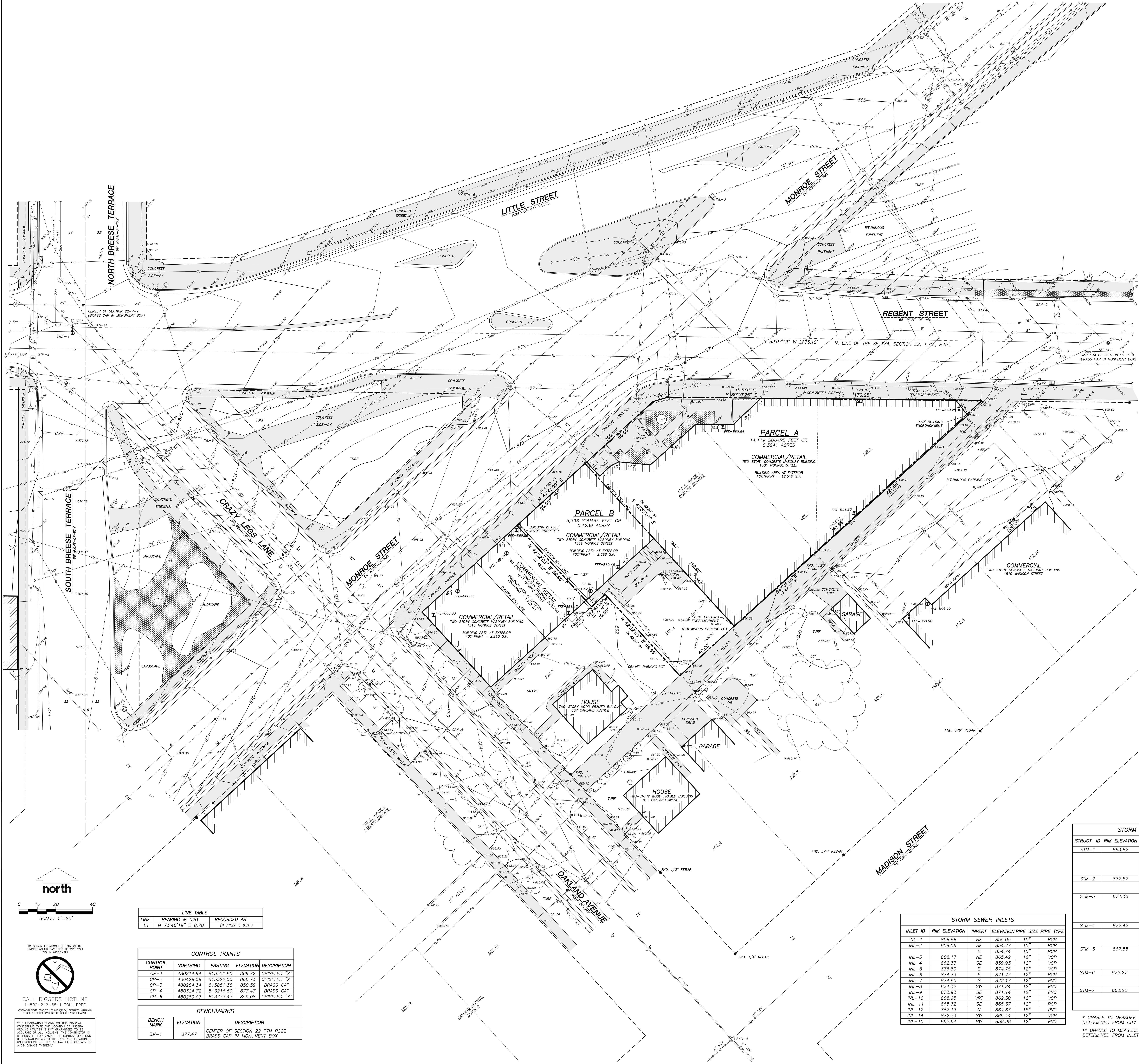


LINE TABLE		
LINE	BEARING & DIST.	RECORDED AS
L1	N 73°46'19" E 8.70'	(N 71°29' E 8.70')

CONTROL POINTS

CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-1	480214.94	813351.85	869.72	CHISELED "X"
CP-2	480429.59	813522.50	868.73	CHISELED "X"
CP-3	480284.34	815851.38	850.59	BRASS CAP
CP-4	480324.72	813216.59	877.47	BRASS CAP
CP-6	480289.03	813733.43	859.08	CHISELED "X"

BENCHMARKS

BENCH MARK	ELEVATION	DESCRIPTION
BM-1	877.47	CENTER OF SECTION 22 T7N R22E BRASS CAP IN MONUMENT BOX

TO OBTAIN LOCATIONS OF PARTICIPANT UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511 TOLL FREE

WISCONSIN STATE STATUTE 182.0175(1974) REQUIRES MINIMUM THREE (3) WORK DAYS NOTICE BEFORE YOU EXCAVATE

"THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THE CONTRACTOR'S OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO."

STORM SEWER INLETS

INLET ID	RIM ELEVATION	INVERT	ELEVATION	PIPE SIZE	PIPE TYPE
INL-1	858.68	NE	855.05	15"	RCP
INL-2	858.06	SE	854.77	15"	RCP
		E	854.74	15"	RCP
INL-3	868.17	NE	865.42	12"	VCP
INL-4	862.33	SE	859.93	12"	VCP
INL-5	876.80	E	874.75	12"	VCP
INL-6	874.73	E	871.73	12"	RCP
INL-7	874.65	S	872.17	12"	PVC
INL-8	874.32	SW	871.24	12"	PVC
INL-9	873.93	SE	871.14	12"	PVC
INL-10	868.95	VRT	862.30	12"	VCP
INL-11	868.32	SE	865.37	12"	RCP
INL-12	867.13	N	864.63	15"	PVC
INL-14	872.33	SW	869.44	12"	VCP
INL-15	862.64	NW	859.99	12"	PVC

STORM SEWER MANHOLES

STRUCT. ID	RIM ELEVATION	INVERT	ELEVATION	PIPE SIZE	PIPE TYPE
STM-1	863.82	SW	858.92	8"	CI
		W	859.72	12"	VCP
		NW	859.32	12"	VCP
		NE	859.28	12"	VCP
		NE	858.89	8"	CI
STM-2	877.57	W	870.81	48"X24"	CON BOX
		SE	867.67	72"X24"	CON BOX
		N	*	18"	RCP
STM-3	874.36	SW	870.76	12"	VCP
		W	870.36	12"	CI
		SE	867.20	72"X24"	CON BOX
		NW	867.24	72"X24"	CON BOX
		NE	**	12"	PVC
STM-4	872.42	NW	864.82	72"X24"	CON BOX
		SE	864.62	72"X24"	CON BOX
		NE	867.78	12"	VCP
		SW	864.97	24"	VCP
STM-5	867.55	SE	860.40	72"X24"	CON BOX
		NW	860.50	72"X24"	CON BOX
		NW	863.67	12"	RCP
		SW	863.95	15"	PVC
STM-6	872.27	NW	866.95	15"	RCP
		N	866.95	12"	RCP
		NE	866.95	15"	RCP
STM-7	863.25	NW	856.75	12"	RCP
		NE	856.75	36"x48"	BOX
		SE	856.75	12"	RCP
		SW	856.75	15"	RCP

* UNABLE TO MEASURE INVERT, PIPE SIZE AND MATERIAL WAS DETERMINED FROM CITY UTILITY MAPS.

** UNABLE TO MEASURE INVERT, PIPE SIZE AND MATERIAL WAS DETERMINED FROM INLET TO THE NE.

SANITARY SEWER MANHOLES

STRUCT. ID	RIM ELEVATION	INVERT	ELEVATION	PIPE SIZE	PIPE TYPE
SAN-1	859.73	E	850.23	18"	RCP
		N	850.67	18"	RCP
		SW	853.30	8"	CLAY
		W	852.03	8"	CLAY
SAN-2	859.11	S	852.09	18"	RCP
		W	853.93	18"	RCP
SAN-3	869.31	E	857.05	18"	VCP
		NW	857.07	18"	VCP
SAN-4	870.74	W	863.50	18"	VCP
		E	859.16	18"	VCP
SAN-5	877.83	SW	860.36	10"	VCP
		N	866.87	8"	PVC
		SE	866.81	8"	PVC
SAN-6	874.95	SW	864.93	18"	CI
		NE	864.89	18"	CI
		N	867.15	8"	VCP
		S	865.43	8"	VCP
SAN-7	868.36	NE	863.52	10"	VCP
		SW	863.54	10"	VCP
		NW	863.56	8"	VCP
		SE	864.54	8"	VCP
SAN-8	864.94	NW	856.81	6"	VCP
		SE	856.85	6"	VCP
		SW	858.02	6"	PVC
		NE	857.02	6"	VCP
SAN-9	859.75	NW	851.87	6"	VCP
		SE	850.28	8"	VCP
		SW	851.87	8"	VCP
		NE	850.18	10"	VCP
SAN-10	878.01	W	866.85	8"	RCP
		E	866.85	8"	RCP
SAN-11	877.93	SE	866.63	8"	RCP
		SW	866.63	8"	RCP
SAN-12	863.82	NE	857.40	10"	VCP
		SW	PLUGGED	10"	VCP ABD.
		N	857.53	6"	VCP ABD.
		12" VPC THROUGH MH			

LEGEND

- SECTION CORNER
- PROPERTY CORNER FOUND, TYPE NOTED
- BM-1 BENCHMARK
- CP-1 CONTROL POINT
- (S 47°48' W 182.50') RECORD BEARING AND DISTANCE
- STREET SIGN
- WATER OR GAS VALVE
- FIRE HYDRANT
- UTILITY MANHOLE
- STORM SEWER INLET
- UTILITY POLE WITH GUY WIRE
- LIGHT POLE
- TRAFFIC LIGHT POLE
- UTILITY PEDESTAL
- SHRUB
- DECIDUOUS TREE
- CONIFEROUS TREE
- × 861.50 SPOT ELEVATION
- BUILDINGS
- PROPERTY LINE
- PLATTED LINE
- SECTION LINE
- W WATER LINE
- San SANITARY SEWER
- Stm STORM SEWER
- Pu UNDERGROUND ELECTRICAL POWER
- Po OVERHEAD ELECTRICAL POWER
- To,Po OVERHEAD ELECTRICAL POWER & TELEPHONE
- Tu UNDERGROUND TELEPHONE
- G GAS MAIN
- X FENCE
- CONCRETE CURB & GUTTER
- PAVEMENT EDGE
- 860 INDEX CONTOUR
- 861 INTERMEDIATE CONTOUR
- RETAINING WALL

NOTES

1. HORIZONTAL LOCATION FOR THIS SURVEY AND MAP IS REFERENCED TO THE DANE COUNTY COORDINATE SYSTEM.
2. BEARINGS FOR THIS SURVEY AND MAP ARE REFERENCED TO THE NORTH LINE OF THE SOUTHEAST 1/4 OF SECTION 22, T7N, R22E, RECORDED AS N 89°07'19" W.
3. ELEVATIONS FOR THIS SURVEY AND MAP ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). SITE BENCHMARK IS A BRASS CAP IN MONUMENT BOX BEING THE CENTER OF SECTION 22-7-22, ELEVATION=877.47.
4. EXISTING CONDITIONS SURVEY PERFORMED BY JENKINS SURVEY & DESIGN, INC. THE WEEK OF APRIL 21, 2006.
5. SPOT ELEVATIONS ALONG CURB DENOTES TOP OF CURB ELEVATION.
6. CONTOUR INTERVAL IS ONE FOOT.
7. SUBSURFACE UTILITIES AND FEATURES SHOWN ON THIS MAP HAVE BEEN APPROXIMATED BY LOCATING SURFICIAL FEATURES AND APPURTENANCES, LOCATING DIGGER'S HOTLINE FIELD MARKINGS AND BY REFERENCE TO UTILITY RECORDS AND MAPS. DIGGER'S HOTLINE TICKET NO: 20061608446.
8. BEFORE EXCAVATION, APPROPRIATE UTILITY COMPANIES SHOULD BE CONTACTED. FOR EXACT LOCATION OF UNDERGROUND UTILITIES, CONTACT DIGGER'S HOTLINE, AT 1.800.242.8511
9. JENKINS SURVEY AND DESIGN DOES NOT GUARANTEE THAT ALL UNDERGROUND UTILITIES ON SITE, WHETHER PUBLIC OR PRIVATE, HAVE BEEN LOCATED.
10. THE ACCURACY OF THE CONTROL POINTS AND BENCHMARKS SHOWN ON THIS MAP SHALL BE VERIFIED BEFORE BEING UTILIZED. JENKINS SURVEY AND DESIGN DOES NOT WARRANT THE ACCURACY OF THESE CONTROL POINTS AND BENCHMARKS.
11. RIGHT-OF-WAY LINES SHOWN OUTSIDE OF SURVEYED SITE ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY.

LEGAL DESCRIPTION AS FURNISHED

PARCEL A

LOTS ONE (1), TWO (2), AND THREE (3), BLOCK ONE (1), OAKLAND HEIGHTS, LOCATED IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

TAX KEY NUMBER: 070922406040

PARCEL B

THE NORTHEAST FIFTY (50) FEET OF THE NORTHWEST 1/2, AND THE NORTHEAST FORTY (40) FEET OF THE SOUTHEAST 1/2 OF LOT FOUR (4), BLOCK ONE (1), OAKLAND HEIGHTS, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

TAX KEY NUMBER: 070922406024

SURVEYOR'S CERTIFICATE

I, DAVE M. JENKINS, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT THIS EXISTING CONDITIONS SURVEY AND MAP IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF IN ACCORDANCE WITH THE INFORMATION PROVIDED.

DAVE M. JENKINS, S-2255
REGISTERED LAND SURVEYOR

DATE

SURVEYED FOR:
SIEGER ARCHITECTS INC.
1501 MONROE STREET
MADISON, WISCONSIN 53711

EXISTING CONDITIONS SURVEY

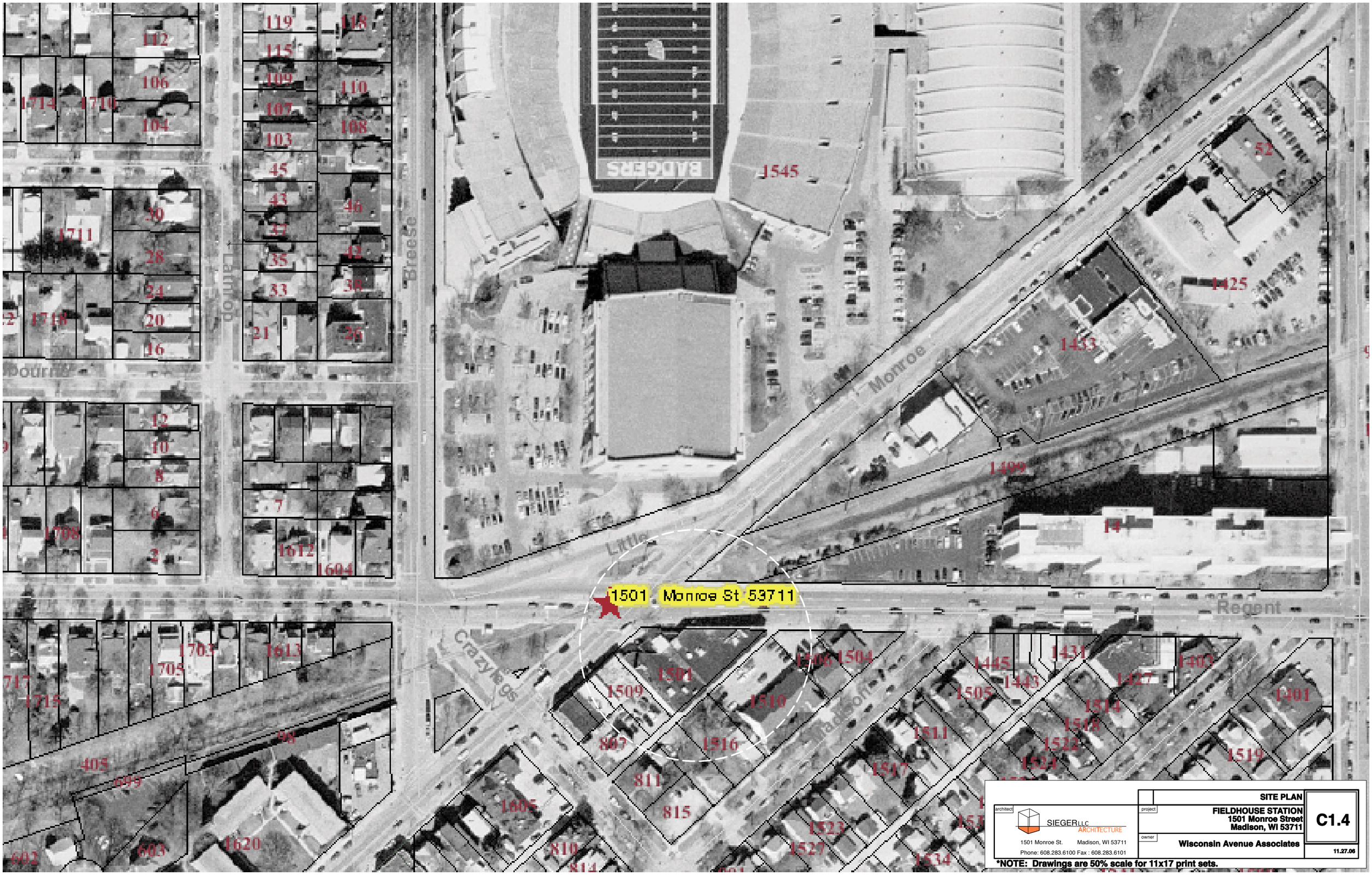
LOTS ONE (1), TWO (2), THREE (3) AND A PORTION OF LOT FOUR (4), BLOCK 1, OAKLAND HEIGHTS, LOCATED IN THE SOUTHEAST QUARTER (SE 1/4) OF SECTION TWENTY-TWO (22), TOWN 7 NORTH (T7N), RANGE 22 EAST (R22E), CITY OF MADISON, DANE COUNTY, WISCONSIN.

JSD • Engineers • Surveyors
Jenkins Survey & Design, Inc.
161 HORIZON DRIVE, SUITE 101
VERONA, WISCONSIN 53593
PHONE: (608)848-5060

PROJECT NO:	06-2287
FILE NO:	E-29
SURVEYED:	DSB
F.B. NO/PG:	185/46-47
SHEET NO:	1 OF 1

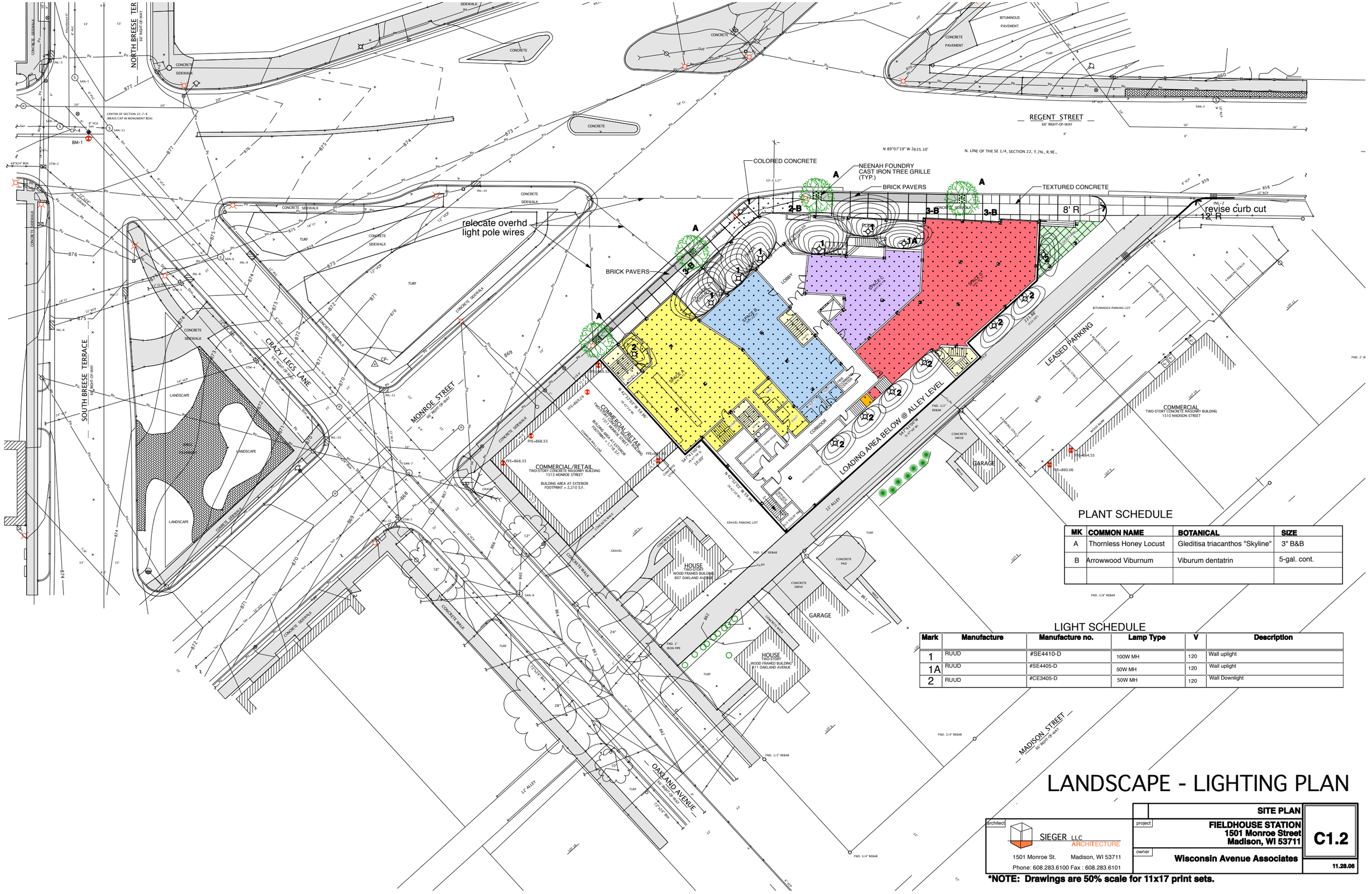
DRAWN BY	DSB	DATE	04-24-2006
CHECKED BY	DRS	DATE	05-05-2006
APPROVED BY	DMJ	DATE	05-05-2006
DWGNAME	J:\2006\062287\DWG\062287-EXCON.DWG		

REVISION	DESCRIPTION	DATE	BY



architect: SIEGER LLC ARCHITECTURE 1501 Monroe St. Madison, WI 53711 Phone: 608.283.6100 Fax : 608.283.6101	SITE PLAN project: FIELDHOUSE STATION 1501 Monroe Street Madison, WI 53711 owner: Wisconsin Avenue Associates	C1.4 11.27.06

*NOTE: Drawings are 50% scale for 11x17 print sets.



PLANT SCHEDULE

MK	COMMON NAME	BOTANICAL	SIZE
A	Thornless Honey Locust	Gleditisa triacanthos "Skyline"	3" B&B
B	Arrowwood Viburnum	Viburum dentatrin	5-gal. cont.

LIGHT SCHEDULE

Mark	Manufacture	Manufacture no.	Lamp Type	V	Description
1	RUUD	#SE4410-D	100W MH	120	Wall uplight
1A	RUUD	#SE4405-D	50W MH	120	Wall uplight
2	RUUD	#CE3405-D	50W MH	120	Wall Downlight

LANDSCAPE - LIGHTING PLAN

architect
SIEGER LLC
ARCHITECTURE
1501 Monroe St. Madison, WI 53711
Phone: 608.283.6100 Fax : 608.283.6101

project
FIELDHOUSE STATION
1501 Monroe Street
Madison, WI 53711

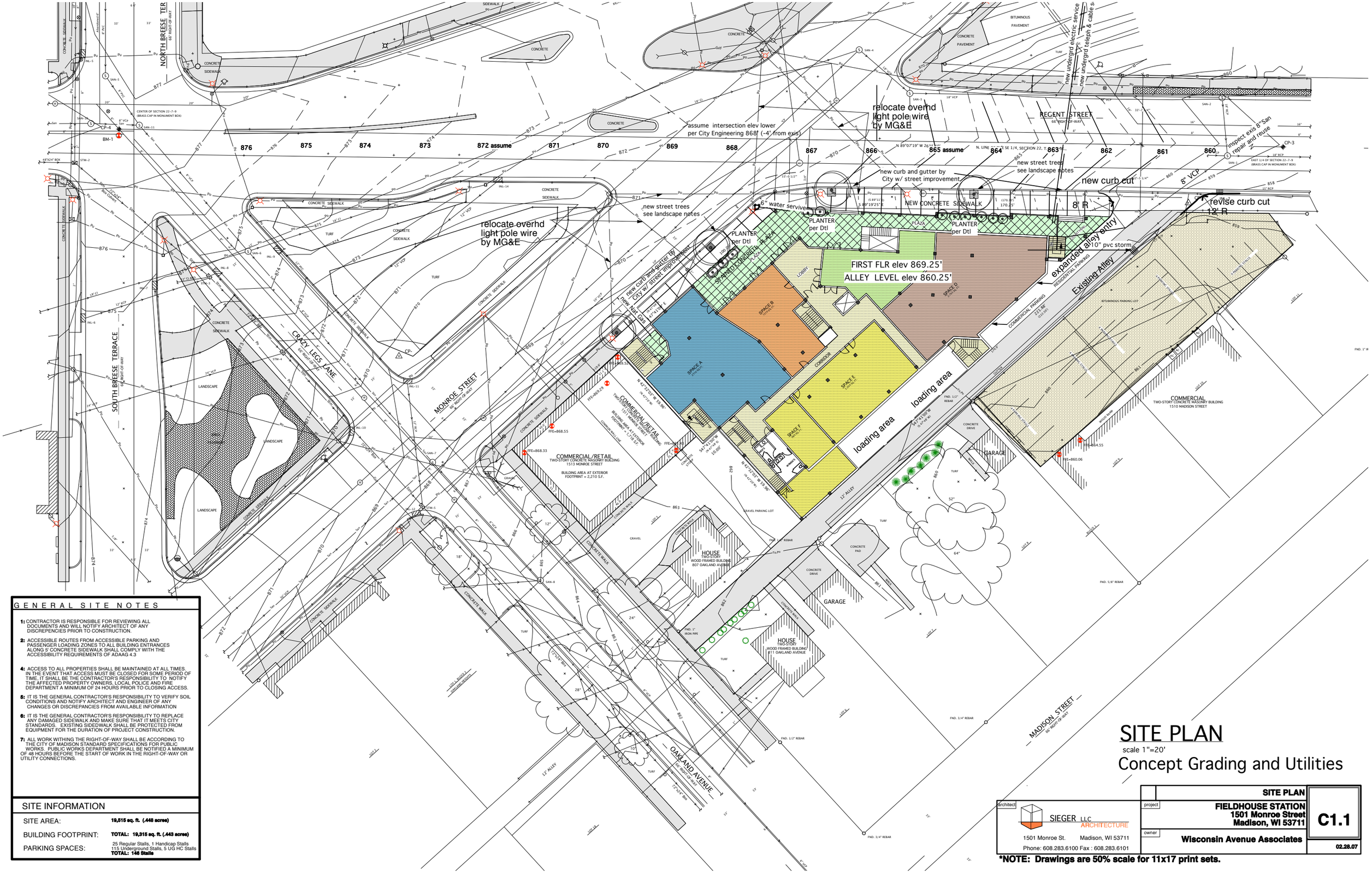
owner
Wisconsin Avenue Associates

SITE PLAN

C1.2

11.28.06

***NOTE: Drawings are 50% scale for 11x17 print sets.**



GENERAL SITE NOTES

1: CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL DOCUMENTS AND WILL NOTIFY ARCHITECT OF ANY DISCREPENCIES PRIOR TO CONSTRUCTION.

2: ACCESSIBLE ROUTES FROM ACCESSIBLE PARKING AND PASSENGER LOADING ZONES TO ALL BUILDING ENTRANCES ALONG 5' CONCRETE SIDEWALK SHALL COMPLY WITH THE ACCESSIBILITY REQUIREMENTS OF ADAAG 4.3

4: ACCESS TO ALL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. IN THE EVENT THAT ACCESS MUST BE CLOSED FOR SOME PERIOD OF TIME, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE AFFECTED PROPERTY OWNERS, LOCAL POLICE AND FIRE DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO CLOSING ACCESS.

5: IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL CONDITIONS AND NOTIFY ARCHITECT AND ENGINEER OF ANY CHANGES OR DISCREPANCIES FROM AVAILABLE INFORMATION

6: IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY DAMAGED SIDEWALK AND MAKE SURE THAT IT MEETS CITY STANDARDS. EXISTING SIDEDWALK SHALL BE PROTECTED FROM EQUIPMENT FOR THE DURATION OF PROJECT CONSTRUCTION.

7: ALL WORK WITHING THE RIGHT-OF-WAY SHALL BE ACCORDING TO THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS. PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 48 HOURS BEFORE THE START OF WORK IN THE RIGHT-OF-WAY OR UTILITY CONNECTIONS.

SITE INFORMATION

SITE AREA:	**19,515 sq. ft. (.448 acres)**
BUILDING FOOTPRINT:	**TOTAL: 19,315 sq. ft. (.443 acres)**
PARKING SPACES:	25 Regular Stalls, 1 Handicap Stalls 115 Underground Stalls, 5 UG HC Stalls **TOTAL: 146 Stalls**

SITE PLAN

scale 1"=20'

Concept Grading and Utilities

architect
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1501 Monroe St. Madison, WI 53711
Phone: 608.283.6100 Fax : 608.283.6101

project
FIELDHOUSE STATION
1501 Monroe Street
Madison, WI 53711

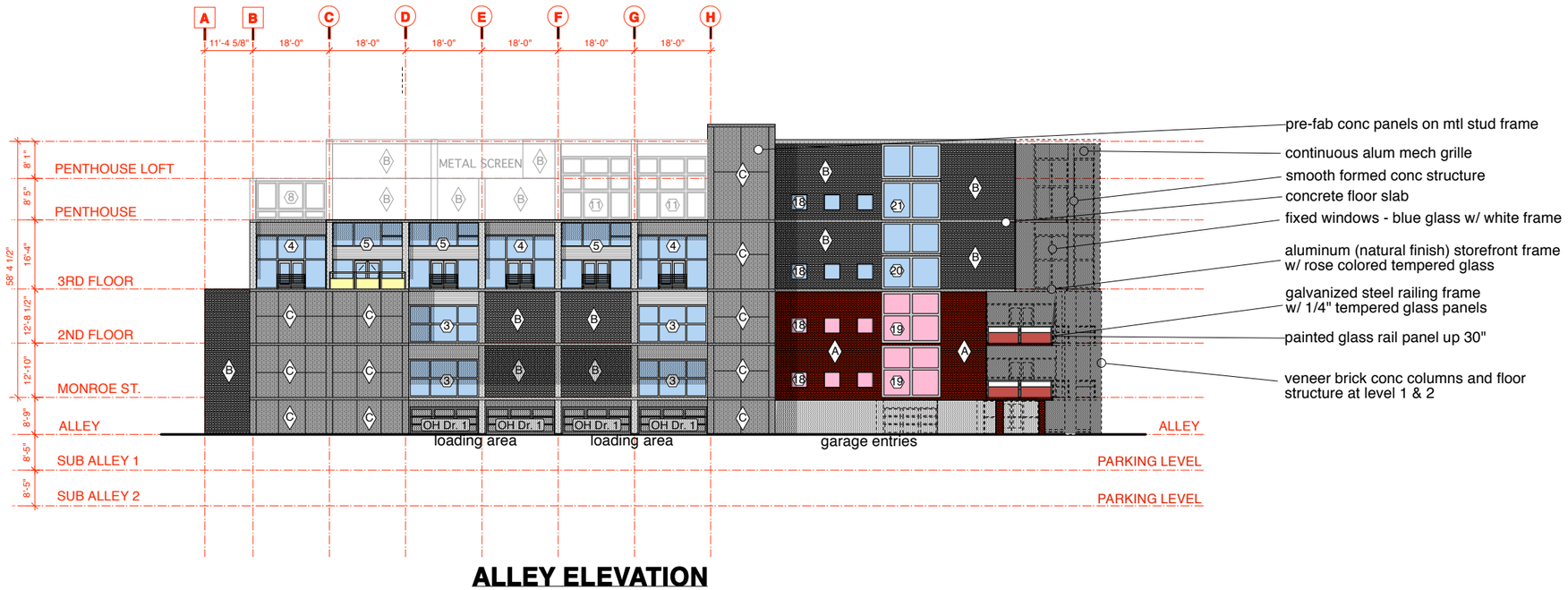
owner
Wisconsin Avenue Associates

SITE PLAN

C1.1

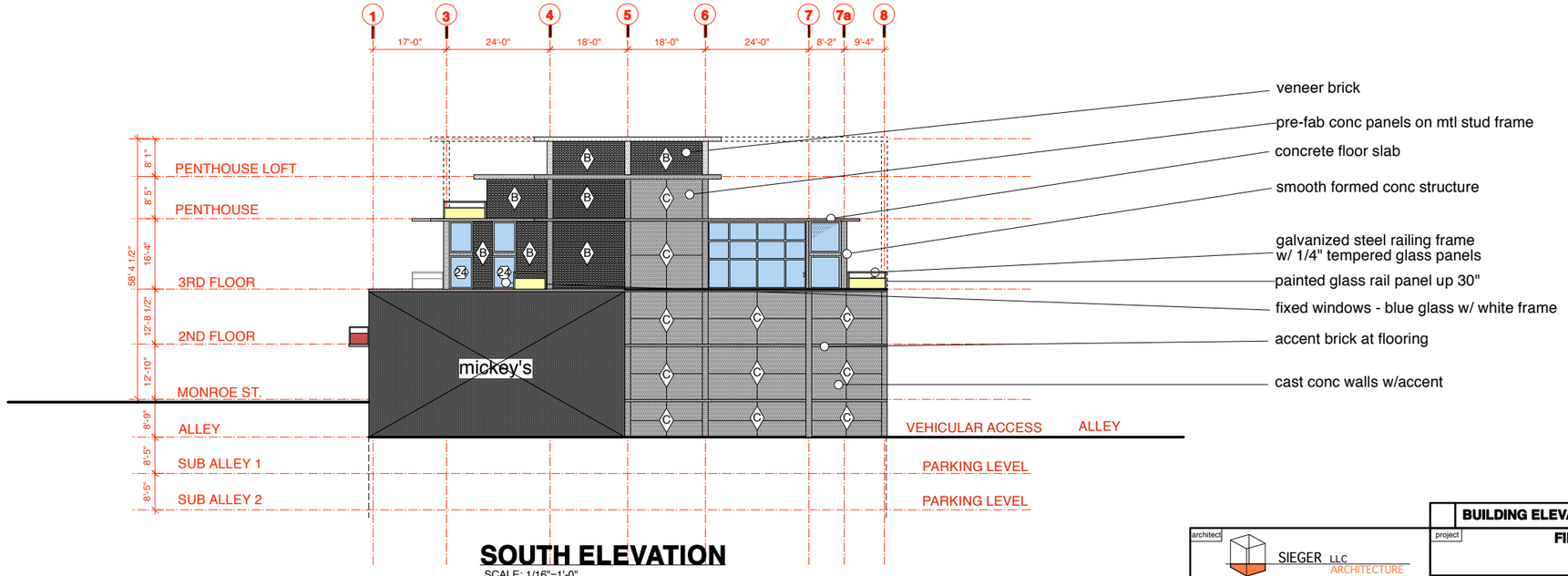
02.28.07

***NOTE: Drawings are 50% scale for 11x17 print sets.**



ALLEY ELEVATION

SCALE: 1/16"=1'-0"



SOUTH ELEVATION

SCALE: 1/16"=1'-0"

architect
SIEGER LLC
ARCHITECTURE
1501 Monroe St. Madison, WI 53711
Phone: 608.283.6100 Fax : 608.283.6101

project
FIELDHOUSE STATION
1501 Monroe Street
Madison, WI 53711

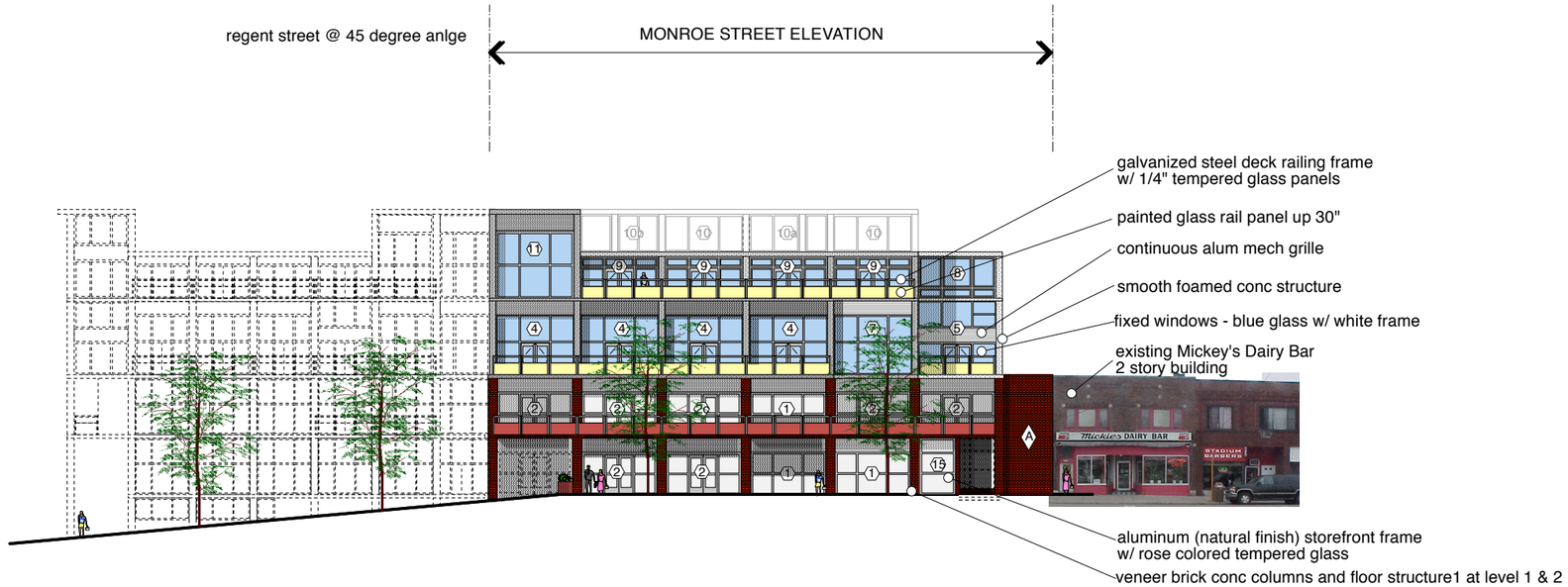
owner
Wisconsin Avenue Associates

BUILDING ELEVATIONS.

A4.2

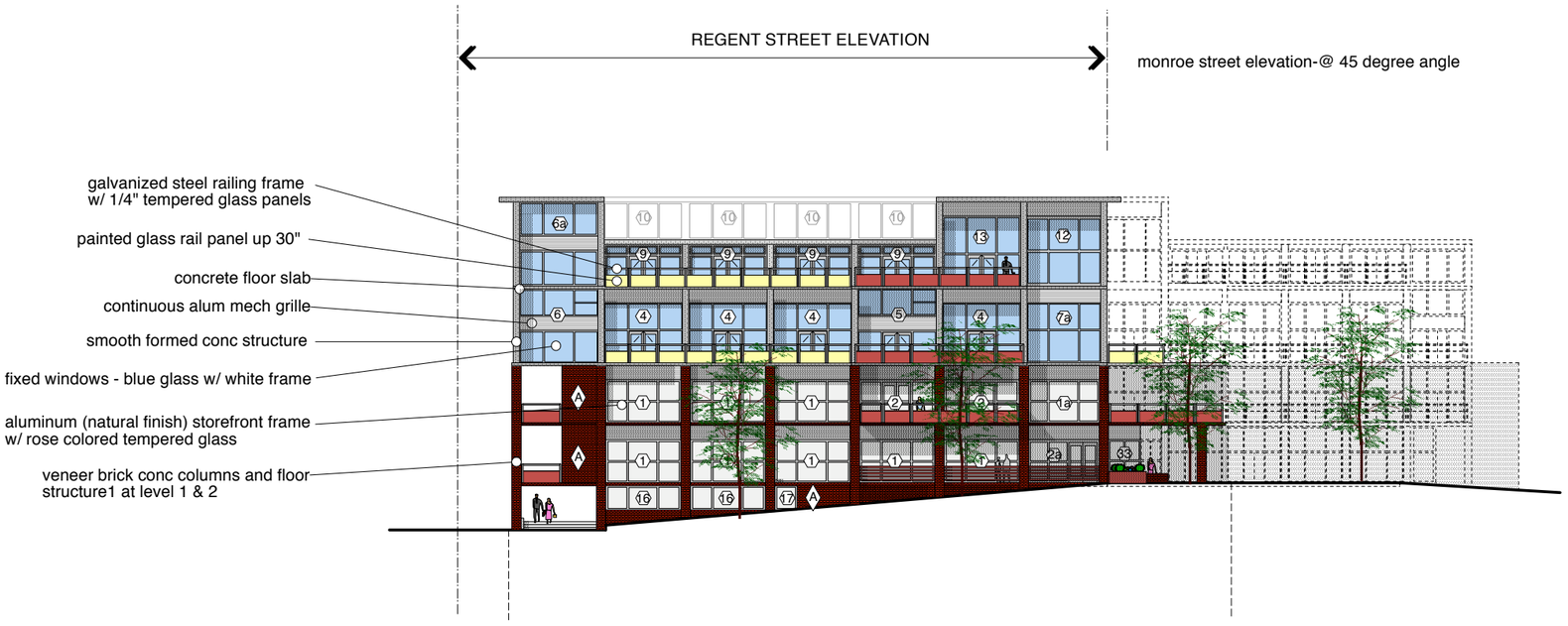
02.28.07

***NOTE: Drawings are 50% scale for 11x17 print sets.**



MONROE ST. ELEVATION

SCALE: 1/16"=1'-0"



REGENT ST. ELEVATION

SCALE: 1/16"=1'-0"

architect
SIEGER LLC
ARCHITECTURE
1501 Monroe St. Madison, WI 53711
Phone: 608.283.6100 Fax : 608.283.6101

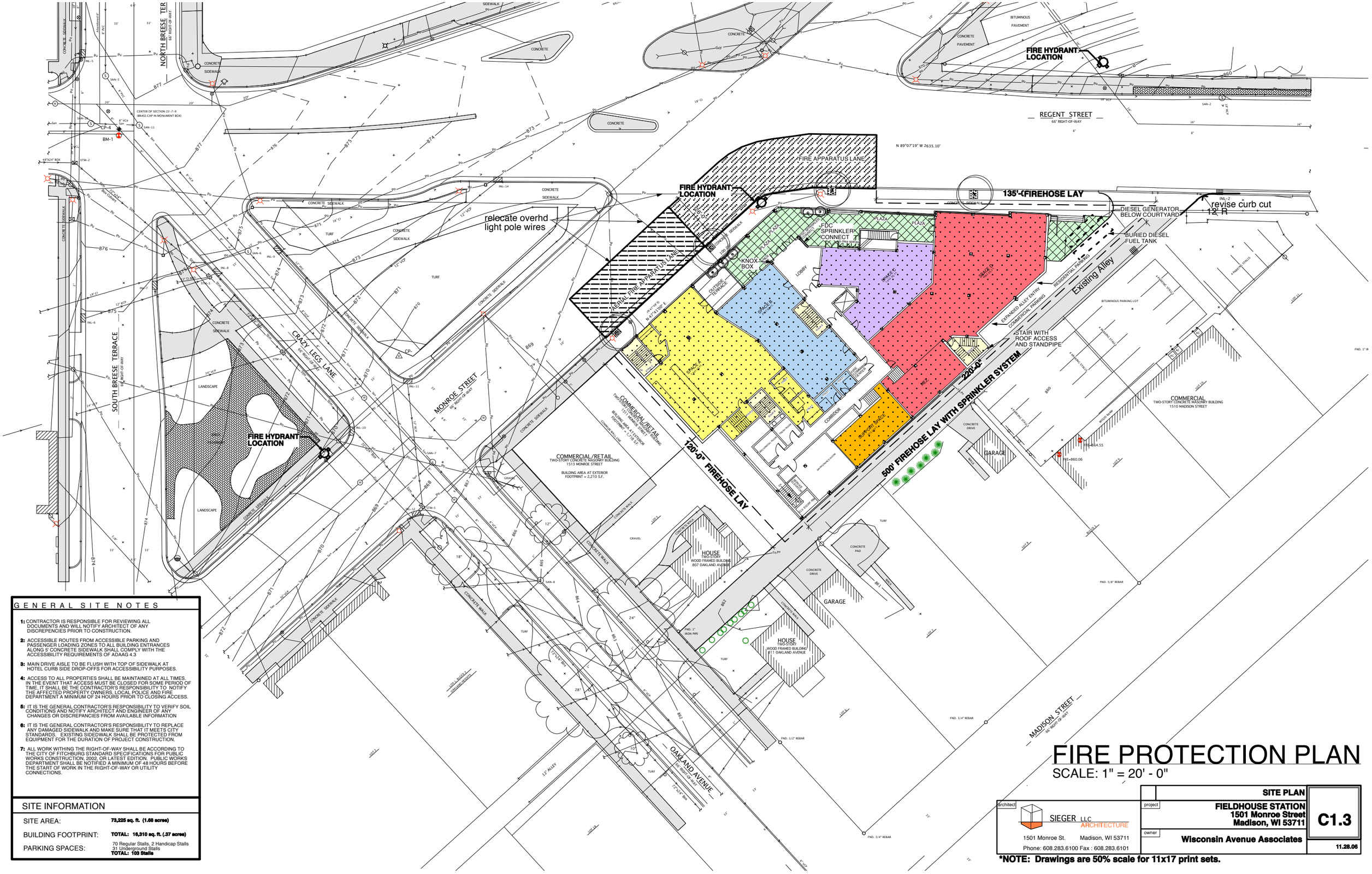
project
BUILDING ELEVATIONS
FIELDHOUSE STATION
1501 Monroe Street
Madison, WI 53711

owner
Wisconsin Avenue Associates

A4.1

02.28.07

***NOTE: Drawings are 50% scale for 11x17 print sets.**



GENERAL SITE NOTES

1: CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL DOCUMENTS AND WILL NOTIFY ARCHITECT OF ANY DISCREPENCIES PRIOR TO CONSTRUCTION.

2: ACCESSIBLE ROUTES FROM ACCESSIBLE PARKING AND PASSENGER LOADING ZONES TO ALL BUILDING ENTRANCES ALONG 5' CONCRETE SIDEWALK SHALL COMPLY WITH THE ACCESSIBILITY REQUIREMENTS OF ADAAG 4.3

3: MAIN DRIVE AISLE TO BE FLUSH WITH TOP OF SIDEWALK AT HOTEL CURB SIDE DROP-OFFS FOR ACCESSIBILITY PURPOSES.

4: ACCESS TO ALL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. IN THE EVENT THAT ACCESS MUST BE CLOSED FOR SOME PERIOD OF TIME, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE AFFECTED PROPERTY OWNERS, LOCAL POLICE AND FIRE DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO CLOSING ACCESS.

5: IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL CONDITIONS AND NOTIFY ARCHITECT AND ENGINEER OF ANY CHANGES OR DISCREPANCIES FROM AVAILABLE INFORMATION

6: IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY DAMAGED SIDEWALK AND MAKE SURE THAT IT MEETS CITY STANDARDS. EXISTING SIDEWALK SHALL BE PROTECTED FROM EQUIPMENT FOR THE DURATION OF PROJECT CONSTRUCTION.

7: ALL WORK WITHING THE RIGHT-OF-WAY SHALL BE ACCORDING TO THE CITY OF FITCHBURG STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2002, OR LATEST EDITION. PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 48 HOURS BEFORE THE START OF WORK IN THE RIGHT-OF-WAY OR UTILITY CONNECTIONS.

SITE INFORMATION

SITE AREA:	**73,225 sq. ft. (1.68 acres)**
BUILDING FOOTPRINT:	**TOTAL: 16,310 sq. ft. (.37 acres)**
PARKING SPACES:	70 Regular Stalls, 2 Handicap Stalls 31 Underground Stalls **TOTAL: 103 Stalls**

FIRE PROTECTION PLAN

SCALE: 1" = 20' - 0"

architect
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ARCHITECTURE
1501 Monroe St. Madison, WI 53711
Phone: 608.283.6100 Fax : 608.283.6101

project
FIELDHOUSE STATION
1501 Monroe Street
Madison, WI 53711

owner
Wisconsin Avenue Associates

SITE PLAN

C1.3

11.28.06

***NOTE: Drawings are 50% scale for 11x17 print sets.**

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

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 (7th 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							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.

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 (7th Edition, 2003). The information is shown in Table 2.

Table 2

Trip Generation - Proposed Fieldhouse Station 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
		Average						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
		Average						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
		Average						16	17
Total	Weekday PM Peak							57	53

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

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

		In	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.

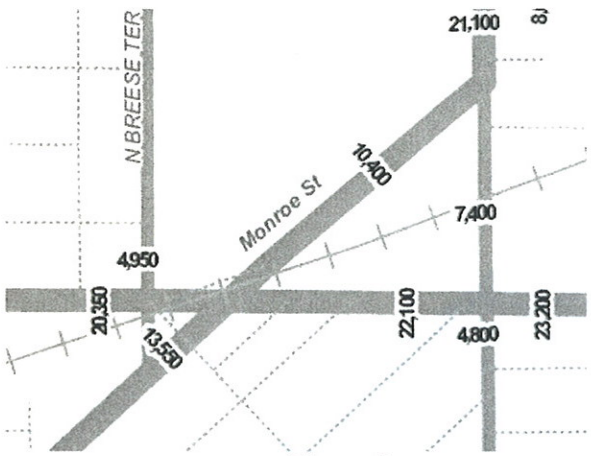

Figure 2

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

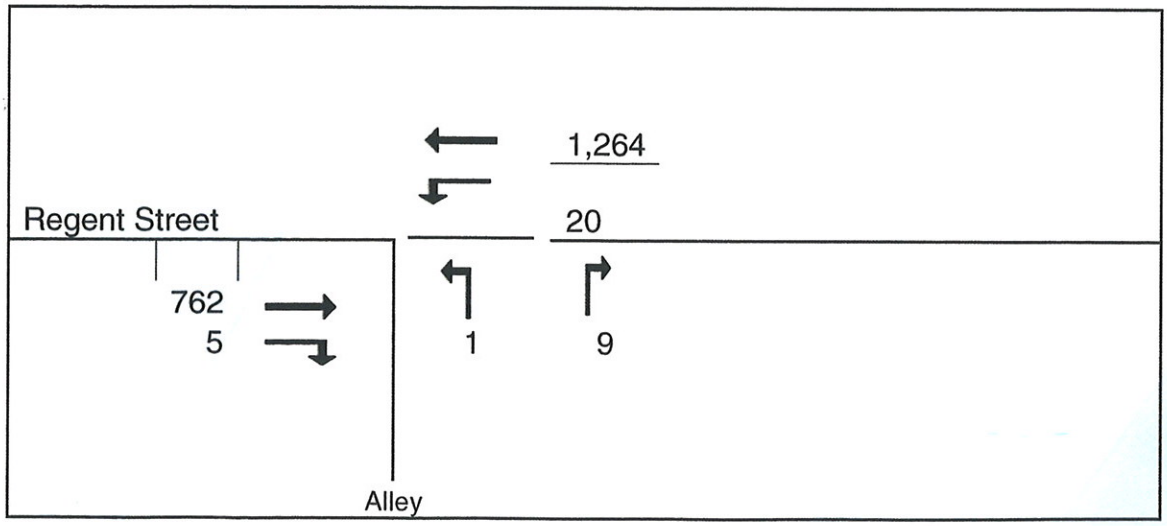

Figure 2

Total Development Traffic

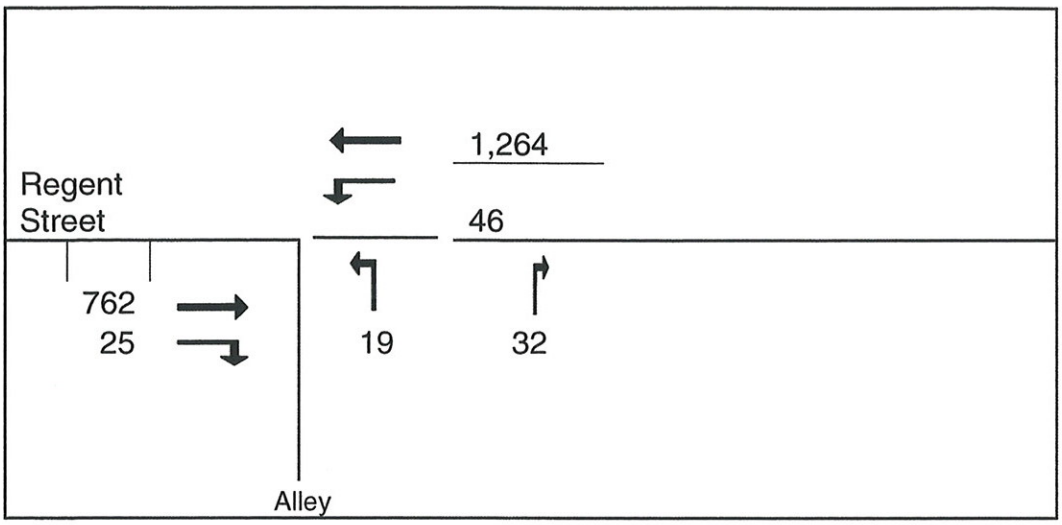

Figure 3

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.

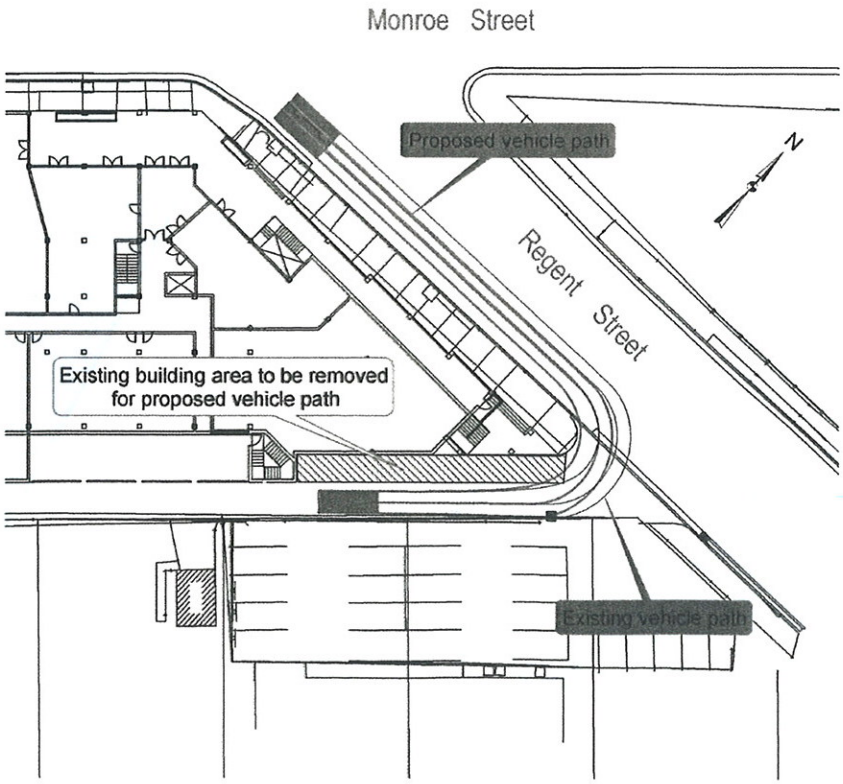

Figure 4

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	Net p.m. Peak HourTrips In	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.

- 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
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