

NONRESIDENTIAL SITE PLAN APPLICATION

City of Rochester, New Hampshire

| | | [office use only. Check | # | Amount \$ | Date paid | I |
|--|----------------|-------------------------|-----------------|--------------------|--|------------|
| Date: <u>1.13.14</u> is | | | _ | | ar: cation as soon as possi | ble.) |
| Property info | rmation | | | | | |
| | s/location: 2 | 38 Rochester Hil | I Rd; 290 Ro | chester Hi | Zoning district: Agr/Res Il Rd. and City parcel | |
| Name of project Taxiway A 200'; | | | 4001' Runw | /ay 15-33; | Extend Runway 15 | <u>and</u> |
| Size of site: 181. | 7 [both lots] | acres; overlay zo | oning district(| s)? <u>Airport</u> | <u>Approach</u> | |
| Property own | er | | | | | |
| Name (include na | ame of indivi | dual): <u>Pease De</u> | velopment A | uthority (M | <u>aria Stowell, PE)</u> | |
| Mailing address: | 55 Internation | onal Drive Portsr | nouth, NH 03 | 3801 | , | |
| Telephone #: <u>603</u> | 3.433.6088 I | Email: <u>M.Stowell</u> | @peasedev. | org | | |
| Applicant/dev Name (include na | • | • • | • | | | |
| Mailing address: | | | | | | |
| Telephone #: | | | Email: | | | |
| Engineer/desi Name (include na | • | dual): <u>Jacobs En</u> | gineering Gr | oup, Inc. (. | John Gorham, PE) | |
| Mailing address: | 2 Executive | Park Dr. Bedford | , NH 03110 | | | |
| Telephone #: <u>603</u> | 3.518.1773 | Fax #: <u>603.666.7</u> | <u> 185</u> | | | |
| Email address: <u>J</u> o | ohn.Gorham | @Jacobs.com P | rofessional li | cense #: | 12001 | |
| Proposed acti New building(s): 2 | - | | tructures, pa | rking, utiliti | es, etc.): <u>X</u> | |
| Addition(s) onto e | xisting build | ing(s): | Demolition: | | Change of use: | |
| | | | | | | |

| (Continued Nonresidential Site Plan application Tax Map: 243/255 Lot: 18/17 Zone AG/R1) |
|---|
| Describe proposed activity/use: Refer to the enclosed cover letter for details. Describe existing conditions/use (vacant land?): Map/lot 243/18 is an Airport. Map/lot 255/17 is a residence (house recently demolished). |
| Utility information |
| City water? yes no; How far is City water from the site? Project does not need water. |
| City sewer? yes no; How far is City sewer from the site? Project does not need sewer. |
| If City water, what are the estimated total daily needs? gallons per day |
| If City water, is it proposed for anything other than domestic purposes? yes no |
| If City sewer, do you plan to discharge anything other than domestic waste? yes no |
| Where will stormwater be discharged? Multiple outfalls after attenuation and required treatment. |
| Building information Type of building(s): Precast concrete, slab on grade. Electrical utility vault. Building height: 12'+/- Finished floor elevation: TBD |
| |
| # parking spaces: existing: total proposed:; Are there pertinent covenants? Number of cubic yards of earth being removed from the site Project requires filling. Number of existing employees:; number of proposed employees total: Check any that are proposed: variance; special exception; conditional use _x |
| Wetlands: Is any fill proposed? Yes: area to be filled: 1.28 ac.: huffer impact? 1.56 ac. |

| Proposed post-development disposition of site (should total 100%) | | | | | | | | |
|---|----------------|----------------|--|--|--|--|--|--|
| | Square footage | % overall site | | | | | | |
| Building footprint(s) – give for each building | 54000 | 1 | | | | | | |
| Parking and vehicle circulation | 927000 | 12 | | | | | | |
| Planted/landscaped areas (excluding drainage) | 2826000 | 35 | | | | | | |
| Natural/undisturbed areas (excluding wetlands) | 1216000 | 15 | | | | | | |
| Wetlands | 2960000 | 37 | | | | | | |
| Other – drainage structures, outside storage, etc. | 0 | 100 | | | | | | |

Page 2 (of 3 pages)

| (Continued Nonresidential Site Plan application Tax Map: 243/25 Lot: 18/17 Zone Agr/851 |
|--|
| Comments |
| Please feel free to add any comments, additional information, or requests for waivers here: |
| Refer to attached waiver requests. |
| 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 <u>City of Rochester Site Plan Regulations</u> 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: |
| Signature of applicant/developer: |
| Signature of agent: Date: |
| 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: |
| Date: |
| Page 3 (of 3 pages) |



January 13, 2014

Two Executive Park Drive Bedford, NH 03110 Phone 1.603.666.7181 Fax 1.603.666.7185

Mr. James B. Campbell Chief Planner 31 Wakefield St. Rochester, NH 03867-1917

RF.

Skyhaven Airport Runway Project Nonresidential Site Plan Application

Dear Mr. Campbell:

On behalf of the Pease Development Authority (PDA), please find enclosed the Nonresidential Site Plan Application. Thank you for meeting with the staff of the PDA and Jacobs Engineering to review the project on December 20, 2013. We appreciate the Planning Department's input on the project.

As discussed at the December meeting, PDA is a state agency. Therefore, RSA 674:54 "Governmental Land Uses" applies to the project. Please consider this letter as the written notification required by this statute.

The project is currently at approximately the 60% design stage. We are currently preparing local and state permit applications as well as public bidding documents.

The below is intended to be the Letter of Intent and Narrative required by the Nonresidential Site Plan Checklist and Memorandum, respectively. The project can be described by its 4 main features as follows:

1. Reconstruction of the existing 4001' x 100' wide runway pavements. The existing pavements are 30-45 years old depending on their location and are in need of replacement. The existing runway crown and width require adjustments to bring the runway into conformance with the current FAA design criteria. The reconstructed runway will have a paved width of 75'. This change results in decreases the impervious surfaces by 2.3 acres. The reconstruction limits will fall within the footprint of the existing runway and side slopes resulting in minimal impacts.

On the south-west comer of the runway there is ponding water In front of the Precision Approach Path Indicator (PAPI) lights. The 4 PAPI lights guide landing aircraft to the end of the runway. The PAPI lights reflect off the standing water in front of the lights when observed by the pilots flying to the end of the runway. This area of wetlands is proposed to be filled or re-graded to remove the standing water. This work will require local and state environmental permits.

An Environmental Assessment completed in 2004 included a wetlands mitigation program involving wetlands banking. Based on the successful Implementation of that mitigation program, the NH Department of Environmental Services (NH DES) approved the improvement projects shown on the Airport Layout Plan (ALP), including the installation of the ODALS and reconstruction and extension of the runway and taxiway.

2. Extension of the north end of the runway (Runway 15) by 200' x 75' wide. The extension will be paved. The 2010 Airport Master Plan recommended a 500' extension to Runway 15 to enhance aircraft performance by small business aircraft as activity increased. The 200' extension is an incremental improvement towards the Master Plan recommendation. The extension will also assist in the construction phasing by providing additional available runway length for takeoffs and landings during the construction.

The 200' extension will include 2 new Runway End Identifier Lights (REILS) to the north end of the runway. Each REIL is a white strobe light that serves to identify the north end of the runway (Runway 15) at night and in low visibility conditions. The REILS and runway lights are normally off and are turned on by the pilot controlled lighting system. The REILS and runway lights are then turned off automatically by a timer in 15 minutes. There are no REILS on the existing end of the north runway at this time. Therefore, the Runway 15 REILS will create a new light source on the north end of the Runway.

- 3. The existing parallel taxiway will be extended to serve the extended Runway 15. The taxiway will be paved and new taxiway edge lights will be added. The taxiway extension impacts wetlands and will require local and state environmental permits.
- 4. Omni-Directional Approach Light System (ODALS) are planned to be installed to the south of Runway 33. The ODALS are an FAA-approved approach light system that assists pilots in identifying the runway and guiding aircraft to the runway during low visibility conditions during day and night. With the installation of the ODALS the FAA will reduce the pilot's requirement to see the runway environment by ¼-mile from the current 1-mile to a proposed ¾-mile minimum. That will increase the utility of the airport, particularly by aircraft flown for business.

The ODALS consists of 7 sequenced white flashing strobe lights: 2 strobe lights near the Runway 33 threshold, and 5 lights spaced approximately 300' apart on the centerline and to the south of the runway. It should be noted that two of the strobe lights adjacent to the Runway 33 threshold, known as Runway End Identifier Lights (REILS), have been in place and operational for almost 20 years. One approach light pole will be located south of innovation Drive on PDA's property at 290 Rochester Hill Rd. The elevations of the lights are fixed by the FAA light plane criteria. The rate of the FAA allowable ODALS slope is less than the existing land slope. This slope difference situates the 5 lights on poles ranging in height from 10' to 25' above the existing ground level.

The ODALS lights will be normally off. When needed a pilot will turn them on via their alreraft radio. The lights will be automatically shut off by a timer in 15 minutes.

The ODALS will include a paved access driveway aligned with the ODAL lights. A curb cut is requested at Innovation Drive. A short access drive is planned for the last light on PDA's property. Access is required for maintenance purposes. A portion of the access road will cross existing wetlands that will require local and state permits.

The FAA criteria requires obstructions within the light plane to be cleared. Obstructions are natural or manmade objects that are above the light plane and would interfere with a pilot's view of the lights while approaching the runway. The light plane is a 400' wide by 1700' long rectangle starting at the beginning of the runway. The light plane elevation follows the height of the lights. A portion of the existing trees south of Innovation Drive, the utility poles with wires on the 290 Rochester Road property and a stand of trees on the property line of 290 and 294 Rochester Hill Road are obstructions to the light plane and will require removal. The removal of the trees will result in a line of sight onto the airport when viewed from the south of 290 Rochester Hill Rd and Route 108.

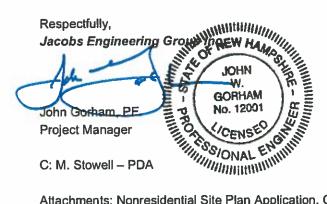
The ODALS will create new light impacts south of the airport during periods when they are activated. To reduce the new light created, the project has considered the following:

- The addition of shrubs that grow below the light plane in the area cleared south of Innovation Drive.
- Minimizing the length of the ODALS from the runway end within the FAA criteria.
- Minimizing the height of the ODALS lights within the FAA criteria.
- Installing 180 degree shields to block the light behind and partly on the sides of the ODALS.
- Limiting the intensity of the approach lights to low and medium, and not allowing high intensity level.
- Tie the approach lights into the existing pilot controlled light system thereby limiting the amount of time the lights will be on.
- Adding fabric to the existing airport perimeter fence to screen a portion of the light from Route 108 and Rochester Hill Rd. residences.

In addition to the obstruction removal necessitated by the ODALS, there are additional tree penetrations that will be removed as part of this project. PDA holds avigation easements that allow for the removal of obstructions on abutting properties including the property owned by the City. In the case of the existing easement on the City parcel directly south of Innovation Drive, PDA is seeking the right to expand the level of removal. The easement currently allows removal above a slope of 34:1. PDA would extend this removal to ground level for the reasons explained in paragraph 4 above.

The project is planned to have construction start in May 2014 with completion anticipated in November 2014. The project is funded by PDA, the NHDOT and the FAA.

Please find enclosed the Nonresidential Site Plan Application, Checklist and attachments. Please call 603.518.1773 should you have any additional questions.



Attachments: Nonresidential Site Plan Application, Checklist and Attachments

SKYHAVEN AIRPORT, ROCHESTER, NH SURFACE AND OVERHEAD AVIGATION EASEMENT

WHEREAS, the City of Rochester, NH, hereinafter called the Grantors are the fee owners of the following specifically described parcel of land situated in City of Rochester, Strafford County, State of New Hampshire:

-Metes & bounds description of easement parcel (to be inserted)-

hereinafter called "Grantors' property" and outlined on an attached Exhibit A map (attached below).

NOW, THEREFORE, in consideration of the sum of \$0 and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantors, for themselves, their heirs, administrators, executors, successors and assigns do hereby grant the following appurtenant rights and benefits to the Pease Development Authority, hereinafter called the "Grantee", for the use and benefit of the public.

The appurtenant rights and benefits include the uses, rights and restrictions described as follows:

The perpetual right of the Grantee to have ingress/egress in the easement area.

The unobstructed use and passage of all types of aircraft in and through the airspace at any height or altitude above the surface of the parcel of land.

The right of said aircraft to cause noise, vibrations, fumes, deposits of dust, fuel particles (incidental to the normal operation of aircraft); interference with sleep or communication, and any other effects associated with the normal operation of aircraft taking off, landing or operating in the vicinity of Skyhaven Airport is hereby granted; and Grantors do hereby fully waive, remise, and release any right or cause of action which they may now have or which they may have in the future against Grantee, its successor and assigns, due to such noise, vibrations, fumes, dust, fuel particles and all other effects that may be caused or may have been caused by the operation of aircraft landing at, or taking off from, or operating at or on said Skyhaven Airport. As used herein, the term "aircraft" shall mean any and all types of aircraft, whether now in existence or hereafter manufactured and developed, to include jet, propeller-driven, civil, military or commercial aircraft; helicopters, regardless of existing or future noise levels, for the purpose of transporting persons or property through the air, by whoever owned or operated.

The continuing right of the Grantee to prevent the construction, erection, growth, of any structure, object, vegetation, or trees on the surface of the burdened property that is or will be in violation of pertinent Federal Aviation Administration regulations, orders, and standards.

The continuing right of the Grantee to remove or cause to be removed any structure, object, vegetation, or trees on the surface of the burdened property that is, or will be, in violation of pertinent Federal Aviation Administration regulations and standards.

The continuing right of the Grantee to erect any structure or object, or install (or cause to be grown) vegetation and or trees on the burdened property, in support of the Airport, and that is not, or will not be, in violation of pertinent Federal Aviation Administration regulations and standards.

The continuing right of the Grantee to construct underground electrical and communication infrastructure in support of the Airport.

In addition:

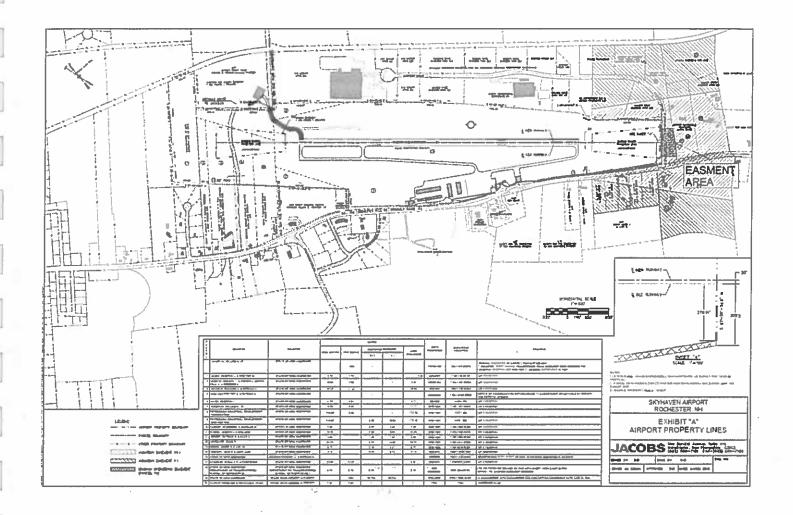
The Grantor, for themselves, their heirs, administrators, executors, successors, and assigns, do hereby agree not to permit any places of public assembly or gatherings within the easement area (examples include but are not limited to: churches, schools, day care facilities, hospitals, restaurants, stadiums, office buildings, etc.).

The Grantor, for themselves, their heirs, administrators, executors, successors, and assigns, do hereby agree to keep the easement area free of the following: structures (permanent or temporary) that might create glare or contain misleading lights that would interfere with aircraft operations; residences; fuel handling and storage facilities; smoke generating activities; creation of any means of electrical interference that could adversely impact aircraft operations.

The Grantor agrees to waive all damages and claims for damages caused or alleged to be caused by the Grantee's violation of any aspect of this easement document.

TO HAVE AND TO HOLD said easement and right of way, and all rights appertaining thereto unto the Grantee, its successors, and assigns, until said Skyhaven Airport shall be abandoned and shall cease to be used for public airport purposes. It is understood and agreed that all provisions herein shall run with the land and shall be binding upon the Grantors, their heirs, administrators, executors, successors and assigns until said Skyhaven Airport shall be abandoned and shall cease to be used for public airport purposes.

| IN WITNESS W | 'HEREOF, the grantors h | ave hereunto set their h | ands and seals this |
|--------------|-------------------------|--------------------------|---------------------|
| | day of | , 20 | |
| | | | |
| | (SEAL) | | |
| Grantor(s) | | | |



Project: <u>Reconstruct 4001' Runway 15-33; Extend Runway 15 and Taxiway A 200'; Install Runway 33 ODALS</u>

Subject: Waiver request

Waiver requested for Omni-directional Approach Lights (ODALS) due the FAA specification requirements. Applicable Site Plan Regulations are as follows:

- Section 6 (E) (2) Glare
- Section 6 (E) (3) Shielding
- Section 6 (E) (4) Maximum Illuminance. Footcandle date is not available to determine need for a waiver request. We contacted the local manufacturer who stated the photometrics are proprietary.
- Section 6 (E) (5) Property Line. Footcandle data is not available to determine need for a waiver request. We contacted the local manufacturer who stated the photometrics are proprietary.
- Section 6 (E) (6) (a) Mounting heights
- Section 6 (E) (10) Flashing lights

NONRESIDENTIAL SITE PLAN APPLICATION

PEASE DEVELOPMENT AUTHORITY

EXTEND RUNWAY 15 AND TAXIWAY A 200' RECONSTRUCT 4001' RUNWAY 15-33 ROCHESTER, NEW HAMPSHIRE **INSTALL RUNWAY 33 ODALS** SKYHAVEN AIRPORT

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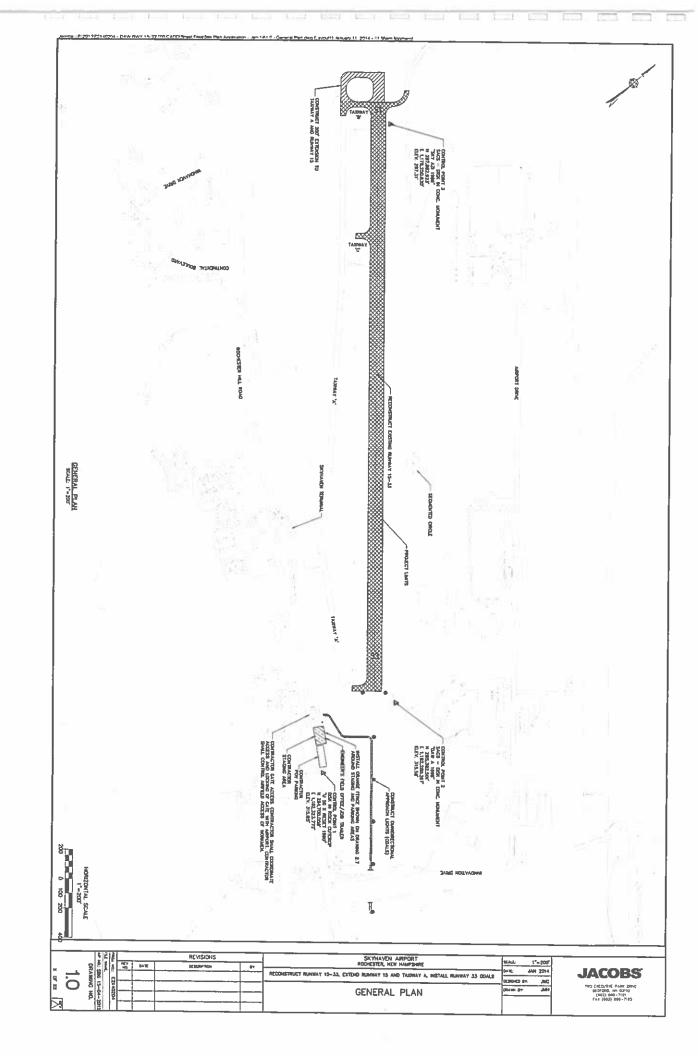
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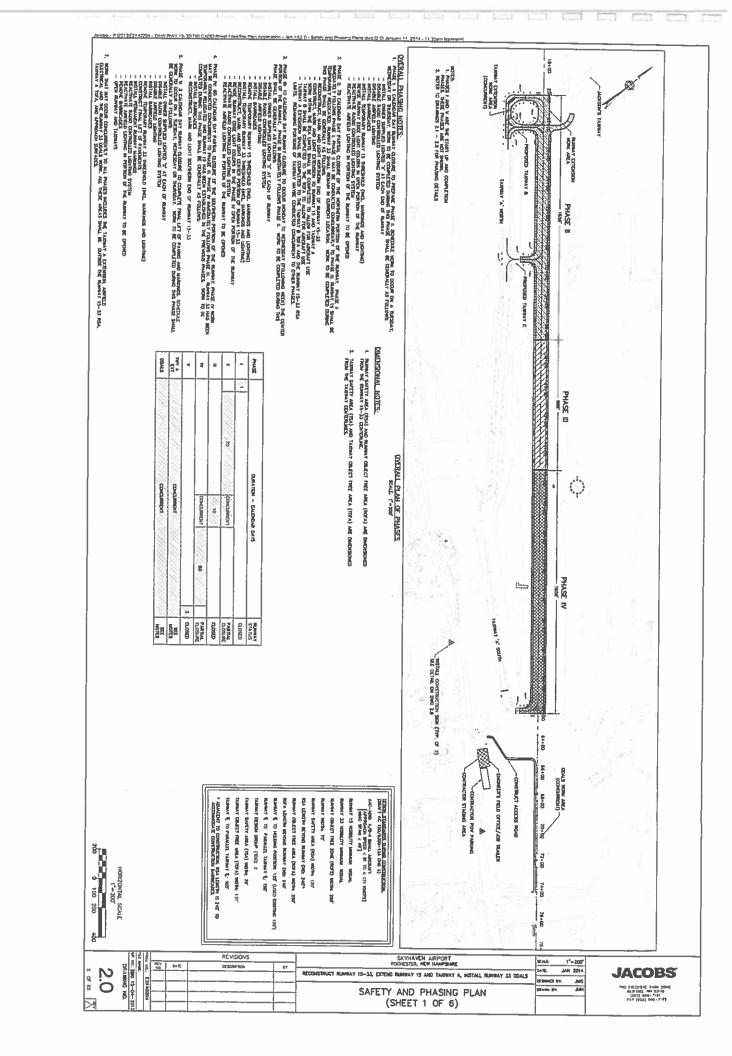
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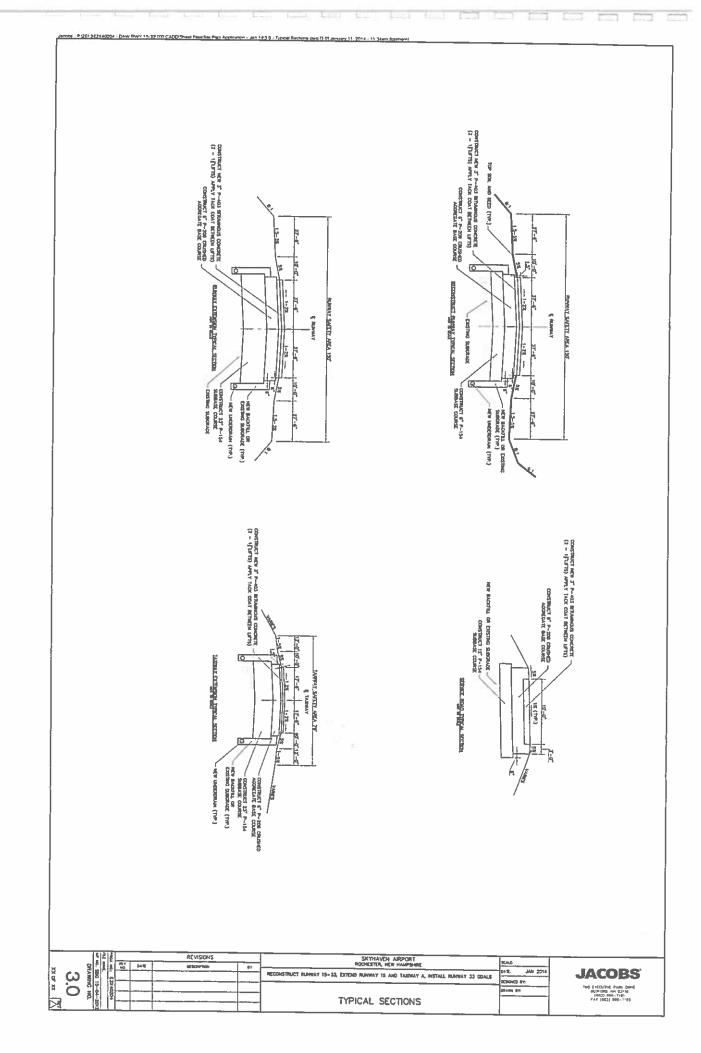
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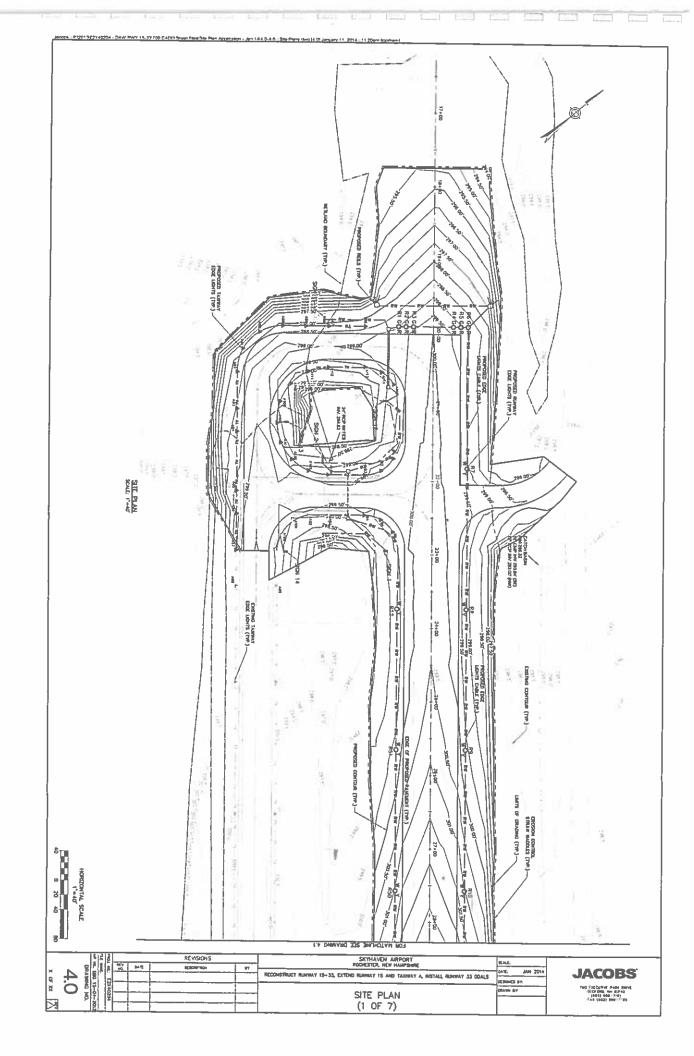


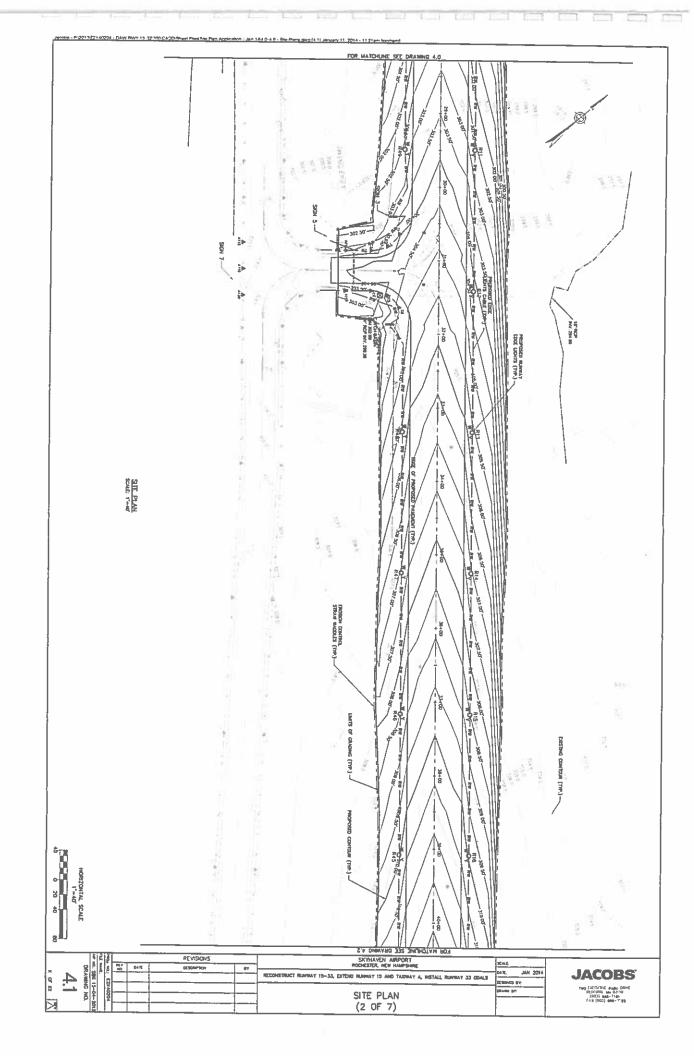
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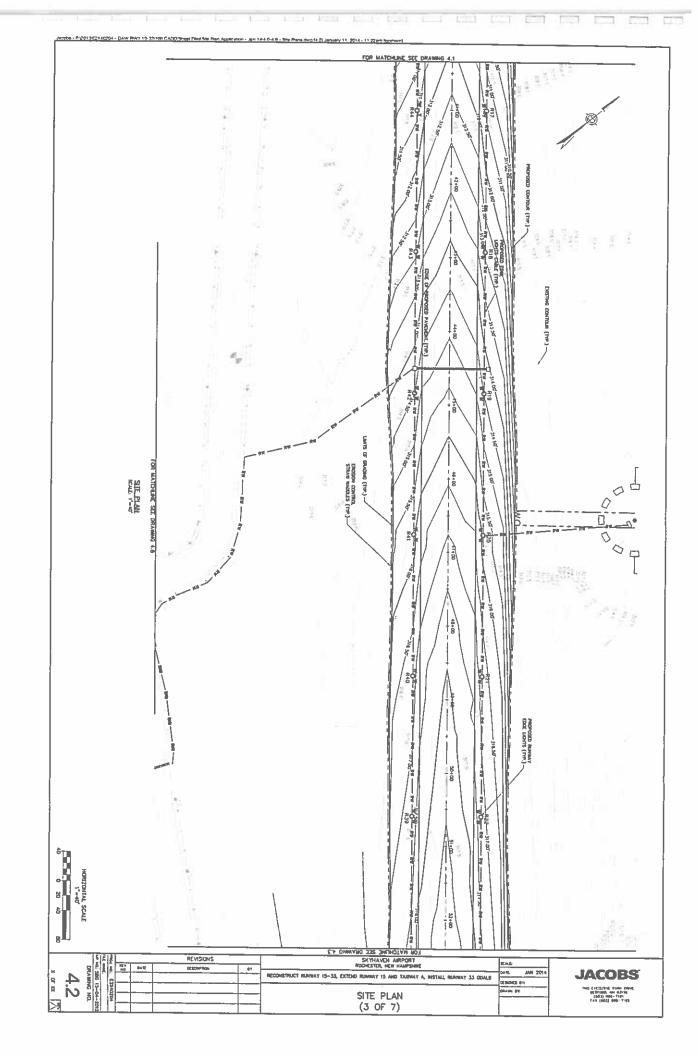


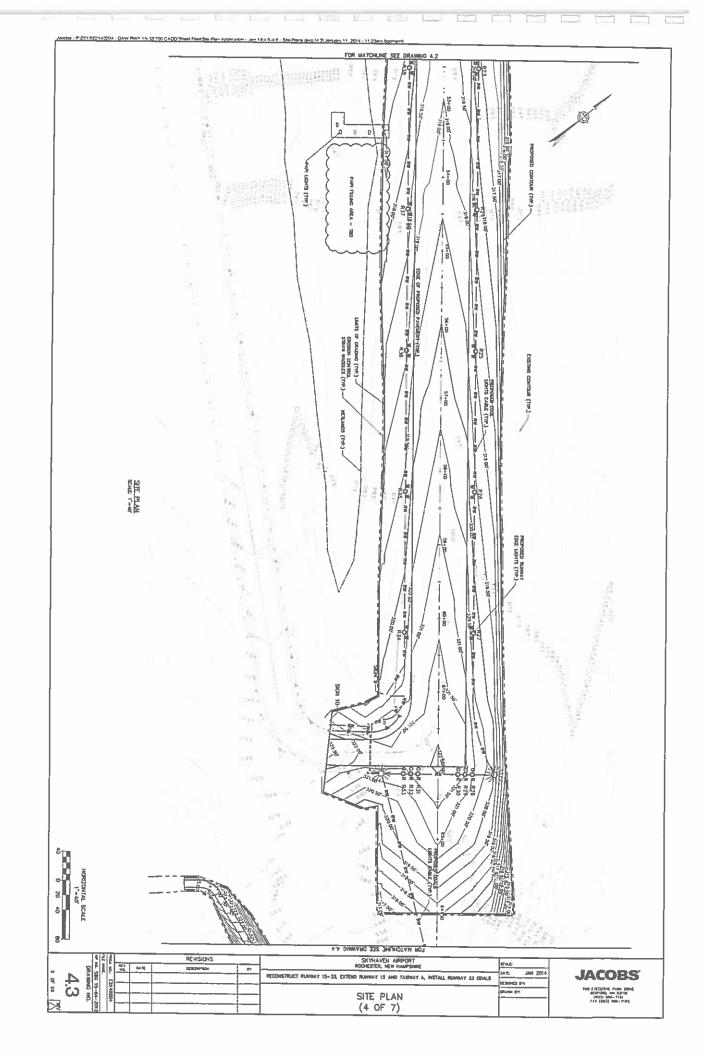


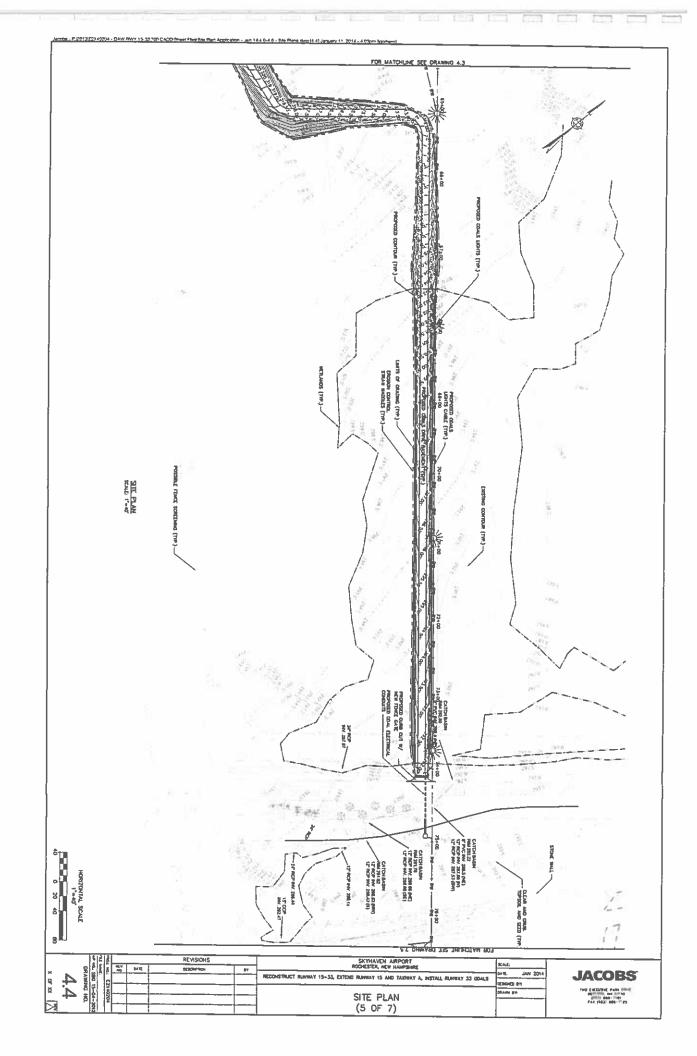


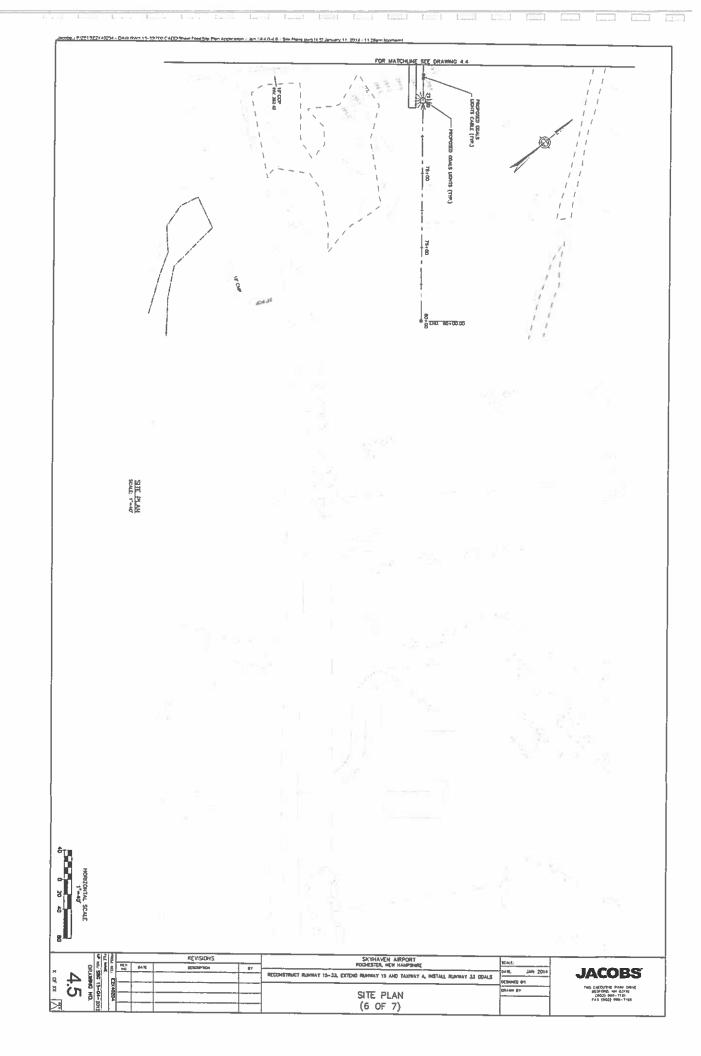


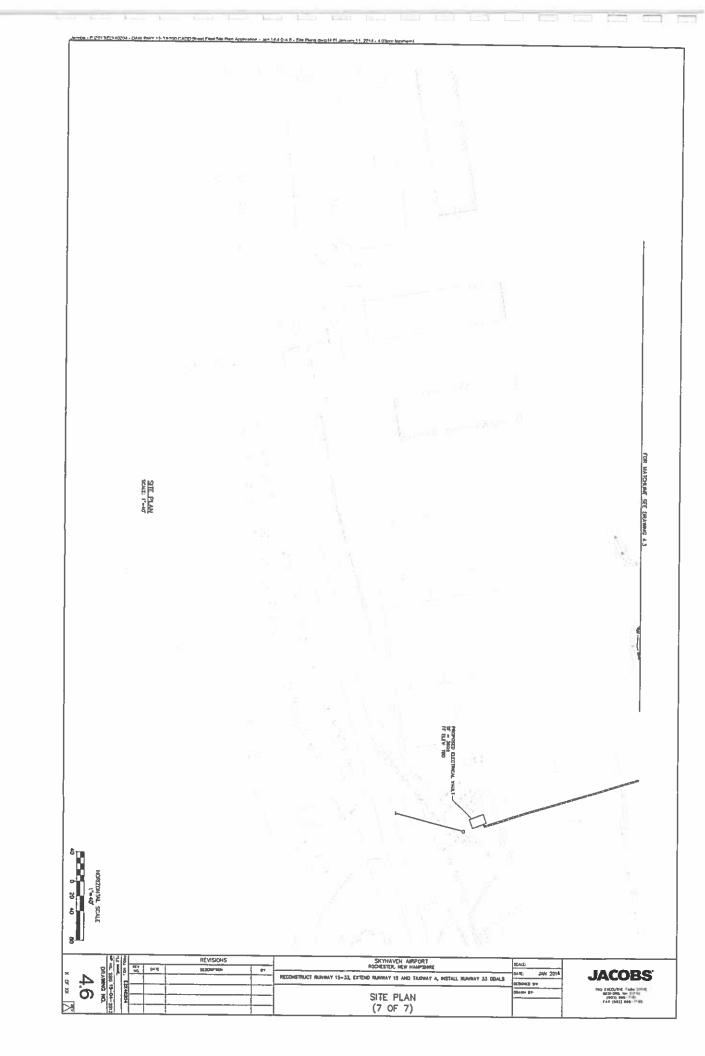


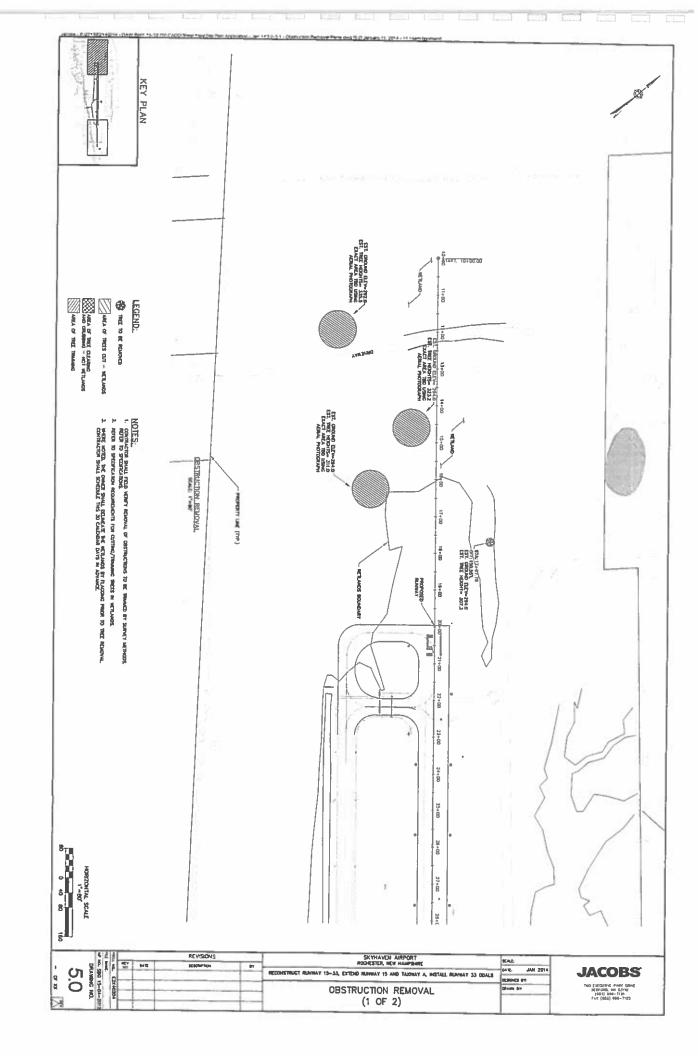


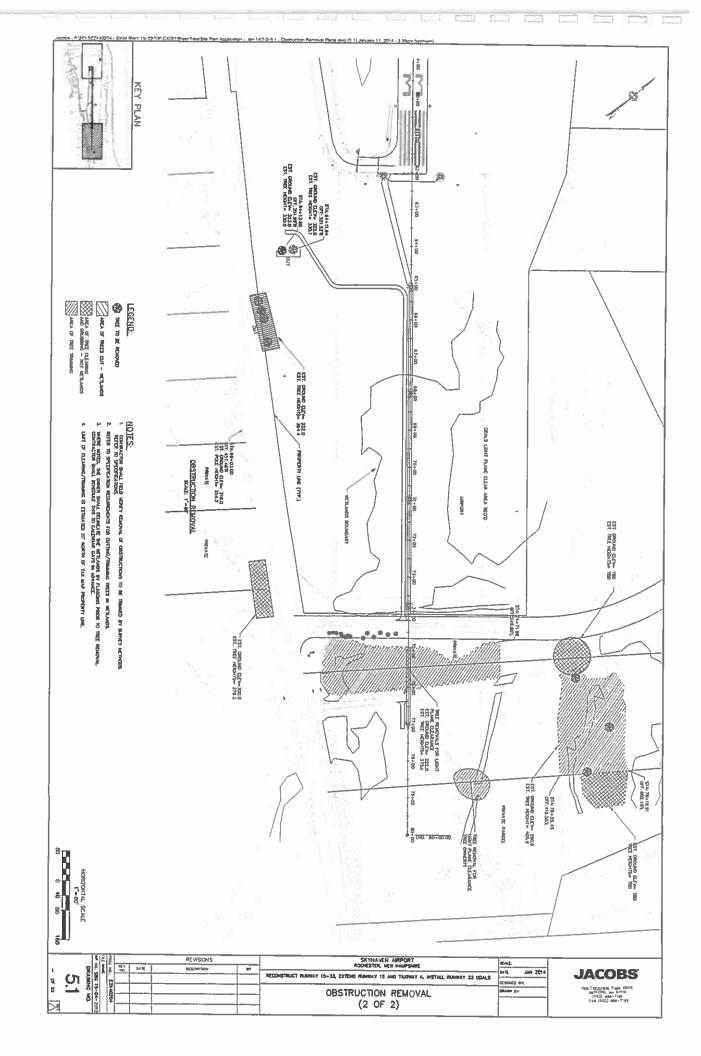


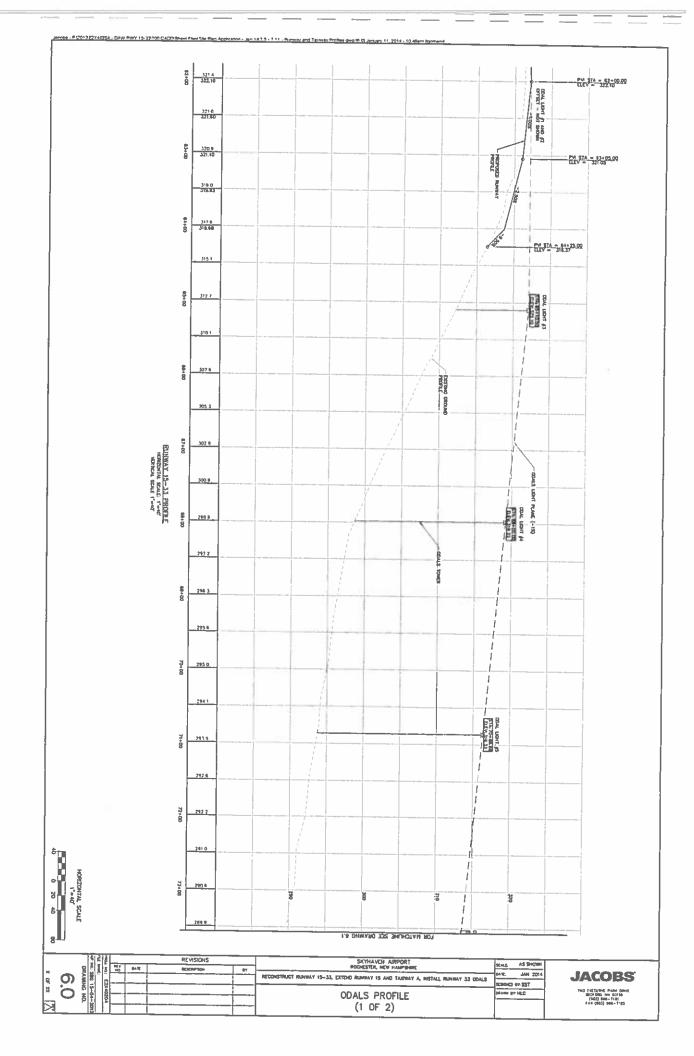












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