

ROAD USE AGREEMENT

THIS AGREEMENT effective this ____ day of _____, 2013 (the “**Effective Date**”)

B E T W E E N :

THE CORPORATION OF THE COUNTY OF MIDDLESEX
(hereinafter referred to as the “**County**”)

- and -

BORNISH WIND L.P.

a limited partnership established under the laws
of the Province of Ontario
(hereinafter referred to as “**Bornish**”)

- and -

KERWOOD WIND, INC.

a corporation established under the laws
of the Province of New Brunswick
(hereinafter referred to as “**Kerwood**”)

- and -

JERICO WIND, INC.

a corporation established under the laws
of the Province of New Brunswick
(hereinafter referred to as “**Kerwood**”)

WHEREAS:

- A. the County is a municipal corporation with the meaning of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, is governed by Warden and Council and operated by Administration, which is hereby authorized to administer this Agreement in its entirety, including but not limited to decisions with respect to the operation and termination of this Agreement in accordance with its provisions;
- B. the County exercises jurisdiction with respect to approval of certain activities with respect public rights of way, highways, streets, sidewalks, walkways, driveways, ditches and boulevards within the County of Middlesex;
- C. the County owns the roads identified in the Approved Road Use Plans, which is attached hereto as **Schedule "B"** and forms a part of this Agreement;
- D. Bornish, Kerwood and Jericho are wind farm owners/operators; Bornish is an Ontario limited partnership; Jericho and Kerwood have a current registered corporate identity in New Brunswick; each Co-owner has an office and mailing address at 390 Bay Street, Suite 1720, Toronto, ON M5H 2Y2; and is operational out of 700 Universe Blvd., Juno Beach, Florida 33408.
- E. Bornish is the owner of the Bornish Wind Project, Kerwood is the owner of the Adelaide Wind Project and Jericho is the owner of the Jericho Wind Project;
- F. Bornish is the owner of a FIT Contract for the Bornish Wind Project, all assets of the Bornish Wind Project, are provided in the Bornish Asset Document, Kerwood is the owner of a FIT Contract for the Adelaide Wind Project, all assets of the Adelaide Wind Project, are provided in the Kerwood Asset Document, Jericho is the owner of a FIT Contract for the Jericho Wind Project, all assets of the Jericho Wind Project, are provided in the Jericho Asset Document, each of the aforementioned Asset Documents are attached hereto as **Schedule "A"**, form a part of this Agreement but shall be treated as confidential between the Parties to extent possible under Applicable Law;
- G. the Co-Owners wish to make use of certain roads located in the County of Middlesex to allow for construction, operation and maintenance of the Wind Project and to deliver components and materials thereto;
- H. pursuant to section 50(3)(d.1) of the *Planning Act*, as amended, the Parties may enter into an agreement that has the effect of granting a use of or right in land directly or by entitlement to renewal for a period of more than twenty-one years;
- I. the County and the Co-Owners enter into this Agreement with respect of the use, installation, construction, maintenance and operation of certain Transmission Infrastructure on, over, under and within the Road Allowances, as defined herein;

- J. subject to Provincial legislation and Ontario Energy Board Approval, and the terms and conditions set forth below with respect to the use of County Road Allowances, the County acknowledges the Co-Owners's right to install, construct, maintain, operate and decommission such Transmission Infrastructure over, along, across or under Road Allowances;
- K. subject to obtaining an access/work permit from the County for electricity transmission related work, the Co-Owners shall have the right to temporarily reconstruct or realign certain portions of the Road Allowances to permit delivery or movement of oversized Transmission Infrastructure components, including but not limited to transmission poles;
- L. subject to obtaining an access permit from the County, the Co-Owners shall have the right to connect access roads from Transmission Infrastructure to the Road Allowances to permit ongoing access to the Transmission Infrastructure during Wind Project operations; and
- M. the Co-Owners warrants that all times throughout the term of this agreement, including its option periods, it shall retain assets which have a minimum value of \$5 million dollars.

NOW THEREFORE THIS AGREEMENT WITNESSETH THAT, in consideration of the payment of the sum of TWO DOLLARS (\$2.00) from each Party to the other and other good and valuable consideration, including the terms, covenants and provisions herein, the receipt and sufficiency of which is hereby acknowledged and agreed, the Parties covenant and agree as follows:

A. INTERPRETATION

- 1. The above recitals are true and the same are hereby incorporated into this Agreement by reference.
- 2. Each obligation of the Parties hereto contained in this Agreement, even if not specifically expressed as a covenant, shall be considered for all purposes to be a covenant. Each covenant in this Agreement is a separate and independent covenant and a breach of covenant by any Party will not relieve any other Party from its obligation to perform each of its covenants; except as otherwise provided herein.

Definitions

- 3. In this Agreement, in addition to terms defined elsewhere in this Agreement, the following terms have the following meanings:
 - (a) **“Adelaide Wind Project”** means the 60 megawatt renewable energy generating facility known as Adelaide Wind Energy Centre.
 - (b) **“Agreement”** means this Agreement, including all Schedules, as it may be confirmed, amended, modified, supplemented or restated by written agreement between the Parties.

- (c) **“Anti-Bribery Laws”** mean any anti-bribery law or international convention, as may apply now or in the future, including the Canadian Corruption of Foreign Public Officials Act, the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and the OECD Convention on Combating Bribery of Foreign Public Officials.
- (d) **“Applicable Law”** means all present or future applicable laws, statutes, regulations, treaties, judgments and decrees and all present or future applicable published directives, rules, policy statements and orders of any Public Authority and all applicable orders and decrees of courts and arbitrators of like application to the extent, in each case, that the same are legally binding on the Parties in the context of this Agreement.
- (e) **“Appropriate Emergency Service Providers”** means those emergency service providers set out in Schedule “C”, which is attached hereto and forms a part of this Agreement;
- (f) **“Approved Road Use Plans”** means the diagrams attached as Schedule “B” hereto depicting the location of and other aspects in relation to Transmission Infrastructure in Road Allowances, as approved by the County Engineer prior to the execution of this Agreement.
- (g) **“As-Built Plan”** means a Plan following the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure confirming the exact location and specifications of any Transmission Infrastructure installed over, along, across, under or within the Road Allowances.
- (h) **“Bornish Wind Project”** means the 73.5 megawatt renewable energy generating facility known as Bornish Wind Energy Centre.
- (i) **“Business Day”** means any day excluding a Saturday, Sunday or statutory holiday in the Province of Ontario, and also excluding any day on which the principal chartered banks located in the Municipality of Strathroy-Caradoc are not open for business during normal banking hours.
- (j) **“Commercial Operation Date”** means the Commercial Operation Date as defined in the Power Purchase Agreement, as defined herein.
- (k) **“Co-Owners”** means collectively Bornish, Jericho and Kerwood, and **“Co-Owner”** means any one of them.
- (l) **“County Engineer”** means the individual designated to serve in that position for the Corporation of the County of Middlesex duly passed via municipal by-law.
- (m) **“Deliveries”** means the transporting of materials, components and equipment including overweight or over-size cargoes across or along Road Allowances, to

provide for the construction, maintenance, repair, replacement, relocation or removal of Transmission Infrastructure for the Wind Project.

- (n) **“Easement Rights”** means the right to place, install, construct, re-construct, inspect, maintain, operate, alter, enlarge, repair, replace, relocate and remove Transmission Infrastructure over, along, across, within or under the Road Allowances provided for this Agreement.
- (o) **“Entrance(s)”** means one or more points of access across and through the Road Allowances from the travelled portion of the Road Allowances connecting to private lands beyond and certain access roads in and upon adjacent lands used in connection with the Wind Project, which has been approved by the County Engineer
- (p) **“Entrance Work”** means the constructing and maintaining of Entrances to private wind turbine access roads.
- (q) **“Jericho Wind Project”** means the 150 megawatt renewable energy generating facility known as Jericho Wind Energy Centre.
- (r) **“Municipal Infrastructure”** means structures, services or facilities of any kind owned or operated by or for the benefit of the County, including drains, water mains and culverts.
- (s) **“Parties”** means the County and the Co-Owners collectively, and **“Party”** means any one of them.
- (t) **“Permits”** means those permits required to be obtained by the Co-Owners from the County for the purposes of performing the Work and for the purposes of use of the Road Allowances, along with all requirements for the issuance of such Permits and all fees associated with such Permits, as set out in the Permits and Fees Document, which is attached hereto as **Schedule “D”** and forms a part of this Agreement.
- (u) **“Plan”** means a detailed plan drawn to scale, which:
 - (i) identifies the location, size and elevation of the Transmission Infrastructure;
 - (ii) demonstrate that the installation of the Transmission Infrastructure will comply with applicable safety, technical and regulatory standards and the requirements of Applicable Law;
 - (iii) show the Road Allowances where the installation of Transmission Infrastructure is proposed and the location of the proposed Transmission Infrastructure or part thereof together with specifications relating to the proposed Transmission Infrastructure or part thereof; and

- (iv) shows the “no winter maintenance” road allowances within the County.
- (v) **“Plans”** means more than one Plan, as defined herein, referred to collectively.
- (w) **“Power Purchase Agreements”**, (hereinafter **“PPA”**) means, individually and collectively, the Feed-In Tariff Contracts made between each of Bornish, Kerwood and Jericho and the Ontario Power Authority, including any amendments or renewals thereof.
- (x) **“Public Authority”** means any governmental, federal, provincial, regional, municipal or local body having authority over the County, the Co-Owners, the Wind Project, the Transmission Infrastructure or the Road Allowances.
- (y) **“Narrowed Right-of-Way Area”** means the area of Road Allowance described in **Schedule “F”** of this Agreement.
- (z) **“Repair Work”** means work involving the maintenance, repair and replacement of the Transmission Infrastructure and Entrances that does not cause the location, elevation, position, layout or route of the Transmission Infrastructure or Entrance to materially change.
- (aa) **“Road Allowances”** means public rights of way, road allowances, streets, sidewalks, highways, walkways, driveways, ditches and boulevards and the allowances therefor, and includes all existing infrastructure located on or within the Road Allowances, all owned, or managed under the legal jurisdiction of the County as shown in the Approved Road Use Plans (**Schedule “B”**).
- (bb) **“Secured Party”** or **“Secured Parties”** means, individually or collectively, the Co-Owners’ lenders, from time to time.
- (cc) **“Transmission”** means the conveyance of electricity at voltages in excess of 50 kilovolts.
- (dd) **“Transmission Infrastructure”** means infrastructure conveying electricity at voltages in excess of 50 kilovolts and includes all structures, equipment or other things used for that purpose including, but not limited to, a line or lines of towers and/or poles, with such wires and/or cables for the transmission of electricity at voltages in excess of 50 kilovolts, and all necessary and proper foundations, safety barriers, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith including without limitation, pads, vaults and junction boxes manholes, handholes, conduits, fiber optics, cables, wires, lines and other conductors of any nature, multiple above or below ground control, communications, data and radio relay systems, and telecommunications equipment, including without limitation, conduits, fiber optics, cables, wires and lines.
- (ee) **“Transmission Infrastructure Work”** means the installing, constructing, operating, inspecting, maintaining, altering, enlarging, repairing, replacing,

relocating and removing of Transmission Infrastructure over, along, across, within or under the Road Allowances in connection with the Wind Project.

- (ff) **“Tree Work”** means the cutting, trimming, removing or replacing of trees or bushes growing in or extending into, over or under the Road Allowances.
- (gg) **“Wind Project(s)”** means, collectively, the Bornish Wind Project, the Adelaide Wind Project, the Jericho Wind Project and their appurtenant wind turbines, equipment, buildings, distribution infrastructure and Transmission Infrastructure, to be constructed in the County of Middlesex for the purpose of supplying electricity in accordance with the PPA.
- (hh) **“Work”** means all work required to be performed by the Co-Owners pursuant to the terms of this Agreement, including, but not limited to, all Deliveries, Transmission Infrastructure Work, Entrance Work, Tree Work, and Repair Work.

Schedules

4. The following schedules to this Agreement are an integral part of this Agreement:

Schedule “A”

The Co-Owners Asset Document

Shows type and value of all current assets owned by the Co-Owners

Schedule “B”

Approved Road Use Plans

Geographically shows the location of the Wind Project; municipal description and location of County Road Allowances (including those Road Allowances which are not subject to winter maintenance); and particulars with respect of the route of Transmission Infrastructure, including but not limited to location of poles, engineering details of poles (type, material, size, foundation, construction methods, guying details.), electrical transmission line arrangement (height of cables, vertical clearances, expected cable sag/sway, etc.), and the location of any alteration of the County Road in relation to the installation of said transmission facilities (ditch grading and guardrails).

Schedule “C”

List of Appropriate Emergency Service

Providers Rights

Schedule “D”

Permits and Fees

Shows all Permits and fees required to be applied for and obtained by the Co-Owners from the County, including but not limited to Oversize/Overweight Permits, Entrance Permits, Drain Crossing Permits, Road Occupation/Excavation Permits

Schedule “E”

Rights and Remedies Accorded to Secured Parties

Schedule “F”

Narrowed Right-of-Way Area

Schedule “G”

Private Easement Lands

Statutory Rights

5. The Parties agree that nothing contained in this Agreement shall abrogate or prejudice any statutory rights held by any Party under any applicable statute, including but not limited to the *Municipal Act, 2001*, as amended, the *Ontario Energy Board Act, 1998*, as amended, the *Green Energy and Green Economy Act, 2009*, as amended and the *Electricity Act, 1998*, as amended.

B. GRANT OF PERMISSION

Term

6. The rights provided for in this Agreement shall be for a term which is the greater of: (i) thirty (30) years from the Effective Date plus an option in favour of the Co-Owners to extend the term of this Agreement for two (2) further ten (10) year periods, or (ii) from the Effective Date to the expiry of the term of the PPA and any extensions thereof, together with such additional time (not to exceed nine (9) months) as may be reasonably required to complete the decommissioning of the Wind Project, (hereinafter, the “Term”).

Grant of Easement

7. The County hereby grants and transfers to the Co-Owners for the duration of the Term, the non-exclusive right, privilege, interest, benefit and easement to enter upon and use the

Road Allowances as identified in the Approved Road Use Plans (**Schedule “B”**) with such persons, vehicles, equipment and machinery as may be necessary for the purpose of placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure and the right to perform Work over, along, across, within or under the Road Allowances in connection with the Wind Project, subject to the following conditions:

Prior Approvals

- (a) The Co-Owners, prior to the installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Transmission Infrastructure over, along, across, within or under the Road Allowances, shall obtain the approval of any Public Authority required by or have the authority pursuant to Applicable Law in connection with such activity.

Notice

- (b) The Co-Owners shall make its best effort, prior to the installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Transmission Infrastructure over, along, across, within or under the Road Allowances, to provide notice of all other existing Road Allowance users of the aforementioned installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Transmission Infrastructure over, along, across, within or under the Road Allowances.

Transmission Infrastructure Placement

- (c) All Transmission Infrastructure shall be installed above-grade within the Road Allowance in the location specified in the Approved Road Use Plans (**Schedule “B”**) within a reasonable error range and supported by stand facilities (poles) at an appropriate elevation to avoid incompatibilities and/or conflicts with other existing infrastructure;

Distance from Travelled Portion and Property Line

- (d) The Parties agree that the Co-Owners shall make commercially reasonable efforts to install Transmission Infrastructure in the following locations within the Road Allowances:
 - (i) in locations between the outer limit of the travelled portion of the relevant Road Allowance and the property line of the Road Allowance;
 - (ii) at depths and/or elevations within the relevant Road Allowance to avoid incompatibilities and/or conflicts with existing infrastructure and, using

commercially reasonable efforts, to avoid incompatibilities and/or conflicts with currently planned infrastructure; and

- (iii) in consistent locations within the Road Allowances such that the number of road crossings is minimized.

Permits/Fees

- (e) The Co-Owners will obtain all Permits from the County and pay the appropriate fees associated with obtaining the same, which fees are shown in the Permits and Fees Document (**Schedule “D”**). The County shall issue all such Permits within the timelines set out in the County’s by-laws or in the relevant statutes or regulations or thirty (30) days following receipt from the Co-Owners of their applications and fees, whichever is less, and, without limiting the generality of the foregoing, in respect of grading, guardrails and culverts related to the Transmission Infrastructure, shall issue the applicable work permit on the basis of standards typically applied in accordance with the Road Safety Manual;

Legal Compliance

- (f) All actions of the Co-Owners and the County shall be in compliance with Applicable Law;

Insurance Coverage

- (g) The Co-Owners agree that prior to the placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure over, along, across, within or under the Road Allowances, the Co-Owners shall arrange for and maintain commercial general liability insurance (hereinafter, the “CGL”), insuring the Co-Owners and naming the County as an additional insured. The CGL shall provide, at a minimum limits of liability, not less than five million dollars (\$5,000,000.00) per incident and in the aggregate. In addition, the CGL shall contain a cross liability and severability of interest clause and provide for a minimum of ten (10) days’ notice of cancellation of the CGL. the Co-Owners shall upon written request thereof, deliver to the County, from time to time and in any event prior to commencement of the Work, a copy of a certificate of insurance evidencing that the CGL is in full force and effect.

Commencement of Work

- (h) Prior to the commencement of any Work, the Co-Owners shall document, by means of a video recording or other means satisfactory to the County, acting reasonably, the then-existing condition of all Road Allowances or structures that the Co-Owners expects will or may be used for or subject to Work, and both Parties shall receive a complete copy of such video recording or document;

- (i) The Co-Owners agree to maintain the surface of the Road Allowances for a period of twelve (12) months following the Commercial Operations Date for the Bornish Wind Project and restore the surface of the Road Allowance to at least the same condition as prior to the commencement of any Work, except in the cases where the alteration to the untraveled portion of the Road Allowance forms part of the Work;
- (j) The Co-Owners agree the Easement Rights shall be exercised and carried out in a good, safe and workmanlike manner;
- (k) The Co-Owners shall be responsible for any damage caused to the Road Allowances at any time by itself, its agents, employees or contractors and for removing all debris from the work area following the undertaking of any of the Easement Rights contemplated herein;
- (l) The Co-Owners shall make commercially reasonable efforts to protect the integrity and security of all existing equipment, installations, utilities, and other facilities within the Road Allowance or which might otherwise be located in, on, or under the Road Allowances or any adjacent lands;
- (m) The Co-Owners shall make all payments and taking all such steps as may be reasonably necessary to ensure that no construction lien or other lien is registered against the Road Allowances as a result of the undertaking by the Co-Owners of any of the Easement Rights or any other work contemplated in this Agreement and taking such steps as may be required to cause any such registered lien or claim for lien to be discharged or vacated immediately after notice thereof from the County is provided to the Co-Owners.

Non-Exclusive Permission

- 8. The Easement Rights provided for in this Agreement shall constitute a non-exclusive easement. Without limiting the foregoing, the Easement Rights are subject to the rights of the owners of the property adjoining the Road Allowances who are entitled access to and from the Road Allowances from their properties, and subject to the rights and privileges that the County may grant to other persons on the Road Allowances, all of which rights are expressly reserved, the rights shown on the Approved Road Use Plans and specifications only excepted. The Co-Owners hereby acknowledge and agree that there are other utilities and third parties that do and/or may have similar rights over the Road Allowances and the Co-Owners hereby agree to make commercially reasonable efforts to accommodate the interests of other third parties when exercising the Easement Rights.
- 9. In respect of and without limiting the foregoing, the Co-Owners agree that when engaging in any Work, they shall use commercially reasonable efforts to ensure there is minimal interference with the traveled portion of any Road Allowance or any pedestrian, vehicular, or other traffic thereon, or any use or operation of any ditch or drain adjacent to such public right-of-way, highway, street, or walkway. Unless otherwise agreed by the

County, the Road Allowances shall always be open to pedestrian, vehicular or other traffic and shall be open to the public. Without limiting the generality of the foregoing, the Co-Owners shall be entitled to temporarily close any of the Road Allowances with the prior written consent of the County Engineer, which consent shall not be unreasonably withheld, delayed or conditioned. The Co-Owners agree that they shall reimburse the County for all reasonable costs associated with services rendered for traffic control purposes, and/or the erection of road closures/barriers required during the period in which Work is being performed, including but not limited to during decommissioning periods. If the Co-Owners propose the temporary closure of a Road Allowance, they shall also provide written notice to the Appropriate Emergency Service Providers.

Right of Entry

10. The County reserves its right to enter upon and use the Road Allowances without notice to the Co-Owners for its own purposes and to grant and transfer rights to third parties to enter upon and use the Road Allowances to construct, operate, maintain, alter, repair or relate infrastructure, and to modify the Road Allowances, provided such entry, use, grant or transfer by the County does not adversely affect the Transmission Infrastructure, the Work, the Wind Project or the exercise of the Co-Owners's rights under this Agreement.

Title

11. The County represents that:
 - (a) it has legal and beneficial title to the Road Allowances;
 - (b) it has obtained the full and unconditional due authorization for execution and delivery of this Agreement by all required resolutions and other required municipal approvals; and
 - (c) it shall defend its title to the Road Allowances against any person or entity claiming any interest adverse to the County in the Road Allowances during the term of this Agreement, save and except where such adverse interest arises as a result of the gross negligence or willful misconduct of the Co-Owners or any person for which they are responsible at law;
 - (d) the Permits are the only permits, approvals, consents or authority within the jurisdiction of the County required in connection with the Work and the fees as set forth in attached hereto are the only fees payable by the Co-Owners in connection with the Permits; and
 - (e) the execution and delivery of this Agreement by the County will not result in a breach of any other agreement to which the County is a party and no rights, interests or privileges have been granted in respect of the Road Allowances by the County which will or could adversely affect the rights, interests or privileges granted to the Co-Owners hereunder.

Transmission Infrastructure at Expense of the Co-Owners

12. Notwithstanding and without limiting any other term hereof, the Co-Owners agree and undertakes that all Transmission Infrastructure over, along, across, within or under the Road Allowances will be placed, installed, constructed, re-constructed, inspected, maintained, operated, altered, enlarged, repaired, replaced, relocated and removed at its own expense and in accordance with good engineering practices, and in compliance with Approved Road Use Plans, this Agreement and Applicable Law.

C. ADDITIONAL TERMS AND CONDITIONS RE EASEMENT RIGHTS

Road Closure

13. The County agrees, in the event of closing of any Road Allowances, to give the Co-Owners reasonable notice of such closing and to provide the Co-Owners with a further easement over that part of the closed Road Allowances sufficient to allow the Co-Owners to preserve any part of the Transmission Infrastructure in its then existing location, and to enter upon the closed Road Allowances to maintain and repair such part of the Transmission Infrastructure.

Traffic Effects

14. Notwithstanding and without limiting any other term hereof, the Parties acknowledge that the Work from time to time may require the temporary modification of traffic patterns or the imposition of temporary restrictions on public access to or use of the Road Allowances ("**Traffic Effects**"). In the event that the Co-Owners determine that Traffic Effects are required, the Co-Owners agree to:
 - (a) give five (5) days' notice of anticipated Traffic Effects to the County Engineer and affected residents and to coordinate with the County Engineer and the Appropriate Emergency Service Providers to minimize and mitigate any adverse impacts of the Traffic Effects and to ensure public safety; and
 - (b) use reasonable efforts to maintain adequate public access to and use of the Road Allowances while Traffic Effects are in progress and to remove the Traffic Effects as soon as reasonably possible when the Traffic Effects are no longer necessary.

Restoration

15. The Co-Owners further agree that in the event that it becomes necessary to break, remove, or otherwise pierce the existing surface of any of the Road Allowances or any other municipal lands to undertake any placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure or to undertake any Work over, along, across, within or under the Road Allowances, the Co-Owners in all cases will repair, reinstate and restore such surface at its own expense to the same or better condition which existed prior to the performing of the Work. The Co-Owners also agree that, except in those cases where breaking, removing or otherwise piercing the untraveled portion of the Road

Allowance forms part of the Work, it shall thereafter, for a period of twelve (12) months following the Commercial Operation Date (the “**Interim Period**”), monitor that portion of such restored Road Allowances, at the sole expense of the Co-Owners, and repair any settling thereof directly caused by the placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure or any of the Work performed over, along, across, within or under the Road Allowances to the satisfaction of the County Engineer, acting reasonably.

Repairs

16. The Co-Owners shall be liable for any and all Repairs required to be performed on the Transmission Infrastructure or on the Road Allowances due to the existence of the Transmission Infrastructure. Any Repair Work undertaken shall restore the road surface to at least the same condition it was in immediately prior to the use of the Road Allowances by the Co-Owners. In the event that Repair Work is required, the Co-Owners agree to provide the County with at least five (5) days’ notice that the Repair Work will occur if such Repair Work:
 - (a) will have or is likely to have Traffic Effects;
 - (b) will involve or is likely to involve Tree Work;
 - (c) could present a danger to public health and safety; or
 - (d) is located in Entrances.
17. Subject to the provisions of this Agreement and provided that Repair Work on Transmission Infrastructure complies with this Agreement, the Co-Owners shall be entitled to conduct Repair Work on Transmission Infrastructure without prior approval of the County Engineer.

Emergency

18. Notwithstanding any other provision of this Agreement, in the event of any emergency involving the Transmission Infrastructure, the Co-Owners shall notify the Appropriate Emergency Service Providers immediately upon becoming aware of the situation and shall do all that is necessary and desirable to control the emergency, including such work in and to the Transmission Infrastructure or the Road Allowances as may be required for the purpose. If after reasonable and unsuccessful efforts to communicate with the County and in the event the emergency, at the Co-Owners’ sole determination, the Co-Owners require immediate access to Transmission Infrastructure, the Co-Owners may enter upon the subject Road Allowances and/or municipal lands without prior notice to the County in order to gain access to such Transmission Infrastructure in order to address such emergency and, in so doing, shall undertake to rectify the Transmission Infrastructure to the standards and as are otherwise required by the terms of this Agreement and to thereafter provide written notification and details and specification of such Repair Work to the County on the next municipal business day and to thereafter file amended Plans

and drawings detailing such repairs as is otherwise required by this Agreement. Without limiting the foregoing, subject to resolving to the emergency, the Co-Owners agree that all work completed under this subsection shall maintain the same location of the Transmission Infrastructure as previously approved by the County.

19. The Co-Owners shall be responsible for all costs associated with such emergencies. The Parties hereby agree to cooperate with each other and with the Appropriate Emergency Service Providers and Hydro One Networks Inc. to develop and adopt protocols applicable in the event of an emergency involving the Transmission Infrastructure.

Upgrades Required

20. In the event that the standard, condition or maintenance of any of the Road Allowances is not sufficient to permit the Co-Owners to carry out its desired operations, the Co-Owners shall be solely responsible for carrying out any work or maintenance required to upgrade the Road Allowances, at its own expense.

Locating Infrastructure:

21. The Co-Owners agree at their sole expense to:
 - (a) mark the location of Transmission Infrastructure installed by the Co-Owners within the Road Allowances with appropriate markings;
 - (b) participate in the "Ontario One Call" system to facilitate ongoing notice to the public of the location of the Transmission Infrastructure; and
 - (c) upon written request of the County, the Co-Owners shall properly and accurately identify the location of any Transmission Infrastructure within the County, and provide such reports to identify the depth of the relevant portion of the Transmission Infrastructure, such request to be made in writing to the Co-Owners with advance notice of twenty (20) days prior to the County or a third party commencing work that may conflict with the Transmission Infrastructure.

Relocation of Installed Infrastructure

Upon Election of the Co-Owners

22. In the event that the Co-Owners wish to relocate Transmission Infrastructure which has been previously installed in accordance with this Agreement at 100% its own expense, the Co-Owners shall notify the County of such request, in writing, and such request will thereafter be considered and administered by the County acting reasonably and with diligence giving due consideration to the scope of the works already undertaken by the Co-Owners on the Road Allowances, provided that, in considering and administering such request the County shall be entitled to take into consideration any specific municipal or engineering interests affected by such relocation including any additional facilities located within the Road Allowances. Notwithstanding the foregoing, the County shall not be permitted to unreasonably withhold, delay or condition its approval for such request.

Required by the County

23. In the event that the County concludes that: (i) it will widen the road allowance, in respect of the **Narrowed Right-of-Way Area**, (ii) it has approved the widening of the road allowance, (iii) it attains the land necessary for such widening, and (iv) it, in its sole discretion, deems it necessary at any time for the Transmission Infrastructure identified in **Schedule "F"** (hereafter, a "**Narrowed Right-of-Way Relocation**") as the Narrowed Right-of-Way Area, to be taken up, removed, or modified within the Road Allowance, the required Narrowed Right-of-Way Area and any related installation work shall be, upon request by the County, conducted by the Co-Owners at 100% its own expense and within a reasonable period of time, subject to Force Majeure.
24. In the event that the County, in conjunction with an approved municipal plan, and acting reasonably, deems it necessary for the location of any part of the Transmission Infrastructure or Entrances which are not located in the Narrowed Right-of-Way Area identified in **Schedule "F"** (hereafter, "a **General Relocation**") to be taken up, removed, or modified within the Road Allowance, the General Relocation and any related installation work shall be conducted at the 100% of the expense of the Co-Owners within a reasonable period of time and subject to Force Majeure.
25. Without limiting and in addition to the sections 23 and 24, in the event that the Co-Owners determine that leave to construct or amendment thereto or any other approval is required from a Public Authority, or any successor thereof, with respect to the proposed Narrowed Right-of-Way Relocation, a General Relocation or related installation work, then the County shall provide such reasonable period of time as is necessary for the Co-Owners to obtain such leave to construct, amendment or other approval before closing or disposing of the Road Allowance, if applicable; provided, however, in the event that any Public Authority's approval is not provided to the Co-owners both the Co-Owners and the County shall be bound to comply with the determination of the Public Authority and shall modify or discontinue the relocation of the Transmission Infrastructure or Entrances as necessary.

Required by Legislation or Lawful Order

26. In the event that a General Relocation is required as a result of the County's compliance with a legislative requirement, Ministerial order or such other law or order of a body which has the ability to force the County to act then the costs of the Relocation and/or related installation work associated with the installed Transmission Infrastructure shall be performed by the Co-Owners at 100% their cost.

By Third Party

27. Where the Relocation under Section 24 is required due to the County accommodating a third party (hereinafter "**Third Party Work**"), the required Relocation or related installation work shall be conducted by the Co-Owners in accordance with the terms of this Agreement respecting installation, and the full cost of the amendment or Relocation shall be borne solely by the third party and paid in advance. The County agrees to

provide the Co-Owners with ninety (90) days' notice of the need for any such Third Party Work and to require that the relevant third party or parties bear the full cost of such Third Party Work and indemnify the Co-Owners against all claims and liabilities arising from the amendment or Relocation as a condition precedent to any such amendment or Relocation.

Temporary Reconstruction or Realignment of Road Allowances

28. The Co-Owners shall, upon reasonable prior notice to the County, have the right to:
- (a) temporarily reconstruct or realign certain portions of the Road Allowances in order to permit the delivery or movement of oversized Transmission Infrastructure components; and
 - (b) connect access roads located on private land and running from the Transmission Infrastructure to the Road Allowances to permit ongoing access to such Transmission Infrastructure during the period of commercial operation of the Wind Project.

D. MAINTENANCE, SNOW CLEARANCE AND TREE WORK/REPLACEMENT

No County Winter Maintenance

29. The Co-Owners acknowledges that certain of the Road Allowances, which are clearly identified in the Road-Use Diagram (Schedule "B") are not maintained by the County for winter use due to soft surfaces and otherwise. In the event that the Co-Owners require the Road Allowances to be maintained for winter access, they shall undertake the necessary snow plowing on its own accord and at its expense and shall be responsible for all costs associated with the repair of any Road Allowance damaged as a result of such use by the Co-Owners.

Tree Work

30. Notwithstanding applicable statutory rights, in the event that the Co-Owners deems it necessary to perform any Tree Work, the Co-Owners shall be entitled to conduct the Tree Work. In the event that trees are removed from within the Road Allowances, the Co-Owners agree at its sole expense, to remove the tree stump to a level below grade and to restore and remediate the surface of the Road Allowance.

E. IMPLEMENTATION OF PLANS

Revisions Required

31. In the event that physical features of the Road Allowances or other obstacles or circumstances frustrate the ability of the Co-Owners to complete the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlargement, repair, replacement, relocation and removal of Transmission Infrastructure in compliance in all material respects with the Approved Road Use Plans , the Co-

Owners agree to revise the relevant Plans and submit such revised Plans for review by the County Engineer. If a material revision is required, subject to Section 64 of this Agreement, the County agrees to expedite in the instance of a revision of Plans submitted and agrees not to unreasonably condition, delay or withhold approval of revised Plans.

Adherence to Approved Road Use Plans

32. The Co-Owners further agree to commence, perform and complete the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure in compliance with the Approved Road Use Plans and Road-Use Diagram within a reasonable margin of error.

Filing of As-Built Plan Following Installation etc.

33. Following the completed placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure and within one hundred eight (180) days after the Commercial Operation Date, the Co-Owners agree to conduct the necessary investigation necessary to produce and file with the County Engineer an As-Built Plan together with a final electronic copy (CD ROM or DVD) prepared in an AUTOCAD, CAD or GIS environment of the As-Built Plan, showing the exact location and specifications of any Transmission Infrastructure installed over, along, across, under or within the Road Allowances and any Entrances. The Parties agree that the County shall not release of any deposits or securities held until the As-Built Plan is filed.

Post-Installation Report and Required Repairs

34. Following the County Engineer's receipt of notice from the Co-Owners confirming that installation of the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure over, along, across, within or under the Road Allowances is complete (the "**Completion Notice**"), the Consulting Engineer shall conduct a further inspection and provide a post-installation report (the "**Post-Installation Report**"), which includes the following:
 - (a) identification of the Road Allowances which in the opinion of the Consulting Engineer, have been damaged or destroyed by the Co-Owners and its employees, agents or contractors during the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure over, along, across, within or under the Road Allowances, hauling, or establishing of Entrances; and
 - (b) identification of the repairs, replacements or remedial work necessary to repair the damaged Road Allowances.

The Consulting Engineer's inspection, for the purposes of producing the Post-Installation Report shall be completed no later than ten (10) business days following receipt by the County of the Completion Notice. The Consulting Engineer shall prepare a draft Post-Installation Report for review and approval by the County Engineer, acting reasonably. the Co-Owners agree to repair any and all damage to the Road Allowances directly caused by the Work in accordance with the Post-Installation Report (hereinafter referred to as the "**Required Repairs**"). In the event the Co-Owners fail to complete the Required Repairs in a manner and within a timeframe acceptable to the County Engineer acting reasonably, the County may do so at the sole expense of the Co-Owners.

Final Condition Report and Final Repairs

35. Following the expiry of the Interim Period, the County's Engineer shall forthwith conduct an inspection of the Road Allowances to either (i) confirm its satisfaction that all restoration work has been completed and that the Road Allowances are in the same or better condition which existed prior to the performing of the Work; or (ii) identify those Road Allowances which are not in the same or better condition which existed prior to the performing of the Work and identify the repair, replacement or remedial work required to repair the Road Allowance to the same condition which existed prior to the performing of the Work (the "**Final Condition Report**"). The County Engineer's inspection, for the purposes of producing the Final Condition Report shall be completed no later than ten (10) business days following the expiry of the Interim Period and the Final Condition Report shall be delivered to the Co-Owners not later than ten (10) business days following the date of inspection aforesaid. the Co-Owners agree to repair any damage to the Road Allowances identified in the Final Condition Report (the "**Final Repairs**") within a reasonable period of time. In the event the Co-Owners fail to complete the Final Repairs in a manner and within a timeframe acceptable to the County Engineer acting reasonably, the County may do so at the sole expense of the Co-Owners.

F. COMPENSATION

For Use of Road Allowance

36. To offset the administrative expenses incurred by the County as a result of the use of its road allowances and to further secure covenants of the Co-Owners as set out in this Agreement, the Co-Owners agree to pay to the County,
- (a) An initial payment of ten thousand dollars (\$10,000.00) within 30 days of the effective date of this Agreement, which shall *inter alia*, fully compensate the County for all reasonable out of pocket costs incurred in connection with the preparation and implementation of this Agreement including reasonable legal, engineering and inspection costs; and

An annual fee in the amount of four thousand dollars (\$4,000.00) per kilometer of transmission lines located on County Road Allowances per year, payable by March 31 of every year during the term of this Agreement.

- (b) The appropriate permit fees, which fees are shown in the Permits and Fees Document (**Schedule “D”**) with respect to those permits the Co-Owners require in order to engage in desired actions while using the rights identified in this Agreement.
37. All overdue payments payable by the Co-Owners to the County under the terms of this Agreement shall bear interest at the rate of ten (10%) per cent per annum.

First Security Deposit

38. Prior to the commencement of the Work, the Co-Owners shall deposit with the County an irrevocable letter of credit in a form satisfactory to the County and from a financial institution satisfactory to the County, acting reasonably (the “**First LC**”) in the amount of \$250,000, which shall secure the obligations of the Co-Owners pursuant to this Agreement during the initial placement, installation and construction of the Transmission Infrastructure over, along, across, within or under the Road Allowances. the Co-Owners acknowledge and agree that the County shall be entitled to draw on and use the proceeds from the First LC to complete the Required Repairs if the Co-Owners fail to do so in accordance with section 35 of this Agreement.

Second Security Deposit

39. Following the completion of any Required Repairs to the satisfaction of the County acting reasonably, the County shall forthwith return the First LC to the Co-Owners and the Co-Owners shall, within five (5) business days of the receipt of the First LC, provide a second irrevocable letter of credit in a form satisfactory to the County and from a financial institution satisfactory to the County, acting reasonably (the “**Second LC**”) in the amount of \$125,000, which shall secure the obligations of the Co-Owners with respect to section 35. the Co-Owners acknowledge and agree that the County shall be entitled to draw on and use the proceeds of the Second LC to complete the Final Repairs in the event the Co-Owners fail to do so within a reasonable period of time, in accordance with section 35 of this Agreement. The County shall return the Second LC to the Co-Owners within five (5) business days following the earlier of, (i) the date on which the the Co-Owners notify the County that the Final Repairs required to be performed by the Co-Owners pursuant to sections 35 have been satisfactorily completed in the opinion of the County, acting reasonably; and (ii) the date which is [**ninety (90)**] days following the date of the Final Condition Report.

G: LIABILITY

Risk with the Co-Owners

40. The Co-Owners hereby acknowledge that the placement, installation, construction, reconstruction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Electrical Infrastructure by the Co-Owners in accordance with the Easement Rights granted hereunder is performed entirely at the risk of the Co-Owners and that the County shall in no way or under any circumstances will be responsible or liable to the Co-Owners or its contractors, agents, or customers for

any damage or losses in consequence thereof, unless due to the negligent or intentional acts of the County or those for whom it is at law responsible.

Indemnification

41. The Co-Owners will indemnify and hold harmless the County, its Warden, Councilors, officers, employees, legal counsel, agents and contractors from and against any and all claims, suits, demands, liabilities, losses, costs, damages, and other expenses of every kind that the County may incur or suffer as a direct consequence of the Easement Rights granted hereunder, except where such claims, suits, demands, liabilities, losses, costs, damages, and other expenses result from the negligence or intentional acts of the County, its Warden, Councilors, officers, employees, legal counsel, agents or contractors.

No Joint Venture, Partnership or Co-ownership

42. The County and the Co-Owners hereby acknowledge and agree that this Agreement is solely a road use agreement and that no relationship is formed between the County and the Co-Owners in the nature of a joint venture, partnership co-ownership arrangement or other similar relationship.

G. ABANDONMENT AND DECOMMISSIONING OF TRANSMISSION INFRASTRUCTURE

Notice of Abandonment

43. During the term of this Agreement, the Co-Owners may elect to permanently discontinue the use of (hereinafter, “**Abandon**”) any part of the Transmission Infrastructure in which event the Co-Owners shall provide written notice specifying the part of the Transmission Infrastructure to be abandoned and the date when the abandonment will occur.

Removal

44. If the Co-Owners Abandon any part or all of the Transmission Infrastructure, it shall decommission and remove in accordance with the Project’s decommissioning plan and the Ministry of Environment (“**MOE**”) requirements in the Co-Owners’ Renewable Energy Approval (“**REA**”). Should the Co-Owners fail to decommission and remove the infrastructure as set out above, the County may, to the extent permitted by Applicable Law, retain necessary personnel to remove the infrastructure and the Co-Owners shall compensate the County for 100% of its cost to decommission and remove the infrastructure. This provision shall survive the termination of this Agreement.

H. DEFAULT

Breach

45. Subject to the rights granted to any Secured Parties hereunder or by the County, in the event that a Party commits a material breach of or omits to comply with any of the provisions of this Agreement (the “**Defaulting Party**”) which continues for at least sixty

(60) days after written notification of such default is provided to the Defaulting Party, the other Party (the “**Complainant**”) shall have the right to terminate this Agreement. However, if the Defaulting Party shall have remedied the breach or shall have commenced to remedy the breach and has diligently pursued the remedying thereof within the sixty (60) days after the initial written notification of default, the Defaulting Party shall be allowed not less than one hundred and fifty (150) days after the expiry of the original notice period to remedy the breach, or such longer period of time as is reasonable in the circumstances. In the event of default by the Co-Owners and without such default being rectified within the time period referred to in this section, the County shall have the right to terminate this Agreement.

Expiration of PPA

46. Notwithstanding any other term or provision of this Agreement, if the PPA expires or is terminated and not otherwise extended or renewed during the Term of this Agreement, and the Co-Owners do not secure an adequate replacement market for the electricity generated by the Wind Project within ninety (90) days of the expiry or termination of the PPA, this Agreement shall, at the option of the Co-Owners be terminated.

Force Majeure

47. Whenever, and to the extent that a Party will be unable to fulfill or will be delayed or restricted in the fulfillment of any obligations under any provision of this Agreement by reason of:
- (a) strikes;
 - (b) lock-outs;
 - (c) war acts of military authority;
 - (d) rebellion or civil unrest;
 - (e) material or labour shortage not within the control of the affected Party;
 - (f) fire or explosion;
 - (g) inclement weather, flood, wind, water, earthquake, or other casualty;
 - (h) changes in Applicable Law not wholly or mainly within the control of the affected Party, including the revocation by any Public Authority of any permit, privilege, right, approval, license or similar permission granted to the Co-Owners or the Wind Project;
 - (i) any event or matter not wholly or mainly within the control of the affected Party (other than lack of funds or any financial condition of the parties hereto); or,
 - (j) acts of God,

(in each case a “**Force Majeure**”) not caused by the default or act of or omission by that Party and not avoidable by the exercise or reasonable effort or foresight by it, then, so long as any such impediment exists, that Party will be relieved from the fulfillment of such obligation and the other Party will not be entitled to compensation for any damage, inconvenience, nuisance or discomfort thereby occasioned. The Party relying on Force Majeure will be required and is entitled to perform such obligation within a period of time immediately following the discontinuance of such impediment that is equal to the period of time that such impediment existed. A Party shall promptly notify the other Party of the occurrence of any Force Majeure, which might prevent or delay, that doing or performance of acts or things required to be done or performed.

I. MISCELLANEOUS

Assignment

48. Subject to the provisions in other paragraphs of this Agreement, the Co-Owners shall not assign this Agreement without the written consent of the County, which shall not be unreasonably withheld, delayed or conditioned, except that no consent shall be required for a Co-Owner to assign this Agreement to another Co-Owner or to an affiliated or successor entity, or for purposes of securing indebtedness or other obligations respecting the Transmission Infrastructure or the Wind Project. The County acknowledges that a change in control of the Co-Owners shall not be considered an assignment by a Co-Owner of this Agreement or of any of the Co-Owner’s rights and obligations under this Agreement.
49. Each Co-Owner shall be entitled to assign this Agreement and all of its rights thereunder without the consent of the County to the Secured Parties as security for the Co-Owner’s obligations to such Secured Parties which shall be further entitled to assign this Agreement and the Co-Owner’s rights thereunder in connection with an enforcement of their security. The County hereby grants to any Secured Party the rights and remedies set forth in this Agreement, including those rights and remedies set forth in **Schedule “E”**. In addition, the County will, from time to time, at the request of the Secured Party, promptly execute and deliver in favour of any Secured Party such consents and acknowledgements granting and confirming the rights and remedies in this Agreement, including those rights and remedies set forth in **Schedule “E”**. The County shall enter into any other reasonable agreements with the Secured Party, as may reasonably be required by a Co-Owner in order to obtain financing from the Secured Party.
50. Each Co-Owner shall be entitled, with the written consent of the County, which may not be unreasonably conditioned, delayed, or withheld, to assign this Agreement to a transferee of the Wind Project other than an affiliated or successor company, and the Co-Owners shall thereupon be released from any and all obligations under this Agreement from and after the date of such assignment, provided that such assignee has agreed in writing with the County, in a form acceptable to the assignee and the County, both acting reasonably, to be bound by the provisions of this Agreement from and after the date of the assignment.

51. In the event a Co-Owner applies to the County for consent to a transfer, the County shall have a period of thirty (30) days following receipt of sufficient information to make a determination as to whether the County shall provide or refuse to provide its consent to the proposed Transfer. The County's failure to respond within that thirty (30) day period shall be construed as consent by the County.
52. Any documents relating to a transfer or the County's consent will be prepared by the County or its solicitors or their retained agents and all of the legal costs borne as a result by the County together with a reasonable administrative charge of One Thousand Dollars (\$1,000) shall be reimbursed to the County by the Co-Owners on demand.

Dispute Resolution

53. In the event that either Party provides the other Party with written notice of dispute regarding the interpretation or implementation of this Agreement (a "**Dispute**") then both Parties shall use their best efforts to settle the Dispute by consulting and negotiating with each other in good faith to reach a solution satisfactory to both Parties. However, if the Parties do not resolve the Dispute within thirty (30) days following receipt of such notice, then either Party may provide written notice to the other Party (the "**Arbitration Notice**") requiring resolution by arbitration or thereafter the Dispute shall be referred to arbitration in accordance with the provisions of the *Arbitration Act, 1991*.
54. The Parties agree to the following with respect to any arbitration between the Parties:
 - (a) the arbitration tribunal shall consist of one arbitrator appointed by mutual agreement of the Parties or, if the Parties fail to agree on an arbitrator within ten (10) days after receipt of the Arbitration Notice then either Party may apply to a judge of the Ontario Superior Court of Justice to appoint an arbitrator;
 - (b) The arbitrator shall be qualified by education and training to be able to decide upon the matter to be decided;
 - (c) The arbitration shall be conducted in English;
 - (d) The arbitration shall take place in the geographic boundary of the County of Middlesex or another place mutually agreed upon by the Parties;
 - (e) The arbitration award shall be given in writing and shall address the question of costs of the arbitration and all related matters;
 - (f) The arbitration award shall be final and binding on the Parties as to all questions of fact and shall be subject to appeal only with respect to matters of law or jurisdiction.
55. The Parties agree that except to the extent that a matter is specifically the subject of a Dispute, both Parties shall continue to observe and perform the terms and conditions of this Agreement pending the resolution of a Dispute.

Termination by the Co-Owners

56. The Co-Owners may upon six (6) months' notice in writing, terminate this Agreement. Once the notice has been provided, the Co-Owners shall be liable to the County for the provisions of this Agreement to the date of termination. Following the termination date, the Co-Owners will only be liable for the provisions which survive this Agreement.

Further Assurances

57. Each of the Parties covenant and agrees with the other that it will at all times hereafter execute and deliver, at the request of the other, all such further documents, agreements, deeds and instruments, and will do and perform all such acts as may be necessary to give full effect to the intent and meaning of this Agreement.

Notices

58. The parties hereto agree as follows:

Any written notice provided for and contemplated by this Agreement will be delivered to the parties by hand or registered mail at the following addresses:

To the County:

The Corporation of the County of Middlesex
Attention: County Clerk
399 Ridout Street North
London, ON N6A 2G7

To the Co-owners:

Bornish Wind LP / Kerwood Wind, Inc. / Jericho Wind, Inc.

Attention: Business Management
390 Bay Street, Suite 1720
Toronto, ON, M5H 2Y2, Canada

Phone: (416) 364-9714

With a copy to:

Bornish Wind LP / Kerwood Wind, Inc. / Jericho Wind, Inc.

Attention: General Counsel
700 Universe Blvd. LAW/JB
Juno Beach, Florida 33408
Phone: (561) 691-2359

Every such notice shall be deemed to have been received if personally delivered at the time of such delivery and if sent by prepaid registered mail, at the end of five (5) business days after the mailing thereof.

Governing Law

59. This Agreement shall be governed by, and be construed and interpreted in accordance with, the laws of Ontario and the laws of Canada applicable in Ontario.

Counterparts

60. This Agreement may be executed by facsimile or PDF transmission and in one or more counterparts, all of which shall be considered one and the same Agreement.

Binding Covenant

61. This Agreement and the rights granted hereunder are and shall be of the same force and effect, to all intents and purposes, as a covenant running with the Road Allowances. The provisions of this Agreement, including all of the covenants and conditions herein shall extend, be binding upon and enure to the benefit of the County, the Co-Owners and their respective successors and permitted assigns as the case may be.

Severability

62. The invalidity or unenforceability of any provision of covenant contained in this Agreement shall affect the validity or enforceability of such provision or covenant only and any such invalid provision or covenant shall be deemed to be severable from the balance of this Agreement, which shall be enforced to the greatest extent permitted by law.

Amendments to the Agreement

63. No supplement, modification, amendment, or waiver of this Agreement shall be binding unless executed in writing by the Parties.

Amendments to the Approved Road Use Plan

64. Any material amendment to the Approved Road Use Plan will be submitted to the County Engineer for his approval, who will not unreasonably withhold such approval. The parties agree that once approved, the amended Approved Road Use Plan shall substitute for, and replace the attached **Schedule "B"** as part of this Agreement.
65. Bornish has agreed to file a proposed amendment to its REA with the MOE in order to allow Bornish to move portions of its Electrical Infrastructure to lands over which Bornish has an easement as shown in "green" on **Schedule "G"**. Bornish agrees to undertake all commercially reasonable efforts to obtain an amendment of its REA from the MOE on or before February 1, 2014. In the event Bornish is successful in obtaining a non-appealable amendment of its REA on or before February 1, 2014, then the Approved Road Use Plans set out in **Schedule "B"** to this Agreement shall be replaced to reflect the amendment approved by the MOE and such replacement schedule shall form part of this Agreement as amended in accordance with the terms of this Agreement. The Co-Owners shall be entitled to construct the Transmission Infrastructure in accordance with the

amended **Schedule “B”**. Subject to the foregoing sentence, to the extent that approval is not received by February 1, 2014, Bornish shall use all commercially reasonable efforts to seek the applicable REA amendments thereafter.

Waiver

66. No supplement, modification, amendment, or waiver of this Agreement shall be binding unless executed in writing by the Parties.

Foreign Corrupt Practices Act and Anti-Bribery Indemnity

67. Notwithstanding anything to the contrary herein, the County, in its administration of this Agreement, shall refrain from offering, giving or promising, directly or indirectly, money or anything of value to a Canadian or foreign governmental official to influence the official in his or her official capacity, induce the official to do or omit to do an act in violation of his or her lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business to, any person. For the purposes of this Section, “**anything of value**” includes, but is not limited to, cash or a cash equivalent, discounts, gifts, use of materials, facilities or equipment, entertainment, drinks, meals, transportation, lodging, insurance benefits, or promise of future employment. “**governmental official**” shall mean any person holding any level of legislative, administrative, or judicial office of the Canadian or a foreign government or any of its departments or agencies or divisions; any person acting on behalf of the Canadian or a foreign government, including a local or provincial agency, enterprise, or organization; any official or agent of a Canadian or a foreign public administration or publicly funded organization; any official of a Canadian or a foreign political party; any officer or agent of a public international organization (e.g., World Bank, International Monetary Fund, World Health Organization, United Nations, World Trade Organization); or any relatives or close family/household members of any of those listed above. The County shall indemnify and hold harmless the Co-Owners from all claims brought against the Co-Owners as a result of the County or its representatives’ failure to comply with Anti-Bribery Law. The County shall immediately report any breach of Anti-Bribery Law by the County or its representatives. The County shall indemnify and hold harmless the Co-Owners from all claims brought against the Co-Owners as a result of the County or its representatives’ failure to comply with Anti-Bribery Law. The County shall immediately report any breach of Anti-Bribery Law by the County or its representatives. The Co-Owners shall have the right to audit the County’s books and records with respect to payments made on behalf of the Co-Owners in the event that the Co-Owners believes that the County has violated this Section 67. The Co-Owners shall have the right to immediately terminate all payments to the County under this Agreement if the County fails to comply with this Section 67.

Co-Ownership Provisions

68. The Parties acknowledge and agree that Bornish, Jericho and Kerwood are co-owners of the interests provided hereunder and that each Co-Owner's interest therein is a one third undivided interest. Any reference to a Secured Parties’ rights in this Agreement is

limited to the Co-Owner's one third interest and after it exercises its rights hereunder the Secured Parties' rights under the Agreement will be subject to any rights held by the other Co-Owners.

69. Notwithstanding any other provision of this Agreement, the County acknowledges and agrees that:

- (a) any recourse against either of Bornish, Jericho or Kerwood in any manner in respect of any obligation or liability of the Co-Owners under this Agreement shall be limited to, and satisfied only out of, the undivided interest of each of Bornish, Jericho and Kerwood in and to the Agreement;
- (b) if any of Bornish, Jericho or Kerwood, as applicable, is in breach of the performance of any of its obligations under this Agreement, then either of the other Co-Owner parties shall have the right, but not the obligation, to remedy such non-performance on behalf of the non-performing party and the County agrees to give concurrent notices of any such breach or default pursuant to the Agreement to each of Bornish, Jericho and Kerwood;
- (c) if any of Bornish, Kerwood or Jericho, as applicable, is in default of a provision of the Agreement which is not capable of being cured by the other Co-Owner parties, the County will not terminate the Agreement if, within 30 days of the County giving notice of such default to the other Co-Owners, a non-defaulting Co-Owner:
 - (i) cures any existing curable defaults on the part of the defaulting Co-Owner; or
 - (ii) undertakes to the County that it will fulfil all obligations of the defaulting Co-Owner under the Agreement; and

while a Secured Party is exercising its rights and remedies in relation to a default by Bornish, Jericho or Kerwood, the non-defaulting Co-Owners will not be obliged to cure the default or non-performance by the defaulting Co-Owner and any cure periods set out in this Agreement shall not run against a non-defaulting Co-Owner until the County gives notice to a non-defaulting Co-Owners and to the Secured Parties of the defaulting Co-Owner's interest and the Secured Parties have failed to remedy the defaults in accordance with the Secured Parties' rights under this Agreement.

IN WITNESS WHEREOF the parties hereto affix their hands and seal or corporate seals, attested to by the hand of their authorized officers, as the case may be, at London, Ontario, this 10th day of September, 2013 to be effective as of the date first written above.

SIGNED, SEALED AND DELIVERED
in the presence of

**THE CORPORATION OF THE
COUNTY OF MIDDLESEX**

Warden

Clerk

We have the authority to bind the Corporation

**BORNISH WIND GP, INC., AS GENERAL
PARTNER**

**FOR AND ON BEHALF OF BORNISH
WIND L.P.**

As to Form

Per:

Title:

*I have the authority to bind the Corporation
and the Partnership*

KERWOOD, INC.

Per:

Title:

I have the authority to bind the Corporation

JERICO, INC.

Per:

Title:

I have the authority to bind the Corporation

As to Form

IN WITNESS WHEREOF the parties hereto affix their hands and seal or corporate seals,
attested to by the hand of their authorized officers, as the case may be, at Juno Beach,
Ontario, this 12th day of September, 2013 to be effective as of the date first written above.
Florida

SIGNED, SEALED AND DELIVERED
in the presence of

**THE CORPORATION OF THE
COUNTY OF MIDDLESEX**

Warden

Clerk

We have the authority to bind the Corporation

**BORNISH WIND GP, INC., AS GENERAL
PARTNER
FOR AND ON BEHALF OF BORNISH
WIND LP**

As to Form

Per: John DiDonato
Title: Vice President

*I have the authority to bind the Corporation
and the Partnership*

KERWOOD, INC.

Per: John DiDonato
Title: Vice President

I have the authority to bind the Corporation

JERICO, INC.



Per: John DiDonato
Title: Vice President

I have the authority to bind the Corporation

As to Form

SCHEDULE “A”

The Co-Owners Asset Document

Bornish

Bornish Wind, L.P. (“Bornish”) is the project entity for the Bornish Wind Energy Centre (“Bornish Project”) located in Middlesex County, Ontario. Bornish is the owner of a Feed-In-Tariff Contract with reference number F-002173-WIN-130-601 (FIT Contract).

The Bornish Project will generate 73.5 megawatts, and Bornish is the owner of wind farm leases and easement agreements to support the infrastructure and facilities for the Bornish Project.

Bornish will own all the turbines and infrastructure for the Bornish Project. Bornish will also have an interest in portions of the transmission lines and facilities supporting the Bornish Project. The estimated value of the assets of the Bornish Project, as of the commercial operation date, will be \$ [REDACTED].

Kerwood

Kerwood, Inc. (“Kerwood”) is the project entity for the Adelaide Wind Energy Centre (“Adelaide Project”) located in Middlesex County, Ontario. Kerwood is the owner of a Feed-In-Tariff Contract with reference number F-002176-WIN-130-601 (FIT Contract).

The Adelaide Project will generate 60 megawatts, and Kerwood is the owner of wind farm leases and easement agreements to support the infrastructure and facilities for the Adelaide Project.

Kerwood will own all the turbines and infrastructure for the Adelaide Project. Kerwood will also have an interest in portions of the transmission lines and facilities supporting the Adelaide Project. The estimated value of the assets of the Adelaide Project, as of the commercial operation date, will be \$ [REDACTED].

Jericho

Jericho, Inc. (“Jericho”) is the project entity for the Jericho Wind Energy Centre (“Jericho Project”) located in Middlesex County, Ontario. Jericho is the owner of a Feed-In-Tariff Contract with reference number F-002172-WIN-130-601 (FIT Contract).

The Jericho Project will generate 150 megawatts, and Jericho is the owner of wind farm leases and easement agreements to support the infrastructure and facilities for the Jericho Project.

Jericho will own all the turbines and infrastructure for the Jericho Project. Jericho will also have an interest in portions of the transmission lines and facilities supporting the Jericho Project. The estimated value of the assets of the Jericho Project, as of the commercial operation date, will be \$ [REDACTED].

CONFIDENTIAL

SCHEDULE "B"

Approved Road Use Plans

As to Form

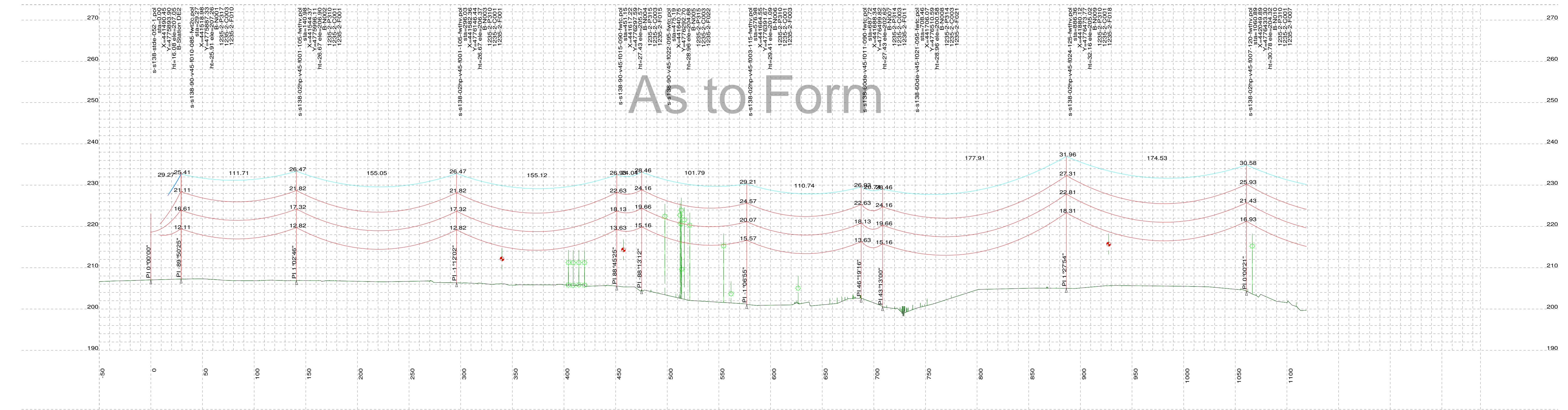
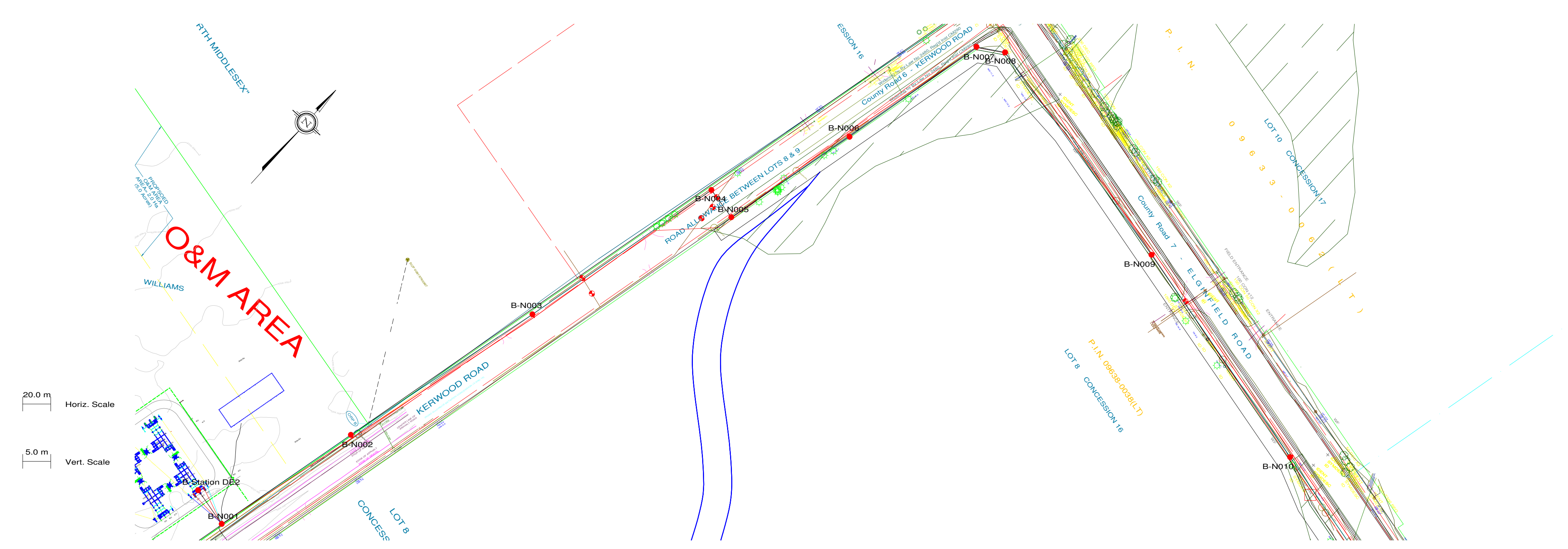
Co-Owners B1

Co-Owners Transmission Plan and Profile

As to Form



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)

STRUCTURE DESCRIPTION LEGEND:

s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001

PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	07/08/13	ISSUED FOR REVIEW								
L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW								
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW								
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW								
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW								
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW								
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER								
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR REVIEW								
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW								
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW								
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW								
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW								
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW								
REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES			

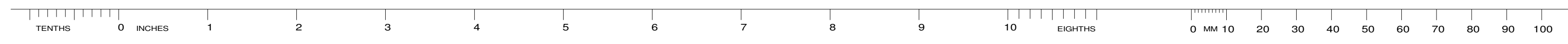
STAMP/SEAL
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 1 OF 12	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	APP			
N.T.S.					

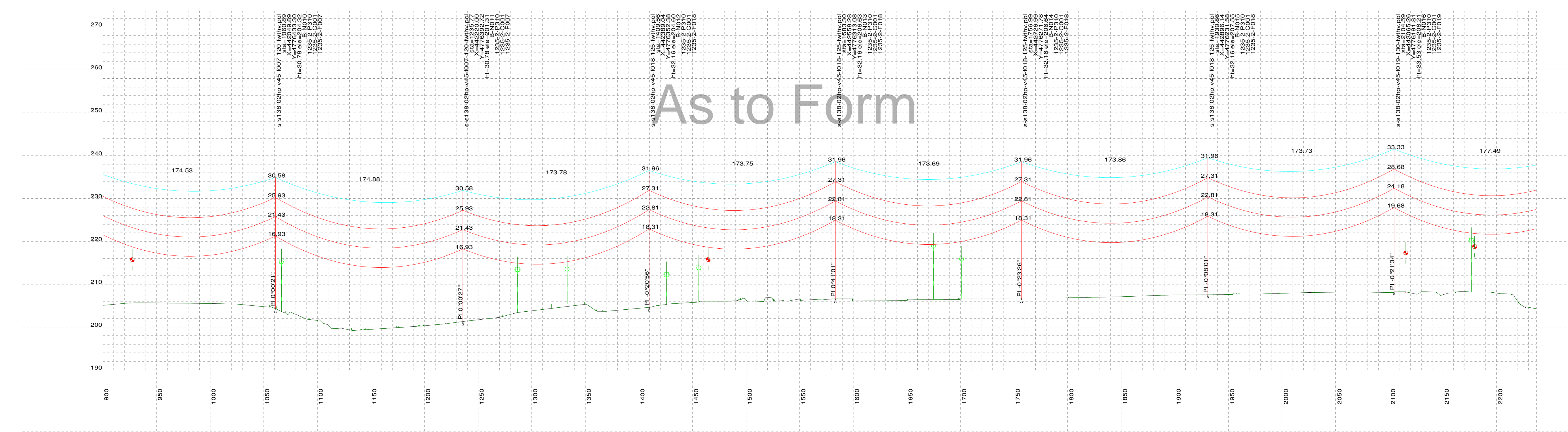
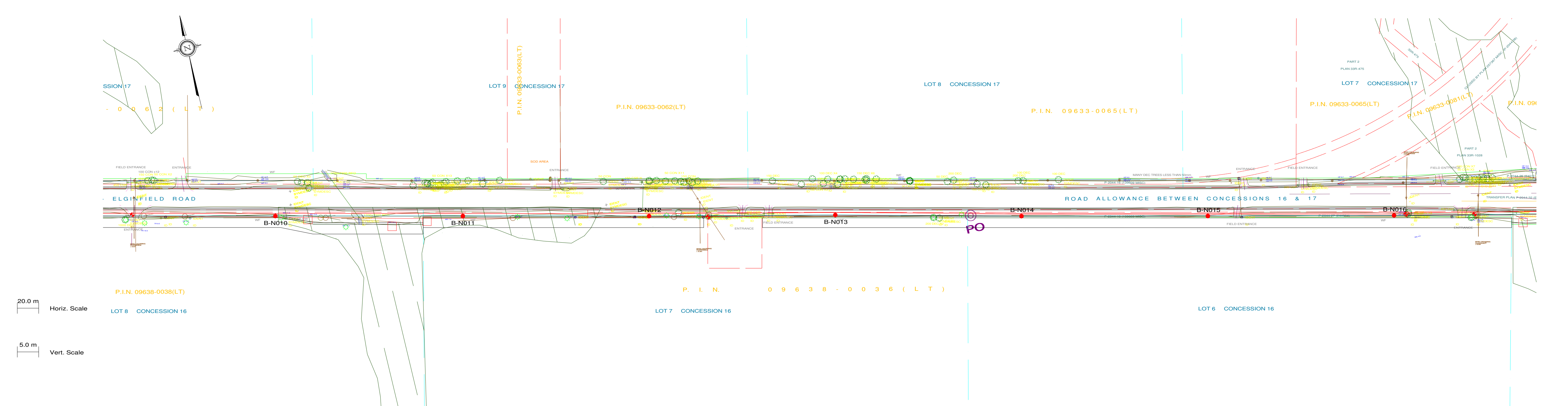
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-2-P012-S1
REV.
N



PLS-CADD Drawing



- PLAN & PROFILE LEGEND:
- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
 - OPGW
 - SHIELD WIRE
 - GROUND CLEARANCE LINE
 - HYDRO WIRE
 - TREE
 - WOOD LAND HABITAT (WOD)

- STRUCTURE DESCRIPTION LEGEND:
- s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001
- PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

- NOTES:
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 - OPGW & SHIELD WIRE SAG AT 40°C.
 - ALL DIMENSIONS ARE IN METERS U.N.O.

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L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW				
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW				
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW				
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW				
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW				
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER				
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR TENDER				
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW				
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW				
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW				
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW				
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP				

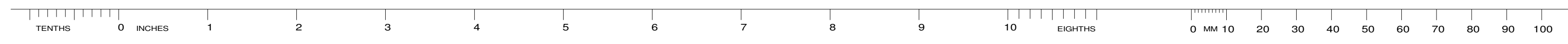
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 2 OF 12	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	APP			
N.T.S.					

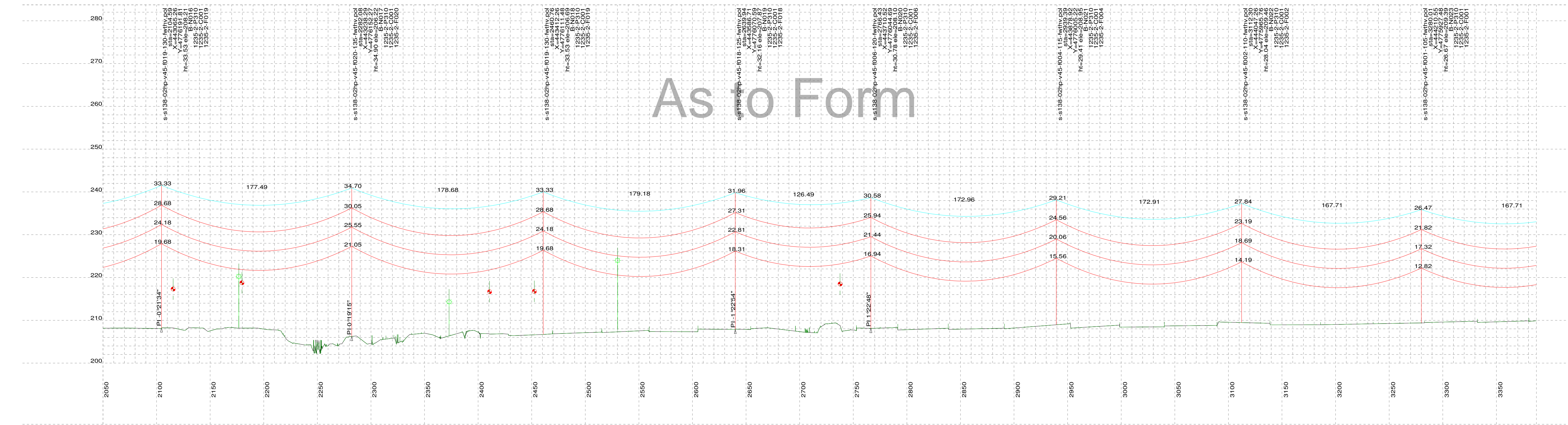
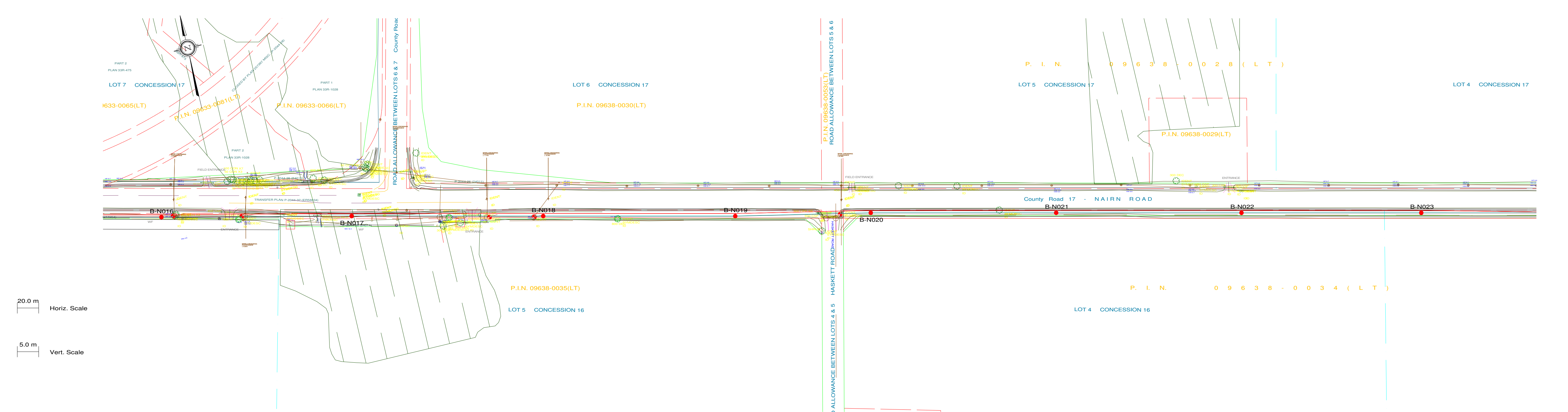
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-2-P012-S2
REV.
N



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)

STRUCTURE DESCRIPTION LEGEND:

s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001

PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
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- ALL DIMENSIONS ARE IN METERS U.N.O.



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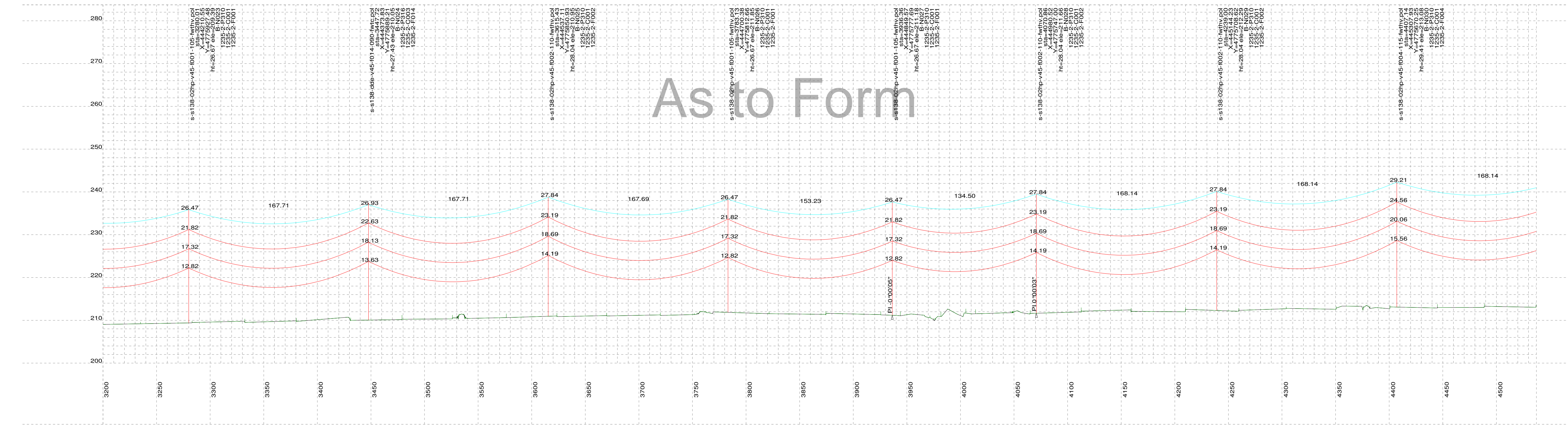
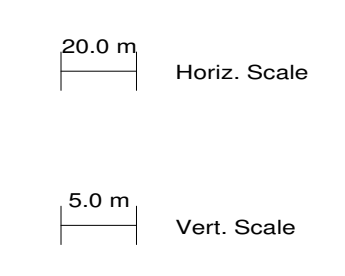
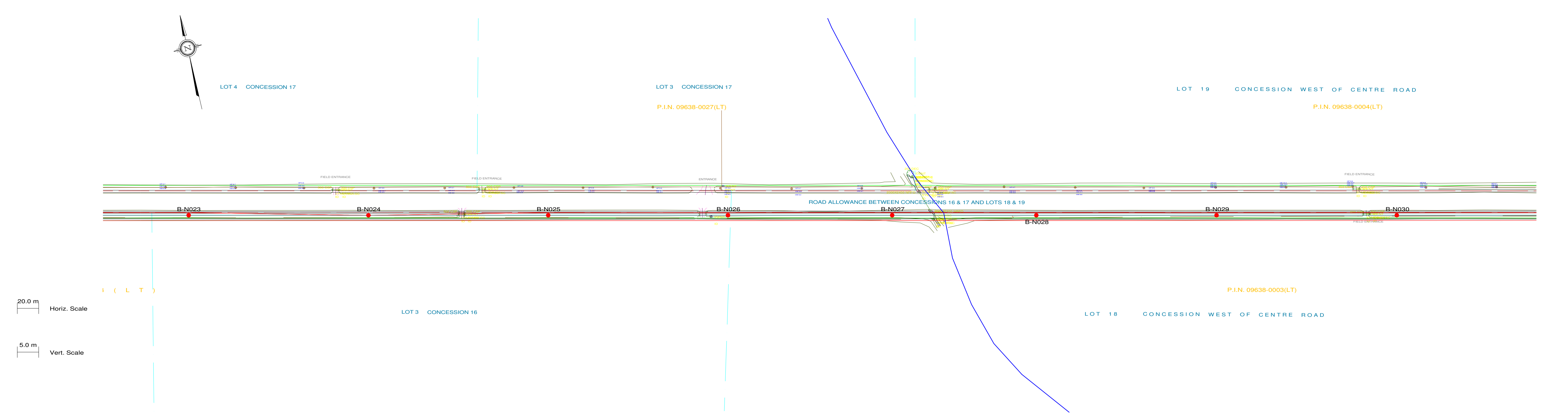
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L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW						
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW						
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW						
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW						
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW						
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER						
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR TENDER						
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW						
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW						
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW						
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW						
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW						
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP						

STAMP/SEAL
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 3 OF 12	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK		CLIENT DWG. NO.	
N.T.S.		APP		DRAWING NO. 1235-2-P012-S3	
				REV. N	



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)

STRUCTURE DESCRIPTION LEGEND:

s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001

PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
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Chimax Inc.
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

M	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	07/08/13	ISSUED FOR REVIEW								
L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW								
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW								
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW								
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW								
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW								
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER								
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR TENDER								
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW								
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW								
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW								
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW								
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW								
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP								

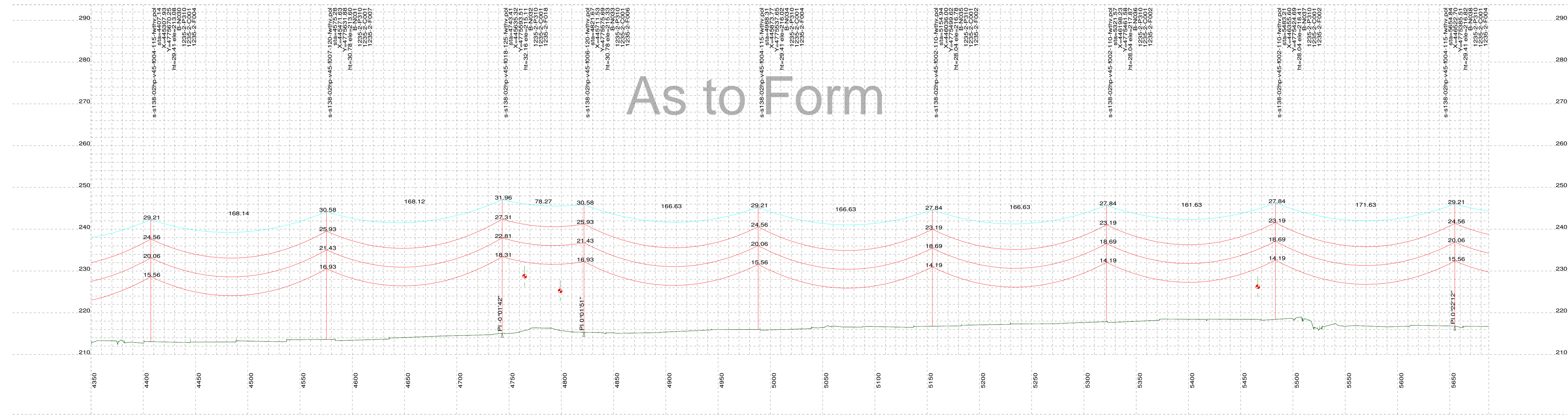
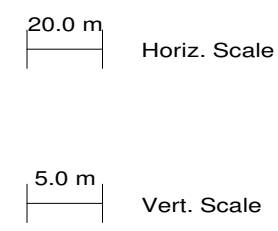
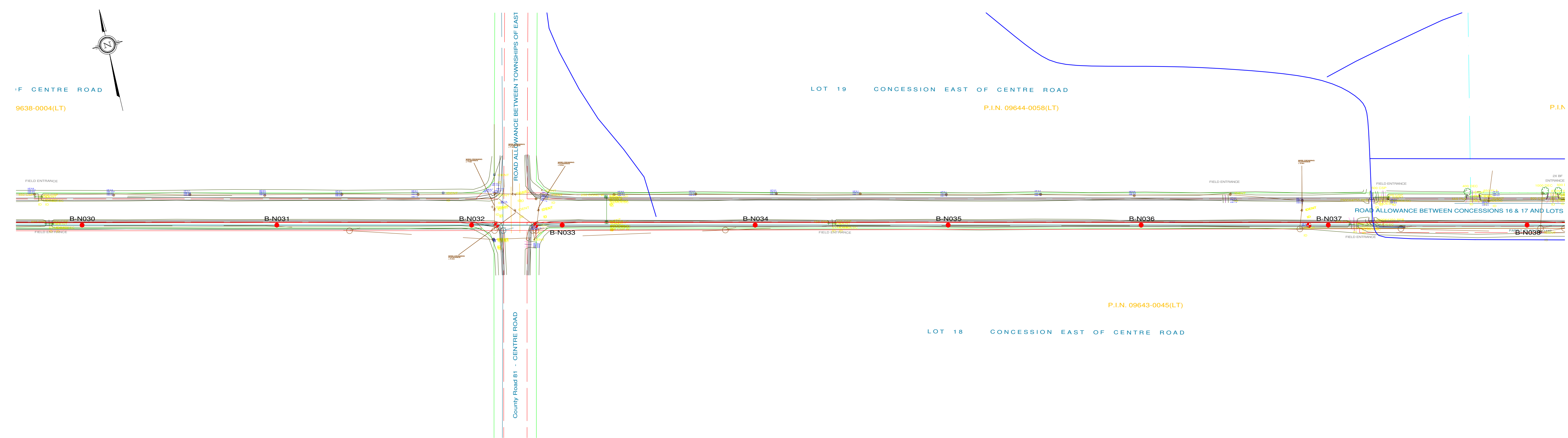
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 4 OF 12	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	APP			
N.T.S.					

CLIENT DWG. NO.	
DRAWING NO. 1235-2-P012-S4	
REV. N	



PLS-CADD Drawing



As to Form

- PLAN & PROFILE LEGEND:
- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
 - OPGW
 - SHIELD WIRE
 - GROUND CLEARANCE LINE
 - HYDRO WIRE
 - TREE
 - WOOD LAND HABITAT (WOD)

- STRUCTURE DESCRIPTION LEGEND:
- s-s138-02hp-v45-105-ld10.pol
- sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001
- PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

- NOTES:
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J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW								
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G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER								
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E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW								
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW								
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW								
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW								
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW								
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP								

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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 5 OF 12	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	APP			
N.T.S.					

Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

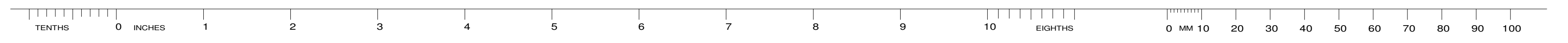
CLIENT DWG. NO.

DRAWING NO.

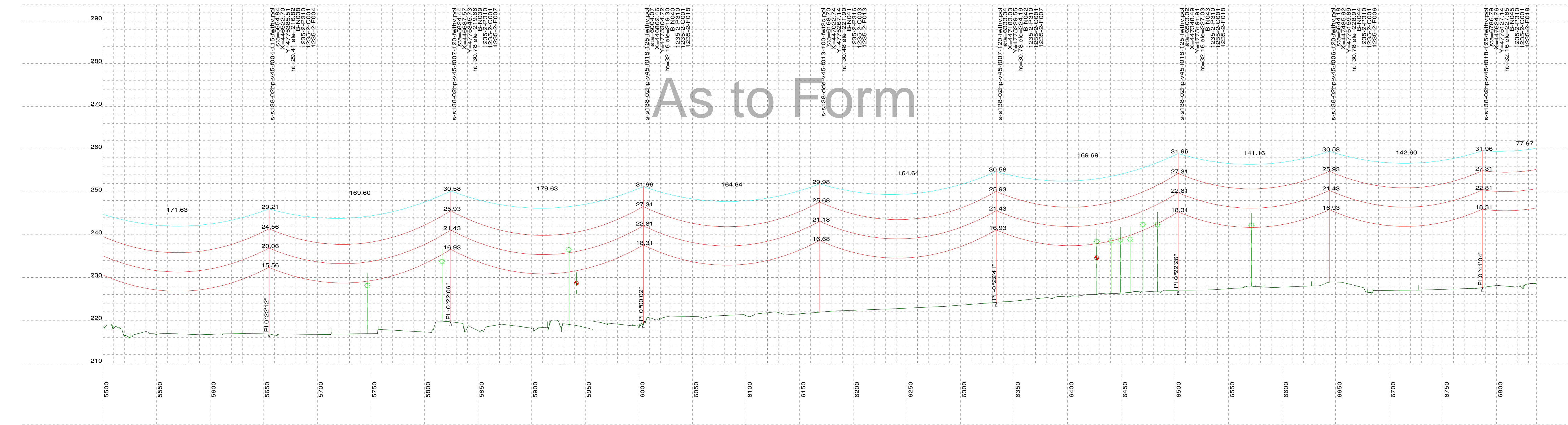
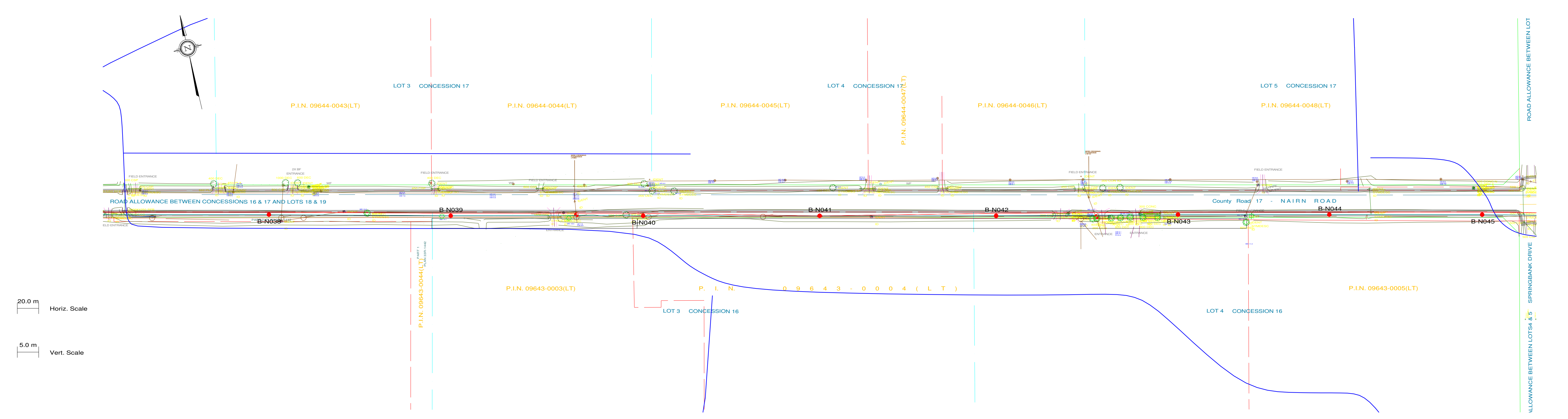
1235-2-P012-S5

REV.

N



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)

STRUCTURE DESCRIPTION LEGEND:

s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001

PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.

M	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	07/08/13	ISSUED FOR REVIEW						
L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW						
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW						
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW						
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW						
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW						
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER						
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR TENDER						
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW						
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW						
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW						
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW						
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW						
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP						

STAMP/SEAL
PROPRIETARY INFORMATION:
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AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY
WITHOUT THE PERMISSION OF CHIMAX INC.

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.					
PROJECT PHASE				AREA	BORNISH WIND PROJECT 1CCT 115kV TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.		BY	DDMMYY	SUBJECT <

Engineering Company
3550 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-2-P012-S6
REV.
N



D



B

STEEL POLE DESIGN
PLAN & PROFILE DRAWINGS
SHEET 7 OF 12

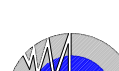


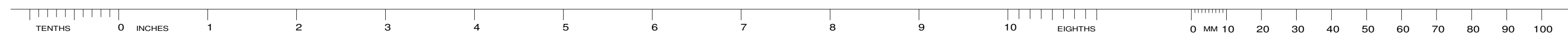
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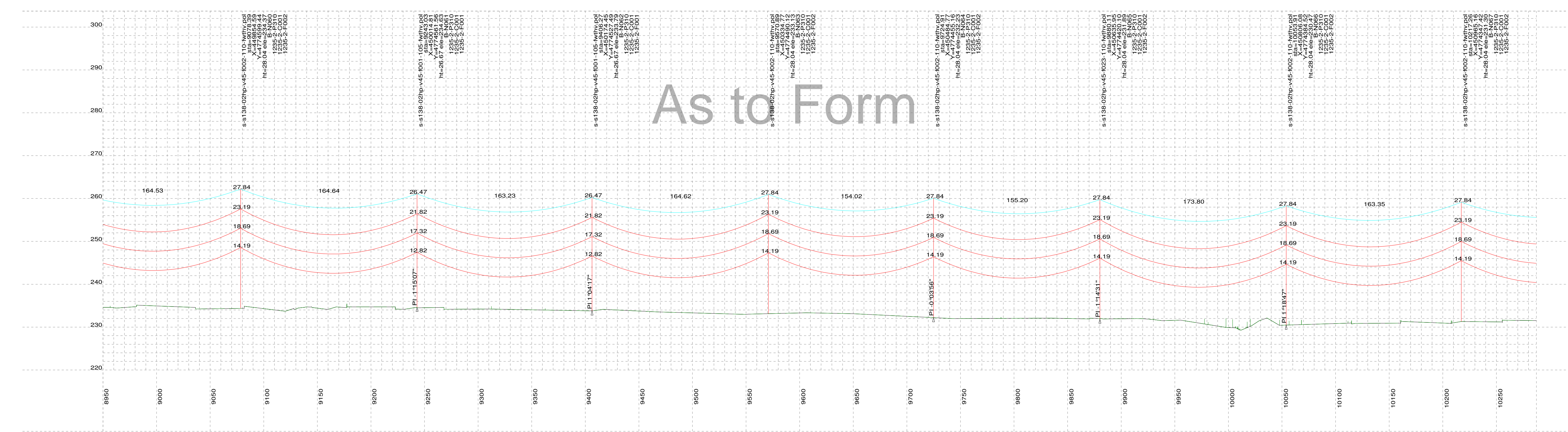
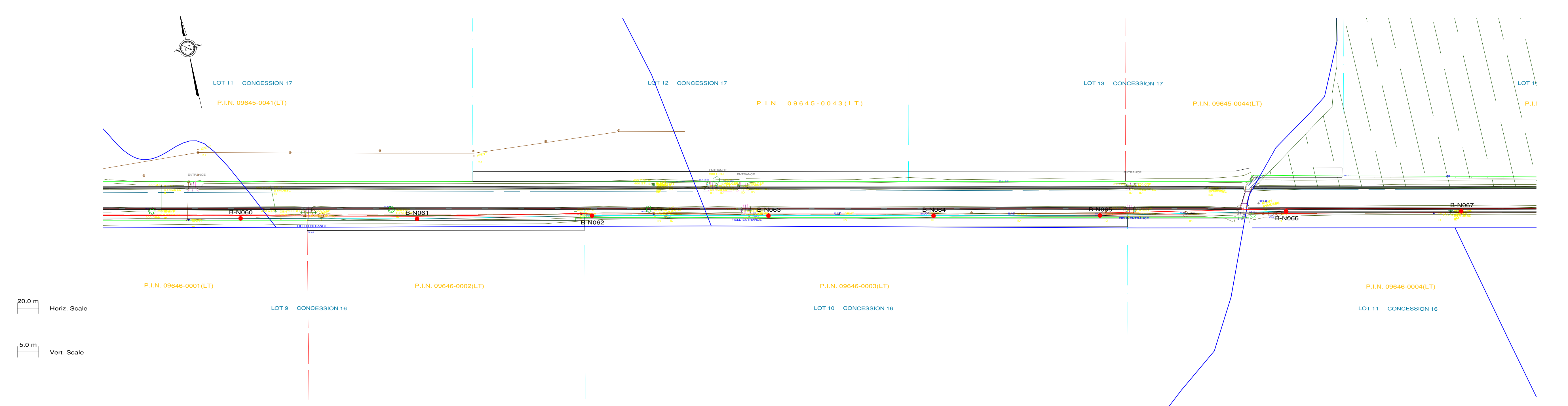
B

A

	<h1 style="text-align: center;">Chimax Inc.</h1> <p style="text-align: center;">Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On, L3R 0A9 Email: chimax@chimax.ca</p>
	<p>CLIENT DWG. NO.</p>
<p>DRAWING NO.</p> <p style="font-size: 1.5em; font-weight: bold;">1235-2-P012-S8</p>	<p>REV.</p> <p style="font-size: 1.5em; font-weight: bold;">N</p>



PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)

STRUCTURE DESCRIPTION LEGEND:

s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001

PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.



Chimax Inc.
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

M	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	07/08/13	ISSUED FOR REVIEW								
L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW								
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW								
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW								
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW								
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW								
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER								
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR TENDER								
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW								
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW								
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW								
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW								
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW								
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP								

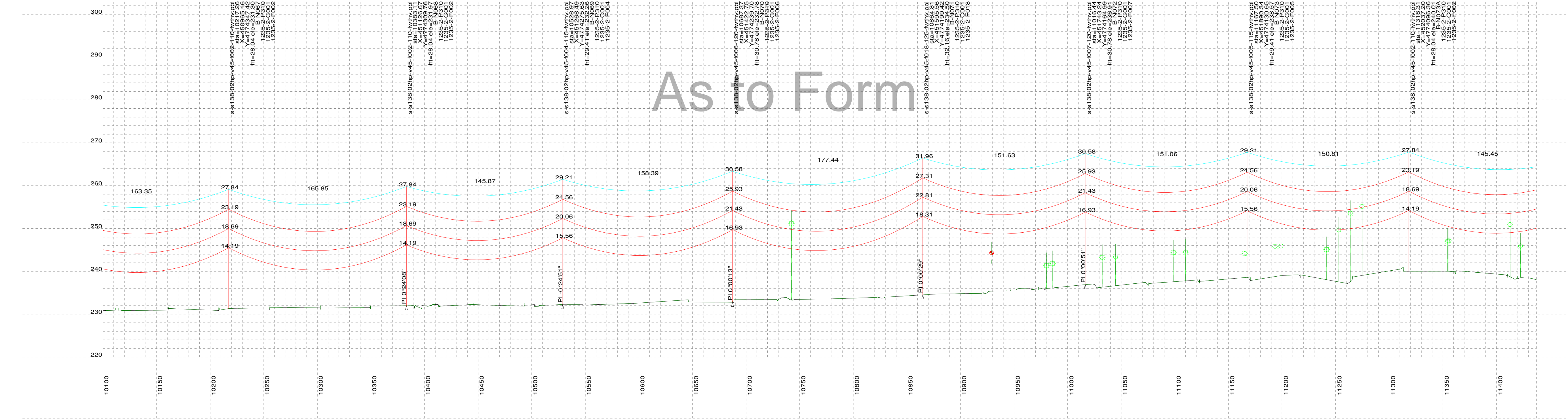
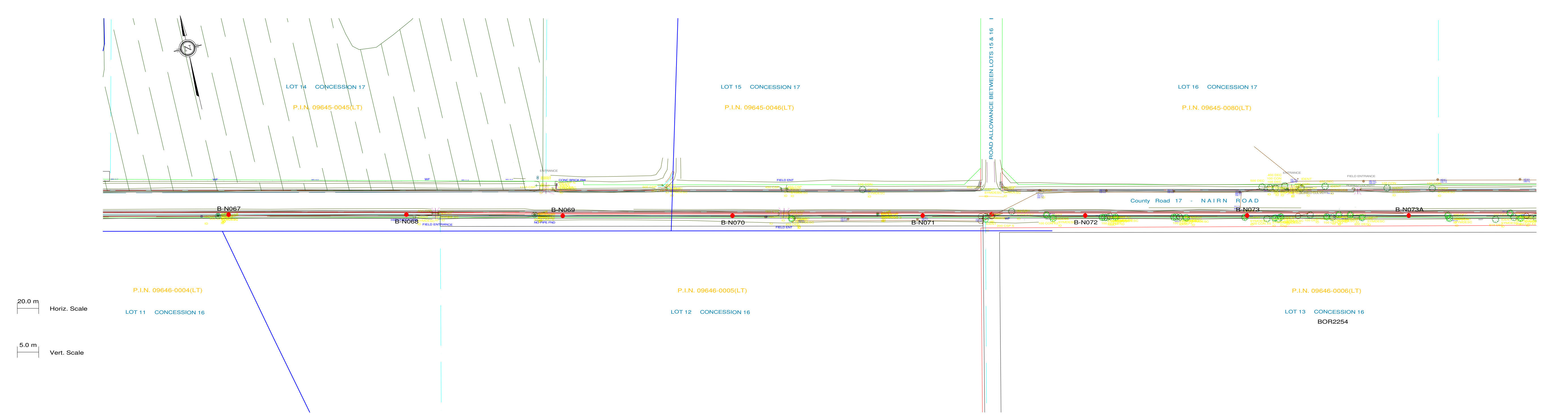
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WITHOUT THE PERMISSION OF CHIMAX INC.

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 9 OF 12	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK		CLIENT DWG. NO.	
N.T.S.		APP		DRAWING NO. 1235-2-P012-S9	
				REV. N	

CAD FILE: PLS-Cadd 1235-2-P012-P



PLS-CADD Drawing



As to Form

PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- TREE
- WOOD LAND HABITAT (WOD)

STRUCTURE DESCRIPTION LEGEND:

s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001

PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

NOTES:

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.



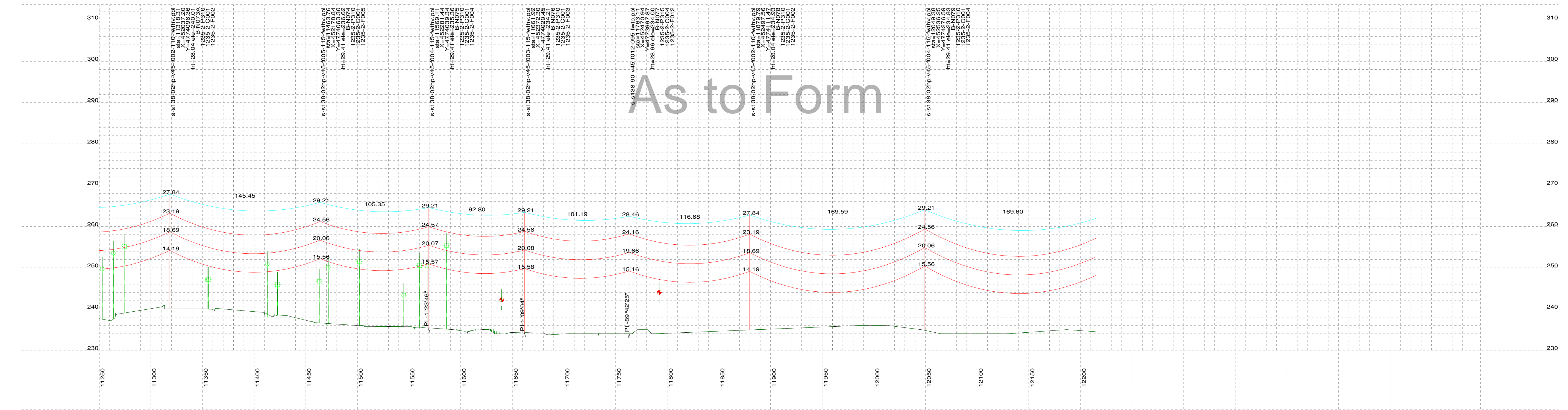
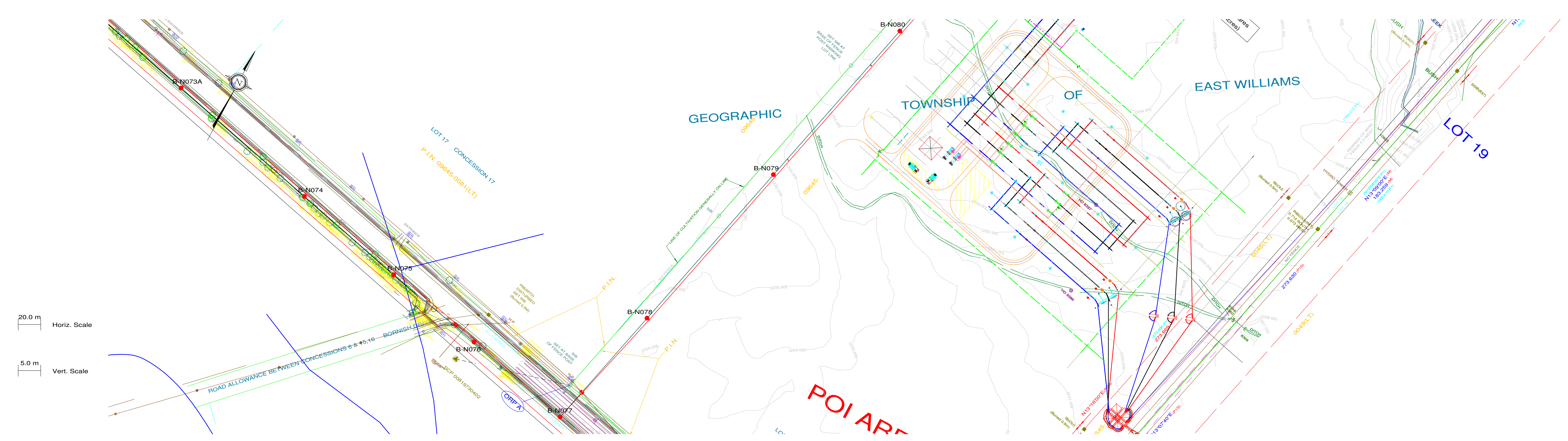
Chimax Inc.
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

M	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	07/08/13	ISSUED FOR REVIEW								
L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW								
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW								
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW								
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW								
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW								
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER								
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR TENDER								
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW								
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW								
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW								
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW								
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW								
REV	DDMMYY		DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP								

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.					
PROJECT PHASE				AREA	BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.		BY	DDMMYY	SUBJECT
		DSN	E.KWONG	21/08/12	
		DRN	M.HUANG	21/08/12	
		CHK			
SCALE	PACKAGE CODE				STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 10 OF 12
N.T.S.		APP			
STAMP/SEAL					
PROPRIETARY INFORMATION: THIS DRAWING IS THE PROPERTY OF CHIMAX INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.					



PLS-CADD Drawing



As to Form

- PLAN & PROFILE LEGEND:
- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
 - OPGW
 - SHIELD WIRE
 - GROUND CLEARANCE LINE
 - HYDRO WIRE
 - TREE
 - WOOD LAND HABITAT (WOD)

- STRUCTURE DESCRIPTION LEGEND:
- s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001
- PLS-POLE FILE IDENTIFICATION
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

- NOTES:
- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
 - CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
 - OPGW & SHIELD WIRE SAG AT 40°C.
 - ALL DIMENSIONS ARE IN METERS U.N.O.

M	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	07/08/13	ISSUED FOR REVIEW						
L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW						
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW						
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW						
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW						
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW						
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER						
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR TENDER						
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW						
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW						
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW						
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW						
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW						
REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE		

STAMP/SEAL
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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 11 OF 12	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK			
N.T.S.		APP			

Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

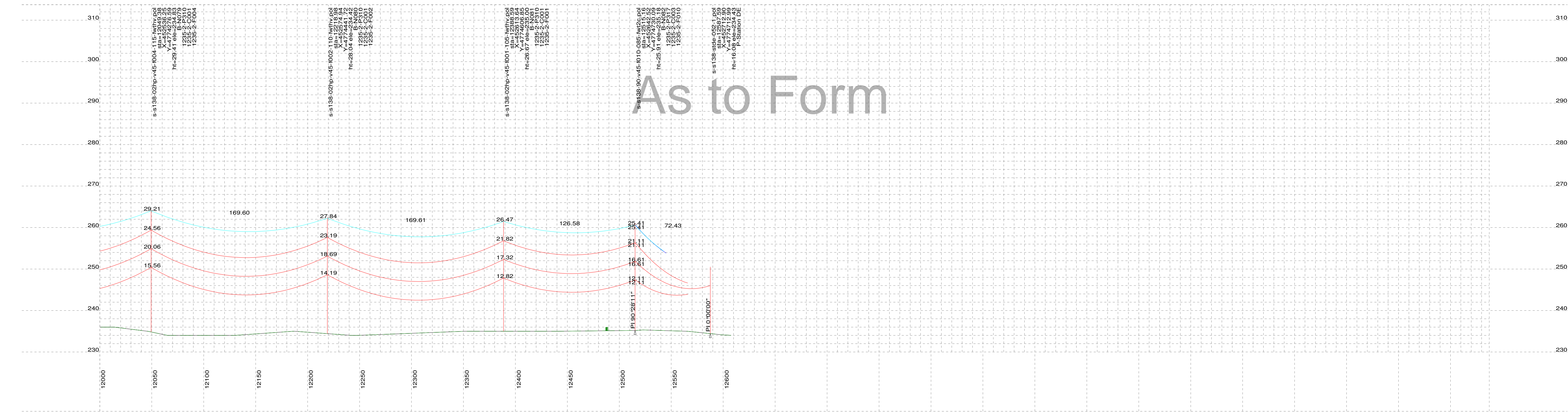
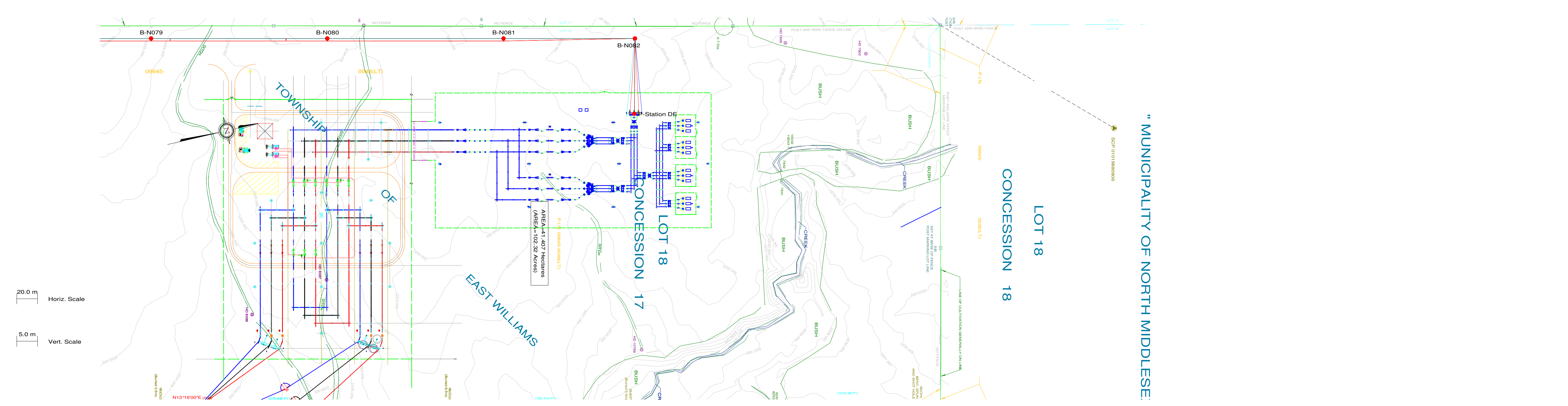
CLIENT DWG. NO.

DRAWING NO.
1235-2-P012-S11

REV.
N



PLS-CADD Drawing




- PLAN & PROFILE LEGEND:**
- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
 - OPGW
 - SHIELD WIRE
 - GROUND CLEARANCE LINE
 - HYDRO WIRE
 - TREE
 - WOOD LAND HABITAT (WOD)

- STRUCTURE DESCRIPTION LEGEND:**
- s-s138-02hp-v45-105-ld10.pol
sta
X
Y
ht
ele
B-N002
1235-2-P310
1235-2-C001
1235-2-F001
- PLS-POLE FILE IDENTIFICATION**
STATION CHAINAGE
UTM EASTING
UTM NORTHING
STRUCTURE HEIGHT ABOVE GROUND (M)
GROUND ELEVATION (M)
STRUCTURE NO.
FRAMING DRAWING NO.
FOUNDATION DRAWING NO.
ENGINEERING DRAWING NO.

- NOTES:**
- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
 - CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
 - OPGW & SHIELD WIRE SAG AT 40°C.
 - ALL DIMENSIONS ARE IN METERS U.N.O.

M	07/08/13	ISSUED FOR REVIEW	M.H.	E.K.					M	07/08/13	ISSUED FOR REVIEW				
L1	31/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L1	31/07/13	ISSUED FOR REVIEW				
L	26/07/13	ISSUED FOR REVIEW	M.H.	E.K.					L	26/07/13	ISSUED FOR REVIEW				
K	25/07/13	ISSUED FOR REVIEW	M.H.	E.K.					K	25/07/13	ISSUED FOR REVIEW				
J	22/07/13	ISSUED FOR REVIEW	M.H.	E.K.					J	22/07/13	ISSUED FOR REVIEW				
H	21/07/13	ISSUED FOR REVIEW	M.H.	E.K.					H	21/07/13	ISSUED FOR REVIEW				
G	15/05/13	ISSUED FOR TENDER	M.H.	E.K.					G	15/05/13	ISSUED FOR TENDER				
F	01/03/13	ISSUED FOR TENDER	M.H.	E.K.					F	01/03/13	ISSUED FOR REVIEW				
E	14/02/13	ISSUED FOR TENDER	M.H.	E.K.					E	14/02/13	ISSUED FOR REVIEW				
D	18/01/13	ISSUED FOR TENDER	M.H.	E.K.					D	18/01/13	ISSUED FOR REVIEW				
C	11/06/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN	M.H.	E.K.					C	11/06/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN	M.H.	E.K.					B	26/09/12	ISSUED FOR REVIEW				
N	03/09/13	ISSUED FOR REVIEW	M.H.	E.K.					N	03/09/13	ISSUED FOR REVIEW				
REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE

STAMP/SEAL
PROPRIETARY INFORMATION:
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AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY
WITHOUT THE PERMISSION OF CHIMAX INC.

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA		 <div>Chimax Inc. Engineering Company 3950 Fourteenth Ave. East, Suite 506 Mankato, Mn, 56001 Email: chimax@chimax.ca</div>
PROJECT PHASE				BORNISH WIND PROJECT 1CCT 115KV TRANSMISSION LINE		
PROJECT NO.	ACTIVITY NO.		BY	DDMMYY	SUBJECT	CLIENT DWG. NO.
SCALE N.T.S.	PACKAGE CODE	DSN	E.KWONG	21/08/12		
		DRN	M.HUANG	21/08/12		
		CHK				
		APP				
STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 12 OF 12					DRAWING NO. 1235-2-P012-S12	REV. N



Chimax Inc.
Engineering Company
3950 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

Co-Owners B2

Co-Owners Transmission Foundation Designs



As to Form

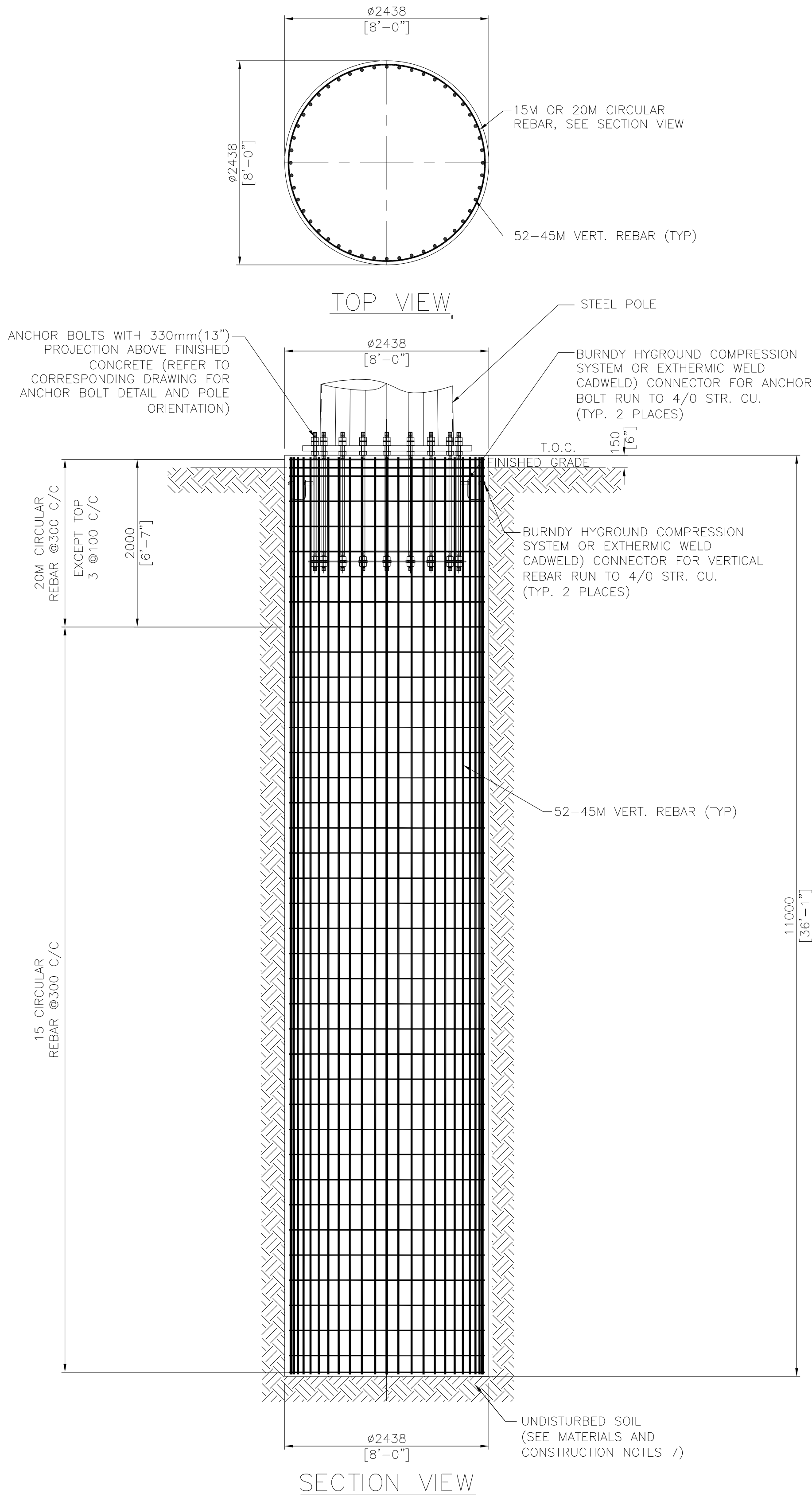


1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG31235-2-P012), ANCHOR BOLT DRAWINGS AND STAKING INFORMATION.
2. FOR POLE FRAMING DETAILS, SEE DWG#1235-2-P3XX SERIES
3. FOR ANCHOR BOLT DETAILS, SEE DWG#1235-2-F101 AND 102.
4. ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETERS U.N.O.

1. FOUNDATION DESIGN IS BASED ON THE DRAFT GEOTECHNICAL INVESTIGATION REPORT PREPARED BY "AMEC ENVIRONMENT & INFRASTRUCTURE" DATED ON 27 NOVEMBER, 2012. THE INFORMATION ON BOREHOLE RECORDS ALONG THE PROPOSED BORNISH TRANSMISSION LINE HAS BEEN USED FOR THE FOUNDATION DESIGN.
2. GROUND WATER LEVEL IS DESIGNED AT GRADE.
3. FROST DEPTH IS 1.2m (4') BELOW GRADE
4. BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:
 - A. FROM 0m TO 1.2m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE = 20 DEG
 - B. FROM 1.2m TO 1.6m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 8 (COHESIVE) FOR STRUCTURE B-N001 TO B-N027, AND 'N' = 5 (COHESIVE) FOR STRUCTURE B-N028 TO B-N082
 - C. FROM 1.6m TO 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 10 (COHESIVE)
 - D. FROM 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 15 (COHESIVE)

- CONCRETE MATERIAL DESIGN, TESTING AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN 2-A23 SERIES.
2. CONCRETE SPECIFICATION
SUPPLY AND DELIVERY OF CONCRETE SHALL BE AS FOLLOWS:
 - A) MINIMUM COMPRESSIVE STRENGTH: 35 MPa AT 28 DAYS
 - B) SPECIFICATIONS ON PORTLAND CEMENT: TYPE GU NORMAL PORTLAND CEMENT, EXPOSURE CLASS C-1
 - C) 4%–7% AIR CONTENT
- D) MIN. 3 CYLINDERS TESTING WITH ONE AT 7 DAYS AND TWO AT 28 DAYS ARE REQUIRED
3. UNLESS OTHERWISE SPECIFIED, MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
 - CONCRETE CAST AGAINST SOIL = 75mm
 - FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 50mm
 - CONCRETE SURFACE EXPOSED TO WEATHER = 50mm
4. REINFORCING STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400 MPa (60PSI) AND CONFIRMING TO CSA G30.12 GR.400 EXCEPT TIES AND STIRRUPS WHICH SHALL BE GRADE 300.
5. MINIMUM SPLICES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CAN 3-A23.1
6. ALL OTHER STEEL MATERIAL SHALL BE CSA-G40.21-M300W U.N.O. AND SHALL BE HOT DIP GALVANIZED FINISH ACCORDING TO CSA-G164 U.N.O.
7. ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK. FLOODED EXCAVATIONS SHALL BE DETERAVERED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
8. AFTER EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO CONCRETE CASTING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADOPT PROPER CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND ON SITE
9. PRIOR TO THE PLACEMENT OF CONCRETE, BOTTOM OF FOUNDATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATION REPORT AND DESIGN PARAMETERS
10. BEFORE PLACING CONCRETE, CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF ALL MECHANICAL, UTILITY SERVICES FOR EMBEDDED ITEMS, HOLES, ETC.
11. PROPER VIBRATION METHODS SHALL BE USED DURING CONCRETING.
12. CONCRETE SHALL BE ADEQUATELY CURED BY ADDITIONAL MOISTURE AND/OR COVERED BY WATER RETAINING MATERIAL AFTER POURING.
13. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 25mm CHAMFER.
14. ALL BACKFILL SURROUNDING FOUNDATIONS SHALL BE WELL GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRANULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SPMD WITH MAX LIFT OF 300mm.
15. ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MIX OR GRANULAR B MATERIAL AND SHALL BE COMPACTED TO 100% SPMD WITH MAX LIFT OF 200mm.
16. SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.

	
 <div> Chimax Inc. Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On. L3R 0A9 Email: chimax@chimax.ca </div>	
CLIENT DWG. NO.	
DRAWING NO. 1235-2-C002	REV. B
CADD FILE ADDRESS 1235-2-C002-B	



TYPICAL DETAILS FOR
POLE FOUNDATION TYPE B
TOTAL 9 REQ'D

- GENERAL NOTES
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG31235-2-P012), ANCHOR BOLT DRAWINGS AND STAKING INFORMATION.
 - FOR POLE FRAMING DETAILS, SEE DWG#1235-2-P3XX SERIES
 - FOR ANCHOR BOLT DETAILS, SEE DWG#1235-2-F101 AND 102.
 - ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETERS U.N.O.

- DESIGN PARAMETERS
- FOUNDATION DESIGN IS BASED ON THE DRAFT GEOTECHNICAL INVESTIGATION REPORT PREPARED BY "AMEC ENVIRONMENT & INFRASTRUCTURE" DATED ON 27 NOVEMBER, 2012. THE INFORMATION ON BOREHOLE RECORDS ALONG THE PROPOSED BORNISH TRANSMISSION LINE HAS BEEN USED FOR THE FOUNDATION DESIGN.
 - GROUND WATER LEVEL IS DESIGNED AT GRADE.
 - FROST DEPTH IS 1.2m (4') BELOW GRADE.
 - BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:
 - FROM 0m TO 1.2m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE = 20 DEG
 - FROM 1.2m TO 1.6m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 8 (COHESIVE) FOR STRUCTURE B-N001 TO B-N027, AND 'N' = 5 (COHESIVE) FOR STRUCTURE B-N028 TO B-N082
 - FROM 1.6m TO 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 10 (COHESIVE)
 - FROM 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 15 (COHESIVE)

- FOUNDATION MATERIAL AND CONSTRUCTION NOTES
- CONCRETE MATERIAL, DESIGN, TESTING AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN 2-A23 SERIES.
 - CONCRETE SPECIFICATION
SUPPLY AND DELIVERY OF CONCRETE SHALL BE AS FOLLOWS:
 - MINIMUM COMPRESSIVE STRENGTH: 35 MPa AT 28 DAYS
 - SPECIFICATIONS ON PORTLAND CEMENT: TYPE GU NORMAL PORTLAND CEMENT, EXPOSURE CLASS C-1
 - 4%-7% AIR CONTENT
 - MIN. 3 CYLINDERS TESTING WITH ONE AT 7 DAYS AND TWO AT 28 DAYS ARE REQUIRED
 - UNLESS OTHERWISE SPECIFIED, MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
 - CONCRETE CAST AGAINST SOIL = 75mm
 - FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 50mm
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 - REINFORCING STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400 MPa (60PSI) AND CONFIRMING TO CSA G30.12 GR.400 EXCEPT TIES AND STIRRUPS WHICH SHALL BE GRADE 300.
 - MINIMUM SPLICES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CAN 3-A23.1
 - ALL OTHER STEEL MATERIAL SHALL BE CSA-G40.21-M300W U.N.O. AND SHALL BE HOT DIP GALVANIZED FINISH ACCORDING TO CSA-G164 U.N.O.
 - ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK. FLOODED EXCAVATIONS SHALL BE DEWATERED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
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 - PROPER VIBRATION METHODS SHALL BE USED DURING CONCRETING.
 - CONCRETE SHALL BE ADEQUATELY CURED BY ADDITIONAL MOISTURE AND/OR COVERED BY WATER RETAINING MATERIAL AFTER POURING.
 - ALL EXPOSED CONCRETE EDGES SHALL HAVE A 25mm CHAMFER.
 - ALL BACKFILL SURROUNDING FOUNDATIONS SHALL BE WELL GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRANULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SPMD WITH MAX LIFT OF 300mm.
 - ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MIX OR GRANULAR B MATERIAL AND SHALL BE COMPACTED TO 100% SPMD WITH MAX LIFT OF 200mm.
 - SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.

As to Form

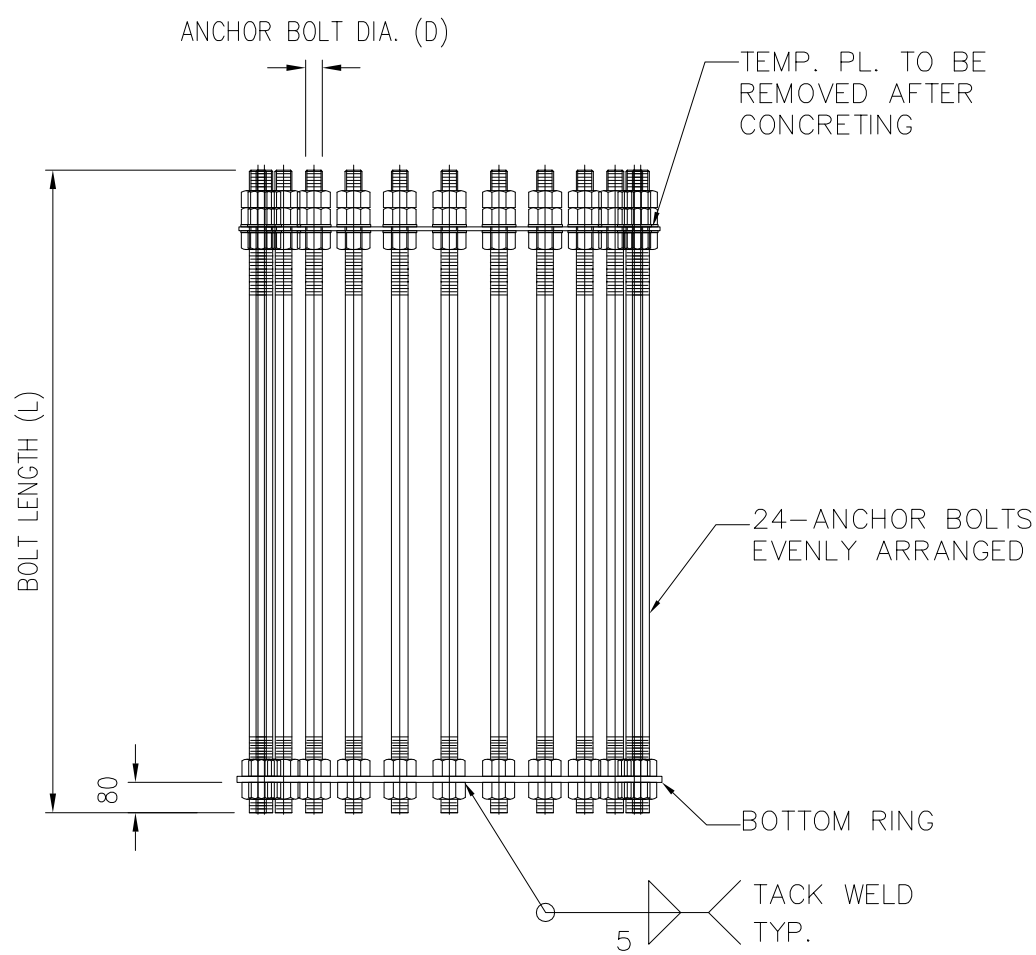
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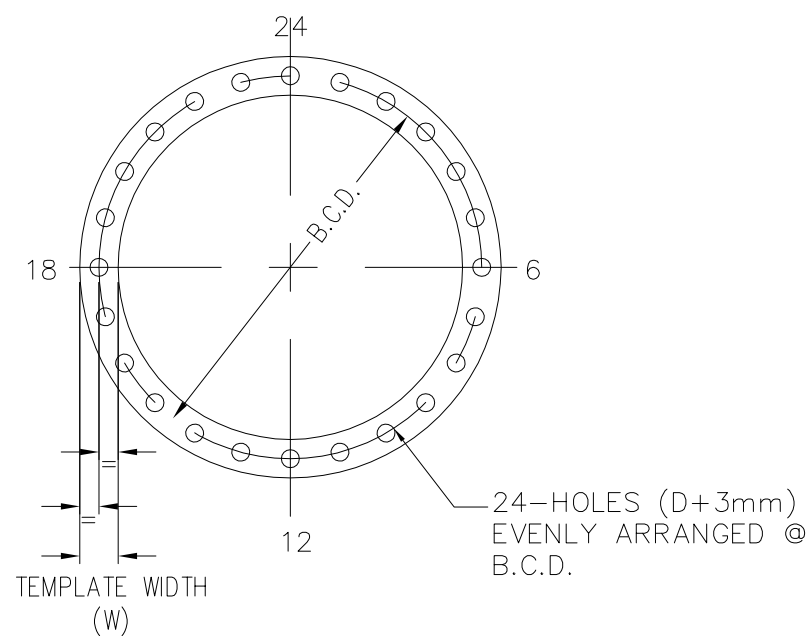
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 - FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 50mm
 - CONCRETE SURFACE EXPOSED TO WEATHER = 50mm
4. REINFORCING STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400 MPa (60PSI) AND CONFIRMING TO CSA G30.12 GR.400 EXCEPT TIES AND STIRRUPS WHICH SHALL BE GRADE 300.
5. MINIMUM SPLICES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CAN 3-A23.1
6. ALL OTHER STEEL MATERIAL SHALL BE CSA-G40.21-M300W U.N.O. AND SHALL BE HOT DIP GALVANIZED FINISH ACCORDING TO CSA-G164 U.N.O.
7. ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK. FLOODED EXCAVATIONS SHALL BE DETERAURED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
8. AFTER EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO CONCRETE CASTING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADOPT PROPER CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND ON SITE
9. PRIOR TO THE PLACEMENT OF CONCRETE, BOTTOM OF FOUNDATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATION REPORT AND DESIGN PARAMETERS
10. BEFORE PLACING CONCRETE, CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF ALL MECHANICAL, UTILITY SERVICES FOR EMBEDDED ITEMS, HOLES, ETC.
11. PROPER VIBRATION METHODS SHALL BE USED DURING CONCRETING.
12. CONCRETE SHALL BE ADEQUATELY CURED BY ADDITIONAL MOISTURE AND/OR COVERED BY WATER RETAINING MATERIAL AFTER POURING.
13. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 25mm CHAMFER.
14. ALL BACKFILL SURROUNDING FOUNDATIONS SHALL BE WELL GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRANULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SPMD WITH MAX LIFT OF 300mm.
15. ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MIX OR GRANULAR B MATERIAL AND SHALL BE COMPACTED TO 100% SPMD WITH MAX LIFT OF 200mm.
16. SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.

TYPICAL DETAILS FOR
POLE FOUNDATION TYPE C
TOTAL 1 REQ'D

[illegible]



ANCHOR BOLT
ARRANGEMENT



TEMP. (12 TK.) (NOT GALV'D)
BOTTOM RING (20 TK.) (NOT GALV'D)

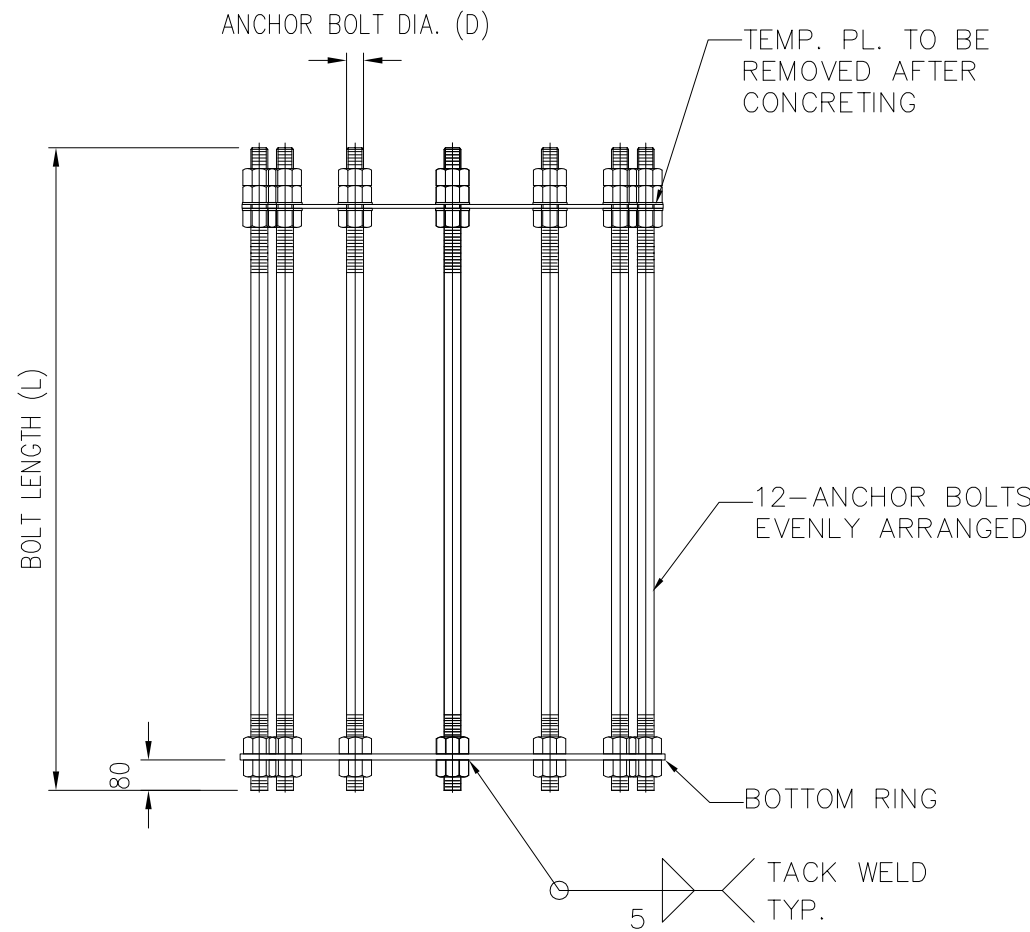
TYPE	BOLT CIRCLE DIA. B.C.D. mm	No. OF BOLT	BOLT DIA. (D) mm	BOLT LENGTH (L) mm	RING TEMPLATE WIDTH (W) mm	TOTAL REQ'D	POLE
A	1680	24	64	2100	160	2 SET	B-N001,N082
B	1730	24	70	2300	175	4 SET	B-N004,N007,N024,N058
C	1810	24	70	2300	175	2 SET	B-N005,N008
D	1840	24	70	2300	175	1 SET	B-N041
E	2110	24	76	2500	190	1 SET	B-N077

NOTES:

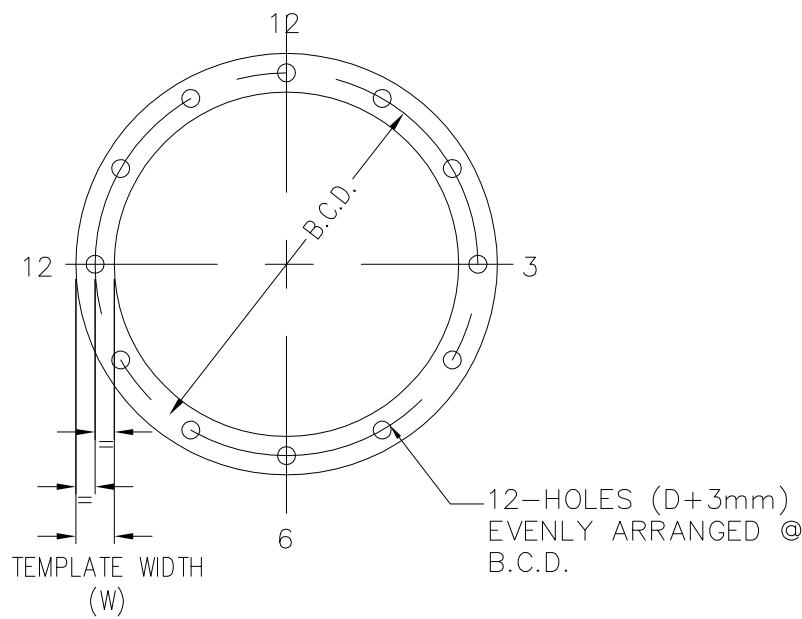
1. ALL DIMENSIONS AS SHOWN ARE IN MILLIMETERS [IMPERIAL] U.N.O.
2. FOR FOUNDATION DRAWINGS, SEE DWG# 1235-2-C001 TO C004.
3. FOR POLE LINE PLAN AND PROFILE DRAWINGS, SEE DWG# 1235-2-P012
4. FOR ANCHOR BOLT ORIENTATION, SEE DWG# 1235-2-XXXX
5. ANCHOR BOLT SHALL HAVE A MINIMUM ULTIMATE TENSILE STRENGTH OF 860 MPa (125 ksi) AND A MINIMUM YIELD STRENGTH OF 750 MPa (108 ksi) EQUIVALENT TO ASTM A354 GRADE BC. ANCHOR BOLT HARDWARE AND ASSEMBLIES SHALL MEET THE EQUIVALENT STRENGTH AND MATERIAL SPECIFICATION REQUIREMENTS.
6. ALL OTHER STEEL MATERIAL SHALL BE CSA-G40.21-300W U.N.O.
7. TOP PORTION OF ANCHOR BOLT AS SHOWN AND BOLT HARDWARE SHALL BE HOT DIP GALVANIZED FINISH AS IN ACCORDANCE WITH CSA-G164.
8. ANCHOR BOLT SHALL BE SET ACCURATELY PLUMB, TRUE, ALIGNED AND RIGID.
9. ANCHOR BOLT THREADS SHALL BE PROTECTED FROM DAMAGES DURING CONCRETING.
10. NUMBER'6', '12', '18' AND '24' DENOTES FACE ORIENTATION OF POLE STRUCTURE, SEE ANCHOR BOLT ORIENTATION DRAWINGS FOR SETTING DETAILS.

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NOTES:

1. ALL DIMENSIONS AS SHOWN ARE IN MILLIMETERS [IMPERIAL] U.N.O.
2. FOR FOUNDATION DRAWINGS, SEE DWG# 1235-2-C001 TO C004.
3. FOR POLE LINE PLAN AND PROFILE DRAWINGS, SEE DWG# 1235-2-P012
4. FOR ANCHOR BOLT ORIENTATION, SEE DWG# 1235-2-XXXX
5. ANCHOR BOLT SHALL HAVE A MINIMUM ULTIMATE TENSILE STRENGTH OF 860 MPa (125 ksi) AND A MINIMUM YIELD STRENGTH OF 750 MPa (108 ksi) EQUIVALENT TO ASTM A354 GRADE BC. ANCHOR BOLT HARDWARE AND ASSEMBLIES SHALL MEET THE EQUIVALENT STRENGTH AND MATERIAL SPECIFICATION REQUIREMENTS.
6. ALL OTHER STEEL MATERIAL SHALL BE CSA-G40.21-300W U.N.O.
7. TOP PORTION OF ANCHOR BOLT AS SHOWN AND BOLT HARDWARE SHALL BE HOT DIP GALVANIZED FINISH AS IN ACCORDANCE WITH CSA-G164.
8. ANCHOR BOLT SHALL BE SET ACCURATELY PLUMB, TRUE, ALIGNED AND RIGID.
9. ANCHOR BOLT THREADS SHALL BE PROTECTED FROM DAMAGES DURING CONCRETING.
10. NUMBER '3', '6', '9' AND '12' DENOTES FACE ORIENTATION OF POLE STRUCTURE, SEE ANCHOR BOLT ORIENTATION DRAWINGS FOR SETTING DETAILS.

As to Form

Chimax Inc.
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Markham, On. L3R 0A9
Email: chimax@chimax.ca

APPROVED FOR CONSTRUCTION		AREA		BORNISH WIND PROJECT	
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.		SUBJECT		CLIENT DWG. NO.	
PROJECT PHASE		1CCT 115kV TRANSMISSION LINE		DRAWING NO.	
PROJECT NO. ACTIVITY NO. PACKAGE CODE		ANCHOR BOLT AND TEMPLATE SETTING DETAILS		1235-2-F102	
SCALE		BY		REV.	
NTS (D-SIZE)		DSN. K.WONG DSN. L.KANG		B	
D/M/Y		18/01/13		CADD FILE ADDRESS	
18/01/13		18/01/13		1235-2-F102-B	

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
B	11/03/13	ISSUED FOR TENDER								B	11/03/13	ISSUED FOR TENDER				
A	18/01/13	ISSUED FOR TENDER								A	18/01/13	ISSUED FOR TENDER				

Co-Owners B3

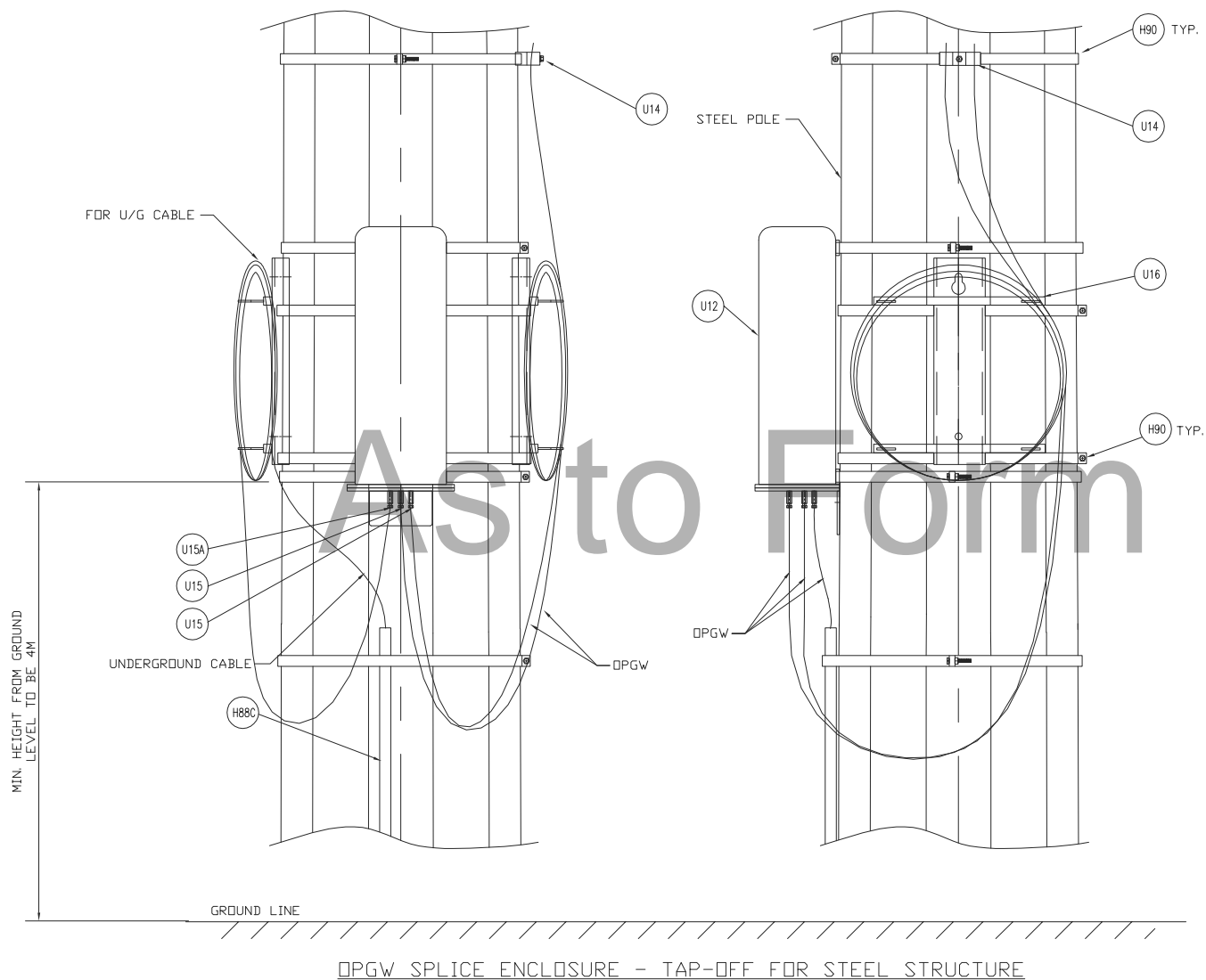
Co-Owners Transmission Pole Configurations

As to Form

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BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY.	DESCRIPTION	MANUFACTURER/NO. OR EQUIVALENT	REMARKS
	T.B.A.	OPGW OPTI-GUARD SPLICE ENCLOSURE FOR STEEL STRUCTURE		
H88C	1	CABLE GUARD	HUBBELL 6535	
H90	5	BAND FOR STEEL POLE		T.B.A.
U12	1	OPGW OPTI-GUARD SPLICE ENCLOSURE C/W BAND MOUNTING KIT	AFL OG03	T.B.A.
U14	LOT	OPGW DOWNLEAD CLAMP FOR STEEL POLE	AFL FDDAB5B5A	
U15	2	OPGW CONNECTOR KIT (FOR 48 FIBERS OPGW)		T.B.A.
U15A	1	OPGW CONNECTOR KIT (FOR U/G FIBER OPTICS CABLE)		T.B.A.
U16	2	EXTERNAL COIL BRACKET	AFL CB-44	



OPGW SPLICE ENCLOSURE - TAP-OFF FOR STEEL STRUCTURE

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
C	01/03/13	ISSUED FOR TENDER								C	01/03/13	ISSUED FOR TENDER				
B	14/02/13	ISSUED FOR TENDER								B	14/02/13	ISSUED FOR TENDER				
A	18/01/13	ISSUED FOR REVIEW								A	18/01/13	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE			
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	07/01/13	
	DRN. J.CHEN	07/01/13	

AREA	CLIENT DWG. NO.
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION OPGW SPLICE ENCLOSURE-TAP-OFF INSTALLATION & ASSEMBLY DETAIL	

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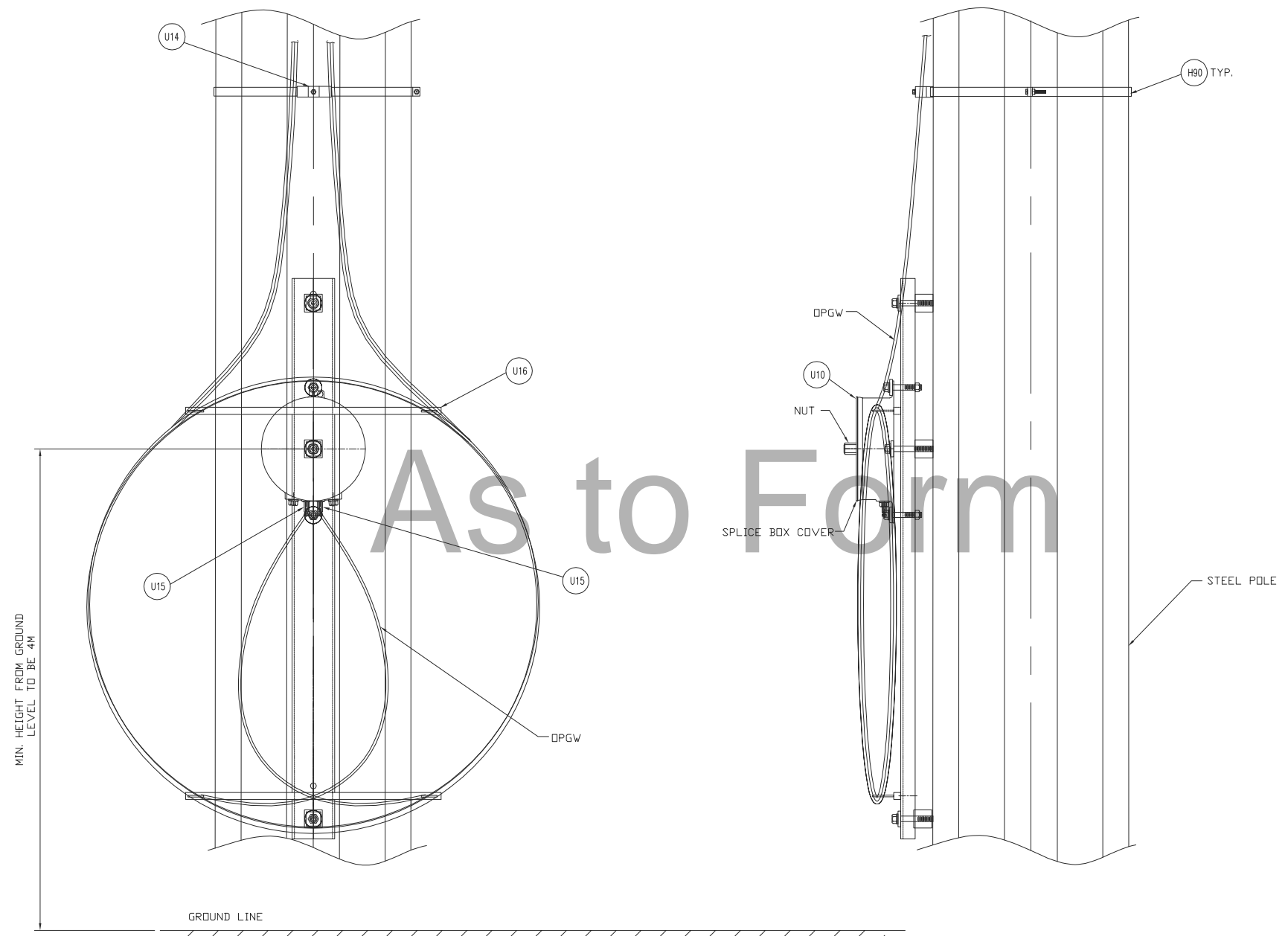
CLIENT DWG. NO.

DRAWING NO.
1235-2-P131

CADD FILE ADDRESS
1235-2-P131-C

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BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY.	DESCRIPTION	MANUFACTURER/NO. OR EQUIVALENT	REMARKS
	T.B.A.	OPGW SPLICE BOX ENCLOSURE FOR STEEL STRUCTURE		
H90	LOT	BAND FOR STEEL POLE		T.B.A.
U10	1	OPGW SPLICE BOX ENCLOSURE C/W BANDING AND STEEL TOWER ADAPTERS	AFL SB-01	
U14	LOT	OPGW DOWNLEAD CLAMP FOR STEEL POLE	AFL FDOAB5B5A	
U15	2	OPGW CONNECTOR KIT (FOR 48 FIBERS OPGW)		T.B.A.
U16	1	EXTERNAL COIL BRACKET	AFL CB-44	

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REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
C	01/03/13	ISSUED FOR TENDER								C	01/03/13	ISSUED FOR TENDER				
B	14/02/13	ISSUED FOR TENDER								B	14/02/13	ISSUED FOR TENDER				
A	18/01/13	ISSUED FOR REVIEW								A	18/01/13	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. ACTIVITY NO. PACKAGE CODE

SCALE
N.T.S. (11"x17")

DSN. E.KWONG
DRN. J.CHEN

BY
D/M/Y
07/01/13
07/01/13

AREA
NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT
115kV TRANSMISSION LINE
DOUBLE CONDUCTOR CONFIGURATION
OPGW SPLICE ENCLOSURE-SPLICE THROUGH
INSTALLATION & ASSEMBLY DETAIL

CLIENT DWG. NO.

DRAWING NO.
1235-2-P132

REV.
C

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Engineering Company
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Markham, On., L3R 0A9
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CADD FILE ADDRESS
1235-2-P132-C

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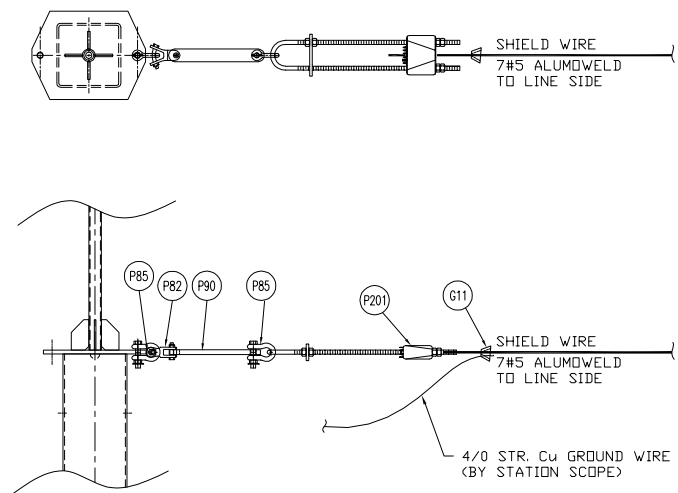
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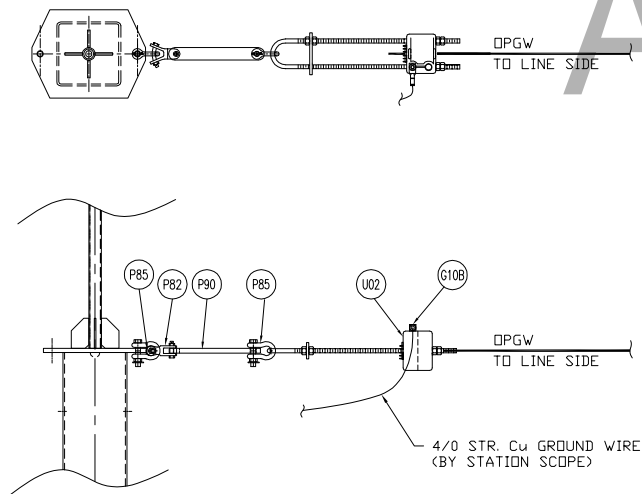
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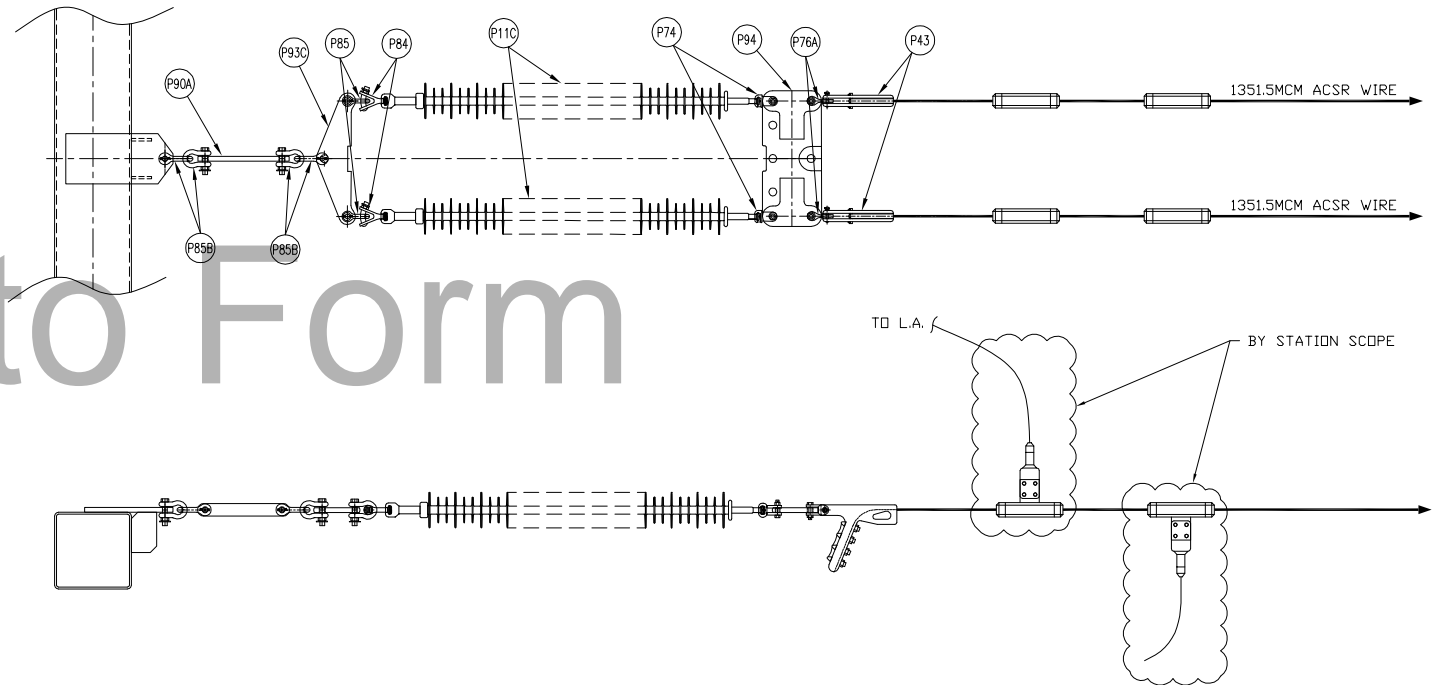
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SHIELD WIRE FOR STATION TOWER FRAMING DETAIL
SCALE: N.T.S.
SHIELD WIRE DEADEND ASSEMBLY



OPGW FOR STATION TOWER FRAMING DETAIL
SCALE: N.T.S.
OPGW DEADEND ASSEMBLY



CONDUCTOR FOR STATION TOWER FRAMING DETAIL
SCALE: N.T.S.
STRAIN INSULATOR MOUNTING DETAIL
PER PHASE (3 PHASE REQUIRED)

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)

ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P74	6	SDCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	6	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	10	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P90A	3	EXTENSION STRAP (12" LENGTH, UTS 60,000LBS)	HUBBELL ES60781912	
P93C	3	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	3	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	
G10B	1	COPPER COMPRESSION TERMINAL FOR 4/0 STR. Cu. (C/W 1-HOLE NEMA)	HUBBELL VHCL4012	
G11	1	IMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 4/0 STR. Cu.	AMP 600466	
U02	1	DEADEND CLAMP FOR 48 FIBERS OPGW (REF: SFP0C/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

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REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
C	01/03/13	ISSUED FOR TENDER								C	01/03/13	ISSUED FOR TENDER				
B	14/02/13	ISSUED FOR TENDER								B	14/02/13	ISSUED FOR TENDER				
A	18/01/13	ISSUED FOR REVIEW								A	18/01/13	ISSUED FOR REVIEW				

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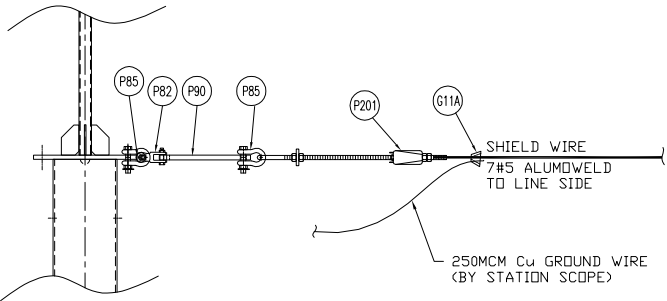
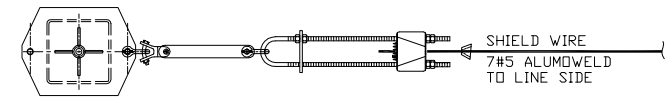
APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	SUBJECT
SCALE	BY	D/M/Y	115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION STATION DEADEND TOWER TO BORNISH STATION FRAMING DETAILS
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	07/01/13 07/01/13	



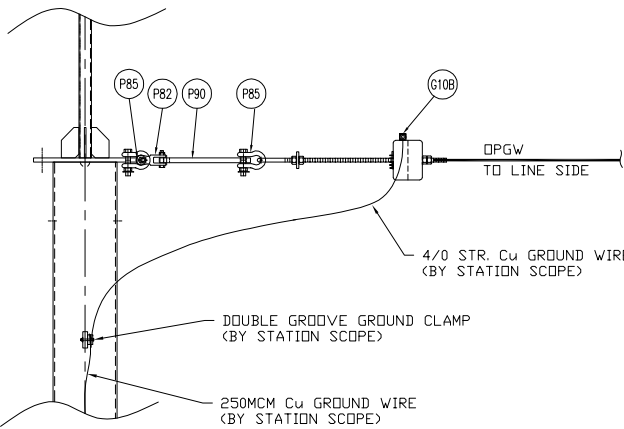
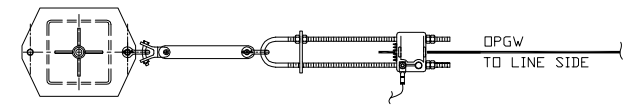
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CLIENT DWG. NO.	REV.
DRAWING NO. 1235-2-P133	C
CADD FILE ADDRESS 1235-2-P133-C	

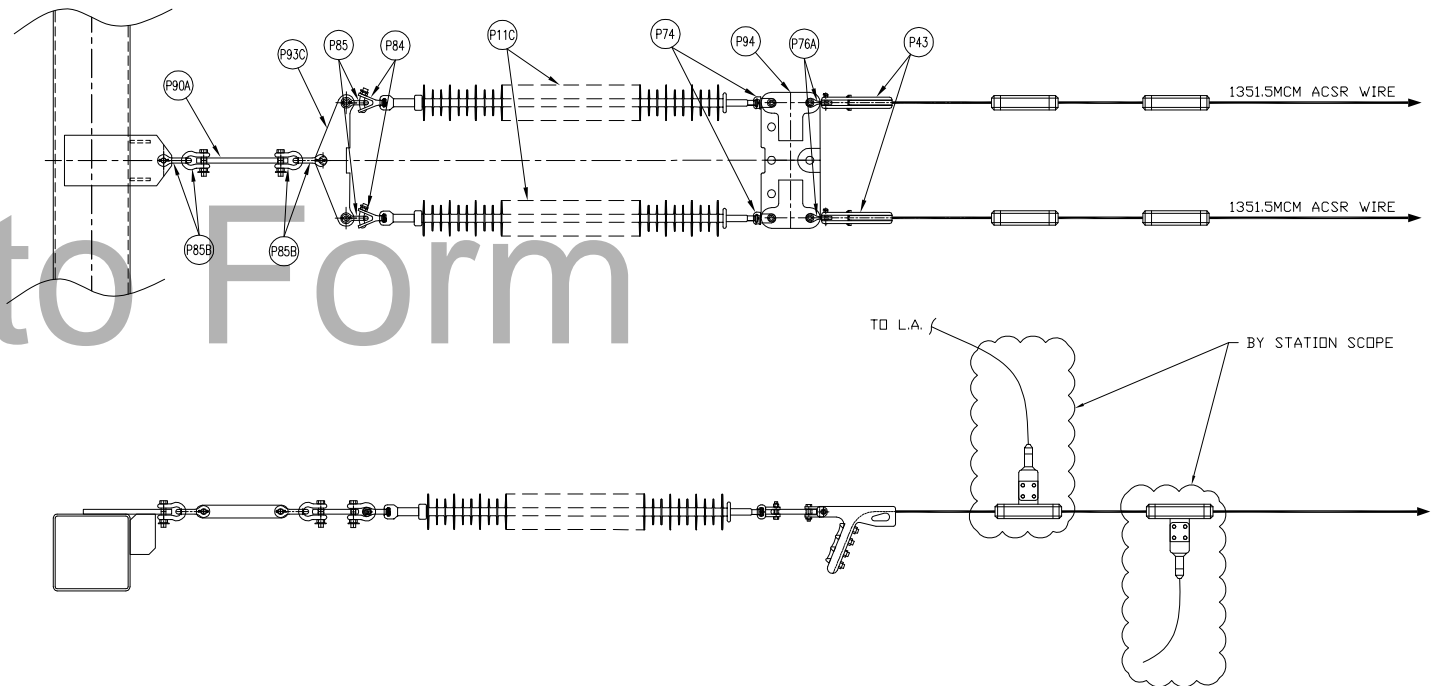
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SHIELD WIRE FOR STATION TOWER FRAMING DETAIL
SCALE: N.T.S.
SHIELD WIRE DEADEND ASSEMBLY



OPGW FOR STATION TOWER FRAMING DETAIL
SCALE: N.T.S.
OPGW DEADEND ASSEMBLY



CONDUCTOR FOR STATION TOWER FRAMING DETAIL
SCALE: N.T.S.
STRAIN INSULATOR MOUNTING DETAIL
PER PHASE (3 PHASE REQUIRED)

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P74	6	SDCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	6	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	10	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P90A	3	EXTENSION STRAP (12" LENGTH, UTS 60,000LBS)	HUBBELL ES60781912	
P93C	3	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	3	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	
G10B	1	COPPER COMPRESSION TERMINAL FOR 4/0 STR. Cu. (C/W 1-HOLE NEMA)	HUBBELL VHCL4012	
G11A	1	IMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 250 MCM Cu.	AMP 602046-7	
U02	1	DEADEND CLAMP FOR 48 FIBERS OPGW (REF: SFP0C/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
B	01/03/13	ISSUED FOR TENDER								B	01/03/13	ISSUED FOR TENDER				
A	14/02/13	ISSUED FOR TENDER								A	12/02/13	ISSUED FOR TENDER				

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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	SUBJECT
SCALE	BY	D/M/Y	115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION STATION DEADEND TOWER TO PARKHILL STATION FRAMING DETAILS
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	07/01/13 07/01/13	

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Email: chimax@chimax.ca

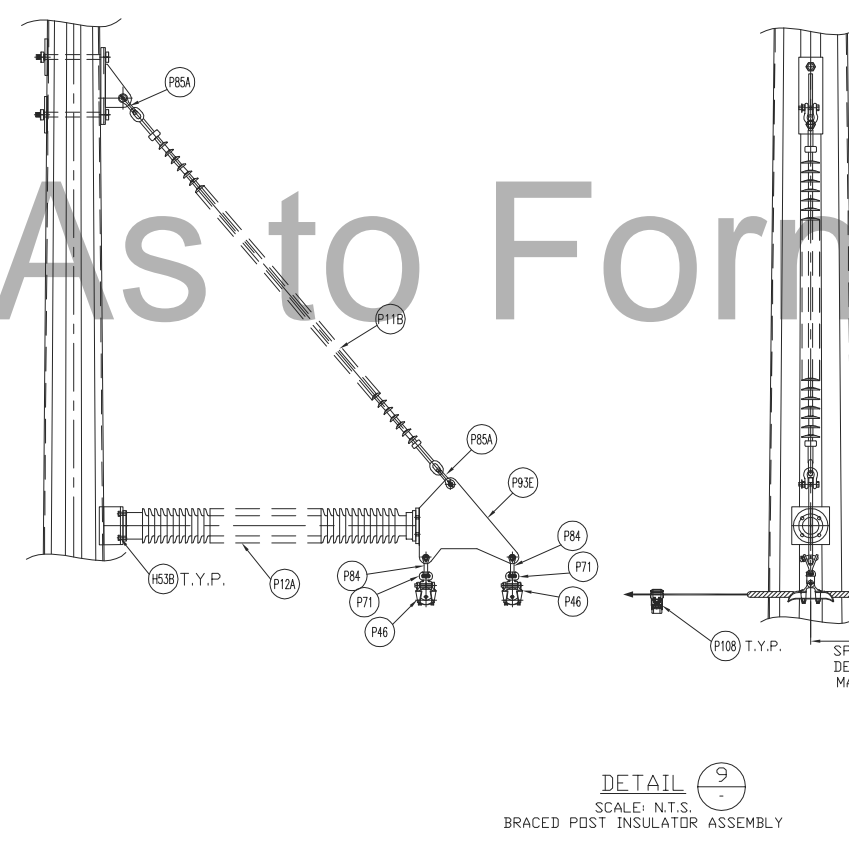
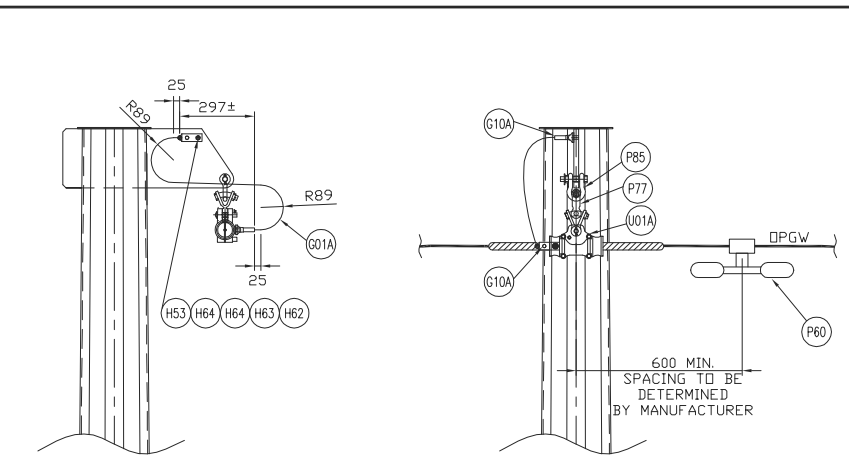
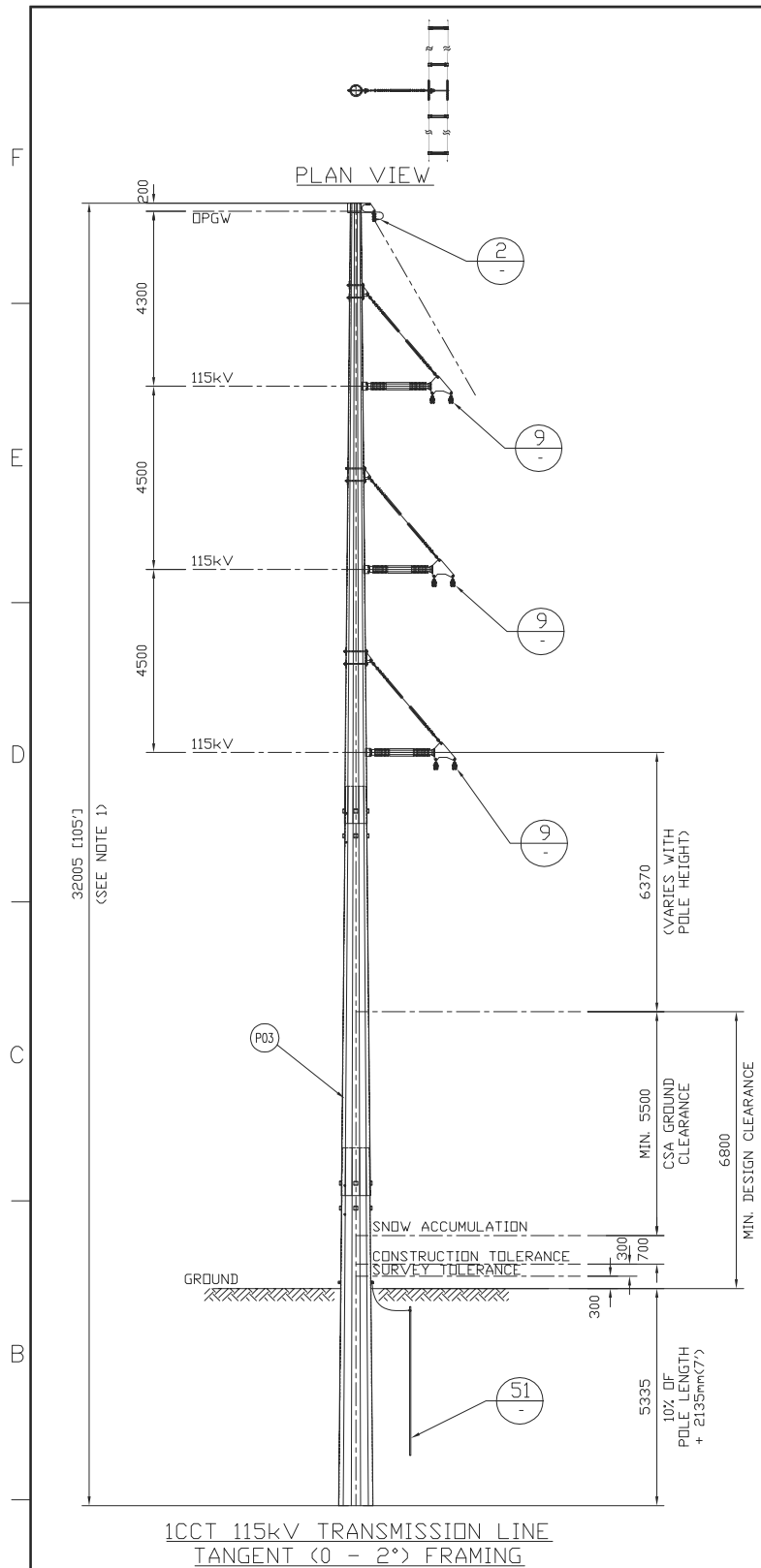
CLIENT DWG. NO.

DRAWING NO.
1235-2-P134

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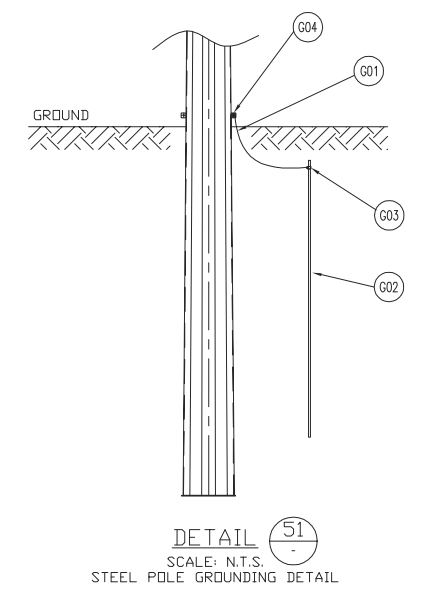
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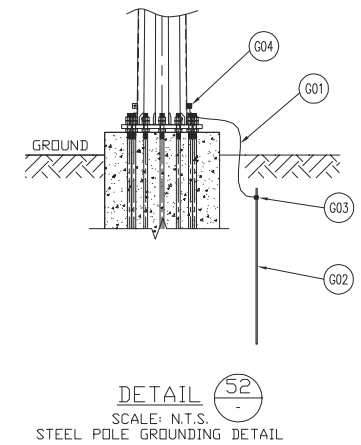
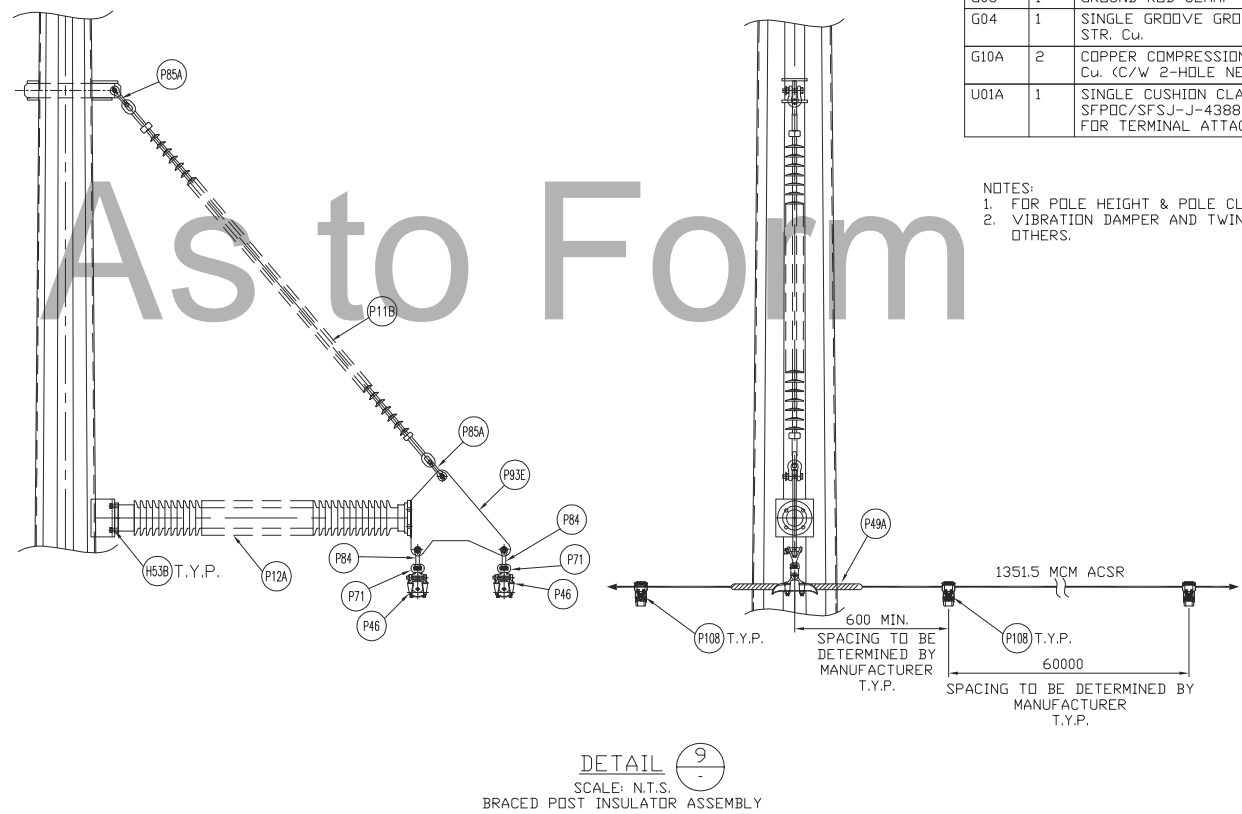
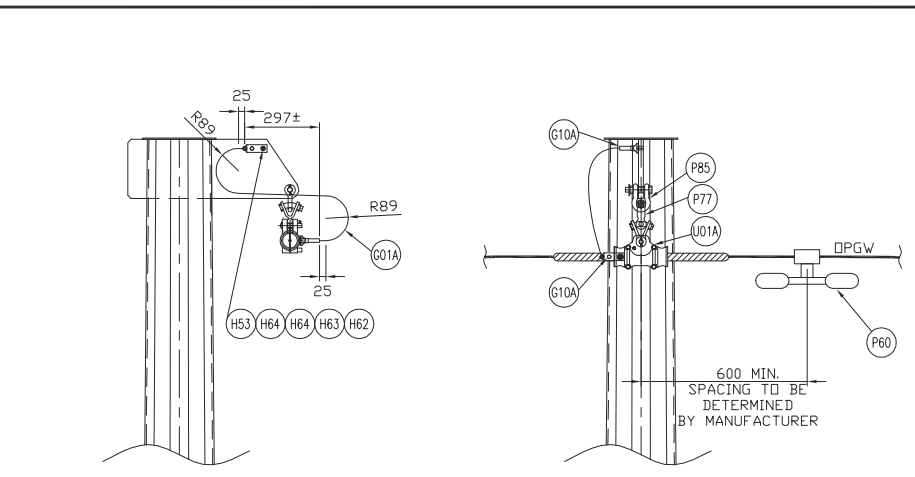
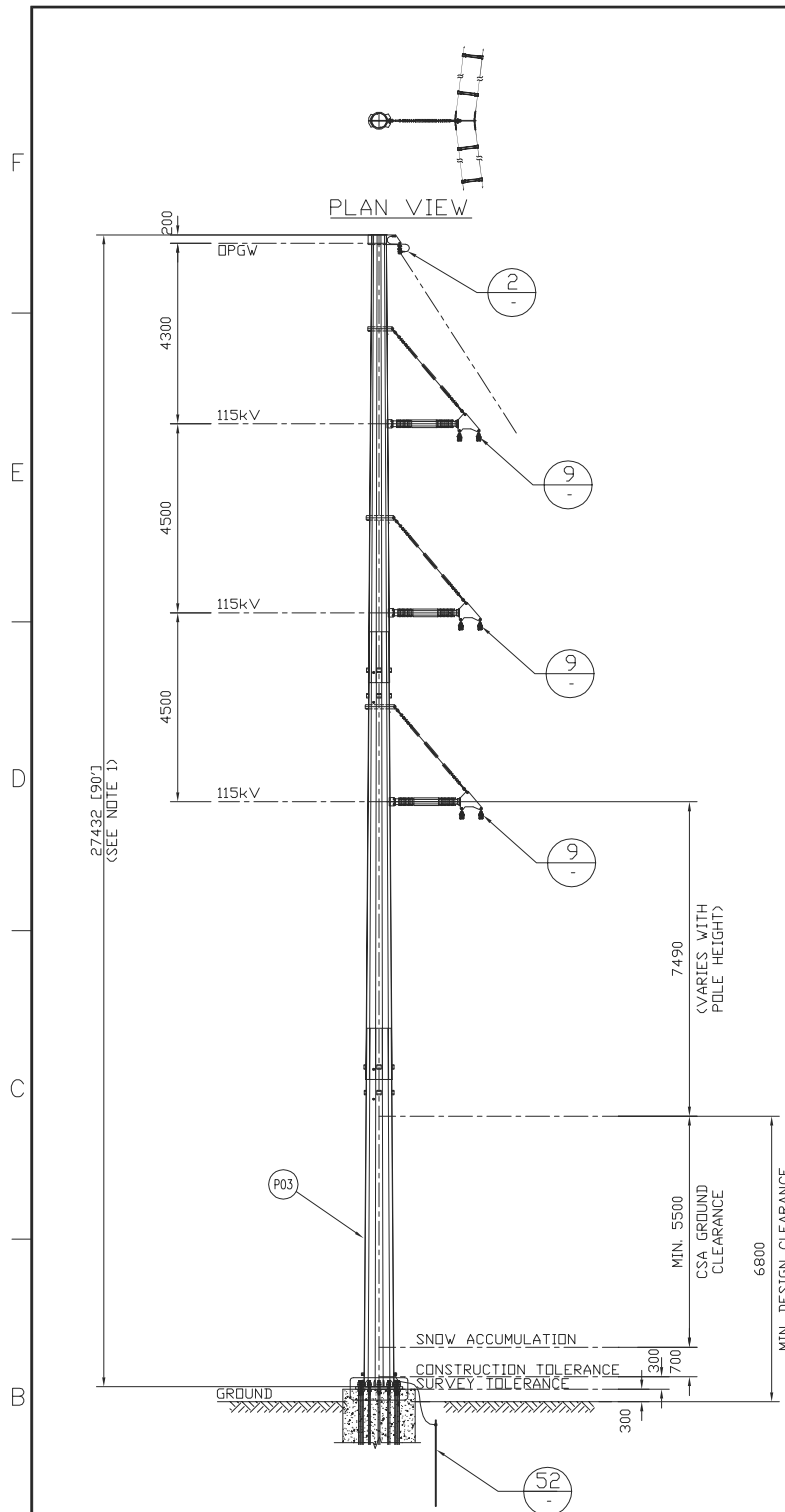
BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11B	3	230kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 50,000LBS EYE - EYE ENDS)	NGK-LOCKE PART #502-SC690-EE	
P12A	3	115/138kV TRANSMISSION LINE POST INSULATOR (FLANGE TOP - FLANGE BASE)	NGK-LOCKE PART #L4-SN321-55U	
P46	6	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) WITH ARMOR RODS (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	6	AL. ARMOR RODS FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P71	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA22	
P78	1	Y-CLEVIS EYE 90 DEG. CONNECTOR (UTS 25,000LBS)	HUBBELL YCS0690	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	1	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85A	6	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
P93E	3	CONDUCTOR YOKE PLATE FOR BRACED POST INSULATOR		DWG# 1235-2-F017
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53	1	1/2" HEX HEAD BOLT (STAINLESS STEEL)	HUBBELL HBS150	
H53B	12	16mm(5/8")x32mm A325 BOLT + 2xFLAT WASHER (GALV.)		
H62	1	HEX NUTS FOR 1/2" BOLTS (STAINLESS STEEL)	HUBBELL HNS500	
H63	1	BELLEVILLE WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL BW500	
H64	2	ROUND WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL HFS500	
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90 DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2), C/W ARMOR ROD AND HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
2. VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.						F	14/05/13	ISSUED FOR TENDER			
E	01/03/13	ISSUED FOR TENDER	X.Z.	W.L.						E	01/03/13	ISSUED FOR TENDER			
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.						D	14/02/13	ISSUED FOR TENDER			
C	18/01/13	ISSUED FOR TENDER	J.C.	M.R.						C	18/01/13	ISSUED FOR TENDER			
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.R.						B	11/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.R.						A	17/08/12	ISSUED FOR REVIEW			

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		CLIENT PROJECT MGR.		DEPARTMENT MGR.		PROJECT MGR.		AREA		NEXTERA 5-PACK TRANSMISSION LINE	
		PROJECT PHASE		PROJECT NO.		ACTIVITY NO.		PACKAGE CODE		SUBJECT	
								1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION TANGENT (0 - 2°) FRAMING		CLIENT DWG. NO.	
		SCALE				BY		D/M/Y		DRAWING NO.	
		N.T.S. (11"x17")		DSN.		E.KWONG		14/08/12		1235-2-P310	
				DRN.		X.ZHANG		14/08/12		REV.	
										F	
										CADD FILE ADDRESS	
										1235-2-P310-F	



BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11B	3	230kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 50,000LBS EYE - EYE ENDS)	NGK-LOCKE PART #502-SC690-EE	
P12A	3	115/138kV TRANSMISSION LINE POST INSULATOR (FLANGE TOP - FLANGE BASE)	NGK-LOCKE PART #L4-SN321-55U	
P46	6	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) WITH ARMOR RODS (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	6	AL. ARMOR RODS FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P71	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA22	
P77	1	Y-CLEVIS EYE CONNECTOR (UTS 25,000LBS)	HUBBELL YCS06	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	1	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85A	6	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
P93E	3	CONDUCTOR YOKE PLATE FOR BRACED POST INSULATOR		DWG# 1235-2-F017
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53	1	1/2" HEX HEAD BOLT (STAINLESS STEEL)	HUBBELL HBS150	
H53B	12	16mm(5/8")x32mm A325 BOLT + 2xFLAT WASHER (GALV.)		
H62	1	HEX NUTS FOR 1/2" BOLTS (STAINLESS STEEL)	HUBBELL HNS500	
H63	1	BELLEVILLE WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL BW500	
H64	2	ROUND WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL HFS500	
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90 DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W ARMOR ROD AND HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

NOTES:
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
2. VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.						F	14/05/13	ISSUED FOR TENDER			
E	01/03/13	ISSUED FOR TENDER	X.Z.	W.L.						E	01/03/13	ISSUED FOR TENDER			
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.						D	14/02/13	ISSUED FOR TENDER			
C	18/01/13	ISSUED FOR TENDER	J.C.	M.R.						C	18/01/13	ISSUED FOR TENDER			
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.R.						B	11/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.R.						A	17/08/12	ISSUED FOR REVIEW			

APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. ACTIVITY NO. PACKAGE CODE

SCALE N.T.S. (11"x17")

BY DSN. E.KWONG DRN. X.ZHANG

D/M/Y 14/08/12 14/08/12

AREA B

NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT

1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION LIGHT ANGLE (2 - 15°) FRAMING

CLIENT DWG. NO.

DRAWING NO. 1235-2-P311

CADD FILE ADDRESS 1235-2-P311-F

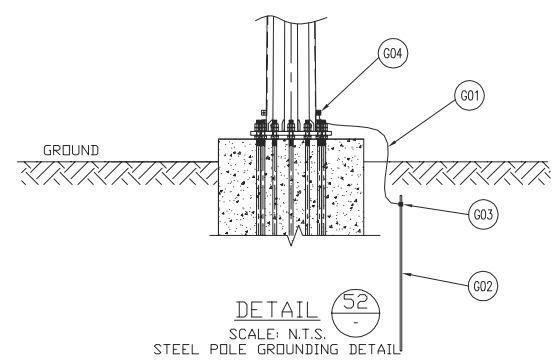
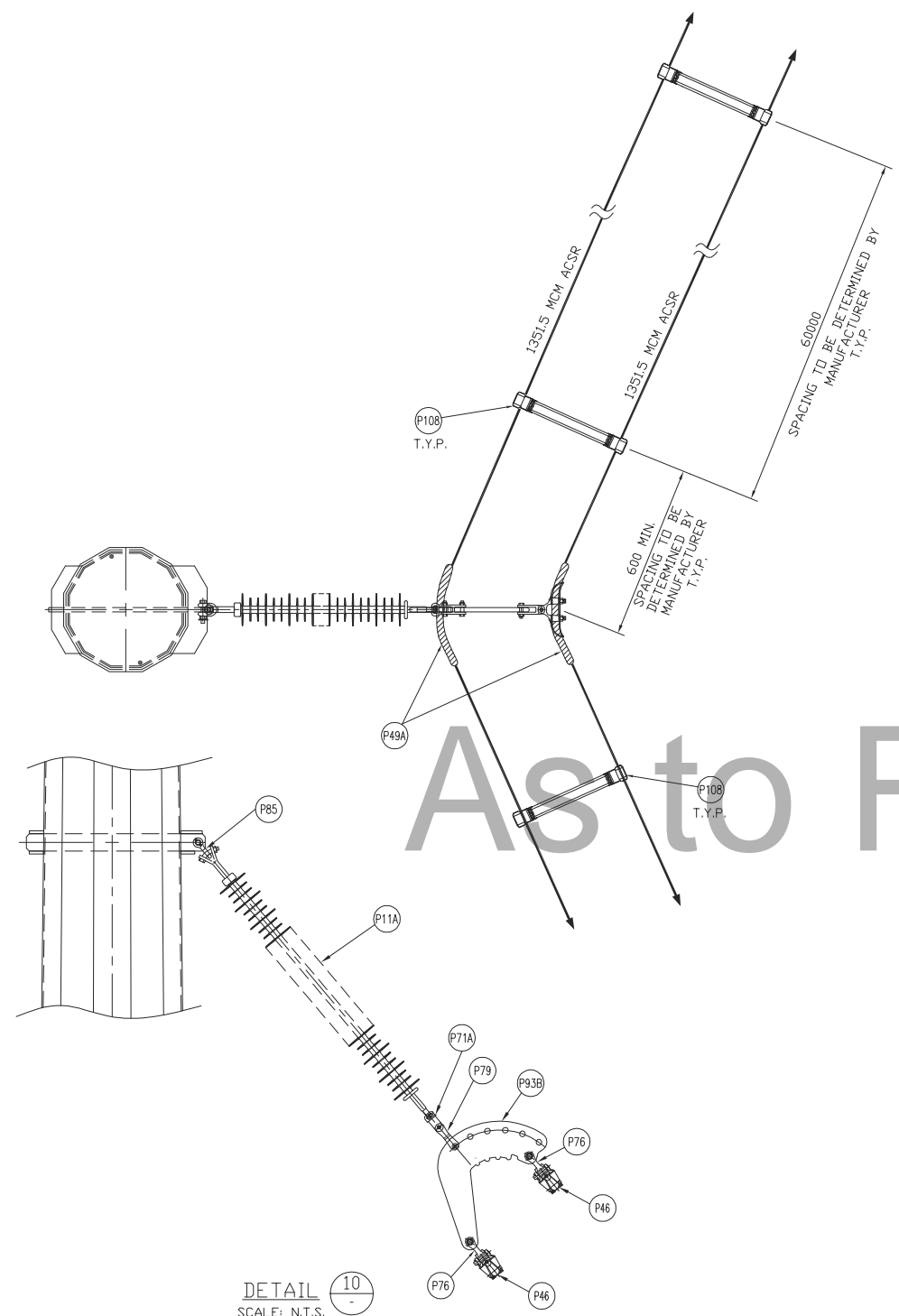
REV. F

NEXTERA ENERGY CANADA

Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

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DETAIL 10
SCALE: N.T.S.
STRAIN INSULATOR MOUNTING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					F	14/05/12	ISSUED FOR TENDER			
E	01/03/13	ISSUED FOR TENDER	D.W.	W.L.					E	01/03/13	ISSUED FOR TENDER			
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					D	14/02/13	ISSUED FOR TENDER			
C	18/01/13	ISSUED FOR TENDER	J.C.	M.R.					C	18/01/13	ISSUED FOR TENDER			
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.R.					B	11/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.R.					A	17/08/12	ISSUED FOR REVIEW			

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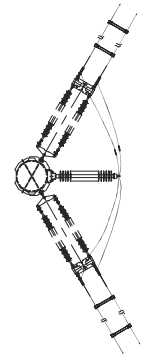
APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12

AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION MEDIUM ANGLE (15 - 45°) FRAMING	

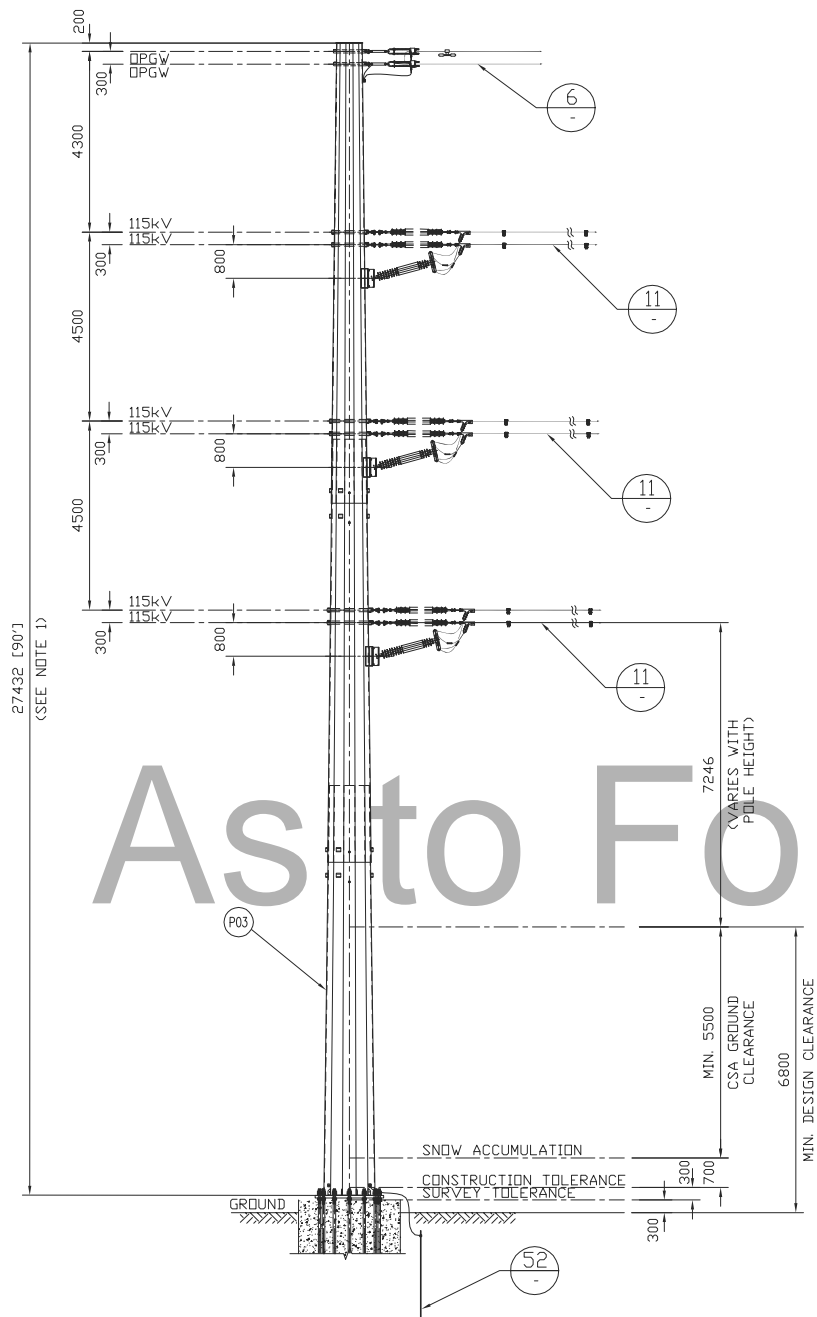
Engineering Company
3850 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.	REV.
DRAWING NO. 1235-2-P313-S02	F
CADD FILE ADDRESS 1235-2-P313-S01&S02-F	

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PLAN VIEW



1CCT 115kV TRANSMISSION LINE
HEAVY ANGLE (45 - 60°) FRAMING

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	115/138kV TRANSMISSION LINE POST INSULATOR (DRDP TONGUE - FLAT BASE)	NGK-LOCKE PART #L4-SN321-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53A	12	22mm(7/8")Øx64mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

- NOTES:
- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
 - VIBRATION DAMPER AND TWIN SAPACER DAMPER TO BE ADVISED BY OTHERS.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.						F	14/05/13	ISSUED FOR TENDER				
E	01/03/13	ISSUED FOR TENDER	J.C.	W.L.						E	01/03/13	ISSUED FOR TENDER				
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.						D	14/02/13	ISSUED FOR TENDER				
C	18/01/13	ISSUED FOR TENDER	J.C.	M.A.						C	18/01/13	ISSUED FOR TENDER				
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.A.						B	11/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.A.						A	17/08/12	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	14/08/12	
	DRN. J.CHEN	14/08/12	

SUBJECT	
1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (45 - 60°) FRAMING	

3850 Fourteenth Ave. East, Suite 506
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-2-P314-S01

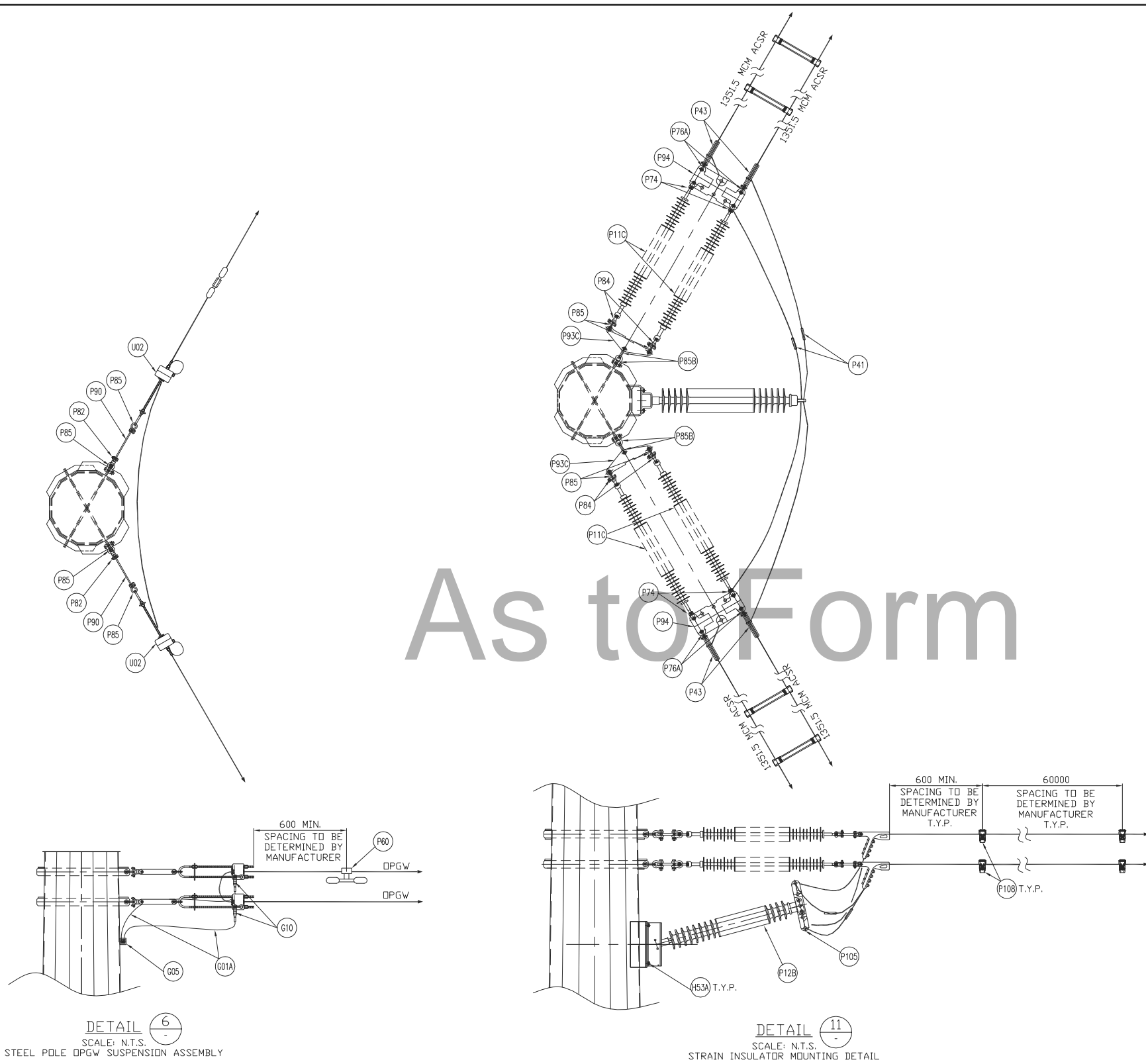
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CADD FILE ADDRESS
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REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
F	14/05/13	ISSUED FOR TENDER		J.C.	W.L.					F	14/05/13	ISSUED FOR TENDER				
E	01/03/13	ISSUED FOR TENDER		J.C.	W.L.					E	01/03/13	ISSUED FOR TENDER				
D	14/02/13	ISSUED FOR TENDER		J.C.	W.L.					D	14/02/13	ISSUED FOR TENDER				
C	18/01/13	ISSUED FOR TENDER		J.C.	M.J.A.					C	18/01/13	ISSUED FOR TENDER				
B	11/01/13	ISSUED FOR REVIEW		J.C.	M.J.A.					B	11/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW		J.C.	M.J.A.					A	17/08/12	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12

AREA

NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT

1CCT 115kV TRANSMISSION LINE
DOUBLE CONDUCTOR CONFIGURATION
HEAVY ANGLE (45 - 60°) FRAMING

CLIENT DWG. NO.

DRAWING NO.
1235-2-P314-S02

REV.
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NEXTERA ENERGY
CANADA

Chimax Inc.
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

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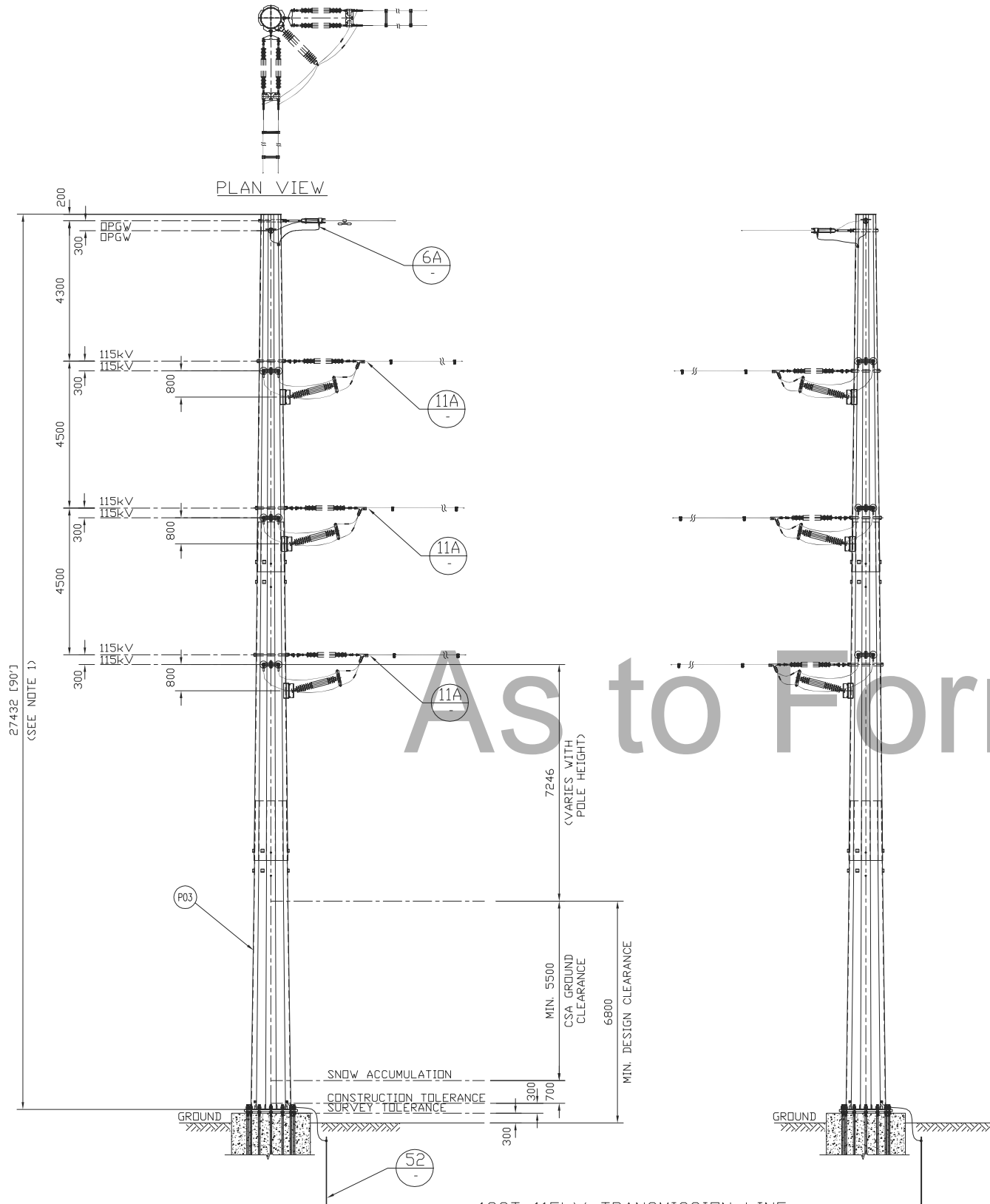
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BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)

ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	115/138kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L4-SN321-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53A	12	22mm(7/8")x64mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

- NOTES:
- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
 - VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.

1CCT 115kV TRANSMISSION LINE
HEAVY ANGLE (60 - 90°) DEADEND FRAMING

Engineering Company
3950 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-2-P315-S01

REV.
F

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REFERENCES
F	14/05/13	ISSUED FOR TENDER			J.C.	W.L.				F	14/05/13	ISSUED FOR TENDER	
E	01/03/13	ISSUED FOR TENDER			J.C.	W.L.				E	01/03/13	ISSUED FOR TENDER	
D	14/02/13	ISSUED FOR TENDER			J.C.	W.L.				D	14/02/13	ISSUED FOR TENDER	
C	18/01/13	ISSUED FOR TENDER			J.C.	M.H.				C	18/01/13	ISSUED FOR TENDER	
B	11/01/13	ISSUED FOR REVIEW			J.C.	M.H.				B	11/01/13	ISSUED FOR REVIEW	
A	17/08/12	ISSUED FOR REVIEW			J.C.	M.H.				A	17/08/12	ISSUED FOR REVIEW	

STAMP/SEAL

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APPROVED FOR CONSTRUCTION					
CLIENT PROJECT MGR.		DEPARTMENT MGR.		PROJECT MGR.	
PROJECT PHASE				AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.		PACKAGE CODE		SUBJECT 1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60 - 90°) FRAMING
SCALE	BY		D/M/Y		
N.T.S. (11"x17")	DSN.	E.KWONG	14/08/12		
	DRN.	J.CHEN	14/08/12		

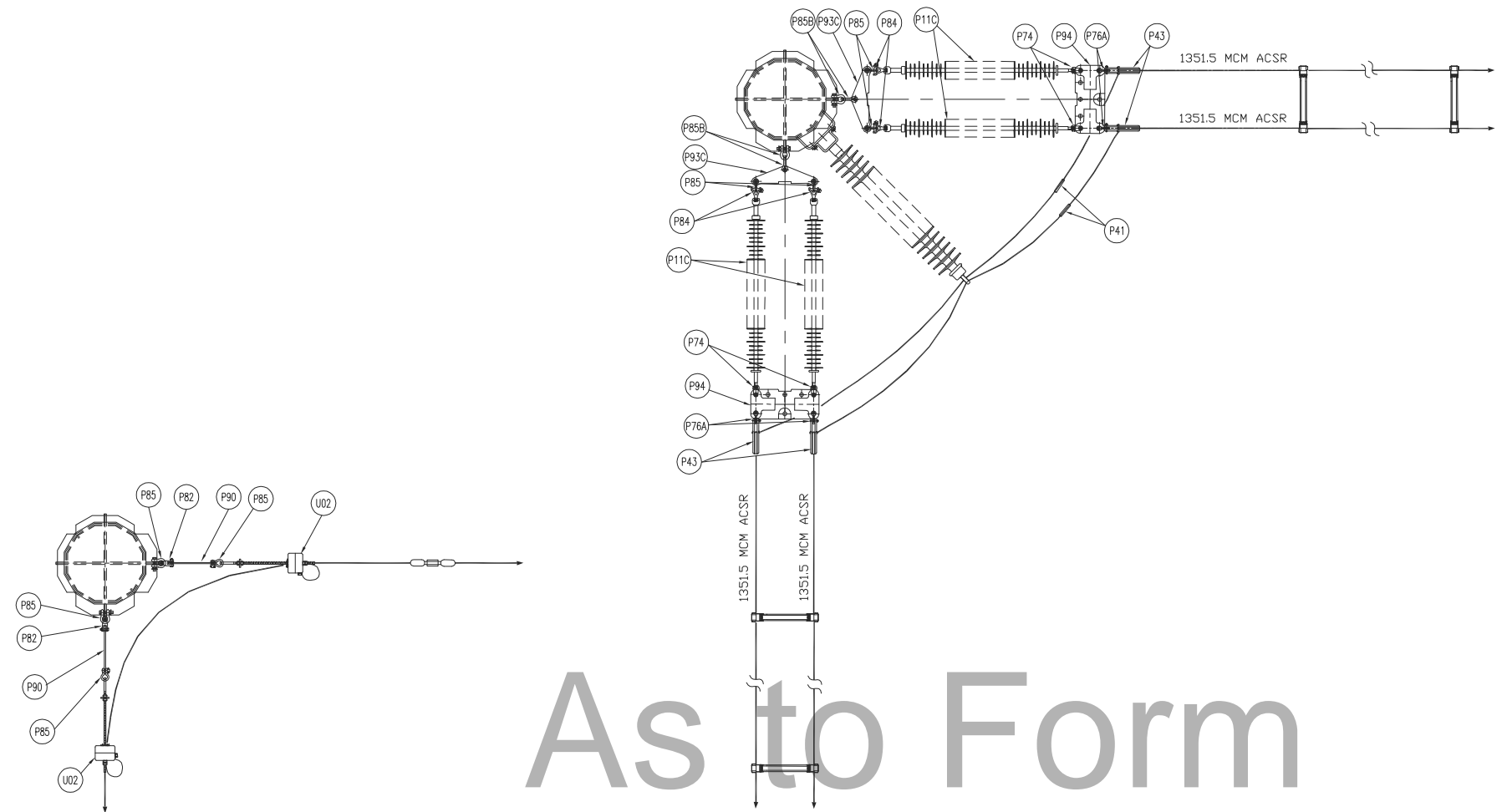
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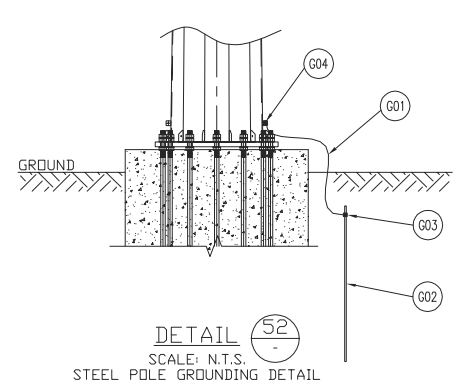
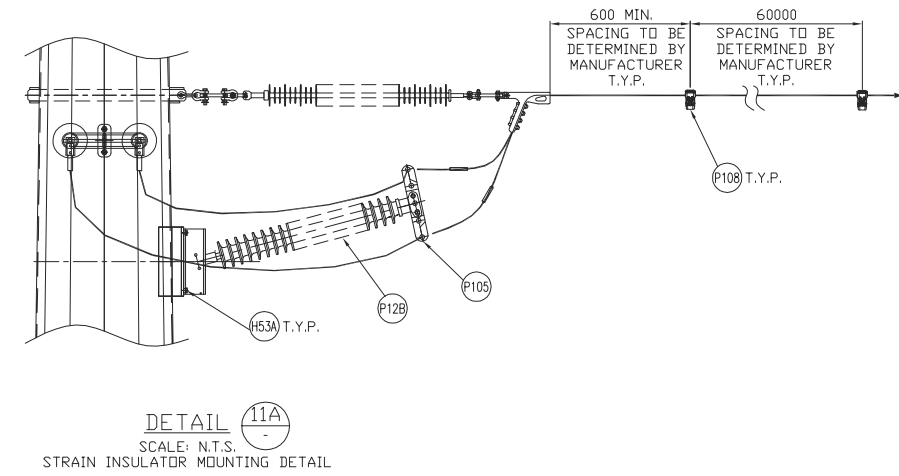
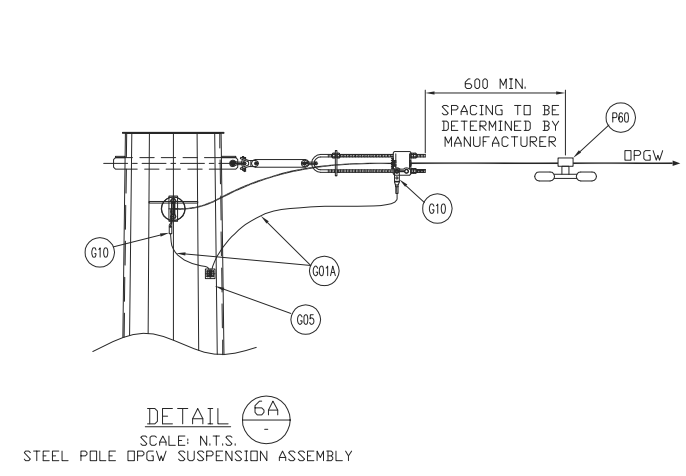
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As to Form



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
F	14/05/13	ISSUED FOR TENDER		J.C.	W.L.				F	14/05/13	ISSUED FOR TENDER				
E	01/03/13	ISSUED FOR TENDER		J.C.	W.L.				E	01/03/13	ISSUED FOR TENDER				
D	14/02/13	ISSUED FOR TENDER		J.C.	W.L.				D	14/02/13	ISSUED FOR TENDER				
C	18/01/13	ISSUED FOR TENDER		J.C.	M.R.				C	18/01/13	ISSUED FOR TENDER				
B	11/01/13	ISSUED FOR REVIEW		J.C.	M.R.				B	11/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW		J.C.	M.R.				A	17/08/12	ISSUED FOR REVIEW				

APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. ACTIVITY NO. PACKAGE CODE

SCALE N.T.S. (11"x17")

BY DSN. E.KWONG DRN. J.CHEN

D/M/Y 14/08/12

AREA NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT 1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60 - 90°) FRAMING

STAMP/SEAL

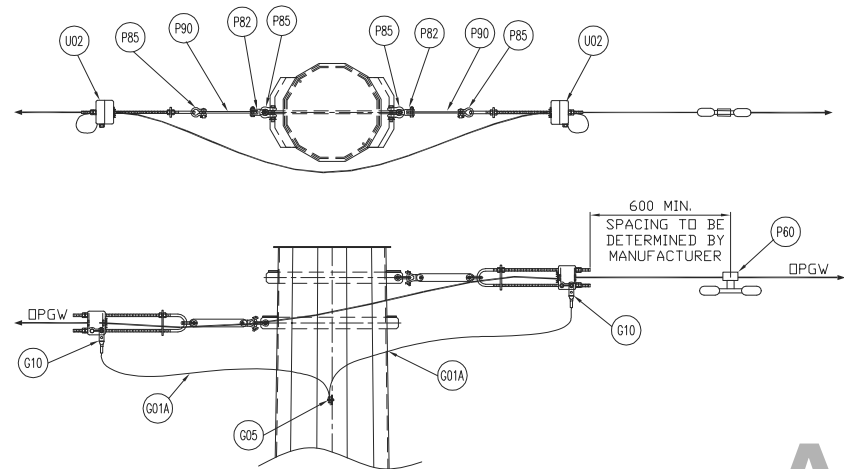
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Chimax Inc. Engineering Company 3850 Fourteenth Ave. East, Suite 508 Markham, On., L3R 0A9 Email: chimax@chimax.ca

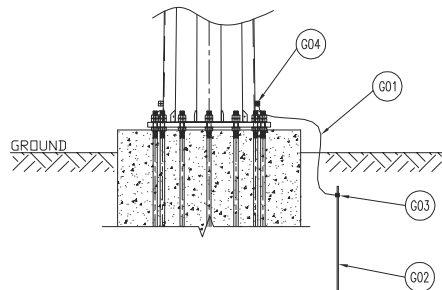
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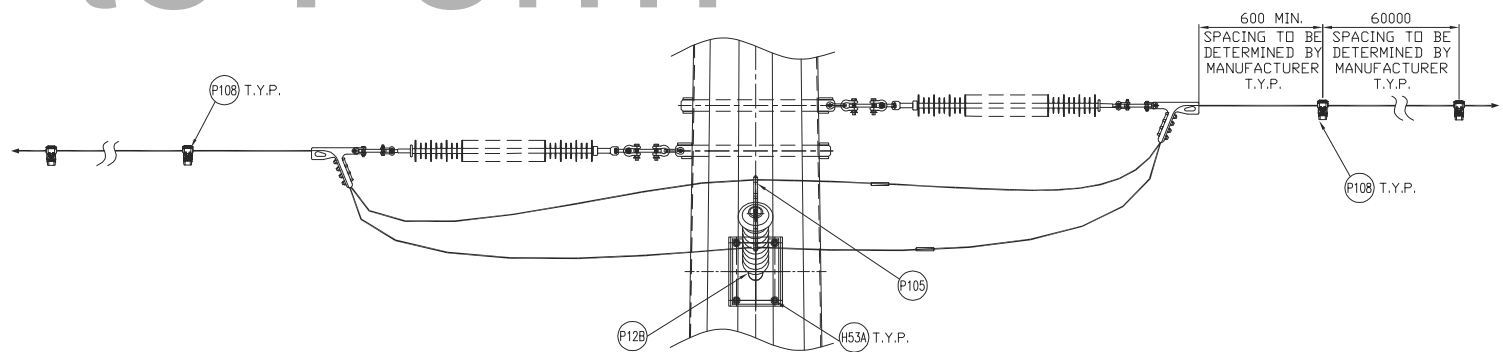
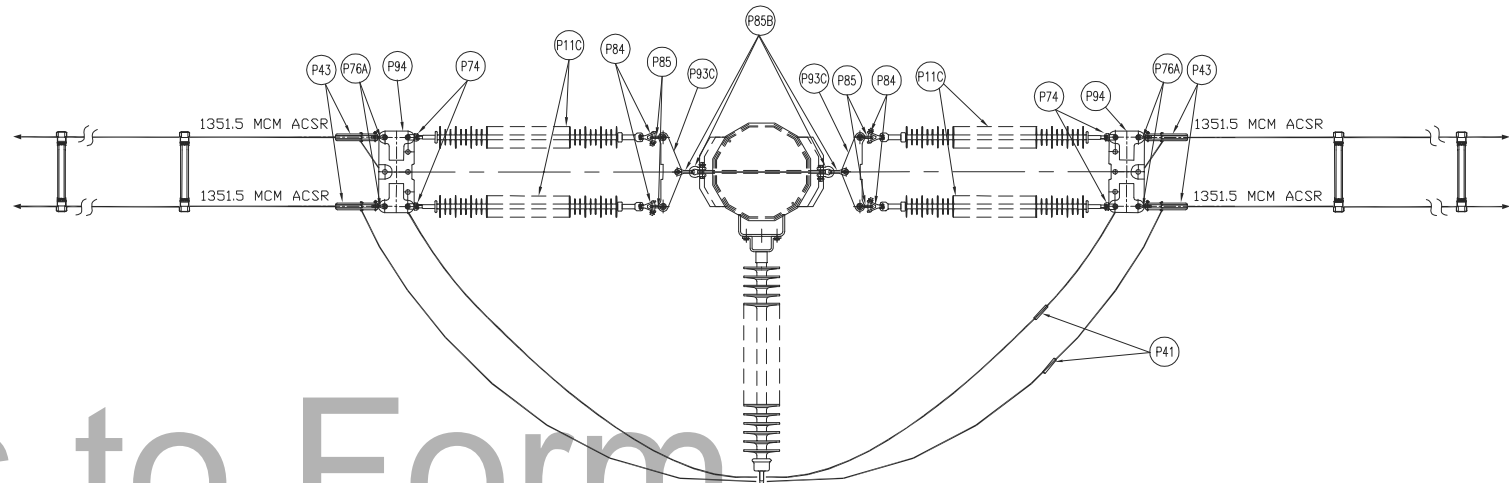
REV. F



DETAIL 6B
SCALE: N.T.S.
STEEL POLE DPGW SUSPENSION ASSEMBLY



DETAIL 52
SCALE: N.T.S.
STEEL POLE GROUNDING DETAIL



DETAIL 11B
SCALE: N.T.S.
STRAIN INSULATOR MOUNTING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					E	14/05/13	ISSUED FOR TENDER			
D	01/03/13	ISSUED FOR TENDER	J.C.	W.L.					D	01/03/13	ISSUED FOR TENDER			
C	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					C	14/02/13	ISSUED FOR TENDER			
B	18/01/13	ISSUED FOR TENDER	J.C.	M.R.					B	18/01/13	ISSUED FOR TENDER			
A	11/01/13	ISSUED FOR REVIEW	J.C.	M.R.					A	11/01/13	ISSUED FOR REVIEW			

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PROJECT PHASE			
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	08/01/13	
	DRN. J.CHEN	08/01/13	

AREA	NEXTERA 5-PACK TRANSMISSION LINE
SUBJECT	
1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION DOUBLE DEADEND FRAMING	

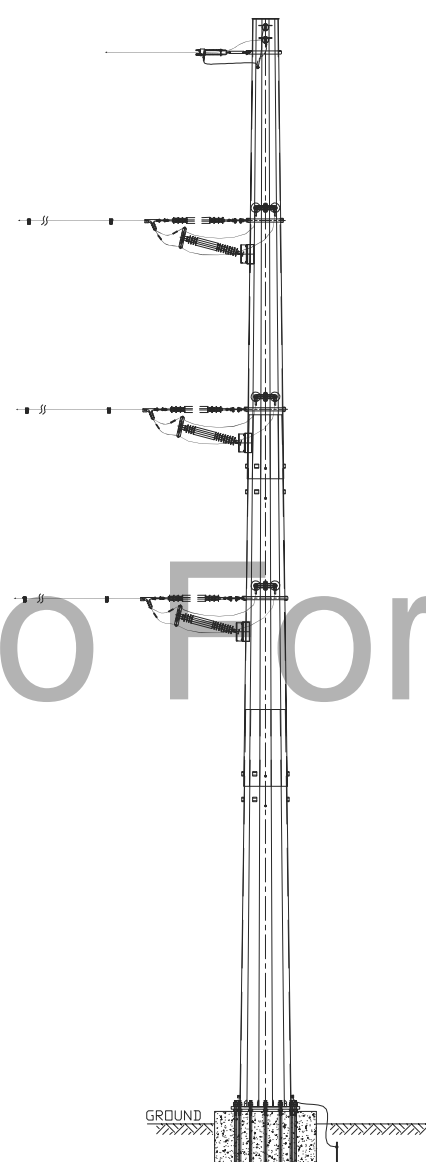
Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-2-P316-S02



CADD FILE ADDRESS
1235-2-P316-S01&S02-E

REV.
E

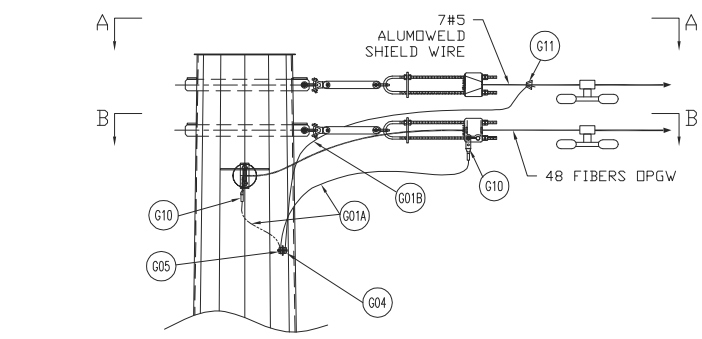


ADDITIONAL PARTS FOR SHIELD WIRE TAP TO STATION				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P60B	1	VIBRATION DAMPER FOR 7#5 ALUMOWELD SHIELD WIRE	HUBBELL 607051011	
P82	1	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P85	2	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	1	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
G01B	LOT	4/0 STR. Cu. GROUND WIRE		
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G11	1	AMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 4/0 STR. Cu.	AMP 600466	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	

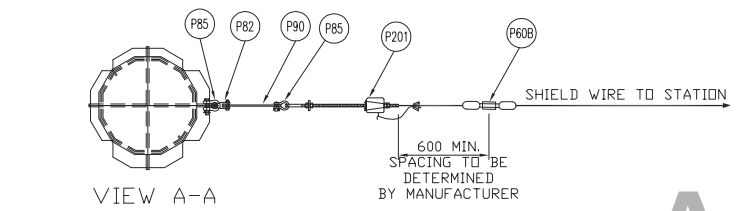
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
2. VIBRATION DAMPER AND TWIN SAPACER DAMPER TO BE ADVISED BY OTHERS.

			
	Chimax Inc. Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On. L3R 0A0 Email: chimax@chimax.ca		
CLIENT DWG. NO.			
DRAWING NO. 1235-2-P317-S01			REV. D
CADD FILE ADDRESS 1235-2-P317-S01&S02-D	1		

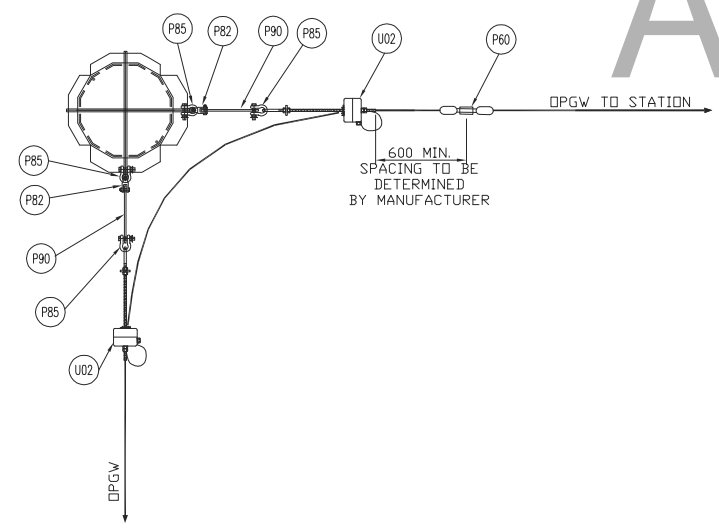
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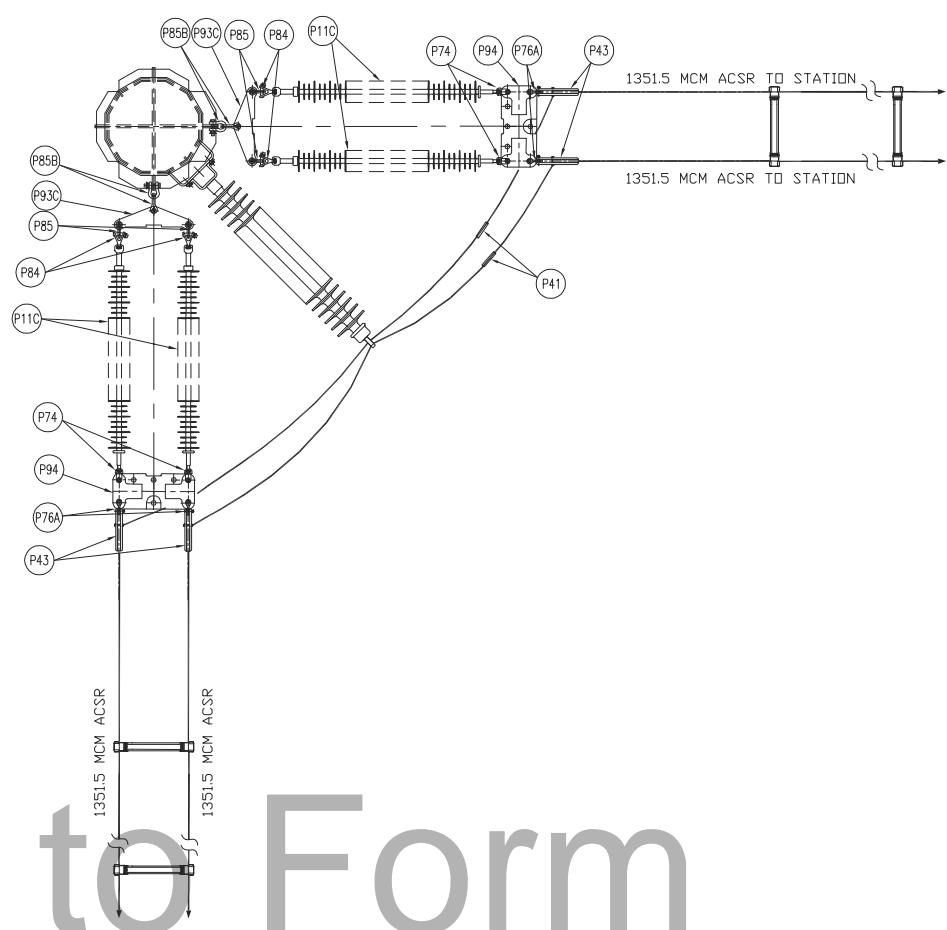
DETAIL 12
SCALE: N.T.S.
STEEL POLE SHIELD WIRE & OPGW SUSPENSION ASSEMBLY



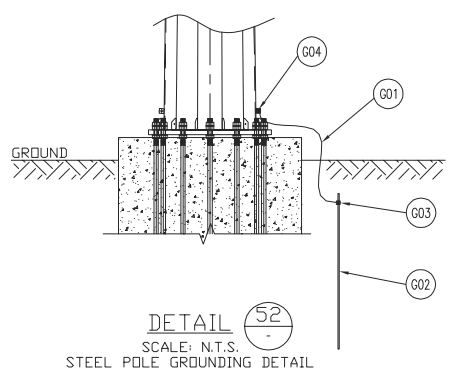
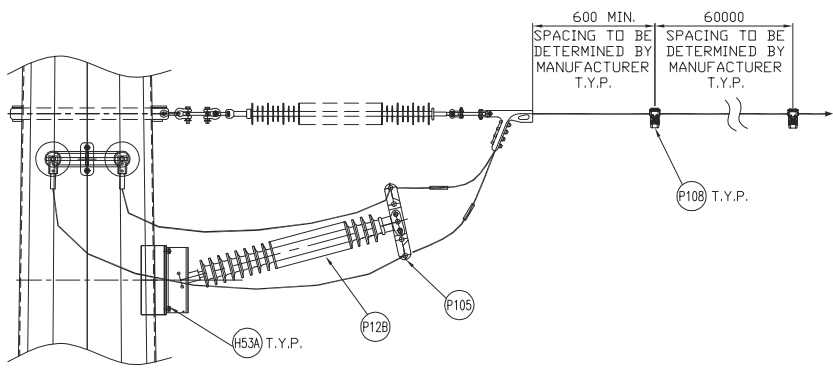
SHIELD WIRE SUSPENSION ASSEMBLY



VIEW B-B
OPGW SUSPENSION ASSEMBLY



DETAIL 11A
SCALE: N.T.S.
STRAIN INSULATOR MOUNTING DETAIL



DETAIL 52
SCALE: N.T.S.
STEEL POLE GROUNDING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
D	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					D	14/05/13	ISSUED FOR TENDER			
C	01/03/13	ISSUED FOR TENDER	J.C.	W.L.					C	01/03/13	ISSUED FOR TENDER			
B	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					B	14/02/13	ISSUED FOR TENDER			
A	18/01/13	ISSUED FOR REVIEW	J.C.	M.R.					A	18/01/13	ISSUED FOR REVIEW			

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APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	18/01/13

AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60 - 90°) FRAMING (FOR STATION TAP)	

Engineering Company
3850 Fourteenth Ave. East, Suite 508
Markham, On., L3R 0A9
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.
1235-2-P317-S02

REV.
D

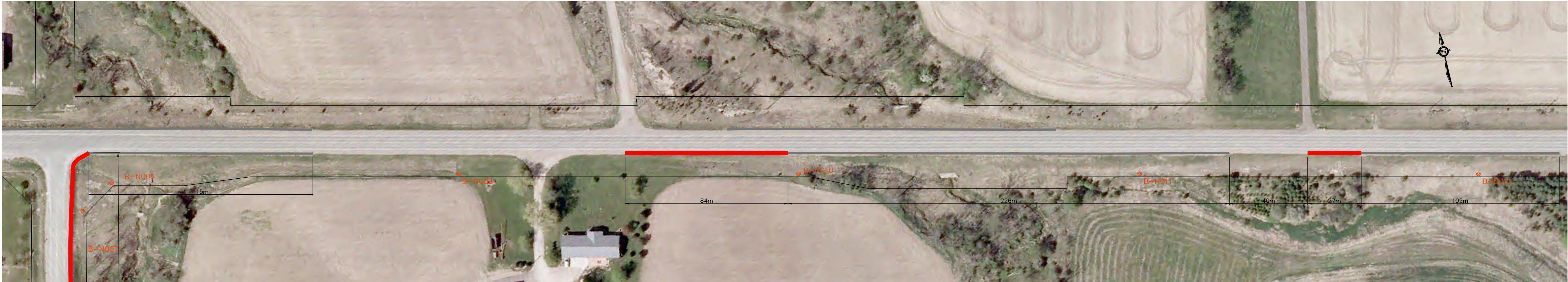
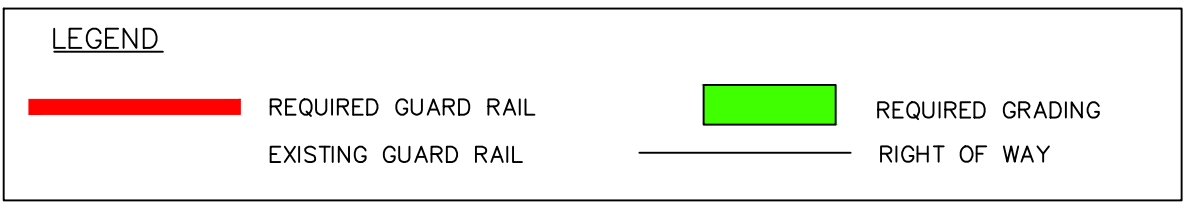
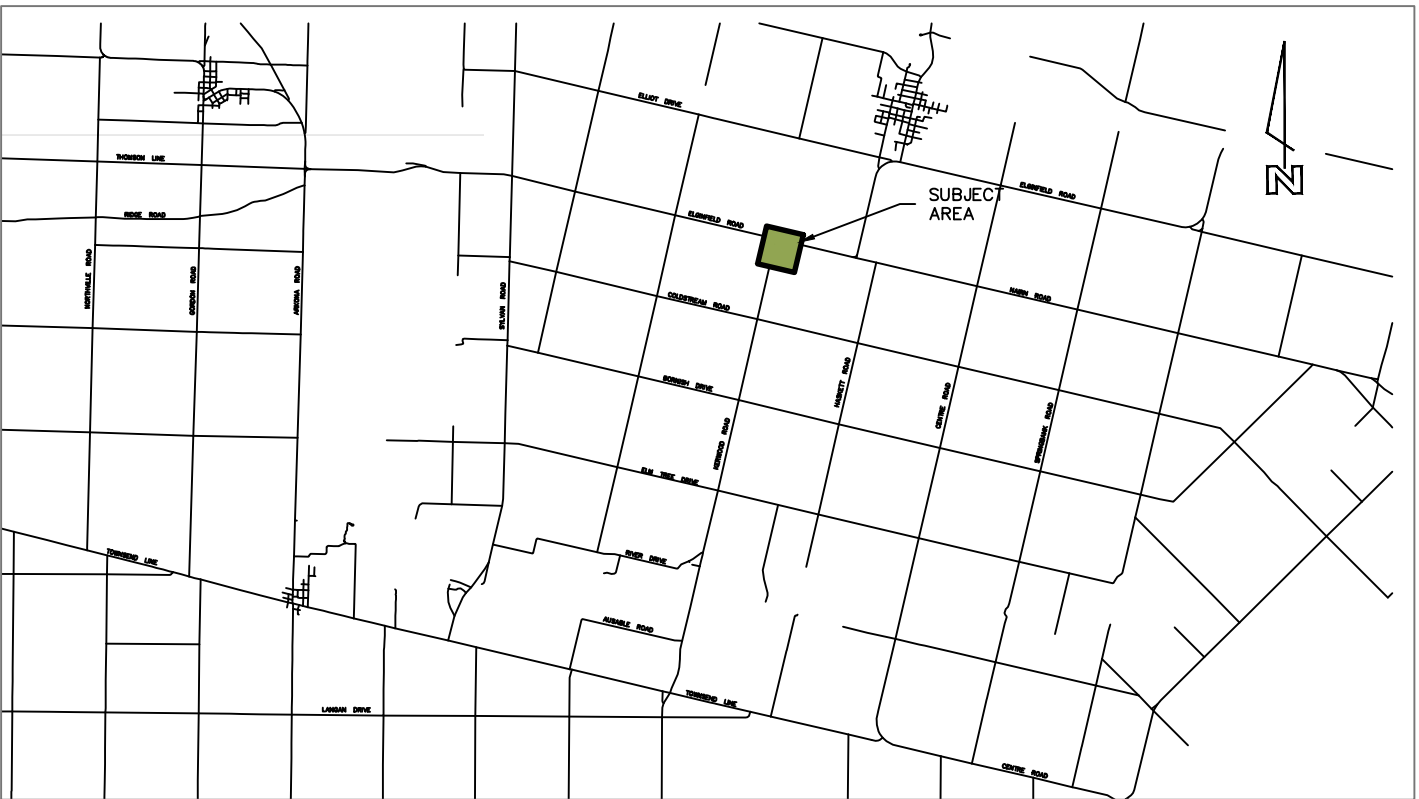
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Co-Owners B4

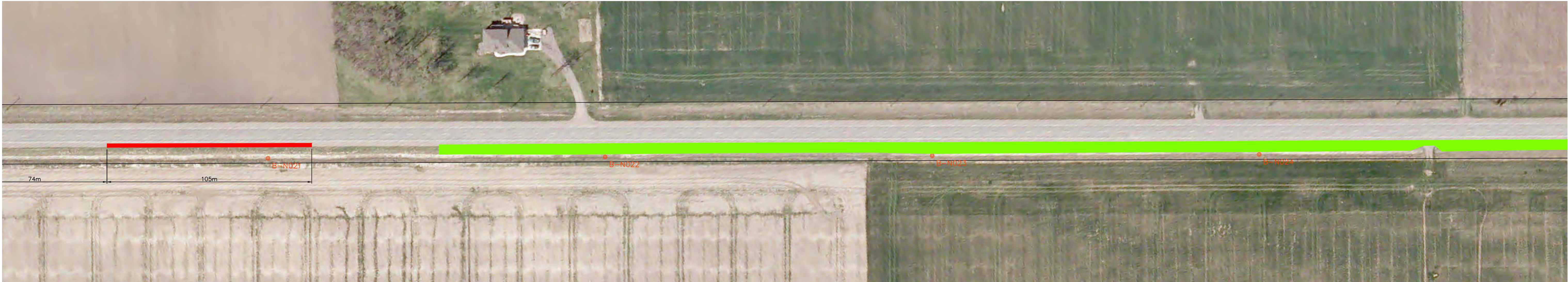
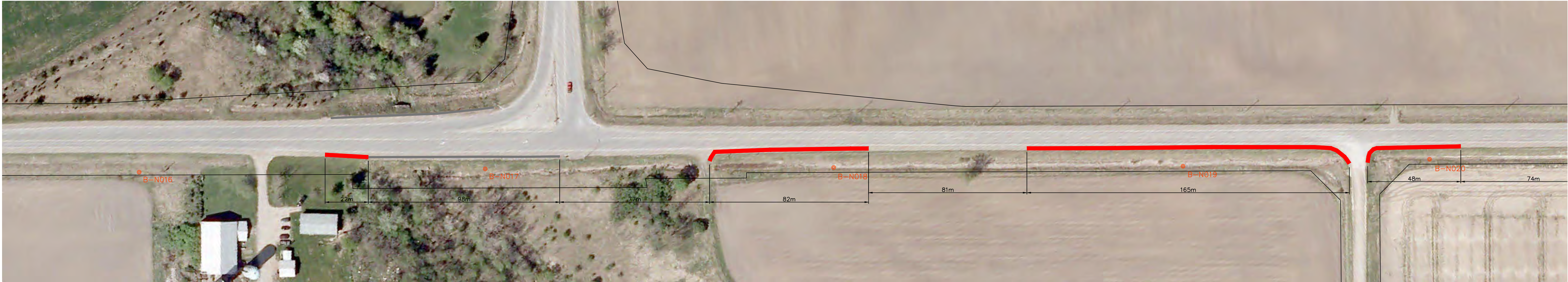
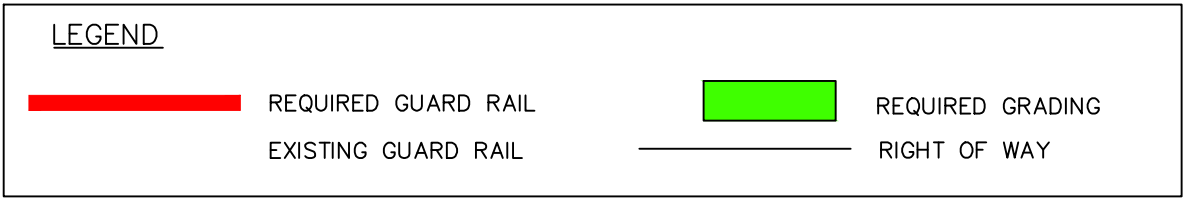
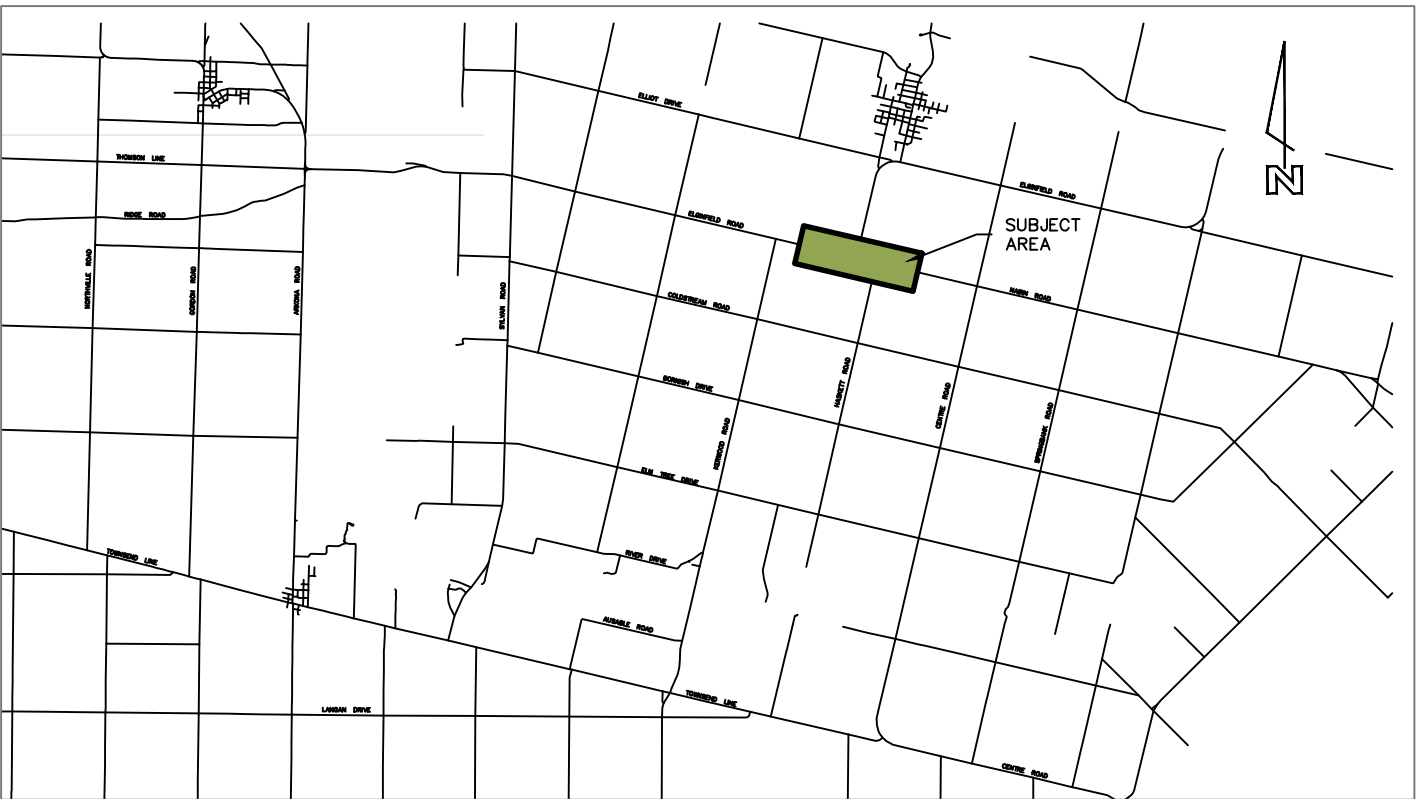
Co-Owners Transmission Pole Clear Zone Mitigation Map

As to Form



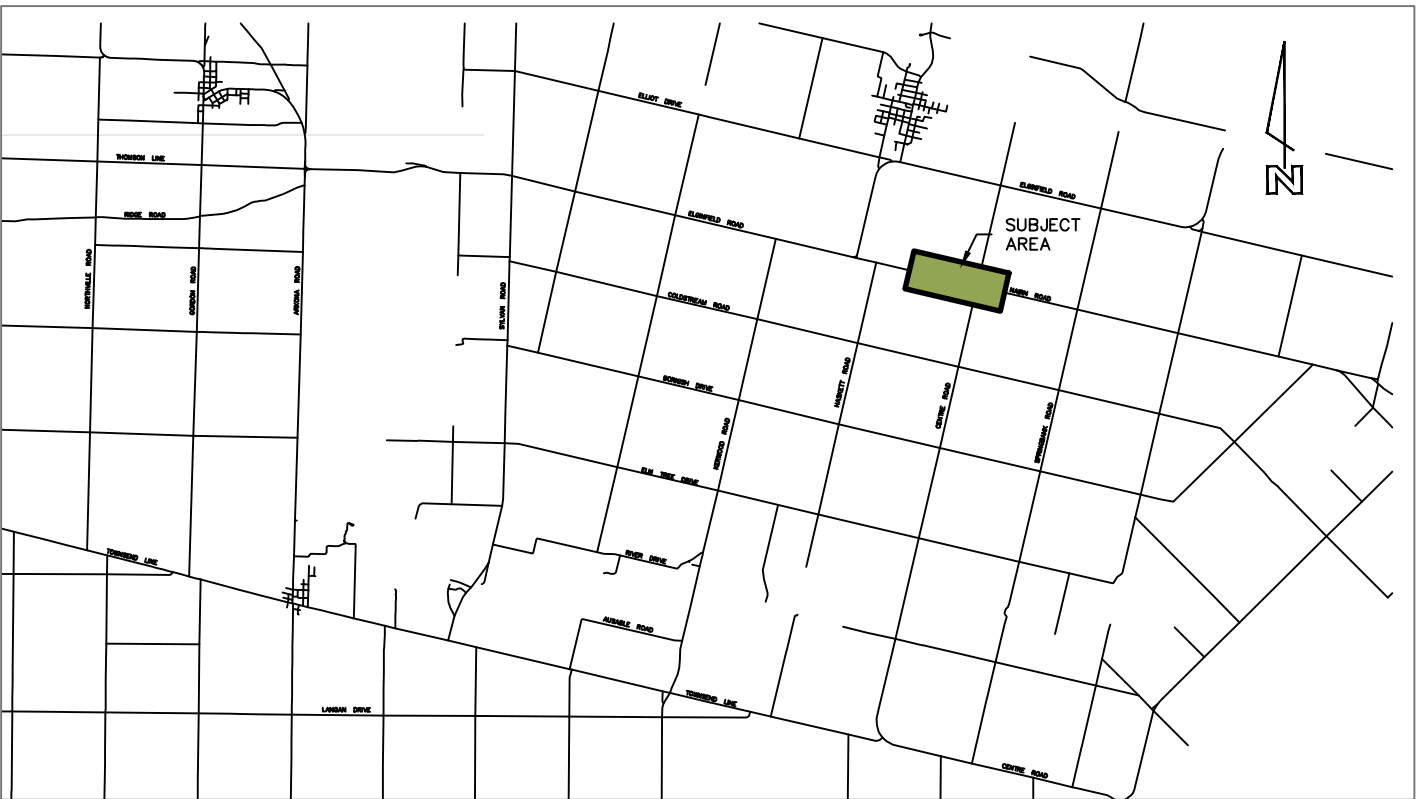
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EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	TITLE	PROJECT No.
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NEXT ERA ENERGY											SCALE 1:1000 	BTLSITE - CLEARZONE SOL2	

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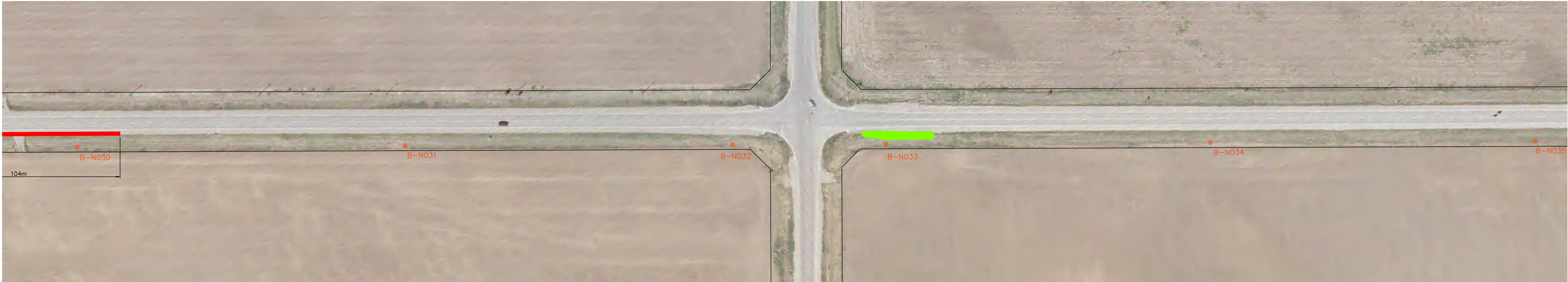
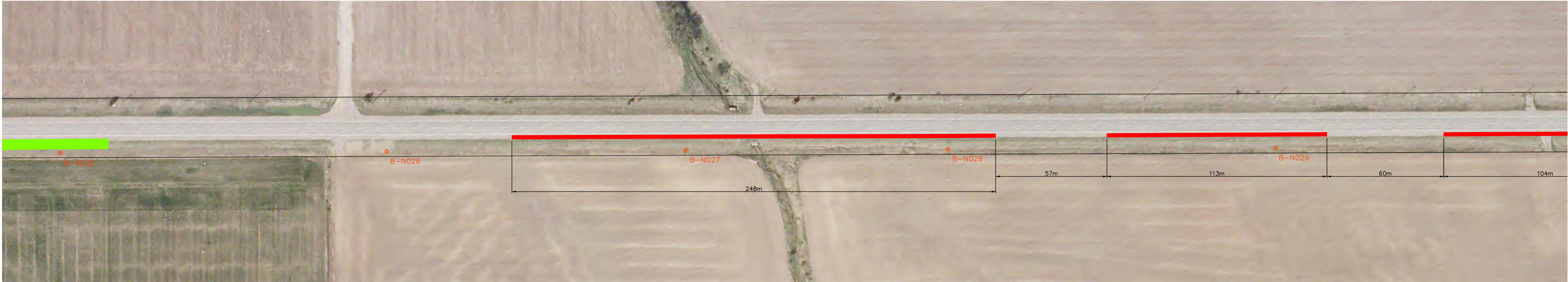
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REQUIRED GUARD RAIL

EXISTING GUARD RAIL

REQUIRED GRADING

RIGHT OF WAY



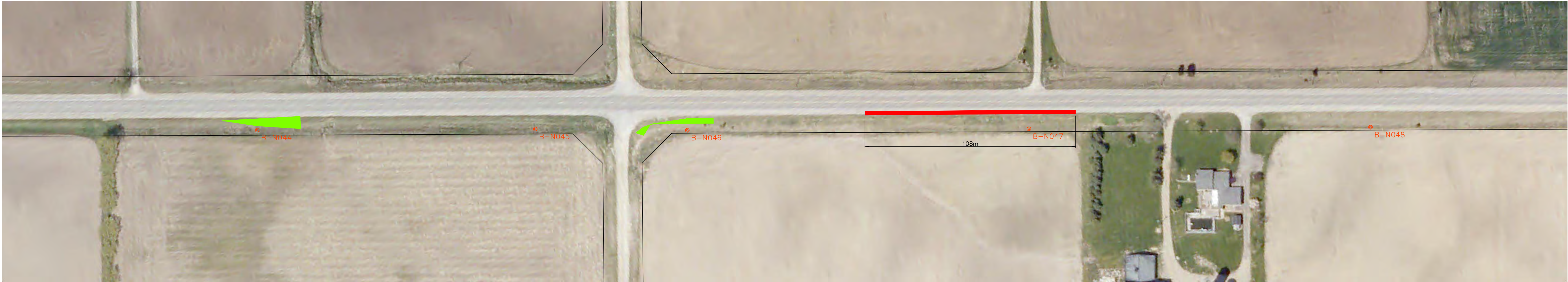
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LEGEND

	REQUIRED GUARD RAIL		REQUIRED GRADING
	EXISTING GUARD RAIL		RIGHT OF WAY



EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	TITLE	PROJECT No.
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					DATE 2013-08-29								
					BTLSite.dwg								

SCALE 1:1000

IBI Group
203 - 350 Oxford Street West
London ON N6H 1T3 Canada
tel 519 472 7328
fax 519 472 9354

NEXT ERA ENERGY

BTLSITE - CLEARZONE SOL4



LEGEND

REQUIRED GUARD RAIL

EXISTING GUARD RAIL

REQUIRED GRADING

RIGHT OF WAY



EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	TITLE	PROJECT No.		
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EXISTING GUARD RAIL

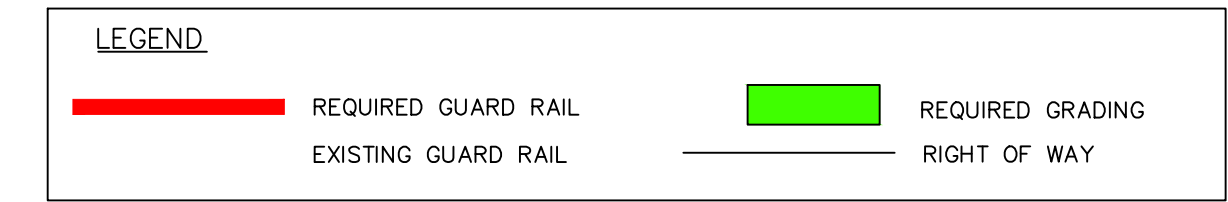
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RIGHT OF WAY



EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	TITLE	PROJECT No.
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					CHECKED RWC									
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Co-Owners B5

**Table re Co-Owners Transmission Pole
Clearance from Pavement Edge**

As to Form



Co-Owners Transmission Line Pole Example

Ontario, Canada

* Pole location in private easement

**Attempting to move pole into private easement

Date: 9/9/2013

PROPRIETARY AND CONFIDENTIAL

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As to Form

Edge of Shoulder

Closest Face of Pole



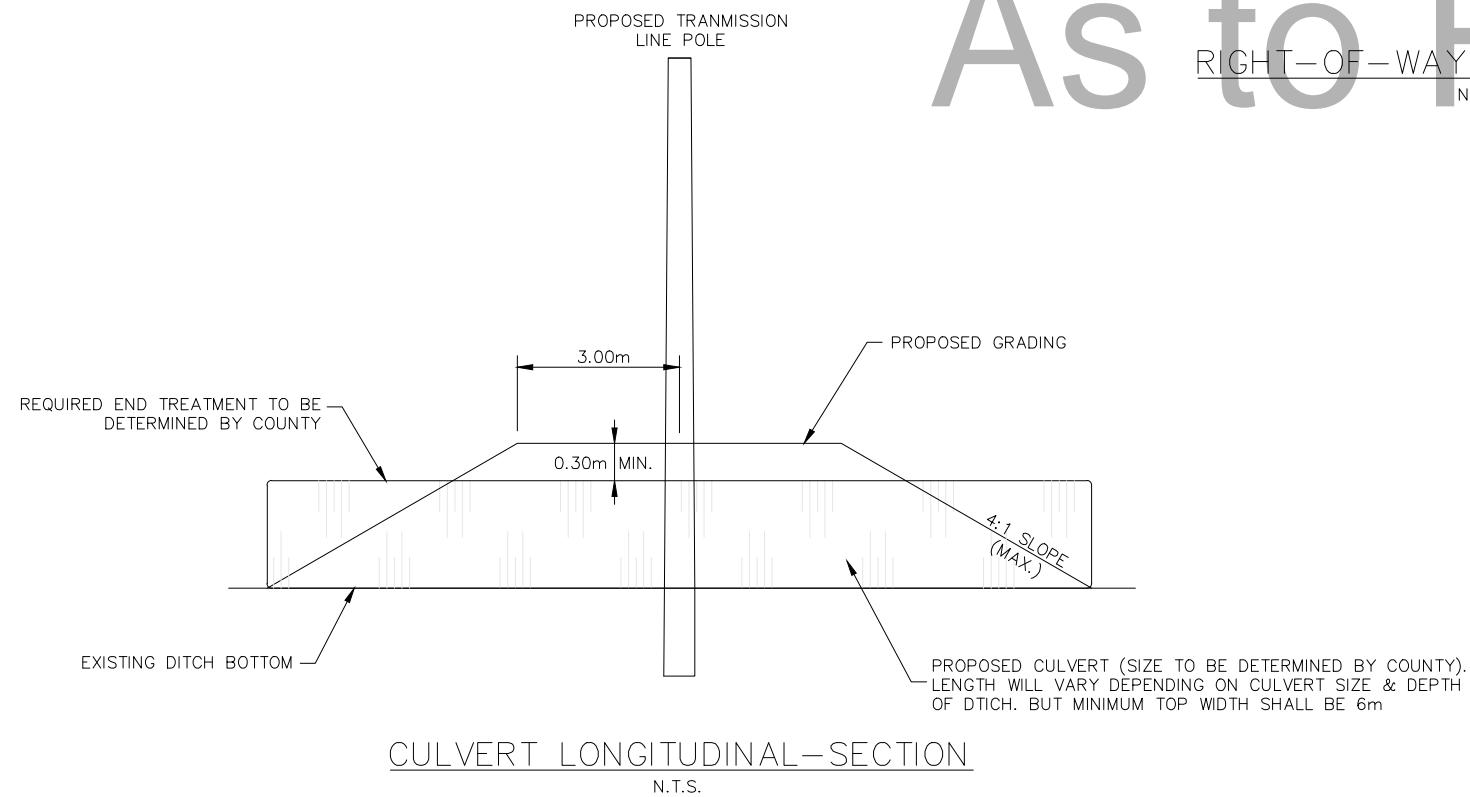
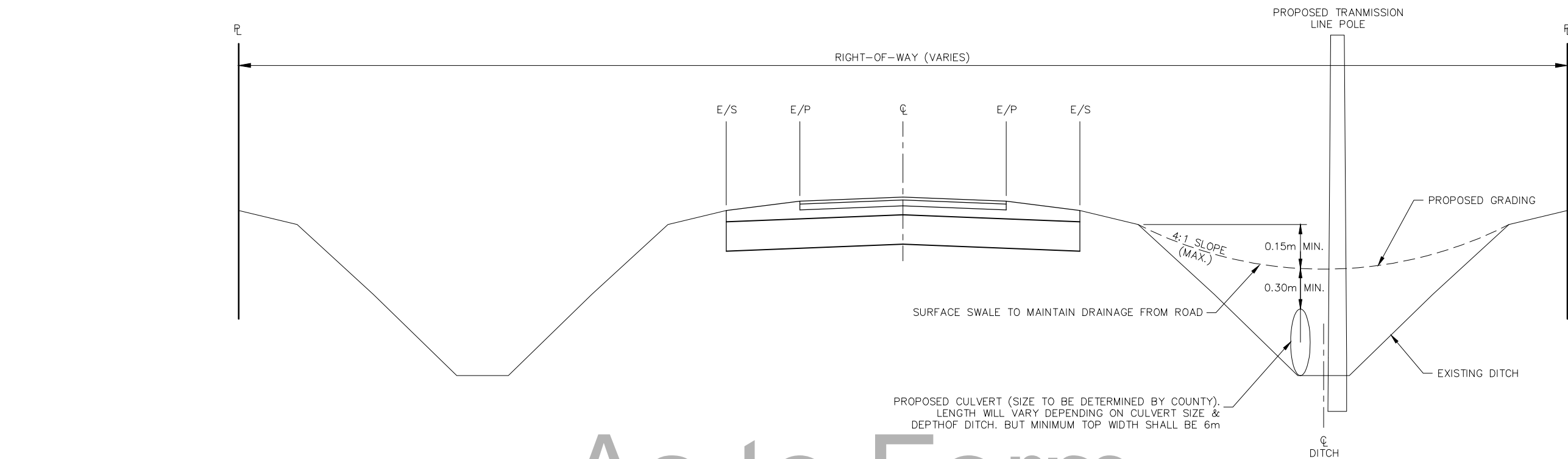
Co-Owners Transmission Line		Co-Owners Transmission Line	
POLE DISTANCES		POLE DISTANCES	
Pole #	Distance to Closest Pole Face	Pole #	Distance to Closest Pole Face
B-N001*	11.2	B-N040**	9.9
B-N002*	11.1	B-N041**	9.4
B-N003	7.7	B-N042**	9.7
B-N004	7.2	B-N043**	8.2
B-N005	7.3	B-N044	8.5
B-N006	9.1	B-N045	8.9
B-N007	7.7	B-N046	10.0
B-N008	16.4	B-N047	10.1
B-N009**	12.3	B-N048	10.2
B-N010	12.2	B-N049**	9.9
B-N011	12.3	B-N050**	9.8
B-N012**	12.1	B-N051**	9.8
B-N013**	11.1	B-N052	9.8
B-N014**	12.2	B-N053	9.5
B-N015**	12.3	B-N054	9.6
B-N016**	12.3	B-N055**	9.6
B-N017	8.4	B-N056**	9.8
B-N018	11.6	B-N057**	9.4
B-N019	11.5	B-N058**	9.1
B-N020	8.4	B-N059	14.4
B-N021	8.4	B-N060	14.9
B-N022	8.5	B-N061**	15.3
B-N023	8.4	B-N062**	12.4
B-N024	8.0	B-N063**	12.5
B-N025	8.4	B-N064**	12.4
B-N026	8.4	B-N065**	12.1
B-N027	8.6	B-N066	8.1
B-N028	8.5	B-N067	8.3
B-N029	8.5	B-N068	8.3
B-N030	8.6	B-N069**	9.3
B-N031	8.7	B-N070**	9.4
B-N032	7.6	B-N071**	9.4
B-N033	8.1	B-N072**	9.5
B-N034	8.6	B-N073**	9.5
B-N035	8.7	B-N073A**	9.5
B-N036	8.7	B-N074**	9.4
B-N037	8.6	B-N075**	9.3
B-N038	8.6	B-N076**	7.4
B-N039	9.8	B-N077**	7.1

Co-Owners B6

Co-Owners Typical Culvert Cross-Section

As to Form

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DETAILS	No.	REVISIONS	DATE
DESIGN	RWC	1	ISSUED FOR NEXTERA REVIEW
DRAWN BY	BDH		
CHECKED	RWC		
APPROVED	RWC		
DATE	2013-08-09		

CONSULTANT OR DIVISION		
 IBI Group 203 - 350 Oxford Street West London ON N6H 1T3 Canada tel 519 472 7328 fax 519 472 9354		
ENGINEER'S STAMP	SCALE NOT TO SCALE	
ADELAIDE & BORNISH WIND PROJECTS MIDDLESEX COUNTY		
TRANSMISSION LINE PROPOSED CULVERT INSTALLATION AT POLE LOCATIONS		
TYP-1.DWG	PROJECT No. 34803	SHEET No. TYP-1

Co-Owners B7

Co-Owners T-line Construction Methods

As to Form

Exhibit B7a

DESCRIPTION OF PROPOSED CONSTRUCTION

Support Structure Assembly and Erection

Support structure assembly will begin with auger drilling of a cylindrical shaft in the soil of appropriate diameter and depth to provide necessary support to the structure. For direct-embedded poles, the bottom section of the pole will be centered in this drilled shaft and the gap between the pole and the soil will be backfilled with crushed rock. For base-plated tubular steel poles, a steel reinforcing bar "cage" and an anchor bolt "cage" will be placed in the shaft and the shaft will be filled with concrete to create a sturdy concrete foundation for the structure. Once the concrete has cured to an acceptable strength, the remaining structure will be assembled and erected on top of this foundation.

Equipment required for construction will likely include a combination of cranes, trucks, and augers.

Conductor Stringing

Once a series of support structures have been erected along the transmission line, the conductor stringing phase can begin. Specialized equipment will be attached to insulators that will properly support and protect the conductor during the pulling, tensioning, and sagging operations. Once the conductors and shield wire are in place, and tension and sag have been verified, suspension units are installed at each suspension point to maintain conductor position. Conductor stringing will continue until the transmission line construction is complete.

Co-Owners B8

Co-Owners Conductor Horizontal Clearances

As to Form

Exhibit B8

The horizontal cable clearance is defined for cable under conductor Blowout Wind condition as specified in C22.3 No.1 Section 5.2.7 & A5.2.7. The horizontal clearance requirements are specified in C22.3 No.1 Table 6 (Railroad), Table 9 (building, signs, fence, etc.), Table 10 (bridges) and Table 35 (flashover for tree pruning).

As to Form

SCHEDULE "C"

List of Appropriate Emergency Service Providers

As to Form

Schedule “C”

Appropriate Emergency Service Providers

Contact Information:

Ambulance Station

Middlesex-London Emergency Medical Services Authority at 519-679-5466

Fire Stations

Kerwood Fire Department

Kerwood Fire Station

27817 Kerwood Road
Kerwood, ON N0M 2B0

Fire Chief: Arend Noordhof kerwoodfiredept@bellnet.ca

Ailsa Craig and Parkhill Fire Departments

Ailsa Craig Fire Station

159 William Street, Ailsa Craig, ON N0M 1A0

Parkhill Fire Station

194 Main Street, Parkhill, ON N0M 2K0

Contact Scott Jones: 519-494-6001

SCHEDULE "D"

Permits and Fees

[NTD: List all permits needed, application requirements and fees associated with granting of such permits]

As to Form

Schedule "D"

Permits and Fees

** All references to legislation, by-laws and fees in this Schedule shall be interpreted as references to those by-laws and fees as they may be amended, superseded or replaced from time to time*

<u>By-Law Reference</u>	<u>Permit Required with Appropriate Application</u>	<u>Cost</u>
By-law #5783: Use, Construction or Alteration; By-law #6410: User Fees	Access/Entrance Permit (authorizing access, via entrance application)	\$400 fee + refundable deposit determined by County Engineer
By-law #5783: Use, Construction or Alteration; By-law #6410: User Fees	Work Permit (authorizing work and/or services, via work application)	\$400 fee + refundable deposit determined by County Engineer
Highway Traffic Act , R.S.O. 1990, Chapter 198; By-law #6410: User Fees	Moving Oversize Load/Weight Vehicles on County Roads Permit (via application with utility company and emergency services sign-offs)	Variable fee between \$50 and \$500 depending on dimensions and weight of load + \$500 refundable deposit (\$2M liability insurance required)

SCHEDULE "E"

Rights and Remedies Accorded to Secured Parties

1. The County will from time to time execute and deliver such consents and acknowledgements reasonably requested by the Secured Party.
2. The County agrees that, upon the Secured Party giving the County written notice of any security granted by the Co-Owners in the Agreement, the Secured Party will, without any further action being required, have the benefit of the following provisions until such time as the Secured Party advises the County in writing that its security is no longer in effect (and, if the Secured Party so requests, the County will (i) acknowledge in writing that the Secured Party so benefits from these provisions, or (ii) enter into a written agreement with the Secured Party substantially in accordance with these provisions):
 - (a) the County will give prompt written notice to the Secured Party of any breach or default by the Co-Owners of their obligations under the Agreement in respect of which the County proposes to exercise any of its remedies;
 - (b) the County will give the Secured Party the right to cure any breach or default by the Co-Owners under the Agreement, within a period of 90 days commencing on the later of (i) the expiry of the cure period afforded the Co-Owners under the Agreement, and (ii) the date on which the County gives the Secured Party notice of such breach or default pursuant to Section 2(a), or such longer period of time as the Secured Party may reasonably require to cure such breach or default; and no exercise by the County of any of its rights or remedies against the Co-Owners will be effective against the Co-Owners or the Secured Party unless the County has provided the Secured Party such notice and opportunity to cure.
 - (c) the County will, at any time and from time to time, upon not less than ten (10) days' prior request by the Co-Owners or the Secured Party or proposed the Secured Party, execute any agreements, certificates or acknowledgements that the Co-Owners or the Secured Party may reasonably request with respect to this Agreement; and
 - (d) all notices to the Secured Party from the County will be in writing and will be sent by personal delivery, registered mail, email or by fax to the address, email address or facsimile number of the Secured Party set out in any notice that the Secured Party delivers to the County.
3. The provisions of Section 2 will enure to the benefit of the Secured Party and its successors and assigns, and any rights conferred on the Secured Party by the terms of the Agreement, limiting its liability under the Agreement will benefit each receiver or receiver-manager appointed by the Secured Party or by a court of competent jurisdiction.
5. The County hereby acknowledges that the Co-Owners may grant security to a trustee or collateral agent acting on behalf of one or more lenders (a "**Collateral Agent**"), and the County hereby acknowledges and agrees that upon its receipt of notice that such security was granted,

the Collateral Agent will be entitled to all of the rights of the Secured Party set forth in the Agreement and such notice will constitute notice of the existence of the Collateral Agent as the Secured Party.

As to Form

SCHEDULE "F"

Narrowed Right-of-Way Area

The portion of the road allowance south of the edge of pavement of Nairn Road, running to the Northern boundary of the parcels with the following PIN numbers:

096460004

096460005

096460006

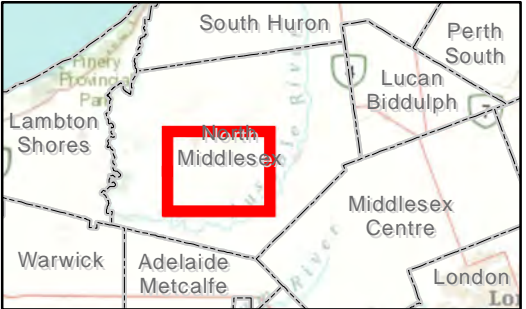
096480007

As to Form

SCHEDULE "G"

Private Easement Lands

As to Form



Bornish Project Transmission

Ontario, Canada

- ROW Transmission to Private Property
- Transmission in Municipal ROW
- Transmission on Private Property
- ▨ Substation
- Property Boundary
- ▭ Local Municipal Boundary

0 0.5 1
Kilometers



PROPRIETARY AND CONFIDENTIAL

Date: 8/30/2013

Coordinate System: NAD 1983 UTM Zone 17N
Projection: Transverse Mercator
Datum: North American 1983

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