**TOWN OF NEWBURGH**
**PLANNING BOARD**
**TECHNICAL REVIEW COMMENTS**

| | |
|---|---|
| **PROJECT NAME:** | **DARRIGO SOLAR** |
| **PROJECT NO.:** | **19-24** |
| **PROJECT LOCATION:** | **SECTION 86, BLOCK 1, LOT 96** |
| **REVIEW DATE:** | **26 JANUARY 2024** |
| **MEETING DATE:** | **1 FEBRUARY 2024** |
| **PROJECT REPRESENTATIVE:** | **ARDEN CONSULTING** |

1. The Project proposes a revised landscape plan and a phased construction of the project. Two phases are proposed a 4 MW and a 1 MW phase . The plan should depict each phase clearly.

2. A cost estimate is provided. It appears the estimate is for the entire project, and not broken into phases.

3. Construction of the Patton Road drainage improvements and the maintenance of the swale should be noted to be complete in the initial construction time period .

4. Confirm the fencing on the southeast portion of the site.

5. Dominic Cordisco comments on the need for a referral to county plan should be received.

Respectfully submitted,

**MHE Engineering, D.P.C.**

Patrick J. Hines
Principal
PJH/dns

**NEW YORK OFFICE**
33 Airport Center Drive, Suite 202, New Windsor, NY 12553
845-567-3100 | F: 845-567-3232 | mheny@mhepc.com

**PENNSYLVANIA OFFICE**
111 Wheatfield Drive, Suite 1, Milford, PA 18337
570-296-2765 | F: 570-296-2767 | mhepa@mhepc.com

22 January 2024



Town of Newburgh Planning Board
John Ewasutyn, Chairperson & Planning Board Members
21 Hudson Valley Professional Plaza
Newburgh, NY 12550

Jeffrey Lease, Representative
Darrigo Solar Farm
5020 Route 9W
Newburgh, NY 12550

Re: Darrigo Solar Farm, 84 Lakeside Road, Newburgh, New York
Town Planning Board Number 2019-2024

The former Landscape Architect for this project retired and so the revised landscape plans have been redrawn by a new office, ULS of Saratoga Springs, New York.

Because of New York State power regulations, the 5 MW project is in the NYSERDA database and Central Hudson que as a 4MW and two 0.50 MW projects. We learned after preliminary approval that Central Hudson could not take all the power to the substation at one time.

Since then the substation connector has been improved and has just become available, but approval for interconnection by Central Hudson will take up to three months. Once approved the two 0.5 MW projects will be built at the same time.

I request that the project be built in two parts, Phase I being the 4 MW project and Phase II being the two 0.5 MW projects. The completion of Phase II will occur no longer than 6 months after Phase I. All the site improvements will be completed with Phase I.

Respectfully,

Jeffrey Lease
845.542.0345

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
**Division of Water, Bureau of Water Permits**
625 Broadway, Albany, New York 12233-3505
P: (518) 402-8111 F: (518) 402-9029
www.dec.ny.gov

2/8/2022



Private Owner
Jeffrey Lease
597 GRAND AVENUE
NEWBURGH, NY 12550

**RE: ACKNOWLEDGMENT of NOTICE OF INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY – General Permit No. GP-0-20-001**

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-20-001 for the construction activities located at:

**Solar Farm Site Plan for Darrigo Farm**
**84 Lakeside Avenue**
**Newburgh, NY 12550**

**County: ORANGE**

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, and ECL Article 70, discharges in accordance with GP-0-20-001 from the above construction site will be authorized **5** business days from **2/7/2022**, which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: **NYR11J306**. Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

1. The information submitted in the NOI received by the Department on **2/7/2022** is accurate and complete.

2. You have developed a Stormwater Pollution Prevention Plan (SWPPP) that complies with GP-0-20 -001 which must be implemented as the first element of construction at the above-noted construction site.

3. Activities related to the above construction site comply with all other requirements of GP-0-20-001.

**4. Payment of the annual $110 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now $110 per acre of land disturbed and $675 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.**

5. Your SWPPP has been reviewed by the regulated, traditional land use control MS4 where your project is located and has been determined to be in substantive conformance with the requirements in the SPDES General Permit for Stormwater Discharges from MS4s.

**6. Before disturbing greater than 5 acres of soil at any one time, you have obtained written authorization from the regulated, traditional land use control MS4 that has jurisdiction over the project.**

7. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisfied.

8. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

***Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.**

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-20-001, please contact Dave Gasper at (518) 402-8114.

Sincerely,

David Gasper

David Gasper
Environmental Engineer

cc: RWE - **3**
SWPPP Preparer
ARDEN CONSULTING ENGINEERS
MORGANTE MICHAEL
PO BOX 340
MONROE, NY 10949

ULS
Landscape Architecture + Environmental Services + Planning



Date: January 23, 2024

To: Karen Arent
Karen Arent Landscape Architect
12 Old Minisink Trail Goshen, New York 10924
Phone: 845-294-9958 Email: KALA@hve.rr.com

From: Erin Maciel, RLA Principal- Urban Landscape Studio Landscape Architecture PLLC

Subject: Darrigo Solar Farm Landscape Plan Comment Response Memo
Comments Received by Email (Town Project Number 2019-14)

Dear Ms. Arent,

The following is a list of outstanding comments received from your office on January 6, 2022 and our corresponding responses (in red) that have been addressed in the latest plan set submittal (January 23, 2024).

4. Screen planting along the southern and easter property lines include some larger trees at the time of planting. However, the planting should include some evergreens such as Red Cedar Juniper (which will look very natural as it is commonly found along the highway). Also include more plants. This area should look like a forest. The Oak trees are shown 100' wide. This may never happen and if it grows that large, it will take decades. Please mimic nature but at an accelerated pace. Maybe show 9 Oaks. Show a forest in this area. Additional tree and shrub plantings have been included for the restoration area along I84. The plant list for this area has been updated to include more evergreen trees (Eastern Red Cedar and White Pine).
5. No fence details were included. Please include a detail for the proposed fencing at the lakeside road entrance. Fence and gate details have been added on Sheet L-502.
6. Please forward the enlarged planting plan so we can make sure this comment was addressed. Enlarged planting plans have been included in the updated plan set.
7. -----
8. This comment was not addressed. Please show many more plants, several of which are larger in size at time of planting, to provide screening of the access drive that runs between the two residential properties off Lakeside Dr. Consider a thickly planted hedge of Bottlebrush Buckeye, Aesculus parviflora. It grows in both sun and shade and grows 12'+ in height. The planting plan has been updated accordingly.
9. Please forward the enlarged planting plan so we can make sure this comment was addressed. Taxus x media has been removed from the planting plan and replaced with Ilex glabra. Enlarged planting plan has also been included in the updated plan set.
10. Red cedars are pioneer species that require full sun and Gray Dogwood is not deer resistant. Instead propose layers of shade and deer-tolerant species such as Hamamelis virginiana (Witchhazel) and Aesculus parviflora, Bottlebrush Buckeye. Eastern Red Cedar has been replaced with thuja occidentalis 'Techny' due to its tolerance of partial shade. Bridal wreath spirea, winterberry and red-twig dogwood has been included as understory plantings.

Additional items that must be addressed:

1. Another concern that we discussed is the sloped area between the solar arrays. Please take off the word top. Trees should never be topped! Please remove the Red Maples or show them only at the bottom of the slope as they will get too tall. Consider replacing with 100 Bottlebrush Buckeye, Aesculus parviflora. Note removed. Planting plan amended.

2. Please remove note 23 on the planting notes. regarding tree topping. NO trees should be topped. Note removed.

3. Amend note 20 to read that the guarantee is for a two year period. Note amended.

4. Amend note 21 to include that the plants will be inspected each growing season and those deemed 25% or more dead or otherwise unfit are to be replaced every growing season as well. Note amended.

We look forward to scheduling a virtual plan review with you to address any further comments to the landscape plans. Please let us know a date and time that is convenient for you.

Kindly,

Erin Maciel, RLA

Erin Maciel, RLA, Principal
URBAN LANDSCAPE STUDIO
Landscape Architecture PLLC

Attachments:

Landscape Comments (January 27, 2021)
Landscape Comments (January 6, 2022)

# KALA

Karen Arent Landscape Architect


## Memorandum

**To:** Chairman John Ewasutyn and the Town of Newburgh Planning Board

**From:** Karen Arent, Landscape Architect

**Date:** January 27, 2021

**Subject:** Darrigo Solar Farm Landscape Plan Dated November 5, 2020

**Town Project Number:** 2019-14

**Consultant:** Jeff Lease

**Cc:** Pat Hines, Dominick Cordisco, Gerald Canfield, Scott Manley, Jeff Lease

### COMMENTS:

We reviewed the latest proposed landscape plan for Darrigo Solar Farm and found that significant changes were made to the plans that provide better screening than previously issued plans. The surrounding buffer area of existing vegetation and wooded areas has been expanded. Formerly the buffer was 50' wide in many areas and at the northwest part of the property it was expanded to 150'. Along the northern property line adjacent to residences along Meadow Hill Road the buffer was increased to 120' and more area along the proposed driveway was preserved. Along the eastern property line, the buffer was increased to 100'. This provides screening of the solar arrays as most areas inside the buffer are densely wooded.

The following comments are listed for discussion with the planning board:

1. Please include notes on the drawing that existing topsoil will remain and will not be trucked off site.

2. The proposed screening planting technique along the southern and eastern property lines may be beneficial in the future as smaller plants need less care after planting and have less risk of shock than larger plants. However, neighbors may voice screening concerns due to the small size of plants. Perhaps a few plants should be specified that are larger in size?


12 Old Minisink Trail, Goshen, New York 10924
Phone (845) 294-9958, Fax (845) 294-6546, Email: KALA@hvc.rr.com

3. Please consider planting native shrubs that form thick masses such as Cornus amomum, Silky Dogwood, to block grade level views of the solar arrays in various locations.

4. Deciduous screen planting is proposed along the property line adjacent to Interstate 84 as these plantings will blend in better with existing plants in the area. However, screening will be lacking come winter when the leaves have fallen so this should be discussed with the planning board. The size of the trees for proposed screening should also be discussed as all plants are small in size and will not be visible for quite some time.

5. Please include a detail for the proposed fencing at the Lakeside road entrance. This fence will be highly visible from the road and it should be aesthetically pleasing.

6. *Erianthus ravennae* has been proposed at the Lakeside Road entrance. It is a non-native plant which spreads from ornamental plantings along roadsides and other disturbed edge habitats and has been reported as invasive in Western, Midwestern, and Southern states, as near as Ohio and Maryland. Please consider using a native grass, or other grass without reported invasive tendencies.

7. Additional screening has not been provided for residences that border the site and are on Lakeside road per previous comment 6.

8. Utility poles, remain proposed off Meadow Hill Road, across from Monarch Drive, and will have a negative visual impact on the neighborhood. Please consider screening with more low growing trees such as Shadblows. Also consider planting trees in larger sizes to provide more immediate screening to mitigate negative visual impacts of the proposed entrance drive and telephone poles. A gate is also recommended to keep people from hanging out in cars next to the neighboring residential properties. Please show an aesthetically pleasing gate and locate it 20-30' from Meadow Hill Road to allow a car or truck to pull in while opening the gate to get in.

9. *Taxus x media* 'Nigra' has been proposed at the Meadow Hill Road entrance. *Taxus* is very susceptible to deer browsing. It is nice to have well-spaced evergreens but it would take decades for the *Taxus* to grow to the approximate mature plant size illustrated on the plan. For these reasons we suggest replacing them with a different evergreen. Also, when proposing mature spacing for shrubs, low growing plants or groundcovers should be specified to fill in and help prevent

weeds from taking over while shrubs grow into their mature size. We recommend proposing some at the Meadow Hill Road entrance.

10. Additional screening has not been provided for the residence off Patton Road on the west side of the property or the residence off Meadow Hill Road at the intersection of Meadow Hill Road and Patton Drive per previous comment 7.

11. Please describe on the plan what is meant by "6-8" wattle of whips" as a planting size.

12. Scotch Pines are not native and may not grow well in this area. We suggest the use of a native evergreen tree better suited to the environment.

13. *Picea glauca* grow so slowly that they will not reach a size suitable for screening for decades. We recommend fast growing native shrubs that form dense thickets. Also please consider specifying Red Cedar Juniper or another native evergreen tree for winter interest.

**From:** KarenArentDesign@Frontier.com
**Subject:** RE: Darrigo solar farm
**Date:** January 6, 2022 at 12:49 PM
**To:** jefflease@johnjleaserealtors.com

Hello Jeff:

Here is a list of my concerns:

Most comments prepared Jan 27 were not addressed. Here's a brief synopsis of the comments and what we discussed yesterday along with some of the other comments that were not addressed. Comments correspond to comments dated Jan 27, 2021. I attach this comment letter for your reference.

1. Addressed.
2. Addressed.
3. Addressed.
4. Screen planting along the southern and easter property lines include some larger trees at the time of planting. However, the planting should include some evergreens such as Red Cedar Juniper (which will look very natural as it is commonly found along the highway). Also include more plants. This area should look like a forest. The Oak trees are shown 100' wide. This may never happen and if it grows that large, it will take decades. Please mimic nature but at an accelerated pace. Maybe show 9 Oaks. Show a forest in this area.
5. No fence details were included. Please include a detail for the proposed fencing at the lakeside road entrance.
6. Please forward the enlarged planting plan so we can make sure this comment was addressed.
7. -----
8. This comment was not addressed. Please show many more plants, several of which are larger in size at time of planting, to provide screening of the access drive that runs between the two residential properties off Lakeside Dr. Consider a thickly planted hedge of Bottlebrush Buckeye, Aesculus parviflora. It grows in both sun and shade and grows 12'+ in height.
9. Please forward the enlarged planting plan so we can make sure this comment was addressed.
10. Red cedars are pioneer species that require full sun and Gray Dogwood is not deer resistant. Instead propose layers of shade and deer-tolerant species such as Hamamelis virginiana (Witchhazel) and Aesculus parviflora, Bottlebrush Buckeye.
11. Addressed
12. Addressed
13. Addressed

Additional items that must be addressed:

1. Another concern that we discussed is the sloped area between the solar arrays. Please take off the word top. Trees should never be topped! Please remove the Red Maples or show them only at the bottom of the slope as they will get too tall. Consider replacing with 100 Bottlebrush Buckeye, Aesculus parviflora.

2. Please remove note 23 on the planting notes. regarding tree topping. NO trees should be topped.

3. Amend note 20 to read that the guarantee is for a two year period.

4. Amend note 21 to include that the plants will be inspected each growing season and those deemed 25% or more dead or otherwise unfit are to be replaced every growing season as well.

Please call with questions or concerns.
Kind Regards,

*Karen Arent*

Karen Arent Landscape Architect
Phone: (845) 294-9958
*Follow me on Instagram:* https://www.instagram.com/karenarentdesigns

---

**From:** Jeff Lease <jefflease@johnjleaserealtors.com>
**Sent:** Wednesday, January 5, 2022 4:11 PM
**To:** Karen Arent <karenarentdesign@frontier.com>
**Subject:** Darrigo solar farm

ka,

as per our conversation of this afternoon, here are the points that need to be addressed.

on the slope between the two fields:
1. remove 'top' from hillside drawing.
2. do we really want acer rubrum, wattles or other wise when they may grow 75' tall and shadow the solar panels? sugest 100 bottle eye brush, asculaus carbaoforu in its stead.

at meadow and monarch:
3. there was a previous unmet request to screen both sides of the service road with something. there's not much room, but something is better than nothing at all. consider shadblow, bottle brush, or some smaller tree.

84 buffer:
4. that buffer is a bit jejuneplease beefup a bit, those red maples and white oaks will be underwhelming for a while. please consider some red cedars that provide year-round screening as this is a visual sore spot in the approval process.

patton road buffer:
5. i question the use of red cedar in this area. with the existing trees left i don't see them doing well as an under story tree. how about viburnum or... bottle brush and possibly something a bit more substantial like ...red maple. generally bef this up a bit as it also was a bit contentious in the approval process.

**Project Name:** 5MW Solar Farm Site Plan for Darrigo **Municipality:** Newburgh
**Planning Board No.:** **Date:** 12/3/2021

**PRIVATE IMPROVEMENT**
**AND SITE PLAN UNIT PRICES**
***(Interim Update Dec. 2018)***

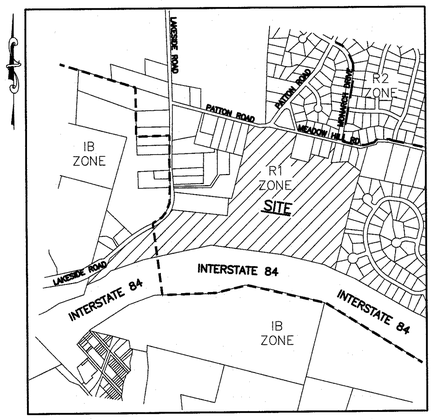
| Description | Unit | Unit Cost | Qty | Total Cost |
|---|---|---|---|---|
| **Roadway and Parking Lot** | | | | |
| Erosion Control | AC | $ 2,455.00 | 33.35 | $ 81,874.25 |
| Silt Fencing | LF | $ 4.85 | 8712 | $ 42,253.20 |
| Grading | SY | $ 2.50 | | $ - |
| Paving & Base (regular construction) | SY | $ 26.75 | | $ - |
| Paving & Base (heavy-duty construction) | SY | $ 35.00 | | $ - |
| Tack Coat | SY | $ 0.75 | | $ - |
| Overlay Existing Pavement (1.5") | SY | $ 8.75 | | $ - |
| Double Surface Treatment | SY | $ 8.00 | | $ - |
| | | | | |
| Asphalt Paving | TON | $ 166.75 | | $ - |
| Asphalt Pavement (1.5" top) | SY | $ 14.60 | | $ - |
| Asphalt Pavement (2" top) | SY | $ 18.70 | | $ - |
| Asphalt Pavement (3"course) | SY | $ 28.50 | | $ - |
| Asphalt Pavement (3.5"course) | SY | $ 33.00 | | $ - |
| Asphalt Pavement (4"course) | SY | $ 47.00 | | $ - |
| | | | | $ - |
| Topsoil & Seeding | SY | $ 8.00 | | $ - |
| Street Signs (Traffic Control) | EA | $ 335.00 | | $ - |
| | | | | |
| Parking Space Striping | EA | $ 13.80 | | $ - |
| Handicap symbol | EA | $ 72.50 | | $ - |
| Parking & Lane Striping | LF | $ 0.75 | | $ - |
| Painted Striped Island | EA | $ 53.50 | | $ - |
| Site Plan Stop Bar | EA | $ 115.00 | | $ - |
| Handicapped Sign & Striping | EA | $ 300.00 | | $ - |
| Traffic Control Sign | EA | $ 300.00 | | $ - |
| | | | | |
| Concrete Curbing | LF | $ 24.15 | | $ - |
| Concrete Sidewalk | SY | $ 53.50 | | $ - |
| Timber Curbing | LF | $ 17.25 | | $ - |
| Curb (Precast) Bumpers | EA | $ 100.00 | | $ - |
| Shale Parking (Overflow) Area | SY | $ 12.10 | | $ - |
| | | | | |
| Guiderail | LF | $ 53.50 | | $ - |
| | | | | |
| **Drainage** | | | | |
| Catch Basin | EA | $ 3,600.00 | | $ - |
| Connection to Existing Catch Basin | EA | $ 768.00 | | $ - |
| Stormwater Pipe (15") HDPE | LF | $ 42.25 | | $ - |
| Stormwater Pipe (18") HDPE | LF | $ 52.00 | | $ - |
| Stormwater Pipe (24")HDPE | LF | $ 57.50 | | $ - |
| Stormwater Pipe (30")HDPE | LF | $ 75.00 | | $ - |
| Stormwater Pipe (36") HDPE | LF | $ 105.00 | | $ - |
| Stormwater Pipe (48") HDPE | LF | $ 136.50 | | $ - |
| End Section | EA | $ 535.00 | | $ - |
| | | | | |
| Stormwater Pipe (15") RCP | LF | $ 46.00 | | $ - |
| Stormwater Pipe (18") RCP | LF | $ 57.50 | | $ - |
| Stormwater Pipe (24") RCP | LF | $ 84.00 | | $ - |
| Stormwater Pipe (30") RCP | LF | $ 115.00 | | $ - |
| Stormwater Pipe (36") RCP | LF | $ 152.00 | | $ - |

| | | | | | |
|---|---|---|---|---|---|
| Stormwater Pipe (48") RCP | LF | $ 238.00 | | $ | - |
| | | | | | |
| Stormwater Pipe (15") CMP | LF | $ 53.50 | | $ | - |
| Stormwater Pipe (18") CMP | LF | $ 61.50 | | $ | - |
| Stormwater Pipe (24") CMP | LF | $ 75.50 | | $ | - |
| Stormwater Pipe (30") CMP | LF | $ 106.00 | | $ | - |
| Stormwater Pipe (36") CMP | LF | $ 137.50 | | $ | - |
| Stormwater Pipe (48") CMP | LF | $ 192.00 | | $ | - |
| Concrete Headwall | EA | $ 5,348.00 | | $ | - |
| Rip Rap Drainage Channel | LF | $ 22.00 | | $ | - |
| Non-lined Drainage Channel | LF | $ 9.25 | | $ | - |
| | | | | | |
| **Utilities** | | | | | |
| Watermain (8") | LF | $ 71.50 | | $ | - |
| Gate Valve (8") | EA | $ 1,300.00 | | $ | - |
| Tapping Sleeve and Valve (8") | EA | $ 4,615.00 | | $ | - |
| Watermain (12") | LF | $ 88.00 | | $ | - |
| Gate Valve (12") | EA | $ 3,932.50 | | $ | - |
| Hydrant Assembly | EA | $ 5,070.00 | | $ | - |
| Sewer Main (8") | LF | $ 52.00 | | $ | - |
| Sewer Main (12") | LF | $ 65.00 | | $ | - |
| Sewer Manholes | EA | $ 3,068.00 | | $ | - |
| Septic Tank | EA | $ 3,450.00 | | $ | - |
| | | | | | |
| Utility Trench (elec, phone, cable) | LF | $ 12.00 | | $ | - |
| | | | | | |
| **Misc.** | | | | | |
| Landscaping Trees | EA | $ 333.50 | 253 | $ | 84,375.50 |
| Landscaping Shrubs | EA | $ 48.25 | | $ | - |
| Mulched surface | SY | $ 4.15 | | $ | - |
| Chain link fence (4' black vinyl coated) | LF | $ 27.15 | 5536 | $ | 150,302.40 |
| Split Rail Fence | LF | $ 21.25 | | $ | - |
| Short Masonry Landscape Walls | LF | $ 27.15 | | $ | - |
| Retaining Walls (modular) 4' height | LF | $ 107.00 | | $ | - |
| Lamppost | EA | $ 2,000.00 | | $ | - |
| Building Mtd. Light | EA | $ 670.00 | | $ | - |
| | | | | | |
| Waste Enclosure (small) | EA | $ 1,095.00 | | $ | - |
| Dumpster Enclosure (masonry/concrete) | EA | $ 6,670.00 | | $ | - |
| | | | | | |
| Clear and Grub | AC | $ 7,995.00 | 33.35 | $ | 266,633.25 |
| Rock Excavation | CY | $ 162.50 | | $ | - |
| Excavation | CY | $ 16.15 | | $ | - |
| Erosion Control Matting | SY | $ 2.25 | | $ | - |
| Bollards (Concrete filled) | EA | $ 632.50 | | $ | - |

**Other**

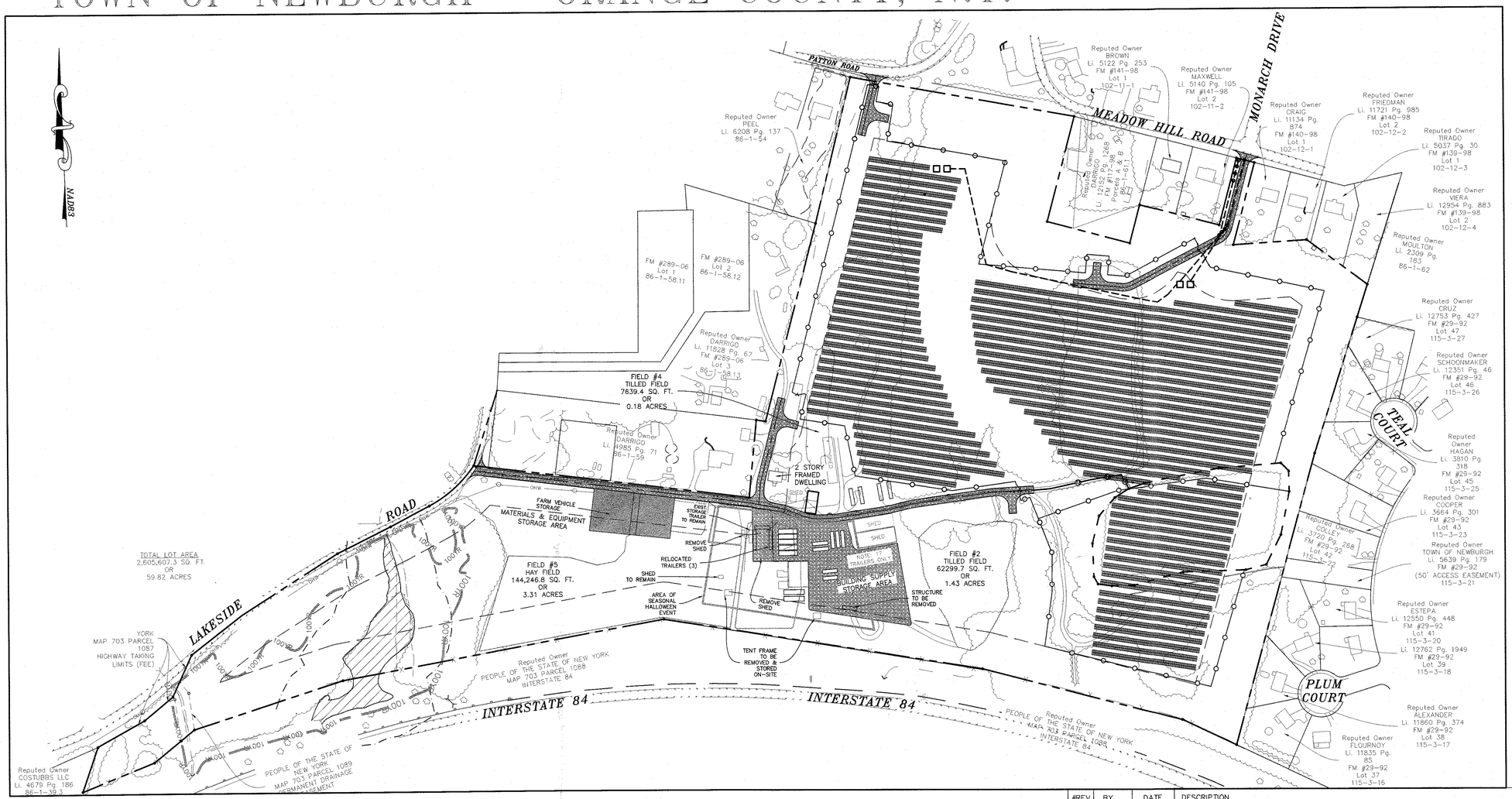
| | | | | | |
|---|---|---|---|---|---|
| Gravel Access Road | SY | 2210 | $7.00 | $ | 15,470.00 |
| Wooden Guide Rail | LF | | $15.00 | $ | - |
| Level Spreaders | LF | | $12.00 | $ | - |
| Seeding | SY | | $2.00 | $ | - |
| | | | | $ | - |
| | | | | $ | - |
| | | | | $ | - |
| | | | | $ | - |
| | | | | $ | - |
| | | | | $ | - |
| | | | Total | $ | 640,908.60 |

# AMENDED 5 MW AC SOLAR FARM SITE PLAN FOR
# DARRIGO
# 84 LAKESIDE AVENUE
# TOWN OF NEWBURGH – ORANGE COUNTY, N.Y.




LOCATION MAP
SCALE: 1"=1000'
SOURCE: OCWAGIS TAX MAPS

| DRAWING LIST | | |
|---|---|---|
| SHEET # | SHEET TITLE | ORIGINAL DATE/ LAST REVISED DATE |
| 01 OF 09 | TITLE SHEET | 10-30-20/1-18-24 |
| 02 OF 09 | EXISTING CONDITIONS PLAN | 11-12-19/1-18-24 |
| 03 OF 09 | SITE PLAN | 11-12-19/1-18-24 |
| 04 OF 09 | GRADING AND UTILITY PLAN | 11-12-19/1-18-24 |
| 05 OF 09 | EROSION CONTROL PLAN | 11-12-19/1-18-24 |
| 06 OF 09 | ACCESS ROAD PROFILES 01 | 11-12-19/1-18-24 |
| 07 OF 09 | ACCESS ROAD PROFILES 02 | 11-12-19/1-18-24 |
| 08 OF 09 | CONSTRUCTION DETAILS | 12-16-19/1-18-24 |
| 09 OF 09 | TURNING DIAGRAMS | 11-12-19/1-18-24 |
| L110 | LANDSCAPE PLAN | 1-22-24 |
| L111 | LANDSCAPE PLAN ENLARGEMENTS | 1-22-24 |
| L501 | ENTRANCE PIER ELEVATIONS | 1-22-24 |
| L502 | ENTRANCE FEATURE DETAILS | 1-22-24 |




TITLE SHEET
SCALE: 1"=150'

SCALE
150 0 75 150 300
SCALE FEET

## RECORD OWNER & APPLICANT

OWNER:
FRANK DARRIGO REVOCABLE TRUST
84 LAKESIDE RD
NEWBURGH NY 12550

APPLICANT
JEFFREY LEASE
597 GRAND AVENUE
NEWBURGH, NY 12550

## REFERENCES:

1. TOWN OF NEWBURGH TAX MAP SBL 86-1-96.
2. BOUNDARY AND PLANIMETRIC INFORMATION ON THIS PLAN HAS BEEN TAKEN FROM A SURVEY ENTITLED "SURVEY PREPARED FOR F&T DARRIGO" DATED MAY 13, 2012 AS PREPARED BY DJ SCALZO ASSOCIATES ENGINEERING and PLANNING, 57 FIFTH AVENUE, NEWBURGH, NEW YORK 12550.
3. SOLAR ARRAY DESIGN INFORMATION ON THIS PLAN HAS BEEN TAKEN FROM A PLAN ENTITLED "MOUNTAIN GARDENS, LLC" DATED JUNE 5, 2018 AS PREPARED BY ENTER SOLAR, 805 THIRD AVENUE, 20th FLOOR, NEW YORK, NY 1002.
4. TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN HAS BEEN TAKEN FROM AN AERIAL SURVEY PREPARED BY GEODETIC ASSOCIATES IN 2005.
5. TOPOGRAPHIC INFORMATION IN THE REMEDIATION AREA HAS BEEN TAKEN FROM A SURVEY PREPARED BY CHRISTOPHER M. COPPENS OF COPPENS LAND SURVEYING.

## SITE PLAN APPROVAL NOTES:

1. ORIGINAL ZONING BOARD OF APPEALS USE VARIANCE GRANTED ON NOVEMBER 26, 2019.
2. AMENDED ZONING BOARD OF APPEALS USE VARIANCE AND PRE-EXISTING NON-CONFORMING USES THAT CURRENTLY EXIST ON THE SITE TO REMAIN ON SEPTEMBER 24, 2020.
3. PLANNING BOARD ORIGINAL RESOLUTION OF APPROVAL – SITE PLAN APPROVAL DATED APRIL 15, 2021.

| #REV. | BY | DATE | DESCRIPTION |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| #5 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #4 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #3 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #2 | MM | 2/23/21 | PER WS COMMENTS |
| #1 | MM | 1/11/21 | PER PB COMMENTS |

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET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STATE OF NEW YORK · MICHAEL A. MORGANTE · LICENSED PROFESSIONAL ENGINEER · 078577

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

AMENDED 5 MW AC SOLAR FARM SITE PLAN FOR
DARRIGO
84 LAKESIDE AVENUE
TOWN OF NEWBURGH – ORANGE COUNTY, N.Y.

TITLE SHEET

| | |
|---|---|
| JOB#: | 18-014 |
| SCALE: | AS NOTED |
| ORIGINAL DATE: | 10-30-20 |
| DRAWN: | MM |
| CHECKED: | MM |
| SHEET NO. | 01 of 09 |

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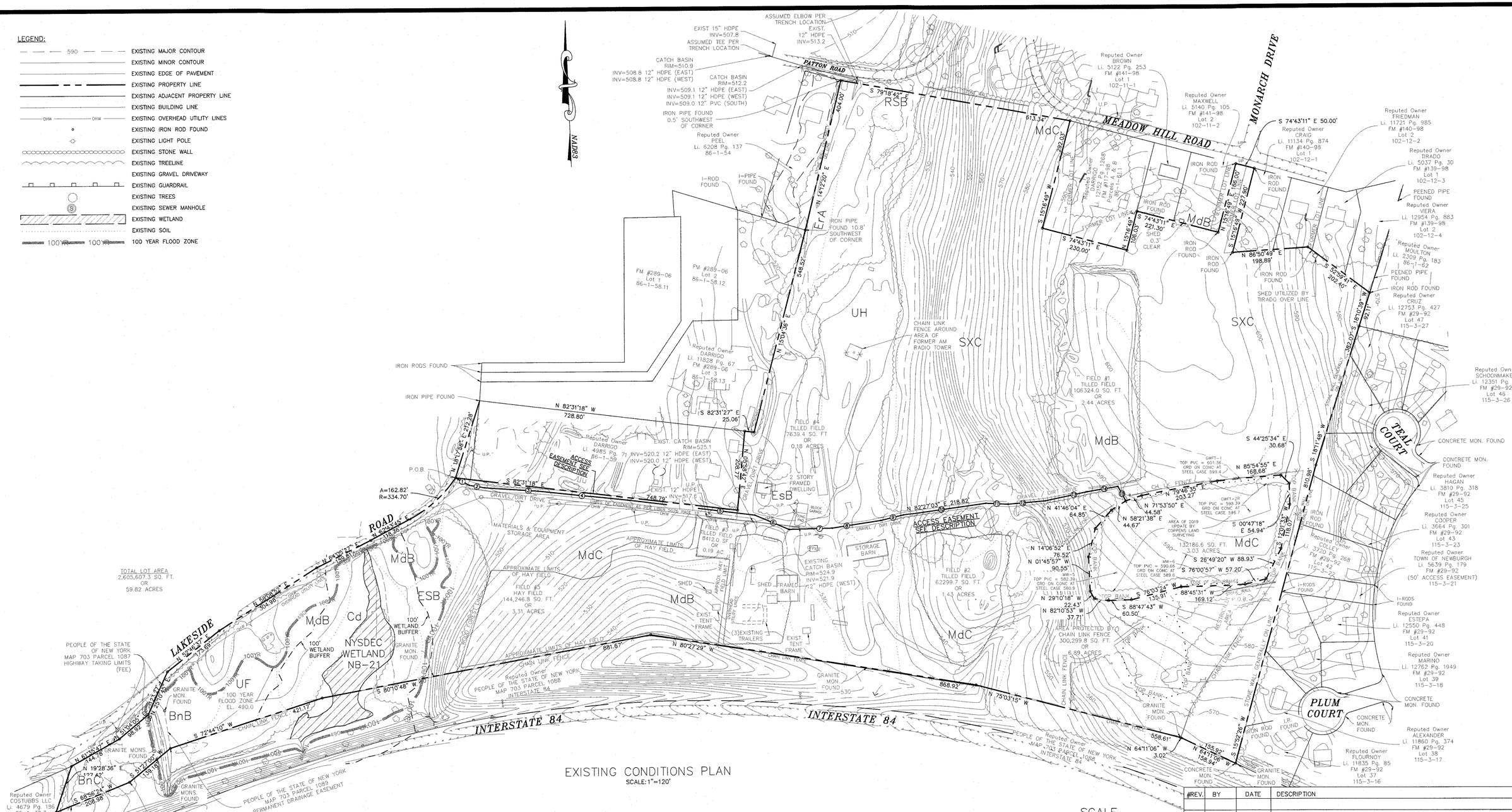


## EXISTING CONDITIONS PLAN

SCALE: 1"=120'

### RESTRICTED AREA DESCRIPTION

ALL THAT CERTAIN PARCEL OF LAND SITUATE, LYING, AND BEING IN THE TOWN OF NEWBURGH, COUNTY OF ORANGE, STATE OF NEW YORK, BEING THE RESTRICTED AREA AS INDICATED ON A MAP TITLED "SURVEY PREPARED FOR F&T DARRIGO" AND BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE TERMINOUS OF A 20 FOOT WIDE ACCESS EASEMENT LEADING FROM LAKESIDE ROAD TO THE RESTRICTED AREA AS DEPICTED ON THIS MAP; SAID ACCESS EASEMENTS LAST COURSE AND DISTANCE OF SOUTH 27 DEGREES 36 MINUTES 09 SECONDS EAST 43.05 FEET AND PASSING THROUGH THE CHAIN LINK FENCE GATE TO A POINT IN THE RESTRICTED AREA; THENCE THROUGH LANDS REPUTEDLY OF DARRIGO THE FOLLOWING COURSES AND DISTANCES:

NORTH 71 DEGREES 53 MINUTES 50 SECONDS EAST 44.58 FEET TO A POINT;
NORTH 79 DEGREES 46 MINUTES 35 SECONDS EAST 203.27 FEET TO A POINT;
NORTH 85 DEGREES 54 MINUTES 55 SECONDS EAST 168.68 FEET TO A POINT;
SOUTH 44 DEGREES 25 MINUTES 34 SECONDS EAST 30.68 FEET TO A POINT;
SOUTH 00 DEGREES 47 MINUTES 18 SECONDS EAST 54.94 FEET TO A POINT;
SOUTH 12 DEGREES 01 MINUTES 33 SECONDS WEST 118.07 FEET TO A POINT;
SOUTH 26 DEGREES 49 MINUTES 20 SECONDS WEST 88.93 FEET TO A POINT;
SOUTH 76 DEGREES 00 MINUTES 57 SECONDS WEST 57.20 FEET TO A POINT;
SOUTH 88 DEGREES 45 MINUTES 31 SECONDS WEST 169.12 FEET TO A POINT;
SOUTH 76 DEGREES 03 MINUTES 24 SECONDS WEST 135.91 FEET TO A POINT;
SOUTH 88 DEGREES 47 MINUTES 43 SECONDS WEST 60.50 FEET TO A POINT;
NORTH 82 DEGREES 10 MINUTES 53 SECONDS WEST 37.71 FEET TO A POINT;
NORTH 29 DEGREES 10 MINUTES 18 SECONDS WEST 22.43 FEET TO A POINT;
NORTH 01 DEGREES 45 MINUTES 57 SECONDS WEST 90.55 FEET TO A POINT;
NORTH 14 DEGREES 06 MINUTES 52 SECONDS EAST 76.52 FEET TO A POINT;
NORTH 41 DEGREES 46 MINUTES 04 SECONDS EAST 64.85 FEET TO A POINT;
NORTH 58 DEGREES 21 MINUTES 38 SECONDS EAST 44.67 FEET TO THE POINT OR PLACE OF BEGINNING AND CONTAINING 3.03 ACRES.

### ACCESS EASEMENT DESCRIPTION

ALL THAT CERTAIN PARCEL OF LAND SITUATE, LYING, AND BEING IN THE TOWN OF NEWBURGH, COUNTY OF ORANGE, STATE OF NEW YORK, AS INTENDED FOR RIGHT OF ACCESS FOR INGRESS AND EGRESS TO THE RESTRICTED SITE ON LANDS REPUTEDLY OF F & T DARRIGO, SAID PARCEL BEING A 20 FEET WIDE ACCESS AND THE CENTERLINE THEREOF BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN LAKESIDE ROAD, SAID POINT BEING SOUTH 18 DEGREES 17 MINUTES 58 SECONDS WEST 212.28 FEET FROM AN IRON PIPE FOUND AT THE SOUTHWESTERLY CORNER OF LANDS REPUTEDLY OF DARRIGO AS DESCRIBED ON PAGE 67 OF LIBER OF DEEDS 11828; THENCE FROM SAID POINT, AND ALONG THE CENTER OF A DIRT/GRAVEL DRIVEWAY THE FOLLOWING COURSES AND DISTANCES;

1. SOUTH 60 DEGREES 42 MINUTES 37 SECONDS EAST 40.88 FEET TO A POINT;
2. SOUTH 79 DEGREES 45 MINUTES 30 SECONDS EAST 41.68 FEET TO A POINT;
3. SOUTH 85 DEGREES 31 MINUTES 15 SECONDS EAST 140.51 FEET TO A POINT;
4. SOUTH 83 DEGREES 19 MINUTES 36 SECONDS EAST 237.20 FEET TO A POINT;
5. SOUTH 82 DEGREES 19 MINUTES 52 SECONDS EAST 338.09 FEET TO A POINT;
6. SOUTH 66 DEGREES 28 MINUTES 09 SECONDS EAST 98.17 FEET TO A POINT;
7. NORTH 89 DEGREES 12 MINUTES 21 SECONDS EAST 114.18 FEET TO A POINT;
8. NORTH 81 DEGREES 58 MINUTES 49 SECONDS EAST 129.97 FEET TO A POINT;
9. NORTH 76 DEGREES 50 MINUTES 57 SECONDS EAST 61.07 FEET TO A POINT;
10. NORTH 82 DEGREES 27 MINUTES 03 SECONDS EAST 218.82 FEET TO A POINT;
11. SOUTH 86 DEGREES 46 MINUTES 11 SECONDS EAST 58.51 FEET TO A POINT;
12. NORTH 85 DEGREES 34 MINUTES 14 SECONDS EAST 99.38 FEET TO A POINT;
13. NORTH 78 DEGREES 23 MINUTES 27 SECONDS EAST 112.80 FEET TO A POINT;
14. NORTH 81 DEGREES 04 MINUTES 17 SECONDS EAST 82.60 FEET TO A POINT;
15. SOUTH 27 DEGREES 36 MINUTES 09 SECONDS EAST 43.05 FEET AND PASSING THROUGH THE CHAIN LINK FENCE GATE TO A POINT IN THE RESTRICTED AREA.

| #REV. | BY | DATE | DESCRIPTION |
|---|---|---|---|
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| | | | |
| | | | |
| #6 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #5 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #4 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #3 | MM | 2/23/21 | PER WS COMMENTS |
| #2 | MM | 1/11/21 | PER PB COMMENTS |
| #1 | MM | 10/30/20 | FINAL PLAN PREPARATION |

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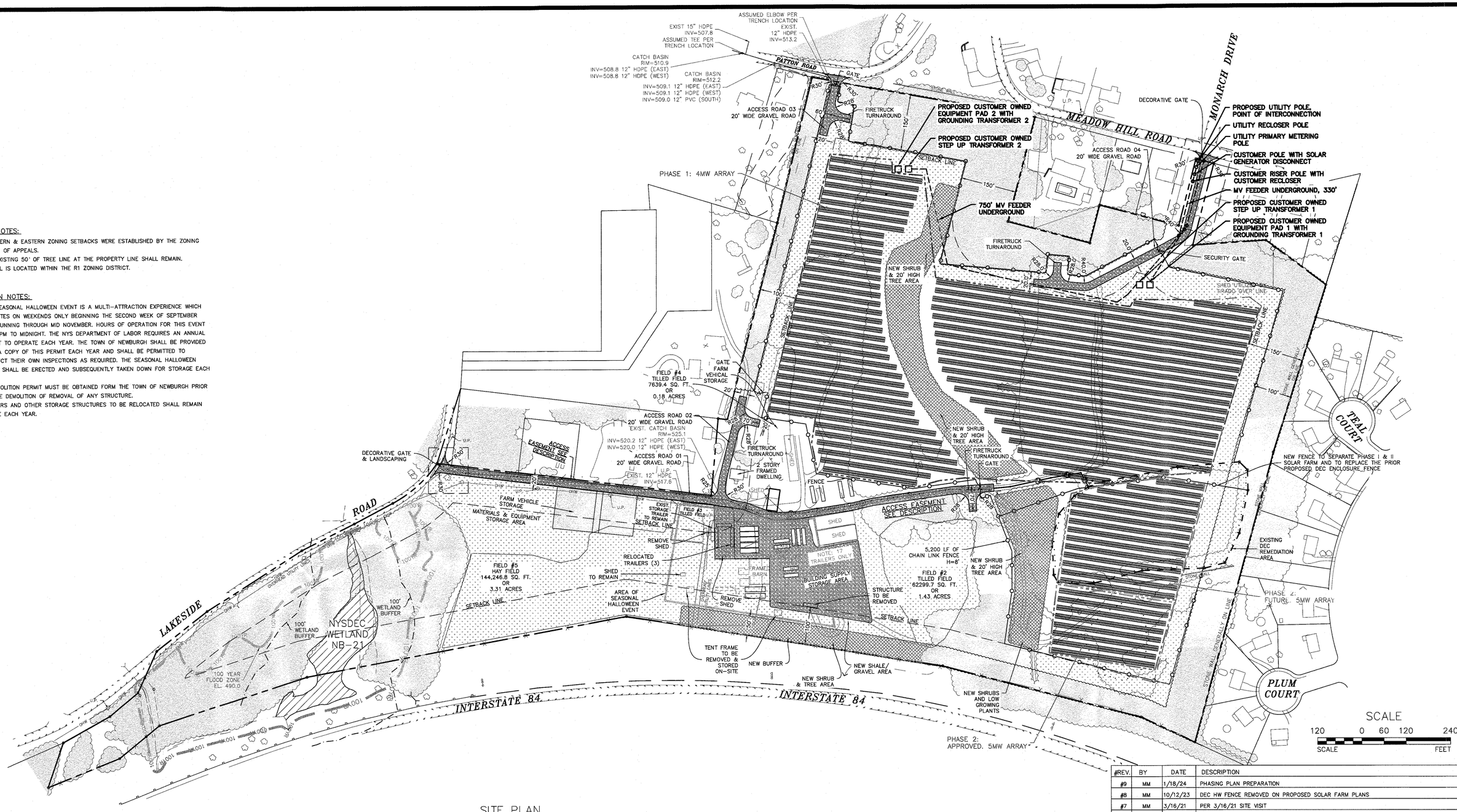
AMENDED 5 MW AC SOLAR FARM SITE PLAN FOR
DARRIGO
84 LAKESIDE AVENUE
TOWN OF NEWBURGH – ORANGE COUNTY, N.Y.

EXISTING CONDITIONS PLAN

JOB#: 18-014
SCALE: AS NOTED
ORIGINAL DATE: 11-12-19
DRAWN: MM
CHECKED: MM
SHEET NO. 02 of 09




ZONING NOTES:

1. NORTHERN & EASTERN ZONING SETBACKS WERE ESTABLISHED BY THE ZONING BOARD OF APPEALS.
2. THE EXISTING 50' OF TREE LINE AT THE PROPERTY LINE SHALL REMAIN.
3. PARCEL IS LOCATED WITHIN THE R1 ZONING DISTRICT.

SITE PLAN NOTES:

1. THE SEASONAL HALLOWEEN EVENT IS A MULTI-ATTRACTION EXPERIENCE WHICH OPERATES ON WEEKENDS ONLY BEGINNING THE SECOND WEEK OF SEPTEMBER AND RUNNING THROUGH MID NOVEMBER. HOURS OF OPERATION FOR THIS EVENT ARE 7PM TO MIDNIGHT. THE NYS DEPARTMENT OF LABOR REQUIRES AN ANNUAL PERMIT TO OPERATE EACH YEAR. THE TOWN OF NEWBURGH SHALL BE PROVIDED WITH A COPY OF THIS PERMIT EACH YEAR AND SHALL BE PERMITTED TO CONDUCT THEIR OWN INSPECTIONS AS REQUIRED. THE SEASONAL HALLOWEEN EVENT SHALL BE ERECTED AND SUBSEQUENTLY TAKEN DOWN FOR STORAGE EACH YEAR.
2. A DEMOLITION PERMIT MUST BE OBTAINED FORM THE TOWN OF NEWBURGH PRIOR TO THE DEMOLITION OF REMOVAL OF ANY STRUCTURE.
3. TRAILERS AND OTHER STORAGE STRUCTURES TO BE RELOCATED SHALL REMAIN IN USE EACH YEAR.

SITE PLAN
SCALE: 1"=120'

LEGEND:

- 590 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING IRON ROD FOUND
- EXISTING LIGHT POLE
- EXISTING STONE WALL
- EXISTING TREELINE
- EXISTING GRAVEL DRIVEWAY
- EXISTING GUARDRAIL
- EXISTING TREES
- EXISTING SEWER MANHOLE
- EXISTING WETLAND
- NEW SHRUB & TREE AREA
- EXISTING VEGETATION TO REMAIN
- EXISTING GRASS
- PROPOSED SOLAR
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED ZONING SETBACKS
- PROPOSED FENCE

| #REV. | BY | DATE | DESCRIPTION |
|---|---|---|---|
| #9 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #8 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #7 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #6 | MM | 2/23/21 | PER WS COMMENTS |
| #5 | MM | 1/11/21 | PER PB COMMENTS |
| #4 | MM | 10/30/20 | FINAL PLAN PREPARATION |
| #3 | MM | 10/23/20 | REVISIONS PER ZBA MTG. |
| #2 | MM | 2/11/20 | REVISIONS PER 2/4/20 PB MTG. |
| #1 | MM | 1/31/20 | UTILITY POLE RELOCATION FOR INTERCONNECTION POINT |

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OWNER'S CONSENT NOTE:

THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS PLAN, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON AND TO THE FILING OF THIS PLAN IN THE OFFICE OF THE CLERK OF THE COUNTY OF ORANGE, IF SO REQUIRED.

SIGNATURE – OWNER(S) TAX LOT 86-1-96

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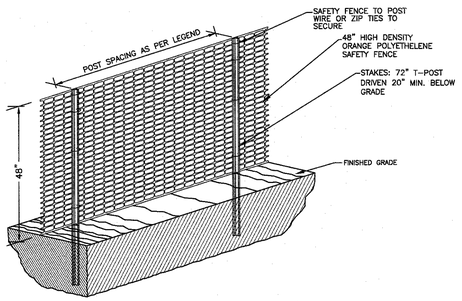
SITE PLAN

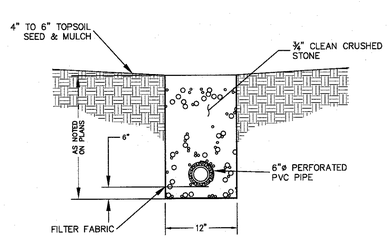
JOB#: 18-014
SCALE: AS NOTED
ORIGINAL DATE: 11-12-19
DRAWN: MM
CHECKED: MM
SHEET NO. 03 of 09

| 48" SAFETY FENCE, 72" T-POSTS | |
|---|---|
| SAF12 | 48" ORANGE FENCE, 12 FEET O.C. |
| SAF11 | 48" ORANGE FENCE, 11 FEET O.C.. |
| SAF10 | 48" ORANGE FENCE, 10 FEET O.C. |
| SAF9 | 48" ORANGE FENCE, 9 FEET O.C. |
| SAF8 | 48" ORANGE FENCE, 8 FEET O.C.. |
| SAF7 | 48" ORANGE FENCE, 7 FEET O.C. |
| SAF6 | 48" ORANGE FENCE, 6 FEET O.C. |




SENSITIVE AREA/TREE PROTECTION
NOT TO SCALE

**NOTES:**
1. ALL SENSITIVE AREAS SHALL BE PROTECTED AS PER PLAN.
2. ALL TREES IN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PRESERVED AND PROTECTED WITH HIGH VISIBILITY FENCE AS PER PLAN.
3. WHEN PRACTICABLE, INSTALL HIGH VISIBILITY 3 FEET OUTSIDE OF THE DRIP LINE OF THE TREE.
4. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.
5. THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.
6. FENCE SHALL BE MANUFACTURED BY EROSION RUNNER OR EQUAL.




FRENCH DRAIN DETAIL
NOT TO SCALE




GRADING AND UTILITY PLAN
SCALE: 1"=120'

NOTES:
1. APPROXIMATELY 22 ACRES OF TREE CLEARING IS PROPOSED.
2. LIMITS OF DISTURBANCE AREA =33.35 ACRES
3. NO TREE REMOVAL SHALL OCCUR FROM APRIL 1 – OCTOBER 31 TO MITIGATE POTENTIAL IMPACTS ON INDIANA BAT.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE LIMITS OF CLEARING WILL BE CLEARLY DEMARCATED ON THE SITE WITH ORANGE CONSTRUCTION FENCING.

600 PROPOSED MAJOR CONTOUR
602 PROPOSED MINOR CONTOUR
PROPOSED SOLAR
PROPOSED GRAVEL ACCESS ROAD
PROPOSED ZONING SETBACKS
PROPOSED FENCE
EXISTING VEGETATION TO REMAIN
EXISTING GRASS
NEW SHRUB & TREE AREA

LEGEND:
590 EXISTING MAJOR CONTOUR
EXISTING MINOR CONTOUR
EXISTING EDGE OF PAVEMENT
EXISTING PROPERTY LINE
EXISTING ADJACENT PROPERTY LINE
EXISTING BUILDING LINE
EXISTING IRON ROD FOUND
EXISTING LIGHT POLE
EXISTING STONE WALL
EXISTING TREELINE
EXISTING GRAVEL DRIVEWAY
EXISTING GUARDRAIL
EXISTING TREES
EXISTING SEWER MANHOLE
EXISTING WETLAND



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| #REV. | BY | DATE | DESCRIPTION |
|---|---|---|---|
| | | | |
| #8 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #7 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #6 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #5 | MM | 2/23/21 | PER WS COMMENTS |
| #4 | MM | 1/11/21 | PER PB COMMENTS |
| #3 | MM | 10/30/20 | FINAL PLAN PREPARATION |
| #2 | MM | 1/24/20 | REVISION PER MHE 1/2/20 COMMENT LETTER |
| #1 | MM | 12/16/19 | ADDITION OF STORMWATER FACILITIES |

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GRADING AND UTILITY PLAN

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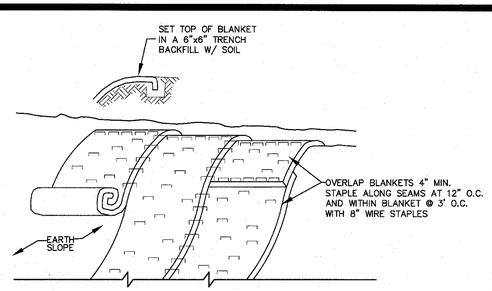


## SLOPE STABILIZATION DETAIL

NOT TO SCALE

NOTES:
1. STABILIZE PREPARED EARTHEN SLOPE WITH A BIODEGRADABLE NATURAL FIBER NETTING APPROVED TYPES ARE AS FOLLOWS:
   - –C350 –NORTH AMERICAN GREEN #1–800–772–2040
   - –ECOCOIR 9000– EASTERN PRODUCTS, INC. #1–201–234–5050
   - –ERO–MAT V125C– EROSION CONTROL TECH. #1–800–245–0551
   - –ALL SLOPE RESTORATION TO GET 4" TOPSOIL
2. SEED SLOPE PRIOR TO INSTALLING EROSION CONTROL NETTING.
3. AFTER NETTING IS INSTALLED, PLANT GROUND–COVER THROUGH SLITS CUT IN FABRIC.




## EROSION CONTROL PLAN

SCALE: 1"=120'

LIMITS OF DISTURBANCE AREA: 1,242,930 (28.53 ACRES)

THIS EROSION CONTROL PLAN SHALL BE USED FOR EROSION CONTROL METHODS AND LOCATIONS ONLY. DO NOT USE THIS PLAN FOR BUILDING, PAVED AREA, UTILITY LOCATIONS, etc.

THE OWNER IS ASSIGNED THE RESPONSIBILITY FOR THE CONSTRUCTION AND MAINTENANCE OF THE MEASURES AS DETAILED ON THIS PLAN AND ACCOMPANYING TECHNICAL SPECIFICATIONS

SCALE

120 0 60 120 240

SCALE FEET



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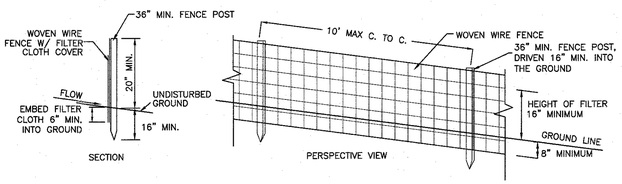



**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

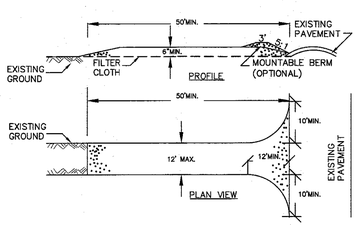
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.

POST: STEEL EITHER 'T' OR 'U' TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 1/2 GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEIOFAB, ENVIROFENCE, OR APPROVED EQUAL.

## SILT FENCE DETAIL

NOT TO SCALE

NOTES:
1. APPROXIMATELY 22 ACRES OF TREE CLEARING IS PROPOSED.
2. LIMITS OF DISTURBANCE AREA =28.53 ACRES
3. NO TREE REMOVAL SHALL OCCUR FROM APRIL 1 – OCTOBER 31 TO MITIGATE POTENTIAL IMPACTS ON INDIANA BAT.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE LIMITS OF CLEARING WILL BE CLEARLY DEMARCATED ON THE SITE WITH ORANGE CONSTRUCTION FENCING.




## STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

## E&SC MAINTENANCE NOTES:

1. SILT FENCE: MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.
2. STABILIZED CONSTRUCTION ENTRANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY OR STREETS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL AGGREGATE. ALL SEDIMENT SPILLED, DROPPED OR WASHED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY. WHEN NECESSARY, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERCOURSES.
3. CONSTRUCTION ROAD STABILIZATION: INSPECT CONSTRUCTION ROADS AND PARKING AREAS PERIODICALLY FOR CONDITION OF SURFACE. TOP–DRESS WITH NEW GRAVEL AS NEEDED. CHECK DITCHES FOR EROSION AND SEDIMENTATION AFTER RAINFALL EVENTS. MAINTAIN VEGETATION IN A HEALTHY, VIGOROUS CONDITION. AREAS PRODUCING SEDIMENT SHOULD BE TREATED IMMEDIATELY.

## SEDIMENT AND EROSION CONTROL NOTES & CONSTRUCTION SEQUENCING

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES FOR ALL ROAD AND DRIVE ENTRANCES. STREETS SHALL BE BROOM SWEPT DAILY.
2. INSTALL SEDIMENT BARRIERS/SWALES/DITCHES/DIKES AT DOWN SLOPE AREAS FROM ALL PROPOSED GRADING OPERATIONS, AND INSTALL OTHER SEDIMENTATION AND EROSION CONTROL STRUCTURES OR MEASURES AS SHOWN ON THE DRAWINGS.
3. LAND DISTURBANCE SHALL BE LIMITED TO ONLY THAT AREA NECESSARY FOR DEVELOPMENT. A WAIVER HAS BEEN RECEIVED FROM THE TOWN OF NEWBURGH TO DISTURB MORE THAN FIVE (5) ACRES OF UNPROTECTED SOIL AT ONE TIME.
4. CLEAR EXISTING TREES AND VEGETATION FROM AREAS TO BE EXCAVATED OR FILLED, THEN STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE DISTURBED. SEED STOCKPILED TOPSOIL WITH TEMPORARY RYEGRASS COVER AS SPECIFIED BELOW (SEE NOTE 8), AND ERECT A SILT FENCE AROUND THE STOCKPILE.
5. PROTECT ALL TREES WHICH ARE TO REMAIN AND WHICH ARE IN OR NEAR CONSTRUCTION AREAS.
6. PERFORM NECESSARY EXCAVATION OR FILL OPERATIONS TO BRING SITE TO DESIRED SUBGRADE.
7. INSTALL SEDIMENT BARRIERS AROUND ALL STORM DRAIN INLETS, OR MODIFY SEDIMENT CONTROL MEASURES INSTALLED IN #2 ABOVE AND MAINTAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATION AND ALL PAVEMENTS ARE PAVED WITH A BASE COURSE.
8. TEMPORARILY SEED ALL DISTURBED AREAS WHICH WILL REMAIN UNDISTURBED FOR A PERIOD OF 14 DAYS OR MORE AND WHICH WILL NOT BE UNDER CONSTRUCTION WITHIN 30 DAYS IN ACCORDANCE WITH SPECIFICATION FOR VEGETATIVE ESTABLISHMENT.
9. IF CONSTRUCTION IS SUSPENDED OR COMPLETED, ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IMMEDIATELY. ALL SLOPES STEEPER THAN ONE ON THREE (V/H) AND PERIMETER TRENCHES AND TRAP EMBANKMENTS SHALL, ON COMPLETION, BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING AND SLOPE STABILIZATION MATTING.
10. AFTER COMPLETION OF SITE CLEARING, FINE GRADE AND SPREAD TOPSOIL ON ALL AREAS NOT REQUIRED FOR CONSTRUCTION AND SEED WITH PERMANENT LAWN MIX AS DISCUSSED ON THE SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT ON THIS SHEET.
11. INSTALL LEVEL SPREADERS AND FLOW DIFFUSERS AS SHOWN ON THE PLANS.
12. INSTALLATION OF GROUND MOUNTED SOLAR ARRAYS CAN COMMENCE AFTER CONSTRUCTION OF LEVEL SPREADERS AND FLOW DIFFUSERS IS COMPLETE. SILT FENCE AND ADDITIONAL SEEDING AND MULCHING WILL BE REQUIRED DURING INSTALLATION OF SOLAR ARRAYS.
13. DURING THE PROGRESS OF CONSTRUCTION, MAINTAIN ALL SEDIMENT TRAPS, BARRIERS, AND FILTERS AS NECESSARY TO PREVENT THEIR BEING CLOGGED UP WITH SEDIMENT.
14. AFTER PAVEMENTS ARE INSTALLED AND PERMANENT VEGETATIVE COVER AND PLANTINGS ARE ESTABLISHED, REMOVE SEDIMENT BARRIERS AND SEED THOSE DISTURBED AREAS.
15. MAINTAIN ALL SEEDED AND PLANTED AREAS TO INSURE A VIABLE STABILIZED VEGETATIVE COVER.
16. STRUCTURAL MEASURES MUST BE MAINTAINED TO BE EFFECTIVE. IN GENERAL, THESE MEASURES MUST BE PERIODICALLY INSPECTED TO INSURE STRUCTURAL INTEGRITY, TO DETECT VANDALISM DAMAGE, AND FOR CLEANING AND REPAIR WHENEVER NECESSARY.
17. DURING CONSTRUCTION, ALL STRUCTURES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAIN. REMOVE ACCUMULATED SEDIMENT AND STOCKPILE AND STABILIZE IN AN AREA NOT SUBJECT TO FURTHER EROSION.
18. AFTER CONSTRUCTION IS COMPLETED, PERMANENT SEDIMENT OR EROSION CONTROL STRUCTURES SHOULD BE INSPECTED AT LEAST SEMI–ANNUALLY AND AFTER EVERY RAIN.

## PERMANENT SEEDING:

1. PERMANENT SEEDING:
   A. SEEDBED PREPARATION: AREA TO BE SEEDED SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES. THE TOP LAYER SHALL BE LOOSENED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS OF DOLOMITIC LIMESTONE AND 21 POUNDS OF 10–20–20 FERTILIZER PER 1,000 SF. HARROW OR DISK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3 INCHES ON SLOPES FLATTER THAN 3:1.
   B. PERMANENT SEEDING
   MIXTURE – ERNST MIX#157
   YELLOW BLOSSOM SWEET CLOVER 25%
   ALSIKE CLOVER 25%
   CRIMSON CLOVER 15%
   RED CLOVER 20%
   WHITE CLOVER 15%

   NOTES:
   A. MIX #157 TO BE APPLIED AT A RATE OF 10 LBS./ACRE
   B. PRIOR TO CLOVER MIX APPLICATION, A FESCUE SEED MIXTURE SHALL BE APPLIED AND ESTABLISHED.

   C. MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED, MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING. MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 POUNDS PER 1,000 SQUARE FEET (2 BALES). IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY, OR BY HAND TO A DEPTH OF 1–2 INCHES.
   D. SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATIONS TO MINIMIZE MOVEMENT BY WIND OR WATER. THE FOLLOWING METHODS ARE PERMITTED:
   i. USE A MULCH ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR FABRIC TYPE MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH, HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.
   ii. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
   iii. LIQUID BINDERS MAY BE USED AND APPLIED HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION.
   iv. LIGHTWEIGHT NETTING, MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE GROUND ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.
2. FILL:
   NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 8 INCHES. ALL FILL IN ROADWAYS AND PARKING AREAS IS TO BE CLASSIFIED TYPE 2 COMPACTED TO 90% DENSITY; COMPACTION TO BE DETERMINED BY ASTM D–1557–66T (MODIFIED PROCTOR). ANY FILL WITHIN THE BUILDING AREA IS TO BE COMPACTED TO A MINIMUM OF OF 95% AS DETERMINED BY METHODS PREVIOUSLY MENTIONED. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER THE PROJECT ENGINEER'S SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAGE.
3. PERMANENT SOD;
   INSTALLATION OF SOD SHOULD FOLLOW THE PERMANENT SEEDING DATES. PERMANENT SOD IS TO BE STATE APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD. SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH APPROVED EROSION CONTROL NETTING. ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE APPLIED ON FROZEN GROUND. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO INSURE ESTABLISHED SOD.

## DEEP RIPPING & DECOMPACTION:

AREAS OF TREE CLEARING AND SOLAR ARRAY INSTALLATION WILL REQUIRE DEEP RIPPING & DECOMPACTION IN ORDER TO RETURN THESE AREAS TO THEIR PRE–DEVELOPMENT HYDROLOGIC CONDITIONS. SITE SOILS CONSIST OF HYDROLOGIC SOIL GROUP "C". DEEP RIPPING AND DECOMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH THE NYSDEC DIVISION OF WATER "DEEP–RIPPING & DECOMPACTION" GUIDANCE DOCUMENT DATED APRIL 2008.

## CONSTRUCTION SPECIFICATIONS

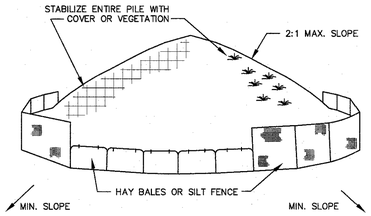
1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. THE NYCDEP WILL NOT PERMIT A WIDTH WIDER THAN 12' DUE TO THE EXISTING WIDTH OF THE TRAVELED WAY.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

## TEMPORARY SEEDING:

MULCHING AS REQUIRED ON SITES DIFFICULT TO VEGETATE (SANDS, SLOPES, OR HYDROSEEDINGS AND OFF–SEASON OPERATIONS).

A. MULCH MATERIALS SHALL BE UN–ROTTED SALT HAY, HAY OR SMALL GRAIN STRAW AT THE RATE OF 1–1/2 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FOOT. MULCH BLOWERS SHOULD NOT GRIND OR CHOP TILE MATERIAL.
B. SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75 PERCENT TO 95 PERCENT OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
C. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING ON THE SIZE OF THE AREA, AND STEEPNESS OF SLOPES:

1. PEG AND TWINE: DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTING: STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTING TO THE TOP SURFACE USE A DEGRADABLE NETTING IN AREAS TO BE MOWED
3. MULCH ANCHORING TOOL: (A TRACTOR DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE.) TOOL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHALL BE DONE ON THE CONTOUR.




INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE
2. MAXIMUM SLOPE OF STOCKPILES SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR HAY BALES, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.

## SOIL STOCKPILE DETAIL

NOT TO SCALE

LEGEND:

- EXISTING MAJOR CONTOUR (590)
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING IRON ROD FOUND
- EXISTING LIGHT POLE
- EXISTING STONE WALL
- EXISTING TREELINE
- EXISTING GRAVEL DRIVEWAY
- EXISTING GUARDRAIL
- EXISTING TREES
- EXISTING SEWER MANHOLE
- EXISTING WETLAND
- EXISTING VEGETATION TO REMAIN
- NEW SHRUB & TREE AREA
- EXISTING GRASS
- PROPOSED MAJOR CONTOUR (600)
- PROPOSED MINOR CONTOUR (602)
- PROPOSED SOLAR ARRAY
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED ZONING SETBACKS
- PROPOSED FENCE
- LIMIT OF DISTURBANCE
- PROPOSED SILT FENCE

| #REV. | BY | DATE | DESCRIPTION |
|---|---|---|---|
| | | | |
| | | | |
| #7 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #6 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #5 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #4 | MM | 2/23/21 | PER WS COMMENTS |
| #3 | MM | 1/11/21 | PER PB COMMENTS |
| #2 | MM | 10/30/20 | FINAL PLAN PREPARATION |
| #1 | MM | 1/24/20 | REVISION PER MHE 1/2/20 COMMENT LETTER |

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

ARDEN CONSULTING ENGINEERS, PLLC
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WWW.ARDENCONSULTING.NET

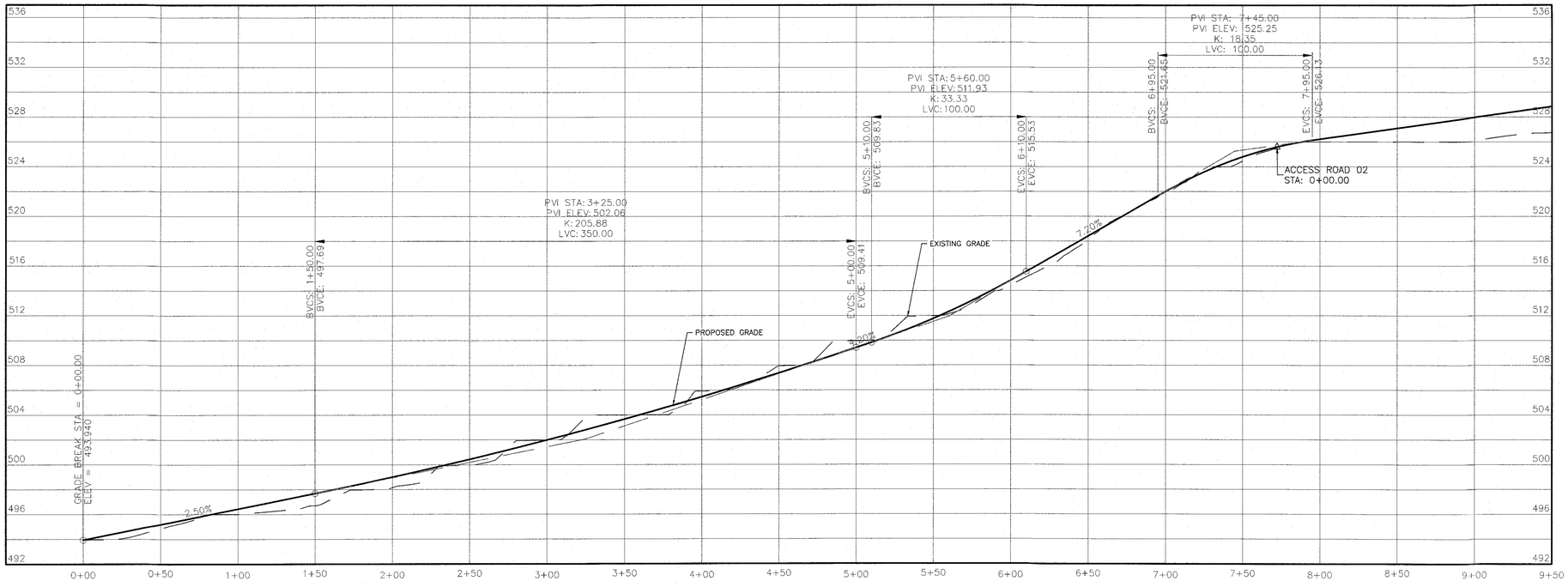
STATE OF NEW YORK · MICHAEL A. MORGANTE · 078577 · LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

AMENDED 5 MW AC SOLAR FARM SITE PLAN FOR
DARRIGO
84 LAKESIDE AVENUE
TOWN OF NEWBURGH – ORANGE COUNTY, N.Y.

EROSION CONTROL PLAN

JOB#: 18–014
SCALE: AS NOTED
ORIGINAL DATE: 12–18–19
DRAWN: MM
CHECKED: MM
SHEET NO. 05 of 09

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## STA: 0+00 TO 9+00

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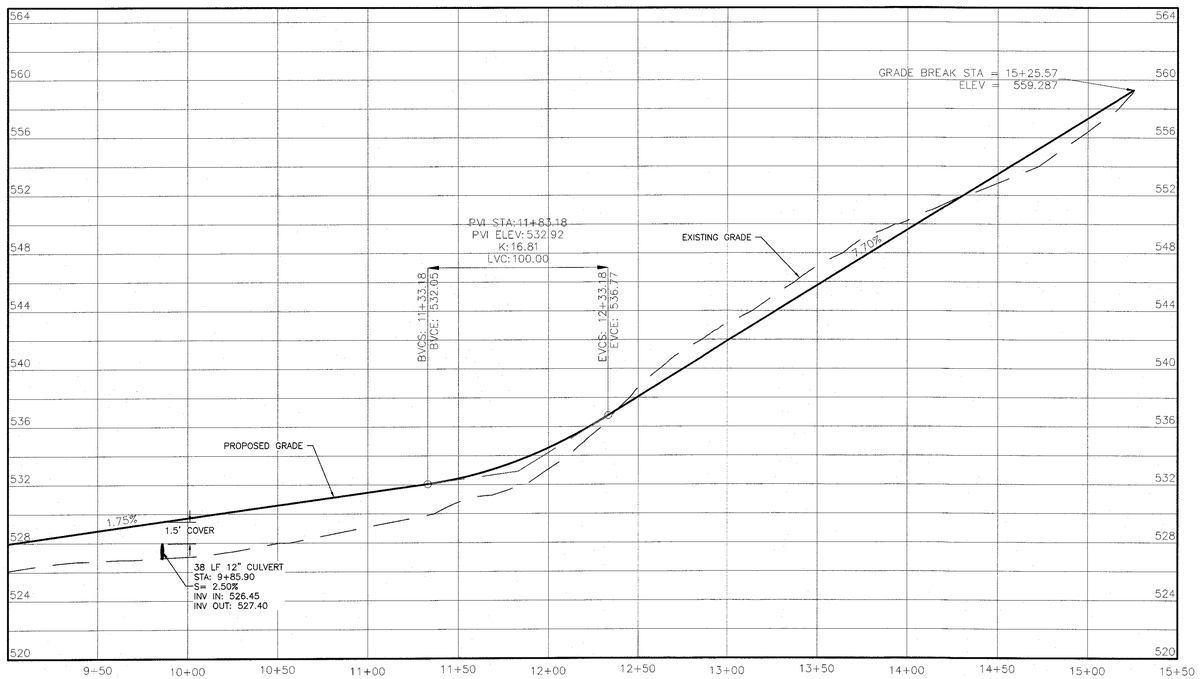
VERTICAL: 1"=5'

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| #6 | MM | 1/18/24 | PHASING PLAN PREPARATION |
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| #3 | MM | 2/23/21 | PER WS COMMENTS |
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| #1 | MM | 10/30/20 | FINAL PLAN PREPARATION |

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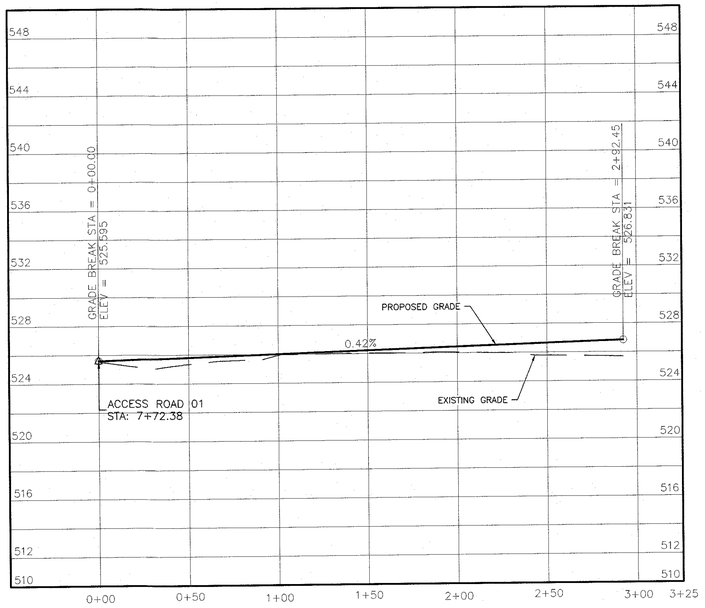
DARRIGO
84 LAKESIDE AVENUE
TOWN OF NEWBURGH – ORANGE COUNTY, N.Y.

ACCESS ROAD PROFILES 01

| | |
|---|---|
| JOB#: | 18-014 |
| SCALE: | AS NOTED |
| ORIGINAL DATE: | 11-12-19 |
| DRAWN: | MM |
| CHECKED: | MM |
| SHEET NO. | 06 of 09 |

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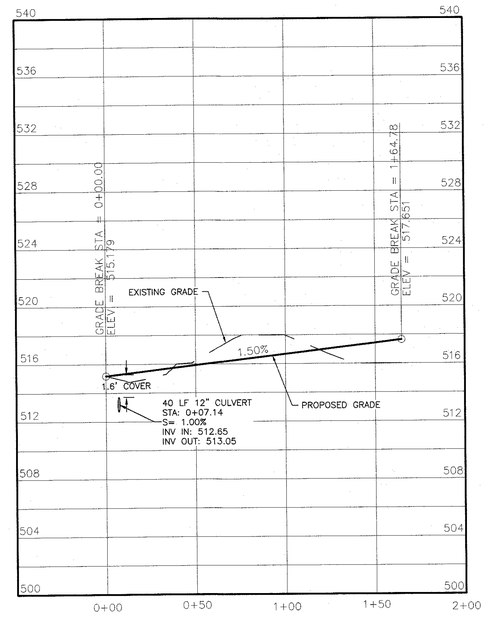


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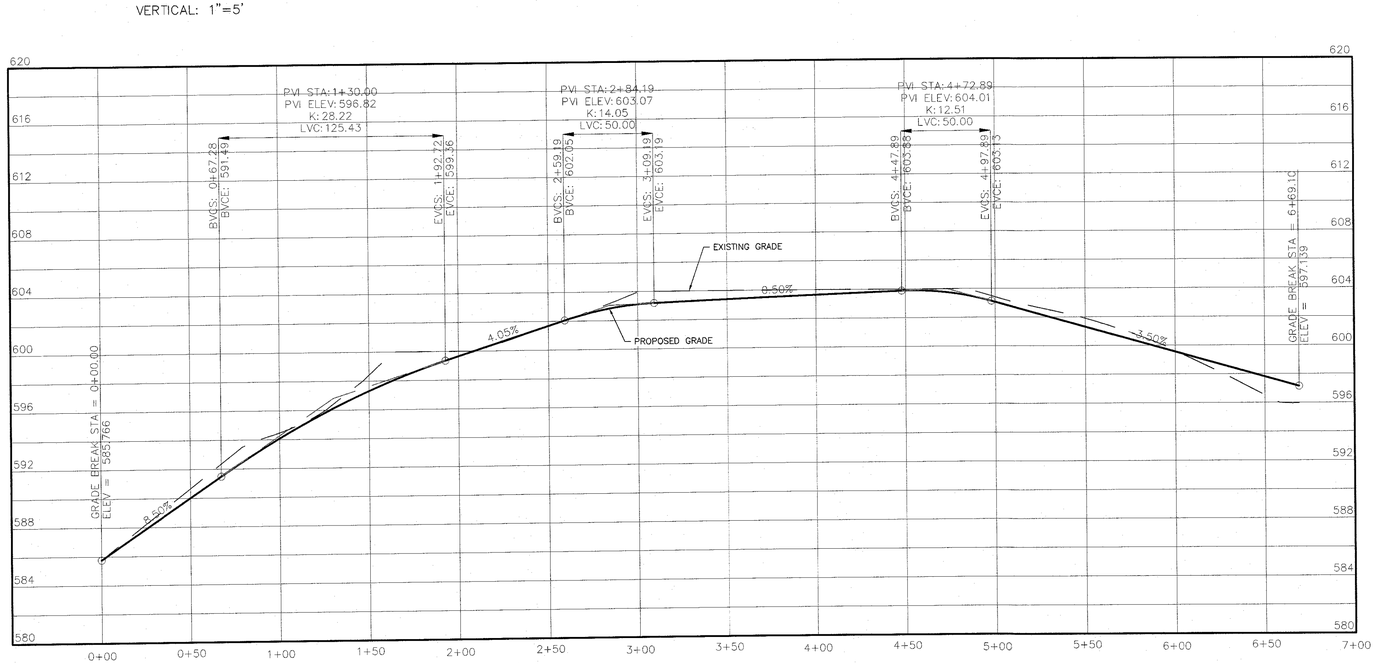


## ACCESS ROAD 04 PROFILE

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VERTICAL: 1"=5'

| #REV. | BY | DATE | DESCRIPTION |
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| | | | |
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| | | | |
| #6 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #5 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #4 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #3 | MM | 2/23/21 | PER WS COMMENTS |
| #2 | MM | 1/11/21 | PER PB COMMENTS |
| #1 | MM | 10/30/20 | FINAL PLAN PREPARATION |

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET


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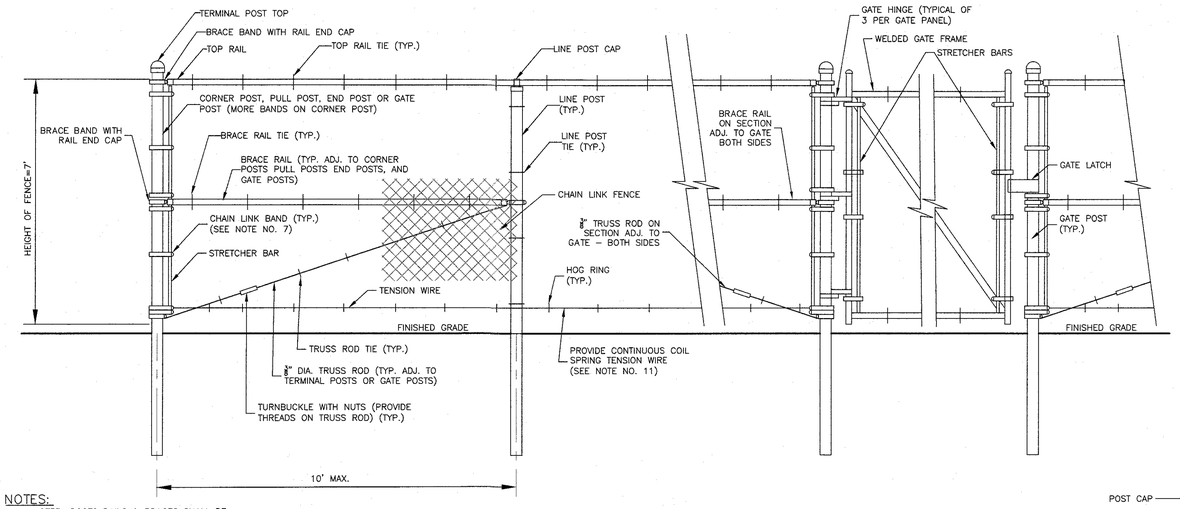
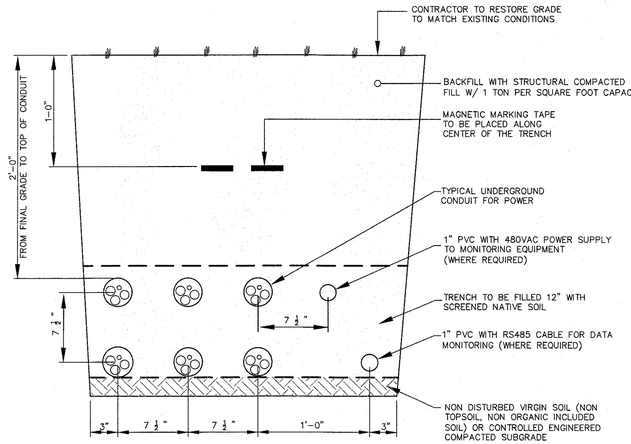
ACCESS ROAD PROFILES 02

JOB#: 18-014
SCALE: AS NOTED
ORIGINAL DATE: 11-12-19
DRAWN: MM
CHECKED: MM
SHEET NO. 07 of 09




## SECTION – 750MV AC TRENCH

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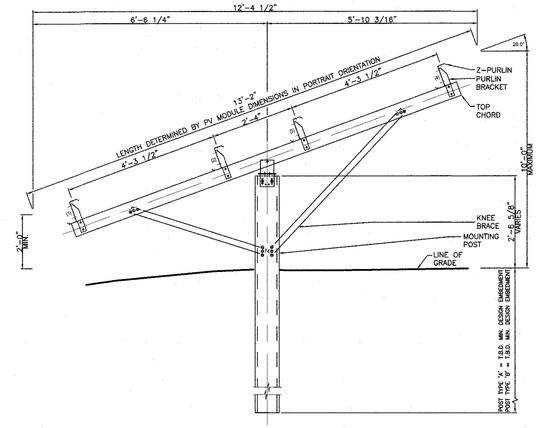



## RACK SECTION

SCALE: ¾" = 1'-0"

NOTES:

1. STEEL POSTS RAILS & BRACES SHALL BE
   A. STANDARD WEIGHT SCHEDULE 40 GALVANIZED STEEL PIPE: POSTS, RAILS, AND BRACES SHALL BE STANDARD WEIGHT SCHEDULE 40 GALVANIZED STEEL PIPE, MANUFACTURED IN ACCORDANCE WITH ASTM F1083. PIPE SHALL BE GALVANIZED BOTH INSIDE AND OUT IN ACCORDANCE WITH ASTM F1083.
2. PIPE/TUBING DIAMETERS INDICATED HEREIN ARE FENCE INDUSTRY O.D. (OUTSIDE DIAMETER). THE FOLLOWING TABLE ALSO PRESENTS ACTUAL DECIMAL O.D. EQUIVALENTS.

PIPE/TUBING SIZES

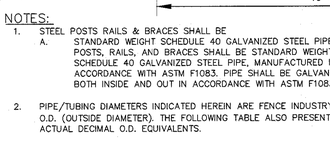
| FENCE INDUSTRY O.D. | DECIMAL O.D. EQUIVALENT |
|---|---|
| 1 ⅜" | 1.315" |
| 1 ⅝"" | 1.660" |
| 2" | 1.900" |
| 2 ⅜" | 2.375" |
| 3" | 2.875" |
| 3 ½" | 3.500" |
| 4" | 4.000" |
| 4 ½" | 4.500" |
| 6 ⅝" | 6.625" |
| 8 ⅝" | 8.625" |

3. CORNER POSTS, PULL POSTS, AND END POSTS SHALL BE 3" O.D. FOR 7' HIGH FENCE.
4. FOR SMALL GATES, SINGLE PANEL GATE OPENING WIDTH OF 4'–0" OR LESS AND DOUBLE PANEL GATE OPENING WIDTH OF 8'–0" OR LESS, GATE POSTS SHALL BE 3" O.D. FOR 7' HIGH FENCE. FOR LARGER GATES, SINGLE PANEL GATE OPENING WIDTH OF UP TO 8'–0" AND DOUBLE PANEL GATE OPENING WIDTHS OF UP TO 16'–0", GATE POSTS SHALL BE 3 ½" O.D. FOR 7' HIGH FENCE. OTHER GATE POSTS SHALL BE AS NOTED OR DETAILED IN THE DRAWINGS.
5. LINE POSTS SHALL BE 2 ½" O.D. FOR 7' HIGH FENCE.
6. TOP RAIL & BRACE SHALL BE 1 ⅝" O.D.
7. FENCE FABRIC SHALL BE SECURED TO CORNER POSTS, PULL POSTS, AND GATE OR END POSTS WITH STRETCHER BARS (TENSION RODS) FABRICATED FROM GALVANIZED STEEL AND SECURED TO THE SAID POSTS BY THE FOLLOWING NUMBER OF EQUALLY SPACED CHAIN LINK BANDS WITH AN INSIDE DIAMETER APPROPRIATE TO THE OUTSIDE DIAMETER OF THE POST TO WHICH THEY ATTACH:
   A. FOR 7' HIGH FENCE: 7 EACH CHAIN LINK BANDS PER FENCE DIRECTION.
8. FENCE FABRIC AND ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL. FENCE FABRIC SHALL BE 9 GAUGE WIRE SIZE, 2" MESH, AND SHALL BE KNUCKLED AT THE TOP AND BOTTOM OF THE FABRIC. FENCE FABRIC, POSTS, RAILS, FITTINGS, AND APPURTENANCES SHALL CONFORM WITH SECTION 607, FENCES, AND SECTION 710, FENCE AND GUIDERAIL, OF THE NYSDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, AND ALL ADDENDA THERETO.
9. THE WIRE SHALL BE AS FOLLOWS:
   A. AT POSTS, RAILS, TRUSS RODS, AND WHERE NECESSARY ON GATE FRAMES, MINIMUM 11 GAUGE GALVANIZED STEEL SPACED AT NOT LESS THAN 14" ON CENTER, (ALUMINUM LINE POSTS TIES MAY BE UTILIZED AS APPROVED BY THE ENGINEER).
   B. AT TENSION WIRE: BY HOG RINGS SPACED AT NOT LESS THAN 18" ON CENTER.
10. TRUSS ROD SHALL BE ⅜" DIAMETER GALVANIZED STEEL ROD TIED TO FENCE FABRIC AS PROVIDED FOR IN NOTE NO. 9A. PROVIDE THREADS AS NECESSARY ON TRUSS ROD AND COMPATIBLE NUTS ON TURNBUCKLE TO FACILITATE TIGHTENING TO PUT TRUSS ROD IN TENSION.
11. TENSION WIRE SHALL BE 7 GAUGE GALVANIZED STEEL COIL SPRING WIRE. LOCATE TENSION WIRE 6" (NOMINALLY) FROM BOTTOM OF FENCE FABRIC.
12. FENCE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM F–567 AND GATES SHALL BE INSTALLED IN ACCORDANCE WITH ASTM F–900.
13. GATE FRAMES:
   A. FOR UP TO 4'–0", SINGLE PANEL OR 8'–0" DOUBLE PANEL GATES, GATE FRAMES SHALL BE FABRICATED FROM 1 ⅜" O.D. PIPE/TUBING FOR LARGER GATES, GATE FRAMES SHALL BE FABRICATED FROM 2" O.D. PIPE/TUBING. FRAMES OF SINGLE PANEL GATES FOR OPENINGS OF 4'–0" AND LARGER, AND PANELS OF DOUBLE PANEL GATES 8'–0" AND LARGER SHALL INCLUDE A DIAGONAL BRACE, AS SHOWN IN THE DETAIL ABOVE, WELDED TO THE GATE FRAME DURING FABRICATION. THE DIAGONAL BRACE SHALL BE 1 ⅜" O.D. PIPE/TUBING. GATE FRAME FABRICATION SHALL BE BY WELDING.
   B. SPECIFIC DETAILS, IF PROVIDED, SHALL TAKE PRECEDENCE OVER THESE NOTES IF AT VARIANCE.
   C. EACH SIDE OF A GATE FRAME SHALL HAVE THE FOLLOWING NUMBER OF EQUALLY SPACED CHAIN LINK BANDS OF AN INSIDE DIAMETER APPROPRIATE TO THE OUTSIDE DIAMETER OF THE SCHEDULE 40 GALVANIZED STEEL PIPE FROM WHICH THE SAID FRAME IS MANUFACTURED:
      FOR 7' HIGH GATE FRAME: 7 EACH CHAIN LINK BANDS PER GATE PANEL SIDE.
   D. DOUBLE GATE PANEL GATES SHALL BE PROVIDED WITH HOLD OPEN DEVICES.
   E. DOUBLE PANEL GATES SHALL BE PROVIDED WITH A CENTER DROP ROD AND A DROP ROD CATCHMENT PIPE SET IN CONCRETE AND LOCATED SUCH THAT WHEN THE DROP IS ENGAGED, THE GATE PANELS ARE ON THE SAME HORIZONTAL ALIGNMENT AS THE ADJACENT FENCE.
14. THE GATE LATCH SHALL BE THE MALLEABLE IRON FORK TYPE AS MANUFACTURED BY "HOOVER FENCE CO." AS THEIR "STRONG ARM" INDUSTRIAL GATE LATCH. PAD LOCKS WILL BE PROVIDED BY THE OWNER.
15. GATE HINGES SHALL BE BE WELDABLE STEEL, CAST STEEL, OR MALLEABLE IRON 180 DEGREE OFFSET INDUSTRIAL TYPE. THE HINGES SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. THE GATE(S) SHALL BE CAPABLE OF BEING CLOSED BY ONE PERSON. HINGES SHALL BE GALVANIZED.
16. POST FOUNDATIONS:
   A. CORNER POSTS, PULL POSTS, END POSTS, AND GATE POSTS SHALL EACH BE SET IN CONCRETE FOUNDATIONS AS FOLLOWS:

| POST SIZE (FENCE INDUSTRY O.D.) | DIAMETER | DEPTH |
|---|---|---|
| 2 ½ " O.D. | 12" | 3'–0" |
| 3" O.D. | 12" | 3'–6" |
| 3 ½ " O.D. | 15" | 3'–6" |
| 4" O.D. | 18" | 3'–6" |
| 4 ½ " O.D. | 18" | 4'–0" |

LARGER POSTS AND SPECIFIC CONDITIONS SHALL BE AS DETAILED, DETAILS SHALL TAKE PRECEDENCE OVER THESE THESE NOTES IF AT VARIANCE.

   B. ALL CONCRETE FOR POST FOUNDATIONS SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH AFTER 28 DAYS OF 4,000 PSI.
17. FENCE COATINGS:
   A. ALL FENCE COMPONENTS WILL BE BLACK VINYL COATED.



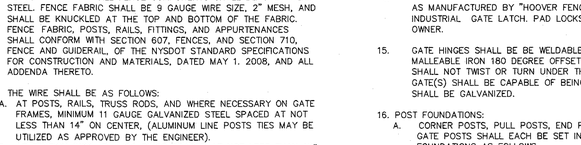

NOTES:
1. INSTALL ON EXISTING AREAS THAT HAVE A 10% SLOPE OR LESS.

## LEVEL SPREADER DETAIL

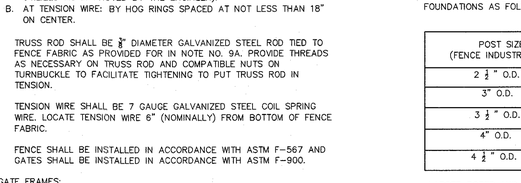
NOT TO SCALE

## CHAIN LINK SECURITY FENCE DETAIL

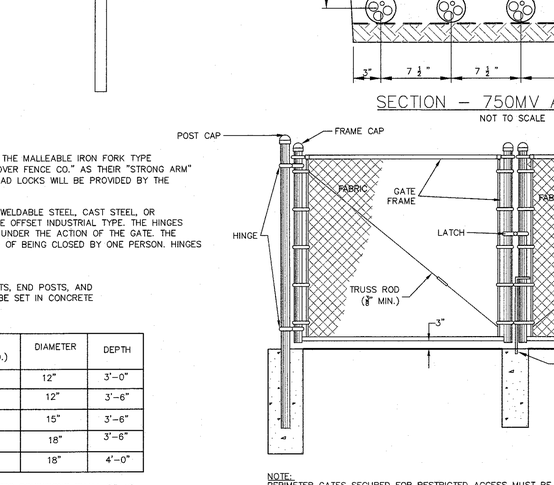
NOT TO SCALE



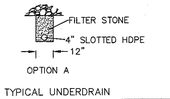

1 B512 TYPICAL SECTION AND PLAN – EXISTING TRAVELED WAY
1/2" = 1 FOOT




1A B512 SECTION AND PLAN – SECONDARY ROUTE OVER EXISTING TRAVELED WAY
1/2" = 1 FOOT

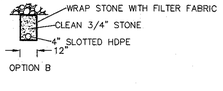



2 B512 TYPICAL SECTION AND PLAN – NEW ROAD THROUGH WOODS
1/2" = 1 FOOT




OPTION A

BOTTOM OF UNDERDRAIN TO BE AT LEAST 18" BELOW FINISHED GRADE.




OPTION B

3 B512 TYPICAL UNDERDRAIN
1/2" = 1 FOOT




NOTE:
PERIMETER GATES SECURED FOR RESTRICTED ACCESS MUST BE EQUIPPED WITH AN EMERGENCY SERVICES ENTRY SYSTEM. PROVIDE KNOX® EXTERIOR PADLOCK MODEL 3770. THE PADLOCK SHALL BE DAISY CHAINED WITH THE OWNER PADLOCK(S) PROVIDED.

## CHAIN LINK SECURITY FENCE DETAIL
## DOUBLE PANEL GATE

NOT TO SCALE

ROAD CONSTRUCTION PROCEDURES

A. CONSTRUCTION ON EXISTING CLEARED TRAVELED WAY

1. BLADE THE SURFACE TO REMOVE ALL GRASS AND VEGETATION, TO THE TOP OF THE SOIL SURFACE. MINIMIZE DISTURBANCE OF SOIL.
2. PLACE A FINE–GRADING LAYER OF SURFACE STONE OR SELECT SITE–BORROW SOIL TO FILL ANY LOW SPOTS THAT COULD TRAP WATER UNDER THE ROADWAY.
3. COMPACT THE SUBGRADE SURFACE WITH A SMOOTH–DRUM VIBRATORY SOIL ROLLER WITH A MINIMUM NOMINAL SIZE OF 10 TONS.
4. PLACE GEOSYNTHETIC REINFORCEMENT OVER THE PREPARED SUBGRADE SURFACE. LAP ALL SEAMS AT LEAST 12 INCHES.
5. PLACE BASE STONE OVER THE GEOSYNTHETIC LAYER, WITH A MINIMUM THICKNESS OF SIX INCHES, SHAPED TO PRODUCE A 4–INCH CROWN IN THE CENTER OF THE ROAD. IF THE MAXIMUM THICKNESS OF BASE STONE WILL EXCEED 16 INCHES, PLACE THE STONE IN TWO OR MORE EQUAL LIFTS.
6. COMPACT THE BASE STONE WITH AT LEAST SIX VIBRATORY PASSES OF THE ROLLER.
7. PLACE AND GRADE THE SURFACE STONE IN A 4–INCH LIFT OVER THE BASE STONE.
8. COMPACT THE SURFACE STONE WITH AT LEAST FOUR PASSES OF THE VIBRATORY ROLLER.

B. CONSTRUCTION ON NEWLY–CLEARED AREAS

1. FILL ALL BOULDER POCKETS, STUMP HOLES AND OTHER VOIDS WITH THOROUGHLY–COMPACTED BASE STONE OR SURFACE STONE, OR GOOD–QUALITY SITE BORROW SOIL.
2. PLACE A STABILIZING AND LEVELING COURSE OF BASE STONE OVER THE SUBGRADE SURFACE. THIS COURSE SHOULD BE AT LEAST FOUR INCHES THICK OVER HIGH SPOTS. IN LOCATIONS WHERE IT WILL EXCEED 12 INCHES THICKNESS, PLACE THIS COURSE IN MULTIPLE LIFTS.
3. COMPACT THE STABILIZING AND LEVELING COURSE WITH AT LEAST SIX PASSES OF A SINGLE–DRUM VIBRATORY SOIL ROLLER WITH A NOMINAL WEIGHT OF AT LEAST 7 TONS, EQUIPPED WITH A SHEEPS–FOOT OR DEEP TAMPING–FOOT DRUM.
4. FINE–GRADE THE SURFACE OF THE LEVELING COURSE. RE–COMPACT ANY RE–WORKED AREAS WITH A SMOOTH–DRUM ROLLER.
5. PLACE GEOSYNTHETIC REINFORCEMENT OVER THE STABILIZING AND LEVELING COURSE. LAP ALL SEAMS AT LEAST 12 INCHES.
6. PLACE BASE STONE OVER THE GEOSYNTHETIC LAYER, WITH A MINIMUM THICKNESS OF SIX INCHES, SHAPED TO PRODUCE A 4–INCH CROWN IN THE CENTER OF THE ROAD. IF THE MAXIMUM THICKNESS OF BASE STONE WILL EXCEED 16 INCHES, PLACE THE STONE IN TWO OR MORE EQUAL LIFTS.
7. COMPACT THE BASE STONE WITH AT LEAST SIX VIBRATORY PASSES OF A SINGLE–DRUM VIBRATORY ROLLER WITH A NOMINAL WEIGHT OF AT LEAST 10 TONS, EQUIPPED WITH A SMOOTH DRUM.
8. PLACE AND GRADE THE SURFACE STONE IN A 4–INCH LIFT OVER THE BASE STONE.
9. COMPACT THE SURFACE STONE WITH AT LEAST FOUR PASSES OF THE SMOOTH–DRUM VIBRATORY ROLLER.

C. MATERIALS

1. BASE STONE SHALL BE CRUSHED STONE, 1–1/2" TO 3" NOMINAL SIZE, CONTAINING SUFFICIENT FINES TO FILL THE VOIDS.

| BASE STONE Sieve | % Pass |
|---|---|
| 4" | 100 |
| 2" | 40–90 |
| 1/4" | 5–20 |
| #40 | 2–20 |
| #200 | 2–10 |

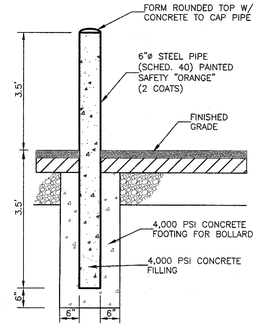
2. SURFACE STONE SHALL BE NYSDOT ITEM 304 TYPE 2, CRUSHED STONE FROM LEDGE ROCK.

| SURFACE STONE Sieve | %Pass |
|---|---|
| 2" | 100 |
| 1/4" | 25–60 |
| #40 | 5–40 |
| #200 | 0–10 |

3. FILTER STONE SHALL BE NYSDOT ITEM 733–20, TYPE 1 OR TYPE 2. FOR OPTION B, 3/4" STONE SHALL BE ASTM C33 #5, #6, #57 OR #67 SIZE, OR NYSDOT CA–2 OR ITEM 702 #2 SIZE.

| FILTER TYPE 1 Sieve | % Pass | FILTER TYPE 2 Sieve | %Pass |
|---|---|---|---|
| 1" | 100 | 1" | 100 |
| 1/2" | 30–100 | 1/2" | 100 |
| 1/4" | 0–30 | 1/4" | 20–100 |
| #10 | 0–10 | #10 | 0–15 |
| #20 | 0–5 | #20 | 0–5 |

4. GEOSYNTHETIC REINFORCEMENT TEN CATE MIRAFI 600X WOVEN REINFORCEMENT GEOTEXTILE OR EQUIVALENT.
5. FILTER FABRIC CARTHAGE MILLS "CARTHAGE 6%" WOVEN DRAINAGE GEOTEXTILE OF EQUIVALENT.

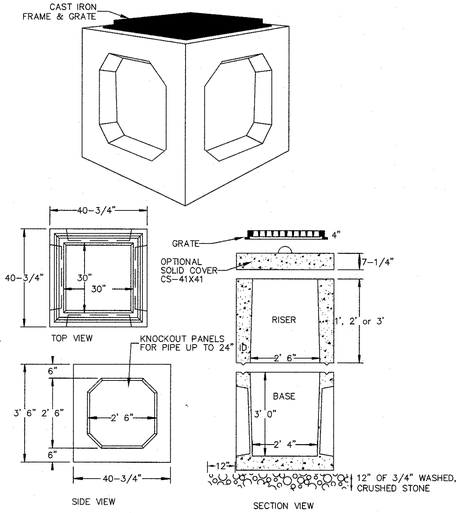



SECTION

NOTES:
1. HORIZONTAL DISTANCE FROM CENTERLINE TO CENTERLINE OF BOLLARDS SHALL BE 4'–0" MAXIMUM.
2. HORIZONTAL DISTANCE FROM BOLLARD TO OBJECT BEING PROTECTED SHALL BE 3'–6" MINIMUM.
3. SEE PLANS FOR BOLLARD LOCATIONS.

## STEEL & CONCRETE BOLLARD DETAIL

NOT TO SCALE




SPECIFICATIONS

CONCRETE MIN. STRENGTH: 4,000 PSI AT 28 DAYS
REINFORCEMENT: #4 REBAR / ASTM A615
AIR ENTRAINMENT: 5%
CONSTRUCTION JOINT: BUTYL RUBBER SEALANT
WEIGHTS: BASE =2,200 LBS, RISER = 950 LBS/FOOT
LOAD RATING: H20 / ASTM C857

## PRECAST 30"X30" CATCHBASIN FIELD INLET (CBFI)

NOT TO SCALE

| #REV. | BY | DATE | DESCRIPTION |
|---|---|---|---|
| | | | |
| | | | |
| #7 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #6 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #5 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #4 | MM | 2/23/21 | PER WS COMMENTS |
| #3 | MM | 1/11/21 | PER PB COMMENTS |
| #2 | MM | 10/30/20 | FINAL PLAN PREPARATION |
| #1 | MM | 1/24/20 | REVISION PER MHE 1/2/20 COMMENT LETTER |

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET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STATE OF NEW YORK · MICHAEL A. MORGANTE · 078577 · LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

AMENDED 5 MW AC SOLAR FARM SITE PLAN FOR
DARRIGO
84 LAKESIDE AVENUE
TOWN OF NEWBURGH – ORANGE COUNTY, N.Y.

CONSTRUCTION DETAILS

JOB#: 18–014
SCALE: AS NOTED
ORIGINAL DATE: 12–16–19
DRAWN: MM
CHECKED: MM
SHEET NO. 08 of 09

WARNING– IT IS A VIOLATION OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

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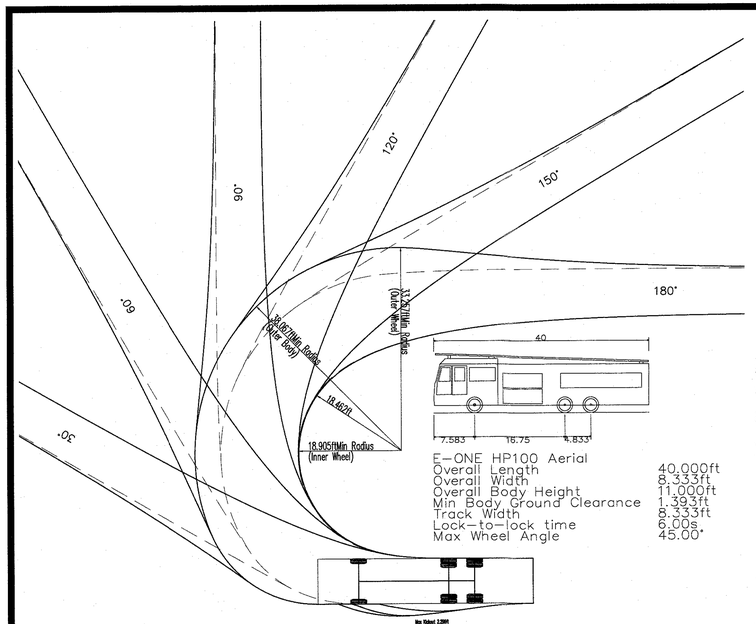
Dig Safely. New York Call811 before you dig




E-ONE HP100 Aerial

| | |
|---|---|
| Overall Length | 40.000ft |
| Overall Width | 8.333ft |
| Overall Body Height | 11.000ft |
| Min Body Ground Clearance | 1.393ft |
| Track Width | 8.333ft |
| Lock-to-lock time | 6.00s |
| Max Wheel Angle | 45.00° |

VEHICLE TEMPLATE: E-ONE HP100 AERIAL FIRETRUCK

PATTON ROAD

STONE WALL

ACCESS ROAD 03
20' WIDE GRAVEL ROAD

FIRETRUCK TURNAROUND

MEADOW HILL ROAD

MONARCH DRIVE

ACCESS ROAD 04
20' WIDE GRAVEL ROAD

FIRETRUCK TURNAROUND

ACCESS ROAD 02
20' WIDE GRAVEL ROAD

ACCESS ROAD 01
20' WIDE GRAVEL ROAD

FIRETRUCK TURNAROUND

FIRETRUCK TURNAROUND

INTERSTATE 84

TEAL COURT

STONE WALL (GENERALLY ON LINE)

LEGEND:

- EXISTING MAJOR CONTOUR (590)
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING IRON ROD FOUND
- EXISTING LIGHT POLE
- EXISTING STONE WALL
- EXISTING TREELINE
- EXISTING GRAVEL DRIVEWAY
- EXISTING GUARDRAIL
- EXISTING TREES
- EXISTING SEWER MANHOLE
- EXISTING WETLAND
- PROPOSED SOLAR
- PROPOSED GRAVEL ACCESS ROAD

NAD83

SCALE
80 0 40 80 160
SCALE FEET

TURNING DIAGRAMS
SCALE: 1"=80'

| #REV. | BY | DATE | DESCRIPTION |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| #6 | MM | 1/18/24 | PHASING PLAN PREPARATION |
| #5 | MM | 10/12/23 | DEC HW FENCE REMOVED ON PROPOSED SOLAR FARM PLANS |
| #4 | MM | 3/16/21 | PER 3/16/21 SITE VISIT |
| #3 | MM | 2/23/21 | PER WS COMMENTS |
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| #1 | MM | 10/30/20 | FINAL PLAN PREPARATION |

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

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DARRIGO
84 LAKESIDE AVENUE
TOWN OF NEWBURGH - ORANGE COUNTY, N.Y.

TURNING DIAGRAMS

| | |
|---|---|
| JOB#: | 18-014 |
| SCALE: | AS NOTED |
| ORIGINAL DATE: | 12-16-19 |
| DRAWN: | MM |
| CHECKED: | MM |
| SHEET NO. | 09 of 09 |

## PLANTING NOTES:

1. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMAL GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. PROVIDE QUALITY, SIZE, GENUS, SPECIES,VARIETY OF TREES AND SHRUBS INDICATED, AND ROOT BALL SIZE COMPLYING WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK." ALL PLANTS SHOULD BE NURSERY GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
2. PLANT SIZES: MEASURE TREES AND SHRUBS ACCORDING TO ANSI Z60.1 WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVEGROUND FOR TREES UP TO 4-INCH CALIPER SIZE, MEASURE MAIN BODY OF TREE OR SHRUB FOR HEIGHT AND SPREAD; DO NOT MEASURE BRANCHES OR ROOTS TIP-TO-TIP.
3. ALL CONTAINER GROWN PLANTS SHALL BE SIZED ACCORDING TO ANSI Z60.1 FOR TYPE AND SIZE OF PLANT REQUIRED. PLANTS SHALL BE PREMIUM QUALITY, APPEAR 'FULL', OR 'HEAVY' WITHIN THEIR CONTAINER, AND BE REPRESENTATIVE OF THE CONTAINER SIZE SPECIFIED. PLANTS DEEMED TO BE SUBSTANDARD IN SIZE BY THE LANDSCAPE ARCHITECT WILL BE REJECTED.
4. ALL NEW PLANTS TO BE BALLED AND BURLAPPED OR CONTAINER GROWN UNLESS OTHERWISE NOTED ON PLANT LIST.
5. TREES SHOULD BE FRESHLY DUG DURING THE SEASON OF PLANTING. PLANTS KNOWN AS FALL DIG HAZARDS SHALL BE DUG IN THE SPRING ONLY.
6. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS.
7. IN GENERAL, PLANT SPECIES SUBSTITUTIONS WILL NOT BE ACCEPTED. IF SPECIFIED MATERIAL IS NOT OBTAINABLE, CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO LANDSCAPE ARCHITECT ALONG WITH PROPOSED SUBSTITUTION. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, SIZE, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
8. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO INSPECT TREES AND SHRUBS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS, INJURIES AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. CONTRACTOR SHALL REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE.
9. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT.
10. THE CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL PROPOSED PLANT MATERIAL AND PLANT BEDS FOR APPROVAL BY THE DEVELOPER OR DEVELOPER'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF PLANTING.
11. INSTALLED PLANTS SHALL BEAR THE SAME RELATIONSHIP TO PROPOSED GRADE AS THEY BORE TO PREVIOUS GRADE. NO TREES SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING.
12. CONTRACTOR SHALL PROVIDE LONG LASTING, SLOW RELEASE STARTER FERTILIZER IN EACH PLANTING PIT FOR TREES, SHRUBS AND PERENNIALS.
13. ALL PLANT BEDS SHALL RECEIVE THREE INCHES (3") OF SHREDDED BARK MULCH. MULCH SHALL BE FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS, CONSISTING OF DOUBLE HAMMERED SHREDDED BARK MULCH COMPRISED OF EITHER HARDWOOD OR SOFTWOOD SHREDDED BARK. SHREDDED BARK MULCH SHALL NOT EXCEED 3" IN GREATEST DIMENSION, AND SHALL BE DARK BROWN IN COLOR.
14. PLANTS SHALL BE DELIVERED ONLY AS THEY CAN BE INSTALLED IN REASONABLE TIME. ALL PLANTS ARE SUBJECTED TO INSPECTION AT DELIVERY BY THE LANDSCAPE ARCHITECT / OWNER'S REPRESENTATIVE.
15. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE PLANT LIST, THE PLANTING PLAN SHALL GOVERN.
16. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE FOR A MINIMUM 30-DAY MONITORING PERIOD AFTER NOTIFICATION OF SUBSTANTIAL COMPLETION, AND UNTIL FINAL ACCEPTANCE, WHICHEVER IS GREATER. MAINTENANCE INCLUDES PRUNING, WEEDING, WATERING, FERTILIZATION, AND RE-SEEDING AS NECESSARY.
17. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACT MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED ORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND PLANTINGS.
18. FOLLOWING THE ISSUANCE OF THE CERTIFICATE OF SUBSTANTIAL COMPLETION TO THE CONTRACTOR, THE CONTRACTOR SHALL MAINTAIN THE PLANTS FOR THE MAINTENANCE PERIOD SPECIFIED IN THIS SECTION.
19. ACCEPTANCE STANDARDS AT END OF THE MAINTENANCE PERIOD:

    19.1. PLANTS SHALL BE FREE OF FROST CRACKS; SUN SCALD; DAMAGE DUE TO INSECTS, PESTS, AND DISEASE; STRUCTURAL DEFECTS; AND DAMAGE RESULTING FROM MACHINERY OR TOOLS. ALL PLANTS REGARDLESS OF THE SEASON OF REVIEW SHALL HAVE A MINIMUM OF 75 PERCENT HEALTHY, BALANCED BRANCHING STRUCTURE WITH A HEALTHY TERMINAL LEADER(S) WITH VIABLE TERMINAL BUD(S). TREES SHALL BE PLUMB AND SHOW NO SIGNS OF UNEVEN SETTLING OR LEANING.

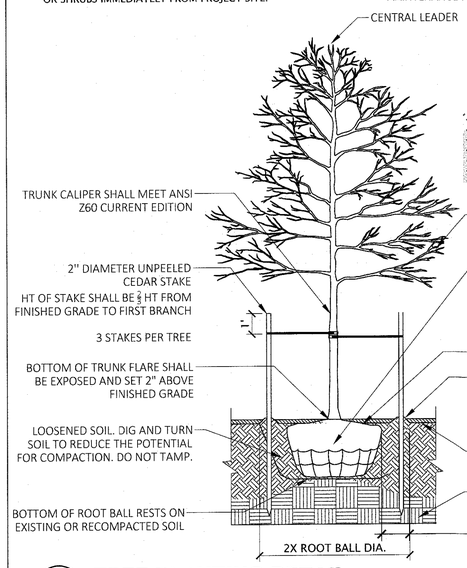
    19.2. LAWN AREAS SHALL HAVE A HEALTHY, UNIFORM STAND OF GRASS FREE OF WEEDS, SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90% OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5"X5".
20. GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL TO REMAIN ALIVE AND BE IN A HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF TWO YEARS AFTER FINAL ACCEPTANCE OF PLANTING WORK, AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY WORK. CONTRACTOR SHALL REPLACE ALL PLANTS THAT ARE MORE THAN 25% DEAD OR, AS DETERMINED BY THE LANDSCAPE ARCHITECT, ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION. CONTRACTOR SHALL BEAR THE COST OF COMPLETE REPLACEMENT(S). REPLACEMENTS SHALL BE OF THE SAME SIZE AND SPECIES AS SPECIFIED ON THE PLANTING LIST.
21. SEED MIXES TO BE BROADCAST SPREAD: FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES. PROVIDE SEED MIXTURE COMPOSED OF SPECIES, PROPORTIONS AND MINIMUM PERCENTAGES OF PURITY, GERMINATION, AND MAXIMUM PERCENTAGE OF WEED SEED, AS FOLLOWS:

    Erosion Control & Revegetation for Sloped Areas:

    Ernst Seed Mix ERNMX-181 (Native Steep Slope Mix w/Annual Ryegrass) or approved equal Seeding Rate: 60 lb per acre, or 1.5 lb per 1,000 sq ft

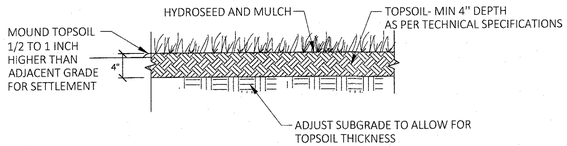
    Buffer Area along I-84 and East Property Boundary:

    Ernst Seed Mix ERNMX-111 (Ernst Native Habitat for Strip Mines Mix) or approved equal Seeding Rate: 20 lb per acre
22. ALL SOIL AND TOPSOIL SHALL REMAIN ON SITE AND WILL NOT BE TRUCKED OFF SITE. REFER TO THE SOIL MANAGEMENT PLAN FOR THE DEC REMEDIATION AREA REQUIREMENTS.




1 / L110 **TREE PLANTING DETAIL**

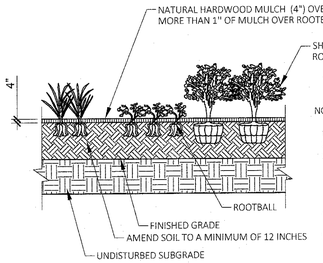
SCALE: NTS
CROSS REFERENCE: NONE




NOTES:
1. REFERENCE PLAN SHEET FOR LIMITS OF SEED MIX. SEED MIXES VARY BETWEEN LAWN AND WILDFLOWER ESTABLISHMENT.

2 / L110 **LAWN AND WILDFLOWER SEEDING DETAIL**

SCALE: NTS
CROSS REFERENCE: NONE




NOTES:
1. SET ALL PLANTS TO SAME LEVEL AS PREVIOUSLY GROWING.
2. PRUNE OUT ALL DEAD WOOD & SHAPE PLANTS AS REQUIRED.
3. PRIOR TO PLACING MULCH, LIGHTLY TAMP SOIL AROUND ROOTBALL IN 6" LIFTS TO BRACE PLANT MATERIAL. DO NOT OVER COMPACT. WHEN THE PLANTING HOLE HAS BEEN FILLED, POUR WATER AROUND THE ROOTBALL TO SETTLE THE SOIL.
4. ALL PLANTS TO BE PLANTED IN CONTINUOUS BEDS. NOT IN INDIVIDUAL PITS.
5. ALL PLANTING BEDS SHALL HAVE A 90 DEGREE MACHINE CUT LAWN EDGE, ALLOWING MULCH TO TAPER DOWN 2 TO 3 INCHES BELOW THE LAWN SURFACE.

3 / L110 **SHRUB AND PERRENIAL PLANTING DETAIL**

SCALE: NTS
CROSS REFERENCE: NONE




BAR SCALE 0 50 100 200 — 1 inch = 100ft.

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PROJECT

# 5 MW AC SOLAR

FARM SITE PLAN

JANUARY 22, 2024

CLIENT

DARRIGO
84 LAKESIDE AVENUE
NEWBURGH, NY

| MARK | DATE | DESCRIPTION |
|---|---|---|
| REV#2 | | |
| REV#1 | | |
| CD | | |
| DD | | |
| SD | | |

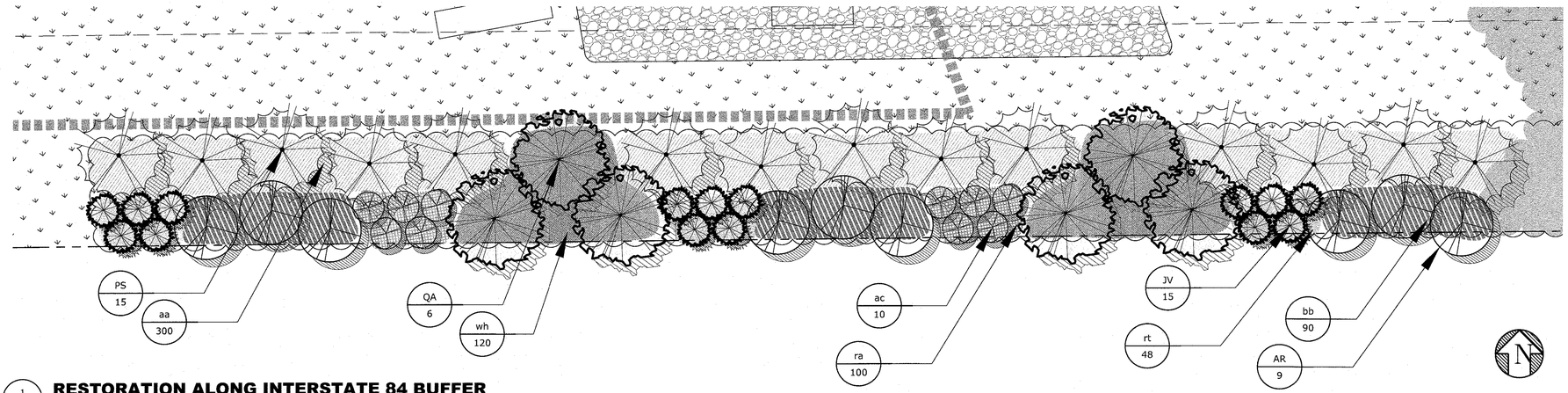
PROJECT NO: 33-23
DRAWING ID:
DRAWN BY: RG CHK'D BY: EM
SCALE:

SHEET TITLE

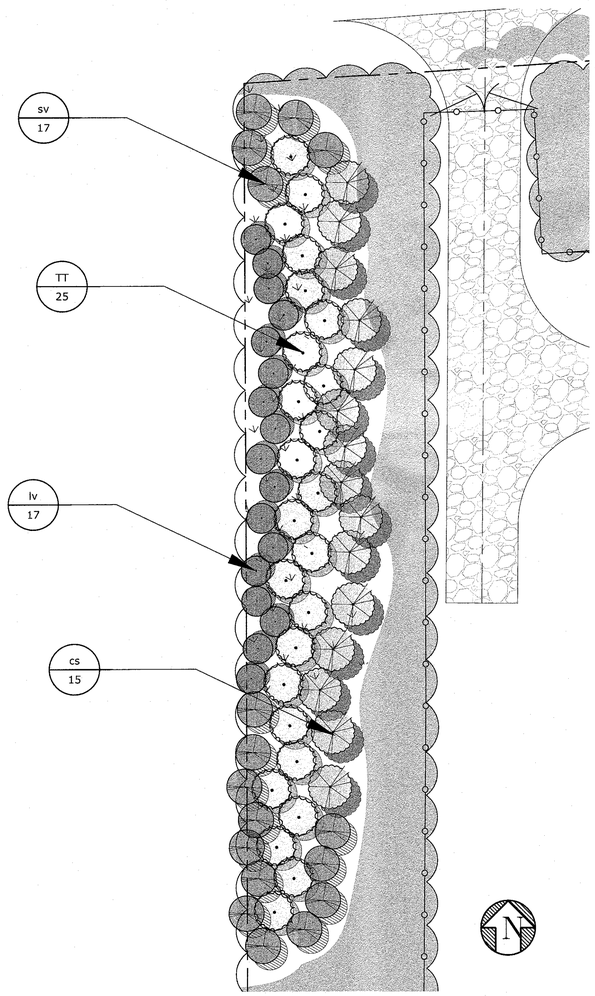
LANDSCAPE PLAN

L-110

SHEET 1 OF 4




1 / L111 **RESTORATION ALONG INTERSTATE 84 BUFFER**
SCALE: 1" = 30'
CROSS REFERENCE: NONE




2 / L111 **SCREENING AT RESIDENCE ON PATTON ROAD**
SCALE: 1" = 20'
CROSS REFERENCE: NONE

| # | Abbr. | Botanical Name | Common Name | Mature Height | Planting Size | Spacing |
|---|---|---|---|---|---|---|
| | | | Trees | | | |
| 9 | AR | Acer rubrum | Red Maple | 40-75' | #15 Cont., 8' height min. | As shown on plans |
| 55 | JV | Juniperus virginiana | Eastern Red Cedar | 30' | #15 Cont., 8' height min. | As shown on plans |
| 8 | QA | Quercus alba | White Oak | 50-80' | 2-2.5'' Cal. B&B, 12' hieght min. | As shown on plans |
| 15 | PS | Pinus strobus | White Pine | 50-80' | 6-8' Height, B&B | As shown on plans |
| 25 | TT | Thuja occidentalis 'Techny' | Techny Arborvitae | 12'-15' | 7-8' Height, B&B | As shown on plans |
| | | | | | | |
| | | | Shrubs | | | |
| 53 | ac | Amelanchier X grandiflora | Autumn Brillance Serviceberry | 6-20' | #7 MS, 6-8' height min. | As shown on plans |
| 300 | aa | Aronia arbutifolia | Red Chokeberry | 5-10' | #3, 36'' height min. | 5' O.C., As Shown |
| 450 | ra | Rhus aromatica | Fragrant Sumac | 2' | #3 Cont., 36'' height min. | As shown on plans |
| 90 | bb | Aesculus parviflora | Bottlebrush Buckeye | 8-12' | #3 Cont., 36'' height min. | As shown on plans |
| 120 | wh | Hamamalis virginiana | Witchhazel | 8-10' | #3 Cont., 36'' height min. | As shown on plans |
| 25 | cs | Cornus sericea | Red Twig Dogwood | 6-9' | #3 Cont., 36'' height min. | 5' O.C., As Shown |
| 29 | sv | Spirea x vanhouttei | Bridal Wreath Spirea | 5-8' | #3 Cont., 36'' height min. | 5' O.C., As Shown |
| 13 | iv | Ilex verticillata 'Winter Gold' | Winterberry 'Winter Gold' | 5-8' | #3 Cont., 36'' height min. | 5' O.C., As Shown |
| 4 | ivj | Ilex verticillata 'Jim Dandy' | Winterberry 'Jim Dandy' | 3-6' | #3 Cont., 36'' height min. | 5' O.C., As Shown |
| 6 | tm | Ilex glabra | Ink Berry | 4-6' | #3 Cont., 36 height min. | As shown on plans |
| 176 | rt | Rhus typhina | Staghorn Sumac | 15-25' | #3 Cont., 36'' height min. | 8' O.C., As Shown |
| 26 | fg | Fotherfilla gardenii | Dwarf Fothergilla | 3-4' | #3 Cont., 36'' height min. | As shown on plans |
| | | | | | | |
| | | | PERRENNIALS | | | |
| 18 | ca | Calamagrostis x acutifolia 'Karl Forester' | Karl Forester Feather Reed Grass | 4-5' | #2 Cont., 24'' height min. | As shown on plans |
| 10 | er | Panicum virgatum Cloud Nine | Cloud Nine Switch Grass | 5-7' | #2 Cont., 24'' height min. | As shown on plans |
| 68 | ss | Sedum spectabile ' Autumn Joy' | Autumn Joy Sedum | 18-24'' | #1 Cont., 12'' height min. | As shown on plans |

3 / L111 **PLANTING SCHEDULE**
SCALE: NTS
CROSS REFERENCE: NONE

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5 MW AC SOLAR
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PROJECT NO: 33-23
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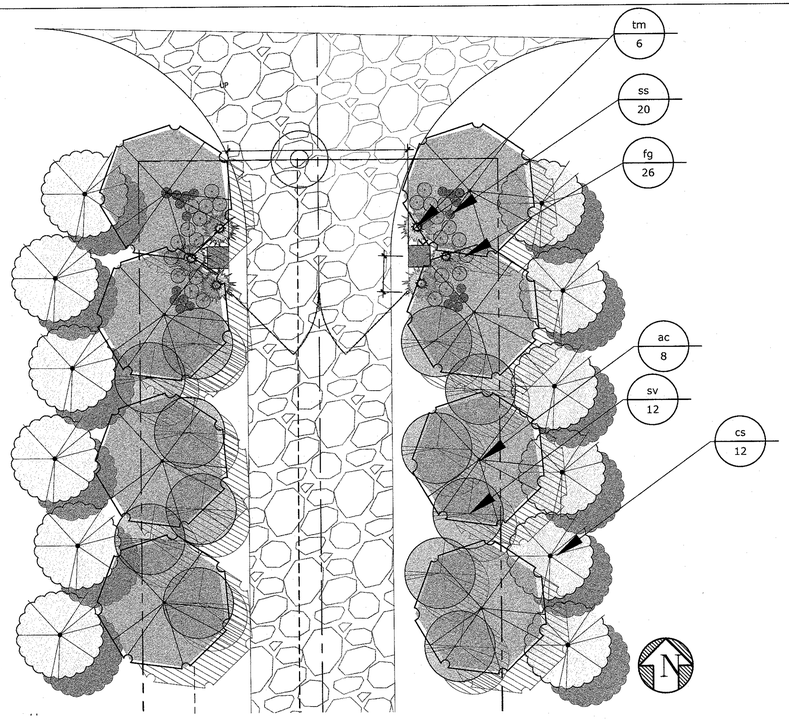
DRAWN BY: RG CHK'D BY: EM
SCALE:

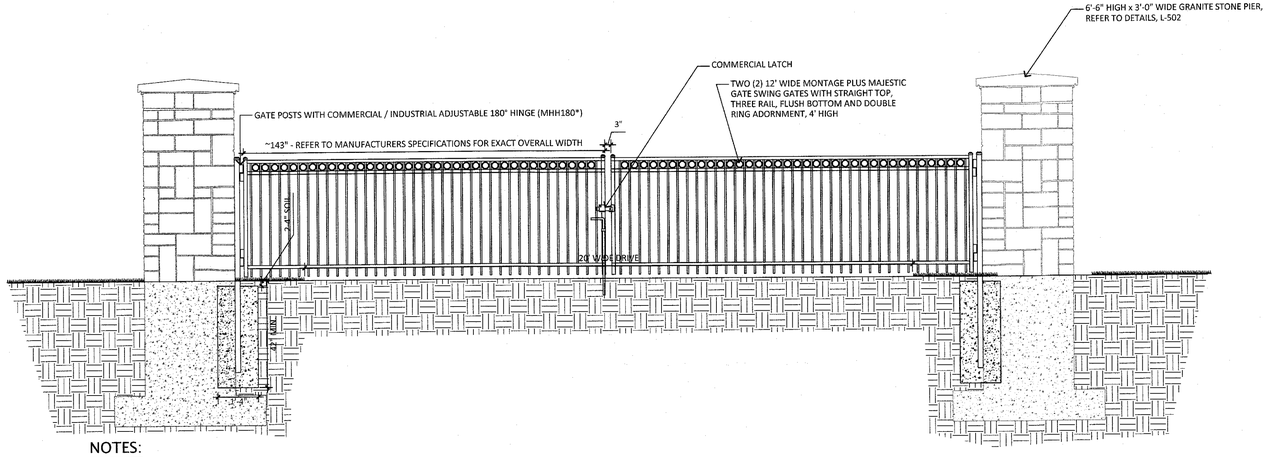
SHEET TITLE
LANDSCAPE PLAN ENLARGEMENTS

L-111

SHEET 2 OF 4



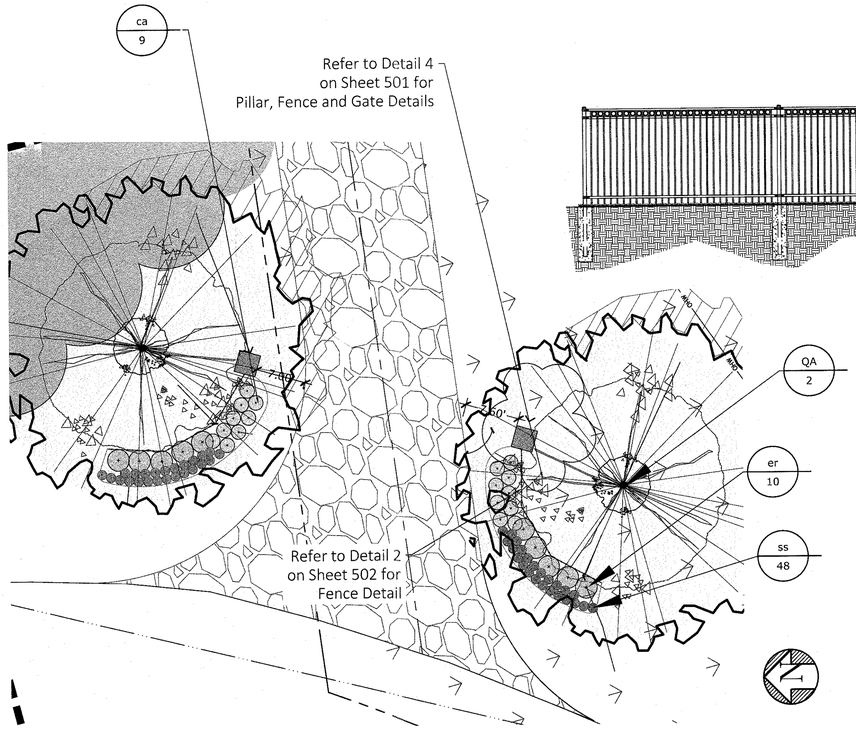

1 / L501 **MEADOW HILL ROAD ENTRANCE PLANTING**
SCALE: 1" = 10'
CROSS REFERENCE: NONE



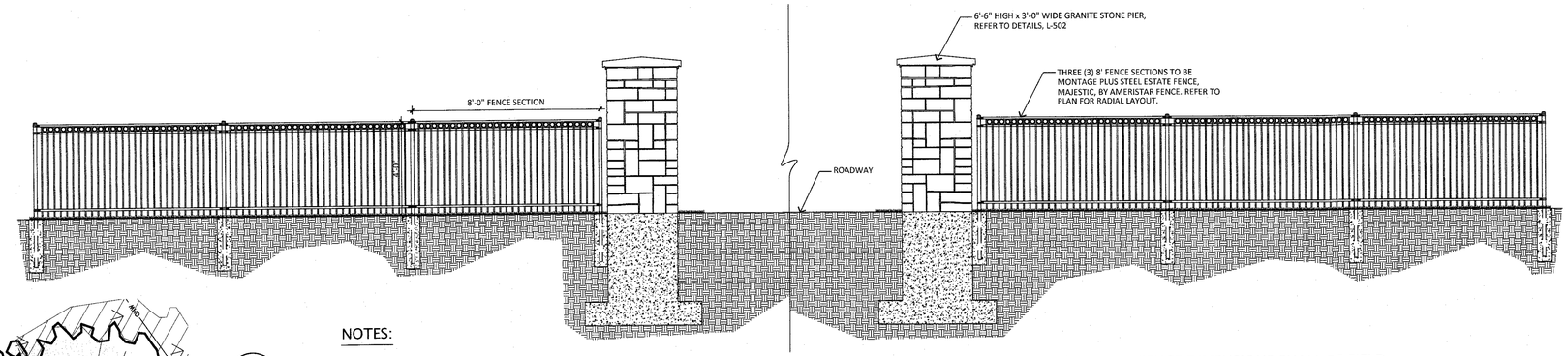

NOTES:

1. GATES ARE A DELEGATED DESIGN ITEM. DIMENSIONS ARE PROVIDED FOR BIDDING INFORMATION ONLY. ALL GATE DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO FABRICATION.
2. THICKNESS OF ALL GATE POSTS AND RAILS ARE MINIMUM REQUIREMENTS.
3. MINIMUM CLEAR OPENING FOR GATE IS 24'.
4. INSTALL BARRIER FATE AND POSTS AS PER MANUFACTUERS SPECIFICATIONS.
5. PERIMETER GATES SECURED FOR RESTRICTED ACCESS MUST BE EQUIPPED WITH AN EMERGENCY SERVICES RAPID ENTRY SYSTEM. PROVIDE KNOX EXTERIOR PADLOCK MODEL 3770. THE KNOX PADLOCK SHALLBE DAISY CHAINED WITH THE OWNER PROVIDED PADLOCKS.

2 / L501 **MEADOW HILL ROAD ENTRANCE GATE ELEVATION**
SCALE: 1" = 30'
CROSS REFERENCE: NONE




3 / L501 **LAKESIDE ROAD ENTRANCE PLANTING**
SCALE: 1" = 10'
CROSS REFERENCE: NONE




NOTES:

1. FENCES ARE A DELEGATED DESIGN ITEM. DIMENSIONS ARE PROVIDED FOR BIDDING INFOMRATION ONLY. ALL FENCE DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE PRIOR TO FABRICATION.
2. THICKNESS OF ALL FENCE POSTS AND RAILS ARE MINIMUM REQUIREMENTS.
3. INSTALL FENCE AND POSTS AS PER MANUFACTURERS SPECIFICATIONS.

4 / L501 **LAKESIDE ROAD ENTRANCE GATE ELEVATION**
SCALE: 1" = 30'
CROSS REFERENCE: NONE

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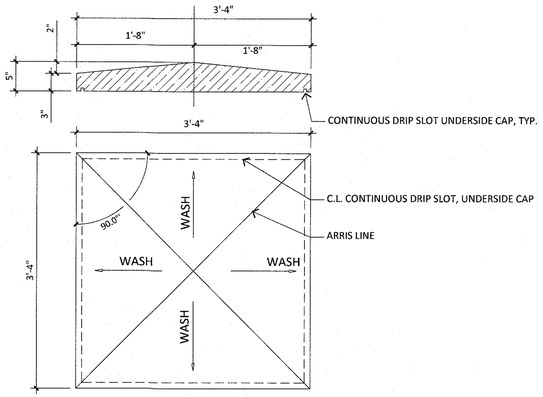
DRAWN BY: RG CHK'D BY: EM
SCALE:
SHEET TITLE
ENTRANCE
PIER
ELEVATIONS &
PLANS

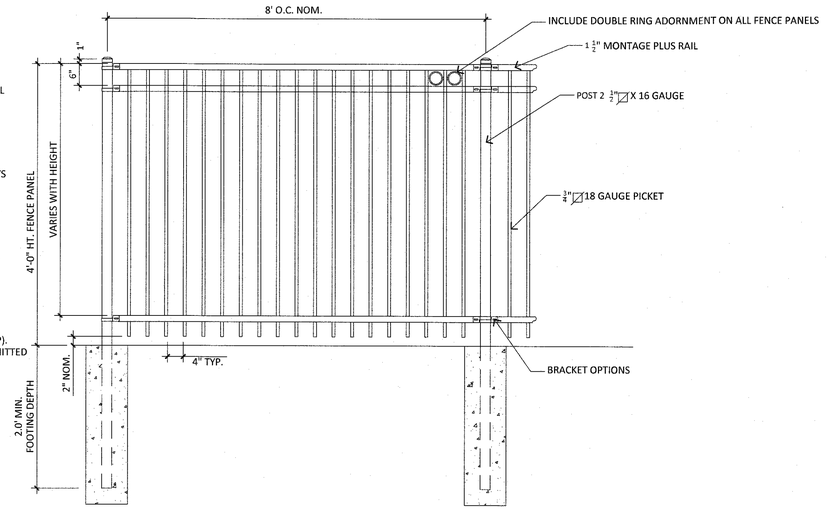
L-501
SHEET 3 OF 4




NATIVE STONE GRANITE CAP

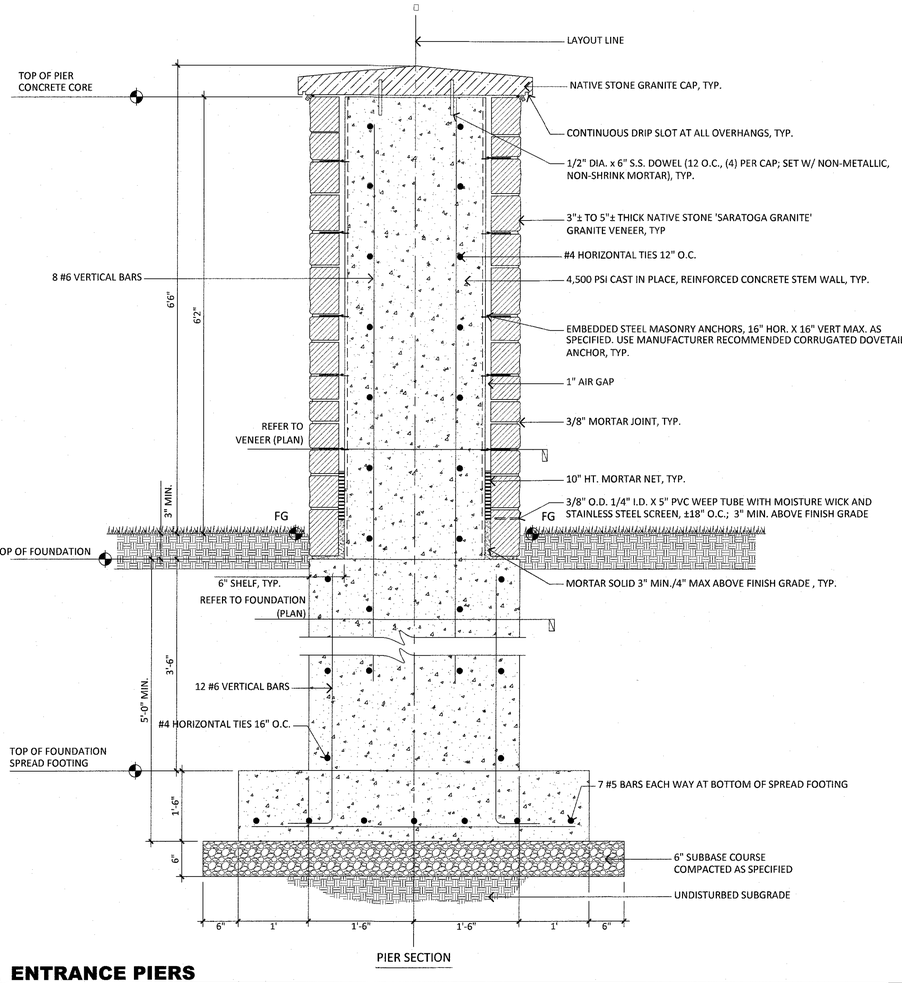
NOTES:

1. FENCES ARE A DELEGATED DESIGN ITEM. DIMENSIONS ARE PROVIDED FOR BIDDING INFORMATION ONLY. ALL GATE DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO FABRICATION.
2. BASIS OF DESIGN SHALL BE MONTAGE PLUS STEEL ESTATE FENCE, MAJESTIC, BY AMERISTAR FENCE.
3. THICKNESS OF ALL GATE POSTS, RAILS, AND PICKETS ARE MINIMUM REQUIREMENTS.
4. ALL METAL FRAMES, PICKETS, POSTS, RAILS, AND HARDWARE SHALL CONSIST OF GALVANIZED STEEL WITH GAUGE SIZES AS INDICATED PER THE MANUFACTURES RECOMMENDATION
5. ALL STEEL MEMBERS AND HARDWARE SHALL BE HOT-DIPPED GALVANIZED WITH A BLACK POWDER COATED FINISH.
6. POST SIZE DEPENDS ON FENCE HEIGHT, WEIGHT AND WIND LOADS. SEE MONTAGE PLUS SPECIFICATIONS FOR POST SIZING CHART.
7. INCLUDE DOUBLE RING ADORNMENT. THIRD RAIL REQUIRED FOR DOUBLE RINGS
7. FENCE SHALL BE POWDER COATED BLACK (IN SHOP). ONLY MINOR TOUCH-UP PAINTING SHALL BE PERMITTED ON SITE.




2 / L502 **DECORATIVE METAL FENCE PANEL**

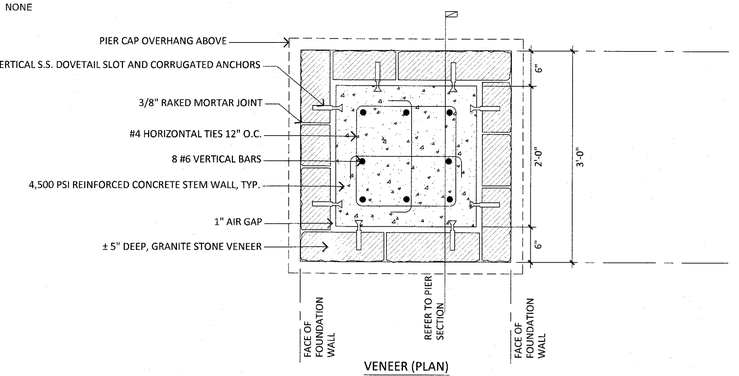
SCALE: NTS
CROSS REFERENCE: NONE



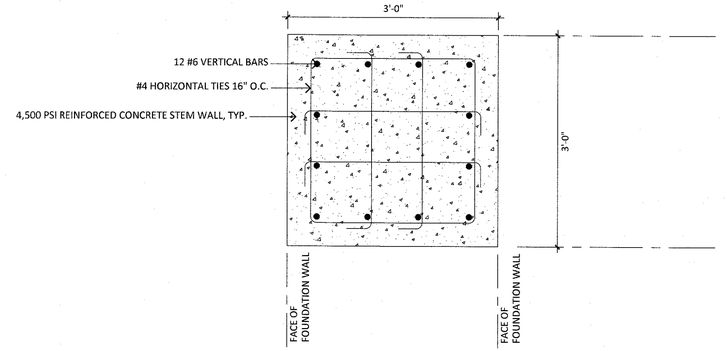

PIER SECTION

1 / L502 **ENTRANCE PIERS**

SCALE: NTS
CROSS REFERENCE: NONE




VENEER (PLAN)




FOUNDATION (PLAN)

PROTECTION OF STONE MASONRY NOTE:

DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK.
ANY WORK THAT IS NOT PROTECTED AND BECOMES WETTED FROM INCIDENT MOISTURE SHALL BE REMOVED IN ITS ENTIRETY BEFORE FURTHER WORK CONTINUES.

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SCALE:

SHEET TITLE

ENTRANCE FEATURE DETAILS

L-502

SHEET 4 OF 4