



**NV ENERGY PLAN REVIEW PROCESS AND STANDARDS FOR PRIVATE AND PUBLIC
DEVELOPMENT WITHIN AND ADJACENT TO NV ENERGY TRANSMISSION
RIGHTS-OF-WAY**

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1. SCOPE

The NV Energy (NVE) Land Resources Department manages and maintains NV Energy's existing and future transmission corridors. These corridors contain 55kV, 60kV, 69kV, 120kV, 138kV, 230kV, 345kV and/or 525kV lines. This document outlines the processes, requirements, and conditions that shall be adhered to in order to ensure short-term and long-term safe and efficient cohabitation of NV Energy's transmission system and public/private development. While this document outlines a lot of information, unique circumstances do arise from time to time and those unique circumstances will need to be addressed based on the intent of this document.

NVE will be checking the improvement plans for internal compliance items and for National Electrical Safety Code (NESC) compliance. **Occupational Safety and Health Administration (OSHA) compliance is not part of this review.** The Applicant/Customer/Developer shall adhere to any and all applicable requirements during both construction and long-term operation and use of their facilities.

The words easements, grants, rights-of-way, and corridors are used interchangeably within this document. All refer to land rights that NVE has obtained for transmission facilities.

Since applications can be submitted by various parties including, but limited to, the Developer, Customer, Landowner, Engineer, Utility, or Governmental Entity, this document can use these words interchangeably. Each party associated with a project is held to comply with this document.

This process is focused on reviewing locations of physical facilities installed within or near NV Energy's transmission easements. Construction methods and techniques are not considered part of this review. NV Energy's Safety department shall be consulted before construction via the "Call Before You Crane" and "Call Before You Dig" programs. The following website is dedicated to safe construction.

<https://www.nvenergy.com/safety>

2. PLAN SUBMITTAL, REVIEW, AND APPROVAL

It is necessary to submit improvement plans for review if the property being developed is within or immediately adjacent to NV Energy transmission high voltage facilities, easements or rights-of-way. It is critical for the Transmission Engineering Review Team to review all projects that are within 100 feet of NV Energy Transmission facilities and/or NV Energy Transmission easements. If construction activity includes blasting within 300 feet of a transmission line, a blasting agreement must be signed before blasting commences (refer to Section 2.2). This process is coordinated via NV Energy Project Management, Distribution Design, or Safety teams.

In general, the developer will submit plans and NVE will review those plans for a variety of items. After the review, revisions may be required. When the entire plan set is adequate, NV Energy may issue an approval letter. The following section details that process.

2.1 RED-LINE APPLICATION/PRE-DESIGN MEETINGS

If a generic project location map is provided, NV Energy can provide redlines showing the existing transmission facilities. Redlines can be requested by emailing Land Resources at RightOfWay@NVEnergy.com.

Applicants can request a pre-design meeting with the Land Resources team for larger, complex projects. If NV Energy agrees a team meeting would be beneficial, a pre-design meeting may be hosted through Teams on a

case-by-case basis to discuss the proposed design and specifics about what is acceptable or not acceptable within the transmission corridors.

2.2 PLAN SUBMITTAL AND REVIEW

A “Plan Submittal Package” consists of a *Land Resources Application for Power Line Conflict Project Review* (Attachment 7) along with project improvement plans. The form must be downloaded, filled in with project and company specific information, and submitted with the Applicant’s improvement plans to the rightofway@nvenergy.com email address. Plans that are too large to submit via email will require alternate accommodation. The application can be found at: https://www.nvenergy.com/publish/content/dam/nvenergy/brochures_arch/safety/Conflict-Review-Fillable-Application.pdf

Additional information can be found at: <https://www.nvenergy.com/safety/right-of-way>.

Alternatively, the “Plan Submittal Package” (including all subsequent revisions) can be delivered to the NV Energy’s ROW Management Department for review, by hand or by mail to:

*NV Energy – Land Resources
Attn: ROW Management Department
6226 West Sahara Avenue M/S 9
Las Vegas NV 89146*

Submittals will be reviewed by NVE’s Land Resources department. The Land Resources department will send or e-mail notification confirming the receipt of the completed submittal package. Land Resources will be the primary contact for information regarding the project. Land Resources will review the “Plan Submittal Package” for completeness (refer to the bullet point lists below) and to determine the extent of the impact upon NV Energy’s transmission easements or rights-of-way (ROW). If the project may impact a Transmission easement, then the package will be forwarded to Transmission Engineering as described in Section 3.

Written notification of the status of your submittal can be provided throughout the review process, as requested by the applicant. A flowchart of the entire submittal and review process is included in Attachment 12. This flowchart outlines the responsibilities of the Applicant, NV Energy Land Resources, and NV Transmission Engineering.

The submittal shall include but not be limited to, at a minimum, the following:

- Grading plans (must show existing and future grades)
- AutoCAD Civil 3D drawings with the existing surface and latest finished grade surface in state plane coordinate system (NAD83 Nevada State Planes, [East Zone for Southern Nevada] or [East/Central/West Zone as appropriate for Northern Nevada], US Foot/NV83-EF). Drawings that contain intelligent site data such as contours, spot elevations, and other topography objects must not be exploded. (Contour lines must not be exploded into individual polylines.)
- Removal plans
- Site development plans
- Building plans and elevations (if applicable)
- Utility plans (if applicable)
- Plan and profiles
- Landscaping plans (if applicable)
- Lighting and signal plans (if applicable)
- Sign details (if applicable)

- Grounding details (if applicable)
- Additional information based on project specific circumstances. This information may not be known at the time of submittal and may be requested after the first, or any subsequent, reviews.

All sheets on the improvement plans and AutoCAD Civil 3D drawings must identify:

- The location of existing NV Energy transmission poles (with pole numbers, if available) and centerline.
- The location and width of NV Energy easement/land rights for the NV Energy transmission facilities.
- County Assessor's parcel numbers and nearby street names to help identify the subject location. All roads should be labeled with the "private" or "public" designation. (Larger parcels may require latitude/longitude location information.)

Additional supporting information that can be beneficial but is not required:

- Title report
- ALTA survey
- Record map(s)
- Deed(s)
- Assessor's parcel map(s)
- Aerial image(s) with location(s) of interest identified

The following information is required to review blasting near transmission lines:

- Blasting location exhibit that shows the blasting limits/range limit for blasting
- Blasting detailed scope of work, including but not limited to general order of construction activities within the transmission corridor, blasting activity schedules, monitoring methods, methods to minimize fly rock and other aerial releases resulting from the blast, proposed safety construction meeting, etc.
- Calculation for blasting (must show maximum blasting limitation /maximum peak particle velocity).
Note: NVE will not approve maximum peak particle velocities more than 2 inches per second.
- Blasting safety plan

2.3 INCOMPLETE SUBMITTALS

Incomplete submittals will not be processed. The contact provided on the application will be notified if the submittal is incomplete. A transmittal letter will be sent that will indicate the items that need to be addressed and/or included before the review can proceed. An example of the transmittal letter is included as Attachment 11.

2.4 APPROVAL TYPES

2.4.1 No Conflict Process

In the event there are no transmission corridors/facilities within or adjacent to the proposed development/property, Land Resources will issue a transmittal letter (Attachment 11) that indicates there is no impact to NV Energy transmission facilities and/or rights-of-way. No further action is required unless Applicant's revisions encroach upon NV Energy's ROW.

2.4.2 Private Development Conflict Process

In the event the proposed development encroaches upon NV Energy's ROW, Land Resources will then prepare and send an *Acknowledgement of Responsibility* (Attachment 9) form to the applicant. The Applicant must sign and return *Acknowledgement of Responsibility*, along with a check for the fees. Both

the *Acknowledgement of Responsibility* and the fees must be received before the project will be reviewed.

In the event the encroachment is in compliance, Land Resources will issue a *Transmission Use Agreement* to be executed by the applicant. An Exhibit C-1 is included with the TUA that documents the results of the clearance checks. A job aid included as Attachment 13 should help all stakeholders understand the calculations and potential impacts to the project.

In the event the encroachment is not in compliance, the plans will need to be revised and resubmitted or the Comments will be provided on the *Right of Way/Transmission Application Review Notice* (Attachment 11) and the plans may be redlined to show the areas that need to be addressed. If the Applicant cannot or chooses not to revise the plans then the Applicant must agree to relocate or modify NV Energy's transmission facilities accordingly (refer to Section 4).

A private development project is not approved until a *Transmission Use Agreement* has been executed.

NOTE: The approval is provided for the scope of work shown on the drawings at the time of approval. It will be necessary to follow this same process again for future projects and/or any changes or revisions to the current project.

NOTE: If, at any point during the review process, NVE does not receive any correspondence from the Applicant for a period of six months, the application may be cancelled. If the Applicant wants to move forward after the application has been cancelled then NVE may require the project restart from the beginning of the process.

2.4.3 Governmental Agency or Utility Conflict Process

In the event the proposed development encroaches upon NV Energy's ROW, Land Resources and Transmission Engineering will review for compliance with electrical clearance, access, and maintenance requirements.

In the event the encroachment is in compliance, NV Energy's Land Resources will issue a *Governmental Agency and Utility Authorization Letter (GAL)* (Attachment 10). This document incorporates our *Transmission Use Agreement* terms and conditions in a format specific to Governmental and Utility projects. An Exhibit C-1 is included with the TUA that documents the results of the clearance checks. A job aid (Attachment 13) has been created in order to help all stakeholders understand the calculations and potential impacts to the project.

In the event the encroachment is not in compliance, the plans will need to be revised and resubmitted or the comments will be provided on the *Right of Way/Transmission Application Review Notice* (Attachment 11) and the plans may be redlined to show the areas that need to be addressed. If the Applicant cannot or chooses not to revise the plans then the Applicant must agree to relocate or modify NV Energy's transmission facilities accordingly (refer to Section 4).

A Governmental Agency or Utility project is not approved until a *Governmental Agency and Utility Authorization Letter* has been issued.

NOTE: The approval is provided for the scope of work shown on the drawings at the time of approval. It will be necessary to follow this same process again for future projects and/or any changes or revisions to the current project.

NOTE: If, at any point during the review process, NVE does not receive any correspondence from the Applicant for a period of six months, the application may be cancelled. If the Applicant wants to move forward after the application has been cancelled then NVE may require the project restart from the beginning of the process.

2.5 PROJECT VIOLATIONS

The only documents that are considered approvals, thereby authorizing your project to proceed to construction are:

- No Conflict Letter
- Transmission Use Agreement
- Governmental Agency and Utility Authorization

If the project goes to construction without any of these approvals, it is subject to a *Stop Work Order*. An additional “Advance Subject to Refund” fee of \$5000 will be assessed for each incident when NVE inspectors or staff members are called to the site.

The *Stop Work Order* may trigger a complete stoppage of any outstanding Distribution work orders and new meter sets on the property being developed.

2.6 COMMON DELAYS

These items most frequently delay the completion and approval of projects.

- Incomplete “Plan Submittal Package.”
- Applicant does not provide associated review fees.
- Drawings devoid of poles, easements, grading and other pertaining details.
- Improvements found to be out of compliance with electrical clearances, access, and maintenance requirements.
- Applicant does not provide requested revisions or information needed to complete the review process.
- Applicant's plans require relocation or modification of NV Energy’s facilities.

2.7 TIMELINE

NV Energy recognizes the importance of efficient reviews. The following timelines can be used for guidance when planning. NV Energy will make every effort to meet these timelines, but may need additional time due to various circumstances. The time starts on the date NVE receives the complete Plan Submittal Package.

2.7.1 Typical Projects

Typical projects are projects that are under or adjacent to six or fewer spans on a single pole alignment.

- First review – Eight (8) weeks
- Subsequent reviews – Three (3) weeks

2.7.2 Atypical Projects

Atypical projects are projects that could include multiple pole alignments or more than six spans that require multiple sets of calculations

- First review – Twelve (12) weeks
- Subsequent reviews – Four (4) weeks

NOTE: Time for the first review starts once the signed *Acknowledgement of Responsibility* and the applicable fees are received. Time for the subsequent reviews starts when updated improvement plans and/or required documentation is received.

3. TRANSMISSION ENGINEERING DEPARTMENT REQUIREMENTS

NV Energy Transmission Engineering will review all projects when the property or proposed facilities are within or adjacent to NV Energy Transmission facilities and/or easements. The following information may be used as guidance by engineers and planners when determining how to integrate development around transmission facilities. This information is provided as a reference. Compliance with these guidelines does not guarantee automatic approval of the project. Standard drawings are referenced and included with this document.

3.1. DEVELOPMENT WITHIN TRANSMISSION CORRIDORS

Development within or adjacent to Transmission corridors requires a case-by-case review. All projects require NV Energy approval for conductor clearances. Applicants/Developers/Customers are responsible for complying with all OSHA (Operational Safety and Health Administration) and NESC (National Electric Safety Code) minimum clearances within and outside NV Energy corridors.

In general, NV Energy transmission corridors may be utilized (with the proper NV Energy authorization letter/agreement) for the following secondary uses:

- General parking of operational vehicles not exceeding 14' in height. This height will be reviewed on a project specific basis and may need to be decreased. Non-operational vehicles and trailers are not allowed.
- Driveways
- Passive recreational parks (trails, grass, benches, etc.)
- Open space/wildlife corridors
- Parking lot/on-site lighting
- Bike, walking, and hiking trails within existing ROWs; but not within NV Energy fee owned properties
- Free standing signs

Certain improvements, for safety and liability reasons, are **typically** not allowed within transmission corridors. These include, but are not limited to, the following:

- Swimming pools
- Long-term parking/storage of non-operational vehicles exceeding 8' height
- Covered parking
- Buildings or structures
- Trash enclosures
- Excavation and significant elevation/grade changes
- Parallel utilities
- Sports parks/fields/stadiums
- Playground equipment
- Metallic fences
- Block/retaining walls
- Parking lights and signs unless they meet clearance standards
- Stockpiling of materials and equipment
- Landscape vegetation with a maximum mature height over 12 feet (please refer to NVE's Master Tree List)
- Landscaping inside of NVE's access roads or within maintenance pad areas

3.2. CONDUCTOR CLEARANCES

All projects require NVE review of conductor clearances to all other facilities. NESC requires different vertical and horizontal clearances for different objects based on the capacity of the conductor. NVE shall verify clearances for all proposed improvements within NVE easements and may deviate from the established easement width if required for safety purposes in accordance with the NESC.

Specific guidance for various facilities is provided in the following sections.

NOTE: NVE's review is focused on ensuring safe clearances to the facilities. OSHA mandates specific clearances when working around energized conductor. Those working clearances are the responsibility of the Applicant/Developer/Customer and are not reviewed by NVE. The Applicant/Developer/Customer shall call the "Call Before You Overhead" line at 702-402-2929 when working around energized facilities.

NOTE: The minimum clearances for operation and maintenance of transmission lines may vary from the established easement width. Calculations to determine the required clearances will be completed by NVE Transmission Engineering and provided to the Applicant for reference.

3.3. POLE CLEARANCES AND BARRIERS

If NVE transmission poles are adjacent to a roadway or a driveway, certain conditions must be met to ensure the safety of the public and NVE's facilities. Standard guidelines and details are provided in Attachments 1 through 6.

- Distances from poles to other facilities – NV Energy requires various facilities to be a minimum distance away from transmission poles (refer to Section 3.10.2)
- **Steel Protection Barriers** – In parking lots and speed restricted streets, steel bollards are required to protect the pole from low-speed impact (Attachment 1). Bollards can be installed by the Applicant around steel or wood poles.
- **Wood Poles**
 - If the face of the pole is located:
 - Five (5) feet or more behind back of curb – No action is required.
 - Less than five (5) feet behind back of curb – Relocation of the pole will be required.
- **Steel Poles** – Concrete barriers are required on poles located adjacent to vehicular traffic with speed limits more than 15mph (Attachment 6). They may only be installed on steel poles and not on wood poles. The following provide requirements and guidance on the applicability of concrete barriers.
 - If the pole is located;
 - Five (5) feet or more behind back of curb – No barrier is required.
 - Three (3) feet to five (5) feet behind back of curb – NV Energy requires relocation of the pole. If NV Energy determines that the pole cannot be relocated, a barrier is required. Sidewalk width shall meet current ADA Standards.
 - Less than three (3) feet behind back of curb – Relocation of the pole will be required.
 - **Crash attenuators** may be necessary in certain conditions. A Facility Safety Agreement is required in this case (refer to Section 4).
 - **Centerline Medians** – NV Energy requires relocation of the pole. If NV Energy determines that the pole cannot be relocated, a concrete barrier and/or crash attenuator may be sufficient in some cases.
 - NV Energy will design and inspect all concrete pole barriers. The associated material and installation costs for bollards, barriers, attenuators, or relocations are the sole responsibility of the Applicant and will be detailed in an Agreement drafted by NV Energy.

- o Facility Safety Agreement is required if any concrete pole barriers are needed (refer to Section 3.3).
 - Barriers may be constructed by the Applicant or NV Energy.

3.3.1. Public Right-of-Way Accessibility Guidelines (PROWAG) / Americans with Disabilities Act (ADA)

PROWAG shall be adhered to when required by the governing government agency. NV Energy will require pole(s) to be relocated if pole(s) are zero (0) to four (4) feet from front of curb and require to be relocated five (5) feet or more behind front of curb and toward property line. A Facility Relocation Agreement (refer to Section 4.1) will be required. If PROWAG is not being required by the governing governmental agency then the current ADA pole requirements will govern.

3.4. SUBSTATION PROXIMITY

NV Energy is required to maintain a safe perimeter around all substation walls/fences. The NESC requires NV Energy to ensure that climbing aids are not installed in close proximity to the substation perimeter walls/fences. Facilities including, but not limited to, bus shelters, walls/fences, trees, benches, etc. are generally considered climbing aids. The NESC requires six feet of horizontal separation and/or seven feet of vertical separation from such objects. Substation proximity will be reviewed with the rest of the application.

3.5. UNDERGROUND TRANSMISSION PROXIMITY

NV Energy has underground transmission throughout the service territory. Since underground facilities are not as easy to see from a visual site visit, it is critical that the developer contact NV Energy to find out if underground transmission is within the project area. NV Energy will generally have an easement width ranging between 20 to 40 feet wide per circuit, although this could vary depending on the voltage, vintage, configuration of the duct bank, number of circuits, etc. NV Energy will allow utilities to cross the duct bank as long as necessary separations are maintained. The minimum vertical separation is 24 inches above and below the duct bank. Parallel utilities within the easement must be reviewed and approved because they could impede restoration or repair efforts if the duct bank trench needs to be excavated. Contact NV Energy early in the project to discuss options. NV Energy can provide duct bank plan and profile drawings for the project area.

3.6. BUILDINGS AND STRUCTURES

Buildings and structures are not allowed in NV Energy corridors. Architectural plans are required to be submitted for review when awnings and other projections/overhangs are to be checked for easement encroachments.

3.7. SIGNS

Signs must be grounded to the designated highest voltage on the existing transmission line(s) as outlined in the NESC. Refer to Section 3.8 for grounding requirements.

3.8. GROUNDING REQUIREMENTS

Any metallic object, including, but not limited to, fencing, light poles, railings, gates, large drop inlets/storm drain and sewer grates, etc. constructed within transmission easements (and those that fall within the calculated horizontal clearance width) will require adequate grounding per NV Energy requirements in this section. NV Energy may, in addition, require items that fall outside of the existing NV Energy easement to be

grounded. All items must also be approved for vertical clearance. The grounding must be designed for the highest voltage on the concerned transmission line.

The grounding plans shall consist of the following:

- The Applicant is responsible for providing grounding plans integrated into their improvement plans.
- The grounding plans must be signed and stamped by a licensed State of Nevada Electrical Engineer.
- The grounding plans shall include a note stating: "Grounding details meet NV Energy Requirements for a [add NVE provided voltage] kV line". NV Energy will provide the transmission voltage (55kV, 60kV, 69kV, 120kV, 138kV, 230kV, 345kV or 525kV) for the specific project.
- The improvement plans shall clearly identify construction notes for all metallic items. Construction notes for those metallic items shall reference the applicable grounding drawing(s) and their appropriate detail and section numbers.

NV Energy Minimum Grounding Specifications:

- Fencing or Railings: Grounds shall be installed on every other fence/rail post that falls within the NV Energy easement. This applies where the fence/rail either crosses or runs parallel to the transmission line.
- Gates: Grounds shall be installed on both of the moving sections and the stationary post.
- Stand-alone items including, but not limited to, signs, cattle guards, light poles, etc. shall be grounded at a single location.
- Minimum Ground: At a minimum, the ground shall consist of an eight (8) foot ground rod connected with 4/0 copper, 7#8, 19#9 copperweld, or equivalent, wire using a clamp or compression fitting. (Copperweld is preferred to copper to minimize loss due to copper theft.)

Note: For unique situations NV Energy may require a detailed study to be performed by the Applicant. Examples of unique situations include, but are not limited to, parallel pipelines, railroad tracks, long parallel fencing, soil conditions, etc.

3.9. TRAILS/PARKS/OPEN SPACES

NV Energy allows trail, park, and open space joint use within easements with the following conditions.

- **Trail Access** – Proposed trails within easements shall provide for access as outlined in Section 3.10.2 in order to accommodate access for NV Energy's maintenance/emergency vehicles, facilities, and maintenance pad areas. Access shall be clearly defined on the improvement plans.
- **Trail Amenities** – Trail amenities including, but not limited to the following, are reviewed and approved on a case-by-case basis. (Amenities cannot be within the maintenance pad areas, and grounding details per Section 3.8 are required for any metallic objects):
 - Wood, concrete, or composite benches
 - Kiosk signs
 - Recreational/exercise station equipment
 - Trash bins/doggy clean up stations
 - Landscaping – Landscaping types will be reviewed to ensure they will not grow large enough to encroach into the conductor in the future.
- **Trail Lighting** – Light fixtures for illuminating the trail will be reviewed for clearance and are subject to meeting grounding requirements per Section 3.8.

- **Trail Material** – Trail material shall be used that provides adequate strength for NV Energy's maintenance/emergency vehicles. NV Energy prefers that the trail material be constructed of concrete. Applicant can request other trail material be used for NV Energy's review and approval.
- **Trail Design** – Trail widths shall be at least twelve (12) feet in width to accommodate NV Energy's maintenance/emergency vehicles. Grades cannot exceed 15% along the trail and cross slopes cannot exceed two-percent (2%).
- **Bike/Horse Trails** – Bike/horse trails are reviewed and approved on a case-by-case basis and are subject to the same guidelines in this section and throughout this process. Bike trails proposing to use the natural ground as their trail require approval due to possible erosions, potholes, and damage to NV Energy's existing access roads. Bike/horse trails are not allowed within 15 feet of a downguy wire, or between downguys and poles for safety purposes.

Please note all items shall comply with the requirements outlined in this process.

3.10. GRADE CHANGES AND ACCESS

Ground elevations within the easement are critical to the safe operation of NV Energy's facilities. Any changes, whether cut or fill, could negatively impact several factors including pole stability, conductor clearance, and access. Each is discussed below.

3.10.1. Grade Changes

- **Pole/Foundation Stability** – Ground elevations around the poles are critical. Grade changes shall be clearly identified on the improvement plans to show the existing and proposed elevations adjacent to the poles. Existing grade should be maintained. NV Energy will review any proposed grade changes on a case-by-case basis. A decrease may negatively impact the structural capacity and stability of the pole. An increase could reduce clearance from the ground to the conductor or could result in soil being placed against an unprotected portion of the pole. If a grade increase is approved by NV Energy, a Facility Safety Agreement may be required at the Applicant's expense so that NV Energy can apply an anti-corrosion coating to the pole and restore the grounding system. In some cases, grade changes can trigger pole relocations. See Attachment 2 for details regarding pole stability when excavation will be performed around a pole.
- **Mid-Span Clearances** – The distance from conductor to the ground is one of the biggest items that impacts NV Energy's ability to safely transmit electricity. This distance is checked in NV Energy's line models when the conductor is at its maximum operating temperature which may vary from actual site conditions. Cutting or filling within an easement may or may not be allowed based on the existing and proposed elevations. It is very important to clearly identify proposed grading within the easement areas.

3.10.2. Access

- **Maintenance Pads** – NVE has established the space required for conducting maintenance around NV Energy poles, as shown on the Maintenance pad exhibits (Attachment 3 and Attachment 4). Maintenance pad grades are required to be relatively flat (slopes not to exceed 3%) and unobstructed (including landscaping) to allow for maintenance truck operation. Maintenance pad must be able to withstand the weight of NV Energy boom trucks (STD-D5).

Maintenance pad requirements vary and will be reviewed on a case-by-case basis for poles taller than 150', lattice tower structures, H-frame structures, 3-pole structures, underground riser structures, and underground vaults.

- **ROW Access** – Clear unobstructed access is required along the length of NV Energy ROWs. Roll curbs may be required in lieu of L-curbs to ensure there is continuous access to structures within the easement. Access roads and curbs must always have a minimum width of twelve (12) feet. Gates or other obstructions are typically not allowed unless they comply with Sections 3.10 and 3.11. If gates are necessary, the Applicant shall install an NVE-provided lock installed in series with other locks on the gate. Refer to Section 3.11.2 for additional details on gates.
- **Riprap and Open Channels/Drainages** – Proposed riprap and open channels within NV Energy's rights-of-way are typically not allowed, although Applicants may request a project specific review for approval of riprap and open channels with shallow depths/slopes, bridge access, and other specified requests. NV Energy requires access to all parts of the right-of-way and riprap and channels can potentially block that drive path.
- **Bridges and Culverts** – Proposed bridges and culverts within the development must be designed to withstand the weight of NV Energy boom truck shown in Attachment 5 if the bridges and culverts are to be utilized to access existing or future transmission corridors. No bridges or culverts are allowed over underground transmission lines, manholes, or vaults.
- **Retaining Walls and Ramps** – Retaining walls may be required to protect NV Energy's existing and future facilities and maintenance areas that require that the soil be stabilized and compacted to avoid slope fall off, being washed away during rainstorms, etc., due to increased and/or decreased grade elevations. Pedestrian safety railings and associated grounding details may be required. Ramps and slopes shall be installed to meet the required minimum percent slope access for NV Energy's service vehicles and shall be designed to withstand the weight of the vehicles for access to NV Energy's existing facilities.

3.11. FENCES/WALLS/GATES

This section addresses fences, walls, and/or gates that are along alleys, back lot lines, etc. that are not owned by NVE and are within an easement or on the easement boundary.

3.11.1. Fences/Walls

Fences must provide continuous access to NV Energy corridors and must be maintained. Metallic fences require adequate grounding. Refer to Sections 3.8 and 3.10.2.

3.11.2. Gates

NV Energy corridors must be open and accessible for maintenance of poles. Corridors or facilities that are inside of gated communities or other gated areas such as parking lots or alleys cannot be blocked with walls and must include gates as outlined in this section. NV Energy will review and approve the location and size of gates. Gates shall allow NV Energy to gain 24-hour access to all areas within NV Energy's corridors and/or NESC horizontal clearance areas. Refer to Section 3.2. The developer shall use NV Energy provided locks along with manual releases on electronic gates. Gates must meet the minimum vertical clearance for the lines they are under. Metallic gates require adequate grounding per Sections 3.8 and 3.10.2.

- **Gated Developments** – Gated developments, whether for a community or other gated facility, which install electronic gates shall adhere to requirements in this section. The ingress/egress for NV Energy vehicles shall be a minimum of 12 feet wide. All electrical vehicular gate accesses shall have two means of opening as follows:
 - Approved automated means of opening via a transmitter located on NV Energy vehicles similar to first responder access.
 - Capability to disengage automated function and manually open the vehicle gate.
- In case the vehicle gate cannot be manually opened from the outside, a separate personnel gate shall be installed near the vehicle gate that can be opened by unlocking an NV Energy standard padlock.
- **Manual Gates** – Developer shall provide approved manual gates for NV Energy’s 24-hour access by providing and installing an 8-1/2” X 11” “NV Energy 24 Hour Access” sign, as shown in Attachment 14, that is mounted on gate in a conspicuous location. Developer shall install an NV Energy provided padlock that can be used to gain unobstructed access through vehicular gates. NV Energy’s standard padlocks can be obtained from the Land Resources department at 6226 West Sahara Avenue.

Note: All exceptions must be approved by NV Energy.

3.12. STREETLIGHTS/PARKING LOT LIGHTS/ON-SITE LIGHTS/TRAFFIC SIGNALS

Lights and traffic signals must meet the minimum vertical clearance for the lines they are under. It is the Applicant’s responsibility to provide a detail of any streetlights, parking lights, and signals that are planned within a transmission corridor (Refer to Sections 3.8 Grounding Requirements and 3.10.2 Access).

3.13. EXISTING TRANSMISSION CORRIDORS FOR CURRENT OR FUTURE USE

NV Energy generally acquires rights-of-way for the ultimate configuration of the corridor. Do not assume that existing NV Energy transmission corridors are being fully utilized. Most are capable of accommodating additional lines and equipment, including underground lines and equipment. NV Energy will review the submittal for compliance with future facilities as well as existing facilities.

3.14. PARALLEL UTILITIES

NV Energy typically does not allow other utilities to be built parallel to NV Energy lines within the transmission corridor/easement including, but not limited to, telecommunications, sanitary sewer, storm drain, water, gas, or irrigation lines. Every effort should also be made to locate any above-ground installations such as valves and meters outside of NV Energy easements. Easements need to be kept free from underground facilities in the event that poles need to be relocated or so that a new pole alignment can be installed within the existing easement, per Section 3.10.2.

NV Energy will review requests to place utilities parallel to NV Energy’s existing overhead lines within NV Energy’s easements/ROWs on a case-by-case basis. Applicant shall show that it has exhausted all other engineering options, before designing utilities parallel to NV Energy’s facilities and ROWs. NV Energy may review request for approval of a short distance of proposed utilities paralleling NV Energy’s facilities or ROW’s.

3.15. SIGHT VISIBILITY ZONE REQUIREMENT (SVZ)

Sight visibility zones are required to be shown on the improvement plans that meet local government and Regional Transportation Commission’s (RTC) uniformed standards and code requirements for SVZs. If NV

Energy's facilities are within the SVZ, NV Energy will require relocation of its facilities to be outside of the SVZ. Refer to Section 4 for details about relocation requirements.

Note: NVE does not accept waivers from government agencies for SVZs. NV Energy requires relocation of its facilities within a SVZ even if an Applicant has acquired approval on their improvement plans and/or waiver by a local government agency.

4. RELOCATION/FACILITY SAFETY AGREEMENTS

Any improvements determined to be in conflict with transmission facilities may require relocation or safety modification of the pole(s). A separate process must be followed. Relocation projects are funded by the Applicant and are subject to additional costs and will require additional time. Due to the dynamic nature of our transmission grid, certain projects may only be completed during off-peak electrical seasons and are subject to outage schedules. Design requirements and material availability may also impact these projects.

Note: A *Transmission Use Agreement (TUA)* or *Governmental Agency and Utility Authorization (GAL)* will still be required when a *Facility Relocation Agreement (FRA)* or *Facility Safety Agreement (FSA)* is executed. The TUA/GAL will not be signed until the installations outlined in the FRA/FSA are complete.

4.1. FACILITY RELOCATION AGREEMENT/DESIGN COST AGREEMENT

A *Facility Relocation Agreement (FRA)* is required when NVE facilities are to be relocated or significantly modified to be in compliance with NVE or NESC requirements and standards. The Applicant/Customer will be assigned an NV Energy Project Engineer/Project Manager once the project is identified as a relocation project. Based on project scope and schedule, a *Design Cost Agreement (DCA)* may be necessary ahead of the FRA. A DCA allows for design to commence prior to full scoping of the project.

Relocation Procedures:

- Applicant submits 60% (or better) improvement plans to NV Energy ROW Management
- NV Energy provides preliminary cost estimate
- Applicant sends approval acknowledgement of cost estimate
- NV Energy prepares relocation agreement and/or preliminary design, if necessary
- Applicant and NVE executes *Relocation Agreement* and applicant pays invoice
- NVE prepares final design for transmission facilities and Applicant revises their improvement plans to show Transmission Engineering's final design and resubmits drawings to ROW Management
- Applicant obtains easements, permits, agreements, and Special Use Permits, if applicable
- NVE prepares and releases final construction turnover package (CTO)
- NVE sets construction schedule once all easements, permits, and agreements are executed and outages are approved
- NVE completes construction
- NVE prepares, and Applicant executes, *Transmission Use Agreement(s)* and/or *Governmental Authorization Letter*

Note: The Project Engineer/Project Manager will not initiate a relocation/safety modification project without a signed agreement and receipt of fees. Governmental relocation/safety modification projects will not be initiated without a signed agreement and a check or a purchase order number for the estimated amount of the project.

4.2. FACILITY SAFETY AGREEMENT

A *Facility Safety Agreement (FSA)* is required when minor modifications or support needs to be made to NVE facilities. Those minor items include, but are not limited to, concrete protection barriers, crash attenuators, pole wrapping, grounding restoration, or other facilities that are not associated with pole relocations. In addition, this could also cover NVE's costs when supporting a pole with a crane during close proximity excavation. FSAs generally include labor costs only but may involve fees and other costs if NVE is involved in engineering or construction activities (Refer to Section 4.1 for Facility Relocation procedures and Section 3.3 for Pole Clearances and Barriers).

5. DOCUMENTS AND LETTERS

The following are the types of written notifications you may receive as part of the application and review. Each document is identified by name and a brief description is provided to define the purpose and indicate under what circumstances they are used.

5.1. RIGHT-OF-WAY/TRANSMISSION APPLICATION REVIEW NOTICE

This email is used to communicate the results of the review to the Applicant. NV Energy will indicate whether the project poses no conflict, is approved as submitted, whether revisions are required, or whether the plan set was incomplete. In the case where revisions are required, NV Energy will not take any further action on the project until the Applicant resubmits improvement plans in accordance with the notes in the document.

5.2. ACKNOWLEDGEMENT OF RESPONSIBILITY

This document (Attachment 9) is provided by the ROW Management to identify the party responsible for authorizing NV Energy to proceed with the *Transmission Use Agreement* and to ensure that they will return a completed agreement prior to construction. It also identifies the fee amount for the project. The Applicant must sign and return the document with a check for the fee amount. Projects will not be processed further without a signed *Acknowledgement of Responsibility* and fees.

5.3. TRANSMISSION USE AGREEMENT

A *Transmission Use Agreement (TUA)* is issued by Land Resources to the Applicant after the satisfactory review of the Applicant's plans. It defines the legal requirements of the development within NV Energy corridors and/or around or near Transmission facilities. It is project specific and contains the results of analysis of specific project requirements. Any changes or revisions to a project after the issuance of a *Transmission Use Agreement* may be considered a new project. At NVE's discretion, revisions could be handled as a revision to the existing approved TUA. A private development project is not approved until a *Transmission Use Agreement* has been executed. The executed *Transmission Use Agreement* will be recorded at the Clark County Recorder's Office by NV Energy's Land Resources department.

5.4. GOVERNMENTAL AGENCY AND UTILITY AUTHORIZATION

These are issued to Governmental Agencies and Utilities in place of a *Transmission Use Agreement*. Governmental/Utility projects still require the same review process as other projects. Any changes or revisions to a project after the issuance of a *Governmental Agency and Utility Authorization* may be considered a new project. At NVE's discretion, revisions could be handled as a revision to the existing approved GAL. A

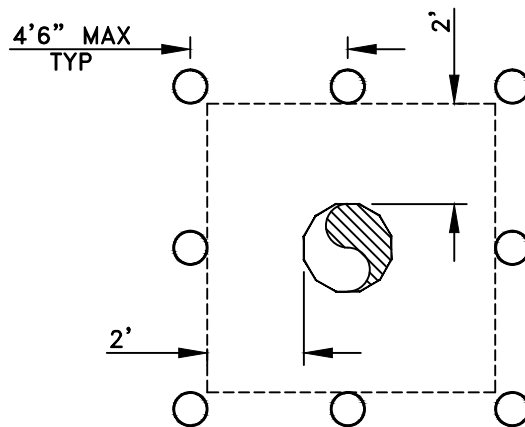
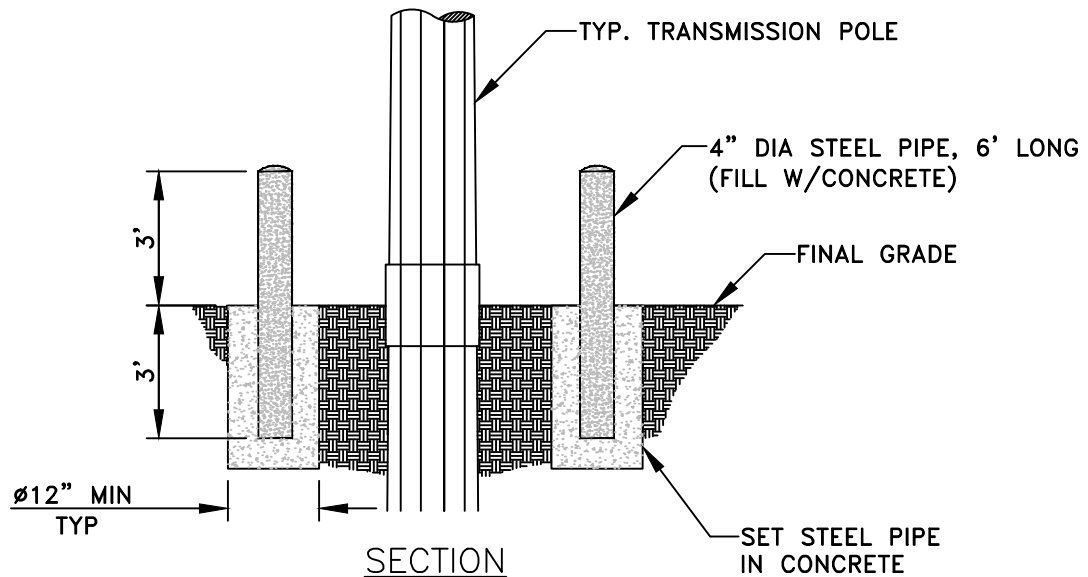
Governmental Agency or Utility project is not approved until a *Governmental Agency and Utility Authorization* has been executed.

5.5. CONSTRUCTION AUTHORIZATION

A *Construction Authorization Letter* may be issued at the discretion of NV Energy Transmission Engineering and Land Resources to approve and release specific portions of a project for construction before a *Transmission Use Agreement* is issued. This is not an approval of the project. The appropriate agreement or authorization must be completed before a project is approved.

6. ATTACHMENTS

- 6.1. ATTACHMENT 1: D1 – STEEL POLE BARRIERS**
- 6.2. ATTACHMENT 2: D2 – TRENCH AND POLE STABILITY DETAIL**
- 6.3. ATTACHMENT 3: D3 – MAINTENANCE ACCESS FOR DEAD-END STRUCTURE**
- 6.4. ATTACHMENT 4: D4 – MAINTENANCE ACCESS FOR TANGENT STRUCTURE**
- 6.5. ATTACHMENT 5: D5 – CONDOR BOOM TRUCK SPECIFICATIONS**
- 6.6. ATTACHMENT 6: D6 – CONCRETE POLE BARRIERS**
- 6.7. ATTACHMENT 7: APPLICATION FOR PLAN SUBMITTAL REVIEW**
- 6.8. ATTACHMENT 8: TRANSMISSION USE AGREEMENT NOTIFICATION (LEGACY DOC.)**
- 6.9. ATTACHMENT 9: ACKNOWLEDGEMENT OF RESPONSIBILITY**
- 6.10. ATTACHMENT 10: GOVERNMENTAL AGENCY AND UTILITY NOTIFICATION (GAL)**
- 6.11. ATTACHMENT 11: RIGHT-OF-WAY/TRANSMISSION APPLICATION REVIEW NOTICE**
- 6.12. ATTACHMENT 12: SUBMITTAL AND REVIEW PROCESS FLOWCHART**
- 6.13. ATTACHMENT 13: EXHIBIT C-1 JOB AID**
- 6.14. ATTACHMENT 14: 24 HOUR ACCESS SIGN**



NOTES:

1. STEEL PROTECTION BARRIERS TO BE INSTALLED WHEN TRANSMISSION POLES ARE LOCATED LESS THAN 5' FROM BACK OF CURB OR WHEN NO CURB EXISTS IN PARKING LOTS OR SPEED RESTRICTED STREETS WITH 15MPH MAX SPEED LIMIT.
2. IF MAX SPEED LIMIT IS HIGHER, REFER STD-D6 FOR CONCRETE PROTECTION BARRIERS.
3. BARRIERS ON SIDES NOT ACCESSIBLE TO VEHICLES MAY BE OMITTED.
4. PROVIDE ADEQUATE CLEARANCE FOR EQUIPMENT ITEMS SUCH AS SWITCH OPERATING HANDLES.
5. BARRIERS TO BE PAINTED WITH YELLOW STREET MARKING PAINT.
6. CALL BEFORE YOU DIG AT (800) 227 2600 PRIOR TO THE COMMENCEMENT OF EXCAVATING ACTIVITIES.

NOT TO SCALE

DRAWING INFO.		
DRAWN	04/01/03	JLH
DESIGNED	04/01/03	JLH
CHECKED	04/01/03	SA
APPROVED	04/01/03	SA
	DATE	BY
REV. 1	11/12/08	DP



VEHICULAR PROTECTION BARRIERS FOR TRANSMISSION POLES EXHIBIT C-3

SHEET: 1 OF 1

DWG. NO.: STD-D1

REQUIREMENTS:

NO TRENCHING, EXCAVATION, OR SOIL DISTURBANCE IS PERMITTED WITHIN A 10-FOOT RADIUS AND A 1:1 SLOPE EXTENDING FROM THE FACE OF THE POLE, FACE OF FOUNDATION, OR FACE OF DOWNGUY WIRE ANCHOR. MAINTENANCE PAD AREAS, AS SPECIFIED IN STD-D3 AND STD-D4, MUST REMAIN ACCESSIBLE AT ALL TIMES.

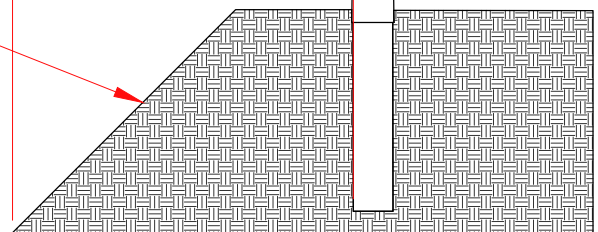
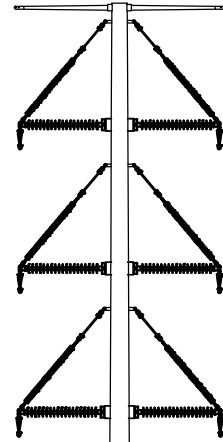
IF TRENCHING IS PROPOSED WITHIN THIS POLE STABILITY REGION, THE APPLICANT MUST SUBMIT A DETAILED STRUCTURAL ANALYSIS, STAMPED BY A LICENSED PROFESSIONAL ENGINEER (P.E.), FOR THE TRANSMISSION POLE AND/OR FOUNDATION.

THE REPORT MUST INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:

- A CROSS-SECTION DRAWING AT THE POLE LOCATION, CLEARLY SHOWING THE ARRANGEMENT OF THE STEEL POLE/FOUNDATION IN RELATION TO THE TRENCH. THE DRAWING MUST INDICATE TRENCH ELEVATIONS, TRENCH WIDTH, AND HORIZONTAL DISTANCES BETWEEN THE TRENCH FACE AND FOUNDATION FACE.
- AN ANALYSIS OF EXCAVATION RISKS NEAR THE STEEL POLE/FOUNDATION, INCLUDING SOIL RESPONSE TO LATERAL AND VERTICAL LOADS, POTENTIAL FOUNDATION MOVEMENT, AND EXPECTED LATERAL/VERTICAL DISPLACEMENTS. MITIGATION STRATEGIES MUST ALSO BE ADDRESSED.
- RECOMMENDED EXCAVATION SUPPORT, TRENCH SHORING, AND RISK CONTROL MEASURES. THIS INCLUDES THE ESTABLISHMENT OF EXCAVATION STANDARDS, TRENCH BACKFILL RECOMMENDATIONS, AND TEMPORARY SUPPORT FOR THE TRANSMISSION STRUCTURE. (NOTE: ANY IDENTIFIED MITIGATION OPTIONS WILL BE AT THE SOLE COST OF THE APPLICANT.)
- IF ANY FACILITY OR UTILITY IS APPROVED WITHIN THE POLE STABILITY REGION, IT WILL BE CONSIDERED A PERMANENT COMPONENT OF THE POLE'S STRUCTURAL STABILITY. THE TRANSMISSION USE AGREEMENT WILL STATE THAT NO MODIFICATIONS TO THIS FACILITY MAY BE MADE IN THE FUTURE WITHOUT NVE'S REVIEW AND APPROVAL.

CONTINGENT ON DEPTH
OF PROPOSED TRENCH.

1:1 SLOPE



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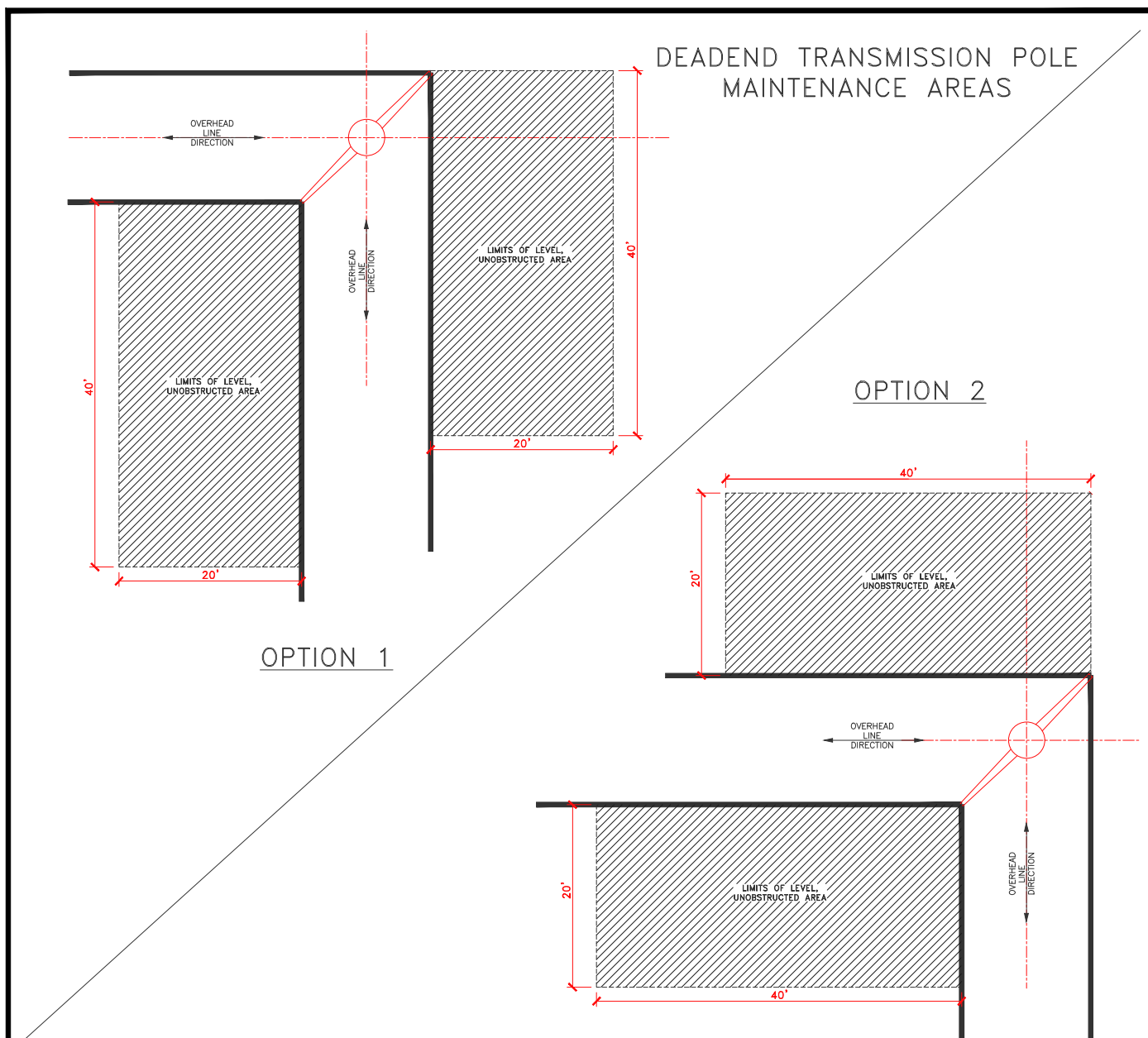
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DESIGNED	6/12/01	JLH
CHECKED	6/12/01	SA
APPROVED	6/12/01	SA
	DATE	BY
REV. 2	6/2/25	JJ



TRANSMISSION ENGINEERING
STANDARDS

TRENCH DETAIL POLE STABILITY

SHEET: 1 OF 1 DWG. NO.: STD-D2



1. EACH CIRCUIT ON A STRUCTURE LESS THAN 150-FEET TALL REQUIRES A MINIMUM 20'x40' MAINTENANCE PAD AREA FOR MAINTENANCE PURPOSES. THE ARRANGEMENT OF THE PADS MAY VARY DEPENDING ON LINE DIRECTION, POLE CONFIGURATION, AND SITE CONDITIONS. THE PADS MUST BE ORIENTED IN LINE WITH THE LINE DIRECTION. SEE DETAIL ABOVE FOR CLARIFICATION – ANY COMBINATION OF OPTIONS 1 AND 2 IS ACCEPTABLE.
2. MAINTENANCE PAD GRADES MUST BE RELATIVELY FLAT (SLOPES NOT TO EXCEED 3%) AND UNOBSTRUCTED (INCLUDING LANDSCAPING) TO ALLOW FOR MAINTENANCE TRUCK OPERATION.
3. THE MAINTENANCE PAD MUST BE CAPABLE OF WITHSTANDING THE WEIGHT OF NV ENERGY BOOM TRUCKS (STD-D5).
4. MAINTENANCE PAD REQUIREMENTS VARY AND WILL BE REVIEWED ON A CASE-BY-CASE BASIS FOR POLES TALLER THAN 150-FEET, LATTICE TOWER STRUCTURES, H-FRAME STRUCTURES, 3-POLE STRUCTURES, UNDERGROUND RISER STRUCTURES, AND UNDERGROUND VAULTS.
5. COMPLIANCE WITH ALL NESC & OSHA REQUIREMENTS IS REQUIRED.
6. MATERIALS AND EQUIPMENT CAN NOT BE STOCKPILED UNDER LINES.

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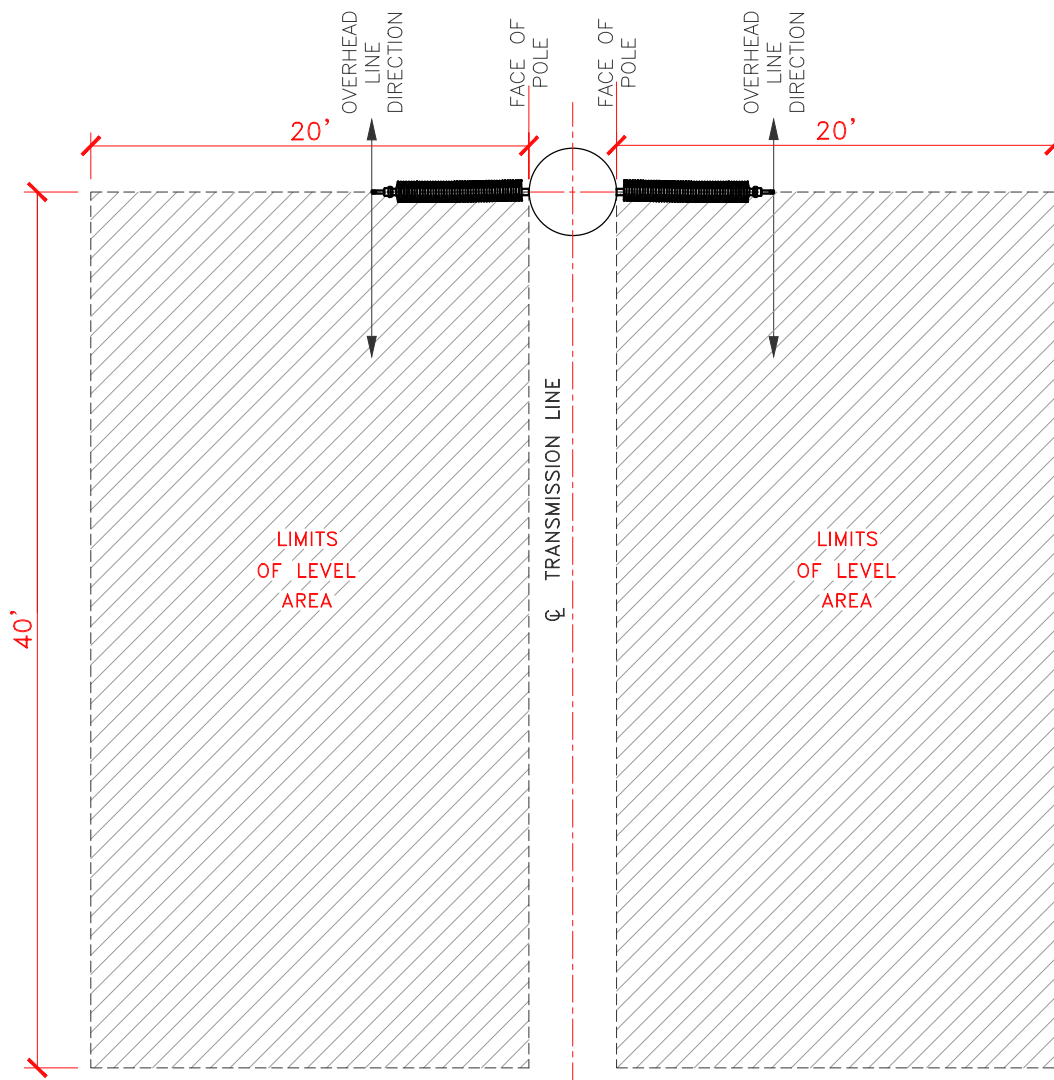
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DESIGNED	01/24/01	MDV
CHECKED	04/07/01	SA
APPROVED	04/07/01	SA
	DATE	BY
REV. 6	06/02/25	JJ



TRANSMISSION ENGINEERING
STANDARDS

NV ENERGY CRITERIA FOR MAINTENANCE ACCESS DEADEND STRUCTURE

SHEET: 1 OF 1 DWG. NO.: STD-D3



TANGENT TRANSMISSION POLE MAINTENANCE AREAS

1. EACH CIRCUIT ON A TANGENT STRUCTURE LESS THAN 150-FEET TALL REQUIRES A MINIMUM 20'x40' MAINTENANCE PAD AREA FOR MAINTENANCE PURPOSES. THE ARRANGEMENT OF THE PADS MAY VARY DEPENDING ON LINE DIRECTION, POLE CONFIGURATION, AND SITE CONDITIONS. THE PADS MUST BE ORIENTED IN LINE WITH THE LINE DIRECTION. SEE DETAIL ABOVE FOR CLARIFICATION.
2. MAINTENANCE PAD GRADES MUST BE RELATIVELY FLAT (SLOPES NOT TO EXCEED 3%) AND UNOBSTRUCTED (INCLUDING LANDSCAPING) TO ALLOW FOR MAINTENANCE TRUCK OPERATION.
3. THE MAINTENANCE PAD MUST BE CAPABLE OF WITHSTANDING THE WEIGHT OF NV ENERGY BOOM TRUCKS (STD-D5).
4. MAINTENANCE PAD REQUIREMENTS VARY AND WILL BE REVIEWED ON A CASE-BY-CASE BASIS FOR POLES TALLER THAN 150-FEET, LATTICE TOWER STRUCTURES, H-FRAME STRUCTURES, 3-POLE STRUCTURES, UNDERGROUND RISER STRUCTURES, AND UNDERGROUND VAULTS.
5. COMPLIANCE WITH ALL NESC & OSHA REQUIREMENTS IS REQUIRED.
6. MATERIALS AND EQUIPMENT CAN NOT BE STOCKPILED UNDER LINES.

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DRAWN	01/24/01	PH
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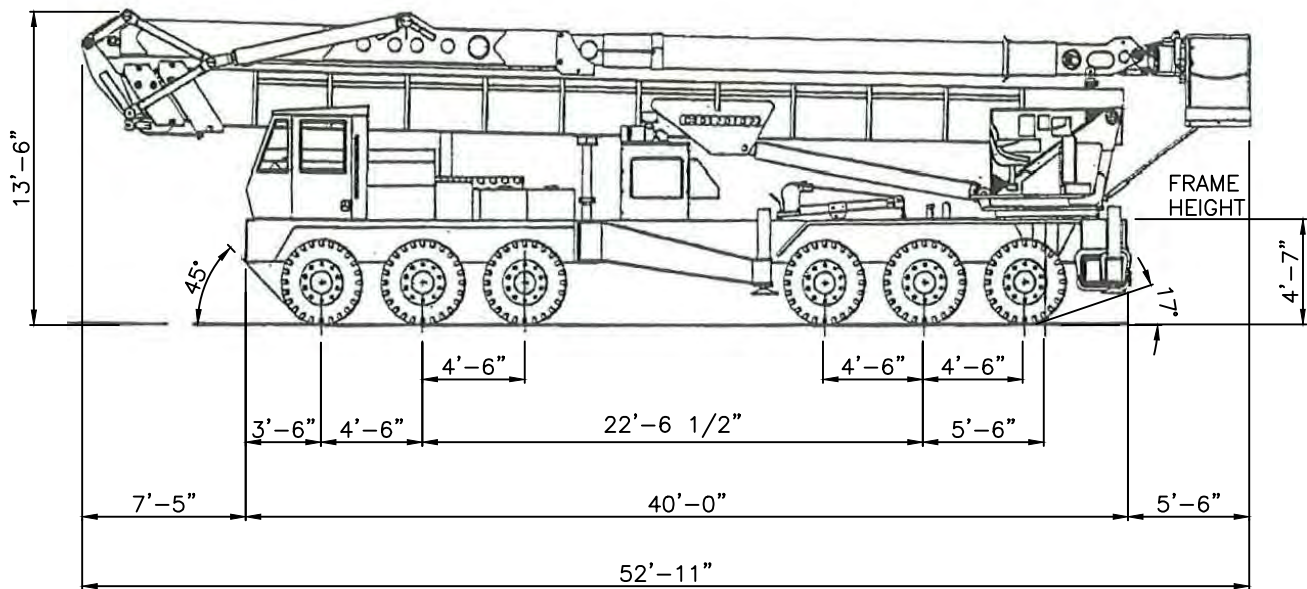


TRANSMISSION ENGINEERING
STANDARDS

NV ENERGY CRITERIA FOR MAINTENANCE ACCESS TANGENT STRUCTURE

SHEET: 1 OF 1

DWG. NO.: STD-D4



FEATURES/OPTIONS

1. 1500 LBS UNRESTRICTED CAPACITY
2. INTERCHANGEABLE STEEL PLATFORM
3. 180° PLATFORM ROTATION
4. FRONT SWING OUT OUTRIGGERS
5. REAR DOUBLE TELESCOPING OUTRIGGERS
6. 24" OUTRIGGER PENETRATION
7. 360° CONTINUOUS ROTATION
8. ALUMINUM WHEELS
9. ALUMINUM FENDERS
10. 36" X 36" OUTRIGGER FLOATS
11. 500kV ELECTRICALLY CERTIFIED
12. DECK MOUNTED ENGINE OPTION SHOWN

ESTIMATED WEIGHTS:

FRONT - 45000 LBS
 REAR - 50000 LBS
 TOTAL - 95000 LBS

PENETRATION SPECS:

VERTICAL PENETRATION 2 FEET PER OUTRIGGER
 SIDEWAY 24 FEET OUTRIGGER SPAN ON 2:24 MAX. SLOPE
 FRONT TO BACK 28 FEET OUTRIGGER SPAN ON 2:28 MAX. SLOPE

OTHER SPECS:

WIDTH = 8'-6"
 GRADABILITY=25%
 MIN. TURNING RADIUS (CURB TO CURB) = 82'-4"
 APPROACH ANGLE = 45°
 DEPARTURE ANGLE = 17°

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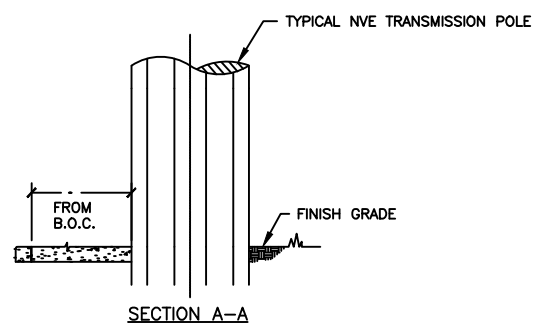
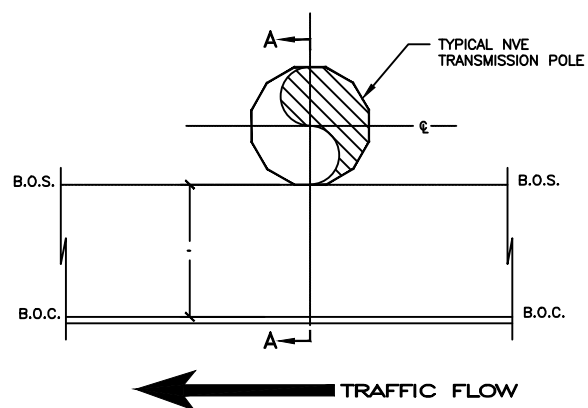
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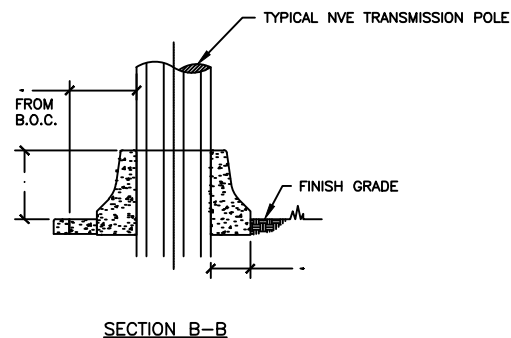
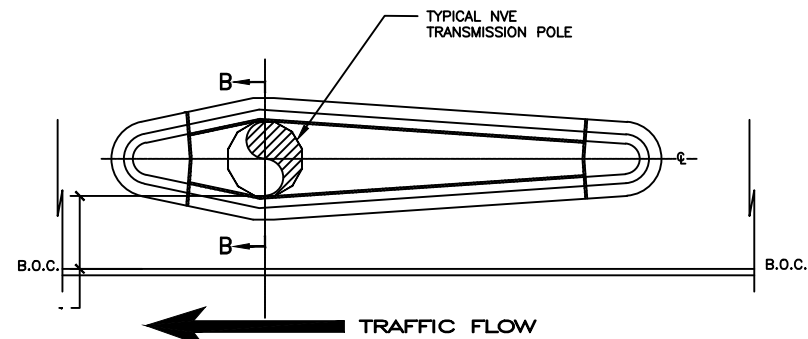
CONDOR MODEL 180-I
 INSULATED BOOM TRUCK
 12 X 8 TORQUE BOX CHASSIS

SHEET: 1 OF 1

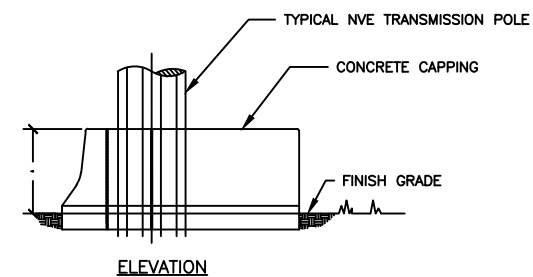
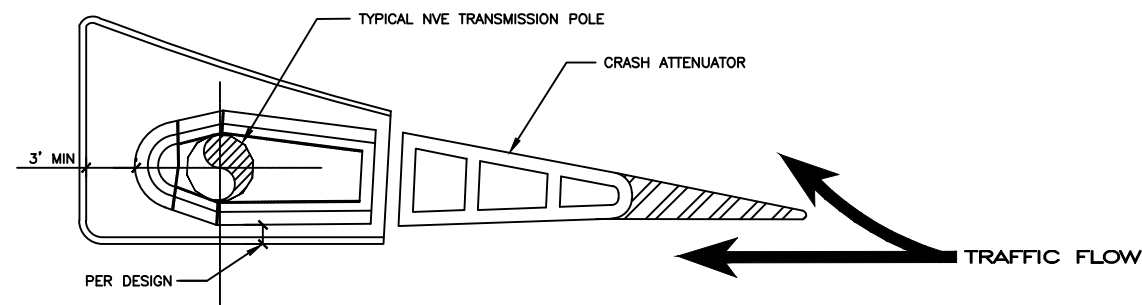
DWG. NO.: STD-D5



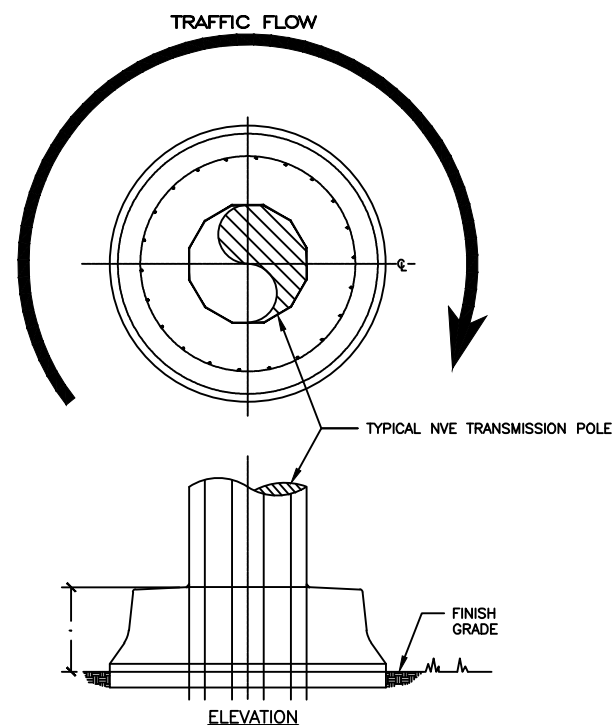
DETAIL "A"
GREATER THAN OR EQUAL TO
5.0' FROM B.O.C.



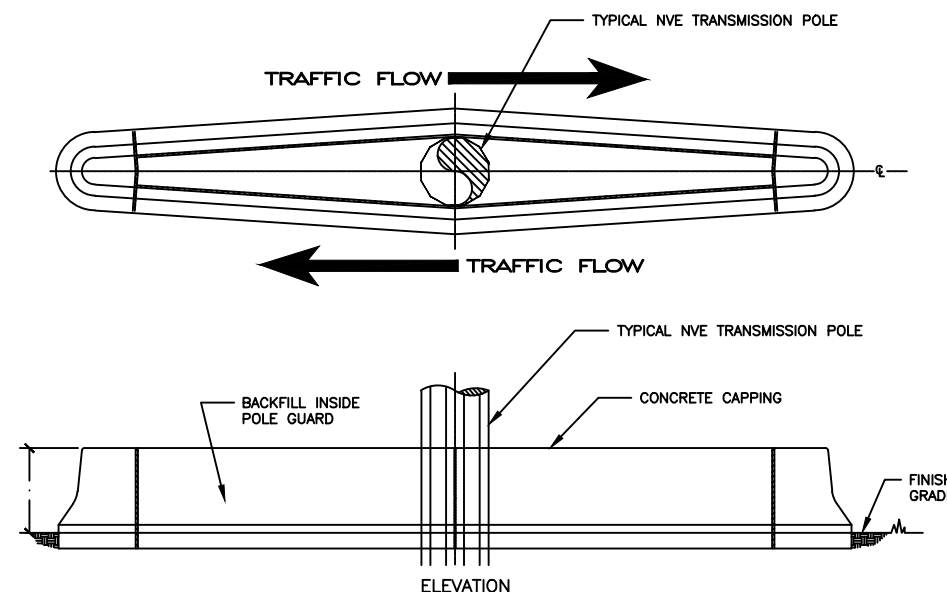
DETAIL "B"
BETWEEN 3.0' AND 4.9'
FROM B.O.C.



DETAIL "C"
IN PORK CHOP
ISLAND



DETAIL "D"
FOR 25MPH MAXIMUM SPEED AREAS



DETAIL "E"
IN CENTER MEDIAN

GUIDELINES:

- DETAIL "A"** THE FACE OF AN UNPROTECTED STEEL POLE MUST BE AT LEAST 5.0' FROM BACK OF CURB. IF THIS CANNOT BE MAINTAINED, REFER TO DETAIL "B".
- DETAIL "B"** CONCRETE BARRIER TO BE INSTALLED IF THE AVAILABLE CLEARANCE IS BETWEEN 3.0' AND 4.9' FROM BACK OF CURB TO THE FACE OF THE POLE. SIDEWALK MAY BE ROUTED AROUND BACK SIDE OF POLE.
- IF SIDEWALK IS TO BE INSTALLED ON THE STREET SIDE ALONG WITH THE POLE BARRIER, CUSTOMER IS RESPONSIBLE TO MEET RTC AND/OR ADA REQUIREMENTS ON MINIMUM SIDEWALK WIDTH.
- IF A MINIMUM CLEARANCE OF 3.0' IS NOT AVAILABLE FROM BACK OF CURB TO THE FACE OF THE POLE, THE POLE WILL REQUIRE RELOCATION.
- DETAIL "C"** PORK CHOP ISLAND CONFIGURATION IS CONTINGENT UPON POLE BARRIER AND CRASH ATTENUATOR DESIGN.
- DETAIL "D"** CONCRETE BARRIER FOR LOW SPEED AREAS: ALLOWED ONLY FOR A 25MPH MAX SPEED ZONE.
- DETAIL "E"** CONCRETE BARRIER FOR ROAD CENTER MEDIAN TO BE INSTALLED WHEN: FACE OF POLE TO BACK OF CURB IS LESS THAN 5.0', OR NO CENTER MEDIAN EXISTS. CRASH ATTENUATOR MAY BE NECESSARY. REFER TO DETAIL "C".

GENERAL NOTES:

- CONCRETE POLE BARRIERS FOR STEEL POLES ONLY. REFER TO SECTION 3.3 FOR WOOD POLE REQUIREMENTS.
- ALL CONCRETE BARRIERS ARE INDIVIDUALLY ENGINEERED FOR THE GIVEN STEEL POLE BY NVE. APPLICABLE BARRIER DESIGN WILL BE PROVIDED.
- NVE FACILITY SAFETY AGREEMENT IS REQUIRED IF BARRIER IS BUILT.
- BARRIER CAN BE INSTALLED BY NVE AT CUSTOMER COST OR CUSTOMER CAN INSTALL AS PER NVE DESIGN.
- POLE BARRIER INSTALLATION WILL BE INSPECTED BY NVE AT EACH STAGE OF INSTALLATION IF WORK IS NOT PERFORMED BY NVE.
- CRASH ATTENUATORS, WHEN NECESSARY, WILL BE INSTALLED, OWNED AND MAINTAINED BY OTHERS. NVE FACILITY SAFETY AGREEMENT IS REQUIRED.
- IF MAX SPEED LIMIT IS 15MPH OR LESS, REFER TO STD-D1 FOR STEEL BARRIERS.

DRAWING NOT TO SCALE

DRAWING INFO.		
DRAWN	06/20/08	DP
DESIGNED	06/20/08	SA
CHECKED	06/20/08	DMc
APPROVED	06/20/08	MF
	DATE	BY
REV. 3	8/1/18	MI



CONCRETE BARRIERS
FOR STEEL
TRANSMISSION POLES

SHEET: 1 OF 1 DWG. NO.: STD-D6



LANDS RESOURCES APPLICATION FOR POWER LINE CONFLICT PROJECT REVIEW

This is the application for those projects immediately adjacent to or containing NV Energy transmission and distribution facilities and corridors. Provide accurate and complete information as requested. A separate application should be prepared for each phase or unit of a project. Inaccurate or incomplete submittals will not be accepted and will cause delays in the review process.

PROJECT INFORMATION

PROJECT TITLE: _____ DATE: _____

APPLICANT NAME: _____

PHONE NUMBER: _____

EMAIL: _____

ASSESSORS PARCEL NUMBER (APN #): _____

COUNTY: _____

ADDRESS: _____

CROSS STREETS: _____

TYPE OF DEVELOPMENT: _____

Specify Proposed Improvements:

Access Road/Road Crossing: ☐ Fence/Gate: ☐ Parking: ☐ Power Line: ☐

Street/Traffic Light: ☐ Sign: ☐ Temporary Workspace: ☐ Trail/Path: ☐ Underground
Utility: ☐

Other (Explain): ☐ _____

Requested by:

(Please check the one that applies)

Owner/Developer: ☐ Governmental/Utility: ☐ Consultant: ☐ Engineering Firm: ☐

Landscaping Firm: ☐ Contractor: ☐ Sign Company: ☐ Architect: ☐

Other (Explain): ☐ _____

Type of Request:

(Please check the one that applies)

☐ Information Query:

☐ Preliminary facility red line request only
(If checked, please skip to customer information)

☐ Improvement Plan Submittal
(USE Agreement Request)

☐ Revision(s)/Improvement Plan—Provide Project Number: _____
(If checked please provide NPC's Assigned Project Number/Improvement plans that were previously or are currently being reviewed)

☐ Other: _____



PRELIMINARY FACILITY REDLINE REQUEST REQUIREMENTS:

A site plan showing Existing Structures, Adjacent Streets, Proposed Improvements, Pole Locations, Pole Numbers. Plan submittals without this information are incomplete and will not be accepted.

IMPROVEMENT PLAN AND REVISIONS SUBMITTAL REQUIREMENTS:

All plans must show Existing Structures, Adjacent Streets, Proposed Improvements, and their relationship to NV Energy Easements, Pole Locations, Pole Numbers on the noted drawings listed below. Plan submittals without this information are incomplete and will not be accepted.

(Please indicate if your Plan Submittal Package includes the following):

☐ Utility plans ☐ Profile and elevation plans ☐ Traffic/lighting plans
☐ Building plans ☐ Sign plans ☐ Landscaping plans ☐ Other (explain)

APPLICATION SUBMITTAL DOES NOT MEAN YOUR PROJECT IS APPROVED

All submittals are subject to technical review by NV Energy and additional information may be requested. Projects may be denied due to safety and liability issues. Approvals are contingent upon compliance with NESC and OSHA requirements as well as NV Energy's ability to access and maintain our facilities. Construction cannot begin without prior written approval or executed Transmission Use Agreement. In order to ensure the safety of the public, and to aid in the preparation of your designs, please refer to NV Energy's Transmission, Design, and Construction Standards (Available upon request.)



Transmission Use Agreement Notification

Name
1234 Street
City, ST Zip Code
Attn:

Date

Subject: **Project Name, Project #**

NV Energy's Right-of-Way (ROW) Management Department, has reviewed your drawings and based on your submittal, we find that our facilities are affected by this project. Based on our preliminary review, a "Transmission Use Agreement" will be required. Please complete and return the enclosed "Acknowledgement of Responsibility" (Appendix A or Appendix B) with the requested fees to the ROW Management, listed below.

Note: Current processing time for a "Transmission Use Agreement" is 14 to 16 weeks. Time starts once the completed application and the applicable fees are received.

Your project will not proceed until this requested information is received.

NPC is primarily concerned with the continued safe and reliable delivery of power through our facilities within our easement. In order to insure the safety of the public, the following conditions must be met:

- Compliance with all NESC and OSHA requirements.
- Materials and equipment cannot be stockpiled under lines.
- Pole bollards are required and shall be installed by the owner if parking is within 10' of any transmission structure. (Detail provided as required)
- A 40'x40' square must be maintained on one side of tangent structures and a 40'x40' square around a dead end structure to allow access for maintenance purposes.

This is also to inform you that it is necessary to obtain prior approval from NV Energy's ROW Management for future projects and any changes or revisions to this project. Certain improvements, for safety and liability reasons, are typically not allowed within transmission corridors, including but not limited to the following items:

- Parking or storage of vehicles exceeding 8' in height
- Covered parking
- Parking lights
- Metallic fences or block walls
- Trash enclosures
- Buildings or structures and free standing signs
- Swimming pools
- Pine and palm trees
- Elevation or grade changes

If you have any questions, please call me at XXX-XXXX.

Sincerely,

Your Name

ROW Management

Cc: Sharon McShea, File

APPENDIX A
Acknowledgement of Responsibility

Project Title: _____ Project # _____

Fee Amount: _____

Non-refundable Advance:

1. Minimum project fee - 2 poles and/or a single span affecting property	\$1,200.00
2. Additional poles and/or spans affecting property	\$600.00 per pole/span

By signing and submitting fees, you are acknowledging that you are the owner of the above property or an authorized agent of the owner, able to enter into agreements on their behalf. Additionally you authorize NV Energy's, Right-of-Way (ROW) Management Department, to proceed with the preparation of a "Transmission Use Agreement" defining compliance with the terms and conditions to allow certain encroachments.

The undersigned agrees to provide complete designs, and requested information necessary for the preparation of the "Transmission Use Agreement". You also agree to complete the execution of the Agreement by signing and returning the "Transmission Use Agreement" for recording in a timely manner. Incomplete submittals are subject to rejection.

You must notify ROW Management if the person responsible for providing this information changes or of any changes in the project name. A new form will need to be completed if changes are made. Failure to notify ROW Management of any changes, in writing, may be cause for cancellation of your project.

Fees must accompany this completed form.
Project will not proceed until fees are received.

A private development project is not approved until a "Transmission Use Agreement" has been executed.

Prepared by:

_____	_____	_____
ROW Management	Phone	Date

_____	_____	_____
Signature of Owner/Agent	Title	Date

Print or Type Name



Governmental Agency and Utility Notification

Name
1234 Street
City, ST Zip
Attn:

Date

Subject: **Project Name and Project #**
Transmission Line Name and Voltage

NV Energy has reviewed your drawings and based on your submittal, we find that our facilities do affect the property in question, and your proposed improvements have been determined to comply with NESC clearances. A copy of the site plan and clearance exhibit(s) is attached.

NV Energy is primarily concerned with the continued safe and reliable delivery of power through our facilities within our easement. In order to insure the safety of the public, the following conditions must be met:

- Compliance with all NESC and OSHA requirements.
- Materials and equipment cannot be stockpiled under lines.
- Pole bollards are required and shall be installed by the owner if parking is within 10' of any transmission structure. (Detail provided as required)
- A 40'x40' square must be maintained on one side of tangent structures and a 40'x40' square around a dead end structure to allow access for maintenance purposes.

This is also to inform you that it is necessary to obtain prior approval from NV Energy's ROW Management for future projects and any changes or revisions to this project. Certain improvements, for safety and liability reasons, are typically not allowed within transmission corridors, including but not limited to the following items:

- Parking or storage of vehicles exceeding 8' in height
- Covered parking
- Parking lights
- Metallic fences or block walls
- Trash enclosures
- Buildings or structures and free standing signs
- Swimming pools
- Pine and palm trees
- Elevation or grade changes

If you have any questions, please call xxx-xxxx.

Sincerely,

Your Name
ROW Management

encl
Cc: Sharon McShea File



Right of Way/Transmission Application Review Notice

Date: _____

To: _____

Project Name: _____

NVE Project #: _____

Review #

_____1

_____2

_____3

-
- _____ The application has been reviewed and it has been determined that NVE transmission facilities or easements are not impacted. A Transmission Use Agreement (TUA) and/or NVE Transmission signature on the civil plans is not required.
- _____ The application has been reviewed and it has been determined that NVE transmission facilities are impacted. The plans are approved. A TUA is included with this review notice. The TUA must be executed and returned to NVE. The mylars will be signed, if applicable, when the executed TUA is returned. Construction cannot begin until the mylars have been signed.
- _____ The application has been reviewed and revisions are required. The following comments need to be addressed in the next submittal. Additional comments may be included on the returned drawings. A copy of this transmittal letter and the redlines included with this transmittal need to be included in the next submittal.
- _____
- _____
- _____ The application has been reviewed and it has been determined that NVE transmission facilities are impacted. Poles and/or other facilities may need to be relocated or adjusted. It may be more efficient to revise the project plans to remove the conflict. Please see the following comments. Additional comments may be included on the returned drawings. NVE can meet in-person with developer and/or engineer. If plans cannot be revised, then a contract will be a required. Notify NVE of preferred solution within six months from the date of this review.
- _____
- _____
- _____ The application submittal package for this project is **not complete**. Developer must re-submit with the requested information below before the detailed review of the project can begin. A copy of this transmittal letter needs to be included in the next submittal.
- | | | |
|-------------------|-------------------------|-------------------|
| _____ Application | _____ Additional Plans | _____ Easements |
| _____ Grading | _____ Pole Locations | _____ SVZ Issue |
| _____ Landscaping | _____ Grounding Details | _____ Other _____ |

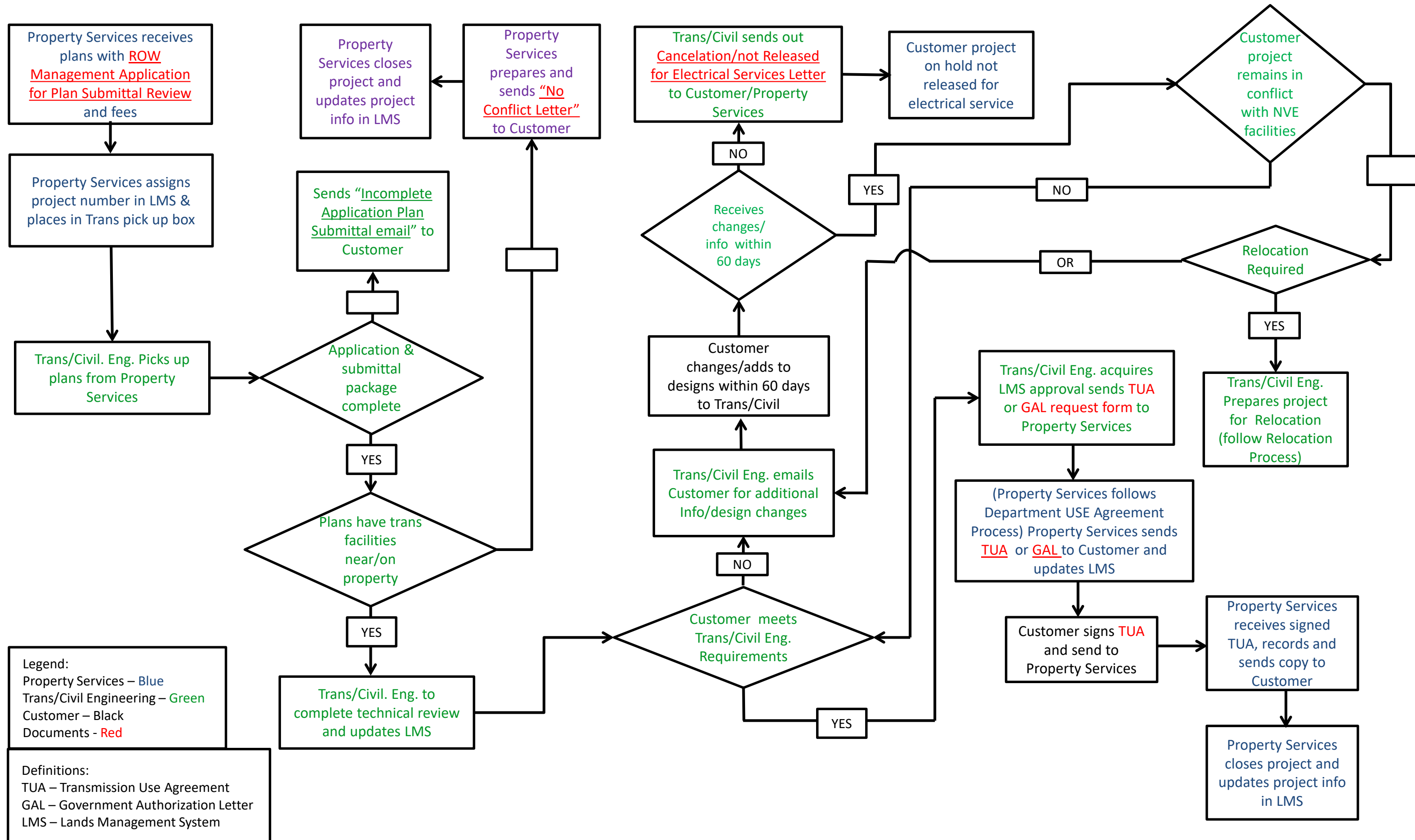
Please provide the information requested above and resubmit to **Land Services, Attn: ROW Management M/S 9**. Please note incomplete drawings or design packages will not be returned.

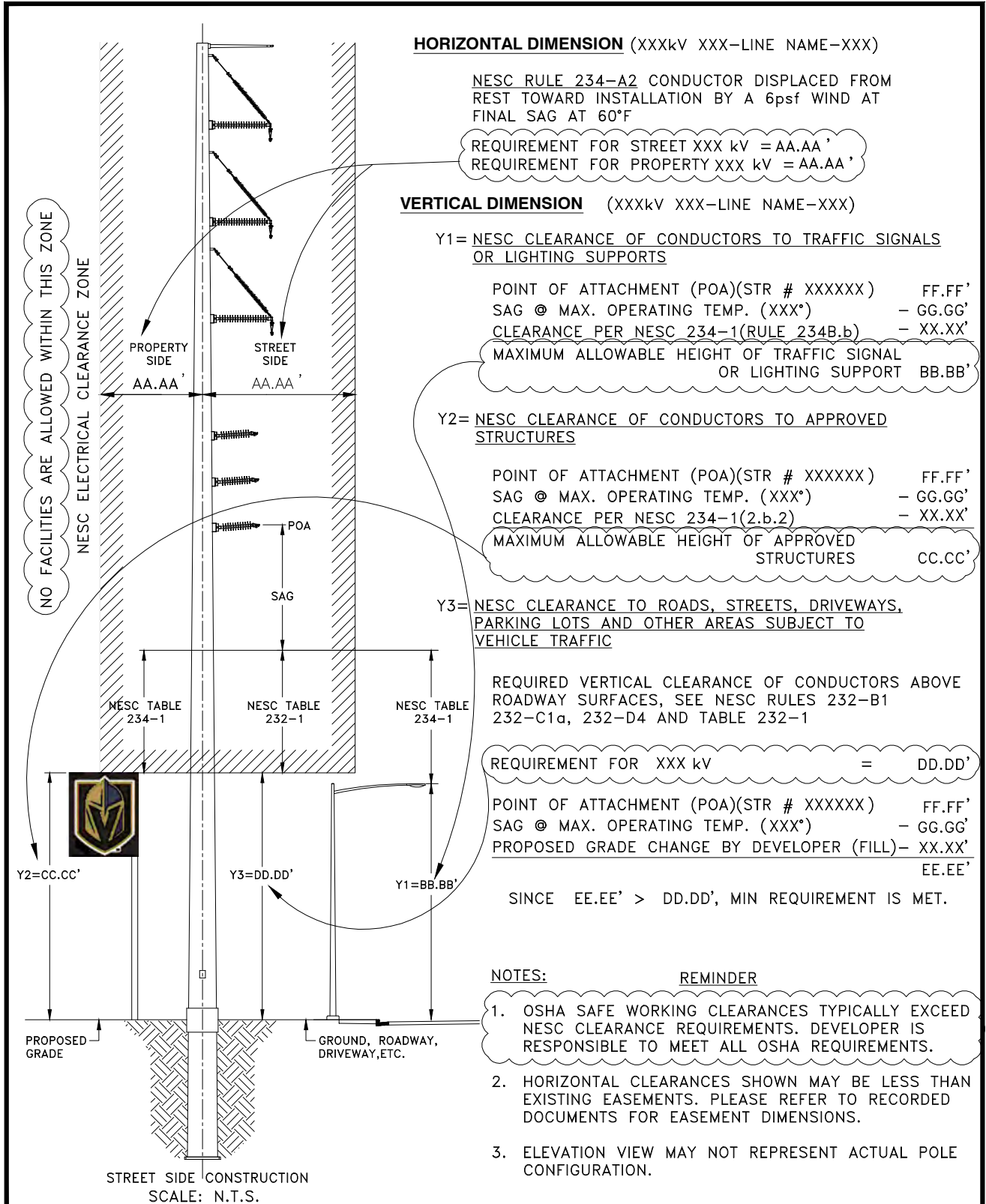
This application will expire in 6 months from the date on this transmittal unless a new submittal is made. Once the application expires, it will be cancelled and the project will need to be resubmitted as a new project.

If the project changes from anything that was reviewed in this submittal, then the new plans will need to be submitted for further review.

ROW Management
e-mail and Phone

ROW Management Submittal Plan Process Flowchart





DRAWING INFO.		
DRAWN	XX/XX/XX	XX
DESIGNED	XX/XX/XX	XX
CHECKED	XX/XX/XX	XX
APPROVED	XX/XX/XX	XX
DATE	BY	
REV. 0		



TRANSMISSION ENGINEERING

WMS PROJECT TITLE		
MINIMUM CLEARANCE CALCULATION		
EXHIBIT 'C-1'		
PROJ. ID:GXXXXXXXXXX	DWG. NO.: N/A	SHEET: 1 OF 1

PLOT DATE/TIME: 8/29/2018 12:38 PM PLOTTED BY: IGLESIAS, MARIA

G:\CONFLICT\TECHNICAL REVIEW DOCS\EXHIBIT C-1 (JOB AID).DWG



THIS GATE PROVIDES
24 HOUR ACCESS
TO NV ENERGY