



**PLANNING COMMISSION
MEETING AGENDA
SPECIAL/STUDY MEETING**

500 W. Big Beaver
Troy, MI 48084
(248) 524-3364
www.troymi.gov
planning@troymi.gov

Michael W. Hutson, Chair, and Mark Maxwell, Vice Chair
Donald Edmunds, Tom Krent, Philip Sanzica, Robert M. Schultz
Thomas Strat, John J. Tagle, and Lon M. Ullmann

April 26, 2011

7:30 P.M.

Council Board Room

1. ROLL CALL
2. APPROVAL OF AGENDA
3. MINUTES – April 12, 2011 Regular Meeting
4. PUBLIC COMMENT – For Items Not on the Agenda
5. BOARD OF ZONING APPEALS (BZA) REPORT
6. DOWNTOWN DEVELOPMENT AUTHORITY (DDA) REPORT
7. PLANNING AND ZONING REPORT

PRELIMINARY SITE PLAN REVIEW

8. PRELIMINARY SITE PLAN REVIEW (File Number SP 967) – Proposed Gaucho Brazilian Steakhouse, 3635 Rochester Road, West Side of Rochester between Troywood and Colebrook, Section 22, Currently Zoned B-3 (General Business) District and P-1 (Vehicular Parking) District

OTHER ITEMS

9. PUBLIC COMMENT – Items on Current Agenda
10. PLANNING COMMISSION COMMENT

ADJOURN

NOTICE: People with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk by e-mail at clerk@troymi.gov or by calling (248) 524-3317 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.

The Regular Meeting of the Troy City Planning Commission was called to order by Vice Chair Maxwell at 7:30 p.m. on April 12, 2011, in the Council Chamber of the Troy City Hall.

1. ROLL CALL

Present:

Donald Edmunds
Tom Krent
Mark Maxwell
Robert Schultz
Thomas Strat
John J. Tagle

Absent:

Michael W. Hutson
Philip Sanzica
Lon M. Ullmann

Also Present:

R. Brent Savidant, Acting Planning Director
Allan Motzny, Assistant City Attorney
Zachary Branigan, Carlisle/Wortman Associates, Inc.
Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

Resolution # PC-2011-04-018

Moved by: Edmunds
Seconded by: Schultz

RESOLVED, To approve the Agenda as prepared.

Yes: All present (6)
Absent: Hutson, Sanzica, Ullmann

MOTION CARRIED

3. APPROVAL OF MINUTES

Resolution # PC-2011-04-019

Moved by: Tagle
Seconded by: Schultz

RESOLVED, To approve the minutes of the March 22, 2011 Special/Study meeting as prepared.

Yes: All present (6)
Absent: Hutson, Sanzica, Ullmann

MOTION CARRIED

4. PUBLIC COMMENTS – Items not on the Agenda

There was no one present who wished to speak.

PRELIMINARY SITE PLAN REVIEW

5. PRELIMINARY SITE PLAN REVIEW (File Number SP 967) – Proposed Gaucho Brazilian Steakhouse, 3635 Rochester Road, West Side of Rochester between Troywood and Colebrook, Section 22, Currently Zoned B-3 (General Business) District

Resolution # PC-2011-04-020

Moved by: Schultz

Seconded by: Strat

RESOLVED, That the item be tabled or postponed until such time as a complete preliminary site plan package has been turned over to the Planning Department and both the Planning Consultant and the Planning Commission have had time to review it.

Yes: All present (6)

Absent: Hutson, Sanzica, Ullmann

MOTION CARRIED

OTHER BUSINESS

6. PUBLIC COMMENTS – Items on Current Agenda

There was no one present who wished to speak.

7. PLANNING COMMISSION COMMENTS

The Regular Meeting of the Planning Commission adjourned at 8:20 p.m.

Respectfully submitted,

Mark Maxwell, Vice Chair

Kathy L. Czarnecki, Recording Secretary

DATE: April 20, 2011

TO: Planning Commission

FROM: R. Brent Savidant, Acting Planning Director

SUBJECT: PRELIMINARY SITE PLAN REVIEW (File Number SP 967) – Proposed Gaucho Brazilian Steakhouse, 3635 Rochester Road, West Side of Rochester between Troywood and Colebrook, Section 22, Currently Zoned B-3 (General Business) District and P-1 (Vehicular Parking) District

The petitioner, Metro Group Architects, submitted the above referenced Preliminary Site Plan Approval application for a new Gaucho Brazilian Steakhouse. The existing vacant building will be demolished to make room for the restaurant.

The item was considered by the Planning Commission at the April 12, 2011 Regular meeting, but was postponed “until such time as a complete preliminary site plan package has been turned over to the Planning Department and both the Planning Consultant and the Planning Commission have had time to review it”. The applicant revised the site plan as per the recommendations in the report.

The attached report prepared by Carlisle/Wortman Associates, Inc. summarizes the application.

Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.

cc: Applicant
File/ SP 967

G:\SITE PLANS\SP 967 Gaucho Brazilian Steakhouse Sec 22\SP-967 Gaucho Restaurant 04 26 11.docx

PRELIMINARY SITE PLAN REVIEW

PRELIMINARY SITE PLAN REVIEW (File Number SP 967) – Proposed Gaucho Brazilian Steakhouse, 3635 Rochester Road, West Side of Rochester between Troywood and Colebrook, Section 22, Currently Zoned B-3 (General Business) District

Proposed Resolution # PC-2011-04-

Moved by:

Seconded by:

RESOLVED, That Preliminary Site Plan Approval, pursuant to Section 03.40.03 of the Zoning Ordinance, as requested for the proposed Gaucho Brazilian Steakhouse, located on the west Side of Rochester between Troywood and Colebrook (3635 Rochester Road), in Section 22, within the B-3 zoning district, be (granted, subject to the following conditions):

_____) or

(denied, for the following reasons: _____) or

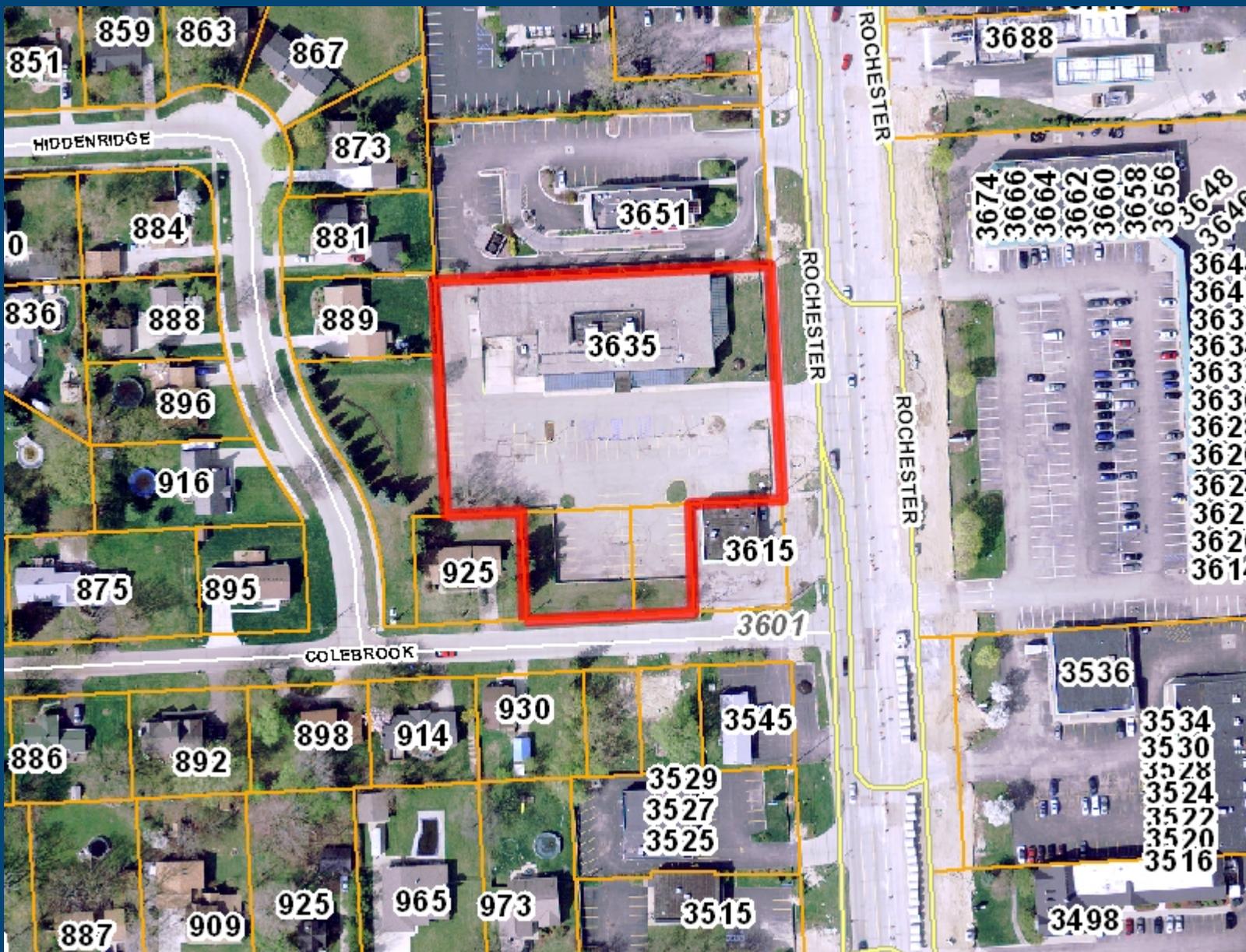
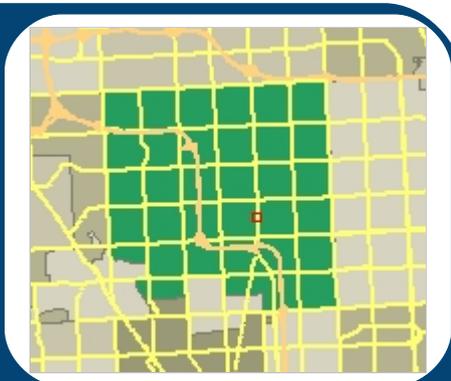
(postponed, for the following reasons: _____)

Yes:

No:

Absent:

MOTION CARRIED / DENIED

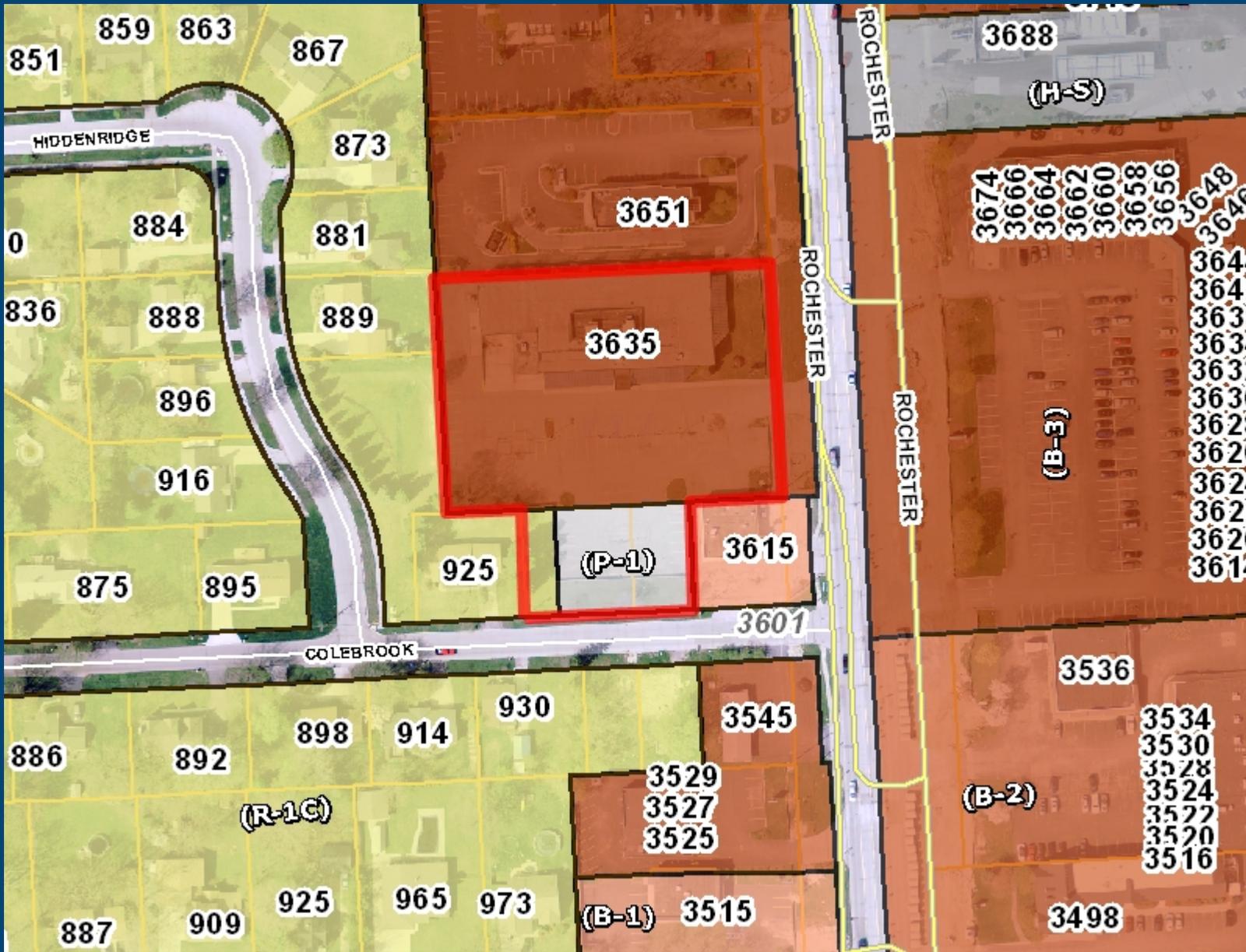


- Legend**
-  I-75
 -  Road Centerline
 -  Major Road
 -  Industrial Road
 -  Local Road
 -  Hydrography Poly
 -  Hydrography Arc
 -  Parcels
 - Aerial Photos - 2010**
 -  Red: Band_1
 -  Green: Band_2
 -  Blue: Band_3

277 0 138 277Feet

Scale 1: 1,660





Legend

- I-75
- Road Centerline
 - Major Road
 - Industrial Road
 - Local Road
- Zoning
 - (PUD) Planned Unit Development
 - (B-1) Local Business District
 - (B-2) Community Business District
 - (B-3) General Business District
 - (R-C) Research Center District
 - (C-F) Community Facilities District
 - (C-J) Consent Judgment
 - (E-P) Environmental Protection District
 - (R-EC) Residential Elder Care
 - (P-1) Vehicular Parking District
 - (H-S) Highway Service District
 - (M-1) Light Industrial District
 - (O-1) Office Building District
 - (O-M) Office Mid-Rise District
 - (OSC) Office Service Commercial District
 - (CR-1) One Family Residential Cluster District
 - (R-1A) One Family Residential District
 - (R-1B) One Family Residential District
 - (R-1C) One Family Residential District
 - (R-1D) One Family Residential District
 - (R-1E) One Family Residential District
 - (R-1T) One Family Attached Residential Distr
 - (R-2) Two Family Residential District
 - (R-M) Multiple Family Residential Medium De
 - (RM-1) Multiple Family Residential District Lc
 - (RM-2) Multiple Family Residential District (M
 - (RM-3) Multiple Family Residential District (Hi
- Hydrography Poly
- Hydrography Arc
- Parcels
- Aerial Photos - 2010
 - Red: Band_1
 - Green: Band 2



Scale 1: 1,660



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.



CARLISLE/WORTMAN ASSOCIATES, INC.

Community Planners /Landscape Architects

605 S. Main, Suite 1
Ann Arbor, MI 48104
734-662-2200
fax 734-662-1935

6401 Citation Drive, Suite E
Clarkston, MI 48346
248-625-8480
fax 248-625-8455

Date: April 7, 2011
Rev.: April 20, 2011

Preliminary Site Plan Review For City of Troy, Michigan

Applicant:	GaUCHO, LLC
Project Name:	GaUCHO SteakHouse
Plan Date:	April 19, 2011
Location:	3635 Rochester Road
Zoning:	B-3, General Business District and P-1, Parking District
Action Requested:	Preliminary Site Plan Approval
Required Information:	Deficiencies noted

PROJECT AND SITE DESCRIPTION

We are in receipt of a revised preliminary site plan application, which includes a topographic survey with existing conditions, a grading plan, a landscape plan, a site plan, details sheets, a floor plan, and elevations. The applicant also submitted, under separate cover, a manufacturer's package describing the specific rooftop mechanical screening product proposed for the project. The site plan submittal includes a much greater amount of detail and provides sufficient information for preliminary site plan review.

The applicant intends to demolish an existing vacant building and construct a new, smaller building to house a restaurant. Additional parking will be constructed and an existing loading dock will be removed. The remaining existing parking area will be resealed and restriped. Existing landscaping will be maintained and new landscaping will be added. The site is abutted

on its south and west sides by a masonry screen wall. The site has frontage on Rochester Road, but also has frontage (but no access) to the adjacent road to the south, Colebrook Drive.

Location of Subject Property:

The property is located on the west side of Rochester, just north of Colebrook Drive.

Size of Subject Property:

The parcel is 82,238 square feet in size (three parcels of 82,758, 10,000, and 5,569 square feet equal 98,327 gross less 16,089 square feet of right-of-way, which equals 82,238 square feet net site area.

Proposed Uses of Subject Parcel:

The applicant proposes to build a new building to house a Brazilian steak house restaurant.

Current Use of Subject Property:

The subject property is currently occupied by a vacant building.

Current Zoning:

The property is currently zoned B-3 General Business District and P-1 Parking District.

Zoning Classification of Adjacent Parcels and Current Land Use:

- North: B-3, General Business; restaurant
- South: R-1C; single family home, and B-2, retail
- East: Rochester Road
- West: R-1C; single-family homes

BUILDING LOCATION AND SITE ARRANGEMENT

The existing building is located at the north boundary of the site with parking to the south accessed via a single driveway to Rochester Road. The proposed site arrangement is nearly identical, albeit with a slightly smaller new building and an enlarged parking area. We have no objection to the proposed site arrangement.

Items to be Addressed: *None.*

AREA, WIDTH, HEIGHT, SETBACKS

Required and Provided Dimensions:

Section 30.20.00 requires the following setbacks and height limits:

For this project, there are two front yards, on Colebrook Drive and Maple Road, both of which require a front yard setback. The front yard setback on Colebrook Drive is unaffected, given that no improvements are proposed along that frontage.

	<u>Required:</u>	<u>Provided:</u>
Front (to Rochester Road R.O.W)	40 feet	45.55 feet
Front (to Colebrook Drive R.O.W)	30 Feet (P-1 District requires the same front yard setback as the adjacent residential category, in this case it is 30 feet for R-1C)	Existing wall is 28.88 feet from the property boundary. This is an existing condition and will not change. The building is 208.37 feet from the property line.
Rear (to west property line)	30 feet	141.77 feet
Side (to north property line)	0 feet	0 feet
Building Height	Maximum of 3 stories or 40 feet.	1 story; 26 feet

Items to be Addressed: None.

PARKING

Proposed Parking:

The site plan shows 127 parking spaces, 5 of which are barrier free spaces.

Parking Calculations:

The parking calculations provided by the applicant are as follows.

<u>Required</u>	<u>Provided</u>
One (1) space per 2 seats of dining capacity = $150 \text{ seats} / 2 = 75 \text{ spaces}$ Plus One employee space for every ten spaces of diner capacity = $75 / 10 = 8 \text{ spaces}$ Plus Private dining area capacity 80 diners – $60 / 2 = 40 \text{ spaces}$ Plus One employee space for every ten spaces of diner capacity = $40 / 10 = 4 \text{ spaces}$ Total $75 + 8 + 40 + 4 = 127 \text{ spaces}$	127 spaces (97 existing, 30 proposed)

The applicant has provided no extra parking spaces. The proposed plan meets minimum parking requirements. The floor plan and parking calculations match with regard to proposed occupancy, and the proposed maximum occupancy of 225 dining seats and 12 employees would indicate that a total of 237 people may be anticipated on the site at a given time. The site plan now includes building code load occupancy calculations on Sheet AO.1. The building code occupant load calculations indicate that a maximum of 242 people could be permitted in the building. We are

satisfied that the proposed occupancy load would permit the number of seats and employees proposed, and are therefore also satisfied that the proposed parking provided is sufficient to satisfy Ordinance requirements.

Items to be Addressed: None.

SITE ACCESS AND CIRCULATION

Proposed Circulation:

The site will be accessed from one proposed entrance on Rochester Road, as it currently exists. We have no objection to this approach. Site circulation will essentially remain unchanged, with the exception of the proposed additional new parking area.

Sidewalks:

The applicant is proposing a sidewalk surrounding the south, east and west of the new building, and a suitable connection to the Rochester Road sidewalk.

Items to be Addressed: None.

NATURAL RESOURCES

The site is an existing vacant building with typical site landscaping. The proposed landscape plan would not impact any protected natural features.

Items to be Addressed: None.

LANDSCAPING

The site plan provides revised landscaping information, and gives full details about the quantity, species, and details of proposed materials.

Article 39.20.02 states “*All land use buffers, landscaping, screening and open space areas required under the terms of this Chapter shall be reviewed by the Planning Department as to compliance with the intent of this Chapter, and by the Department of Parks and Recreation as to compliance with the Landscape Design and Tree Preservation Standards.*”

Trees:

The applicant is required to provide trees within the greenbelt at a rate of one tree for every 30 feet of frontage. There are 370 feet of frontage along the two rights-of-way. The landscaping plan includes 12 trees, seven of which are new and are located along Rochester Road. Two of the trees along Colebrook are new, while two are existing and proposed to remain. The greenbelt tree requirements have been met. The site plan also includes a series of additional new trees located within parking lot landscaping islands for a total of 17 new trees.

Greenbelt:

A ten (10) foot wide greenbelt has been provided along the public street frontages. Required trees are provided as noted above.

Minimum landscaped area:

The proposed landscape plan provides 16,489 total square feet of landscaped area, and approximately 8,234 square feet are required. The plan exceeds Ordinance requirements.

Items to be Addressed: None.

SUBMITTAL REQUIREMENTS

Section 3.43.01 establishes the requirements for preliminary site plan approval. The revised submittal satisfies the minimum submittal requirements.

Items to be Addressed: None.

RECOMMENDATIONS

We support the proposed project and are satisfied that the revisions address our previous concerns. We recommend the Planning Commission grant preliminary site plan approval.



CARLISLE/WORTMAN ASSOCIATES, INC.
Zachary G. Branigan, LEED AP, AICP
Associate

Gaucha SteakHouse

New Building

3635 Rochester Road
Troy, MI 48083

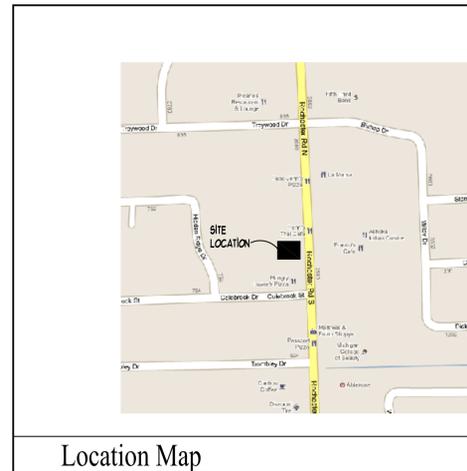
Owner:
Gaucha LLC
5118 Woodview Ct.
Dearborn, MI 48126
P: (313) 996-3988

Architect:
Metro Group Architects
P.O. Box 7363
Ann Arbor, MI 48107- 7363
P: (734) 747-8999
Contact: Maria Hochendoner
Robb Kerr

MEP:
Alkemeyer and Associates
353 Marshall Avenue
St. Louis, MO 63119
Ph. (314) 772-1782
Contact: Matt Thompson

Structural:
SDI Structures
275 E. Liberty
Ann Arbor, MI 48104
Ph. (734) 213-6091
Contact: Paul Dannels

Civil:
Diffin Development
24353 Tara Drive
South Lyon, MI 48178
P: (248) 943-8244
Contact: Matt Diffin



No Scale
2

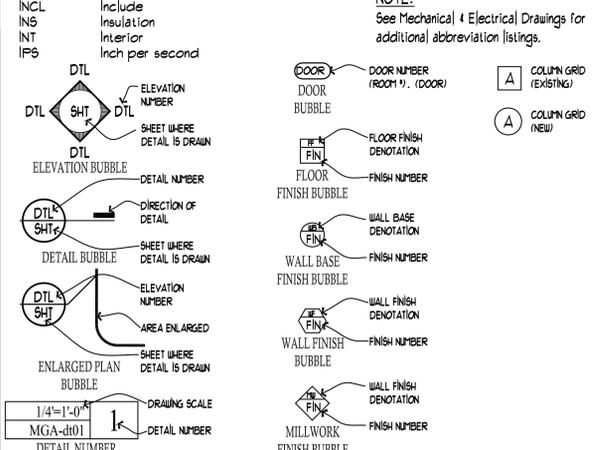
Abbreviation Index

No Scale
GaTr-abbr 2

Sheet Index

No Scale
Detail I. D. 1

A	Ampere	JB	Junction box
ABV	Above	JST	Joist
AC	Alternating Current	JT	Joint
ACOUS	Acoustical	L	Long or Length
ADA	Americans w/Disabilities Act	LAM	Laminate
ADJ	Adjacent or adjustable	LAV	Lavatory
AF	Above finish floor	LP	Low Point
AISC	American Institute of Steel Construction	MAT'L	Material
APPROX	Approximately	MAX	Maximum
ARCH	Architect(ural)	MECH	Mechanical
ASTM	American Society of Testing Materials	MIN	Minimum or minute
BD	Board	MTD	Mounted
BLK	Block	M.O.	Masonry Opening
BM	Beam	N	North
BOCA	Building Officials & Code Administrator International	N/A	Not applicable
BOT	Bottom	NEC	National Electrical Code
CABT	Cabinet	NECES	Necessary
CFM	Cubic feet per minute	NIC	Not in contract
CF	Cast iron pipe or Cast-in-Place	NTS	Not to scale
CJ	Control Joint	OC	On center
CL	Centerline	OH	Overhead
CLG	Ceiling	OPG	Opening
CNTR	Counter	OPP	Opposite Hand
CO	Clean out	OS	Overflow Scupper
CPT	Carpet	PART	Partition
COL	Column	PART BD	Particle board
CONC	Concrete	P, LAM	Plastic Laminate
CONT	Continuous	PLBG	Plumbing
CRS	Carpet Reducer Strip	FR	Pair
C.T.	Ceramic Tile	FSF	Pounds per square foot
CW	Cold water or Cool white	FSl	Pounds per square inch
D	Deep	FTD	Painted
DET	Detail	FVC	Polyvinylchloride pipe
DEMO	Demolition	Q.T.	Quarry Tile
DR	Door	R	Riser
DS	Down Spout	RA	Return air
DSS	Down Spout w/ Scupper	REF	Reference
DRUG	Drawing	REJ	Roof Expansion Joint
EA	Each	REINF	Reinforced
EF	Exhaust Fan	REQ'D	Required
EJ	Expansion Joint	RET	Return
EIFS	Exterior Wall Insulation and Finish System	REV	Revised
ELEV	Elevation	RM	Room
ELEC	Electrical	RO	Rough opening
EMER	Emergency	RS	Roof Sump
EQ	Equal	RTU	Roof-top unit
EQUIP	Equipment	S	South
EXIST or EX	Existing	SA	Supply air
EXP	Exposed	SECT	Section
EXT	Exterior	SF	Supply fan or Square foot
FD	Floor Drain	SHT	Sheet
FFE	Finish Floor Elevation	SIM	Similar
FIN	Finish	SPEC	Specifications
FL	Floor	STD	Standard
FR	Frame	STRUCT	Structural
FRMG	Framing	T4B	Top and Bottom
FRP	Fiberglass Reinforced Panel	T4G	Tongue & Groove
FT	Foot: Feet	TEMP	Tempered (Glass)
FTG	Footing	TH	Thick
FV	Field Verify	TOS	Top of Steel
G	Gas or Gutter	TS	Tube steel
GC	General Contractor	TWS	Through-wall Scupper
GA	Gauge	TYP	Typical
GFI	Ground fault interrupter	UL	Underwriters Laboratories
GR	Grade	UNFIN	Unfinished
GYP	Gypsum	UON	Unless otherwise noted
GYP BD	Gypsum board	V	Vent or Volt
H	Hot or High	VCT	Vinyl composition tile
HD	Fire Alarm Heat Detector	VERT	Vertical
HC	Hollow core	VIF	Verify in Field
HDWE	Hardware	VTR	Vent Through Roof
HGT	Height	w/	With
HM	Hollow metal	WD	Wood
HORIZ	Horizontal	w/o	Without
HP	High Point or Horsepower	WH	Water Heater
HT	Height	NOTE:	
HVAC	Heating, Ventilation & Air Conditioning		See Mechanical & Electrical Drawings for additional abbreviation listings.
HW	Hot water		
IN	Inch		
INCL	Include		
INS	Insulation		
INT	Interior		
IPS	Inch per second		



Drawing Sheet Index		2/1/11 Initial Bid	3/5/11 Revised Budget Bid	3/24/11 Prelim Site Plan Approval	4/7/11 Prelim Site Plan Approval	4/9/11 Prelim Site Plan Approval														
SHEET	TITLE	O/C	O/C	O/P	O/P	O/P														
A0.0	Sheet Index, Location Map, 4 Abvr																			
A0.1	Building Code Review																			
Civil																				
C-2	Topographic Survey/Removal Plan																			
C-3	Site Plan																			
C-4	Site Grading/Soil Erosion Utility Plan																			
C-5	Landscape Plan																			
C-6	Detail Sheet																			
Architectural																				
SFL0	Existing Architectural Site Plan	O/C	O/C	O/P	O/P															
SPL1	Architectural Site Plan	O/C	O/C	O/P	O/P															
A0.1	Building Code Review																			
A2.1	Floor Plan	O/C	O/C	O/P	O/P															
A2.2	Finish Floor Plan	O/C	O/C																	
A3.1	Reflected Ceiling Plan	O/C	O/C																	
A5.1	Exterior Elevations	O/C	O/C	O/P	O/P	O/P														
A1.1	Building Section	O/C	O/C																	
A1.2	Wall Sections	O/C	O/C																	
Equipment																				
EQU	Equipment Plan		O/C																	
E0.1	Equipment Schedule		O/C																	
Mechanical																				
Electrical																				
Plumbing																				
Fire Protection																				
Legend: O: Owner C: Contractor L: Landlord V: Vendor P: Permits (Building/Health Departments)																				

METRO GROUP ARCHITECTS
P.O. Box 7363
Ann Arbor, Michigan 48107-7363
Phone: (734) 747-8999

353 Marshall Avenue
St. Louis, Missouri 63119
Phone: (314) 772-1782
Fax: (314) 373-3514
Alkemeyer & Associates
Engineering Consultants
Mechanical - Electrical - Plumbing

Gaucha Steakhouse
3635 Rochester Road
Troy, Michigan 48083

4/9/11 Prelim Site Plan Approval
4/7/11 Prelim Site Plan Approval
3/24/11 Prelim Site Plan Approval
3/5/11 Revised Budget Bid
2/1/11 Initial Bid
Drawn: MMH Checked: RDK

A0.0
Sheet Index
Location Map
Abbreviations

REGULATING AUTHORITY:
NORTHVILLE TOWNSHIP BUILDING SERVICES
215 WEST MAIN STREET
NORTHVILLE, MI 48167
(248) 449-9902

GENERAL BUILDING DATA:
BUILDING REVIEWED AS: NON-SEPARATED USES
USE GROUP CLASSIFICATION: ASSEMBLY (A-2)
BUILDING AREA - FIRST FLOOR: 12,743 SF
BUILDING HEIGHT (AT HIGHEST POINT): 26'-0"
BUILDING CONSTRUCTION: TYPE II-B
BUILDING SPRINKLER SYSTEM: BUILDING TO BE FULLY SPRINKLERED (PER SECTION 903.2.9)
BUILDING FIRE ALARM: BUILDING TO HAVE A FIRE ALARM SYSTEM
BUILDING STANDPIPE SYSTEM: BUILDING IS NOT REQUIRED TO HAVE A STANDPIPE SINCE THE HIGHEST STORY IS NOT LOCATED MORE THAN 30 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT ACCESS.

GOVERNING CODES:
2009 MICHIGAN BUILDING CODE
2009 MICHIGAN PLUMBING CODE
2009 MICHIGAN ELECTRICAL CODE
2009 MICHIGAN MECHANICAL CODE
???? MICHIGAN UNIFORM ENERGY CODE
2003 ICC/ANSI A117.1 (ACCESSIBLE & USEABLE BUILDINGS & FACILITIES)

CHAPTER 3: USE & OCCUPANCY CLASSIFICATION
(303.1) USE GROUP: ASSEMBLY (A-2)

CHAPTER 5: GENERAL BUILDING HEIGHTS AND AREAS:
(TABLE 503) ALLOWABLE HEIGHT AND BUILDING AREAS FOR TYPE II-B CONSTRUCTION:

USE GROUP	HEIGHT	AREA
GROUP A-2 (ASSEMBLY)	1 STORY	12,743 SF

USE GROUP	ALLOWABLE HEIGHT	ALLOWABLE AREA
GROUP A-1 (ASSEMBLY)	2 STORIES	9,500 SF

*INDICATES AREA MODIFICATION FOR (A-2) ASSEMBLY:
If = [F/P - 0.25] (W/30)
F = 462' If = [462/462 - 0.25] (0)
P = 462' If = [0.75] (1)
W = 30 If = .75

Aa = Aa = A + [(A*10) + [(A*10)²]]
At = 9,500 Aa = 9,500 + [(9,500*.75) + [(9,500)²]]
If = .75 Aa = 9,500 + 7,125 + 19,000
Is = 2 Aa = 35,625 SF

(508.1) GENERAL
THE PROVISIONS IN THIS SECTION SHALL PERMIT THE USE OF SPECIAL CONDITIONS THAT ARE EXEMPT FROM, OR MODIFY, THE SPECIFIC REQUIREMENTS OF THIS CHAPTER REGARDING THE ALLOWABLE HEIGHTS AND AREAS OF BUILDINGS BASED ON THE OCCUPANCY CLASSIFICATION AND TYPE OF CONSTRUCTION, PROVIDED THE SPECIAL CONDITION COMPLIES WITH THE PROVISIONS SPECIFIED IN THIS SECTION FOR SUCH CONDITION AND OTHER APPLICABLE REQUIREMENTS OF THIS CODE.

CHAPTER 6: TYPES OF CONSTRUCTION
(602) CONSTRUCTION CLASSIFICATION: TYPE II-B, USE GROUP A-2 ASSEMBLY

(TABLE 601) FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS) FOR TYPE II-B CONSTRUCTION:

BUILDING ELEMENTS	FIRE-RESISTANCE REQUIREMENTS
STRUCTURAL FRAME	
INCLUDING COLUMNS, GIRDERS, TRUSSES	0 HOURS
BEARING WALLS	
EXTERIOR	0 HOURS
INTERIOR	0 HOURS
NONBEARING WALLS & PARTITIONS	
EXTERIOR	0 HOURS
NONBEARING WALLS & PARTITIONS	
INTERIOR	0 HOURS
FLOOR CONSTRUCTION	
INCLUDING SUPPORTING BEAMS AND JOISTS	0 HOURS
ROOF CONSTRUCTION	
INCLUDING SUPPORTING BEAMS AND JOISTS	0 HOURS

(TABLE 602) FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE FOR TYPE V-B CONSTRUCTION:

FIRE SEPARATION DISTANCE (FEET)	USE GROUP	FIRE-RESISTANCE REQUIREMENTS
<5	A-2	1 HOUR
≥5	A-2	1 HOUR
<10		
≥10	A-2	0 HOUR
<30		
≥30	A-2	0 HOUR

CHAPTER 7: FIRE-RESISTANCE - RATED CONSTRUCTION:
FIRE-RESISTIVE MATERIALS & SYSTEMS TO COMPLY WITH THE REQUIREMENTS SET FORTH IN CHAPTER 7.

(704.8) ALLOWABLE AREA OF OPENINGS
THE MAXIMUM AREA OF UNPROTECTED OPENINGS PERMITTED IN AN EXTERIOR WALL IN ANY STORY SHALL NOT EXCEED THE VALUES SET FORTH IN TABLE 704.8 WHERE BOTH UNPROTECTED AND PROTECTED OPENINGS ARE LOCATED IN THE EXTERIOR WALL IN ANY STORY, THE TOTAL AREA OF THE OPENINGS SHALL COMPLY WITH THE FOLLOWING FORMULA (BASED ON EXCEPTION "G" OF TABLE 704.8 UNLIMITED UNPROTECTED OPENINGS ARE ALLOWED AT THE 1st AND 2nd FLOORS.):

$$(A/a) + (Au/au) \leq 1.0$$

WHERE:
A = ACTUAL AREA OF PROTECTED OPENINGS, OR THE EQUIVALENT AREA OF PROTECTED OPENINGS, A_c (SEE SECTION 704.7)
a = ALLOWABLE AREA OF PROTECTED OPENINGS
Au = ACTUAL AREA OF UNPROTECTED OPENINGS
au = ALLOWABLE AREA OF UNPROTECTED OPENINGS

TABLE 704.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS
UNPROTECTED OPENING: FIRE SEPARATION DISTANCE GREATER THAN 5 TO 10 FEET = 10%
FIRE SEPARATION DISTANCE GREATER THAN 30 FEET = NO LIMIT

(704.8.1) AUTOMATIC SPRINKLER SYSTEM (EXISTING WITH IN SPACE)
IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1, THE MAXIMUM ALLOWABLE AREA OF UNPROTECTED OPENINGS IN OCCUPANCIES OTHER THAN GROUPS H-1, H-2 AND H-3 SHALL BE THE SAME AS THE TABULATED LIMITATIONS FOR PROTECTED OPENINGS.

(704.9) VERTICAL SEPARATION OF OPENINGS
OPENINGS IN EXTERIOR WALLS IN ADJACENT STORIES SHALL BE SEPARATED VERTICALLY TO PROTECT AGAINST FIRE SPREAD ON THE EXTERIOR OF THE BUILDINGS WHERE THE OPENINGS ARE WITHIN 5 FEET OF EACH OTHER HORIZONTALLY AND THE OPENING IN THE LOWER STORY IS NOT A PROTECTED OPENING IN ACCORDANCE WITH SECTION 715.4.8. SUCH OPENINGS SHALL BE SEPARATED VERTICALLY AT LEAST 3 FEET BY SPANDREL GIRDERS, EXTERIOR WALLS OR OTHER SIMILAR ASSEMBLIES THAT HAVE A FIRE-RESISTANCE RATING OF AT LEAST 1 HOUR OR BY FLAME BARRIERS THAT EXTEND HORIZONTALLY AT LEAST 30 INCHES BEYOND THE EXTERIOR WALL. FLAME BARRIERS SHALL ALSO HAVE A FIRE-RESISTANCE RATING OF AT LEAST 1 HOUR. THE UNEXPOSED SURFACE TEMPERATURE LIMITATIONS SPECIFIED IN ASTM E 119 SHALL NOT APPLY TO THE FLAME BARRIERS OR VERTICAL SEPARATION UNLESS OTHERWISE REQUIRED BY THE PROVISIONS OF THIS CODE.

EXCEPTIONS:
1. THIS SECTION SHALL NOT APPLY TO BUILDINGS THAT ARE THREE STORIES OR LESS IN HEIGHT.
2. THIS SECTION SHALL NOT APPLY TO BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2.
3. OPEN PARKING GARAGES.

(704.11) PARAPETS
PARAPETS SHALL BE PROVIDED ON EXTERIOR WALLS OF BUILDINGS.

EXCEPTIONS:
1. THE WALL IS NOT REQUIRED TO BE FIRE-RESISTANCE RATED IN ACCORDANCE WITH TABLE 602 BECAUSE OF FIRE SEPARATION DISTANCE.

(706.1) GENERAL
FIRE BARRIERS USED FOR SEPARATIONS OF SHAFTS, EXITS, EXIT PASSAGEWAYS, HORIZONTAL EXITS OR INCIDENTAL USE AREAS, TO SEPARATE DIFFERENT OCCUPANCIES, TO SEPARATE A SINGLE OCCUPANCY INTO DIFFERENT FIRE AREAS, OR TO SEPARATE OTHER AREAS WHERE A FIRE BARRIER IS REQUIRED ELSEWHERE IN THIS CODE OR THE INTERNATIONAL FIRE CODE, SHALL COMPLY WITH THIS SECTION.

(707.1) GENERAL
THE PROVISIONS OF THIS SECTION SHALL APPLY TO VERTICAL SHAFTS WHERE SUCH SHAFTS ARE REQUIRED TO PROTECT OPENINGS AND PENETRATIONS THROUGH FLOOR/CEILING AND ROOF/CEILING ASSEMBLIES.

(707.2) SHAFT ENCLOSURE REQUIRED
OPENINGS THROUGH A FLOOR/CEILING ASSEMBLY SHALL BE PROTECTED BY A SHAFT ENCLOSURE COMPLYING WITH THIS SECTION.
EXCEPTIONS:
1. A SHAFT ENCLOSURE IS NOT REQUIRED FOR OPENINGS TOTALLY WITHIN AN INDIVIDUAL RESIDENTIAL DWELLING UNIT AND CONNECTING FOUR STORIES OR LESS.
4. A SHAFT ENCLOSURE IS NOT REQUIRED FOR PENETRATIONS BY DUCTS PROTECTED IN ACCORDANCE WITH SECTION 712.4. GREASE DUCTS SHALL BE PROTECTED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE.
11. WHERE PERMITTED BY OTHER SECTIONS OF THIS CODE.

(707.4) FIRE-RESISTANCE RATING
SHAFT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 2 HOURS WHERE CONNECTING FOUR STORIES OR MORE AND NOT LESS THAN 1 HOUR WHERE CONNECTING LESS THAN FOUR STORIES. SHAFT ENCLOSURES SHALL BE CONSTRUCTED AS FIRE BARRIERS IN ACCORDANCE WITH SECTION 706. SHAFT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING NOT LESS THAN THE FLOOR ASSEMBLY PENETRATED, BUT NEED NOT EXCEED 2 HOURS.

(708.1) GENERAL- FIRE PARTITIONS
THE FOLLOWING WALL ASSEMBLIES SHALL COMPLY WITH THIS SECTION.
1. WALLS SEPARATING DWELLING UNITS IN THE SAME BUILDING.
3. WALLS SEPARATING TENANT SPACES IN COVERED MALL BUILDINGS AS REQUIRED BY SECTION 402.7.2.
4. CORRIDOR WALLS AS REQUIRED BY SECTION 1016.1.

(708.3) FIRE-RESISTANCE RATING
THE FIRE-RESISTANCE RATING OF THE WALLS SHALL BE AT LEAST 1 HOUR.
EXCEPTIONS:
1. CORRIDOR WALLS AS PERMITTED BY TABLE 1016.1.
2. DWELLING UNIT AND SLEEPING UNIT SEPARATIONS IN BUILDINGS OF TYPE IIB, IIIB AND VB SHALL HAVE
FIRE-RESISTANCE RATINGS OF NOT LESS THAN 1 HOUR IN BUILDINGS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1.

(708.4) CONTINUITY
FIRE PARTITIONS SHALL EXTEND FROM THE TOP OF THE FLOOR ASSEMBLY BELOW TO THE UNDERSIDE OF THE FLOOR OR ROOF SLAB OR DECK ABOVE OR TO THE FIRE-RESISTANCE- RATED FLOOR/CEILING OR ROOF/CEILING ASSEMBLY ABOVE, AND SHALL BE SECURELY ATTACHED THERETO.

EXCEPTIONS:
1. THE WALL NEED NOT BE EXTENDED INTO THE CRAWL SPACE BELOW WHERE THE FLOOR ABOVE THE CRAWL SPACE HAS A MINIMUM 1- HOUR FIRE-RESISTANCE RATING.
2. WHERE THE ROOM-SIDE FIRE-RESISTANCE-RATED MEMBRANE OF THE CORRIDOR IS CARRIED THROUGH TO THE UNDERSIDE OF A FIRE-RESISTANCE-RATED FLOOR OR ROOF ABOVE, THE CEILING OF THE CORRIDOR SHALL BE PERMITTED TO BE PROTECTED BY THE USE OF CEILING MATERIALS AS REQUIRED FOR A 1-HOUR FIRE-RESISTANCE-RATED FLOOR OR ROOF SYSTEM.
3. WHERE THE CORRIDOR CEILING IS CONSTRUCTED AS REQUIRED FOR THE CORRIDOR WALLS, THE WALLS SHALL BE PERMITTED TO TERMINATE AT THE UPPER MEMBRANE OF SUCH SEALING ASSEMBLY.
4. THE FIRE PARTITION SEPARATING TENANT SPACES IN A MALL, COMPLYING WITH SECTION 402.7.2, IS NOT REQUIRED TO EXTEND BEYOND THE UNDERSIDE OF A CEILING THAT IS NOT PART OF A FIRE-RESISTANCE-RATED ASSEMBLY. A WALL IS NOT REQUIRED IN ATTIC OR CEILING SPACES ABOVE TENANT SEPARATION WALLS.
5. FIREBLOCKING OR DRAFTSTOPPING IS NOT REQUIRED AT THE PARTITION LINE IN GROUP R-2 BUILDINGS THAT DO NOT EXCEED FOUR STORIES IN HEIGHT PROVIDED THE ATTIC SPACE IS SUBDIVIDED BY DRAFTSTOPPING INTO AREAS NOT EXCEEDING 3,000 SQUARE FEET OR ABOVE EVERY TWO DWELLING UNITS, WHICH EVER IS SMALLER.
6. FIREBLOCKING OR DRAFTSTOPPING IS NOT REQUIRED AT THE PARTITION LINE IN BUILDINGS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED THROUGHOUT IN ACCORDANCE WITH SECTION 903.3.1 OR 903.1.2 PROVIDED THAT AUTOMATIC SPRINKLERS ARE INSTALLED IN COMBUSTIBLE FLOOR/CEILING AND ROOF/CEILING SPACES.

(708.5) EXTERIOR WALLS
WHERE EXTERIOR WALLS SERVE AS A PART OF A REQUIRED FIRE-RESISTANCE-RATED ENCLOSURE, SUCH WALLS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 704 FOR EXTERIOR WALLS AND THE FIRE-RESISTANCE-RATED ENCLOSURE REQUIREMENTS SHALL NOT APPLY.

(712.3.1) THROUGH PENETRATIONS
THROUGH PENETRATIONS OF FIRE-RESISTANCE-RATED WALLS SHALL COMPLY WITH SECTION 712.3.1.1 OR 712.3.1.2.

(710.1) GENERAL- HORIZONTAL ASSEMBLIES
FLOOR AND ROOF ASSEMBLIES REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL COMPLY WITH THIS SECTION.

(711.3) FIRE-RESISTANCE RATING
THE FIRE-RESISTANCE RATING OF FLOOR AND ROOF ASSEMBLIES SHALL NOT BE LESS THAN THAT REQUIRED BY THE BUILDING TYPE OF CONSTRUCTION. WHERE THE FLOOR ASSEMBLY SEPARATES MIXED OCCUPANCIES, THE ASSEMBLY SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN THAT REQUIRED BY SECTION 302.3.2. BASED ON THE OCCUPANCIES BEING SEPARATED. WHERE THE FLOOR ASSEMBLY SEPARATES A SINGLE OCCUPANCY INTO DIFFERENT FIRE AREAS, THE ASSEMBLY SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN THAT REQUIRED BY SECTION 708.3.7. FLOOR ASSEMBLIES SEPARATING DWELLING UNITS IN THE SAME BUILDING OR SLEEPING UNITS IN OCCUPANCIES R-1, HOTEL OCCUPANCIES, R-2 AND I-1 SHALL BE A MINIMUM OF 1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION.
EXCEPTION: DWELLING UNIT AND SLEEPING UNIT SEPARATIONS IN BUILDING OF TYPE IIB, IIIB, AND VB CONSTRUCTION SHALL HAVE FIRE- RESISTANCE RATINGS OF NOT LESS THAN 1 HOUR IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEMS IN ACCORDANCE WITH SECTION 903.3.1.1

(714.2) PROTECTION OF STRUCTURAL MEMBERS
PROTECTION OF COLUMNS, GIRDERS, TRUSSES, BEAMS, LINTELS OR OTHER STRUCTURAL MEMBERS THAT ARE REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL COMPLY WITH THIS SECTION.

(714.2.1) INDIVIDUAL PROTECTION
COLUMNS, GIRDERS, TRUSSES, BEAMS, LINTELS OR OTHER STRUCTURAL MEMBERS THAT ARE REQUIRED TO HAVE A FIRE-RESISTANCE RATING AND THAT SUPPORT MORE THAN TWO FLOORS OR ONE FLOOR AND ROOF, OR SUPPORT A LOAD-BEARING WALL OR A NON LOAD-BEARING WALL MORE THAN TWO STORIES HIGH, SHALL BE INDIVIDUALLY PROTECTED ON ALL SIDES FOR THE FULL LENGTH WITH MATERIALS HAVING THE REQUIRED FIRE-RESISTANCE RATING. OTHER STRUCTURAL MEMBERS REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL BE PROTECTED BY INDIVIDUAL ENCASEMENT, BY A MEMBRANE OR CEILING PROTECTION AS SPECIFIED IN SECTION 711.7, OR BY A COMBINATION OF BOTH. COLUMNS SHALL ALSO COMPLY WITH SECTION 714.2.2.

(714.2.2) COLUMN PROTECTION ABOVE CEILINGS
WHERE COLUMNS REQUIRE A FIRE-RESISTANCE RATING, THE ENTIRE COLUMN, INCLUDING ITS CONNECTIONS TO BEAMS OR GIRDERS, SHALL BE PROTECTED. WHERE THE COLUMN EXTENDS THROUGH A CEILING, FIRE RESISTANCE OF THE COLUMN SHALL BE CONTINUOUS FROM THE TOP OF THE FLOOR THROUGH THE CEILING SPACE TO THE TOP OF THE COLUMN.

(714.2.3) TRUSS PROTECTION
THE REQUIRED THICKNESS AND CONSTRUCTION OF FIRE-RESISTANCE-RATED ASSEMBLIES ENCLOSING TRUSSES SHALL BE BASED ON THE RESULTS OF FULL-SCALE TESTS OR COMBINATIONS OF TESTS ON TRUSS COMPONENTS OR ON APPROVED CALCULATIONS BASED ON SUCH TESTS THAT SATISFACTORILY DEMONSTRATE THAT THE ASSEMBLY HAS THE REQUIRED FIRE RESISTANCE.

(714.2.4) ATTACHMENTS TO STRUCTURAL MEMBERS
THE EDGES OF LUGS, BRACKETS, RIVETS AND BOLT HEADS ATTACHED TO STRUCTURAL MEMBERS SHALL BE PERMITTED TO EXTEND TO WITHIN 1 INCH OF THE SURFACE OF THE FIRE PROTECTION.

(714.2.5) REINFORCING
THICKNESS OF PROTECTION FOR CONCRETE OR MASONRY REINFORCEMENT SHALL BE MEASURED TO THE OUTSIDE OF THE REINFORCEMENT EXCEPT THAT STIRRUPS AND SPINAL REINFORCEMENT TIES ARE PERMITTED TO PROJECT NOT MORE THAN 0.5-INCH INTO THE PROTECTION.

(715.3) FIRE DOOR & SHUTTER ASSEMBLIES
APPROVED FIRE DOOR AND FIRE SHUTTER ASSEMBLIES SHALL BE CONSTRUCTED OF ANY MATERIAL OR ASSEMBLY OF COMPONENT MATERIALS THAT CONFORMS TO THE TEST REQUIREMENTS OF SECTION 715.3.1, 715.3.2 OR 715.3.3 AND THE FIRE PROTECTION RATING INDICATED IN TABLE 715.3. FIRE DOOR ASSEMBLIES AND SHUTTERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION AND NFPA 80.

(716.6.3) NON FIRE-RESISTANCE-RATED ASSEMBLIES
DUCT SYSTEMS CONSTRUCTED OF OR APPROVED MATERIALS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE THAT PENETRATE NONFIRE-RESISTANCE-RATED FLOOR ASSEMBLIES AND THAT CONNECT NOT MORE THAN TWO STORIES ARE PERMITTED WITHOUT SHAFT ENCLOSURE PROTECTION PROVIDED THAT THE ANNULAR SPACE BETWEEN THE ASSEMBLY AND THE PENETRATING DUCT IS FILLED WITH AN APPROVED NONCOMBUSTIBLE MATERIAL TO RESIST FREE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION. DUCT SYSTEMS CONSTRUCTED OF OR APPROVED MATERIALS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE THAT PENETRATE NONFIRE-RESISTANCE-RATED FLOOR ASSEMBLIES AND THAT CONNECT NOT MORE THAN THREE STORIES ARE PERMITTED WITHOUT SHAFT ENCLOSURE PROTECTION PROVIDED THAT THE ANNULAR SPACE BETWEEN THE ASSEMBLY AND THE PENETRATING DUCT IS FILLED WITH AN APPROVED NONCOMBUSTIBLE MATERIAL TO RESIST FREE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION, AND A FIRE DAMPER IS INSTALLED AT EACH FLOOR LINE.

(717.2.1) FIREBLOCKING MATERIALS
FIREBLOCKING SHALL CONSIST OF 2-INCH NOMINAL LUMBER OR TWO THICKNESSES OF 1-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS OR ONE THICKNESS OF 0.719-INCH WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY 0.719-INCH WOOD STRUCTURAL PANEL OR ONE THICKNESS OF 0.75-INCH PARTICLEBOARD WITH JOINTS BACKED BY 0.75-INCH PARTICLEBOARD. GYPSUM BOARD, CEMENT FIBER BOARD, BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE SHALL BE PERMITTED AS AN ACCEPTABLE FIREBLOCK. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NONRIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH THE 10-FOOT HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES. THE INTEGRITY OF FIREBLOCKS SHALL BE MAINTAINED.

CHAPTER 8: INTERIOR FINISHES:

(803.1) GENERAL
INTERIOR WALL & CEILING FINISHES SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E 84. SUCH INTERIOR FINISH MATERIALS SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE-DEVELOPED INDEXES.
CLASS A: FLAME SPREAD 0-25; SMOKE-DEVELOPED 0-450
CLASS B: FLAME SPREAD 26-75; SMOKE-DEVELOPED 0-450
CLASS C: FLAME SPREAD 76-200; SMOKE-DEVELOPED 0-450

(803.5) INTERIOR FINISH REQUIREMENTS BASED ON GROUP
INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN THAT SPECIFIED IN TABLE 803.5 FOR THE GROUP AND LOCATION DESIGNATED. INTERIOR WALL AND CEILING FINISH MATERIALS, OTHER THAN TEXTILES, TESTED IN ACCORDANCE WITH NFPA 286 AND MEETING THE ACCEPTANCE CRITERIA OF SECTION 803.2.1, SHALL BE PERMITTED TO BE USED WHERE A CLASS A CLASSIFICATION IN ACCORDANCE WITH ASTM 84 IS REQUIRED.

GROUP	VERTICAL EXITS & EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS & OTHER EXITWAYS	ROOMS & ENCLOSED SPACES
A-2 ASSEMBLY	B	B	C

(804.5.1) MINIMUM CRITICAL RADIANT FLUX
INTERIOR FLOOR FINISH IN VERTICAL EXITS, EXIT PASSAGEWAYS, & EXIT ACCESS CORRIDORS SHALL NOT BE LESS THAN CLASS II IN GROUPS A, M & S-2. IN ALL OTHER AREAS, THE INTERIOR FLOOR FINISH SHALL COMPLY WITH THE DOC FF-1 "PILL TEST" (CPS 16 CFR 1630)
EXCEPTION:
WHERE A BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1, CLASS II MATERIALS ARE PERMITTED IN ANY AREA WHERE CLASS I MATERIALS ARE REQUIRED AND MATERIALS COMPLYING WITH DOC FF-1 "PILL TEST" (CPS 16 CFR PART 1630) ARE PERMITTED IN ANY AREA WHERE CLASS II MATERIALS ARE REQUIRED

CHAPTER 9: FIRE PROTECTION SYSTEMS:

(901.2) FIRE PROTECTION SYSTEMS
FIRE PROTECTION SYSTEMS SHALL BE INSTALLED, REPAIRED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THIS CODE AND THE INTERNATIONAL FIRE CODE. ANY FIRE PROTECTION SYSTEM FOR WHICH AN EXCEPTION OR REDUCTION TO THE PROVISIONS OF THIS CODE HAS BEEN GRANTED SHALL BE CONSIDERED TO BE A REQUIRED SYSTEM.
EXCEPTION: ANY FIRE PROTECTION SYSTEM OR PORTION THEREOF NOT REQUIRED BY THIS CODE SHALL BE PERMITTED TO BE INSTALLED FOR PARTIAL OR COMPLETE PROTECTION PROVIDED THAT SUCH SYSTEM MEETS THE REQUIREMENTS OF THIS CODE.

(903.2) WHERE REQUIRED
APPROVED AUTOMATIC SPRINKLER SYSTEMS IN BUILDINGS AND STRUCTURES SHALL BE PROVIDED IN THE LOCATIONS DESCRIBED IN THIS SECTION.

(903.2.1) GROUP A
AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT BUILDINGS AND PORTIONS THEREOF USED AS GROUP A OCCUPANCIES AS PROVIDED IN THIS SECTION. FOR GROUP A-1, A-2, A-3 AND A-4 OCCUPANCIES, THE AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT THE FLOOR AREA WHERE THE GROUP A-1, A-2, A-3 AND A-4 OCCUPANCY IS LOCATED, AND IN ALL FLOORS BETWEEN THE GROUP A OCCUPANCY AND THE LEVEL OF EXIT DISCHARGE. FOR GROUP A-5 OCCUPANCIES, THE AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED IN THE SPACES INDICATED IN SECTION 903.2.1.5.

(903.2.1.2) GROUP A-2
AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED FOR GROUP A-2 OCCUPANCY WHERE ONE OF THE FOLLOWING CONDITIONS EXISTS:
1. THE FIRE AREA EXCEEDS 5,000 SQUARE FEET.
2. THE FIRE AREA HAS AN OCCUPANT LOAD OF 300 OR MORE.
3. THE FIRE AREA IS LOCATED ON A FLOOR OTHER THAN THE LEVEL OF EXIT DISCHARGE.

(903.2.10.3) BUILDINGS MORE THAN 30 FEET IN HEIGHT.
AN AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED THROUGHOUT A BUILDING THAT HAS A FLOOR LEVEL WHICH HAS AN OCCUPANT LOAD OF 30 OR MORE OCCUPANTS AND WHICH IS LOCATED 30 FEET OR MORE ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS.

(905.3.1) BUILDING HEIGHT (STANDPIPE SYSTEMS)
CLASS III STANDPIPE SYSTEMS SHALL BE INSTALLED THROUGHOUT BUILDING WHERE THE FLOOR LEVEL OF THE HIGHEST STORY IS LOCATED MORE THAN 30 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS, OR WHERE THE FLOOR LEVEL OF THE LOWEST STORY IS LOCATED MORE THAN 30 FEET BELOW THE HIGHEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS.

EXCEPTIONS:
CLASS I STANDPIPES ARE ALLOWED IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM
IN ACCORDANCE WITH SECTION 903.1.1 OR 903.1.2.

(906.1) GENERAL
PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN OCCUPANCIES & LOCATIONS AS REQUIRED BY THE INTERNATIONAL FIRE CODE.

(907.2) WHERE REQUIRED
AN APPROVED MANUAL, AUTOMATIC OR MANUAL AND AUTOMATIC FIRE ALARM SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 907.2.1 THROUGH 907.2.3 WHERE AUTOMATIC SPRINKLER PROTECTION, INSTALLED IN ACCORDANCE WITH SECTION 903.1.1 OR 903.3.1.2, IS PROVIDED AND CONNECTED TO THE BUILDING FIRE ALARM SYSTEM. AUTOMATIC HEAT DETECTION REQUIRED BY THIS SECTION SHALL NOT BE REQUIRED. AN APPROVED AUTOMATIC FIRE DETECTION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE AND NFPA 72. DEVICES, COMBINATIONS OF DEVICES, APPLIANCES AND EQUIPMENT SHALL COMPLY WITH SECTION 907.1.2. THE AUTOMATIC FIRE DETECTORS SHALL BE SMOKE DETECTORS, EXCEPT THAT AN APPROVED ALTERNATIVE TYPE OF DETECTOR SHALL BE INSTALLED IN SPACES SUCH AS BOILER ROOMS WHERE, DURING NORMAL OPERATION, PRODUCTS OF COMBUSTION ARE PRESENT IN SUFFICIENT QUANTITY TO ACTUATE A SMOKE DETECTOR.

(907.2.1) GROUP A
A MANUAL FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 IN GROUP A OCCUPANCIES HAVING AN OCCUPANT LOAD OF 300 OR MORE. PORTIONS OF GROUP E OCCUPANCIES OCCUPIED FOR ASSEMBLY PURPOSES SHALL BE PROVIDED WITH A FIRE ALARM SYSTEM AS REQUIRED FOR THE GROUP E OCCUPANCY.
EXCEPTION:
MANUAL FIRE ALARM BOXES ARE NOT REQUIRED WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM AND THE NOTIFICATION APPLIANCES WILL ACTIVATE UPON SPRINKLER WATER FLOW.

(907.2.1.1) SYSTEM INITIATION IN GROUP A. OCCUPANCIES WITH AN OCCUPANT LOAD OF 1,000 OR MORE SHALL INITIATE A SIGNAL USING AN EMERGENCY VOICE/ALARM COMMUNICATIONS SYSTEM IN ACCORDANCE WITH NFPA 72.

WHERE APPROVED, THE PRE-RECORDED ANNOUNCEMENT IS ALLOWED TO BE MANUALLY DEACTIVATED FOR A PERIOD OF TIME, NOT TO EXCEED 3 MINUTES, FOR THE SOLE PURPOSE OF ALLOWING A LIVE VOICE ANNOUNCEMENT FROM AN APPROVED, CONSTANTLY ATTENDED LOCATION.

(907.2.1.2) EMERGENCY POWER.
EMERGENCY VOICE/ALARM COMMUNICATIONS SYSTEMS SHALL BE PROVIDED WITH AN APPROVED EMERGENCY POWER SOURCE.

CHAPTER 10 MEANS OF EGRESS, SECTION 1004: OCCUPANT LOAD.

(1004.1) DESIGN OCCUPANT LOAD
IN DETERMINING MEANS OF EGRESS REQUIREMENTS, THE NUMBER OF OCCUPANTS FOR WHOM MEANS OF EGRESS FACILITIES SHALL BE PROVIDED SHALL BE ESTABLISHED BY THE LARGEST NUMBER COMPUTED IN ACCORDANCE WITH SECTION 1004.1.1 THROUGH 1004.1.3.

(1004.1.1) ACTUAL NUMBER.
THE ACTUAL NUMBER OF OCCUPANTS FOR WHOM EACH OCCUPIED SPACE, FLOOR OR BUILDING IS DESIGNED.

(1004.1.2) JNUMBER BY TABLE 1004.1.2
THE NUMBER OF OCCUPANTS COMPUTED AT THE RATE OF ONE OCCUPANT PER UNIT OF AREA AS PRESCRIBED IN TABLE 1004.1.2.

(1004.1.3) NUMBER BY COMBINATION
WHERE OCCUPANTS FROM ACCESSORY SPACES EGRESS THROUGH AS PRIMARY AREA, THE CALCULATED OCCUPANT LOAD FOR THE PRIMARY SPACE SHALL INCLUDE THE TOTAL OCCUPANT LOAD OF THE PRIMARY SPACE PLUS THE NUMBER OF OCCUPANTS EGRESSING THROUGH IT FROM THE ACCESSORY SPACE.

OCCUPANT LOAD:

ASSEMBLY:		
CHAIRS ONLY	25 SF / 7 SF NET	= 4 PEOPLE
TABLES AND CHAIRS	1,702 SF / 15 SF NET	= 114 PEOPLE
STANDING SPACE	309 SF / 5 SF NET	= 62 PEOPLE
BOOTH SEATING	68 L F / 2LF PER PERSON	= 34 PEOPLE
COMMERCIAL KITCHEN	2,911 SF / 200 GROSS	= 15 PEOPLE
ACCESSORY STORAGE	1,649 SF / 300 GROSS	= 7 PERSON
BUSINESS AREA	661SF/ 100 SF GROSS	= 6 PEOPLE
TOTAL		= 242 PEOPLE

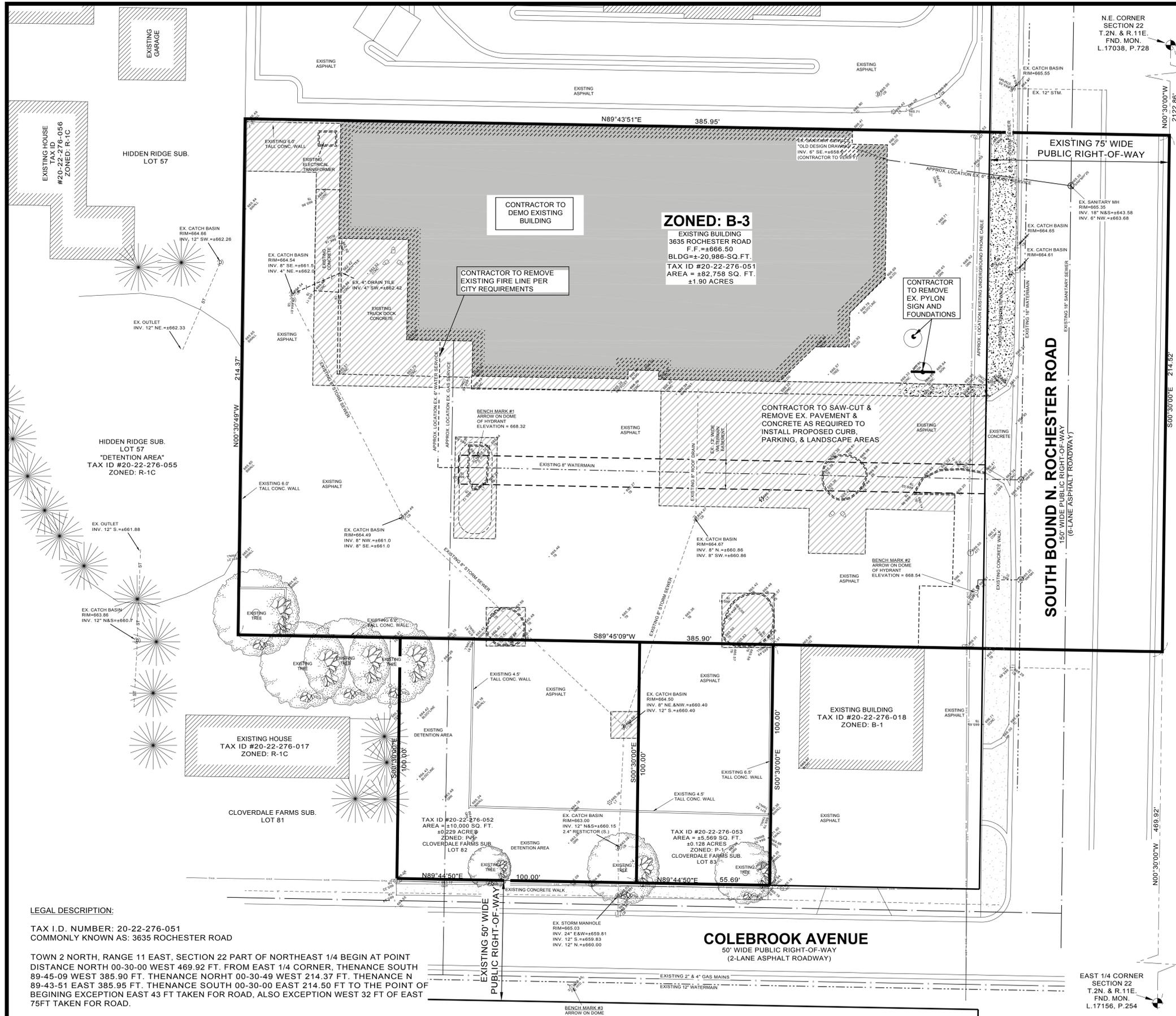
(1004.7) FIXED SEATING
FOR AREAS HAVING FIXED SEATS AND AISLES, THE OCCUPANT LOAD SHALL BE DETERMINED BY THE NUMBER OF FIXED SEATS INSTALLED THEREIN.

FOR AREAS HAVING FIXED SEATING WITHOUT DIVIDING ARMS, THE OCCUPANT LOAD SHALL NOT BE LESS THAN THE NUMBER OF SEATS BASED ON ONE PERSON FOR EACH 18 INCHES (457 MM) OF SEATING LENGTH.

THE OCCUPANT LOAD OF SEATING BOOTHS SHALL BE BASED ON ONE PERSON FOR EACH 24 INCHES (610 MM) OF BOOTH SEAT LENGTH MEASURED AT THE BACKREST OF THE SEATING BOOTH.

(1005.1) MINIMUM REQUIRED EGRESS WIDTH.
THE MEANS OF EGRESS WIDTH SHALL NOT BE LESS THAN REQUIRED BY THIS SECTION. THE TOTAL WIDTH OF MEANS OF EGRESS IN INCHES SHALL NOT BE LESS THAN THE TOTAL OCCUPANT LOAD SERVED BY THE MEANS OF EGRESS MULTIPLIED BY THE FACTORS IN TABLE 1005.1 AND NOT LESS THAN SPECIFIED ELSEWHERE IN THIS CODE. MULTIPLE MEANS OF EGRESS SHALL BE SIZED SUCH THAT THE LOSS OF ANY ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50 PERCENT OF THE REQUIRED CAPACITY. THE MAXIMUM CAPACITY REQUIRED FROM ANY STORY OF A BUILDING SHALL BE MAINTAINED TO THE TERMINATION OF THE MEANS OF EGRESS.

OCCUPANCY	STAIRWAYS (INCHES PER OCCUPANT)	OTHER EGRESS COMPONENTS (INCHES PER OCCUPANT)
A-2	NONE	197 (2)= 39.4" (216" PROVIDED)



N.E. CORNER SECTION 22 T.2N. & R.11E. FND. MON. L.17038, P.728



LEGEND	
SYMBOL	DESCRIPTION
○	CLEAN OUT
□	ELEC. RISER
⊠	FIRE HYDRANT
⊞	ELEC. TRANSFORMER
⋈	GUY ANCHOR
⊙	STM. MANHOLE
⊕	SAN. MANHOLE
↑	VENT
○	LIGHT POLE
⊙	WATER STOP BOX
⊙	WATER VALVE
⊙	SPEAKER BOX
⊙	POWER POLE
⊙	ROUND CATCH BASIN
⊙	SQUARE CATCH BASIN
⊙	TELEPHONE RISER
⊙	SET IRON
●	FOUND IRON
—	ELECTRIC
—	GAS
—	FENCE

- GENERAL NOTES:**
- BACKFILL EXISTING REMOVAL AREAS WITH MDOT CLASS II GRANULAR MATERIAL COMPACTED IN 12" MAX LIFTS TO 95% MAXIMUM DENSITY.
 - ALL ITEMS REMOVED FROM SITE WILL BE DISPOSED OF AT A DISPOSAL FACILITY APPROVED TO ACCEPT THE MATERIAL. CONTRACTOR TO SUPPLY OWNER A LIST OF DISPOSAL SITE(S) WHERE MATERIAL WAS DISPOSED OF.
 - ALL EXISTING UTILITY CONNECTIONS TO EX. BUILDINGS WILL BE ABANDONED. COORDINATE ABANDONMENT WITH APPROPRIATE UTILITY COMPANY.
 - REFER TO SUBSURFACE EXPLORATION AND FOUNDATION EVALUATION PSI REPORT NUMBER 862-85026 DATED APRIL 30, 1998 FOR SOIL INFORMATION. AVAILABLE FROM PROJECT OWNER.
 - THE CITY OF TROY DEPARTMENT OF PUBLIC WORKS MUST BE NOTIFIED 24 HOURS IN ADVANCE AND MUST BE PRESENT TO WITNESS ALL SANITARY SEWER & WATER SERVICE LINES WHICH WILL BE ABANDONED. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROPERLY CAPPING ALL TERMINATED UTILITY LINES.
 - REMOVAL TO INCLUDE PADS AND FOOTINGS FOR BUILDINGS, SIGNS, LIGHT BASES, ETC..
 - COORDINATE REMOVAL OF EX. GAS, ELEC., TELE. & WATER LEADS TO EX. BUILDING W/ PROPER UTILITY COMPANY.

LEGEND	
///	REMOVE CURB & GUTTER
X X X	REMOVE UTILITIES
○	REMOVE OBJECT
⊞	PULVERIZE EX. BIT AND REUSE AS AGG. BASE MATERIAL
⊞	REMOVE TOPSOIL
⊞	REMOVE CONCRETE OR PAVEMENT
⊞	REMOVE & REUSE GRAVEL AS BASE
■	REMOVE BUILDING

LEGAL DESCRIPTION:
 TAX I.D. NUMBER: 20-22-276-051
 COMMONLY KNOWN AS: 3635 ROCHESTER ROAD

TOWN 2 NORTH, RANGE 11 EAST, SECTION 22 PART OF NORTHEAST 1/4 BEGIN AT POINT DISTANCE NORTH 00-30-00 WEST 469.92 FT. FROM EAST 1/4 CORNER, THENANCE SOUTH 89-45-09 WEST 385.90 FT. THENANCE NORTH 00-30-49 WEST 214.37 FT. THENANCE N 89-43-51 EAST 385.95 FT. THENANCE SOUTH 00-30-00 EAST 214.50 FT TO THE POINT OF BEGINNING EXCEPTION EAST 43 FT TAKEN FOR ROAD, ALSO EXCEPTION WEST 32 FT OF EAST 75FT TAKEN FOR ROAD.

COLEBROOK AVENUE
 50' WIDE PUBLIC RIGHT-OF-WAY
 (2-LANE ASPHALT ROADWAY)

EAST 1/4 CORNER SECTION 22 T.2N. & R.11E. FND. MON. L.17156, P.254



REVISIONS 	SECTION: 22 TOWN 2 NORTH, RANGE 11 EAST CITY OF TROY OAKLAND COUNTY, MICHIGAN	<i>These documents are instruments of service in respect of the Project and any reuse without written verification or adaptation by Diffin Development Consultants (DDC) for the specific purposes intended will be at Users sole risk and without liability or legal exposure to DDC and User shall indemnify and hold harmless DDC from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom. Any such verification or adaptation will entitle DDC to further compensation at rates to be agreed upon by User and DDC.</i>	CLIENT: GAUCHO LLC 5118 WOODVIEW CT. DEARBORN MI, 48126	DDC DIFFIN Development Consultants CIVIL ENGINEERING • SURVEYING • CONSTRUCTION SERVICES 24353 TARA DRIVE, SOUTH LYON, MICHIGAN 48178 PH: (248) 437-9955, FAX: (866) 690-4307 WEB: www.diffindevelopment.com	DATE: 4-18-11 Drawn By: MD P.E.: Matthew A. Diffin SCALE: 1 inch = 20 ft.
	JOB NO.: 110401 SHEET NO.:				
	C - 2				



SITE DATA

EXISTING ZONING	B-3
GROSS SITE AREA	2.257 ACRES
EXISTING KENNETT RD. R.O.W.	0.37 ACRES
NET SITE AREA	1.887 ACRES
EXISTING BUILDING AREA	±20,986 SQ. FT.
PROPOSED BUILDING AREA	±12,743 SQ. FT.
EXISTING PAVEMENT AREA	±46454 SQ. FT.
PROPOSED PAVEMENT AREA	±53006 SQ. FT.
EXISTING TOTAL IMPERVIOUS	±67440 SQ. FT.
PROPOSED TOTAL IMPERVIOUS	±65749 SQ. FT.

BUILDING SETBACKS		
	REQUIRED	PROVIDED
ROCHESTER ROAD SETBACK	40'	45.55'
COLEBROOK AVENUE SETBACK	40'	208.37'
NORTH SETBACK PROP. LINE	0'	0'
WEST SETBACK PROP. LINE	20'	141.77'

PARKING SETBACKS		
	REQUIRED	PROVIDED
ROCHESTER ROAD SETBACK	10'	10.69'
COLEBROOK AVENUE SETBACK	10'	28.88'
NORTH SETBACK PROP. LINE	0'	0'
WEST SETBACK PROP. LINE	0'	0'

REQUIRED PARKING
 RESTAURANTS = 1 SPACE FOR EACH TWO PERSON WITHIN THE SEATING CAPACITY OF THE ESTABLISHMENT, PLUS 1 EMPLOYEE PARKING SPACE FOR EACH TEN SEATS WITHIN THE SEATING CAPACITY OR 1 FOR EACH 35 SQUARE FEET OF DINING AREA, WHICHEVER IS GREATER.

DINING SQ. FT. FOR PARKING = 4,546-SQ.FT.
 150 SEATS (BAR AND DINING) / 2 = 75 SPACES
 75 SPACES / 10 = 7.5 OR 8 EMPLOYEE SPACES
 REQUIRED SPACES = 83 SPACES

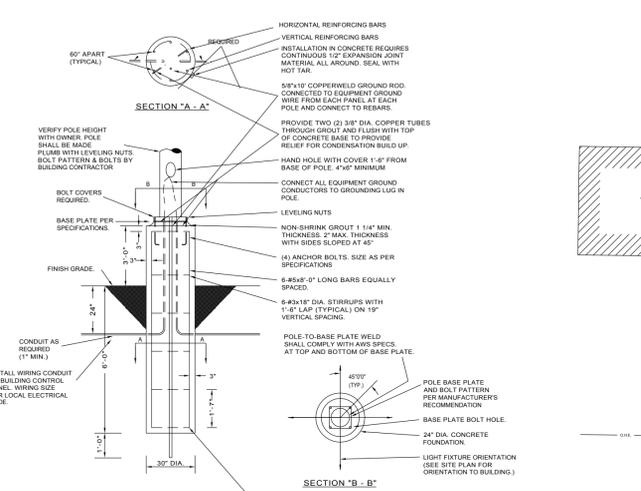
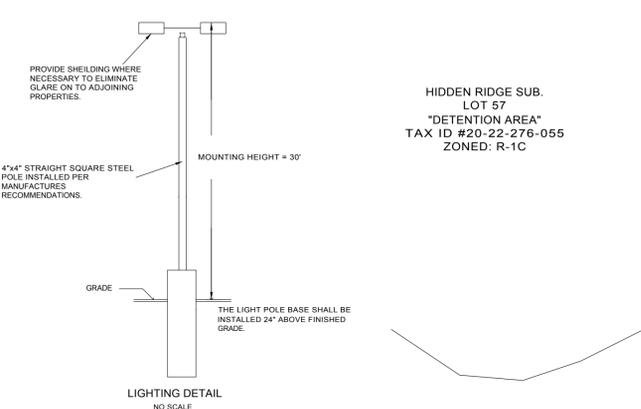
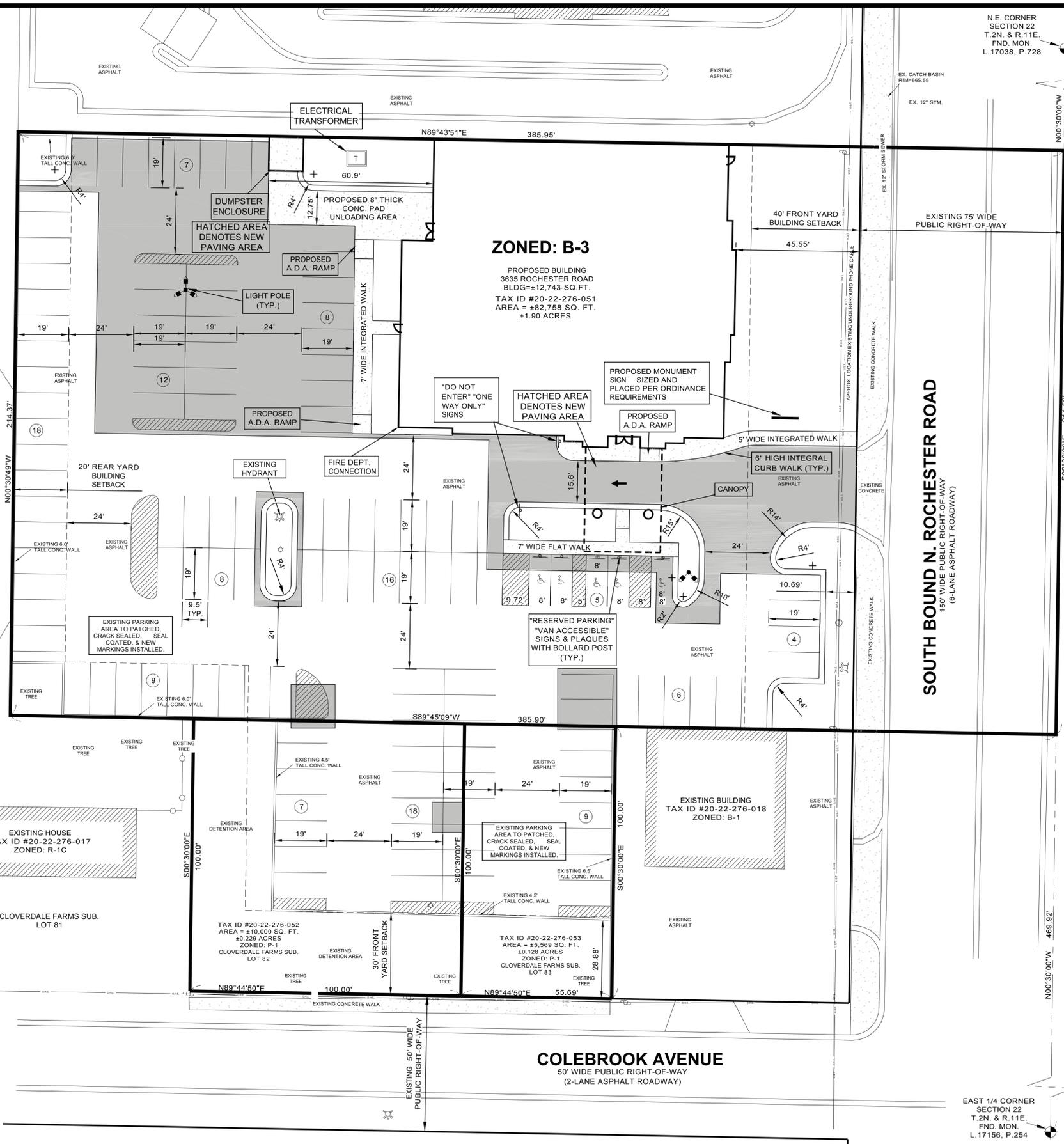
PRIVATE DINING SQ. FT. FOR PARKING = 1,476 SQ.FT.
 80 SEATS / 2 = 40 SPACES
 40 SPACES / 10 = 4 EMPLOYEE SPACES
 REQUIRED PARKING FOR PRIVATE DINING = 44 SPACES

TOTAL REQUIRED PARKING = 127 - SPACES

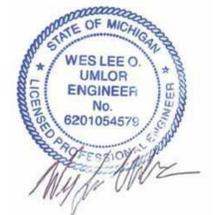
PROVIDED PARKING	
HANDI CAP SPACES	5
STANDARD SPACES	122
TOTAL SPACES	127-SPACES

LEGAL DESCRIPTION:
 TAX I.D. NUMBER: 20-22-276-051
 COMMONLY KNOWN AS: 3635 ROCHESTER ROAD
 TOWN 2 NORTH, RANGE 11 EAST, SECTION 22 PART OF NORTHEAST 1/4 BEGIN AT POINT DISTANCE NORTH 00-30-00 WEST 469.92 FT. FROM EAST 1/4 CORNER, THENANCE SOUTH 89-45-09 WEST 385.90 FT. THENANCE NORTH 00-30-49 WEST 214.37 FT. THENANCE N 89-43-51 EAST 385.95 FT. THENANCE SOUTH 00-30-00 EAST 214.50 FT TO THE POINT OF BEGINNING EXCEPTION EAST 43 FT TAKEN FOR ROAD, ALSO EXCEPTION WEST 32 FT OF EAST 75FT TAKEN FOR ROAD.

- GENERAL NOTES:**
- ALL LIGHTS SHALL BE SQUARE, ARM-MOUNTED, CUT-OFF TYPE LUMINAIRE W/250 WATT METAL HALIDE LAMP WITH VERTICAL REFLECTOR. ALL LIGHTING SHALL BE DIRECTED AWAY FROM ADJOINING PARCELS (TYP.). MAXIMUM HEIGHT OF LIGHTING FIXTURES SHALL NOT EXCEED 30'.
 - REFER TO UTILITY PLANS AND PROFILES FOR STORM SEWER, SANITARY SEWER, WATERMANS, AND BUILDING CONNECTION LOCATIONS, SIZES, AND INVERTS.
 - ALL PARKING AREAS AND LANDSCAPE ISLANDS TO HAVE 18" CURB AND GUTTER (TYP.)
 - GENERAL CONTRACTOR TO COORDINATE AND INSTALL UNDERGROUND ELECTRICAL CONDUIT TO PARKING LOT UTILITIES, MONUMENT SIGNS, AND DIRECTIONAL SIGNS. GENERAL CONTRACTOR TO PROVIDE A UNIT PRICE FOR INSTALLATION OF IRRIGATION SLEEVES. EXACT QUANTITY AND LOCATION TO BE DETERMINED PRIOR TO THE START OF CONSTRUCTION. WINNERS THE LOCATION OF EACH SLEEVE. DEVELOPER TO INSTALL FIRE LANE SIGN AS NECESSARY.
 - CONTRACTOR TO INSTALL FIRE LANE SIGN AS NECESSARY PER THE CITY OF PONTIAC FIRE DEPARTMENTS REQUIREMENTS. CONTRACTOR SHALL COORDINATE INSTALLATION OF SIGNS WITH THE TOWNSHIP'S FIRE MARSHAL (TYP.)
 - ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL COMPLY WITH THE DESIGN AND PLACEMENT REQUIREMENTS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.



- NOTES**
- 3600 PSI MIN. 28 DAY COMPRESSIVE STRENGTH CONCRETE WITH GRADE 60 REINF. STEEL.
 - IF WATER IS PRESENT IN HOLE. REMOVE BEFORE POURING CONCRETE.
 - EXPOSED CONCRETE AND GROUT SHALL BE PAINTED TRAFFIC YELLOW BY THE PAVEMENT STRIPING CONTRACTOR.
 - FOUNDATION EXCAVATION SHALL BE BY 24" AUGER IN UNDISTURBED OR PROPERLY COMPACTED FILL PER SPECIFICATIONS. USE SOAK TUBE.
- TYPICAL PARKING LOT LIGHTING POLE FOUNDATION



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	TOWN 2 NORTH, RANGE 11 EAST			
	CITY OF TROY			
	OAKLAND COUNTY, MICHIGAN			
GAUCHO STEAKHOUSE SITE PLAN		DDC DIFFIN Development Consultants CIVIL ENGINEERING • SURVEYING • CONSTRUCTION SERVICES 24353 TARA DRIVE, SOUTH LYON, MICHIGAN 48178 PH: (248) 437-9955, FAX: (866) 690-4307 WEB: www.diffindevelopment.com		Job No.: 110401 Sheet No.: 3 OF 6

GENERAL NOTES

- ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
- ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BUR LAPPED AS INDICATED IN THE PLANT LIST.
- ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
- ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
- ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
- ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF THE PLANTING AREAS AND LAWN UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
- THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
- THE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION.
- AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
- ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
- STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- ALL SHRUB, GROUND COVER AND SEASONAL COLOR ANNUAL PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH PINE BARK MULCH TO A MINIMUM DEPTH OF FOUR INCHES.
- LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD.
- SAFE, CLEARLY MARKED PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
- DURING THE GROWING SEASON ALL ANNUALS SHALL REMAIN IN A HEALTHY, VITAL CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- ALL PLANT MATERIALS QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.
- ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOP SOIL, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. THIS IS EXCLUDING ALL LANDSCAPED ISLANDS AND ENTRANCE AREAS.
- ALL TREES SHALL BE A MINIMUM OF 10' FROM ALL WATERMAIN, SANITARY SEWER, AND STORM SEWER.

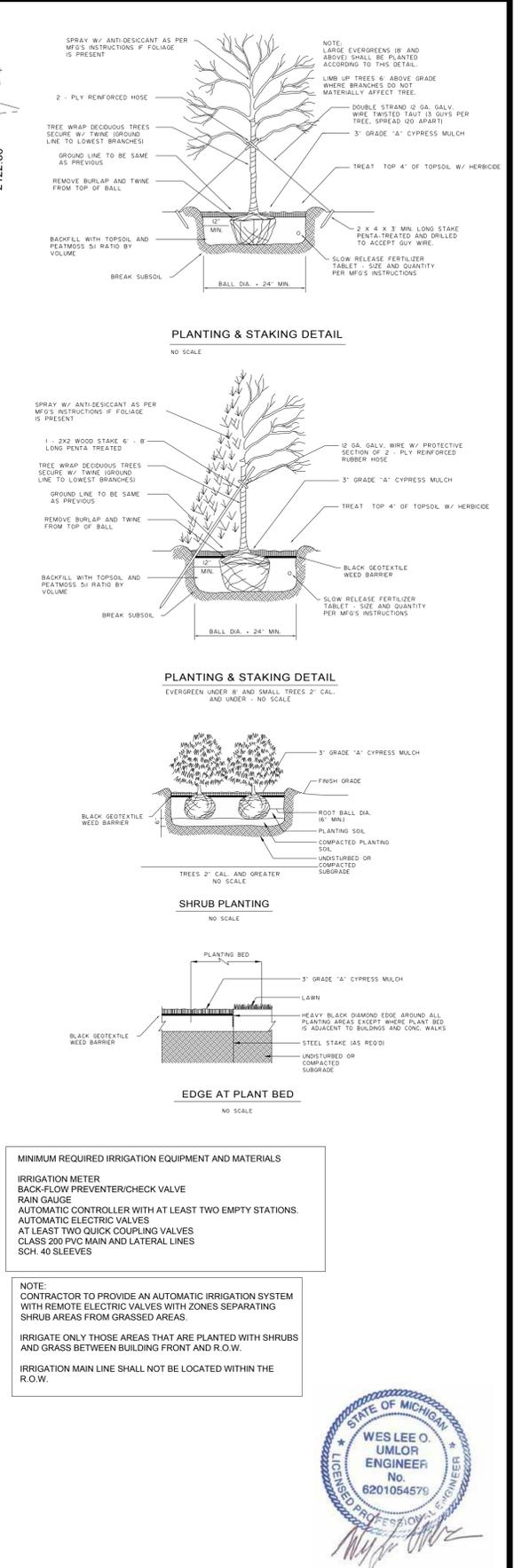
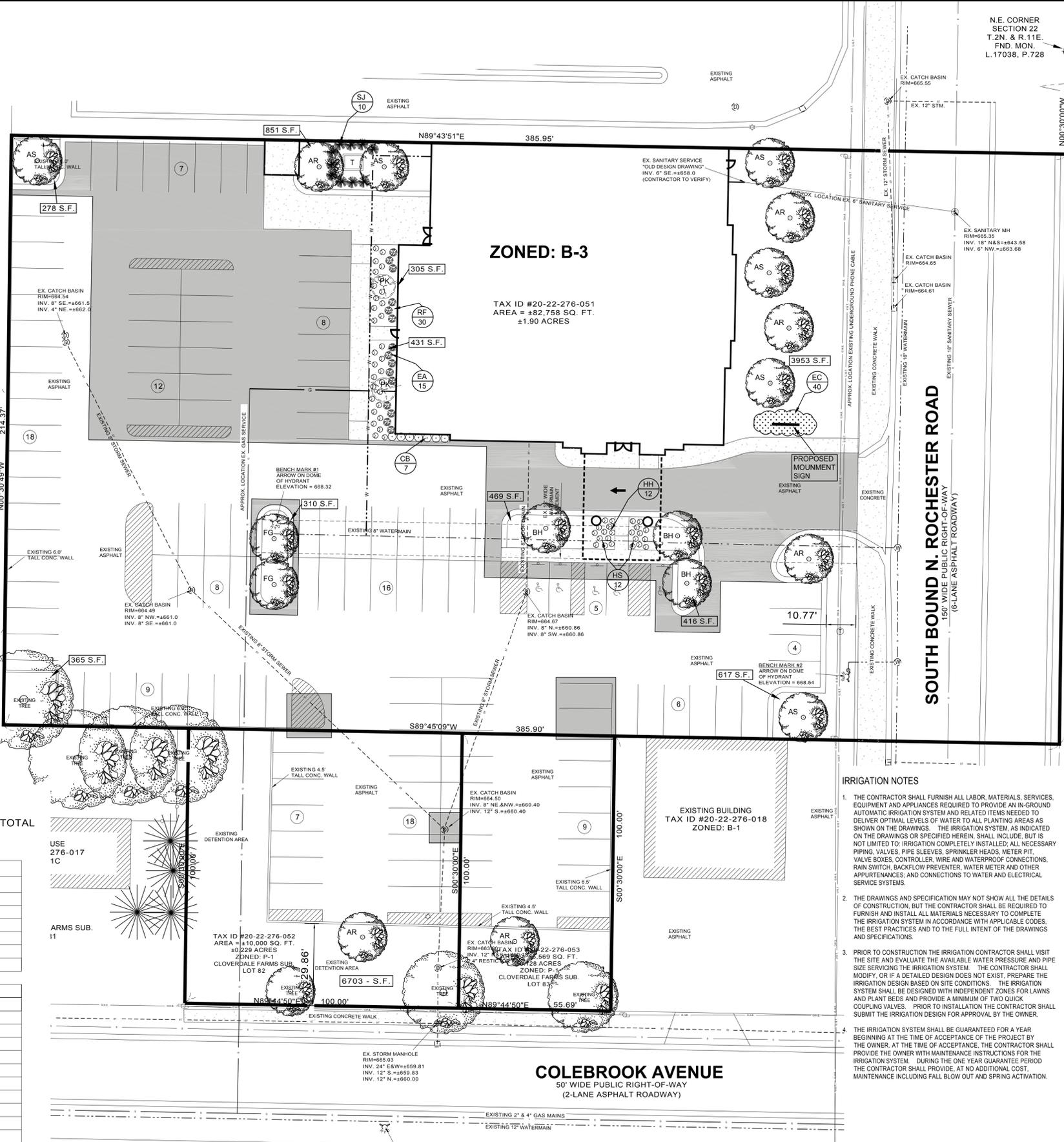
CALCULATIONS

GREENBELT
 10' MIN. GREENBELT PROVIDED
 1 TREE FOR EACH 30-LF OF FRONTAGE
 370 -LF OF FRONTAGE / 30 = 12 TREES REQUIRED
 12 TREES PROVIDED

OPEN SPACE
 LOT AREA= 82238 SQ-FT X 10% = 8224 - SQFT REQUIRED
 DETENTION AREA = 8224- SQFT X 0.05= 411-SQFT < 6703-SQFT
 (411+365+310+278+851+305+431+469+416+617+3953 = 8406-SQFT)
 TOTAL PROVIDED= 8406-SQFT.
 NOTE: 8406 DOES NOT INCLUDE 10' GREENBELT AREA ALONG ROADWAY. TOTAL OPEN SPACE = 16,489-SQ FT

PLANTING SCHEDULE FOR SITE LANDSCAPING

Code	Plant Name	Quantity	Size	Notes
AS	Acer s. 'Green Mountain'	6	2.5"	Green Mountain Sugar Maple
AR	Acer rubrum 'Red Sunset'	6	2.5"	Red Maple
BH	Carya cordiformis	3	2.5"	Bitternut Hickory
FG	Fagus grandifolia	2	2.5"	American beech
PK	Prunus s. 'Kwanzan'	2	2" CAL.	Kwanzan Cherry
CB	Berberis	7	24" HT.	Concorde Barberry
EA	Euonymus alata 'Compactus'	15	24" HT.	Burning Bush
SJ	Syringa Vulgaris	10	36" HT.	Lilac
NM	Nepeta m. 'Blue Wonder'	0	1/2 Gal.	Catmint
RF	Rudbeckia f. 'Goldstrum'	30	1/2 Gal.	Blackeyed Susan
HH	Hemerocallis 'Happy Returns'	12	1/2 Gal.	Daylily
HS	Hemerocallis 'Stella de Oro'	12	1/2 Gal.	Daylily
PA	Pennisetum alopecuroides	0	1/2 Gal.	Fountain Grass
EC	Euonymus f. 'Coloratus'	40	2-1/4" Cell	Purpleleaf Wintercreeper



IRRIGATION NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, SERVICES, EQUIPMENT AND APPLIANCES REQUIRED TO PROVIDE AN IN-GROUND AUTOMATIC IRRIGATION SYSTEM AND RELATED ITEMS NEEDED TO DELIVER OPTIMAL LEVELS OF WATER TO ALL PLANTING AREAS AS SHOWN ON THE DRAWINGS. THE IRRIGATION SYSTEM, AS INDICATED ON THE DRAWINGS OR SPECIFIED HEREIN, SHALL INCLUDE, BUT IS NOT LIMITED TO: IRRIGATION COMPLETELY INSTALLED; ALL NECESSARY PIPING, VALVES, PIPE SLEEVES, SPRINKLER HEADS, METER PIT, VALVE BOXES, CONTROLLER, WIRE AND WATERPROOF CONNECTIONS, RAIN SWITCH, BACKFLOW PREVENTER, WATER METER AND OTHER APPURTENANCES; AND CONNECTIONS TO WATER AND ELECTRICAL SERVICE SYSTEMS.
- THE DRAWINGS AND SPECIFICATION MAY NOT SHOW ALL THE DETAILS OF CONSTRUCTION, BUT THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND INSTALL ALL MATERIALS NECESSARY TO COMPLETE THE IRRIGATION SYSTEM IN ACCORDANCE WITH APPLICABLE CODES, THE BEST PRACTICES AND TO THE FULL INTENT OF THE DRAWINGS AND SPECIFICATIONS.
- PRIOR TO CONSTRUCTION THE IRRIGATION CONTRACTOR SHALL VISIT THE SITE AND EVALUATE THE AVAILABLE WATER PRESSURE AND PIPE SIZE SERVING THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL MODIFY OR IF A DETAILED DESIGN DOES NOT EXIST, PREPARE THE IRRIGATION DESIGN BASED ON SITE CONDITIONS. THE IRRIGATION SYSTEM SHALL BE DESIGNED WITH INDEPENDENT ZONES FOR LAWNS AND PLANT BEDS AND PROVIDE A MINIMUM OF TWO QUICK COUPLING VALVES. PRIOR TO INSTALLATION THE CONTRACTOR SHALL SUBMIT THE IRRIGATION DESIGN FOR APPROVAL BY THE OWNER.
- THE IRRIGATION SYSTEM SHALL BE GUARANTEED FOR A YEAR BEGINNING AT THE TIME OF ACCEPTANCE OF THE PROJECT BY THE OWNER. AT THE TIME OF ACCEPTANCE, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH MAINTENANCE INSTRUCTIONS FOR THE IRRIGATION SYSTEM. DURING THE ONE YEAR GUARANTEE PERIOD THE CONTRACTOR SHALL PROVIDE, AT NO ADDITIONAL COST, MAINTENANCE INCLUDING FALL BLOW OUT AND SPRING ACTIVATION.

MINIMUM REQUIRED IRRIGATION EQUIPMENT AND MATERIALS

- IRRIGATION METER
- BACK-FLOW PREVENTER/CHECK VALVE
- RAIN GAUGE
- AUTOMATIC CONTROLLER WITH AT LEAST TWO EMPTY STATIONS, AUTOMATIC ELECTRIC VALVES
- AT LEAST TWO QUICK COUPLING VALVES
- CLASS 200 PVC MAIN AND LATERAL LINES
- SCH. 40 SLEEVES

NOTE:
 CONTRACTOR TO PROVIDE AN AUTOMATIC IRRIGATION SYSTEM WITH REMOTE ELECTRIC VALVES WITH ZONES SEPARATING SHRUB AREAS FROM GRASSED AREAS.
 IRRIGATE ONLY THOSE AREAS THAT ARE PLANTED WITH SHRUBS AND GRASS BETWEEN BUILDING FRONT AND R.O.W.
 IRRIGATION MAIN LINE SHALL NOT BE LOCATED WITHIN THE R.O.W.



REVISIONS

No.	Description

SECTION: 22
 TOWN 2 NORTH, RANGE 11 EAST
 CITY OF TROY
 OAKLAND COUNTY, MICHIGAN

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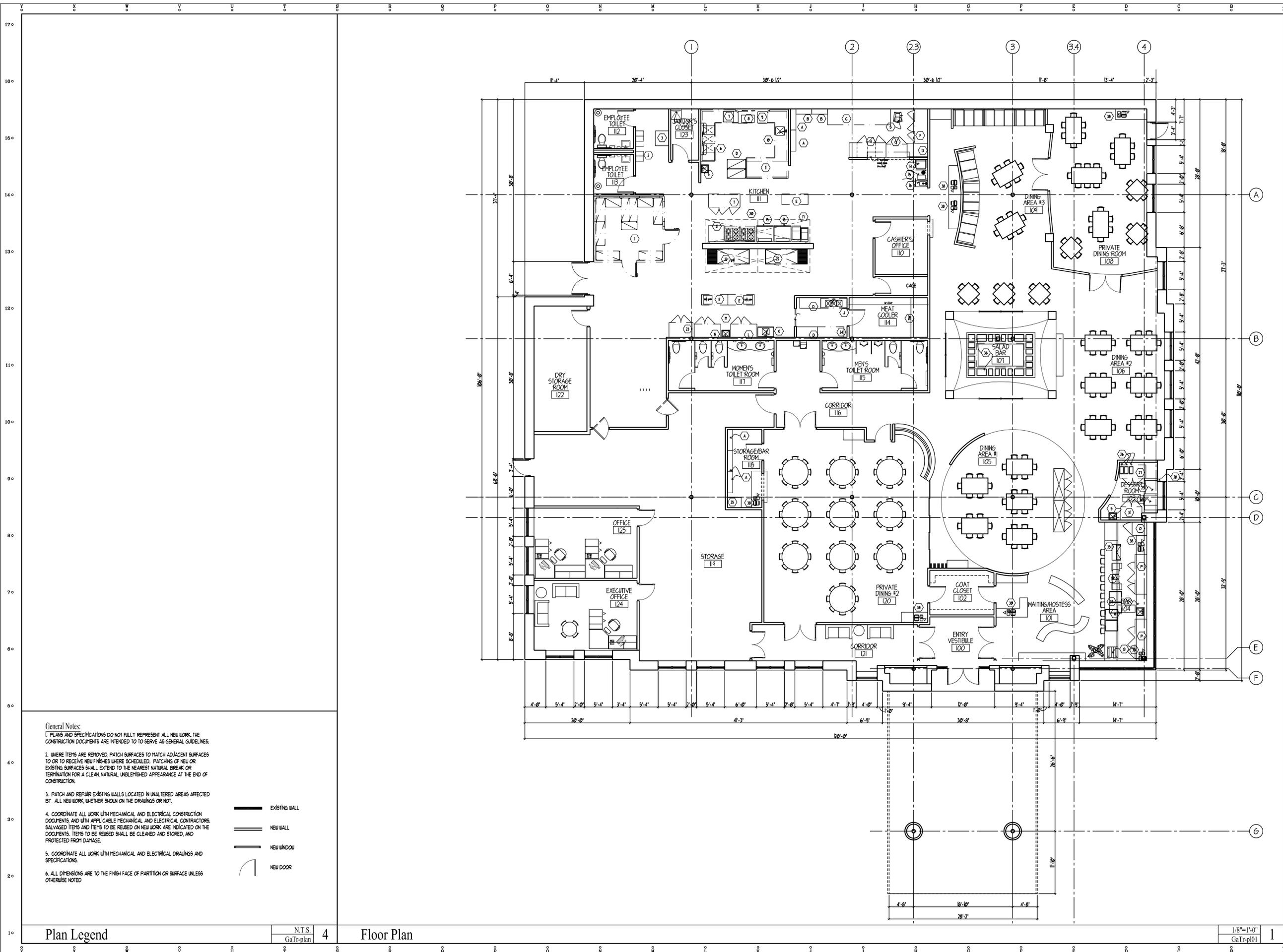
GAUCHO STEAKHOUSE
 LANDSCAPE \ UTILITY PLAN

CLIENT:
GAUCHO LLC
 5118 WOODVIEW CT.
 DEARBORN MI, 48126



DIFFIN Development Consultants
 CIVIL ENGINEERING • SURVEYING • CONSTRUCTION SERVICES
 24353 TARA DRIVE, SOUTH LYON, MICHIGAN 48178
 PH: (248) 437-9955, FAX: (866) 690-4307
 WEB: www.diffindevelopment.com

DATE: 4-18-11
 Drawn By: MD
 P.E.: Matthew A. Diffin
 SCALE: 1 inch = 20 ft.
 Job No.: 110401
 Sheet No.
C-5



- General Notes:
1. PLANS AND SPECIFICATIONS DO NOT FULLY REPRESENT ALL NEW WORK. THE CONSTRUCTION DOCUMENTS ARE INTENDED TO SERVE AS GENERAL GUIDELINES.
 2. WHERE ITEMS ARE REMOVED, PATCH SURFACES TO MATCH ADJACENT SURFACES TO OR TO RECEIVE NEW FINISHES WHERE SCHEDULED. PATCHING OF NEW OR EXISTING SURFACES SHALL EXTEND TO THE NEAREST NATURAL BREAK OR TERMINATION FOR A CLEAN, NATURAL, UNBLEMISHED APPEARANCE AT THE END OF CONSTRUCTION.
 3. PATCH AND REPAIR EXISTING WALLS LOCATED IN UNALTERED AREAS AFFECTED BY ALL NEW WORK, WHETHER SHOWN ON THE DRAWINGS OR NOT.
 4. COORDINATE ALL WORK WITH MECHANICAL AND ELECTRICAL CONSTRUCTION DOCUMENTS AND WITH APPLICABLE MECHANICAL AND ELECTRICAL CONTRACTORS. SALVAGED ITEMS AND ITEMS TO BE REUSED ON NEW WORK ARE INDICATED ON THE DOCUMENTS. ITEMS TO BE REUSED SHALL BE CLEANED AND STORED, AND PROTECTED FROM DAMAGE.
 5. COORDINATE ALL WORK WITH MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
 6. ALL DIMENSIONS ARE TO THE FINISH FACE OF PARTITION OR SURFACE UNLESS OTHERWISE NOTED.

- EXISTING WALL
- NEW WALL
- NEW WINDOW
- NEW DOOR

Plan Legend

N.T.S.
GaTr-plan 4

Floor Plan

1/8"=1'-0"
GaTr-p101 1

METRO GROUP ARCHITECTS
P.O. Box 7363
Ann Arbor, Michigan 48107-7363
Phone: (734) 767-8999

353 Marshall Avenue
St. Louis, Missouri 63119
Phone (314) 772-1782
Fax (314) 373-3514
Alkemeyer & Associates
Engineering Consultants
Mechanical - Electrical - Plumbing

Gaucha Steakhouse

3635 Rochester Road
Troy, Michigan 48063

4/9/11 Prelim Site Plan Approval
4/11/11 Prelim Site Plan Approval
3/24/11 Prelim Site Plan Approval
3/15/11 Revised Budget Bid
2/11/11 Initial Bid

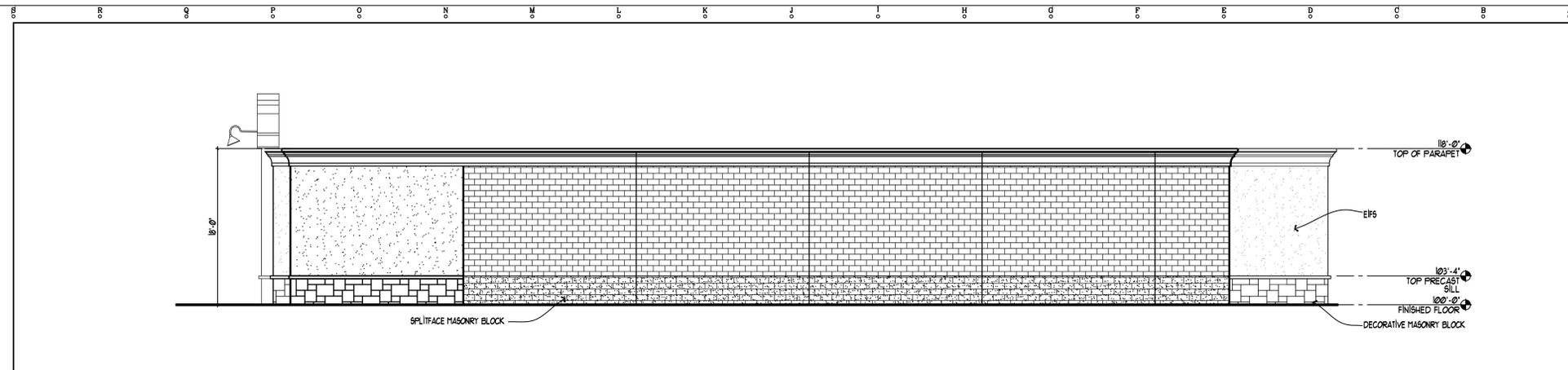
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10B19
Floor Plan

A2.1

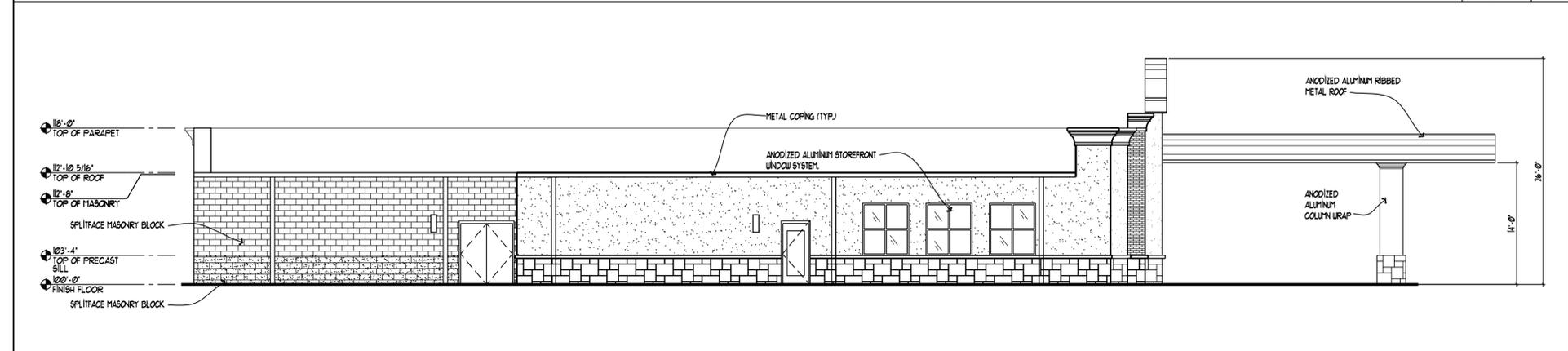
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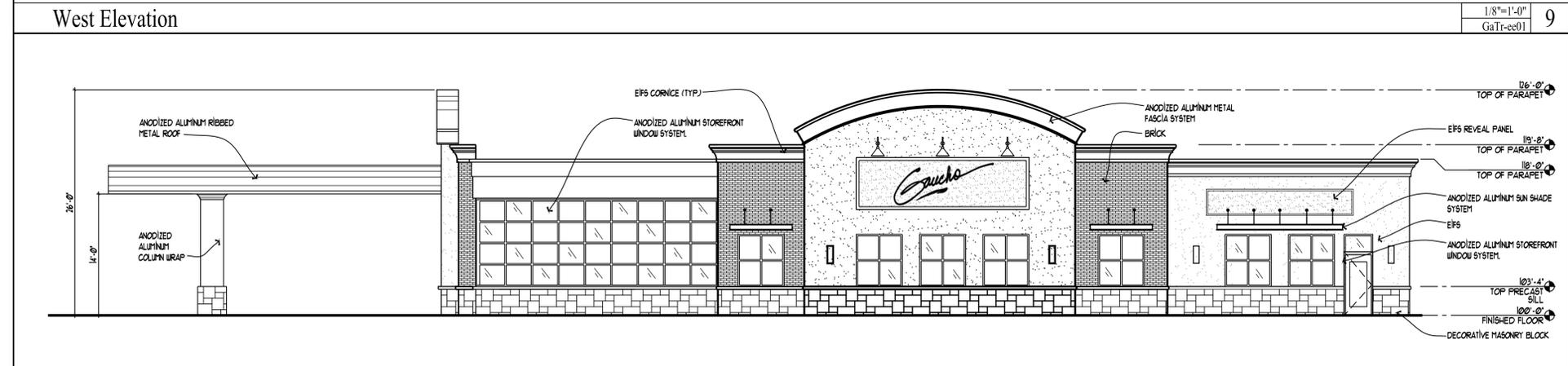
North Elevation

1/8"=1'-0"
GaTr-ec01 13



West Elevation

1/8"=1'-0"
GaTr-ec01 9



East Elevation

1/8"=1'-0"
GaTr-ec01 5



South Elevation

1/8"=1'-0"
GaTr-ec01 1

METRO GROUP ARCHITECTS
P.O. Box 7363
Ann Arbor, Michigan 48107-7363
Phone: (734) 767-8999

353 Marshalls Avenue
St. Louis, Missouri 63119
Phone (314) 772-1782
Fax (314) 373-3514
Aikemeyer & Associates
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Mechanical - Electrical - Plumbing

Gaucha Steakhouse

3635 Rochester Road
Troy, Michigan 48063

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3/15/11 Revised Budget Bid
2/7/11 Initial Bid

Drawn: MMH Checked: RDK

10/13
Exterior Elevations

A5.1

envisor³

innovative equipment screens



3 generations ahead of the next best solution

An affordable solution for equipment screening is finally here

Envisor equipment screens now offer architects the flexibility to create affordable, elegant, **customized screening solutions** that integrate with their building design, all with **no rooftop penetration**.

Our patented equipment screens also provide a viable solution for **municipal screening code requirements** on everything from HVAC units to



The Ohio State University Foundation - Columbus, Ohio

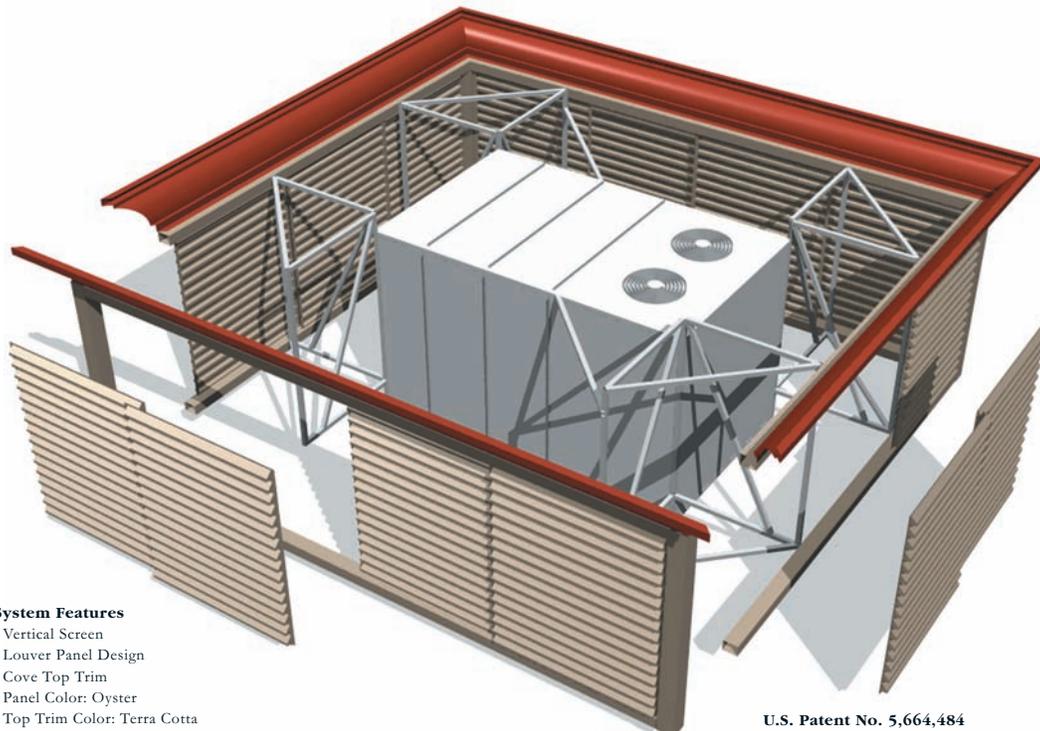
chillers, air handlers, power exhausts, roof stacks, communication equipment, dumpsters - you name it!

Customizing a screen to fit your needs is easy

Simply choose between canted or vertical, decide on a panel design, select a top trim (optional), and pick a color. It's that simple! **We can customize any feature** to your particular design requirements, including custom panel designs, custom colors, and custom top trim designs. If you don't see what you need, tell us what you want. We'll build it for you.



52" Louver Panels



System Features

- Vertical Screen
- Louver Panel Design
- Cove Top Trim
- Panel Color: Oyster
- Top Trim Color: Terra Cotta

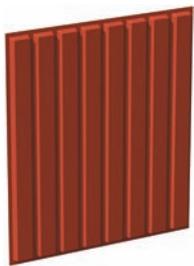
U.S. Patent No. 5,664,484

Step 1: Choose a Canted or Vertical System

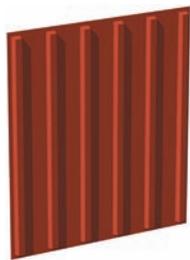


Envisor screens are the perfect alternative to parapet walls and they satisfy even the strictest screening code requirements. Both styles feature our patented attachment method, which secure our screens directly to the equipment with no rooftop penetration. Screen heights are available to screen virtually anything you desire.

Step 2: Decide on a Panel Design



WIDE RIB



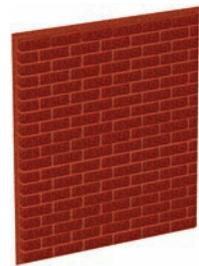
BATTEN



LOUVER



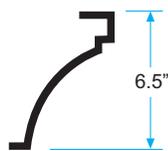
PAN



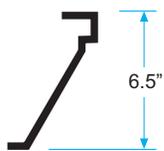
BRICK

Panels are available in **5 standard styles** allowing you to control the project without sacrificing the essential elements of the building design. The panels are constructed of thermoformed high impact ABS with a **co-extruded UV protective layer** on both sides. The panels are held firmly in place using a rust-free, double tracked aluminum rail system. This enables the panels to slide side-to-side for easy access to the unit during servicing and maintenance. Don't see a panel that fits your project? Tell us and we'll make one that you design.

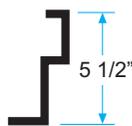
Step 3: Select a Top Trim (optional)



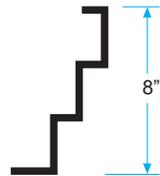
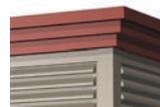
COVE



ALAMO



STEP 1



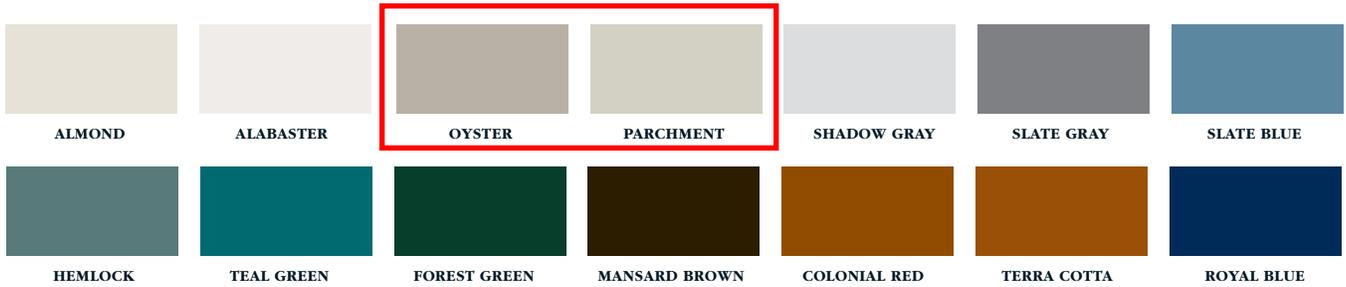
STEP 2



FLAT

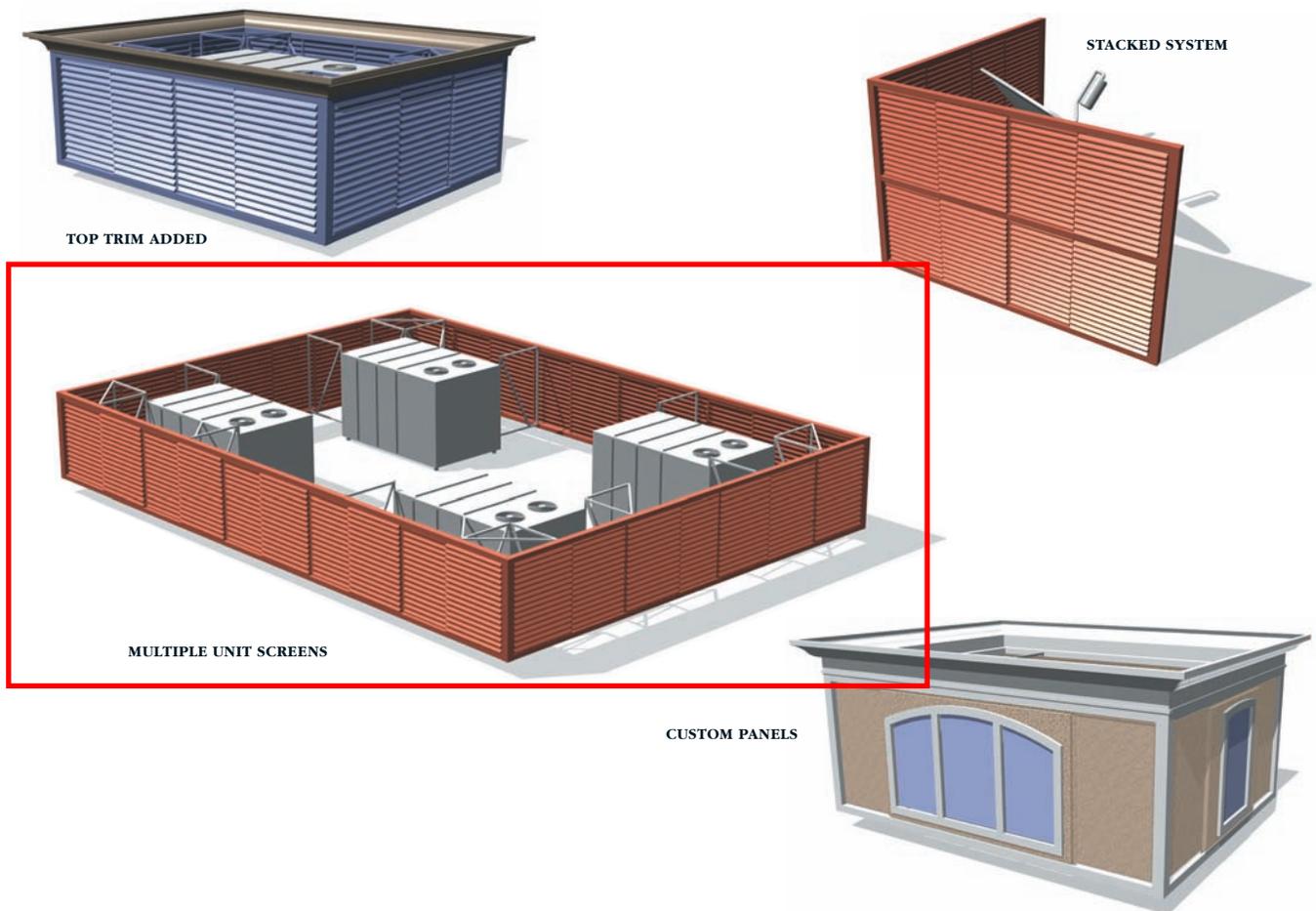
Decorative top trim options offer the flexibility to further customize the elegant appearance of the screens by **picking up on your building design elements** and incorporating those details into the screen itself. Although optional, they offer one more way to make screens part of the design, not part of the problem. We can manufacture any size and shape top trim you create.

Step 4: Pick a Designer Color



Our designer colors complement most architectural applications, but don't let standard colors limit your creativity. We have the ability to **match to any cross-referenced color specification**. Send us samples to match. We've even matched a color to a rock! *Colors shown are only approximate. Please call for actual samples.*

Step 5: Custom Designed Solutions



Envisor equipment screens can be manufactured in a limitless combination of shapes and configurations to help reduce cost, add to the aesthetics of a building, or both. Let us design one for you! Just tell us the equipment manufacturer, the model numbers, and the special requirements you might have. Call for a complete design kit today or visit our website at www.cityscapesinc.com.

Product Features

No Rooftop Penetration

Pre-Engineered Screening System

Screening Code Solution

Attractive Alternative to Parapet Walls

Multiple Panel Designs

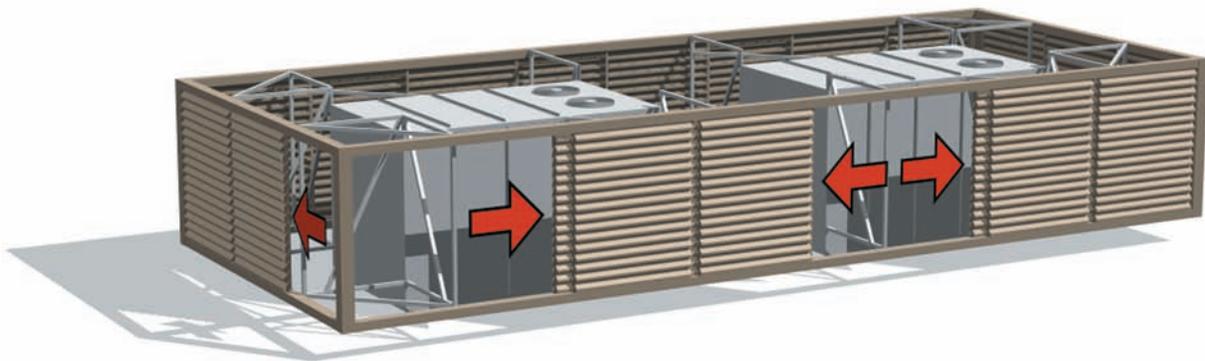
Designer Top Trim Accents

Vertical or Canted Designs

Wide Range of Designer Colors

Panels Slide for Easy Service Access

Custom Design Capabilities



Our panels are designed to slide side-to-side in either direction for easy access to the equipment for servicing and routine maintenance.

Equipment Vendors

Commercial HVAC and Chiller Equipment Vendors who have installed ENVISOR Rooftop Equipment Screens include:

Trane
Lennox
York
Carrier
Heil
AAON
Liebert
Rheem
Reznor

Hussmann
Airwise
Bryant
McQuay
BAC
Hill Phoenix
Am. Standard
Munters
Engineered Air

Retail Clients

Some of the clients utilizing ENVISOR Rooftop Equipment screens on their HVAC and Chiller Equipment include:

Aldi
AMC Theaters
Avis
Best Buy
Blockbuster
Costco
CVS
Hertz
Home Depot
Kohl s
Lowe s

McDonald s
Meijer
Mobil Oil
Muvico
Rite Aid
Sam s Club
Sears
Target
Walgreen s
Wal-Mart
Wendy s



by CityScapes International
4200 Lyman Court
Hilliard, OH 43026
Toll Free: 877.727.3367
Fax: 800.726.4817

CityScapes
international