

Native Design Architecture, L.L.C.
(772) 801-5224 O
(772) 519-1216 M

200 S. Indian River Drive, Suite 302
Fort Pierce, FL 34950
admin@natedesign.us

TRAFFIC STATEMENT

June 15, 2026

City of Port St. Lucie
Department of Public Works
c/o Mr. Francis Forman, City of PSL Planning Department
Airoso Blvd
Port St. Lucie, FL 34952
VIA EMAIL and PORTAL

Project:

Remade Church SEU Traffic Statement – PROJECT #P26052
490 Kentwood Rd
Port St. Lucie, FL 34953

Dear Mr. Forman:

Please in the forward this memorandum to the appropriate party at the Department of Public Works.
Thank you for your kind assistance.

Existing facility – Windmill Point HOA Recreation Center

3,871 GSF
Original parking layout 36 standard spaces, 10' x 20'
23' wide drive aisle

Proposed facility – Remade Church Worship Center and Offices

No proposed change in area (3,871 GSF)
Change of Use and Occupancy
Proposed seats in worship hall: 120 seats in rows
Additional parking TBD, as required by City of Port St. Lucie code. Sunday morning overflow parking on stabilized grass will be installed, in order to maximize permeable area.

Hours of Operation:

Office hours	Monday – Thursday	10 a.m. to 2 p.m.	2-5 staff
Small group mtgs	Wednesday	7 p.m. – 9 p.m.	up to 30 participants
Worship rehearsal	Thursday	7 p.m. – 9 p.m.	up to 15 participants
Occasional events	Saturday	varies	varies
Worship services	Sunday	8 a.m. – 1 p.m.	up to 135 participants (15 team, 120 congregants)

SUMMARY OF FINDINGS per ITE Trip Generation Manual, 11th Edition

(Data shown per **highlighted** calculations below)

Use type:	Weekday Peak	Weekday hourly	Sunday peak hour
Rec Center	61 trips	(not available)	(not available)
Church	7 trips	12 trips	42 trips
Less intense use:	Church	Church (likely)	Rec center (likely)

STATEMENT OF FINDINGS:

The proposed Church use will probably result in less traffic during the week, but likely more traffic on Sunday mornings within an hour of morning worship. Due to the lack of statistically significant data available in the ITE Manual, this is a professional opinion.

Calculations

Existing facility traffic – Windmill Point HOA Recreation Center

Recreational Community Center

Land Use Code 495

Assuming employee count of 10 (director, admin assistant, janitor, groundskeeper, lifeguard, concessionaire, and 4 instructors / activity leaders / child care providers)

Gross Floor Area: 3,871 GSF (area calc); 4,097 GSF (pasc.gov "under air" area), rounded to 4,000SF.

No data available for membership count.

No statistically significant studies available for weekend traffic.

Weekday – peak p.m. hour per employee

(study avg 146 employees, 5 studies)

$$\ln(T) = 0.89 \ln(x) + 1.58$$

$$\ln(T) = 0.89 \ln(10) + 1.58 = 0.89(2.31) + 1.58 = 3.63 = \ln(T)$$

$$T = 37.71 \text{ or } 38 \text{ trips}$$

Weekday – peak p.m. hour per employee

(study avg 146 employees, 6 studies)

$$T = 2.42(x) + 34.81$$

$$T = 2.42(10) + 34.81 = 59.01$$

$$T = 59 \text{ trips}$$

Weekday – peak p.m. hour per 1,000 GSF

(study avg 143,000 GSF, 11 studies)

$$\ln(T) = 0.50 \ln(x) + 3.42$$

$$\ln(T) = 0.50 \ln(4) + 3.42 = 0.50(1.39) + 3.42 = 4.11 = \ln(T)$$

$$T = 61.14 \text{ or } 61 \text{ trips}$$

Weekday – peak p.m. hour per 1,000 GSF

(study avg 124,000 GSF, 15 studies)

$$\ln(T) = 0.71 \ln(x) + 2.31$$

$$\ln(T) = 0.71 \ln(4) + 2.31 = 0.71(1.39) + 2.31 = 3.29 = \ln(T)$$

$$T = 26.96 \text{ or } 27 \text{ trips}$$

Weekday – peak a.m. hour per employee

(study avg 146 employees, 5 studies)

$$\ln(T) = 0.58 \ln(x) + 2.73$$

$$\ln(T) = 0.58 \ln(10) + 2.73 = 0.58(2.30) + 2.73 = 4.07 = \ln(T)$$

$$T = 58.29 \text{ or } 58 \text{ trips}$$

Weekday – peak a.m. hour per 1,000 GSF

(study avg 142,000 GSF, 11 studies)

$$\ln(T) = 0.47 \ln(x) + 3.28$$

$$\ln(T) = 0.47 \ln(4) + 3.28 = 0.47(1.39) + 3.28 = 3.93 = \ln(T)$$

$$T = 50.99 \text{ or } 51 \text{ trips}$$

Walk + bike + transit per 1,000 GSF

(study avg 245,000 GSF, 4 studies)

$$T = 0.21(x) - 15.53$$

$$T = 0.21(4) - 15.53 = \text{less than zero}$$

Proposed facility traffic – Remade Church Worship Center and Offices

Church

Land Use Code 560

Proposed seats: 120

Proposed Gross Floor Area: 3,871 GSF (area calc); 4,097 GSF (paslc.gov “under air” area), rounded to 4,000SF.

Sundays – trips per 1,000 GSF area

(study avg 40,000 SF church, 16 studies)

$$T = 7.87(x) + 93.13$$

$$T = 7.87(4) + 93.13 = 124.61 \text{ peak trips}$$

$$T = 125 \text{ trips} / 3 \text{ hours} = 41.67$$

$$T = 42 \text{ trips}$$

Sundays (peak hour) – trips per seat

(study avg 840 seat church, 14 studies)

$$T = 0.53(x) - 21.83$$

$$T = 0.53(120) - 21.83 = 41.77 \text{ peak trips}$$

$$T = 42 \text{ peak hour trips}$$

Weekdays – peak a.m. hour, trips per 1,000 GSF

(study avg 40,000 SF church)

$$T = 0.37(x) - 1.84$$

$$T = 0.37(4) - 1.84 = 0$$

Weekdays – peak p.m. hour, trips per 1,000 GSF

(study avg 35,000 SF church, 11 studies)

$$T = 0.36(x) + 4.70$$

$$T = 0.36(4) + 4.7 = 6.14 \text{ @ peak evg hr}$$

$$T = 7 \text{ peak pm hour trips}$$

(study avg 37,000 SF church)

$$T = 0.22(x) + 21.72$$

$$T = 0.22(4) + 21.72 = 22.6 \text{ @ peak evg hr}$$

T = 23 peak pm hour trips
May have been based on evening event

Weekday, all day, trips per seat
(study avg 524 seats)

$$T = 0.93(x) - 16.74$$

$$T = 0.93(120) - 16.74 = 94.86$$

T = 95 per day, or 12 per hour 9am to 5pm

Weekday, all day, trips per 1,000 GSF area
(study avg 23,000 SF church)

$$T = 5.40(x) + 50.83$$

$$T = 5.4(4) + 50.83 = 72.43$$

T = 73 trips per day, or 9 per hour 9am to 5pm

Valerie Dekle Slack

Valerie Dekle Slack, AIA, NCARB, LEED BD+C

15 June 2026

Date

