#### PROJECT INFORMATION

**DESCRIPTION:** Four Story MIxed Use Office/Retail/ Residential

**SITE AREA:** 19,515 Sq. Ft. (.45 Acres)

BUILDING FOOTPRINT: 15,484 Sq. Ft.

BUILDING AREA: 1st Floor = 14,824 Sq. Ft. Alley = 17,784 Sq. Ft. 2nd Floor= 13,114 Sq. Ft. Sub Alley Lvl.1= 17,152 Sq. Ft. 3rd Floor = 22,268 Sq. Ft. S A Lvl. 2 Op 1= 13,451 Sq. Ft.

= 14,819 Sq. Ft.

Total = 48,387 Sq. Ft.

= 65,025 Sq. Ft.

**Grand Total** = 113,412 Sq. Ft.

**OCCUPANCY CLASSIFICATION:** Mixed Use- B Business, A-2 Assembly, M Mercantile,

R-2 Residential, S-2 Storage

**CLASS OF CONSTRUCTION:** Type 1B Sprinklered

BUILDING HEIGHT: 60' - 8 1/2" From Monroe Street

**FIRE PROTECTION:** Building Shall Have Smoke Detectors and Fire Alarms Per Governing Code. Life Safety Per 2006 NFPA 101 Life Safety Code. Sprinklers per NFPA 13

### **UNIT COUNT**

Description	Sq. Ft.	1st FL.	2nd FL.	3rd FL.	PENT.	Total
RETAIL SPACE	14,824	5				
OFFICE SPACE	13,114		4			
TYPE "A" 2 BEDROOM IZ	660			1		1
TYPE "B" 2 BEDROOM/DEN	2,100			1		1
TYPE "C" 1 BEDROOM/DEN	1,295			1	2	3
TYPE "D" 2 BEDROOM/DEN	2,525			1		1
TYPE "E" 1 BEDROOM/DEN	1,761			1	1	2
TYPE "F" 1 BEDROOM IZ	543			1	1	2
TYPE "G" 1 BEDROOM/DEN	1,078			1	1	2
TYPE "H" 1 BEDROOM/DEN	1,069			1	1	2
TYPE "J" 2 BEDROOM	2,110			1	1	2
TYPE "K" 1 BEDROOM/DEN	1,440			1		1
TYPE "L" 1 BEDROOM	543			2		2
TYPE "M" 1 BEDROOM/DEN	1,430			1		1
TYPE "N" 2 BEDROOM/DEN	1,430			1		1
TYPE "O" 2 BEDROOM/DEN	1,360			1		1
TYPE "P" 1 BEDROOM	1,815				1	1
TYPE "Q" 1 BEDROOM	2,600				1	1
total residential units				15	9	24

## FIELDHOUSE STATION

1501 MONROE ST. **MADISON**, WI 53711

#### **OWNER**

#### **WISCONSIN AVE ASSOCIATES**

1501 MONROE ST. MADISON, WI 53711 PHONE: 608.283.6100 FAX: 608.283.6101

#### **ARCHITECT**

#### **SIEGER ARCHITECTS**

1501 MONROE ST. MADISON, WI 53711 PHONE: 608.283.6100 FAX: 608.283.6101 siegerarchitects@sbcglobal.net

# CONCEPT #4

# **UDC INITIAL APPROVAL**

DATE: 02.28.07

REVISED DATE: 05.11.07

### SHEET INDEX

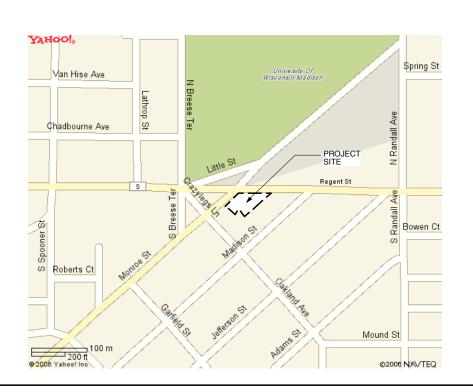
SITE

C1.0 Existing Site Plan/Demo C1.1 Concept Grading & Utilities Plan **C1.2** Landscaping/Lighting Plan C1.3 Fire Protection Plan

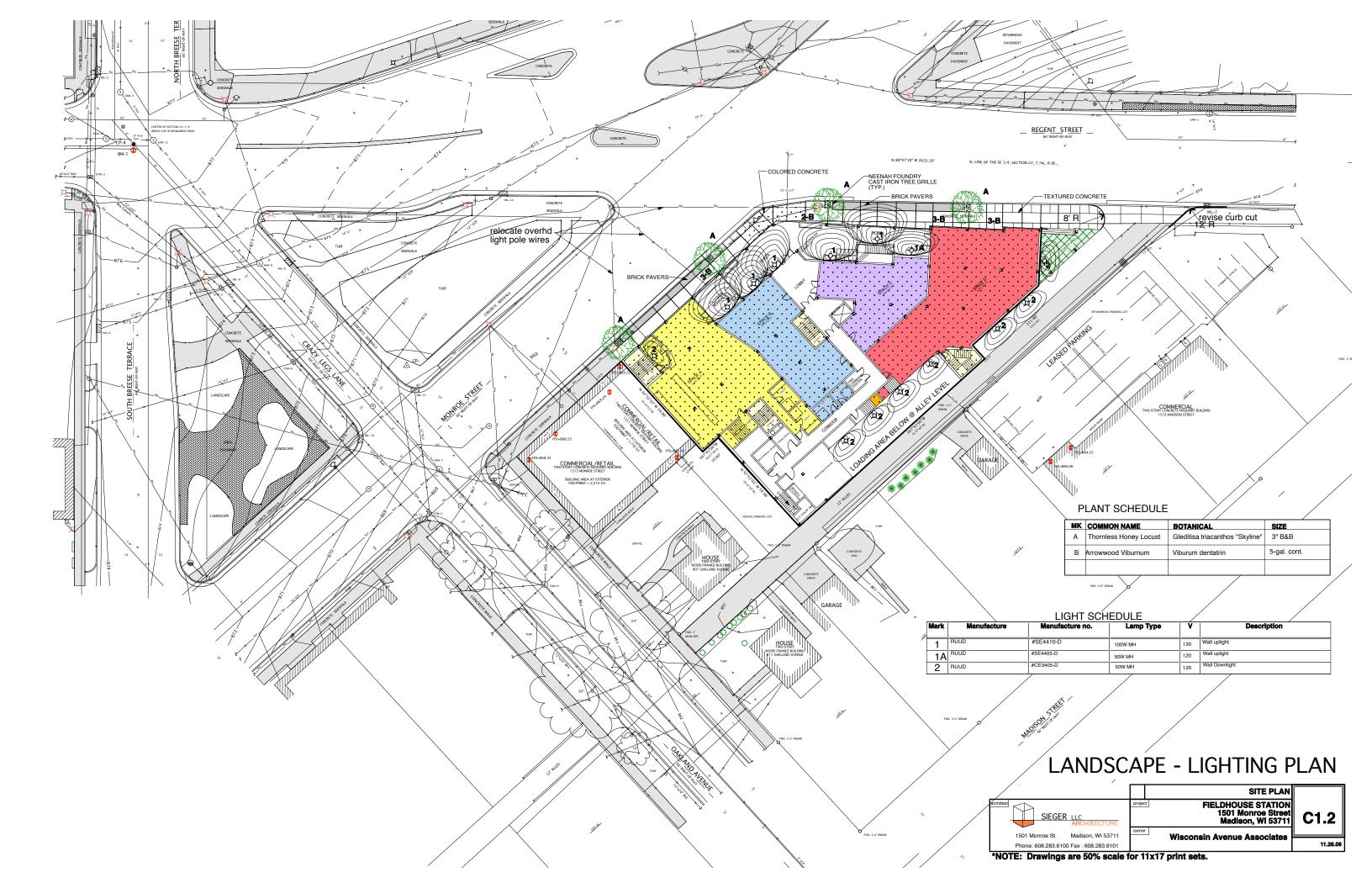
**C1.4 Aerial Photo** 

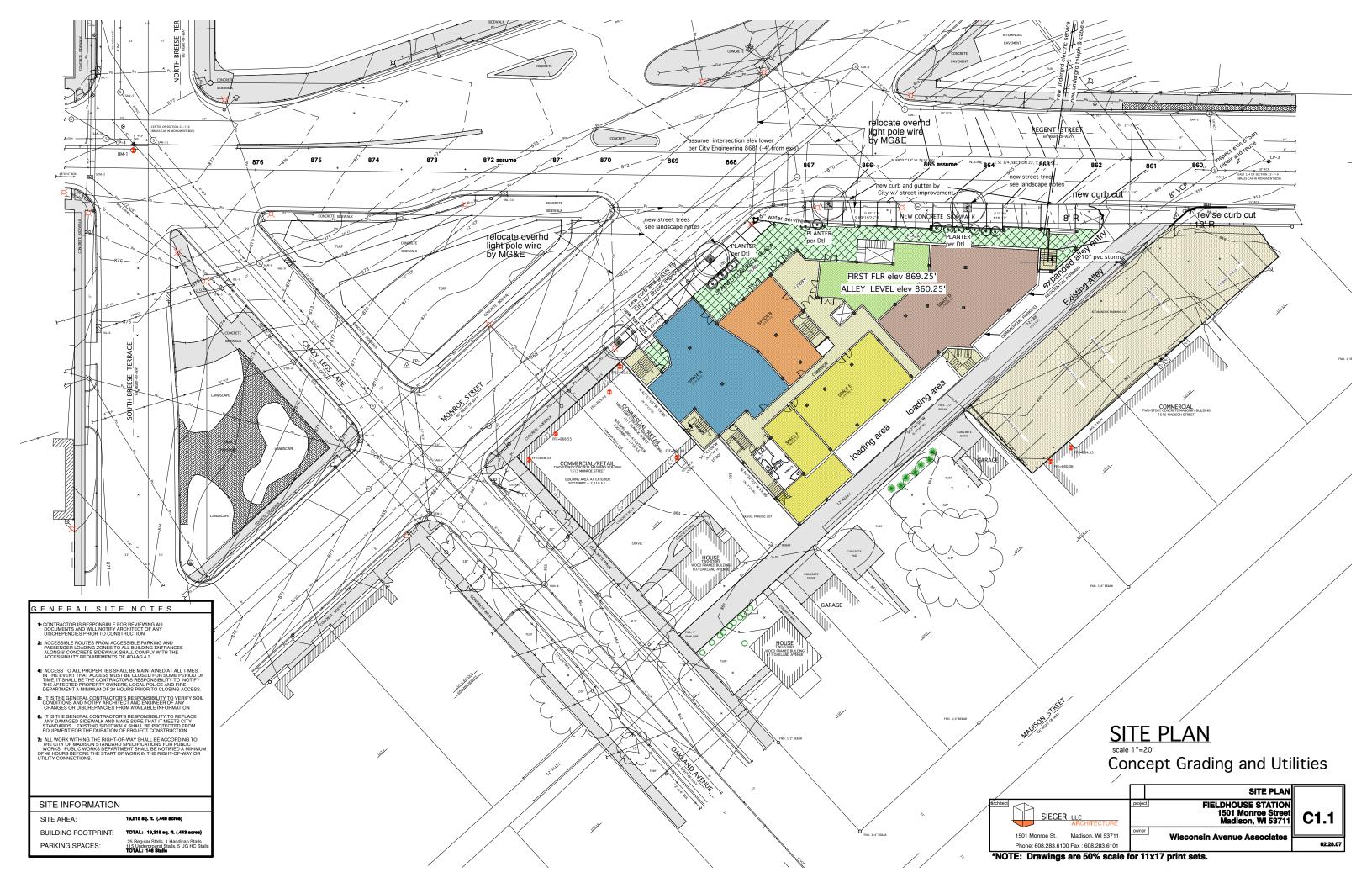
#### **ARCHITECTURAL**

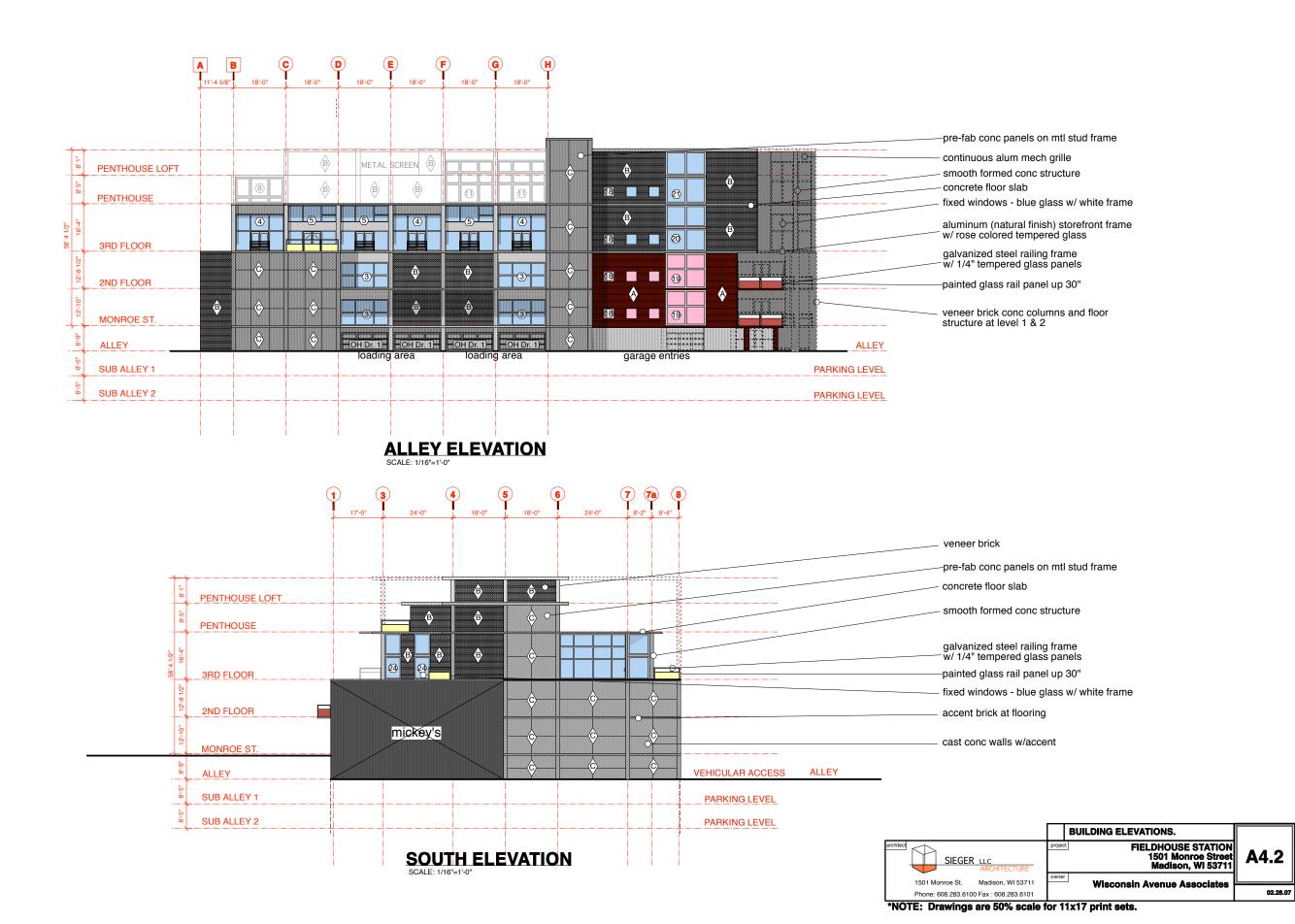
**Exterior Building Elevations** Exterior Building Elevations A4.2

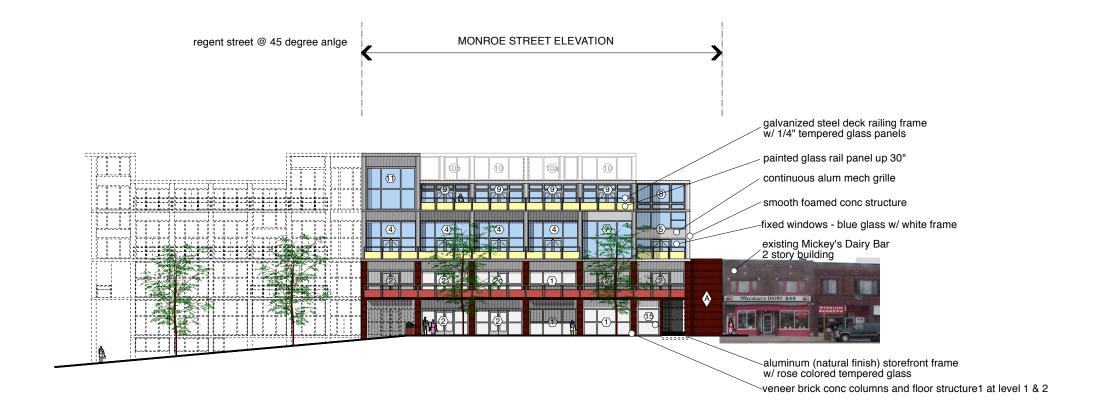




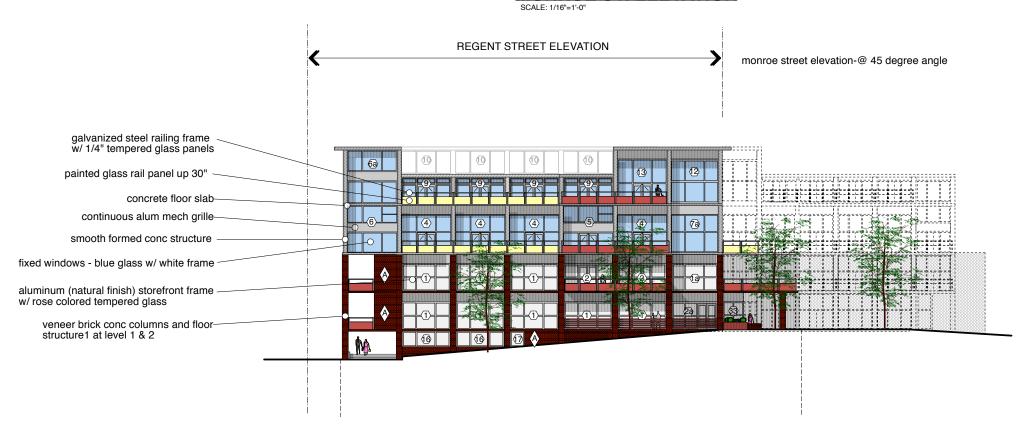




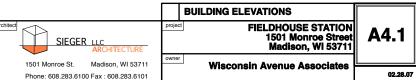


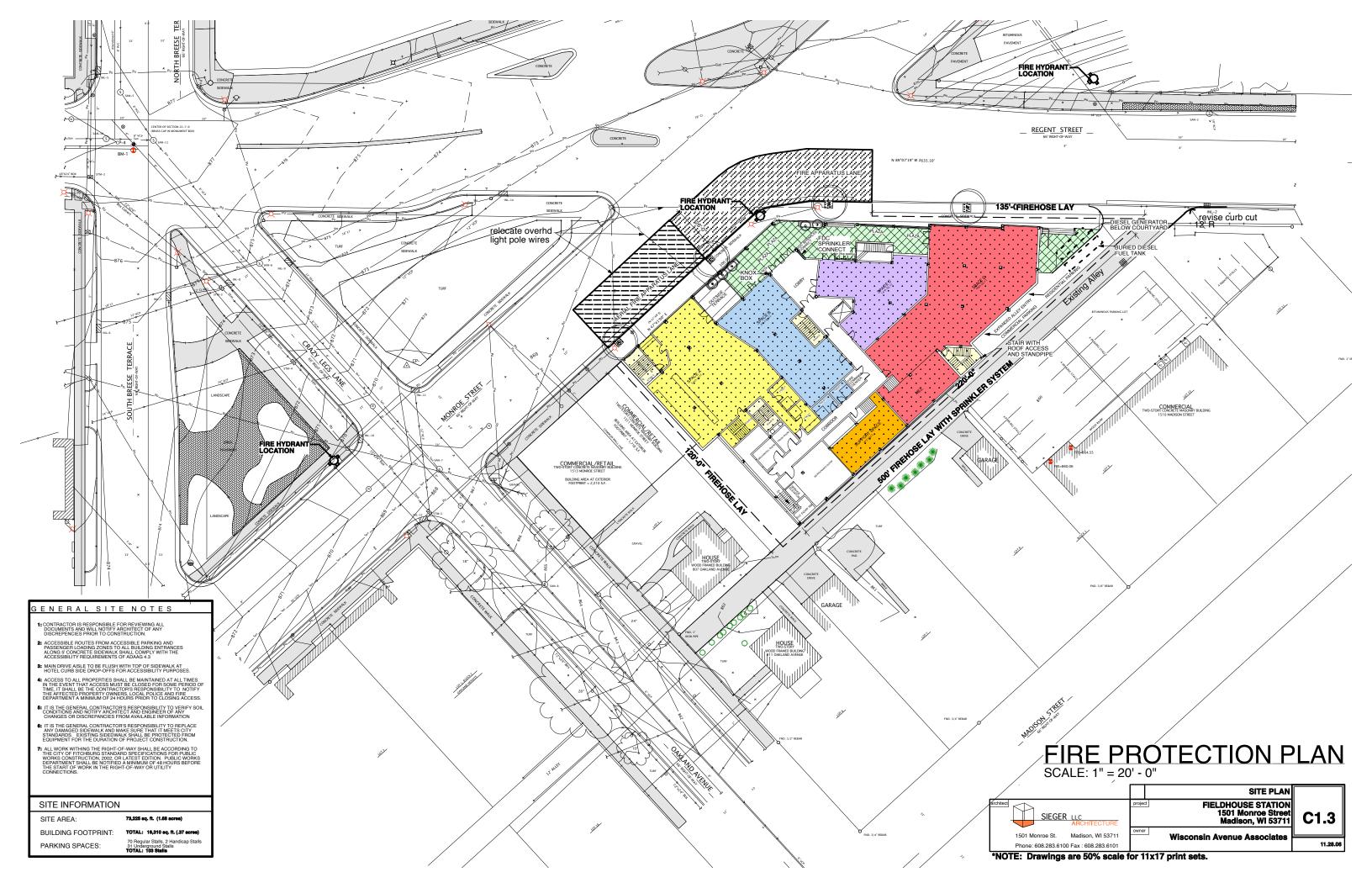


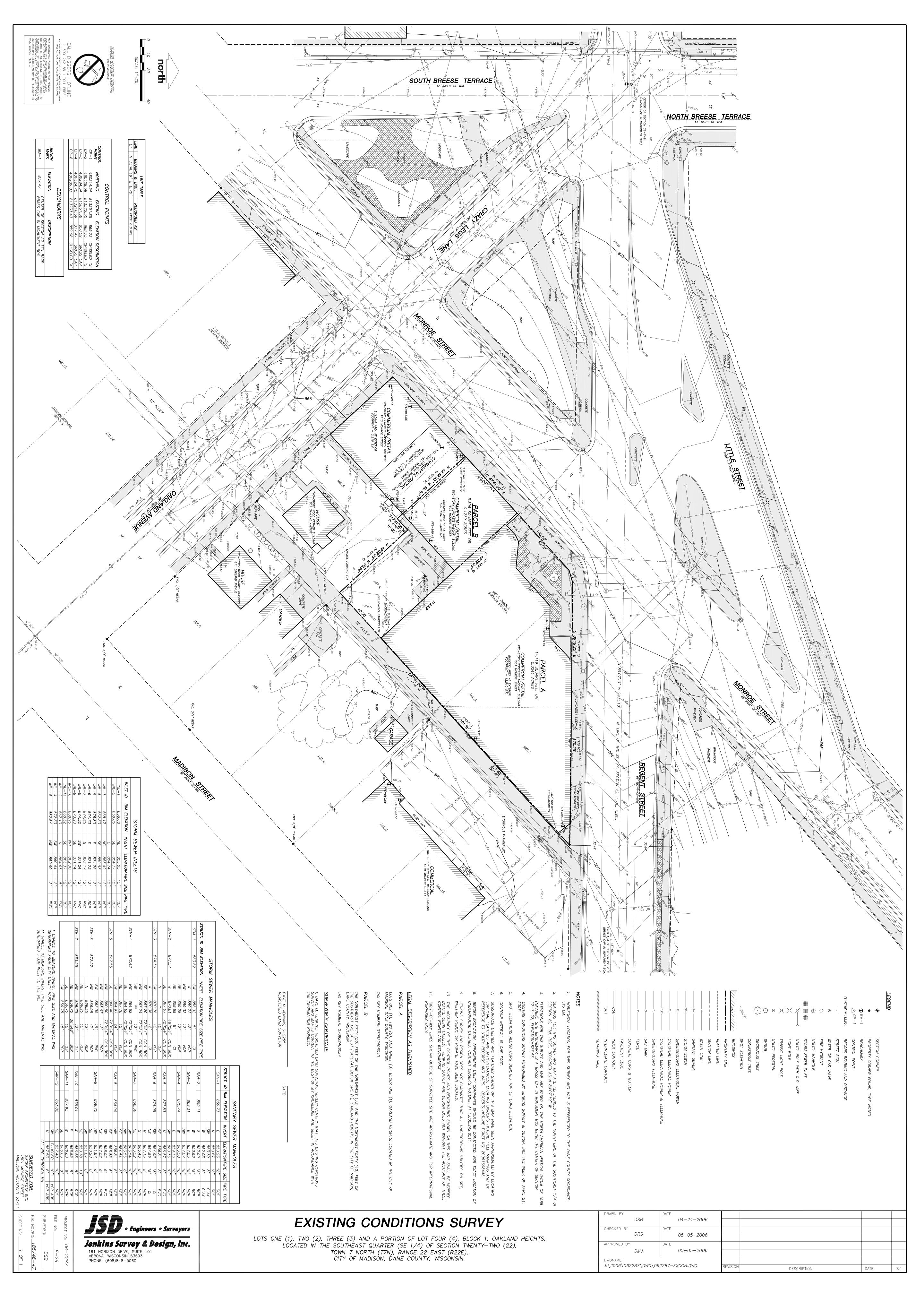
#### **MONROE ST. ELEVATION**



REGENT ST. ELEVATION









December 18, 2006

RE: Sieger Architecture, LLC Fieldhouse Station SEH No. A-SEIGE0602.00 14.00

Dan McCormick Traffic Engineer City of Madison Traffic Engineering Division 215 Martin Luther King Jr. Blvd. Madison, WI 53701-2986

Dear Mr. McCormick:

Short Elliott Hendrickson Inc. (SEH®) was contracted by Sieger Architecture LLC to provide an analysis and evaluation of the traffic impacts caused to the proposed Fieldhouse Station project located at the intersection of Monroe and Regent Streets. The purpose of the letter is to provide a summary of the findings and offer conclusions on the impacts of the proposed Fieldhouse Station development.

#### **Existing Conditions**

The current building owned and operated by Sieger Architecture LLC has current tenants occupying 6,800 square feet of office space, 8,300 square feet of restaurant/bar space (3,300 square feet for Urban Pizza and 5,000 square feet for Grid Iron), and approximately 1,000 square feet of retail space. The building has approximately 4,500 square feet of vacant space previously occupied by a health club.

#### **Parking**

The current building currently has 42 available parking spaces. The parking garage includes 12 spaces and the area behind the Grid Iron has 5 spaces. Sieger Architecture LLC currently leases 25 parking spaces from the church located on the southeast side of the alley. Five of the spaces have unlimited times and the other 20 spaces are limited to the hours of 7:00 a.m. to 6:00 p.m. Those spaces are used by the church during the other times of the day. They currently have activities on Wednesday and Friday evenings and Sunday mornings. The current lease expires in 2028.

#### Access

Traffic coming to and from the site that use the parking spaces access them from the alley that runs parallel to Monroe Street behind the building. The alley intersects both Regent Street on the north end and Oakland Avenue on the south end. Other traffic generated by the site uses available on-street parking and other alternative modes of travel such as walking, biking, or transit. Deliveries to the occupants of the Sieger building and the other businesses on the block (New Orleans Take-out, Mickies Dairy Bar and Stadium Barbers) enter the alley from Regent Street and exit onto Oakland Avenue.

The access to the current site via the alley intersection with Regent Street has been an issue due to the sharp angle with Regent Street, uphill grade of Regent Street west of the alley, and the current width of the alley (12 feet). The majority of the deliveries to tenants in the block come from Regent Street east and turn left into the alley. The right turns into the alley from the west are limited to passenger vehicles and small trucks. The majority of vehicles turning right must either encroach on the inside lane of Regent

Dan McCormick December 18, 2006 Page 2

Street or back up into traffic in order to make the sharp turn into the alley. It is not possible to turn into the alley while someone is waiting to turn onto Regent Street. Traffic must wait on Regent Street before the vehicle clears from the alley.

Oakland Avenue is currently a southbound one-way street between Monroe Street and Madison Street. Site traffic including truck deliveries exiting the alley onto Oakland Avenue destined for Monroe Street must either continue through the alley to Madison Street or trail blaze through the neighborhood to access Monroe Street from another intersection.

#### **Current Traffic Generation**

The current development generated trips were estimated using the standard steps of trip generation. The trips generated to and from this development are based on the current uses and rates found in the Institute of Transportation Engineers (ITE) Trip Generation Manual (7<sup>th</sup> Edition, 2003). The information is shown in Table 1.

Table 1

Trip Generation - Existing

Description	Time	Code	Unit	Size	Rate	Trips	% In	Trips In	Trips Out
Office / Commerical	Weekday PM Peak	710	1000 sf	6.8	1.49	10	17%	2	8
Food & Beverage	Weekday PM Peak	936	1000 sf	3.3	11.34	37	66%	25	13
		932	1000 sf	5.0	10.92	55	61%	33	21
		Total						58	34
Retail	Weekday PM Peak	814	1000 sf	1.0	2.71	3	44%	1	2
Total	Weekday PM Peak	ner ex security						61	44

Source: Institute of Transportation Engineers Trip Generation, 7th Ed

The current building occupants have the potential to generate approximately 1,050 trips per day (assuming p.m. peak is approximately 10% of the daily traffic) and 105 during the p.m. peak hour (61 to the site and 44 away from the site). This assumes the Grid Iron bar/restaurant were to open during other days of the week. Currently, the Grid Iron opens only for special events involving UW athletic events.

#### **Proposed Fieldhouse Station**

The proposed Fieldhouse Station building is expected to include a mixture of residential, retail and restaurant/bar tenants. The latest proposal includes 39 independently owned residential condominium units totaling approximately 53,000 square feet. In addition, the proposed development includes 10,900 square feet of office space, 4,700 square feet of restaurant/bar space, and 7,700 square feet of retail.

Dan McCormick December 18, 2006 Page 3

#### **Parking**

The Fieldhouse Station project is proposing three covered levels of parking. The first two underground levels will have a total of 78 parking spaces exclusively allocated for the 39 condominium units. The ground level will have 30 spaces reserved for customers of the retail tenants and restaurant/bar. In addition, the 20 spaces leased from the church will be available until 2028.

#### Access

All traffic (to and from) using the parking garage will use the alley intersection with Regent Street. Deliveries will continue to enter the alley from Regent Street as they do now and exit on the south end at Oakland Avenue. Traffic using the parking area leased from the church will still be able to exit the site on either end of the alley.

The Fieldhouse Station project is proposing to increase the width of the alley 8 feet to 20 feet to a point past the entry into the parking garage. The project also includes an area for delivery trucks to pull along the building so that they don't block the alley for other traffic. The loading area will be made available to the other tenants of the block.

#### Proposed Traffic Generation

The trips generated to and from the proposed Fieldhouse Station are based on the current uses and rates found in the Institute of Transportation Engineers (ITE) Trip Generation Manual (7<sup>th</sup> Edition, 2003). The information is shown in Table 2.

 ${\bf Table} \ 2$   ${\bf Trip} \ {\bf Generation - Proposed} \ {\bf Fieldhouse} \ {\bf Station} \ {\bf Development}$ 

Description	Time	Code	Unit	Size	Rate	Trips	% In	Trips In	Trips Out
Residential	Weekday PM Peak	230	Units	39	0.52	20	67%	14	7
		232	Units	39	0.38	15	62%	9	6
united in the man base AAAaan Aaaa	421-0-0-44100-00 (0.2000-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	Average	uvičkoho sub no entintuli kao n	aut on the Natherine recommen	DEROVA CONTROL STREET	of entire transporters.	PRIVATE SPRINGER THAN SERVICE THE SPRINGER THAN SERVICE THE SPRINGER THAN SERVICE THE SPRINGER THAN SERVICE THE SPRINGER THAN SERVICE T	11	6
Office	Weekday PM Peak	710	1000 sf	10.9	1.49	16	17%	3	13
Food & Beverage	Weekday PM Peak	931	1000 sf	4.7	7.49	35	67%	24	12
		932	1000 sf	4.7	10.92	51	61%	31	20
	to considerate Militaria Constitution Consti	Average	c.leistensagtiet in der eine Anner	THE SOUND WAS ARREST OF	Microsoft Compression (Compression Compression Compres			27	16
Retail	Weekday PM Peak	814	1000 sf	7.7	2.71	21	44%	9	12
		816	1000 sf	7.7	4.84	37	47%	18	20
		820	1000 sf	7.7	3.75	29	48%	14	15
		870	1000 sf	7.7	3.83	30	50%	15	15
		879	1000 sf	7.7	6.21	48	46%	22	26
	umo desan dicatto da propriato	Average			W. (TT) 1 - 10 - 1 - 1 - 1	Commence		16	17
Total	Weekday PM Peak							57	53

The proposed building occupants have the potential to generate approximately 1,100 trips per day (assuming p.m. peak is approximately 10% of the daily traffic) and 110 during the p.m. peak hour (57 to the site and 53 away from the site).

It is standard practice to consider reducing the amount of trips to and from a development based upon any of the following:

- 1. Mode Split. A percentage of traffic coming to and from the site will use other modes of travel such as walking, biking, and transit. The mode split in this location has the potential to be high due to the close proximity to the UW campus, Southwest Bike Trail, and numerous transit routes.
- 2. Internal/chained trips. These are multi-stop trips that visit two or more of the uses within a site. An example would be a trip to the site that stops first for a retail tenant and then finally to their residential unit. Mixed used developments including residential, commercial, and office uses typically have a higher percentage of internal trips.

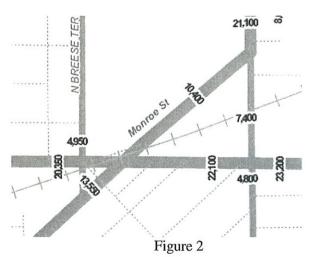
It is typical to assume a reduction factor in the range between 20 and 40 percent for a mixed use building similar to that proposed. After applying the reduction factor to the total trips to the site, the resulting traffic volumes are as shown in Table 3. In order to be on the conservative side, this analysis will assume a reduction factor of only 20 percent.

Table 3

		ln	Out	
Total	Weekday PM Peak	57	53	
	with 20% reduction factor	46	42	
	with 40% reduction factor	34	32	

#### **Proposed Traffic Distribution**

The distribution of trips generated by the development was based upon existing traffic volumes. The volumes used were obtained from the City of Madison's website and are shown in Figure 1.



The resulting distribution consists of the following:

- 17.3% to/from Monroe Street south
- 27.0% to/from Monroe Street north/Randall Street north
- 26.0% to/from Regent Street west
- 29.7% to/from Regent Street east

#### Traffic Volumes

The current p.m. peak traffic volumes for Regent Street were obtained from the Regent-Monroe Street Intersection Project from the City of Madison. The p.m. peak hour volumes on Regent Street at the alley were 1,264 westbound and 762 eastbound. On Thursday, December 14, 10 vehicles were observed entering Regent Street from the alley. Those vehicles (1-left turn, and 9 -right turns) were added to the traffic from the proposed Fieldhouse Station. In addition, 25 vehicles were observed turning onto the alley from Regent Street (20 left-turns and 5 right-turns). The current p.m. peak hour traffic is shown on Figure 2.

The resulting turning movement volumes for the proposed Fieldhouse Station project assuming 20 % reduction in site trips due to mode shift and internal trips and current intersection traffic is shown in Figure 3. The analysis did not assume pass-by trips from the surrounding street system. However, traffic counted during the peak hour was added to the alley approach. In addition, the analysis did not remove any portion of the existing traffic to account for the net change in development.

#### **Existing Intersection Traffic**

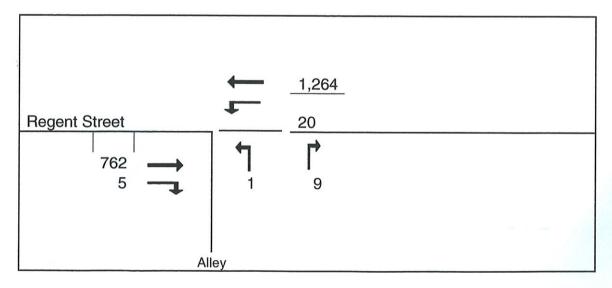


Figure 2

#### **Total Development Traffic**

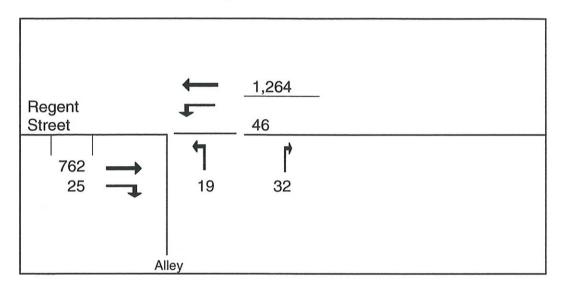


Figure 3

#### Capacity Analysis

Synchro (Version 6.0) was utilized to analyze traffic operations at the intersection of Regent Street and the alley accessing the proposed Fieldhouse Station development. The base numbers assume from full build-out and occupancy of the building. Level of service (LOS) is a letter grade assigned to a transportation facility to designate the quality of operations or extent of delay. Very good operations with little or no impedance correspond to a LOS A, and very poor operations or conditions exceeding capacity correspond to a LOS F.

The results of the unsignalized analysis show that the northbound alley approach to Regent Street is expected to operate at level of service E with an average delay of 38.2 seconds/vehicle. The remainder of the movements operate at level of service A.

In order to verify the results of the Synchro analysis, a "gap" study was performed at the alley entrance to Regent Street.

Gaps, or the time between vehicles, were measured electronically for vehicles traveling eastbound and for vehicles traveling in both directions. If the vehicles were traveling in a queue or platoon of closely spaced vehicles, gaps were generally in the 2 to 4 second range. If the eastbound vehicles were traveling with a 6 second distance between them, but a westbound vehicle passed the alley in the time between two eastbound vehicles, the measured gap was probably less than 3 seconds. In this study, the number of gaps and their duration were measured and recorded during the p.m. peak hour.

Studies have shown that motorists will use a 6 to 10 second gap in traffic to enter the vehicle stream. Design guidelines indicate that a 7 second gap is considered minimum and a 10 second gap is considered desirable. Other studies have shown that many motorists will take a 6 second gap in heavy traffic and have little or no impact on the flow of traffic.

In the study on Regent Street, there were 24 two-way gaps of 10 seconds or more in a period of two hours (4:00-6:00 p.m.). There were an additional 71 two-way gaps of 6 to 10 seconds.

If 8 seconds is called an acceptable gap on Regent Street, there were 47 acceptable gaps in 120 minutes or about 23 gaps per hour. If the total traffic volume includes 19 outbound left turns in the p.m. peak hour, that traffic will theoretically take 19 of the 23 gaps available to the alley traffic. In reality, the chances that the available gaps would appear at the same time the left turning traffic is not favorable. Therefore, we can confirm the findings of the capacity analysis. We would expect less than desirable conditions for traffic wishing to turn left onto Regent Street from the alley during the p.m. peak hour.

#### Turning Operations at Alley and Regent Street

The project is proposing to expand the width of the alley from 12 feet to 20 feet to improve the ability of vehicles to turn right into the alley. Figure 4 illustrates the before and after turning paths into the alley. The red line shows the ability of the vehicle to use the new space created by the project. The blue path shows the current conditions that force passenger vehicles to encroach on the inside lane of Regent Street in order to make the turn. Even while making the turn, the vehicle path does not fit in the current opening between the existing building and edge of parking lot on the east side of the alley.

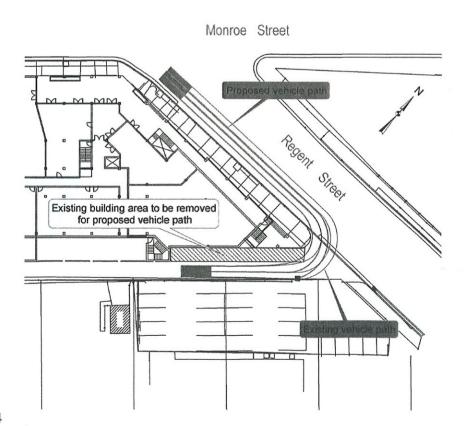


Figure 4

#### **Findings**

• The existing building with current and potential tenants has the potential to generate similar traffic volumes as the proposed Fieldhouse Station development. The information shown in Table 4 below assumes full utilization of the Grid Iron bar/restaurant and that the 4,500 square foot area formally occupied by a health club remains vacant. However, Sieger LLC plans to fill that space if the Fieldhouse Station project does not go through.

Table 4

	Existing	Proposed	1.5	n. Peak Trips Out
Retail	1,000	7,700	15	15
Office	6,800	10,900	1	5
Food/Beverage	8,300	4,700	-31	-18
Residential		39 units	11	6
		Total	-4	9

The net change is four fewer trips coming to the site and 9 additional trips going from the site resulting in a net change of 5 trips per hour (50 per day). This number does not include a reduction factor.

- A capacity analysis and gap study confirms that there is a lack of acceptable gaps for traffic wishing
  to turn left from the alley during the p.m. peak hour. The capacity analysis resulted in a poor level of
  service for the movement (LOS E). The gap study conducted during the p.m. peak hour measured an
  inadequate number of gaps for the left turns. There is ample capacity and gaps for right turning traffic
  from the alley.
- The current alley geometry (width and skew angle with Regent Street) does not allow for passenger vehicles to turn right into the alley without encroaching on the inside lane of Regent Street. The proposed Fieldhouse Station plans to widen the alley to 20 feet would improve turning operations over the current situation.
- The proposed Fieldhouse Station traffic will not affect the operations at the Oakland Avenue and alley intersection. The majority of traffic will use the alley intersection with Regent Street. Deliveries will continue to enter the alley from Regent Street and exit onto Oakland Avenue. Some of the delivery trucks will continue on through the alley and enter Monroe Street from Madison Avenue. Others will turn left on Oakland Avenue and use other local streets to access Monroe Street or Regent Street.

#### Recommendations

 Post turn prohibition signs at the alley entrance to Regent Street banning left turns during the peak periods. The turn restriction would result in approximately 19 vehicles during the p.m. peak hour finding alternative routes on other City of Madison public streets. Dan McCormick December 18, 2006 Page 9

• Consider changing Oakland Avenue to a two-way street between the alley and Monroe Street. The two-way movement would allow for delivery and other vehicles traveling south on the alley to avoid traveling through the Vilas neighborhood and access Monroe Street from Oakland Avenue.

#### Conclusion

Based upon the lack of a significant increase in traffic volumes generated by the site, improvements
to the alley including increased width to improve turning operations and recommended changes to
one block of Oakland Avenue which will help to reduce neighborhood traffic, it's my conclusion that
the proposed Fieldhouse Station will not result in adverse traffic impacts to the surrounding roadway
system including the Vilas neighborhood.

Please feel free to contact me with any questions and/or comments at 608.270.5359

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

James D. Hanson, PE, PTOE

Project Manager

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c: Bob Sieger, Sieger Architects, LLC p:\pt\stsiege\060100\_stadium\_square\reports\stadium letter post qaqc.doc