

# CHARLOTTE'S GARDEN

56 UNIT APARTMENT FOR SENIORS  
3709 West College Avenue  
Franklin, Wisconsin

Ensor, Charlotte D Living Trust

Developer:

McKowen Family Partnership, LLP, an Arizona Limited Liability Partnership

JOHN ROSSO  
9375 East Shea Blvd. Suite 100  
SCOTTSDALE, ARIZONIA 85260  
TEL: 602-704-4588

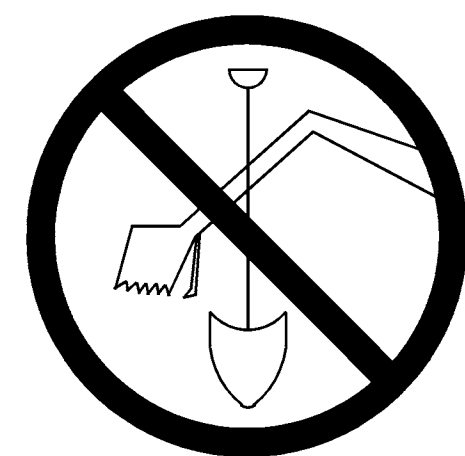
Architect / Engineer / Landscape Architect:

TDI Associates, Inc.

N8 W22350 Johnson Dr. Suite B-4  
Waukesha, Wisconsin 53186  
TEL: 262-409-2530  
FAX: 262-409-2531

## DRAWING INDEX :

T1.0	Title Sheet
-	Plat of Survey by Jahnke and Jahnke
C-2.0	Site Development Plan
C-2.1	Site Lighting Plan
C-3.0	Site Grading Plan
L-1.0	Site Landscaping Plan
A1.0	Basement Plan & Details
A1.1	First Floor Plan & Wall Types
A1.2	Second Floor Plan & Details
A2.1	Exterior Elevations



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

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

## FOUNDATION NOTES

1. THE SOIL BEARING PRESSURE WAS VERIFIED TO BE A MIN. OF 2000 P.S.F. IF THE SOIL ENCOUNTERED DOES NOT INDICATE A MIN. SOIL BEARING PRESSURE OF 2000 PSF NOTIFY THE ARCHITECT AT 262/431-0400.
2. IF ANY EXISTING SERVICE LINES, UTILITIES, AND UTILITY STRUCTURES WHICH ARE TO REMAIN IN SERVICE ARE UNCOVERED OR ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE SAFEGUARDED, PROTECTED FROM DAMAGE AND SUPPORTED IF NECESSARY.
3. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN THE EVENT ANY EXISTING UTILITIES, UTILITY STRUCTURES OR ANY OBSTRUCTION INTERFERES WITH THE PROPER INSTALLATION OF THE FOUNDATION WORK.
4. THE CONTRACTOR SHALL REMOVE AT HIS EXPENSE FROM THE SITE ALL TOPSOIL, UNSUITABLE, AND OBSTRUCTIONS AS REQUIRED BY THE TESTING LABORATORY AND REPLACE IT WITH COMPACTED (48% MODIFIED PROCTOR) GRANULAR FILL.
5. IN AREAS WHERE THE BEARING CAPACITY OF SOIL AT DESIGN ELEVATION IS LESS THAN THE DESIGN BEARING CAPACITY, THE CONTRACTOR SHALL REMOVE THE UNSUITABLE MATERIAL AND REPLACE IT WITH THE ENGINEERED FILL UP TO THE DESIGN ELEVATION.
6. FILL SHALL BE GRANULAR AND COMPACTED TO A MINIMUM OF 48% MAXIMUM DENSITY (ASTM D1557-10, MODIFIED PROCTOR).
7. THE SOIL BEARING CAPACITY AT EACH FOOTING SHALL BE CHECKED AND APPROVED BY THE TESTING LABORATORY.
8. CONCRETE FOR ANY FOOTING SHALL NOT BE POURED ON FROZEN GROUND OR WHEN WATER IS PRESENT.
9. THE CONTRACTOR SHALL PROVIDE WELL POINTS TO ADEQUATELY LOWER THE GROUND WATER LEVEL AND MAINTAIN THEM AS LONG AS THEY ARE REQUIRED DURING CONSTRUCTION.
10. PROVIDE 3" CLEAR COVER AROUND ALL STEEL REINFORCING IN FOUNDATION.

## DESIGN LOADS

1. CONCRETE:  $F_c = 3,000$  P.S.I.
2. REINFORCING STEEL:  $F_y = 60,000$  P.S.I.
3. STRUCTURAL STEEL:  $F_y = 46,000$  P.S.I. - COLUMNS  
 $F_y = 50,000$  P.S.I. - BEAMS
4. SOIL BEARING DESIGN PRESSURE: 2,000 P.S.F.
5. DESIGN LOADS: ROOF  
WIND LOAD 20 P.S.F.      DESIGN LOADS: SECOND & THIRD FLOOR  
SNOW LOAD (BALANCED) 27 P.S.F.      WIND LOAD 20 P.S.F.  
DEAD LOAD 14 P.S.F.      LIVE LOAD 40 P.S.F.  
DEAD LOAD 15 P.S.F.
6. IMPORTANCE FACTOR      SNOW LOAD FACTORS  
SEISMIC FACTOR = 1.0       $C_e = 1.0$   
SNOW FACTOR = 1.0       $C_t = 1.1$  TYPICAL  
WIND FACTOR = 1.0       $C_t = 1.2$  WORST CASE  
    $C_t = 1.1$  ABOVE ATTICS  
    $C_s = 1.0$
7. SEISMIC DESIGN CATEGORY = B
8. WIND LOAD FACTORS  
EXPOSURE 'B'  
WIND SPEED = 90 M.P.H.
9. SITE SOIL CLASS = D

## BUILDING CODE INFORMATION

OCCUPANCY R-2 = RESIDENTIAL  
TYPE V A CONSTRUCTION  
SPRINKLERED PER NFPA 13 (PARKING GARAGE) & NFPA 13R (RESIDENTIAL)  
THREE STORIES (PER TABLE 503)  
ALLOWABLE AREA PER FLR. = 14,004 SQ FT PER SBD WORKSHEET  
EXIT DISTANCE: 250'

STRUCTURAL FRAME = 1 HR  
BEARING WALL (EXTERIOR) = 1 HR  
BEARING WALL (INTERIOR) = 1 HR  
NONBEARING WALL (EXTERIOR) = 1 HR (> 30FT)  
NONBEARING WALL (INTERIOR) = 0 HR (any code approved material)  
FIRE PARTITION WALL CONSTRUCTION = 1 HR (PER IBC 708.3)  
FLOOR CONSTRUCTION = 1 HR (PER IBC 710.3)  
ROOF CONSTRUCTION = 1 HR

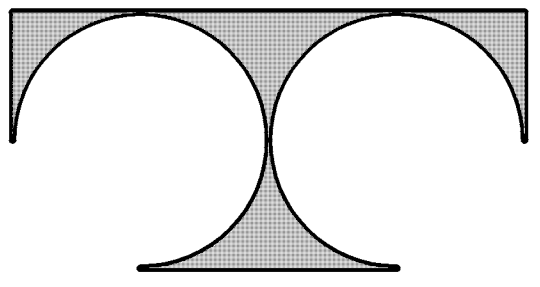
IBC 310.3 REQUIRED DWELLING UNIT AND GUEST ROOM SEPARATION-  
WALLS AND FLOORS SEPARATING DWELLING UNITS IN THE  
SAME BUILDING SHALL BE FIRE PARTITIONS OR HORIZONTAL  
ASSEMBLIES AS REQUIRED BY SECTIONS 708 & 710

IBC 708.3 FIRE RESISTANCE RATING -  
THE FIRE RESISTANCE RATING OF THE DWELLING UNIT FIRE  
PARTITION WALLS SHALL BE 1 HOUR

IBC 710.3 FIRE RESISTANCE RATING -  
THE FIRE RESISTANCE RATING OF THE DWELLING UNIT HORIZONTAL  
ASSEMBLIES SHALL BE 1 HOUR

## GENERAL NOTES

1. THE ARCHITECT/ENGINEER MAINTAINS NO RESPONSIBILITY FOR THE GENERAL CONTRACTOR, SUBCONTRACTORS, OR THOSE WORKING IN SUCH CAPACITIES, FOR THE METHODS USED, OR LACK THEREOF, IN THE EXECUTION OF THE WORK AND SAFETY PROCEDURES AND PRECAUTIONS TAKEN AT THE PROJECT SITE.
2. CONTRACTORS SHALL ASSUME FULL RESPONSIBILITY - UNRELIEVED BY REVIEW OF SHOP DRAWINGS NOR BY SUPERVISION OR PERIODIC OBSERVATION OF CONSTRUCTION FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS - FOR DIMENSIONS TO BE CONFIRMED AND CORRELATED ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS OR SETS OF DRAWINGS; FOR FABRICATION PROCESSES AND CONSTRUCTION TECHNIQUES (INCLUDING EXCAVATION, SHORING AND SCAFFOLDING, BRACING, ERECTION, FORMWORK, ETC.); FOR COORDINATION OF THE VARIOUS TRADES; FOR SAFE CONDITIONS ON THE JOB SITE, AND FOR THE PROTECTION OF THE PEOPLE AND PROPERTY AT THE JOB SITE.
3. VARIATIONS IN FIELD CONDITIONS RELATIVE TO THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER. WORK SHALL NOT PROGRESS UNTIL WRITTEN PERMISSION FROM THE ENGINEER IS OBTAINED.
4. THE INFORMATION CONTAINED ON THE DRAWINGS IS IN ITSELF INCOMPLETE, AND VOID UNLESS USED IN CONJUNCTION WITH ALL THE SPECIFICATIONS, TRADE PRACTICES, OR APPLICABLE STANDARDS, CODES, ETC., INCORPORATED THEREIN BY REFERENCE, OF WHICH THE CONTRACTOR CERTIFIES KNOWLEDGE BY SIGNING THE CONTRACT.
5. ARCHITECT/ENGINEER'S REVIEW OF DRAWINGS PREPARED BY THE CONTRACTORS, SUPPLIERS, ETC. ARE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT. CONSTRUCTION SHALL NOT START WITHOUT SAID REVIEW, AND ONLY SHOP DRAWINGS STAMPED BY THE ARCHITECT/ENGINEER WILL BE ALLOWED AT THE JOB SITE.
6. DRAWINGS ARE NOT TO BE USED FOR SHOP DETAILING OR FOR CONSTRUCTION UNLESS SPECIFICALLY STAMPED BY THE ARCHITECT/ENGINEER ON THE DRAWINGS "FOR DETAILING" OR "FOR CONSTRUCTION". THESE DRAWINGS ARE NOT TO BE REPRODUCED FOR THE PURPOSE OF USING THEM AS SHOP DRAWINGS.
7. UNLESS NOTED OTHERWISE, ALL DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE.
8. ALL DIMENSIONS ON STRUCTURAL DRAWINGS ARE TO BE CHECKED BY THE CONTRACTOR AGAINST ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL DIMENSIONS ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS AND TRADES.
9. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, SLEEVES, EQUIPMENT PADS, DEPRESSIONS, CURBS, FLOOR FINISHES, INSERTS, AND OTHER EMBEDDED ITEMS.
10. UNLESS OTHERWISE SHOWN OR NOTED, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND THE PLACEMENT OF ANY INSERTS, HANGARS, PIPE SLEEVES, HOLES OR ANCHOR BOLTS THAT ARE REQUIRED BY THE MECHANICAL OR ELECTRICAL EQUIPMENT.
11. THE CONTRACTOR SHALL COMPLY WITH THE LATEST OCCUPATIONAL SAFETY HEALTH ACT REQUIREMENTS.
12. ALL CONSTRUCTION SHALL BE PERFORMED IN STRICT CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL BUILDING CODES.



TDI ASSOCIATES, INC.  
ARCHITECTS, ENGINEERS, PLANNERS

N8 W22350 JOHNSON DRIVE, SUITE B4  
WAUKESHA, WISCONSIN 53186  
PHONE 262-409-2530 FAX 262-409-2531

CHARLOTTE'S GARDEN  
APARTMENT SENIOR LIVING  
TWO STORY WITH BASEMENT PARKING  
3709 WEST COLLEGE AVENUE  
FRANKLIN, WISCONSIN

©TDI ASSOCIATES, INC  
All Rights Reserved

OWNERSHIP OF DOCUMENTS  
This document, and the ideas and design incorporated herein, as an instrument of professional service, is the sole property of TDI Associates, Inc., and is not to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.

Sheet Title  
TITLE SHEET

Revisions

Issued Date:

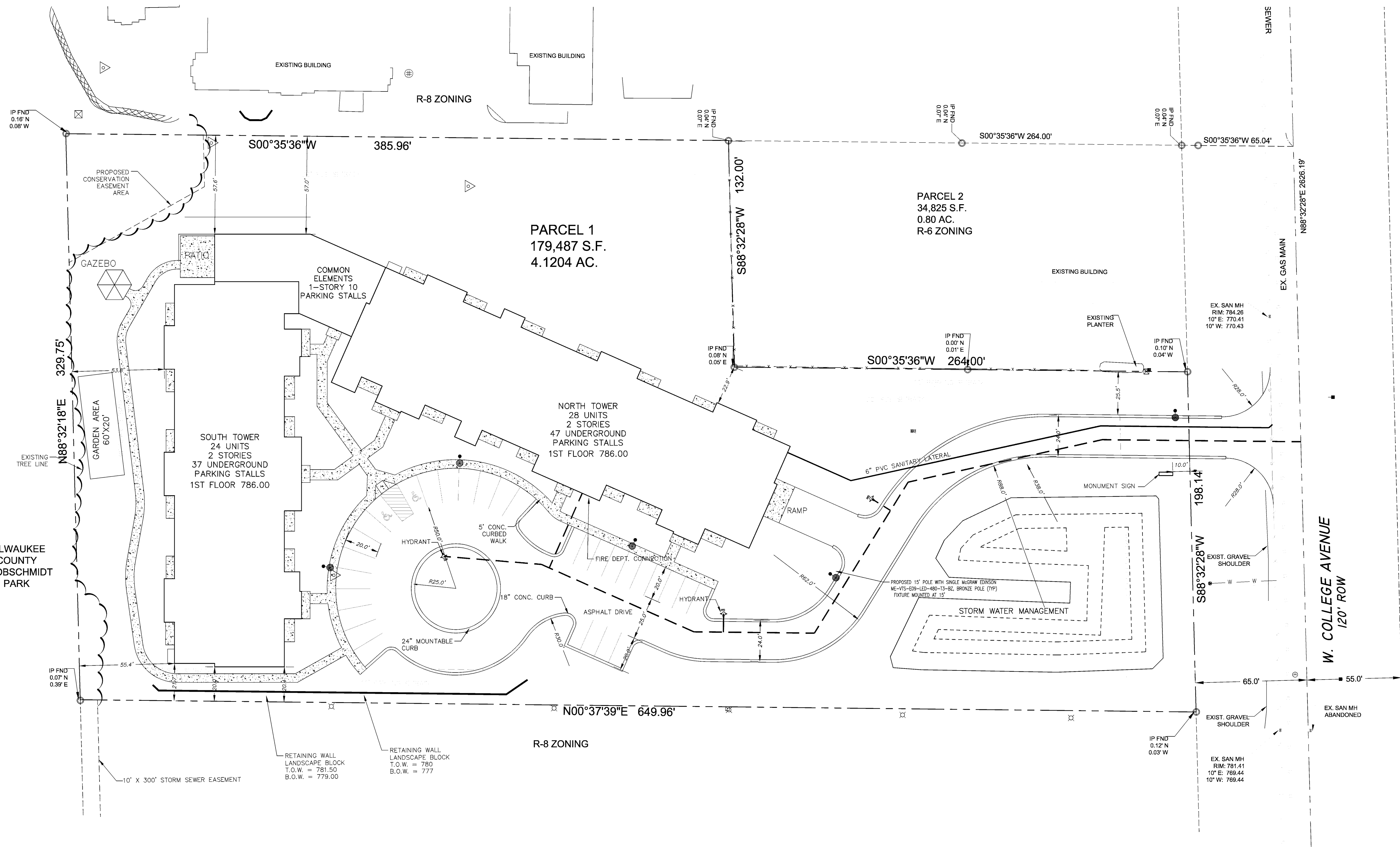
Date: 12/12/2016

Job NO.: 16-218

Drawn By: REM

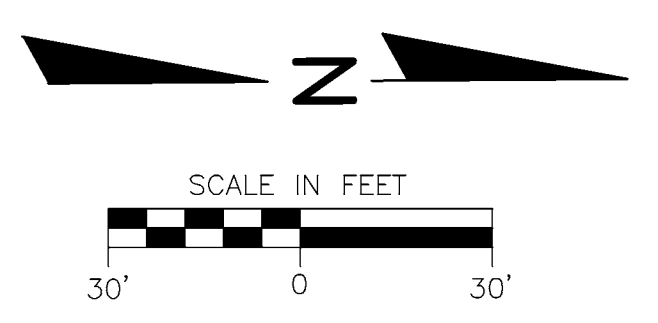
Sheet No.

T1.0



MILWAUKEE COUNTY GROBSCHMIDT PARK

W. COLLEGE AVENUE  
120' ROW

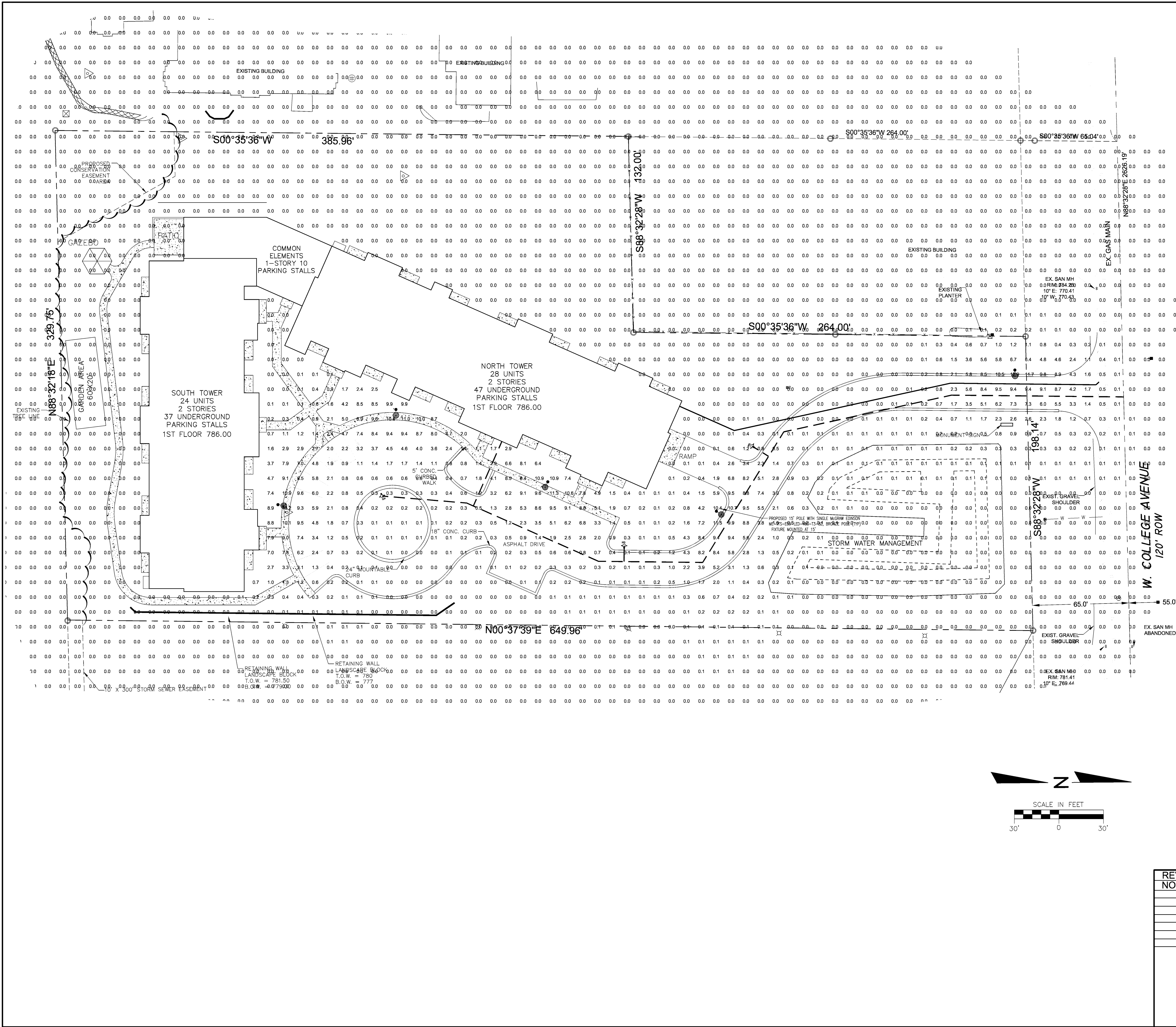


OWNER: CHARLOTTE D ENSOR LIVING TRUST  
5829 W. ADLER ST.  
MILWAUKEE, WISCONSIN 53214

DEVELOPER: MCKOWEN FAMILY PARTNERSHIP, LLP  
C/O JOHN ROSSO  
9375 E. SHEA BLVD., SUITE #100  
SCOTTSDALE, AZ 85260  
PHONE 602-704-4588

SITE DATA:	
GROSS LOT AREA	4.12 ACRES
CURRENT ZONING:	R-6
PROPOSED ZONING:	R-8
BUILDING	0.86 ACRES
BUILDING HEIGHT AT PEAK	36.5 FEET
PARKING AND WALKWAYS	0.70 ACRES
GREEN SPACE	2.56 ACRES (62%)
NUMBER OF LIVING UNITS	52 UNITS TOTAL
PARKING STALLS	BASEMENT 94 STALLS SURFACE 30 STALLS TOTAL 124 STALLS 2.4 PER UNIT

REVISIONS:		OWNER/SHIP OF DOCUMENTS	
NOTE	DATE	This document and the ideas and design incorporated herein, as an instrument of professional service, is the sole property of TDI Associates, Inc., and is not to be used or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.	
		TDI ASSOCIATES, INC. ARCHITECTURE, ENGINEERING, PLANNING 18 W2290 JOHNSON DRIVE, SUITE B4 WAUKESHA, WISCONSIN 53186 PHONE 262-409-2530 FAX 262-409-2531	
		<b>CITY OF FRANKLIN, WI</b> <b>CHARLOTTE'S GARDEN SENIOR HOUSING</b> <b>SITE DEVELOPMENT PLAN</b>	
SCALE: 1"= 30'-0"		JOB NO: 16-218.000	DATE: 12-12-16
DESIGNED BY: ROB		DRAWN BY: ROB	CHECKED BY:
APPROVED BY:		ENGINEER	DATE
		SHEET C-2.0	



**VTS VENTUS LED**

**OPTIC ORIENTATION**

**DRILLING PATTERNS**

**ORDERING INFORMATION**

Product Family	Number of LightBARS	Light Type	Voltage	Beam Spread	Color
VTS-100	1-10	LED	120V/277V	30°	3000K
VTS-200	1-10	LED	120V/277V	45°	3000K
VTS-300	1-10	LED	120V/277V	60°	3000K
VTS-400	1-10	LED	120V/277V	75°	3000K
VTS-500	1-10	LED	120V/277V	90°	3000K

**Options (Add as Suffix)**

**Accessories (Order Separately)**

**Notes:**

**McGraw-Edison**

**VTS VENTUS LED**

**2 - 12 LightBARs Solid State LED AREA LUMINAIRE**

**DESCRIPTION**

The Ventus LED area luminaire provides uncompromising optical performance and outstanding versatility for a wide variety of area and roadway applications. Patent pending modular LightBAR technology delivers uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and any security lighting application. UL/cUL Listed for wet locations.

**DESCRIPTION TABLE**

Project	Type

**SPECIFICATION FEATURES**

**Construction:** Die-cast aluminum frame secures thermally conductive, extruded aluminum heat sink to independent electrical chamber. Heavy wall, anodized aluminum housing and door isolates driver components for cooler operation. The unique construction allows for passive cooling and natural cleaning of the extruded heat sink ensuring reliable operation at 40°C high ambient conditions. Quality steel fasteners and hinges allow access to electrical components for installation and maintenance. Optional tool-less hardware available for ease of entry into electrical chamber.

**Electrical:** LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficiency, and prolonged life. Standard drivers feature electronic universal voltage (120-277V/300VAC), 347V/60Hz or 480V/60Hz operation. 480V systems only use with 480V systems only. Greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in 40°C to 80°C ambient environments. All features are shipped standard with 10kV/100A common and differential mode surge protection. LightBARS feature an IP66 enclosure rating and maintain greater than 90% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

**Optics:** Choice of twelve patented, high efficiency AccuLED Optics are precisely designed to direct the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K L+; 2700K CCT and minimum 70 CRI. Optional 3000K CCT, 5000K CCT and 5700K CCT. For the ultimate level of light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

**Mounting:** Cast aluminum 6" arm includes built-in leveling for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging of housing, separate pole arm and round pole adapter for contractor friendly arrival of product on site. Optional internal mast arm mount accepts a 1.14" to 2" O.D. horizontal beam, while a two-bolt clamping mechanism secures fixture. Cast-in leveling guides provide +5° vertical leveling adjustment. Tension adapters available to shift lever point equipped with 2.38" or 3.12" O.D. beam. 30° rotation rated.

**Finish:** Cast components and arm finished in superior TIG polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic.RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

**Warranty:** Five year warranty.

**CERTIFICATION DATA**

**ENERGY DATA**

**SHIPPING DATA**

**SCALE:** 1" = 30'-0"

**JOB NO:** 16-218.000 **DATE:** 12-12-16

**DESIGNED BY:** ROB **DRAWN BY:** ROB **CHECKED BY:**

**APPROVED BY:** **ENGINEER** **DATE:** **SHEET** C-2.1

**REVISIONS:**

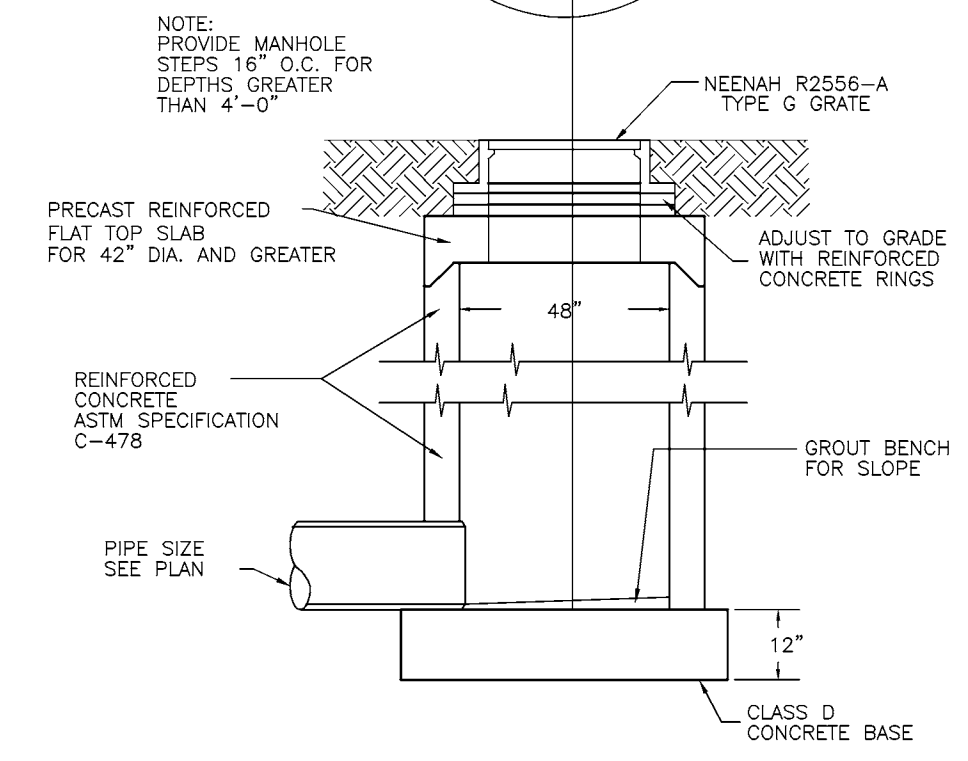
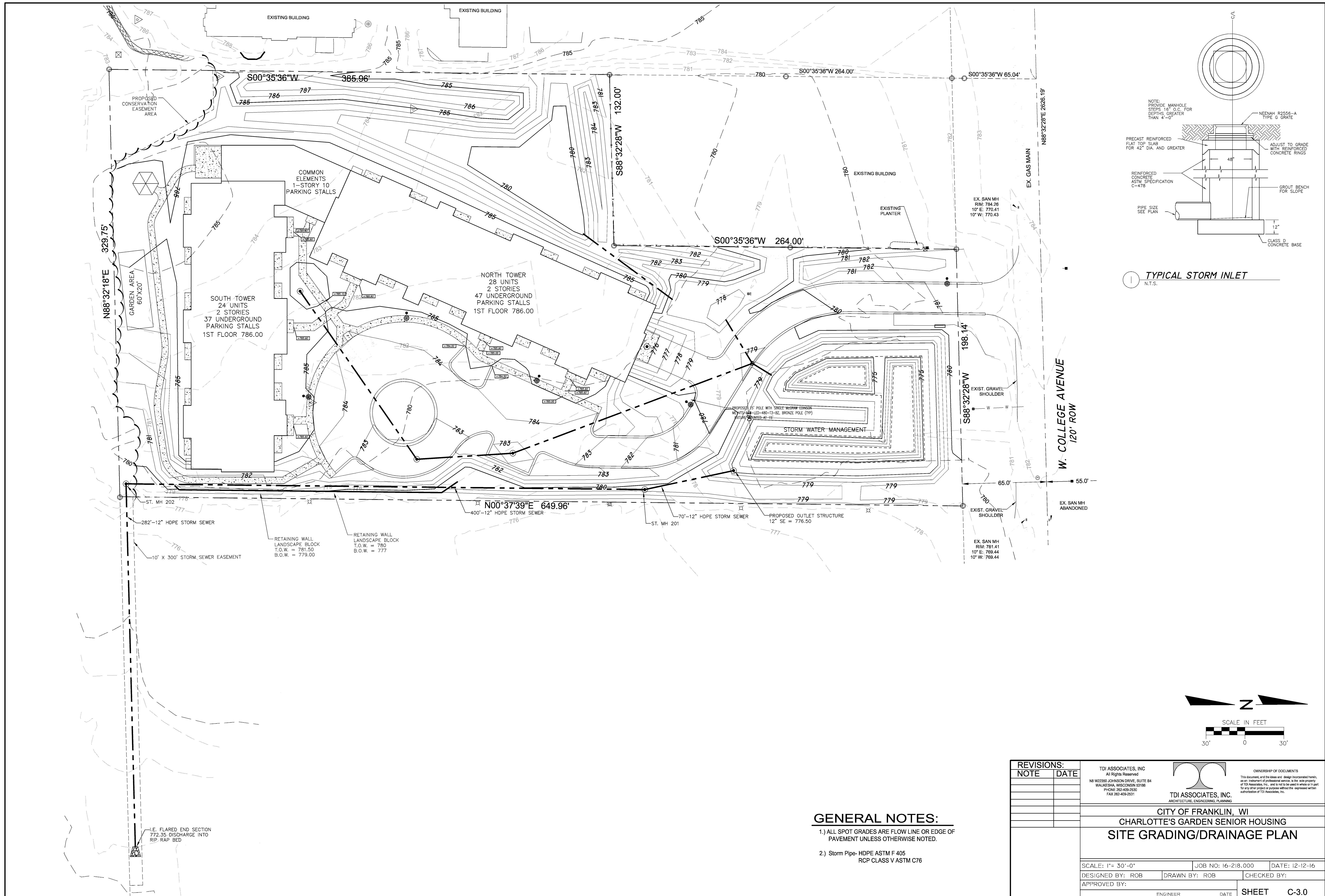
NOTE	DATE

**TDI ASSOCIATES, INC.**  
All Rights Reserved  
16 W2290 JOHNSON DRIVE, SUITE B4  
WALWISHA, WISCONSIN 53186  
PHONE 262-409-2930  
FAX 262-409-2931

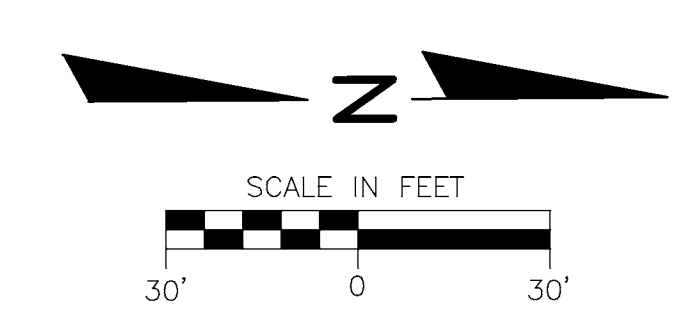
**TDI ASSOCIATES, INC.**  
ARCHITECTURE, ENGINEERING, PLANNING

**CITY OF FRANKLIN, WI**  
**CHARLOTTE'S GARDEN SENIOR HOUSING**  
**SITE LIGHTING PLAN**

**OWNERSHIP OF DOCUMENTS:**  
This document, and the ideas and design incorporated herein, are the intellectual property of TDI Associates, Inc., and it is to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.



1) TYPICAL STORM INLET  
N.T.S.

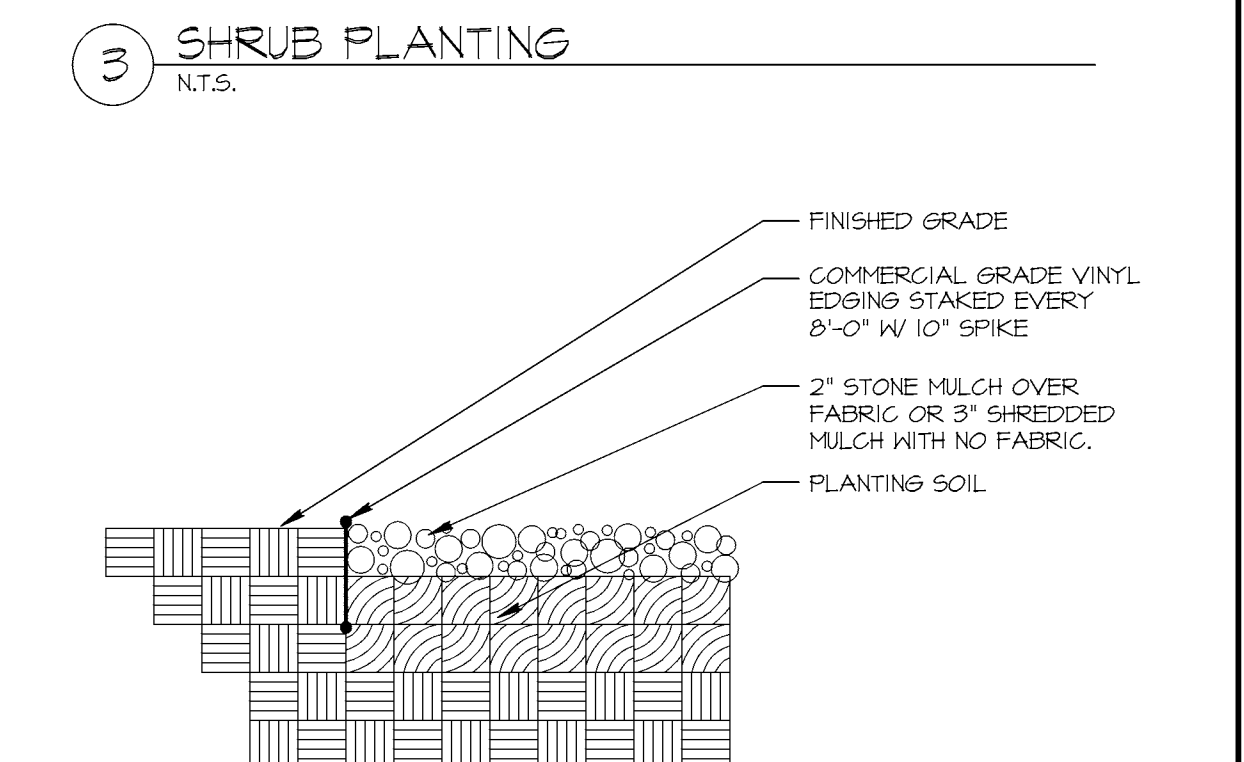
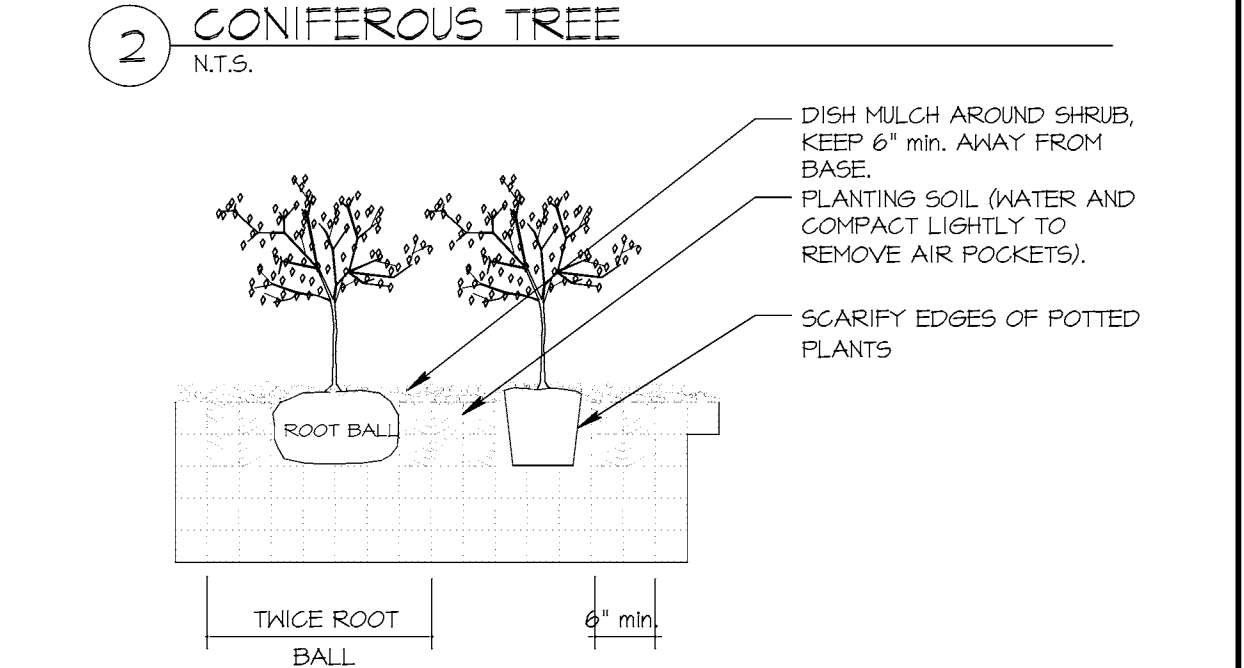
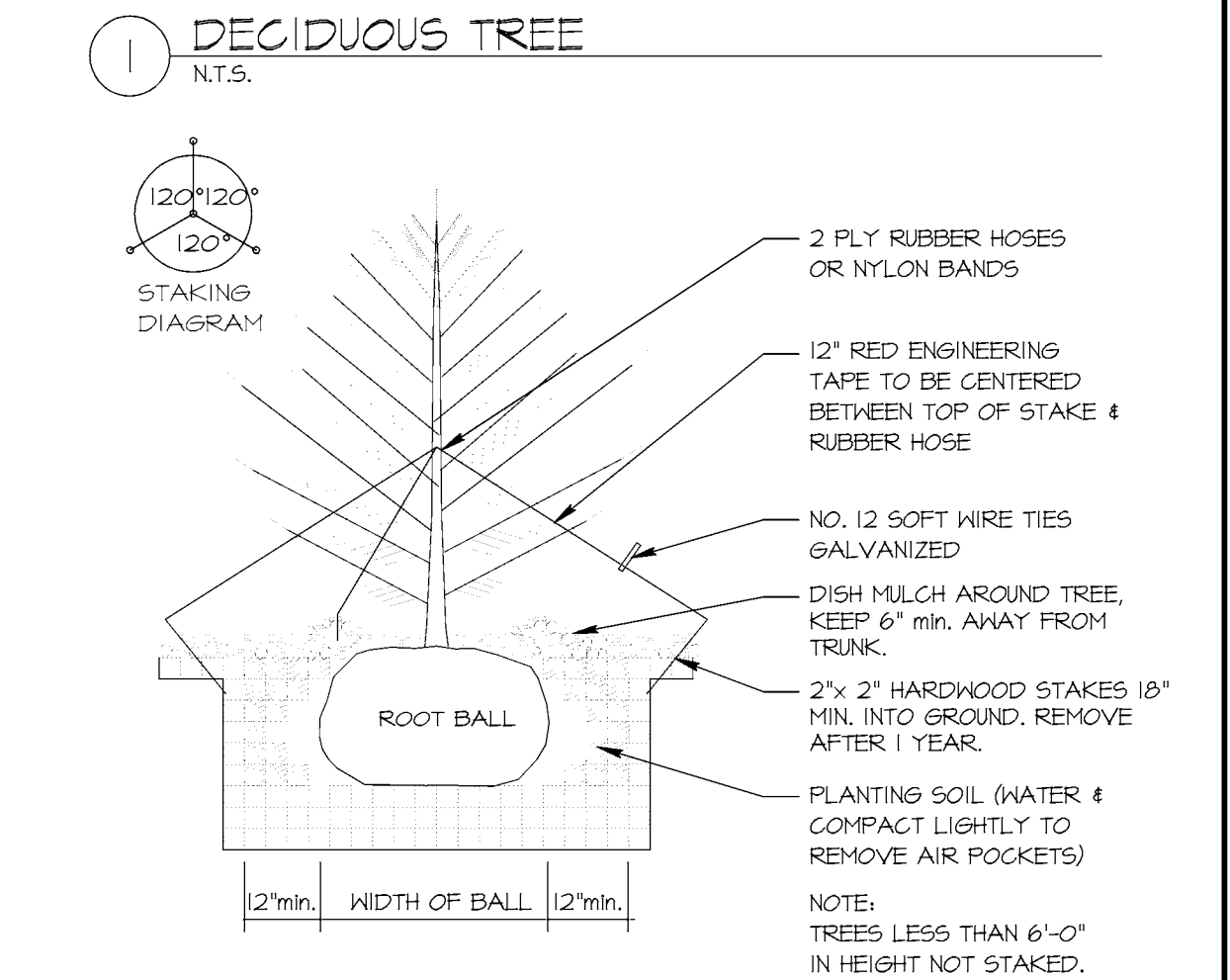
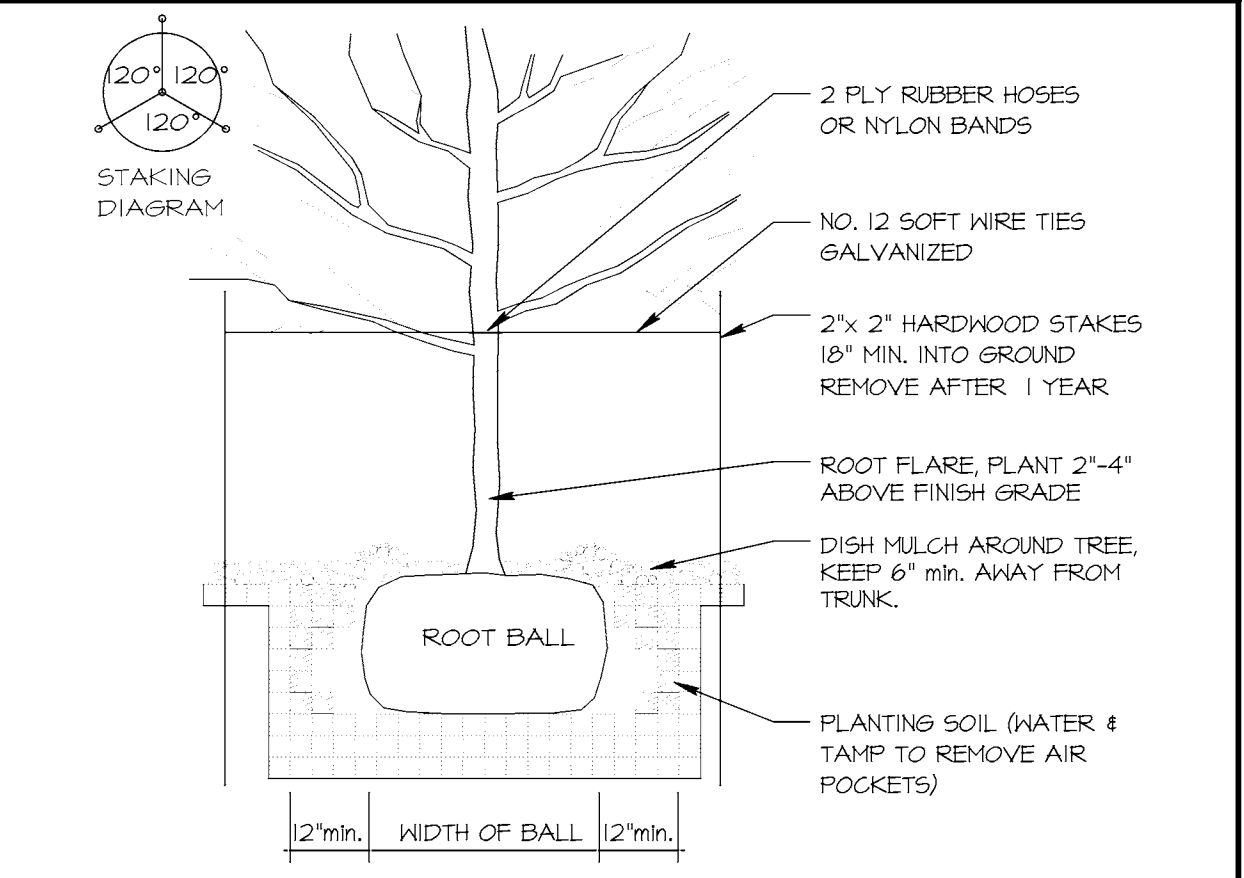
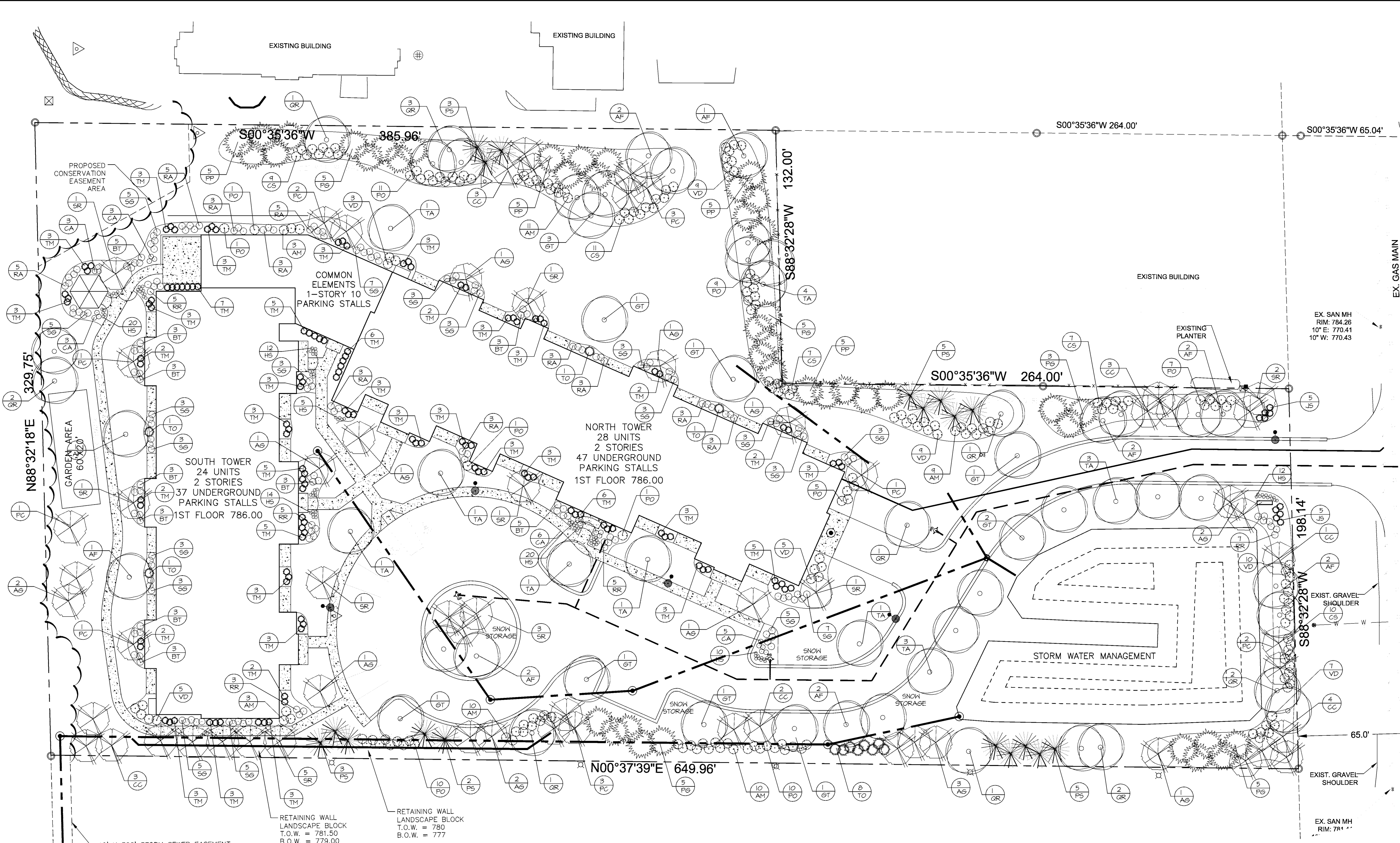


**GENERAL NOTES:**

- 1.) ALL SPOT GRADES ARE FLOW LINE OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- 2.) Storm Pipe- HDPE ASTM F 405 RCP CLASS V ASTM C76

REVISIONS:		DATE	NOTE
NO.	DATE		

TDI ASSOCIATES, INC. All Rights Reserved N8 W2290 JOHNSON DRIVE, SUITE B4 WAUKESHA, WISCONSIN 53186 PHONE 262-409-2530 FAX 262-409-2531		<p>OWNERSHIP OF DOCUMENTS          This document, and the ideas and design incorporated herein, are the intellectual property of TDI Associates, Inc. and are to be used only for the project and for any other project or purpose without the expressed written authorization of TDI Associates, Inc.</p>
<b>TDI ASSOCIATES, INC.</b> ARCHITECTURE, ENGINEERING, PLANNING		
<b>CITY OF FRANKLIN, WI</b> <b>CHARLOTTE'S GARDEN SENIOR HOUSING</b> <b>SITE GRADING/DRAINAGE PLAN</b>		
SCALE: 1"= 30'-0"	JOB NO: 16-218.000	DATE: 12-12-16
DESIGNED BY: ROB	DRAWN BY: ROB	CHECKED BY:
APPROVED BY:	ENGINEER	DATE
		<b>SHEET C-3.0</b>



PLANT SCHEDULE (CONTRACTOR RESPONSIBLE FOR VERIFYING PLANT QUANTITIES)						
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANTING SIZE	TYPE
15	AF	<i>Acer x freemanii</i> 'Autumn Blaze'	Autumn Blaze Maple	45'-60'	B / B 2 1/2"	Shade Tree
12	GT	<i>Gleditsia triacanthos</i> 'Impicola'	Imperial Honeylocust	35'-40'	B / B 2 1/2"	Shade Tree
14	GR	<i>Quercus rubra</i>	Red Oak	45'-55'	B / B 2 1/2"	Shade Tree
17	TA	<i>Tilia americana</i> 'Redmond'	Redmond Linden	35'-40'	B / B 2 1/2"	Shade Tree
17	AG	<i>Amelanchier x grandiflora</i> 'Princess Diana'	Princess Diana Serviceberry	15'-20'	B / B 2"	Ornamental Tree
16	CC	<i>Crataegus crus-galli</i> 'hermits'	Thornless Cockspur Hawthorn	20'-25'	B / B 2"	Ornamental Tree
14	PC	<i>Pyrus calleryana</i> 'Cleveland Select'	Cleveland Select Pear	30'-35'	B / B 2"	Ornamental Tree
16	SR	<i>Syringa reticulata</i> 'Ivory Silk'	Ivory Silk Tree Lilac	15'-20'	B / B 2"	Ornamental Tree
23	PS	<i>Picea glauca densata</i>	Black Hills Spruce	25'-30'	B / B 6'	Evergreen Tree
20	FP	<i>Picea pungens</i> 'Hoopsii'	Hoops Blue Spruce	35'-40'	B / B 6'	Evergreen Tree
18	PS	<i>Pinus strobus</i>	Scot's Pine	25'-35'	B / B 6'	Evergreen Tree
12	TO	<i>Thuja occidentalis</i> 'Nigra'	Dark Green Arborvitae	20'-30'	B / B 6'	Evergreen Tree
46	AM	<i>Anonita melanocarpa</i>	Black Chokeberry	6'-8'	B / B 36"	Deciduous Shrub
34	BT	<i>Berberis thunbergii</i> 'Rose Gio'	Rose Gio Barberry	3'-4'	POT 2 Gal	Deciduous Shrub
44	CS	<i>Cornus sericea</i> 'Artic Pine'	Artic Pine Dogwood	4'-5'	B / B 36"	Deciduous Shrub
34	RA	<i>Ribes alpinum</i>	Alpine Currant	3'-4'	POT 18"	Deciduous Shrub
25	RR	Rosa 'Radkapnik' PPH1850T	Double Pink Knockout Rose	3'-4'	POT 2 Gal	Deciduous Shrub
56	PO	<i>Physocarpus opulifolius</i> 'Sea-ward'	Summer Wine Ninebark	4'-6'	POT 36"	Deciduous Shrub
75	SG	<i>Spiraea x Goldflame</i>	Goldflame Spirea	3'-4'	POT 2 Gal	Deciduous Shrub
48	VD	<i>Viburnum dentatum</i>	Arrowwood Viburnum	4'-6'	B / B 30"	Deciduous Shrub
10	JS	<i>Juniperus sabina</i> 'Broadmoor'	Broadmoor Juniper	2' x 4'	POT 5 Gal	Evergreen Shrub
125	TM	<i>Taxus x media</i> 'Rynjan'	Rynjan Yew	3' x 5'	POT 18"	Evergreen Shrub
20	CA	<i>Calamagrostis acutiflora</i> 'Karl Foerster'	Karl Foerster Grass	42"-48"	POT 1 Gal	Ornamental Grass
43	HS	<i>Hemerocallis x Stella D'oro</i>	Stella D'oro Daylily	18"-24"	POT 1 Gal	Perennial

- GENERAL NOTES:
- 1.) ALL FINISHED GRADES TO BE 1" BELOW TOP OF CURBS OR PAVEMENT.
  - 2.) BACKFILL AND GRADE ALL PLANTING AREAS WITH MIN. 12" BLENDED TOPSOIL.
  - 3.) ALL LAWN AREAS TO BE SEED UNLESS OTHERWISE NOTED.
  - 4.) ALL PLANT MATERIAL SHALL CONFORM TO AMERICAN STANDARD FOR NURSERY STOCK.
  - 5.) ALL TREES NOT IN A PLANTING BED SHALL BE MULCHED WITH A MINIMUM 1' RADIUS FOR EACH 1 INCH CALIPER. USE SHREDDED HARDWOOD MULCH AT 2" DEPTH.
  - 6.) PROVIDE MIN. 2 YEAR WARRANTY ON ALL PLANT MATERIAL.
  - 7.) ALL PLANTING BEDS TO BE EDGED WITH COMMERCIAL GRADE PLASTIC EDGING.
  - 8.) ALL PLANTING BEDS TO BE MULCHED AT 2" DEPTH WITH HARDWOOD MULCH
  - 9.) HOSE BIBS ON BUILDING TO SUPPLY NECESSARY WATER TO PLANTINGS

MINIMUM PLANTING CALCULATIONS  
52 DWELLING UNITS PLUS 20% FOR BUFFERYARD

52 UNITS x 1.5 SHADE TREE x 20% = 44 SHADE TREES REQUIRED  
52 UNITS x 1 EVERGREEN TREE x 20% = 63 EVERGREEN TREES REQUIRED  
52 UNITS x 1 DECORATIVE TREE x 20% = 63 DECORATIVE TREES REQUIRED  
52 UNITS x 3 SHRUBS x 20% = 182 SHRUBS REQUIRED AT 36" PLANTING

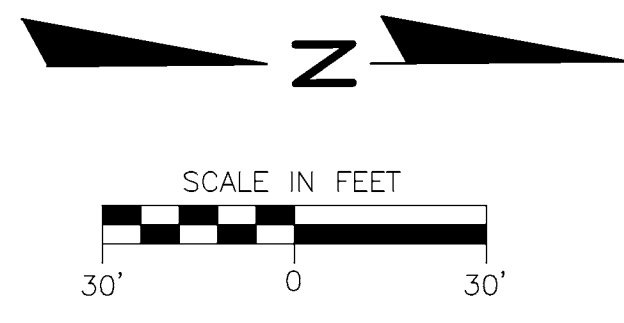
58 SHADE TREES PROPOSED  
73 EVERGREEN TREES PROPOSED  
63 DECORATIVE TREES PROPOSED  
194 SHRUBS PROPOSED AT 36" HEIGHT

SEED MIX # 1 (Lawn)

35% KENTUCKY BLUEGRASS  
20% CREEPING RED FESCUE  
20% IMPROVED HARD FESCUE  
25% IMPROVED FINE PERENNIAL RYEGRASS

APPLICATION RATE: 2lbs/1000 Sq. Ft. \*  
APPLY STRAW MULCH IMMEDIATELY AFTER SEEDING

TURF STARTER FERTILIZER: 20-10-10  
APPLICATION RATE: 5lbs/1000 Sq. Ft.



REVISIONS:		NOTE		DATE

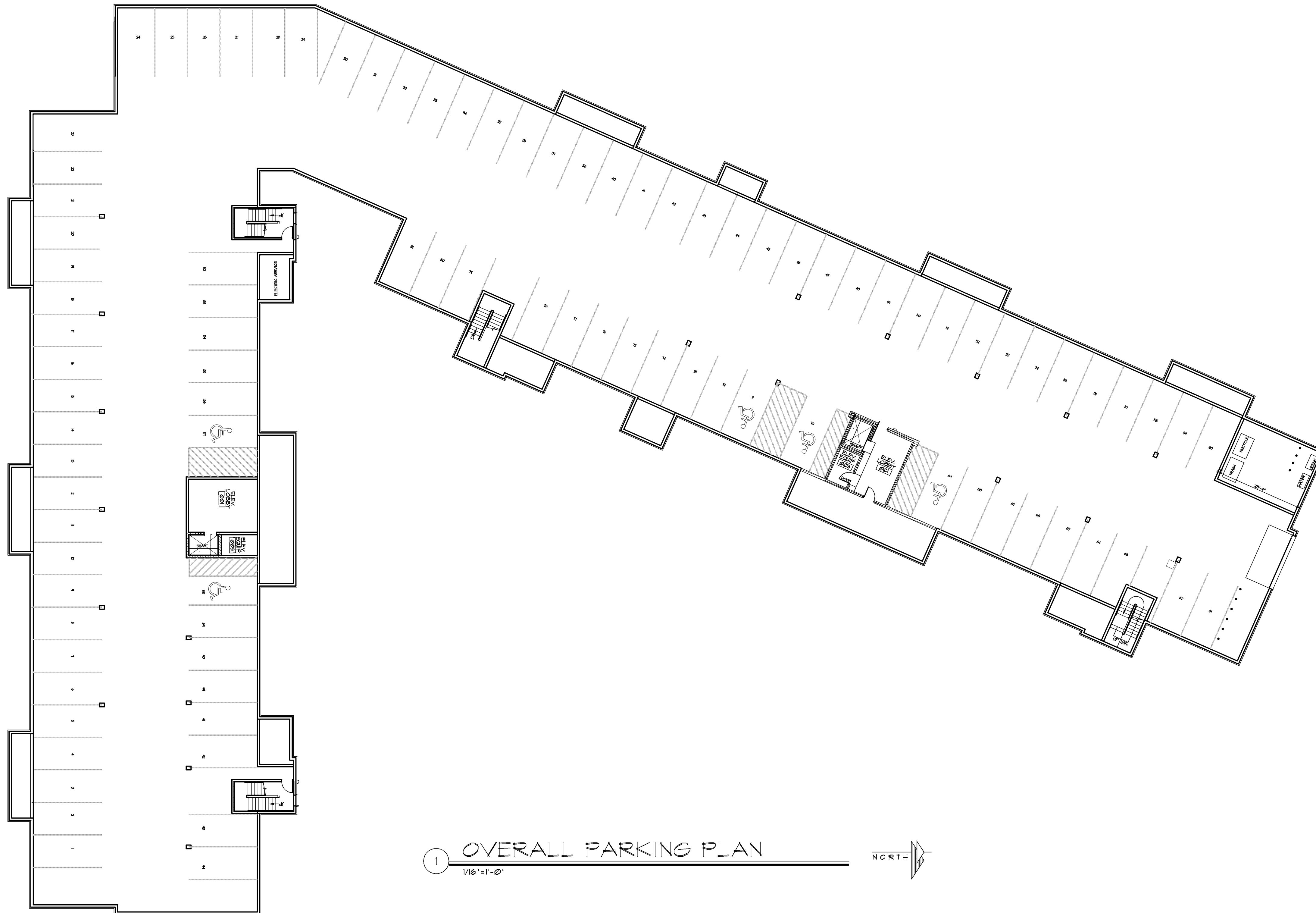
TDI ASSOCIATES, INC  
All Rights Reserved  
N8 W2290 JOHNSON DRIVE, SUITE B4  
WALWISHA, WISCONSIN 53186  
PHONE 262-409-2530  
FAX 262-409-2531

OWNERSHIP OF DOCUMENTS  
This document and the ideas and design incorporated herein, are the instrument of professional services, in the sole property of TDI Associates, Inc., and it is to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.

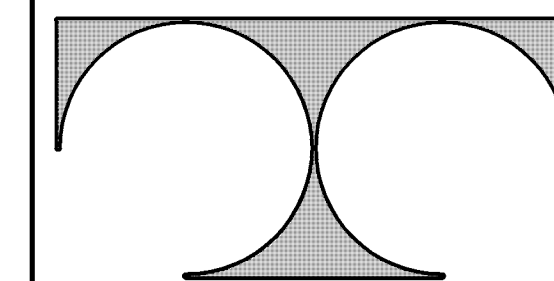
TDI ASSOCIATES, INC.  
ARCHITECTURE, ENGINEERING, PLANNING

CITY OF FRANKLIN, WI  
CHARLOTTE'S GARDEN SENIOR HOUSING  
SITE LANDSCAPE PLAN

SCALE: 1" = 30'-0"      JOB NO: 16-218.000      DATE: 12-12-16  
DESIGNED BY: ROB      DRAWN BY: ROB      CHECKED BY:  
APPROVED BY:      ENGINEER      DATE      SHEET L-1.0



1 OVERALL PARKING PLAN  
1/16"=1'-0"



TDI ASSOCIATES, INC.  
ARCHITECTS, ENGINEERS, PLANNERS

N8 W22350 JOHNSON DRIVE, SUITE B4  
WAUKESHA, WISCONSIN 53186  
PHONE 262-409-2530 FAX 262-409-2531

CHARLOTTE'S GARDEN  
APARTMENT SENIOR LIVING  
TWO STORY WITH BASEMENT PARKING

3709 WEST COLLEGE AVENUE  
FRANKLIN, WISCONSIN

TDI ASSOCIATES, INC.  
All Rights Reserved

OWNERSHIP OF DOCUMENTS

This document, and the ideas and design incorporated herein, as an instrument of professional service, is the sole property of TDI Associates, Inc., and is not to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.

Sheet Title  
Overall Parking Plan

Issued For: Date:

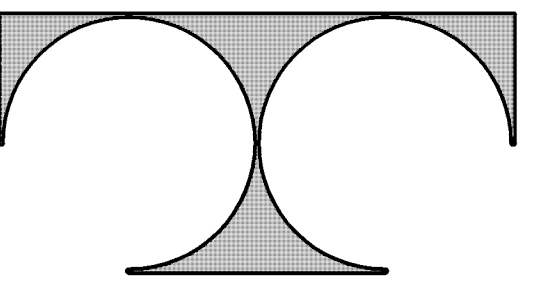
Date: 10/31/2016

Job NO.: 16-218

Drawn By: daj

Sheet No.

A1.0



TDI ASSOCIATES, INC.  
ARCHITECTS, ENGINEERS, PLANNERS

N8 W22350 JOHNSON DRIVE, SUITE B4  
WAUKESHA, WISCONSIN 53186  
PHONE 262-409-2530 FAX 262-409-2531

**CHARLOTTE'S GARDEN  
APARTMENT SENIOR LIVING  
TWO STORY WITH BASEMENT PARKING**  
3709 WEST COLLEGE AVENUE  
FRANKLIN, WISCONSIN

TDI ASSOCIATES, INC  
All Rights Reserved

**OWNERSHIP OF DOCUMENTS**  
This document, and the ideas and design incorporated herein, as an instrument of professional service, is the sole property of TDI Associates, Inc., and is not to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.

Sheet Title  
**Overall First Floor Plan**

Issued For: \_\_\_\_\_ Date: \_\_\_\_\_

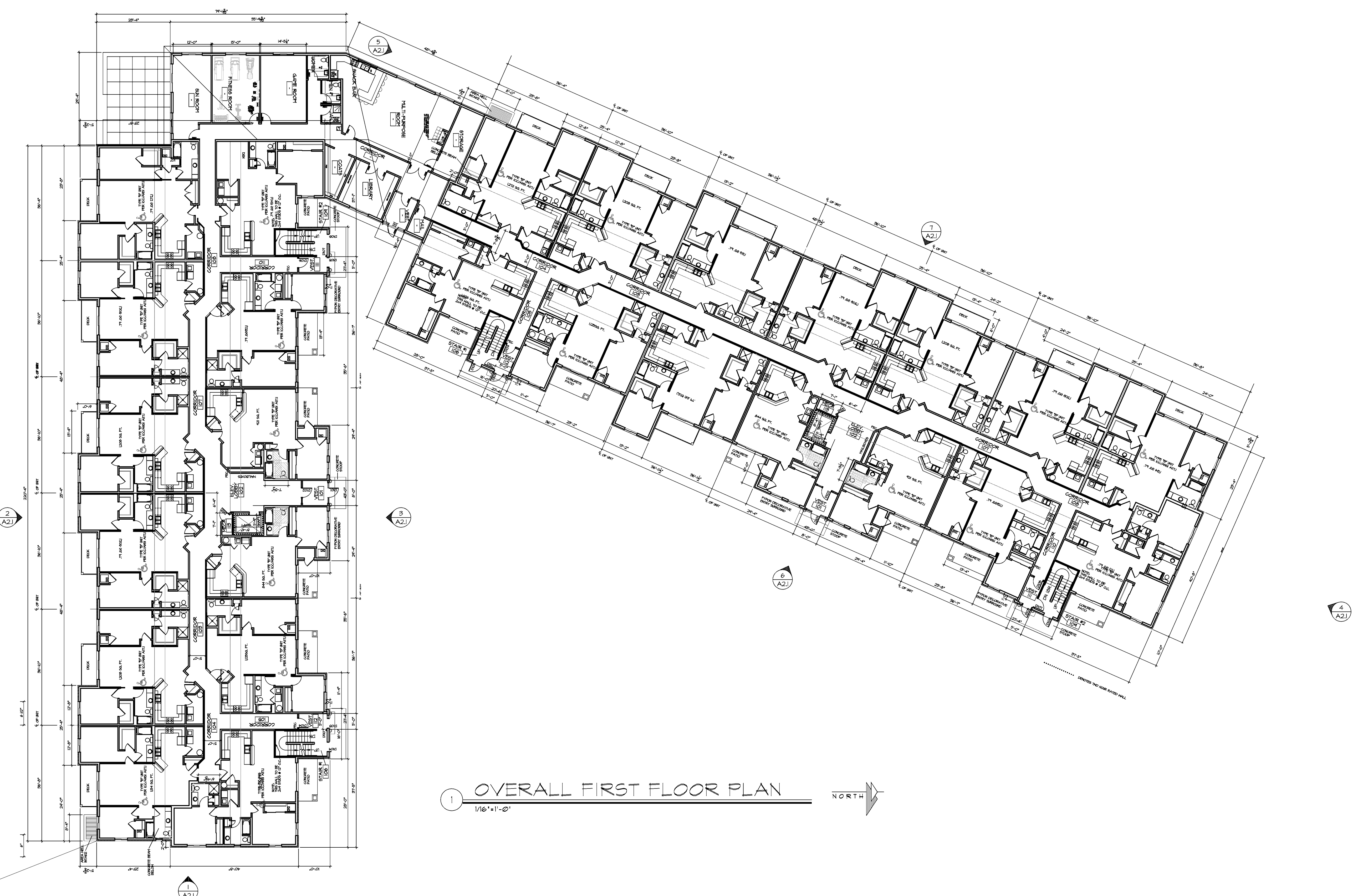
Date: 10/31/2016

Job NO.: 16-218

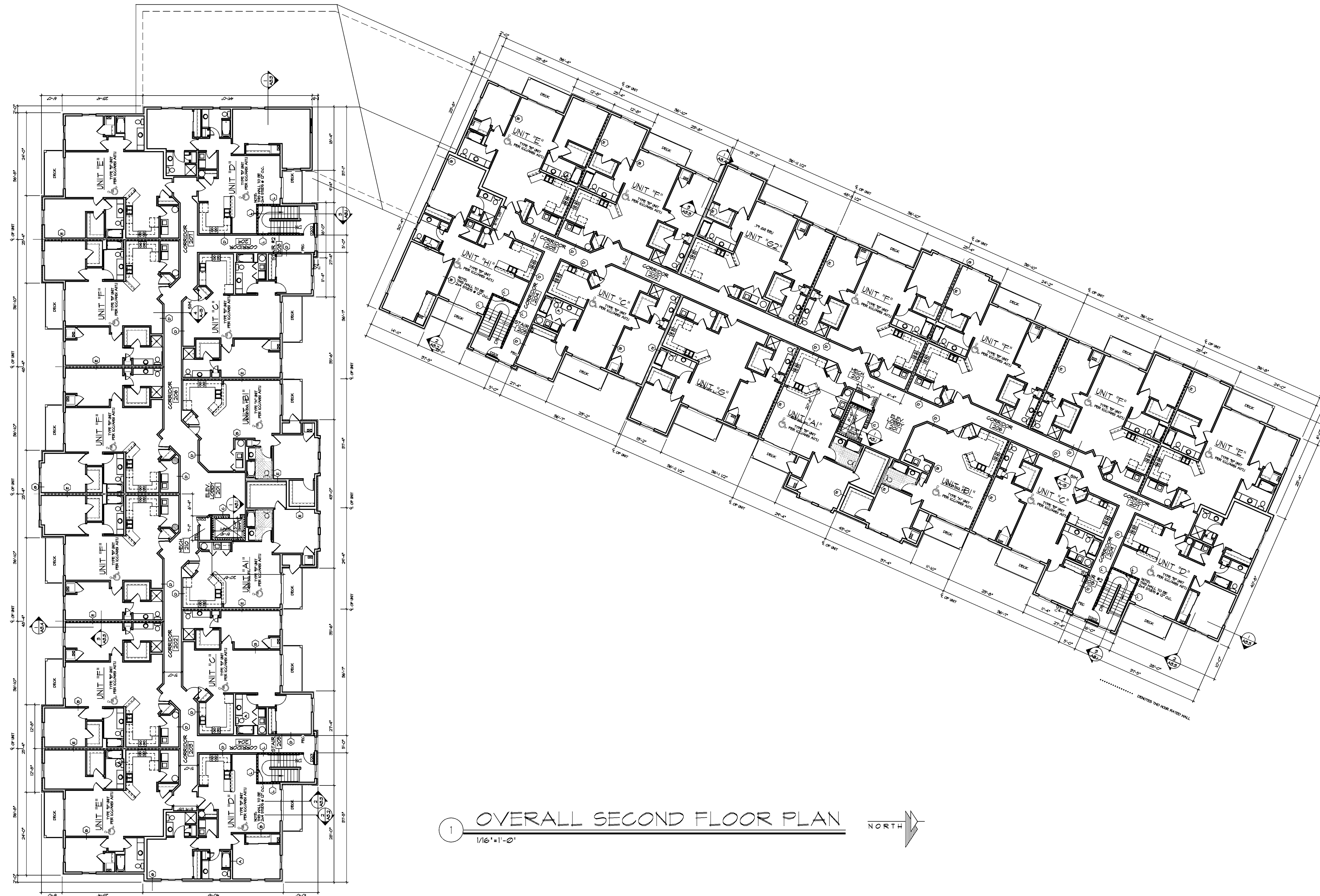
Drawn By: daj

Sheet No. \_\_\_\_\_

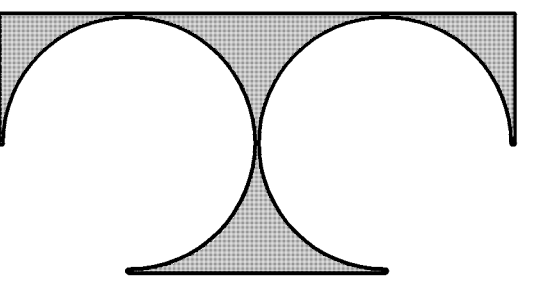
A1.1



1 OVERALL FIRST FLOOR PLAN  
1/16" = 1'-0" NORTH



1 OVERALL SECOND FLOOR PLAN  
 1/16" = 1'-0" NORTH



TDI ASSOCIATES, INC.  
 ARCHITECTS, ENGINEERS, PLANNERS

N8 W22350 JOHNSON DRIVE, SUITE B4  
 WAUKESHA, WISCONSIN 53186  
 PHONE 262-409-2530 FAX 262-409-2531

CHARLOTTE'S GARDEN  
 APARTMENT SENIOR LIVING  
 TWO STORY WITH BASEMENT PARKING  
 3709 WEST COLLEGE AVENUE  
 FRANKLIN, WISCONSIN

TDI ASSOCIATES, INC  
 All Rights Reserved

OWNERSHIP OF DOCUMENTS  
 This document, and the ideas and design incorporated herein, as an instrument of professional service, is the sole property of TDI Associates, Inc., and is not to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.

Sheet Title  
**Overall Second Floor Plan**

Issued For: \_\_\_\_\_ Date: \_\_\_\_\_

Date: 12/12/2016

Job NO.: 16-218

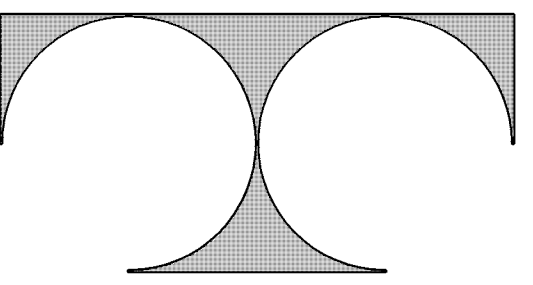
Drawn By: daj

Sheet No.

A1.2







TDI ASSOCIATES, INC.  
ARCHITECTS, ENGINEERS, PLANNERS

N8 W22350 JOHNSON DRIVE, SUITE B4  
WAUKESHA, WISCONSIN 53186  
PHONE 262-409-2530 FAX 262-409-2531

CHARLOTTE'S GARDEN  
APARTMENT SENIOR LIVING  
TWO STORY WITH BASEMENT PARKING  
3709 WEST COLLEGE AVENUE  
FRANKLIN, WISCONSIN

TDI ASSOCIATES, INC  
All Rights Reserved

OWNERSHIP OF DOCUMENTS

This document, and the ideas and design incorporated herein, as an instrument of professional service, is the sole property of TDI Associates, Inc., and is not to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.

Sheet Title  
Exterior Elevations

Issued For: Date:

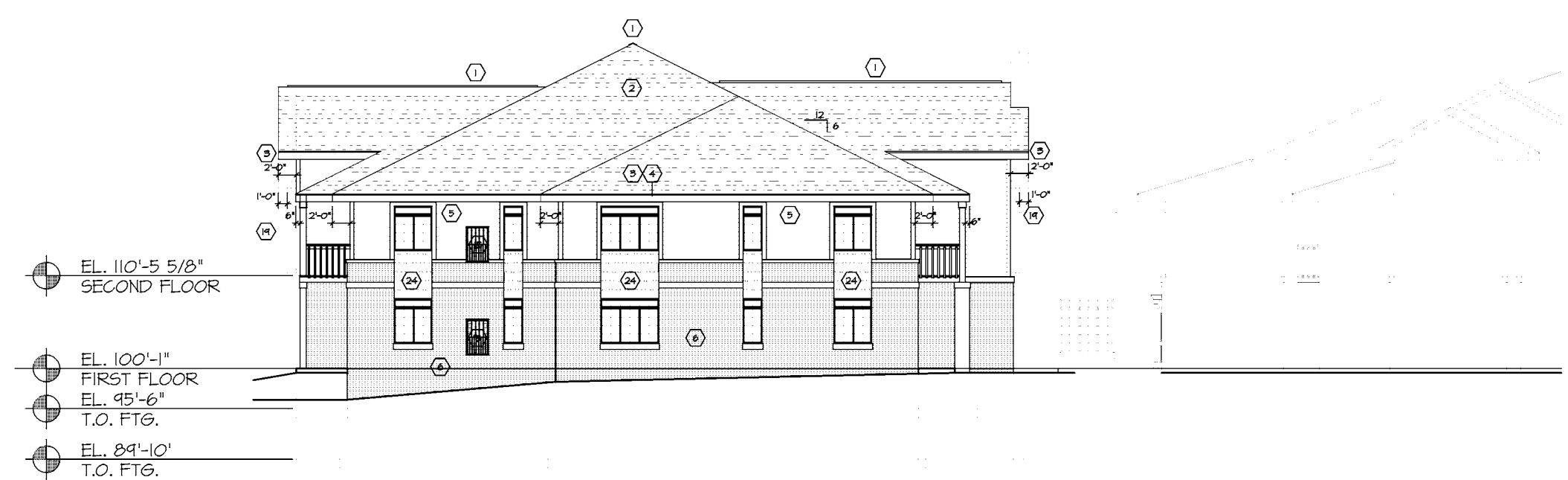
Date: 10/31/2016

Job NO.: 16-218

Drawn By: daj

Sheet No.

A2.1



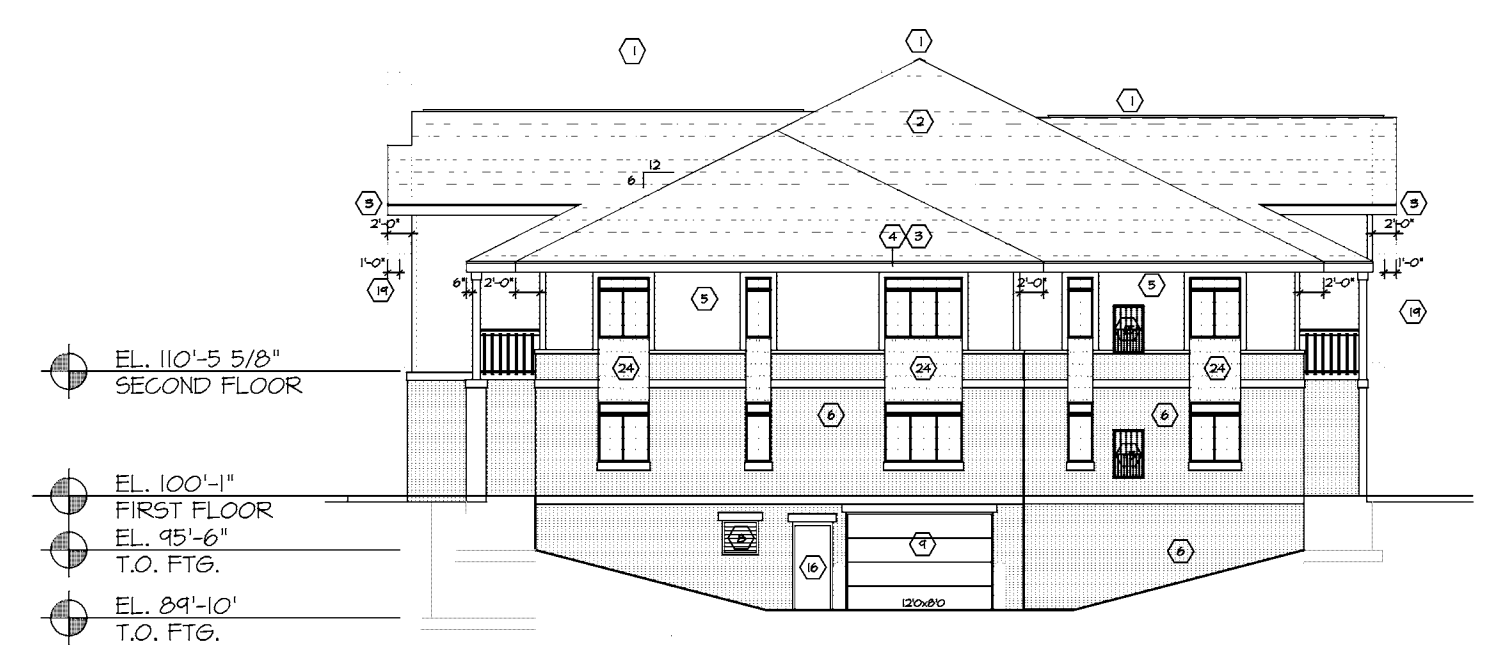
1 WEST ELEVATION  
1/16"=1'-0"



2 SOUTH ELEVATION  
1/16"=1'-0"

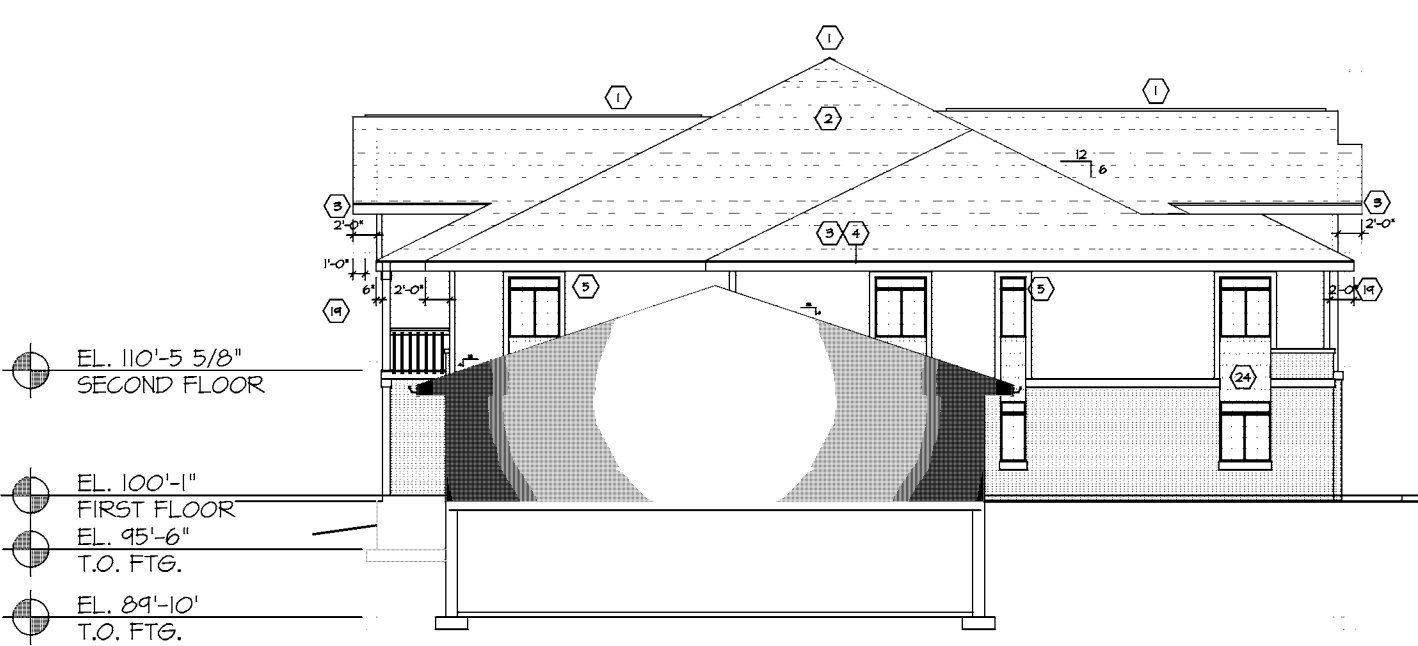


3 NORTH ELEVATION  
1/16"=1'-0"



4 NORTH ELEVATION  
1/16"=1'-0"

TAG	DESCRIPTION
1	CONTINUOUS RIDGE VENT
2	FIBERGLASS SHINGLES
3	PRE-FINISHED ALUMINUM GUTTERS AND DOWN SPOUTS
4	12" PRE-FINISHED ALUMINUM TRIM
5	6" GEMENTIOUS SIDING
6	4" BRICK VENEER
7	INSULATED SLIDE-BY WINDOWS W/ MITING
8	MECHANICAL EXHAUST LOUVER
9	INSULATED OVERHEAD SECTIONAL DOOR
10	PYPON DECORATIVE MAIN ENTRY SURROUND
11	PYPON SIDE EXIT DECORATIVE SURROUND
12	PRECAST WINDOW HEADS & SILLS
13	PRECAST CAP
14	SLIDING PATIO DOORS
15	REFINISHED H.V.A.C. GRILLS
16	INSULATED HOLLOW METAL DOOR
17	PYPON DECORATIVE GABLE LOUVER
18	DECORATIVE ENTRY DOOR W/ SIDELIGHTS
19	5/4 x 6 TRIM & CORNER BOARDS
20	WOOD DECK & WOOD RAILING
21	DECORATIVE SIDE EXIT DOOR W/ SIDELIGHT & MITING
22	STAR EXIT DOOR
23	INTAKE LOUVER
24	GEMENTIOUS SHAKE SIDING



5 SOUTHWEST ELEVATION  
1/16"=1'-0"



6 NORTHEAST ELEVATION  
1/16"=1'-0"



7 WEST ELEVATION  
1/16"=1'-0"



## CITY OF FRANKLIN



## REPORT TO THE PLAN COMMISSION

Meeting of December 22, 2016

**Certified Survey Map**


---

**RECOMMENDATION:** City Development Staff recommends approval of the proposed Certified Survey Map, subject to the conditions in the draft resolution.

---

<b>Project Name:</b>	Bridgestone Capital LLC Certified Survey Map (CSM)
<b>Project Address:</b>	8647 South 35 <sup>th</sup> Street
<b>Applicant:</b>	Ryan Konicek, Bridgestone Capital, LLC
<b>Owners (property):</b>	Bridgestone Capital, LLC
<b>Current Zoning:</b>	R-6 Suburban Single Family Residence District
<b>2025 Future Land Use:</b>	Residential
<b>Use of Surrounding Properties:</b>	Single-family residential to the north, east and west and Franklin Woods/Kayla's Playground to the south
<b>Applicant Action Requested:</b>	Recommendation of approval of the Certified Surrey Map

---

**Introduction:**

Please note:

- Staff recommendations are *underlined, in italics* and are included in the draft resolution.
- Staff suggestions are underlined and are not included in the draft resolution.

At the December 8, 2016 meeting, the Plan Commission approved a motion to table the subject matter to the December 22, 2016 Plan Commission meeting to allow the applicant to work with staff and provide additional information related to the soils, floodplain and potential development of the proposed lots.

The applicant has indicated that they are not yet prepared to move forward and are discussing the matter with a geotechnical firm. The applicant is requesting that the item again be tabled to a future meeting date. A review time extension has been provided.

Attached is a memorandum from the Engineering Department providing their review of the soils and proposed lots. Although additional research and data is still needed, staff finds that the lots are buildable, noting that atypical construction methods may be needed.

As such, staff continues to recommend approval of the proposed Certified Survey Map. Based upon the Plan Commission discussion at the December 8<sup>th</sup> meeting, staff recommends approval at this time with the added conditions below.

- *Soil information, indicating type and labeling as hydric, shall be provided on the face of the Certified Survey Map.*

- The applicant shall utilize signage and boulders to mark the location of the conservation easement boundary on the individual lots. (This was previously a suggestion.)

Staff suggests that the applicant place a note on the face of the Certified Survey Map indicating that hydric soils and a high groundwater table are present, and that special construction methods or designs may be appropriate, particularly if homes with a basement are desired.

Attached is the December 8<sup>th</sup> Plan Commission Staff Report for review and additional project information.

**Staff Recommendation:**

City Development Staff recommends approval of the proposed Certified Survey Map, subject to the conditions in the draft resolution.

RESOLUTION NO. 2017-\_\_\_\_\_

A RESOLUTION CONDITIONALLY APPROVING A 3 LOT CERTIFIED SURVEY MAP, BEING THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 13, TOWNSHIP 5 NORTH, RANGE 21 EAST, IN THE CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN (RYAN S. KONICEK, OPERATOR OF BRIDGESTONE CAPITAL LLC, APPLICANT) (8647 SOUTH 35TH STREET)

---

WHEREAS, the City of Franklin, Wisconsin, having received an application for approval of a certified survey map, such map being that part of the Southeast 1/4 of the Southwest 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin, more specifically, of the property located at 8647 South 35th Street, bearing Tax Key No. 833-9999-000, Ryan S. Konicek, Operator of Bridgestone Capital LLC, applicant; said certified survey map having been reviewed by the City Plan Commission and the Plan Commission having recommended approval thereof pursuant to certain conditions; and

WHEREAS, the Common Council having reviewed such application and Plan Commission recommendation and the Common Council having determined that such proposed certified survey map is appropriate for approval pursuant to law upon certain conditions.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the Certified Survey Map submitted by Ryan S. Konicek, Operator of Bridgestone Capital LLC, as described above, be and the same is hereby approved, subject to the following conditions:

1. That any and all objections made and corrections required by the City of Franklin, by Milwaukee County, and by any and all reviewing agencies, shall be satisfied and made by the applicant, prior to recording.
2. That all land development and building construction permitted or resulting under this Resolution shall be subject to impact fees imposed pursuant to §92-9. of the Municipal Code or development fees imposed pursuant to §15-5.0110 of the Unified Development Ordinance, both such provisions being applicable to the development and building permitted or resulting hereunder as it occurs from time to time, as such Code and Ordinance provisions may be amended from time to time.
3. Each and any easement shown on the Certified Survey Map shall be the subject of separate written grant of easement instrument, in such form as provided within the

RYAN S. KONICEK, OPERATOR OF BRIDGESTONE CAPITAL LLC – CERTIFIED  
SURVEY MAP  
RESOLUTION NO. 2017-\_\_\_\_\_

Page 2

*City of Franklin Design Standards and Construction Specifications* and such form and content as may otherwise be reasonably required by the City Engineer or designee to further and secure the purpose of the easement, and all being subject to the approval of the Common Council, prior to the recording of the Certified Survey Map.

4. Ryan S. Konicek, Operator of Bridgestone Capital LLC, successors and assigns, and any developer of the Bridgestone Capital LLC 3 lot certified survey map project, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19. of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
5. The approval granted hereunder is conditional upon Ryan S. Konicek, Operator of Bridgestone Capital LLC and the 3 lot certified survey map project for the property located at 8647 South 35th Street: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
6. Prior to recording the Certified Survey Map, the applicant shall request that the City extend public water facilities to serve the proposed lots. If rejected, the proposed lots may be developed with private well-water systems. A statement shall be added to Sheet 1 of the Certified Survey Map to indicate whether the land is being served by public sewer and water or public sewer only.
7. The applicant shall apply for a Rezoning Application to remove the existing C-1 Conservancy District zoning, prior to recording the Certified Survey Map. If rezoned, the zoning information on the CSM shall be revised accordingly.
8. The applicant shall demonstrate that a minimum of 50% of young woodland located outside of other more restrictive protected natural resource features are being protected and included within the Conservation Easement.
9. The fifty percent of young woodland onsite to be preserved shall include the majority of the woodland on the east side of the property, in addition to any healthy trees that may exist on the western lot line of proposed Lot 3.
10. The applicant shall submit revised Site Intensity and Capacity Calculations, for

RYAN S. KONICEK, OPERATOR OF BRIDGESTONE CAPITAL LLC – CERTIFIED  
SURVEY MAP

RESOLUTION NO. 2017-\_\_\_\_\_

Page 3

Department of City Development Review and approval, that only include young woodland areas that are outside of other protected natural resources. Furthermore, the Natural Resource Protection Plan map shall be revised to clearly illustrate the young woodland areas to be protected and those areas to be impacted.

11. The “Building Setback” note at the bottom of Sheet 1 shall be revised to include the 19-foot Corner Side Yard Setback.
12. The note on Sheet 1 indicating the zoning of the property shall be revised to state both R-6 Residence District and C-1 Conservancy District.
13. The Conservation Easement shall be shown more clearly on both Sheet 1 and Sheet 2 of the Certified Survey Map.
14. The note indicating that wetlands were delineated by GRAEF on October 20, 2014 shall be revised to also include the name of the individual that performed the delineation.
15. The 12-foot wide roadway dedication adjacent to S. 35th Street shall be labeled similar to the labeling provided for the 27-foot dedication along W. Puetz Road.
16. The note on Sheet 4 under Common Council approval shall be revised to add “dedication” between “and” and “approved.”
17. The applicant shall submit a written Conservation Easement document for Common Council review and approval and recording with the Milwaukee County Register of Deeds.
18. Soil information, indicating type and labeling as hydric, shall be provided on the face of the Certified Survey Map.
19. The applicant shall utilize signage and boulders to mark the location of the conservation easement boundary on the individual lots

BE IT FURTHER RESOLVED, that the Certified Survey Map, certified by owner, Bridgestone Capital LLC, be and the same is hereby rejected without final approval and without any further action of the Common Council, if any one, or more than one of the above conditions is or are not met and satisfied within 180 days from the date of adoption of this Resolution.

RYAN S. KONICEK, OPERATOR OF BRIDGESTONE CAPITAL LLC – CERTIFIED  
SURVEY MAP

RESOLUTION NO. 2017-\_\_\_\_\_

Page 4

BE IT FINALLY RESOLVED, that upon the satisfaction of the above conditions within 180 days of the date of adoption of this Resolution, same constituting final approval, and pursuant to all applicable statutes and ordinances and lawful requirements and procedures for the recording of a certified survey map, the City Clerk is hereby directed to obtain the recording of the Certified Survey Map, certified by owner, Bridgestone Capital LLC, with the Office of the Register of Deeds for Milwaukee County.

Introduced at a regular meeting of the Common Council of the City of Franklin this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this \_\_\_\_\_ day of \_\_\_\_\_, 2017.

APPROVED:

\_\_\_\_\_  
Stephen R. Olson, Mayor

ATTEST:

\_\_\_\_\_  
Sandra L. Wesolowski, City Clerk

AYES \_\_\_\_\_ NOES \_\_\_\_\_ ABSENT \_\_\_\_\_





---

MEMORANDUM: FROM ENGINEERING

DATE: December 13, 2016

TO: Franklin Plan Commission

COPY: Joel Dietl, AICP, Planning Manager

FROM: Glen E. Morrow, PE- City Engineer

SUBJECT: 3-Lot CSM Bridgestone Capital LLC  
NW corner of W. Puetz Road and S. 35<sup>th</sup> Street

The Engineering Staff was requested at the December 8, 2016, Plan Commission Meeting to prepare a report on the soils and suitability for development for the proposed 3-lot development located on the northwest corner of W. Puetz Road and S. 35<sup>th</sup> Street. It is not the practice nor appropriate for City staff to perform detailed engineering and design work for private developers. Please consider the following general observations and opinions within this memorandum as a preliminary analysis and review of the presented and available data for the Plan Commission's consideration.

**Soil Types:**

According to the United States Department of Agriculture Natural Resources Conservation Service (NRCS) current soils report for Milwaukee County (accessed through the NRCS website), there are only two types of soils series designated for this site. See GRAEF's Natural Resource Protection Plan dated November 2016 by Brain Schneider, PE, LEED AP (report) Figure #3.

- "AsA"- Ashkum silty clay loam, 0 to 2 percent slopes
- "MzdB"- Morley silt loam, or Ozaukee silt loam, 2 to 6 percent slopes. There appears to be a map error on the NRCS website- regardless, it appears that Morley and Ozaukee soils are closely related soil series.

Loam generally refers to a soil type with some portion of sand mixed in with the silts and clays. Although both silt and clay are fine grained soil (finer than sands), silts generally have larger particle size than clays and thus are less apt to be plastic/sticky-like than clays.

Based on the soil classifications, one would assume that the areas listed as Ashkum silty clay loam are less apt to drain well. Note that the description of the Ashkum silty clay loam series includes phrases such as "Poorly drained" drainage class and "About 0 to 12 inches" depth to water table. In contrast, the Ozaukee/Morley silt loam series descriptions contain "Moderately well drained" drainage class and "About 24 to 42 inches" depth to water table. Methods to address groundwater should be considered in all three soil types.

### **Sump Pumps:**

Sump pumps are generally the most common way to effectively deal with ground water. However sump pumps in any of the given soil types would likely operate most of the time. Sump pumps could be avoided by the following two ways:

1. Elevate the finish floor elevation of the basement such that a basement foundation drain could daylight to a downhill location by gravity. This is commonly done in a “walk-out basement” scenario. The lowest elevation based on the Figure #4 of the GRAEF report is approximately 748 near the culvert crossing W. Puetz Road.

For reference, the three homes have been shown on a Draft Natural Resources Map. Assuming that a typical home would have a finish floor elevation (FFE) 9 feet above a basement floor, and another 2 feet above a footing drain, and the drain would fall 1/8-inch per foot (depending on detailed calculations) to the low spot, the minimum theoretical finish floor elevations above surrounding contours for the three homes can be assumed as follows:

- a. The proposed house on Lot 1- aka “Home 1” (located on the north end along S. 35<sup>th</sup> Street) appears to be located with the highest contour elevation is around 756. Needing an easement from Lot 2 to flow to the low spot along a direct route, the home site is 440 feet from the culvert crossing under W. Puetz Road (low spot). The minimum FFE would need to be 763.6, or 7.6 feet higher than the existing grade.
- b. The existing house on Lot 2 (located on the corner of S. 35<sup>th</sup> Street and W. Puetz Road) appears to be located on a spot with the highest contour elevation is 757. The home site is 410 feet from the low spot. The minimum FFE would need to be 763.3, or 6.3 feet higher than the existing grade.
- c. The proposed house on Lot 3- aka “Home 2” (located on the western third of the development and is accessed from W. Puetz Road) appears to be located with the highest contour elevation is around 754. The home site is 170 feet from the low spot. The minimum FFE would need to be 760.8, or 6.8 feet higher than the existing grade.

To summarize the gravity foundation drain discussion, the homes would need to be elevated 6.3 to 7.6 feet above the existing ground contours. Some of the difference could be made up by putting a garage 3-4 feet above existing grade splitting the elevations between the walkout basement and the FFE. The remainder of the distance between the garage floor elevation and the FFE could be made up by elevated exterior porches.

2. Construct a house with “slab-on-grade” or “crawl-space” scenarios. There are several homes in Franklin without basements- for example in the Hale Park area. However it is understood that virtually all Franklin single-family homes since the 1950’s were constructed with basements. Note the exceptions of many condominiums and apartments where the first floor is on a slab. Per Franklin’s UDO (see table 15-3.0207),

an R-6 Suburban Single-Family Residence District requires additional living area if the basement area is less than 600 square feet.

Although Franklin / Metro-Milwaukee homebuilder preferences indicate that virtually all single-family homes must include a basement, this is not so in most other areas of the country. Some areas, such as Florida have high groundwater tables and virtually no homes have basements. Most other areas have ability to construct basements but many homebuilders prefer not to for reasons that include:

- Elderly/other physical ailments where owner prefers a ranch style home all on one level with no climbing stairs.
- Basements have issues/concerns with radon gas exposure in living quarters.
- Basements have negative connotations with costly structure repairs from groundwater and soil pressures.
- Basements have negative connotations associated with dampness and mold conditions.
- Basements are an added expense to the cost of a home.
- Basements are more vulnerable to sewage backups
- Basements are more vulnerable to damage and loss of personal property during area flooding events.

In similar fashion to the basement scenario calculations, assuming that a typical home would have a finish floor elevation (FFE) 4 feet above a footing drain, and the drain would fall 1/8-inch per foot (depending on detailed calculations) to the low spot, the minimum theoretical finish floor elevations above surrounding contours for the three homes can be assumed as follows:

- a. The proposed house on Lot 1- aka “Home 1” with the highest contour elevation around 756. Needing an easement from Lot 2, the home site is 440 feet from the low spot. The minimum FFE would need to be 756.6, or 0.6 feet higher than the existing grade.
- b. The existing house on Lot 2 (located on the corner of S. 35<sup>th</sup> Street and W. Puetz Road) appears to be located on a spot with the highest contour elevation is 757. The home site is 410 feet from the low spot. The minimum FFE would need to be 756.3, or 0.7 feet below the existing grade.
- c. The proposed house on Lot 3- aka “Home 2” (located on the western third of the development and is accessed from W. Puetz Road) appears to be located with the highest contour elevation is around 754. The home site is 170 feet from the low spot. The minimum FFE would need to be 753.8, or 0.2 feet below the existing grade.

To summarize the slab floor/crawl space discussion, the minimum FFE for homes on a slab floor would be at roughly the same elevation as the existing ground contours. The

major obstacle would be the local preference for having a basement and thus the marketability of those homes without basements.

**Structural Stability:**

To consider the stability of soils, Table 8 in the 1971 version of the USDA Soil Conservation Survey gives various engineering properties of each soil series. Below is a table showing the comparisons of limitations for foundations for low buildings.

<b>Soil Series</b>	<b>Ashkum</b>	<b>Morley</b>	<b>Ozaukee</b>
<b>Limitations</b>	Severe	Severe	Severe
<b>Shear strength</b>	Fair	Fair	Fair
<b>Compressibility</b>	High	Moderate	Moderate
<b>Shrink-swell Potential</b>	High	-	Yes
<b>Bearing Capacity</b>	Low	Poor	Low
<b>Water Table</b>	High	-	-

A phone call to a local geotechnical engineer verified that building on the Ashkum soils would likely need removal and replacement with engineered soils. A budget of \$10,000 to \$20,000 is not an unreasonable budget to include for this activity. In addition, it is unknown if the larger footprint required for soil remediation would impact natural resources on the site. The developer and/or builder should consult a qualified and licensed geotechnical engineer to develop a detailed design.

**Conclusion:**

The developer is ultimately responsible for the constructability of the homes and will need to provide the appropriate data and calculations to the Inspection Department to obtain a building permit.

Based on the City Engineering Staff review of the available information, the homes may need atypical construction methods or designs from the average home in Franklin. However it appears that all three lots could have homes constructed.

## Milwaukee and Waukesha Counties, Wisconsin

### AsA—Ashkum silty clay loam, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2ssrw  
*Elevation:* 520 to 930 feet  
*Mean annual precipitation:* 33 to 41 inches  
*Mean annual air temperature:* 46 to 54 degrees F  
*Frost-free period:* 160 to 190 days  
*Farmland classification:* Prime farmland if drained

#### Map Unit Composition

*Ashkum, drained, and similar soils:* 92 percent  
*Minor components:* 8 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ashkum, Drained

##### Setting

*Landform:* End moraines, ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Clayey colluvium over till

##### Typical profile

*Ap - 0 to 12 inches:* silty clay loam  
*Bg1 - 12 to 29 inches:* silty clay  
*2Bg2 - 29 to 54 inches:* silty clay loam  
*2Cg - 54 to 60 inches:* silty clay loam

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum in profile:* 25 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 8.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w

*Hydrologic Soil Group: C/D*  
*Hydric soil rating: Yes*

#### **Minor Components**

##### **Peotone, drained**

*Percent of map unit: 5 percent*  
*Landform: Depressions on ground moraines*  
*Landform position (two-dimensional): Toeslope*  
*Landform position (three-dimensional): Dip*  
*Down-slope shape: Concave*  
*Across-slope shape: Concave*  
*Hydric soil rating: Yes*

##### **Orthents, clayey**

*Percent of map unit: 2 percent*  
*Landform: Ground moraines, lake plains*  
*Landform position (two-dimensional): Summit*  
*Landform position (three-dimensional): Interfluve*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

##### **Urban land**

*Percent of map unit: 1 percent*  
*Landform: Ground moraines*  
*Landform position (two-dimensional): Summit*  
*Landform position (three-dimensional): Interfluve*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

## **Data Source Information**

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin  
Survey Area Data: Version 12, Sep 28, 2016

## Milwaukee and Waukesha Counties, Wisconsin

### MzdB—Ozaukee silt loam, 2 to 6 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2sn0b  
*Elevation:* 640 to 890 feet  
*Mean annual precipitation:* 31 to 40 inches  
*Mean annual air temperature:* 46 to 51 degrees F  
*Frost-free period:* 135 to 190 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Ozaukee and similar soils:* 93 percent  
*Minor components:* 7 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ozaukee

##### Setting

*Landform:* End moraines, ground moraines  
*Landform position (two-dimensional):* Shoulder, summit  
*Landform position (three-dimensional):* Interfluvium  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Loess over Wisconsinan age silty and clayey till

##### Typical profile

*Ap - 0 to 6 inches:* silt loam  
*E - 6 to 8 inches:* silt loam  
*Bt1 - 8 to 12 inches:* silty clay loam  
*2Bt2 - 12 to 36 inches:* silty clay  
*2Bct - 36 to 39 inches:* silty clay loam  
*2Cd - 39 to 60 inches:* silty clay loam

##### Properties and qualities

*Slope:* 2 to 6 percent  
*Depth to restrictive feature:* 24 to 45 inches to densic material  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 24 to 42 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 35 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 5.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C  
*Other vegetative classification:* Trees/Timber (Woody Vegetation)  
*Hydric soil rating:* No

### Minor Components

#### Ashkum, drained

*Percent of map unit:* 3 percent  
*Landform:* End moraines, ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Grass/Prairie (Herbaceous Vegetation)  
*Hydric soil rating:* Yes

#### Pewamo, drained

*Percent of map unit:* 3 percent  
*Landform:* Depressions on ground moraines, drainageways on ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Mixed/Transitional (Mixed Native Vegetation)  
*Hydric soil rating:* Yes

#### Urban land

*Percent of map unit:* 1 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin  
Survey Area Data: Version 12, Sep 28, 2016



## Milwaukee and Waukesha Counties, Wisconsin

### 2sn0b—Ozaukee silt loam, 2 to 6 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2sn0b  
*Elevation:* 640 to 890 feet  
*Mean annual precipitation:* 31 to 40 inches  
*Mean annual air temperature:* 46 to 51 degrees F  
*Frost-free period:* 135 to 190 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Ozaukee and similar soils:* 93 percent  
*Minor components:* 7 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ozaukee

##### Setting

*Landform:* End moraines, ground moraines  
*Landform position (two-dimensional):* Shoulder, summit  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Loess over wisconsinan age silty and clayey till

##### Typical profile

*Ap - 0 to 6 inches:* silt loam  
*E - 6 to 8 inches:* silt loam  
*Bt1 - 8 to 12 inches:* silty clay loam  
*2Bt2 - 12 to 36 inches:* silty clay  
*2BCt - 36 to 39 inches:* silty clay loam  
*2Cd - 39 to 60 inches:* silty clay loam

##### Properties and qualities

*Slope:* 2 to 6 percent  
*Depth to restrictive feature:* 24 to 45 inches to densic material  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 24 to 42 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 35 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 5.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C  
*Other vegetative classification:* Trees/Timber (Woody Vegetation)  
*Hydric soil rating:* No

### Minor Components

#### Ashkum, drained

*Percent of map unit:* 3 percent  
*Landform:* End moraines, ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Grass/Prairie (Herbaceous Vegetation)  
*Hydric soil rating:* Yes

#### Pewamo, drained

*Percent of map unit:* 3 percent  
*Landform:* Depressions on ground moraines, drainageways on ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Mixed/Transitional (Mixed Native Vegetation)  
*Hydric soil rating:* Yes

#### Urban land

*Percent of map unit:* 1 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluvium  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin  
Survey Area Data: Version 12, Sep 28, 2016

TABLE 8.--ENGINEERING

[Clayey land (Cv), Loamy land (Lu), and Sandy and gravelly land (Sf) are omitted from this

Soil series and map symbols	Suitability as a source of--		Degree and kinds of limitations affecting--	
	Topsoil	Sand and gravel	Road subgrade	Foundations for low buildings
Adrian: Ac-----	Poor; soil is erodible and oxidizes rapidly.	Fair; underlying sand is variable; high water table hinders excavation.	Very severe; organic material is unsuitable for subgrade.	Very severe; organic material is unsuitable for foundations.
Alluvial land: Am-----	Fair; variable-----	Unsuitable; soil material is variable.	Severe; soil material is variable; stability and bearing capacity are variable; occasional flooding.	Moderate to severe; occasional flooding; soil material is variable and is unstable in places.
Ashkum: AsA-----	Surface layer good; subsoil poor, clayey; water table within 1 foot of surface most of the time.	Unsuitable-----	Very severe in subsoil; high shrink-swell potential; severe in substratum, low bearing capacity, elastic.	Severe; fair shear strength; high compressibility; high shrink-swell potential; low bearing capacity; high water table.
Aztalan: AzA, AzB-----	Surface layer good; subsoil poor, lower part is silty clay loam and is unstable in sloping areas.	Unsuitable-----	Moderate in subsoil, low bearing capacity when wet, low stability in lower part of subsoil; severe in substratum, unstable when wet.	Severe; moderate shrink-swell potential; high compressibility, poor shear strength; seepage, a high water table at times, or both.
Blount: BlA-----	Surface layer good, thin in some places; subsoil and substratum poor, clayey.	Unsuitable-----	Very severe in subsoil, high to moderate shrink-swell potential; severe in substratum, moderate shrink-swell potential; low bearing capacity; elastic.	Severe; fair shear strength; high compressibility; high to moderate shrink-swell potential; low bearing capacity; high water table, seepage, or both.

See footnote at end of table.

TABLE 8.--ENGINEERING INTERPRETATIONS

Soil series and map symbols	Suitability as a source of--		Degree and kinds of limitations affecting--	
	Topsoil	Sand and gravel	Road subgrade	Foundations for low buildings
Oshtemo: OmB-----	Surface layer unsuitable; subsoil unsuitable, erodible in sloping areas, thin over sand and gravel.	Fair to good; poorly graded sand and some pockets of gravel.	Slight in subsoil where properly compacted, low shrink-swell potential; slight in substratum, lacks stability under wheel load, low shrink-swell potential.	Slight; low compressibility and shrink-swell potential; good shear strength and bearing capacity.
OnB-----	Surface layer poor, droughty; subsoil unsuitable, erodible, thin over sand and gravel.	Fair to good; substratum is poorly graded sand; some gravel in places.	Slight in subsoil where properly compacted; slight in substratum, low stability under load, low shrink-swell potential.	Slight; low compressibility and shrink-swell potential; good shear strength and bearing capacity.
Ozaukee: OuB, OuB2, OuC2, OuD2.	Surface layer good; subsoil poor, clayey.	Unsuitable-----	Severe in subsoil, high shrink-swell potential; severe in substratum, moderate shrink-swell potential, low bearing capacity when wet.	Severe; fair shear strength; moderate compressibility and shrink-swell potential; low bearing capacity.
Palms: Pa-----	Poor; erodible; oxidizes rapidly.	Unsuitable-----	Very severe; organic soil material.	Very severe; organic soil material.
Pella: Ph-----	Good in surface layer, thick, dark; poor in subsoil, clayey; high water table.	Unsuitable-----	Very severe in subsoil and substratum; highly plastic; moderate shrink-swell potential.	Moderate to severe; fair shear strength; moderate compressibility; high water table; moderate shrink-swell potential.
Pella, moderately shallow variant: Pm.	Surface layer good, thick, dark; substratum poor, silty clay loam; high water table.	Unsuitable-----	Very severe in subsoil, highly plastic, moderate shrink-swell potential, elastic; very severe in substratum, dolomite bedrock at depth of 2 to 5 feet; high water table.	Moderate; dolomite bedrock; high water table.

See footnote at end of table.

TABLE 8.--ENGINEERING INTERPRETATIONS

Soil series and map symbols	Suitability as a source of--		Degree and kinds of limitations affecting--	
	Topsoil	Sand and gravel	Road subgrade	Foundations for low buildings
Montgomery: Mzb-----	Surface layer good, dark; subsoil poor, clayey; high water table.	Unsuitable-----	Very severe in subsoil, high shrink-swell potential, low bearing capacity, not suitable for flexible pavement; severe in substratum, low bearing capacity; moderate shrink-swell potential.	Severe; high shrink-swell potential; high to very high compressibility; high water table.
Corley: MzdB, MzdB2, MzdC2, MzdD2.	Surface layer good; subsoil poor, clayey.	Unsuitable-----	Very severe in subsoil, high shrink-swell potential; severe in substratum, moderate shrink-swell potential, low bearing capacity when wet.	Severe; fair shear strength; moderate compressibility; poor bearing capacity.
Mundelein: MzfA-----	Surface layer good; subsoil poor, unstable in sloping areas; seasonal high water table.	Poor; poorly graded; fine sand and silt in places; seasonal high water table.	Severe in subsoil, low bearing capacity; severe in substratum, relatively unstable.	Severe; fairly low compressibility; high susceptibility to frost heave; seasonal high water table, seepage, or both.
Muskego: Mzg-----	Poor; soil is erodible and oxidizes rapidly.	Unsuitable-----	Very severe; organic material; not suitable for subgrade.	Very severe; organic material; not suitable for foundations.
Mussey: Mzk-----	Surface layer good, dark; subsoil poor; high water table.	Good; substratum poorly graded sand and gravel; high water table.	Moderate in subsoil, low shrink-swell potential, low stability; very slight in substratum where properly drained, very stable.	Slight; very low compressibility; low shrink-swell potential; good shear strength; high water table.
Navan: Na-----	Surface layer good, thick, dark; subsoil poor, clayey in lower part; high water table.	Unsuitable-----	Moderate in subsoil, low stability and bearing capacity in lower part; severe in substratum, unstable.	Severe; moderate shrink-swell potential; high compressibility; poor shear strength; high water table.
Ogden: Oc-----	Poor; erodible; oxidizes rapidly.	Unsuitable-----	Very severe; organic material.	Very severe; organic material.

See footnote at end of table.

Table 15-3.0207

R-6 SUBURBAN SINGLE-FAMILY RESIDENCE DISTRICT DEVELOPMENT STANDARDS

Type of Standard	Permitted Use "Conventional Subdivision"	Special Use "Open Space Subdivision"
		Option 1
<b>Minimum Open Space Ratio and Maximum Density</b>		
Open Space Ratio (OSR)	0.00	0.10
Gross Density (GD)	2.972	2.919
Net Density (ND)	2.972	3.243
<b>Lot Dimensional Requirements</b>		
Minimum Lot Area (s.f.)	11,000	10,000
Minimum Lot Width at Setback Line (feet)	90 100 – corner	85 100 – corner
Minimum Front Yard (feet)	30 (c)	30 (c)
Minimum Side Yard (feet)	10 (c)	10 (c)
Minimum Side Yard on Corner Lot (feet)	19 (c)	19 (c)
Minimum Rear Yard (feet)	30 (c)	30 (c)
Minimum Shore Buffer (feet)	75	75
Minimum Wetland Buffer (feet)	30	30
Minimum Wetland Setback (feet)	50	50
Maximum Lot Coverage (maximum percent of lot area)	0.25	0.25
<b>Minimum Total Living Area per Dwelling Unit (D.U.)</b>		
1-Story D.U. 3 Bedrooms	1,250 s.f.	1,250 s.f.
1-Story D.U. >3 Bedrooms	150 s.f. (a)	150 s.f. (a)
1-Story D.U. if Basement is < 600 Square Feet	250 s.f. (b)	250 s.f. (b)
Multi-Story D.U. 3 Bedrooms	1,550 s.f. – total 950 s.f. – 1 <sup>st</sup> floor	1,550 s.f. – total 950 s.f. – 1 <sup>st</sup> floor
Multi-Story D.U. >3 Bedrooms	100 s.f. (a)	100 s.f. (a)
Multi-Story D.U. if Basement is < 600 Square Feet	250 s.f. (b)	250 s.f. (b)
<b>Maximum Building Height</b>		
Principal Structure (stories/ft.)	2.5/30	2.5/30
Accessory Structure (stories/ft.)	1.0/15	1.0/15

- (a) Add to minimum required building floor area for each bedroom in excess of three (3).
- (b) Add to minimum required first floor area for each dwelling unit which has a basement less than 600 s.f.
- (c) See Section 15-5.0108 for increased setback requirements along arterial streets and highways.