# #2022-250 Oasis Senior Living
# 952 McHenry Avenue – Preliminary Planned Unit Development and Special Use Permit for a Nursing Home
# Project Review for Planning and Zoning Commission

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**Meeting Date:** March 1, 2023

**Requests:**

1. Preliminary Planned Unit Development and Special Use Permit for a Nursing Home.
2. Variation from the requirement to have a landscape island ever 10 parking spaces to allow 11 spaces.
3. Variation from the required 50-foot setback from resident zoning districts to allow 43 feet along the south property line and 27 feet along the north property line.

**Location:** 952 McHenry Avenue

**Acreage:** Approximately 4.2 acres

**Existing Zoning:** O PUD Office

**Surrounding Properties:**

| | |
|---|---|
| North: | R-2 Single Family Residential |
| South: | R-2 PUD Single-Family Residential and O PUD Office |
| East: | R-2 Single Family Residential |
| West: | R-2 PUD Single Family Residential |

**Staff Contact**: Elizabeth Maxwell (815.356.3615)

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**Background:**

- The property is owned by the Prince of Peace Lutheran Church and contains an existing residence and storage building.
- The property would be redeveloped with a nursing home for assisted and memory care patients.

**Development Analysis:**

General

- Request: A Preliminary Planned Unit Development and Special Use Permit for a Nursing Home with Variations.

- Zoning: The site is zoned O PUD Office. Nursing Home is allowed as a Special Use Permit in this zoning district.

- Land Use: The land use map shows the area as Office. This land use designation is appropriate for this use.

- Site Plan:
  - The building is two connected squares each with their own center courtyard. The courtyards feature walkways and gazebos.
  - There is one entrance off McHenry Avenue, which leads to a drive around the entire site. This driveway is required for Fire Rescue purposes.
  - Parking is provided at the front of the site. Parking for nursing care is required at 0.5 spaces per room. 77 rooms are provided, which requires 39 spaces. The site is providing 40 spaces.

- Landscape Plan:
  - Numerous trees are being removed on the property, which total 74 replacement trees. The plan illustrates 113 trees to be planted, so the tree removal requirement will be met.
  - Landscape surrounds the entire perimeter of the site including street trees along McHenry Avenue.
  - Foundation base landscape is planted around the building including inside the courtyard areas.

- Elevations:
  - The building is comprised of cultured stone, shake style cement fiber siding, and composite lap siding.
  - The cultured stone wraps around the entire base of the building and extends up to the roofline at the front facing architectural façade features.
  - The front façade features a covered entry, large peaked roof and cupola.
  - Several small dormers are scattered along the roofline to help break up the visual expanse of the long roof.
  - The elevations meet the design standards.

- Engineering Plans: .
  - A large detention basin is designed at the front of the site. Storm sewer piping from around the site will channel water to this basin.
  - The petitioner has created a wetland basin.

- All engineering is reviewed by the City's storm water consultant and staff for compliance with the City Codes. The petitioner will continue to work with staff on final engineering plans.

**Findings of Fact:**

**Preliminary Planned Unit Development**

The petitioner is requesting approval of a Preliminary Planned Unit Development and Special Use Permit to allow a new Nursing Home facility. A Planned Unit Development is a Special Use and Special Uses require separate review because of their potential to impact surrounding properties and the orderly development of the City.

Section 2-400 B General Standards for all special uses in the Unified Ordinance establishes standards for all special uses in Crystal Lake. Briefly, the criteria are as follows:

1. The use is necessary or desirable, at the proposed location, to provide a service or facility which will further the public convenience and general welfare.
   ☐ *Meets* ☐ *Does not meet*

2. The use will not be detrimental to area property values.
   ☐ *Meets* ☐ *Does not meet*

3. The use will comply with the zoning districts regulations.
   ☐ *Meets* ☐ *Does not meet*

4. The use will not negatively impact traffic circulation.
   ☐ *Meets* ☐ *Does not meet*

5. The use will not negatively impact public utilities or municipal service delivery systems. If required, the use will contribute financially to the upgrading of public utilities and municipal service delivery systems.
   ☐ *Meets* ☐ *Does not meet*

6. The use will not negatively impact the environment or be unsightly.
   ☐ *Meets* ☐ *Does not meet*

7. The use, where possible will preserve existing mature vegetation, and provide landscaping and architecture, which is aesthetically pleasing, compatible or complementary to surrounding properties and acceptable by community standards.
   ☐ *Meets* ☐ *Does not meet*

8. The use will meet requirements of all regulating governmental agencies.
   ☐ *Meets* ☐ *Does not meet*

9. The use will conform to any conditions approved as part of the issued Special Use Permit.
   ☐ *Meets* ☐ *Does not meet*

10. The use will conform to the regulations established for specific special uses, where applicable.
☐ *Meets* ☐ *Does not meet*

**Planned Unit Development Variation**
The purpose of Planned Unit Developments is to encourage and allow more creative and imaginative design of land developments than is possible under district zoning regulations. Planned Unit Developments are, in the form of relief from compliance with conventional zoning ordinance site and design therefore, intended to allow substantial flexibility in planning and designing a proposal. This flexibility is often requirements.

Ideally, this flexibility results in a development that is better planned, contains more amenities, and is ultimately more desirable than one that would have been produced through compliance with typical zoning ordinance and subdivision controls.

Therefore more lenient site requirements may be granted where the Planned Unit Development contains features not normally required of traditional developments. If the evidence is not found to justify such conditions, that fact shall be reported to the City Council with a recommendation that the variation request be lessened or denied.

Oasis is requesting variations from:

Article 3-200 Dimensional Standards: From the required 50-foot setback from resident zoning districts to allow 43 feet along the south property line and 27 feet along the north property line.

*The UDO requires an increased setback from residentially zoned property. The land use to the north is a religious establishment. The land use to the south is single-family attached dwellings. The building was placed on the lot to reduce the impact to the single-family attached housing to the south.*

Article 4-400 F Site Landscape: From the requirement to have a parking lot landscape island every 10 parking spaces to allow 11 spaces.

*The variation allows for additional parking to be provided for the proposed land use.*

NURSING CARE FACILITIES
Nursing care facilities, continuing care retirement communities. All nursing care facilities and continuing care retirement communities must comply with the following standards:

1. General: Applications for nursing care facilities and continuing care retirement communities shall include a description of the proposed use, including the maximum number of residents and the nature of the condition or circumstances for which care, or a planned treatment or training program will be provided the number of staff and the name of the agency responsible for regulating or sponsoring the use.

   ☐ *Meets* ☐ *Does not meet*

2. Loading area: A drop-off/pick-up area in front of the building, that can accommodate at least one 20 feet long vehicle and exclusive of the required parking lot drive aisles, shall be provided. Depending on the facility size, a larger area may be required to accommodate additional vehicles.

   ☐ *Meets* ☐ *Does not meet*

3. Natural Features: The development plan shall identify all natural features such as wetlands, water features, mature tree stands, steep slopes and, where feasible, preserve these existing natural features.

   ☐ *Meets* ☐ *Does not meet*

4. Recreational open space: Usable on-site open space appropriate to the needs of the residents and the nature of the care, treatment or training provided shall be provided.

   ☐ *Meets* ☐ *Does not meet*

5. Other applicable regulations: The proposed facility shall maintain all applicable licenses required by the appropriate agencies for the use described in the application.

   ☐ *Meets* ☐ *Does not meet*

**Comprehensive Land Use Plan 2030 Vision Summary Review:**

The Comprehensive Plan designates the subject property as Office, which allows for existing and future office and service uses. The following goal is applicable to this request:

Land Use – Office

**Goal: Maintain and expand the availability of professional and research office in appropriate locations throughout the city to complement commercial and manufacturing uses.**

**Recommended Conditions:**

If a motion to recommend approval of the petitioner's request is made, it should be with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Weber [Trust Officer], received 09/15/22)
   B. Elevations (Seidell Architects, dated 01/31/23, received 01/31/23)
   C. Landscape Plan (G Studio dated 12/12/22, received 01/04/23)
   D. Engineering Plans (BCI, dated 01/31/23, received 01/31/23)

2. An exterior access door for the fire protection equipment room is needed.

3. The trash enclosure must be a brick or stone material to complement the building.

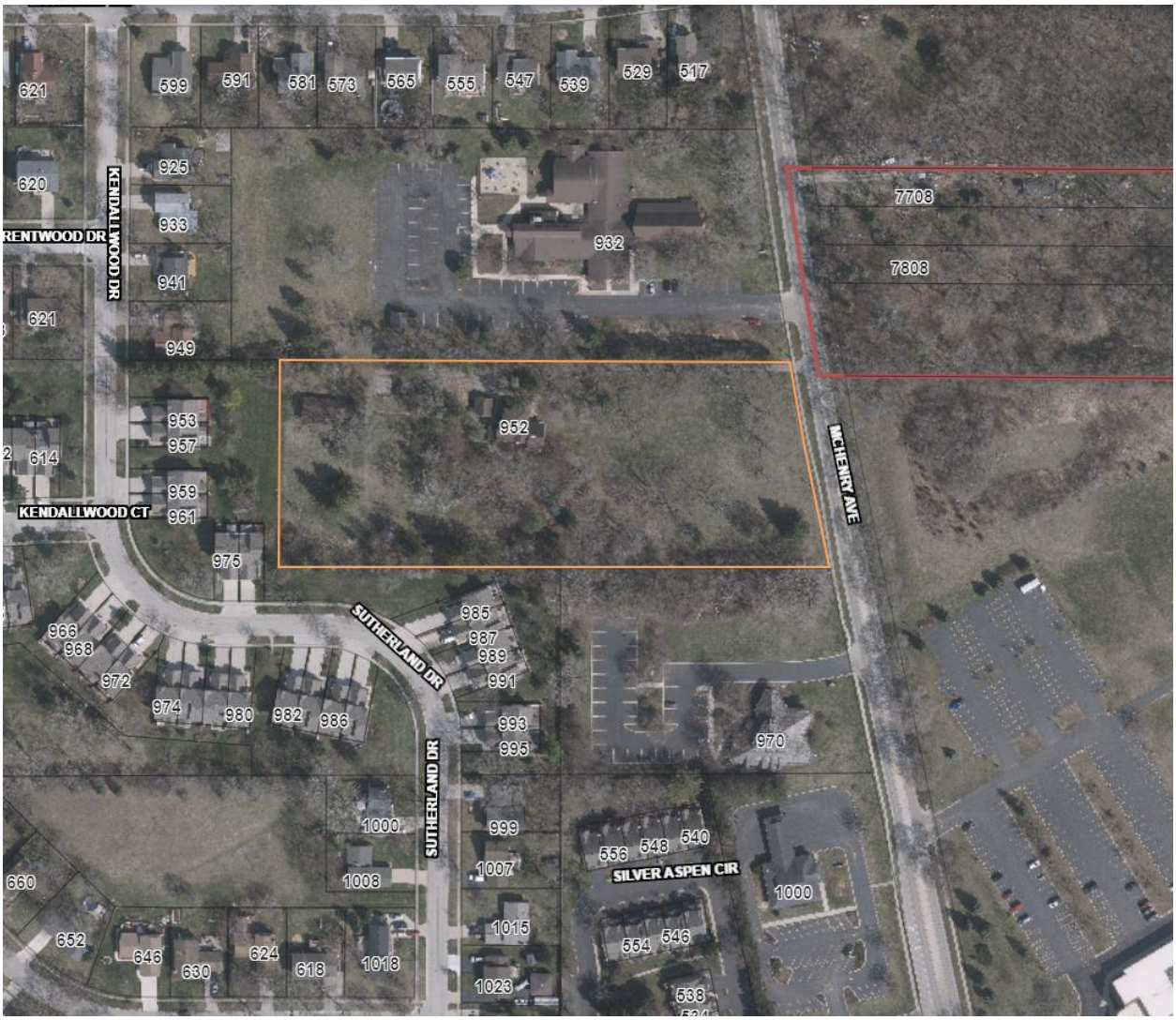
4. The petitioner shall submit a Final PUD that is in concert with the approved preliminary PUD.

5. Final revisions to the plans to meet all engineering requirements are required, which include revisions to the detention basin, as part of the Final PUD submittal.

6. All signage must comply with the UDO standards for multi-family residential signs.

7. The petitioner shall address all of the review comments and requirements of Community Development, Fire Rescue and Public Works and Engineering Departments, as well as the City's Stormwater Consultant.

PIQ Map
952 McHenry 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: Tahir Khan

Address: 2575 Mcleod Drive North Ste C

Saginaw, MI 48604

Phone: (989) 992-4587

E-mail: tahirkhan@oasisseniorhousing.com

Project Name & Description: The Oasis of Crystal Lake

Project Address/Location: 952 S McHenry Ave, Crystal Lake, IL 60014

Signature

12/19/22

Owner: Print and Sign name Date

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.

PUBLIC NOTICE BEFORE THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS

IN THE MATTER OF THE PETITION OF Oasis Senior Housing

LEGAL NOTICE

Notice is hereby given in compliance with the Unified Development Ordinance of the City of Crystal Lake, Illinois that a public hearing will be held before the Planning and Zoning Commission upon the application by Tahir Khan, with Oasis Senior Housing, on behalf of the property owner Prince of Peace Lutheran Church for a for a Preliminary Planned Unit Development and Special Use Permit, relating to the property at 952 McHenry Avenue in Crystal Lake, Illinois 60014. PIN: 19-07-451-036.

This application is filed for the purpose of seeking a Preliminary Planned Unit Development and Special Use Permit for a Nursing Care Facility with variations from Article 3 the required 50-foot setback from residential zoning to allow 43 feet on the south and 27 feet on the north, Article 4 from the foundation landscaping requirement, the street tree perimeter landscape requirement, the off-street parking requirement, the design standards, and any other changes as presented at the hearing, pursuant to Article 2, Article 3, Article 4 and Article 9.

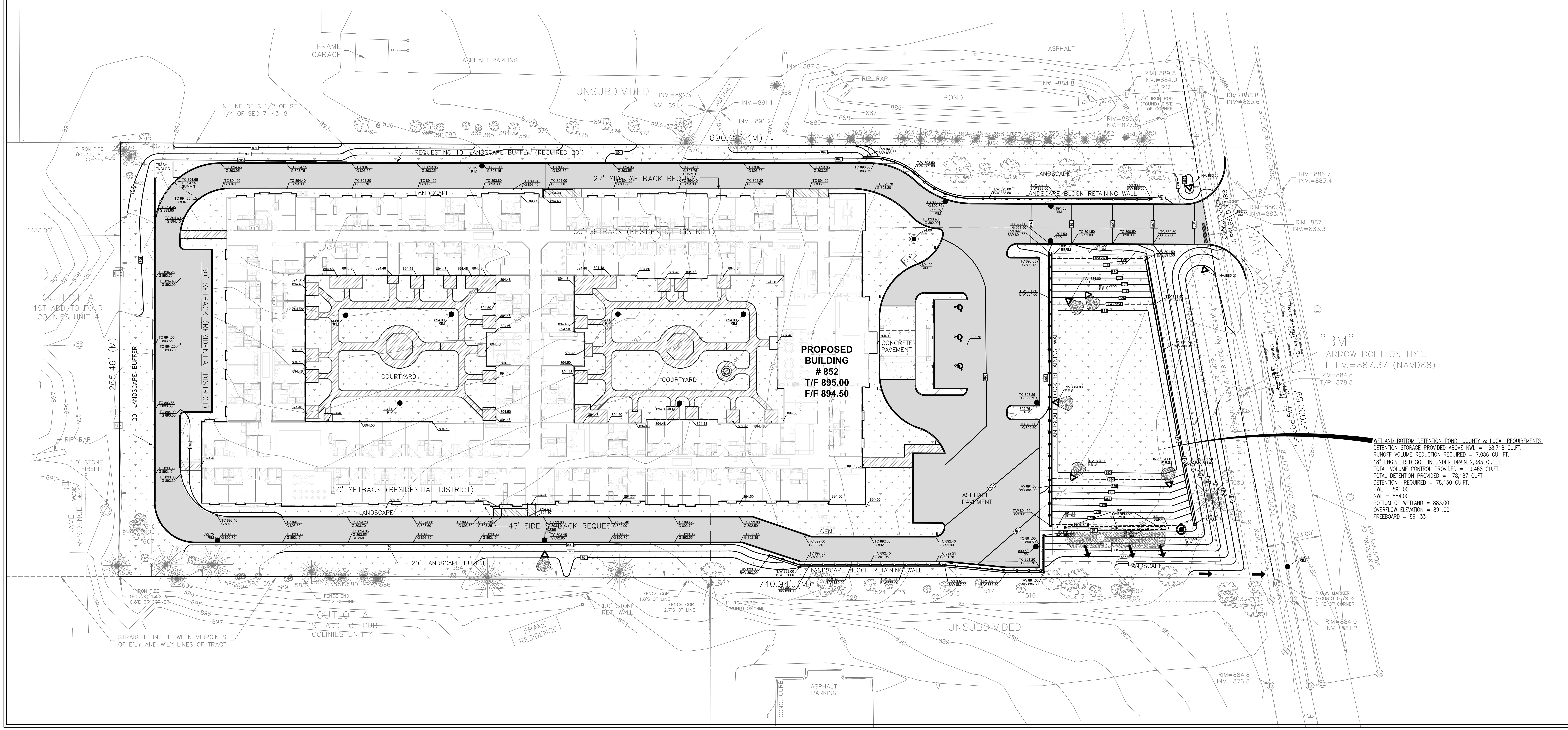
Plans for this project can be viewed at the Crystal Lake Community Development Department at City Hall. A public hearing before the Planning and Zoning Commission for this request will be held at 7:00 p.m. on Wednesday February 1, 2023, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person determining to be heard may be present.

Jeff Greenman, Chairperson
Planning and Zoning Commission
City of Crystal Lake

(Published in the Northwest Herald January 13, 2023)2047194

## GRADING NOTES:

1. RETAINING WALL DESIGN TO BE PROVIDED BY OTHERS.
2. PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
3. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
4. MEET EXISTING GRADE AT PROPERTY LIMITS UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
6. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1–800–892–0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
9. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY OTHERS.
10. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 4H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.




| DATE | REVISIONS | ISSUE |
|---|---|---|
| 12-07-2022 | PRELIMINARY PLAN | A |
| 1-31-2023 | REVISIONS PER VILLAGE COMMENTS | B |

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:


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bbono@bonoconsulting.com


# PROPOSED GRADING, & DRAINAGE PLAN

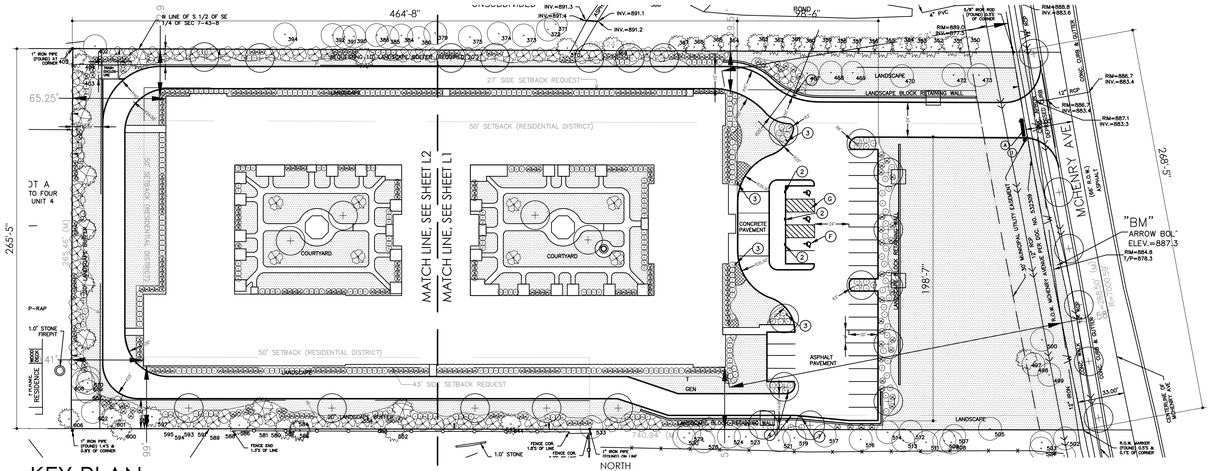
# OVERALL SITE

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION

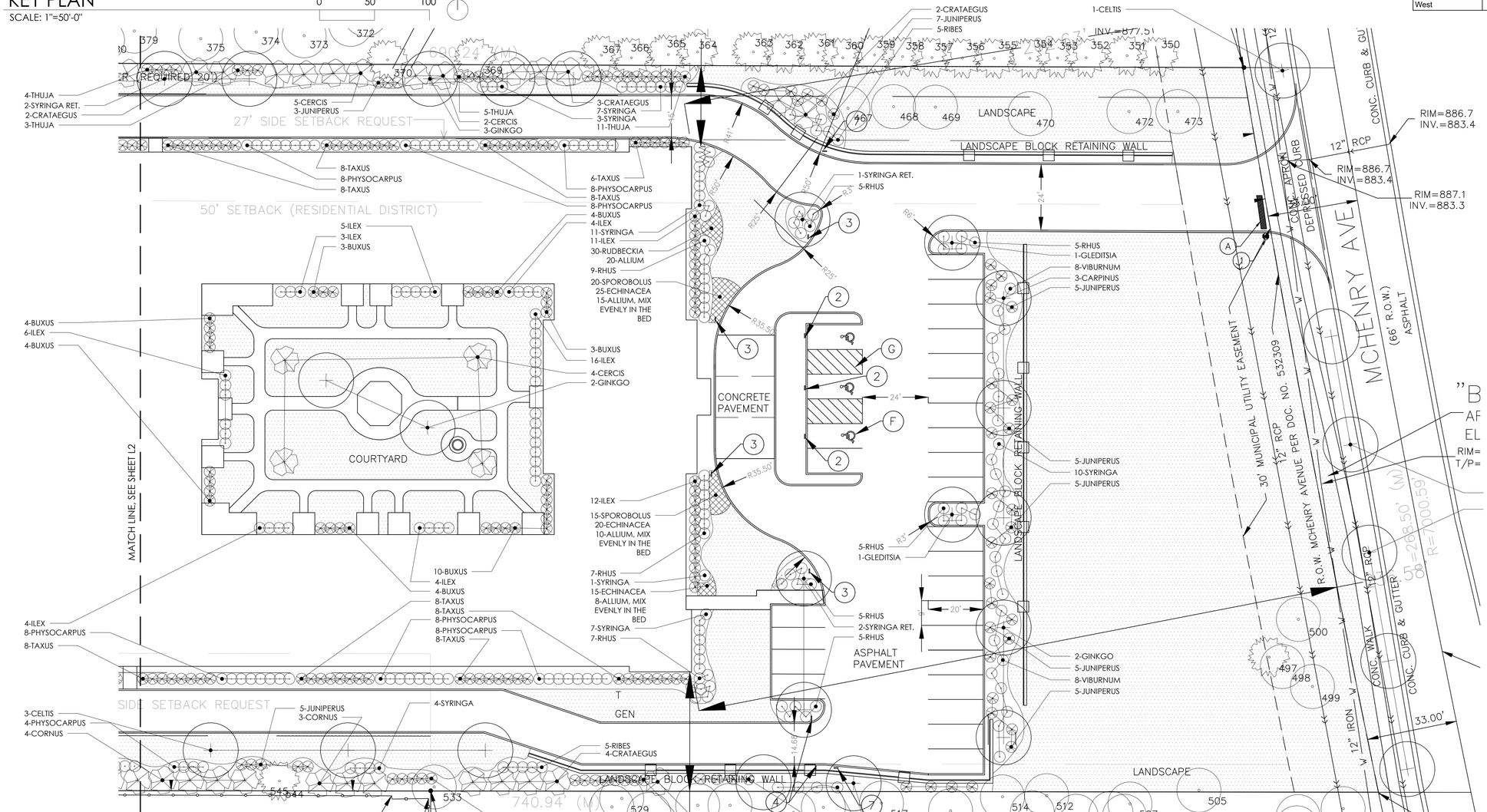

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE 30 0 30
SCALE: 1"=30'-0




## KEY PLAN

SCALE: 1"=50'-0"




## LANDSCAPE PLAN

SCALE: 1"=20'-0"

**Parkway Tree**

| Location | Length (LF) | Requirement (1/40LF) |
|---|---|---|
| McHenry Avenue | 469 | 12 |

**Site Landscaping (Section 4-400.F)**

**Interior Landscape**

| Number of Parking | Req. Number of trees (1/island) | Req. Number of shrubs (5/island) |
|---|---|---|
| 5 | 5 | 25 |

**Perimeter Landscape abutting ROW 15 foot width**

| Location | Length | Req. Number of trees (1/40LF) | Req. Number of shrubs (10/40LF) |
|---|---|---|---|
| East | 199 | 5 | 50 |

**Perimeter Landscape (non-ROW) 8 foot width**

| Location | Length | Req. Number of trees (1/40LF) | Req. Number of shrubs (5/40LF) | Notes |
|---|---|---|---|---|
| North | 99 | 2 | 12 | |
| South | 99 | 2 | 12 | Existing trees prevent requirement |

**Foundation Landscaping**

deciduous and evergreen mix of shrubs along entire perimeter

**Landscape Buffer**

| Location | Length | Req. Number of overstory/evergreen trees (2/100LF) | Req. Number of understory trees (6/100LF) | Req. Number of shrubs (16/100LF) |
|---|---|---|---|---|
| North | 465 | 9 | 28 | 74 |
| South | 465 | 9 | 28 | 74 |
| West | 266 | 5 | 16 | 43 |

LICENSED LANDSCAPE ARCHITECT
GARY W. LEHMAN
157-001193
STATE OF ILLINOIS

| DATE | REVISIONS |
|---|---|
| 12.12.22 | PERMIT REVIEW PLANS |

| ISSUE | |
|---|---|
| 1 | |

PROJECT STAFF
PROJECT MANAGER: G. LEHMAN RLA
ENGINEER: G. LEHMAN RLA
ENGINEER:
TECHNICIAN:


LANDSCAPE ARCHITECTURE
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CHICAGO, IL 60659
773-732-0311
GLEHMAN@STUDIODESIGN.NET

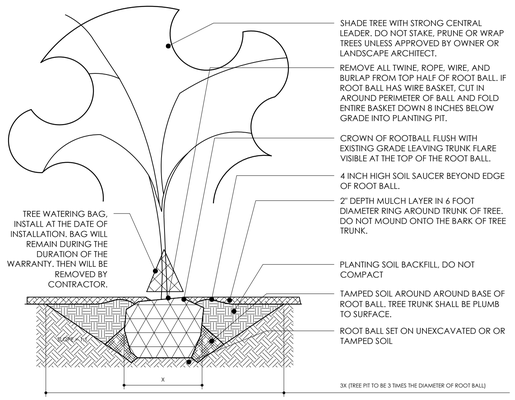

EXISTING EVERGREEN TREE
EXISTING CANOPY
PROPOSED CANOPY TREE
PROPOSED EVERGREEN SHRUBS
PROPOSED SHRUBS
PROPOSED PERENNIAL BED
GRASS, SOD

# LANDSCAPE PLANS
OASIS SENIOR LIVING
952 S. MCHENRY AVE.
CRYSTAL LAKE, ILLINOIS


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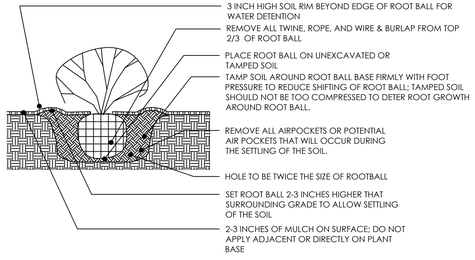

PROJECT NO.: 22030
ISSUE DATE: DEC. 12, 2022
SCALE:

SHEET NUMBER
L1



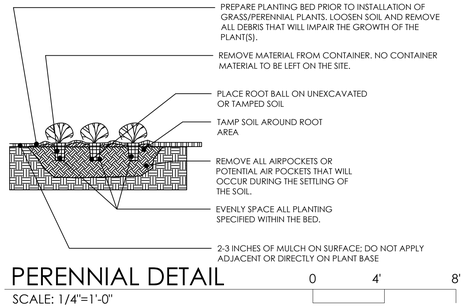

## DECIDUOUS TREE DETAIL

SCALE: 1/4"=1'-0"




## SHRUB DETAIL

SCALE: 1/4"=1'-0"




## PERENNIAL DETAIL

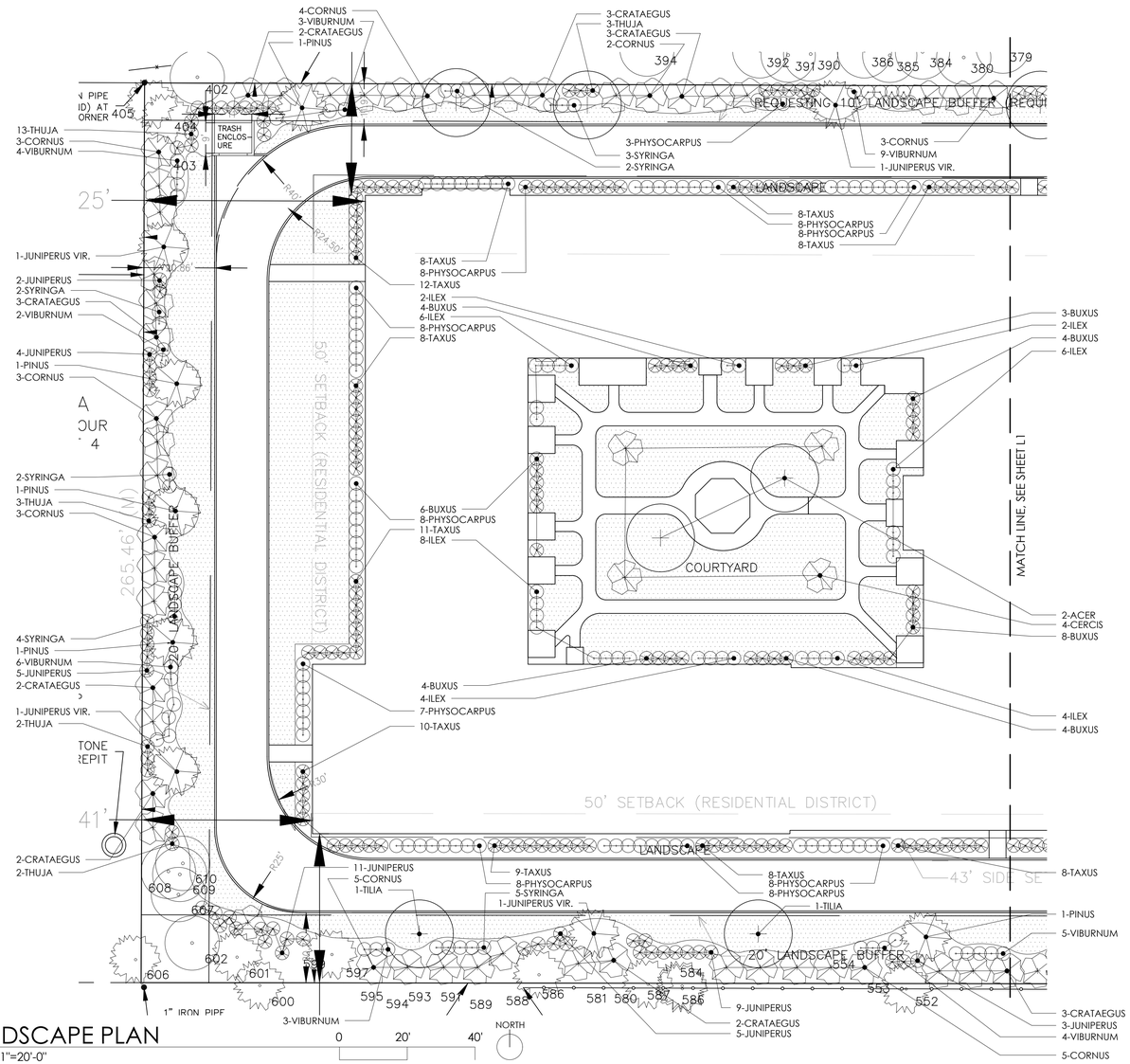
SCALE: 1/4"=1'-0"

GENERAL NOTES:

1. SITE PLAN IS FOR REFERENCE ONLY. PLEASE SEE CIVIL ENGINEERING PLANS FOR CURRENT DRAWING.
2. PLANTING PROPOSED IS TO COMPLY WITH THE VILLAGE OF CRYSTAL LAKE IN LOCATION AND SPECIFICATION.

| Botanical Name | Common Name | Quantity | Size | Condition | Notes |
|---|---|---|---|---|---|
| **Deciduous Trees** | | | | | |
| *Acer rubrum 'Autumn Blaze'* | Autumn Blaze Maple | 2 | 2-1/2" caliper | B&B | |
| *Carpinus betulus* | Hornbeam | 3 | 2-1/2" caliper | B&B | |
| *Celtis occidentalis* | Hackberry | 6 | 2-1/2" caliper | B&B | |
| *Ginkgo biloba* | Ginkgo | 7 | 2-1/2" caliper | B&B | |
| *Gleditsia triacanthos var. inermis* | Honeylocust | 4 | 2-1/2" caliper | B&B | |
| *Quercus imbricaria* | Shingle Oak | 3 | 2-1/2" caliper | B&B | |
| *Syringa reticulata* | Japanese Tree Lilac | 5 | 2-1/2" caliper | B&B | |
| *Tilia Cordata* | Littleleaf Linden | 2 | 2-1/2" caliper | B&B | |
| **Understory Trees** | | | | | |
| *Cercis canadensis* | Eastern Redbud | 15 | 8 foot height | B&B | multi-stemmed |
| *Cornus mas* | Cornelian Cherry | 22 | 8 foot height | B&B | multi-stemmed |
| *Crataegus crusgalli var. inermis* | Cockspur Hawthorn | 35 | 8 foot height | B&B | multi-stemmed |
| **Evergreen Trees** | | | | | |
| *Pinus strobus* | Eastern White Pine | 5 | 6 foot height | B&B | |
| *Juniperus virginiana* | Eastern Red Cedar | 4 | 6 foot height | B&B | |
| **Shrubs** | | | | | |
| *Viburnum dentatum* | Arrowwood Viburnum | 53 | 3 foot height | B&B | |
| *Thuja 'Smaragd'* | Smaragd Arborvitae | 51 | 4 foot height | B&B | |
| Taxus x intermedia | Yew | 142 | 1 foot height | B&B | |
| *Syringa meyeri palibin* | Meyer Lilac | 61 | 2 foot height | B&B | |
| Ribes alpinum 'Green Mound' | Alpine Currant | 10 | 3 foot height | B&B | |
| Rhus glabra 'Gro-Low' | Gro-low Sumac | 48 | 18 inch height | 5 gallon | |
| *Physocarpus opulifolius coppertina* | Ninebark | 127 | 2 foot height | B&B | |
| Juniperus chinensis 'Mint Julep' | Mint Julep Juniper | 91 | 2 foot height | B&B | |
| *Ilex verticillata* | Winterberry | 97 | 2 foot height | B&B | |
| Buxus 'Green Mountain' | Boxwood | 65 | 24 inch height | B&B | |
| **Perennials and Grasses** | | | | | |
| *Allium cernuum* | Nodding Onion | 53 | | 1 gallon | |
| Echinacea purpurea | Purple Coneflower | 60 | | 1 gallon | |
| *Rudbeckia hirta* | Black-eyed Susan | 30 | | 1 gallon | |
| Sporobolus heterolepsis | Prairie Dropseed | 35 | | 1 gallon | |

## PLANT SCHEDULE




## LANDSCAPE PLAN

SCALE: 1"=20'-0"

EXISTING EVERGREEN TREE

EXISTING CANOPY

PROPOSED CANOPY TREE

PROPOSED EVERGREEN SHRUBS

PROPOSED SHRUBS

PROPOSED PERENNIAL BED

GRASS, SOD

LICENSED LANDSCAPE ARCHITECT
GARY W. LEHMAN
157-001193
STATE OF ILLINOIS

| DATE | REVISIONS | ISSUE | PROJECT STAFF |
|---|---|---|---|
| 12.12.22 | PERMIT REVIEW PLANS | 1 | PROJECT MANAGER: G. LEHMAN RLA |
| | | | ENGINEER: G. LEHMAN RLA |
| | | | ENGINEER: |
| | | | TECHNICIAN: |


Studio
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773.732.0311
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# LANDSCAPE PLANS
## OASIS SENIOR LIVING
## 952 S. MCHENRY AVE.
## CRYSTAL LAKE, ILLINOIS


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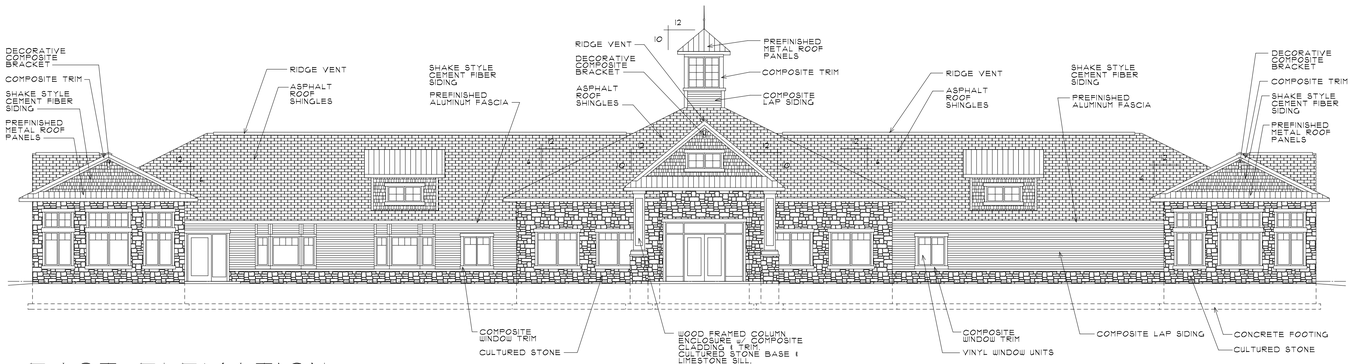

PROJECT NO.: 22030

ISSUE DATE: DEC. 12, 2022

SCALE:

SHEET NUMBER

L2




## EAST ELEVATION

1 / A4.1

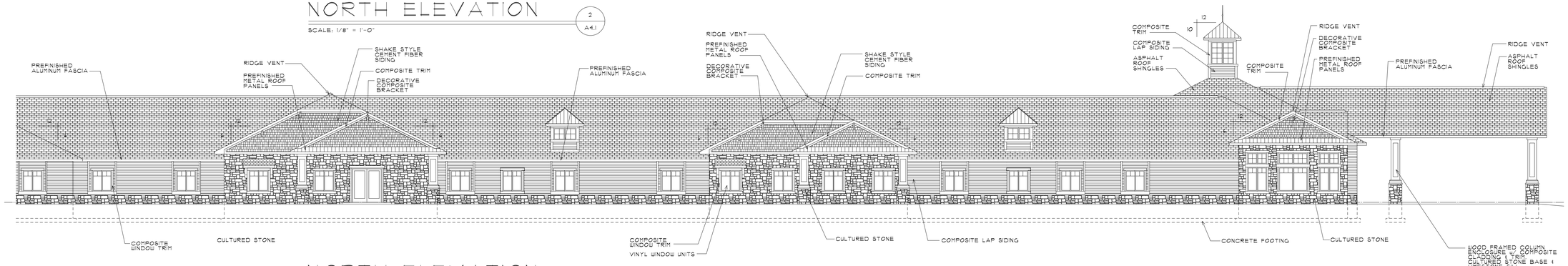
SCALE: 3/32" = 1'-0"



## NORTH ELEVATION

2 / A4.1

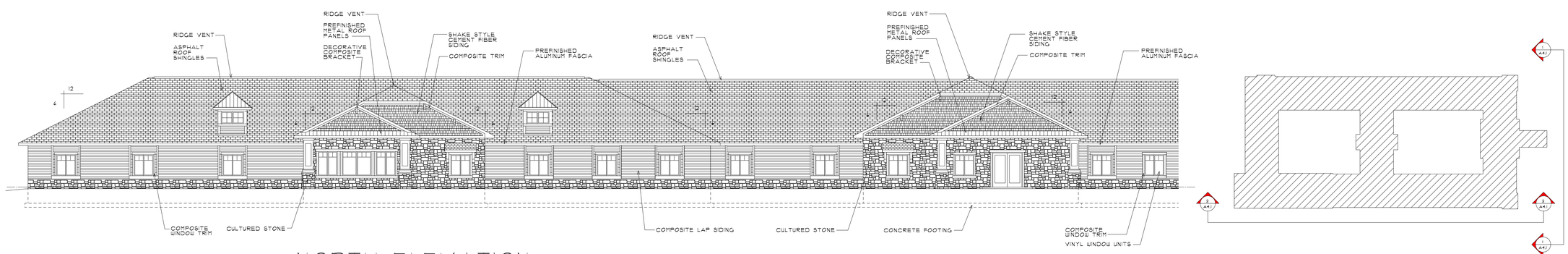
SCALE: 1/8" = 1'-0"




## NORTH ELEVATION

3 / A4.1

SCALE: 3/32" = 1'-0"




## NORTH ELEVATION

4 / A4.1

SCALE: 3/32" = 1'-0"

| | |
|---|---|
| DRAWN BY | T.L.S. |
| CHECKED | T.L.S. |
| APPROVED BY | T.L.S. |
| DATE | 6/30/22 |
| PRINT DATE | |

| ISSUED | DATE |
|---|---|
| FOR PLANNING SUBMITTAL | 01/31/23 |

| ISSUED | DATE |
|---|---|
| | |


SEIDELL ARCHITECTS
COMMERCIAL RESIDENTIAL INDUSTRIAL
114 N. COURT AVE., STE. 201
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PROJECT

OASIS SENIOR LIVING FACILITY

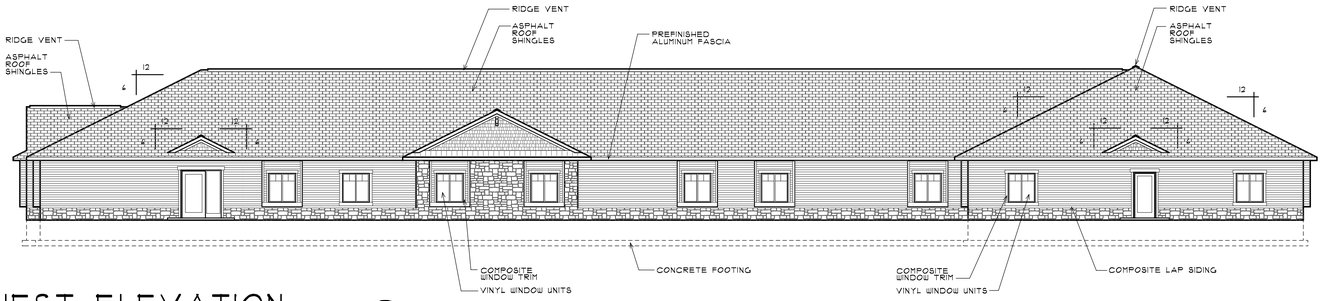
NEW SENIOR LIVING CENTER

CRYSTAL LAKE, IL

952 MCHENRY AVENUE

PROJECT NO.
22-048

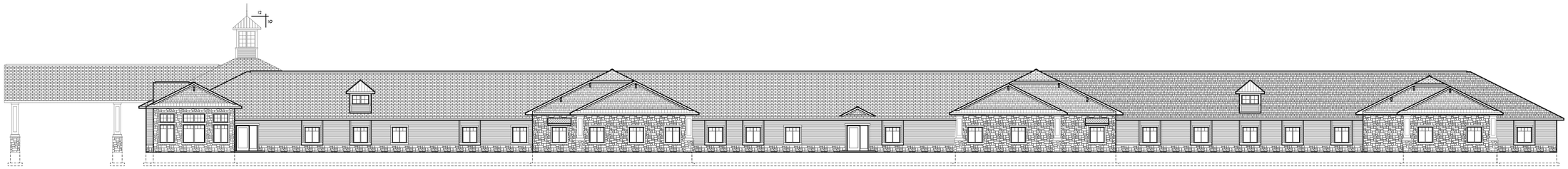
SHEET
A4.1




## WEST ELEVATION

SCALE: 3/32" = 1'-0"

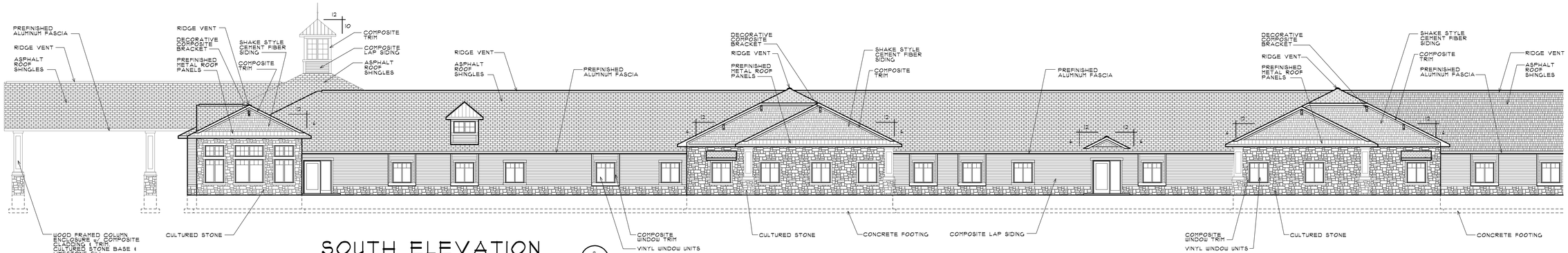
1 / A4.2




## SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

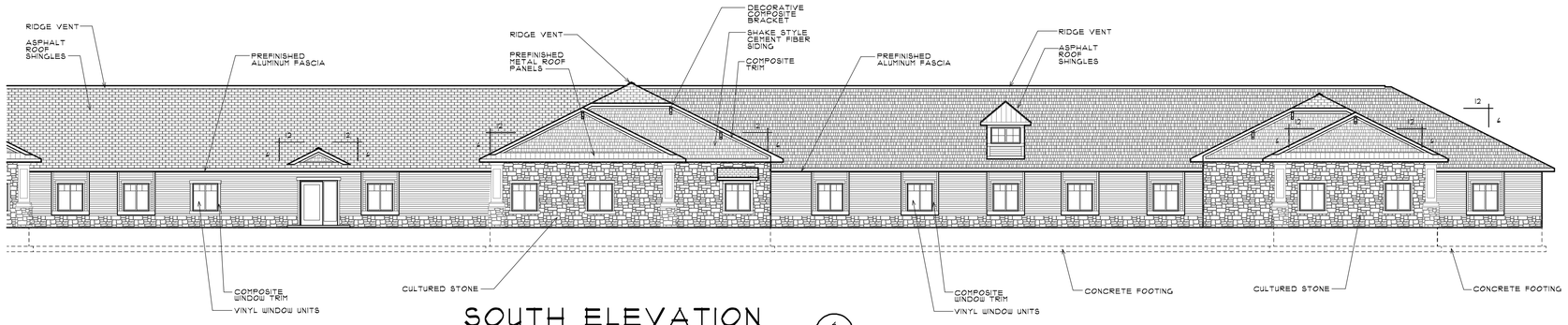
2 / A4.2




## SOUTH ELEVATION

SCALE: 3/32" = 1'-0"

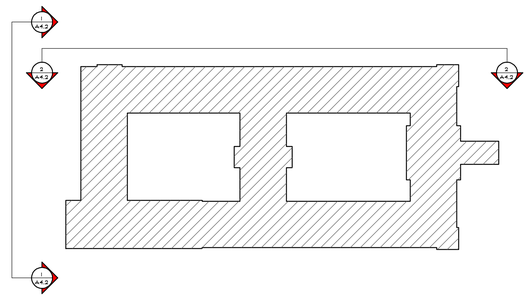
3 / A4.2




## SOUTH ELEVATION

SCALE: 3/32" = 1'-0"

4 / A4.2




| DATE | ISSUED |
|---|---|
| | |
| 01/31/23 | FOR PLANNING SUBMITTAL |

DRAWN BY: T.L.S.
CHECKED: T.L.S.
APPROVED BY: T.L.S.
DATE: 6/30/22
PRINT DATE:

SEIDELL ARCHITECTS
COMMERCIAL RESIDENTIAL INDUSTRIAL
114 N. COURT AVE., STE. 201
GAYLORD, MICHIGAN 49734
PHONE (989) 731-0372
FAX (989) 731-6932

PROJECT
OASIS SENIOR LIVING FACILITY
NEW SENIOR LIVING CENTER
952 MCHENRY AVENUE
CRYSTAL LAKE, IL

PROJECT NO.
22-048

SHEET
A4.2

PROPOSED COLOR PLAN:

HORIZONTAL LAP SIDING ALSIDE
ASCENT COMPOSITE CLADDING, LAGUNA BLUE
(OR APPROVED EQUAL)

CEDAR SHAKE SIDING: CERTAINTEED
MONT TAHOMA SHAKES, WHITE OR STRAIGHT EDGE
MONT TAHOMA SHAKES, WHITE OR GRAY
(OR APPROVED EQUAL)

STONE VENEER: ELDORADO STONE
STACKED STONE SILVER LINING
(OR APPROVED EQUAL)

ASPHALT SHINGLES: CERTAINTEED
LANDMARK ASPHALT SHINGLES, PEUTERWOOD
(OR APPROVED EQUAL)

METAL ROOF: MCCARTHY METAL ROOFING
CLICK LOCK STANDING SEAM, VERMONT SLATE
(OR APPROVED EQUAL)

WINDOW FRAMES:
WHITE

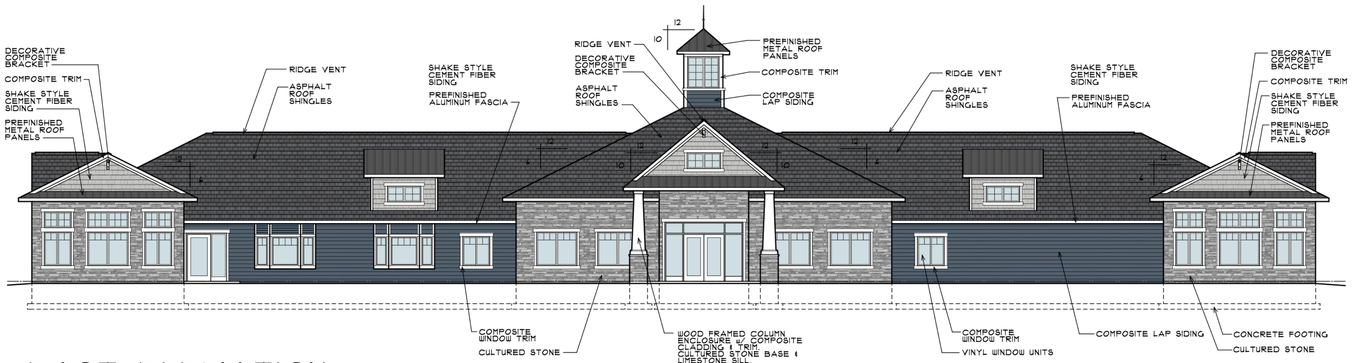
DOORS AND FRAMES:
WHITE

COMPOSITE TRIM AT WINDOWS AND DOORS:
WHITE

COMPOSITE FASCIA:
WHITE

DECORATIVE BRACKETS:
WHITE

WALL MOUNTED EQUIPMENT INCLUDING VENTS AND LOUVERS:
COLOR TO MATCH WALL IN WHICH IT IS LOCATED




## EAST ELEVATION

1 / A4.1

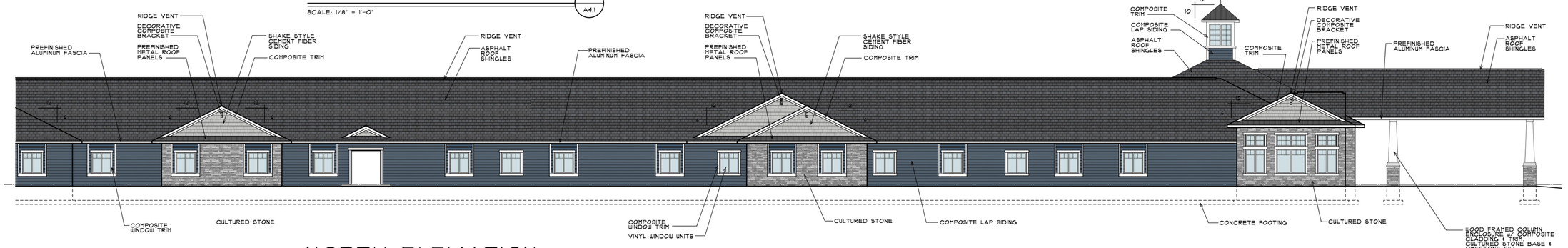
SCALE: 3/32" = 1'-0"



## NORTH ELEVATION

2 / A4.1

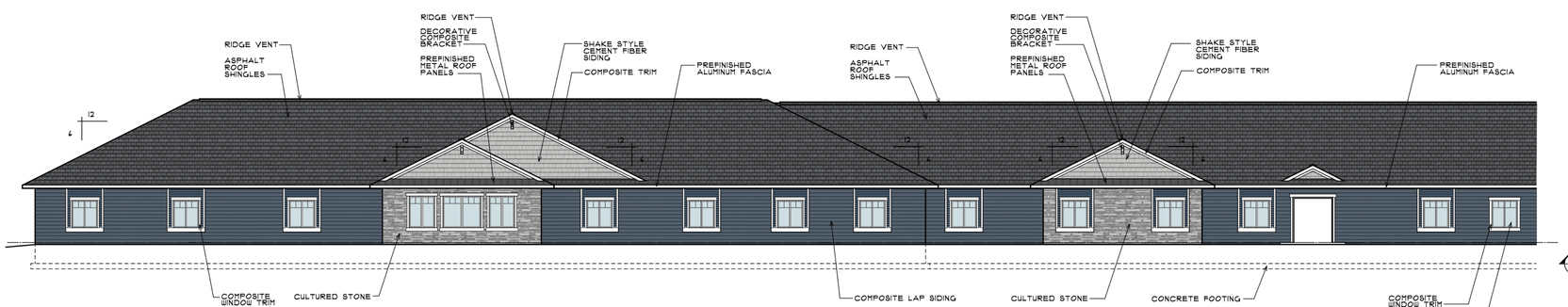
SCALE: 1/8" = 1'-0"




## NORTH ELEVATION

3 / A4.1

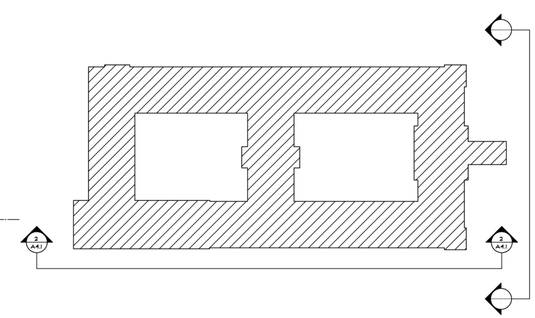
SCALE: 3/32" = 1'-0"




## NORTH ELEVATION

4 / A4.1

SCALE: 3/32" = 1'-0"




| DATE | ISSUED |
|---|---|
| | |
| 10/10/22 | OWNER REVIEW |
| 10/14/22 | OWNER REVIEW |
| 10/18/22 | OWNER REVIEW |

| | |
|---|---|
| DRAWN BY | T.L.S. |
| CHECKED | T.L.S. |
| APPROVED BY | T.L.S. |
| DATE | 6/30/22 |
| PRINT DATE | |


SEIDELL ARCHITECTS
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114 N. COURT AVE., STE. 201
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FAX (989) 731-8932


PROJECT
OASIS SENIOR LIVING FACILITY
NEW SENIOR LIVING CENTER
152 MCHENRY AVENUE
CRYSTAL LAKE, IL

PROJECT NO.
22-048

SHEET
A4.1

PROPOSED COLOR PLAN:

HORIZONTAL LAP SIDING, ALSIDE
ASCEND COMPOSITE CLADDING, LAGUNA BLUE
(OR APPROVED EQUAL)

CEDAR SHAKE SIDING, CERTAINTEED
CEDAR IMPRESSIONS TRIPLE 5" STRAIGHT EDGE
SAINTAL SHINGLES, GRANITE GRAY
(OR APPROVED EQUAL)

STONE VENEER, ELDORADO STONE
STACKED STONE, SILVER LINING
(OR APPROVED EQUAL)

ASPHALT SHINGLES, CERTAINTEED
LANDMARK ASPHALT SHINGLES, PESTERWOOD
(OR APPROVED EQUAL)

METAL ROOF, MCCARTHY METAL ROOFING
LOCK, LOCK STANDING SEAM, VERMONT SLATE
(OR APPROVED EQUAL)

WINDOW FRAMES:
WHITE

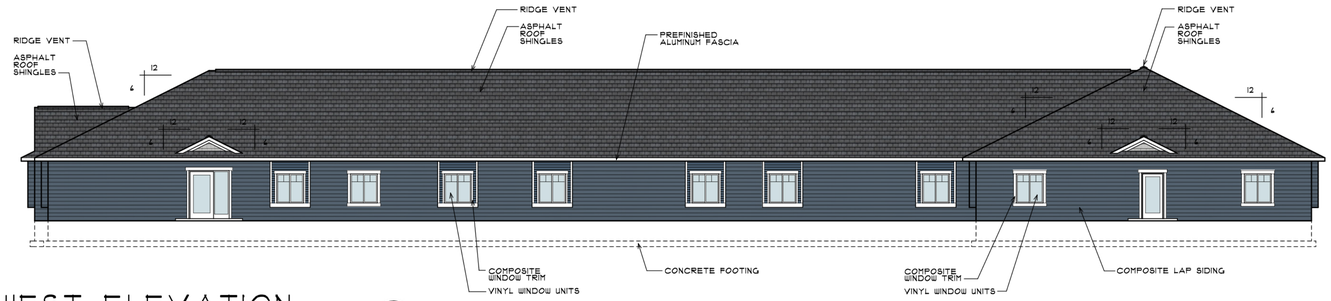
DOORS AND FRAMES:
WHITE

COMPOSITE TRIM AT WINDOWS AND DOORS:
WHITE

COMPOSITE FASCIA:
WHITE

DECORATIVE BRACKETS:
WHITE

WALL MOUNTED EQUIPMENT INCLUDING VENTS AND LOUVERS SHALL MATCH WALL IN WHICH IT IS LOCATED




## WEST ELEVATION

SCALE: 3/32" = 1'-0"

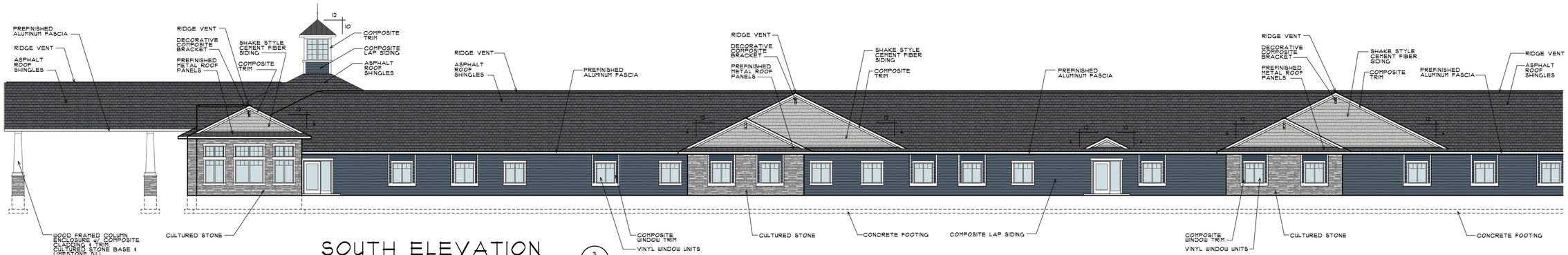
1 A4.2




## SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

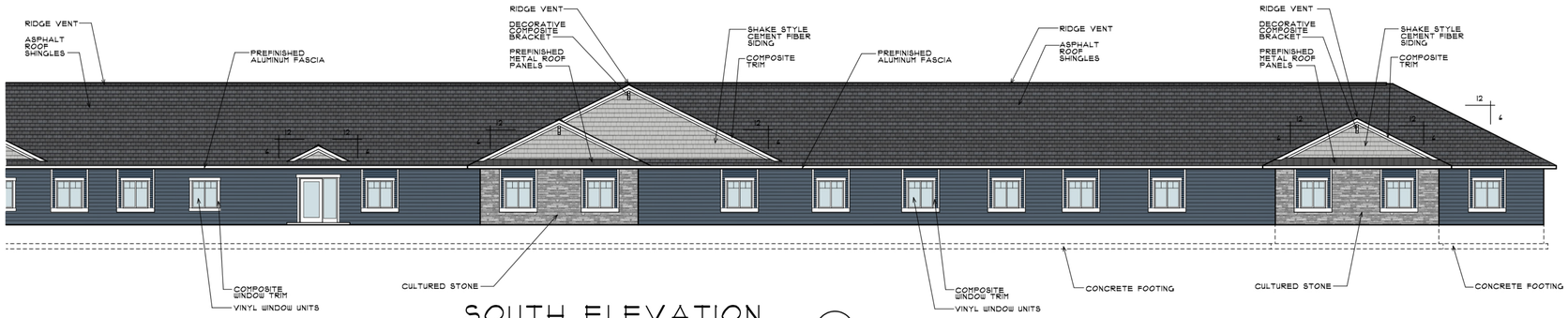
2 A4.2




## SOUTH ELEVATION

SCALE: 3/32" = 1'-0"

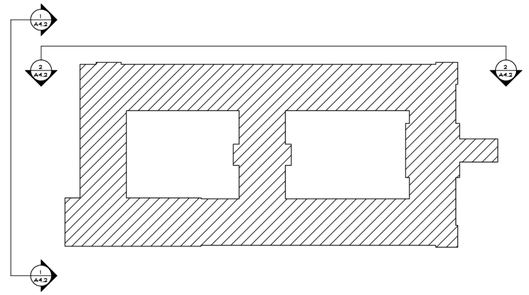
3 A4.2




## SOUTH ELEVATION

SCALE: 3/32" = 1'-0"

1 A4.2




| DATE | ISSUED |
|---|---|
| | |
| 10/10/22 | OWNER REVIEW |
| 10/14/22 | OWNER REVIEW |
| 10/18/22 | OWNER REVIEW |

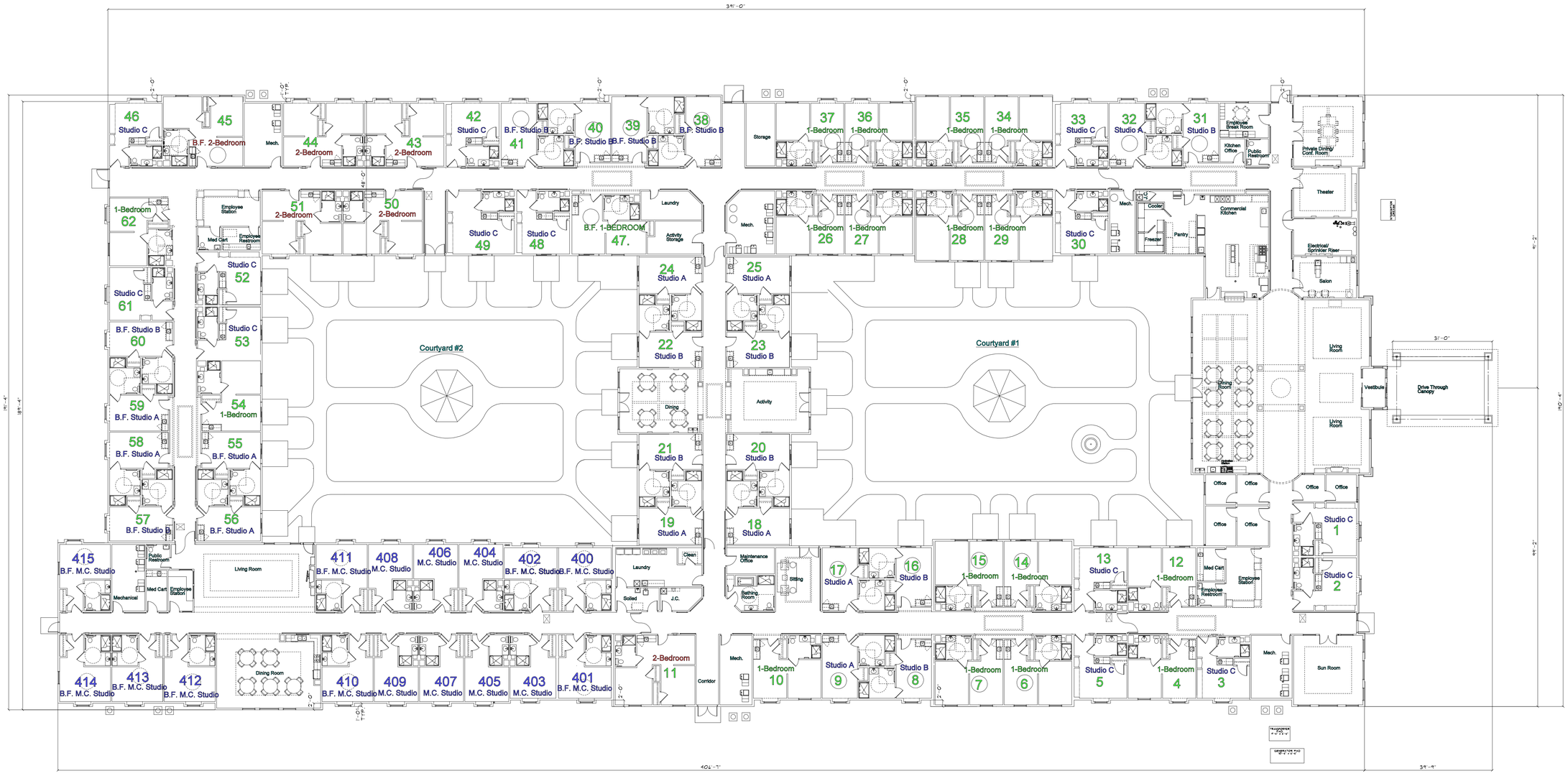
DRAWN BY T.L.S.
CHECKED T.L.S.
APPROVED BY T.L.S.
DATE 6/30/22
PRINT DATE


SEIDELL ARCHITECTS
COMMERCIAL RESIDENTIAL INDUSTRIAL
114 N. COURT AVE. STE. 201
POST OFFICE BOX 2189
GAYLORD, MICHIGAN 49734
PHONE (989) 731-0372
FAX (989) 731-6932


PROJECT
OASIS SENIOR LIVING FACILITY
NEW SENIOR LIVING CENTER
952 MCHENRY AVENUE
CRYSTAL LAKE, IL

PROJECT NO.
22-048

SHEET
A4.2




52,907 SQ. FT.

| Unit Summary | Units | Area (S.F.) |
|---|---|---|
| Memory Care | 16 | 300/345 (BF) |
| Studio | 38 | 335/345 |
| One Bed | 18 | 429/472 |
| Two Bed | 6 | 508/555 |
| Total | 78 | |

# OVERALL FLOOR PLAN

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

NORTH

| ISSUED | DATE |
|---|---|
| | |
| FOR PLANNING SUBMITTAL | 01/31/23 |
| | |
| | |

| | |
|---|---|
| DRAWN BY | T.L.S. |
| CHECKED | T.L.S. |
| APPROVED BY | T.L.S. |
| DATE | 6/30/22 |
| PRINT DATE | |

SEIDELLS ARCHITECTS
COMMERCIAL INDUSTRIAL RESIDENTIAL
114 N. COURT AVE., STE. 201
POST OFFICE BOX 2189
GAYLORD, MICHIGAN 49734
PHONE (989) 731-0372
FAX (989) 731-9832

PROJECT
OASIS SENIOR LIVING FACILITY
NEW SENIOR LIVING CENTER
952 MCHENRY AVENUE
CRYSTAL LAKE, IL

PROJECT NO.
22-048

SHEET
A1

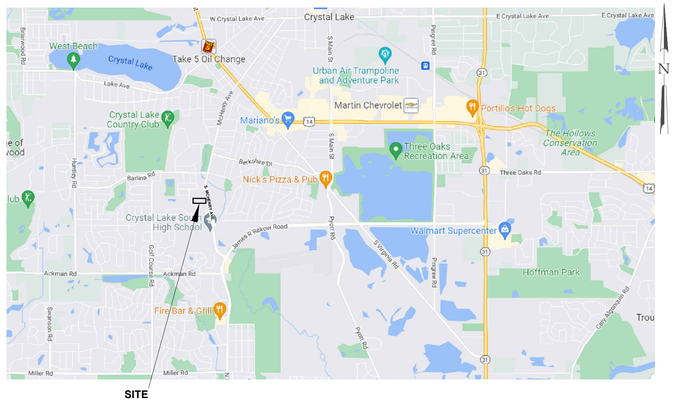
BENCHMARK INFO
SITE BENCHMARK– ARROW BOLT ON HYD. ELEV.=887.37 (NAVD88)

# OASIS SENIOR LIVING
# SITE DEVELOPMENT PLAN
# 952 S. McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

**SECTION: 7**
**TOWNSHIP: 43N**
**RANGE: 8E**

**PIN: 19-07-451-036**

## SITE LOCATION MAP




## PRELIMINARY ENGINEERING

DRAWING INDEX:


1. TITLE SHEET, LEGEND, SITE LOCATION, & AERIAL MAP
2. EXISTING TOPOGRAPHY
3. DEMOLITION PLAN
4. PHASE – I –SOIL EROSION & SEDIMENTATION CONTROL PLAN
5. PHASE – II –SOIL EROSION & SEDIMENTATION CONTROL PLAN [NOT INCLUDED]
6. SWPPP [NOT INCLUDED]
7. PROPOSED GRADING & DRAINAGE PLAN – OVERALL SITE
8. PROPOSED GRADING & DRAINAGE PLAN – EAST SECTION
9. PROPOSED GRADING & DRAINAGE PLAN – WEST SECTION
10. PROPOSED UTILITIES PLAN – OVERALL SITE
11. PROPOSED UTILITIES PLAN – EAST SECTION
12. PROPOSED UTILITIES PLAN – WEST SECTION
13. SITE PLAN & GEOMETRIC PLAN – OVERALL SITE
14. AUTOTURN EXHIBIT
15. CONSTRUCTION NOTES [NOT INCLUDED]
16. STANDARD DETAILS [NOT INCLUDED]


## AERIAL MAP




PROJECT NARRATIVE

GENERAL: PROPOSED OASIS SENIOR LIVING FACILITY IS PROPOSED ON A SITE WITH 4.138 AC., THE NEW BUILDING TO BE A SINGLE STORY BUILDING ON ONE LEVEL FINISHED FLOOR. BUILDING TO HAVE TWO COURTYARDS AND PARKING LOT. THERE WILL BE DRIVE AROUND THE BUILDING FOR FIRE TRUCK ACCESS. DETENTION POND WILL BE IN THE FRONT YARD.

AREA SUMMARY:
TOTAL AREA OF SITE: 4.138 ACRES
DISTURBED AREA OF SITE: 4.138 ACRES

SPECIAL PROTECTION AREAS: NO SPECIAL MANAGEMENT AREAS ARE PRESENT ON SITE OR WITHIN 100' FROM SITE.

UPSTREAM TRIBUTARY: THERE IS A SMALL UPSTREAM TRIBUTARY AREA FOR THE SITE.

COMBINED/SEPARATE SEWER AREA INFO: PROPOSED PROJECT IS LOCATED IN A SEPARATE SEWER AREA. STORM SEWER WILL DISCHARGE TO STORM SEWER EAST OF THE SITE.

DETENTION/VOLUME CONTROL FACILITY: DETENTION IS REQUIRED PER LOCAL & COUNTY REQUIREMENTS. VOLUME REDUCTION FACILITY IS REQUIRED PER COUNTY REQUIREMENTS. DETENTION POND WILL DISCHARGE TO THE STORM SEWER.

SANITARY SEWERS: TWO 6" SANITARY SERVICES FROM THE BUILDING ARE PROPOSED TO CONNECT TO GREASE BASIN & A NEW SANITARY MANHOLE ON THE SITE. FROM THE MANHOLE THE SANITARY SERVICE IS PROPOSED TO CONNECT TO THE SANITARY SEWER MAIN LOCATED IN THE FRONT YARD.

SOILS/INFILTRATION RATE: SILTY CLAYS

GROUNDWATER ELEVATION: N/A

1. I HEREBY CERTIFY THAT THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT THE SUBJECT PROPERTY, THE SURROUNDING PROPERTIES OR THE PUBLIC RIGHT-OF-WAY WITH RESPECT TO STORMWATER DRAINAGE, AND THAT A SAFE OVERFLOW ROUTE HAS BEEN ESTABLISHED.

ABHIJIT VEER 062-067076 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
EXP. 11-30-23

ENGINEER

1/31/2023
DATE

**LEGEND:**

| | EXISTING | PROPOSED |
|---|---|---|
| PROPERTY LINE | | |
| SANITARY SEWER LINE | | |
| WATER LINE | | |
| STORM SEWER LINE | | |
| STORM MANHOLE | | |
| SANITARY MANHOLE | | |
| COMBINED SEWER | | |
| COMBINED MANHOLE | | |
| CATCH BASIN | | |
| INLET | | |
| WATER VALVE VAULT | | |
| WATER VALVE | | |
| GRADE | 100'00 | 887.55 |
| DRAINAGE DIVIDE | | |
| CURB & GUTTER | | |
| CLEANOUT | | CO |
| DOWNSPOUT (ROOF DRAINS) | DS | DS |
| WATER B. BOX | | WB |
| TREE PROTECTION FENCE | | |
| CONSTRUCTION FENCE | | CF |
| INLET FILTER BASKET | | |
| TRAFFIC DIRECTION PAVEMENT MARKING | | |
| FIRE HYDRANT | | |
| RETAINING WALL W/RAILING | | |
| TOP OF CURB<br>BOTTOM OF CURB | | T/C XXX.XX<br>B/C XXX.XX |
| TOP OF CURB<br>BOTTOM OF GUTTER | | T/C XXX.XX<br>B/G XXX.XX |
| WALK<br>BOTTOM OF WALK | | W XXX.XX<br>B/W XXX.XX |
| DESPRESSED CURB<br>BOTTOM OF GUTTER | | D/C XXX.XX<br>B/G XXX.XX |
| MOUNTABLE CURB | | M/C XXX.XX<br>B/C XXX.XX |

NOTE

The location of existing underground utilities, such as water mains, sewers, gas lines, etc., as shown on the plans, has been determined from the best available information and is given for the convenience of the Contractor. However, the Owner and the Engineer do not assume responsibility in the event that during construction, utilities other than those shown may be encountered, and that the actual location of those which are shown may be different from the location as shown on the plans.

Bono Consulting, Inc. is not responsible for the safety of any party at or on the construction site. Safety is the sole responsibility of the contractor and any other person or entity performing work or services. Neither the owner nor engineer assumes any responsibility for the job site safety of persons engaged in the work or the means or methods of construction.

Current Standard Specifications of the Judicial Authority shall apply to the construction on this project.

*Note: The exact location of all utilities shall be verified by the contractor prior to construction activities. For utility locations call:*
*J.U.L.I.E. 1 (800) 892-0123*

| REVISIONS | DATE |
|---|---|
| PRELIMINARY PLAN | 12-07-2022 |
| REVISIONS PER VILLAGE COMMENTS | 1-31-2023 |

| ISSUE | |
|---|---|
| A | |
| B | |

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:


BCI
BONO CONSULTING CIVIL ENGINEERS
A Sovek & Mathé Engineers company
1018 BUSSE HIGHWAY PARK RIDGE, IL 60068
PH : (847) 823-3300 FAX: (847) 823-3303
bbono@bonoconsulting.com


ABHIJIT VEER 062-067076 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
EXP. 11-30-23

TITLE SHEET, LEGEND, SITE LOCATION MAP, & AERIAL MAP
OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION


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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE
0
SCALE: NTS

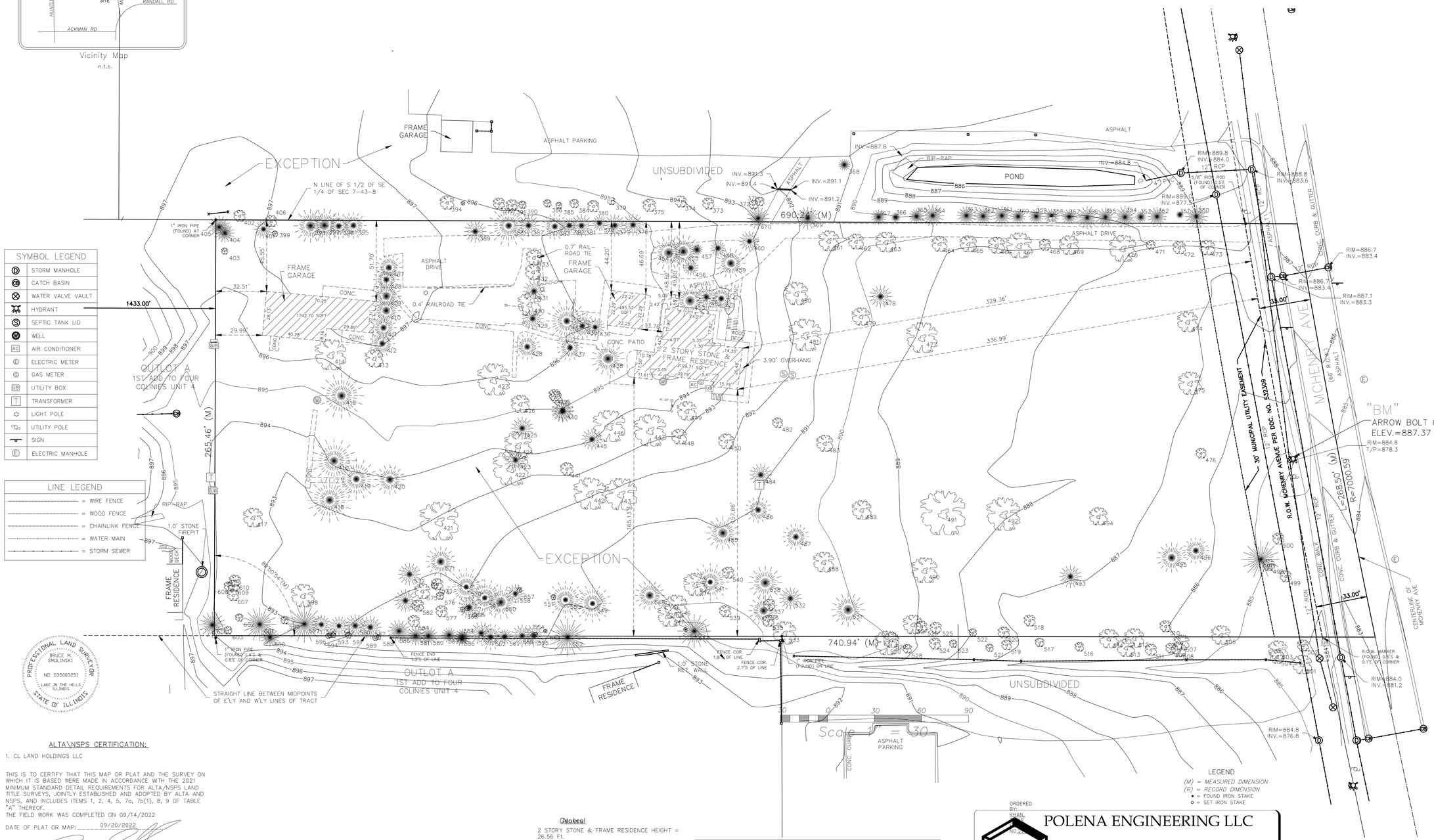
SHEET NUMBER
1 OF 16

NORTHEAST CORNER OF THE SOUTH HALF OF SAID LOT 1 OF SAID SOUTHWEST QUARTER; THENCE SOUTH 8 CHAINS, 22 LINKS TO THE PLACE OF BEGINNING (EXCEPTING THEREFROM THAT PART THEREOF LYING SOUTH OF A STRAIGHT LINE DRAWN FROM A POINT ON THE EASTERLY LINE OF SAID TRACT, WHICH IS MIDWAY BETWEEN THE NORTHEASTERLY AND SOUTHEASTERLY CORNERS OF SAID TRACT, TO A POINT ON THE WEST LINE OF SAID TRACT WHICH IS MIDWAY BETWEEN THE NORTHWESTERLY AND SOUTHWESTERLY CORNERS OF SAID TRACT AS DESCRIBED IN A WARRANTY DEED FROM BLANCHE L. SNYDER TO HAROLD D. AND FRANCES C. HUSAGH DATED JUNE 9, 1927 AND RECORDED IN BOOK 186 OF DEEDS, PAGE 58 AND ALSO EXCEPTING THE WESTERLY, 1433.0 FEET THEREOF), ALL IN MCHENRY COUNTY, ILLINOIS.

**Permanent Index No.:**
**19-07-451-036**




Vicinity Map
n.t.s.




| SYMBOL LEGEND | |
|---|---|
| Ⓓ | STORM MANHOLE |
| CB | CATCH BASIN |
| ⊗ | WATER VALVE VAULT |
| | HYDRANT |
| Ⓢ | SEPTIC TANK LID |
| Ⓦ | WELL |
| AC | AIR CONDITIONER |
| Ⓔ | ELECTRIC METER |
| Ⓖ | GAS METER |
| UB | UTILITY BOX |
| T | TRANSFORMER |
| ☼ | LIGHT POLE |
| | UTILITY POLE |
| | SIGN |
| Ⓔ | ELECTRIC MANHOLE |

| LINE LEGEND | |
|---|---|
| | = WIRE FENCE |
| | = WOOD FENCE |
| | = CHAINLINK FENCE |
| | = WATER MAIN |
| | = STORM SEWER |

LEGEND
*(M) = MEASURED DIMENSION*
*(R) = RECORD DIMENSION*
• = FOUND IRON STAKE
O = SET IRON STAKE

PROFESSIONAL LAND SURVEYOR
BRUCE M. SMOLINSKI
NO. 035003251
LAKE IN THE HILLS, ILLINOIS
STATE OF ILLINOIS

ALTA\NSPS CERTIFICATION:

1. CL LAND HOLDINGS 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, 2, 4, 5, 7a, 7b(1), 8, 9 OF TABLE "A" THEREOF.
THE FIELD WORK WAS COMPLETED ON 09/14/2022

DATE OF PLAT OR MAP: 09/20/2022

(SIGNED) _____

ILLINOIS LAND SURVEYOR NO. 3251, LICENSE EXPIRES 11/30/22
ILLINOIS DESIGN FIRM NO. 184-007260

REFER TO DEED OF GUARANTEE POLICY FOR RESTRICTIONS NOT SHOWN ON SURVEY.
ALL DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF.
COMPARE ALL POINTS BEFORE BUILDING AND REPORT ANY APPARENT DISCREPANCIES TO THE SURVEYOR.

Chicobeal

2 STORY STONE & FRAME RESIDENCE HEIGHT = 26.56 Ft.

PROPERTY AREA = 180250 Sq. Ft.
or 4.138 Acres more or less

REGULAR PARKING SPACES = N/A

*No evidence of recent earth moving work or building construction on site;*

FLOOD NOTE:
BASED UPON A REVIEW OF FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP COMMUNITY – PANEL NO. 17111C0329J, WITH AN EFFECTIVE DATE OF NOVEMBER 16, 2006, THE PROPERTY PLATTED HEREON IS LOCATED IN ZONE X AREA OF MINIMAL FLOOD HAZARD.

ORDERED BY: KHAN

POLENA ENGINEERING LLC
WHEATON: 630-653-6331
LAKE IN THE HILLS: 815-363-9200
INFO@POLENA.COM
WWW.POLENA.COM
ILLINOIS PROFESSIONAL DESIGN FIRM No. 184-007260
POLENA COMPANIES INCLUDE LAND TECHNOLOGY, LAMBERT & ASSOCIATES, AND ALAN J COULSON

N

| REVISIONS | ISSUE | DATE |
|---|---|---|
| PRELIMINARY PLAN | A | 12-07-2022 |
| REVISIONS PER VILLAGE COMMENTS | B | 1-31-2023 |

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. WEER P.E.
ENGINEER:
TECHNICIAN:


BCI
BONO CONSULTING CIVIL ENGINEERS
A Server & Mallet Engineers company
1018 BUSSE HIGHWAY PH : (847) 823-3300
PARK RIDGE, IL 60068 FAX: (847) 823-3303
bbono@bonoconsulting.com


# EXISTING TOPOGRAPHY

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION


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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE 30 0 30
SCALE: 1"=30'-0
SHEET NUMBER
2 OF 16

| Tag | Common Name | Scientific Name | Size | Cond. | Form | Remove | Notes |
|---|---|---|---|---|---|---|---|
| 350 | Black Hills Spruce | *Picea glauca densata* | 9 | 3 | 3 | | Dieback. Northeast corner of lot, by road. |
| 351 | Black Hills Spruce | *Picea glauca densata* | 6 | 6 | 6 | | Dead. |
| 352 | Black Hills Spruce | *Picea glauca densata* | 10 | 2 | 3 | | |
| 353 | Black Hills Spruce | *Picea glauca densata* | 7 | 3 | 4 | | Thin crown. |
| 354 | Black Hills Spruce | *Picea glauca densata* | 12 | 3 | 3 | | Dieback. |
| 355 | Black Hills Spruce | *Picea glauca densata* | 9 | 3 | 4 | | Thin crown. |
| 356 | Black Hills Spruce | *Picea glauca densata* | 11 | 3 | 3 | | Dieback. |
| 357 | Black Hills Spruce | *Picea glauca densata* | 9 | 5 | 5 | | No top, dieback. |
| 358 | Black Hills Spruce | *Picea glauca densata* | 9 | 2 | 3 | | Double leader |
| 359 | Black Hills Spruce | *Picea glauca densata* | 7 | 4 | 4 | | Dieback, thin crown. |
| 360 | Black Hills Spruce | *Picea glauca densata* | 8 | 4 | 4 | | Dieback. |
| 361 | Black Hills Spruce | *Picea glauca densata* | 11 | 3 | 3 | | Dieback. |
| 362 | Black Hills Spruce | *Picea glauca densata* | 11 | 3 | 3 | | Dieback. |
| 363 | Black Hills Spruce | *Picea glauca densata* | 10 | 3 | 3 | | Dieback. |
| 364 | Black Hills Spruce | *Picea glauca densata* | 13 | 2 | 3 | | Dieback. |
| 365 | Black Hills Spruce | *Picea glauca densata* | 9 | 3 | 4 | | Dieback, one sided. |
| 366 | Black Hills Spruce | *Picea glauca densata* | 6 | 3 | 4 | | |
| 367 | Black Hills Spruce | *Picea glauca densata* | 8 | 2 | 3 | | |
| 368 | Black Hills Spruce | *Picea glauca densata* | 6 | 2 | 3 | | |
| 369 | Black Hills Spruce | *Picea glauca densata* | 13 | 6 | 6 | | Dead. |
| 370 | Black Hills Spruce | *Picea glauca densata* | 11 | 4 | 4 | | Dieback, thin crown. |
| 371 | Silver Maple | *Acer saccharinum* | 15 | 2 | 3 | | One sided. |
| 372 | Siberian Elm | *Ulmus pumila* | 13 | 5 | 5 | | Half dead. |
| 373 | Siberian Elm | *Ulmus pumila* | 16 | 4 | 3 | | Sap oozing, dieback. |
| 374 | Siberian Elm | *Ulmus pumila* | 18 | 5 | 5 | | Half dead. |
| 375 | Siberian Elm | *Ulmus pumila* | 22 | 5 | 5 | | Half dead. |
| 376 | Colorado Spruce | *Picea pungens* | 11 | 6 | 6 | X | Dead |
| 377 | Colorado Spruce | *Picea pungens* | 14 | 5 | 5 | X | Half dead |
| 378 | Colorado Spruce | *Picea pungens* | 7 | 5 | 5 | X | Half dead |
| 379 | Siberian Elm | *Ulmus pumila* | 8,7 | 2 | 3 | | |
| 380 | Siberian Elm | *Ulmus pumila* | 16 | 5 | 5 | | Trunk decay, dieback. |
| 381 | Black Hills Spruce | *Picea glauca densata* | 11 | 3 | 4 | X | Dieback. |
| 382 | Scotch Pine | *Pinus sylvestris* | 9 | 2 | 3 | X | |
| 383 | Scotch Pine | *Pinus sylvestris* | 14 | 3 | 3 | X | Dieback. |
| 384 | Siberian Elm | *Ulmus pumila* | 13 | 4 | 4 | | Dieback. |
| 385 | Siberian Elm | *Ulmus pumila* | 9 | 5 | 5 | | Half dead. |
| 386 | Siberian Elm | *Ulmus pumila* | 11 | 4 | 4 | | Dieback. |
| 387 | Douglas Fir | *Pseudotsuga menziesii* | 16 | 2 | 3 | X | Dieback. |
| 388 | Scotch Pine | *Pinus sylvestris* | 16 | 2 | 3 | X | |
| 389 | Scotch Pine | *Pinus sylvestris* | 20,18 | 2 | 3 | X | Included bark. |
| 390 | Siberian Elm | *Ulmus pumila* | 8 | 2 | 3 | | |
| 391 | Siberian Elm | *Ulmus pumila* | 15 | 5 | 5 | | Half dead. |
| 392 | Siberian Elm | *Ulmus pumila* | 15 | 5 | 5 | | Half dead. |
| 393 | Siberian Elm | *Ulmus pumila* | 5 | 4 | 4 | | Dieback. |
| 394 | Siberian Elm | *Ulmus pumila* | 25 | 4 | 4 | | Dieback. |
| 395 | Austrian Pine | *Pinus nigra* | 14 | 3 | 3 | X | Dieback. |
| 396 | Austrian Pine | *Pinus nigra* | 12 | 6 | 6 | X | Dead. |
| 397 | Austrian Pine | *Pinus nigra* | 18 | 6 | 6 | X | Dead. |
| 398 | Austrian Pine | *Pinus nigra* | 18 | 4 | 4 | X | Dieback, one sided. |
| 399 | Buckthorn | *Rhamnus cathartica* | 4,3 | 2 | 3 | | |
| 400 | Green Ash | *Fraxinus pennsylvanica* | 6 | 6 | 6 | | Dead. |
| 401 | Black Hills Spruce | *Picea glauca densata* | 12 | 3 | 3 | X | Dieback. |
| 402 | Siberian Elm | *Ulmus pumila* | 21 | 5 | 5 | | Half dead. |
| 403 | Mulberry | *Morus alba* | 11 | 4 | 4 | | Trunk decay |
| 404 | Buckthorn | *Rhamnus cathartica* | 8,5 | 3 | 3 | | |
| 405 | Black Hills Spruce | *Picea glauca densata* | 12 | 3 | 4 | | Dieback. |
| 406 | Black Hills Spruce | *Picea glauca densata* | 10 | 3 | 4 | X | Dieback. Northwest corner of lot. |
| 407 | Colorado Spruce | *Picea pungens* | 13 | 5 | 5 | X | Northeast of garage. Half dead. |
| 408 | Colorado Spruce | *Picea pungens* | 12 | 6 | 6 | X | Dead. |
| 409 | Colorado Spruce | *Picea pungens* | 18 | 6 | 6 | X | Dead. |
| 410 | Colorado Spruce | *Picea pungens* | 17 | 6 | 6 | X | Dead. |
| 411 | Colorado Spruce | *Picea pungens* | 14 | 6 | 6 | X | Dead. |
| 412 | Black Hills Spruce | *Picea glauca densata* | 12 | 4 | 4 | X | Dieback, thin crown. |
| 413 | Siberian Elm | *Ulmus pumila* | 33 | 4 | 4 | X | Oozing, dieback, included bark. |
| 414 | Siberian Elm | *Ulmus pumila* | 28,24,24 | 5 | 5 | X | Trunk decay, half dead. |
| 415 | Arborvitae | *Thuja occindentalis* | 5*x12 12,10,12,10 | 1 | 1 | X | |
| 416 | Arborvitae | *Thuja occindentalis* | 9 | 1 | 2 | X | Broken branches. |
| 417 | Green Ash | *Fraxinus pennsylvanica* | 10 | 5 | 5 | X | EAB, half dead. |
| 418 | Norway Spruce | *Picea abies* | 21 | 1 | 1 | X | |
| 419 | Norway Spruce | *Picea abies* | 19 | 1 | 1 | X | |
| 420 | Austrian Pine | *Pinus nigra* | 16 | 6 | 6 | X | Dead. |
| 421 | Callery Pear | *Pyrus calleryana* | 8,8,7,5,5 | 2 | 3 | X | Dieback, included bark. |
| 422 | White Poplar | *Populus alba* | 35,32 | 4 | 4 | X | Dieback. |
| 423 | Black Hills Spruce | *Picea glauca densata* | 14 | 6 | 6 | X | Dead. |
| 424 | Siberian Elm | *Ulmus pumila* | 40 | 6 | 6 | X | Dead. |
| 425 | Black Hills Spruce | *Picea glauca densata* | 16 | 5 | 5 | X | Half dead. |
| 426 | Siberian Elm | *Ulmus pumila* | 25 | 5 | 5 | X | Half dead. |
| 427 | Norway Maple | *Acer platanoides* | 9 | 1 | 1 | X | |
| 428 | Douglas Fir | *Pseudotsuga menziesii* | 14 | 5 | 5 | X | Half dead. |
| 429 | Colorado Spruce | *Picea pungens* | 12 | 5 | 5 | X | Half dead. |
| 430 | Siberian Elm | *Ulmus pumila* | 30 | 4 | 4 | X | Oozing, dieback. |
| 431 | Colorado Spruce | *Picea pungens* | 14 | 4 | 4 | X | Dieback, one sided. |
| 432 | Siberian Elm | *Ulmus pumila* | 25 | 5 | 5 | X | Half dead. |
| 433 | Siberian Elm | *Ulmus pumila* | 24 | 5 | 5 | X | Half dead. |
| 434 | Colorado Spruce | *Picea pungens* | 19 | 5 | 5 | X | Half dead. |
| 435 | Colorado Spruce | *Picea pungens* | 15 | 6 | 6 | X | Dead. |
| 436 | Colorado Spruce | *Picea pungens* | 10 | 6 | 6 | X | Dead. |
| 437 | Colorado Spruce | *Picea pungens* | 16 | 6 | 6 | X | Dead. |
| 438 | Colorado Spruce | *Picea pungens* | 19 | 5 | 5 | X | Half dead. |
| 439 | Red Maple | *Acer rubrum* | 17 | 2 | 2 | X | |
| 440 | Colorado Spruce | *Picea pungens* | 14 | 6 | 6 | X | Dead. |
| 441 | Black Cherry | *Prunus serotina* | 19 | 5 | 5 | X | Half dead. |
| 442 | Mulberry | *Morus alba* | 8,4,4,4,4 | 3 | 3 | X | Decay. |
| 443 | Boxelder | *Acer negundo* | 5,5,2,2 | 2 | 4 | X | Overtopped. |
| 444 | Norway Maple | *Acer platanoides* | 35 | 5 | 5 | X | Trunk decay, split. |
| 445 | Siberian Elm | *Ulmus pumila* | 32 | 5 | 5 | X | Half dead. |
| 446 | Red Maple | *Acer rubrum* | 9 | 2 | 2 | X | |
| 447 | Red Maple | *Acer rubrum* | 12 | 2 | 2 | X | |
| 448 | Siberian Elm | *Ulmus pumila* | 33 | 5 | 5 | X | Half dead. |
| 449 | Red Maple | *Acer rubrum* | 7 | 3 | 4 | X | Decay, overtopped |
| 450 | Pin Oak | *Quercus palustris* | 23 | 3 | 2 | X | Southeast corner of house. Dieback. |
| 451 | Black Hills Spruce | *Picea glauca densata* | 13 | 6 | 6 | X | North side of house. Dead. |
| 452 | Black Hills Spruce | *Picea glauca densata* | 11 | 4 | 4 | X | Dieback, thin crown. |
| 453 | Black Hills Spruce | *Picea glauca densata* | 16 | 4 | 4 | X | Dieback, thin crown. |
| 454 | Black Hills Spruce | *Picea glauca densata* | 14 | 6 | 6 | X | Dead. |
| 455 | Black Hills Spruce | *Picea glauca densata* | 16 | 6 | 6 | X | Dead. |
| 456 | Arborvitae | *Thuja occindentalis* | 8,5,3,2,2 | 2 | 3 | X | |
| 457 | Black Hills Spruce | *Picea glauca densata* | 6 | 6 | 6 | X | Dead. |
| 458 | Arborvitae | *Thuja occindentalis* | 13,12,7,4 | 2 | 3 | X | |
| 459 | Scotch Pine | *Pinus sylvestris* | 17 | 2 | 2 | X | |
| 460 | Siberian Elm | *Ulmus pumila* | 32 | 4 | 4 | X | Dieback, decay, included bark. |
| 461 | Silver Maple | *Acer saccharinum* | 30 | 4 | 4 | X | South side of driveway. Dieback, decay. |
| 462 | Silver Maple | *Acer saccharinum* | 23 | 5 | 4 | X | Trunk decay, dieback. |
| 463 | Silver Maple | *Acer saccharinum* | 31 | 5 | 4 | X | Trunk decay, dieback. |
| 464 | Silver Maple | *Acer saccharinum* | 24 | 4 | 3 | X | Decay, dieback. |
| 465 | Silver Maple | *Acer saccharinum* | 25 | 2 | 3 | X | |
| 466 | Silver Maple | *Acer saccharinum* | 25 | 5 | 5 | X | Half dead. |
| 467 | Silver Maple | *Acer saccharinum* | 42 | 5 | 5 | | Trunk decay, dieback. |
| 468 | Silver Maple | *Acer saccharinum* | 14 | 3 | 3 | | Decay. |
| 469 | Silver Maple | *Acer saccharinum* | 30 | 4 | 4 | | Decay, dieback. |
| 470 | Silver Maple | *Acer saccharinum* | 39 | 5 | 4 | | Trunk decay, dieback. |
| 471 | Silver Maple | *Acer saccharinum* | 15 | 6 | 6 | X | Dead. |
| 472 | Silver Maple | *Acer saccharinum* | 21 | 4 | 4 | | Trunk decay, dieback. |
| 473 | Silver Maple | *Acer saccharinum* | 27 | 5 | 5 | | Trunk decay, dieback. |
| 474 | Silver Maple | *Acer saccharinum* | 28 | 2 | 2 | X | |
| 475 | Silver Maple | *Acer saccharinum* | 35 | 2 | 4 | X | Included bark. |
| 476 | Silver Maple | *Acer saccharinum* | 16 | 2 | 2 | X | |
| 477 | Silver Maple | *Acer saccharinum* | 53 | 4 | 4 | X | Trunk decay, dieback. |
| 478 | Colorado Spruce | *Picea pungens* | 14 | 4 | 4 | X | Dieback, thin crown. |
| 479 | Siberian Elm | *Ulmus pumila* | 24 | 5 | 5 | X | Trunk decay, dieback. |
| 480 | Siberian Elm | *Ulmus pumila* | 39 | 5 | 5 | X | Trunk decay, dieback. |
| 481 | Norway Maple | *Acer platanoides* | 10 | 2 | 2 | X | East side of house. |
| 482 | Red Maple | *Acer rubrum* | 14 | 2 | 2 | X | |
| 483 | Siberian Elm | *Ulmus pumila* | 39 | 5 | 5 | X | Half dead. |
| 484 | Arborvitae | *Thuja occindentalis* | 12,10, 4*x5 | 2 | 2 | X | |
| 485 | Austrian Pine | *Pinus nigra* | 17 | 3 | 2 | X | Dieback. |
| 486 | Colorado Spruce | *Picea pungens* | 12 | 6 | 6 | X | Dead. |
| 487 | Arborvitae | *Thuja occindentalis* | 10,7,7, 3*x5 | 2 | 3 | X | Broken branches. |
| 488 | Siberian Elm | *Ulmus pumila* | 33 | 4 | 4 | X | Dieback, decay. |
| 489 | Norway Maple | *Acer platanoides* | 28 | 5 | 5 | X | Trunk decay. |
| 490 | Basswood | *Tilia americana* | 44 | 1 | 2 | X | |
| 491 | Red Maple | *Acer rubrum* | 15 | 5 | 5 | X | Trunk decay, dieback. |
| 492 | Silver Maple | *Acer saccharinum* | 48 | 3 | 3 | X | Dieback, decay. |
| 493 | Black Hills Spruce | *Picea glauca densata* | 11 | 3 | 3 | X | Dieback. |
| 494 | Silver Maple | *Acer saccharinum* | 30 | 5 | 5 | X | Trunk decay, dieback. |
| 495 | Colorado Spruce | *Picea pungens* | 17 | 6 | 6 | X | Dead. |
| 496 | Colorado Spruce | *Picea pungens* | 14 | 5 | 5 | X | Half dead. |
| 497 | Black Hills Spruce | *Picea glauca densata* | 24 | 3 | 3 | | Dieback. |
| 498 | Mulberry | *Morus alba* | 3,3 | 3 | 4 | | |
| 499 | Black Locust | *Robinia pseudoacacia* | 7 | 2 | 4 | | Overtopped. |
| 500 | Mulberry | *Morus alba* | 6 | 3 | 4 | | |
| 501 | Cottonwood | *Populus deltoides* | 16,9 | 3 | 4 | | Southeast corner of lot by fence. |
| 502 | Buckthorn | *Rhamnus cathartica* | 6 | 3 | 4 | | Overtopped. |
| 503 | American Elm | *Ulmus americana* | 9,8 | 2 | 4 | | Overtopped. |
| 504 | Cottonwood | *Populus deltoides* | 27,22,24 | 2 | 3 | | By fence. |
| 505 | Boxelder | *Acer negundo* | 10 | 4 | 4 | | Vine infested |
| 506 | Buckthorn | *Rhamnus cathartica* | 3,3,2 | 3 | 3 | | |
| 507 | Mulberry | *Morus alba* | 7 | 3 | 4 | | |
| 508 | Siberian Elm | *Ulmus pumila* | 24 | 5 | 5 | | Half dead. |
| 509 | Black Walnut | *Juglans nigra* | 14 | 1 | 2 | | |
| 510 | Boxelder | *Acer negundo* | 5 | 4 | 4 | X | |
| 511 | Siberian Elm | *Ulmus pumila* | 16 | 6 | 6 | | Dead. |
| 512 | Buckthorn | *Rhamnus cathartica* | 8,3 | 4 | 4 | | Dieback. |
| 513 | Siberian Elm | *Ulmus pumila* | 23 | 5 | 5 | | Half dead. |
| 514 | Buckthorn | *Rhamnus cathartica* | 6,3,3 | 5 | 5 | | Half dead. |
| 515 | Buckthorn | *Rhamnus cathartica* | 5,3 | 4 | 4 | | |
| 516 | Siberian Elm | *Ulmus pumila* | 13 | 6 | 6 | | Dead. |
| 517 | Buckthorn | *Rhamnus cathartica* | 7,7,6,6 | 2 | 3 | | |
| 518 | Green Ash | *Fraxinus pennsylvanica* | 6 | 6 | 6 | X | Dead. |
| 519 | Siberian Elm | *Ulmus pumila* | 17 | 6 | 6 | | Dead. |
| 520 | Boxelder | *Acer negundo* | 7 | 4 | 4 | X | Overtopped. |
| 521 | Black Walnut | *Juglans nigra* | 11 | 1 | 2 | | |
| 522 | Mulberry | *Morus alba* | 13 | 3 | 4 | X | Dieback. |
| 523 | Black Walnut | *Juglans nigra* | 12 | 2 | 2 | | |
| 524 | Siberian Elm | *Ulmus pumila* | 17 | 6 | 6 | | Dead |
| 525 | Boxelder | *Acer negundo* | 8 | 4 | 4 | X | Dieback, leaning |
| 526 | Boxelder | *Acer negundo* | 6 | 2 | 3 | X | |
| 527 | Boxelder | *Acer negundo* | 9 | 2 | 3 | X | |
| 528 | Black Walnut | *Juglans nigra* | 16 | 2 | 3 | | Dieback. |
| 529 | Mulberry | *Morus alba* | 10,3 | 5 | 5 | | Half dead. |
| 530 | Siberian Elm | *Ulmus pumila* | 29 | 6 | 6 | | Dead. |
| 531 | Austrian Pine | *Pinus nigra* | 15 | 6 | 6 | X | Dead |
| 532 | Austrian Pine | *Pinus nigra* | 14 | 4 | 4 | X | Dieback. |
| 533 | Mulberry | *Morus alba* | 13 | 3 | 4 | | Included bark, decay. |
| 534 | Boxelder | *Acer negundo* | 11 | 3 | 3 | | |
| 535 | Buckthorn | *Rhamnus cathartica* | 5,3 | 5 | 5 | X | Trunk decay. |
| 536 | Norway Spruce | *Picea abies* | 15 | 4 | 4 | X | Dieback, thin crown. |
| 537 | Buckthorn | *Rhamnus cathartica* | 4,3 | 4 | 4 | X | Trunk decay. |
| 538 | Arborvitae | *Thuja occindentalis* | 10,7,4,4 | 3 | 5 | X | Half dead. |
| 539 | Boxelder | *Acer negundo* | 4,3,3 | 5 | 5 | X | One trunk is a Buckthorn. Dieback, decay. |
| 540 | Buckthorn | *Rhamnus cathartica* | 11,11 | 4 | 4 | X | |
| 541 | Austrian Pine | *Pinus nigra* | 6 | 3 | 3 | X | |
| 542 | American Elm | *Ulmus americana* | 19 | 6 | 6 | X | Dead |
| 543 | Green Ash | *Fraxinus pennsylvanica* | 13 | 6 | 6 | X | Dead |
| 544 | Boxelder | *Acer negundo* | 7 | 6 | 6 | X | Dead. |
| 545 | Boxelder | *Acer negundo* | 15 | 4 | 3 | X | Decay, dieback. |
| 546 | Mulberry | *Morus alba* | 6 | 2 | 3 | X | |
| 547 | Mulberry | *Morus alba* | 9,7 | 4 | 4 | X | Dieback. |
| 548 | Norway Spruce | *Picea abies* | 13 | 2 | 3 | X | |
| 549 | Norway Spruce | *Picea abies* | 16 | 5 | 5 | X | Half dead. |
| 550 | Norway Spruce | *Picea abies* | 21 | 2 | 3 | X | Dieback. |
| 551 | Buckthorn | *Rhamnus cathartica* | 23 | 2 | 3 | X | Dieback. |
| 552 | Austrian Pine | *Pinus nigra* | 7 | 2 | 3 | X | |
| 553 | Buckthorn | *Rhamnus cathartica* | 20 | 4 | 4 | X | Dieback, by fence. |
| 554 | Buckthorn | *Rhamnus cathartica* | 6 | 3 | 3 | X | |
| 555 | Norway Spruce | *Picea abies* | 5,4 | 3 | 5 | X | Broken top. |
| 556 | Norway Spruce | *Picea abies* | 13 | 6 | 6 | X | Dead |
| 557 | Buckthorn | *Rhamnus cathartica* | 13 | 6 | 6 | X | Dead |
| 558 | Austrian Pine | *Pinus nigra* | 4,4,3 | 4 | 4 | X | |
| 559 | Buckthorn | *Rhamnus cathartica* | 13 | 6 | 6 | X | Dead |
| 560 | Austrian Pine | *Pinus nigra* | 6,3 | 4 | 5 | X | Broken top. |
| 561 | Colorado Spruce | *Picea pungens* | 16 | 4 | 4 | X | Dieback. |
| 562 | Norway Spruce | *Picea abies* | 8 | 6 | 6 | X | Dead. |
| 563 | Norway Spruce | *Picea abies* | 13 | 6 | 6 | X | Dead |
| 564 | Norway Spruce | *Picea abies* | 14 | 6 | 6 | X | Dead |
| 565 | Buckthorn | *Rhamnus cathartica* | 12 | 6 | 6 | X | Dead |
| 566 | Buckthorn | *Rhamnus cathartica* | 6,2,2,2 | 3 | 4 | X | |
| 567 | Buckthorn | *Rhamnus cathartica* | 6,4,3,3 | 4 | 4 | X | |
| 568 | Norway Spruce | *Picea abies* | 6,5 | 4 | 4 | X | |
| 569 | Norway Spruce | *Picea abies* | 16 | 4 | 4 | X | Dead |
| 570 | Norway Spruce | *Picea abies* | 17 | 2 | 3 | X | Dieback. |
| 571 | Austrian Pine | *Pinus nigra* | 17 | 6 | 6 | X | By lawn. Dead. |
| 572 | Austrian Pine | *Pinus nigra* | 14 | 6 | 6 | X | By lawn. Dead. |
| 573 | Mulberry | *Morus alba* | 6,3 | 3 | 4 | X | |
| 574 | Mulberry | *Morus alba* | 10 | 4 | 4 | X | Dieback. |
| 575 | Mulberry | *Morus alba* | 8 | 4 | 4 | X | |
| 576 | Mulberry | *Morus alba* | 14 | 2 | 3 | X | |
| 577 | Buckthorn | *Rhamnus cathartica* | 5,4,3 | 5 | 5 | X | Half dead. |
| 578 | Colorado Spruce | *Picea pungens* | 8 | 6 | 6 | X | Dead |
| 579 | Buckthorn | *Rhamnus cathartica* | 5,3,3 | 4 | 4 | X | |
| 580 | Colorado Spruce | *Picea pungens* | 11 | 6 | 6 | X | Dead |
| 581 | Colorado Spruce | *Picea pungens* | 10 | 6 | 6 | X | Dead |
| 582 | Buckthorn | *Rhamnus cathartica* | 5,5,3,3 | 5 | 5 | X | Half dead. |
| 583 | Norway Spruce | *Picea abies* | 11 | 4 | 4 | X | Dieback, thin crown. |
| 584 | Buckthorn | *Rhamnus cathartica* | 5,4,3 | 5 | 5 | X | Half dead. |
| 585 | Colorado Spruce | *Picea pungens* | 13 | 6 | 6 | | Dead |
| 586 | Black Walnut | *Juglans nigra* | 11 | 2 | 2 | | Dieback. |
| 587 | Colorado Spruce | *Picea pungens* | 10 | 6 | 6 | X | Dead |
| 588 | Mulberry | *Morus alba* | 10 | 4 | 4 | | Dieback, leaning |
| 589 | Buckthorn | *Rhamnus cathartica* | 6,5,4 | 3 | 3 | | |
| 590 | Colorado Spruce | *Picea pungens* | 10 | 6 | 6 | X | Dead |
| 591 | Black Walnut | *Juglans nigra* | 11 | 1 | 2 | | |
| 592 | Colorado Spruce | *Picea pungens* | 10 | 6 | 6 | X | Dead |
| 593 | Black Walnut | *Juglans nigra* | 7 | 2 | 4 | | Overtopped |
| 594 | Black Walnut | *Juglans nigra* | 10 | 2 | 3 | | |
| 595 | Mulberry | *Morus alba* | 11 | 3 | 4 | | Overtopped |
| 596 | Colorado Spruce | *Picea pungens* | 10 | 6 | 6 | X | Dead |
| 597 | Black Hills Spruce | *Picea glauca densata* | 17 | 5 | 5 | | Half dead. |
| 598 | Boxelder | *Acer negundo* | 13 | 4 | 4 | | Decay, dieback. |
| 599 | Buckthorn | *Rhamnus cathartica* | 8,6,5,6 | 3 | 4 | | |
| 600 | Colorado Spruce | *Picea pungens* | 10 | 6 | 6 | | Dead |
| 601 | Black Hills Spruce | *Picea glauca densata* | 15 | 4 | 4 | | Dieback. |
| 602 | Buckthorn | *Rhamnus cathartica* | 3,3 | 4 | 4 | | |
| 603 | Buckthorn | *Rhamnus cathartica* | 6 | 2 | 3 | X | |
| 604 | Boxelder | *Acer negundo* | 7 | 2 | 3 | | |
| 605 | Black Cherry | *Prunus serotina* | 21 | 5 | 4 | | Trunk decay, dieback. Southwest corner of site |
| 606 | Black Hills Spruce | *Picea glauca densata* | 15 | 2 | 3 | | Dieback. |
| 607 | Buckthorn | *Rhamnus cathartica* | 4,4,3,3 | 4 | 4 | | Decay, dieback. |
| 608 | Black Walnut | *Juglans nigra* | 13 | 2 | 3 | | |
| 609 | Boxelder | *Acer negundo* | 8 | 4 | 4 | | Dieback, leaning |
| 610 | Boxelder | *Acer negundo* | 6 | 5 | 5 | | Decay, dieback |

**Tree Condition.** A visual assessment and rating of the overall health and vigor of the tree, as follows:

5 – Excellent
4 – Very Good
3 – Good
2 – Below Average
1 – Poor
0 – Dead

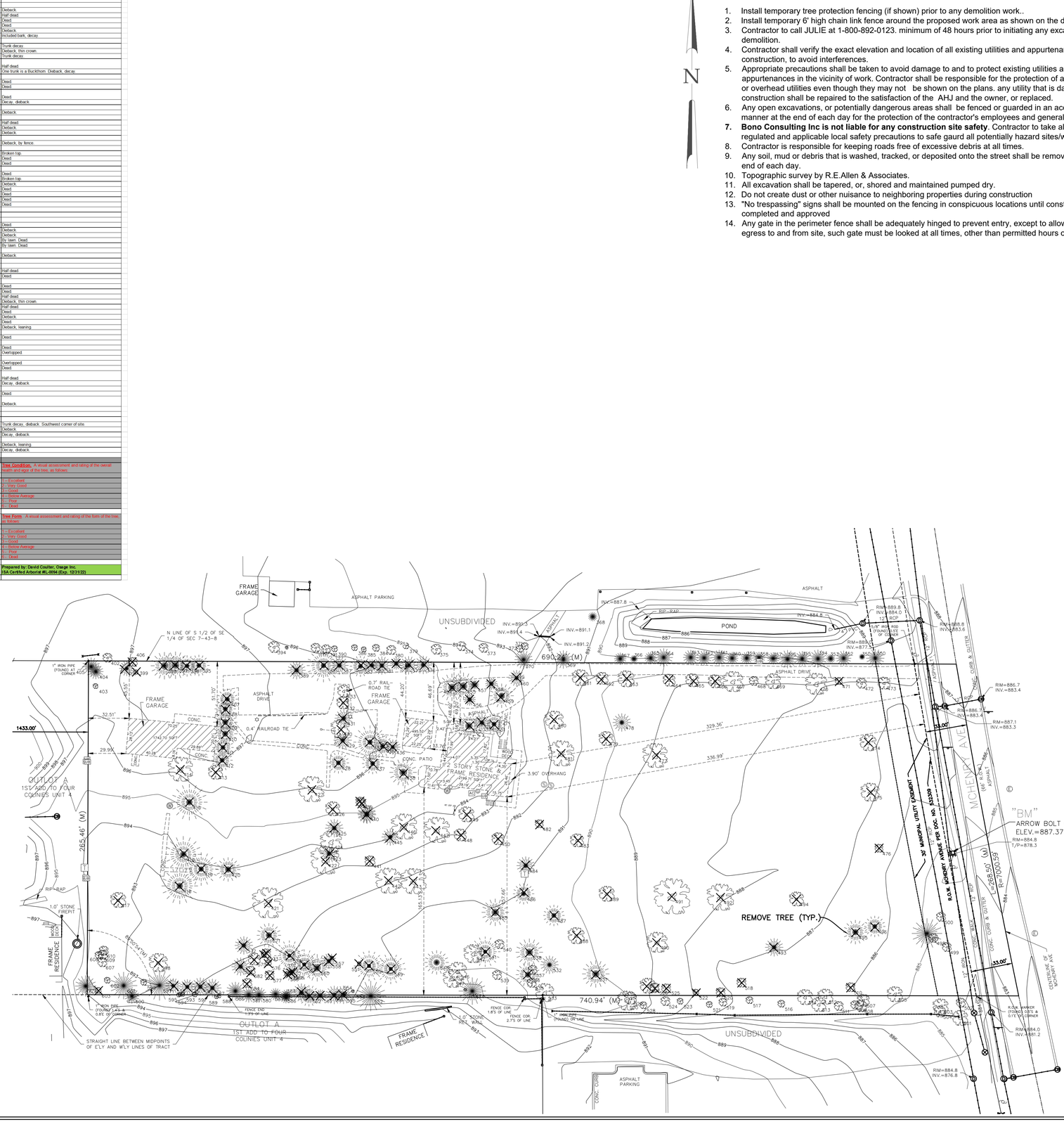
**Tree Form.** A visual assessment and rating of the form of the tree, as follows:

5 – Excellent
4 – Very Good
3 – Good
2 – Below Average
1 – Poor
0 – Dead

**Prepared by: David Coulter, Osage Inc.**
**ISA Certified Arborist #IL-0094 (Exp. 12/31/22)**

## DEMOLITION NOTES

1. Install temporary tree protection fencing (if shown) prior to any demolition work..
2. Install temporary 6' high chain link fence around the proposed work area as shown on the drawing.
3. Contractor to call JULIE at 1-800-892-0123. minimum of 48 hours prior to initiating any excavation or demolition.
4. Contractor shall verify the exact elevation and location of all existing utilities and appurtenances prior to construction, to avoid interferences.
5. Appropriate precautions shall be taken to avoid damage to and to protect existing utilities and appurtenances in the vicinity of work. Contractor shall be responsible for the protection of all underground or overhead utilities even though they may not be shown on the plans. any utility that is damaged during construction shall be repaired to the satisfaction of the AHJ and the owner, or replaced.
6. Any open excavations, or potentially dangerous areas shall be fenced or guarded in an acceptable manner at the end of each day for the protection of the contractor's employees and general public safety.
7. **Bono Consulting Inc is not liable for any construction site safety**. Contractor to take all OSHA regulated and applicable local safety precautions to safe gaurd all potentially hazard sites/work.
8. Contractor is responsible for keeping roads free of excessive debris at all times.
9. Any soil, mud or debris that is washed, tracked, or deposited onto the street shall be removed before the end of each day.
10. Topographic survey by R.E.Allen & Associates.
11. All excavation shall be tapered, or, shored and maintained pumped dry.
12. Do not create dust or other nuisance to neighboring properties during construction
13. "No trespassing" signs shall be mounted on the fencing in conspicuous locations until construction is completed and approved
14. Any gate in the perimeter fence shall be adequately hinged to prevent entry, except to allow ingress and egress to and from site, such gate must be looked at all times, other than permitted hours of construction.




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BONO CONSULTING CIVIL ENGINEERS
A Survey & Mailer Engineers company
1018 BUSSE HIGHWAY PH : (847) 823-3300
PARK RIDGE, IL 60068 FAX: (847) 823-3303
bbono@bonoconsulting.com

| PROJECT STAFF | | ISSUE | DATE |
|---|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | | |
| ENGINEER: | A. VEER P.E. | A | 12-07-2022 |
| ENGINEER: | | B | 1-31-2023 |
| TECHNICIAN: | | | |

REVISIONS
A PRELIMINARY PLAN
B REVISIONS PER VILLAGE COMMENTS

# DEMOLITION & TREE PRESERVATION PLAN

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

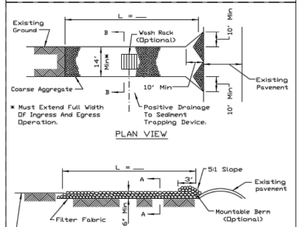
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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE
40 0 40
SCALE: 1"=40'-0

SHEET NUMBER
3 OF 16

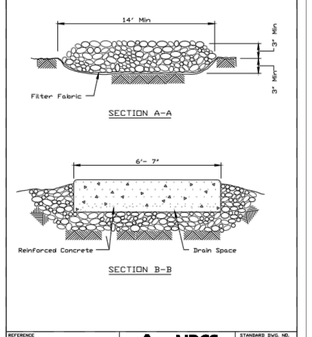
## STABILIZED CONSTRUCTION ENTRANCE PLAN



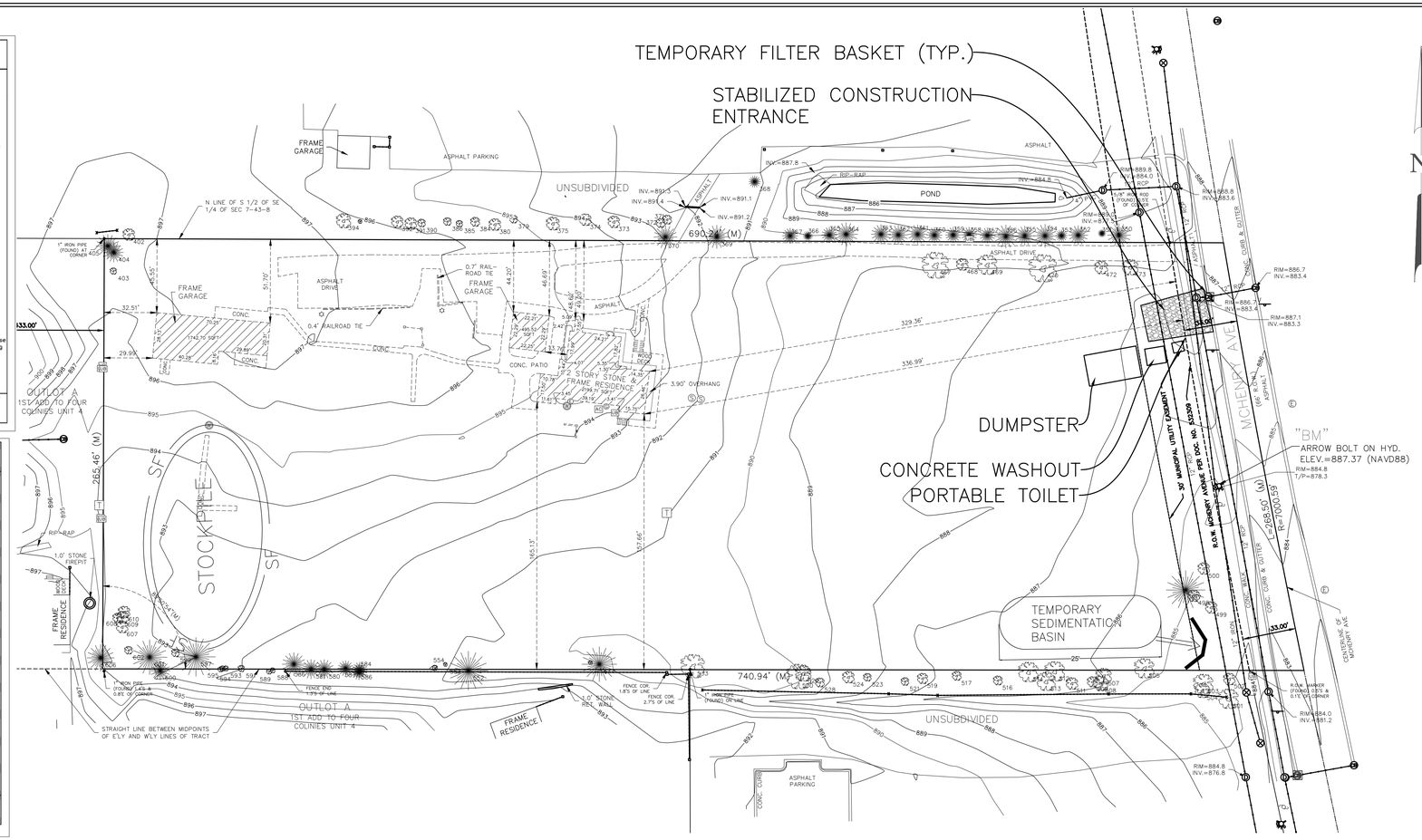

NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification BS 1004(b) using placement Method 1 and Class III compaction.
3. Any drainage facility required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

| REFERENCE | | STANDARD SVG. NO. |
|---|---|---|
| Project | | IL-630 |
| Designed ____ Date ____ | NRCS Natural Resources Conservation Service | SHEET 1 OF 2 |
| Checked ____ Date ____ | | DATE 9-18-94 |
| Approved ____ Date ____ | | |

## STABILIZED CONSTRUCTION ENTRANCE PLAN




| REFERENCE | | STANDARD SVG. NO. |
|---|---|---|
| Project | | IL-630 |
| Designed ____ Date ____ | NRCS Natural Resources Conservation Service | SHEET 2 OF 2 |
| Checked ____ Date ____ | | DATE 9-18-94 |
| Approved ____ Date ____ | | |




## BEST MANAGEMENT PRACTICES SEQUENCE

NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREAS WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

PHASE – I
1. INSTALL TREE PROTECTION FENCING AND EROSION CONTROL SILT FENCE, INLET FILTER BASKETS, MAINTAIN THROUGH OUT PROJECT.
2. USE McHENRY AVE./FRONTAGE ROAD FOR CONSTRUCTION ACCESS DRIVEWAY FOR CONSTRUCTION. INSTALL STABILIZED CONSTRUCTION ENTRANCE. OBSERVE ALL APPROPRIATE MUTCD/IDOT TRAFFIC CONTROL MEASURES FOR CONSTRUCTION TRAFFIC ENTERING HIGHWAY. CONTRACTOR IS RESPONSIBLE FOR KEEPING ROADS FREE OF MUD AND DEBRIS.
3. PROTECT TREES THAT ARE SHOWN TO BE PROTECTED.
4. CLEAR AND REMOVE BRUSH AND TREES.
5. CONSTRUCT DETENTION FACILITY WITHIN 30DAYS OF TREE REMOVAL/BRUSH CLEARING.
6. INSTALL UTILITIES AND PERFORM MASS GRADING.

HALT ALL ACTIVITIES AND CONTACT THE VILLAGE TO PERFORM INSPECTION AND CERTIFICATION OF BMPs. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT THE STORMWATER PRE-CONSTRUCTION MEETING WITH THE CONSTRUCTION MANAGER, AGENCY(IES) AND GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

ALL EXCEPTIONS NOTED ON THE BMP CERTIFICATION FORM MUST BE ADDED TO THE FIRST DAILY REPORT AS A DEFICIENCY OR DEFICIENCIES AND RESOLVED WITHIN 24-HOURS. BMPs CAN NOT BE CERTIFIED IF ANY EXCEPTION REQUIRES GREATER THAN 24-HOURS TO RESOLVE.

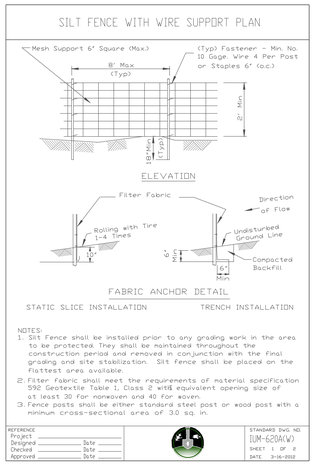
DAILY INSPECTIONS AND REPORTING USING THE SWPPP MANAGEMENT TOOL MUST START THE DAY OF OR IMMEDIATELY AFTER BMP CERTIFICATION.

7. CONSTRUCT AND STABILIZE SEDIMENT BASIN(S) AND SEDIMENT TRAP(S) WITH APPROPRIATE OUTFALL STRUCTURES (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BASINS AND TRAPS).
8. INSTALL AND STABILIZE HYDRAULIC CONTROL STRUCTURES (DIKES, SWALES, CHECK DAMS, ETC.).
9. BEGIN CLEARING AND GRUBBING THE SITE.
10. BEGIN GRADING THE SITE.

PHASE II
1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE. IF ACTIVITY WILL RESUME WITHIN 14 DAYS, TEMPORARY SEEDING IS NOT REQUIRED.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
3. INSTALL RIP RAP AROUND OUTLET STRUCTURES AS EACH OUTLET STRUCTURE IS INSTALLED.
4. INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
5. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
6. PREPARE SITE FOR PAVING.
7. PAVE SITE.
8. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
9. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
10. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION REPORT, MARKED 'READY TO TERMINATE PERMIT', IS SIGNED BY THE CONSTRUCTION MANAGER AND SUBMITTED VIA THE SWPPP MANAGEMENT TOOL.
12. STABILIZE SITE AND INSTALL ALL FENCES CONCURRENTLY.

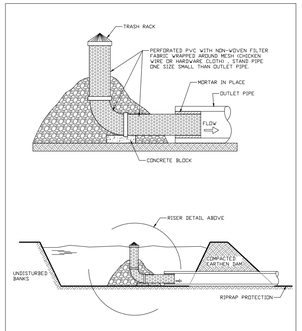
NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPs HAVE BEEN COMPLETELY INSTALLED.

## SILT FENCE WITH WIRE SUPPORT PLAN




NOTES:
1. Silt Fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization. Silt fence shall be placed on the flattest area available.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1, Class 2 with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

| REFERENCE | | STANDARD SVG. NO. |
|---|---|---|
| Project | | IUM-620A(W) |
| Designed ____ Date ____ | | SHEET 1 OF 2 |
| Checked ____ Date ____ | | DATE 3-16-2012 |
| Approved ____ Date ____ | | |




## SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

| CONSTRUCTION SEQUENCE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TEMPORARY CONSTRUCTION EXITS | | | | | | | | | | | | | | | | | | | | | | | | | |
| TEMPORARY CONTROL MEASURES | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEDIMENT CONTROL BASINS | | | | | | | | | | | | | | | | | | | | | | | | | |
| STRIP & STOCKPILE TOPSOIL | | | | | | | | | | | | | | | | | | | | | | | | | |
| ROUGH GRADE | | | | | | | | | | | | | | | | | | | | | | | | | |
| STORM FACILITIES | | | | | | | | | | | | | | | | | | | | | | | | | |
| SITE CONSTRUCTION | | | | | | | | | | | | | | | | | | | | | | | | | |
| PERMANENT CONTROL STRUCTURES | | | | | | | | | | | | | | | | | | | | | | | | | |
| FOUNDATION / BUILDING CONSTRUCTION | | | | | | | | | | | | | | | | | | | | | | | | | |
| FINISH GRADING | | | | | | | | | | | | | | | | | | | | | | | | | |
| LANDSCAPING/SEED/FINAL STABILIZATION | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | |

1) CONTRACTOR SHALL UPDATE THE TABLE BY DATING THE APPLICABLE ACTIVITIES AS PROJECT PROGRESSES.
2) TIME SCHEDULE MUST COINCIDE WITH SEQUENCE OF CONSTRUCTION.

SEEDING INFORMATION
CONTRACTOR TO SEED ALL DISTURBED AREA.
TURF GRASS SEED MIX:
FURNISH AND APPLY SUNNY TURF GRASS SEED MIX (TIMOTHY-33.3% / ORCHARDGRASS-33.3% / KENTUCKY BLUEGRASS-33.3%, SEEDING RATE=70 LBS./ACRE AND COMMON OATS=30 LBS./ACRE FOR A TOTAL 100 LBS./ACRE. OVERSEED WITH 10 LBS./ACRE ANNUAL RYE.
SEEDING MUST COMMENCE WITHIN 1 WEEK OF THE COMPLETION OF FINAL GRADING.

## TEMPORARY SEEDING, SPECIES, RATES, & DATES

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

| SPECIES | LBS/ ACRE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OATS | 90 | | | | | | | | | | | | |
| CEREAL RYE | 90 | | | | | | | | | | | | |
| WINTER WHEET | 90 | | | | | | | | | | | | |
| WINTER MULCH | 25 | | | | | | | | | | | | |

| REVISIONS | DATE |
|---|---|
| PRELIMINARY PLAN | 12-07-2022 |
| REVISIONS PER VILLAGE COMMENTS | 1-31-2023 |

| PROJECT STAFF | | ISSUE |
|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | A |
| ENGINEER: | A. WEER P.E. | B |
| ENGINEER: | | |
| TECHNICIAN: | | |

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bbono@bonoconsulting.com

# PHASE - I -SOIL EROSION & SEDIMENTATION CONTROL PLAN

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE
40 0 40
SCALE: 1"=40'-0
SHEET NUMBER
4 OF 16

# STORMWATER POLLUTION PREVENTION PLAN

A COPY OF THIS PLAN, ALONG WITH ALL INSPECTION REPORTS, WILL BE KEPT AT THE SITE AT ALL TIMES.
THE PERMITEE SHALL RETAIN COPIES OF STORMWATER POLLUTION PREVENTION PLANS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THE PERMIT COVERAGE EXPIRES OR IS TERMINATED.

## SITE DESCRIPTION:

PROJECT NAME AND LOCATION:
COMFORT CARE SENIOR LIVING – 406 MONAVILLE RD., LAKE VILLA, LAKE COUNTY, IL.

PROJECT DESCRIPTION:
NEW 1 STORY BUILDING WITH PARKING LOT DEVELOPMENT TO BE CONSTRUCTED ON A VACANT PROPERTY/FARM LAND.

TOTAL SITE AREA = 8.809 ACRES

TOTAL AREA DISTURBED = 5.164 ACRES

RUNOFF COEFFICIENT OF SITE AFTER CONSTRUCTION = CN=83.75

SOILS: VARIES, PREDOMINATELY SILTY CLAY LOAM

RECEIVING WATERS: EAGLE CREEK

EXISTING SITE CONDITIONS: FARM LAND

ADJACENT/OFFSITE AREAS: EXISTING SINGLE-FAMILY RESIDENCES TO WEST ACROSS THE CREEK, & EAST.TO THE NORTH ARE SINGLE-FAMILY RESIDENTIAL SUBDIVISION.

REFER TO IMPROVEMENT PLANS FOR COMFORT CARE SENIOR LIVING DEVELOPMENT FOR ADDITIONAL SITE INFORMATION.

## EROSION AND SEDIMENT CONTROLS

REFER TO THE IMPROVEMENT PLANS FOR COMFORT CARE SENIOR LIVING DEVELOPMENT, AND THIS SWPPP.

STABILIZATION PRACTICES:

EXISTING VEGETATION SHALL BE PROTECTED AS MUCH AS POSSIBLE
TEMPORARY SEEDING AND MULCHING SHALL OCCUR WITHIN 7 DAYS FOLLOWING THE COMPLETION OF ANY LAND DISTURBING ACTIVITIES.
EROSION CONTROL BLANKETS SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE SEEDING OF SLOPES 6:1 OR GREATER.

STRUCTURAL PRACTICES:

INLET FILTERS SHALL BE INSTALLED IN EXISTING DRAINAGE STRUCTURES PRIOR TO ANY GROUND DISTURBING ACTIVITIES.
A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE ESTABLISHMENT OF PROPOSED GRADES AT THE ENTRANCE LOCATION.

## STORM WATER MANAGEMENT

REFER TO THE IMPROVEMENT PLANS FOR COMFORT CARE SENIOR LIVING DEVELOPMENT AND THE STORMWATER MANAGEMENT CALCULATIONS FOR ADDITIONAL INFORMATION

RUNOFF:
THE SITE DRAINS TO THE STORM SEWER LOCATED ON SITE AND DRAINS TO EAGLE CREEK TO THE WEST.

VELOCITY DISSIPATION
THE SITE UTILIZES STORM SEWERS.

## WASTE DISPOSAL

ALL WASTES COMPOSED OF BUILDING MATERIALS MUST BE REMOVED FROM THE SITE FOR DISPOSAL IN PERMITTED DISPOSAL FACILITIES. THE PROJECT SITE WILL BE KEPT CLEAR OF ALL HUMAN AND CONSTRUCTION DEBRIS. NO BUILDING MATERIALS, GAS OR OIL SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE. A SECURELY LIDDED DUMPSTER WILL BE PROVIDED FOR STANDARD SOLID WASTE.

HAZARDOUS WASTE WILL BE DISPOSED OF AS SPECIFIED BY THE VILLAGE OF LAKE VILLA, THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, OR THE MANUFACTURER OF THE MATERIAL, WHICH EVER IS STRICTER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL HAZARDOUS WASTE PRODUCED AS A PART OF THIS CONSTRUCTION PROJECT.

SANITARY WASTE WILL BE COLLECTED IN PORTABLE UNITS AND DRAINED AS SPECIFIED BY THE VILLAGE OF LAKE VILLA.

ANY SPILLED OIL, GAS, OR OTHER CONSTRUCTION MATERIAL WILL BE CONTAINED AND CLEANED IMMEDIATELY. CONTAMINATED SOIL WILL BE DISPOSED OF IN AN APPROVED MANNER AT A LICENSED LANDFILL.

A SINGLE CONCRETE WASHOUT AREA WILL BE DESIGNATED BY THE CONTRACTOR FOR USE DURING THE DURATION OF THE PROJECT. THE WASHOUT AREA WILL BE DUG OUT OR BERMED UP TO CONTAIN ALL WASHOUT MATERIAL. ALL AFFECTED SOILS AND CONCRETE SPOILS WILL BE REMOVED FROM THE SITE UPON COMPLETION OF THE CONCRETE PLACEMENT ACTIVITIES.

## OTHER REQUIREMENTS

THE VILLAGE OF LAKE VILLA CODE WILL GOVERN ALL EROSION CONTROL AND STORMWATER MANAGEMENT OPERATIONS.

IF ANY SITE AREA IS TO REMAIN DISTURBED FOR OVER 14 DAYS THEN 7 DAYS AFTER THE LAST DISTURBANCE THE CONTRACTOR MUST INITIATE STABILIZATION MEASURES.

NO FUEL OR OIL WILL BE STORED ON-SITE WITHOUT PROPER CONTAINMENT AND WRITTEN PERMISSION FROM THE VILLAGE OF LAKE VILLA.

THE CONTRACTOR WILL PREVENT OFF-SITE TRACKING OF SEDIMENTS. IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT SUFFICIENT, FURTHER MEASURES MUST BE IMPLEMENTED. ANY SEDIMENT LEFT ON THE PUBLIC ROADWAY WILL BE CLEANED OFF EVERY NIGHT.

DUST CONTROL, IF DEEMED NECESSARY BY THE VILLAGE ENGINEER, WILL BE DONE BY MEANS OF A WATER TRUCK SPRAYING WATER ON THE SURFACE OF THE SITE.

## NON-STORMWATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THIS SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER MAIN AND FIRE HYDRANT FLUSHING.
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED)
- UNCONTAMINATED GROUND AND SURFACE WATER FROM DEWATERING EXCAVATIONS AND DETENTION BASINS
- DUST CONTROL WATER

ALL NON-STORMWATER DISCHARGES WILL BE DIRECTED TO THE EXISTING STORM SEWERS

## DEMOLITION AND RECONSTRUCTION SCHEDULE OF CONSTRUCTION

1. INSTALL SILT FENCE AND EROSION CONTROL MEASURES.
2. CONSTRUCT IMPROVEMENTS.
3. COMPLETE RESTORATION.
4. REMOVE TEMPORARY EROSION CONTROL MEASURES.

## MAINTENANCE AND INSPECTION PROCEDURES

THE GENERAL CONTRACTOR FOR THIS PROJECT IS RESPONSIBLE FOR MAINTAINING THE EROSION AND SEDIMENT CONTROL MEASURES IN GOOD AND EFFECTIVE OPERATING CONDITIONS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL REGULAR INSPECTIONS REQUIRED BY THE NPDES GENERAL PERMIT #2 INCLUDING RECORDING AND KEEPING A RECORD OF EACH INSPECTION. THIS PROCESS WILL CONTINUE UNTIL FINAL STABILIZATION IS ACHIEVED AND A NOTICE OF TERMINATION IS RECEIVED BY THE OWNER. INSPECTIONS WILL BE PERFORMED AND RECORDED BY QUALIFIED INDIVIDUALS TRAINED BY THE GENERAL CONTRACTOR AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER.

DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

BASED ON THE RESULTS OF THE INSPECTIONS, MODIFICATIONS NECESSARY SHALL BE IMPLEMENTED WITHIN 7 DAYS OF THE INSPECTION.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. ANY NECESSARY REPAIRS WILL BE INITIATED IMMEDIATELY.

SEDIMENT BUILDUP WILL BE REMOVED FROM SILT FENCES WHEN IT HAS REACHED 1/3 THE HEIGHT OF THE FABRIC.

SEDIMENT BUILDUP WILL BE REMOVED FROM OTHER EROSION CONTROLS AS NEEDED TO MAINTAIN STORMWATER FLOW THROUGH THE SITE AND AVOID SEDIMENT FROM BYPASSING THE EROSION CONTROLS.

EROSION CONTROL MEASURES WILL BE REPAIRED, MAINTAINED, OR INCREASED AT THE DIRECTION OF THE LOCAL SOIL AND WATER CONSERVATION DISTRICT, THE VILLAGE OF LAKE VILLA OR THE PARK DISTRICT'S ENGINEER.

A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. THE REPORT SHALL SUMMARIZE THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORMWATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN TO SOLVE ANY PROBLEMS OBSERVED. THE INSPECTION REPORT SHALL BE SIGNED BY A QUALIFIED INDIVIDUAL PER NPDES GENERAL PERMIT NO. 2.

INSPECTION REPORTS SHALL BE RETAINED AS A PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS AFTER FINAL STABILIZATION AND A NOTICE OF DISCONTINUATION HAS BEEN SUBMITTED TO THE DEPARTMENT.

## CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS A PART OF THIS CERTIFICATION.

GENERAL CONTRACTOR

_____
COMPANY NAME

_____
COMPANY ADDRESS

_____
COMPANY PHONE NUMBER

_____
PRINTED NAME AND TITLE

_____
SIGNATURE

_____
DATE

SUB-CONTRACTOR #1

_____
SUB-CONTRACTORS RESPONSIBILITY

_____
COMPANY NAME

_____
COMPANY ADDRESS

_____
COMPANY PHONE NUMBER

_____
PRINTED NAME AND TITLE

_____
SIGNATURE

_____
DATE

USE ADDITIONAL SHEETS FOR ADDITIONAL SUB-CONTRACTORS.
EACH SHEET WILL HAVE THE PROJECT NAME AND LOCATION AS DESCRIBED IN THE SITE DESCRIPTION ON THIS SHEET.
EACH ADDITIONAL SUB-CONTRACTOR WILL PROVIDE THEIR RESPONSIBILITY, COMPANY NAME, ADDRESS AND PHONE NUMBER, PRINTED NAME AND TITLE, SIGNATURE AND DATE.
THIS INFORMATION WILL BE KEPT WITH THIS PLAN.

## OWNERS'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS A PART OF THIS CERTIFICATION.

_____
COMPANY NAME

_____
COMPANY ADDRESS

_____
COMPANY PHONE NUMBER

_____
PRINTED NAME AND TITLE

_____
SIGNATURE

_____
DATE

| PROJECT STAFF | | ISSUE | REVISIONS | DATE |
|---|---|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | A | PRELIMINARY PLAN | 12-07-2022 |
| ENGINEER: | A. VEER P.E. | B | REVISIONS PER VILLAGE COMMENTS | 1-31-2023 |
| ENGINEER: | | | | |
| TECHNICIAN: | | | | |

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A Service & Material Engineers company
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PARK RIDGE, IL 60068 FAX: (847) 823-3303
bbono@bonoconsulting.com

SWPPP

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION

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PROJECT NUMBER: 22334

START DATE: NOV. 23 , 2020

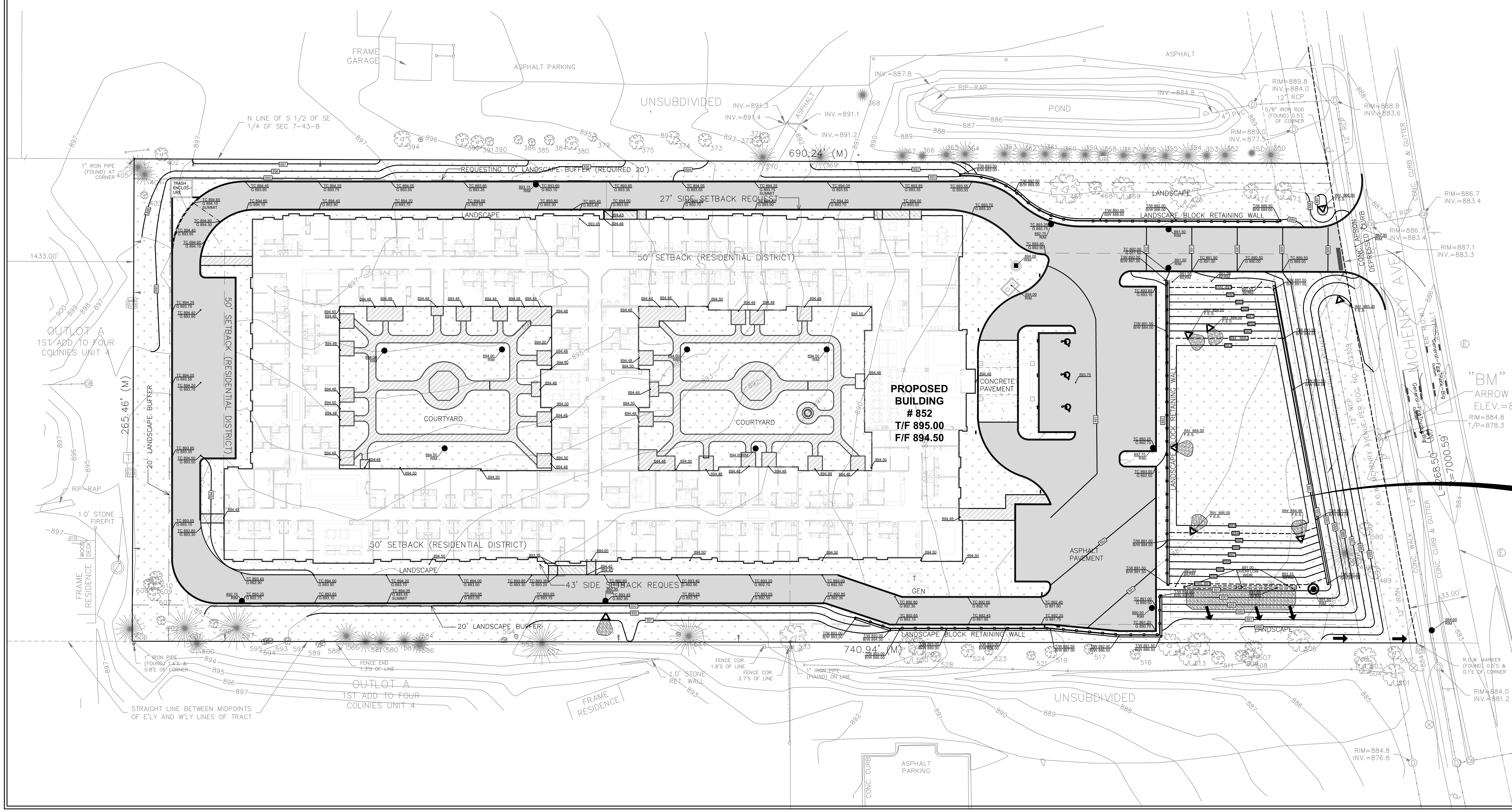
GRAPHIC SCALE
30 0 30

SCALE: 1"=30'-0

SHEET NUMBER
6 OF 16

## GRADING NOTES:

1. RETAINING WALL DESIGN TO BE PROVIDED BY OTHERS.
2. PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
3. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
4. MEET EXISTING GRADE AT PROPERTY LIMITS UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
6. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
9. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY OTHERS.
10. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 4H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.




WETLAND BOTTOM DETENTION POND [COUNTY & LOCAL REQUIREMENTS]
DETENTION STORAGE PROVIDED ABOVE NWL = 68,718 CU.FT.
RUNOFF VOLUME REDUCTION REQUIRED = 7,086 CU. FT.
18" ENGINEERED SOIL IN UNDER DRAIN 2,383 CU FT.
TOTAL VOLUME CONTROL PROVIDED = 9,468 CU.FT.
TOTAL DETENTION PROVIDED = 78,187 CUFT
DETENTION REQUIRED = 78,150 CU.FT.
HWL = 891.00
NWL = 884.00
BOTTOM OF WETLAND = 883.00
OVERFLOW ELEVATION = 891.00
FREEBOARD = 891.33

| DATE | REVISIONS | ISSUE |
|---|---|---|
| 12-07-2022 | PRELIMINARY PLAN | A |
| 1-31-2023 | REVISIONS PER VILLAGE COMMENTS | B |

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:


BONO CONSULTING CIVIL ENGINEERS
A Sevee & Maher Engineers company
1018 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH : (847) 823-3300
FAX: (847) 823-3303
bbono@bonoconsulting.com


# PROPOSED GRADING, & DRAINAGE PLAN

## OVERALL SITE

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE 30 0 30
SCALE: 1"=30'-0

MATCH LINE SEE SHEET 9

**PROPOSED BUILDING # 852 T/F 895.00 F/F 894.50**

690.24' (M)

740.94' (M)

"BM"
ARROW BOLT ON HYD.
ELEV.=887.37 (NAVD88)

WETLAND BOTTOM DETENTION POND [COUNTY & LOCAL REQUIREMENTS]
DETENTION STORAGE PROVIDED ABOVE NWL = 68,718 CU.FT.
RUNOFF VOLUME REDUCTION REQUIRED = 7,086 CU. FT.
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FREEBOARD = 891.33

| PROJECT STAFF | | ISSUE | REVISIONS | DATE |
|---|---|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | A | PRELIMINARY PLAN | 12-07-2022 |
| ENGINEER: | A. VEER P.E. | B | REVISIONS PER VILLAGE COMMENTS | 1-31-2023 |
| ENGINEER: | | | | |
| TECHNICIAN: | | | | |


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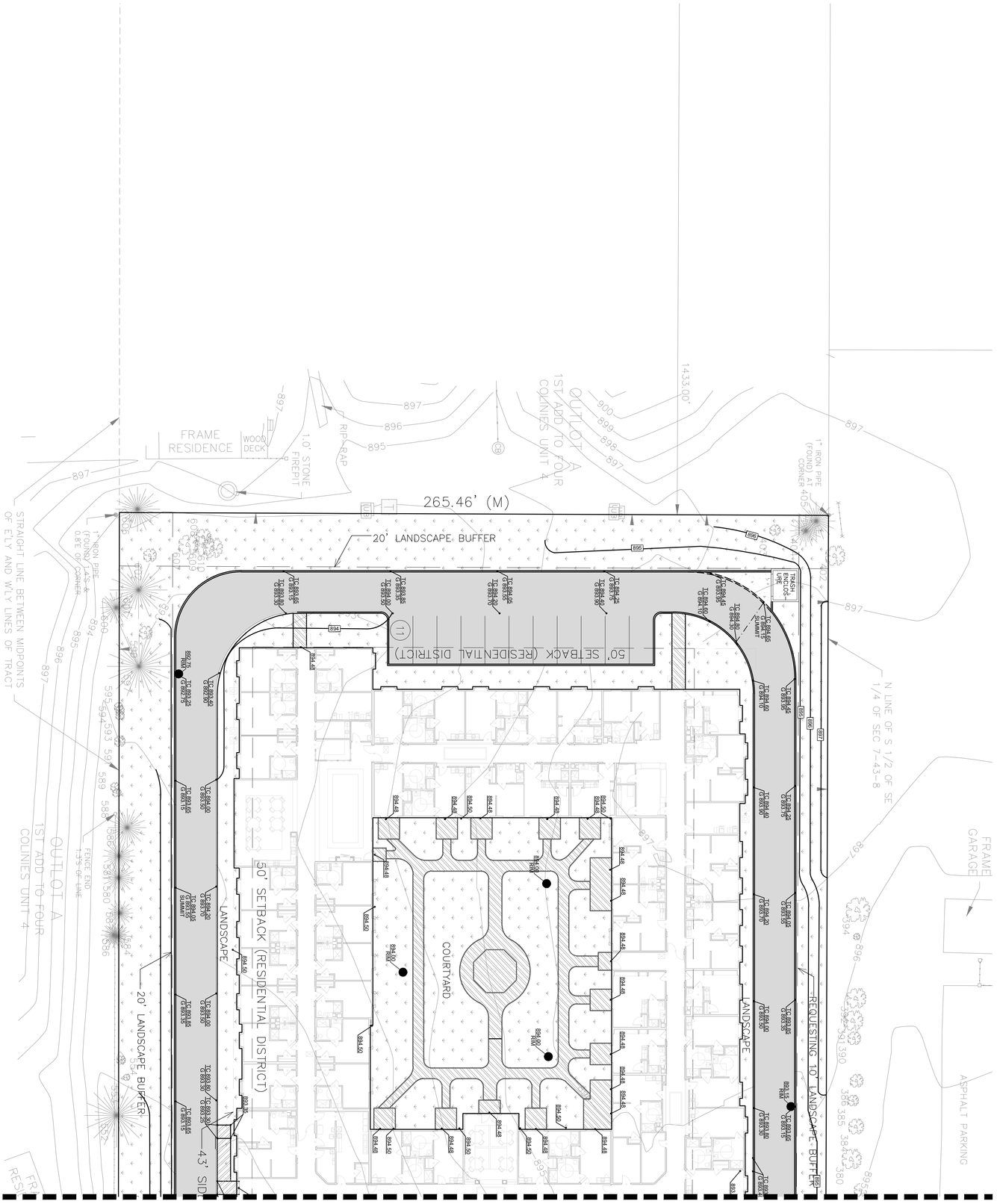

# PROPOSED GRADING, & DRAINAGE PLAN
## EAST SECTION
OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE: 20 0 20
SCALE: 1"=20'-0

SHEET NUMBER
8 OF 16



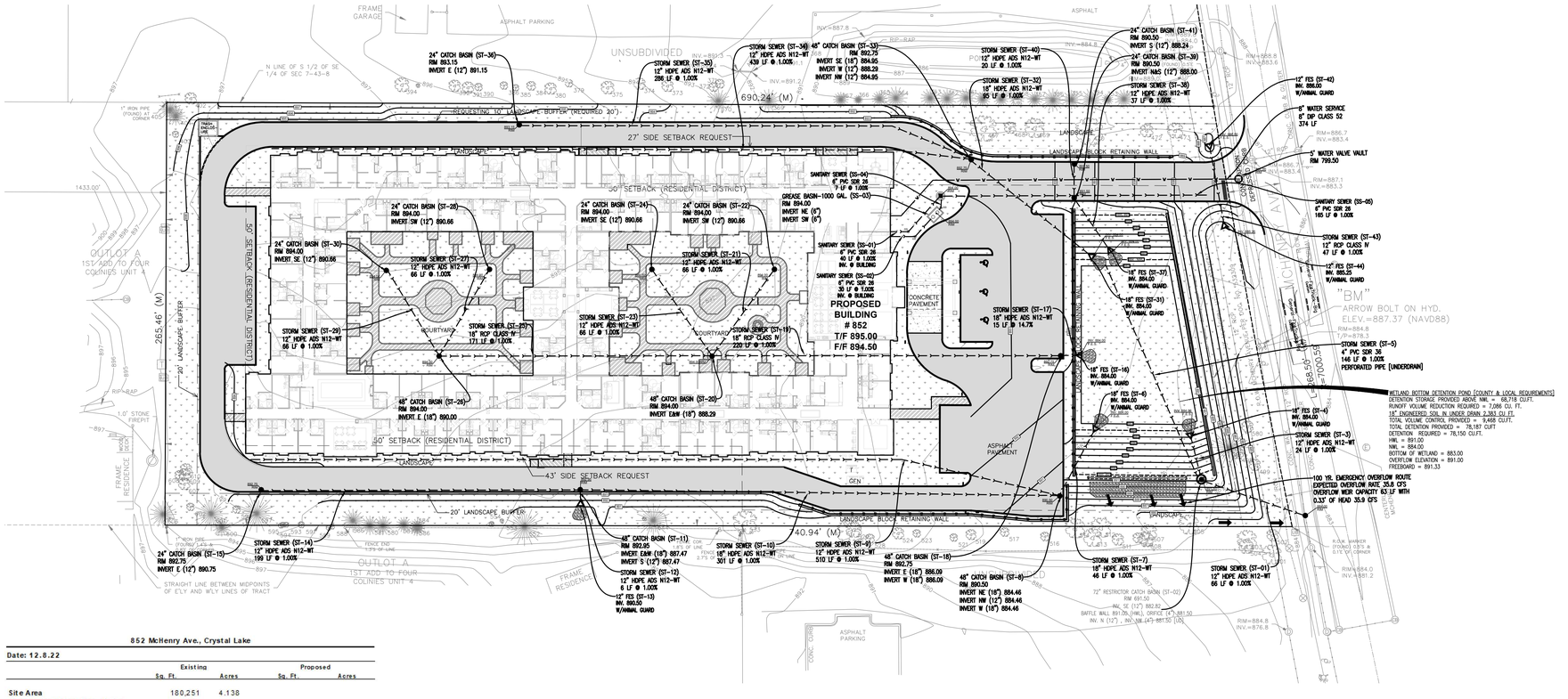

MATCH LINE SEE SHEET 8

| | | | | | |
|---|---|---|---|---|---|
| 9 OF 16 | PROPOSED GRADING, & DRAINAGE PLAN<br>WEST SECTION<br>OASIS SENIOR LIVING<br>952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL | BCI BONO CONSULTING CIVIL ENGINEERS<br>A Sevee & Maher Engineers company<br>1018 BUSSE HIGHWAY<br>PARK RIDGE, IL 60068<br>PH : (847) 823-3300<br>FAX: (847) 823-3303<br>bbono@bonoconsulting.com | PROJECT STAFF | ISSUE | REVISIONS / DATE |
| | | | PROJECT MANAGER: B. BONO P.E. | A | PRELIMINARY PLAN 12-07-2022 |
| | | | ENGINEER: A. VEER P.E. | B | REVISIONS PER VILLAGE COMMENTS 1-31-2023 |
| | | | ENGINEER: | | |
| | | | TECHNICIAN: | | |

SHEET NUMBER
SCALE: 1"=20'-0"
GRAPHIC SCALE
PROJECT NUMBER: 22334
START DATE: NOV. 23 - 2020

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NOT FOR CONSTRUCTION




**852 McHenry Ave., Crystal Lake**

**Date: 12.8.22**

| | Existing Sq. Ft. | Existing Acres | Proposed Sq. Ft. | Proposed Acres |
|---|---|---|---|---|
| **Site Area** | 180,251 | 4.138 | | |
| **Project/ Disturbed Area of Site** | 180,251 | 4.138 | | |
| **Building** | 0 | 0.000 | 52,482 | 1.205 |
| **Walks, Play Ground & Conc. Pads** | 0 | 0.000 | 10,470 | 0.240 |
| **Access & Parking** | 0 | 0.000 | 36,167 | 0.830 |
| **Impervious Area** | 0 | 0.000 | 99,119 | 2.275 |
| | | | 54.99% | |
| **Pervious Area** | 180,251 | 4.138 | 81,131 | 1.863 |

**DETENTION VOLUME**

1) **Surface Ponding - Detention Pond (HWL: 891.00)** (6' Ponding)

| Elevation | Area (sq. ft.) | Avg. Area | Depth | Vol. (cu.ft.) |
|---|---|---|---|---|
| 891.00 | 11780 | | | |
| | | 11,473.00 | 1.00 | 11,473 |
| 890.00 | 11166 | | | |
| | | 10,880.00 | 1.00 | 10,880 |
| 889.00 | 10594 | | | |
| | | 10,305.00 | 1.00 | 10,305 |
| 888.00 | 10016 | | | |
| | | 9,734.00 | 1.00 | 9,734 |
| 887.00 | 9452 | | | |
| | | 9,156.50 | 1.00 | 9,157 |
| 886.00 | 8861 | | | |
| | | 8,579.50 | 1.00 | 8,580 |
| 885.00 | 8298 | | | |
| | | 8,057.50 | 1.00 | 8,058 |
| 884.00 | 7817 | | | |
| | | | | **68,186** |

1) **Pipe Storage**

| Pipe numbers | Pipe Size (in.) | Length LF | Cuft per Lf | Total |
|---|---|---|---|---|
| **St-10** | **18** | **301** | **1.770** | **532.77** |
| 3) Volume Reduction Storage | | | | **9,468** |

**TOTAL DETENTION PROVIDED** **78,186** < **78,150** OK

A additional detetion is provided as volume control

Detention Required 78,150 Cu. Ft.

**BEST MANAGEMENT PRACTICES**

Impervious Area (Net New) 99,119 s.f.

**VOLUME REDUCTION BEST MANAGEMENT PRACTICES**

| | | |
|---|---|---|
| Volume Control Requirements | **1** | Rainfall |
| Volume Control Storage Required | 8,260 | Cu. Ft. |

**PROPOSED**

**Storage Below - NWL 884.00** (Bottom Portion)

| CONTOUR | HEIGHT BETWEEN CONTOURS(FT.) | AREA OF CONTOUR (SQ.FT) | VOLUME(CU.FT) |
|---|---|---|---|
| 884.00 | | *7,817* | |
| | *1.00* | | *7,086* |
| 883.00 | | *6,354* | |

**Storage Below Wetland Bottom- NWL 883-881.50** (Engineered Soil)

| AREA SF | POROSITY % | DEPTH | VOLUME(CU.FT) |
|---|---|---|---|
| 6354.00 | *0.25* | *16"* | *2,383* |
| Total | | | **9,468** |

**UTILITY NOTES:**

1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS AND ADJACENT UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCTUTECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
4. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER OR WATER MAIN LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
6. LIGHTING AND UNDERGROUND CABLE IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND DETAILS.
7. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
8. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
9. AT LOCATIONS WHERE WATER MAIN CROSSES BENEATH OR LESS THAN 18" ABOVE A SEWER, PROVIDE WATER MAIN PROTECTION PER STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
10. ELEVATIONS GIVEN FOR STORM SEWER STRUCTURES LOCATED IN CURB LINE ARE PAVEMENT ELEVATIONS.
11. ALL WATER MAIN SHALL BE 5'-6" BELOW FINISHED GRADE TO TOP OF MAINS UNLESS NOTED OTHERWISE.
12. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
13. ALL SANITARY AND STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
14. PROVIDE CONCRETE COLLAR AT ALL NEW STORM STRUCTURE IN PAVEMENT, NOT ADJACENT TO CURB. SEE CONCRETE COLLAR DETAIL ON DETAIL SHEET.
15. CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO SANITARY MANHOLES.
16. EXTERNAL CHIMNEY SEALS ARE REQUIRED ON PROPOSED AND ADJUSTED EXISTING SANITARY MANHOLES.
17. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
18. ALL STORM MANHOLES IN PAVEMENT SHALL BE OPEN LID UNLESS OTHERWISE NOTED.
19. ALL UNDERGROUND IMPROVEMENTS SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS. IN THE EVENT OF CONFLICTING GUIDELINES, THE MORE RESTRICTIVE SHALL GOVERN.

| REVISIONS | ISSUE | DATE |
|---|---|---|
| PRELIMINARY PLAN | A | 12-07-2022 |
| REVISIONS PER VILLAGE COMMENTS | B | 1-31-2023 |

PROJECT STAFF

PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:


BCI
BONO CONSULTING CIVIL ENGINEERS
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# PROPOSED UTILITY PLAN
## OVERALL SITE
OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION


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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE 40 0 40
SCALE: 1"=40'-0

SHEET NUMBER
10 OF 16

MATCH LINE SEE SHEET 12

STORM SEWER (ST-34) 48" CATCH BASIN (ST-33)
12" HDPE ADS N12-WT
439 LF @ 1.00%
RIM 892.75
INVERT SE (18") 884.95
INVERT W (12") 888.29
INVERT NW (12") 884.95

STORM SEWER (ST-35)
12" HDPE ADS N12-WT
286 LF @ 1.00%

STORM SEWER (ST-40)
12" HDPE ADS N12-WT
20 LF @ 1.00%

STORM SEWER (ST-32)
18" HDPE ADS N12-WT
95 LF @ 1.00%

24" CATCH BASIN (ST-41)
RIM 890.50
INVERT S (12") 888.24

24" CATCH BASIN (ST-39)
RIM 890.50 (FOUND) 0.5'S
INVERT N&S (12") 888.00

STORM SEWER (ST-38)
12" HDPE ADS N12-WT
37 LF @ 1.00%

12" FES (ST-42)
INV. 886.00
W/ANIMAL GUARD

8" WATER SERVICE
8" DIP CLASS 52
374 LF

5' WATER VALVE VAULT
RIM 799.50

SANITARY SEWER (SS-04)
6" PVC SDR 26
7 LF @ 1.00%

GREASE BASIN-1000 GAL. (SS-03)
RIM 894.00
INVERT NE (6")
INVERT SW (6")

24" CATCH BASIN (ST-24)
RIM 894.00
INVERT SE (12") 890.66

24" CATCH BASIN (ST-22)
RIM 894.00
INVERT SW (12") 890.66

SANITARY SEWER (SS-05)
6" PVC SDR 26
165 LF @ 1.00%

STORM SEWER (ST-43)
12" RCP CLASS IV
47 LF @ 1.00%

12" FES (ST-44)
INV. 885.25
W/ANIMAL GUARD

SANITARY SEWER (SS-01)
6" PVC SDR 26
40 LF @ 1.00%
INV. @ BUILDING

SANITARY SEWER (SS-02)
6" PVC SDR 26
30 LF @ 1.00%
INV. @ BUILDING

STORM SEWER (ST-21)
12" HDPE ADS N12-WT
66 LF @ 1.00%

**PROPOSED BUILDING # 852**
**T/F 895.00**
**F/F 894.50**

18" FES (ST-37)
INV. 884.00
W/ANIMAL GUARD

18" FES (ST-31)
INV. 884.00
W/ANIMAL GUARD

STORM SEWER (ST-17)
18" HDPE ADS N12-WT
15 LF @ 14.7%

"BM"
ARROW BOLT ON HYD.
ELEV.=887.37 (NAVD88)

STORM SEWER (ST-23)
12" HDPE ADS N12-WT
66 LF @ 1.00%

STORM SEWER (ST-19)
18" RCP CLASS IV
220 LF @ 1.00%

STORM SEWER (ST-5)
4" PVC SDR 36
146 LF @ 1.00%
PERFORATED PIPE [UNDERDRAIN]

18" FES (ST-16)
INV. 884.00
W/ANIMAL GUARD

18" FES (ST-6)
INV. 884.00
W/ANIMAL GUARD

WETLAND BOTTOM DETENTION POND [COUNTY & LOCAL REQUIREMENTS]
DETENTION STORAGE PROVIDED ABOVE NWL = 68,718 CU.FT.
RUNOFF VOLUME REDUCTION REQUIRED = 7,086 CU. FT.
18" ENGINEERED SOIL IN UNDER DRAIN 2,383 CU FT.
TOTAL VOLUME CONTROL PROVIDED = 9,468 CU.FT.
TOTAL DETENTION PROVIDED = 78,187 CUFT
DETENTION REQUIRED = 78,150 CU.FT.
HWL = 891.00
NWL = 884.00
BOTTOM OF WETLAND = 883.00
OVERFLOW ELEVATION = 891.00
FREEBOARD = 891.33

18" FES (ST-4)
INV. 884.00
W/ANIMAL GUARD

STORM SEWER (ST-3)
12" HDPE ADS N12-WT
24 LF @ 1.00%

100 YR. EMERGENCY OVERFLOW ROUTE
EXPECTED OVERFLOW RATE 35.8 CFS
OVERFLOW WEIR CAPACITY 63 LF WITH
0.33' OF HEAD 35.9 CFS

48" CATCH BASIN (ST-20)
RIM 894.00
INVERT E&W (18") 888.29

48" CATCH BASIN (ST-11)
RIM 892.95
INVERT E&W (18") 887.47
INVERT S (12") 887.47

STORM SEWER (ST-12)
12" HDPE ADS N12-WT
6 LF @ 1.00%

12" FES (ST-13)
INV. 890.50
W/ANIMAL GUARD

STORM SEWER (ST-10)
18" HDPE ADS N12-WT
301 LF @ 1.00%

STORM SEWER (ST-9)
12" HDPE ADS N12-WT
510 LF @ 1.00%

48" CATCH BASIN (ST-18)
RIM 892.75
INVERT E (18") 886.09
INVERT W (18") 886.09

48" CATCH BASIN (ST-8)
RIM 890.50
INVERT NE (18") 884.46
INVERT NW (12") 884.46
INVERT W (18") 884.46

STORM SEWER (ST-7)
18" HDPE ADS N12-WT
46 LF @ 1.00%

72" RESTRICTOR CATCH BASIN (ST-02)
RIM 691.50
INV. SE (12") 882.82
BAFFLE WALL 891.00 (HWL), ORIFICE (4") 881.50
INV. N (12"), INV. NW (4") 881.50 [UD]

STORM SEWER (ST-01)
12" HDPE ADS N12-WT
66 LF @ 1.00%

ASPHALT PAVEMENT
ASPHALT PARKING
CONCRETE PAVEMENT
LANDSCAPE BLOCK RETAINING WALL
CONC. CURB & GUTTER
UNSUBDIVIDED
690.24' (M)
40.94' (M)
REQUIRED 20'
27' SIDE SETBACK REQUEST
50' SETBACK (RESIDENTIAL DISTRICT)
SETBACK REQUEST
COURTYARD
LANDSCAPE
R.O.W. MARKER (FOUND) 0.5'S & 0.1'E OF CORNER
RIM=884.0
INV.=881.2
RIM=884.8
T/P=878.3
RIM=884.8
INV.=876.8

| PROJECT STAFF | | ISSUE | REVISIONS | DATE |
|---|---|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | A | PRELIMINARY PLAN | 12-07-2022 |
| ENGINEER: | A. VEER P.E. | B | REVISIONS PER VILLAGE COMMENTS | 1-31-2023 |
| ENGINEER: | | | | |
| TECHNICIAN: | | | | |


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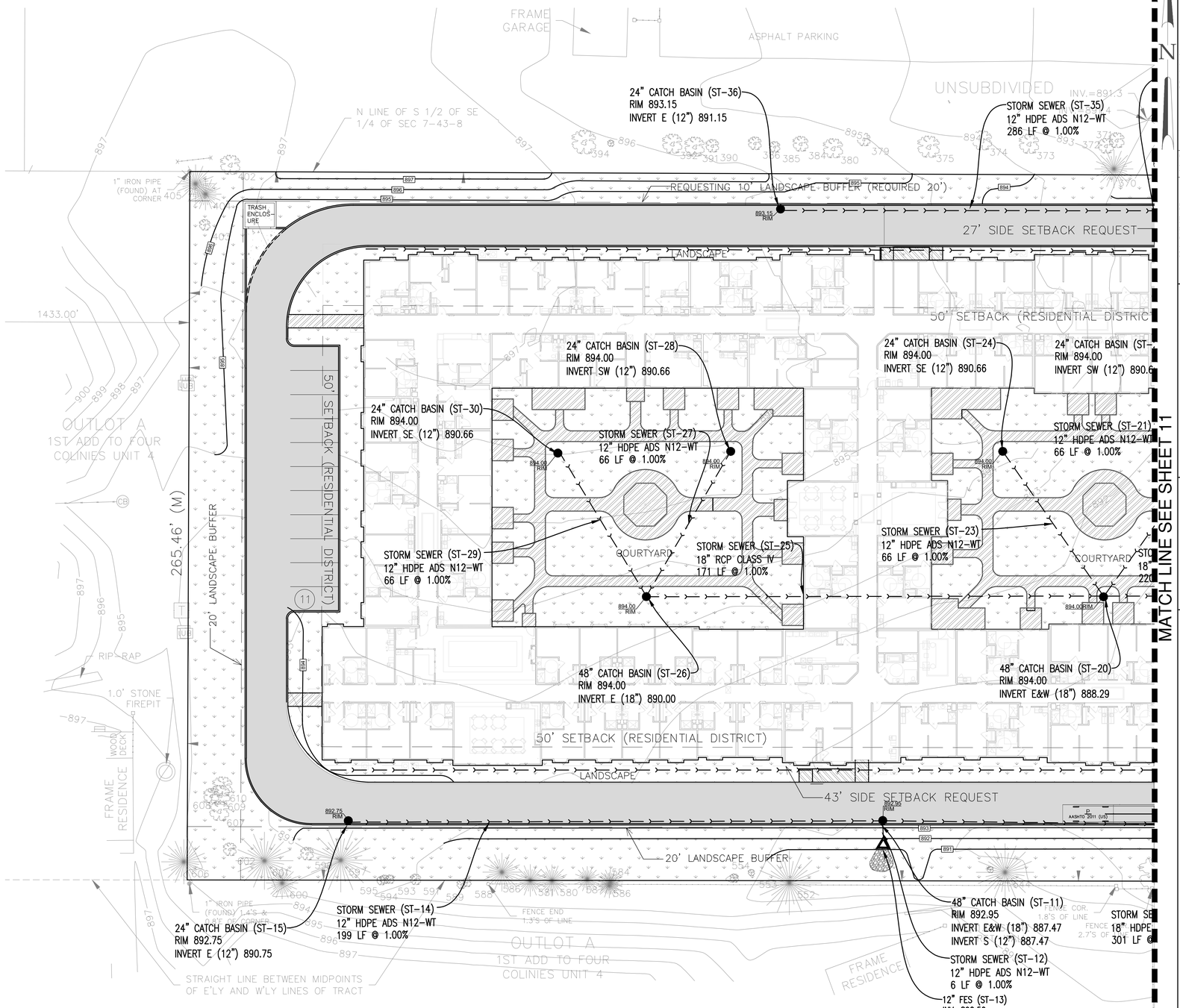

# PROPOSED UTILITY PLAN
## EAST SECTION
OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE
20 0 20
SCALE: 1"=20'-0

SHEET NUMBER
11 OF 16




| DATE | REVISIONS | ISSUE |
|---|---|---|
| 12-07-2022 | PRELIMINARY PLAN | A |
| 1-31-2023 | REVISIONS PER VILLAGE COMMENTS | B |

PROJECT STAFF

| | | |
|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | |
| ENGINEER: | A. VEER P.E. | |
| ENGINEER: | | |
| TECHNICIAN: | | |


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# PROPOSED UTILITY PLAN
## WEST SECTION
OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

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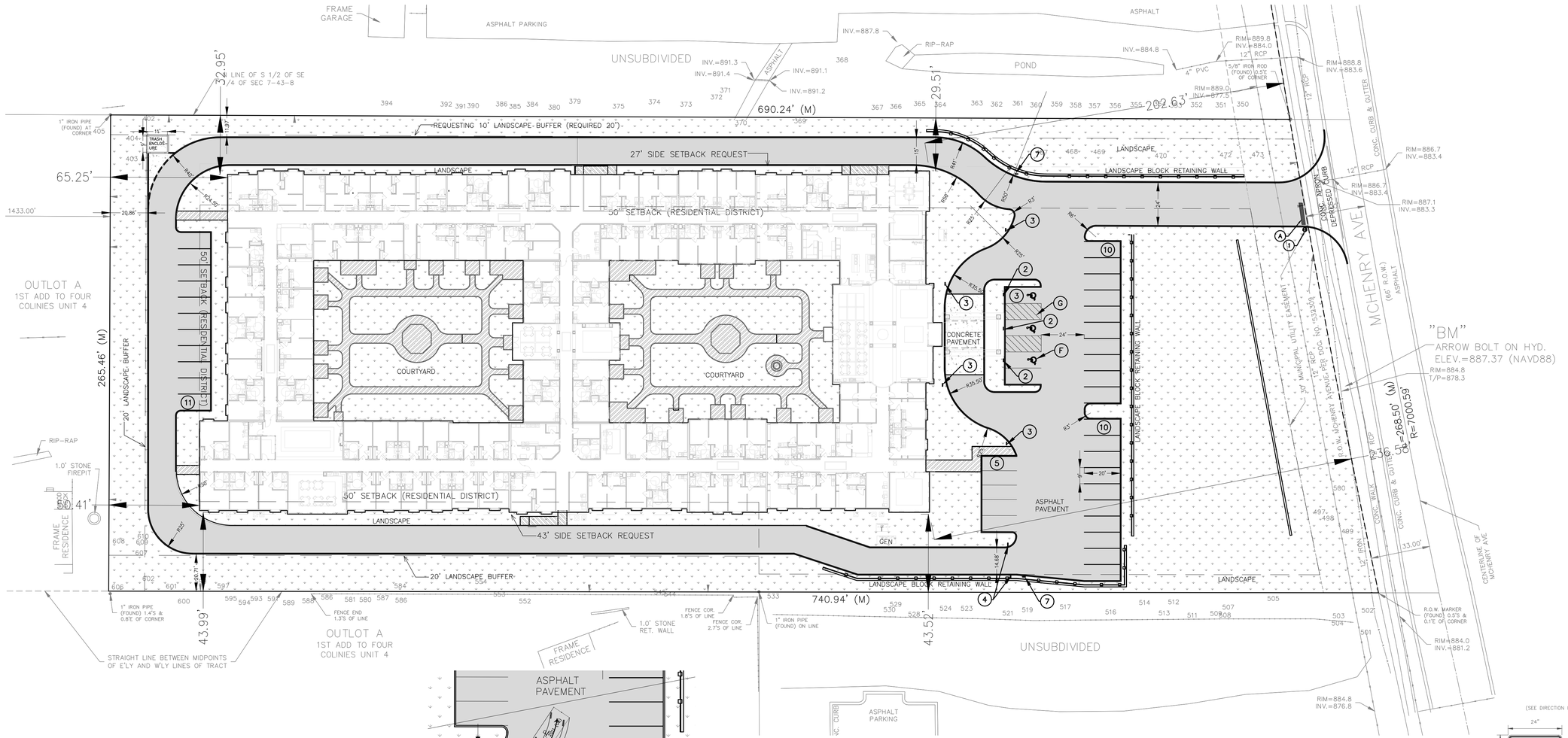

PROJECT NUMBER: 22334

START DATE: NOV. 23 , 2020

GRAPHIC SCALE
20 0 20

SCALE: 1"=20'-0

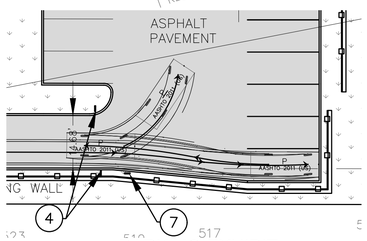
SHEET NUMBER
12 OF 16

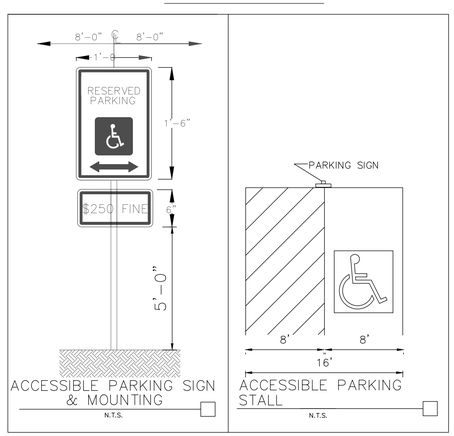


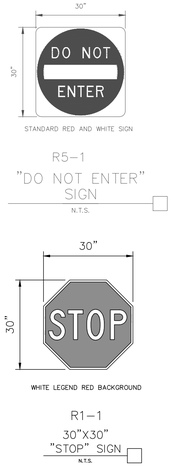

## PARKING EXHIBIT

## SITE PLAN NOTES:

A. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY /COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
B. ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH AND WATER UNTIL HEALTHY STAND OF GRASS IS ESTABLISHED UNLESS OTHERWISE NOTED.
C. ALL CURBED RADII ARE TO BE 3' MEASURED TO FACE OF CURB UNLESS OTHERWISE NOTED. STRIPED RADII ARE TO BE 5' UNLESS OTHERWISE NOTED.
D. ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB AND RADII ARE BACK OF CURB OR BUILDING FOUNDATION UNLESS OTHERWISE NOTED.
E. BUILDING DIMENSIONS AND ADJACENT PARKING AND UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST, THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
F. ALL PROPOSED CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
G. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITION AS PREPARED BY OTHERS, BONO CONSULTING INC. IS NOT LIABLE FOR OMISSIONS OR ERRORS IN SURVEY. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
H. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
I. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE REMOVED UNDER PROPOSED BUILDINGS AND ABANDONED ELSEWHERE AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
J. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS AND POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITEWORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
K. SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY OTHERS.
L. IMPROVEMENTS ADJACENT TO BUILDING IF SHOWN SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
M. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED GRADES AS INDICATED ON PLANS.
N. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATIONS OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
O. TOTAL LAND AREA IS 4.138+/- ACRES.
P. NO WETLANDS WERE PRESENT ON THIS SITE.
Q. THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE "SITE SPECIFIC SPECIFICATIONS."
R. MONUMENT AND/OR PYLON SIGNS SHALL BE CONSTRUCTED BY OWNER ASSIGNED CONTRACTOR.
S. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. PURCHASER OF OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.
T. ALL ROADWAY AND PARKING LOT IMPROVEMENTS SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS, LATEST EDITION.
U. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
V. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE



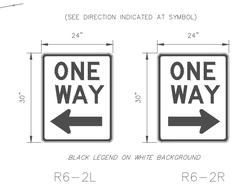

B6.12 CURB & GUTTER
B6.12 CURB & GUTTER (REVERSE PITCH)
DEPRESSED CURB
DEPRESSED CURB (REVERSE PITCH)

### SIGNAGE LEGEND

| | |
|---|---|
| 1 | STOP SIGN (R1-1) |
| 2 | ACCESSIBLE PARKING SIGN (R7-8) |
| 3 | NO PARKING SIGN FIRE LANE (R8-31) |
| 4 | DO NOT ENTER (R5-1) |
| 5 | ~~PEDESTRIAN CROSSING SIGN~~ |
| 6 | ~~NO OUTLET SIGN~~ |
| 7 | ONE-WAY SIGN |
| 8 | ~~NO LEFT TURN DURING 4:00 PM TO 6:00 PM SIGN~~ |
| 9 | ~~PEDESTRIAN CROSSING SIGN~~ |

### PAVEMENT MARKING LEGEND

| | |
|---|---|
| A | 24" WHITE SOLID STOP BAR |
| B | 4" YELLOW SOLID LINE |
| C | ~~8" SOLID WHITE LINE~~ |
| D | ~~LETTERS & SYMBOLS PAVEMENT MARKINGS~~ |
| E | ~~TRAFFIC FLOW DIRECTIONAL ARROWS~~ |
| F | ACCESSIBLE PARKING SPACE PAVEMENT MARKINGS-SEE DETAIL |
| G | 4" YELLOW DIAGONAL AT 45° SPACED 3' O.C. |
| H | ~~4" SOLID WHITE LINE~~ |




"ONE WAY" SIGNS
N.T.S.

### PAVEMENT LEGEND

HEAVY DUTY PAVEMENT (20 YEAR SERVICE LIFE) [NOT USED]
1-1/2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50
2-1/2" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50
12" AGGREGATE BASE COURSE CA-6, TYPE B

STANDARD DUTY PAVEMENT
2" BITUMINOUS SURFACE COURSE, HOT-MIX ASPHALT, MIX D, N50
2" BITUMINOUS BINDER COURSE, HOT-MIX ASPHALT, IL-19, N50
8" AGGREGATE BASE COURSE CA-6, TYPE B

CONCRETE APRON
8" CONCRETE PAVEMENT (W/6X6 W/1.4 WWF, IF ALLOWED IN ROW)*
4" COMPACTED AGGREGATE BASE CA-6, TYPE B

CONCRETE PADS - TRASH CORAL & UTILITY PADS
8" CONCRETE PAVEMENT W/6X6 W/1.4 WWF*
4" COMPACTED AGGREGATE BASE CA-6, TYPE B

SIDEWALKS/PATIO
5" PORTLAND CEMENT CONCRETE (8" PCC THROUGH DRIVEWAYS)
4" COMPACTED AGGREGATE BASE COURSE, TYPE B

DETECTABLE WARNING AND DEPRESSED CURB
REPLACEABLE RED POLYMER COMPOSITE PLATES

*REFER TO CONCRETE JOINT DETAILS (IF ANY).

| DATE | REVISIONS | ISSUE |
|---|---|---|
| 12-07-2022 | PRELIMINARY PLAN | A |
| 1-31-2023 | REVISIONS PER VILLAGE COMMENTS | B |

PROJECT STAFF
PROJECT MANAGER: B. BONO P.E.
ENGINEER: A. VEER P.E.
ENGINEER:
TECHNICIAN:

BCI
BONO CONSULTING CIVIL ENGINEERS
A Sovereign & Mather Engineers company
1018 BUSSE HIGHWAY PH : (847) 823-3300
PARK RIDGE, IL 60068 FAX: (847) 823-3303
bbono@bonoconsulting.com

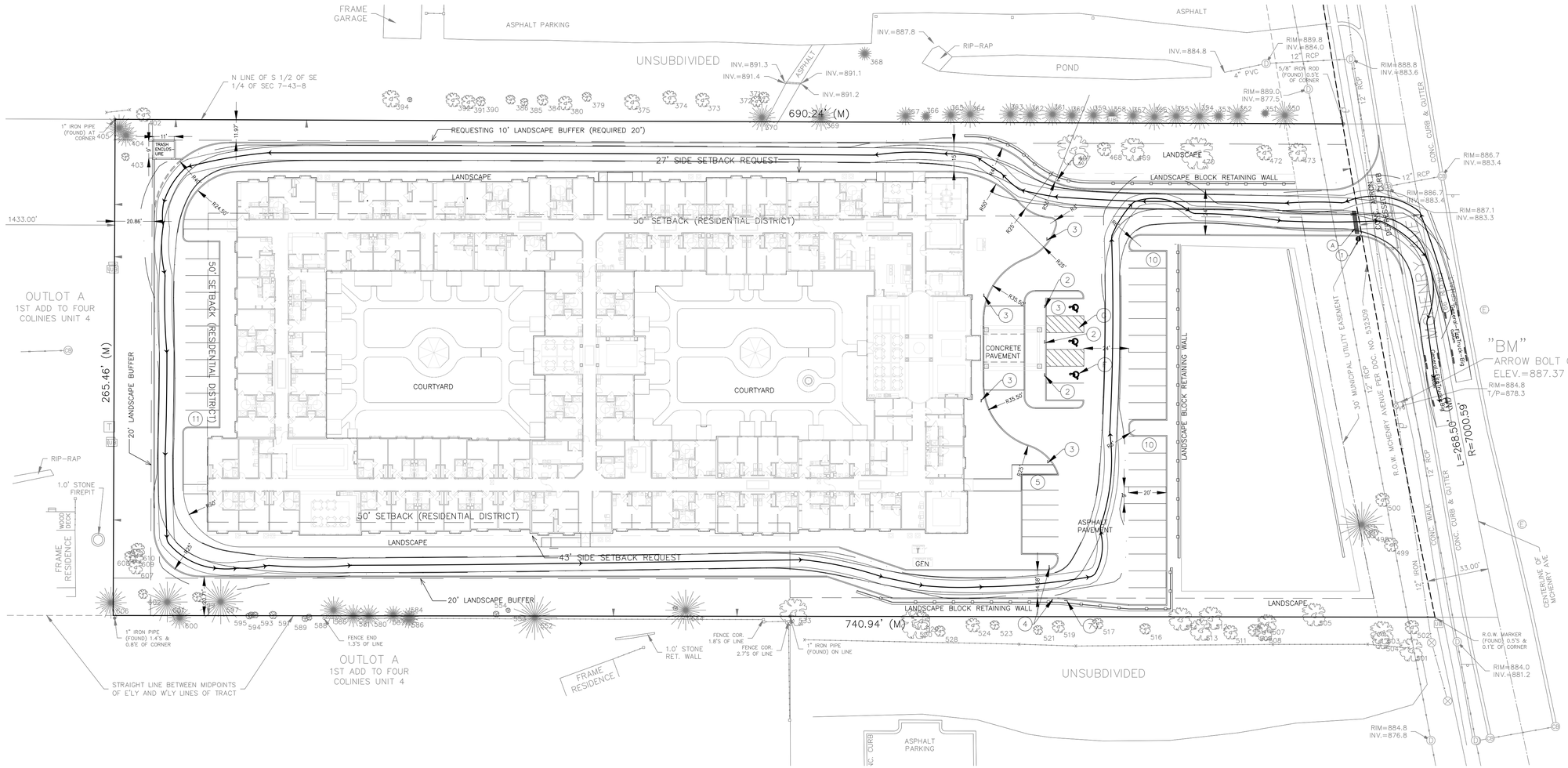
# SITE PLAN & GEOMETRIC PLAN

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE
20 0 20
SCALE: 1"=20'-0
SHEET NUMBER
13 OF 16




N

| PROJECT STAFF | | ISSUE | REVISIONS | DATE |
|---|---|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | A | PRELIMINARY PLAN | 12-07-2022 |
| ENGINEER: | A. WEIER P.E. | B | REVISIONS PER VILLAGE COMMENTS | 1-31-2023 |
| ENGINEER: | | | | |
| TECHNICIAN: | | | | |


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1018 BUSSE HIGHWAY PH : (847) 823-3300
PARK RIDGE, IL 60068 FAX: (847) 823-3303
bbono@bonoconsulting.com


# AUTOTURN EXHIBIT

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION


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PROJECT NUMBER: 22334

START DATE: NOV. 23 , 2020

GRAPHIC SCALE
20 0 20

SCALE: 1"=20'-0

SHEET NUMBER
14 OF 16

GENERAL CONSTRUCTION NOTES

1. The construction shall be under the general inspection of the Village engineer and the owner's engineer.
2. All work shall be in accordance with the applicable sections of the following specifications:
   a. Illinois Department of Transportation (I.D.O.T.) "Standard Specifications for Road and Bridge Construction" January 1, latest edition.
   b. "Standard Specifications for Water and Sewer Main Construction in Illinois" latest edition.
   c. "Illinois Recommended Standards for Sewage Works" as published by the I.E.P.A.
   d. "Manual on Uniform Traffic Control Devices" (M.U.T.C.D.) latest edition.
   e. The Subdivision and Development Codes and Standards of the Village of Lake Villa.
   f. "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" published by the Association of Illinois Soil and Water Conservation Districts.

   Where a contradiction occurs with any part of the standard specifications, the most stringent requirement shall take precedence, as determined by the engineer.

   The contract documents (Plans and Specifications/General Notes) shall supersede the standard specifications. If there is a conflict between the plans and specifications, the most stringent requirement shall take precedence, as determined by the engineer.

   The contractor shall have at least one copy of all applicable specifications as well as one copy of the contract documents (Plans and Specifications) available at the job site at all times that work is in progress.
3. Should any discrepancies or conflicts on the plans, quantities or specifications be discovered by the contractor, whether prior to awarding or after the award of the contract, the engineer's attention shall be called to the same before work is begun thereon and so that proper corrections can be made.
4. Contract Documents and Drawings:
   A. The engineer's drawings (The Plans) shall be included as part of the contract documents.
   B. The contractor is required to review the soils report for the site.
   C. All bidders shall carefully examine the drawings and specifications prepared for the work. They shall visit the site of the work and acquaint themselves with all local conditions, codes, and requirements affecting the contract. If awarded the contract, they shall not be allowed extra compensation by reason of any unforeseen difficulties or obstacles which the bidder could have discovered or reasonably anticipated prior to the bidding.
   D. Should it appear that the work covered by the contract documents is not sufficiently detailed or explained, an RFI form shall be submitted to the engineer for further drawings or explanations as may be necessary to clarify the point in question prior to the contract award. It is the intention of the contract documents to provide a job complete in every respect. The contractor is responsible for this result and to turn over the project in complete operating condition, irrespective of whether the contract documents cover every individual item in minute detail.
5. The Lake Villa Department of Public Works shall be notified 24 hours in advance to schedule inspections for sidewalk, curb and gutter driveways, aprons, paving, grading, watermain, sewer main and utility services.
6. Work shall not take place without required traffic control devices and barricades in place per the M.U.T.C.D. Any deficiency of safety or traffic control devices shall be just cause to stop the project until such time as the deficiency is corrected.
7. Village streets shall not be closed without the written permission of the Lake VillaDepartment of Engineering and then only after proper notification has been given to the Police and Fire Departments.
8. The contractor shall immediately remove mud, soil or debris deposited on public streets. Failure to keep streets clean shall be just-cause for issuance of a Stop Work Order or citation.
9. Signs located in the public right-of-way must not be removed or damaged. If a sign needs to be moved, notify the Public Works Department
10. Construction materials shall not be stored within the Village Right-Of-Way.
11. The owner/contractor shall be responsible for obtaining all required Federal, State, County, I.E.P.A. permits.

    The contractor shall, at his own expense, obtain all other permits, licenses, etc., as may be required for the execution of this work, give all necessary notices, pay all fees required, post all bonds, and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of public health and safety.

    All required insurance and/or bonds shall be provided by the contractor as may be required by the permitting agency.

    The contractor shall meet all of the requirements of any permits as might be issued for this work by other agencies, and shall pay for at their sole expense any surety or bonds as may be required by the permitting agency.

12. The contractor is responsible for having a set of approved engineering plans with the latest revision date on the job site at all times during the construction period.
13. The contractor shall indemnify and save harmless the owner, Bono Consulting Inc., and their officers and employees; the Village and their officers, employees, agents, and engineers, and from and against all losses, claims, demands, payments, suits, actions, recoveries, and judgment of every nature and description brought or recovered against them, by reason of any act or omission of said contractor, their agents, subcontractors or employees, in the execution of the work or in the guarding of it.
14. The location of existing underground utilities, such as water mains, sewers, gas lines, etc., as shown on the plans, has been determined from the best available information and is given for the convenience of the Contractor. However, the Owner and Engineer do not assume responsibility in the event that during construction, utilities other than those shown may be encountered and that the actual location of those which are shown may be different from the location as shown on the plans. The contractor is to verify the location of all utilities prior to the start of work and is responsible for damage to same. The contractor shall call J.U.L.I.E. 1-800-892-0123 and the Village public works department for utility locates before excavating.
15. Existing utilities are shown on the plans according to information obtained from utility companies and surveys. The owner and engineer do not guarantee the accuracy or completeness of this information. The contractor shall make their own investigation to determine the existence, nature and location of all utility lines and appurtenances within the limits of the improvement. The contractor shall locate all utilities far enough in advance to avoid all conflicts in grade separation between existing utilities and proposed improvements. If the contractor encounters a conflict between the proposed improvement and existing utility that was not located in advance by the contractor, then the contractor shall at no cost to owner, relocate the proposed improvements and/or utility to avoid the conflict.

    The contractor will be required to cooperate with all utility companies involved in connection with the removal, temporary relocation, reconstruction or abandonment by these companies of any and all services or facilities owned or operated by them within the limit of this improvement.

    Before doing any work which will damage, disturb or leave unsupported or unprotected any utility lines or appurtenances encountered, the contractor shall notify the respective owner thereof, who will make all arrangements for relocating, adjusting, or otherwise maintaining or abandoning service on lines that fall within the limits of the proposed construction without cost to the contractor, including the removal of all cables, manhole covers and other appurtenances which the owner desires to salvage. After such arrangements have been made, the contractor will proceed with the work as directed by the engineer. All utility lines and appurtenances which are abandoned shall be removed and legally disposed of by the contractor.

    No extra compensation will be allowed by the contractor for any expense incurred by complying with these requirements or because of delays, inconvenience or interruptions in their work resulting from the failure of any utility company to remove, relocate, reconstruct or abandon their services. The responsibility for prompt and timely removal, relocation, reconstruction or abandonment of their facilities by all utility companies involved, and the coordination of their own work with that of these companies to the end that work on this improvement is not delayed because of the necessary changes in the existing utilities, public or private, shall rest upon the contractor.

16. The flow from any field tiles draining off-site properties shall be maintained. The contractor shall notify the engineer if any such field tiles are encountered and shall show them on a set of as-built plans.
17. All existing utilities or improvements, including walks, curbs, pavements and parkways damaged or removed during construction shall be promptly restored to their respective original condition.
18. All existing pavement or concrete to be removed shall be saw cut along the limits of the proposed removal. Payment for sawing shall be included in the cost of the removal of each item.
19. The contractor is to verify all critical elevations prior to commencing work and if there are any discrepancies, is to notify the engineer immediately. The contractor shall call to the attention of the engineer any errors or discrepancies which may be suspected in the lines and grades which are established by the surveyor, and shall not proceed with the work until any lines and grades which are to believed to be in error have been verified or corrected by the engineer.
20. No holes are to be left open in the pavement or the parkway over a holiday, weekend, or after 3 p.m. on the day preceding a holiday or weekend.
21. Any bracing, sheeting or special construction methods deemed necessary by the contractor in order to install the proposed improvements shall be considered incidental to the cost of the project. Any additional soils data needed to confirm the contractor's opinions of the subsoil conditions shall be done at the contractor's expense. The contractor shall obtain the owner's written authorization to access the site to conduct a supplemental soils investigation.
22. Whenever the performance of work is indicated on the plans, and no item is included in the contract for payment, the work shall be considered incidental to the contract and no additional compensation will be allowed.
23. All items shown to be removed, shall be legally disposed of off-site.
24. All work performed under this contract shall be guaranteed against all defects in materials and workmanship of whatever nature by the contractor and his surety for a minimum period of 12 months from the date of final acceptance of the work by the Village, other applicable governmental agencies, and the owner.
25. No work shall be performed on adjacent private property without the written permission of the property owner.
26. During construction the contractor and their subcontractors shall remove from the premises, rubbish, waste material and accumulations, and shall keep the premises clean. The contractor shall clean the premises to the satisfaction of the owner, engineer, and City.
27. The contractor shall have appropriate equipment, including street sweepers and end loaders available on-site at all times when equipment or vehicles are using existing public or private pavement. The contractor shall immediately remove any dirt, mud, clay, sediment, concrete, gravel, sand, stones, plant matter, debris, refuse, garbage, etc. deposited on any street, sidewalk or alley by any equipment, vehicles or people associated with this project. The contractor is responsible for complying with all City ordinances including any and all assessments of cost that may result. This work shall not be paid for separately, but shall be included in the cost of the work.
28. All trenching, shoring, and construction work performed shall be in accordance with O.S.H.A. Standards. The contractor shall at all times maintain proper dust control at the site and shall have a watering truck readily available during all working hours.
29. The contractor shall water the entire site whenever the site conditions become unhealthy due to blowing soil or dust. The site shall be watered as many times per day as necessary to maintain a healthy work site as determined by the owner or engineer. Water for non-emergency use shall not be obtained from any fire hydrant, unless the fire hydrant is metered in accordance with City requirements. The cost to furnish dust control shall be incidental to the cost of construction.
30. The contractor must follow the requirements of the City Specification for all pavement openings and repairs.
31. Tree removal permit is required for removal of all trees 10" diameter or greater.
32. An inspection of the top of foundation will be required prior to pouring.
33. A final inspection of grading will be required before placement of any sod.
34. All street openings shall be in accordance with IDOT standards for work within an IDOT R.O.W.
35. All retaining walls greater than 36" high need to be approved by a licensed structural engineer. Retaining wall shop drawings to be submitted by contractor for approval.
36. Construction staking shall be provided by the contractor and shall be included in the contract price. A licensed surveyor must stake all grading, utility and paving work.
37. Upon completion of the project, the contractor or engineer shall submit a sets of as-built engineering plan and a grading certificate. These documents shall be submitted within thirty (30) days of final approval to the City. The price per this work shall be included in contractors fee.

IEPA NOTES:

Sewers crossing water mains shall be laid to meet the following specifications:

1. Horizontal Separation:
   A. Whenever possible, a water main must be laid at least ten feet horizontally from any existing or proposed drain or sewer line.
   B. Should local conditions exist which would prevent a lateral separation of ten feet, a water main may be laid closer than ten feet to a storm or sanitary sewer provided that the water main invert is at least eighteen inches above the crown of the sewer, and is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
   C. If it is impossible to obtain proper horizontal and vertical separation as described in 1 and 2 above, both the water main and sewer must be constructed of pipe material which would conform to water main standards and be pressure tested to assure water tightness before backfilling.
2. Vertical Separation:
   - Whenever water mains cross house sewers, storm drains or sanitary sewers, the water main shall be laid at such an elevation that the invert of the water main is eighteen inches above the crown of the drain or sewer. This vertical separation must be maintained for that portion of the water main located within ten feet horizontally of any sewer or drain crossed. This must be measured as the normal distance from the water main to the drain or sewer.
   - Where conditions exist that the minimum vertical separation set forth in 1 above cannot be maintained, or it is necessary for the water main to pass under a sewer or drain, one of the following two measures must be taken:

     •A. The water main shall be installed within a PVC carrier pipe and the carrier pipe shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least ten (10) feet.
     •B. The involved sewer or drain shall be constructed of pipe material which would conform to water main standards until the normal distance from the water main to the sewer is at least ten (10) feet.
3. In making such crossings, center a length of water main pipe over the sewer to be crossed so that the joints will be equidistant from the sewer and as remote there from as possible. Where a water main must cross under a sewer, a vertical separation of eighteen inches between the invert of the sewer and the crown of the water main shall be maintained, along with means to support the larger sized sewer lines to prevent their settling and breaking the water main. The horizontal and vertical separation between water service lines and all sanitary sewers, storm sewers, or any drain should be the same as for water mains, as detailed above, except that when minimum horizontal and vertical separation cannot be maintained, water pipe as described under Vertical Separation above, may be used for sewer service lines.

**EARTHWORK AND GRADING**

1. All earthwork shall be done in accordance with the state of Illinois, "Standard Specifications for Road and Bridge Construction," latest edition and "Supplemental Specifications and Recurring Special Provisions," latest edition. Included in this work, but not necessarily limited to the following are: clearing, stripping and stockpiling of topsoil, mass grading and fine grading of the site and roadways, excavation of unsuitable materials and excavation of detention ponds, landscape mound construction, and miscellaneous topsoil respread and seeding.
2. Any earthwork summaries provided by the engineer are intended to be used as a guide for the contractor in determining the scope of the completed project. It is the responsibility of the contractor to determine all material quantities and appraise themselves of all site conditions. The contract price submitted by the contractor shall be considered as lump sum for the complete project. **No claims for extra work will be recognized unless ordered in writing by the owner.**
3. The initial establishment of erosion control procedures and the placement of erosion control fence, etc. shall be installed by the contractor prior to the start of mass grading.
4. All grading operations are to be supervised and inspected by the owner's engineer or their representative. All testing, inspection, and supervision of soil quality, unsuitable soil removal and its replacement, and other soils related operations shall be entirely the responsibility of the soils engineer. No undercut shall be performed or claims for extra work without authorization by the owner and documentation by the soils engineer.
5. Clearing shall consist of the removal and disposal of all obstructions such as trees, hedges, fences, walls, accumulations of rubbish of whatever nature, and all logs, shrubs, brush, grass, weeds, and other vegetation and stumps. These items shall be performed whenever they occur within the street right of ways, and within the limits of construction. Trees to be saved shall be identified by the Engineer on the construction plans. All trees, except those designated to be saved, and all stumps shall be cut and legally disposed of. Trees, stumps, and hedges within the limits of construction shall be removed completely. Trees designated to be saved as indicated on the plans, or as directed by the engineer, shall be protected in accordance with the procedures outlined in Article 201.05 of the "Standard Specifications for Road and Bridge Construction."
6. Strip topsoil down to firm subbase. stockpile quantity necessary for landscaping, and remove other materials from the site.
7. Excavation shall consist of the excavation, removal, and satisfactorily disposal or placement and compaction of all materials taken from within the site for the construction of embankments, subgrade, subbase, shoulders, intersections, ditches, waterways, entrances, approaches and incidental work, and the removal and satisfactory disposal of unstable and unsuitable materials and their replacement with satisfactory materials where required.
8. After stripping and excavating to the proposed subgrade level, as required, the building and parking areas should be proof-rolled with a loaded, tandem-axle dump truck or similar rubber tired vehicle, loaded with at least 9 tons per axle. Proof-rolling aids in providing a firm base for compaction of fills, and help to delineate soft, loose, or disturbed areas that may exist below subgrade level. Proof-rolling is especially important to help evaluate the surficial stability of existing fill soils that may be left in place below floor slabs and pavements. Soils which are observed to rut or deflect excessively (more than 1 inch) under the moving load should either be scarified and re-compacted with a smooth drum vibratory roller for granular soils, a sheeps foot roller for cohesive soils, or undercut and replaced with properly compacted and documented structural fill. The proof-rolling and undercutting activities should be observed and documented by a representative of the geotechnical engineer and should be performed during a period of dry weather. In addition to proof-rolling, the subgrade soils should be scarified and compacted to at least 90 percent of the Modified Proctor maximum dry density ASTM D 698 for a depth of at least 8 inches below the surface.
9. Where encountered, loose sands and asphalt grindings should be re-compacted with a vibratory roller. Clay subgrade soils can be easily disturbed by construction activities and are sensitive to moisture. Therefore, extra care should be used to avoid disturbing these soils during construction activities. If the soils become unstable during construction, or if near surface soft subgrade soils are encountered, it is recommended that coarse aggregate be placed on the subgrade until a stable base for compaction of fill is achieved. Typically, 12 to 24 inches of course aggregate are required, depending in the consistency of the subgrade. the course aggregate should consists of clean, crushed stone gravel between 1/4 and 3 inches in size. The course aggregate should be spread in a max. of 12-inch layers and consolidated with compaction equipment until it is "locked" in place.
10. Topsoil excavation shall consist of the removal and stockpiling, or placing on fill slopes or placing in mounds, of the uppermost layers of organic soil. Topsoil shall be stockpiled on the areas as shown on the plans or as directed by the engineer.
11. Topsoil respread shall consist of placing a minimum of a four (4) inch layer of topsoil over the unpaved areas within the construction limits.
12. 4" topsoil & sod shall be placed on all disturbed areas within the right of way.
13. Refer to the landscape plans for additional information on ground cover & planting requirements.
14. Embankment shall be placed in accordance with Section 205 of the "Standard Specifications for Road and Bridge Construction." All embankments located within structural fill areas shall be constructed to a minimum 95% of the modified proctor density (ASTM D1557). Embankments located in non-structural fill areas shall be constructed to a minimum of 90% of the modified proctor density (ASTM D1557).
15. Completed grading (finished fine grade) for all proposed improvements shall be within a tolerance of plus or minus one-tenth (0.1) feet of design subgrade elevations.
16. The subgrade for the proposed streets and pavement areas shall be proof-rolled by the contractor in the presence of the City engineer and soils engineer. Any unstable areas encountered shall be removed and replaced as directed by the City engineer and soils engineer. Any unstable areas shall be documented by the soils engineer.
17. It shall be the responsibility of the contractor to remove from the site any and all materials and debris which results from their construction operations at no additional expense to the owner.
18. When in the opinion of the soils engineer, unsuitable soil conditions are encountered within utility trenches which require the removal of unsuitable materials below the depth of the bedding specified, the contractor shall obtain approval by the owner and the owner's engineer prior to removing the unsuitable soils and replace the material with granular compacted bedding material as directed by the soils engineer and the City. The depth of the removal and replacement shall be documented by the owner's engineer and witnessed by the contractor.

    This work, when approved by the owner and owner's engineer, will be measured and paid for at the contract unit price per cubic yard in place for unsuitable soil which price shall include the removal and off-site disposal of unsuitable soil, the additional bedding material, and all labor, materials and equipment required to perform the work as specified.
19. The contractor shall be responsible for hiring and scheduling a qualified testing firm for all soil testing.This shall be included in the cost of work.

| PROJECT STAFF | | ISSUE | REVISIONS | DATE |
|---|---|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | A | PRELIMINARY PLAN | 12-07-2022 |
| ENGINEER: | A. VEER P.E. | B | REVISIONS PER VILLAGE COMMENTS | 1-31-2023 |
| ENGINEER: | | | | |
| TECHNICIAN: | | | | |

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# CONSTRUCTION NOTES

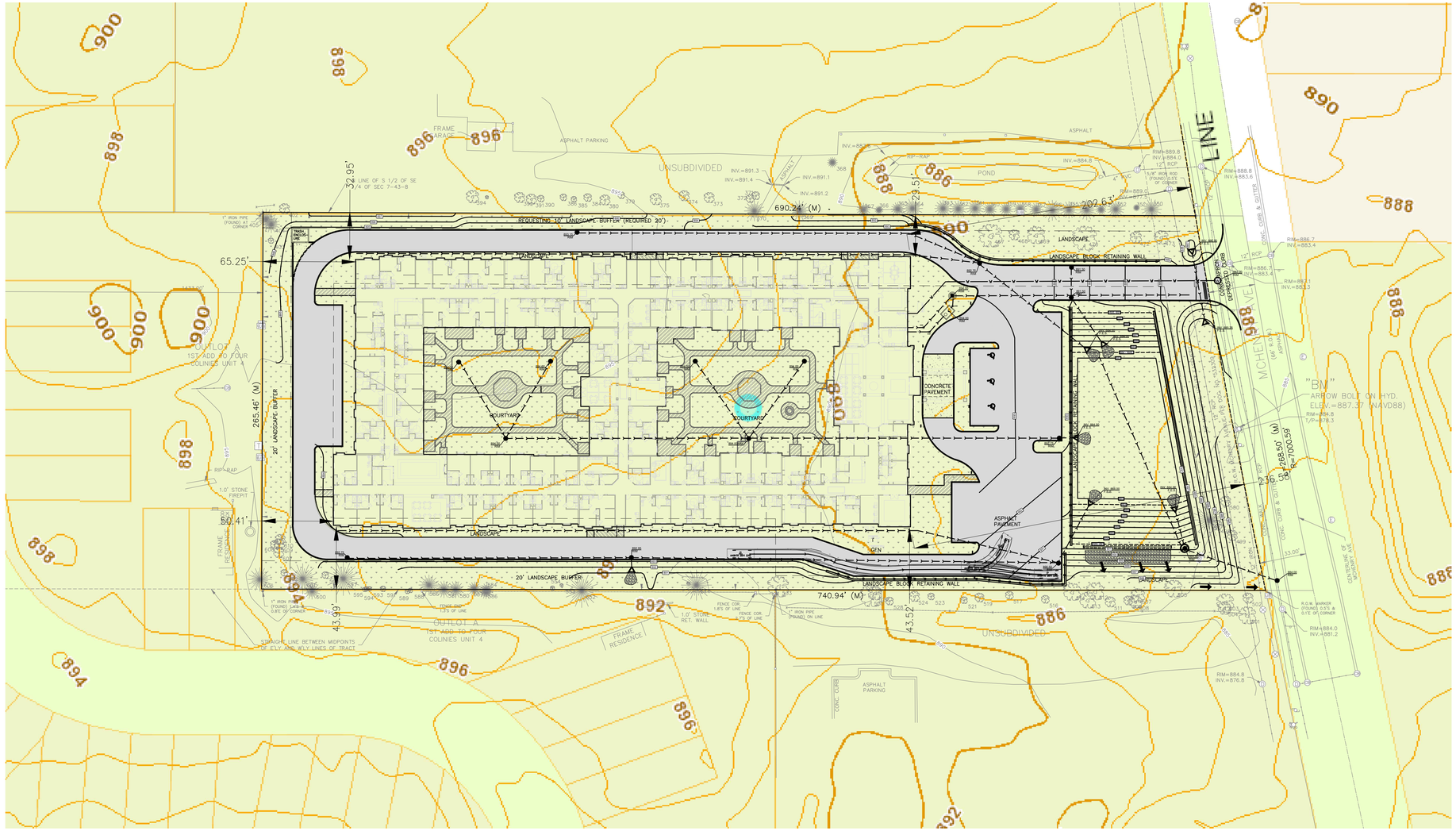
OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

NOT FOR CONSTRUCTION

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE
0
SCALE: NTS

SHEET NUMBER
16 OF 16




## OFF SITE FLOW SUMMARY

UNRESTRICTED FLOW AREA 0.544 ARES

OFF SITE TRIBUTARY FLOW 0.275
OFF SITE TRIBUTARY FLOW 0.283
TOTAL OFF SITE TRIBUTARY FLOW 0.558

UNRESTRICTED FLOW AREA TO BE OFFSET BY OFF SITE TRIBUTARY FLOW

N

| PROJECT STAFF | | ISSUE | REVISIONS | DATE |
|---|---|---|---|---|
| PROJECT MANAGER: | B. BONO P.E. | A | PRELIMINARY PLAN | 12-07-2022 |
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# OFF SITE TRIBUTARY FLOW EXHIBIT

OASIS SENIOR LIVING
952 McHENRY AVE., CRYSTAL LAKE, McHENRY COUNTY, IL

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PROJECT NUMBER: 22334
START DATE: NOV. 23 , 2020
GRAPHIC SCALE
40 0 40
SCALE: 1"=40'-0

SHEET NUMBER
EX -1