

Lana Remington

Lana Remington
Permit Specialist, SCWD
(949) 499-4555 x 3177
Cell (949) 289-0037
lremington@scwd.org

From: Janet Cutler [<mailto:Janet.Cutler@lsa-assoc.com>]
Sent: Wednesday, October 02, 2013 1:56 PM
To: Lana Remington
Cc: Alyssa Helper
Subject: LSA Environmental Review - Wastewater Questionnaire

Dear Ms. Remington,

This email has been sent to you as part of an environmental review process being conducted pursuant to the California Environmental Quality Act (CEQA). The City of Dana Point has determined that preparation of an Environmental Impact Report is necessary to adequately analyze the environmental effects of the South Shores Church Master Plan project.

Please find attached a letter including information about the expansion project and a questionnaire regarding the South Coast Water District's ability to provide services to the project.

This letter was previously sent on July 21, 2010, however, due to the lack of response, we are resending the letter. It is important to note that the project has not changed since the time the original letter was sent.

It would be helpful to the analysis for LSA to receive a response by Friday, **October 18, 2013**.

Thank you in advance for your time and assistance.

Janet Cutler
Assistant Environmental Planner
LSA Associates, Inc.
20 Executive Park, Suite 200

Irvine, CA 92614
p. 949-553-0666 / f. 949-553-2019

APPENDIX J

TRAFFIC IMPACT ANALYSIS

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TRAFFIC IMPACT ANALYSIS AND PARKING ANALYSIS

SOUTH SHORES CHURCH MASTER PLAN
DANA POINT, CALIFORNIA

This traffic study has been prepared under the supervision of
Meghan Macias, T.E.

Signed *Meghan Macias*



LSA

July 2014

TRAFFIC IMPACT ANALYSIS AND PARKING ANALYSIS

SOUTH SHORES CHURCH MASTER PLAN
DANA POINT, CALIFORNIA

Submitted to:

City of Dana Point
Planning Division
33282 Golden Lantern
Dana Point, California 92629

Prepared by:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614
(949) 553-0666

Project No. DPC0902A

LSA

July 2014

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INTRODUCTION

The purpose of this Traffic Impact Analysis (TIA) and Parking Analysis is to identify the potential traffic, circulation, and parking impacts associated with the South Shores Church Master Plan Project (project) in the City of Dana Point (City). The project includes demolition of the existing Preschool, Administration and Fellowship Hall, Chapel (23,467 square feet [sf] of building space), and revisions to the surface parking lot. The project proposes to construct a new Preschool/Administration Building, two Christian Education Buildings, a Community Life Center (70,284 sf of new building space), and a two-level, partially subterranean parking structure.

The project site is located at the southeast corner of the signalized intersection of Crown Valley Parkway/Sea Island Drive in the City. Access to the site is provided via the east leg of the Crown Valley Parkway/Sea Island Drive intersection and a right-in/right-out (RIRO) driveway on Crown Valley Parkway. Figure 1 illustrates the project location.

This TIA addresses three general issues associated with the development of the proposed project:

1. Increases in traffic volumes at nearby intersections.
2. Adequacy of the proposed access locations and on-site circulation.
3. Adequacy of the proposed parking supply.

This TIA examines the following four scenarios:

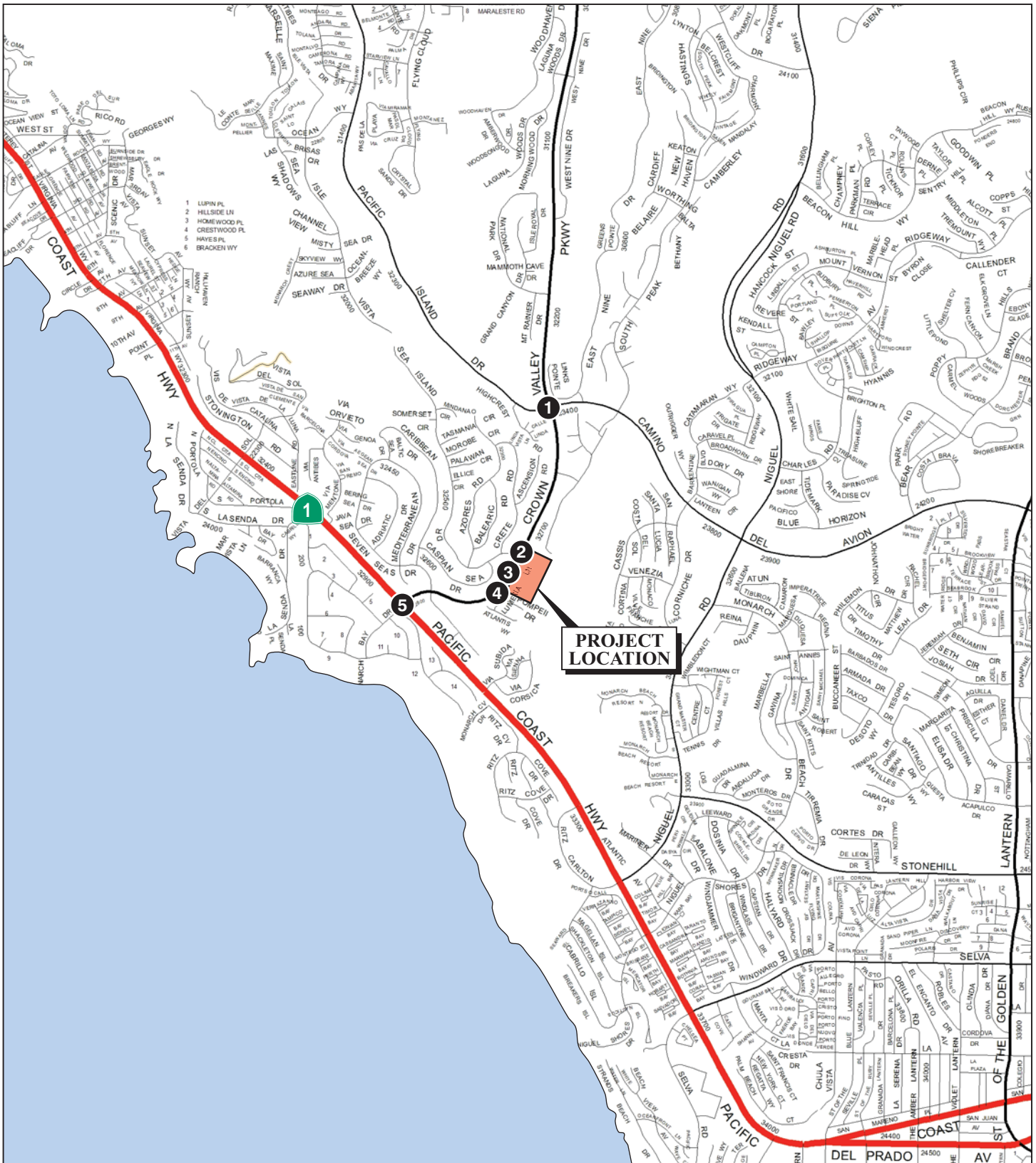
1. Existing Conditions (2014)
2. Existing Plus Project Conditions
3. Future Conditions (2025 – corresponding to project completion)
4. Future Plus Project Conditions

The following analysis periods have been evaluated:

1. Weekday a.m. peak hour (between 7:00 a.m. and 9:00 a.m.)
2. Weekday p.m. peak hour (between 4:00 p.m. and 6:00 p.m.)
3. Sunday peak hour (between 11:00 a.m. and 1:00 p.m.)

PROJECT DESCRIPTION

The existing South Shores Church site includes a 19,078 sf Sanctuary, a 3,765 sf Chapel, a 12,985 sf Administration and Fellowship Hall, a 6,717 sf Preschool, and 228 surface parking spaces, as shown in Table A.

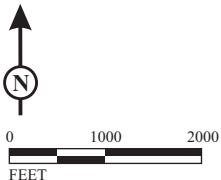


LSA

LEGEND

① - Study Area Intersections

FIGURE 1



SOURCE: The Thomas Guide

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South Shores Church Master Plan

Project Location and Study Area Intersections

Table A: Existing Buildings Summary

Existing Buildings (and Parking)	sf
Sanctuary	19,078
Chapel	3,765
Administration and Fellowship Hall	12,985
Preschool	6,717
Surface Parking (228 spaces)	-
Total	42,545

sf = square feet

The South Shores Church proposes to demolish the existing Preschool, Administration and Fellowship Hall, and Chapel. The total building demolition is 23,467 sf. At project buildout, the existing 19,078 sf Sanctuary will remain. The proposed project will construct 70,284 sf of new building space, including a 15,115 sf Preschool/Administration Building, a 24,314 sf Community Life Center, a 15,399 sf Christian Education Building 1, and a 15,456 sf Christian Education Building 2. The project will also construct a two-level parking structure with 352 spaces (176 spaces on each level) with 59 surface parking spaces.

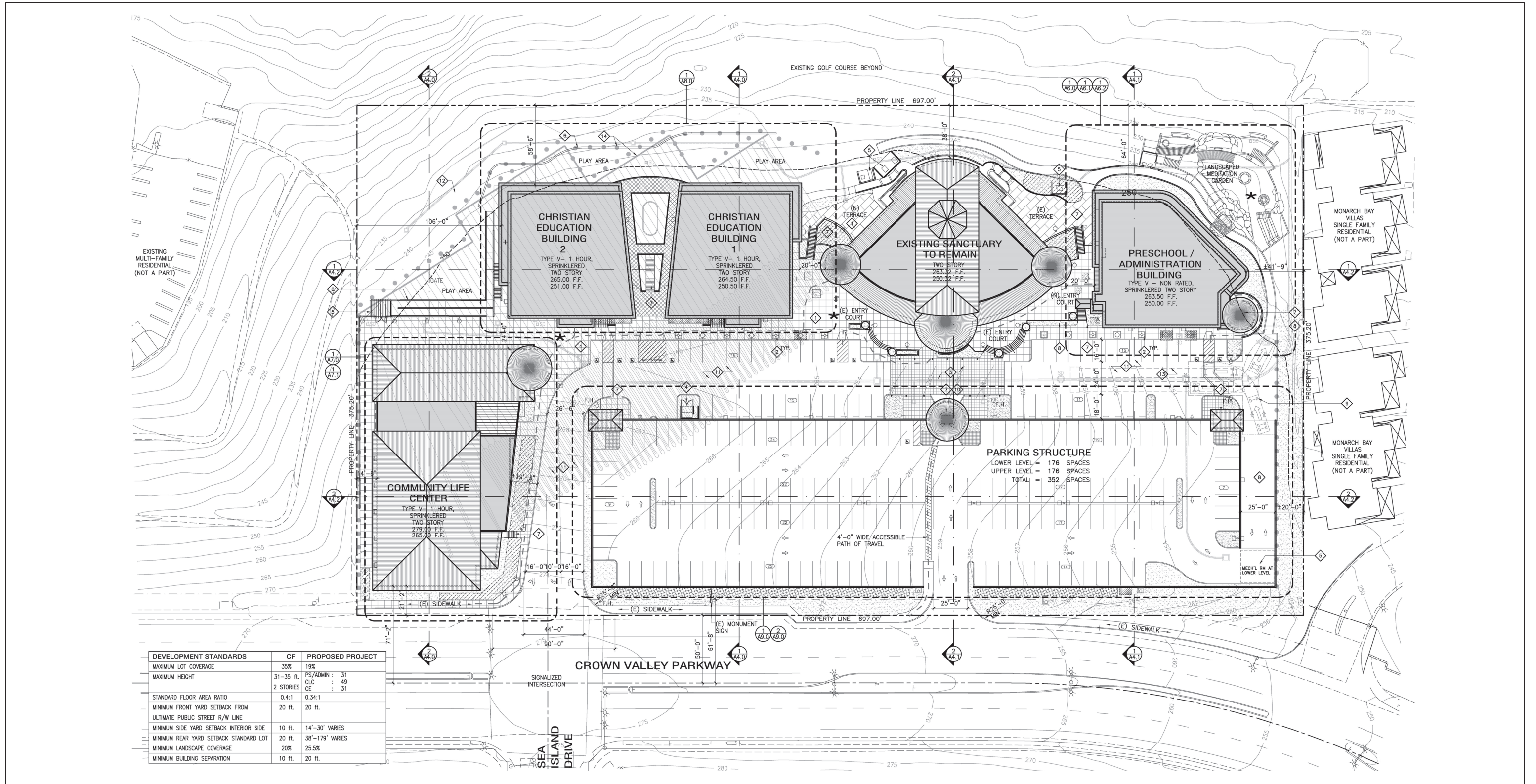
Figure 2 illustrates the project site plan. Access to the project site will continue to be provided at a full-access driveway (the east leg of the signalized intersection of Crown Valley Parkway/Sea Island Drive) and an unsignalized RIRO driveway along Crown Valley Parkway.

Table B summarizes the proposed project buildings and identifies the changes from existing conditions. As shown in this table, the proposed project results in a net increase of 46,817 sf of building space.

Table B: Project Buildings Summary

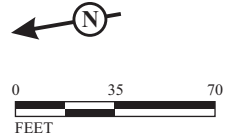
Existing Buildings (and Parking)	sf	Proposed Project Buildings (and Parking)	sf
Sanctuary	19,078	Sanctuary (to remain)	19,078
Chapel	3,765	Chapel (to be demolished)	-
Administration and Fellowship Hall	12,985	Administration and Fellowship Hall (to be demolished)	-
Preschool	6,717	Preschool (to be demolished)	-
Surface Parking (228 spaces)	-	Surface Parking (59 net spaces)	-
		Preschool/Administration Building (new)	15,115
		Community Life Center (new)	24,314
		Christian Education Building 1 (new)	15,399
		Christian Education Building 2 (new)	15,456
		Parking Structure (352 new spaces)	-
Total Existing	42,545	Total Project	89,362

sf = square feet



DEVELOPMENT STANDARDS	CF	PROPOSED PROJECT
MAXIMUM LOT COVERAGE	35%	19%
MAXIMUM HEIGHT	31-35 ft.	PS/ADMIN : 31 CLC : 49 CE : 31
STANDARD FLOOR AREA RATIO	0.4:1	0.34:1
MINIMUM FRONT YARD SETBACK FROM ULTIMATE PUBLIC STREET R/W LINE	20 ft.	20 ft.
MINIMUM SIDE YARD SETBACK INTERIOR SIDE	10 ft.	14'-30' VARIES
MINIMUM REAR YARD SETBACK STANDARD LOT	20 ft.	38'-179' VARIES
MINIMUM LANDSCAPE COVERAGE	20%	25.5%
MINIMUM BUILDING SEPARATION	10 ft.	20 ft.

LSA



KEY NOTES

- 1 NEW HARDSCAPE
- 2 NEW TREE WELL
- 3 NEW ENHANCED PAVING
- 4 NEW CMU TRASH ENCLOSURE WITH WOOD TRELLIS
- 5 NEW MECHANICAL EQUIPMENT ENCLOSURE BELOW
- 6 NEW RETAINING WALL: "SOIL RETENTION" PLANTABLE, STACKING WALL SYSTEM. WALL HEIGHT VARIES
- 7 NEW STAIRS
- 8 NEW RAMP
- 9 OCFA HAMMERHEAD
- 10 NEW ELEVATOR
- 11 AC PAVING
- 12 EARTHEN NATURE TRAIL, FIELD VERIFY
- 13 UNDERGROUND DETENTION BASIN, CONSTRUCTED PHASE 1A
- 14 CAISSONS, REACTION WALL & TIE BACKS BELOW GRADE

LEGEND

- CENTERLINE
- BUILDING SETBACK
- PROPERTY LINE
- ACCESSIBLE PATH OF TRAVEL
- TOPOGRAPHIC CONTOUR LINE
- [Pattern] LANDSCAPED AREA
- [Pattern] HARDSCAPE
- [Pattern] BUILDING
- [Symbol] POLE MOUNTED AREA LIGHT
- [Symbol] PEDESTRIAN AREA LIGHT
- [Symbol] WALL MOUNTED AREA LIGHTS. SEE SHEET A15.0 LIGHTING PLAN FOR MORE INFORMATION
- [Symbol] PROPOSED LOCATION OF "PUBLIC ART"

BMP's

- REFER TO CIVIL ENGINEERS WOMP EXHIBIT FOR PROPOSED BMP's
- [Pattern] BIORETENTION WITH UNDERDRAINS (BIO-1) DOWNSPOUT PLANTER BOXES - BMP-1
 - [Pattern] VEGETATED SWALE (BIO-2) BIOSWALE / DEPRESSED LANDSCAPE - BMP-2
 - [Pattern] PROPRIETARY BIO-FILTRATION (BIO-7) FILTERRA SYSTEM - BMP-3
 - [Symbol] STORM DRAIN

PARKING COUNT

- 59 ON SITE PARKING SPACES
- 176 SPACES LOWER LEVEL PARKING STRUCTURE
- 176 SPACES UPPER LEVEL PARKING STRUCTURE
- 411 SPACES TOTAL

FIGURE 2

The project will be constructed in five phases (of which Phase 1 has five subphases) over an estimated 10-year period (with gaps between each phase). Each phase and duration is listed below.

- **Phase 1A (Construction of Preschool/Administration Building):** 13 months
- **Phase 1B (Demolition of Existing Buildings):** 3 months
- **Phase 1B-E1 (Earthwork):** 3 months
- **Phase 1B-E2 (Grading):** 3 months
- **Phase 1C (Construction of Community Life Center Building):** 12 months
- **Phase 2 (Construction of Christian Education Building 1):** 12 months
- **Phase 3 (Construction of Christian Education Building 2):** 12 months
- **Phase 4 (Construction of 1st Half of Parking Structure):** 7 months
- **Phase 5 (Construction of 2nd Half of Parking Structure):** 7 months

METHODOLOGY

This TIA is prepared consistent with the objectives and requirements of the City's General Plan Circulation Element (1995), the Orange County Congestion Management Program (CMP) (2013), and applicable provisions of the California Environmental Quality Act (CEQA), including disclosure of project impacts in both existing and future (cumulative) horizon years.

Study Area

Based on coordination with the City, five intersections are analyzed in this TIA. Figure 1 shows the project location and the following study area intersections:

1. Crown Valley Parkway/Camino Del Avion
2. Crown Valley Parkway/Sea Island Drive–full-access driveway
3. Crown Valley Parkway/RIRO driveway
4. Crown Valley Parkway/Lumeria Lane
5. Crown Valley Parkway/Pacific Coast Highway (PCH)

Intersection Level of Service Methodology

Level of service (LOS) is a qualitative assessment of the quantitative effects of such factors as traffic volume, roadway geometrics, speed, delay, and maneuverability on roadway and intersection operations. Typical intersection operations by LOS grade are as follows:

Level of Service	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized, and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally, drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is attained no matter how great the demand.
F	This level describes forced-flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream.

Traffix (Version 8.0 R1) computer software was utilized to determine the study area intersection LOS based on the intersection capacity utilization (ICU) methodology for signalized intersections and the 2000 Highway Capacity Manual (HCM) methodology for unsignalized intersections.

Consistent with the City’s requirements, the ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at a signalized intersection, sums up these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The resulting ICU is expressed in terms of LOS, where LOS A represents free-flow activity and LOS F represents overcapacity operation. The relationship between LOS and the ICU value (i.e., v/c ratio) is as follows:

Level of Service	Volume-to-Capacity (ICU Methodology)
A	≤0.60
B	>0.60 and ≤0.70
C	>0.70 and ≤0.80
D	>0.80 and ≤0.90
E	>0.90 and ≤1.00
F	>1.00

ICU = Intersection Capacity Utilization

In addition to the ICU methodology of calculating study area intersection LOS, the HCM methodology was used. The HCM intersection methodology presents LOS in terms of delay (in seconds per vehicle). The resulting delay is expressed in terms of LOS, as in the ICU methodology. The relationship between LOS and the delay at an unsignalized intersection is demonstrated in the following table:

Level of Service	Unsignalized Intersection Delay (seconds) per Vehicle
A	≤10.0
B	>10.0 and ≤15.0
C	>15.0 and ≤25.0
D	>25.0 and ≤35.0
E	>35.0 and ≤50.0
F	>50.0

The study area intersection LOS analysis was conducted for the weekday a.m. peak hour, the weekday p.m. peak hour, and the Sunday peak hour.

Threshold of Significance

According to the City of Dana Point General Plan Circulation Element (1995), LOS C is the minimum acceptable condition that should be maintained during the peak commute hours for Primary Arterials, Secondary Arterials, and local streets. LOS D is the minimum acceptable condition that should be maintained during the peak commute hours for Major Arterials and State highways. LOS E is the minimum acceptable condition that should be maintained for CMP-designated roadways. However, the City Public Works Department strives to maintain LOS C as the lowest service level for impacts to signalized intersections for development projects.

For purposes of this traffic impact analysis, a minimum acceptable service level of LOS C has been applied to signalized study area intersections. For unsignalized study area intersections, the LOS thresholds outlined in the Circulation Element have been applied. For example, the minimum acceptable LOS for an unsignalized intersection along a Major Arterial such as Crown Valley Parkway is LOS D.

EXISTING BASELINE CONDITIONS

Existing Circulation System

Key roadways in the vicinity of the proposed project are as follows:

- Crown Valley Parkway:** Crown Valley Parkway is a divided four-lane, north-south roadway providing direct access to the project site at the Sea Island Drive–full-access driveway. It is designated as a Major Arterial in the City’s General Plan Circulation Element and the Orange County Master Plan of Arterial Highways (MPAH). The speed limit along Crown Valley Parkway is 45 miles per hour (mph) between Pacific Island Drive and Sea Island Drive, and 35 mph between Sea Island Drive and PCH. Curbside parking is permitted on both sides of the roadway in select locations, including along the project frontage between Sea Island Drive and Lumeria Lane.
- Pacific Coast Highway:** PCH is a divided six-lane, east–west roadway located south of the project site. It is a Caltrans and Orange County CMP facility with a speed limit of 50 mph in this area. PCH is designated as a Major Arterial Highway in the City’s General Plan Circulation

Element and the Orange County MPAH. It is also a CMP facility. Curbside parking is permitted on both sides of the highway in select locations.

- **Camino Del Avion:** Camino Del Avion is a divided, four-lane east–west roadway located north of the project site. It is designated as a Primary Arterial in the City’s General Plan Circulation Element and the Orange County MPAH, and is owned by the City of Laguna Niguel. The speed limit is 45 mph along Camino Del Avion. Curbside parking is prohibited on both sides of the roadway.
- **Sea Island Drive:** Sea Island Drive is an undivided two-lane, local residential street. Direct access to the project site is provided at its terminus (i.e., full-access driveway) at Crown Valley Parkway. The speed limit is 25 mph along Sea Island Drive. Curbside parking is permitted on both sides of the roadway in select locations.
- **Lumeria Lane:** Lumeria Lane is an undivided two-lane, private road that serves the gated Monarch Bay Villas residences located south of the project site.

The study area intersection geometrics are shown on Figure 3.

Existing Pedestrian and Bicycle Facilities

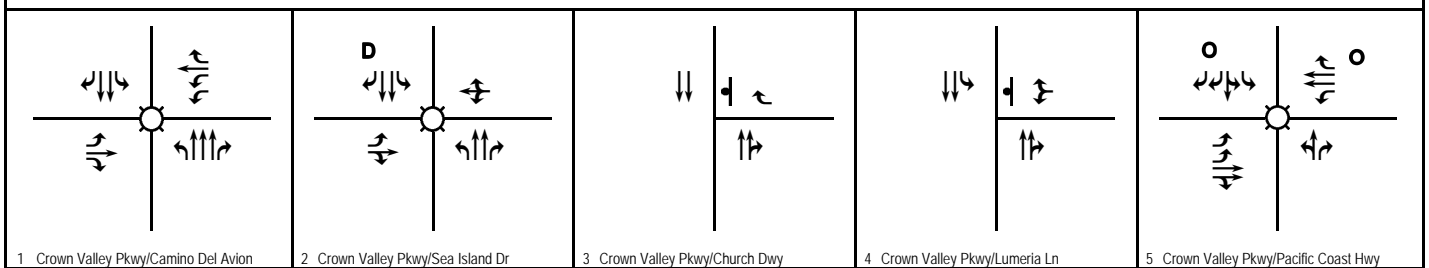
Pedestrian sidewalks are located on each side of Crown Valley Parkway, Camino Del Avion, Sea Island Drive, and PCH. Pedestrian crossings are provided at all study area intersections with the exception of Crown Valley Parkway/Lumeria Lane.

According to the Bicycle and Pedestrian Trail Master Plan, February 2006, Crown Valley Parkway and Camino Del Avion are designated as Class II bikeways, and PCH is a designated Class III bikeway. A future Class II bike lane is proposed along PCH and a bicycle parking station is proposed on the northeast corner of the intersection of Crown Valley Parkway/PCH.

Existing Transit Service

Transit service is provided within the project vicinity by the Orange County Transportation Authority (OCTA). OCTA bus stops are located adjacent to the project site at the northeast and southwest corners of the Crown Valley Parkway/Sea Island Drive–full-access driveway. Bus stops are also located south of the project site on both sides of Crown Valley Parkway and PCH. The routes and schedule of each transit service route provided below were verified as of October 2013.

- **Route 1:** Route 1 originates at the Long Beach Transit Gallery (Shelter D) and ends in San Clemente while passing through Dana Point along PCH. The bus operates between 5:30 a.m. and 10:40 p.m., Monday through Friday, and between 5:30 a.m. and 9:30 p.m. on weekends and holidays.
- **Route 85:** Route 85 originates at Mission Viejo and ends at Dana Point High School. The bus operates between 5:35 a.m. and 8:53 p.m., Monday through Friday, and between 6:52 a.m. and 7:51 p.m. on Saturdays.



LSA

Legend

- Signal
- ⊞ Defacto Right-Turn Lane
- ⊥ Stop Sign
- Right-Turn Overlap

FIGURE 3

South Shores Church Master Plan
Existing Intersection Geometries and Traffic Control Devices

Existing Traffic Volumes and LOS Analysis

Peak-hour intersection turn volumes were provided by City staff (from other projects/sources) and collected by National Data & Surveying Services (NDS) in September 2012 and April 2014 for the study area intersections. The study area traffic volumes have not dramatically changed from 2012 to 2014. The existing peak-hour volumes for the study area intersections are shown on Figures 4a and 4b. Appendix A provides the existing peak-hour count data.

Table C summarizes the results of the peak-hour LOS analysis for the five study area intersections. As previously discussed, the LOS was determined using the ICU methodology for signalized intersections and the HCM methodology for unsignalized intersections. As shown in Table C, all study area intersections currently operate at satisfactory LOS (defined as LOS C or better for signalized intersections and LOS D or better for unsignalized intersections) during the weekday and Sunday peak hours. The existing (and existing plus project) LOS worksheets are contained in Appendix B.

FUTURE CONDITIONS

Cumulative Projects

A future long-range analysis (corresponding to project completion) was prepared. According to the project applicant, the project will be completed in 2025. The future year 2025 is an 11-year horizon from the existing 2014 conditions. LSA Associates, Inc. (LSA) applied an ambient growth rate of 1 percent per year to the traffic volumes (i.e., 13 percent total growth to the 2012 weekday volumes and 11 percent total growth to the 2014 Sunday volumes) and manually assigned trips generated by approved/pending (cumulative) projects to develop a future 2025 traffic condition.

A list of cumulative projects was reviewed to determine whether projects in the vicinity of the project site should be included in the future baseline condition. With concurrence from the City, the following six cumulative projects would affect the project study area:

- 1. Headlands Specific Plan:** 125 single-family dwelling units (DU); 65-room Seaside Inn that includes meeting/function space, restaurant, and lounge; 13,000 sf of commercial uses; park and recreation areas; visitor recreation (community) facilities; and recreation/open space and visitor commercial areas of up to 40,000 sf.
- 2. Dana Point Town Center Plan:** A combination of land use regulatory and zoning changes to allow mixed-use and transportation capital improvements.
- 3. Dana Point Harbor Revitalization:** Establishment of a Commercial Core and replacement/remodel of all existing retail and restaurant buildings.
- 4. Ritz Carlton Expansion:** Addition of 32 hotel rooms and 41,000 sf of amenities.
- 5. Doheny Hotel:** 258-room hotel with a 12,103 sf conference center/banquet facility and a 7,087 sf restaurant.
- 6. 34202 Del Obispo Street:** 168 residential condominium units with 2,471 sf of commercial space.



<table border="1"> <tr><td>← 14 / 9</td><td>↘ 792 / 790</td><td>↗ 129 / 301</td><td>↖ 203 / 133</td></tr> <tr><td>↖ 4 / 13</td><td>↘ 36 / 72</td><td>↗ 47 / 62</td><td>↖ 615 / 818</td></tr> <tr><td>↖ 94 / 98</td><td>↘ 102 / 206</td><td>↗ 47 / 62</td><td>↖ 615 / 818</td></tr> <tr><td>↖ 47 / 62</td><td>↘ 615 / 818</td><td>↗ 102 / 206</td><td>↖ 706 / 1015</td></tr> </table> <p>1 Crown Valley Pkwy/Camino Del Avion</p>	← 14 / 9	↘ 792 / 790	↗ 129 / 301	↖ 203 / 133	↖ 4 / 13	↘ 36 / 72	↗ 47 / 62	↖ 615 / 818	↖ 94 / 98	↘ 102 / 206	↗ 47 / 62	↖ 615 / 818	↖ 47 / 62	↘ 615 / 818	↗ 102 / 206	↖ 706 / 1015	<table border="1"> <tr><td>← 43 / 47</td><td>↘ 1072 / 993</td><td>↗ 48 / 16</td><td>↖ 5 / 6</td></tr> <tr><td>↖ 44 / 42</td><td>↘ 3 / 0</td><td>↗ 18 / 26</td><td>↖ 3 / 8</td></tr> <tr><td>↖ 30 / 27</td><td>↘ 18 / 26</td><td>↗ 706 / 1015</td><td>↖ 3 / 2</td></tr> </table> <p>2 Crown Valley Pkwy/Sea Island Dr</p>	← 43 / 47	↘ 1072 / 993	↗ 48 / 16	↖ 5 / 6	↖ 44 / 42	↘ 3 / 0	↗ 18 / 26	↖ 3 / 8	↖ 30 / 27	↘ 18 / 26	↗ 706 / 1015	↖ 3 / 2	<table border="1"> <tr><td>← 1105 / 1028</td><td>↘ 0 / 2</td><td>↗ 7 / 0</td><td>↖ 7 / 0</td></tr> <tr><td>↖ 727 / 1043</td><td>↘ 7 / 0</td><td>↗ 7 / 0</td><td>↖ 7 / 0</td></tr> </table> <p>3 Crown Valley Pkwy/Church Dwy</p>	← 1105 / 1028	↘ 0 / 2	↗ 7 / 0	↖ 7 / 0	↖ 727 / 1043	↘ 7 / 0	↗ 7 / 0	↖ 7 / 0	<table border="1"> <tr><td>← 1105 / 1028</td><td>↘ 3 / 7</td><td>↗ 4 / 5</td><td>↖ 3 / 4</td></tr> <tr><td>↖ 727 / 1043</td><td>↘ 2 / 6</td><td>↗ 2 / 6</td><td>↖ 2 / 6</td></tr> </table> <p>4 Crown Valley Pkwy/Lumeria Ln</p>	← 1105 / 1028	↘ 3 / 7	↗ 4 / 5	↖ 3 / 4	↖ 727 / 1043	↘ 2 / 6	↗ 2 / 6	↖ 2 / 6	<table border="1"> <tr><td>← 776 / 470</td><td>↘ 33 / 40</td><td>↗ 198 / 215</td><td>↖ 193 / 216</td></tr> <tr><td>↖ 421 / 721</td><td>↘ 503 / 961</td><td>↗ 10 / 12</td><td>↖ 13 / 12</td></tr> <tr><td>↖ 503 / 961</td><td>↘ 10 / 12</td><td>↗ 13 / 12</td><td>↖ 28 / 44</td></tr> <tr><td>↖ 10 / 12</td><td>↘ 13 / 12</td><td>↗ 28 / 44</td><td>↖ 26 / 30</td></tr> </table> <p>5 Crown Valley Pkwy/Pacific Coast Hwy</p>	← 776 / 470	↘ 33 / 40	↗ 198 / 215	↖ 193 / 216	↖ 421 / 721	↘ 503 / 961	↗ 10 / 12	↖ 13 / 12	↖ 503 / 961	↘ 10 / 12	↗ 13 / 12	↖ 28 / 44	↖ 10 / 12	↘ 13 / 12	↗ 28 / 44	↖ 26 / 30
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LSA

FIGURE 4A

Legend

123 / 456

AM / PM Volume

South Shores Church Master Plan
Existing Peak-Hour Traffic Volumes



<table border="1"> <tr><td>5</td><td>751</td><td>210</td><td>165</td></tr> <tr><td>13</td><td>43</td><td>81</td><td>87</td></tr> <tr><td>81</td><td>674</td><td>211</td><td>151</td></tr> <tr><td>13</td><td>87</td><td>674</td><td>211</td></tr> <tr><td>43</td><td>81</td><td>211</td><td>151</td></tr> <tr><td>751</td><td>165</td><td>151</td><td>87</td></tr> </table> <p>1 Crown Valley Pkwy/Camino Del Avion</p>	5	751	210	165	13	43	81	87	81	674	211	151	13	87	674	211	43	81	211	151	751	165	151	87	<table border="1"> <tr><td>40</td><td>943</td><td>22</td><td>94</td></tr> <tr><td>32</td><td>1</td><td>20</td><td>33</td></tr> <tr><td>1</td><td>20</td><td>33</td><td>797</td></tr> <tr><td>32</td><td>1</td><td>20</td><td>33</td></tr> <tr><td>943</td><td>94</td><td>44</td><td>6</td></tr> <tr><td>94</td><td>44</td><td>6</td><td>33</td></tr> </table> <p>2 Crown Valley Pkwy/Sea Island Dr</p>	40	943	22	94	32	1	20	33	1	20	33	797	32	1	20	33	943	94	44	6	94	44	6	33	<table border="1"> <tr><td>1022</td><td>69</td><td>7</td></tr> <tr><td>1022</td><td>69</td><td>7</td></tr> <tr><td>69</td><td>7</td><td>1022</td></tr> <tr><td>69</td><td>7</td><td>1022</td></tr> </table> <p>3 Crown Valley Pkwy/Church Dwy</p>	1022	69	7	1022	69	7	69	7	1022	69	7	1022	<table border="1"> <tr><td>1011</td><td>13</td><td>6</td><td>8</td></tr> <tr><td>1011</td><td>13</td><td>6</td><td>8</td></tr> <tr><td>13</td><td>6</td><td>8</td><td>1011</td></tr> <tr><td>13</td><td>6</td><td>8</td><td>1011</td></tr> </table> <p>4 Crown Valley Pkwy/Lumeria Ln</p>	1011	13	6	8	1011	13	6	8	13	6	8	1011	13	6	8	1011	<table border="1"> <tr><td>507</td><td>33</td><td>309</td><td>227</td><td>814</td></tr> <tr><td>428</td><td>634</td><td>14</td><td>1</td><td>27</td></tr> <tr><td>428</td><td>634</td><td>14</td><td>1</td><td>27</td></tr> <tr><td>309</td><td>1</td><td>25</td><td>19</td><td>227</td></tr> <tr><td>227</td><td>27</td><td>19</td><td>309</td><td>428</td></tr> </table> <p>5 Crown Valley Pkwy/Pacific Coast Hwy</p>	507	33	309	227	814	428	634	14	1	27	428	634	14	1	27	309	1	25	19	227	227	27	19	309	428
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LSA

FIGURE 4B

Legend

123456

Sunday Mid-day Volume

South Shores Church Master Plan
Existing Peak-Hour Traffic Volumes

Table C: Existing and Existing Plus Project Intersection Level of Service Summary

Intersection	Existing					
	Weekday AM Peak Hour		Weekday PM Peak Hour		Sunday Peak Hour	
	ICU or Delay	LOS	ICU or Delay	LOS	ICU or Delay	LOS
1 Crown Valley Parkway/Camino Del Avion						
No Project	0.442	A	0.486	A	0.427	A
Plus Project	0.444	A	0.488	A	0.435	A
Δ	0.002		0.002		0.008	
2 Crown Valley Parkway/Sea Island Drive-Church Driveway						
No Project	0.407	A	0.390	A	0.449	A
Plus Project ¹	0.405	A	0.388	A	0.429	A
Δ	(0.002)		(0.002)		(0.020)	
3 Crown Valley Parkway/Church Driveway (unsignalized)						
No Project	0.0	A	12.2	B	11.5	B
Plus Project	0.0	A	12.3	B	11.9	B
Δ	0.0		0.1		0.4	
4 Crown Valley Parkway/Lumeria Lane (unsignalized)						
No Project	18.3	C	25.7	D	10.9	B
Plus Project	18.4	C	25.8	D	11.0	B
Δ	0.1		0.1		0.1	
5 Crown Valley Parkway/Pacific Coast Highway						
No Project	0.577	A	0.574	A	0.529	A
Plus Project	0.577	A	0.574	A	0.535	A
Δ	0.000		0.000		0.006	

¹ The project will revise the shared westbound left-turn/through/right-turn lane to a dedicated left-turn lane and a shared through/right-turn lane.

ICU = Intersection Capacity Utilization

LOS = level of service

Delay is reported in seconds (sec) for unsignalized intersections using the Highway Capacity Manual (HCM) methodology.

■ = exceeds City's LOS criteria

The trip generation for each of the six cumulative projects is provided in Table D, and the trip assignment for each individual cumulative project is provided in Appendix C. The locations of the cumulative projects and the total cumulative project trip assignments are shown on Figures 5a and 5b.

Future Traffic Volumes and LOS Analysis

The future peak-hour volumes for the study area intersections are shown on Figures 6a and 6b. An analysis of future LOS was prepared for the study area intersections. The existing intersection geometrics illustrated on Figure 3 were applied to future conditions. The results are shown in Table E. The future (and future plus project) LOS worksheets are provided in Appendix D.

As Table E indicates, all study area intersections are forecast to operate at satisfactory LOS (defined as LOS C or better for signalized intersections and LOS D or better for unsignalized intersections) during the weekday and Sunday peak hours.

PROJECT CONDITIONS

Project Trip Generation

The existing South Shores Church currently accommodates approximately 1,500 members, regular attendees, and visitors. The church holds four worship services and three Bible study groups on Sundays, periodic worship services on Wednesday evenings, preschool programs on weekdays, and 22 youth and adult ministry programs and community activities/meetings (i.e., martial arts classes and support groups) throughout the week. In addition, full-time, part-time, and volunteer staff members work at the church on weekdays between 8:00 a.m. and 5:00 p.m. Trips generated by these current church functions and activities are included in the existing counts. The Church also accommodates various special events such as meetings for organizations, fundraisers, and weddings, etc. The project applicant has provided the existing South Shores Church schedules and attendance figures (as well as future schedules and attendance figures for the various phases and buildout of the project), which is included in Appendix E.

The proposed project would increase overall building square footage with the addition of the Community Life Center and the Christian Education Buildings (as previously discussed and summarized in Table B), but typical weekday and Sunday church activities and schedules are not anticipated to change. It is acknowledged that special events (such as basketball/volleyball leagues) may occur in the Community Life Center, but these activities will not take place during typical peak-hour periods on a weekday or Sunday (the busiest day on site). These facilities will serve as the new locations for church programs and activities currently housed in buildings that will be demolished with the proposed project. The new Community Life Center and Christian Education Buildings will be amenities for the church congregation. As a result, the church trip generation is based on its operations (i.e., activities, schedules, and attendance), not building square footage.

Church activities and schedules will remain the same; however, in order to provide a conservative analysis, attendance was projected to grow from current conditions through project completion. Therefore, increases in attendance (people) have been utilized for purposes of the project trip generation.

Table D: Cumulative Projects Trip Generation Summary

Projects		Weekday AM Peak Hour			Weekday PM Peak Hour			Sunday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
1	Headlands Specific Plan ¹	100	114	214	219	178	397	219	178	397
2	Dana Point Town Center Plan ²	306	180	486	374	498	872	374	498	872
3	Dana Point Harbor Revitalization ³	276	226	502	317	260	577	317	260	577
4	Ritz Carlton Expansion ⁴	11	7	18	10	9	19	10	9	19
5	Doheny Hotel ⁵	56	31	87	55	49	104	55	49	104
6	34202 Del Obispo Street ⁶	15	63	78	64	34	98	64	34	98

Sources:

¹ Headlands Traffic Study, RK Engineering Group, Inc., September 2001.

² Dana Point Town Center Traffic Impact Analysis, Kimley-Horn and Associates, Inc., August 2006.

³ Dana Point Harbor Revitalization Traffic & Parking Analysis, RBF Consulting, September 2005.

⁴ Ritz Carlton Expansion Traffic Impact Analysis, Kimley-Horn and Associates, Inc., February 2007.

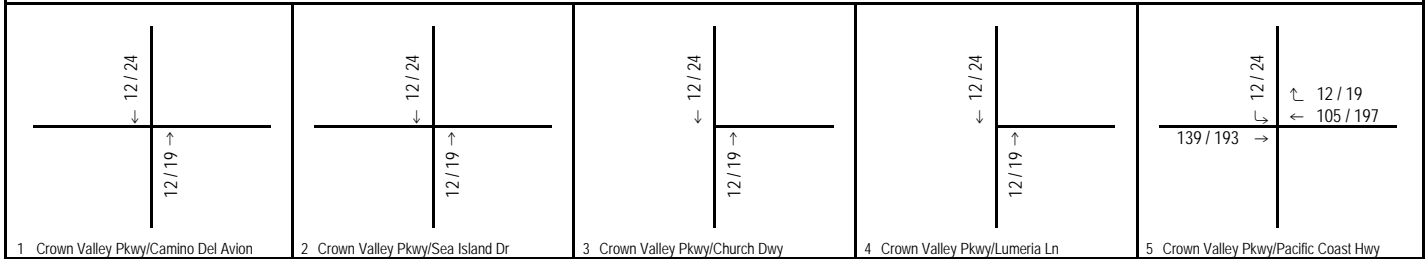
⁵ Doheny Hotel Traffic Impact Analysis, Kunzman Associates, Inc., August 2012.

⁶ 34202 Del Obispo Street Traffic Impact Analysis, LSA Associates, Inc., June 2014.

Sunday peak-hour trip generation not provided. The weekday p.m. peak-hour trip generation has been used to present a conservative analysis.



- LEGEND**
- 1 Study Area Intersections
 - Cumulative Projects:
 - 2 - Headlands Specific Plan
 - 3 - Dana Point Town Center Specific Plan
 - 4 - Dana Point Harbor Revitalization
 - 5 - Ritz Carlton Expansion
 - 6 - Doheny Hotel
 - 7 - 34202 Del Obispo



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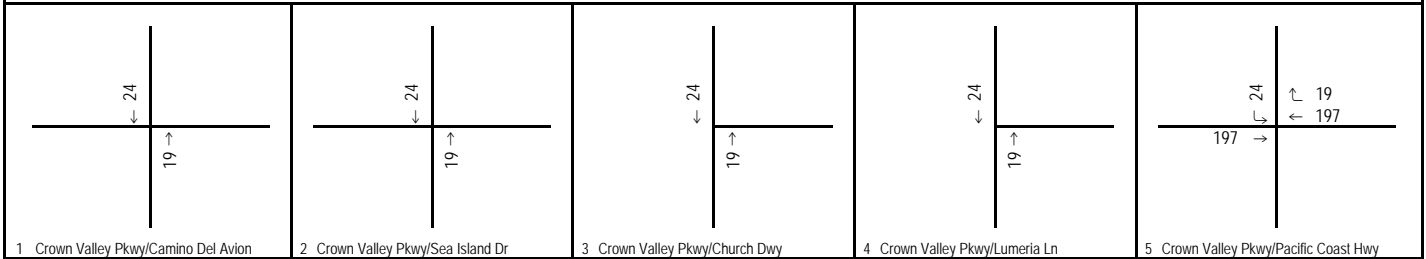
FIGURE 5A

Legend
123 / 456 AM / PM Volume

South Shores Church Master Plan
Cumulative Project Trip Assignment



- LEGEND**
- ① Study Area Intersections
 - Cumulative Projects:**
 - ② - Headlands Specific Plan
 - ③ - Dana Point Town Center Specific Plan
 - ④ - Dana Point Harbor Revitalization
 - ⑤ - Ritz Carlton Expansion
 - ⑥ - Doheny Hotel
 - ⑦ - 34202 Del Obispo



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FIGURE 5B

Legend
123456

Sunday Mid-day Volume

South Shores Church Master Plan
Cumulative Project Trip Assignment



<table border="1"> <tr> <td>16 / 10</td> <td>907 / 917</td> <td>146 / 340</td> <td>229 / 150</td> </tr> <tr> <td>5 / 15</td> <td>41 / 81</td> <td>106 / 111</td> <td>63 / 94</td> </tr> <tr> <td>53 / 70</td> <td>707 / 943</td> <td>115 / 233</td> <td>294 / 158</td> </tr> </table> <p>1 Crown Valley Pkwy/Camino Del Avion</p>	16 / 10	907 / 917	146 / 340	229 / 150	5 / 15	41 / 81	106 / 111	63 / 94	53 / 70	707 / 943	115 / 233	294 / 158	<table border="1"> <tr> <td>43 / 47</td> <td>1223 / 1146</td> <td>48 / 16</td> <td>5 / 6</td> </tr> <tr> <td>44 / 42</td> <td>3 / 0</td> <td>30 / 27</td> <td>1 / 0</td> </tr> <tr> <td>18 / 26</td> <td>810 / 1166</td> <td>3 / 2</td> <td>3 / 8</td> </tr> </table> <p>2 Crown Valley Pkwy/Sea Island Dr</p>	43 / 47	1223 / 1146	48 / 16	5 / 6	44 / 42	3 / 0	30 / 27	1 / 0	18 / 26	810 / 1166	3 / 2	3 / 8	<table border="1"> <tr> <td>1261 / 1186</td> <td>0 / 2</td> </tr> <tr> <td>834 / 1198</td> <td>7 / 0</td> </tr> </table> <p>3 Crown Valley Pkwy/Church Dwy</p>	1261 / 1186	0 / 2	834 / 1198	7 / 0	<table border="1"> <tr> <td>1261 / 1186</td> <td>3 / 7</td> <td>4 / 5</td> </tr> <tr> <td>834 / 1198</td> <td>2 / 6</td> <td>3 / 4</td> </tr> </table> <p>4 Crown Valley Pkwy/Lumeria Ln</p>	1261 / 1186	3 / 7	4 / 5	834 / 1198	2 / 6	3 / 4	<table border="1"> <tr> <td>877 / 531</td> <td>37 / 45</td> <td>236 / 267</td> <td>230 / 263</td> </tr> <tr> <td>476 / 815</td> <td>707 / 1279</td> <td>11 / 14</td> <td>1177 / 1009</td> </tr> <tr> <td>15 / 14</td> <td>32 / 50</td> <td>29 / 34</td> <td>34 / 34</td> </tr> </table> <p>5 Crown Valley Pkwy/Pacific Coast Hwy</p>	877 / 531	37 / 45	236 / 267	230 / 263	476 / 815	707 / 1279	11 / 14	1177 / 1009	15 / 14	32 / 50	29 / 34	34 / 34
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15 / 14	32 / 50	29 / 34	34 / 34																																															

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FIGURE 6A

Legend
123 / 456 AM / PM Volume

South Shores Church Master Plan
Future Peak-Hour Traffic Volumes



<table border="1"> <tr><td>6</td><td>858</td><td>233</td><td>183</td></tr> <tr><td>14</td><td>48</td><td>90</td><td>168</td></tr> <tr><td>97</td><td>767</td><td>234</td><td></td></tr> <tr><td>32</td><td>1</td><td>20</td><td>44</td></tr> <tr><td>33</td><td>904</td><td>6</td><td></td></tr> </table>	6	858	233	183	14	48	90	168	97	767	234		32	1	20	44	33	904	6		<table border="1"> <tr><td>40</td><td>1071</td><td>22</td><td>94</td></tr> <tr><td>32</td><td>1</td><td>20</td><td>44</td></tr> <tr><td>33</td><td>904</td><td>6</td><td></td></tr> </table>	40	1071	22	94	32	1	20	44	33	904	6		<table border="1"> <tr><td>1158</td><td>69</td><td>7</td><td></td></tr> </table>	1158	69	7		<table border="1"> <tr><td>1146</td><td>13</td><td>6</td><td>8</td></tr> </table>	1146	13	6	8	<table border="1"> <tr><td>563</td><td>37</td><td>367</td><td>271</td></tr> <tr><td>475</td><td>897</td><td>16</td><td>1101</td></tr> <tr><td>1</td><td>28</td><td>21</td><td>30</td></tr> </table>	563	37	367	271	475	897	16	1101	1	28	21	30
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LSA

FIGURE 6B

Legend
123456 Sunday Mid-day Volume

South Shores Church Master Plan
Future Peak-Hour Traffic Volumes

Table E: Future and Future Plus Project Intersection Level of Service Summary

Intersection	Future					
	Weekday AM Peak Hour		Weekday PM Peak Hour		Sunday Peak Hour	
	ICU or Delay	LOS	ICU or Delay	LOS	ICU or Delay	LOS
1 Crown Valley Parkway/Camino Del Avion						
No Project	0.497	A	0.547	A	0.475	A
Plus Project	0.499	A	0.548	A	0.484	A
Δ	0.002		0.001		0.009	
2 Crown Valley Parkway/Sea Island Drive-Church Driveway						
No Project	0.452	A	0.435	A	0.486	A
Plus Project ¹	0.450	A	0.433	A	0.467	A
Δ	(0.002)		(0.002)		(0.019)	
3 Crown Valley Parkway/Church Driveway (unsignalized)						
No Project	0.0	A	13.0	B	12.1	B
Plus Project	0.0	A	13.2	B	12.6	B
Δ	0.0		0.2		0.5	
4 Crown Valley Parkway/Lumeria Lane (unsignalized)						
No Project	21.9	C	33.9	D	11.3	B
Plus Project	22.0	C	34.0	D	11.5	B
Δ	0.1		0.1		0.2	
5 Crown Valley Parkway/Pacific Coast Highway						
No Project	0.676	B	0.707	C	0.647	B
Plus Project	0.676	B	0.708	C	0.653	B
Δ	0.000		0.001		0.006	

¹ The project will revise the shared westbound left-turn/through/right-turn lane to a dedicated left-turn lane and a shared through/right-turn lane.

ICU = Intersection Capacity Utilization

LOS = level of service

Delay is reported in seconds (sec) for unsignalized intersections using the Highway Capacity Manual (HCM) methodology.

■ = exceeds City's LOS criteria

With buildout of the project, attendance is anticipated to increase by 12 people during the weekday a.m. peak hour (from 40 to 52 people), by 18 people during the weekday p.m. peak hour (from 70 to 88 people), and by 158 people during the Sunday peak hour (from 580 to 738 people). The projected increases in attendance are provided in Appendix E.

Table F presents the project trip generation for the proposed project based on the estimated increase in attendance. As this table indicates, the project has the potential to generate an additional approximately 12 inbound weekday a.m. peak-hour trips, 18 outbound weekday p.m. peak-hour trips, and 106 Sunday peak-hour trips (57 inbound and 49 outbound) at buildout.

For trip generation purposes, one vehicle has been assumed per new staff member and program/service (i.e., Grief Share) attendee during typical weekday operations at project buildout. The church staff schedule is 8:00 a.m. to 5:00 p.m. As such, 12 new staff members are anticipated to arrive on site during the a.m. peak hour (which is equivalent to 12 additional inbound trips) and depart during the p.m. peak hour (which is equivalent to 12 additional outbound trips). The Grief Share schedule is 2:00 p.m. to 4:00 p.m. 6 new Grief Share attendees would not arrive during either peak hour, but would leave the site during the p.m. peak hour (which is equivalent to 6 additional outbound trips).

In order to identify the existing trip generation characteristics of the South Shores Church during typical Sunday operations, LSA utilized the parking demand survey data and the inbound and outbound volume data at the full-access and RIRO driveways provided in Appendix A. According to the parking surveys, the peak parking demand was 254 spaces. With an attendance of 379 people at this time, the average vehicle occupancy is approximately 1.49 people per vehicle, or 0.67 trips per person. The inbound/outbound split of vehicle trips at the church site is approximately 54 percent inbound and 46 percent outbound during the peak hour of a typical Sunday. Therefore, 158 new church attendees on a Sunday are equivalent to 106 additional trips (57 inbound and 49 outbound).

Project Trip Distribution and Assignment

Trip distribution for the proposed project is based on the inbound and outbound characteristics at the church driveways and turn movements at the upstream and downstream study area intersections. Figures 7a and 7b illustrate the regional project trip distribution and assignment for the study area intersections. As shown on these figures, 44 percent of the trips are destined north via Crown Valley Parkway, 1 percent is destined south via Crown Valley Parkway, 25 percent are destined east (12 percent via Camino Del Avion and 13 percent via PCH), and 30 percent are destined west (4 percent via Camino Del Avion, 2 percent via Sea Island Drive, and 24 percent via PCH).

EXISTING PLUS PROJECT CONDITIONS

To determine existing plus project conditions, traffic generated by the proposed project was added to the existing baseline traffic volumes at the study area intersections. Figures 8a and 8b show the resulting existing plus project peak-hour traffic volumes.

The existing plus project peak-hour LOS analysis for the study area intersections is presented in Table C. As Table C indicates, all study area intersections are anticipated to operate at satisfactory LOS (defined as LOS C or better for signalized intersections and LOS D or better for unsignalized intersections) with the addition of project traffic during the weekday and Sunday peak hours.

Table F: Project Trip Generation Summary

Land Use	Size	Units	Weekday AM Peak Hour			Weekday PM Peak Hour			Sunday Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Project Trip Generation¹											
Church (Weekday AM)	12	Persons	12	0	12	-	-	-	-	-	-
Church (Weekday PM)	18	Persons	-	-	-	0	18	18	-	-	-
Church (Sunday)	158	Persons	-	-	-	-	-	-	57	49	106

¹ For purposes of the project trip generation, forecast increases in attendance have been assumed as follows (i.e., Master Plan attendance - existing 2012/2014 attendance):

Weekday (Thursday) AM Peak Hour: 52 Staff - 40 Staff = 12

Weekday (Thursday) PM Peak Hour: (52 Staff + 36 Grief Share) - (40 Staff + 30 Grief Share) = 18

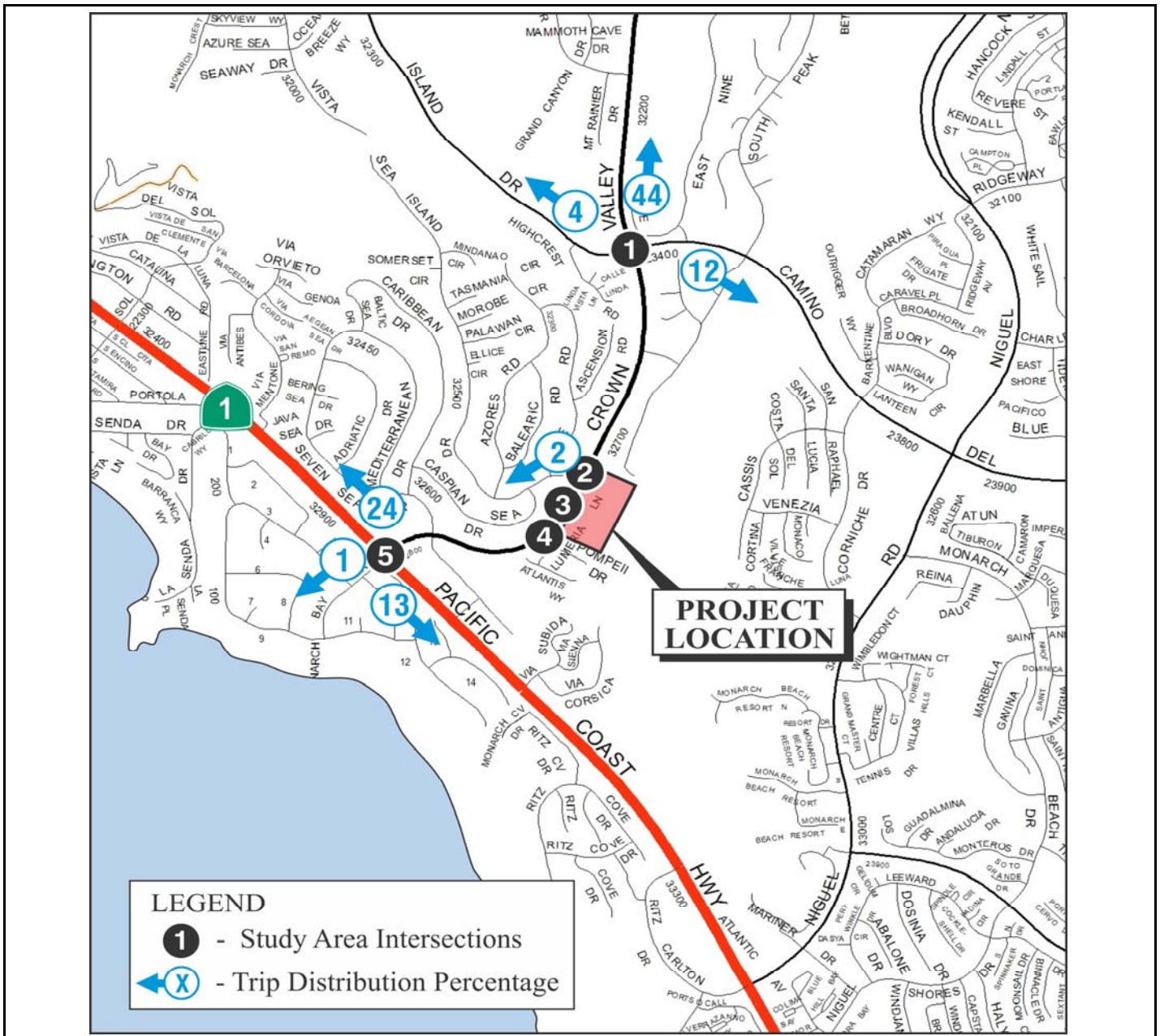
Sunday Peak Hour: (399 2nd Service + 41 Bible Study - 114 from 2nd Service for Bible Studies + 412 3rd Service) -

(344 2nd Service + 35 Bible Study - 100 from 2nd Service for Bible Studies + 301 3rd Service) = 158

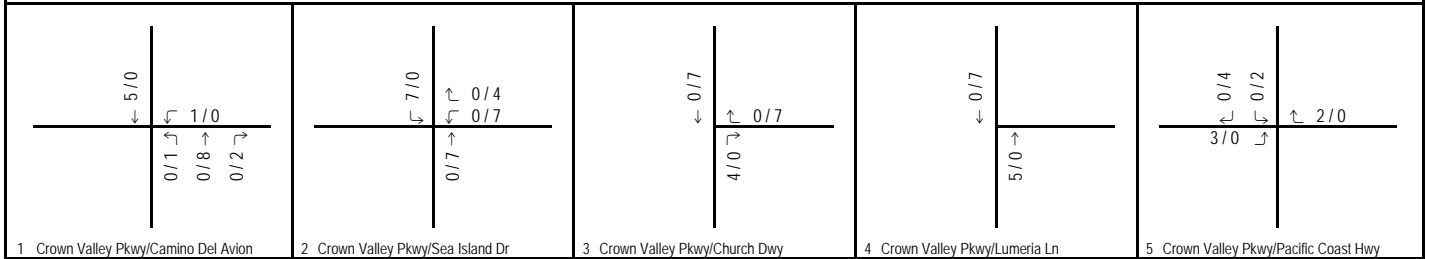
1 vehicle per Staff member and Grief Share attendee is assumed.

Based on Sunday parking surveys, the average vehicle occupancy is approximately 1.49 people per vehicle, or 0.67 vehicles per person.

The inbound/outbound split during the Sunday peak hour is approximately 54/46.



LEGEND
 1 - Study Area Intersections
 X - Trip Distribution Percentage

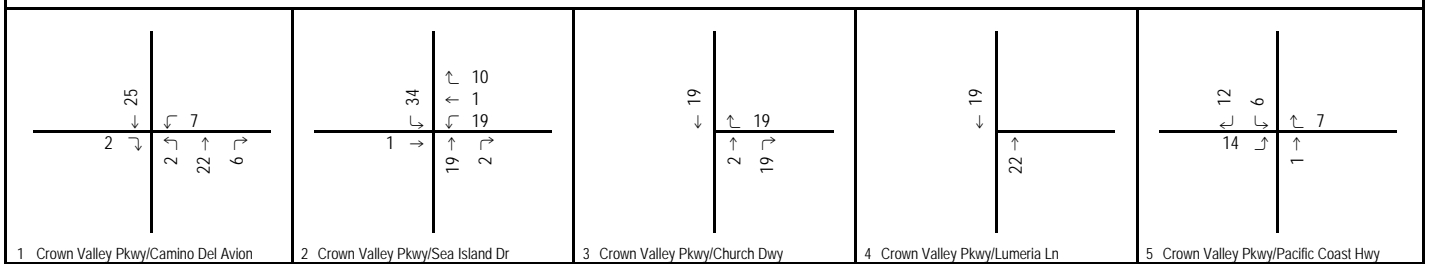
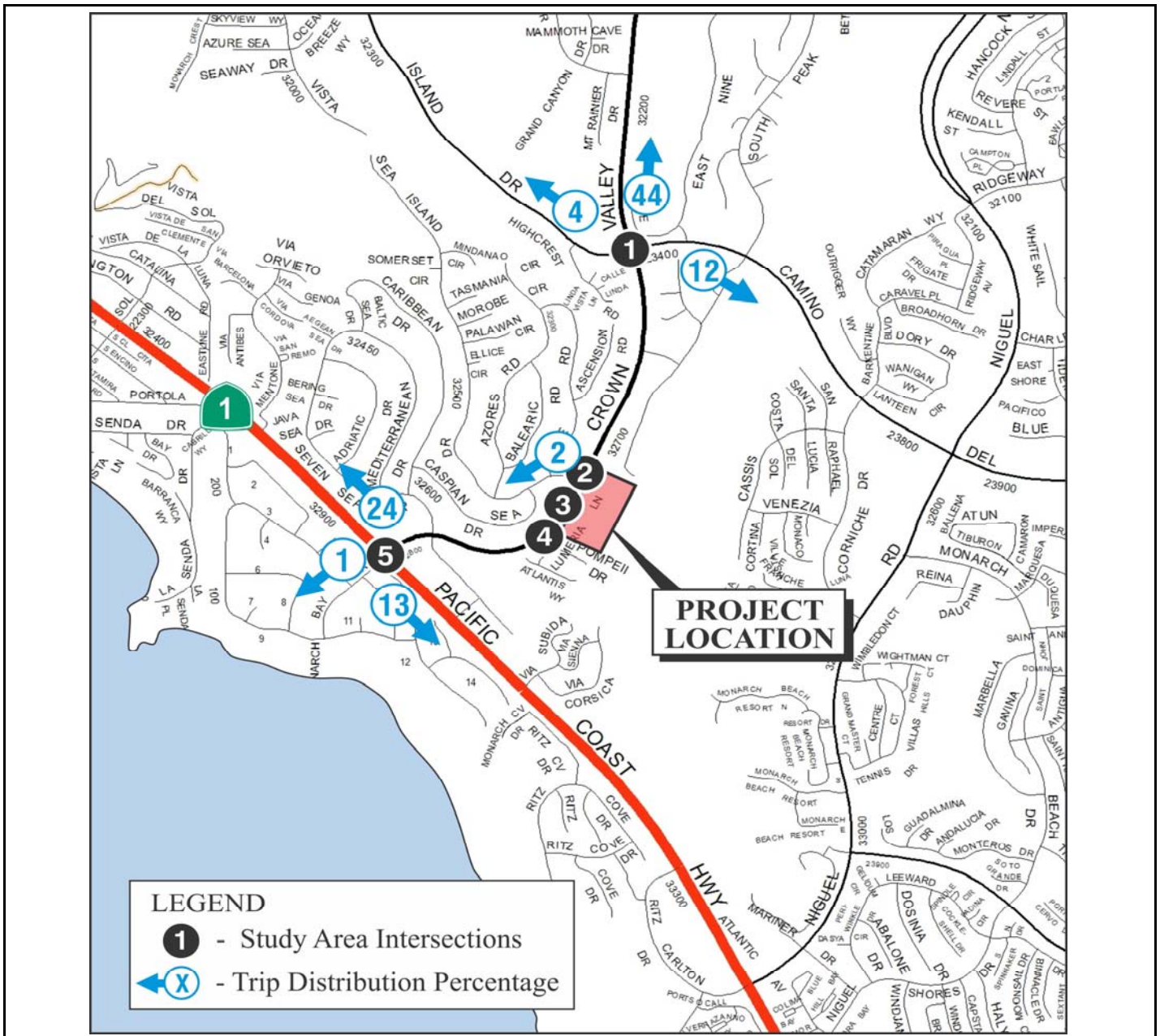


LSA

FIGURE 7A

Legend
 123 / 456 AM / PM Volume

South Shores Church Master Plan
 Project Trip Distribution and Assignment



LSA

FIGURE 7B

Legend
123456

Sunday Mid-day Volume

South Shores Church Master Plan
Project Trip Distribution and Assignment



<table border="1"> <tr><td>← 14 / 9</td><td>↘ 797 / 790</td><td>↙ 129 / 301</td><td>↗ 203 / 133</td></tr> <tr><td>↖ 4 / 13</td><td>↘ 36 / 72</td><td>↙ 47 / 63</td><td>↗ 56 / 83</td></tr> <tr><td>↖ 94 / 98</td><td>↘ 615 / 826</td><td>↙ 102 / 208</td><td>↗ 261 / 140</td></tr> <tr><td></td><td>↘ 47 / 63</td><td>↙ 615 / 826</td><td>↗ 102 / 208</td></tr> </table> <p>1 Crown Valley Pkwy/Camino Del Avion</p>	← 14 / 9	↘ 797 / 790	↙ 129 / 301	↗ 203 / 133	↖ 4 / 13	↘ 36 / 72	↙ 47 / 63	↗ 56 / 83	↖ 94 / 98	↘ 615 / 826	↙ 102 / 208	↗ 261 / 140		↘ 47 / 63	↙ 615 / 826	↗ 102 / 208	<table border="1"> <tr><td>← 43 / 47</td><td>↘ 1072 / 993</td><td>↙ 55 / 16</td><td>↗ 5 / 10</td></tr> <tr><td>↖ 44 / 42</td><td>↘ 3 / 0</td><td>↙ 30 / 27</td><td>↗ 1 / 0</td></tr> <tr><td>↖ 18 / 26</td><td>↘ 706 / 1022</td><td>↙ 3 / 2</td><td>↗ 3 / 15</td></tr> <tr><td></td><td>↘ 18 / 26</td><td>↙ 706 / 1022</td><td>↗ 3 / 2</td></tr> </table> <p>2 Crown Valley Pkwy/Sea Island Dr</p>	← 43 / 47	↘ 1072 / 993	↙ 55 / 16	↗ 5 / 10	↖ 44 / 42	↘ 3 / 0	↙ 30 / 27	↗ 1 / 0	↖ 18 / 26	↘ 706 / 1022	↙ 3 / 2	↗ 3 / 15		↘ 18 / 26	↙ 706 / 1022	↗ 3 / 2	<table border="1"> <tr><td>← 1105 / 1035</td><td>↘ 0 / 9</td><td>↙ 11 / 0</td><td>↗ 11 / 0</td></tr> <tr><td>↖ 727 / 1043</td><td>↘ 11 / 0</td><td>↙ 11 / 0</td><td>↗ 11 / 0</td></tr> </table> <p>3 Crown Valley Pkwy/Church Dwy</p>	← 1105 / 1035	↘ 0 / 9	↙ 11 / 0	↗ 11 / 0	↖ 727 / 1043	↘ 11 / 0	↙ 11 / 0	↗ 11 / 0	<table border="1"> <tr><td>← 1105 / 1035</td><td>↘ 3 / 7</td><td>↙ 4 / 5</td><td>↗ 3 / 4</td></tr> <tr><td>↖ 732 / 1043</td><td>↘ 2 / 6</td><td>↙ 2 / 6</td><td>↗ 2 / 6</td></tr> </table> <p>4 Crown Valley Pkwy/Lumeria Ln</p>	← 1105 / 1035	↘ 3 / 7	↙ 4 / 5	↗ 3 / 4	↖ 732 / 1043	↘ 2 / 6	↙ 2 / 6	↗ 2 / 6	<table border="1"> <tr><td>← 776 / 474</td><td>↘ 33 / 40</td><td>↙ 198 / 217</td><td>↗ 195 / 216</td></tr> <tr><td>↖ 424 / 721</td><td>↘ 503 / 961</td><td>↙ 10 / 12</td><td>↗ 949 / 719</td></tr> <tr><td>↖ 13 / 12</td><td>↘ 28 / 44</td><td>↙ 26 / 30</td><td>↗ 30 / 30</td></tr> <tr><td></td><td>↘ 13 / 12</td><td>↙ 28 / 44</td><td>↗ 26 / 30</td></tr> </table> <p>5 Crown Valley Pkwy/Pacific Coast Hwy</p>	← 776 / 474	↘ 33 / 40	↙ 198 / 217	↗ 195 / 216	↖ 424 / 721	↘ 503 / 961	↙ 10 / 12	↗ 949 / 719	↖ 13 / 12	↘ 28 / 44	↙ 26 / 30	↗ 30 / 30		↘ 13 / 12	↙ 28 / 44	↗ 26 / 30
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LSA

FIGURE 8A

Legend

123 / 456

AM / PM Volume

South Shores Church Master Plan
Existing Plus Project Peak-Hour Traffic Volumes



<table border="1"> <tr><td>5</td><td>776</td><td>210</td><td>165</td></tr> <tr><td>13</td><td>43</td><td>83</td><td>89</td></tr> <tr><td>696</td><td>217</td><td>61</td><td>158</td></tr> <tr><td>8</td><td>2</td><td>20</td><td>33</td></tr> <tr><td>104</td><td>88</td><td>4</td><td>63</td></tr> <tr><td>765</td><td>26</td><td>104</td><td>816</td></tr> <tr><td>6</td><td>8</td><td>13</td><td>8</td></tr> <tr><td>519</td><td>33</td><td>315</td><td>234</td></tr> <tr><td>442</td><td>634</td><td>14</td><td>814</td></tr> <tr><td>1</td><td>26</td><td>19</td><td>27</td></tr> </table>	5	776	210	165	13	43	83	89	696	217	61	158	8	2	20	33	104	88	4	63	765	26	104	816	6	8	13	8	519	33	315	234	442	634	14	814	1	26	19	27	<table border="1"> <tr><td>40</td><td>943</td><td>56</td><td>104</td></tr> <tr><td>32</td><td>2</td><td>20</td><td>33</td></tr> <tr><td>8</td><td>2</td><td>20</td><td>33</td></tr> <tr><td>1041</td><td>88</td><td>4</td><td>63</td></tr> <tr><td>765</td><td>26</td><td>104</td><td>816</td></tr> <tr><td>6</td><td>8</td><td>13</td><td>8</td></tr> <tr><td>519</td><td>33</td><td>315</td><td>234</td></tr> <tr><td>442</td><td>634</td><td>14</td><td>814</td></tr> <tr><td>1</td><td>26</td><td>19</td><td>27</td></tr> </table>	40	943	56	104	32	2	20	33	8	2	20	33	1041	88	4	63	765	26	104	816	6	8	13	8	519	33	315	234	442	634	14	814	1	26	19	27	<table border="1"> <tr><td>1041</td><td>88</td><td>4</td><td>63</td></tr> <tr><td>765</td><td>26</td><td>104</td><td>816</td></tr> <tr><td>6</td><td>8</td><td>13</td><td>8</td></tr> <tr><td>519</td><td>33</td><td>315</td><td>234</td></tr> <tr><td>442</td><td>634</td><td>14</td><td>814</td></tr> <tr><td>1</td><td>26</td><td>19</td><td>27</td></tr> </table>	1041	88	4	63	765	26	104	816	6	8	13	8	519	33	315	234	442	634	14	814	1	26	19	27	<table border="1"> <tr><td>1030</td><td>13</td><td>6</td><td>8</td></tr> <tr><td>784</td><td>8</td><td>13</td><td>8</td></tr> <tr><td>519</td><td>33</td><td>315</td><td>234</td></tr> <tr><td>442</td><td>634</td><td>14</td><td>814</td></tr> <tr><td>1</td><td>26</td><td>19</td><td>27</td></tr> </table>	1030	13	6	8	784	8	13	8	519	33	315	234	442	634	14	814	1	26	19	27	<table border="1"> <tr><td>519</td><td>33</td><td>315</td><td>234</td></tr> <tr><td>442</td><td>634</td><td>14</td><td>814</td></tr> <tr><td>1</td><td>26</td><td>19</td><td>27</td></tr> </table>	519	33	315	234	442	634	14	814	1	26	19	27
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LSA

FIGURE 8B

Legend

123456

Sunday Mid-day Volume

South Shores Church Master Plan
Existing Plus Project Peak-Hour Traffic Volumes

Therefore, the project would not conflict with any plan, ordinance, and policy establishing measures of effectiveness for the performance of the circulation system, or CMP (i.e., LOS standards) in the existing conditions.

FUTURE PLUS PROJECT CONDITION

To determine the future buildout (2025) plus project condition, traffic generated by the project was added to the future traffic volumes at each study area intersection. Figures 9a and 9b illustrate the resulting future plus project peak-hour traffic volumes. The future plus project peak-hour LOS analysis for the study area intersections is presented in Table E.

As Table E indicates, all study area intersections are anticipated to operate at satisfactory LOS (defined as LOS C or better for signalized intersections and LOS D or better for unsignalized intersections) with the addition of project traffic during the weekday and Sunday peak hours. Therefore, the project would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or the CMP (i.e., LOS standards) in the future conditions.

CIRCULATION AND ACCESS ANALYSIS

As shown on the site plan (Figure 2), two driveways will continue to provide access to the project site: a full-access driveway (the east leg of the signalized intersection of Crown Valley Parkway/Sea Island Drive) and a RIRO driveway located south along Crown Valley Parkway.

A queuing analysis was conducted to determine the potential queuing of vehicles entering (i.e., making northbound right turns and southbound left turns) and exiting (i.e., making westbound left turns, proceeding westbound through, and making westbound right turns) the project site at the Crown Valley Parkway/Sea Island Drive–full-access driveway, as well as entering (i.e., making northbound right turns) and exiting (i.e., making westbound right turns) at the Crown Valley Parkway/RIRO driveway. The HCM 2000 analysis was conducted in Traffix to generate queuing reports (provided in Appendix F) for these two intersections under existing plus project and future plus project conditions.

The queuing results for the Crown Valley Parkway/Sea Island Drive–full-access driveway and the Crown Valley Parkway/RIRO driveway are shown in Table G.



<table border="1"> <tr><td>← 16 / 10</td><td>↘ 912 / 917</td><td>↗ 146 / 340</td><td>↖ ↑ 229 / 150</td></tr> <tr><td>↖ 5 / 15</td><td>↘ 41 / 81</td><td>↗ 106 / 111</td><td>↖ ↘ 295 / 158</td></tr> <tr><td>↖ ↘ 53 / 70</td><td>↘ ↗ 707 / 951</td><td>↗ ↖ 115 / 235</td><td></td></tr> </table> <p>1 Crown Valley Pkwy/Camino Del Avion</p>	← 16 / 10	↘ 912 / 917	↗ 146 / 340	↖ ↑ 229 / 150	↖ 5 / 15	↘ 41 / 81	↗ 106 / 111	↖ ↘ 295 / 158	↖ ↘ 53 / 70	↘ ↗ 707 / 951	↗ ↖ 115 / 235		<table border="1"> <tr><td>← 43 / 47</td><td>↘ 1223 / 1146</td><td>↗ 55 / 16</td><td>↖ ↘ 5 / 10</td></tr> <tr><td>↖ 44 / 42</td><td>↘ 3 / 0</td><td>↗ 30 / 27</td><td>↖ ↘ 18 / 26</td></tr> <tr><td>↖ ↘ 810 / 1173</td><td>↘ ↗ 3 / 2</td><td></td><td></td></tr> </table> <p>2 Crown Valley Pkwy/Sea Island Dr</p>	← 43 / 47	↘ 1223 / 1146	↗ 55 / 16	↖ ↘ 5 / 10	↖ 44 / 42	↘ 3 / 0	↗ 30 / 27	↖ ↘ 18 / 26	↖ ↘ 810 / 1173	↘ ↗ 3 / 2			<table border="1"> <tr><td>← 1261 / 1193</td><td>↘ 0 / 9</td><td>↗ 11 / 0</td><td></td></tr> </table> <p>3 Crown Valley Pkwy/Church Dwy</p>	← 1261 / 1193	↘ 0 / 9	↗ 11 / 0		<table border="1"> <tr><td>← 1261 / 1193</td><td>↘ 3 / 7</td><td>↖ ↘ 4 / 5</td></tr> <tr><td>↖ ↘ 839 / 1198</td><td>↘ ↗ 2 / 6</td><td>↖ ↘ 3 / 4</td></tr> </table> <p>4 Crown Valley Pkwy/Lumeria Ln</p>	← 1261 / 1193	↘ 3 / 7	↖ ↘ 4 / 5	↖ ↘ 839 / 1198	↘ ↗ 2 / 6	↖ ↘ 3 / 4	<table border="1"> <tr><td>← 877 / 535</td><td>↘ 37 / 45</td><td>↗ 236 / 269</td><td>↖ ↘ 232 / 263</td></tr> <tr><td>↖ 479 / 815</td><td>↘ 707 / 1279</td><td>↗ 11 / 14</td><td>↖ ↘ 1177 / 1009</td></tr> <tr><td>↖ ↘ 15 / 14</td><td>↘ ↗ 32 / 50</td><td>↗ ↖ 29 / 34</td><td></td></tr> </table> <p>5 Crown Valley Pkwy/Pacific Coast Hwy</p>	← 877 / 535	↘ 37 / 45	↗ 236 / 269	↖ ↘ 232 / 263	↖ 479 / 815	↘ 707 / 1279	↗ 11 / 14	↖ ↘ 1177 / 1009	↖ ↘ 15 / 14	↘ ↗ 32 / 50	↗ ↖ 29 / 34	
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LSA

FIGURE 9A

Legend

123 / 456

AM / PM Volume

South Shores Church Master Plan
Future Plus Project Peak-Hour Traffic Volumes



<table border="1"> <tr><td>6</td><td>883</td><td>233</td><td>183</td></tr> <tr><td>14</td><td>48</td><td>92</td><td>175</td></tr> <tr><td>99</td><td>789</td><td>240</td><td></td></tr> <tr><td>32</td><td>2</td><td>20</td><td>104</td></tr> <tr><td>33</td><td>33</td><td>923</td><td>63</td></tr> <tr><td>8</td><td></td><td></td><td>8</td></tr> </table>	6	883	233	183	14	48	92	175	99	789	240		32	2	20	104	33	33	923	63	8			8	<table border="1"> <tr><td>40</td><td>1071</td><td>56</td><td>104</td></tr> <tr><td>32</td><td>2</td><td>20</td><td>63</td></tr> <tr><td>33</td><td>33</td><td>923</td><td>8</td></tr> </table>	40	1071	56	104	32	2	20	63	33	33	923	8	<table border="1"> <tr><td>1177</td><td>88</td><td>26</td></tr> </table>	1177	88	26	<table border="1"> <tr><td>1165</td><td>13</td><td>6</td><td>8</td></tr> </table>	1165	13	6	8	<table border="1"> <tr><td>575</td><td>37</td><td>373</td><td>278</td><td>1101</td></tr> <tr><td>489</td><td>897</td><td>16</td><td>29</td><td>30</td><td>21</td></tr> </table>	575	37	373	278	1101	489	897	16	29	30	21
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1 Crown Valley Pkwy/Camino Del Avion	2 Crown Valley Pkwy/Sea Island Dr	3 Crown Valley Pkwy/Church Dwy	4 Crown Valley Pkwy/Lumeria Ln	5 Crown Valley Pkwy/Pacific Coast Hwy																																																						

LSA

FIGURE 9B

Legend

123456

Sunday Mid-day Volume

South Shores Church Master Plan
Future Plus Project Peak-Hour Traffic Volumes

Table G: Queuing Summary of Project Driveways

Driveway/ Movement	Existing Plus Project Queue (vehicles)			Future Plus Project Queue (vehicles)		
	AM Peak Hour	PM Peak Hour	Sunday Peak Hour	AM Peak Hour	PM Peak Hour	Sunday Peak Hour
Full-Access Driveway						
Northbound Right Turn	0	0	0	0	0	0
Southbound Left Turn	4	1	4	4	1	4
Westbound Left Turn	0	1	4	0	1	4
Westbound Through/ Right Turn	0	1	6	0	1	6
RIRO Driveway						
Northbound Right Turn	0	0	0	0	0	0
Westbound Right Turn	0	1	1	0	1	1

RIRO = right in right out

The lengths of the northbound right-turn and southbound left-turn pockets at the Crown Valley Parkway/Sea Island Drive–full-access driveway are 100 feet (ft) and 110 ft, respectively. The westbound left-turn and shared westbound through/right-turn lanes at this intersection are both 70 ft. An additional 80 ft of storage is provided between these two westbound lanes to the first surface parking space on site. Therefore, a total storage capacity of 220 ft is provided for vehicles exiting the site at this location. As shown in Table G, the northbound right-turn movement would not have a vehicle queue, and the southbound left-turn queues would not exceed four vehicles (or 88 ft at 22 ft per vehicle) for any of the analysis time periods or scenarios. Therefore, the existing 100 ft northbound right-turn pocket and 110 ft southbound left-turn pocket are adequate. The total westbound left-turn and westbound through/right-turn queues would not exceed two vehicles (or 44 ft at 22 ft per vehicle) for the weekday a.m. and p.m. peak hours. The total westbound left-turn and westbound through/right-turn queues would be 10 vehicles (or 220 combined ft at 22 ft per vehicle) during the Sunday peak hour. Therefore, the existing 220 ft of westbound storage is adequate. Any westbound (outbound) queues would be located on site and would not affect Crown Valley Parkway.

A queuing analysis was also conducted for the northbound right-turn and westbound right-turn movements at the Crown Valley Parkway/RIRO driveway. The northbound right-turn storage is approximately 50 ft. The westbound right-turn storage is approximately 25 ft between the back of the Crown Valley Parkway sidewalk and the first intersecting drive aisle on site. As shown in Table G, the uncontrolled northbound right-turn movement would not have a vehicle queue as there are no opposing turn movements at this location. Therefore, the existing 50 ft of northbound right-turn storage is adequate. The westbound right-turn queue would not exceed one vehicle (or 22 ft) for any of the analysis times periods or scenarios. Therefore, the 25 ft of westbound right-turn storage is adequate. Westbound (outbound) queues at this location would not affect Crown Valley Parkway.

CONSTRUCTION ANALYSIS

Construction Trip Generation

The project will be constructed in five phases (of which Phase 1 has five subphases) over an estimated 10-year period (with time between phases).

Based on information provided by the project applicant in Appendix G, project construction will consist of the following phases (including number of employees, trucks, and duration):

- **Phase 1A (Construction of New Preschool/Administration Building):** 20 workers, 4 delivery trucks, 25 dump trucks, 25 concrete trucks, and 13-month duration
- **Phase 1B (Demolition of Existing Buildings [Preschool, Administration and Fellowship Hall, and the Chapel]):** 15 workers, 4 dump trucks, and 3-month duration
- **Phase 1B-E1 (Earthwork):** 15 workers, 8 dump trucks, and 3-month duration
- **Phase 1B-E2 (Grading):** 15 workers, 4 delivery trucks, 12 dump trucks, 12 concrete trucks, and 3-month duration
- **Phase 1C (Construction of New Community Life Center Building):** 20 workers, 4 delivery trucks, 25 dump trucks, 25 concrete trucks, and 12-month duration
- **Phase 2 (Construction of New Christian Education Building 1):** 20 workers, 4 delivery trucks, 25 dump trucks, 25 concrete trucks, and 12-month duration
- **Phase 3 (Construction of New Christian Education Building 2):** 20 workers, 4 delivery trucks, 25 dump trucks, 25 concrete trucks, and 12-month duration
- **Phase 4 (Construction of the South Half of the Parking Structure):** 15 workers, 4 delivery trucks, 20 dump trucks, 20 concrete trucks, and 7-month duration
- **Phase 5 (Construction of the North Half of the Parking Structure):** 15 workers, 4 delivery trucks, 20 dump trucks, 20 concrete trucks, and 7-month duration

According to the City's Code Enforcement Division, the noise that emanates from construction activities is restricted between 7:00 a.m. and 8:00 p.m. Therefore, construction shall be limited to the hours between 7:00 a.m. and 8:00 p.m. on weekdays (excluding holidays). It should be noted that work hours for grading activities are further restricted by City Municipal Code between 7:00 a.m. and 5:00 p.m. on weekdays (excluding holidays). Construction workers may arrive and depart outside of the peak traffic/commute times; however, in order to present a conservative analysis, construction workers are assumed to arrive after 7:00 a.m. (during the a.m. peak hour) and depart after 5:00 p.m. (during the p.m. peak hour). Truck trips may occur throughout the day (between 7:00 a.m. and 5:00 p.m.). A uniform distribution of trucks has been assumed for the 10-hour period between 7:00 a.m. and 5:00 p.m., although trucking/hauling hours may be further restricted by the City.

Heavy equipment will not be hauled to/from the project site on a daily basis; it will be dropped off at the beginning of construction and picked up at completion of construction. The majority of the construction trips would be associated with workers traveling to and from the site and daily truck activities (i.e., hauling of debris/soil and deliveries of various materials/equipment).

Table H provides a summary of the trip generation for each phase of construction. As shown in this table, Phases 1A, 1C, 2, and 3 would generate the most construction trips. These phases would generate 58 a.m. peak-hour trips (39 inbound and 19 outbound) and 58 p.m. peak-hour trips (19 inbound and 39 outbound). Construction activity is anticipated to generate more trips than typical operations of the church on a weekday.

Table H: Construction Trip Generation Summary

Phase		Vehicles				Vehicle Trip Generation						PCE Trip Generation							
Description	Duration	Description	Quantity	Type	PCE	AM Peak Hour			PM Peak Hour			ADT	AM Peak Hour			PM Peak Hour			
<i>Typical Operations</i>		<i>Project Completion</i>		<i>Passenger</i>		1	7	1	8	6	3	9		7	1	8	6	3	9
						in	out	total	in	out	total		in	out	total	in	out	total	
1A	Construction of Preschool/ Administration Building	13 months	Construction Workers	20	Passenger	1	20	0	20	0	20	20	40	20	0	20	0	20	20
			Delivery Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Dump Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Concrete Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Total					27	7	34	7	27	34	310	39	19	58	19	39
1B	Demolition of Existing Buildings	3 months	Construction Workers	15	Passenger	1	15	0	15	0	15	15	30	15	0	15	0	15	15
			Dump Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Total				16	1	17	1	16	17	50	18	3	21	3	18	21
1B-E1	Earthwork	3 months	Construction Workers	15	Passenger	1	15	0	15	0	15	15	30	15	0	15	0	15	15
			Dump Truck	8	Large Truck	2.5	1	1	2	1	1	2	40	3	3	6	3	3	6
			Total				16	1	17	1	16	17	70	18	3	21	3	18	21
1B-E2	Grading	3 months	Construction Workers	15	Passenger	1	15	0	15	0	15	15	30	15	0	15	0	15	15
			Delivery Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Dump Truck	12	Large Truck	2.5	2	2	4	2	2	4	60	5	5	10	5	5	10
			Concrete Truck	12	Large Truck	2.5	2	2	4	2	2	4	60	5	5	10	5	5	10
			Total				20	5	25	5	20	25	170	28	13	41	13	28	41
1C	Construction of Community Life Center Building	12 months	Construction Workers	20	Passenger	1	20	0	20	0	20	20	40	20	0	20	0	20	20
			Delivery Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Dump Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Concrete Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Total				27	7	34	7	27	34	310	39	19	58	19	39	58
2	Construction of Christian Education Building 1	12 months	Construction Workers	20	Passenger	1	20	0	20	0	20	20	40	20	0	20	0	20	20
			Delivery Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Dump Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Concrete Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Total				27	7	34	7	27	34	310	39	19	58	19	39	58
3	Construction of Christian Education Building 2	12 months	Construction Workers	20	Passenger	1	20	0	20	0	20	20	40	20	0	20	0	20	20
			Delivery Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Dump Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Concrete Truck	25	Large Truck	2.5	3	3	6	3	3	6	125	8	8	16	8	8	16
			Total				27	7	34	7	27	34	310	39	19	58	19	39	58
4	Construction of 1st Half of Parking Structure	7 months	Construction Workers	15	Passenger	1	15	0	15	0	15	15	30	15	0	15	0	15	15
			Delivery Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Dump Truck	20	Large Truck	2.5	2	2	4	2	2	4	100	5	5	10	5	5	10
			Concrete Truck	20	Large Truck	2.5	2	2	4	2	2	4	100	5	5	10	5	5	10
			Total				20	5	25	5	20	25	250	28	13	41	13	28	41
5	Construction of 2nd Half of Parking Structure	7 months	Construction Workers	15	Passenger	1	15	0	15	0	15	15	30	15	0	15	0	15	15
			Delivery Truck	4	Large Truck	2.5	1	1	2	1	1	2	20	3	3	6	3	3	6
			Dump Truck	20	Large Truck	2.5	2	2	4	2	2	4	100	5	5	10	5	5	10
			Concrete Truck	20	Large Truck	2.5	2	2	4	2	2	4	100	5	5	10	5	5	10
			Total				20	5	25	5	20	25	250	28	13	41	13	28	41

PCE = passenger car equivalent. A worker vehicle has a PCE of 1 and a construction truck has a PCE of 2.5.

ADT = average daily traffic

Construction LOS Analysis

To determine existing plus construction conditions, traffic generated by the most intense phases of project construction (Phases 1A, 1C, 2, and 3) was added to the existing baseline traffic volumes at the study area intersections. The existing plus construction peak-hour LOS analysis for the study area intersections is presented in Table I. The LOS worksheets are provided in Appendix H.

As Table I indicates, all study area intersections are anticipated to operate at satisfactory LOS (defined as LOS C or better for signalized intersections and LOS D or better for unsignalized intersections) with the addition of construction traffic during the weekday peak hours. Therefore, project construction would not create any temporary adverse impacts on the existing circulation system.

Construction Management Plan

To ensure impacts to the surrounding street system are kept to a minimum, it is recommended that a Construction Management Plan for the proposed project be developed. The Construction Management Plan should be developed in coordination with the City to address the following:

- Traffic control for any street closure, detour, or other disruption to traffic circulation.
- Identify the routes that construction vehicles will utilize for the delivery of construction materials (i.e. lumber, tiles, piping, windows, etc.) and to access the site, traffic controls and detours, and a proposed construction phasing plan for the project.
- Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts to adjacent streets.
- The haul route for the materials to be removed (i.e. concrete, soil, steel, etc.) during the demolition phase and/or soil import during the site preparation phase will be prepared to the satisfaction for the City's Traffic Engineering Staff Team and may include circulation modifications to help reduce construction impacts.
- Subject to the direction of the City's Traffic Engineering Staff Team, haul operations associated with the materials export/soil import may be prohibited during the a.m. and p.m. peak commute periods (i.e., between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m.).
- Require the applicant to keep all haul routes clean and free of debris including but not limited to gravel and dirt as a result of its operations. The applicant shall clean adjacent streets, as directed by the City's Traffic Engineering Staff Team (or representative of the City Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas.
- Hauling or transport of oversize loads will be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Engineer. No hauling or transport will be allowed during nighttime hours on weekends or Federal holidays.
- Use of local streets shall be prohibited.
- Haul trucks entering or exiting public streets shall at all times yield to public traffic.

Table I: Existing and Existing Plus Construction Intersection Level of Service Summary

Intersection	Existing			
	Weekday AM Peak Hour		Weekday PM Peak Hour	
	ICU or Delay	LOS	ICU or Delay	LOS
1 Crown Valley Parkway/Camino Del Avion				
No Project	0.442	A	0.486	A
Plus Construction	0.451	A	0.491	A
Δ	0.009		0.005	
2 Crown Valley Parkway/Sea Island Drive-Church Driveway				
No Project	0.407	A	0.390	A
Plus Construction	0.414	A	0.416	A
Δ	0.007		0.026	
3 Crown Valley Parkway/Church Driveway (unsignalized)				
No Project	0.0	A	12.2	B
Plus Construction	10.8	B	12.4	B
Δ	10.8		0.2	
4 Crown Valley Parkway/Lumeria Lane (unsignalized)				
No Project	18.3	C	25.7	D
Plus Construction	18.6	C	26.1	D
Δ	0.3		0.4	
5 Crown Valley Parkway/Pacific Coast Highway				
No Project	0.577	A	0.574	A
Plus Construction	0.579	A	0.577	A
Δ	0.002		0.003	

ICU = Intersection Capacity Utilization

LOS = level of service

Delay is reported in seconds (sec) for unsignalized intersections using the Highway Capacity (HCM) methodology.

 = exceeds City's LOS criteria

- If hauling operations cause any damage to existing pavement, street, curb, and/or gutter along the haul route, the applicant will be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer.
- All construction-related parking and staging of vehicles will be kept out of the adjacent public roadways and will occur on-site to the extent feasible.
- This Construction Management Plan shall meet standards established in the current *California Manual on Uniform Traffic Control Device (MUTCD)*, as well as City requirements.

PARKING ANALYSIS

Parking surveys were conducted at the site in April 2014 by NDS to determine the existing parking demand on a weekday and a Sunday. The parking surveys are included in Appendix A. LSA has identified the peak parking demand on weekdays and Sundays, based on review of the parking survey data:

- Weekday (9:45–10:00 a.m.): 193 spaces
- Sunday (10:15–10:30 a.m.): 254 spaces

Based on the NDS parking surveys, the church generates the highest parking demand on a Sunday. The peak parking demand occurs when a worship service and bible study session are both in session. On a typical Sunday, four worship services and three bible study classes are provided as follows:

- 1st Service (8:15–9:15 a.m.)
- 2nd Service (9:30–10:30 a.m.)
- Bible Study (9:30–10:30 a.m.)
- Bible Study (10:45–11:45 a.m.)
- Bible Study (10:45 a.m.–12:00 p.m.)
- 3rd Service (11:00 a.m.–12:00 p.m.)
- 4th (Remix) Service (6:00–7:30 p.m.)

Using the existing attendance for the survey days/times, the following parking rates were developed:

- Weekday (225 people): 0.86 space per person
- Sunday (379 people): 0.67 space per person

Similar to the church trip generation, parking demand is based on church operations (i.e., activities, schedules, and attendance), not building square footage. Although the proposed project would increase overall building square footage (as previously discussed and summarized in Table B), the church activities and schedules are not anticipated to change. However, in order to provide a conservative analysis, attendance was projected to grow from current conditions to project completion. Therefore, increases in attendance (people) have been utilized for purposes of estimating the peak parking demand for weekdays and Sundays for each phase of the project, including completion, as summarized in Table J.

Table J: Project Parking Summary

Land Use	Size	Units	Parking Demand	% Demand Increase from Previous Phase	On-Site Parking Supply	Surplus/ (Deficit) ²
Parking Rates¹						
Church (Weekday)		Person	0.86	-	-	-
Church (Sunday)		Person	0.67	-	-	-
Existing Peak Parking Demand (April 2014)³						
Weekday	225	Persons	193	-	228	35
Sunday	379	Persons	254	-	228	(26)
Projected Phase 1A Peak Parking Demand						
Weekday ⁴	40	Persons	34	-82.00%	161	127
Sunday	391	Persons	262	3.00%	161	(101)
Projected Phase 1B Peak Parking Demand						
Weekday ⁴	40	Persons	34	0.00%	190	156
Sunday	391	Persons	262	0.00%	218	(44)
Projected Phase 1B-E1 Peak Parking Demand						
Weekday ⁴	40	Persons	34	0.00%	188	154
Sunday	391	Persons	262	0.00%	216	(46)
Projected Phase 1B-E2 Peak Parking Demand						
Weekday ⁴	40	Persons	34	0.00%	188	154
Sunday	391	Persons	262	0.00%	216	(46)
Projected Phase 1C Peak Parking Demand						
Weekday ^{4,5}	40	Persons	34	0.00%	109	75
Sunday ⁶	391	Persons	262	0.00%	137	(125)
Projected Phase 2 Peak Parking Demand						
Weekday ⁴	41	Persons	35	3.00%	253	218
Sunday	398	Persons	267	2.00%	281	14
Projected Phase 3 Peak Parking Demand						
Weekday ⁴	42	Persons	36	3.00%	196	160
Sunday	405	Persons	271	1.00%	224	(47)
Projected Phase 4 Peak Parking Demand						
Weekday ⁴	43	Persons	37	3.00%	91	54
Sunday	412	Persons	276	2.00%	91	(185)
Projected Phase 5 Peak Parking Demand						
Weekday ⁴	44	Persons	38	3.00%	150	112
Sunday	419	Persons	281	2.00%	150	(131)
Projected Master Plan Peak Parking Demand						
Weekday	388	Persons	333	776.00%	411	78
Sunday	526	Persons	352	25.00%	411	59

¹ Parking rates developed from surveys conducted at the church on April 27 (Sunday) and April 30 (Wednesday), 2014.

² Parking deficit requires off-site parking.

³ The existing parking demand of 254 spaces on a Sunday includes vehicles parked along Crown Valley Parkway. Therefore, a 26-space deficit is shown.

⁴ The Women's Bible Study Fellowship held on Wednesdays will be discontinued during project construction (Phases 1-5).

Therefore, a significant decrease in parking demand occurs between existing and Phase 1 conditions, and a significant increase in parking demand occurs between Phase 5 and Master Plan buildout conditions.

⁵ After the first 2 months of Phase 1C, the on-site parking supply on weekdays increases to 253 parking spaces.

⁶ After the first 2 months of Phase 1C, the on-site parking supply on Sundays increases to 281 parking spaces.

Based on the construction phases described above, a portion of the parking spaces will be utilized for construction activities, which would reduce the available parking supply for church members. As shown on Table J, the projected weekday and Sunday parking demand has been compared with the available spaces for each phase of construction to determine if adequate on-site parking will be provided.

Based on the results of this analysis, adequate weekday parking would be provided for each phase of construction. However, a parking deficit would occur on Sundays for Phase 1A (101 spaces), Phase 1B (44 spaces), Phases 1B-E1 and 1B-E2 (46 spaces), Phase 1C (125 spaces), Phase 3 (47 spaces), Phase 4 (185 spaces), and Phase 5 (131 spaces). Off-site parking will need to be secured by the church in order to accommodate the Sunday parking demand during project construction (with the exception of Phase 2). It should be noted that the proposed parking supply of 411 spaces at buildout is adequate for the project parking demand on weekdays and Sundays.

Parking is currently allowed on portions of Crown Valley Parkway between Camino Del Avion and PCH. This parking is proposed to be maintained during construction to assist in handling church parking and avoid negative spillover parking impacts to adjacent neighborhoods. When construction of the project is complete, the parking on Crown Valley Parkway will no longer be needed for church activity and will be removed/restricted by the City. The project will provide adequate parking on site to accommodate the parking demand without the need for any on-street parking.

PROJECT ALTERNATIVE

A reduced project alternative is currently being considered. Similar to the proposed project, the reduced project alternative would demolish the existing Preschool, Administration and Fellowship Hall, and Chapel, while keeping the 19,078 sf Sanctuary. The reduced project alternative would construct a new Preschool/Administration Building, two Christian Education Buildings, a Community Life Center, and a parking structure, but the new building space (52,651 sf) would be 17,633 sf less than the proposed project (70,284 sf). Table K summarizes the reduced project alternative buildings and identifies the changes from the proposed project.

It should be noted that the church operations (i.e., activities, schedules, and attendance) for the reduced project alternative would remain the same as the proposed project. Construction of a reduced project alternative with less building space would require a similar number of construction workers and trucks as the proposed project. Therefore, additional traffic analysis of this reduced project alternative is not required as the potential impacts due to project construction have already been evaluated. Based on the results of this construction analysis, no significant temporary impacts would result.

Table K: Reduced Project Alternative Buildings Summary

Proposed Project Buildings (and Parking)	sf	Reduced Project Alternative (and Parking)	sf
Sanctuary (to remain)	19,078	Sanctuary (to remain)	19,078
Preschool/Administration Building	15,115	Preschool/Administration Building	13,867
Community Life Center	24,314	Community Life Center	11,738
Christian Education Building 1	15,399	Christian Education Building 1	17,258
Christian Education Building 2	15,456	Christian Education Building 2	9,788
Surface Parking (59 net spaces)	-	Surface Parking (34 net spaces)	-
Parking Structure (352 new spaces)	-	Parking Structure (330 new spaces)	-
Total Proposed Project	89,362	Total Reduced Project Alternative	71,729

sf = square feet

Construction of the reduced project alternative would result in a reduction of the available parking supply for church members. As shown on Table L, the weekday and Sunday parking demand for the reduced project alternative has been compared with the available spaces for each construction phase to determine if adequate on-site parking will be provided. Based on the results of this analysis, adequate weekday parking would be provided for each phase of construction.

However, a parking deficit would occur on Sundays for Phase 1A (101 spaces), Phase 1B (60 spaces), Phases 1B-E1 and 1B-E2 (62 spaces), Phase 1C (141 spaces), Phase 2 (63 spaces), Phase 3 (67 spaces), Phase 4 (204 spaces), and Phase 5 (146 spaces). Off-site parking will need to be secured by the church in order to accommodate the Sunday parking demand during project construction (Phase 1A through Phase 5). It should be noted that the proposed parking supply of 364 spaces at buildout would be adequate for the reduced project alternative parking demand on weekdays and Sundays.

When construction of the reduced project alternative is complete, the parking on Crown Valley Parkway will no longer be needed for church activity and will be removed/restricted by the City. The reduced project alternative will provide adequate parking on site to accommodate the parking demand without the need for any on-street parking.

CONCLUSIONS

Based on the results of this TIA, implementation of the South Shores Church Master Plan Project (and the reduced project alternative) would not result in any significant impacts to the surrounding roadway system. The evaluation of the study area intersection LOS shows that the addition of project traffic would not create significant adverse impacts.

A circulation and access analysis was conducted to determine the adequacy of the two project driveways on Crown Valley Parkway. Based on the results of this analysis, both driveways have sufficient storage capacity for all inbound and outbound turn movements.

Table L: Reduced Project Alternative Parking Summary

Land Use	Size	Units	Parking Demand	% Demand Increase from Previous Phase	On-Site Parking Supply	Surplus/ (Deficit) ²
Parking Rates¹						
Church (Weekday)		Person	0.86	-	-	-
Church (Sunday)		Person	0.67	-	-	-
Existing Peak Parking Demand (April 2014)³						
Weekday	225	Persons	193	-	228	35
Sunday	379	Persons	254	-	228	(26)
Projected Phase 1A Peak Parking Demand						
Weekday ⁴	40	Persons	34	-82.00%	161	127
Sunday	391	Persons	262	3.00%	161	(101)
Projected Phase 1B Peak Parking Demand						
Weekday ⁴	40	Persons	34	0.00%	174	140
Sunday	391	Persons	262	0.00%	202	(60)
Projected Phase 1B-E1 Peak Parking Demand						
Weekday ⁴	40	Persons	34	0.00%	172	138
Sunday	391	Persons	262	0.00%	200	(62)
Projected Phase 1B-E2 Peak Parking Demand						
Weekday ⁴	40	Persons	34	0.00%	172	138
Sunday	391	Persons	262	0.00%	200	(62)
Projected Phase 1C Peak Parking Demand						
Weekday ^{4,5}	40	Persons	34	0.00%	93	59
Sunday ⁶	391	Persons	262	0.00%	121	(141)
Projected Phase 2 Peak Parking Demand						
Weekday ⁴	41	Persons	35	3.00%	176	141
Sunday	398	Persons	267	2.00%	204	(63)
Projected Phase 3 Peak Parking Demand						
Weekday ⁴	42	Persons	36	3.00%	176	140
Sunday	405	Persons	271	1.00%	204	(67)
Projected Phase 4 Peak Parking Demand						
Weekday ⁴	43	Persons	37	3.00%	72	35
Sunday	412	Persons	276	2.00%	72	(204)
Projected Phase 5 Peak Parking Demand						
Weekday ⁴	44	Persons	38	3.00%	135	97
Sunday	419	Persons	281	2.00%	135	(146)
Projected Master Plan Peak Parking Demand						
Weekday	388	Persons	333	776.00%	364	31
Sunday	526	Persons	352	25.00%	364	12

¹ Parking rates developed from surveys conducted at the church on April 27 (Sunday) and April 30 (Wednesday), 2014.

² Parking deficit requires off-site parking.

³ The existing parking demand of 254 spaces on a Sunday includes vehicles parked along Crown Valley Parkway. Therefore, a 26-space deficit is shown.

⁴ The Women's Bible Study Fellowship held on Wednesdays will be discontinued during project construction (Phases 1-5).

Therefore, a significant decrease in parking demand occurs between existing and Phase 1 conditions, and a significant increase in parking demand occurs between Phase 5 and Master Plan buildout conditions.

⁵ After the first 2 months of Phase 1C, the on-site parking supply on weekdays increases to 253 parking spaces.

⁶ After the first 2 months of Phase 1C, the on-site parking supply on Sundays increases to 281 parking spaces.

Construction of the proposed project (and reduced project alternative) would not result in any impacts to the surrounding roadway system based on evaluation of the study area intersection LOS. The addition of construction traffic would not create any temporary adverse impacts.

During each construction phase (of the project and of the reduced project alternative), a portion of the available parking spaces will be utilized for various construction activities. As a result, a parking deficit would occur on Sundays. The project will be required to acquire off-site parking on Sundays in order to accommodate the peak parking demand of the church during construction.

APPENDIX A

EXISTING COUNTS AND PARKING SURVEYS

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

Crown Valley Parkway (5667) and Pacific Island Dr/Camino Del Avion (5667), City of Laguna Niguel

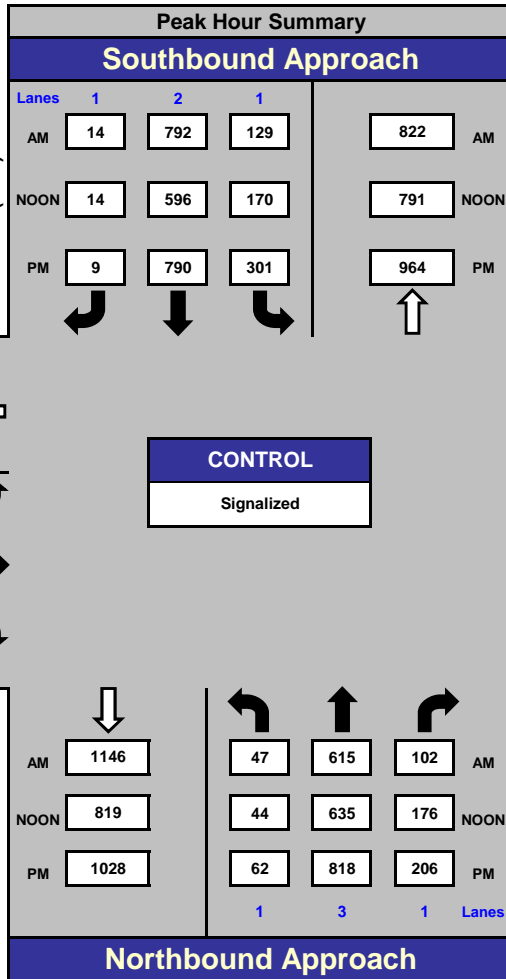
Date: 9/20/2012
Day: Thursday

Project #: CA12_1193_003



Pacific Island Dr/Camino Del Avion (5667)

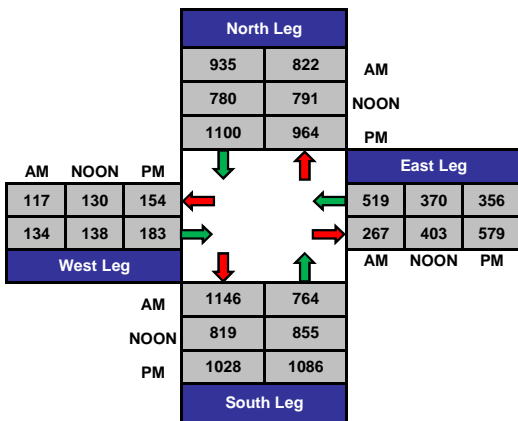
Crown Valley Parkway (5667)



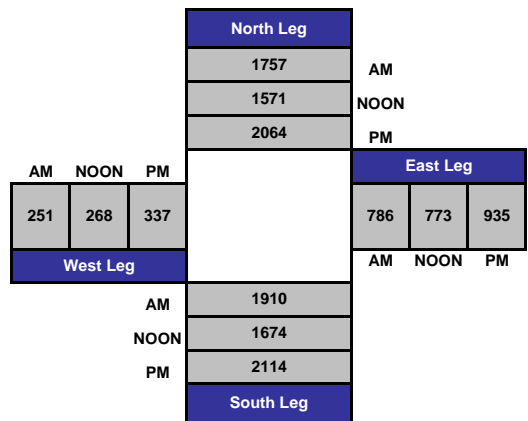
AM Peak Hour	800 AM
NOON Peak Hour	1200 PM
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	11:00 AM	1:00 PM
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



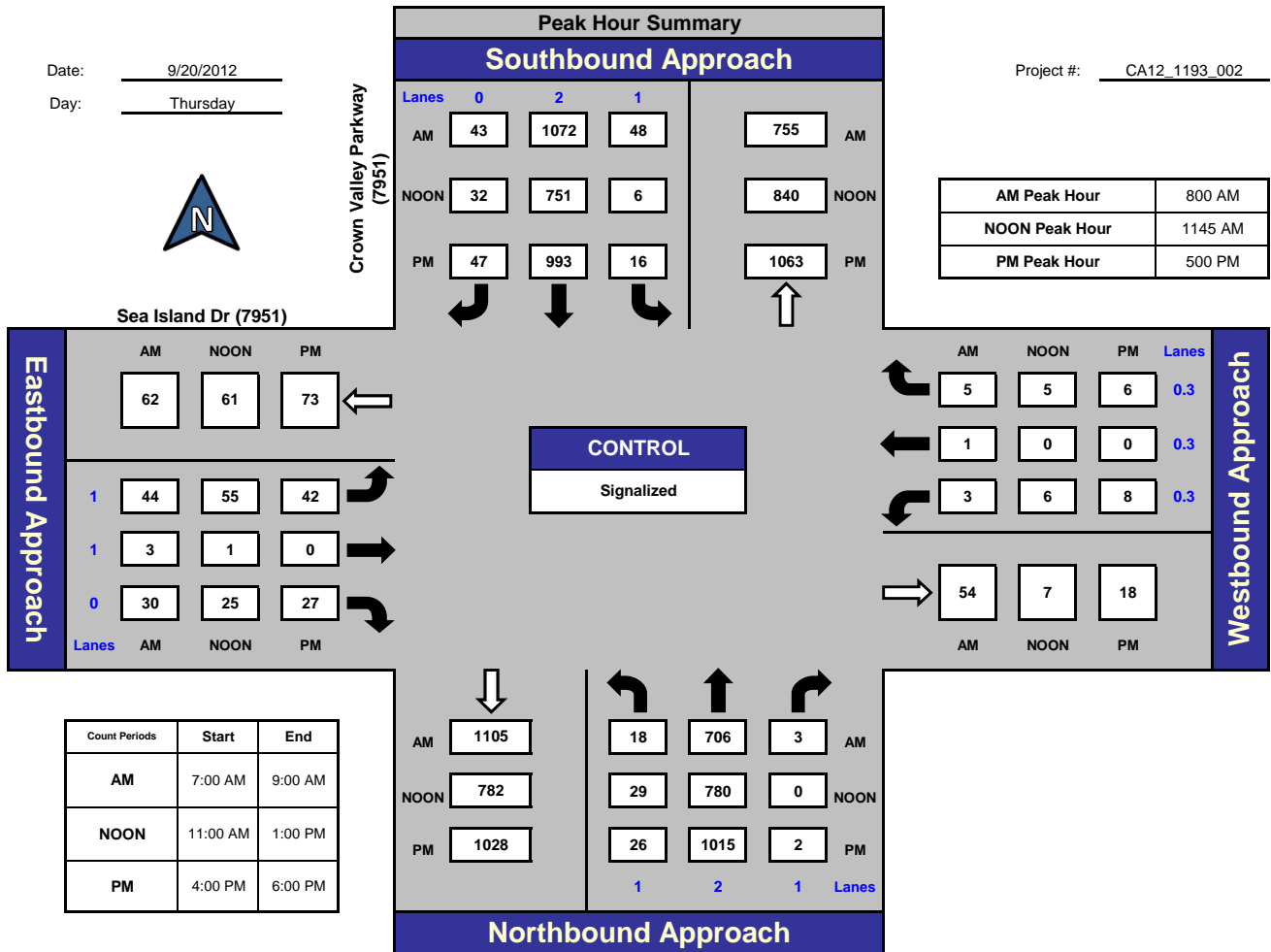
National Data & Surveying Services

Crown Valley Parkway (7951) and Sea Island Dr (7951), City of Laguna Niguel

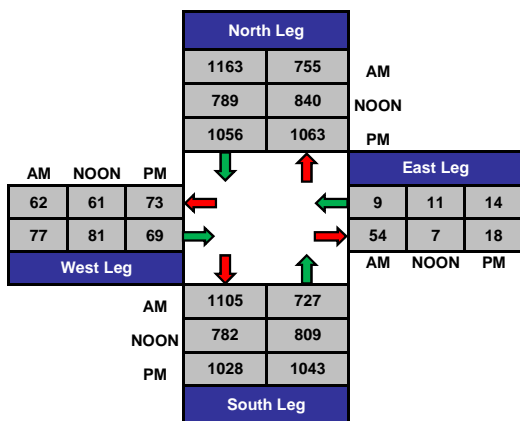
Date: 9/20/2012

Day: Thursday

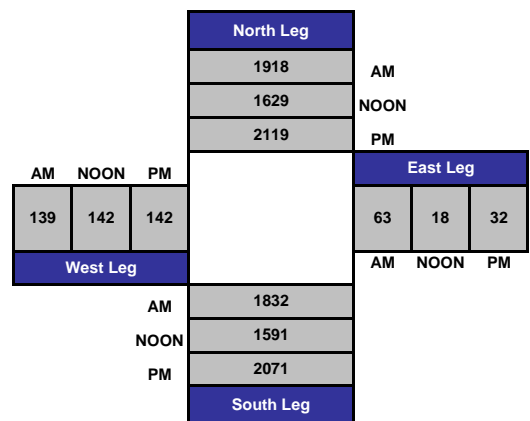
Project #: CA12_1193_002



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA12_1193_002

Day: THURSDAY

City: City of Laguna Niguel

Date: 09/20/2012

AM

NS/EW Streets:	Crown Valley Parkway (7951)	Crown Valley Parkway (7951)	Sea Island Dr (7951)	Sea Island Dr (7951)									
NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	0	1	1	0	0.3	0.3	0.3	
7:00 AM	2	82	0	3	185	2	10	0	11	0	0	0	295
7:15 AM	5	119	0	0	259	9	15	0	10	0	0	0	417
7:30 AM	5	146	0	1	269	4	11	0	4	0	0	0	440
7:45 AM	8	154	0	5	308	8	8	0	5	0	0	0	496
8:00 AM	4	151	1	6	260	10	10	0	10	0	0	1	453
8:15 AM	7	178	0	7	288	8	8	0	5	2	0	3	506
8:30 AM	1	183	0	6	256	10	13	0	8	0	0	0	477
8:45 AM	6	194	2	29	268	15	13	3	7	1	1	1	540
TOTAL VOLUMES :	38	1207	3	57	2093	66	88	3	60	3	1	5	3624
APPROACH %'s :	3.04%	96.71%	0.24%	2.57%	94.45%	2.98%	58.28%	1.99%	39.74%	33.33%	11.11%	55.56%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	18	706	3	48	1072	43	44	3	30	3	1	5	1976
PEAK HR FACTOR :	0.900			0.932			0.837			0.450			0.915

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA12_1193_002

Day: THURSDAY

City: City of Laguna Niguel

Date: 09/20/2012

PM

NS/EW Streets:	Crown Valley Parkway (7951)	Crown Valley Parkway (7951)	Sea Island Dr (7951)	Sea Island Dr (7951)
-----------------------	-----------------------------	-----------------------------	----------------------	----------------------

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	1	2	0	1	1	0	0.3	0.3	0.3	
4:00 PM	6	255	0	2	250	18	14		3	1	0	5	554
4:15 PM	7	252	0	4	204	10	10		10	4	1	6	508
4:30 PM	6	226	0	5	209	9	4		5	0	0	2	466
4:45 PM	15	253	0	4	207	10	7		3	0	0	3	502
5:00 PM	9	260	0	2	231	11	19		5	1	0	1	539
5:15 PM	7	264	0	4	267	13	12		11	0	0	1	579
5:30 PM	4	258	1	4	251	9	5		2	6	0	1	541
5:45 PM	6	233	1	6	244	14	6		9	1	0	3	523

TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	60	2001	2	31	1863	94	77	0	48	13	1	22	4212
	2.91%	96.99%	0.10%	1.56%	93.71%	4.73%	61.60%	0.00%	38.40%	36.11%	2.78%	61.11%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	26	1015	2	16	993	47	42	0	27	8	0	6	2182
PEAK HR FACTOR :	0.962			0.930			0.719			0.500			0.942

CONTROL : Signalized

Intersection Turning Movement

Prepared by:



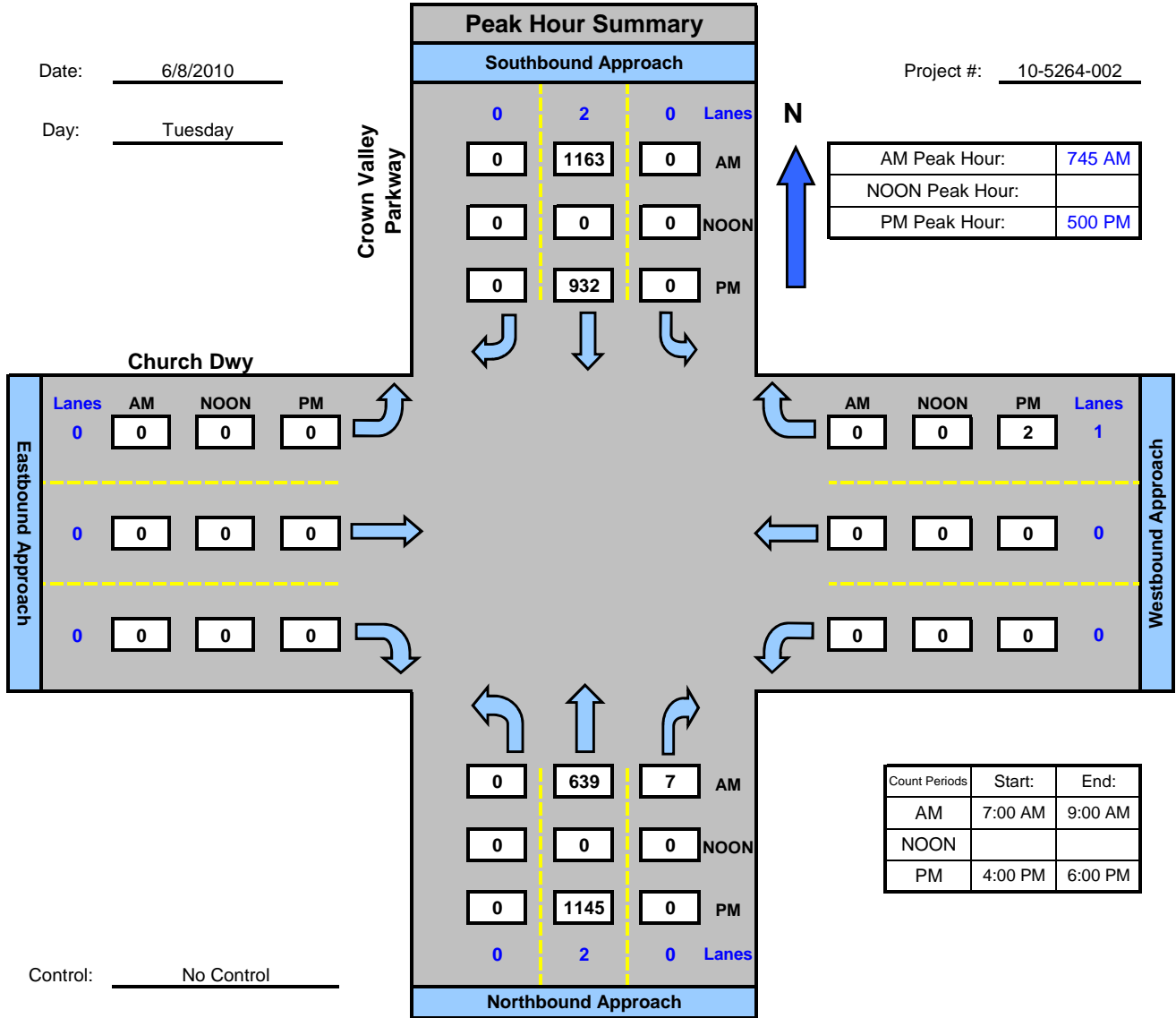
National Data & Surveying Services

Crown Valley Parkway and Church Dwy , City of Dana Point

Date: 6/8/2010

Day: Tuesday

Project #: 10-5264-002



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Crown Valley Parkway

DATE: 06/08/2010

LOCATION: City of Dana Point

E-W STREET: Church Dwy

DAY: TUESDAY

PROJECT# 10-5264-002

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	0	0	0	0	0	1	
7:00 AM		79	1		166								246
7:15 AM		99	0		190								289
7:30 AM		151	0		272								423
7:45 AM		154	2		278								434
8:00 AM		143	0		284								427
8:15 AM		148	2		315								465
8:30 AM		194	3		286								483
8:45 AM		158	4		245								407

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1126	12	0	2036	0	0	0	0	0	0	0	3174

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	639	7	0	1163	0	0	0	0	0	0	0	1809
PEAK HR. FACTOR:		0.820			0.923			0.000			0.000		0.936

CONTROL: No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Crown Valley Parkway](#)

DATE: [06/08/2010](#)

LOCATION: [City of Dana Point](#)

E-W STREET: [Church Dwy](#)

DAY: [TUESDAY](#)

PROJECT# [10-5264-002](#)

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	0	0	0	0	0	1	
4:00 PM		294	0		245							0	539
4:15 PM		276	1		234							0	511
4:30 PM		280	0		249							0	529
4:45 PM		274	1		205							0	480
5:00 PM		293	0		230							1	524
5:15 PM		290	0		255							0	545
5:30 PM		294	0		226							0	520
5:45 PM		268	0		221							1	490

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	2269	2	0	1865	0	0	0	0	0	0	2	4138

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	0	1145	0	0	932	0	0	0	0	0	0	2	2079
PEAK HR. FACTOR:		0.974			0.914			0.000			0.500		0.954

CONTROL: [No Control](#)

Intersection Turning Movement

Prepared by:



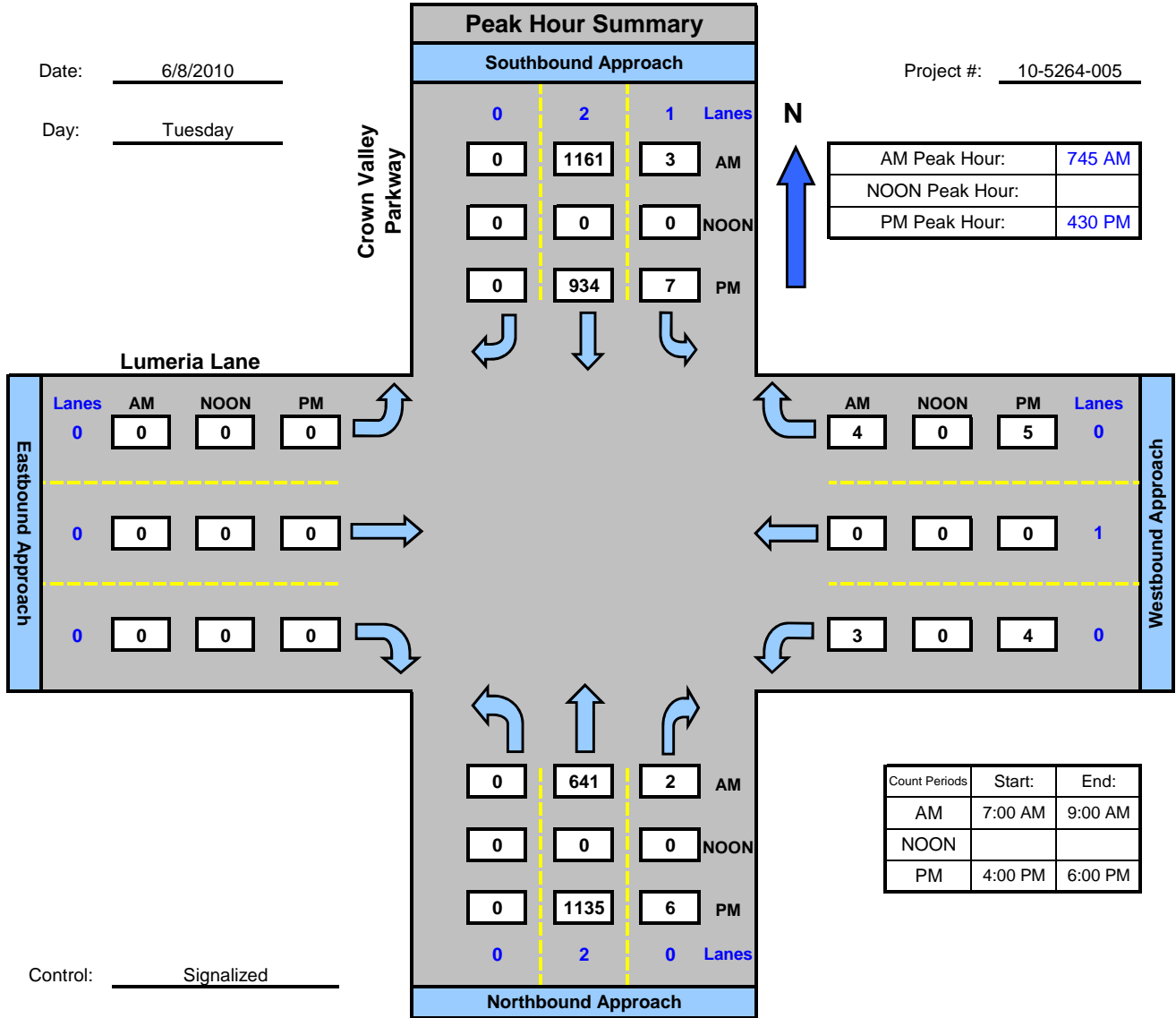
National Data & Surveying Services

Crown Valley Parkway and Lumeria Lane , City of Dana Point

Date: 6/8/2010

Day: Tuesday

Project #: 10-5264-005



ORANGE COUNTY TRANSPORTATION AUTHORITY
INTERSECTION LEVEL OF SERVICE

Intersection: Crown Valley Pkwy (North-South)
and
PCH (East-West)
Jurisdiction: Dana Point Intersection ID: 80

Movement	No. of Lanes	Capacity	Existing Volume	V/C	Critical V/C	Sum
NL	0.50	659	13	0.02		
NT	1.00	1422	28	0.02		
NR	0.50	1319	26	0.02		0.11
SL	1.50	2914	198	0.07		
ST	0.50	486	33	0.07		
SR	2.00	3655	776	0.09		
EL	2.00	3400	421	0.12		
ET	1.50	3334	503	0.15		
ER	0.50	66	10	0.15		0.40
WL	1.00	1700	30	0.02		
WT	2.00	3400	949	0.28		
WR	1.00	1955	193	0.03		
Sum of E-W and N-S Critical V/C						0.51
Adjustment Factor for Lost Time						0.05
Intersection Capacity Utilization (ICU)						0.56

Level of Service: A

Year: 2013

Peak Period: AM

Split Phase:

N/S: Y E/W: N

Free Right Turns:

NB: N SB: N EB: N WB: N

Restricted Right Turns:

NB: N SB: N EB: N WB: N

Right Turn Overlaps:

NB: N SB: Y EB: N WB: Y

ORANGE COUNTY TRANSPORTATION AUTHORITY
INTERSECTION LEVEL OF SERVICE

Intersection: Crown Valley Pkwy (North-South)
and
PCH (East-West)
Jurisdiction: Dana Point Intersection ID: 80

Movement	No. of Lanes	Capacity	Existing Volume	V/C	Critical V/C	Sum
NL	0.50	474	12	0.03		
NT	1.00	1740	44	0.03		
NR	0.50	1186	30	0.03		0.11
SL	1.50	2866	215	0.08		
ST	0.50	534	40	0.07		
SR	2.00	3655	470	0.00		
EL	2.00	3400	721	0.21		
ET	1.50	3359	961	0.29		
ER	0.50	41	12	0.29		0.42
WL	1.00	1700	30	0.02		
WT	2.00	3400	719	0.21		
WR	1.00	1955	216	0.03		
Sum of E-W and N-S Critical V/C						0.53
Adjustment Factor for Lost Time						0.05
Intersection Capacity Utilization (ICU)						0.58

Level of Service: A
Year: 2013
Peak Period: PM
Split Phase: N/S: Y E/W: N
Free Right Turns: NB: N SB: N EB: N WB: N
Restricted Right Turns: NB: N SB: N EB: N WB: N
Right Turn Overlaps: NB: N SB: Y EB: N WB: Y

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

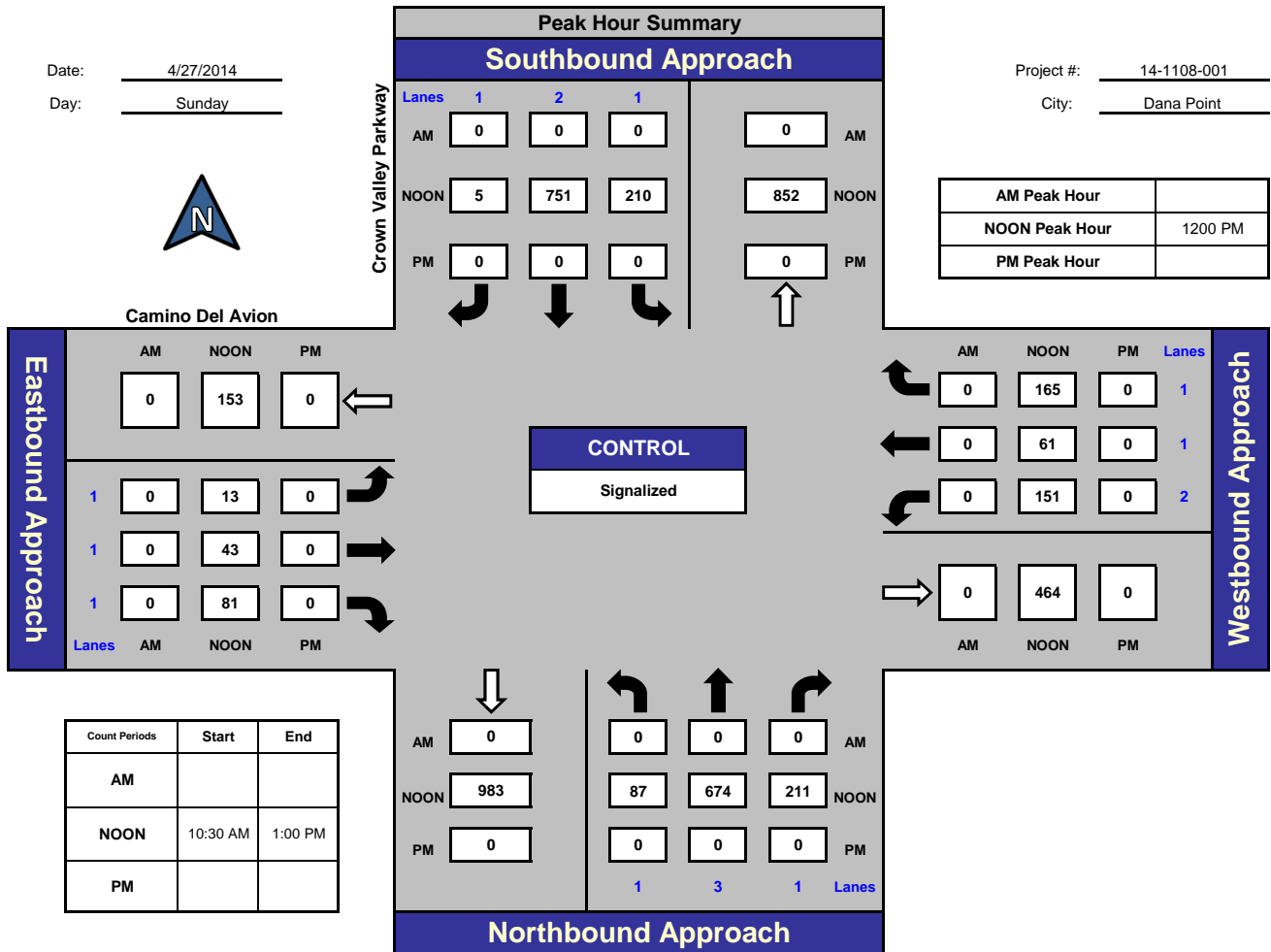
Crown Valley Parkway and Camino Del Avion , Dana Point

Date: 4/27/2014

Day: Sunday

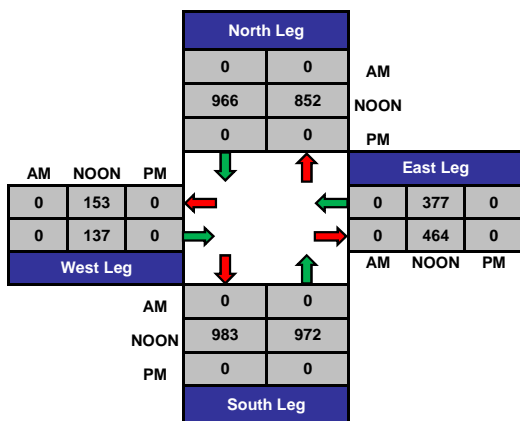
Project #: 14-1108-001

City: Dana Point

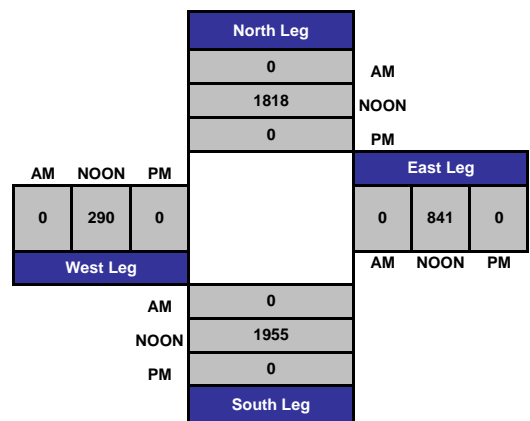


Count Periods	Start	End
AM		
NOON	10:30 AM	1:00 PM
PM		

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

Crown Valley Parkway and Sea Island Dr-South Shores Church -full access dwy , Dana Point

Date: 4/27/2014

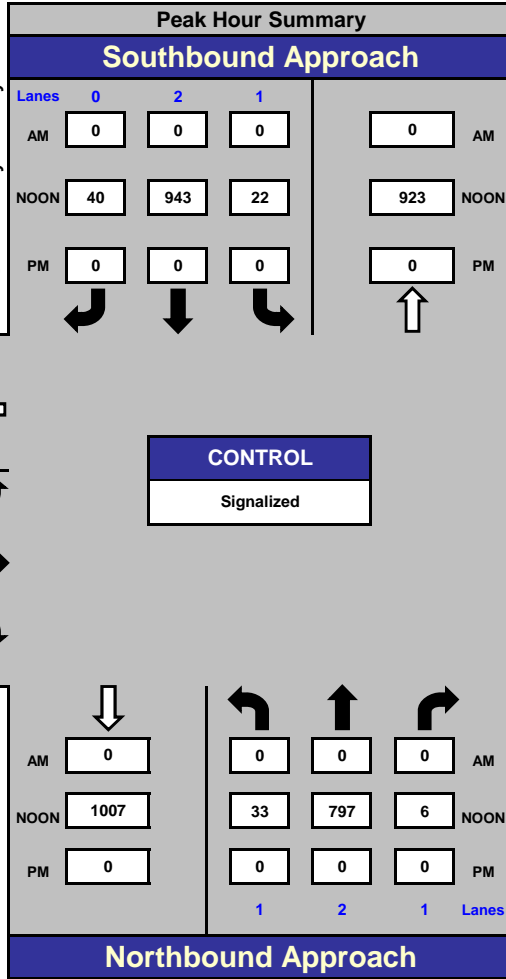
Day: Sunday

Project #: 14-1108-002

City: Dana Point



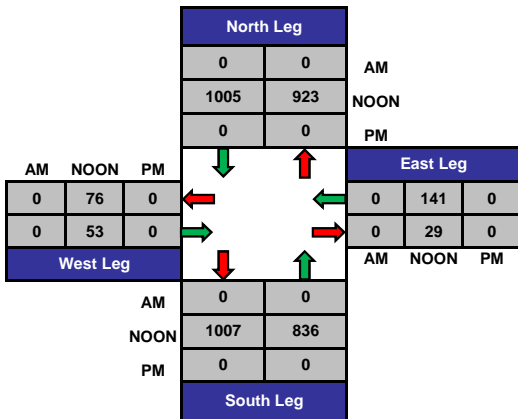
Sea Island Dr-South Shores Church -full access dwy



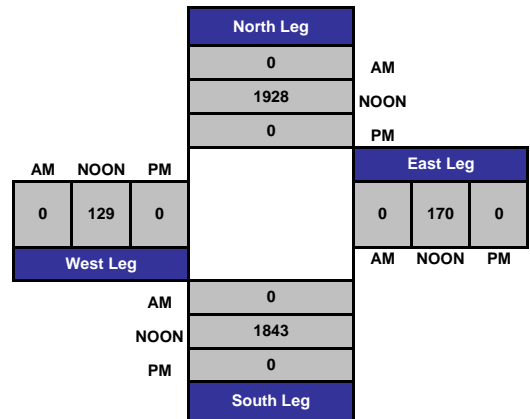
AM Peak Hour	
NOON Peak Hour	1200 PM
PM Peak Hour	

Count Periods	Start	End
AM		
NOON	10:30 AM	1:00 PM
PM		

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 14-1108-002

Day: Sunday

City: Dana Point

Date: 4/27/2014

NOON

NS/EW Streets:	Crown Valley Parkway			Crown Valley Parkway			Sea Island Dr-South Shores Church -full access dwy			Sea Island Dr-South Shores Church -full access dwy			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	1	2	0	1	1	0	0.3	0.3	0.3	
10:30 AM	19	162	13	16	195	3	7	0	3	10	2	21	451
10:45 AM	9	176	20	49	198	4	12	2	4	9	1	15	499
11:00 AM	11	157	1	35	194	8	14	0	5	3	0	11	439
11:15 AM	5	172	0	15	193	5	10	0	5	0	0	4	409
11:30 AM	4	177	0	7	209	4	4	0	1	0	0	5	411
11:45 AM	6	169	0	5	230	7	4	0	6	2	1	1	431
12:00 PM	7	205	0	4	228	9	9	0	6	14	1	40	523
12:15 PM	12	228	1	4	209	7	4	0	3	19	0	21	508
12:30 PM	6	178	5	9	245	13	10	0	5	9	0	15	495
12:45 PM	8	186	0	5	261	11	9	1	6	2	2	18	509
TOTAL VOLUMES :	87	1810	40	149	2162	71	83	3	44	68	7	151	4675
APPROACH %'s :	4.49%	93.44%	2.07%	6.26%	90.76%	2.98%	63.85%	2.31%	33.85%	30.09%	3.10%	66.81%	
PEAK HR START TIME :	1200 PM												TOTAL
PEAK HR VOL :	33	797	6	22	943	40	32	1	20	44	3	94	2035
PEAK HR FACTOR :	0.867			0.907			0.828			0.641			0.973

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

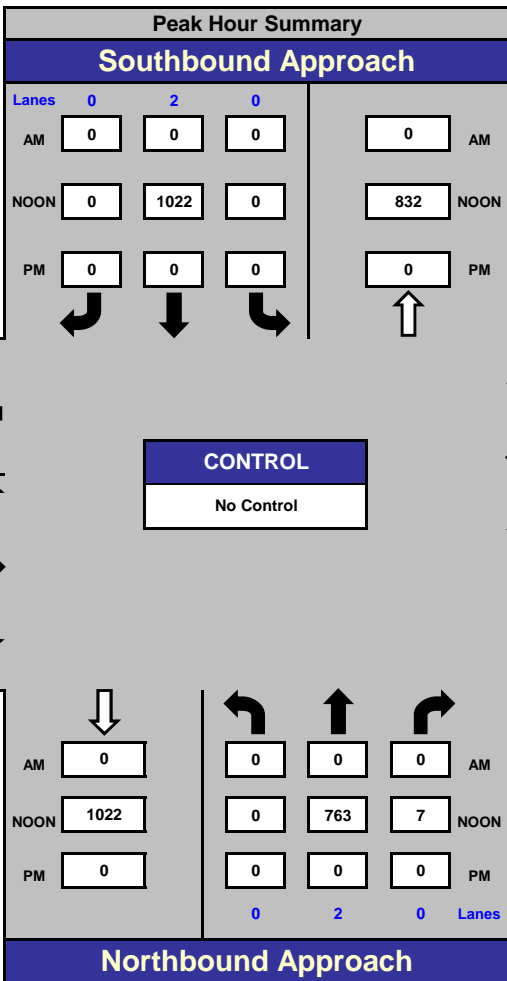
Crown Valley Pkwy and South Shores Church right in-right-out dwy , Dana Point

Date: 4/27/2014
Day: Sunday

Project #: 14-1108-003
City: Dana Point



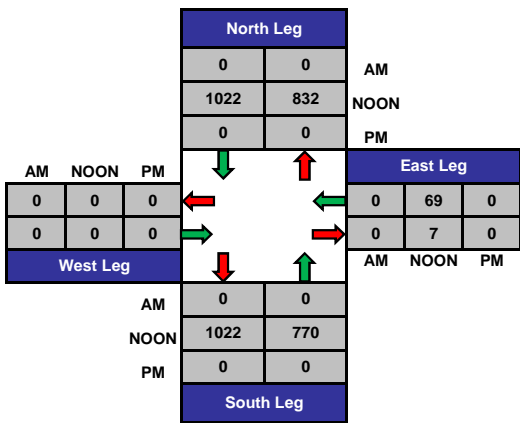
South Shores Church right in-right-out dwy



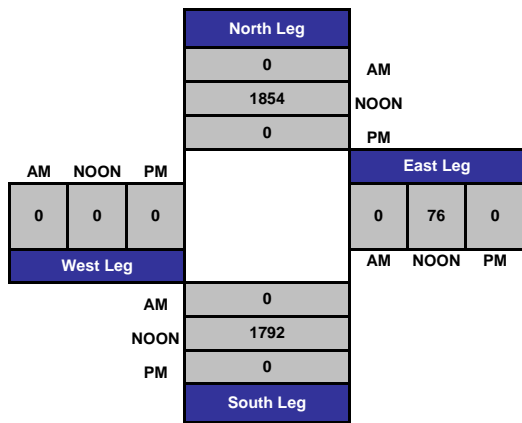
AM Peak Hour	
NOON Peak Hour	1200 PM
PM Peak Hour	

Count Periods	Start	End
AM		
NOON	10:30 AM	1:00 PM
PM		

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 14-1108-003

Day: Sunday

City: Dana Point

Date: 4/27/2014

NOON

NS/EW Streets:	Crown Valley Pkwy			Crown Valley Pkwy			South Shores Church right in-right-out dwy			South Shores Church right in-right-out dwy			TOTAL	
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
	0	2	0	0	2	0	0	0	0	0	0	1		
10:30 AM		156	0		225							29	410	
10:45 AM		203	0		212							14	429	
11:00 AM		151	6		206							9	372	
11:15 AM		182	2		202							5	391	
11:30 AM		167	3		201							2	373	
11:45 AM		184	2		251							2	439	
12:00 PM		181	2		250							36	469	
12:15 PM		212	2		240							24	478	
12:30 PM		177	2		265							5	449	
12:45 PM		193	1		267							4	465	
TOTAL VOLUMES :	0	1806	20	0	2319	0	0	0	0	0	0	130	4275	
APPROACH %'s :	0.00%	98.90%	1.10%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%		
PEAK HR START TIME :	1200 PM												TOTAL	
PEAK HR VOL :	0	763	7	0	1022	0	0	0	0	0	0	69	1861	
PEAK HR FACTOR :		0.900			0.957			0.000				0.479		0.973

CONTROL : No Control

ITM Peak Hour Summary

Prepared by:

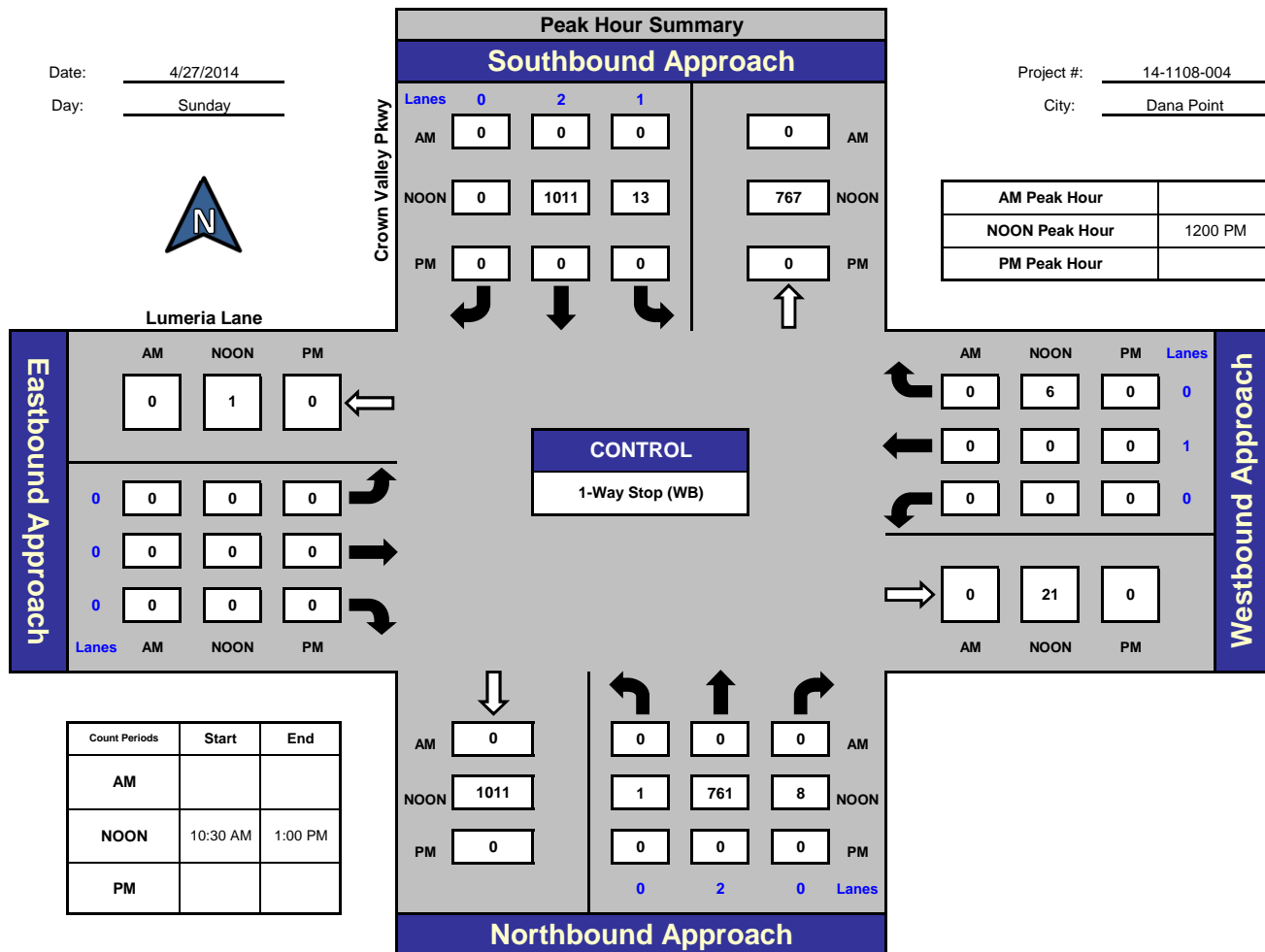


National Data & Surveying Services

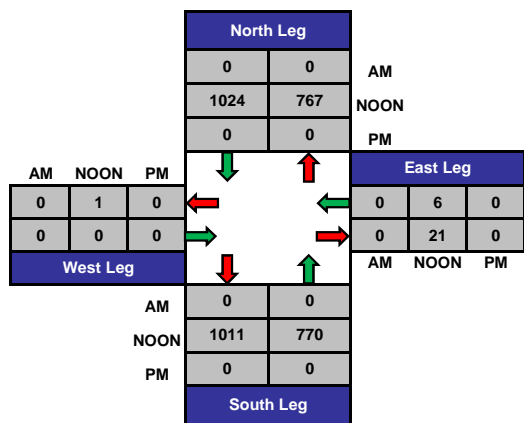
Crown Valley Pkwy and Lumeria Lane, Dana Point

Date: 4/27/2014
Day: Sunday

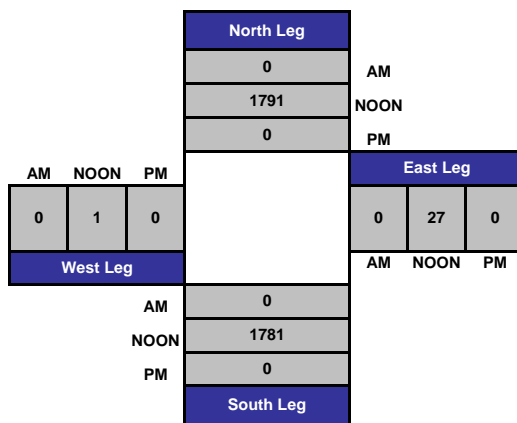
Project #: 14-1108-004
City: Dana Point



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

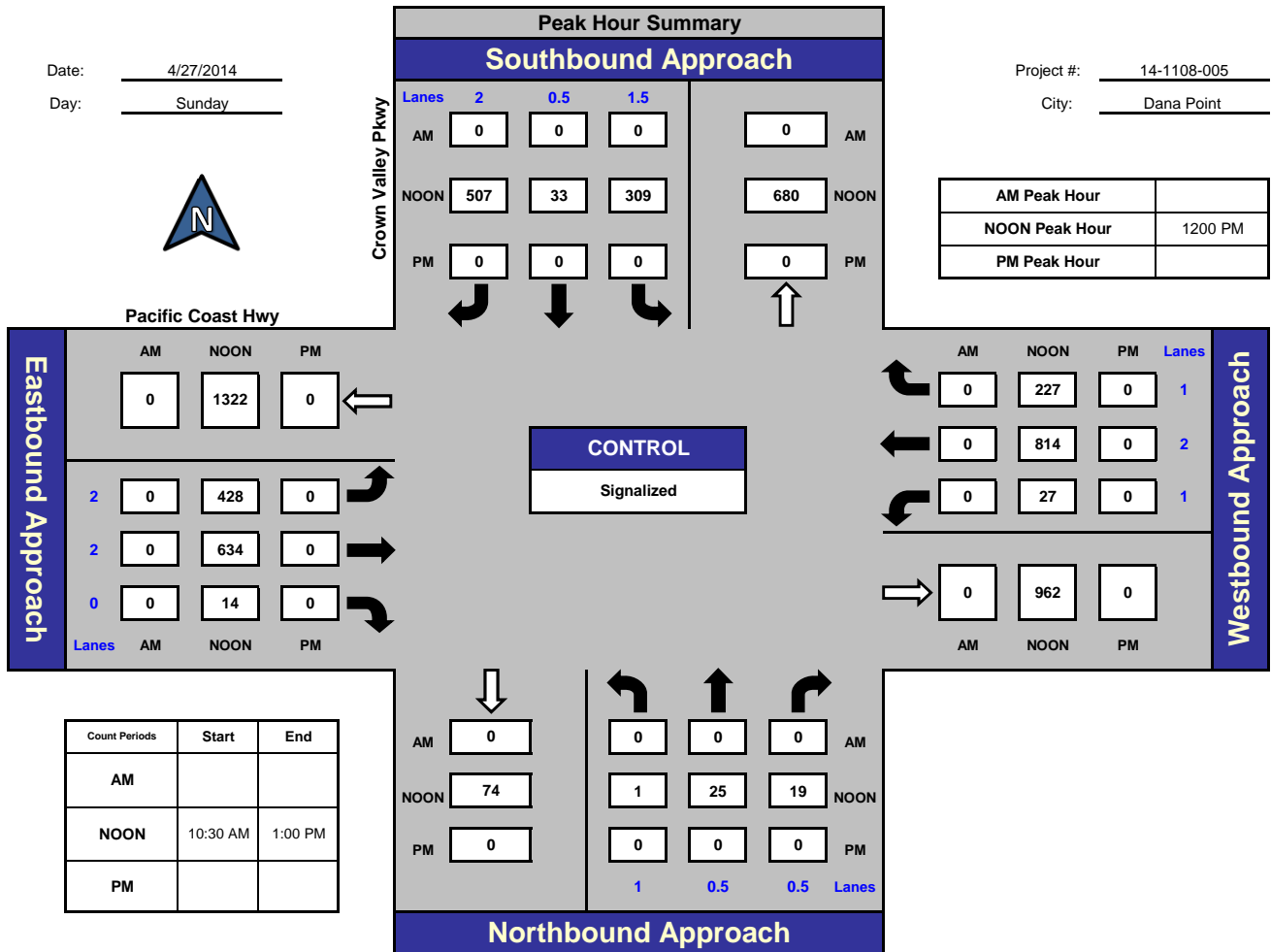
Crown Valley Pkwy and Pacific Coast Hwy, Dana Point

Date: 4/27/2014

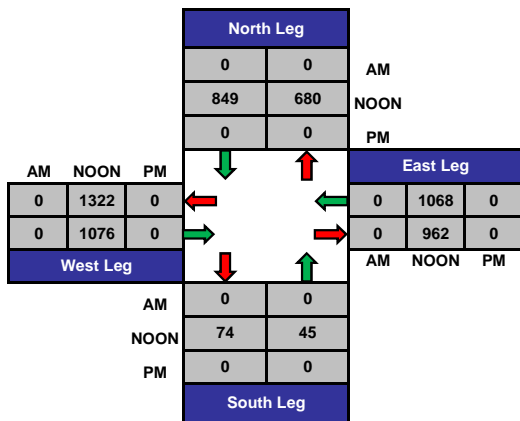
Day: Sunday

Project #: 14-1108-005

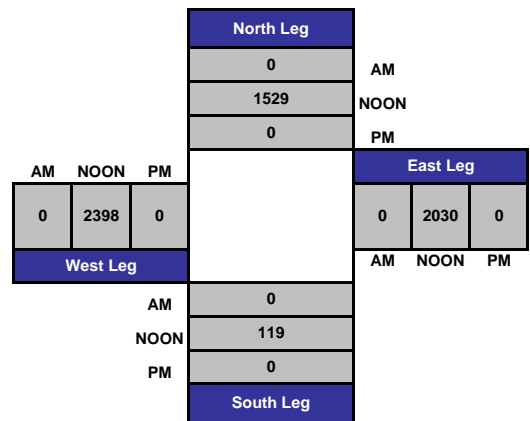
City: Dana Point



Total Ins & Outs



Total Volume Per Leg



South Shores Church Parking Study


Project # 14-1109

Location: 32712 Crown Valley Pkwy

City: Dana Point

Day: Sunday

Date: 4/27/2014


TIME Spaces	ZONE 1					ZONE 2		ZONE 3	ZONE 4	TOTAL
	Regular 76	 10	Reserved 2	First Time Visitor 2	Illegal	Regular 137	Illegal	EASTSIDE	WESTSIDE	
								Crown Valley Pkwy	Crown Valley Pkwy	
8:00 AM	25	5	0	0	0	9	0	1	8	48
8:15 AM	36	6	0	0	0	39	0	1	12	94
8:30 AM	40	6	0	0	0	40	0	2	12	100
8:45 AM	44	6	0	0	0	45	0	2	12	109
9:00 AM	57	9	0	1	0	59	0	5	12	143
9:15 AM	76	10	2	2	0	118	0	5	11	224
9:30 AM	76	10	2	2	0	137	0	7	15	249
9:45 AM	76	10	2	2	0	137	0	11	14	252
10:00 AM	76	10	2	2	0	137	0	12	14	253
10:15 AM	76	10	2	2	0	137	0	12	15	254
10:30 AM	75	8	2	2	0	121	0	12	16	236
10:45 AM	68	6	2	1	0	99	0	9	10	195
11:00 AM	74	7	2	2	0	124	0	7	9	225
11:15 AM	76	10	2	2	0	137	0	9	14	250
11:30 AM	76	10	2	2	0	137	0	12	14	253
11:45 AM	76	10	2	2	0	137	0	13	14	254
12:00 PM	76	10	2	2	0	137	0	14	13	254
12:15 PM	46	4	2	1	0	86	0	10	9	158
12:30 PM	33	4	1	0	0	42	0	7	8	95
12:45 PM	24	2	2	0	0	30	0	6	5	69
1:00 PM	16	0	2	0	0	19	0	4	2	43

From 10:15 to 10:30 a.m., there were 379 people in attendance. With 254 parked vehicles, the average vehicle occupancy is approximately 1.49 people per vehicle.
 From 11:45 a.m. to 12:15 p.m., there were 401 people in attendance. With 254 parked vehicles, the average vehicle occupancy is approximately 1.58 people per vehicle.

South Shores Church Parking Study

Project # 14-1109
Location: 32712 Crown Valley Pkwy
City: Dana Point

Day: Wednesday
Date: 4/30/2014

TIME	ZONE 1					ZONE 2		TOTAL
	Regular		Reserved	First Time Visitor	Illegal	Regular	Illegal	
Spaces	76	10	2	2	0	137	0	227
8:00 AM	3	0	0	0	0	3	0	6
8:15 AM	7	0	0	0	0	7	0	14
8:30 AM	9	0	0	0	0	18	0	27
8:45 AM	12	0	0	0	0	33	0	45
9:00 AM	32	0	0	0	0	64	0	96
9:15 AM	37	0	0	1	0	118	0	156
9:30 AM	46	4	0	0	0	137	1	188
9:45 AM	48	5	0	1	0	137	2	193
10:00 AM	49	4	0	0	0	137	2	192
10:15 AM	49	0	0	0	0	137	2	188
10:30 AM	50	0	0	0	0	135	2	187
10:45 AM	51	4	1	0	0	129	2	187
11:00 AM	51	3	1	0	0	128	2	185
11:15 AM	43	0	1	0	0	70	2	116
11:30 AM	41	1	1	1	0	38	2	84
11:45 AM	28	0	1	0	0	28	3	60
12:00 PM	19	0	1	0	0	22	3	45
12:15 PM	19	0	0	0	0	15	3	37
12:30 PM	17	0	0	0	0	12	3	32
12:45 PM	16	0	0	0	0	9	3	28
1:00 PM	15	0	1	1	0	6	3	26
1:15 PM	16	0	1	1	0	5	3	26
1:30 PM	23	0	1	1	0	3	3	31
1:45 PM	25	0	1	1	0	3	3	33
2:00 PM	22	0	1	1	0	3	3	30
2:15 PM	19	0	1	1	0	3	2	26
2:30 PM	15	0	1	0	0	2	2	20
2:45 PM	14	0	0	0	0	2	2	18
3:00 PM	12	0	0	1	0	2	1	16
3:15 PM	13	0	0	1	0	2	1	17
3:30 PM	13	0	0	0	0	2	1	16
3:45 PM	13	0	0	0	0	2	1	16
4:00 PM	12	0	0	0	0	2	1	15
4:15 PM	12	0	0	0	0	2	1	15
4:30 PM	10	0	0	0	0	2	1	13
4:45 PM	11	0	0	0	0	2	1	14
5:00 PM	10	0	0	0	0	1	1	12
5:15 PM	9	0	0	0	0	1	1	11
5:30 PM	12	0	0	0	0	1	0	13
5:45 PM	11	0	0	0	0	1	0	12
6:00 PM	14	0	0	0	0	1	0	15
6:15 PM	17	0	0	1	0	1	0	19
6:30 PM	28	3	1	1	0	5	0	38
6:45 PM	39	2	1	1	0	15	0	58
7:00 PM	49	3	1	2	0	22	0	77
7:15 PM	49	3	1	2	0	23	0	78
7:30 PM	50	3	1	2	0	23	0	79
7:45 PM	51	3	1	2	0	23	0	80
8:00 PM	47	3	1	2	0	22	0	75
8:15 PM	46	3	0	2	0	19	0	70
8:30 PM	32	1	0	0	0	10	0	43
8:45 PM	16	0	0	0	0	3	0	19
9:00 PM	10	0	0	0	0	1	0	11
9:15 PM	2	0	0	0	0	1	0	3
9:30 PM	2	0	0	0	0	1	0	3
9:45 PM	0	0	0	0	0	1	0	1
10:00 PM	0	0	0	0	0	1	0	1

From 9:45 to 10:00 a.m., there were 225 people in attendance.
With 193 parked vehicles, the average vehicle occupancy is approximately 1.17 people per vehicle.

APPENDIX B

EXISTING AND EXISTING PLUS PROJECT LEVEL OF SERVICE WORKSHEETS

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.442
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 47 615 102 129 792 14 4 36 94 260 56 203
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: 47 615 102 129 792 14 4 36 94 260 56 203
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 47 615 102 129 792 14 4 36 94 260 56 203
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 47 615 102 129 792 14 4 36 94 260 56 203
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 47 615 102 129 792 14 4 36 94 260 56 203
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: 47 615 102 129 792 14 4 36 94 260 56 203

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.03 0.12 0.06 0.08 0.23 0.01 0.00 0.02 0.06 0.08 0.03 0.12
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.407
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 1 0 0

Volume Module:
Base Vol: 18 706 3 48 1072 43 44 3 30 3 1 5
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: 18 706 3 48 1072 43 44 3 30 3 1 5
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 18 706 3 48 1072 43 44 3 30 3 1 5
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 18 706 3 48 1072 43 44 3 30 3 1 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 706 3 48 1072 43 44 3 30 3 1 5
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: 18 706 3 48 1072 43 44 3 30 3 1 5

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 0.33 0.11 0.56
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 155 1545 567 189 944

Capacity Analysis Module:
Vol/Sat: 0.01 0.21 0.00 0.03 0.32 0.03 0.03 0.02 0.02 0.00 0.01 0.01
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[18.3]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.577
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module: Table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol for various approaches.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, Final Sat. for various approaches.

Capacity Analysis Module: Table showing Vol/Sat, OvlAdjV/S, Crit Moves for various approaches.

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.486
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 62 818 206 301 790 9 13 72 98 140 83 133
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: 62 818 206 301 790 9 13 72 98 140 83 133
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 62 818 206 301 790 9 13 72 98 140 83 133
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 62 818 206 301 790 9 13 72 98 140 83 133
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 62 818 206 301 790 9 13 72 98 140 83 133
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: 62 818 206 301 790 9 13 72 98 140 83 133

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.04 0.16 0.12 0.18 0.23 0.01 0.01 0.04 0.06 0.04 0.05 0.08
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.390
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 0 1 0 0

Volume Module:
Base Vol: 26 1015 2 16 993 47 42 0 27 8 0 6
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: 26 1015 2 16 993 47 42 0 27 8 0 6
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 26 1015 2 16 993 47 42 0 27 8 0 6
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 26 1015 2 16 993 47 42 0 27 8 0 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 26 1015 2 16 993 47 42 0 27 8 0 6
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: 26 1015 2 16 993 47 42 0 27 8 0 6

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.00 1.00 0.57 0.00 0.43
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 0 1700 971 0 729

Capacity Analysis Module:
Vol/Sat: 0.02 0.30 0.00 0.01 0.29 0.03 0.02 0.00 0.02 0.00 0.00 0.01
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level of Service: B[12.2]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, Volume Module, Critical Gap Module, Capacity Module, and Level of Service Module.

Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns for Critical Gap, FollowUpTim, Capacity Module, Chnflct Vol, Potent Cap, Move Cap, Volume/Cap.

Table with columns for Level of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap, SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level of Service: D[25.7]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, Volume Module, Critical Gap Module, Capacity Module, and Level of Service Module.

Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns for Critical Gap, FollowUpTim, Capacity Module, Chnflct Vol, Potent Cap, Move Cap, Volume/Cap.

Table with columns for Level of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap, SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.574
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module: Table with columns for various volume metrics (Base Vol, Growth Adj, Initial Bse, etc.) and rows for different street approaches.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module: Table with columns for Vol/Sat, OvlAdjV/S, and Crit Moves for each approach.

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.427
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 87 674 211 210 751 5 13 43 81 151 61 165
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 1.00
Initial Bse: 87 674 211 210 751 5 13 43 81 151 61 165
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 87 674 211 210 751 5 13 43 81 151 61 165
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 1.00
PHF 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 1.00
PHF Volume: 87 674 211 210 751 5 13 43 81 151 61 165
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 87 674 211 210 751 5 13 43 81 151 61 165
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 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 1.00
FinalVolume: 87 674 211 210 751 5 13 43 81 151 61 165

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.05 0.13 0.12 0.12 0.22 0.00 0.01 0.03 0.05 0.04 0.04 0.10
Crit Moves: **** **** **** ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.449
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 1 0 0

Volume Module:
Base Vol: 33 797 6 22 943 40 32 1 20 44 3 94
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: 33 797 6 22 943 40 32 1 20 44 3 94
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 33 797 6 22 943 40 32 1 20 44 3 94
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 797 6 22 943 40 32 1 20 44 3 94
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 797 6 22 943 40 32 1 20 44 3 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: 33 797 6 22 943 40 32 1 20 44 3 94

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.05 0.95 0.31 0.02 0.67
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 81 1619 530 36 1133

Capacity Analysis Module:
Vol/Sat: 0.02 0.23 0.00 0.01 0.28 0.02 0.02 0.01 0.01 0.03 0.08 0.08
Crit Moves: **** **** **** ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[11.5]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[10.9]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.529
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, and OvlAdjVol for various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat, OvlAdjV/S, and Crit Moves for various approaches.

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.444
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 47 615 102 129 792 14 4 36 94 260 56 203
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: 47 615 102 129 792 14 4 36 94 260 56 203
Added Vol: 0 0 0 0 5 0 0 0 0 1 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 47 615 102 129 797 14 4 36 94 261 56 203
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 47 615 102 129 797 14 4 36 94 261 56 203
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 47 615 102 129 797 14 4 36 94 261 56 203
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: 47 615 102 129 797 14 4 36 94 261 56 203

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.03 0.12 0.06 0.08 0.23 0.01 0.00 0.02 0.06 0.08 0.03 0.12
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.405
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 0 1 0

Volume Module:
Base Vol: 18 706 3 48 1072 43 44 3 30 3 1 5
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: 18 706 3 48 1072 43 44 3 30 3 1 5
Added Vol: 0 0 0 7 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 18 706 3 55 1072 43 44 3 30 3 1 5
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 18 706 3 55 1072 43 44 3 30 3 1 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 706 3 55 1072 43 44 3 30 3 1 5
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: 18 706 3 55 1072 43 44 3 30 3 1 5

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 1.00 0.17 0.83
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 155 1545 1700 283 1417

Capacity Analysis Module:
Vol/Sat: 0.01 0.21 0.00 0.03 0.32 0.03 0.03 0.02 0.02 0.00 0.00 0.00
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level of Service: A[0.0]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Rows include Crown Valley Pkwy (North/South Bound) and Church Dwy (East/West Bound).

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume. Rows include Crown Valley Pkwy and Church Dwy.

Table with columns for Critical Gap Module, Critical Gp, FollowUpTim, Capacity Module, and Cnflct Vol. Rows include Crown Valley Pkwy and Church Dwy.

Table with columns for Capacity Module, Cnflct Vol, Potent Cap, Move Cap, and Volume/Cap. Rows include Crown Valley Pkwy and Church Dwy.

Table with columns for Level of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS. Rows include Crown Valley Pkwy and Church Dwy.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level of Service: C[18.4]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Rows include Crown Valley Pkwy (North/South Bound) and Lumeria Ln (East/West Bound).

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume. Rows include Crown Valley Pkwy and Lumeria Ln.

Table with columns for Critical Gap Module, Critical Gp, FollowUpTim, Capacity Module, and Cnflct Vol. Rows include Crown Valley Pkwy and Lumeria Ln.

Table with columns for Capacity Module, Cnflct Vol, Potent Cap, Move Cap, and Volume/Cap. Rows include Crown Valley Pkwy and Lumeria Ln.

Table with columns for Level of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS. Rows include Crown Valley Pkwy and Lumeria Ln.

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

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.577
Loss Time (sec):   5           Average Delay (sec/veh):    xxxxxx
Optimal Cycle:    27           Level Of Service:         A
*****
Street Name:      Crown Valley Pkwy          Pacific Coast Hwy
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:        L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:         Split Phase          Split Phase          Protected          Protected
Rights:          Include             Ovl                 Include             Ovl
Min. Green:      0 0 0              0 0 0              0 0 0              0 0 0
Y+R:            4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0
Lanes:          0 1 0 1 0          1 1 0 0 2          2 0 1 1 0          1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:        13 28 26          198 33 776         421 503 10         30 949 193
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:    13 28 26          198 33 776         421 503 10         30 949 193
Added Vol:      0 0 0              0 0 0              3 0 0              0 0 0 2
PasserByVol:   0 0 0              0 0 0              0 0 0              0 0 0 0
Initial Fut:    13 28 26          198 33 776         424 503 10         30 949 195
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     13 28 26          198 33 776         424 503 10         30 949 195
Reduct Vol:     0 0 0              0 0 0              0 0 0              0 0 0 0
Reduced Vol:    13 28 26          198 33 776         424 503 10         30 949 195
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:    13 28 26          198 33 776         424 503 10         30 949 195
OvlAdjVol:      352                                79
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:       1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:          0.39 0.83 0.78 1.71 0.29 2.00 2.00 1.96 0.04 1.00 2.00 1.00
Final Sat.:     660 1421 1319 2914 486 3400 3400 3334 66 1700 3400 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:        0.02 0.02 0.02 0.07 0.07 0.23 0.12 0.15 0.15 0.02 0.28 0.11
OvlAdjV/S:      0.10                                0.05
Crit Moves:     ****                                ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.488
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 62 818 206 301 790 9 13 72 98 140 83 133
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: 62 818 206 301 790 9 13 72 98 140 83 133
Added Vol: 1 8 2 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 63 826 208 301 790 9 13 72 98 140 83 133
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 63 826 208 301 790 9 13 72 98 140 83 133
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 63 826 208 301 790 9 13 72 98 140 83 133
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: 63 826 208 301 790 9 13 72 98 140 83 133

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.04 0.16 0.12 0.18 0.23 0.01 0.01 0.04 0.06 0.04 0.05 0.08
Crit Moves: **** **

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.388
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 0 1 0

Volume Module:
Base Vol: 26 1015 2 16 993 47 42 0 27 8 0 6
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: 26 1015 2 16 993 47 42 0 27 8 0 6
Added Vol: 0 7 0 0 0 0 0 0 0 0 7 0 4
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 26 1022 2 16 993 47 42 0 27 15 0 10
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 26 1022 2 16 993 47 42 0 27 15 0 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 26 1022 2 16 993 47 42 0 27 15 0 10
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: 26 1022 2 16 993 47 42 0 27 15 0 10

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 0 1700 1700 0 1700

Capacity Analysis Module:
Vol/Sat: 0.02 0.30 0.00 0.01 0.29 0.03 0.02 0.00 0.02 0.01 0.00 0.01
Crit Moves: **** **

Level of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #3 Crown Valley Pkwy/Church Dwy

 Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.3]

Street Name:	Crown Valley Pkwy				Church Dwy				
Approach:	North Bound		South Bound		East Bound		West Bound		
Movement:	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign		
Rights:	Include		Include		Include		Include		
Lanes:	0	0	1	1	0	0	2	0	0

Volume Module:
 Base Vol: 0 1043 0 0 1028 0 0 0 0 0 0 2
 Growth Adj: 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 1043 0 0 1028 0 0 0 0 0 0 2
 Added Vol: 0 0 0 0 7 0 0 0 0 0 0 7
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 1043 0 0 1035 0 0 0 0 0 0 9
 User Adj: 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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 1043 0 0 1035 0 0 0 0 0 0 9
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 1043 0 0 1035 0 0 0 0 0 0 9

Critical Gap Module:
 Critical Gp:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.9
 FollowUpTim:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.3

Capacity Module:
 Cnflct Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 522
 Potent Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 505
 Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 505
 Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.02

Level of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.1
 Control Del:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 12.3
 LOS by Move: * * * * * * * * * * * * * * * * * * B
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Shared LOS: * D
 ApproachDel: xxxxxx xxxxxx xxxxxx 12.3
 ApproachLOS: * * * * * B

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

Level of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #4 Crown Valley Pkwy/Lumeria Ln

 Average Delay (sec/veh): 0.1 Worst Case Level Of Service: D[25.8]

Street Name:	Crown Valley Pkwy				Lumeria Ln				
Approach:	North Bound		South Bound		East Bound		West Bound		
Movement:	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign		
Rights:	Include		Include		Include		Include		
Lanes:	0	0	1	1	0	0	2	0	0

Volume Module:
 Base Vol: 0 1043 6 7 1028 0 0 0 0 4 0 5
 Growth Adj: 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 1043 6 7 1028 0 0 0 0 4 0 5
 Added Vol: 0 0 0 0 7 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 1043 6 7 1035 0 0 0 0 4 0 5
 User Adj: 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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 1043 6 7 1035 0 0 0 0 4 0 5
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 0 1043 6 7 1035 0 0 0 0 4 0 5

Critical Gap Module:
 Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 6.5 6.9
 FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3

Capacity Module:
 Cnflct Vol: xxxxx xxxxx xxxxx 1049 xxxxx xxxxx xxxxx xxxxx xxxxx 1578 2095 525
 Potent Cap.: xxxxx xxxxx xxxxx 671 xxxxx xxxxx xxxxx xxxxx xxxxx 102 53 503
 Move Cap.: xxxxx xxxxx xxxxx 671 xxxxx xxxxx xxxxx xxxxx xxxxx 101 52 503
 Volume/Cap: xxxxx xxxxx xxxxx 0.01 xxxxx xxxxx xxxxx xxxxx xxxxx 0.04 0.00 0.01

Level of Service Module:
 2Way95thQ: xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 Control Del:xxxxx xxxxx xxxxx 10.4 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
 LOS by Move: * * * * * B *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 182 xxxxx
 SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.2 xxxxx
 Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 25.8 xxxxx
 Shared LOS: * D
 ApproachDel: xxxxxx xxxxxx xxxxxx 25.8
 ApproachLOS: * * * * * D

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

```

-----
Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.574
Loss Time (sec):   5           Average Delay (sec/veh):    xxxxxx
Optimal Cycle:     27          Level Of Service:          A
*****
Street Name:      Crown Valley Pkwy          Pacific Coast Hwy
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:        L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:         Split Phase      Split Phase      Protected          Protected
Rights:          Include          Ovl              Include            Ovl
Min. Green:      0 0 0            0 0 0            0 0 0            0 0 0
Y+R:             4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0
Lanes:           0 1 0 1 0        1 1 0 0 2        2 0 1 1 0        1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:        12 44 30          215 40 470        721 961 12        30 719 216
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:    12 44 30          215 40 470        721 961 12        30 719 216
Added Vol:      0 0 0            2 0 4            0 0 0            0 0 0
PasserByVol:   0 0 0            0 0 0            0 0 0            0 0 0
Initial Fut:    12 44 30          217 40 474        721 961 12        30 719 216
User Adj:       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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     12 44 30          217 40 474        721 961 12        30 719 216
Reduct Vol:     0 0 0            0 0 0            0 0 0            0 0 0
Reduced Vol:    12 44 30          217 40 474        721 961 12        30 719 216
PCE Adj:        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
FinalVolume:    12 44 30          217 40 474        721 961 12        30 719 216
OvlAdjVol:      0                                0                                87
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:       1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:          0.28 1.02 0.70 1.69 0.31 2.00 2.00 1.98 0.02 1.00 2.00 1.00
Final Sat.:     474 1740 1186 2871 529 3400 3400 3358 42 1700 3400 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:        0.03 0.03 0.03 0.08 0.08 0.14 0.21 0.29 0.29 0.02 0.21 0.13
OvlAdjV/S:      0.00                                0.05
Crit Moves:     ****          ****          ****          ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.435
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1

Volume Module:
Base Vol: 87 674 211 210 751 5 13 43 81 151 61 165
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: 87 674 211 210 751 5 13 43 81 151 61 165
Added Vol: 2 22 6 0 25 0 0 0 2 7 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 89 696 217 210 776 5 13 43 83 158 61 165
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 89 696 217 210 776 5 13 43 83 158 61 165
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 89 696 217 210 776 5 13 43 83 158 61 165
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: 89 696 217 210 776 5 13 43 83 158 61 165

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.05 0.14 0.13 0.12 0.23 0.00 0.01 0.03 0.05 0.05 0.04 0.10
Crit Moves: **** **** **** ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.429
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 1 0

Volume Module:
Base Vol: 33 797 6 22 943 40 32 1 20 44 3 94
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: 33 797 6 22 943 40 32 1 20 44 3 94
Added Vol: 0 19 2 34 0 0 0 0 1 0 19 1 10
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 33 816 8 56 943 40 32 2 20 63 4 104
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 816 8 56 943 40 32 2 20 63 4 104
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 816 8 56 943 40 32 2 20 63 4 104
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: 33 816 8 56 943 40 32 2 20 63 4 104

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 1.00 0.04 0.96
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 155 1545 1700 63 1637

Capacity Analysis Module:
Vol/Sat: 0.02 0.24 0.00 0.03 0.28 0.02 0.02 0.01 0.01 0.04 0.06 0.06
Crit Moves: **** **** **** ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.9]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.0]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.535
Loss Time (sec):   5          Average Delay (sec/veh):    xxxxxx
Optimal Cycle:    25          Level Of Service:         A
*****
Street Name:      Crown Valley Pkwy          Pacific Coast Hwy
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:        L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:         Split Phase          Split Phase          Protected          Protected
Rights:          Include             Ovl                 Include             Ovl
Min. Green:      0 0 0              0 0 0              0 0 0              0 0 0
Y+R:            4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0
Lanes:          0 1 0 1 0          1 1 0 0 2          2 0 1 1 0          1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:        1 25 19          309 33 507 428 634 14 27 814 227
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:    1 25 19          309 33 507 428 634 14 27 814 227
Added Vol:      0 1 0              6 0 12 14 0 0 0 0 0 7
PasserByVol:   0 0 0              0 0 0 0 0 0 0 0 0 0
Initial Fut:    1 26 19          315 33 519 442 634 14 27 814 234
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    1 26 19          315 33 519 442 634 14 27 814 234
Reduct Vol:    0 0 0              0 0 0 0 0 0 0 0 0 0
Reduced Vol:   1 26 19          315 33 519 442 634 14 27 814 234
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:   1 26 19          315 33 519 442 634 14 27 814 234
OvlAdjVol:     77
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:       1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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:         0.04 1.13 0.83 1.81 0.19 2.00 2.00 1.96 0.04 1.00 2.00 1.00
Final Sat.:    74 1922 1404 3078 322 3400 3400 3327 73 1700 3400 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:       0.01 0.01 0.01 0.10 0.10 0.15 0.13 0.19 0.19 0.02 0.24 0.14
OvlAdjV/S:    0.02
Crit Moves:    ****          ****          ****          ****
*****

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APPENDIX C

CUMULATIVE PROJECTS VOLUMES

Cumulative Project Volumes

1. Headlands

Intersection	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Crown Valley/Camino Del Avion	AM		11			10							
	PM		18			22							
	Sun Mid		18			22							
Crown Valley/Sea Island-FA Dwy	AM		11			10							
	PM		18			22							
	Sun Mid		18			22							
Crown Valley/RIRO Dwy	AM		11			10							
	PM		18			22							
	Sun Mid		18			22							
Crown Valley/Lumeria	AM		11			10							
	PM		18			22							
	Sun Mid		18			22							
Crown Valley/PCH	AM				10			8			9	11	
	PM				22			18			14	18	
	Sun Mid				22			18			14	18	

2. Town Center Specific Plan

Intersection	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Crown Valley/Camino Del Avion	AM												
	PM												
	Sun Mid												
Crown Valley/Sea Island-FA Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/RIRO Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/Lumeria	AM												
	PM												
	Sun Mid												
Crown Valley/PCH	AM									76		45	
	PM									94		125	
	Sun Mid									94		125	

3. Dana Point Harbor Revitalization

Intersection	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Crown Valley/Camino Del Avion	AM												
	PM												
	Sun Mid												
Crown Valley/Sea Island-FA Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/RIRO Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/Lumeria	AM												
	PM												
	Sun Mid												
Crown Valley/PCH	AM							23			20		
	PM							31			24		
	Sun Mid							31			24		

4. Ritz Carlton Expansion

Intersection	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Crown Valley/Camino Del Avion	AM		1			2							
	PM		1			2							
	Sun Mid		1			2							
Crown Valley/Sea Island-FA Dwy	AM		1			2							
	PM		1			2							
	Sun Mid		1			2							
Crown Valley/RIRO Dwy	AM		1			2							
	PM		1			2							
	Sun Mid		1			2							
Crown Valley/Lumeria	AM		1			2							
	PM		1			2							
	Sun Mid		1			2							
Crown Valley/PCH	AM				2				3		2	1	
	PM				2				3		2	1	
	Sun Mid				2				3		2	1	

5. Doheny Hotel

Intersection	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Crown Valley/Camino Del Avion	AM												
	PM												
	Sun Mid												
Crown Valley/Sea Island-FA Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/RIRO Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/Lumeria	AM												
	PM												
	Sun Mid												
Crown Valley/PCH	AM							22			9		
	PM							22			15		
	Sun Mid							26			15		

6. 34202 Del Obispo Street

Intersection	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Crown Valley/Camino Del Avion	AM												
	PM												
	Sun Mid												
Crown Valley/Sea Island-FA Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/RIRO Dwy	AM												
	PM												
	Sun Mid												
Crown Valley/Lumeria	AM												
	PM												
	Sun Mid												
Crown Valley/PCH	AM								7		20		
	PM								25		17		
	Sun Mid								25		17		

Total Cumulative Project Volumes

Intersection	Peak Hour	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Crown Valley/Camino Del Avion	AM		12			12							
	PM		19			24							
	Sun Mid		19			24							
Crown Valley/Sea Island-FA Dwy	AM		12			12							
	PM		19			24							
	Sun Mid		19			24							
Crown Valley/RIRO Dwy	AM		12			12							
	PM		19			24							
	Sun Mid		19			24							
Crown Valley/Lumeria	AM		12			12							
	PM		19			24							
	Sun Mid		19			24							
Crown Valley/PCH	AM				12			139			105	12	
	PM				24			193			197	19	
	Sun Mid				24			197			197	19	

APPENDIX D

FUTURE AND FUTURE PLUS PROJECT LEVEL OF SERVICE WORKSHEETS

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.497
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 47 615 102 129 792 14 4 36 94 260 56 203
Growth Adj: 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13
Initial Bse: 53 695 115 146 895 16 5 41 106 294 63 229
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 12 0 0 12 0 0 0 0 0 0 0
Initial Fut: 53 707 115 146 907 16 5 41 106 294 63 229
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 53 707 115 146 907 16 5 41 106 294 63 229
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 53 707 115 146 907 16 5 41 106 294 63 229
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: 53 707 115 146 907 16 5 41 106 294 63 229

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.03 0.14 0.07 0.09 0.27 0.01 0.00 0.02 0.06 0.09 0.04 0.13
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.452
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 0 1 0 0

Volume Module:
Base Vol: 18 706 3 48 1072 43 44 3 30 3 1 5
Growth Adj: 1.00 1.13 1.00 1.00 1.13 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 18 798 3 48 1211 43 44 3 30 3 1 5
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 12 0 0 12 0 0 0 0 0 0 0
Initial Fut: 18 810 3 48 1223 43 44 3 30 3 1 5
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 18 810 3 48 1223 43 44 3 30 3 1 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 810 3 48 1223 43 44 3 30 3 1 5
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: 18 810 3 48 1223 43 44 3 30 3 1 5

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 0.33 0.11 0.56
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 155 1545 567 189 944

Capacity Analysis Module:
Vol/Sat: 0.01 0.24 0.00 0.03 0.36 0.03 0.03 0.02 0.02 0.00 0.01 0.01
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level of Service: A[0.0]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Crown Valley Pkwy and Church Dwy.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table for Critical Gap Module with columns for Critical Gp, FollowUpTim, Capacity Module.

Table for Capacity Module with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table for Level of Service Module with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level of Service: C[21.9]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Crown Valley Pkwy and Lumeria Ln.

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table for Critical Gap Module with columns for Critical Gp, FollowUpTim, Capacity Module.

Table for Capacity Module with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table for Level of Service Module with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.547
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 62 818 206 301 790 9 13 72 98 140 83 133
Growth Adj: 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13
Initial Bse: 70 924 233 340 893 10 15 81 111 158 94 150
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 70 943 233 340 917 10 15 81 111 158 94 150
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 70 943 233 340 917 10 15 81 111 158 94 150
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 70 943 233 340 917 10 15 81 111 158 94 150
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: 70 943 233 340 917 10 15 81 111 158 94 150

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.04 0.18 0.14 0.20 0.27 0.01 0.01 0.05 0.07 0.05 0.06 0.09
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.435
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 0 1 0 0

Volume Module:
Base Vol: 26 1015 2 16 993 47 42 0 27 8 0 6
Growth Adj: 1.00 1.13 1.00 1.00 1.13 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 26 1147 2 16 1122 47 42 0 27 8 0 6
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 26 1166 2 16 1146 47 42 0 27 8 0 6
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 26 1166 2 16 1146 47 42 0 27 8 0 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 26 1166 2 16 1146 47 42 0 27 8 0 6
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: 26 1166 2 16 1146 47 42 0 27 8 0 6

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.00 1.00 0.57 0.00 0.43
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 0 1700 971 0 729

Capacity Analysis Module:
Vol/Sat: 0.02 0.34 0.00 0.01 0.34 0.03 0.02 0.00 0.02 0.00 0.00 0.01
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[13.0]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflict Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: D[33.9]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflict Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.707
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.475
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 87 674 211 210 751 5 13 43 81 151 61 165
Growth Adj: 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11
Initial Bse: 97 748 234 233 834 6 14 48 90 168 68 183
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 97 767 234 233 858 6 14 48 90 168 68 183
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 97 767 234 233 858 6 14 48 90 168 68 183
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 97 767 234 233 858 6 14 48 90 168 68 183
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: 97 767 234 233 858 6 14 48 90 168 68 183

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.06 0.15 0.14 0.14 0.25 0.00 0.01 0.03 0.05 0.05 0.04 0.11
Crit Moves: **** **** **** ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.486
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 0 1 0 0

Volume Module:
Base Vol: 33 797 6 22 943 40 32 1 20 44 3 94
Growth Adj: 1.00 1.11 1.00 1.00 1.11 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 33 885 6 22 1047 40 32 1 20 44 3 94
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 33 904 6 22 1071 40 32 1 20 44 3 94
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 904 6 22 1071 40 32 1 20 44 3 94
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 904 6 22 1071 40 32 1 20 44 3 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: 33 904 6 22 1071 40 32 1 20 44 3 94

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.05 0.95 0.31 0.02 0.67
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 81 1619 530 36 1133

Capacity Analysis Module:
Vol/Sat: 0.02 0.27 0.00 0.01 0.31 0.02 0.02 0.01 0.01 0.03 0.08 0.08
Crit Moves: **** **** **** ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.1]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for Crown Valley Pkwy and Church Dwy.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.3]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for Crown Valley Pkwy and Lumeria Ln.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.647
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.499
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 47 615 102 129 792 14 4 36 94 260 56 203
Growth Adj: 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13
Initial Bse: 53 695 115 146 895 16 5 41 106 294 63 229
Added Vol: 0 0 0 0 5 0 0 0 0 1 0 0 0
PasserByVol: 0 12 0 0 12 0 0 0 0 0 0 0 0
Initial Fut: 53 707 115 146 912 16 5 41 106 295 63 229
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 53 707 115 146 912 16 5 41 106 295 63 229
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 53 707 115 146 912 16 5 41 106 295 63 229
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: 53 707 115 146 912 16 5 41 106 295 63 229

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.03 0.14 0.07 0.09 0.27 0.01 0.00 0.02 0.06 0.09 0.04 0.13
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.450
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 0 1 0

Volume Module:
Base Vol: 18 706 3 48 1072 43 44 3 30 3 1 5
Growth Adj: 1.00 1.13 1.00 1.00 1.13 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 18 798 3 48 1211 43 44 3 30 3 1 5
Added Vol: 0 0 0 7 0 0 0 0 0 0 0 0 0
PasserByVol: 0 12 0 0 12 0 0 0 0 0 0 0 0
Initial Fut: 18 810 3 55 1223 43 44 3 30 3 1 5
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 18 810 3 55 1223 43 44 3 30 3 1 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 810 3 55 1223 43 44 3 30 3 1 5
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: 18 810 3 55 1223 43 44 3 30 3 1 5

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 1.00 0.17 0.83
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 155 1545 1700 283 1417

Capacity Analysis Module:
Vol/Sat: 0.01 0.24 0.00 0.03 0.36 0.03 0.03 0.02 0.02 0.00 0.00 0.00
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level of Service: A[0.0]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Rows include Crown Valley Pkwy (North, South, East, West) and Church Dwy (West).

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns for Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns for Capacity Module, Cnflict Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns for Level of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level of Service: C[22.0]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Rows include Crown Valley Pkwy (North, South, East, West) and Lumeria Ln (West).

Table with columns for Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns for Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns for Capacity Module, Cnflict Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns for Level of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.548
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 62 818 206 301 790 9 13 72 98 140 83 133
Growth Adj: 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13
Initial Bse: 70 924 233 340 893 10 15 81 111 158 94 150
Added Vol: 1 8 2 0 0 0 0 0 0 0 0 0
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 71 951 235 340 917 10 15 81 111 158 94 150
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 71 951 235 340 917 10 15 81 111 158 94 150
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 71 951 235 340 917 10 15 81 111 158 94 150
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: 71 951 235 340 917 10 15 81 111 158 94 150

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.04 0.19 0.14 0.20 0.27 0.01 0.01 0.05 0.07 0.05 0.06 0.09
Crit Moves: ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.433
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 0 1 0

Volume Module:
Base Vol: 26 1015 2 16 993 47 42 0 27 8 0 6
Growth Adj: 1.00 1.13 1.00 1.00 1.13 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 26 1147 2 16 1122 47 42 0 27 8 0 6
Added Vol: 0 7 0 0 0 0 0 0 0 0 7 0 4
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 26 1173 2 16 1146 47 42 0 27 15 0 10
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 26 1173 2 16 1146 47 42 0 27 15 0 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 26 1173 2 16 1146 47 42 0 27 15 0 10
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: 26 1173 2 16 1146 47 42 0 27 15 0 10

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 0 1700 1700 0 1700

Capacity Analysis Module:
Vol/Sat: 0.02 0.34 0.00 0.01 0.34 0.03 0.02 0.00 0.02 0.01 0.00 0.01
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[13.2]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: D[34.0]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, OvlAdjV/S, Crit Moves.

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.484
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1

Volume Module:
Base Vol: 87 674 211 210 751 5 13 43 81 151 61 165
Growth Adj: 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11 1.11
Initial Bse: 97 748 234 233 834 6 14 48 90 168 68 183
Added Vol: 2 22 6 0 25 0 0 0 2 7 0 0
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 99 789 240 233 883 6 14 48 92 175 68 183
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 99 789 240 233 883 6 14 48 92 175 68 183
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 99 789 240 233 883 6 14 48 92 175 68 183
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: 99 789 240 233 883 6 14 48 92 175 68 183

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.06 0.15 0.14 0.14 0.26 0.00 0.01 0.03 0.05 0.05 0.04 0.11
Crit Moves: **** **** **** ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.467
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 1 0

Volume Module:
Base Vol: 33 797 6 22 943 40 32 1 20 44 3 94
Growth Adj: 1.00 1.11 1.00 1.00 1.11 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 33 885 6 22 1047 40 32 1 20 44 3 94
Added Vol: 0 19 2 34 0 0 0 0 1 0 19 1 10
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0 0
Initial Fut: 33 923 8 56 1071 40 32 2 20 63 4 104
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 923 8 56 1071 40 32 2 20 63 4 104
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 923 8 56 1071 40 32 2 20 63 4 104
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: 33 923 8 56 1071 40 32 2 20 63 4 104

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 1.00 0.04 0.96
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 155 1545 1700 63 1637

Capacity Analysis Module:
Vol/Sat: 0.02 0.27 0.00 0.03 0.31 0.02 0.02 0.01 0.01 0.04 0.06 0.06
Crit Moves: **** **** **** ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.5 Worst Case Level of Service: B[12.6]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, Volume Module, Critical Gap Module, Capacity Module, and Level of Service Module.

Table with columns for Volume Module, Critical Gap Module, Capacity Module, and Level of Service Module.

Table with columns for Capacity Module and Level of Service Module.

Table with columns for Level of Service Module.

Table with columns for Level of Service Module.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level of Service: B[11.5]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, Volume Module, Critical Gap Module, Capacity Module, and Level of Service Module.

Table with columns for Volume Module, Critical Gap Module, Capacity Module, and Level of Service Module.

Table with columns for Capacity Module and Level of Service Module.

Table with columns for Level of Service Module.

Table with columns for Level of Service Module.

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


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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.653
Loss Time (sec):   5           Average Delay (sec/veh):    xxxxxx
Optimal Cycle:    33           Level Of Service:          B
*****
Street Name:      Crown Valley Pkwy          Pacific Coast Hwy
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:         L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|-----|
Control:          Split Phase          Split Phase          Protected          Protected
Rights:           Include             Ovl                 Include             Ovl
Min. Green:       0 0 0              0 0 0              0 0 0              0 0 0
Y+R:              4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0
Lanes:            0 1 0 1 0          1 1 0 0 2          2 0 1 1 0          1 0 2 0 1
-----|-----|-----|-----|-----|
Volume Module:
Base Vol:         1 25 19           309 33 507         428 634 14         27 814 227
Growth Adj:      1.11 1.11 1.11   1.11 1.11 1.11   1.11 1.11 1.11   1.11 1.11 1.11
Initial Bse:     1 28 21           343 37 563         475 704 16         30 904 252
Added Vol:       0 1 0              6 0 12             14 0 0              0 0 0 7
PasserByVol:    0 0 0              24 0 0              0 193 0             0 197 19
Initial Fut:     1 29 21           373 37 575         489 897 16         30 1101 278
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 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:      1 29 21           373 37 575         489 897 16         30 1101 278
Reduct Vol:      0 0 0              0 0 0              0 0 0              0 0 0 0
Reduced Vol:    1 29 21           373 37 575         489 897 16         30 1101 278
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:    1 29 21           373 37 575         489 897 16         30 1101 278
OvlAdjVol:       86
-----|-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:        1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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:           0.04 1.13 0.83   1.82 0.18 2.00   2.00 1.97 0.03   1.00 2.00 1.00
Final Sat.:      74 1919 1407 3096 304 3400 3400 3342 58 1700 3400 1700
-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:         0.01 0.01 0.01 0.12 0.12 0.17 0.14 0.27 0.27 0.02 0.32 0.16
OvlAdjV/S:      0.03
Crit Moves:      ****             ****             ****             ****
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APPENDIX E

**EXISTING AND PROPOSED
CHURCH SCHEDULES AND ATTENDANCE**

South Shores Church - Schedule and Attendance
(Based on information transmitted from G.G. Kohlhaugen to the City of Dana Point on December 6, 2013)

Existing (September 2012 and April 2014)

Day/Time	Activity	Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday (April 27, 2014)							
8:15 – 9:15	1st Service	128	73 attendees and 55 choir members		Trips 10:30-11:30 am	580	344+35-100+301
9:30 – 10:30	2nd Service	344	276 attendees, 55 choir members, and 13 staff/volunteers				
9:30 – 10:30	Bible Study	35			Parking 10:15-10:30 am	379	344+35
10:45 – 11:45 (and 12:00)	Bible Studies	100	2 groups, from 2nd Service		11:45 am-12:15 pm	401	100+301
11:00 – 12:00	3rd Service	301	281 attendees and 20 staff				
6:00 – 7:30 pm	Remix Service	48	45 adults and 3 staff				
Wednesday (April 30, 2014)							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers		Parking 9:45-10:00 am	225	40+185 (Staff+WBSF)
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	185	No summer schedule, discontinued during construction				
4:00 – 5:00 pm	Intern Meeting	6					
6:30 – 8:00 pm	Evening Service	35	49 children, infants through 5th grade				
7:00 – 9:00 pm	Choir Rehearsal	60					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	30					
Thursday (September 20, 2012)							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers		Trips 8:00-9:00 am	40	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	10	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	70	40+30 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	15	No summer schedule				
2:00 – 4:00 pm	Grief Share	30					
6:30 – 8:30 pm	WINGS	18	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	85					

Master Plan Completion

Day/Time	Activity	Forecast Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	171			Trips 10:30-11:30 am	738	399+41-114+412
9:30 – 10:30	2nd Service	399					
9:30 – 10:30	Bible Study	41			Parking 10:15-10:30 am	440	399+41
10:45 – 12:00	Bible Studies	114	2 groups, from 2nd Service		11:45 am-12:15 pm	526	114+412
11:00 – 12:00	3rd Service	412					
6:30 – 8:00 pm	Remix Service	62					
Wednesday							
8:00 – 5:00	Staff	52	16 full-time, 16 part-time, 20 volunteers		Parking 9:45-10:00 am	388	52+336 (Staff+WBSF)
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	336	No summer schedule				
4:00 – 5:00 pm	Intern Meeting	11					
6:30 – 8:00 pm	Evening Service	41					
7:00 – 9:00 pm	Choir Rehearsal	68					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	36					
Thursday							
8:00 – 5:00	Staff	52	16 full-time, 16 part-time, 20 volunteers		Trips 8:00-9:00 am	52	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	15	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	88	52+36 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	20	No summer schedule				
2:00 – 4:00 pm	Grief Share	36					
6:30 – 8:30 pm	WINGS	24	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	98					

Master Plan - Existing

Day/Time	Activity	Attendance Increase	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	43			Trips 10:30-11:30 am	158	55+6-14+111
9:30 – 10:30	2nd Service	55					
9:30 – 10:30	Bible Study	6			Parking 10:15-10:30 am	61	55+6
10:45 – 12:00	Bible Studies	14	2 groups, from 2nd Service		11:45 am-12:15 pm	125	14+111
11:00 – 12:00	3rd Service	111					
6:30 – 8:00 pm	Remix Service	14					
Wednesday							
8:00 – 5:00	Staff	12			Parking 9:45-10:00 am	163	12+151 (Staff+WBSF)
9:00 – 2:00	Preschool/Kinder	0					
9:00 – 11:15	WBSF	151	No summer schedule				
4:00 – 5:00 pm	Intern Meeting	5					
6:30 – 8:00 pm	Evening Service	6					
7:00 – 9:00 pm	Choir Rehearsal	8					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	6					
Thursday							
8:00 – 5:00	Staff	12			Trips 8:00-9:00 am	12	Staff
9:00 – 2:00	Preschool/Kinder	0					
6:45 – 8:00	Men's Group	5	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	18	12+6 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	5	No summer schedule				
2:00 – 4:00 pm	Grief Share	6					
6:30 – 8:30 pm	WINGS	6	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	13					

South Shores Church - Schedule and Attendance
(Based on information transmitted from G.G. Kohlhausen to the City of Dana Point on December 6, 2013)

Existing

Day/Time	Activity	Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	150		Trips	10:30-11:30 am	659	356+35-100+368
9:30 – 10:30	2nd Service	356					
9:30 – 10:30	Bible Study	35		Parking	10:15-10:30 am	391	356+35
10:45 – 11:45 (and 12:00)	Bible Studies	100	2 groups, from 2nd Service		11:45 am-12:15 pm	468	100+368
11:00 – 12:00	3rd Service	368					
6:00 – 7:30 pm	Remix Service	55					
Wednesday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Parking	9:45-10:00 am	225	40+185 (Staff+WBSF)
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	185	No summer schedule, discontinued during construction				
4:00 – 5:00 pm	Intern Meeting	6					
6:30 – 8:00 pm	Evening Service	35	49 children, infants through 5th grade				
7:00 – 9:00 pm	Choir Rehearsal	60					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	30					
Thursday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Trips	8:00-9:00 am	40	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	10	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	70	40+30 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	15	No summer schedule				
2:00 – 4:00 pm	Grief Share	30					
6:30 – 8:30 pm	WINGS	18	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	85					

Phase 1 Completion

Day/Time	Activity	Forecast Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	150		Trips	10:30-11:30 am	659	356+35-100+368
9:30 – 10:30	2nd Service	356					
9:30 – 10:30	Bible Study	35		Parking	10:15-10:30 am	391	356+35
10:45 – 12:00	Bible Studies	100	2 groups, from 2nd Service		11:45 am-12:15 pm	468	100+368
11:00 – 12:00	3rd Service	368					
6:30 – 8:00 pm	Remix Service	55					
Wednesday							
8:00 – 5:00	Staff	40		Parking	9:45-10:00 am	40	Staff
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	0	300 - discontinued during project construction				
4:00 – 5:00 pm	Intern Meeting	6					
6:30 – 8:00 pm	Evening Service	35					
7:00 – 9:00 pm	Choir Rehearsal	60					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	30					
Thursday							
8:00 – 5:00	Staff	40		Trips	8:00-9:00 am	40	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	10	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	70	40+30 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	15	No summer schedule				
2:00 – 4:00 pm	Grief Share	30					
6:30 – 8:30 pm	WINGS	18	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	85					

Phase 1 - Existing

Day/Time	Activity	Attendance Increase	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	0		Trips	10:30-11:30 am	0	
9:30 – 10:30	2nd Service	0					
9:30 – 10:30	Bible Study	0		Parking	10:15-10:30 am	0	
10:45 – 12:00	Bible Studies	0	2 groups, from 2nd Service		11:45 am-12:15 pm	0	
11:00 – 12:00	3rd Service	0					
6:30 – 8:00 pm	Remix Service	0					
Wednesday							
8:00 – 5:00	Staff	0		Parking	9:45-10:00 am	0	
9:00 – 2:00	Preschool/Kinder	0					
9:00 – 11:15	WBSF	0	No summer schedule				
4:00 – 5:00 pm	Intern Meeting	0					
6:30 – 8:00 pm	Evening Service	0					
7:00 – 9:00 pm	Choir Rehearsal	0					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	0					
Thursday							
8:00 – 5:00	Staff	0		Trips	8:00-9:00 am	0	
9:00 – 2:00	Preschool/Kinder	0					
6:45 – 8:00	Men's Group	0	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	0	
10:00 – 11:30	Women's Bible Study	0	No summer schedule				
2:00 – 4:00 pm	Grief Share	0					
6:30 – 8:30 pm	WINGS	0	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	0					

South Shores Church - Schedule and Attendance
(Based on information transmitted from G.G. Kohlhausen to the City of Dana Point on December 6, 2013)

Existing

Day/Time	Activity	Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	150		Trips	10:30-11:30 am	659	356+35-100+368
9:30 – 10:30	2nd Service	356					
9:30 – 10:30	Bible Study	35		Parking	10:15-10:30 am	391	356+35
10:45 – 11:45 (and 12:00)	Bible Studies	100	2 groups, from 2nd Service		11:45 am-12:15 pm	468	100+368
11:00 – 12:00	3rd Service	368					
6:00 – 7:30 pm	Remix Service	55					
Wednesday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Parking	9:45-10:00 am	225	40+185 (Staff+WBSF)
9:00 – 2:00	Preschool/Kindergarten	86					
9:00 – 11:15	WBSF	185	No summer schedule, discontinued during construction				
4:00 – 5:00 pm	Intern Meeting	6					
6:30 – 8:00 pm	Evening Service	35	49 children, infants through 5th grade				
7:00 – 9:00 pm	Choir Rehearsal	60					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	30					
Thursday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Trips	8:00-9:00 am	40	Staff
9:00 – 2:00	Preschool/Kindergarten	86					
6:45 – 8:00	Men's Group	10	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	70	40+30 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	15	No summer schedule				
2:00 – 4:00 pm	Grief Share	30					
6:30 – 8:30 pm	WINGS	18	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	85					

Phase 2 Completion

Day/Time	Activity	Forecast Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	153		Trips	10:30-11:30 am	670	362+36-102+374
9:30 – 10:30	2nd Service	362					
9:30 – 10:30	Bible Study	36		Parking	10:15-10:30 am	398	362+36
10:45 – 12:00	Bible Studies	102	2 groups, from 2nd Service		11:45 am-12:15 pm	476	102+374
11:00 – 12:00	3rd Service	374					
6:30 – 8:00 pm	Remix Service	56					
Wednesday							
8:00 – 5:00	Staff	41		Parking	9:45-10:00 am	41	Staff
9:00 – 2:00	Preschool/Kindergarten	86					
9:00 – 11:15	WBSF	0	305 - discontinued during project construction				
4:00 – 5:00 pm	Intern Meeting	7					
6:30 – 8:00 pm	Evening Service	36					
7:00 – 9:00 pm	Choir Rehearsal	61					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	31					
Thursday							
8:00 – 5:00	Staff	41		Trips	8:00-9:00 am	41	Staff
9:00 – 2:00	Preschool/Kindergarten	86					
6:45 – 8:00	Men's Group	11	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	72	41+31 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	16	No summer schedule				
2:00 – 4:00 pm	Grief Share	31					
6:30 – 8:30 pm	WINGS	19	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	87					

Phase 2 - Existing

Day/Time	Activity	Attendance Increase	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	3		Trips	10:30-11:30 am	11	6+1-2+6
9:30 – 10:30	2nd Service	6					
9:30 – 10:30	Bible Study	1		Parking	10:15-10:30 am	7	6+1
10:45 – 12:00	Bible Studies	2	2 groups, from 2nd Service		11:45 am-12:15 pm	8	2+6
11:00 – 12:00	3rd Service	6					
6:30 – 8:00 pm	Remix Service	1					
Wednesday							
8:00 – 5:00	Staff	1		Parking	9:45-10:00 am	0	
9:00 – 2:00	Preschool/Kindergarten	0					
9:00 – 11:15	WBSF	0	No summer schedule				
4:00 – 5:00 pm	Intern Meeting	1					
6:30 – 8:00 pm	Evening Service	1					
7:00 – 9:00 pm	Choir Rehearsal	1					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	1					
Thursday							
8:00 – 5:00	Staff	1		Trips	8:00-9:00 am	1	Staff
9:00 – 2:00	Preschool/Kindergarten	0					
6:45 – 8:00	Men's Group	1	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	2	1+1 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	1	No summer schedule				
2:00 – 4:00 pm	Grief Share	1					
6:30 – 8:30 pm	WINGS	1	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	2					

South Shores Church - Schedule and Attendance
(Based on information transmitted from G.G. Kohlhausen to the City of Dana Point on December 6, 2013)

Existing

Day/Time	Activity	Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	150		Trips	10:30-11:30 am	659	356+35-100+368
9:30 – 10:30	2nd Service	356					
9:30 – 10:30	Bible Study	35		Parking	10:15-10:30 am	391	356+35
10:45 – 11:45 (and 12:00)	Bible Studies	100	2 groups, from 2nd Service		11:45 am-12:15 pm	468	100+368
11:00 – 12:00	3rd Service	368					
6:00 – 7:30 pm	Remix Service	55					
Wednesday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Parking	9:45-10:00 am	225	40+185 (Staff+WBSF)
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	185	No summer schedule, discontinued during construction				
4:00 – 5:00 pm	Intern Meeting	6					
6:30 – 8:00 pm	Evening Service	35	49 children, infants through 5th grade				
7:00 – 9:00 pm	Choir Rehearsal	60					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	30					
Thursday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Trips	8:00-9:00 am	40	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	10	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	70	40+30 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	15	No summer schedule				
2:00 – 4:00 pm	Grief Share	30					
6:30 – 8:30 pm	WINGS	18	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	85					

Phase 3 Completion

Day/Time	Activity	Forecast Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	156		Trips	10:30-11:30 am	681	368+37-104+380
9:30 – 10:30	2nd Service	368					
9:30 – 10:30	Bible Study	37		Parking	10:15-10:30 am	405	368+37
10:45 – 12:00	Bible Studies	104	2 groups, from 2nd Service		11:45 am-12:15 pm	484	104+380
11:00 – 12:00	3rd Service	380					
6:30 – 8:00 pm	Remix Service	57					
Wednesday							
8:00 – 5:00	Staff	42		Parking	9:45-10:00 am	42	Staff
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	0	310 - discontinued during project construction				
4:00 – 5:00 pm	Intern Meeting	8					
6:30 – 8:00 pm	Evening Service	37					
7:00 – 9:00 pm	Choir Rehearsal	62					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	32					
Thursday							
8:00 – 5:00	Staff	42		Trips	8:00-9:00 am	42	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	12	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	74	42+32 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	17	No summer schedule				
2:00 – 4:00 pm	Grief Share	32					
6:30 – 8:30 pm	WINGS	20	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	89					

Phase 3 - Existing

Day/Time	Activity	Attendance Increase	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	6		Trips	10:30-11:30 am	22	12+2-4+12
9:30 – 10:30	2nd Service	12					
9:30 – 10:30	Bible Study	2		Parking	10:15-10:30 am	14	12+2
10:45 – 12:00	Bible Studies	4	2 groups, from 2nd Service		11:45 am-12:15 pm	16	4+12
11:00 – 12:00	3rd Service	12					
6:30 – 8:00 pm	Remix Service	2					
Wednesday							
8:00 – 5:00	Staff	2		Parking	9:45-10:00 am	0	
9:00 – 2:00	Preschool/Kinder	0					
9:00 – 11:15	WBSF	0	No summer schedule				
4:00 – 5:00 pm	Intern Meeting	2					
6:30 – 8:00 pm	Evening Service	2					
7:00 – 9:00 pm	Choir Rehearsal	2					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	2					
Thursday							
8:00 – 5:00	Staff	2		Trips	8:00-9:00 am	2	Staff
9:00 – 2:00	Preschool/Kinder	0					
6:45 – 8:00	Men's Group	2	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	4	2+ (Staff+Grief)
10:00 – 11:30	Women's Bible Study	2	No summer schedule				
2:00 – 4:00 pm	Grief Share	2					
6:30 – 8:30 pm	WINGS	2	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	4					

South Shores Church - Schedule and Attendance
(Based on information transmitted from G.G. Kohlhausen to the City of Dana Point on December 6, 2013)

Existing

Day/Time	Activity	Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	150		Trips	10:30-11:30 am	659	356+35-100+368
9:30 – 10:30	2nd Service	356					
9:30 – 10:30	Bible Study	35		Parking	10:15-10:30 am	391	356+35
10:45 – 11:45 (and 12:00)	Bible Studies	100	2 groups, from 2nd Service		11:45 am-12:15 pm	468	100+368
11:00 – 12:00	3rd Service	368					
6:00 – 7:30 pm	Remix Service	55					
Wednesday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Parking	9:45-10:00 am	225	40+185 (Staff+WBSF)
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	185	No summer schedule, discontinued during construction				
4:00 – 5:00 pm	Intern Meeting	6					
6:30 – 8:00 pm	Evening Service	35	49 children, infants through 5th grade				
7:00 – 9:00 pm	Choir Rehearsal	60					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	30					
Thursday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Trips	8:00-9:00 am	40	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	10	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	70	40+30 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	15	No summer schedule				
2:00 – 4:00 pm	Grief Share	30					
6:30 – 8:30 pm	WINGS	18	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	85					

Phase 4 Completion

Day/Time	Activity	Forecast Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	159		Trips	10:30-11:30 am	692	374+38-106+386
9:30 – 10:30	2nd Service	374					
9:30 – 10:30	Bible Study	38		Parking	10:15-10:30 am	412	374+38
10:45 – 12:00	Bible Studies	106	2 groups, from 2nd Service		11:45 am-12:15 pm	492	106+386
11:00 – 12:00	3rd Service	386					
6:30 – 8:00 pm	Remix Service	58					
Wednesday							
8:00 – 5:00	Staff	43		Parking	9:45-10:00 am	43	Staff
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	0	315 - discontinued during project construction				
4:00 – 5:00 pm	Intern Meeting	9					
6:30 – 8:00 pm	Evening Service	38					
7:00 – 9:00 pm	Choir Rehearsal	63					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	33					
Thursday							
8:00 – 5:00	Staff	43		Trips	8:00-9:00 am	43	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	13	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	76	43+33 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	18	No summer schedule				
2:00 – 4:00 pm	Grief Share	33					
6:30 – 8:30 pm	WINGS	21	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	91					

Phase 4 - Existing

Day/Time	Activity	Attendance Increase	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	9		Trips	10:30-11:30 am	33	18+3-6+18
9:30 – 10:30	2nd Service	18					
9:30 – 10:30	Bible Study	3		Parking	10:15-10:30 am	21	18+3
10:45 – 12:00	Bible Studies	6	2 groups, from 2nd Service		11:45 am-12:15 pm	24	6+18
11:00 – 12:00	3rd Service	18					
6:30 – 8:00 pm	Remix Service	3					
Wednesday							
8:00 – 5:00	Staff	3		Parking	9:45-10:00 am	0	
9:00 – 2:00	Preschool/Kinder	0					
9:00 – 11:15	WBSF	0	No summer schedule				
4:00 – 5:00 pm	Intern Meeting	3					
6:30 – 8:00 pm	Evening Service	3					
7:00 – 9:00 pm	Choir Rehearsal	3					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	3					
Thursday							
8:00 – 5:00	Staff	3		Trips	8:00-9:00 am	3	Staff
9:00 – 2:00	Preschool/Kinder	0					
6:45 – 8:00	Men's Group	3	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	6	3+3 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	3	No summer schedule				
2:00 – 4:00 pm	Grief Share	3					
6:30 – 8:30 pm	WINGS	3	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	6					

South Shores Church - Schedule and Attendance
 (Based on information transmitted from G.G. Kohlhausen to the City of Dana Point on December 6, 2013)

Existing

Day/Time	Activity	Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	150		Trips	10:30-11:30 am	659	356+35-100+368
9:30 – 10:30	2nd Service	356					
9:30 – 10:30	Bible Study	35		Parking	10:15-10:30 am	391	356+35
10:45 – 11:45 (and 12:00)	Bible Studies	100	2 groups, from 2nd Service		11:45 am-12:15 pm	468	100+368
11:00 – 12:00	3rd Service	368					
6:00 – 7:30 pm	Remix Service	55					
Wednesday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Parking	9:45-10:00 am	225	40+185 (Staff+WBSF)
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	185	No summer schedule, discontinued during construction				
4:00 – 5:00 pm	Intern Meeting	6					
6:30 – 8:00 pm	Evening Service	35	49 children, infants through 5th grade				
7:00 – 9:00 pm	Choir Rehearsal	60					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	30					
Thursday							
8:00 – 5:00	Staff	40	12 full-time, 12 part-time, 16 volunteers	Trips	8:00-9:00 am	40	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	10	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	70	40+30 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	15	No summer schedule				
2:00 – 4:00 pm	Grief Share	30					
6:30 – 8:30 pm	WINGS	18	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	85					

Phase 5 Completion

Day/Time	Activity	Forecast Attendance	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	162		Trips	10:30-11:30 am	703	380+39-108+392
9:30 – 10:30	2nd Service	380					
9:30 – 10:30	Bible Study	39		Parking	10:15-10:30 am	419	380+39
10:45 – 12:00	Bible Studies	108	2 groups, from 2nd Service		11:45 am-12:15 pm	500	108+392
11:00 – 12:00	3rd Service	392					
6:30 – 8:00 pm	Remix Service	59					
Wednesday							
8:00 – 5:00	Staff	44		Parking	9:45-10:00 am	44	Staff
9:00 – 2:00	Preschool/Kinder	86					
9:00 – 11:15	WBSF	0	320 - discontinued during project construction				
4:00 – 5:00 pm	Intern Meeting	10					
6:30 – 8:00 pm	Evening Service	39					
7:00 – 9:00 pm	Choir Rehearsal	64					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	34					
Thursday							
8:00 – 5:00	Staff	44		Trips	8:00-9:00 am	44	Staff
9:00 – 2:00	Preschool/Kinder	86					
6:45 – 8:00	Men's Group	14	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	78	44+34 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	19	No summer schedule				
2:00 – 4:00 pm	Grief Share	34					
6:30 – 8:30 pm	WINGS	22	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	93					

Phase 5 - Existing

Day/Time	Activity	Attendance Increase	Notes		Peak Hour / Peak Period	Attendance	Calculation
Sunday							
8:15 – 9:15	1st Service	12		Trips	10:30-11:30 am	44	24+4-8+24
9:30 – 10:30	2nd Service	24					
9:30 – 10:30	Bible Study	4		Parking	10:15-10:30 am	28	24+4
10:45 – 12:00	Bible Studies	8	2 groups, from 2nd Service		11:45 am-12:15 pm	32	8+24
11:00 – 12:00	3rd Service	24					
6:30 – 8:00 pm	Remix Service	4					
Wednesday							
8:00 – 5:00	Staff	4		Parking	9:45-10:00 am	0	
9:00 – 2:00	Preschool/Kinder	0					
9:00 – 11:15	WBSF	0	No summer schedule				
4:00 – 5:00 pm	Intern Meeting	4					
6:30 – 8:00 pm	Evening Service	4					
7:00 – 9:00 pm	Choir Rehearsal	4					
7:00 – 9:00 pm	The Ride (Middle/Jr. High School)	4					
Thursday							
8:00 – 5:00	Staff	4		Trips	8:00-9:00 am	4	Staff
9:00 – 2:00	Preschool/Kinder	0					
6:45 – 8:00	Men's Group	4	2 Thursdays/month - No Summer Schedule		4:00-5:00 pm	8	4+4 (Staff+Grief)
10:00 – 11:30	Women's Bible Study	4	No summer schedule				
2:00 – 4:00 pm	Grief Share	4					
6:30 – 8:30 pm	WINGS	4	3x/year for 10 weeks = 30 weeks per year				
7:00 – 9:00 pm	CORE	8					

APPENDIX F

PROJECT DRIVEWAYS QUEUING REPORTS

Future Queue Report (cars)

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
#2	[HCM2k95thQ]:	1	15	0	4	22	1	3	2	2	0	0	0
#3	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.375
Loss Time (sec): 12 Average Delay (sec/veh): 18.2
Optimal Cycle: 90 Level Of Service: B

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Control (Protected, Permitted), Rights (Include), and Volume Module (Base Vol, Growth Adj, etc.).

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Uniform Del, IncrementDel, InitQueueDel, Delay Adj, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2k95thQ.

Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Uniform Del, IncrementDel, InitQueueDel, Delay Adj, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2k95thQ.

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name: Crown Valley Pkwy Church Dwy

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes.

Table with columns for Volume Module (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume).

Table with columns for Critical Gap Module (Critical Gp, FollowUpTim).

Table with columns for Capacity Module (Conflict Vol, Potent Cap., Move Cap., Volume/Cap).

Table with columns for Level Of Service Module (2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS).

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

Future Queue Report (cars)

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
#2	[HCM2k95thQ]:	2	22	0	1	20	1	2	0	2	1	0	1
#3	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.1

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-----
Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)
*****
Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy
*****
Cycle (sec):      120      Critical Vol./Cap.(X):    0.354
Loss Time (sec):  12      Average Delay (sec/veh):  17.7
Optimal Cycle:    90      Level of Service:        B
*****
Street Name:      Crown Valley Pkwy      Sea Island Dr-Church Dwy
Approach:         North Bound      South Bound      East Bound      West Bound
Movement:         L - T - R      L - T - R      L - T - R      L - T - R
-----
Control:          Protected      Protected      Permitted      Permitted
Rights:           Include      Include      Include      Include
-----
Min. Green:       6  18  18      6  18  18      32  32  32      32  32  32
Y+R:              4.0 4.0  4.0      4.0 4.0  4.0      4.0 4.0  4.0      4.0 4.0  4.0
Lanes:            1  0  2  0  1      1  0  2  0  1      1  0  0  1  0      1  0  0  1  0
-----
Volume Module:
Base Vol:         26 1015  2  16  993  47  42  0  27  8  0  6
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:     26 1015  2  16  993  47  42  0  27  8  0  6
Added Vol:       0  7  0  0  0  0  0  0  0  7  0  4
PasserByVol:    0  0  0  0  0  0  0  0  0  0  0  0
Initial Fut:     26 1022  2  16  993  47  42  0  27  15  0  10
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 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:      26 1022  2  16  993  47  42  0  27  15  0  10
Reduct Vol:     0  0  0  0  0  0  0  0  0  0  0  0
Reduced Vol:    26 1022  2  16  993  47  42  0  27  15  0  10
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:     26 1022  2  16  993  47  42  0  27  15  0  10
-----
Saturation Flow Module:
Sat/Lane:        1900 1900  1900  1900 1900  1900 1900  1900 1900  1900 1900
Adjustment:      0.95 0.95  0.85  0.95 0.95  0.85 0.76 1.00  0.85 0.75 1.00  0.85
Lanes:           1.00 2.00  1.00  1.00 2.00  1.00 1.00 0.00  1.00 1.00 0.00  1.00
Final Sat.:     1805 3610  1615  1805 3610  1615 1444  0  1615  1417  0  1615
-----
Capacity Analysis Module:
Vol/Sat:         0.01 0.28  0.00  0.01 0.28  0.03 0.03 0.00  0.02 0.01 0.00  0.01
Crit Moves:     ****          ****
Green/Cycle:    0.05 0.54  0.54  0.10 0.58  0.58 0.27 0.00  0.27 0.27 0.00  0.27
Volume/Cap:     0.29 0.53  0.00  0.09 0.47  0.05 0.11 0.00  0.06 0.04 0.00  0.02
Uniform Del:    54.9 17.8  12.8  49.6 14.4  10.7 33.2 0.0  32.8 32.6 0.0  32.5
IncrementDel:   1.8  0.3  0.0  0.2  0.2  0.0  0.1 0.0  0.1  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  1.00  1.00 1.00  1.00 1.00 0.00  1.00 1.00 0.00  1.00
Delay/Veh:      56.7 18.1  12.8  49.8 14.5  10.8 33.4 0.0  32.9 32.7 0.0  32.5
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:     56.7 18.1  12.8  49.8 14.5  10.8 33.4 0.0  32.9 32.7 0.0  32.5
LOS by Move:    E  B  B  D  B  B  C  A  C  C  A  C
HCM2k95thQ:    2  22  0  1  20  1  2  0  2  1  0  1

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-----
Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)
*****
Intersection #3 Crown Valley Pkwy/Church Dwy
*****
Average Delay (sec/veh):  0.1      Worst Case Level Of Service: B[ 12.3]
*****
Street Name:      Crown Valley Pkwy      Church Dwy
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  1  1  0      0  0  2  0  0      0  0  0  0  0      0  0  0  0  1
-----
Volume Module:
Base Vol:         0  1043  0  0  1028  0  0  0  0  0  0  2
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  1043  0  0  1028  0  0  0  0  0  0  2
Added Vol:       0  0  0  0  7  0  0  0  0  0  0  7
PasserByVol:    0  0  0  0  0  0  0  0  0  0  0  0
Initial Fut:     0  1043  0  0  1035  0  0  0  0  0  0  9
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 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:      0  1043  0  0  1035  0  0  0  0  0  0  9
Reduct Vol:     0  0  0  0  0  0  0  0  0  0  0  0
FinalVolume:     0  1043  0  0  1035  0  0  0  0  0  0  9
-----
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  6.9
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  3.3
-----
Capacity Module:
Chnflct Vol:    xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx  522
Potent Cap.:   xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx  505
Move Cap.:     xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx  505
Volume/Cap:    xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx  0.02
-----
Level Of Service Module:
2Way95thQ:     xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx  0.1
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  12.3
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 xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:    *  *  *  *  *  *  *  *  *  *  *  *  *
ApproachDel:   xxxxxx xxxxxx xxxxxx xxxxxx  12.3
ApproachLOS:   *  *  *  *  *  *  *  *  *  *  *  *  B
*****
Note: Queue reported is the number of cars per lane.
*****

```

Future Queue Report (cars)

Node Intersection	Northbound			Southbound			Eastbound			Westbound		
	L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
#2 [HCM2k95thQ]:	2	18	0	4	18	1	2	1	1	4	6	6
#3 [2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.5

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.384
Loss Time (sec): 12 Average Delay (sec/veh): 19.4
Optimal Cycle: 90 Level Of Service: B

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include

Min. Green: 6 18 18 6 18 18 32 32 32 32 32 32
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0

Volume Module:
Base Vol: 33 797 6 22 943 40 32 1 20 44 3 94

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: 33 797 6 22 943 40 32 1 20 44 3 94
Added Vol: 0 19 2 34 0 0 0 1 0 19 1 10
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 33 816 8 56 943 40 32 2 20 63 4 104
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 816 8 56 943 40 32 2 20 63 4 104
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 816 8 56 943 40 32 2 20 63 4 104
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: 33 816 8 56 943 40 32 2 20 63 4 104

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.65 0.86 0.86 0.75 0.86 0.86
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 1.00 0.04 0.96
Final Sat.: 1805 3610 1615 1805 3610 1615 1233 149 1492 1425 60 1566

Capacity Analysis Module:
Vol/Sat: 0.02 0.23 0.00 0.03 0.26 0.02 0.03 0.01 0.01 0.04 0.07 0.07
Crit Moves: ****
Green/Cycle: 0.05 0.52 0.52 0.11 0.58 0.58 0.27 0.27 0.27 0.27 0.27
Volume/Cap: 0.37 0.44 0.01 0.27 0.45 0.04 0.10 0.05 0.05 0.17 0.25 0.25
Uniform Del: 55.2 18.0 14.0 48.5 14.1 10.7 33.1 32.7 32.7 33.8 34.6 34.6
IncrementDel: 2.5 0.2 0.0 0.7 0.2 0.0 0.1 0.0 0.0 0.2 0.3 0.3
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Delay/Veh: 57.7 18.1 14.0 49.2 14.3 10.7 33.3 32.8 32.8 34.0 34.9 34.9
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: 57.7 18.1 14.0 49.2 14.3 10.7 33.3 32.8 32.8 34.0 34.9 34.9
LOS by Move: E B B D B B C C C C C C
HCM2k95thQ: 2 18 0 4 18 1 2 1 1 4 6 6

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.9]

Street Name: Crown Valley Pkwy Church Dwy
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 1 1 0 0 0 2 0 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 763 7 0 1022 0 0 0 0 0 0 0 69

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: 0 763 7 0 1022 0 0 0 0 0 0 0 69
Added Vol: 0 2 19 0 19 0 0 0 0 0 0 0 19
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 765 26 0 1041 0 0 0 0 0 0 0 88
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 765 26 0 1041 0 0 0 0 0 0 0 88
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 765 26 0 1041 0 0 0 0 0 0 0 88

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 6.9

FollowUpTim:xxxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 3.3

Capacity Module:
Chnflct Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxxx 396

Potent Cap.: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 609

Move Cap.: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 609

Volume/Cap: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 0.14

Level Of Service Module:
2Way95thQ: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 0.5

Control Del:xxxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 11.9

LOS by Move: * B

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx

SharedQueue:xxxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx

Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx

Shared LOS: *

ApproachDel: xxxxxx xxxxxx xxxxxx 11.9

ApproachLOS: * B

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

Future Queue Report (cars)

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
#2	[HCM2k95thQ]:	1	17	0	4	26	1	3	2	2	0	0	0
#3	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.421
 Loss Time (sec): 12 Average Delay (sec/veh): 18.6
 Optimal Cycle: 90 Level Of Service: B

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Permitted Permitted

Rights: Include Include Include Include

Min. Green: 6 18 18 6 18 18 32 32 32 32 32 32

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 1 0

Volume Module:

Base Vol: 18 706 3 48 1072 43 44 3 30 3 1 5

Growth Adj: 1.00 1.13 1.00 1.00 1.13 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 18 798 3 48 1211 43 44 3 30 3 1 5

Added Vol: 0 0 0 7 0 0 0 0 0 0 0 0

PasserByVol: 0 12 0 0 12 0 0 0 0 0 0 0

Initial Fut: 18 810 3 55 1223 43 44 3 30 3 1 5

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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 18 810 3 55 1223 43 44 3 30 3 1 5

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 18 810 3 55 1223 43 44 3 30 3 1 5

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: 18 810 3 55 1223 43 44 3 30 3 1 5

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.76 0.86 0.86 0.74 0.88 0.88

Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 1.00 0.17 0.83

Final Sat.: 1805 3610 1615 1805 3610 1615 1452 149 1492 1408 277 1385

Capacity Analysis Module:

Vol/Sat: 0.01 0.22 0.00 0.03 0.34 0.03 0.03 0.02 0.02 0.00 0.00 0.00

Crit Moves: ****

Green/Cycle: 0.05 0.52 0.52 0.12 0.58 0.58 0.27 0.27 0.27 0.27 0.27

Volume/Cap: 0.20 0.43 0.00 0.26 0.58 0.05 0.11 0.08 0.08 0.01 0.01 0.01

Uniform Del: 54.7 18.0 14.0 48.4 15.8 10.7 33.3 32.9 32.9 32.3 32.4 32.4

IncrementDel: 1.1 0.2 0.0 0.7 0.4 0.0 0.1 0.1 0.1 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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Delay/Veh: 55.8 18.1 14.0 49.1 16.2 10.7 33.4 33.0 33.0 32.3 32.4 32.4

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: 55.8 18.1 14.0 49.1 16.2 10.7 33.4 33.0 33.0 32.3 32.4 32.4

LOS by Move: E B B D B B C C C C C

HCM2k95thQ: 1 17 0 4 26 1 3 2 2 0 0 0

Level of Service Computation Report
 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A [0.0]

Street Name: Crown Valley Pkwy Church Dwy

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 1 1 0 0 0 2 0 0 0 0 0 0 0 0 1

Volume Module:

Base Vol: 0 727 7 0 1105 0 0 0 0 0 0 0 0

Growth Adj: 1.00 1.13 1.00 1.00 1.13 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 822 7 0 1249 0 0 0 0 0 0 0 0

Added Vol: 0 0 4 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 12 0 0 12 0 0 0 0 0 0 0 0

Initial Fut: 0 834 11 0 1261 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: 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 Volume: 0 834 11 0 1261 0 0 0 0 0 0 0 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 0 834 11 0 1261 0 0 0 0 0 0 0 0

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx 6.9

FollowUpTim:xxxxxx xxxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.3

Capacity Module:

Chnflct Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 422

Potent Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 586

Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 586

Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.00

Level Of Service Module:

2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Control Del:xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

LOS by Move: *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

SharedQueue:xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd ConDel:xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: *

ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx

ApproachLOS: * * * * *

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

Future Queue Report (cars)

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
#2	[HCM2k95thQ]:	2	26	0	1	24	1	2	0	2	1	0	1
#3	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.1

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 12 Average Delay (sec/veh): 18.2
Optimal Cycle: 90 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Crown Valley Pkwy, Sea Island Dr-Church Dwy, and West Bound.

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat., Capacity Analysis Module, and Delay Adj. Includes data for various traffic metrics.

Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat., Capacity Analysis Module, and Delay Adj. Includes data for various traffic metrics.

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[13.2]

Table with columns for Street Name, Approach, Movement, Control, Rights, Lanes, and Volume Module. Includes data for Crown Valley Pkwy and Church Dwy.

Table with columns for Critical Gap Module, Capacity Module, and Level Of Service Module. Includes data for critical gaps and capacity.

Table with columns for Capacity Module, Level Of Service Module, and Shared Queue. Includes data for capacity and level of service.

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

Future Queue Report (cars)

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
#2	[HCM2k95thQ]:	2	20	0	4	22	1	2	1	1	4	6	6
#3	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.5

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

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.424
Loss Time (sec): 12 Average Delay (sec/veh): 19.4
Optimal Cycle: 90 Level Of Service: B

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 6 18 18 6 18 18 32 32 32 32 32 32
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 1 0 1 0

Volume Module:
Base Vol: 33 797 6 22 943 40 32 1 20 44 3 94
Growth Adj: 1.00 1.11 1.00 1.00 1.11 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 33 885 6 22 1047 40 32 1 20 44 3 94
Added Vol: 0 19 2 34 0 0 0 1 0 19 1 10
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0
Initial Fut: 33 923 8 56 1071 40 32 2 20 63 4 104
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 923 8 56 1071 40 32 2 20 63 4 104
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 923 8 56 1071 40 32 2 20 63 4 104
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: 33 923 8 56 1071 40 32 2 20 63 4 104

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.65 0.86 0.86 0.75 0.86 0.86
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.09 0.91 1.00 0.04 0.96
Final Sat.: 1805 3610 1615 1805 3610 1615 1233 149 1492 1425 60 1566

Capacity Analysis Module:
Vol/Sat: 0.02 0.26 0.00 0.03 0.30 0.02 0.03 0.01 0.01 0.04 0.07 0.07
Crit Moves: ****
Green/Cycle: 0.05 0.53 0.53 0.10 0.58 0.58 0.27 0.27 0.27 0.27 0.27
Volume/Cap: 0.37 0.48 0.01 0.30 0.51 0.04 0.10 0.05 0.05 0.17 0.25 0.25
Uniform Del: 55.2 17.8 13.3 49.8 14.8 10.7 33.1 32.7 32.7 33.8 34.6 34.6
IncrementDel: 2.5 0.2 0.0 0.9 0.2 0.0 0.1 0.0 0.0 0.2 0.3 0.3
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Delay/Veh: 57.7 18.0 13.3 50.7 15.0 10.7 33.3 32.8 32.8 34.0 34.9 34.9
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: 57.7 18.0 13.3 50.7 15.0 10.7 33.3 32.8 32.8 34.0 34.9 34.9
LOS by Move: E B B D B B C C C C C C
HCM2k95thQ: 2 20 0 4 22 1 2 1 1 4 6 6

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

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B [12.6]

Street Name: Crown Valley Pkwy Church Dwy
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 1 1 0 0 0 2 0 0 0 0 0 0 0 0 1

Volume Module:
Base Vol: 0 763 7 0 1022 0 0 0 0 0 0 0 69
Growth Adj: 1.00 1.11 1.00 1.00 1.11 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 847 7 0 1134 0 0 0 0 0 0 0 69
Added Vol: 0 2 19 0 19 0 0 0 0 0 0 0 19
PasserByVol: 0 19 0 0 24 0 0 0 0 0 0 0 0
Initial Fut: 0 868 26 0 1177 0 0 0 0 0 0 0 88
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 868 26 0 1177 0 0 0 0 0 0 0 88
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 868 26 0 1177 0 0 0 0 0 0 0 88

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx 6.9
FollowUpTim:xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx 3.3

Capacity Module:
Chnflct Vol: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxxx 447
Potent Cap.: xxxxx xxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx 565
Move Cap.: xxxxx xxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxx xxxxxx xxxxx xxxxx 565
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.16

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx 0.5
Control Del:xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx 12.6
LOS by Move: * * * * * * * * * * * * * * * * * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue:xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx
Shrd ConDel:xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx
Shared LOS: *
ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx 12.6
ApproachLOS: * * * * * * * * * * * * * * * * * B

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

APPENDIX G

CONSTRUCTION PHASING ASSUMPTIONS

Both for Project 8

21235 South Shores - Alternative
Vehicle Traffic Review

5/15/2014

Phase	Duration	Vehicle/ Heavy Equip. Type	Average p/day	Peak Duration
1A	12 Mo.	Construction Workers	15 - 20	N/A
		Delivery Truck	2	Avg. Peak 4 for 4 weeks
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Concrete Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Crane	N/A	Approx. 2 move-ins
1B	3 Mo.	Construction Workers	10 - 15	N/A
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 4 p/hr for 2 weeks
1B.E1	3 Mo.	Construction Workers	10 - 15	N/A
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 8 p/hr for 6 weeks
1B.E2	3 Mo.	Construction Workers	10 - 15	N/A
		Delivery Truck	2	Avg. Peak 4 for 8 weeks
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Drill Rig	1	N/A
		Dump Truck	N/A	Avg. Peak 12 p/day for 8 weeks
		Concrete Truck	N/A	Avg. Peak 12 p/day for 8 weeks
Crane	N/A	Approx. 2 Move-ins		
1C	12 Mo.	Construction Workers	15 - 20	N/A
		Delivery Truck	2	Avg. Peak 4 for 4 weeks
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Concrete Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Crane	N/A	Approx. 2 move-ins
2	12 Mo.	Construction Workers	15 - 20	N/A
		Delivery Truck	2	Avg. Peak 4 for 4 weeks
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Concrete Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Crane	N/A	Approx. 2 move-ins
3	12 Mo.	Construction Workers	15 - 20	N/A
		Delivery Truck	2	Avg. Peak 4 for 4 weeks
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Concrete Truck	N/A	Avg. Peak 25 p/day for 2 weeks
		Crane	N/A	Approx. 2 move-ins

**21235 South Shores - Alternative
Vehicle Traffic Review**

5/15/2014

4	7 Mo.	Construction Workers	10 - 15	N/A
		Delivery Truck	2	Avg. Peak 4 for 4 weeks
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 20 p/day for 4 weeks
		Concrete Truck	N/A	Avg. Peak 20 p/day for 4 weeks
		Boom Pump	N/A	Approx. 4 Move-ins
		Crane	N/A	Approx. 2 Move-ins
5	7 Mo.	Construction Workers	10 -15	N/A
		Delivery Truck	2	Avg. Peak 4 for 4 weeks
		Backhoe	1	N/A
		Loader	1	N/A
		Excavator	1	N/A
		Dump Truck	N/A	Avg. Peak 20 p/day for 4 weeks
		Concrete Truck	N/A	Avg. Peak 20 p/day for 4 weeks
		Boom Pump	N/A	Approx. 4 Move-ins
		Crane	N/A	Approx. 2 Move-ins

APPENDIX H

**EXISTING PLUS CONSTRUCTION
LEVEL OF SERVICE WORKSHEETS**

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.451
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 47 615 102 129 792 14 4 36 94 260 56 203
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: 47 615 102 129 792 14 4 36 94 260 56 203
Added Vol: 1 8 2 0 17 0 0 0 2 5 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 48 623 104 129 809 14 4 36 96 265 56 203
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 48 623 104 129 809 14 4 36 96 265 56 203
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 48 623 104 129 809 14 4 36 96 265 56 203
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: 48 623 104 129 809 14 4 36 96 265 56 203

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.03 0.12 0.06 0.08 0.24 0.01 0.00 0.02 0.06 0.08 0.03 0.12
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.414
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 1 0 0

Volume Module:
Base Vol: 18 706 3 48 1072 43 44 3 30 3 1 5
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: 18 706 3 48 1072 43 44 3 30 3 1 5
Added Vol: 0 7 1 23 0 0 0 0 1 0 7 0 4
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 18 713 4 71 1072 43 44 4 30 10 1 9
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 18 713 4 71 1072 43 44 4 30 10 1 9
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 713 4 71 1072 43 44 4 30 10 1 9
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: 18 713 4 71 1072 43 44 4 30 10 1 9

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.12 0.88 0.50 0.05 0.45
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 200 1500 850 85 765

Capacity Analysis Module:
Vol/Sat: 0.01 0.21 0.00 0.04 0.32 0.03 0.03 0.02 0.02 0.01 0.01 0.01
Crit Moves: ****

```

-----
Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)
*****
Intersection #3 Crown Valley Pkwy/Church Dwy
*****
Average Delay (sec/veh): 0.0 Worst Case Level of Service: B[ 10.8]
*****
Street Name: Crown Valley Pkwy Church Dwy
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 1 1 0 0 0 2 0 0 0 0 0 0 0 0 0 0 1
-----
Volume Module:
Base Vol: 0 727 7 0 1105 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: 0 727 7 0 1105 0 0 0 0 0 0 0 0
Added Vol: 0 1 13 0 7 0 0 0 0 0 0 0 7
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 728 20 0 1112 0 0 0 0 0 0 0 7
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 728 20 0 1112 0 0 0 0 0 0 0 7
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 728 20 0 1112 0 0 0 0 0 0 0 7
-----
Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.9
FollowUpTim:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 3.3
-----
Capacity Module:
Cnflict Vol: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 374
Potent Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 629
Move Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 629
Volume/Cap: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01
-----
Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 10.8
LOS by Move: * * * * * * * * * * * * * * * * * * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * * * * * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx xxxxxx 10.8
ApproachLOS: * * * * * * * * * * * * * * * * * * B
*****
Note: Queue reported is the number of cars per lane.
*****

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Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)
*****
Intersection #4 Crown Valley Pkwy/Lumeria Ln
*****
Average Delay (sec/veh): 0.1 Worst Case Level of Service: C[ 18.6]
*****
Street Name: Crown Valley Pkwy Lumeria Ln
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 1 1 0 1 0 2 0 0 0 0 0 0 1! 0 0
-----
Volume Module:
Base Vol: 0 727 2 3 1105 0 0 0 0 3 0 4
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: 0 727 2 3 1105 0 0 0 0 3 0 4
Added Vol: 0 15 0 0 7 0 0 0 0 0 0 0 7
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 742 2 3 1112 0 0 0 0 3 0 4
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 742 2 3 1112 0 0 0 0 3 0 4
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 742 2 3 1112 0 0 0 0 3 0 4
-----
Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxxx xxxxx xxxxx xxxxx xxxxx 6.8 6.5 6.9
FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3
-----
Capacity Module:
Cnflict Vol: xxxxx xxxxx xxxxx 744 xxxxx xxxxx xxxxx xxxxx xxxxx 1305 1861 372
Potent Cap.: xxxxx xxxxx xxxxx 873 xxxxx xxxxx xxxxx xxxxx xxxxx 154 74 631
Move Cap.: xxxxx xxxxx xxxxx 873 xxxxx xxxxx xxxxx xxxxx xxxxx 154 74 631
Volume/Cap: xxxxx xxxxx xxxxx 0.00 xxxxx xxxxx xxxxx xxxxx xxxxx 0.02 0.00 0.01
-----
Level of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del:xxxxx xxxxx xxxxx 9.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * * * A * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 271 xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.1 xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 18.6 xxxxx
Shared LOS: * * * * * * * * * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx xxxxxx 18.6
ApproachLOS: * * * * * * * * * * * * * * * * * * C
*****
Note: Queue reported is the number of cars per lane.
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy
*****
Cycle (sec):      100          Critical Vol./Cap.(X):      0.579
Loss Time (sec):   5           Average Delay (sec/veh):     xxxxxx
Optimal Cycle:    28           Level Of Service:           A
*****
Street Name:      Crown Valley Pkwy          Pacific Coast Hwy
Approach:         North Bound          South Bound          East Bound          West Bound
Movement:         L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:          Split Phase          Split Phase          Protected          Protected
Rights:           Include             Ovl                 Include             Ovl
Min. Green:       0 0 0              0 0 0              0 0 0              0 0 0
Y+R:              4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0        4.0 4.0 4.0
Lanes:            0 1 0 1 0          1 1 0 0 2          2 0 1 1 0          1 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:         13 28 26           198 33 776         421 503 10         30 949 193
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:      13 28 26           198 33 776         421 503 10         30 949 193
Added Vol:        0 0 0              2 0 5              9 0 0              0 0 5
PasserByVol:     0 0 0              0 0 0              0 0 0              0 0 0
Initial Fut:      13 28 26           200 33 781         430 503 10         30 949 198
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 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:       13 28 26           200 33 781         430 503 10         30 949 198
Reduct Vol:       0 0 0              0 0 0              0 0 0              0 0 0
Reduced Vol:     13 28 26           200 33 781         430 503 10         30 949 198
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:     13 28 26           200 33 781         430 503 10         30 949 198
OvlAdjVol:                351                                81
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:         1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:            0.39 0.83 0.78 1.72 0.28 2.00 2.00 1.96 0.04 1.00 2.00 1.00
Final Sat.:       660 1421 1319 2918 482 3400 3400 3334 66 1700 3400 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:          0.02 0.02 0.02 0.07 0.07 0.23 0.13 0.15 0.15 0.02 0.28 0.12
OvlAdjV/S:                0.10                                0.05
Crit Moves:      ****                **** ****                ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crown Valley Pkwy/Camino Del Avion

Cycle (sec): 100 Critical Vol./Cap.(X): 0.491
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Street Name: Crown Valley Pkwy Camino Del Avion
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 3 0 1 1 0 2 0 1 1 0 1 0 1 2 0 1 0 1

Volume Module:
Base Vol: 62 818 206 301 790 9 13 72 98 140 83 133
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: 62 818 206 301 790 9 13 72 98 140 83 133
Added Vol: 2 17 5 0 8 0 0 0 1 2 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 64 835 211 301 798 9 13 72 99 142 83 133
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 64 835 211 301 798 9 13 72 99 142 83 133
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 64 835 211 301 798 9 13 72 99 142 83 133
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: 64 835 211 301 798 9 13 72 99 142 83 133

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1700 5100 1700 1700 3400 1700 1700 1700 1700 3400 1700 1700

Capacity Analysis Module:
Vol/Sat: 0.04 0.16 0.12 0.18 0.23 0.01 0.01 0.04 0.06 0.04 0.05 0.08
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Crown Valley Pkwy/Sea Island Dr-Church Dwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.416
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Street Name: Crown Valley Pkwy Sea Island Dr-Church Dwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 0 1 0 0 0 0 1 0 0

Volume Module:
Base Vol: 26 1015 2 16 993 47 42 0 27 8 0 6
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: 26 1015 2 16 993 47 42 0 27 8 0 6
Added Vol: 0 15 1 11 0 0 0 0 0 15 1 8
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 26 1030 3 27 993 47 42 0 27 23 1 14
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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 26 1030 3 27 993 47 42 0 27 23 1 14
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 26 1030 3 27 993 47 42 0 27 23 1 14
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: 26 1030 3 27 993 47 42 0 27 23 1 14

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
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: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 0.00 1.00 0.60 0.03 0.37
Final Sat.: 1700 3400 1700 1700 3400 1700 1700 0 1700 1029 45 626

Capacity Analysis Module:
Vol/Sat: 0.02 0.30 0.00 0.02 0.29 0.03 0.02 0.00 0.02 0.01 0.02 0.02
Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Crown Valley Pkwy/Church Dwy

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.4]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflict Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Crown Valley Pkwy/Lumeria Ln

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: D[26.1]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Table with columns: Critical Gap Module, Critical Gp, FollowUpTim.

Table with columns: Capacity Module, Cnflict Vol, Potent Cap., Move Cap., Volume/Cap.

Table with columns: Level Of Service Module, 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

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

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crown Valley Pkwy/Pacific Coast Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.577
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Crown Valley Pkwy and Pacific Coast Hwy with North, South, East, and West bounds.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, and OvlAdjVol.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values.

Capacity Analysis Module table showing Vol/Sat, OvlAdjV/S, and Crit Moves.