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Planning Dept.

NONRESIDENTIAL SITE PLAN APPLICATION**City of Rochester, New Hampshire**

[office use only. Check # _____ Amount \$ _____ Date paid _____]

Date: Feb. 29, 2016 Is a conditional use needed? Yes: _____ No: _____ Unclear: _____
(If so, we encourage you to submit an application as soon as possible.)

Property informationTax map #: 215; Lot #'s): 59; Zoning district: IndustrialProperty address/location: 100 Jarvis AvenueName of project (if applicable): Jarvis Cutting Tools, Inc. Solar ArraySize of site: 36.5 acres; overlay zoning district(s)? Conservation Overlay**Property owner**Name (include name of individual): Jarvis Cutting Tools, Inc.Mailing address: 100 Jarvis Avenue; Rochester, NH 03868Telephone #: 603-332-9000 Email: jpier@jarviscuttingtools.com**Applicant/developer** (if different from property owner)Name (include name of individual): Same as Property Owner

Mailing address: _____

Telephone #: _____ Email: _____

Engineer/designerName (include name of individual): Norway Plains Associates, Inc. - Scott A. Lawler, PEMailing address: PO Box 249; Rochester, NH 03866-0249Telephone #: 603 335-3948 Fax #: 603 332-0098Email address: slawler@norwayplains.com Professional license #: 10026**Proposed activity** (check all that apply)New building(s): _____ Site development (other structures, parking, utilities, etc.): X

Addition(s) onto existing building(s): _____ Demolition: _____ Change of use: _____

(Continued Nonresidential Site Plan application Tax Map: 215 Lot: 59 Zone I)

Describe proposed activity/use: The proposal is to construct a 500 kW-AC ground mounted solar array on the parcel to supply electricity to the manufacturing facility. The array will contain 2,040 solar panels mounted on a pile driven rack system.

Describe existing conditions/use (vacant land?): The area where the solar array will be constructed is wooded. The parcel is developed with an existing manufacturing business and associated parking and loading docks.

Utility information

City water? yes X no ; How far is City water from the site?

City sewer? yes no X; How far is City sewer from the site? 0.5 miles

If City water, what are the estimated total daily needs? n/a gallons per day

If City water, is it proposed for anything other than domestic purposes? yes no X

If City sewer, do you plan to discharge anything other than domestic waste? yes no

Where will stormwater be discharged? Large wetlands complex after an infiltration basin and vegetated buffers

Building information

Type of building(s): Steel Framed

Building height: 20' +/- Finished floor elevation: 237.7'

Other information

parking spaces: existing: total proposed: n/a; Are there pertinent covenants?

Number of cubic yards of earth being removed from the site None

Number of existing employees: 75; number of proposed employees total:

Check any that are proposed: variance ; special exception ; conditional use

Wetlands: Is any fill proposed? No; area to be filled: ; buffer impact?

Proposed <u>post-development</u> disposition of site (should total 100%)		
	Square footage	% overall site
Building footprint(s) – give for each building	30,150	1.9 %
Parking and vehicle circulation	58,810	3.7%
Planted/landscaped areas (excluding drainage)	356,200	16.1%
Natural/undisturbed areas (excluding wetlands)	871,100	54.8%
Wetlands	145,000	9.1%
Other – drainage structures, outside storage, etc.	228,950	14.4%

(Continued Nonresidential Site Plan application Tax Map: 215 Lot: 59 Zone I)

Comments

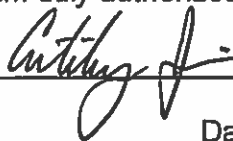
Please feel free to add any comments, additional information, or requests for waivers here:

Submission of application

This application must be signed by the property owner, applicant/developer (if different from property owner), and/or the agent.

I (we) hereby submit this Site Plan application to the City of Rochester Planning Board pursuant to the City of Rochester Site Plan Regulations and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

Signature of property owner: _____



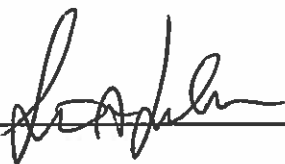
Date: _____

3/2/2016

Signature of applicant/developer: _____

Date: _____

Signature of agent: _____



Date: _____

3/2/2016

Authorization to enter subject property

I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.

Signature of property owner: _____



3/2/2016

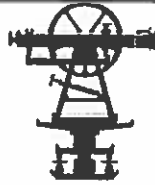
Date: _____

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NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS • SEPTIC SYSTEM DESIGNERS • ENGINEERS • TRANSPORTATION PLANNERS

P.O. Box 249
Continental Blvd. (03867)
Rochester, NH 03866-0249
Fax (603)332-0098
Phone (603) 335-3948 / (800) 479-3948
slawler@norwayplains.com



P. O. Box 268
31 Mooney St.
Alton, NH 03809
www.norwayplains.com
Phone & Fax (603) 875-3948
rtetreault@norwayplains.com

March 4, 2016

Seth Creighton, Chief Planner
Department of Planning and Development
Second Floor, City Hall
31 Wakefield Street
Rochester, NH 03867-1917

Re: Non- Residential Site Plan Application; Jarvis Cutting Tools - Map 215, Lot 59.

Dear Mr. Creighton:

On behalf of Jarvis Cutting Tools, we hereby submit plans and nonresidential site plan application for a proposed ground mounted solar array. The proposed solar array will provide power to the existing manufacturing business. Jarvis Cutting Tools is a fifth-generation family owned business that was founded in 1901 and has been in Rochester since 1967. Jarvis manufactures a wide variety of taps from only a couple millimeters in diameter to several inches. Nearly the entire process from raw stock to finished product is completed in Rochester by our valuable employees who work 24 hours per day, five days per week. The products go out to many different industries, including heavy machinery, aerospace, automotive, construction and everything in between.

The 36.5 acre property is owned by Jarvis Cutting Tools and located within the Industrial zoning district. The parcel is currently developed with a 30,150 square foot manufacturing building with associated parking and loading facilities.

The proposed ground mounted solar arrays will be constructed in the wooded area north of the existing business and field. The 500 kW-AC solar array will consist of 2,040 solar panels which will be mounted pile rack system. Each of the 320 Watt-Peak solar panels will be set at a 25 degree angle to best optimize the solar energy. The bottom of the panels will be approximately 42 inches off the ground with the top of the upper panel being approximately 10 feet above grade.

The project will generate approximate 875,000 kWh annually, which will be used by the owners. Jarvis Cutting Tools will take advantage of net metering during low demands within the manufacturing business, such as weekends and holidays. The addition of solar panels demonstrates the Jarvis commitment to sustainability while continuing to be at the cutting edge of new technologies and a strong Rochester based company.

This project would not be feasible without being awarded a rebate from the NH Public Utilities Commission (PUC) C & I Solar Rebate Program. However, in order to claim the rebate, the project must be completed within 6 months of being awarded, which is August 10, 2016.

A gravel drive will be constructed to the entrance of the solar array to provide access to the panels for maintenance. Underground conduits will contain power and data wires from the array to the existing building. A chain link fence will be constructed around the entire solar array as a safety measure and protection of the panels.

The construction of the solar array will require the area under the panel to be logged, grubbed and graded as depicted on the plans. Once the panels are installed the area will be seeded and mulched. The area outside the

proposed fence will be logged to remove trees that might cast shadows on the panels. The stumps from these trees will remain and the existing ground cover will remain.

There will be virtually no changes to the stormwater runoff from the site, since there will be very little additional impervious surfaces from the development. The panels and racking systems are considered to not add any significant impervious surfaces, since the rain water falling on the panels will fall between the gaps and directly onto the vegetated ground below them. Grading of the site will maintain the existing drainage patterns, generally flowing from south to north. Located at the northern edge of the parcel, adjacent to NH Route 202, is a large wetlands complex. Erosion and sedimentation controls, silt fence and stabilized construction entrance, will be installed to ensure there are no environmental impacts during construction.

Wetlands in the vicinity of the proposed development were delineated by Greg Howard, CWS from North Country Soil Services in October 2015. Wetlands adjacent to the existing building were delineated by David Allain, CWS from Round Pond Soil Survey in August 2011. There are two very small pockets of wetlands near the proposed array, in which there will be a minimum of a 34 foot buffer to. Otherwise, the panels will be more than 50 feet from any other jurisdictional wetlands.

Due to the size of the development, the proposed project will require a Construction General Permit with the EPA for disturbance of more than an acre. The Notice of Intent has already been filed with the EPA and the SWPPP has been created.

We look forward to discussing this project with staff and the Planning Board. Thank you for your consideration

Sincerely,

NORWAY PLAINS ASSOCIATES, INC.



By:
Scott A. Lawler, PE, Project Engineer

cc: Jarvis Cutting Tools
Independent Solar

- LEGEND
- PROPERTY LINE
 - LINE OF JURISDICTION WETLANDS
 - WETLAND SETBACK
 - BUILDING SETBACK
 - EXISTING TREE LINE
 - PROPOSED SOLAR ARRAY
 - PROPOSED TREE LINE
 - PROPOSED CHALKLINE FENCE



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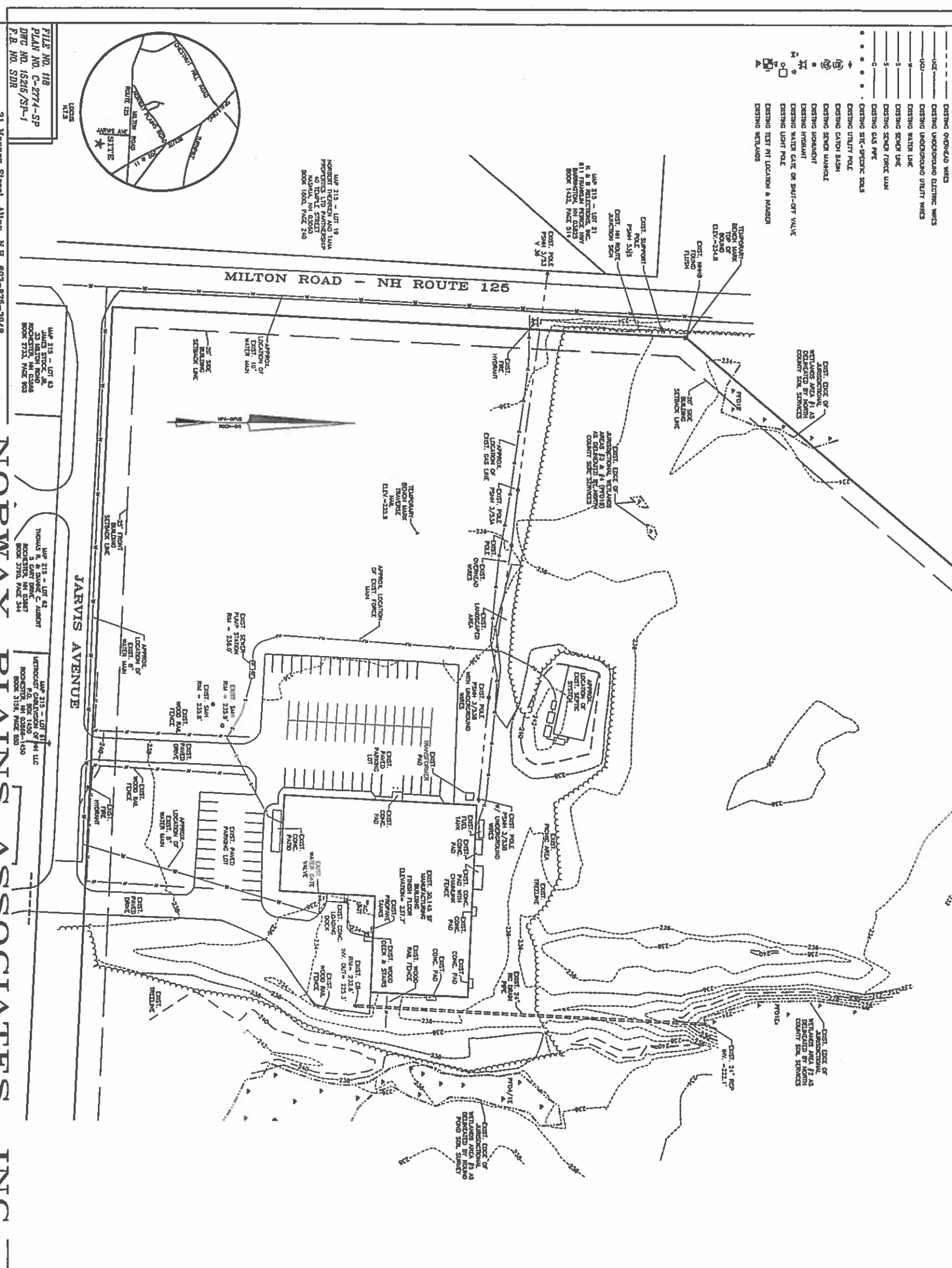
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LEGEND

- PROPERTY LINE
- LIMITS OF JURISDICTIONAL WETLANDS
- WETLANDS SETBACK
- BUILDING SETBACK
- EXISTING WIRE LINE
- EXISTING DRAINAGE LINE
- EXISTING OVERHEAD WIRE
- EXISTING UNDERGROUND UTILITY WIRE
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING SEWER FORCE MAIN
- EXISTING GAS PIPE
- EXISTING SITE-SPECIFIC SOILS
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING HYDRAULIC
- EXISTING WATER GATE OR SHUT-OFF VALVE
- EXISTING LIGHT POLE
- EXISTING TEST PIT LOCATION & NUMBER
- EXISTING WETLANDS



REVISIONS:



EXISTING FEATURES PLAN
JARVIS AVENUE
ROCHESTER
STRAFFORD COUNTY
NEW HAMPSHIRE
JARVIS CUTTING TOOLS, INC.
JANUARY 2016

TAX MAP 216, LOT 58
OWNER OF RECORD
JARVIS CUTTING TOOLS, INC
100 JARVIS AVE
ROCHESTER, N.H.
SCRID: 939/260

GENERAL SITE PLAN NOTES
1. TOTAL PARCEL AREA IS 34.5 ACRES
2. THIS PARCEL IS LOCATED IN INDUSTRIAL (I) ZONE AND CONSERVATION ORIENTED (CO) ZONE
3. THE PURPOSE OF THIS PLAN IS TO DEPICT A PORTION OF THE EXISTING
4. ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE
5. THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT
6. ON THE DATE OF SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES
7. OR UTILITIES, OR FROM THESE PLANS, BUT IN CONFORMANCE WITH THE
8. CHARTERED REGULATIONS PER ZONING ORDINANCE.
9. LANDLORD LOT SIZE (NORTH WATER) = 30,000 SF
10. LANDLORD LOT SIZE (SOUTH WATER) = 100 FEET
11. FROM = 25'
12. FROM = 25'
13. FROM = 25'
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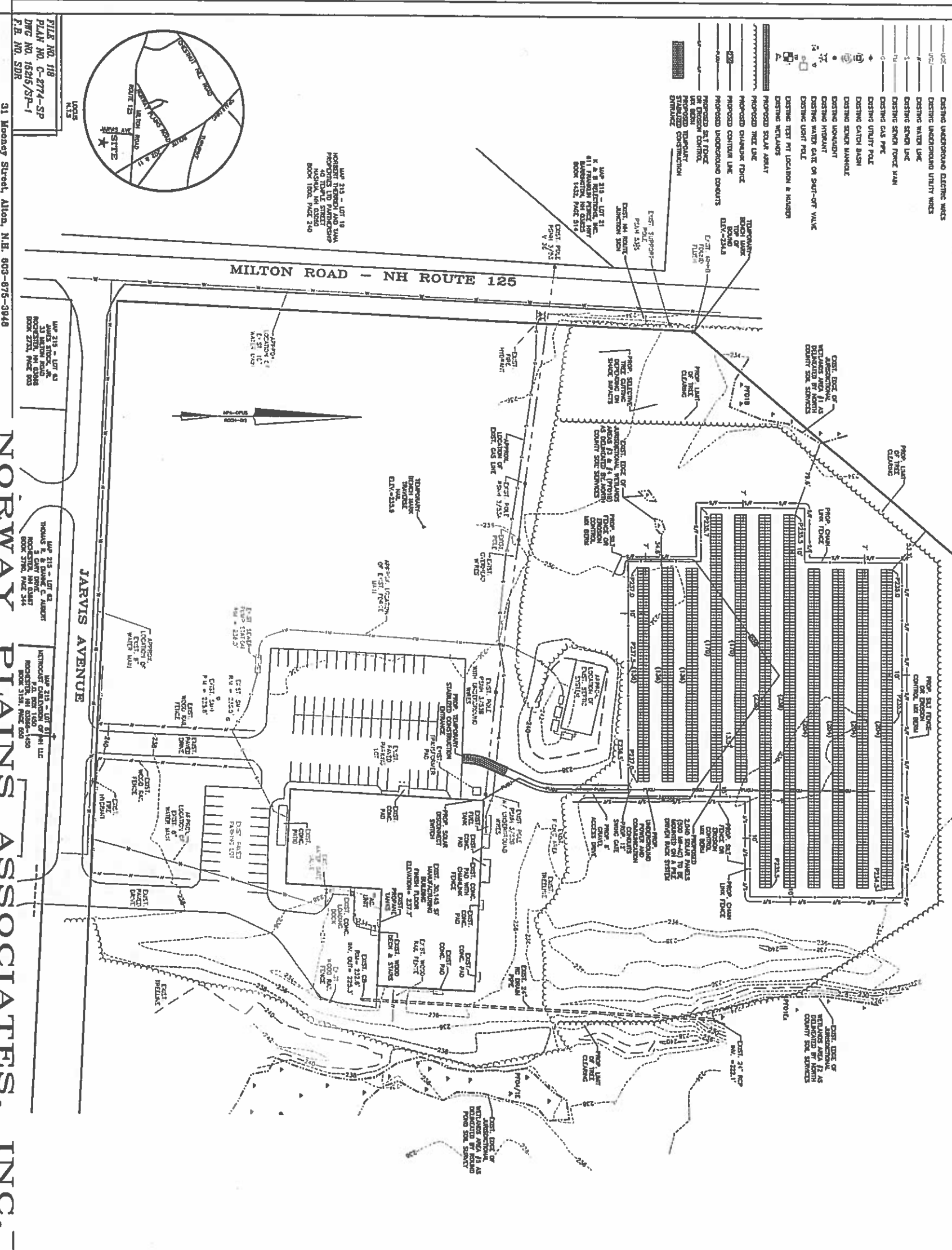
LEGEND

- PROPERTY LINE
- LIMITS OF JURISDICTIONAL WETLANDS
- WETLANDS SETBACK
- BUILDING SETBACK
- EXISTING TREE LINE
- EXISTING CONTOUR LINE
- EXISTING DRAIN LINE
- EXISTING OVERHEAD WIRES
- EXISTING UNDERGROUND ELECTRIC WIRES
- EXISTING UNDERGROUND UTILITY WIRES
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING SEWER FORCE MAIN
- EXISTING GAS PIPE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING EXTERIOR MANHOLE
- EXISTING MANHOLE
- EXISTING INVERT
- EXISTING WATER GATE ON SHUT-OFF WALK
- EXISTING LIGHT POLE
- EXISTING TEST PIT LOCATION & NUMBER
- EXISTING WETLANDS
- PROPOSED SOLAR ARRAY
- PROPOSED TREE LINE
- PROPOSED CHAINLINK FENCE
- PROPOSED CONTOUR LINE
- PROPOSED UNDERGROUND CONDUITS
- PROPOSED S&J DITCH OR EROSION CONTROL
- OR BORN TEMPORARY STABILIZED CONSTRUCTION DISTURBANCE



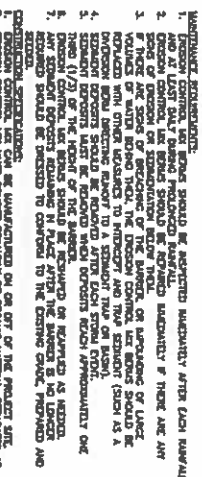
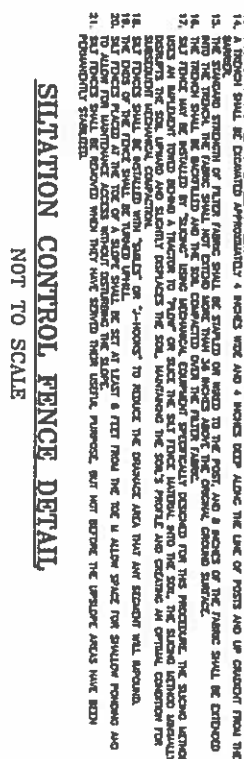
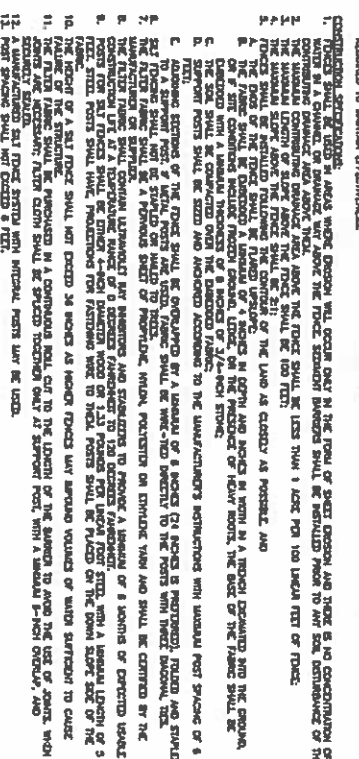
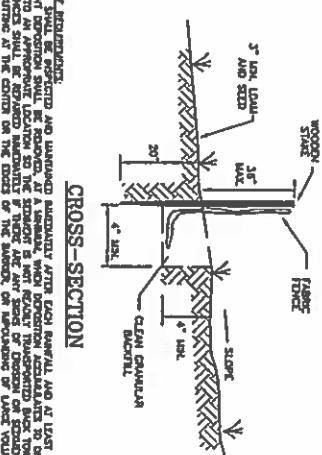
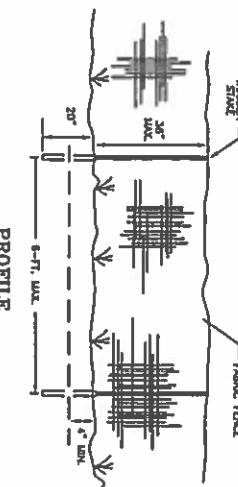
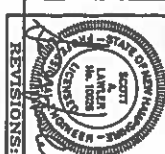
REVISIONS:

- SITE PLAN NOTES**
1. ALL DISTURBED AREA NOT GRAVEL SHALL HAVE A MINIMUM OF 4 INCHES OF TOP SOIL OR HUMUS, SEEDED WITH MIXTURE A, AND MULCHED.
 2. THE TREE STUMPS OUTSIDE THE PROPOSED FENCE LINE SHALL BE CUT, STUMPED, GROUND AND REMOVED WITHIN 60 DAYS OF THE DATE OF THE PERMIT.
 3. THE TREE STUMPS OUTSIDE THE PROPOSED FENCE LINE SHALL BE CUT, STUMPED, GROUND AND REMOVED WITHIN 60 DAYS OF THE DATE OF THE PERMIT.
 4. THE TREE STUMPS OUTSIDE THE PROPOSED FENCE LINE SHALL BE CUT, STUMPED, GROUND AND REMOVED WITHIN 60 DAYS OF THE DATE OF THE PERMIT.
 5. THE TREE STUMPS OUTSIDE THE PROPOSED FENCE LINE SHALL BE CUT, STUMPED, GROUND AND REMOVED WITHIN 60 DAYS OF THE DATE OF THE PERMIT.
 6. THE TREE STUMPS OUTSIDE THE PROPOSED FENCE LINE SHALL BE CUT, STUMPED, GROUND AND REMOVED WITHIN 60 DAYS OF THE DATE OF THE PERMIT.



DETAILED SITE PLAN
JARVIS AVENUE
ROCHESTER
STRAFFORD COUNTY
NEW HAMPSHIRE
FOR: JARVIS CUTTING TOOLS, INC.
FEBRUARY 2016





EROSION CONTROL MIX
BERM DETAIL
NOT TO SCALE

[illegible]

5. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE REVEGETATED WITH PLANTS SUITABLE TO THE CLIMATE AND SOIL TYPE. EROSION CONTROL MEASURES AND EROSION PREVENTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

TAX MAP 215, LOT 59
OWNER OF RECORD:
JARVIS CUTTING TOOLS INC
100 JARVIS AVE
ROCHESTER, N.H.
SCRID: 959/269

INSTRUCTION DETAILS
JARVIS AVENUE
ROCHESTER