

Memorandum

To: Jennifer Liston
Zyscovich, Inc.
100 Biscayne Boulevard, 27th Floor
Miami, FL 33132

From: J. Suzanne Danielsen, P.E.

Date: September 23, 2024

Re: **YMCA of South Florida - Fort Lauderdale, Florida**
Traffic and Parking Statement

As requested, Danielsen Consulting Engineers, Inc. (DC Engineers, Inc.) has prepared this traffic and parking statement specific to development of a new 45,953 square foot YMCA facility, and a 12-bed 12,951 square foot Broward Health medical center at 840/845 N. Federal Highway (SR 5/US 1) (along the east side of N. Federal Highway (SR 5/US 1) north of NE 8 Street) within municipal limits of the City of Fort Lauderdale. Figure 1 shows the location of the project site.

TRIP GENERATION ANALYSIS

The project site is currently vacant. The Parker, an entertainment venue, is located east of the project site while public rights of way border the south, west and north property lines. Vehicular access is proposed at three (3) locations: one (1) two-lane, two-way driveway along NE 8 Street, one (1) one-lane, one-way driveway along NE 6 Terrace and one (1) two-lane, two-way driveway along NE 9 Street. A current site plan is included as Attachment A.

Trip Generation

A trip generation analysis has been completed for the proposed YMCA and medical center using rates and formulae published in the Institute of Transportation Engineer's (ITE) report *Trip Generation* (11th Edition). The trip generation analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. According to the referenced ITE report, the most appropriate land use categories and corresponding rates for the proposed development are as follows:

Recreational Community Center – ITE Land Use #495

- Weekday: $\ln(T) = 0.98\ln(X) + 3.42$
where T = number of trips and X = gross floor area (GFA)
- AM Peak Hour: $T = 1.91(X)$ (66% in / 34% out)
- PM Peak Hour: $\ln(T) = 0.71\ln(X) + 2.31$ (47% in / 53% out)

Hospital – ITE Land Use #610

- Weekday: $T = 22.32(X)$
where T = number of trips and X = beds
- AM Peak Hour: $T = 1.79(X)$ (72% in / 28% out)
- PM Peak Hour: $T = 1.69(X)$ (33% in / 67% out)

The results of this effort are documented in report Table 1 'Trip Generation Summary Proposed Uses'. As shown in Table 1, the proposed YMCA facility and Broward Health medical center are expected to produce 1,617 vehicle trips per day (vpd) with 112 vehicle trips occurring during the AM peak hour (75 entering and 37 exiting) and 175 vehicle trips occurring during the PM peak hour (80 entering and 95 exiting).

PARKING ANALYSIS

Off-street parking requirements specific to the City of Fort Lauderdale require 320 parking spaces for the land uses proposed. Table 2 below shows each land use, parking rate and number of spaces required by code. The current site plan (Attachment A) shows the proposed development will provide 161 parking spaces (50%).

Table 2: Parking Generation (Fort Lauderdale ULDR's)

Land Use	Intensity (sf)	Rate	Parking Spaces
Wellness Areas	22,295	1/200	111.5
Youth Development	2,736	1/325	8.4
Assembly	2,179	1/400	5.4
Locker Rooms/Restrooms	3,377	1/250	13.5
Office (YMCA/City)	2,578	1/250	10.3
Circulation/Lobby/Storage	9,920	1/250	39.7
Equipment/Stairs	2,868	-	-
Subtotal	45,953		188.8
Hospital	12,951 (12 beds)	2/bed	24.0
Subtotal	12,951		24.0
Pool-Lap	3,555	1/200	17.8
Pool-Teaching Pool	1,245	1/200	6.2
Subtotal	4,800		24.0
Total			236.8

Historic data published by the Institute of Transportation Engineers (ITE) in the document *Parking Generation* (6th Edition) has been considered in place of rates provided within the City's Unified Land Development Regulations for the proposed uses. Table 3 below shows that the ITE parking generation rates yield a project-specific parking demand of 154.6 parking spaces. Although rates and formulae for LUC 495 'Recreational Community Center' include many onsite educational/athletic opportunities including nursery school, meeting rooms, swimming pools and saunas, to provide a conservative analysis parking demand for the swimming pools was calculated separately using ULDR rates.

Table 3: Parking Generation (ITE)

Land Use	Intensity (sf)	Rate	Parking Spaces
Wellness Areas	22,295		
Youth Development	2,736		
Assembly	2,179		
Locker Rooms/Restrooms	3,377		
Office (YMCA/City)	2,578		
Circulation/Lobby/Storage	9,920		
Equipment/Stairs	2,868		
Subtotal (LUC 495)	45,953	P=1.44(X)+17.73	83.9
Hospital	12,951 (12 beds)		
Subtotal (LUC 610)	12,951	P=3.89(X)	46.7
Pool-Lap	3,555		
Pool-Teaching Pool	1,245		
Subtotal	4,800	1/200*	24.0*
Total			154.6

*City ULDR rate.

With 161 parking spaces provided, the proposed YMCA facility is expected to have adequate parking to meet all anticipated needs.

CONCLUSION

Based upon the foregoing analysis, the proposed project will likely require a comprehensive traffic impact study for the following reason:

- Unified Land Development Regulations (ULDR's) specific to the City of Fort Lauderdale stipulate that when a proposed project generates more than 1,000 net new vehicle trips per day, a comprehensive traffic study is required. The proposed YMCA of South Florida, as proposed, is expected to produce 1,617 vehicle trips per day as shown in Table 1.

In addition, historic data published by the Institute of Transportation Engineers (ITE) in the document *Parking Generation* (6th Edition) shows that ITE parking generation rates yield a project-specific parking demand of 154.6 parking spaces. With 161 parking spaces provided, the proposed YMCA facility is expected to have adequate parking to meet all anticipated needs.

DC ENGINEERS, INC.

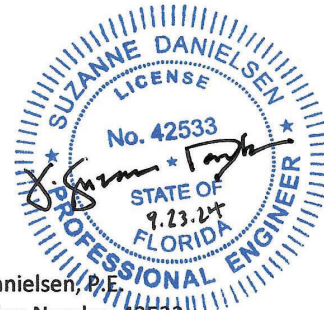
Of course, please do not hesitate to contact me directly with any questions you may have.

Sincerely,

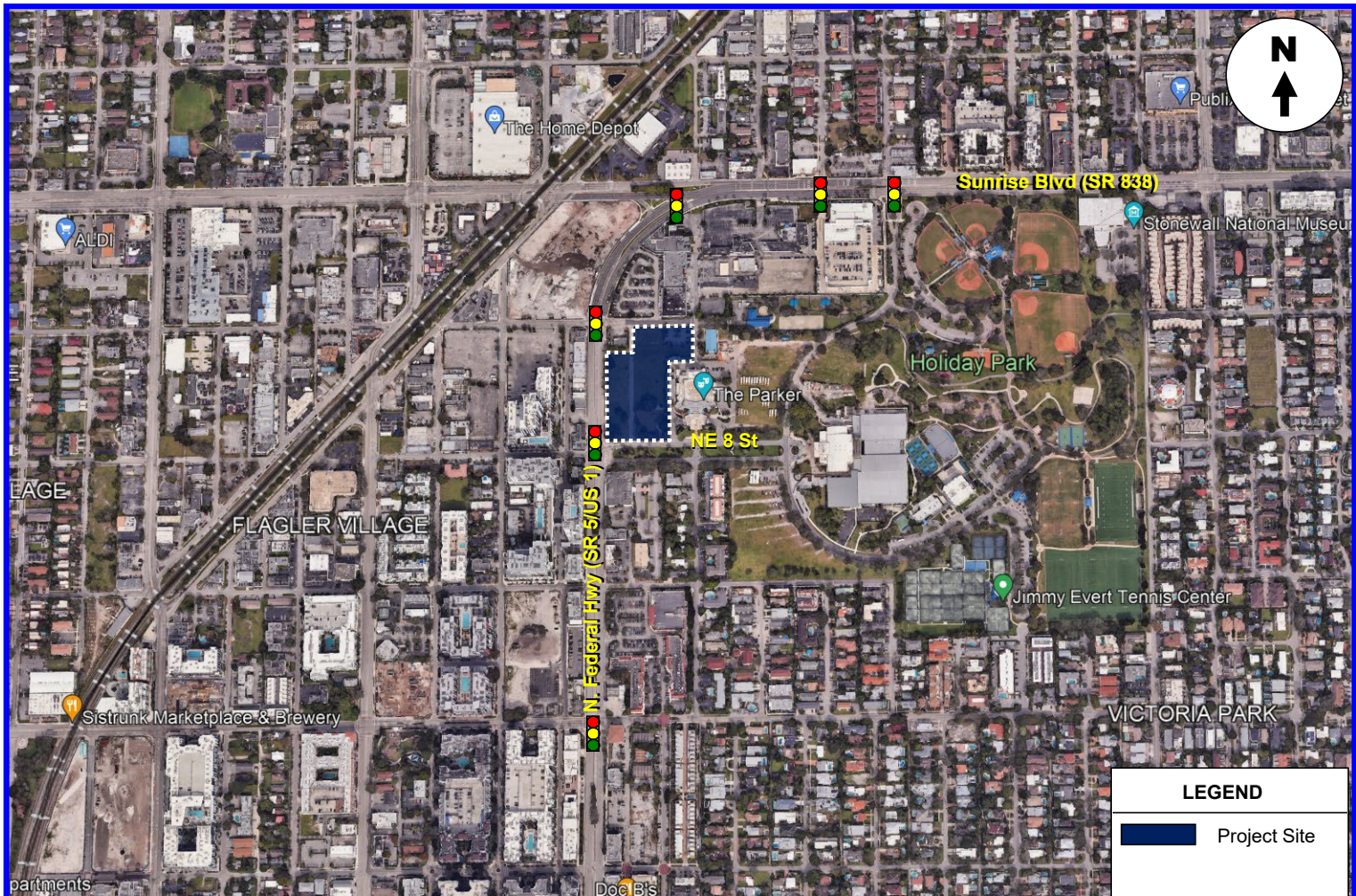
DC ENGINEERS, INC.



J. Suzanne Daniels, P.E.
Senior Transportation Engineer



J. Suzanne Daniels, P.E.
Florida Registration Number 42533
Danielsen Consulting Engineers, Inc.
12743 NW 13th Court
Coral Springs, FL 33071
CA # 32022



DC Engineers, Inc.

Project Location Map

FIGURE 1
YMCA
Fort Lauderdale, Florida

Table 1: Trip Generation Summary Proposed Uses

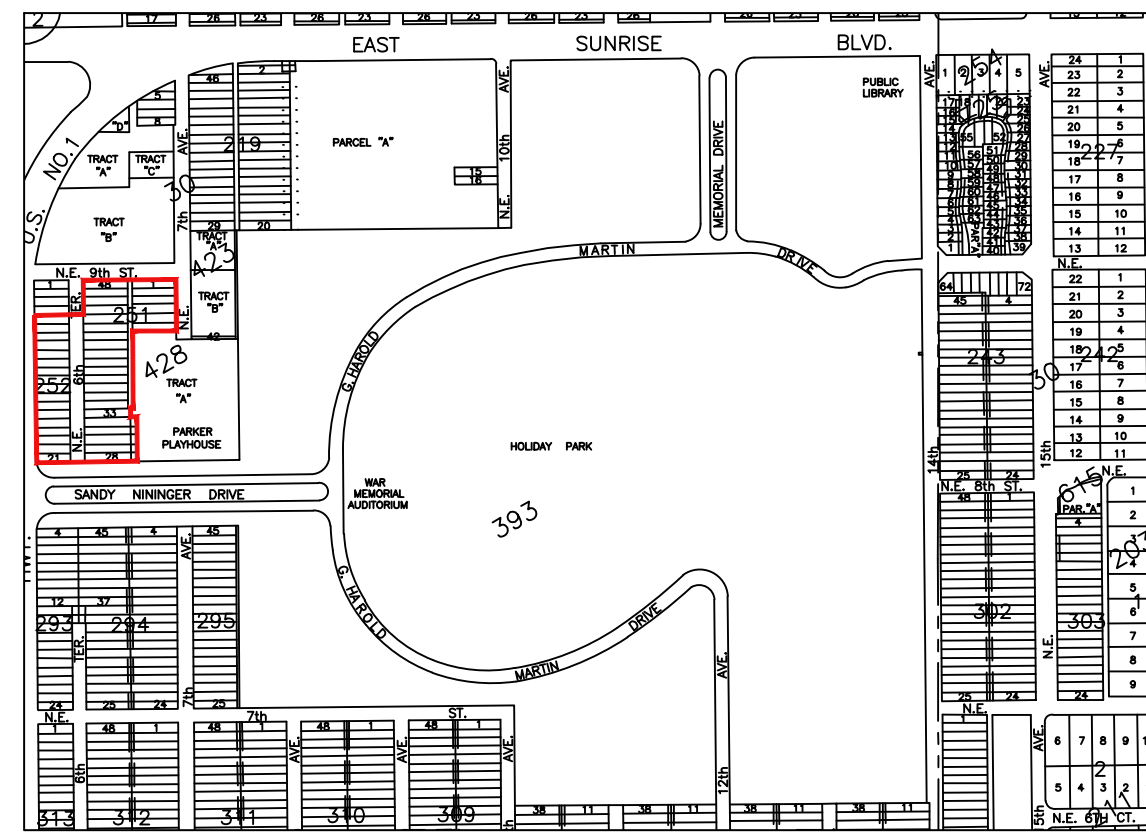
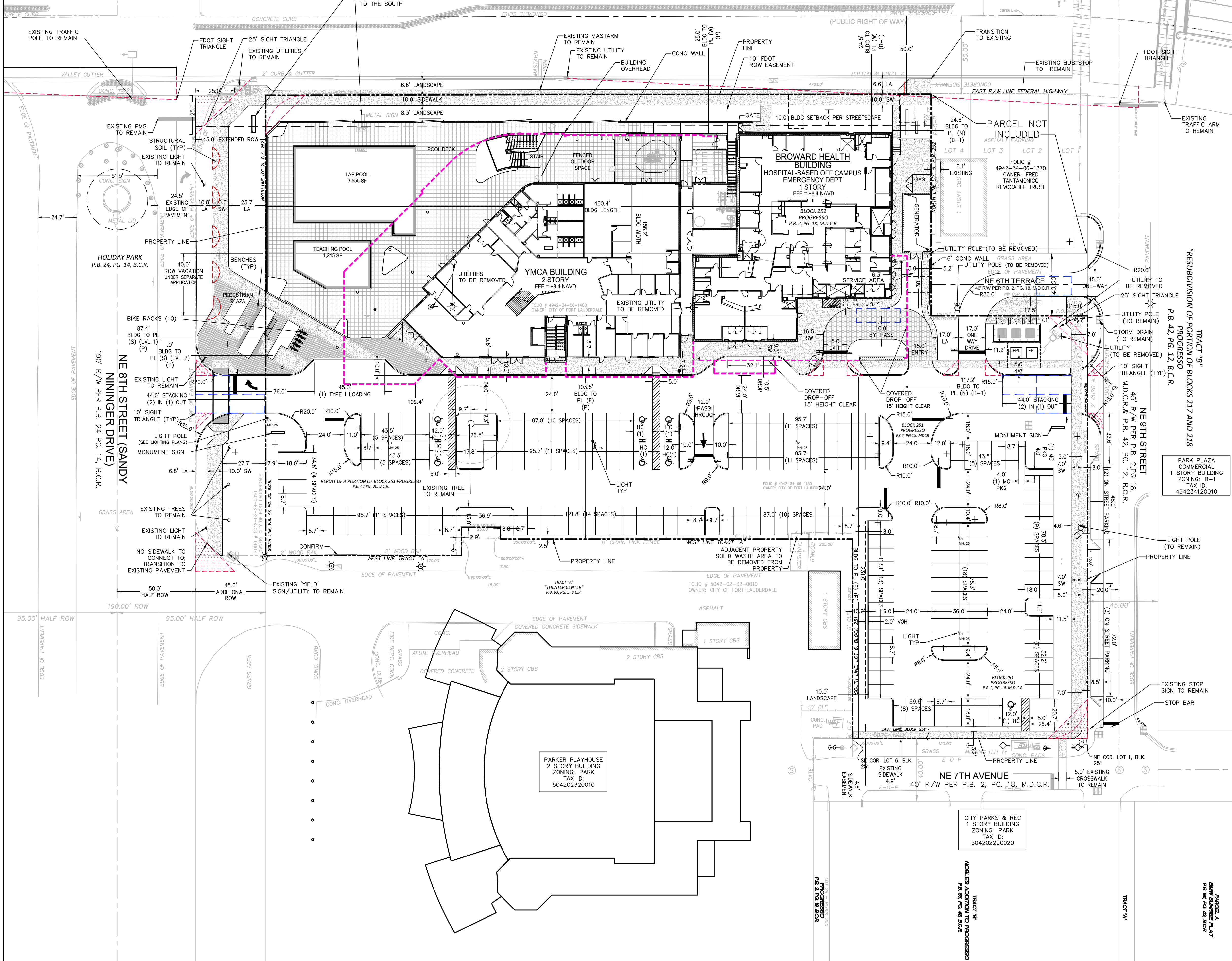
Land Use	Scale	Units	AM Peak Hour			PM Peak Hour			Daily
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound	Total Trips
Recreational Community Center (LUC 495)*	50.753	ksf	97	64	33	164	77	87	1,434
Hospital (LUC 610)	12	beds	21	15	6	20	7	13	268
Subtotal			118	79	39	184	84	100	1,702
Internal (0%, 0%)			0	0	0	0	0	0	0
Subtotal			118	79	39	184	84	100	1702
Multi-Modal Reduction (5%)			(6)	(4)	(2)	(9)	(4)	(5)	(85)
Total			112	75	37	175	80	95	1,617

Source: ITE Trip Generation Manual (11th Edition)

* Includes 45,953 sf building area and 4,800 sf pool area.

ATTACHMENT A

FEDERAL HIGHWAY (S.R. NO. 5)
FDOT R/W MAP SECTION 86020-2107



LOCATION MAP
NTS

LEGAL DESCRIPTION

PROGRESSO REPLAT POR 251 47-30B W 18 LOTS 17 THRU 21 & LOTS 28 THRU 31 & TOGETHER WITH W 7.50 OF LOTS 7 THRU 15 & LOTS 34 THRU 41 BLK 251 OF PROGRESSO PER 2-180; PROGRESSO 2-18 D LOT 5 THRU 21 LESS STATE ROAD BLK 252; PROGRESSO 2-18 D LOTS 1 THRU 6, LOTS 42 THRU 48 ALL IN BLK 251 (SEE SURVEY FOR FULL DESCRIPTION)

SETBACK TABLE (B-1): (MEDICAL)	REQUIRED	PROVIDED
FRONT YARD (EAST) - ADJ PROP/NE 9TH ST	5' TO PL	24.5' TO PL
REAR YARD (WEST) - N FEDERAL HWY	0' TO PL	24.5' TO PL
SIDE YARD (NORTH) - ADJ PROPERTY	5' TO PL	24.6' TO PL (9TH ST)

SETBACK TABLE (P): (YMCA)	REQUIRED	PROVIDED
SIDE YARD (WEST) - N FEDERAL HWY	25' TO PL	25.0' TO PL
FRONT YARD (SOUTH) - NE 8TH ST	25' TO PL	25.0' TO PL (LEVEL 2)
SIDE YARD (EAST) - NE 7TH AVE/ADJ PROP	25' TO PL	104.2' TO PL

SITE PLAN DATA TABLE:

CURRENT USE OF PROPERTY	VACANT
CURRENT LAND USE DESIGNATION	RECREATION & OPEN SPACE / COMMERCIAL
PROPOSED LAND USE DESIGNATION	RECREATION & OPEN SPACE / COMMERCIAL (PUBLIC PURPOSE)
CURRENT ZONING DESIGNATION	P / B-1
PROPOSED ZONING DESIGNATION	P / B-1 (PUBLIC PURPOSE)
ADJACENT ZONING DESIGNATION - E, N & S	P / B-1
WATER & WASTEWATER SERVICE PROVIDER	CITY OF FORT LAUDERDALE
TOTAL SITE AREA (INCLUDES SF WITHIN ROW VACATION)	155,134 SF / 3.56 ACRES
TOTAL PERVIOUS PROPOSED (LANDSCAPE)	18,382 SF 12%
TOTAL PERVIOUS EXISTING (LANDSCAPE)	142,960 SF 92%
TOTAL IMPERVIOUS PROPOSED	94,609 SF 61%
TOTAL IMPERVIOUS EXISTING	12,174 SF 8%
TOTAL BUILDING FOOTPRINT PROPOSED	42,143 SF 27%
TOTAL BUILDING FOOTPRINT EXISTING	0 SF 0%

LOT COVERAGE	51,718 SF	33.3%
--------------	-----------	-------

TOTAL BUILDING SQUARE FOOTAGE PROPOSED	58,904 GROSS SF
FLOOR AREA RATIO (F.A.R.)	58,904 / 155,134 = 2.77

PROPOSED USE (YMCA-COMMUNITY CENTER)	45,953 SF
PROPOSED USE (MEDICAL CLINIC)	12,951 SF

BUILDING HEIGHT	53'-6" (YMCA) / 26'-8" (BH)
NUMBER OF STORIES	2 STORIES (YMCA) / 1 STORY (BH)
BUILDING WIDTH & LENGTH	401' X 156'

VJA AREA	60,233 SF	38.8%
PEDESTRIAN WALKS & PLAZAS	34,376 SF	22.2%

OPEN SPACE:	REQUIRED SF / %	PROVIDED SF / %
OPEN SPACE*	0 SF / 0%	42,836 SF / 27.6%

PARKING DATA:	AREA	RATIO	CODE REQUIRED	PROVIDED*
WELLNESS AREAS	22,295 SF	1/200 SF	111.5	
YOUTH DEVELOPMENT	2,736 SF	1/325 SF	8.4	
ASSEMBLY	2,179 SF	1/400 SF	5.4	
LOCKER ROOMS/RESTROOMS	3,377 SF	1/250 SF	13.5	
OFFICE (YMCA/CITY)	2,578 SF	1/250 SF	10.3	
CIRCULATION/LOBBY/STORAGE	9,920 SF	1/250 SF	39.7	
EQUIPMENT/STAIRS	2,868 SF	0 SF	0.0	
SUBTOTAL	45,953 SF		188.8	

HOSPITAL	12 BEDS	2/BED	24.0
SUBTOTAL	12,951 SF		

POOL-LAP	3,555 SF	1/200 SF	17.8
POOL-TEACHING POOL	1,245 SF	1/200 SF	6.2
			24.0

TOTAL	236.8	161.0
-------	-------	-------

OFF-SITE PARKING AGREEMENT FOR 22 PARKING SPACES FOR THE CITY (PARKS & REC DEPT) LOCATED AT 844 NE 7TH AVE.

LOADING / STACKING DATA:

USES:	GSF	REQUIRED	PROVIDED
COMMUNITY CENTER / OFFICE	45,953 SF	1 TYPE I	1 TYPE I
HOSPITAL	12,951 SF	0	0
		1 TYPE I	1 TYPE I

STACKING REQ.:	IN-BOUND REQUIRED	IN-BOUND PROVIDED	OUT-BOUND REQUIRED	OUT-BOUND PROVIDED
NE 8TH STREET	2	2	1	1
NE 9TH STREET	2	2	1	1

* STACKING REQUIREMENT PER ULDR SEC 47-20.5.C.6.

Revisions		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Phase:
DRC
DOCUMENTS

SEAL