#2022-103
Clover Senior Residential – 731 E. Terra Cotta Avenue – Final PUD
Project Review for Planning and Zoning Commission

Meeting Date:	June 15, 2022	
Request:	Final Planned Unit Development for 121 apartment units	
Location:	731 E. Terra Cotta Avenue	
Acreage:	Approximately 9 acres	
Zoning:	B-2 PUD General Commercial	
Surrounding Properties:	North:	B-2 PUD General Commercial
	South:	R-3B PUD Multi-Family Residential
	East:	R-3A PUD Two Family Residential
	West:	B-2 General Commercial
Staff Contact:	Katie Rivard (815.356.3612)	

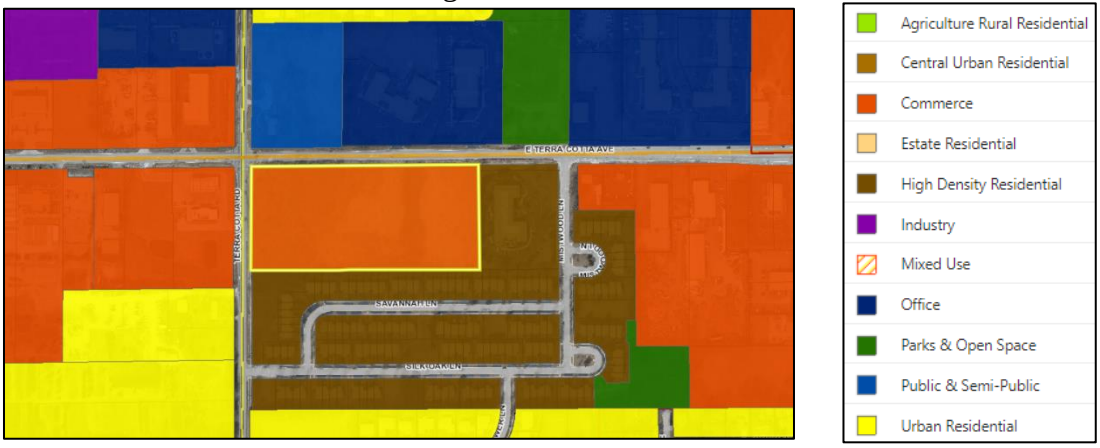
Background:

- Existing Use: The site is a vacant wooded area. Sunrise Assisted Living is to the east and the Mistwood residential development is to the south.
- Previous Approvals:
    - The proposed development presented a conceptual review to the Planning and Zoning Commission (PZC) in September 2021. The PZC was supportive of the request, and noted there was a need for this type of housing. The PZC requested additional traffic information.
    - The proposed development received approval of Preliminary Planned Unit Development with Variations, Rezoning to R-3B Multi-Family Residential, and a Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential in February 2022.
- The Final PUD is in substantial conformance with the approved Preliminary PUD. The building footprint changed slightly as the design was refined. Therefore, lot coverage, setbacks, and storm water calculations have changed slightly. There are no changes to previously approved variations.

Development Analysis:

LAND USE/ZONING

- The site is zoned R-3B Multi-Family Residential.
- The current Comprehensive Plan land use designation is High Density Residential, which fits the character of the surrounding area.



- The petitioner was granted the following variations in conjunction with the Preliminary PUD.
    - Density: The proposed density is 13.9 units to the acre. R-3B allows a maximum of 9 units to the acre. This is a variation of 4.9 units.
    - Lot Area: The lot is an existing vacant lot at 388,932 square feet. Lot area for multi-family is calculated based on the total number of units, and the number of units proposed requires a lot area of 497,400 square feet. This is a variation of 108,468 square feet. Since this is an existing lot surrounded by development, there is not an opportunity to acquire additional property to increase the lot size. At 9 units to the acres (81 units), a variation would not be required, as the lot area would be 325,400 square feet.
    - Lot Width: The existing lot width is 420.12 feet. The front lot line is defined as the narrowest boundary of a lot which is along a public right-of-way. Therefore, the property's front lot line is along Terra Cotta Road despite the proposed building facing Route 176. Lot width for multi-family is calculated based on the total number of units, and the number of units proposed requires a minimum lot width of 1,290 feet. This is a variation of 869.88 feet. In order to meet the lot width requirements, the development would need to be reduced to 37 units.
    - Parking: The proposal provides 124 parking spaces, with 21 deferred parking spaces, for a total of 145 parking spaces. The proposal requires 277 parking spaces, a variation of 132 parking spaces. The required number of parking spaces is calculated based on the multi-family parking requirements of 1.5 space per 1-bedroom unit, 2 space per 2-bedroom unit, and 0.25 guest stalls per unit.

- The petitioner is now providing an additional 25 deferred parking spaces for a total of 149 parking spaces.

SITE

- The proposed development is age restricted (55 or older), market-rate, multi-family residential senior living complex. There would be 124 units total with 120 two-bedroom units and 4 one-bedroom units.
    - The number of units has decreased from 124 units to 121 units.
- The proposed development complies with the setback requirements of the R-3B zoning district.

	R-3B Requirement	**Lot – Proposal**
Front Yard Setback	30 feet	~358 feet
Side Yard Setback	8 feet (interior) 30 feet (abutting a street)	~65 feet (interior) ~91 feet (abutting a street)
Combined Side Yard Setback	38 feet	~159 feet
Rear Yard Setback	50 feet (abutting residential districts)	~114 feet

- The proposed impervious surface is surface coverage has increased from approximately 27% to ~40%, which meets the UDO requirements of 65%. The increase is due to slight changes to the building footprint.

PARKING

- The proposed development is providing 124 spaces, which includes 84 surface spaces and 40 garage spaces. The petitioner is now providing an additional 25 deferred parking spaces for a total of 149 parking spaces as required by the Preliminary PUD approval.

SITE LAYOUT - ACCESS

- Access into the site would be provided off Terra Cotta Road and Route 176. The access on Terra Cotta Road would be a right-out/left-out and right-in only. There would be no left turns into the development from Terra Cotta Road.
- The access on Route 176 is a full access, and it lines up with office complex access across the street.
- A new sidewalk is provided along Route 176, and there is an existing sidewalk on Terra Cotta Road. A new sidewalk should be provided along the east-west driveway so residents can walk to the sidewalk along Terra Cotta Road.

TRAFFIC STUDY

- A traffic study was completed by Gewalt Hamilton Associates, Inc. The study found that the proposed development will have little to no effect on peak hour operations of the area's roadway network with the recommendations as follows:
    - Construct a new full access to Route 176 as has been discussed aligned opposite the existing access for the office complex.
    - Westbound left turns into the site from Route 176 will be made from a newly created westbound left turn lane within the existing painted median on Route 176.
    - Eastbound right turns into the site from Route 176 will be made from the existing through lane. An increased curb radius is recommended, but a right turn lane is not warranted.
    - Exiting traffic onto Route 176 should have separate right and left turn lanes under Stop Sign control.
        - Following discussions with City staff, this recommendation is no longer required. Per the petitioner's engineer, the traffic demand is low, delays will be minimal, and there is ample spaces for cars to stack while waiting to turn. Additionally, this will reduce impervious surface that would drain into the wetland, and the sidewalks will become more pedestrian friendly.
    - As previously noted, a 3/4 access (left turns in prohibited) to Terra Cotta Road has been discussed offset south of the existing Casey's access drive.
    - Exiting traffic onto Terra Cotta Road should have separate right and left turn lanes under Stop Sign control.
    - On-site parking should be increased by approximately 11 spaces to provide a supply sufficient to meet the Clover Group's internal data's suggested demand of 0.84 spaces per unit plus the City's required 0.25 spaces per unit guest parking requirements.
    - Preserve additional space for future Right of Way along Route 176 and Terra Cotta Road (not dedicate) to minimize development impacts should IDOT ultimately improve the intersection to the geometrics recommended in the 2010 SRA report.
        - The petitioner is providing free space of a minimum 25 feet to any basins or parking areas.

BUILDING ELEVATIONS

- The building is very residential in character with various gable roofs, decorative trim around windows and doors, balconies and soft colors.
- The building would be brick on the bottom level and a mix of vertical and horizontal vinyl siding on the top two floors and under the gable roof peaks. The mix of materials, colors and trim helps break up the façade.
    - There is a minor change to the front façade with the addition of a new brick color (tan). Staff recommends the tan brick is also added to the end elevations.

LANDSCAPING

- The proposed landscape plan includes foundation landscaping on all perimeters of the buildings, perimeter parking lot landscaping and overall site landscaping.
- The petitioner is providing trees along the north property line (Route 176), and several existing trees near the western property line (Terra Cotta Road) will be maintained.
- The petitioner is providing a 20-foot landscape buffer (combination of trees and evergreens) along the south property line to provide screening between the development and the existing single-family residences (Mistwood) to the south.

Findings of Fact:

PRELIMINARY PLANNED UNIT DEVELOPMENT
The following is a synopsis of the conditions of approval from the Preliminary PUD and the status of their completion.

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Terra Cotta Development, dated 07/11/2021, received 11/02/2021)
   B. Site Plan (Midwestern Consulting, dated 11/02/2021, last revised 12/23/2021, received 12/21/2021)
   C. Landscape Plan (Midwestern Consulting, dated 11/02/21, last revised 12/23/21, received 12/21/2021)
   D. Elevations (Sebree Architects, received 11/19/2021)
   E. Engineering Plans (Midwestern Consulting, dated 11/02/2021, last revised 12/23/2021, received 12/21/2021)
   F. Project Narrative (Clover Communities Crystal Lake LLC, dated 11/19/2021, received 11/19/2021)
   G. Traffic Impact Study (Gewalt Hamilton Associates, Inc., dated 09/29/2021, received 09/30/2021)

No comment necessary. This is just the notation of the approved plans.

2. Final elevations must comply with the requirements of the UDO Design Standards of Section 4-900. Work with staff to include two of the suggested design elements listed below:
   A. Rafter tails under the projections in the gables **Not illustrated. Recommended to be carried over as a condition of Final PUD.**
   B. Thicker window trim. **Not illustrated.**
   C. Extension of the brick vertically on a portion of the front elevation. **Provided. Staff recommends new a condition of Final PUD that the tan brick shown on the front elevation be incorporated into the end elevations.**

These shall remain a condition of Final PUD.

3. Final Engineering Plans must be submitted with Final Planned Unit Development in compliance with the City's Code and Stormwater ordinance. **This shall remain a condition of Final PUD.**

4. The Final Landscape Plan must comply with the landscape requirements of the UDO of Section 4-400. **OK.**

5. A Final Photometric and Lighting Plan must comply with the lighting requirements of the UDO of Section 4-800. **The Final Photometric and Lighting Plan shall be revised to meet the maximum light level of 0.1 footcandles at the south and eastern property lines.**

6. If the City finds the parking to be insufficient for its residents and staff, the petitioner shall work with staff to provide additional parking on the site to meet the demand. **This shall remain a condition of Final PUD.**

7. Traffic Study:
   A. Construct a new full access to IL Route 176 has been discussed aligned opposite the existing access for the office complex. **OK.**
   B. Westbound left turns into the site from IL Route 176 will be made from a newly created westbound left turn lane within the existing painted median on IL Route 176. **OK.**
   C. Eastbound right turns into the site from IL Route 176 will be made from the existing through lane. An increased curb radius is recommended, but a right turn lane is not warranted. **OK.**
   D. Exiting traffic onto IL Route 176 should have separate right and left turn lanes under Stop Sign control. **OK.**
   E. As previously noted, a 3/4 access (left turns in prohibited) to Terra Cotta Road has been discussed offset south of the existing Casey's access drive. **OK.**
   F. Exiting traffic onto Terra Cotta Road should have separate right and left turn lanes under Stop Sign control. **This recommendation is no longer required.**
   G. On-site parking should be increased by approximately 11 spaces to provide a supply sufficient to meet the Clover Group's internal data's suggested demand of 0.84 spaces per unit plus the City's required 0.25 spaces per unit guest parking requirements. **OK.**
   H. Preserve additional space for future Right of Way along IL Route 176 and Terra Cotta Road (not dedicate) to minimize development impacts should IDOT ultimately improve the intersection to the geometrics recommended in the 2010 SRA report. **OK.**

   These shall remain a condition of Final PUD.

8. The petitioner shall address all of the review comments and requirements of the Community Development, Public Works, Police and Fire Rescue Departments, as well as the City's traffic consultant, Gewalt Hamilton Associates, Inc. and stormwater consultant, Christopher B. Burke Engineering, Ltd. **This will remain a condition of Final PUD.**

Comprehensive Land Use Plan 2030 Vision Summary Review:

Land Use: Residential

Goal: Encourage a diversity of high quality housing in appropriate locations throughout the city that supports a variety of lifestyles and invigorates community character.

The Comprehensive Plan indicates this can be accomplished with the following supporting action:

Supporting Action: Encourage a diversity of housing types throughout the city, which satisfy wide-range needs for all persons regardless of age, race, religion, national origin, physical ability and economic level for existing and future city residents.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made, the following conditions are recommended:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Terra Cotta Development, dated 07/11/2021, received 11/02/2021)
   B. Site Plan (Midwestern Consulting, dated 05/11/2022, received 05/11/2022)
   C. Landscape Plan (Midwestern Consulting, dated 05/11/2022, received 05/11/2022)
   D. Elevations (Sebree Architects, received 05/11/2022)
   E. Engineering Plans (Midwestern Consulting, dated 05/11/2022, received 05/11/2022)
   F. Project Narrative (Clover Communities Crystal Lake LLC, dated 11/19/2021, received 11/19/2021)
   G. Traffic Impact Study (Gewalt Hamilton Associates, Inc., dated 09/29/2021, received 09/30/2021)

2. All conditions of approval from Ordinance #7780 remain valid, as applicable.

3. Final elevations must include the following elements:
   A. Rafter tails under the projections in the gables
   B. Extension of the tan brick vertically on a portion of the front elevation.

4. Final Engineering Plans must be submitted with permit in compliance with the City's Code and Stormwater ordinance.

5. A Final Photometric and Lighting Plan must comply with the lighting requirements of the UDO of Section 4-800. The Final Photometric and Lighting Plan shall be revised to meet the maximum light level of 0.1 footcandles at the south and eastern property lines.

6. If the City finds the parking to be insufficient for its residents and staff, the petitioner shall work with staff to provide additional parking on the site to meet the demand.

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   D. Exiting traffic onto IL Route 176 should have separate right and left turn lanes under Stop Sign control.

   E. As previously noted, a 3/4 access (left turns in prohibited) to Terra Cotta Road has been discussed offset south of the existing Casey's access drive.

   F. On-site parking should be increased by approximately 11 spaces to provide a supply sufficient to meet the Clover Group's internal data's suggested demand of 0.84 spaces per unit plus the City's required 0.25 spaces per unit guest parking requirements.

   G. Preserve additional space for future Right of Way along IL Route 176 and Terra Cotta Road (not dedicate) to minimize development impacts should IDOT ultimately improve the intersection to the geometrics recommended in the 2010 SRA report.

8. The petitioner shall address all of the review comments and requirements of the Community Development, Public Works, Police and Fire Rescue Departments, as well as the City's traffic consultant, Gewalt Hamilton Associates, Inc. and stormwater consultant, Christopher B. Burke Engineering, Ltd.

PIQ Map

731 E. Terra Cotta Avenue



City of Crystal Lake
Development Application
Ownership Sign-off Acknowledgement Form

The following information is related to a development application. As the owner of the property in question, I (we) acknowledge that the information provided in the submittal was reviewed and approved.

Owner Information

Name: Terra Cotta Development, LLC

Address: 2081 C Glengarry Cir.
Deer Park, IL 60010

Phone: 847-276-6579

E-mail: terracottacorners@att.net

Project Name & Description: Clover Communities Crystal Lake - 119 units of senior independent living to be constructed.

Project Address/Location: SEC of Terra Cotta and Rt 176

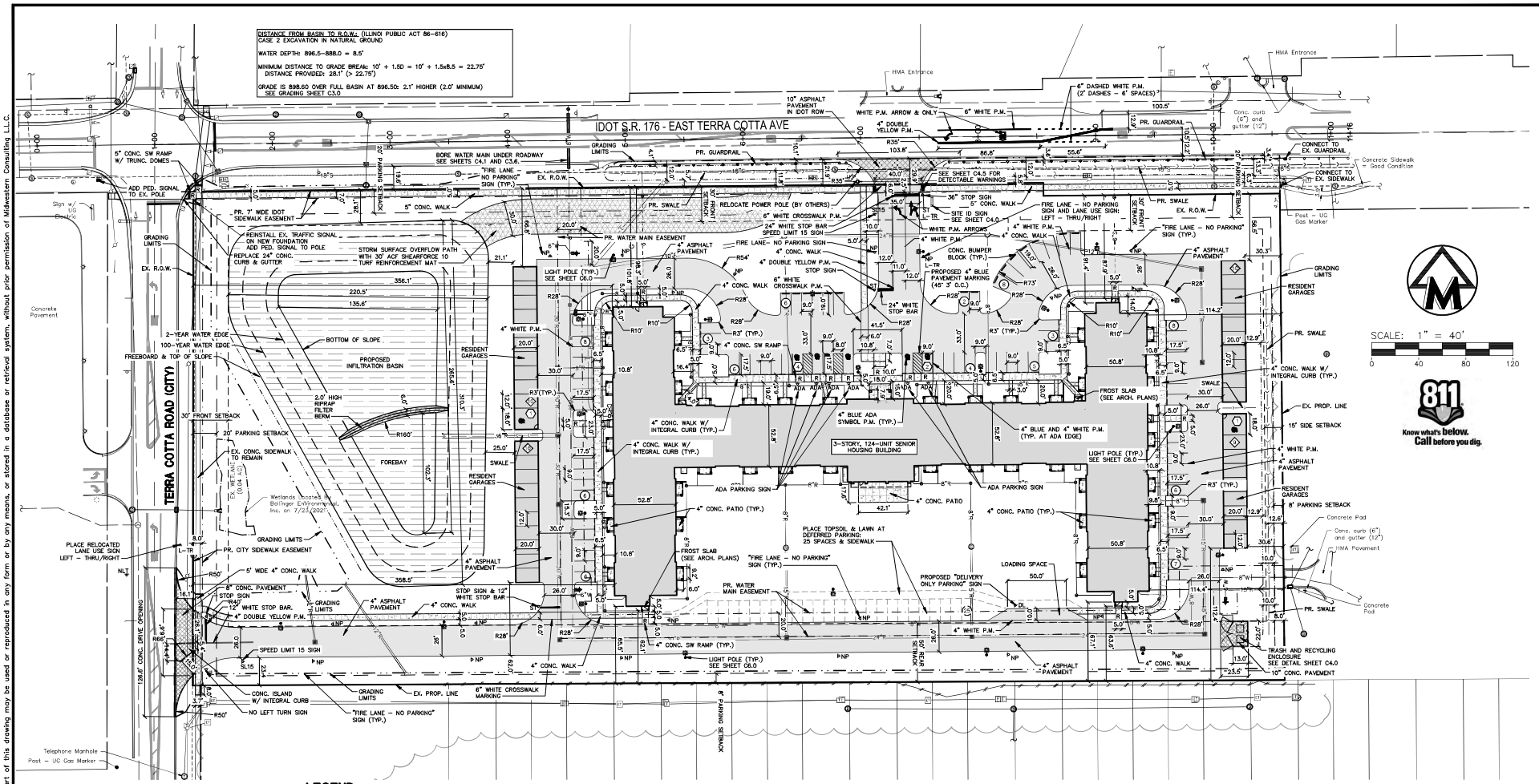
Signature	Lane R Moyer

Lane R. Moyer, President of Terra Cotta Development, LLC

Owner: Print and Sign name

Date 7/11/21

NOTE: If the property is held in a trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.



NOTES

1. WORK IN STATE ROUTE 176 RIGHT-OF-WAY, AND AT THE INTERSECTION OF S.R. 176 AND TERRA COTTA ROAD, SHALL BE PERMITTED AND APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
2. WORK IN THE TERRA COTTA ROAD RIGHT-OF-WAY SHALL BE PERMITTED AND APPROVED BY THE CITY OF CRYSTAL LAKE.
3. ALL PAVEMENT MARKINGS AND SIGNS SHALL COMPLY WITH THE LATEST MUTCD AND IDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. PAVEMENT MARKINGS SHALL BE WATERBORNE UNLESS REQUESTED OTHERWISE BY THE CITY OF CRYSTAL LAKE OR IDOT.

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

LEGEND

- 4" ASPHALT PAVEMENT
- 10" ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- CONCRETE PATIO
- CONCRETE PAVEMENT
- BUILDING
- RESIDENT GARAGES

EXIST. UTILITY POLE
PROP. TRANSFORMER
EXIST. OVERHEAD UTILITY LINE
PROP. LIGHT POLE
EXIST. TELEPHONE LINE
PROP. TELEPHONE LINE
EXIST. ELECTRIC LINE
PROP. ELECTRIC LINE
EXIST. GAS LINE
PROP. GAS LINE
EXIST. FIBER OPTIC LINE
PROP. FIBER OPTIC LINE
EXIST. WATER MAIN
PROP. WATER MAIN
EXIST. HYDRANT
PROP. HYDRANT
EXIST. GATE VALVE IN BOX
PROP. GATE VALVE IN BOX
EXIST. GATE VALVE IN WELL
PROP. GATE VALVE IN WELL
EXIST. STORM SEWER
PROP. STORM SEWER
EXIST. CATCH BASIN OR INLET
PROP. CATCH BASIN OR INLET
PROP. BEEHIVE INLET
END SECTION
EXIST. SANITARY SEWER
PROP. SANITARY SEWER

SIDEWALK RAMP
SIGN
FIRE LANE – NO PARKING SIGN
STOP SIGN
ADA PARKING SIGN
NO LEFT TURN SIGN
DELIVERY ONLY PARKING SIGN
SPEED LIMIT 15 SIGN
PEDESTRIAN CROSSING SIGNAL
WELL
FENCE
TREE OR BRUSH LIMIT
PROP. C/L OF SWALE
PROP. GUARDRAIL
PROP. SIDEWALK EASEMENT
PROP. PARKING SETBACK
PROP. SETBACK
PROP. WATER MAIN EASEMENT
PROP. BUMPER BLOCK
GRADING LIMITS
WETLAND LIMITS
NUMBER OF PARKING SACES
NUMBER OF HANDICAP PARKING SPACES
NUMBER OF GARAGE PARKING SPACES
SECTION CORNER

DEVELOPMENT SUMMARY AND COMPARISON CHART

Zoning Classification	**B-2-PUD (General Commercial)---Proposed Rezoning to R-3B-PUD (Multi-Family Residential)**
Number of Units	124 Units Total: 4 1-bedroom + 119 2-bedroom

SITE INFORMATION	Requirement	Calculated Requirement	Provided	Variance Requested
Minimum Lot Area	1,400 + 4,000/unit	1,400 + 4,000 x 124 = 497,400 sft = 11.42 ac	388,932 sft = 8.93 ac	108,468 sft = 2.49 ac
Minimum Lot Width	50 + 10/unit	50 + 10 x 124 = 1,290 ft	921 ft	366 ft
Dwelling Unit Density	9.0 units/acre	9.0 units/acre	121 units / 8.93 ac = 13.9 units/ac	4.9 unit/ac
Front Setback	30 ft	30 ft	879 ft (56.5 ft garage)	---
Side Setback	15 ft	15 ft	114.2 ft (30.3 ft garage)	---
Rear Setback	50 ft (abutting 1-family homes)	50 ft	62.1 ft (62.0 ft garage)	---
Maximum Building Lot Coverage	30% of site	30%	44,940 sft + 9,862 sft garages = 54,802 sft total / 388,932 = 14.1%	---
Maximum Impervious Lot Coverage	65% of site	65%	54,802 sft roof + 97,111 sft pvmt + 8,749 deferred parkng = 159,662 sft / 388,932 = 40.8%	---
Maximum Building Height	36 ft	36 ft	35ft	---
Maximum Stories	N/A	N/A	3 stories	---
Total Building Floor Area	N/A		131,820 sft + 9,862 sft garages = 141,682 sft total	---
Floor Area Ratio (FAR)	0.6 maximum	0.6	141,682 / 388,932 = 037	---
Minimum Apartment Area	N/A	N/A	673 sft (1 BR), 778-910 (2 BR)	---
Vehicle Parking (Multi-Family Residential)	1.5/ 1BR unit, 2.25 / 2BR unit	1.5 x 4 1BR + 2.25 x 119 2BR = 274	124 total (84 surface + 40 garage) Add'l 25 deferred spaces (149 total)	125 spaces
ADA Parking Spaces Required	ADA Chart	5 ADA spaces for 101-150 (1 to be van space)	8 van spaces provided (6 surface + 2 garage)	---
Loading Space	1 space	1 space	1 provided	---

M:\Civil\3d_Proj\21216\Site Plan\21216SP1.dwg, 9/1/2022 11:22 AM, Jeremy A. Walther, C2.0 SITE LAYOUT AND PAVING PLAN, XCLUP PDF.pc3
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MIDWESTERN CONSULTING
38±1 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.com
Land Development • Land Survey • Institutional • Municipal
Water/Communication • Transportation • Landfill Services

CLIENT
CLOVER COMMUNITIES CRYSTAL LAKE LLC
348 HARRIS HILL ROAD
WILLIAMSVILLE, NY 14221
ATTN: BETH ERNAT
734-345-0246

Know what's below. Call before you dig.

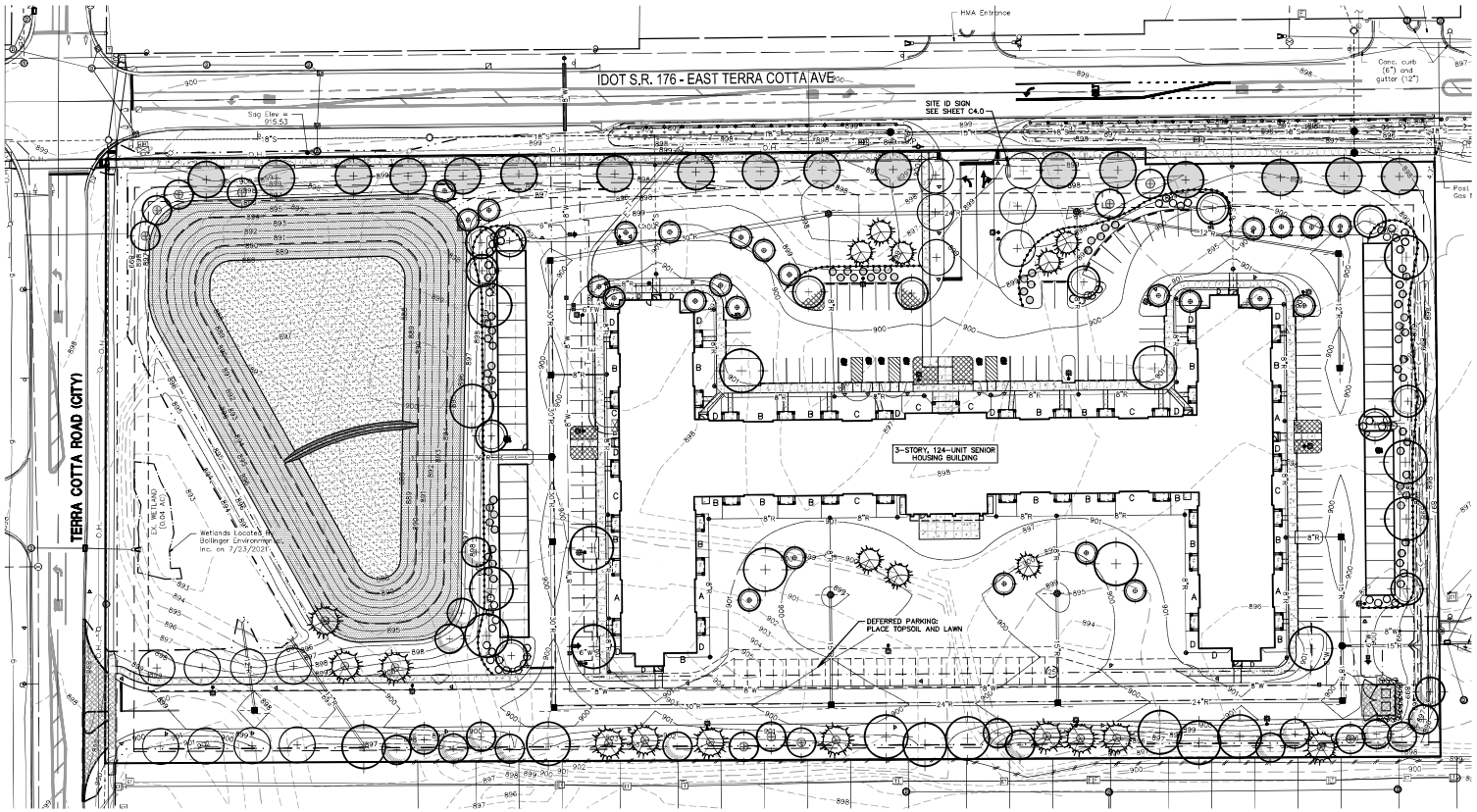
CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
SITE LAYOUT AND PAVING PLAN

C2.0

JOB No. 21216
DATE: 8/11/2022
SHEET 6 OF 42
DRAWN: JRB
CHKD: JW
ENG: JW
PM: RCW
21216SP1.DWG

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/29/21
SITE PLAN SUBMITTAL 2	01/27/22
SITE PLAN SUBMITTAL 3	02/16/22
SITE PLAN SUBMITTAL 4	05/11/22
FINAL ENG. SITE PLAN SUBMITTAL 1	08/11/22



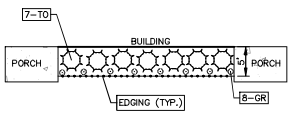
811 Know what's below. Call before you dig.

SCALE: 1" = 40'

0 40 80 120

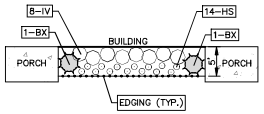
LANDSCAPE LEGEND

- AUTUMN BLAZE RED MAPLE
- REDSPIRE PEAR
- BLACK HILLS SPRUCE
- SERVICEBERRY
- JAPANESE LILAC
- GREEN COLUMN BLACK MAPLE
- NORWAY SPRUCE
- REDMOND LINDEN
- REDBUD
- ARROWWOOD VIBURNUM
- GRAY DOGWOOD
- GLOBE ARBORVITAE
- GREEN MOUNTAIN BOXWOOD
- EMERALD GREEN ARBORVITAE
- AUTUMN JOY SEDUM
- LITTLE HENRY SWEETSPIRE
- ROZANNE GERANIUM
- STELLA D'ORO DAYLILY
- PERENNIAL BED
- BASIN BOTTOM SEED MIX
- SIDE SLOPE SEED MIX
- SWALE SEED MIX
- PROPOSED EDGING
- A/B/C/D FOUNDATION PLANTINGS – SEE TYPICAL DETAILS



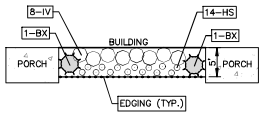
FOUNDATION PLANTING TYPE A

SCALE: 1" = 10FT



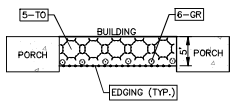
FOUNDATION PLANTING TYPE B

SCALE: 1" = 10FT



FOUNDATION PLANTING TYPE C

SCALE: 1" = 10FT



FOUNDATION PLANTING TYPE D

SCALE: 1" = 10FT

PLANT SCHEDULE

Symbol	Tree Mitigation	Foundation	Parking	Other	Botanical Name	Common Name	Spp Group	Size	Cont	Notes
AC	18				Amelanchier canadensis	Serviceberry	B	2.5 " cal	B&B	
PG	3		2		Picea glauca 'Densata'	Black Hills Spruce	B	6' hgt	B&B	
TA	17		4		Tilia americana 'Redmond'	Redmond Linden	A	2.5 " cal	B&B	
SR			13		Syringa reticulata	Japanese Tree Lilac	B	2.5 " cal	B&B	
AR	10		7		Acer rubrum 'Autumn Blaze'	Autumn Blaze Red Maple	B	2.5 " cal	B&B	
CC	27				Cercis canadensis	Redbud	B	2.5" cal	B&B	
AS	9				Acer saccharum nigrum 'Green Coumn'	Green Column Black Maple	A	2.5" cal	B&B	
PC	14				Pyrus calliyana 'Redspire'	Redspire Pear	A	2.5" cal	B&B	
PA	11				Picea abies	Norway Spruce	B	6' hgt	B&B	
SUBTOTAL			26							
IV		274			Itea virginica	Little Henry Sweetspire		36" hgt	B&B	
VD			54		Viburnum dentatum	Arrowwood Viburnum		36" hgt	B&B	
CR			61		Cornus racemosa	Gray Dogwood		36" hgt	B&B	
BX		40			Buxus x 'Green Mountain'	Green Mountain Boxwood		No. 3	Cont.	
TO		80			Thuja occidentalis 'Little Giant'	Little Giant Globi Arborvitae		36" hgt	B&B	
TS				12	Thuja occidentalis 'Smaragd'	Emerald Green Arborvitae	A	4' hgt	B&B	
SUBTOTAL			115							
HS		280			Hemerocalis stella d'oro	Stel D'Oro Daylily		No. 3	Cont.	
SS		171			Sedum spectabile	Autumn Joy Secum		No. 3	Cont.	
GR		94			Geranium 'Rozanne'	Rozanne Geranum		No. 3	Cont.	
TOTAL	109	939	141	12						

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

M:\Civil3d Proj\21216\Site Plan\21216Plan.dwg, 5/11/2022 11:41 AM, Jeremy A. Weitner, L1.0 LANDSCAPE PLAN, MCLLC PDF.pc3
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MIDWESTERN CONSULTING
38471 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.com
Land Development • Land Survey • Institutional • Municipal
Water/Wastewater • Transportation • Landfill Services

CLIENT
CLOVER COMMUNITIES CRYSTAL LAKE LLC
348 HARRIS HILL ROAD
WILLIAMSVILLE, NY 14221
ATTN: BETH EPNAT
734-345-0246

CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
LANDSCAPE PLAN

L1.0

JOB No. 21216

DATE: 5/11/2022
SHEET 40 OF 42
DRN: JAM
CHKD: JWB
ENG: JAM
PM: RDW

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/22/21
SITE PLAN SUBMITTAL 2	01/26/22
SITE PLAN SUBMITTAL 3	02/16/22
SITE PLAN SUBMITTAL 4	04/15/22
FINAL SITE PLAN SUBMITTAL 1	05/11/22

21216-LP1.DWG

NEW CONSTRUCTION FOR:
CLOVER SENIOR HOUSING
XXXXX XXXXX XXX
CRYSTAL, ILLINOIS

OWNER

The Clover Group
348 Harris Hill Road
Williamsville, NY 14221
716.688.8640

ARCHITECT

SEBREE Architects, Inc.
97 Dover Street, Suite 400
Avon, Indiana 46123
317.272.7800

STRUCTURAL ENGINEER

The Structural Shop Ltd.
9601 River Street
Schiller Park, Illinois 60176
847.349.1099

MECH/ELEC/PLUMBING ENGINEER

KROMAC Design, Inc.
10225 Main Street, Suite 10B
Clarence, New York 14031
716.803.8787

CIVIL ENGINEER

Midwestern Consulting
3815 Plaza Drive
Ann Arbor, Michigan 48108
734.995.0200

CODE INFORMATION - APARTMENTS

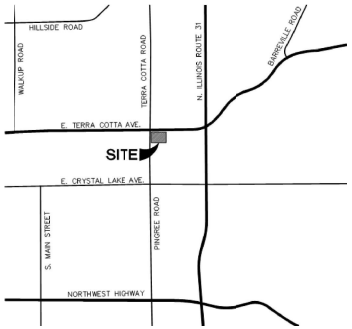
1. ILLINOIS BUILDING CODES AND STANDARDS:
   - –Building Code, the International Building Code, 2018 Edition, as amended by Chapter 187-2.
   - –Accessibility Code, 2018 Illinois Accessibility Code, effective date October 23, 2018.
   - –2010 ADA Standard
   - –Electrical Code, the National Electrical Code, 2017 Edition, as as amended by Chapter 230-2.
   - –Energy Code, the International Energy Conservation Code, 2009 Edition, and subsequent amendments.
   - –Existing Building Code, the International Existing Building Code, 2018 Edition as amended by Chapter 187-2.
   - –Fire Code, the International Fire Code. 2018 Edition, and subsequent amendments.
   - –Gas Code, the International Fuel Gas Code, 2018 Edition, and subsequent amendments.
   - –Life Safety Code, the Life Saftey Code 2015 of Illinoins (the NFPA 101, 2015 with amendments)
   - –Mechanical Code, the International Mechanical Code, 2018 Edition, and subsequent amendments.
   - –Plumbing Code, the Illinois Plumbing Code, effective date April 24, 2014, and subsequent amendments.
   - –Residential Code, the International Residential Code, 2018 Edition, as amended by Chapter 422-2.
2. OCCUPANCY:
   BUILDING – R2 APARTMENTS
3. CONSTRUCTION TYPE: 5A, ONE HOUR
4. FIRE RESISTANCE RATING REQUIREMENT:
   - EXTERIOR BEARING WALLS.....1–HOUR–TABLE 601/602
   - EXTERIOR NON–BEARNG WALLS.....1–HOUR–TABLE 601/602
   - INTERIOR BEARING WALLS.....1–HOUR–TABLE 601/602
   - INTERIOR NON–BEARING WALLS (INTERIOR PARTITIONS).0–HOUR–TABLE 601/602
   - CORRIDORS.....1–HOUR–TABLE 1018.1
   - STAIRS ENCLOSURE.....1–HOUR–1026
   - FLOORS: FLOOR/CEILING ASSEMBLIES.....1–HOUR–TABLE 01/711.1
   - ROOFS: ROOF/CEILING ASSEMBLIES.....1–HOUR–TABLE 601
   - FIRE PARTITIONS (UNIT SEPARATIONS).....1–HOUR–708.1
   - STRUCTURAL FRAME.....1–HOUR–TABLE 601
5. MARKING AND IDENTIFICATION PER IBC 703.7
   FIRE WALLS AND VERTICAL FIRE BARRIERS SHALL BE EFFECTIVELY AND PERMANENT IDENTIFIED WITH SIGNS OR STENCILING. THE IDENTIFICATION SHALL BE LOCATED IN ATTIC SPACES, BE LOCATED WITHIN 15 FT. OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FT. MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION. LETTERING TO BE NOT LESS THAN 3 INCHES IN HEIGHT WITH A MIN 3/8 INCH STROKE IN A CONTRASTING COLOR WITH THE SUGGESTED WORDING "FIRE AND/OR SMOKE BARRIER – PROTECT ALL OPENINGS"
6. FIRE SPRINKLER SYSTEM, YES
   NFPA 13R THROUGHOUT – SPRINKLERS ARE REQUIRED FOR PORCHES, BALCONIES
   SPRINKLERS ARE NOT REQUIRED FOR ALL CONCEALED SPACES WHICH INCLUDE ATTIC AREA, FLOOR/CEILING ASSEMBLIES.
   NFPA 13 SYSTEM FIRE SUPPRESSION AT A3 COMMUNITY ROOM
   FIRE SUPPRESSION SYSTEM TO BE FILED SEPARATELY
7. IECC CLIMATE ZONE: 5A
8. DRYER VENTING: MAXIMUM 35 LINEAL FEET MINUS 2.5 FEET FOR EACH 45° AND 5 FEET FOR EACH 90°
9. SMOKE DETECTORS PROVIDED AS REQUIRED BY CODE.
10. BUILDING STORIES: ALLOWED BY TABLE 503 AND SPRINKLER INCREASES PER SECTION 504.2 = 4 STORIES
    ACTUAL BUILDING STORIES: 3 STORY BUILDINGS
11. BUILDING HEIGHT: ALLOWED BY TABLE 503 AND SPRINKLER INCREASES PER SECTION 504.2 = 60 FT.
    ACTUAL BUILDING HEIGHT = 39'–5 1/2" (REFER TO EXTERIOR ELEVATIONS)
12. MANUAL FIRE ALARM SYSTEM PER 907.2.9
13. PROVIDE ACCESSIBLE DWELLING UNITS PER IBC 1107.6.2 & 1107.7.1
    ACCESSIBLE TYPE B DWELLING UNITS =ALL UNITS
14. MAXIMUM FLOOR AREA EACH FLOOR INCLUDING FRONTAGE INCREASE = 21,000 SF
    CODE SQUARE FOOTAGE SUMMARY (INCLUDES BALCONIES AND PORCHES):
    - FIRST FLOOR – 49,867 SQ. FT.
    - SECOND FLOOR – 48,125 SQ. FT.
    - THIRD FLOOR – 48,098 SQ. FT.
    - BUILDING TOTAL – 146,090 SQ. FT.

CODE INFORMATION - DETACHED GARAGE

1. ILLINOIS BUILDING CODES & STANDARDS (SEE APARTMENTS FOR FULL LIST)
2. OCCUPANCY: U
3. CONSTRUCTION TYPE: 5B
4. FIREWALLS:
   - INTERIOR BEARING WALLS.....0–HOUR–TABLE 601
   - INTERIOR NON–BEARING WALLS (INTERIOR PARTITIONS).....0–HOUR–TABLE 601
   - ROOFS: ROOF/CEILING ASSEMBLIES.....0–HOUR–TABLE 601
5. NOT SPRINKLERED
6. BUILDING STORIES: ALLOWED BY TABLE 503 = 1 STORY
   ACTUAL BUILDING STORIES = 1 STORY
7. BUILDING HEIGHT: ALLOWED BY TABLE 503 = 40 FT.
   ACTUAL BUILDING HEIGHT = 14'–0"
8. ACCESSIBLE GARAGES = 2% (46x.02=1 GARAGES)
9. SF PERMITTED: ALLOWED BY TABLE 503 = 5,500 SQ. FT.
   CODE SQUARE FOOTAGE:
   - (1) 7 BAY GARAGE: 1,679 SQ. FT.
   - (1) 10 BAY HC GARAGE: 2,516 SQ. FT.
   - (2) 11 BAY GARAGE: 2,636 SQ. FT.

VICINITY MAP

LOCATION MAP



BUILDING MATRIX

CLOVER SENIOR LIVING
Crystal Lake, IL
Project No. 21031
02/10/22

FLOOR LEVEL	CODE SQ FT	BLDG GROSS SQ FT	UNITS' SQ FT	UNIT C 1 BDR/1BA		UNIT B 2 BDR/1 BA w/shower			UNIT E 2 BDR/1-1/2 BA		TOTALS		STORAGE UNITS
				STD	ACCESSIBLE	STD	ACCESSIBLE	CORE	STD	ACCESSIBLE			
				SQ FT	SQ FT	SQ FT	SQ FT	SQ FT	SQ FT	SQ FT			
				660	660	740	739	793	876	876			
FIRST	49,867	46,781	30,688	0	0	32	0	0	7	1	40	30	
SECOND	48,125	45,165	32,001	2	0	31	1	0	8	0	42	30	
THIRD	48,098	45,158	32,008	1	1	32	0	0	8	0	42	30	
TOTAL	146,090	137,124	94,703	3	1	95	1	0	23	1	124	90	

INDEX OF DRAWINGS

ISSUE DATE	LATEST REVISION	SHEET #	DESCRIPTION
02.04.22	02.10.22	A-001	CODE INFORMATION AND SHEET INDEX
02.04.22	02.10.22	A-002	ABBREVIATIONS, SYMBOLS, GENERAL NOTES AND UNIT MIX
02.04.22	02.10.22	A-003	ICC ANSI TYPE B UNIT NOTES AND DETAILS
02.04.22	02.10.22	A-004	ICC ANSI TYPE A UNIT NOTES AND DETAILS
02.04.22		A-005	BUILDING LIFE SAFETY PLANS
00.00.22		A-006	BUILDING FIRE AREA PLANS
00.00.22		A-007	WALL TYPES
00.00.22		008-010	UL ASSEMBLIES - PENETRATIONS
00.00.22		A-011	UL ASSEMBLIES - WALLS
		A-012	UL ASSEMBLIES - FLOORS & ROOF
			CIVIL SHEETS - CROSSROAD ENGINEERS, PC
00.00.22		100	TITLE SHEET
00.00.22		200	TOPOGRAPHIC SURVEY
00.00.22		300	SITE DIMENSION PLAN
00.00.22		301-309	TURNING MOVEMENT PLAN
00.00.22		400-401	UTILITY PLAN
00.00.22		500	GRADING & DRAINAGE PLAN
00.00.22		600	SANITARY PLAN & PROFILE
00.00.22		700-702	STORM PLAN & PROFILE
00.00.22		800-801	INITIAL CONTROLS PLAN
00.00.22		802-803	TEMPORARY CONTROLS PLAN
00.00.22		804-805	POST-CONSTRUCTION CONTROLS PLAN
00.00.22		806	EROSION CONTROL DETAILS
00.00.22		900	MISCELLANEOUS DETAILS
00.00.22		1000	SPECIFICATIONS
00.00.22		1100	MAINTENANCE OF TRAFFIC PLAN
00.00.22		1200-1202	GRAVITY SEWER DETAILS
00.00.22		LP.1	PHOTOMETRIC PLAN
00.00.22		1-20	CITY OF FISHERS STANDARD CONSTRUCTION DETAILS
			STRUCTURAL SHEETS - PETRILLI STRUCTURAL
01.27.22		S0.0	GENERAL NOTES
01.27.22		S2.0	2ND FLOOR FRAMING PLAN (AREA A)
01.27.22		S2.1	2ND FLOOR FRAMING PLAN (AREA B)
01.27.22		S2.2	2ND FLOOR FRAMING PLAN (AREA C)
01.27.22		S2.3	2ND FLOOR FRAMING PLAN (AREA D)
01.27.22		S2.4	2ND FLOOR FRAMING PLAN (AREA E)
01.27.22		S3.0	3RD FLOOR FRAMING PLAN (AREA A)
01.27.22		S3.1	3RD FLOOR FRAMING PLAN (AREA B)
01.27.22		S3.2	3RD FLOOR FRAMING PLAN (AREA C)
01.27.22		S3.3	3RD FLOOR FRAMING PLAN (AREA D)
01.27.22		S3.4	3RD FLOOR FRAMING PLAN (AREA E)
01.27.22		S4.0	4TH FLOOR FRAMING PLAN (AREA A)
01.27.22		S4.1	4TH FLOOR FRAMING PLAN (AREA B)
01.27.22		S4.2	4TH FLOOR FRAMING PLAN (AREA C)
01.27.22		S4.3	4TH FLOOR FRAMING PLAN (AREA D)
01.27.22		S4.4	4TH FLOOR FRAMING PLAN (AREA E)
			ARCHITECTURAL SHEETS - SEBREE ARCHITECTS
02.04.22		A-100	OVERALL FIRST FLOOR PLAN
02.04.22		A-101	PARTIAL FIRST FLOOR PLAN – AREA A
02.04.22		A-102	PARTIAL FIRST FLOOR PLAN – AREA B
02.04.22		A-103	PARTIAL FIRST FLOOR PLAN – AREA C & D
02.04.22		A-104	PARTIAL FIRST FLOOR PLAN – AREA E & F
02.04.22		A-105	OVERALL SECOND FLOOR PLAN
02.04.22		A-106	PARTIAL SECOND FLOOR PLAN – AREA A
02.04.22		A-107	PARTIAL SECOND FLOOR PLAN – AREA B
02.04.22		A-108	PARTIAL SECOND FLOOR PLAN – AREA C & D
02.04.22		A-109	PARTIAL SECOND FLOOR PLAN – AREA E & F
02.04.22		A-110	OVERALL THIRD FLOOR PLAN
02.04.22		A-111	PARTIAL THIRD FLOOR PLAN – AREA A
02.04.22		A-112	PARTIAL THIRD FLOOR PLAN – AREA B
02.04.22		A-113	PARTIAL THIRD FLOOR PLAN – AREA C & D
02.04.22		A-114	PARTIAL THIRD FLOOR PLAN – AREA E & F
02.04.22	02.10.22	A-200	EXTERIOR ELEVATIONS
02.04.22	02.10.22	A-201	EXTERIOR ELEVATIONS
02.04.22	02.10.22	A-202	EXTERIOR ELEVATIONS
02.04.22	02.10.22	A-203	EXTERIOR ELEVATIONS
02.04.22	02.10.22	A-204	EXTERIOR ELEVATIONS
00.00.22		A-300	PARTIAL FIRST FLOOR REFLECTED CEILING PLAN – AREA A
00.00.22		A-301	PARTIAL FIRST FLOOR REFLECTED CEILING PLAN – AREA B
00.00.22		A-302	PARTIAL FIRST FLOOR REFLECTED CEILING PLAN – AREA D
00.00.22		A-303	PARTIAL FIRST FLOOR REFLECTED CEILING PLAN – AREA E & F
00.00.22		A-304	PARTIAL SECOND FLOOR REFLECTED CEILING PLAN – AREA A
00.00.22		A-305	PARTIAL SECOND FLOOR REFLECTED CEILING PLAN – AREA B
00.00.22		A-306	PARTIAL SECOND FLOOR REFLECTED CEILING PLAN – AREA D
00.00.22		A-307	PARTIAL SECOND FLOOR REFLECTED CEILING PLAN – AREA E&F
00.00.22		A-308	PARTIAL THIRD FLOOR REFLECTED CEILING PLAN – AREA A
00.00.22		A-309	PARTIAL THIRD FLOOR REFLECTED CEILING PLAN – AREA B
00.00.22		A-310	PARTIAL THIRD FLOOR REFLECTED CEILING PLAN – AREA C & D
00.00.22		A-311	PARTIAL THIRD FLOOR REFLECTED CEILING PLAN – AREA E & F
02.04.22	02.10.22	A-400	ROOF PLAN
00.00.22		A-401	ROOF DETAILS
00.00.22		A-402	ROOF DETAILS

INDEX OF DRAWINGS

ISSUE DATE	LATEST REVISION	SHEET #	DESCRIPTION
00.00.22		A-500	ELEVATOR PLANS, SECTION AND DETAILS
00.00.22		A-501	STAIR PLANS, & DETAILS
00.00.22		A-502	STAIR SECTION
02.04.22	02.10.22	A-600	BUILDING SECTION
02.04.22	02.10.22	A-601	BUILDING SECTION
02.04.22	02.10.22	A-602	WALL SECTIONS & DETAILS
02.04.22	02.10.22	A-603	WALL SECTIONS & DETAILS
02.04.22	02.10.22	A-604	WALL SECTIONS & DETAILS
02.04.22	02.10.22	A-605	PATIO SECTIONNS & DETAILS
02.04.22	02.10.22	A-606	DETAILS
00.00.22		A-607	DETAILS
00.00.22		A-608	DETAILS
02.04.22		A-700	ENLARGED UNIT PLANS AND INTERIOR ELEVATIONS
02.04.22		A-701	ENLARGED UNIT PLANS AND INTERIOR ELEVATIONS
02.04.22		A-702	ENLARGED UNIT PLANS AND INTERIOR ELEVATIONS
02.04.22		A-703	ACC ENLARGED UNIT PLANS AND INTERIOR ELEVATIONS
02.04.22		A-704	KITCHEN AND BATH DETAILS
02.04.22		A-705	ENLARGED PLANS – FIRST FLOOR COMMON AREAS
02.04.22		A-706	ENLARGED PLANS – FIRST FLOOR COMMON AREAS
02.04.22		A-707	ENLARGED PLANS – SECOND FLOOR COMMON AREAS
02.04.22		A-708	ENLARGED PLANS – THIRD FLOOR COMMON AREAS
02.04.22		A-709	MAIL ROOM – INTERIOR ELEVATIONS AND DETAILS
02.04.22		A-710	COVERT BAR PLANS, ELEVATIONS & DETAILS
00.00.22		A-711	INTERIOR ELEVATIONS AND DETAILS
00.00.22		A-800	DOOR SCHEDULE AND ELEVATIONS
00.00.22		A-801	WINDOW SCHEDULE, ELEVATIONS, AND DETAILS
00.00.22		A-802	DOOR DETAILS
00.00.22		A-900	ROOM FINISH SCHEDULE & FINISH PLANS
00.00.22		A-901	FINISH DETAILS
			MECHANICAL, ELECTRICAL, PLUMBING SHEETS - KROMAC DESIGN, INC.
00.00.22		M-100	NOTES AND SCHEDULES
00.00.22		M-101	DETAILS
00.00.22		M-102	FIRST FLOOR PLAN
00.00.22		M-103	SECOND FLOOR PLAN
00.00.22		M-104	THIRD FLOOR PLAN
00.00.22		M-105	ENLARGED UNIT PLANS
00.00.22		M-106	ENLARGED COMMON AREA PLANS
00.00.22		M-107	ENLARGED MECHANICAL ROOM PLANS
00.00.22		M-108	SPECIFICATIONS
00.00.22		E-100	NOTES AND SCHEDULES
00.00.22		E-101	FIRST FLOOR LIGHTING AND POWER PLANS
00.00.22		E-102	FIRST FLOOR LIGHTING AND POWER PLANS
00.00.22		E-103	FIRST FLOOR LIGHTING AND POWER PLANS
00.00.22		E-104	FIRST FLOOR LIGHTING AND POWER PLANS
00.00.22		E-105	SECOND FLOOR LIGHTING AND POWER PLANS
00.00.22		E-106	SECOND FLOOR LIGHTING AND POWER PLANS
00.00.22		E-107	SECOND FLOOR LIGHTING AND POWER PLANS
00.00.22		E-108	SECOND FLOOR LIGHTING AND POWER PLANS
00.00.22		E-109	THIRD FLOOR LIGHTING AND POWER PLANS
00.00.22		E-110	THIRD FLOOR LIGHTING AND POWER PLANS
00.00.22		E-111	THIRD FLOOR LIGHTING AND POWER PLANS
00.00.22		E-112	THIRD FLOOR LIGHTING AND POWER PLANS
00.00.22		E-113	ENLARGED PLANS
00.00.22		E-114	POWER PANELS
00.00.22		E-115	ELECTRICAL LOADS
00.00.22		E-116	ELECTRICAL DETAILS
00.00.22		E-117	MECHANICAL EQUIPMENT SCHEDULES
00.00.22		E-118	FIRE ALARM SPECIFICATIONS
00.00.22		E-119	SINGLE LINE DIAGRAM
00.00.22		E-120	ELECTRICAL SPECIFICATIONS
00.00.22		E-121	GARAGE FLOOR PLANS
00.00.22		P-100	NOTES AND SCHEDULES
00.00.22		P-101	PARTIAL FIRST FLOOR PLAN AREA A SANITARY WASTE
00.00.22		P-102	PARTIAL FIRST FLOOR PLAN AREA B SANITARY WASTE
00.00.22		P-103	PARTIAL FIRST FLOOR PLAN AREA C SANITARY WASTE
00.00.22		P-104	PARTIAL FIRST FLOOR PLAN AREA D SANITARY WASTE
00.00.22		P-105	PARTIAL FIRST/SECOND/THIRD FLOOR PLANS AREA A
00.00.22		P-106	PARTIAL SECOND/THIRD FLOOR PLANS AREA B
00.00.22		P-107	PARTIAL SECOND/THIRD FLOOR PLANS AREA A
00.00.22		P-108	PARTIAL SECOND/THIRD FLOOR PLANS AREA A
00.00.22		P-109	ENLARGED UNIT PLANS – SANITARY WASTE AND VENT
00.00.22		P-110	ENLARGED UNIT PLANS – DOMESTIC WATER
00.00.22		P-111	ENLARGED FIRST FLOOR COMMON AREA PLANS
00.00.22		P-112	PLUMBING RISERS
00.00.22		P-113	PLUMBING RISERS
00.00.22		P-114	PLUMBING RISERS
00.00.22		P-115	DETAILS
			OTHER SHEETS
02.04.22		AG-100	9 BAY GARAGE PLAN, ELEVATIONS AND SECTIONS
02.04.22		AG-101	10 BAY GARAGE PLAN, ELEVATIONS AND SECTIONS
02.04.22		AG-102	9 BAY ACC GARAGE PLAN, ELEVATIONS AND SECTIONS
02.04.22		AG-103	10 BAY ACC GARAGE PLAN, ELEVATIONS AND SECTIONS
02.04.22		AT-101	TRASH ENCLOSURE AND MONUMENT SIGN

SEBREE ARCHITECTS
www.SEBREEarchitects.com
sebree@SEBREEarchitects.com
97 Dover Street
Suite 400
Avon, IN 46123
Phone: 317-272-7800
Fax: 317-272-7808

CONSULTANT

NEW CLOVER COMMUNITY
SENIOR HOUSING
for CLOVER GROUP
SEC E TERRA COTTA AVE AND TERRA COTTA ROAD
CRYSTAL LAKE, ILLINOIS 60012

NOT FOR CONSTRUCTION

CERTIFIED BY

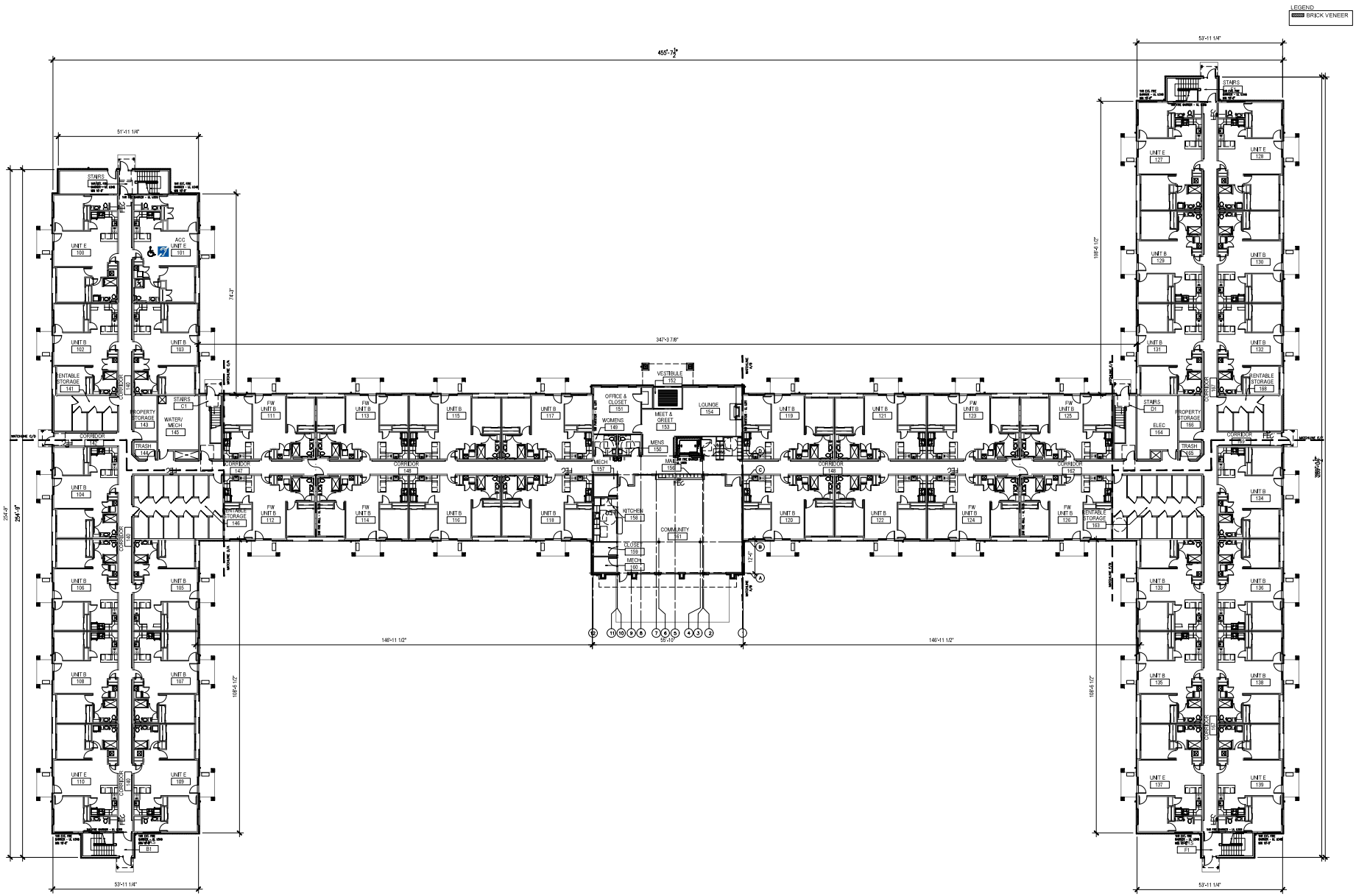
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DATE: 09/08/2021
DRAWN BY: rrp
PROJECT NO.: 21031
CHECKED BY: KAS

DRAWING INDEX
CODE AND
PROJECT INFORMATION

SHEET NO.
A-001



1 OVERALL FIRST FLOOR PLAN

1/16" = 1'-0"

SEBREE ARCHITECTS
www.SEBREEarchitects.com
sebree@SEBREEarchitects.com
97 Dover Street
Suite 400
Avon, IN 46123
Phone: 317-272-7800
Fax: 317-272-7808

CONSULTANT

NEW CLOVER COMMUNITY
SENIOR HOUSING
FOR CLOVER GROUP
178 TERRA COTTA AVENUE
CRYSTAL LAKE, ILLINOIS XXXXX

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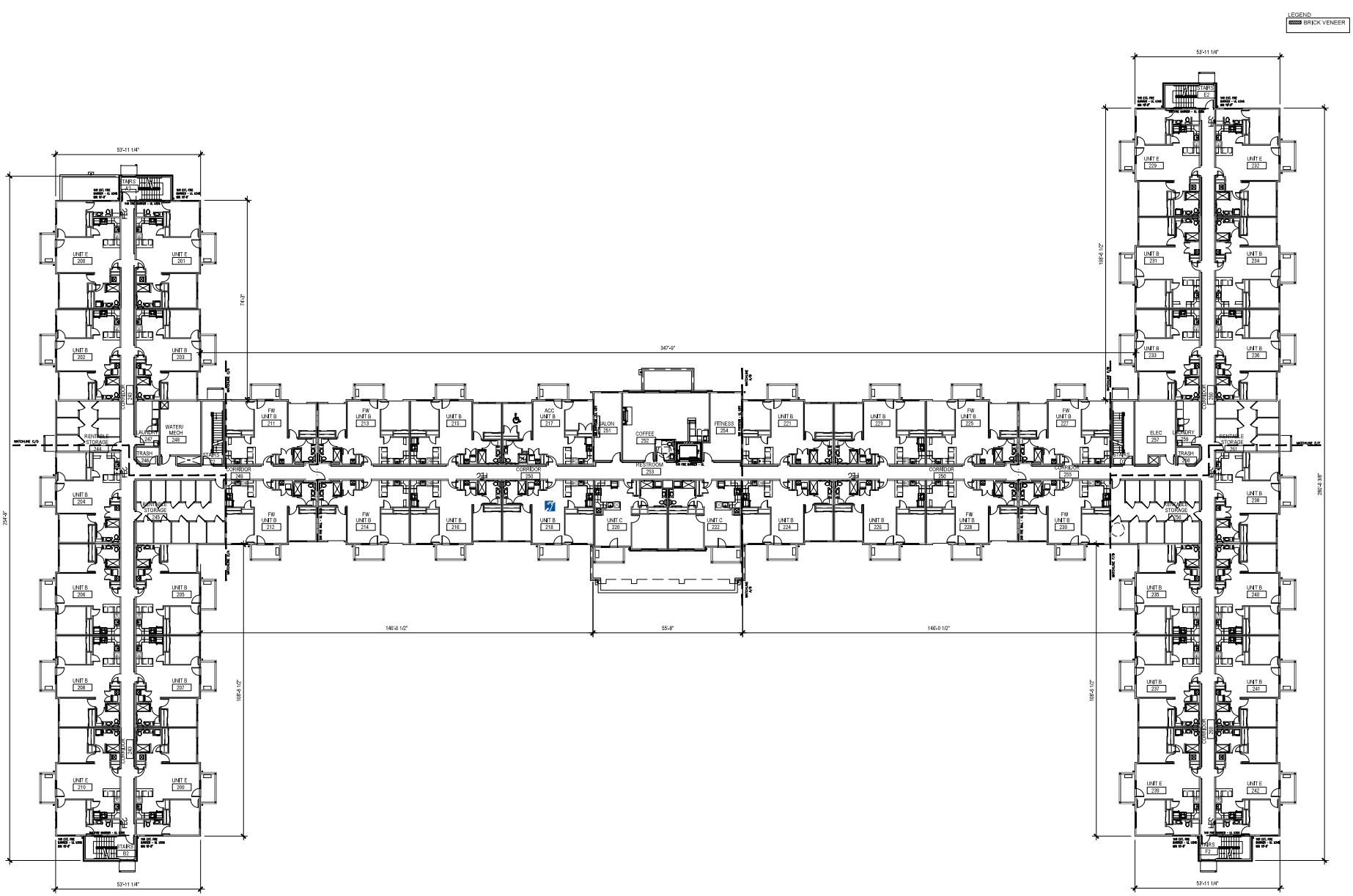
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DATE	DRAWN BY
02/04/2022	rrp
PROJECT NO. 21031	CHECKED BY KAS

OVERALL FIRST FLOOR PLAN

SHEET NO.
A-100



1 OVERALL SECOND FLOOR PLAN

1/16"=1'-0"

SEBREE ARCHITECTS
www.SEBREEarchitects.com
sebree@SEBREEarchitects.com
97 Dover Street
Suite 400
Avon, IN 46123
Phone: 317-272-7800
Fax: 317-272-7808

CONSULTANT

NEW CLOVER COMMUNITY
SENIOR HOUSING
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178 TERRA COTTA AVENUE
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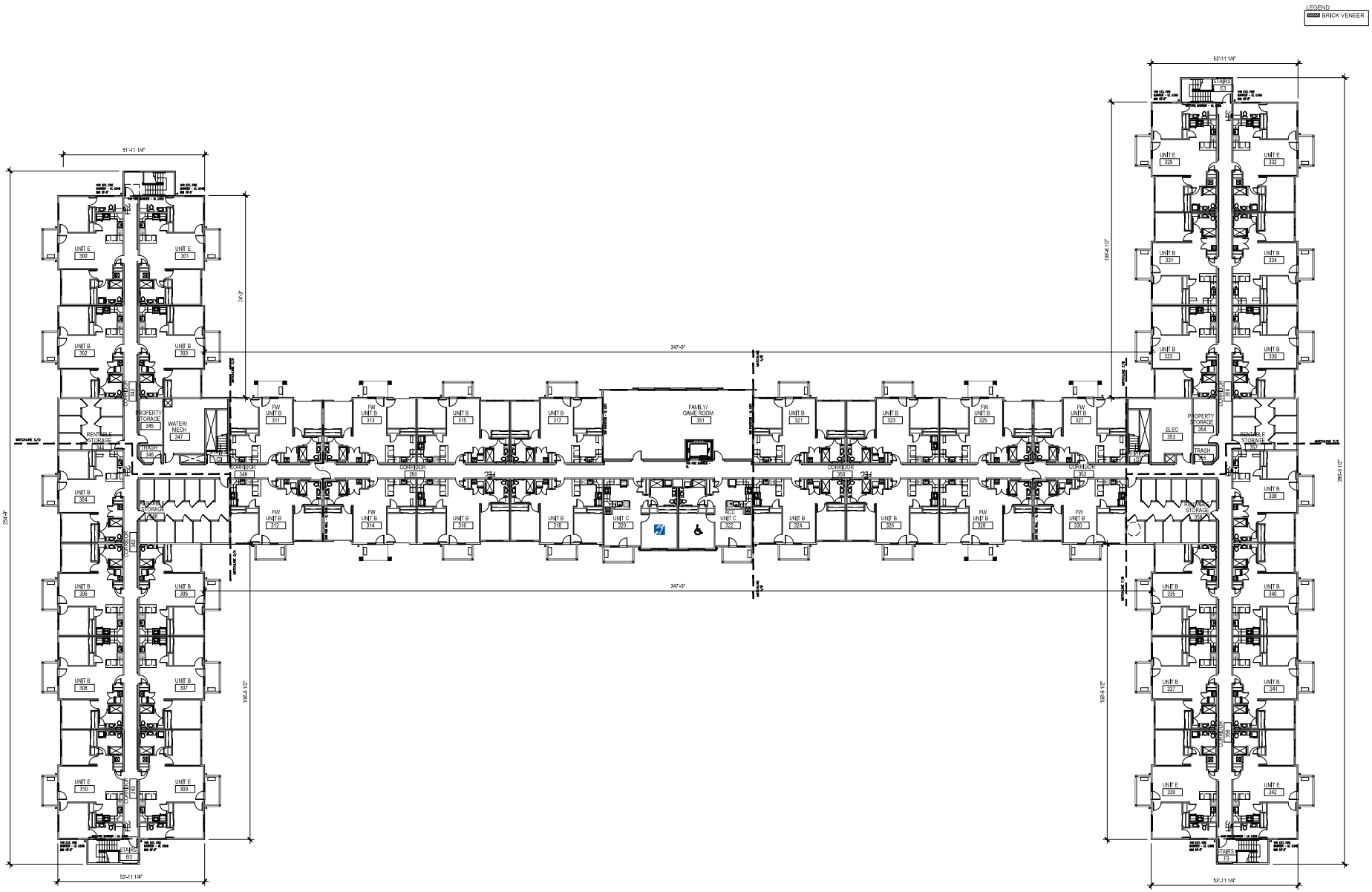
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OVERALL SECOND FLOOR PLAN

SHEET NO.
A-105



1 OVERALL THIRD FLOOR PLAN

1/16"=1'-0"

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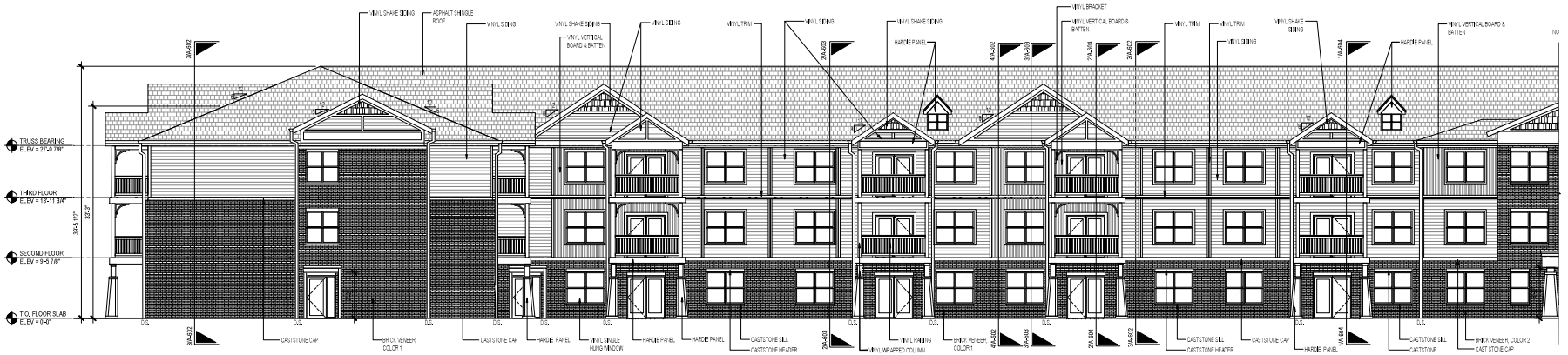
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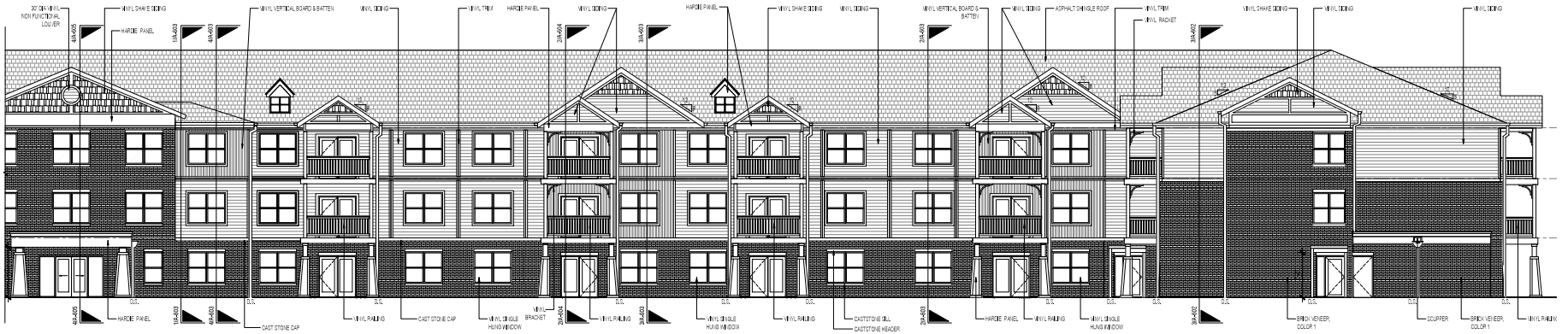
OVERALL THIRD FLOOR PLAN

SHEET NO.
A-110



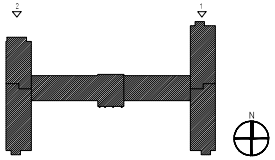
1 NORTH ELEVATION

1/8"=1'-0"



2 NORTH ELEVATION

1/8"=1'-0"



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EXTERIOR ELEVATIONS

SHEET NO.
A-200



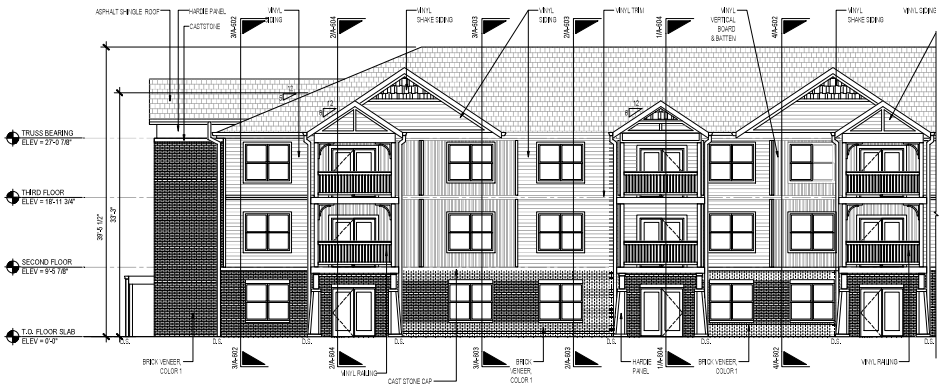
1 WEST ELEVATION

1/8" = 1'-0"



2 WEST ELEVATION

1/8" = 1'-0"



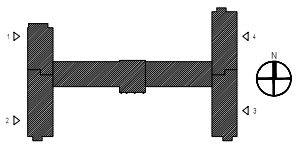
3 EAST ELEVATION

1/8" = 1'-0"



4 EAST ELEVATION

1/8" = 1'-0"



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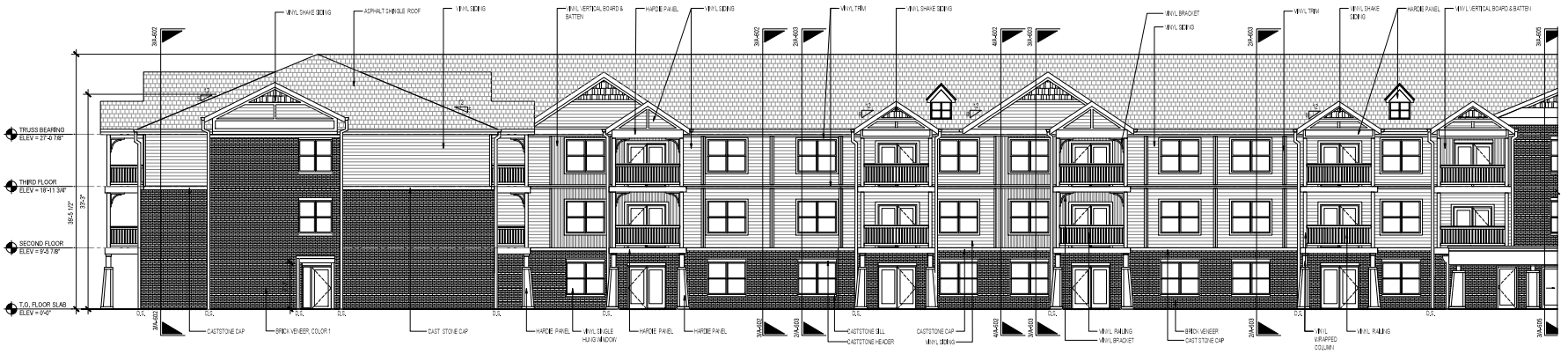
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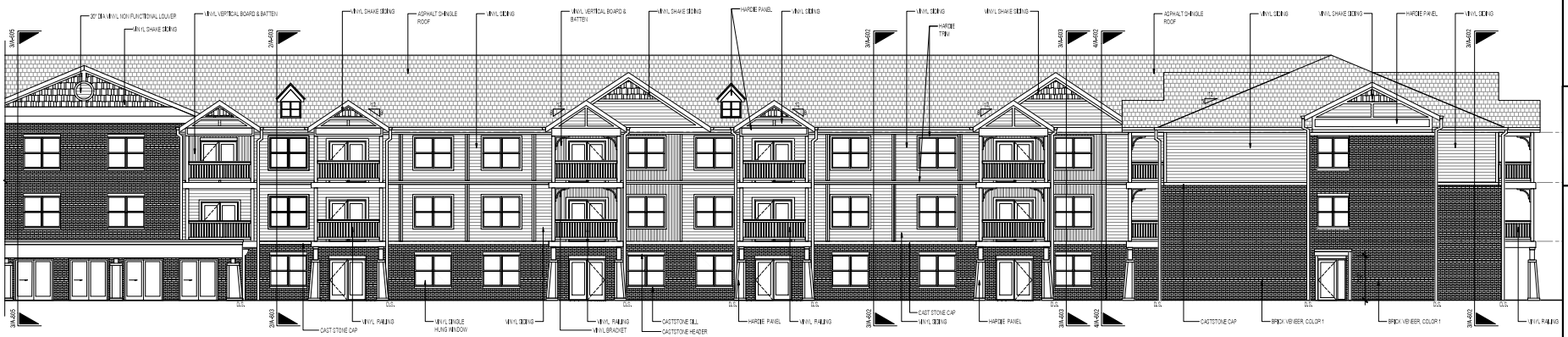
EXTERIOR ELEVATIONS

SHEET NO.
A-201



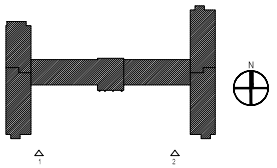
1 SOUTH ELEVATION

1/8"=1'-0"



2 SOUTH ELEVATION

1/8"=1'-0"



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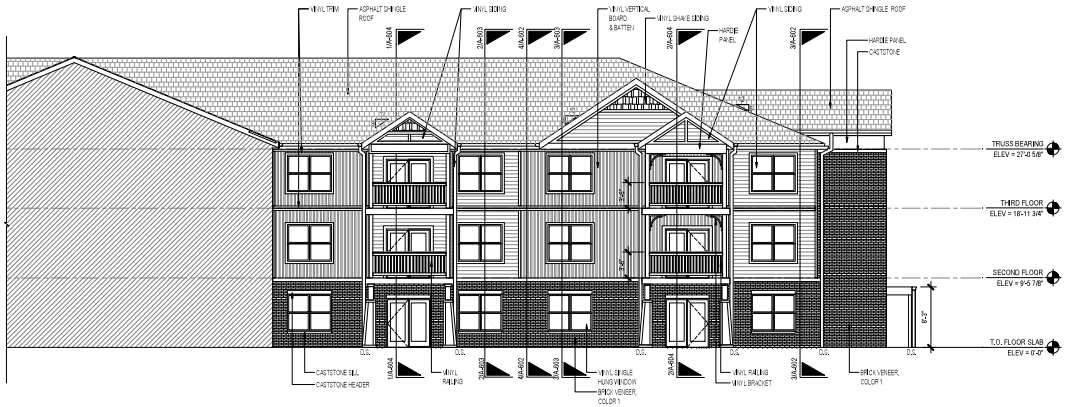
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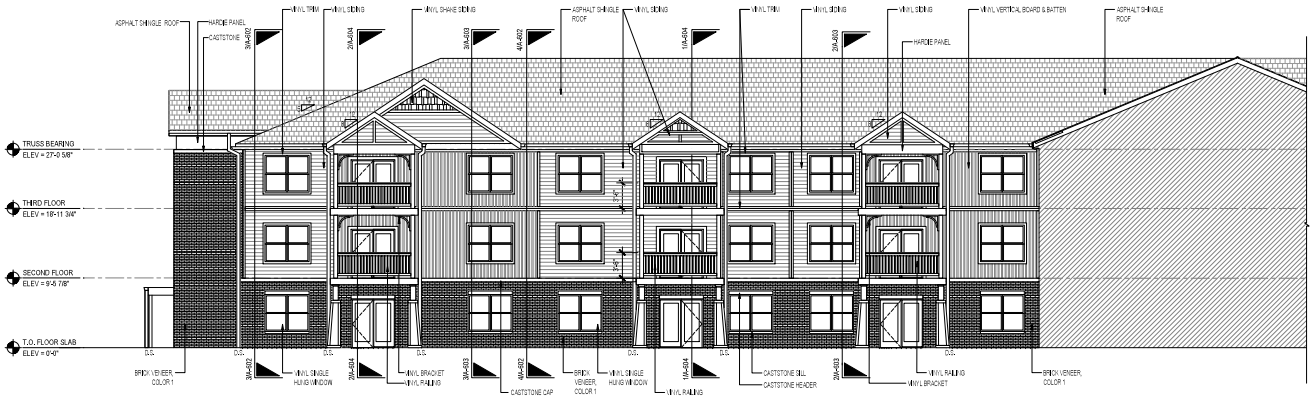
EXTERIOR ELEVATIONS

SHEET NO.
A-202



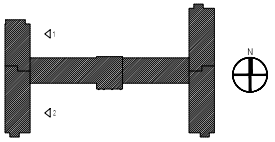
1 ELEVATION

1/8"=1'-0"



2 ELEVATION

1/8"=1'-0"



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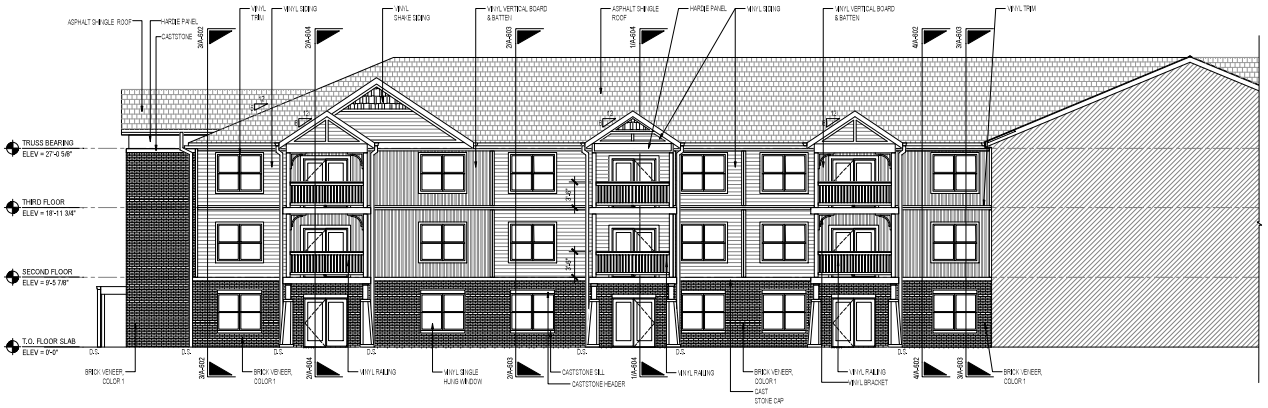
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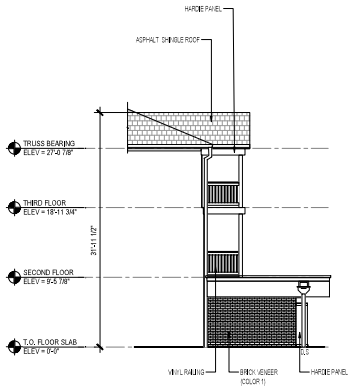
EXTERIOR ELEVATIONS

SHEET NO.
A-203



1 ELEVATION

1/8"=1'-0"



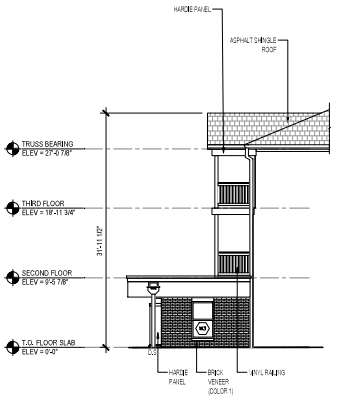
2 ELEVATION

1/8"=1'-0"



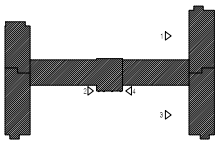
3 ELEVATION

1/8"=1'-0"



4 ELEVATION

1/8"=1'-0"



N

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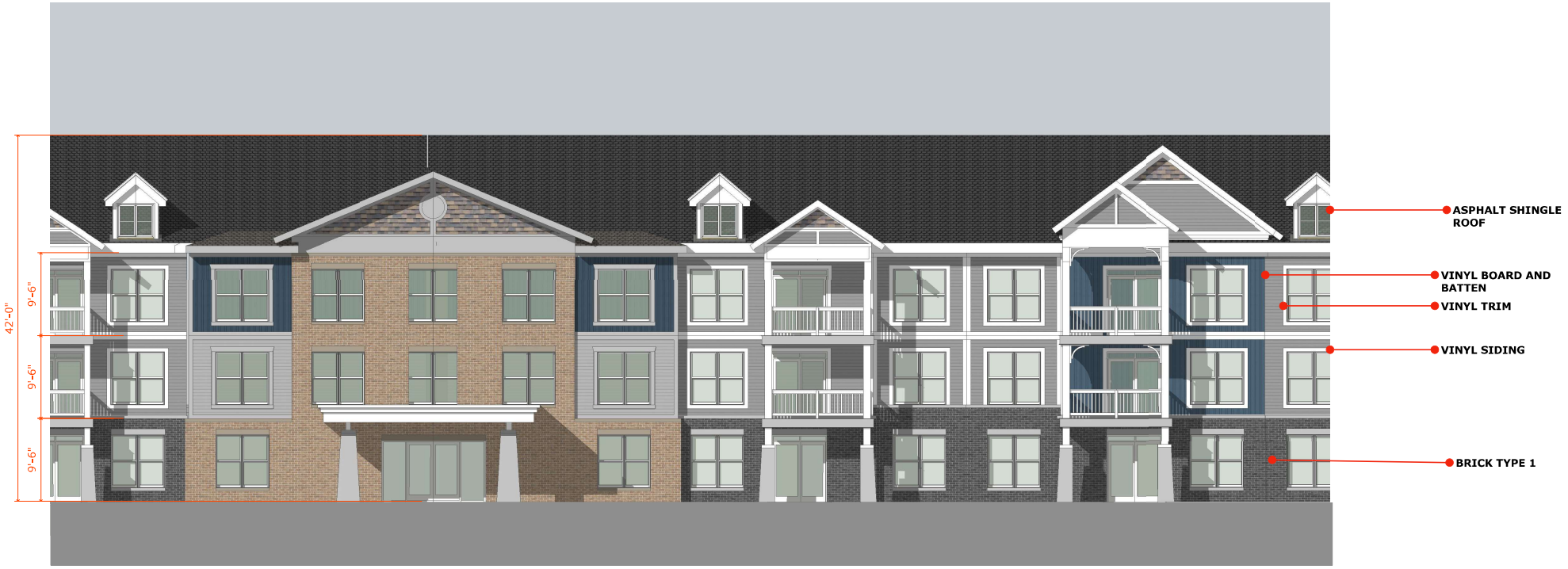
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EXTERIOR ELEVATIONS

SHEET NO.
A-204



NORTH/ FRONT ELEVATION
SCALE 1/16"=1"



ENLARGED PART FRONT ELEVATION
SCALE 3/16"=1"

CLOVER SENIOR LIVING, CRYSTAL LAKE IL

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SOUTH/ REAR ELEVATION
SCALE 1/16"=1"



WEST ELEVATION
SCALE 1/16"=1"



EAST ELEVATION
SCALE 1/16"=1"

CLOVER SENIOR LIVING, CRYSTAL LAKE IL

SEBREE ARCHITECTS



VIEW FROM EAST TERRA COTTA AVE LOOKING SOUTH

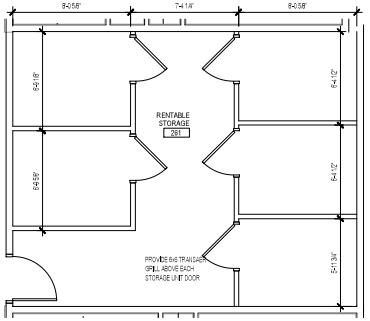


VIEW FROM EAST TERRA COTTA ROAD LOOKING EAST

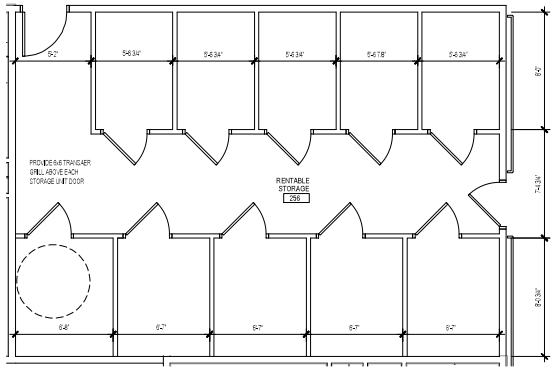
CLOVER SENIOR LIVING, CRYSTAL LAKE IL

SEBREE ARCHITECTS

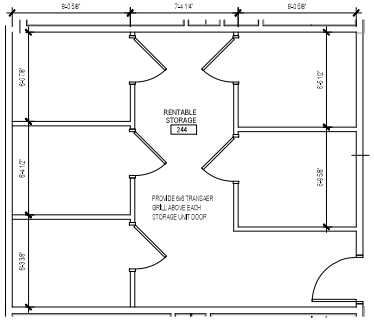
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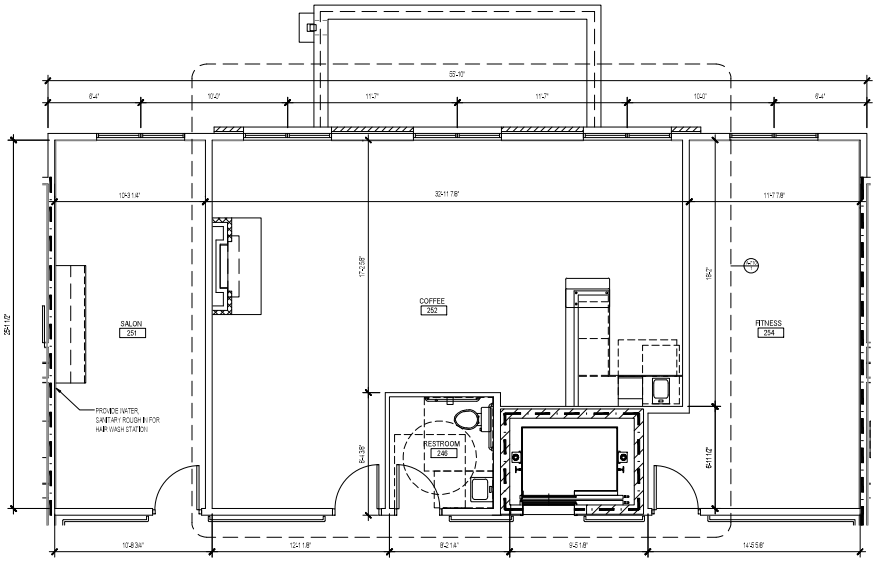
5 SECOND FLOOR
STORAGE AREA
1/4"=1'-0"



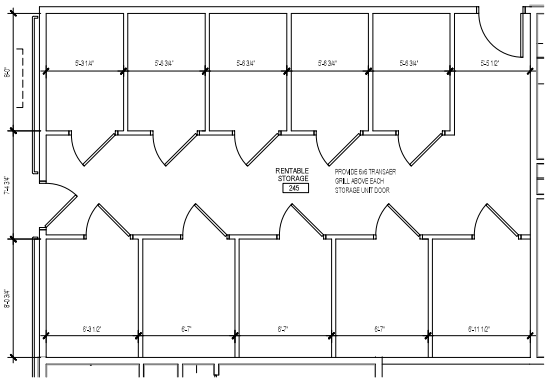
3 SECOND FLOOR
TRASH/STORAGE AREA
1/4"=1'-0"



2 SECOND FLOOR
STORAGE AREA
1/4"=1'-0"



4 SECOND FLOOR
ENLARGED PUBLIC COMMON AREA
1/4"=1'-0"



1 SECOND FLOOR
TRASH/STORAGE AREA
1/4"=1'-0"

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sebree@SEBREEarchitects.com
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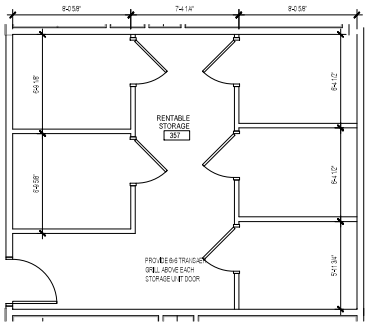
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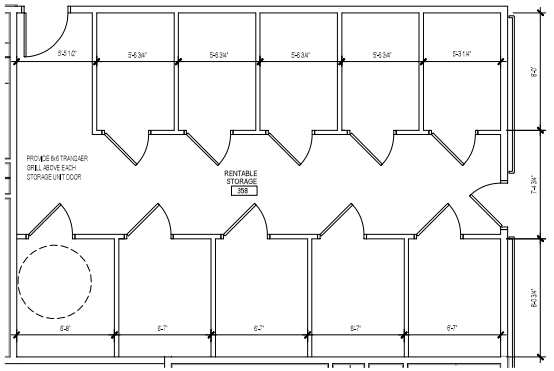
ENLARGED PLANS
COMMON AREAS

SHEET NO.
A-707

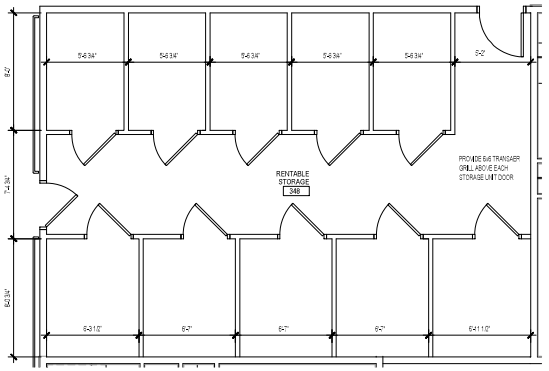
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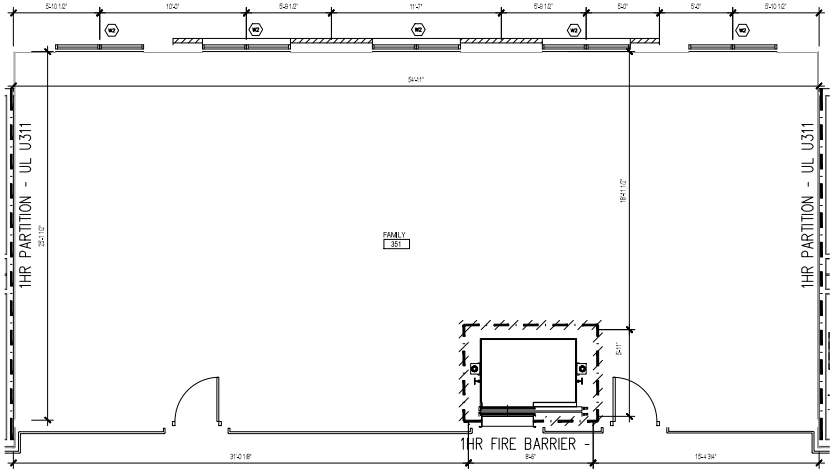
5 THIRD FLOOR
STORAGE AREA
1/4"=1'-0"



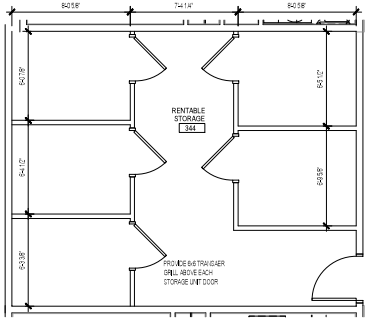
3 THIRD FLOOR
TRASH/STORAGE AREA
1/4"=1'-0"



2 THIRD FLOOR
MECHANICAL/STORAGE AREA
1/4"=1'-0"



4 THIRD FLOOR
ENLARGED PUBLIC COMMON AREA
1/4"=1'-0"



1 THIRD FLOOR
TRASH/STORAGE AREA
1/4"=1'-0"

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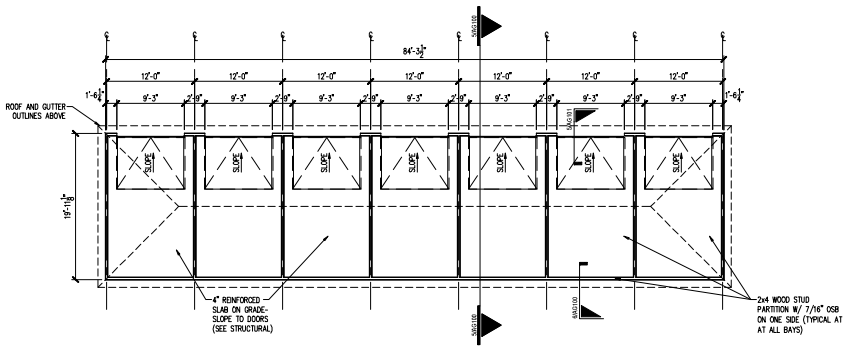
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COMMON AREAS

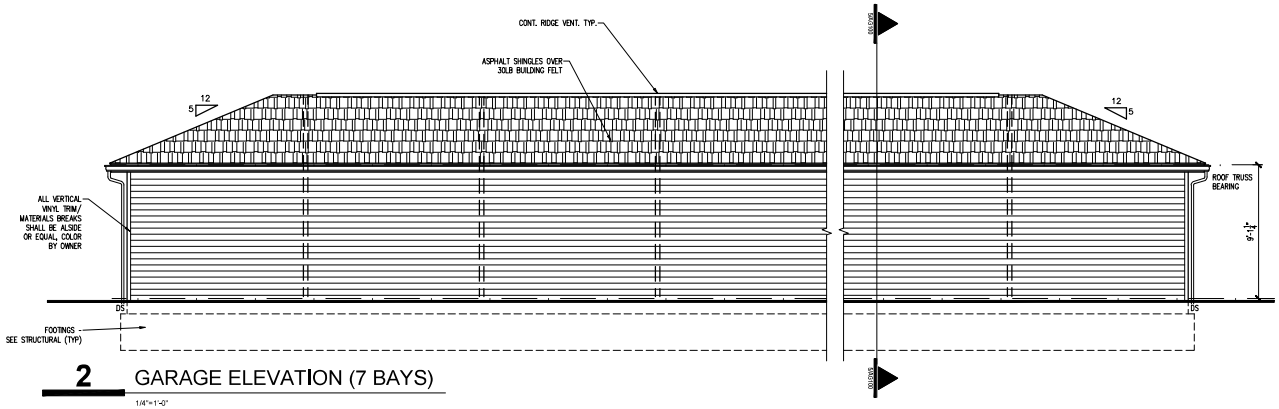
SHEET NO.
A-708



1 FLOOR PLAN: GARAGE (7 BAYS)

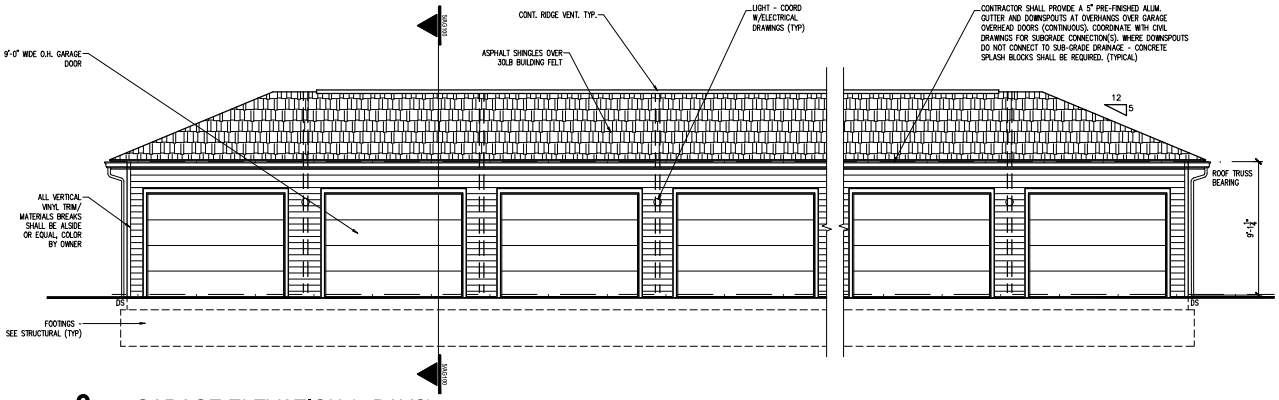
1/8" = 1'-0"

NOTE:
1. COORDINATE WITH ELECTRICAL DRAWINGS FOR EXTENTS OF LIGHTING AND POWER REQUIREMENTS NOT SHOWN HERE FOR CLARITY.
2. CONTRACTOR TO REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL STRUCTURAL AND ARCHITECTURAL DETAIL AND NOTS NOT SHOWN HERE FOR CLARITY.
3. REFER TO CIVIL DRAWINGS FOR NUMBER OF GARAGE BUILDINGS AND FINAL LOCATIONS.



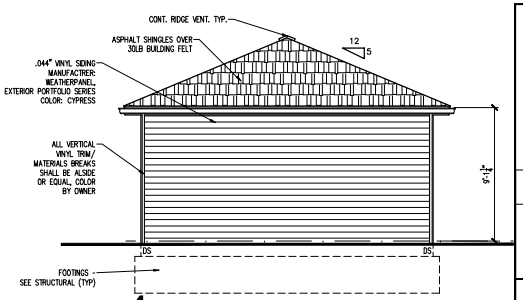
2 GARAGE ELEVATION (7 BAYS)

1/4" = 1'-0"



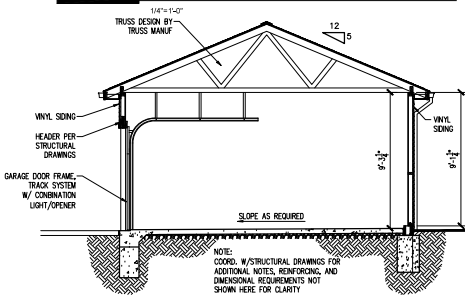
3 GARAGE ELEVATION (7 BAYS)

1/4" = 1'-0"



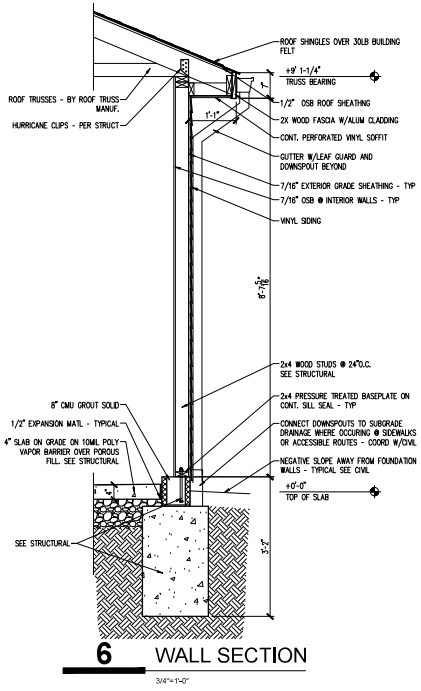
4 GARAGE ELEVATION (7 BAYS)

1/4" = 1'-0"



5 GARAGE BUILDING SECTION

1/4" = 1'-0"



6 WALL SECTION

3/4" = 1'-0"

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sebree@SEBREEarchitects.com
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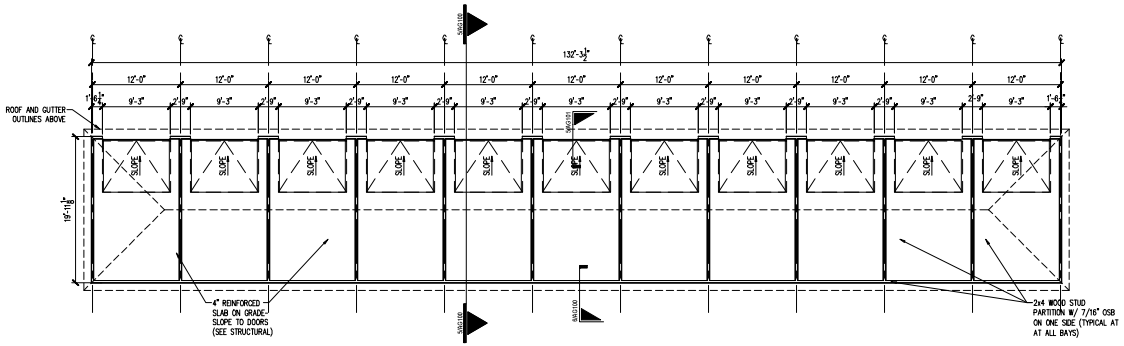
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9 BAY GARAGE PLAN, ELEVATIONS AND SECTIONS

SHEET NO.

AG100

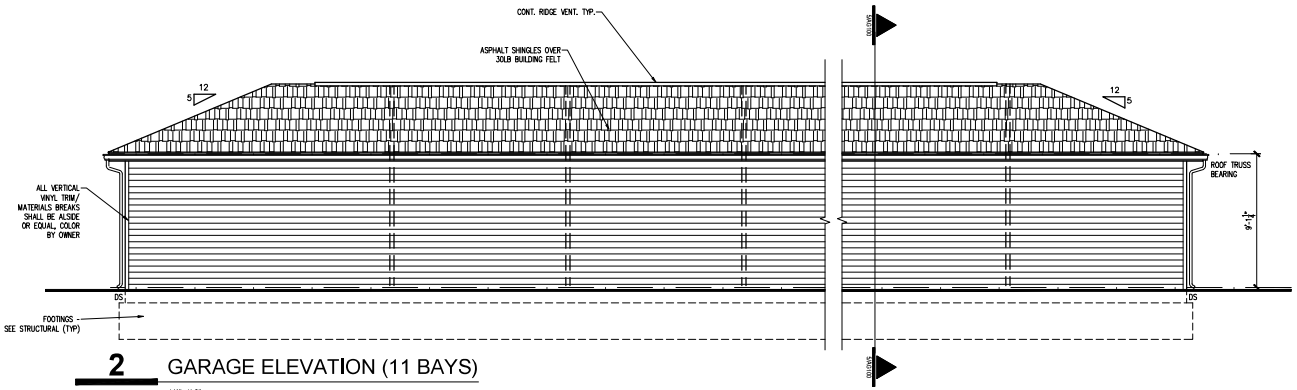
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1 FLOOR PLAN: GARAGE (11 BAYS)

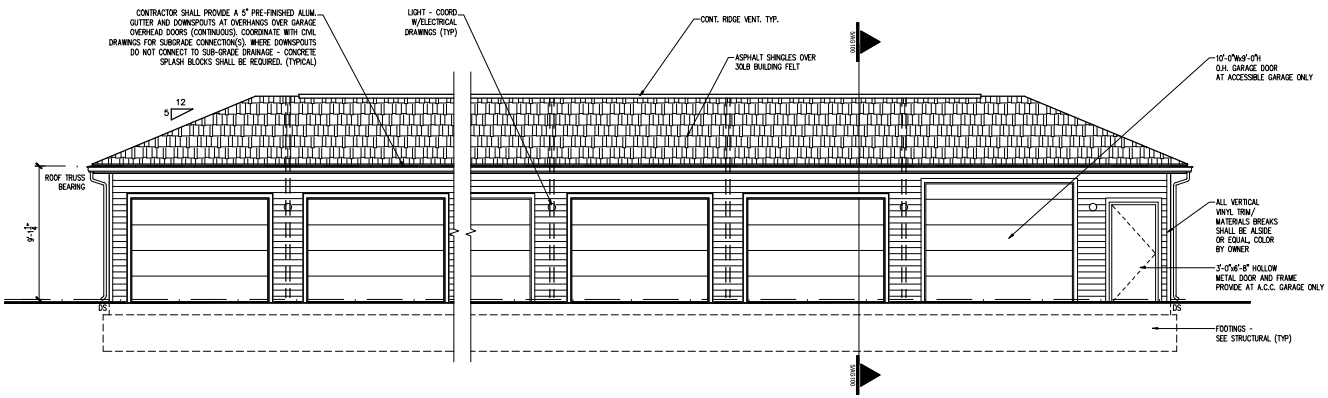
1/8"=1'-0"

NOTE:
1. COORDINATE WITH ELECTRICAL DRAWINGS FOR EXTENTS OF LIGHTING AND POWER REQUIREMENTS NOT SHOWN HERE FOR CLARITY.
2. CONTRACTOR TO REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL STRUCTURAL AND ARCHITECTURAL DETAIL AND NOTS NOT SHOWN HERE FOR CLARITY.
3. REFER TO CIVIL DRAWINGS FOR NUMBER OF GARAGE BUILDINGS AND FINAL LOCATIONS.



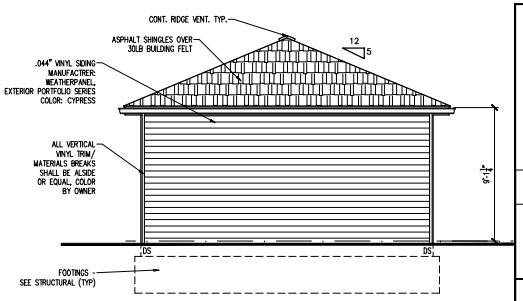
2 GARAGE ELEVATION (11 BAYS)

1/4"=1'-0"



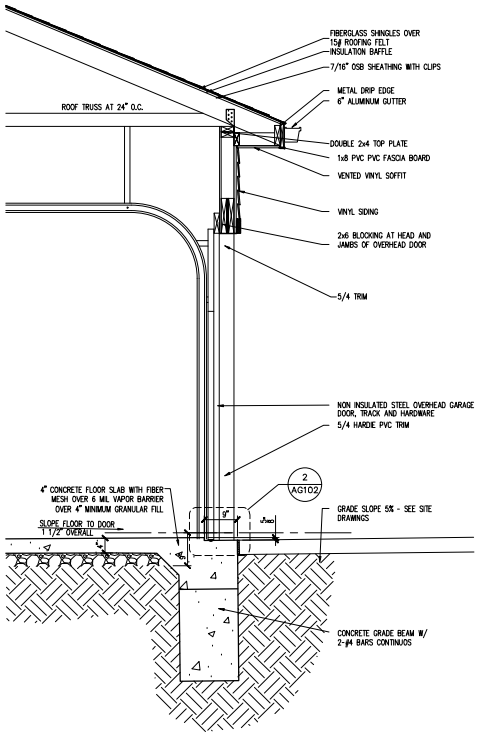
3 GARAGE ELEVATION (11 BAYS)

1/4"=1'-0"



4 GARAGE ELEVATION (11 BAYS)

1/4"=1'-0"



5 WALL SECTION

3/4"=1'-0"

SEBREE ARCHITECTS
www.SEBREEarchitects.com
sebree@SEBREEarchitects.com
97 Dover Street
Suite 400
Avon, IN 46123
Phone: 317-272-7800
Fax: 317-272-7808

CONSULTANT

CERTIFIED BY

NO.	DATE	BY	DESCRIPTION

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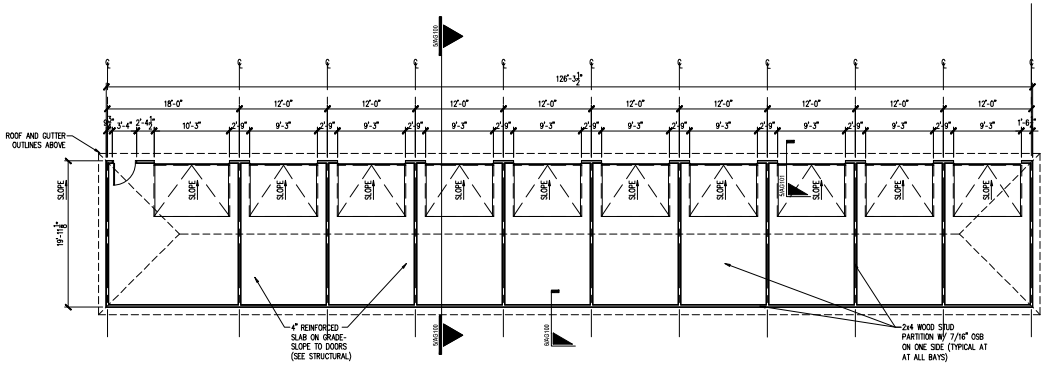
DATE	DRAWN BY
	rrp
PROJECT NO.	CHECKED BY
	KAS

10 BAY GARAGE PLAN, ELEVATIONS AND SECTIONS

SHEET NO.

AG101

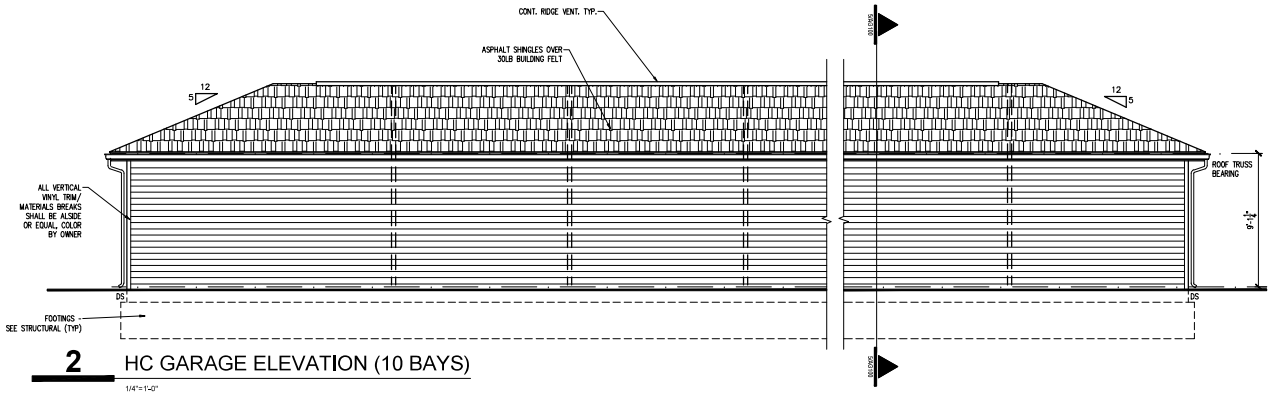
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1 FLOOR PLAN: HC GARAGE (10 BAYS)

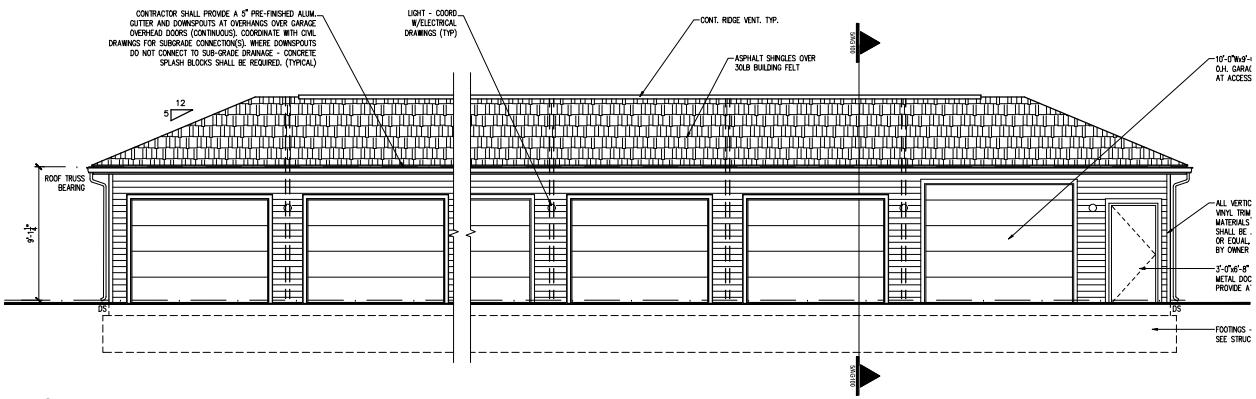
1/8"=1'-0"

NOTE:
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2. CONTRACTOR TO REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL STRUCTURAL AND ARCHITECTURAL DETAIL AND NOTS NOT SHOWN HERE FOR CLARITY.
3. REFER TO CIVIL DRAWINGS FOR NUMBER OF GARAGE BUILDINGS AND FINAL LOCATIONS.



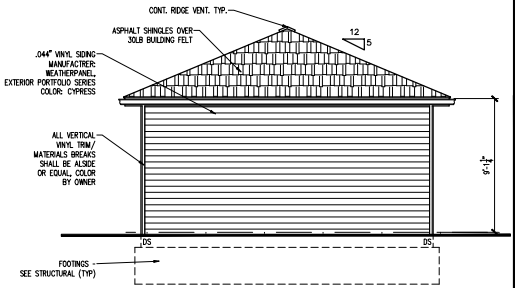
2 HC GARAGE ELEVATION (10 BAYS)

1/4"=1'-0"



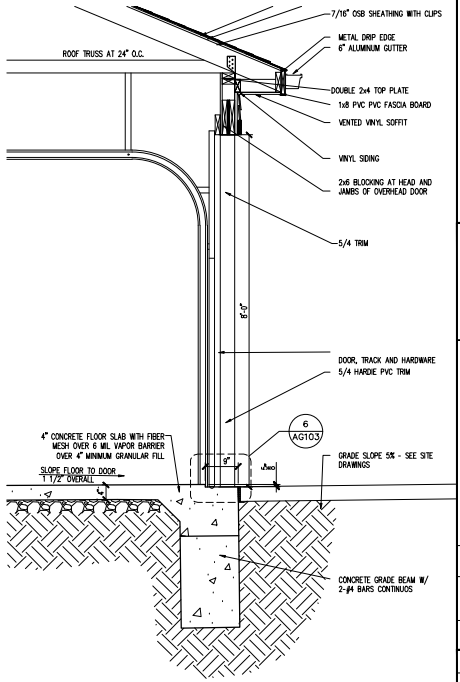
3 HC GARAGE ELEVATION (10 BAYS)

1/4"=1'-0"



4 GARAGE ELEVATION (10 BAYS)

1/4"=1'-0"



5 HC DOOR SECTION

3/4"=1'-0"

SEBREE
ARCHITECTS
www.SEBREEarchitects.com
sebree@SEBREEarchitects.com
97 Dover Street
Suite 400
Avon, IN 46123
Phone: 317-272-7800
Fax: 317-272-7808

CONSULTANT

CERTIFIED BY

NO.	DATE	BY	DESCRIPTION

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DATE	DRAWN BY: rrp
PROJECT NO.	CHECKED BY: KAS

9 BAY ACCESSIBLE GARAGE PLAN, ELEVS. AND SECTIONS

SHEET NO.
AG102

f ..\P1040 title.dwg

CLOVER COMMUNITIES CRYSTAL LAKE LLC

731 EAST TERRA COTTA AVENUE (S.R. 176)

(PARCEL ID: 14-34-301-048)

CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS 60014

FINAL PUD SITE PLAN SUBMITTAL 1 - 5/11/2022

OWNER/APPLICANT

CLOVER CONSTRUCTION
348 HARRIS HILL ROAD
WILLIAMSVILLE, NY, 14221
CONTACT: BETH ERNAT
734-346-0246

ENGINEER/SURVEYOR/LANDSCAPE ARCH.

MIDWESTERN CONSULTING, LLC
3815 PLAZA DR.
ANN ARBOR, MI 48108
CONTACT: JEREMY MATTHEI
734-332-5317

ARCHITECT

SEBREE ARCHITECTS
97 DOVER ST., SUITE 400
AVON, IN 46123
CONTACT: RALPH PITMAN JR.
317-272-7800

PROJECT NARRATIVE

THIS CLOVER DEVELOPMENT PROJECT CONSISTS OF THE PROPERTY LOCATED AT THE SOUTHEASTERN CORNER OF ILLINOIS STATE ROUTE 176 AND TERRA COTTA ROAD, IN THE CITY OF CRYSTAL LAKE, ILLINOIS.

THE 8.93 ACRE SITE IS CURRENTLY ZONED B-2-PUD (GENERAL COMMERCIAL), AND IS PROPOSED TO BE REZONED TO R-3-PUD (MULTIFAMILY RESIDENTIAL) WITH DENSITY AND MINIMUM PARKING WAIVERS, TO ALLOW FOR THE CONSTRUCTION OF A 3-STORY, 124-UNIT SENIOR INDEPENDENT LIVING APARTMENT FACILITY. PLEASE SEE SHEET C2.0 FOR A FULL SITE DATA CHART OUTLINING THE MORE DETAILED SITE COMPLIANCE INFORMATION.

THE PROJECT WILL CONSTRUCT 40 ENCLOSED GARAGE PARKING SPACES, AND 84 SURFACE PARKING SPACES FOR A TOTAL OF 124 SPACES, WHICH CLOVER HOUSING HAS FOUND TO BE ADEQUATE FOR THEIR DEVELOPMENTS IN OTHER COMMUNITIES. AN ADDITIONAL 21 DEFERRED SPACES HAVE BEEN LAID OUT ON THE SOUTH SIDE OF THE SITE AND INCLUDED IN STORMWATER MANAGEMENT CALCULATIONS TO BE CONSTRUCTED IF NECESSARY.

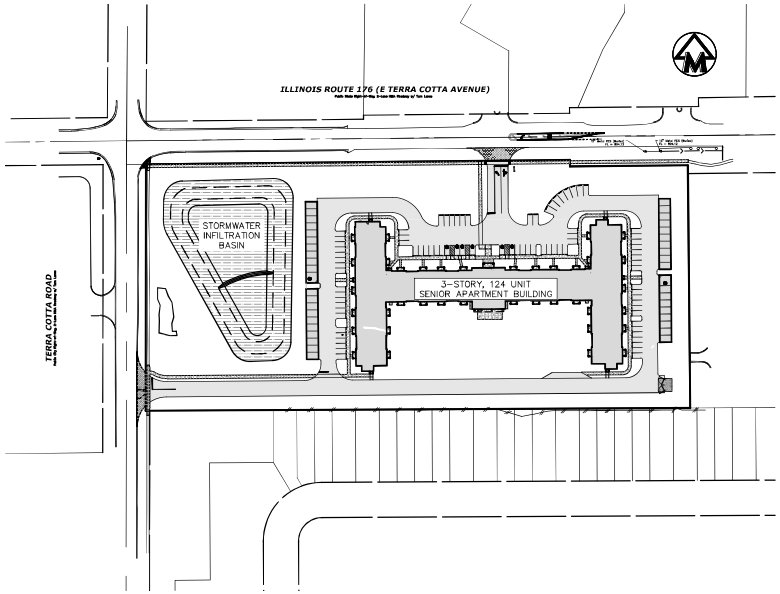
ADDITIONALLY A SITE ALTERNATE ALTERNATE IS SHOWN ON C2.1 TO INDICATE THAT A TOTAL OF 265 PARKING SPACES COULD BE CONSTRUCTED ON THE SITE IF NECESSARY IN THE FUTURE, SHOULD THIS EVER BE REQUIRED. ADDITIONAL STORMWATER AND LANDSCAPING WOULD BE REQUIRED WITH A SITE PLAN AMENDMENT IF THAT OCCASION WERE TO OCCUR.

SITE ACCESS WILL BE BY A FULL DRIVEWAY CONNECTION TO STATE ROUTE 176, AND A PARTIAL DRIVEWAY CONNECTION TO TERRA COTTA ROAD, IN WHICH LEFT TURNS WILL NOT BE ALLOWED FROM SOUTHBOUND TERRA COTTA ROAD INTO THE SITE, BUT ALL OTHER MOVEMENTS WILL BE ALLOWED.

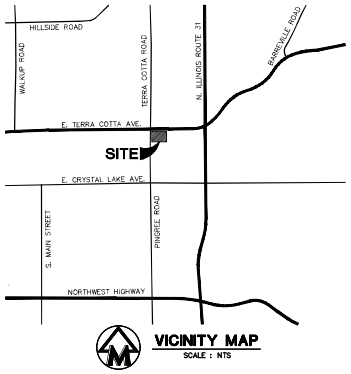
AS ADEQUATELY DEEP STORM SEWERS ARE NOT AVAILABLE IN EITHER ADJACENT ROADWAY, THE STORMWATER BASIN IS BEING OVERSIZED AND DESIGNED TO INFILTRATE THE 100-YEAR STORM INTO THE EXISTING SITE SOILS. A SURFACE OVERFLOW PATH FROM THE BASIN TO THE ROADWAY, AVOIDING THE BUILDING, IS INDICATED ON THE SITE GRADING AND STORMWATER PLANS. A NEW SWALE WITH PROTECTIVE GUARDRAIL WILL BE CONSTRUCTED ON THE SOUTH SIDE OF STATE ROUTE 176 TO DIVERT ROADWAY WATER FROM THE SITE (EXTENDING THE EXISTING SWALE CONSTRUCTED AT SUNRISE SENIOR LIVING). SEE THE STORMWATER CALCULATION SHEETS IN THE SET FOR FURTHER INFORMATION.

THE PROJECT WILL BE SERVED BY SANITARY SEWER LEADS CONNECTING TO THE PUBLIC SEWER IN STATE ROUTE 176, AND BY A NEW PUBLIC LOOPING WATER MAIN TO BE CONSTRUCTED AROUND THE SOUTH AND WEST SIDES OF THE BUILDING, CONNECTING TO THE STUB IN SUNRISE SENIOR LIVING AND TO THE LOOPED MAIN IN STATE ROUTE 176.

ALTHOUGH SIDEWALK ALREADY EXISTS ON TERRA COTTA ROAD, A NEW SIDEWALK WILL BE INSTALLED ALONG STATE ROUTE 176, AND A CONNECTOR SIDEWALK WILL BE PLACED BETWEEN THE FRONT DOOR AND THE WALK ON STATE ROUTE 176. ADDITIONALLY, NEW SIDEWALK RAMPS WILL BE INSTALLED AT THE SOUTHEAST CORNER OF TERRA COTTER/S.R. 176, AND NEW PEDESTRIAN SIGNALS WILL BE INSTALLED ACROSS THE SOUTH LEG OF THE INTERSECTION.



SITE MAP
SCALE : NTS



VICINITY MAP
SCALE : NTS

ALL WORK IN THE IDOT RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH:

- IDOT 2022 STANDARD SPECIFICATIONS FOR CONSTRUCTION
- IDOT SPECIAL PROVISIONS:
  PUBLIC CONVENEINCE AND SAFETY
  TEMPORARY INFORMATION SIGNING
  VEHICLE AN DEQUIPMENT WARNING LIGHTS
  WORK ZONE TRAFFIC CONTROL DEVICES

Sheet List Table

SHEET NUMBER	SHEET TITLE
C1.0	COVER SHEET
V1.0	TOPOGRAPHIC SURVEY
V1.1	BOUNDARY & LAND TITLE SURVEY
C1.1	SITE DEMOLITION PLAN
C1.2	TREE DATA TABLE
C2.0	SITE LAYOUT AND PAVING PLAN
C2.1	ALTERNATE SITE 265 PARKING SPACES
C2.2	SITE FIRE PROTECTION PLAN
C2.3	TRUCK TURNING MOVEMENTS
C3.0	GRADING PLAN
C3.1	CROSS-SECTIONS AT S.R. 176 RIGHT-OF-WAY
C3.2	UTILITY PLAN
C3.3	STORM BASIN AND STORM PROFILES 1
C3.4	STORM SEWER & CULVERT PROFILES 2
C3.5	ROOF LEADER & SANITARY LEAD PROFILES
C3.6	WATER MAIN PROFILE
C4.0	SITE DETAILS
C4.1	UTILITY DETAILS
C4.2	CRYSTAL LAKE SITE DETAILS
C4.3	CRYSTAL LAKE UTILITY DETAILS
C4.4	CONSTRUCTION SPECIFICATIONS
C4.5	CURB RAMP DETAILS
C4.6	IDOT GUARDRAIL DETAILS
C4.7	IDOT MISC. DETAILS
C4.8	IDOT TRAFFIC DETAILS 1
C4.9	IDOT TRAFFIC DETAILS 2
C4.10	IDOT TRAFFIC DETAILS 3
C4.11	IDOT DISTRICT TRAFFIC DETAILS
C5.0	EXISTING DEPRESSION PLAN
C5.1	PROPOSED DEPRESSION PLAN
C5.2	STORMWATER DEPRESSION FILL CALCULATIONS
C5.3	SURFACE FLOW & STORM PIPE SECTIONS & CALCULATIONS
C5.4	EXISTING DRAINAGE PLAN
C5.5	PROPOSED SITE DRAINAGE PLAN
C5.6	STORM WATER NARRATIVE & BASIN CALCULATIONS
C5.7	SOIL EROSION AND SEDIMENTATION CONTROL PLAN
C5.8	SOIL EROSION CONTROL DETAILS
C6.0	PHOTOMETRIC AND SITE LIGHTING PLAN
C7.0	TRAFFIC CONTROL PLAN
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE DETAILS
L1.2	LANDSCAPE ILLUSTRATIONS

PERMITS/APPROVALS REQUIRED

AGENCY:	PERMIT:	APPLIED:	APPROVED:
CITY OF CRYSTAL LAKE	PRELIMINARY SITE PLAN APPROVAL*	11/02/21, REV. 12/23/21, 01/14/22, 02/16/22	02/24/2022
CITY OF CRYSTAL LAKE CITY OF CRYSTAL LAKE	FINAL SITE PLAN APPROVAL* STORMWATER PERMIT	05/11/22	
CITY OF CRYSTAL LAKE	RIGHT-OF-WAY PERMIT		
CITY OF CRYSTAL LAKE	BUILDING PERMIT*		
ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT)	HIGHWAY PERMIT	11/17/21	
MCHENRY COUNTY SOIL & WATER CONS. DIST.	SOIL EROSION & SED. CONROL		

* CRYSTAL LAKE SITE PLAN APPROVAL TO INCLUDE REVIEW OF WATER MAINS, SANITARY SEWERS, SITE GRADING, AND SITE PAVING. CONSTRUCTION TO BE PERMITTED UNDER BUILDING PERMIT.

S.R. 176 TRAFFIC DATA

- SPEED LIMIT = 35 MPH
- ADT = 16,200 VEHICLES PER DAY

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

CLOVER COMMUNITIES CRYSTAL LLC

JOB No. 21216

REVISIONS:	REV. DATE
SITE PLAN SUBMITTAL 1	11/02/21
IDOT SUBMITTAL 1	11/17/21
SITE PLAN SUBMITTAL 4	02/16/22
FINAL PUD SITE PLAN SUBMITTAL 1	05/11/22

DATE: 5/11/2022
SHEET 1 OF 42
CADD: JBB
ENG: JAM
PM: ROW
TECH:
21216CV1.DWG

C1.0

MIDWESTERN CONSULTING
3815 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesterncnsulting.com
Land Development • Land Survey • Institutional • Municipal
Wireless Communications • Transportation • Landfill Services

RELEASED FOR:	DATE

LICENSED PROFESSIONAL ENGINEER
JEREMY A. MATTHEI
062-073442
OF ILLINOIS

JEREMY A. MATTHEI
IL P.E. #062.073442

M:\Civil\Jobs\Proj\21216\Site Plan\21216CV1.dwg, 5/11/2022 11:20 AM, Jeremy A. Matthei, C1.0 COVER SHEET, MCALC PDF.pc3
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ALTA/NSPS LAND TITLE SURVEY

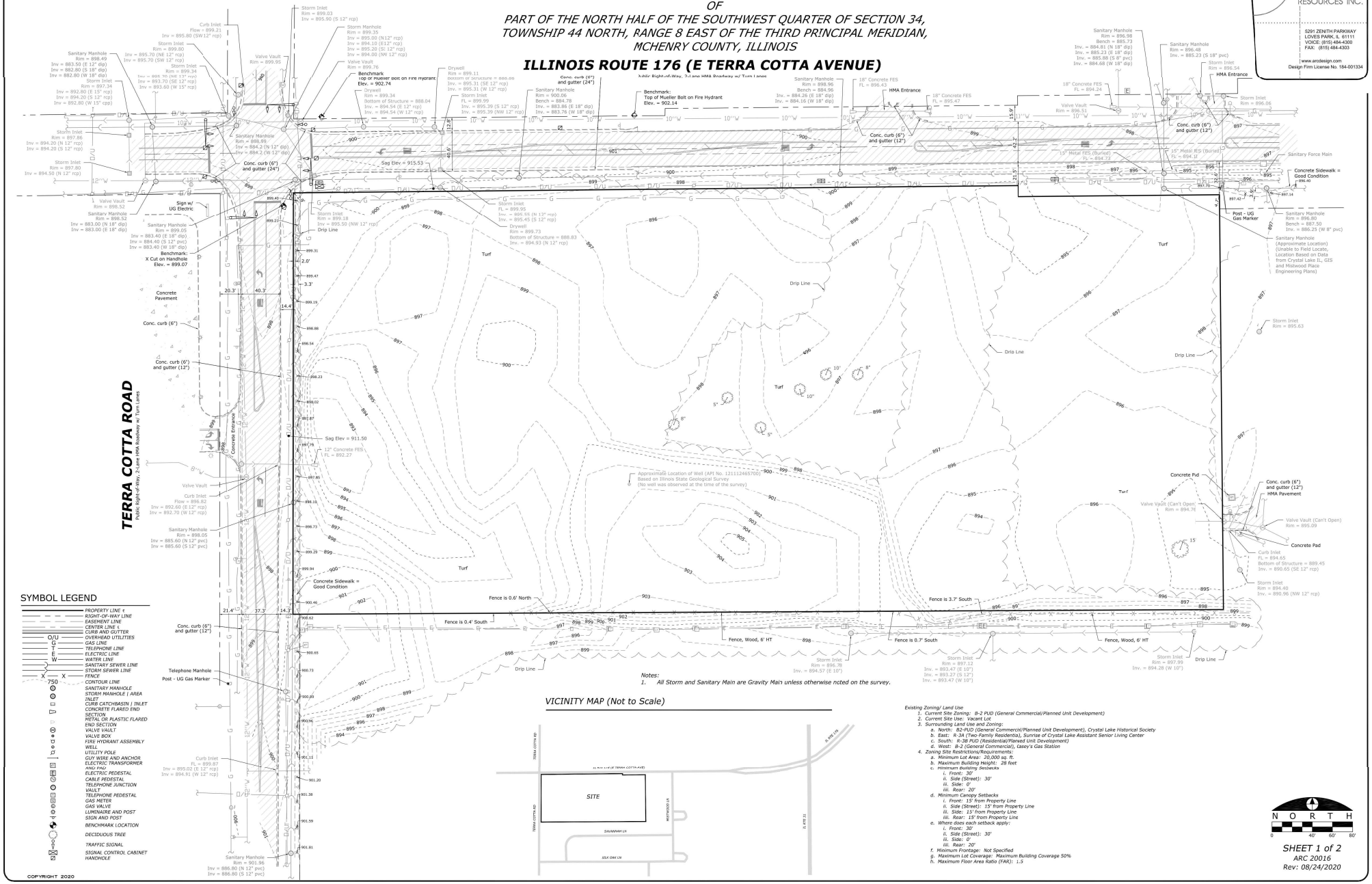
OF

PART OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, MCHENRY COUNTY, ILLINOIS

ILLINOIS ROUTE 176 (E TERRA COTTA AVENUE)

ARC DESIGN RESOURCES INC.

5291 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
www.arcdesign.com
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SYMBOL LEGEND

- PROPERTY LINE ℄
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- CENTER LINE ℄
- CURB AND GUTTER
- O/U OVERHEAD UTILITIES
- G GAS LINE
- T TELEPHONE LINE
- E ELECTRIC LINE
- W WATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- X FENCE
- 750 CONTOUR LINE
- SANITARY MANHOLE
- STORM MANHOLE / AREA INLET
- CURB CATCHBASIN / INLET
- CONCRETE FLARED END SECTION
- METAL OR PLASTIC FLARED END SECTION
- VALVE VAULT
- VALVE BOX
- FIRE HYDRANT ASSEMBLY
- WELL
- UTILITY POLE
- GUY WIRE AND ANCHOR
- ELECTRIC TRANSFORMER AND PAD
- ELECTRIC PEDESTAL
- CABLE PEDESTAL
- TELEPHONE JUNCTION VAULT
- TELEPHONE PEDESTAL
- GAS METER
- GAS VALVE
- LUMINAIRE AND POST
- SIGN AND POST
- BENCHMARK LOCATION
- DECIDUOUS TREE
- TRAFFIC SIGNAL
- SIGNAL CONTROL CABINET
- HANDHOLE

Notes:

1. *All Storm and Sanitary Main are Gravity Main unless otherwise noted on the survey.*

VICINITY MAP (Not to Scale)

Existing Zoning/ Land Use

1. *Current Site Zoning: B-2 PUD (General Commercial/Planned Unit Development)*
2. *Current Site Use: Vacant Lot*
3. *Surrounding Land Use and Zoning:*
   a. *North: B2-PUD (General Commercial/Planned Unit Development), Crystal Lake Historical Society*
   b. *East: R-3A (Two-Family Residential), Sunrise of Crystal Lake Assistant Senior Living Center*
   c. *South: R-3B PUD (Residential/Planed Unit Development)*
   d. *West: B-2 (General Commercial), Casey's Gas Station*
4. *Zoning Site Restrictions/Requirements:*
   a. *Minimum Lot Area: 20,000 sq. ft.*
   b. *Maximum Building Height: 28 feet*
   c. *Minimum Building Setbacks*
      i. *Front: 30'*
      ii. *Side (Street): 30'*
      iii. *Side: 0'*
      iiii. *Rear: 20'*
   d. *Minimum Canopy Setbacks*
      i. *Front: 15' from Property Line*
      ii. *Side (Street): 15' from Property Line*
      iii. *Side: 15' from Property Line*
      iiii. *Rear: 15' from Property Line*
   e. *Where does each setback apply:*
      i. *Front: 30'*
      ii. *Side (Street): 30'*
      iii. *Side: 0'*
      iiii. *Rear: 20'*
   f. *Minimum Frontage: Not Specified*
   g. *Maximum Lot Coverage: Maximum Building Coverage 50%*
   h. *Maximum Floor Area Ratio (FAR): 1.5*

N O R T H
0 40' 60' 80'

SHEET 1 of 2
ARC 20016
Rev: 08/24/2020

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ALTA/NSPS LAND TITLE SURVEY

OF

PART OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, MCHENRY COUNTY, ILLINOIS

ARC DESIGN RESOURCES INC.
5291 ZENITH PARKWAY
LOVES PARK, IL 61111
VOICE: (815) 484-4300
FAX: (815) 484-4303
www.ardesign.com
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SCHEDULE B, PART II
EXCEPTIONS

1. Rights or claims of parties in possession not shown by the public records. **(Not a survey matter.)**
2. Easements or claims of easements, not shown by Public Records. **(No parole evidence was collected as a part of this survey. Therefore we have no knowledge of any any such easements or claims thereof.)**
3. Any encroachments, encumbrance, violation, variation, or adverse circumstance affecting Title that would be disclosed by an accurate survey of the Land pursuant to the "Minimum Standards of Practice," 68 III Admin Code, Sec. 1270.56(i)(6)(P) for residential property or the ALTA/NSPS land title survey standards for commercial/industrial property. **(Please refer to the survey.)**
4. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records. **(Not a survey matter.)**
5. Taxes, or special assessments, if any, not shown as existing liens by the Public Records. **(Not a survey matter.)**
6. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I-Requirements are met. **(Not a survey matter.)**
7. General taxes and assessments for the year 2020 2nd Installment, 2021 and subsequent years which are not yet due and payable. **(Not a survey matter.)**

   Tax Identification no.: 14-34-301-048

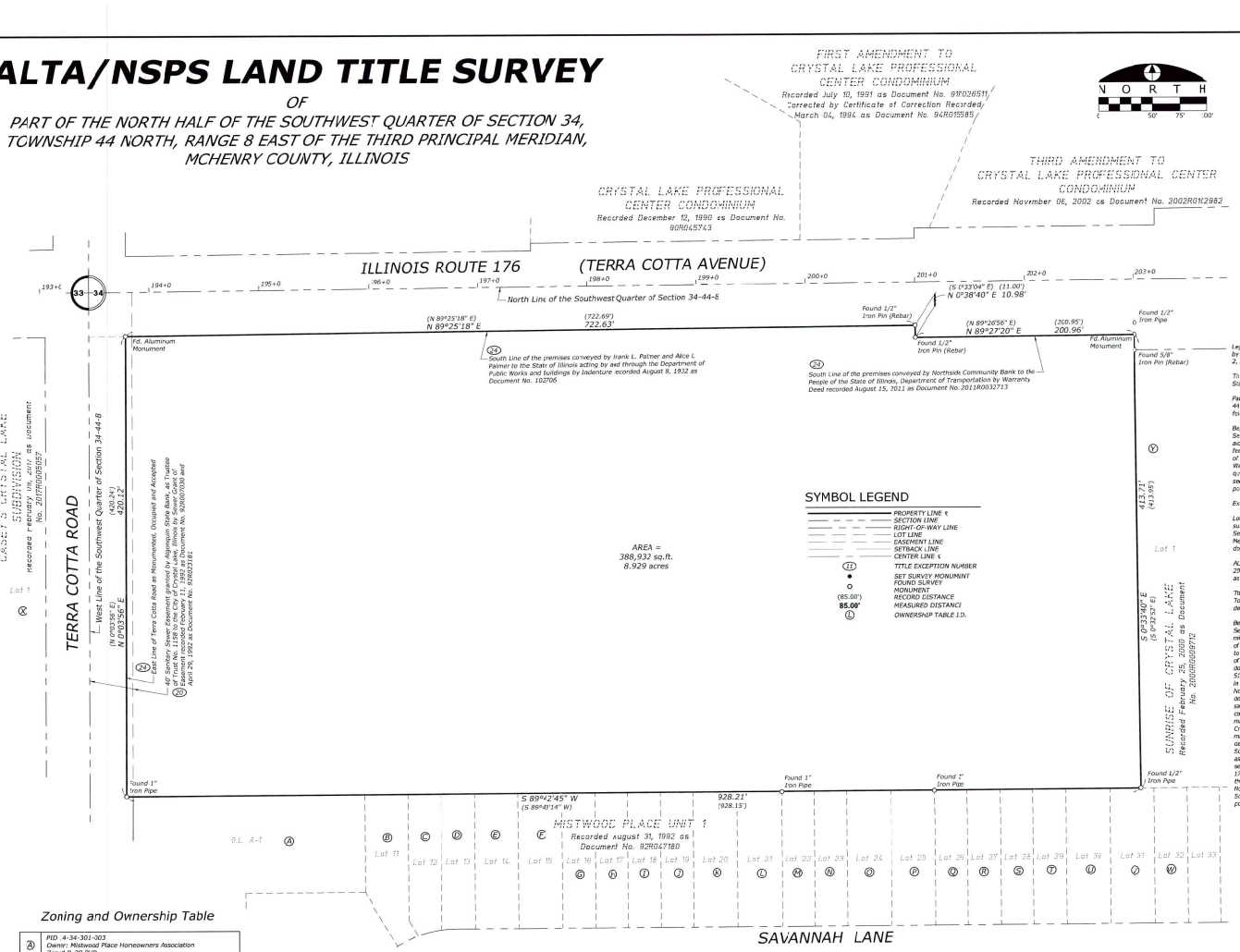
   Note for informational purposes 2020 taxes:

   1st Installment in the amount of $8,991.42 with a status of PAID. (Due Date 46/07/2021)
   2nd Installment in the amount of $8,991.42 with a status of DUE. (Due Date 09/07/2021)

   Note: If applicable, an original tax bill must be presented if taxes are to be paid at time of closing.
8. We find no outstanding voluntary liens of record affecting subject property. An inquiry should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any security interest in the subject property. **(Not a survey matter.)**
9. Terms, powers, provisions and limitations of the Limited Liability Company Operating Agreement under which title to the land is held. **(Not a survey matter.)**
10. Evidence that Articles of Organization have been filed with the Secretary of State of Illinois should be furnished for the following Limited Liability Company: Terra Cotta Development, LLC **(Not a survey matter.)**
11. The Operating Agreement for Terra Cotta Development, LLC, a Limited Liability Company, together with all amendments thereto, should be furnished and this commitment is subject to such further exceptions, if any, as may then be deemed necessary. **(Not a survey matter.)**
12. We should be furnished evidence that no event of dissolution has occurred for Terra Cotta Development, LLC, a Limited Liability Company. **(Not a survey matter.)**
13. Rights of the partners comprising the firm of Lancaster Land L.P., and of all persons claiming thereunder. **(Not a survey matter.)**
14. The partnership agreement establishing the partnership of Lancaster Land L.I., together with all amendments thereto, properly identified in writing by all the partners of the agreement under which the partnership acquires and holds title, should be furnished; and this commitment is subject to such further exceptions, if any, as may then be deemed necessary. Note: this commitment is subject to such further exceptions, if any, which may be disclosed after a name search has been made for judgments and other matters against all the members of the partnership of Lancaster Land L.P. **(Not a survey matter.)**
15. Any lien, or right to a lien in favor of a property manager employed to manage the land. Note: we should be furnished either (a) an affidavit from the owner indicating that there is no property manager employed; or (b) a final lien waiver from the property manager acting on behalf of the owner. **(Not a survey matter.)**
16. Existing unrecorded eases, if any, and rights of parties in possession under such unrecorded leases. **(Not a survey matter.)**
17. Note: If any contemplated deed of conveyance of the land is exempt from the operation of the provisions of paragraph 1(a) of 765 ILCS 205/1, the plat act, such deed should be accompanied by a proper affidavit establishing to the satisfaction of the recorder of deeds of McHenry County, Illinois, that the conveyance is so exempt. If said conveyance is not so exempt, compliance should be had with the provisions of said paragraph 1(a). **(Not a survey matter.)**
18. It appears that the land described herein lies within the municipal boundaries of Crystal Lake, please contact the municipality for any requirements which must be complied with prior to closing. The municipal phone number may be found at www.firstam.com/title/il under Products and Resources, then Forms and Documents, then Municipal Transfer Stamp Requirements. **(Not a survey matter.)**
19. Relative to the deletion of Standard Exceptions 1 through 6, we should be furnished the following: **(This survey is provided to satisfy exception 19 a.)**
    a) A current survey of the land, properly certified to the Company, made in accordance with (i) the accuracy requirements of a survey pursuant to the 'Minimum Standard Detail Requirements for Land Title Surveys' Jointly Established and Adopted by the American Land Title Association and National Society of Professional Surveyors (NSPS) February 23, 2021; and (ii) the Laws of the State of Illinois.
    b) A properly executed ALTA 2006 Loan and Extended Coverage Statement.
20. Grant of Easement for sanitary sewage facilities recorded as document no. 92R007030, and also recorded as document 92R023111, and the terms and conditions contained therein.

    (Affects the Western 40 feet) **(Please refer to the survey for the easement location and to said Document for more particular information.)**
21. Declaration regarding certain responsibilities for landscaping recorded August 31, 1992 as document 92R047188 and the terms and provisions contained therein. **(Affects the property and more, please refer to said Document for more particular information.)**
22. Easement in favor of Northern Illinois Gas Company for the installation, maintenance, repair, relocation, removal and renewal of gas mains granted by document 98R0044501 on July 13, 1998, and the terms and conditions thereof.

    (Affects a 20 foot wide by 650 foot long strip of land South of and adjacent to the Northern property line, as well as a 20 foot wide by 60 foot long strip of land East of and adjacent to the Western property line.) **(We are unable to depict the easement locations on the survey due to a lack of information in the document provided. The North property line of the description is 1359 feet and the West line of the description is 1024.84 feet. It is not stated in the Document where on the property lines the easements are located, only that they are adjacent to the North and West property lines.)**
23. Rights of way for drainage tiles, ditches, feeders and laterals, if any. **(No Drainage Ditches, Tiles, Feeders or Laterals were observed on the property at the time of the survey and we were not provided with any Documentation regarding any such matters.)**
24. Rights of the Public, the State of Illinois and the Municipality in and to that part of the land, if any, taken or used for road purposes. **(Please refer to the survey.)**
25. Rights of the interested parties to the free and unobstructed flow of the waters of the stream which may flow on or through the land. **(There was no stream observed on the property at the time of the survey.)**
26. Note: The Extended Coverage Endorsement, deleting Standard Exceptions 1 through 6, will be considered for approval upon receipt and review of the requirements referenced herein. **(Not a survey matter.)**



Zoning and Ownership Table

Ⓐ	PID :4-34-301-003 Owner: Mistwood Place Homeowners Association Zoned R-3B PUD
Ⓑ	PID :4-34-301-004 Owner: Pamela J. Sault Zoned R-3B PUD
Ⓒ	PID :4-34-301-005 Owner: Aneta Stankiewicz Zoned R-3B PUD
Ⓓ	PID :4-34-301-006 Owner: Gregory A. & Jody L. Latowicz Zoned R-3B PUD
Ⓔ	PID :4-34-301-007 Owner: Tyler P. Meier & Kerrie E. Kurth Zoned R-3B PUD
Ⓕ	PID 14-34-301-008 Owner: Baibsunova G. & Asanbekov B. Zoned R-3B PUD
Ⓖ	PID 14-34-301-009 Owner: Glasgow Group LLC Zoned R-3B PUD
Ⓗ	PID 14-34-301-010 Owner: L. M. Propety LLC Zoned R-3B PUD
Ⓘ	PID 14-34-301-011 Owner: Kabir Pramukh Realty, Inc. Zoned R-3B PUD
Ⓙ	PID 14-34-301-012 Owner: Evan R. Breyley Zoned R-3B PUD
Ⓚ	PID 14-34-301-013 Owner: B3D Living LLC Zoned R-3B PUD
Ⓛ	PID 14-34-301-014 Owner: Joy G. Mangold Zoned R-3B PUD
Ⓜ	PID 14-34-301-015 Owner: Calienth T Gonzalez Palomar O. Zoned R-3B PUD
Ⓝ	PID 14-34-301-016 Owner: Home State Bank N/A Trust 5339 Zoned I-3B PUD
Ⓞ	PID 14-34-301-017 Owner: Brenda L. Othick Zoned I-3B PUD
Ⓟ	PID 14-34-301-018 Owner: Pamela A. (Rev Tr Legl) Zoned I-3B PUD
Ⓠ	PID 14-34-301-019 Owner: GJ SJ Family Revisionary Trust Zoned I-3B PUD
Ⓡ	PID 14-34-301-020 Owner: Jennifer Kuranek Zoned I-3B PUD
Ⓢ	PID 14-34-301-021 Owner: Kimberley Greenough Zoned I-3B PUD
Ⓣ	PID 14-34-301-022 Owner: Kristen O'Brien Glover Zoned I-3B PUD
Ⓤ	PID 14-34-301-023 Owner: John Handschiegel Zoned I-3B PUD
Ⓥ	PID 14-34-301-024 Owner: Kevin M. & Jennifer K. Engstrom Zoned I-3B PUD
Ⓦ	PID 14-34-301-026 Owner: Home State Bank Trust No. 6021 Zoned I-3B PUD
Ⓧ	PID 14-33-426-025 Owner: Casey's Retail Company Zoned I-2
Ⓨ	PID 14-34-301-047 Owner: Sunrise Third Crystal Lake Senior Living Zoned I-3A PUD

SURVEYOR'S NOTES

1. Survey is based on field work performed by Arc Design Resources on July 27, 2021.
2. No investigation concerning environmental and subsurface conditions, or for the existence of underground or overhead containers or facilities which may affect the use or development of this property was made as par of this survey.
3. The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.
4. The above described property is not located within any regulated flood zones according to the Flood Insurance Rate Map (17.11C0335J) for McHenry County, Illinois revised November 16, 2006.
5. Surveyed property is based upon the legal description contained in Commitment for Title Insurance, Commitment No. 3102992 issued by First American Title Insurance Company - Metro Commercial Title dated July 04, 2021.
6. Bearings are based upon G.P.S observations and referenced to the Illinois State Plane Coordinate System - East Zone.
   Vertical Datum - NAD83
7. There was no evidence of any recent earth moving activity at the time of survey.
8. Utility Company Contacts.
   AT&T/DISTRIBUTION: 1-800-288-2020
   COMCAST: 1-866-594-1234
   COMED: 1-800-334-7661
   NICOR GAS: 1-888-642-6748
   CITY OF CRYSTAL LAKE: 1-815-356-3738

SURVEYOR'S CERTIFICATION:

To First American Title Insurance Company- Metro Commercial Title, Lancaster Land L.P. and Terra Cotta Development, LLC:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 3, 4, 6a, 8, 11a, 13 and 16 of Table A thereof. The fieldwork was completed on July 27, 2021.

Dated this 28th day of July, 2021.

Lee S. Sprecher
Illinois Professional Land Surveyor No. 3436
Arc Design Resources, Inc.
5291 Zenith Parkway
Loves Park, IL 61111
(815) 484-4300

My current license expires 11/30/2022

LEE S. SPRECHER 035-3436 LOVES PARK, IL — STATE OF ILLINOIS — PROFESSIONAL LAND SURVEYOR

Legal Description contained in Commitment for Title Insurance issued by First American Title Insurance Company File No. 3102992 dated July 2, 2021

The Land referred to herein below is situated in the County of McHenry, State of IL, and is described as follows:

Part of the North half of the Southwest quarter of Section 34, Township 44 North, Range 8 East of the Third Principal Meridian, described as follows:

Beginning at the Northwest corner of the Southwest quarter of said Section 34, thence North 89 degrees, 24 minutes, 10 seconds East along the North line of said Southwest quarter, a distance of 1278.38 feet, thence South 00 degrees, 37 minutes, 07 seconds East, a distance of 465.88 feet; thence South 89 degrees, 39 minutes, 16 seconds West, a distance of 1283.35 feet to the West line of the Southwest quarter of said Section 34, thence North 00 degrees, 00 minutes, 00 seconds East along said West line, a distance of 460.27 feet to the point of beginning.

Except that part described as follows:

Lot 1 in the final plat of subdivision of Sunrise of Crystal Lake, being a subdivision of part of the North half of the Southwest quarter of Section 34, Township 44 North, Range 8, East of the Third Principal Meridian, according to the plat thereof recorded February 25, 2000 as document number 2000R009712.

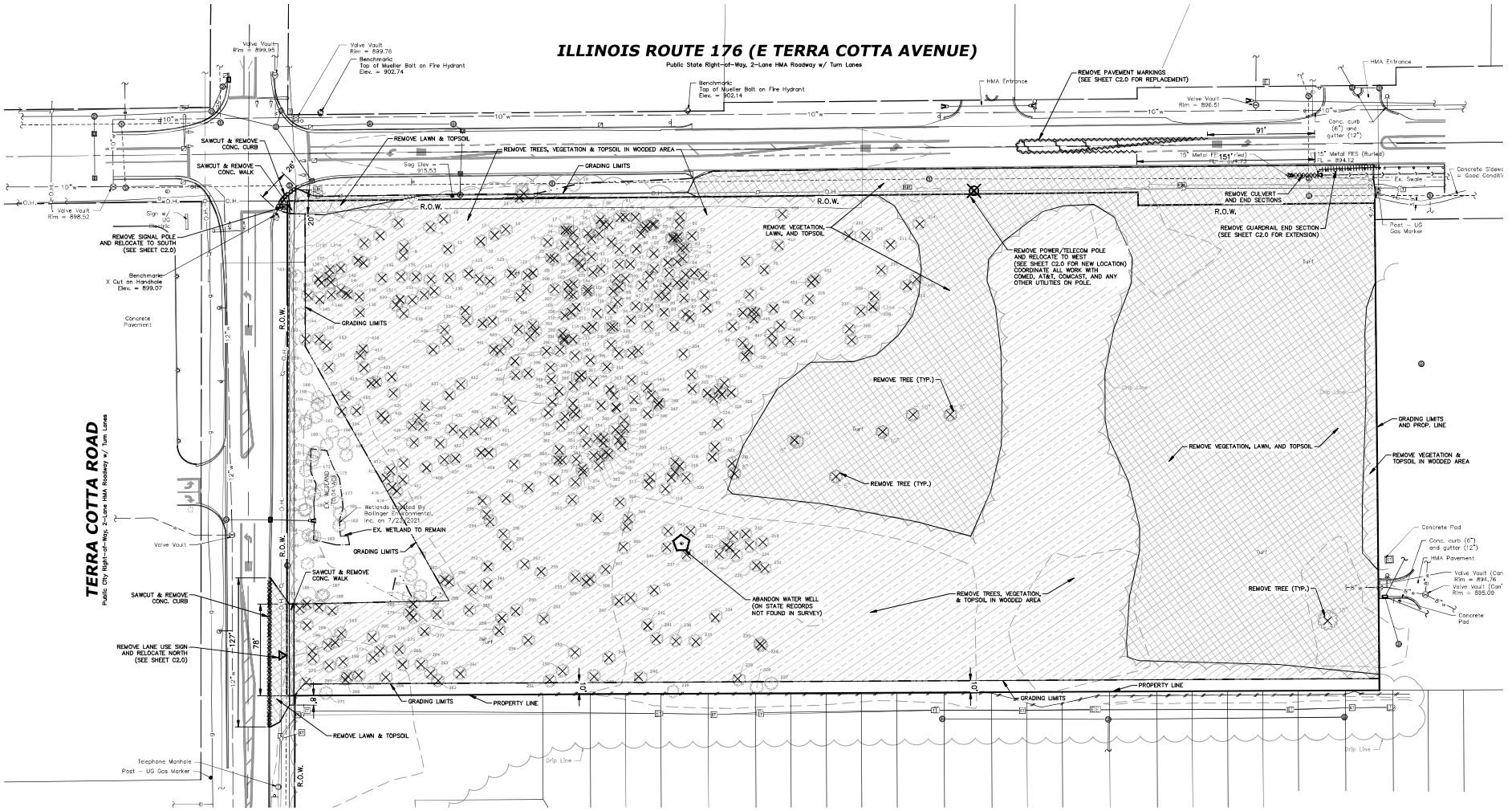
ALSO EXCEPT that portion granted for road purposes in document 2911R0032713 and corrected by document 20.2R0010940, described as follows:

That part of the North half of the Southwest quarter of Section 34, Township 44 North, Range 8 East of the Third Principal Meridian, described as follows:

Beginning at the Northwest corner of the Southwest quarter of said Section 34; thence on an assumed bearing of North 89 degrees 28 minutes 09 seconds East along the North line of the Southwest quarter of said Section 34, a distance of 1278.57 feet (1278.38 feet, recorded) to a point of intersection with the Northerly extension of the East line of Lot 1 in Sunrise of Crystal Lake recorded February 25, 2000 as document number 2000R0009712; thence South 0 degrees 32 minutes 51 seconds East along the Northerly extension of the East line of Lot 1 in said Sunrise of Crystal Lake, a distance of 46.00 feet to the Northeast corner of Lot 1 in Sunrise of Crystal Lake; thence South 89 degrees 28 minutes 09 seconds West along the North line of Lot 1 in said Sunrise of Crystal Lake, a distance of 322.35 feet to the Northwest corner of Lot 1 in Sunrise of Crystal Lake; thence South 0 degrees 32 minutes 52 seconds East along the West line of Lot 1 in said Sunrise of Crystal Lake, a distance of 10.51 feet; thence South 89 degrees 26 minutes 56 seconds West, a distance of 200.91 feet; thence North 0 degrees 33 minutes 04 seconds West, a distance of 11.00 feet to the South right of way line of Illinois Route 176 reported August 8, 1932 as document number 102706; thence South 89 degrees 25 minutes 18 seconds West along the said South right of way line of Illinois Route 176 and the Westerly extension thereof, a distance of 755.70 feet to the West line of the Southwest quarter of said Section 34; thence North 0 degrees 03 minutes 56 seconds East along the West line of the Southwest quarter of said Section 34, a distance of 40.20 feet to the point of beginning, all in McHenry County, Illinois.

SHEET 2 of 2
ARC 21145
Rev: 07/28/2021

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NOTES

1. WORK IN STATE ROUTE 172 RIGHT-OF-WAY, AND AT THE INTERSECTION OF S.R. 172 AND TERRA COTTA ROAD, SHALL BE PERMITTED AND APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
2. WORK IN THE TERRA COTTA ROAD RIGHT-OF-WAY SHALL BE PERMITTED AND APPROVED BY THE CITY OF CRYSTAL LAKE.
3. REMOVE ALL VEGETATION AND STOCKPILE TOPSOIL WITHIN GRADING LIMITS.
4. ALL REMOVALS WORK IN CITY OR STATE ROADWAY R.O.W. SHALL BE COORDINATED WITH REPLACEMENT WORK, TO REDUCE THE IMPACT TO THE PUBLIC TO THE GREATEST EXTENT POSSIBLE.
5. POWER POLE RELOCATION SHALL BE COORDINATED WITH COMED AND ALL TELECOM UTILITIES.

LEGEND

- REMOVE VEGETATION LAWN AND TOPSOIL
- REMOVE TREES, VEGETATION, & TOPSOIL IN WOODED AREA
- EXIST. OVERHEAD UTILITY LINE
- EXIST. TELEPHONE LINE
- EXIST. ELECTRIC LINE
- EXIST. GAS LINE
- EXIST. FIBER OPTIC LINE
- EXIST. WATER MAIN
- EXIST. HYDRANT
- EXIST. GATE VALVE IN BOX
- EXIST. GATE VALVE IN WELL
- EXIST. STORM SEWER
- EXIST. CATCH BASIN OR INLET
- CULVERT
- EXIST. SANITARY SEWER
- SIGN
- WELL
- FENCE
- GUARDRAIL REMOVAL
- TREE OR BRUSH LIMIT

SCALE: 1" = 40'
0 40 80 120

811 Know what's below. Call before you dig.

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348 HARRIS HILL ROAD
WILLIAMSVILLE, NY 14221
ATTN: BETH EPNAT
734-345-0246

CLOVER COMMUNITIES CRYSTAL LAKE LLC
SITE PLAN FOR PLANNING COMMISSION
SITE DEMOLITION PLAN

C1.1

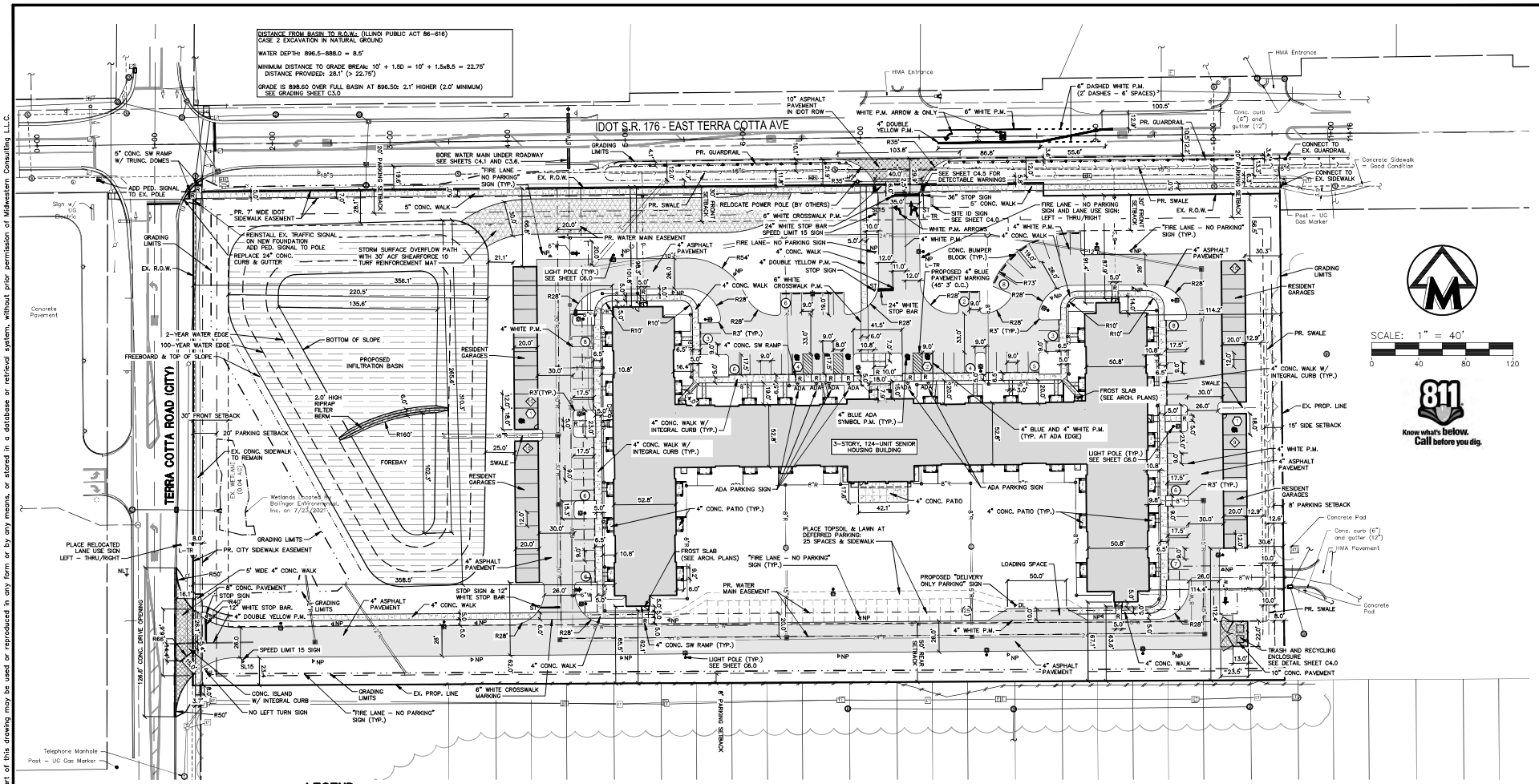
JOB No. 21216
DATE: 3/24/2022
SHEET 4 OF 42
DES. MWM
CHKD. JRB
ENG. JJM
PIC. RCW
FIELD BK. 1
FILE: 21216X1.DWG

ISSUED:

REV.	DATE
SITE PLAN SUBMITTAL 1	11/22/21
SITE PLAN SUBMITTAL 2	01/07/22
SITE PLAN SUBMITTAL 4	02/16/22
FINAL SITE PLAN SUBMITTAL 1	03/11/22

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M:\Civil3d Proj\21216\Site Plan\21216X1.dwg, 3/11/2022 11:21 AM, Jeremy A. Wetherl, C1.1 SITE DEMOLITION PLAN, MCGLC PDF.pc3



NOTES

1. WORK IN STATE ROUTE 176 RIGHT-OF-WAY, AND AT THE INTERSECTION OF S.R. 176 AND TERRA COTTA ROAD, SHALL BE PERMITTED AND APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
2. WORK IN THE TERRA COTTA ROAD RIGHT-OF-WAY SHALL BE PERMITTED AND APPROVED BY THE CITY OF CRYSTAL LAKE.
3. ALL PAVEMENT MARKINGS AND SIGNS SHALL COMPLY WITH THE LATEST MUTCD AND IDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. PAVEMENT MARKINGS SHALL BE WATERBORNE UNLESS REQUESTED OTHERWISE BY THE CITY OF CRYSTAL LAKE OR IDOT.

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

LEGEND

- 4" ASPHALT PAVEMENT
- 10" ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- CONCRETE PATIO
- CONCRETE PAVEMENT
- BUILDING
- RESIDENT GARAGES

EXIST. UTILITY POLE
PROP. TRANSFORMER
EXIST. OVERHEAD UTILITY LINE
PROP. LIGHT POLE
EXIST. TELEPHONE LINE
PROP. TELEPHONE LINE
EXIST. ELECTRIC LINE
PROP. ELECTRIC LINE
EXIST. GAS LINE
PROP. GAS LINE
EXIST. FIBER OPTIC LINE
PROP. FIBER OPTIC LINE
EXIST. WATER MAIN
PROP. WATER MAIN
EXIST. HYDRANT
PROP. HYDRANT
EXIST. GATE VALVE IN BOX
PROP. GATE VALVE IN BOX
EXIST. GATE VALVE IN WELL
PROP. GATE VALVE IN WELL
EXIST. STORM SEWER
PROP. STORM SEWER
EXIST. CATCH BASIN OR INLET
PROP. CATCH BASIN OR INLET
PROP. BEEHIVE INLET
END SECTION
EXIST. SANITARY SEWER
PROP. SANITARY SEWER

SIDEWALK RAMP
SIGN
FIRE LANE – NO PARKING SIGN
STOP SIGN
ADA PARKING SIGN
NO LEFT TURN SIGN
DELIVERY ONLY PARKING SIGN
SPEED LIMIT 15 SIGN
PEDESTRIAN CROSSING SIGNAL
WELL
FENCE
TREE OR BRUSH LIMIT
PROP. C/L OF SWALE
PROP. GUARDRAIL
PROP. SIDEWALK EASEMENT
PROP. PARKING SETBACK
PROP. SETBACK
PROP. WATER MAIN EASEMENT
PROP. BUMPER BLOCK
GRADING LIMITS
WETLAND LIMITS
NUMBER OF PARKING SACES
NUMBER OF HANDICAP PARKING SPACES
NUMBER OF GARAGE PARKING SPACES
SECTION CORNER

DEVELOPMENT SUMMARY AND COMPARISON CHART

Zoning Classification	**B-2-PUD (General Commercial)---Proposed Rezoning to R-3B-PUD (Multi-Family Residential)**
Number of Units	124 Units Total: 4 1-bedroom + 119 2-bedroom

SITE INFORMATION	Requirement	Calculated Requirement	Provided	Variance Requested
Minimum Lot Area	1,400 + 4,000/unit	1,400 + 4,000 x 124 = 497,400 sft = 11.42 ac	388,932 sft = 8.93 ac	108,468 sft = 2.49 ac
Minimum Lot Width	50 + 10/unit	50 + 10 x 124 = 1,290 ft	921 ft	366 ft
Dwelling Unit Density	9.0 units/acre	9.0 units/acre	121 units / 8.93 ac = 13.9 units/ac	4.9 unit/ac
Front Setback	30 ft	30 ft	879 ft (56.5 ft garage)	---
Side Setback	15 ft	15 ft	114.2 ft (30.3 ft garage)	---
Rear Setback	50 ft (abutting 1-family homes)	50 ft	62.1 ft (62.0 ft garage)	---
Maximum Building Lot Coverage	30% of site	30%	44,940 sft + 9,862 sft garages = 54,802 sft total / 388,932 = 14.1%	---
Maximum Impervious Lot Coverage	65% of site	65%	54,802 sft roof + 97,111 sft pvmt + 8,749 deferred parkng = 159,662 sft / 388,932 = 40.8%	---
Maximum Building Height	36 ft	36 ft	35ft	---
Maximum Stories	N/A	N/A	3 stories	---
Total Building Floor Area	N/A		131,820 sft + 9,862 sft garages = 141,682 sft total	---
Floor Area Ratio (FAR)	0.6 maximum	0.6	141,682 / 388,932 = 037	---
Minimum Apartment Area	N/A	N/A	673 sft (1 BR), 778-910 (2 BR)	---
Vehicle Parking (Multi-Family Residential)	1.5/ 1BR unit, 2.25 / 2BR unit	1.5 x 4 1BR + 2.25 x 119 2BR = 274	124 total (84 surface + 40 garage) Add'l 25 deferred spaces (149 total)	125 spaces
ADA Parking Spaces Required	ADA Chart	5 ADA spaces for 101-150 (1 to be van space)	8 van spaces provided (6 surface + 2 garage)	---
Loading Space	1 space	1 space	1 provided	---

M:\Civil\3d_Proj\21216\Site Plan\21216SP1.dwg, 9/1/2022 11:22 AM, Jeremy A. Walther, C2.0 SITE LAYOUT AND PAVING PLAN, XCLUP PDF.pc3
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WILLIAMSVILLE, NY 14221
ATTN: BETH ERNAT
734-345-0246

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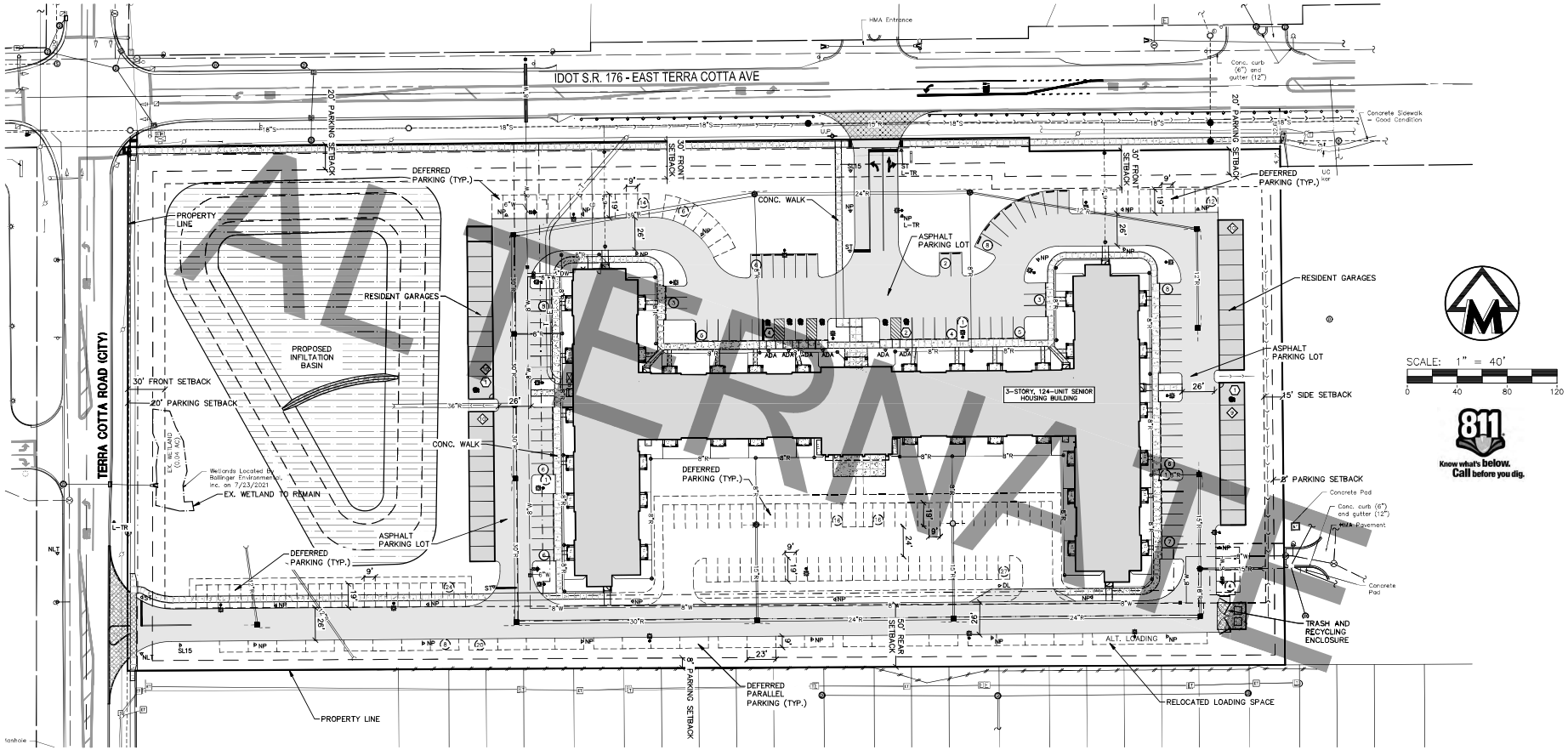
CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
SITE LAYOUT AND PAVING PLAN

C2.0

JOB No. 21216
DATE: 8/11/2022
SHEET 6 OF 42
DRAWN: JRB
CHKD: JW
ENG: JW
PM: RCW
21216SP1.DWG

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/29/21
SITE PLAN SUBMITTAL 2	01/27/22
SITE PLAN SUBMITTAL 3	02/16/22
SITE PLAN SUBMITTAL 4	05/11/22
FINAL ENG. SITE PLAN SUBMITTAL 1	08/11/22



ALTERNATE

NOTES

1. THIS PLAN SHOWS AN ALTERNATE SET OF DEFERRED PARKING AREAS THAT REACHES AN INCREASED NUMBER OF 265 SPACES. CLOVER CONSTRUCTION WISHES TO INDICATE THAT IT IS PHYSICALLY POSSIBLE TO PLACE 265 PARKING SPACES ON THE SITE, BUT THAT THEY ARE CONFIDENT FROM PREVIOUS EXPERIENCE THAT 120 SPACES ARE ADEQUATE. IN ORDER TO REASSURE THE CITY OF CRYSTAL LAKE THAT ADDITIONAL PARKING WILL BE ADDED IF REQUIRED, THEY ARE PROPOSING THE 21' DEFERRED SPACES SHOWN ON SHEET C2.0 TO BE INSTALLED IF DEMAND REQUIRES IT, AS A MORE PRACTICAL ALTERNATIVE TO THE FULL PARKING LOT SHOWN IN THE COURTYARD IN THIS EXHIBIT.
2. THE ONLY DIFFERENCES BETWEEN THE LAYOUT ON THIS SHEET AND IN THE MAIN LAYOUT SHEET C2.0 ARE THE DEFERRED PARKING SPACES — ALL OTHER PAVED AREAS, BUILDING AREAS, DIMENSIONS, AND NOTES ARE EQUIVALENT.

LEGEND

- ASPHALT ROADWAY
- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- BUILDING
- EXIST. UTILITY POLE
- EXIST. OVERHEAD UTILITY LINE
- EXIST. TELEPHONE LINE
- EXIST. ELECTRIC LINE
- EXIST. GAS LINE
- EXIST. FIBER OPTIC LINE
- EXIST. WATER MAIN
- EXIST. HYDRANT
- EXIST. GATE VALVE IN BOX
- EXIST. STORM SEWER
- EXIST. CATCH BASIN OR INLET
- EXIST. SANITARY SEWER
- PEDESTRIAN CROSSING SIGNAL
- SIGN
- FIRE LANE — NO PARKING SIGN
- SECTION CORNER
- GRADING LIMITS
- WETLAND LIMITS
- PROP. WATER MAIN
- PROP. HYDRANT
- PROP. GATE VALVE IN BOX
- PROP. STORM SEWER
- PROP. CATCH BASIN OR INLET
- PROP. BEEHIVE INLET
- PROP. SANITARY SEWER

DEVELOPMENT SUMMARY AND COMPARISON CHART (ALTERNATE)

Zoning Classification	**B-2-PUD (General Commercial)---Proposed Rezoning to R-3B-PUD (Multi-Family Residential)**
Number of Units	124 Units Total: 4 1-bedroom+ 119 2-bedroom

SITE INFORMATION	Requirement	Calculated Requirement	Provided	Variance Requested
Minimum Lot Area	1,400 + 4,000/unit	1,400 + 4,000 x 124 = 497,400 sf = 11.42 ac	388,932 sft = 8.93 ac	108,468 sft = 2.49 ac
Minimum Lot Width	50 + 10/unit	50 + 10 x 124 = 1,290 ft	924 ft	366 ft
Dwelling Unit Density	9.0 units/acre	9.0 units/acre	124 units / 8.93 ac = 13.9 units/ac	4.9 unit/ac
Front Setback	30 ft	30 ft	87.9 ft (56.5 ft garage)	---
Side Setback	15 ft	15 ft	114.2 ft (30.3 ft garage)	---
Rear Setback	50 ft (abutting 1-family homes)	50 ft	62.1 ft (62.0 ft garage)	---
Maximum Building Lot Coverage	30% of site	30%	44,940 sft + 9,862 sft garages = 54,802 sft total / 388,932 = 14.1%	---
Maximum Impervious Lot Coverage	65% of site	65%	54,802 sft roof + 97,111 sft pvmt + 41,567 deferred parking = 193,480 sft / 388,932 = 49.7%	---
Maximum Building Height	36 ft	36 ft	35 ft	---
Maximum Stories	N/A	N/A	3 stories	---
Total Building Floor Area	N/A		134,820 sft + 9,862 sft garages = 144,682 sft total	---
Floor Area Ratio (FAR)	0.6 maximum	0.6	144,682 / 388,932 = 0.37	---
Minimum Apartment Area	N/A	N/A	678 sft (1 BR), 778-910 (2 BR)	---
Vehicle Parking (Multi-Family Residential)	1.5/ 1BR unit, 2.25 / 2BR unit	1.5 x 4 1BR + 2.25 x 119 2BR = 274	124 total (84 surface + 40 garage) Add'l 150 deferred spaces (274 total)	---
ADA Parking Spaces Required	ADA Chart	7 ADA spaces for 201-300 (2 to be van space)	8 van spaces provided (6 surface + 2 garage)	---
Loading Space	1 space	1 space	1 provided	---

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

M:\Civil\21xx\Proj\21216\Site Plan\21216Site Plan Alt.dwg, 5/11/2022 11:23 AM, Jeremy A. Nottnel, C2.1 ALTERNATE SITE 265 PARKING SPACES, XCELLC PDF.pc3
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CLOVER COMMUNITIES CRYSTAL LAKE LLC
348 HARRIS HILL ROAD
WILLIAMSVILLE, NY 14221
ATTN: BETH EPNAT
734-345-0246

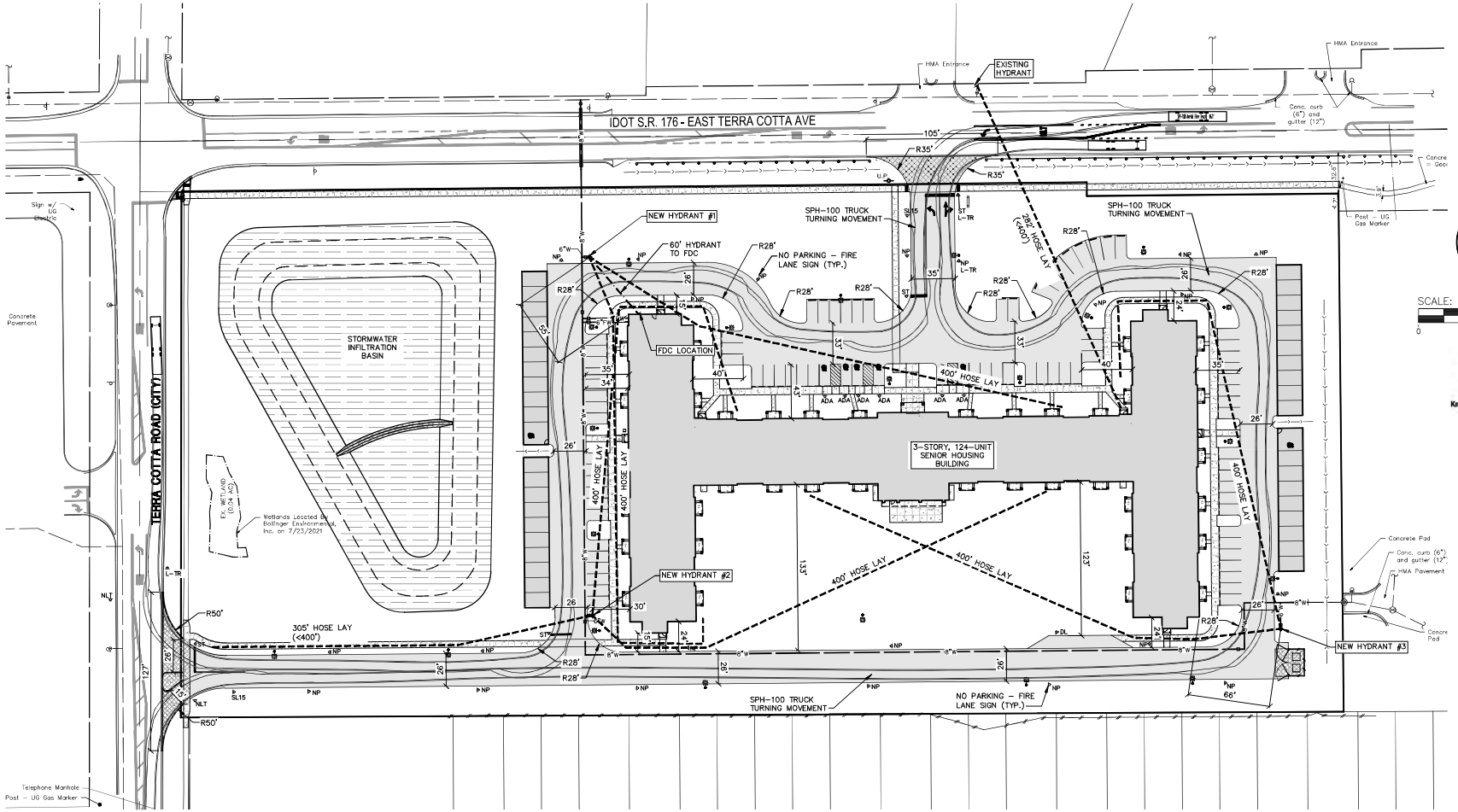
CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
ALTERNATE SITE 265 PARKING SPACES

C2.1

JOB No. 21216
DATE: 5/12/2022
SHEET 7 OF 42
DRN: JAN
CHKD: JRB
ENG: JAN
PIC: RCW
P.M.: RCW
FILE: 21216SP1.DWG

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/22/21
SITE PLAN SUBMITTAL 2	12/20/21
SITE PLAN SUBMITTAL 4	02/16/22
FINAL PSD, SITE PLAN SUBMITTAL 1	05/11/22



NOTES

PROJECT MEETS 2021 INTERNATIONAL FIRE CODE

ALL EXTERIOR WALLS OF BUILDING ARE WITHIN 150' OF PAVED PARKING LOT DRIVES DESIGNED TO HANDLE THE WEIGHT OF A FIRE TRUCK. THIS LOOPED PARKING LOT CONNECTS ON THE NORTH SIDE OF THE SITE TO ILLINOIS STATE ROUTE 76, AND ON THE WEST SIDE OF THE SITE TO TERRA COTTA ROAD.

THE BUILDING IS LESS THAN 30 FEET TO THE EAVES OF THE ROOF (CEILING OF THE TOP FLOOR) AND THUS IS NOT REQUIRED TO MEET THE REQUIREMENTS FOR AERIAL FIRE ROADS. HOWEVER, IT MEETS THESE FIRE ROAD REQUIREMENTS ANYWAY AS THE PARKING LOT DRIVE IS 26' WIDE, AND THE WEST AND EAST SIDES OF THE BUILDING ARE ALL BETWEEN 15' AND 30' FROM THE PARKING LOT DRIVE AISLE. THE NORTH AND SOUTH SIDES ARE WITHIN 150' AS MENTIONED ABOVE.

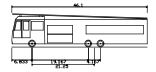
THIS PROJECT SITE HAS NO DEAD–END DRIVES.

ALL EXTERIOR WALLS OF THE BUILDING FALL WITHIN A 400' HOSE LAY OF A FIRE HYDRANT.

THE BUILDING IS FULLY SPRINKLED, AND THE FDC IS LESS THAN 100' FROM THE NEAREST FIRE HYDRANT.

ALL HYDRANTS MAY BE ISOLATED FROM EACHOTHER, AND FROM THE BUILDING'S FIRE LEAD CONNECTION, THROUGH VALVES.

WITH PROPER ISOLATION AND CLOSING OF VALVES, NO MORE THAN ONE HYDRANT WOULD BE REMOVED FROM SERVICE.



SPH–100 Aerial Fire Truck 46.1'

Overall Length	46.100ft
Overall Width	7.800ft
Overall Body Height	11.992ft
Min Body Ground Clearance	1.833ft
Front Track Width	7.583ft
Rear Track Width	7.750ft
Max Steering Angle (Virtual)	36.30°

FIRE TRUCK TURNING MOVEMENT TEMPLATE TRUCK

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in–service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

M:\Civil3d Proj\21216\Site Plan\21216PI.dwg, 5/11/2022 11:24 AM, Jeremy A. Wetherl, C2.2 SITE FIRE PROTECTION PLAN, MCLLC PDF.pc3
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ATTN: BETH EPNAT
734–345–0246

CLOVER COMMUNITIES CRYSTAL LAKE LLC

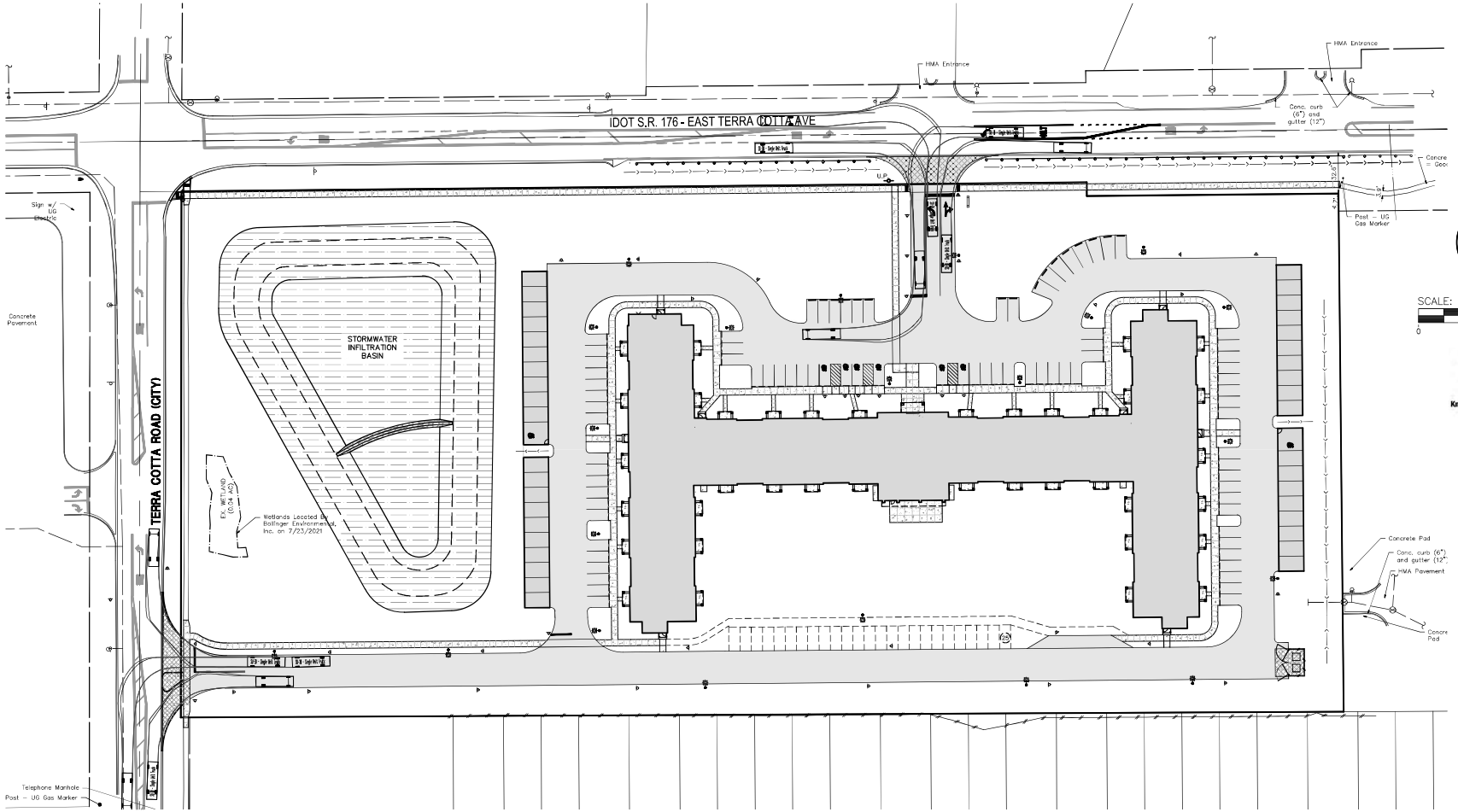
SITE PLAN FOR PLANNING COMMISSION
SITE FIRE PROTECTION PLAN

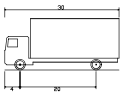
C2.2

JOB No. 21216
DATE: 5/13/2022
SHEET 8 OF 42

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/22/21
SITE PLAN SUBMITTAL 2	12/17/21
SITE PLAN SUBMITTAL 4	02/16/22
FINAL PUD SITE PLAN SUBMITTAL 1	05/11/22

CHKD: JAW
ENG: RCW
PIC: RCW
FILE: 21216PI.DWG





SU-30 - Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.267ft
Track Width	8.000ft
Lock-to-lock time	6.0s
Max Steering Angle (Virtual)	31.80°

DESIGN VEHICLE - SU30 TRUCK

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M:\Civil3d Proj\21216\Site Plan\21216P2.dwg, 9/11/2022 11:24 AM, Jeremy A. Weitner, C2.3 TRUCK TURNING MOVEMENTS, MCLLC PDF.ctb

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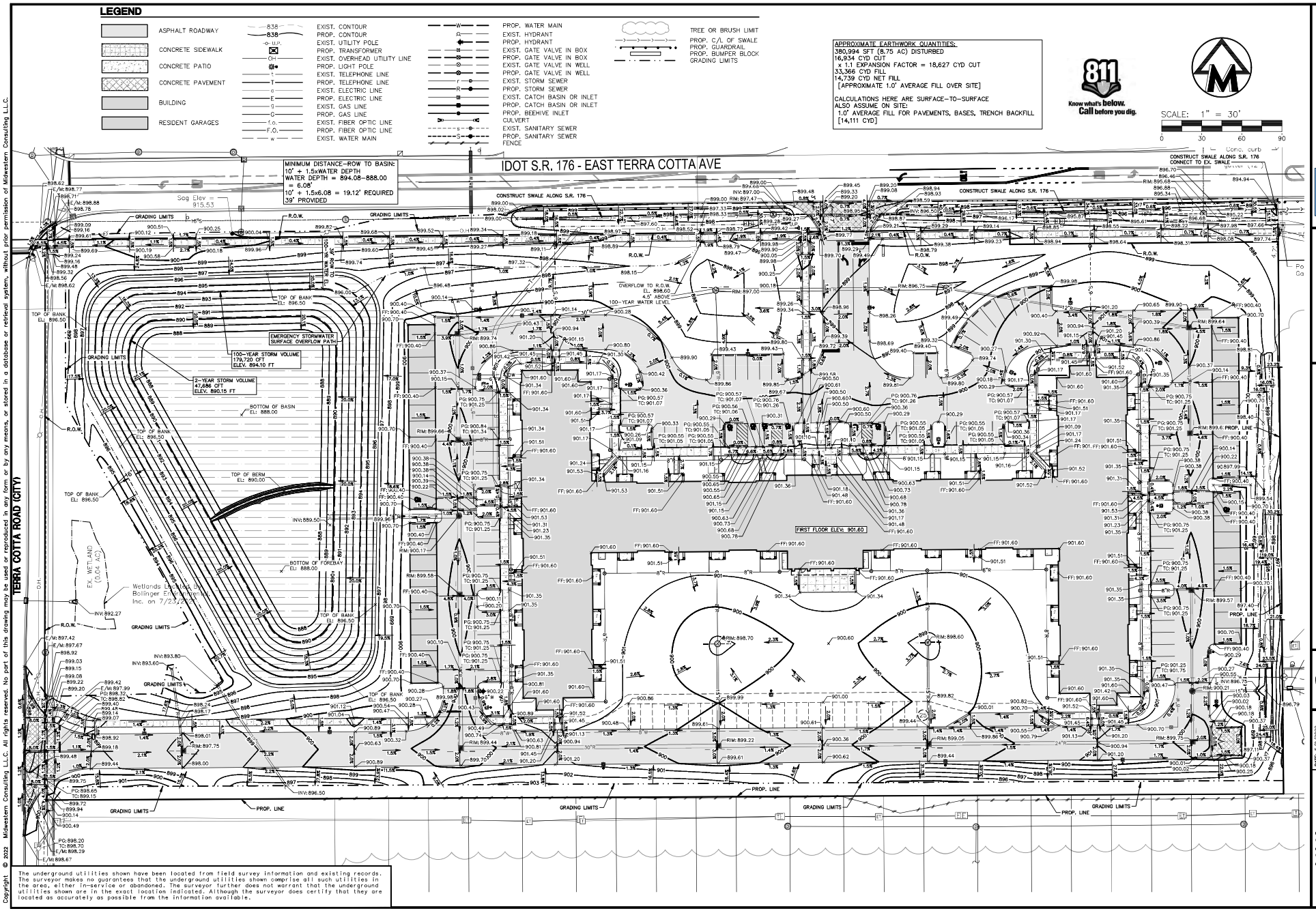
CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
TRUCK TURNING MOVEMENTS

C2.3

JOB No. 21216
DATE: 5/6/2022
SHEET 9 OF 42
DRN: JAW
CHKD: JRB
APP'D: AAW
PM: RCW
FILE: 21216P2.DWG

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/22/21
SITE PLAN SUBMITTAL 2	03/16/22
SITE PLAN SUBMITTAL 4	05/16/22
FINAL SITE PLAN SUBMITTAL 1	06/17/22



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M:\Civil3d Proj\21216\Site Plan\21216SP1.dwg, 5/11/2022 11:25 AM, Jeremy A. Mettler, C3.0 GRADING PLAN, MIDWEST PDF.ctb
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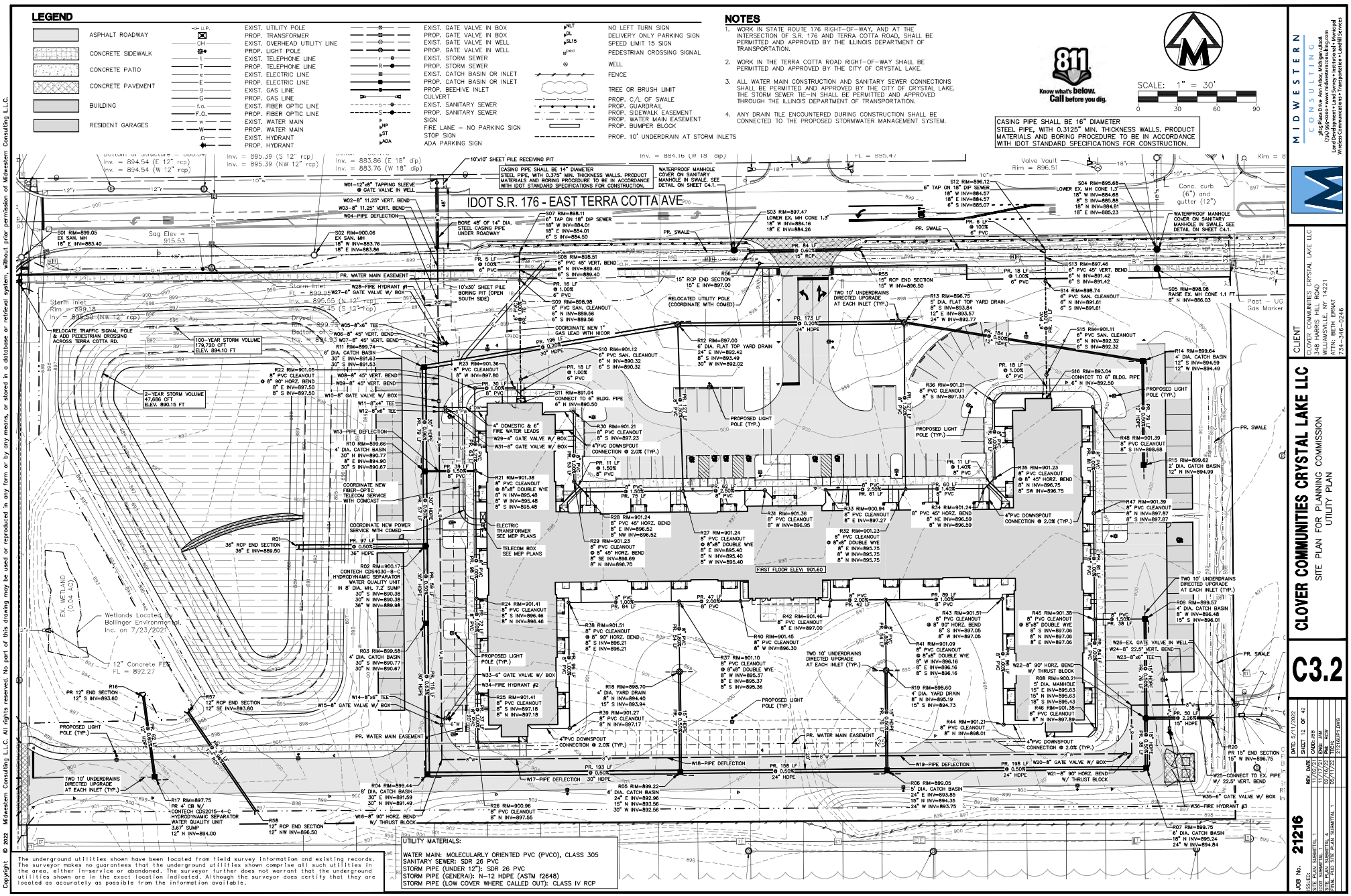
CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
GRADING PLAN

C3.0

JOB No. 21216
DATE: 5/9/2022
SHEET 10 OF 42

ISSUED:	REV. DATE	DRAWN:
SITE PLAN SUBMITTAL 1	11/22/21	JMB
SITE PLAN SUBMITTAL 2	12/17/21	DNS: JM
SITE PLAN SUBMITTAL 4	02/16/22	PIC: RKW
FINAL PUD SITE PLAN SUBMITTAL 1	05/11/22	CHECKED: DNS



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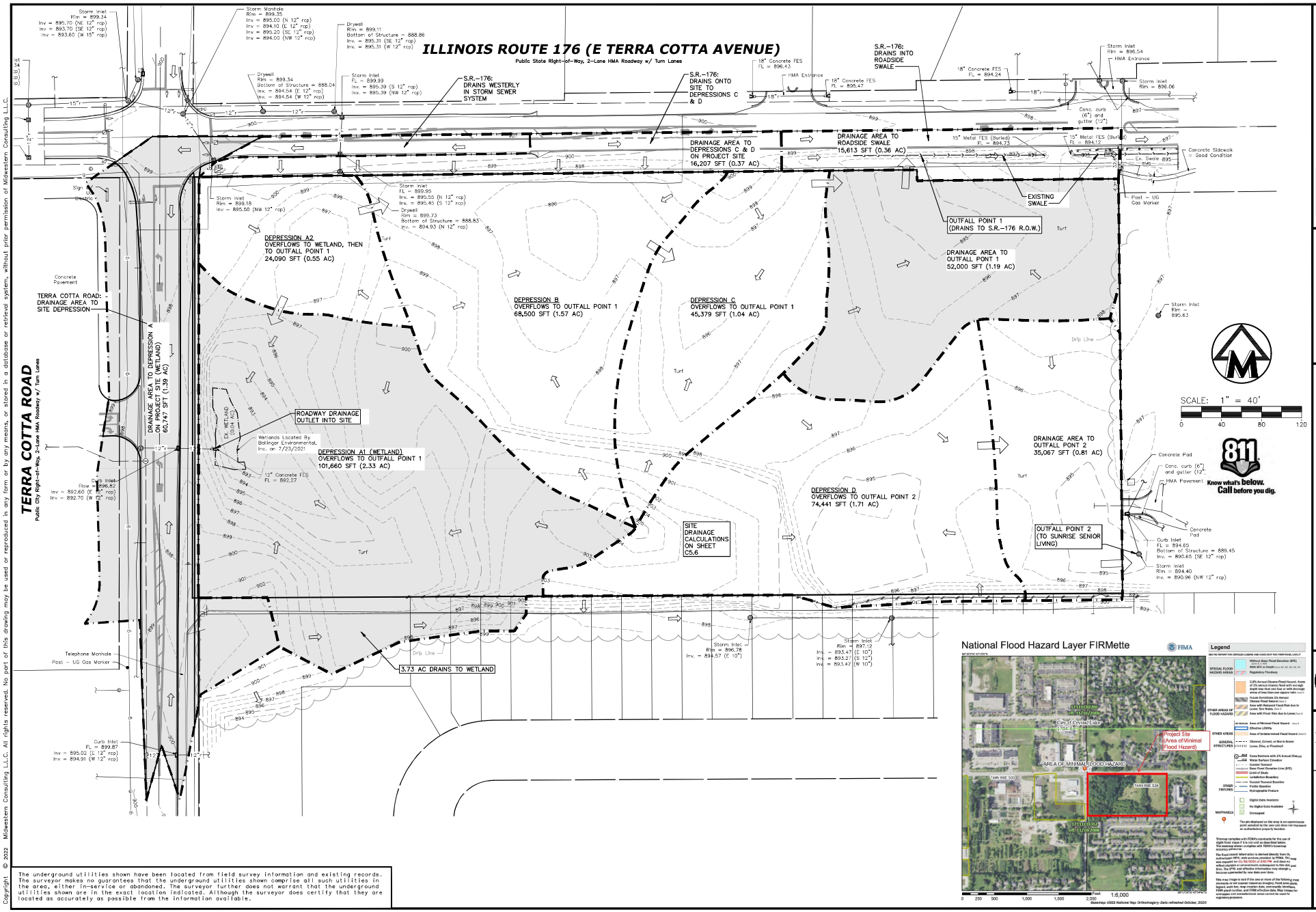
CLOVER COMMUNITIES CRYSTAL LAKE LLC
SITE PLAN FOR PLANNING COMMISSION
UTILITY PLAN

C3.2

JOB No. 21216
DATE: 5/11/2022
SHEET 12 OF 42
DES.BY: JAM
DWN: JAM
CHK: RVW
FIELD BY: LDMG

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/30/21
SITE PLAN SUBMITTAL 2	01/26/22
SITE PLAN SUBMITTAL 4	03/16/22
FINAL SITE PLAN SUBMITTAL 1	05/11/22

M:\Civil\34-Proj\21216\Site Plan\21216SP1.dwg, 5/11/2022 11:28 AM, Jeremy A. Mettler, C3.2 UTILITY PLAN, MSAC PDF.ctb
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M:\Civil\21216\Proj\21216Site Plan\21216SITE.dwg, 3/11/2022 11:36 AM, Jeremy A. Mattheis, Cb.4 EXISTING DRAINAGE PLAN, MCLLC PDF.pc3
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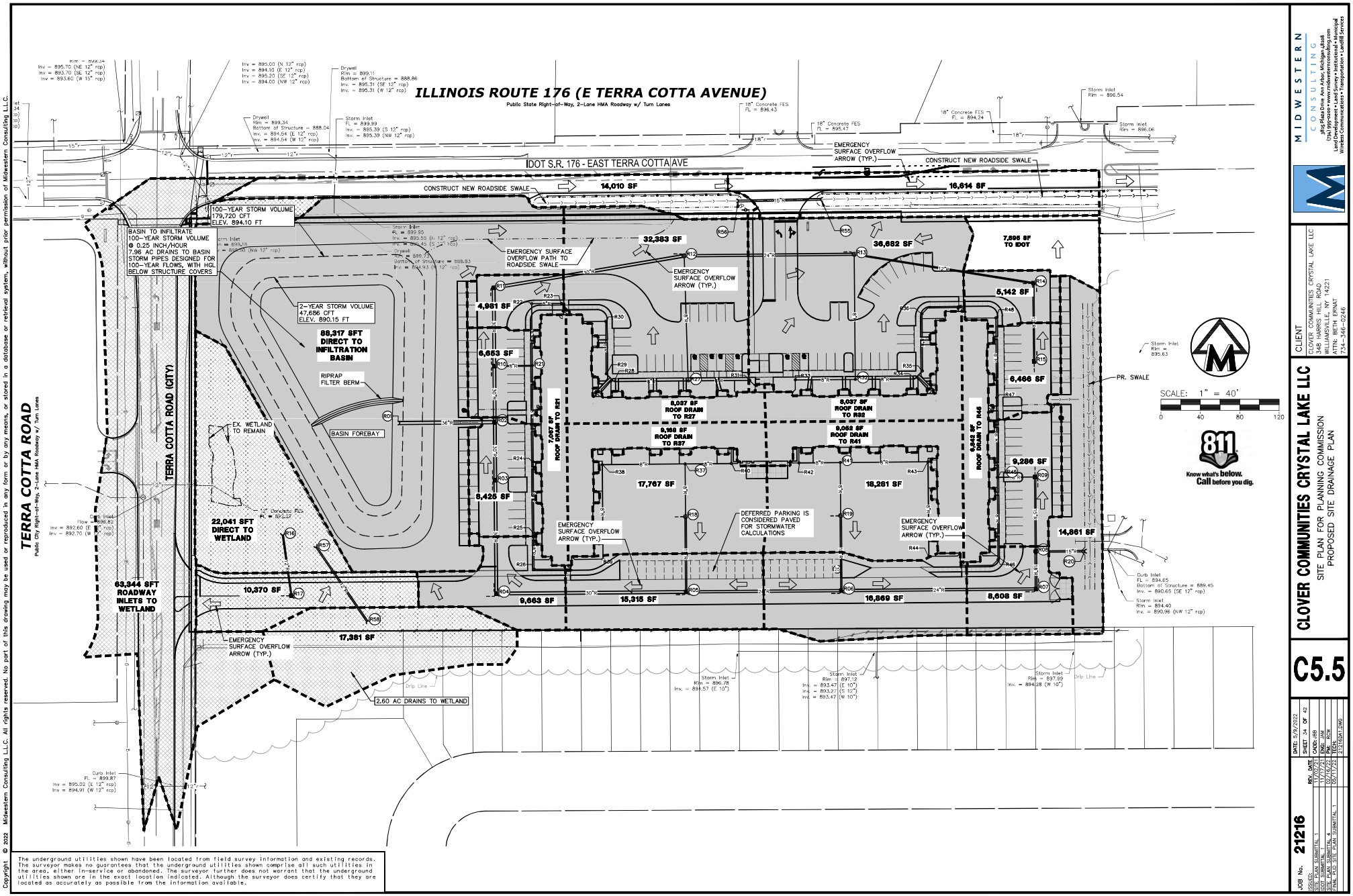
CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
EXISTING DRAINAGE PLAN

C5.4

JOB No. 21216
DATE: 11/17/21
SHEET 35 OF 37
DRWN: JAM
CHKD: RDB
ENG: RDB
PM: RDB
21216SAT.dwg

REVISIONS:	REV. DATE
1ST SUBMITTAL	11/17/21



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M:\Civil3d Proj\21216\Site Plan\21216SitePlan.dwg, 9/1/2022 11:37 AM, Jeremy A. Wetherell, C5.5 PROPOSED SITE DRAINAGE PLAN, XCLUC PDF.pc3
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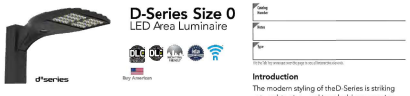
CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
PROPOSED SITE DRAINAGE PLAN

C5.5

JOB No. 21216
DATE: 9/9/2022
SHEET 34 OF 42
DRWN: JAW
CHKD: WB
PIC: RCW

ISSUED:	REV. DATE
SITE PLAN SUBMITTAL 1	11/22/21
SITE PLAN SUBMITTAL 2	01/24/22
SITE PLAN SUBMITTAL 4	05/16/22
FINAL SITE PLAN SUBMITTAL 1	08/11/22
PLANNING COMMISSION	



D-Series Size 0
LED Area Luminaire

d-series

Specifications

EPA: 0.95 ft² (0.09 m²)
Length: 26" (66 cm)
Width: 13" (33 cm)
Height$_A$: 3" (8 cm)
Height$_B$: 7" (18 cm)
Weight (max): 56 lbs (25 kg)

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLAIR2 PIRHN DDBXD

DSX0 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	Forward optics: P1 P5 P2 P6 P3 P7 P4* — Rotated optics: P10* P12* P11* P13*	30K 3000 K; 40K 4000 K; 50K 5000 K	T1S Type I short (Rotationally symmetric); T2S Type II short; T2M Type II medium; T3S Type III short; T3M Type III medium; T4M Type IV medium; T4W Type IV wide; T5VS Type V very short; T5S Type V short; T5W Type V wide; BLC Backlight control; LCCO Left corner cutoff; RCCO Right corner cutoff	MVOLT 120–277V; XVOLT 347–480V	Shipped included: SPA Square pole mounting; RPA Round pole mounting; WBA Wall adapter; SPUMBA Square pole universal mounting adapter; RPUMBA Round pole universal mounting adapter; Shipped separately: KMA8 DDBXD U Soft arm mounting bracket adapter (specify finish)

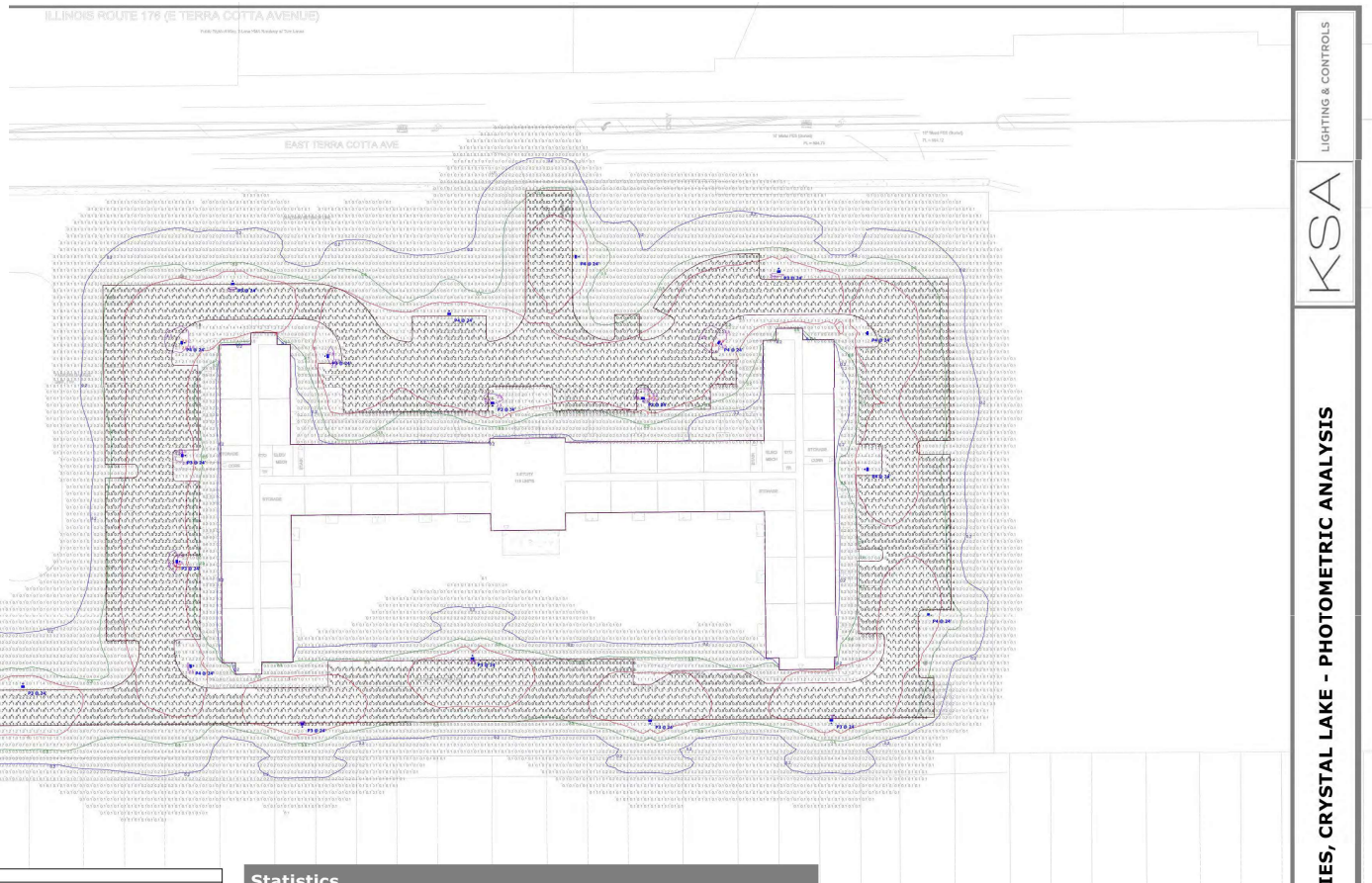
Control options	Other options	Finish
Shipped installed: NLTAIR2 nLight AIR generation 2 enabled; PIRHN Network, high/low motion/ambient sensor; PER NEMA twist-lock receptacle only (control ordered separately); PERS Five-pin receptacle only (control ordered separately); PIRT Sensor configurable with Bluetooth Tuning Tool (ordered separately); DMG 0-10V dimming extend out back of housing for external control (control ordered separately)	PIR High/low, motion/ambient sensor, 8–15' mounting height, ambient sensor enabled at 5 FC; PIRH High/low, motion/ambient sensor, 15–30' mounting height, ambient sensor enabled at 5 FC; PIR1FC3V High/low, motion/ambient sensor, 8–15' mounting height, ambient sensor enabled at 1 FC; PIRH1FC3V High/low, motion/ambient sensor, 15–30' mounting height, ambient sensor enabled at 1 FC; FAO Field adjustable output; Shipped installed: HS Houseside shield; SF Single fuse (120, 277, 347V); DF Double fuse (208, 240, 480V); L90 Left-rotated optics; R90 Right-rotated optics; DDL Diffused drop lens; HA 50°C ambient operation; BAA Buy America(n) Act Compliant; Shipped separately: BS Bird spikes; EGS External glare shield	DDBXD Dark bronze; DBLXD Black; DNAXD Natural aluminum; DWHXD White; DDBTXD Textured dark bronze; DBLBXD Textured black; DNATXD Textured natural aluminum; DWHGXD Textured white

LITHONIA LIGHTING COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

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DSX0 LED
Rev. 09/01/21
Page 1 of 8



NOTES:
1. CALCULATION POINTS ARE AT GROUND LEVEL.
2. ALL FIXTURE HEIGHTS ARE NOTED ON THE PLAN
3. CALCULATIONS POINTS ARE ON A 5' x 5' SPACING.
4. CARS, SHRUBBERY, EQUIPMENT AND SIGNAGE CAN CAUSE REDUCED LIGHT LEVELS FROM WHAT IS EXPECTED.
5. CALCULATIONS PROVIDED ARE NOT A GUARANTEE OF PERFORMANCE. ACTUAL LIGHT LEVELS MAY VARY.
**FIELD VERIFICATION REQUIRED.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Full Area Calc.	+	0.1 fc	2.8 fc	0.0 fc	N/A	N/A
Parking Lot Calc.	X	1.3 fc	2.8 fc	0.4 fc	7.0:1	3.3:1

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor
	P4	8	Lithonia Lighting	DSX0 LED P4 40K T4M MVOLT	DSX0 LED P4 40K T4M MVOLT	LED	1	DSX0_LED_P4_40K_T4M_MVOLT.ies	10335	0.93
	P3	13	Lithonia Lighting	DSX0 LED P4 40K T3M MVOLT	DSX0 LED P4 40K T3M MVOLT	LED	1	DSX0_LED_P4_40K_T3M_MVOLT.ies	10256	0.93

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KSA LIGHTING & CONTROLS

CLOVER COMMUNITIES, CRYSTAL LAKE - PHOTOMETRIC ANALYSIS

DRAFTED BY: JB
DATE: 10/11/2021
SCALE: Not to Scale
KSA CONTACT:
PAGE SIZE: ARCH E1
2 of 2

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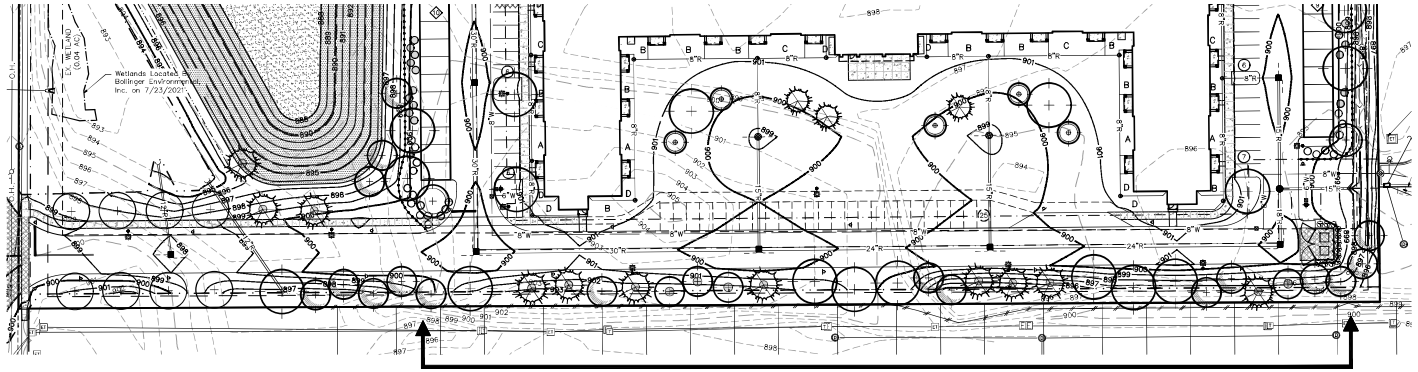
CLOVER COMMUNITIES CRYSTAL LAKE LLC
SITE PLAN FOR PLANNING COMMISSION
PHOTOMETRIC AND SITE LIGHTING PLAN

C6.0

JOB No. 21216
DATE: 5/9/2022
SHEET 38 OF 42
CHKD: JRB
DWN: JJM
PM: RCW
FILE: 21216PH1.DWG

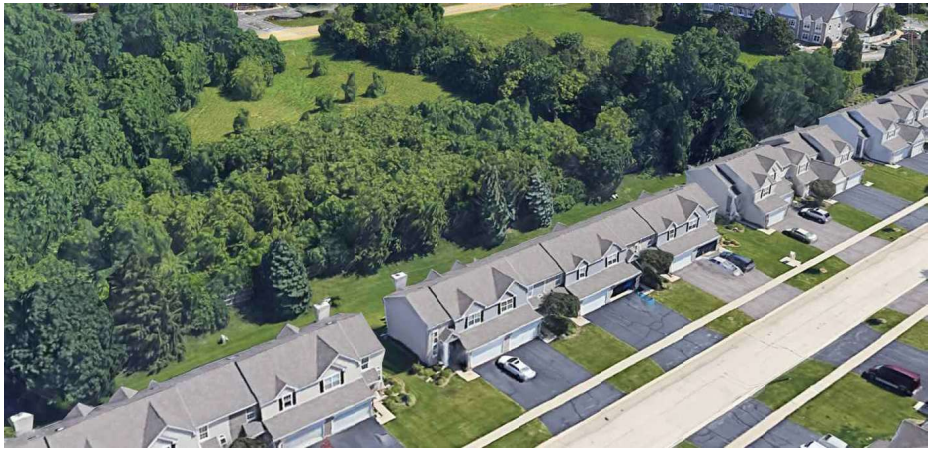
ISSUED:	REV.	DATE
SITE PLAN SUBMITTAL	1	11/10/21
SITE PLAN SUBMITTAL	2	12/17/21
SITE PLAN SUBMITTAL	4	02/16/22
FINAL SITE PLAN SUBMITTAL	1	05/11/22

M:\Civil\Projects\21216\Site Plan\21216PH1.dwg, 5/11/2022 11:38 AM, Jeremy A. Wetherell, DSX PHOTOMETRIC AND SITE LIGHTING PLAN, XCLUC PDF.pc3
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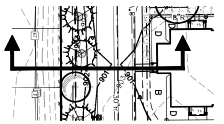




ELEVATION OF SHARED PROPERTY LINE LOOKING NORTH FROM MISTWOOD
NO SCALE



EXISTING MATURE VEGETATION ALONG SOUTH SIDE OF PROPERTY LINE
NO SCALE





MASSING STUDY
NO SCALE

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M:\Civil3d Proj\21216\Site Plan\21216SP1.dwg, 9/11/2022 11:42 AM, Jeremy A. Weitner, L1.2 LANDSCAPE ILLUSTRATIONS, MCLLC PDF.ctb
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CLOVER COMMUNITIES CRYSTAL LAKE LLC

SITE PLAN FOR PLANNING COMMISSION
LANDSCAPE ILLUSTRATIONS

L1.2

JOB No. 21216
DATE: 9/9/2022
SHEET 42 OF 42

ISSUED:	REV. DATE	
SITE PLAN SUBMITTAL 1	11/22/21	CHKD: JRB
SITE PLAN SUBMITTAL 2	12/17/21	DWG: JW
SITE PLAN SUBMITTAL 4	02/16/22	PIC: RCW
FINAL SITE PLAN SUBMITTAL 1	09/11/22	FILE: L1.2.DWG

November 19, 2021

City of Crystal Lake,
Community Development

VIA Electronic Submission

RE: Concept Plan Review Application – Southeast Corner of Terra Cotta and Rt 176 PIN 14-34-301-048-0000

Clover Communities Crystal Lake LLC, has the property referenced above under contract and is seeking a concept review of the use and general layout of the property prior to proceeded with approvals.

Clover Communities

Clover Communities Crystal Lake LLC is a subsidiary of Clover Management West "Clover" and is proposing a 124-unit senior living complex. The proposed project is age restricted, market-rate, multi-family residential. If approved for construction the project would break ground in Spring, 2022. Clover Communities has been in business for over 35 years providing independent senior living with over 60 communities currently in operation in New York, Pennsylvania, Ohio, Indiana, Missouri and Kentucky. Clover is expanding its operations to Illinois, Michigan, North and South Carolina, and Tennessee. While many senior care facilities were devasted by COVID-19, Clover Communities continued operations with regulations and were able to continue with development and construction of new sites.

Project Introduction

Clover Communities Crystal Lake LLC has proposed 124-units of market rate senior (age-restricted 55 and older) independent living. The project would sit on approximately-9 acres and consist of rental units in a single 3-story wood frame building approximately 28 feet in height measured to the eave of the roof. The unit mix will consist of 4 1 bedroom, 1-bathroom units, 100 2-bedroom, 1-bathroom units, and 20 2 bedroom, 1 and ½ bathroom units. The building includes 90 leasable interior storage units and

40 leasable exterior garage units. Each unit is fully equipped with a kitchen, dishwasher, and washer and dryer. The building includes a large service elevator, ample common space throughout including a Community Room, Common Patio area, Common garden/open space, Family Room, Fitness Area, Salon, Coffee Bar and Lounge.

Background Information

Clover was started in 1987 by Its current owner and President, Mr. Michael Joseph. Clover consists of development, construction, and property management and currently owns or manages more than 10 million square feet of property, including market rate, senior Independent Living communities, totaling over 6,500 units.

Aging in Place

The U.S. Centers for Disease Control and Prevention defines aging in place as "the ability to live in one's own home and/or community safely, independently, and comfortably, regardless of age, income, or ability level". Census.gov estimates that by 2030 all baby boomers will be older than 65, accounting for 1 for every 5 residents in the United States.

Residents staying within their community and region as they age is identified by many organizations as an overall health benefit to the community. According to AARP in 2014, "In addition to preventing social isolation, allowing older people to stay involved in their communities [aging in place] has been found to have health benefits. Civic engagement and volunteering can reduce mortality; increase physical function, muscular strength, and levels of self-rated health; reduce symptoms of depression and pain; and increase life expectancy." An additional benefit for choosing to age in place with independent living is freeing up single family homes for new buyers creating market demand for existing housing stock and increasing population density without demand on the school districts.

Clover provides an independent living option to the aging population that is seeking to stay within its community. Providing rental units at market rate targets populations that do not qualify for income restricted properties and do not want or cannot afford full-service care type facilities with meals, housekeeping, and medical assistance. Additionally, rental units do not create legacy costs and burdens to beneficiaries that may not qualify to occupy properties in a community with an age restricted Home Owners Association. Clover structures leases with several options for long- or short-term rental. All of Clover's leases have provisions that allow residents to move quickly if health declines and a medical care facility is needed. Clover has no "buy-in" costs that make aging in place restrictive to middle class aging populations.

Site Considerations

Access and accessibility are major factors in selecting a Clover site. Residents who are aging restrict their driving and drive times to access shopping, worship, and healthcare independently. The proposed site is conveniently located for residents and provides little impact to the residential property to the south. The proposed orientation of the building would be toward Route 176 with the south elevation consisting of patios and outdoor open space for residents. A detention pond would be located on the west side of the property nearest the existing wetland. The property is located in a bowl and is taking in much of the surrounding properties water. Utilities and primary access to the property would be from Rt 176 utilizing the existing road . Due to the low impact independent senior living has on traffic counts this is an ideal entry point with the lighted intersection of IL 176 and Terra Cotta.

There is existing wetland on the western most boundary of the lot. We intend to preserve this area with no need to cause disturbance.

Clover Survey

Clover surveys its 10,000+ residents bi-annually to determine market trends and marketing philosophy. Through the survey important information is derived such as:

- The average age of Clover residents is 76 years or older.
- 27 percent of residents come from an existing apartment and 61 percent come from a single-family home (12% other).
- 97 percent of residents come from 1-5 miles of the property.
- 79 percent of residents live alone.
- 45 percent of residents chose Clover based on the location.

Impact Considerations

The proposed project has the potential to bring up to 244 residents to Crystal Lake based on full capacity and double occupancy of all units. However, typical market trends and experience tell us 79 percent of residents in a Clover project are single occupants, therefore the expected increase in population would be 147 residents at full occupancy.

While no empirical data exists for age-restricted independent senior living emergency call generation, Clover estimates approximately one call for service weekly based on call history at over 60 locations. The majority of calls are medical assistance related. Call trends also increase with the age of the building as there is a direct correlation to the age of the residents within the building. The average Clover residents stays for 10 years.

Using the assumption of 1 additional Fire/EMS per week, the proposed development would generation approximately 52 additional calls per year. This does not assume that most of the residents are current Bartlett residents and would generate the same call volume in their current living situation.

Site Specific Safety Features:

Clover Communities Crystal Lake is an age-restricted senior independent living project. Independent living does not provide for medical care; residents are ambulatory. The proposed building in addition to being fully sprinkled with have emergency exit plans clearly labeled in each unit as well as hallways and common areas. Resident drills are conducted to re-enforce safe exit plans in case of a fire. The main elevator is full sized to accommodate a full-sized stretcher. The drive aisle around the exterior of the building is sized for full-turns for all fire apparatus. Each unit has a balcony or patio to access outdoors. There is no commercial kitchen on-site, reducing potential for large scale fires. Lastly, residents can quickly end lease terms when medical care becomes necessary because of decreased mobility.

Community Living Benefits

Clover communities are designed as retirement communities allowing for independent living in a community setting.

Individual units are equipped with the following:

- Fully equipped kitchen with breakfast bar
- In unit washer and dryer
- Central air conditioning
- Energy-saving appliances
- Sliding glass doors leading to private patio/balcony
- Walk-in shower available
- Emergency pull-cord system

The proposed building and all clover buildings are equipped with the following:

- On-site beauty salon/barber shop
- Community room with patio
- Community activities and planned trips
- Community lounge with fireplace
- Fully handicapped-accessible
- Centrally located elevator service
- Wide, well-lit hallways with handrails
- Secure building, TV-monitored entrance with controlled access
- Fitness center
- Indoor central mailbox system
- Indoor trash rooms

- Coffee room with seating
- Family room
- Game room
- Individual storage units
- Sprinkler system throughout building
- Smoke/CO detectors throughout building

The building amenities are included in every tenant lease and do not require additional deposits. Resident keys access all the amenities. This facility is not open to the public or rentable without a lease. These facilities are designed to be an extension of the individual tenant units specific to senior independent living.



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Apartment Interiors



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Common Areas









Patio
&
Reading Room

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Events








CLOVER
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Events











Traffic Impact Study

Clover Group
Residential Development
Crystal Lake, Illinois

September 29, 2021

Prepared for:

Prepared by:

Dan Brinkman, P.E., PTOE
Assistant Director of Transportation Services

GHA GEWALT HAMILTON ASSOCIATES, INC.



Part IV. Recommendations and Conclusions

Analyses have been conducted under existing and future conditions to determine the impact from the proposed delivery station development on the study area intersections. The capacity analysis results indicate that the increase in project site-generated traffic has little to no effect upon the Peak Hour operations of the area roadway network with the recommendations contained herein:

- Construct a new full access to IL Rte 176 has been discussed aligned opposite the existing access for the office complex.
- Westbound left turns into the site from IL Rte 176 will be made from a newly created westbound left turn lane within the existing painted median on IL Rte 176.
- Eastbound right turns into the site from IL Rte 176 will be made from the existing through lane. An increased curb radius is recommended, but a right turn lane is not warranted.
- Exiting traffic onto IL Rte 176 should have separate right and left turn lanes under Stop Sign control.
- As previously noted, a 3/4 access (left turns in prohibited) to Terra Cotta Road has been discussed offset south of the existing Casey's access drive.
- Exiting traffic onto Terra Cotta Road should have separate right and left turn lanes under Stop Sign control.
- On site parking should be increased by approximately 11 spaces to provide a supply sufficient to meet the Clover Group's internal data's suggested demand of 0.84 spaces per unit plus the City's required 0.25 spaces per unit guest parking requirements.
- Preserve additional space for future Right of Way along IL Rte 176 and Terra Cotta Road (not dedicate) to minimize development impacts should IDOT ultimately improve the intersection to the geometrics recommended in the 2010 SRA report.

This Impact Study has been prepared by



Daniel P Brinkman, PE, PTOE
Assistant Director of Transportation Services

Part V. Technical Addendum

The following Appendices were previously referenced. They provide technical support for our observations, findings and recommendations discussed in the text.

Appendices

A. Photo Inventory
B. 2021 & Historic Traffic Count Summaries
C. Crash Summary Map
D. CMAP Traffic Projections
E. July 12, 2021 Site Plan
F. ITE Trip Generation Manual Excerpts
G. Capacity Analysis Worksheets
H. Clover Group Parking Data
I. ITE Parking Generation Manual Excerpts
J. December 2010 SRA Report Excerpt

CLOVER COMMUNITIES – CRYSTAL LAKE - STORMWATER NARRATIVE:

The Clover Communities project in Crystal Lake has been designed to meet the stormwater requirements for the City of Crystal Lake, with storm sewers designed to handle the 10-year storm flowing full (5-minute time of concentration, 0.62 inches in 5 minutes = 7.44 in/hour) and the 100-year storm flowing with HGL below structure rims (5-minute time of concentration, 1.03 inches in 5 minutes = 12.36 in/hour), and a stormwater infiltration basin designed to handle the 150% of the 100-year 24-hour (8.57 inch) storm, based on Illinois Stormwater Bulletin #75, for the Northeast Region of the state. Calculations use TR-20 methodology with the HydroCAD program.

Presently drainage from Illinois State Route 176 drains onto the project property, and we are proposing a swale system matching that in front of the Sunrise Housing development to keep the IDOT water on IDOT property. We are matching existing culvert and swale sizes and shapes, as well as matching the existing guardrail location. Given that this portion of the swale will be upstream of the already constructed swale, we will be maintaining existing flow capacity with a smaller drainage area leading to it, ensuring that the swale in front of the Clover Development will not serve as a bottleneck for flow. Swale and culvert calculations are also included in the set, and have been submitted to IDOT for review and approval.

There are no available storm sewers on Terra Cotta Road or State Route 176 available at a depth sufficient to serve the project development and storm basin with gravity flow—in fact, part of Terra Cotta Road drains onto an unnamed wetland on the project site. Given the nature of the site and the 0.25 inch/hour infiltration rates found in a 10/22/2021 investigation by G2, the project will be designed with an infiltration basin that will infiltrate the full 100-year storm volume into the ground, at a calculated rate of 0.25 inches/hour.

The stormwater basin is designed to contain 150% of the volume required to infiltrate the runoff at 0.25 inch/hour, and additional freeboard within the basin is provided to give a total of 1.6 times the total 100-year runoff volume in the basin. Additionally, depressional storage on the site is being maintained on the site above the top of bank of the formal detention basin. Calculations ensuring this storage volume are maintained are included in this set. Depressional storage calculations can be found on Sheets C5.0, C5.1, and C5.2.

Additionally, we calculated the 2-year, 24-hour storm runoff to the wetland, ensuring that the total wetland runoff after the project would be 80-150% of the runoff from before the project. To meet this 80% minimum requirement, we needed to direct R17 directly to the wetland, bypassing the stormwater basin. This inlet has also been upgraded to a combined inlet and water quality unit, to ensure the flows to the wetland are properly treated.

If the infiltration basin were to overtop, it would flow northeastward toward the new swale on S.R. 176. We have provided sections of this path with weir flow calculations to prove that it can handle the 100-year storm runoff flow of the site, without flooding the building or adjacent properties. We calculated the peak runoff from a 15-minute, 30-minute, 1-hour, 2-hour, and 3-hour storm at 100-year duration for the full watershed areas draining to the basin and the site wetland, and ensured that the flow through this overflow channel maintains at least 12 inches of freeboard to the garages and to the main building, through this channel. These sections and calculations can be seen on Sheet C5.3-C5.5. The channel is lined with turf reinforcement mat as indicated on Sheet C2.0.

The storm sub-watershed area map can be found on Sheet C5.5. The table of areas and CN values may be found on C5.6. The storm pipe calculation spreadsheet can be found on Sheet C5.3.

The overall site drainage plan can be found on Sheet C5.5, with the basin calculations and water quality calculations found on Sheet C5.6.

Stormwater calculations and HydroCAD data reports also follow this narrative in the separate Stormwater Report, submitted with the Plans. The Report and Plans shall be taken together to represent the project design and intent.