

**STANDARDS AND REGULATIONS FOR  
SMALL WIRELESS FACILITIES IN THE  
PUBLIC RIGHT-OF WAY  
CITY OF ALBUQUERQUE,  
NEW MEXICO**

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## **I. PURPOSE AND OVERVIEW**

The City of Albuquerque (“City”) has prepared these Standards and Regulations for Small Wireless Facilities in the Public Right-of-Way (“Standards”) to enable the installation of these facilities in compliance with all requirements in the most efficient manner possible. The City has designed these Standards so that providers can effectively plan their projects from the day of inception. Through these efforts, the City envisions the market entry of a broad cross-section of providers and the resulting advanced networks needed to meet the diverse, evolving technology needs of the City’s vibrant residential and business communities.

These Standards facilitate the City’s management of its rights-of way; at the same time, they establish competitively neutral requirements that apply to all providers without discriminatory or prohibitive effects. In addition, these Standards aid in the implementation of the City’s telecommunications ordinances, such as the Small Wireless Facility (also “SWF”) Ordinance; as well as federal laws governing small wireless facilities.<sup>1</sup> In the event of a conflict between these Standards and the underlying laws, the laws shall prevail.

The Planning Department Director may update these Standards from time to time. You are encouraged to check on the Planning Department’s website regularly for updates, including updated versions of the applications, permits, agreements, and these Standards.

## **II. MUNICIPAL AUTHORITIES FOR WIRELESS FACILITIES**

In these Standards, “*wireless services*” are defined as the offering to the public for rent, sale, or lease, or in exchange for other value received, of the transmittal of voice, data, image, graphic, and video programming information between or among points excluding only cable services; whether services received are mobile or at a fixed location; and whether using licensed or unlicensed spectrum.<sup>2</sup> Therefore, “*wireless facilities*” means equipment at a fixed location that enables wireless communications; including radio transceivers, antennas, coaxial or fiber-optic cables, power supplies and comparable equipment, regardless of their technological configuration.<sup>3</sup>

The City has established three types of municipal authority to regulate the installation of wireless facilities. These are:

- A. **Small Wireless Facility Permits**, required for the installations of small wireless facilities on City, Public Service Company of New Mexico (“PNM”), and other third-party streetlights and utility poles as defined by the Federal Communications Commission (“FCC”),<sup>4</sup> and as implemented by the City’s Small Wireless Facility Ordinance.
- B. **Section 6409 Permits**, required for modifications of existing towers or base stations as defined in the federal statutes and by the FCC.<sup>5</sup>

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<sup>1</sup> §§ 5-10-1 to 5-10-11, Revised Ordinances of Albuquerque (R.O.A.)(2018); 47 U.S.C. 332; and Federal Communications Commission (“FCC”) Declaratory Ruling and Third Report and Order, 18-133 (September 27, 2018).

<sup>2</sup> §14-16-7, R.O.A. [Integrated Development Ordinance, “IDO”]; § 5-10-3(X), R.O.A. [SWF Ordinance].

<sup>3</sup> §14-16-7, R.O.A.; §5-10-3(U), R.O.A.

<sup>4</sup> FCC Declaratory Ruling and Third Report and Order, 18-133 (2018).

<sup>5</sup> 47 U.S.C. 1455; and 47 C.F.R. § 1.6100 (2019)

- C. **Wireless Facility Site Licenses**, required for the installations of wireless facilities on new or existing structures where the installations do not meet the requirements of either Section 6409 or the SWF Ordinance.

We explain the permitting processes in the following sections, including how to obtain construction permits to excavate, barricade, and conduct other necessary activities.

### III. PROCEDURES FOR SMALL WIRELESS FACILITY PERMITS

#### **Step A: Preparation of a Small Wireless Facility Permit Application**

1. *Nature of the Application.* The City established the Small Wireless Facility (“SWF”) permitting process by ordinance.<sup>6</sup> The SWF Ordinance sets out a streamlined and expedited process for the overall installation of SWFs in the City’s rights-of-way (“ROW”).<sup>7</sup> A SWF permit application must, therefore, be a request for the City’s approval to install, modify, or replace a streetlight or other utility pole for the purpose of collocating a SWF on that structure; and/or to col-locate a SWF on an existing streetlight or other utility pole; or on an existing wireless support structure in the City’s rights-of-way.<sup>8</sup>

“Collocate”, as used in this set of Standards and in the SWF ordinance means “to install, mount, maintain, modify operate or replace one or more wireless facilities on, in or adjacent to a pre-existing or modified wireless support structure or utility pole.”<sup>9</sup>

In addition, the permit application must demonstrate that each new or replacement utility pole and each SWF collocation requested must meet the following requirements:

- a. Each *new* utility pole, that is, one proposed at a location where a utility pole does not currently exist, must be shown to be necessary because no existing or replacement utility pole could be used based on engineering and construction site studies;<sup>10</sup> and
- b. Each antenna associated with the deployment is no more than three cubic feet in volume, or could fit, inside an enclosure with a volume of three or fewer cubic feet;<sup>11</sup> and
- c. The SWF is mounted on a structure – whether it is a new, replacement, or existing utility pole or existing wireless support structure - fifty feet or less in height including its antennas; or on structures no more than ten percent taller than any adjacent utility pole, wireless support, or electric transmission structure;<sup>12</sup> and
- d. The SWF’s deployment does not require the extension or replacement of any existing structures to a height of more than fifty feet, or by more than ten percent taller than any adjacent utility pole, wireless support structure, or electric transmission structure, whichever is greater;<sup>13</sup> and

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<sup>6</sup> §§ 5-10-1 to 5-10-11, R.O.A., (2018).

<sup>7</sup> § 5-10-3(M) and § 5-10-4(A)-(B), R.O.A.

<sup>8</sup> *Id.* Also, the term “right-of-way” means the area on, below or above a public roadway, highway, street, sidewalk, alley or utility easement; but does not include federal or state roadways, a private easement, or City property not in the ROW, such as parks, open spaces, etc. §5-10-3(Q).

<sup>9</sup> §5-10-3(G).

<sup>10</sup> §5-10-5(A)(3)(i).

<sup>11</sup> §5-10-3(R)(1)

<sup>12</sup> §5-10-3(R)(2)

<sup>13</sup> §5-10-3(R)(3).

- e. The SWF's ground or pole-mounted wireless equipment is twenty-eight or fewer cubic feet in volume;<sup>14</sup> and
- f. The SWF is in all respects in compliance with local, state, and federal regulations including those at 47 C.F.R. § 1.6002.<sup>15</sup>
- g. The SWF is in all respects in compliance with the requirements set out in the SWF Ordinance, including without limitation that the SWF:
  - (i) Shall *not* impede pedestrian traffic; or interfere with requirements pertaining to public safety; sight lines for vehicular transport or pedestrians; or the Americans with Disabilities Act;<sup>16</sup> and
  - (ii) Shall comply with reasonable stealth-concealment standards;<sup>17</sup> and
  - (iii) Shall comply with aesthetic standards;<sup>18</sup> and
  - (iv) Shall comply with standards established for design and historic districts;<sup>19</sup> and
  - (v) Shall *not* be in a right-of-way that is less than fifty (50) feet wide or adjacent on at least one side to a residential zone unless the SWF fills a significant gap.<sup>20</sup>

2. *Regulations and Procedures.* Applicants for SWF permits must follow these regulations and procedures:

- a. For all new poles where none presently exist, prior to making an application for permit, seek approval of the location(s) from the Planning Department. The City may deny a request if the applicant has not adequately explained why it could not use an existing or replacement utility pole or wireless support structure owned either by the City, PNM or by a third-party.<sup>21</sup> Additional reasons for denial may be found in § 5-10-5(A)(3) of the Small Wireless Facility Ordinance.
- b. All consideration will be given but the City reserves the right to control the use of the rights-of-way.<sup>22</sup>
- c. If the location is in right-of-way where the roadway is less than 50 feet, measured from curb to curb, and at least one side abuts land zoned for residential use, the City may require the applicant to demonstrate that placement of the SWF is necessary in that location to fill a significant gap in service and no reasonable alternatives exist.<sup>23</sup> See the attached Appendix B for a suggested form of supporting documents.
- d. Any new or replacement poles become the property of the City.<sup>24</sup>
- e. If a SWF is proposed in an area of decorative poles and the existing pole cannot be used, it will be necessary to replace the decorative pole that conforms to the design aesthetics of the pole being replaced and any other design applicable design requirements for the area.<sup>25</sup>

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<sup>14</sup> §5-10-3(R)(4).

<sup>15</sup> §5-10-3(R)(5).

<sup>16</sup> §5-10-5(A)(a)-(c)

<sup>17</sup> §5-10-5(A)(f), see Section VI, Concealment Standards, below in these Standards.

<sup>18</sup> §5-10-5(A)(e), see Section VII, Aesthetic Standards, below in these Standards.

<sup>19</sup> §5-10-5(A)(d)-(e), see Section VIII, Design and Historic Districts, below in these Standards.

<sup>20</sup> §5-10-5(A)(h).

<sup>21</sup> §5-10-5(A)(3)(i)

<sup>22</sup> See §5-10-2 and §5-10 5(A)(3)(i).

<sup>23</sup> §5-10-5(A)(3)(h)

<sup>24</sup> Permit Agreement.

<sup>25</sup> §5-10-6(C)

- f. Submittal of Application: The Application process is a three-step process: obtain an application appointment, fill out the application on line and attend an application appointment:
- (i) *By Appointment Only*: All applications and resubmittals of applications for SWF Permits must be filed on line prior to the “in person” appointment with the City at a pre-scheduled appointment after the information for the application has been entered and submitted to the city on line. To schedule an appointment, contact the Planning Department’s Urban Design & Development Division as listed on the SWF Permit application. The appointment information is required for the application.
  - (ii) *Fill out Application*. Once an appointment date and time is scheduled, complete the application permit and agreement on line with all necessary information. This insures that all necessary information, including site location information, is imputed as requested by the Applicant. Prior to the application submittal, an appointment to deliver all necessary drawings, fees, and supporting documentations **must be obtained** from the Planning Department.
  - (iii) *The Appointment*. At the appointment, the Planning staff will verify that all required materials are present with the application.
  - (iv) **The applicant is responsible for ensuring that the latest version of the application is submitted at the time of submittal.** You are encouraged to check this website regularly for updates to the application. Applications not submitted on the most current form will not be processed.
- g. Documentation for Application. Applications must include the following:
- (i) Structural analysis and site drawings, stamped and sealed by a qualified, New Mexico licensed engineer, demonstrating that the installation complies with applicable design codes. Batch packets to include the following:
    - (a) Cover sheet
    - (b) Photo sheet using aerial photo showing dots where each SWF is proposed, and numbering each (to correspond to the numbering above, in table.)
    - (c) Sheet showing table of latitudes and longitudes corresponding to each SWF in the batch with the numbering above, in table.
    - (d) Elevations sheet showing the light pole without and with SWF, drawn to scale with heights clearly labeled-bottom of antenna, COR, detailed bolt drawing demonstrating bolt pattern and top of antenna, table of colors and finishes for each type of SWF proposed in the batch.
    - (e) Photo sim for each type of SWF proposed in the batch
    - (f) Antenna sheet showing configuring (looking down at it) and providing antenna specs for each type proposed in the batch
    - (g) Detailed sheet for ground equipment for each type proposed in the batch.
    - (h) Detailed equipment drawing providing the discrete dimensions and volume of every component of the proposed small wireless facility, including electronic equipment component or cabinet (e.g. radio transmission; backhaul;

interconnection; etc.); support structures added to each site (e.g., new and replacement poles; all cable trays; etc.); all conduits, above and below ground, any cables not within conduit, and interconnecting equipment, etc.); all surface-mounted and sub-surface structures not already disclosed; all electric utility and grounding equipment associated with each SWF; foundations; and all other elements of the SWF not disclosed in any of the above.

- (ii) Operator's proof of identity, Articles of Incorporation, Partnership agreement, and LLC documents, etc.
- (iii) Copy of Operator's active City Business Permit and proof of good standing with the Secretary of State.
- (iv) Proof of insurance.
- (v) Documentation that Operator has permission to use site other than a City pole or site:
  - (a) If the SWF is proposed on a PNM streetlight, the Operator shall provide with the application the PNM Authorization/Consent and any other documents required by PNM
  - (b) If the SWF is proposed on a privately owned/non-PNM, non-City streetlight, the Operator shall provide with the application: Documentation demonstrating consent of the property owner to allow the SWF on property; Documentation demonstrating property ownership of the property where the SWF will be located; Documentation demonstrating authority of the owner to sign consent documents (ex: LLC operating agreements, HOA board minutes with accompanying board signature authorization, Articles of Incorporation, etc.)
- (vi) Documentation that Operator has permission for location of ground equipment.

h. Fees for Submission of Application. All processing/non-recurring fees must be paid at the time of application. The processing/non-recurring fees are for the review of the application and are non-refundable. All applications for permits that use existing light or utility poles shall be accompanied by a processing/non-recurring fee of \$500.00 for no more than the first five applications and an additional \$100.00 for each SWF beyond five.<sup>26</sup> A consolidated application may be filed for up to twenty-five SWF within a five business-day period. All permits requested under the same consolidated application must be of a substantially the same type, and on substantially the same type of structure and design.<sup>27</sup> All application fees for a replacement/newly installed light pole or utility pole for collocation of SWF will be \$750.00 per pole.<sup>28</sup>

3. *Design Standards.* The City has researched and adopted design standards for SWFs. Given the rapidness with which personal wireless service facility technology may change, City staff are available to meet with wireless carriers and their representatives to discuss design standards that deviate from those shown in this Standards and Regulations and as required by the IDO. The intent of these design standards is to establish objective camouflage and concealment elements for personal

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<sup>26</sup> §5-10-4(G)(1)

<sup>27</sup> §5-10-4(B)

<sup>28</sup> §5-10-4(G)(2)

wireless service facilities. Planning may waive or impose additional standards if doing so is conducive to the site being the least intrusive, maximally blending with the natural and built environment of the City, and protecting the aesthetic character of the City. Generally, the following requirements shall apply to all SWF in the public rights-of-way:

- a. A collocation of a wireless facility of any type shall be installed in the least visibly intrusive manner, to blend in with the existing structure and its surroundings.<sup>29</sup>
- b. All facilities shall have subdued colors and not-reflective materials that blend with the materials and colors of the surrounding area and structures to the satisfaction of the City.
- c. The SWF shall be of the least intrusive design reasonably possible and occupy the least amount of space in the right-of-way possible but in no event shall exceed the limits prescribed in the Ordinance.
- d. A facility shall not be located within any portion of the public right-of-way that interferes or may interfere with City and emergency operations, and pedestrian and vehicular access.
- e. If an existing streetlight is proposed to be replaced with a new streetlight pole to accommodate the installation of the wireless facility, the replaced streetlight pole shall be designed to resemble existing poles in the right-of-way near that location in all respects, including in size, height, color and/or finish, materials, and style. The replacement mast arm and luminaire shall match the existing arm and luminaire.
- f. The replacement streetlight shall be offset at the minimum distance technically possible from the existing streetlight.
- g. The replacement streetlight is required to have acceptable bolt patterns and sizes. See Appendix C for presently allowed bolt patterns and sizes.
- h. If a new streetlight is proposed at a location where no streetlight currently exists, the new streetlight shall be designed to resemble existing poles in the right-of-way near that location in all respects, including in size, height, color, materials, and style, including the style of the mast arm and luminaire.
- i. *Ground Equipment.* Vaults and pull boxes shall be installed flush to grade. Ground equipment must be screened by a wall, fence, or other method, including but not limited to a telecommunications box, artificial rock, or decorative feature that fully screens the equipment with opaque material.—Equipment and screening materials shall not block pedestrian pathways and sidewalks.<sup>30</sup>
- j. All luminaires will meet all present standards for efficiencies, brightness and safety standards in place at the time of application.
- k. All cabling, wires and conduit shall be concealed completely within the pole and the concealment shroud. Cabling and wires shall enter/exit the streetlight pole through conduit sweeps within the streetlight footing.
- l. All replacement poles and new light poles will match the City’s light pole bolt pattern.
- m. All shrouds shall be colored to match the streetlight pole.
- n. Pole-Top shrouds and Backpack Shrouds, mounted to the side of the pole will be permitted upon the approval of the aesthetics and how it relates to the surrounding area and surrounding light

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<sup>29</sup> IDO – 14-16-4-3

<sup>30</sup> IDO – 14-16-4-3

poles. For example, if an area already has Pole-top shrouded SWFs, new SWFs, regardless of the applicant, will need to reasonably match in the least intrusive design way.

- o. All stainless steel banding or similar shall be concealed within shrouding unless the design proposes a shroud mounted to the side of the pole only.
  - p. For wooden utility poles regulated/owned by PNM, if a top-of-pole mounting is not expressly prohibited by PNM, equipment shall be installed on top of the wooden utility pole. All wooden utility poles shall be equipped with a top-of-pole mounting bracket to which the personal wireless service facility will be attached and the mounting brackets shall be colored to match the pole. All wiring running along the length of the pole shall be enclosed to appropriate conduit colored to match the pole and installed flush to the pole (no riser or equipment stand-off brackets). All wiring shall be concealed to the maximum extent technically possible. Equipment must be enclosed in a single concealment shroud colored to match the pole.
  - q. *Strand-Mount Installations.* All strand-mounted equipment shall be colored to a non-reflective gray color or similar shade. All wiring running along the length of the pole shall be enclosed in appropriate conduit color to match the pole and installed flush to the pole (no riser or equipment stand-off brackets).
  - r. Equipment and screening materials shall not block pedestrian pathways and sidewalks.
  - s. Multiple providers are encouraged to co-locate on the same streetlight as much as possible. Their respective antennas shall be mounted on existing or replaced street lighting and spaced in a manner that is consistent with demonstrated engineering requirements and these standards. The proposed spacing must be approved by the City's Planning Department.
4. *Approval of Planning Director or Designee Is Required.* The Planning Director or designee must provide prior approval of the concealment method and materials. A wireless facility is considered concealed if the Planning Director determines that the facility is aesthetically integrated with the existing structure and landscaping, if applicable, to blend in with the nature and character of the built and natural environment, considering height, color, style, massing, placement, design, and shape.

5. *Design Examples – top shroud*



6. *Design Examples – Backpacks*



7. *Wood utility poles*



Please refer to Appendix A for application submittal requirements.

### **Step B: Administrative Review.**

The City will review the application. If an application is deemed incomplete, the City shall notify the applicant at the email address provided in the application. The City will include what information is needed in order to deem the application complete in the notification. **The applicant must provide all requested information within sixty (60) days of being notified by the City that the application is incomplete, or the application shall be deemed withdrawn without prejudice by the applicant** and, if it is materially incomplete, provide the applicant a written notice on or before the tenth (10<sup>th</sup>) day of the application's filing. The notice of incompleteness will clearly and specifically delineate specify the missing information and/or documents and the legal authority that establishes the requirement for the submission of such documents.

Upon resubmission of the application, the time period for the City's review of the application will reset to the first day of that time period.<sup>31</sup> Following the resubmission of the application, if documents that were listed in the City's initial notice of incompleteness are still missing, the City will provide another notice of incompleteness within thirty (30) days of resubmission. Upon the second notice of incompleteness, the City's time period for its review will be tolled until those documents are submitted.<sup>32</sup>

The City intends to comply with the time limits for reviewing qualified SWP permit applications (not including periods during which the "clock" is tolled due to incomplete applications) unless the City and applicant agree to a different time frame. The time period for the review of applications for SWF collocations on existing utility poles or wireless support structures is sixty (60) days; the time period for the review of applications for SWF collocations on new utility poles, including replacement poles, is ninety (90) days.<sup>33</sup>

The City may require the installation of a new, replacement, or modified utility pole associated with the proposed SWF collocation.<sup>34</sup> If the City requires a new, replacement, or modified utility pole, the City shall retain ownership of the resulting pole.

At any time after the receipt of a SWF permit application, the City may provide or require the applicant to provide public notice of the application and the opportunity for written public comment according to the notice provisions of the Integrated Development Ordinance. The City shall provide any written public comments to the applicant within 3 days of receipt, and the applicant shall respond to any such comments in writing to the City within 5 days of receipt. The applicant's failure to respond is grounds for the application being deemed incomplete by the City.<sup>35</sup>

### **Step C: Decision and DMD Permits.**

1. The City will issue its decision in a timely manner and serve decision by email. All applications must have email contact information. The goal of the City is to approve complete applications

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<sup>31</sup> 47 C.F.R. § 1.6003(d).

<sup>32</sup> *Id.*

<sup>33</sup> 47 C.F.R. § 1.6003(c); and FCC 18-133, Declaratory Ruling and Third Report and Order, In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment Acceleration, at ¶105.

<sup>34</sup> Section 5, Paragraph C, SB 14. The City shall retain ownership of any new replacement streetlight or other utility pole that the applicant must replace due to construction or engineering requirements.

<sup>35</sup> §5-10-5(B)(1).

immediately. Incomplete applications will be returned to the applicant and the City will provide the applicant a written notice of the application deficiencies on or before the tenth (10<sup>th</sup>) day of the application's filing. The notice of incompleteness will clearly and specifically delineate specify the missing information and/or documents and the legal authority that establishes the requirement for the submission of such documents.

2. Upon approval, the applicant and City's designee will sign the approved permit and, upon doing so, the SWF permit shall become effective.
3. Any work described in a permit granted pursuant to City's SWF ordinance shall be completed within one hundred eighty (180) days of the Permit issuance date unless the City and applicant agree to extend this period due to delay caused by the lack of commercial power or communications facilities. Extensions of the 180 days will only be granted in writing and for lack of commercial power or fiber at the site.<sup>36</sup>
4. The permittee must obtain the Excavations and Barricading Permit from the Department of Municipal Development ("DMD") and any other required permits.

**Step D: Routine Maintenance and Replacement.**

For routine maintenance of a SWF, no new application is required, only notice as described in the Permit Agreement.<sup>37</sup> If a replacement is of the SWF is required, no application is required as long as the new equipment is substantially similar to or the same size and shape or smaller in size and weight and height as long as the Applicant notifies the City and provides details of the proposed replacement within ten days before the replacement is made.<sup>38</sup> The replacement must conform to all aesthetic requirements. If the replacement does not meet the requirements of being the same or substantially similar or if the size and shape increase the wind/structural load, to be decided at the sole discretion of the City, the applicant will be required to make a new application for a new permit for the SWF.

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<sup>36</sup> §5-10-7(B)

<sup>37</sup> §5-10-4(E)(i) and Permit Agreement

<sup>38</sup> §5-10-4(E)(ii)

## Appendix A

### Application submittal requirements for a Small Cell Wireless Facility Application:

- a. Permit and Agreement, completed on line in full and uploaded to the City by a representative of the Applicant.
- b. A copy of the applicant's organizational documents, such as its articles of incorporation or partnership agreement; and most recent report to show the organization's good standing, if applicable, with the secretary of state or other comparable agency.
- c. A copy of the applicant's business permit.
- d. A certificate or certificates of insurance.
- e. A list of one to twenty five sites with corresponding maps and photographs, including information about the ownership of any existing streetlights or other utility poles; or existing wireless support structures.
- f. If the existing streetlights or other utility poles, or existing wireless support structures are not owned by the applicant, then documents executed by the legally authorized agents of each of the owners evidencing their consent to each of the proposed co-locations. For example, if the pole is owned by a Homeowners Association ("HOA"), then a lease/grant of use document plus the corporate documents for the HOA demonstrating signing authority and a signed/certified copy of the minutes that approved the lease/grant of use.
- g. If the application includes new utility poles at locations where a utility pole (including a streetlight) does not currently exist, DMD's executed authorization form demonstrating approval of the installation of the new utility poles at the proposed locations.
  - (i) If the application is in a right-of-way that is less than fifty (50) feet wide or adjacent on at least one side to a residential zone, DMD's executed authorization form demonstrating approval of the installation of the new utility poles at the proposed locations. If required for approval by DMD, then engineering studies, stamped and sealed by a qualified licensed engineer, explaining in detail why the proposed co-location is the one and only location where the facility would work technically must occur in the proposed location to fill a significant technical gap; and/or
- h. If the application includes the collocation of SWFs on utility poles or structures owned by the Public Service Company of New Mexico ("PNM"), then PNM's executed authorization forms demonstrating approval of the proposed engineering and construction plans.
- i. Structural analyses, construction drawings, and descriptions of proposed installations by a qualified representative (a New Mexico certified engineer) showing that the utility poles, support structures, and co-located SWFs comply with:
  - (i) Standards and rules pertaining to public safety, pedestrian traffic, sight lines for pedestrians and vehicular transport, and the Americans with Disabilities Act
  - (ii) Reasonable stealth and concealment standards
  - (iii) Aesthetic standards
  - (iv) Any standards established for design and historic districts
  - (v) All applicable construction codes

- j. A detailed description of the services that will be provided through the use of the proposed SWF infrastructure.
- k. Radio frequency (“RF”) electromagnetic energy report and all other FCC forms reflecting applicant’s compliance with federal RF standards.
- l. Certification that the collocation will begin in one hundred eighty (180) days unless a delay is caused by lack of power.

**Appendix B**  
**Alternative Candidate Sites**

If the location is in right-of-way where the roadway is less than 50 feet, measured from curb to curb, and at least one side abuts land zoned for residential use, the City may require the applicant to demonstrate that placement of the SWF is necessary in that location to fill a significant gap in service and no reasonable alternatives exist. Below is a suggested format and may be used with other supporting documents.

- 1) Has the applicant, operator or owner or anyone working on behalf of the applicant, operator or owner secured or attempted to secure any leases or lease-options or similar formal or informal agreements in connection with this Project for any sites other than the candidate site requested? If so, please provide the physical address and latitude and longitude of each such other location, and provide an expansive technical explanation as to why each such other site was disfavored over the Project Site.
  
- 2) Considering this proposed site, is it the one and only one location within a reasonable and practical radius of the proposed site that can possibly meet the objectives of the Project? Provide a technically expansive and detailed explanation supported as required by comprehensive radio frequency data fully describing why the proposed site is the one is it the one and only one location within or without the City that can possibly meet the radio frequency objectives of the Project. Explain, in exact and expansive technical detail, all of the objectives of this Project.
  
- 3) Identify by name, title, company affiliation, work address, telephone number and extension, and email address the key person or persons most knowledgeable regarding this Project so that the City may contact them with questions regarding the Project:

(1) Person responsible for the final site selection for the Project:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Affiliation: \_\_\_\_\_

Work Address: \_\_\_\_\_

Telephone / Ext.: \_\_\_\_\_

Email Address: \_\_\_\_\_

(2) Person responsible for the radio frequency engineering of the Project:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Affiliation: \_\_\_\_\_

Work Address: \_\_\_\_\_

Telephone / Ext.: \_\_\_\_\_

Email Address: \_\_\_\_\_

(3) Person responsible for rejection of other candidate sites evaluated, if any:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Affiliation: \_\_\_\_\_

Work Address: \_\_\_\_\_

Telephone / Ext.: \_\_\_\_\_

Email Address: \_\_\_\_\_

If more than one key person is now or was involved in any of the functions identified in this section at or before the time of the submission of this form, attach a separate sheet providing the same information for each additional person, and identifying which function or functions are/were performed by each additional person.

**Additional Information Provided by Applicant**

You are invited and encouraged to provide any additional written information that you wish the City to consider in connection with your proposed project.

The undersigned certifies on behalf of itself, the Applicant, and the Owner that the information provided in this form and its contents are true and complete to the best of the undersigned's ability and knowledge, and that information should be relied upon by the City as being accurate and complete in evaluating this project.

\_\_\_\_\_  
Signature Title

\_\_\_\_\_  
Print Name Email Address

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Print Company Name

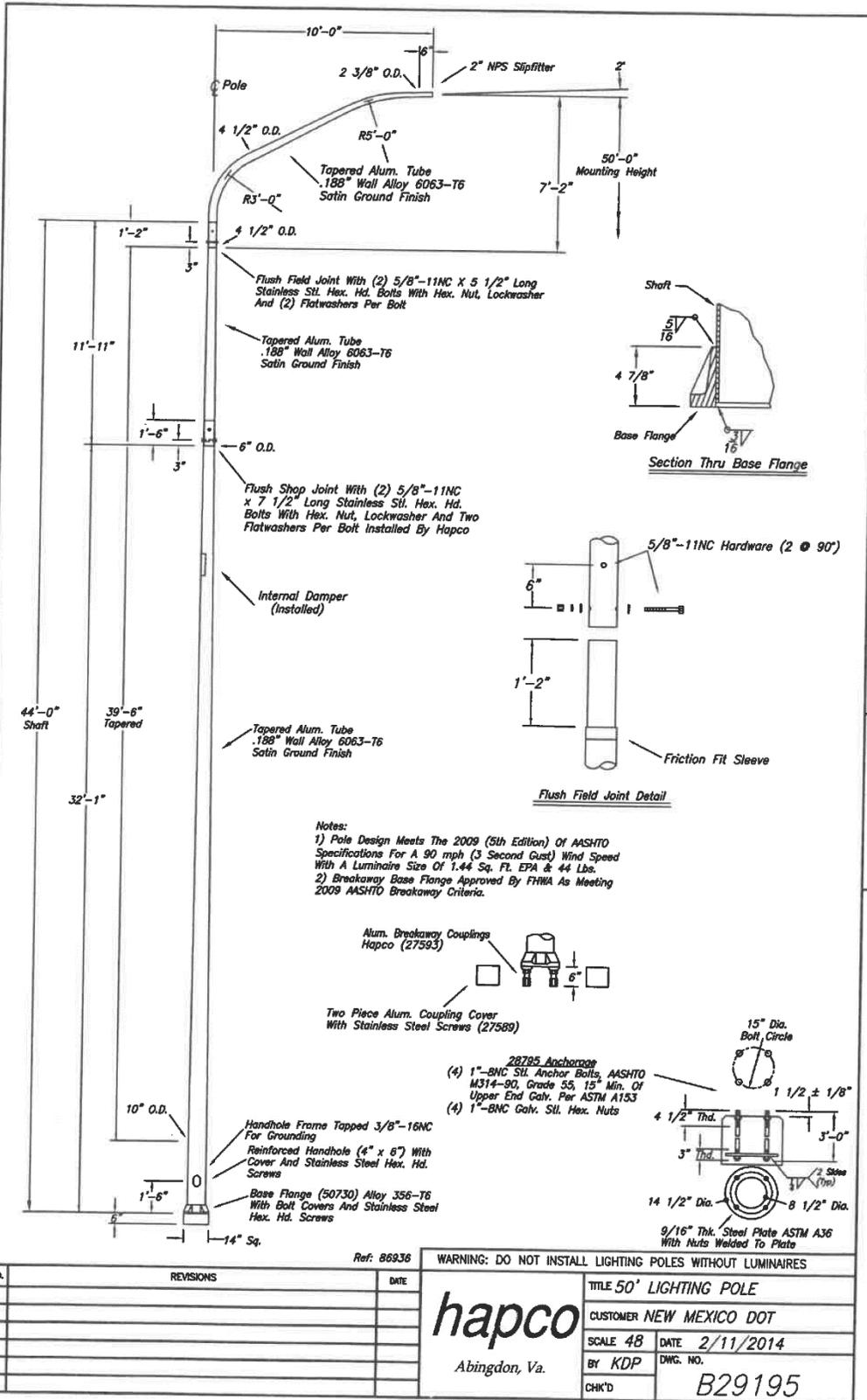
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Telephone Number

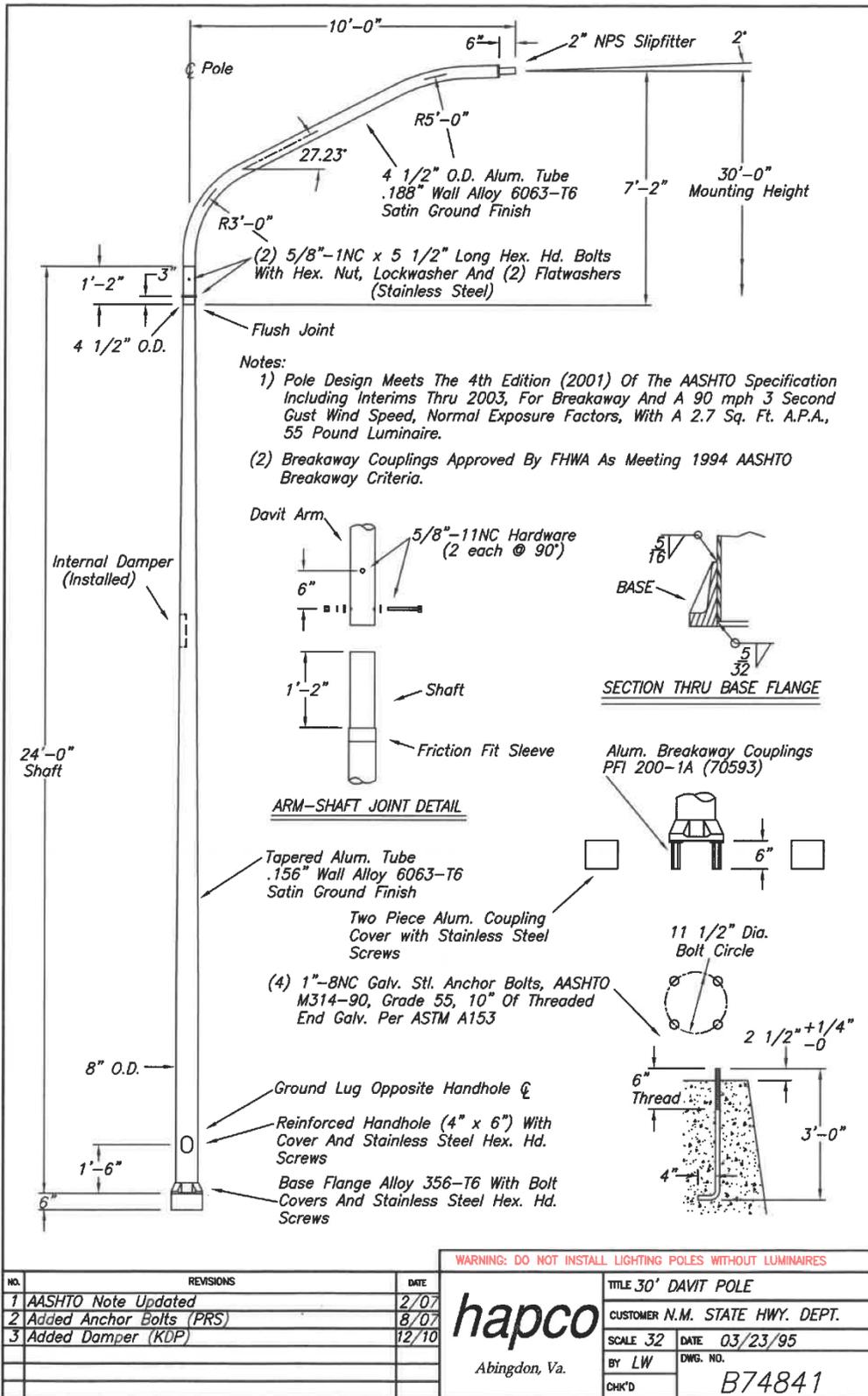
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Date Signed

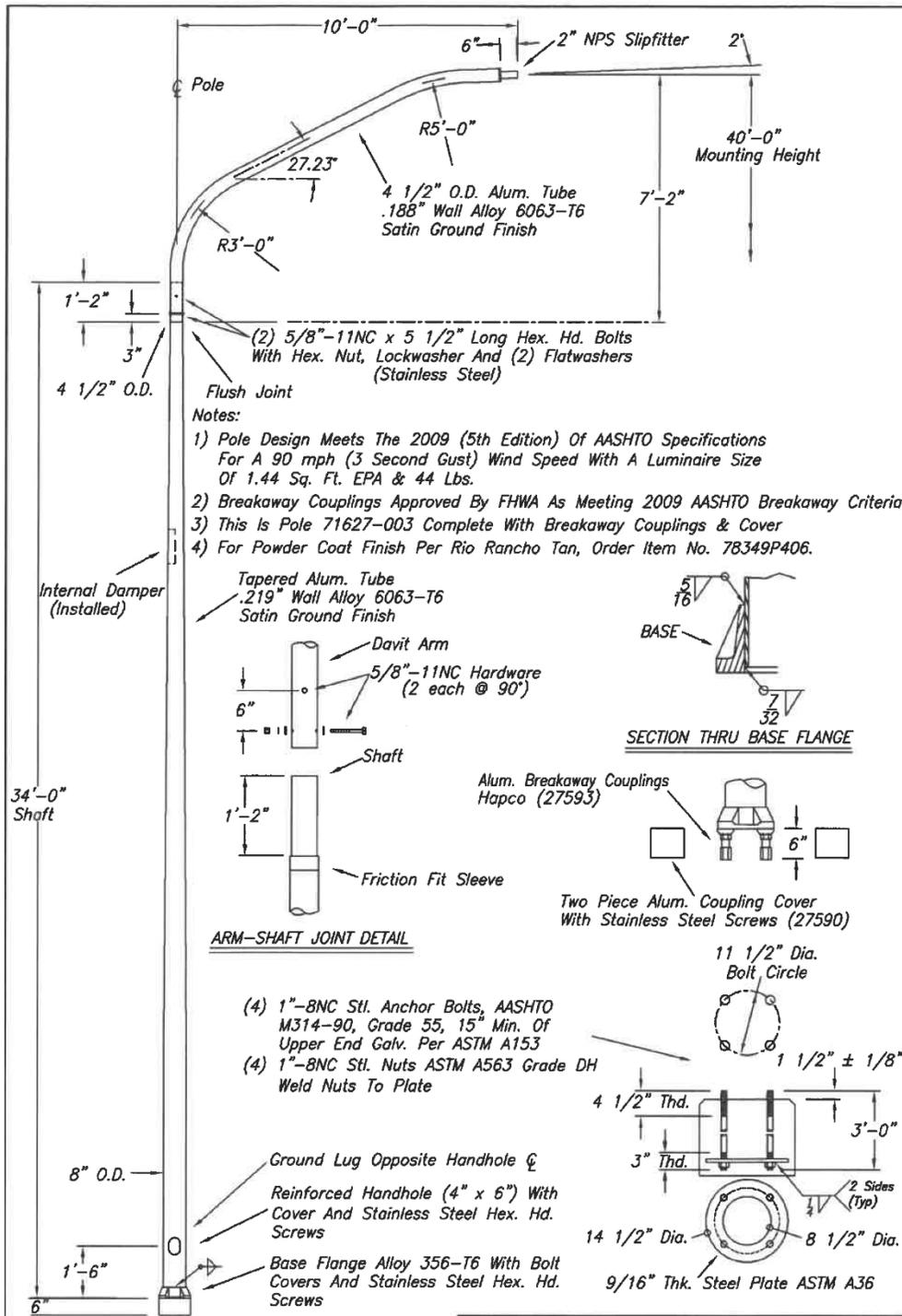
# Appendix C Acceptable Bolt Patterns



B29195



B74841



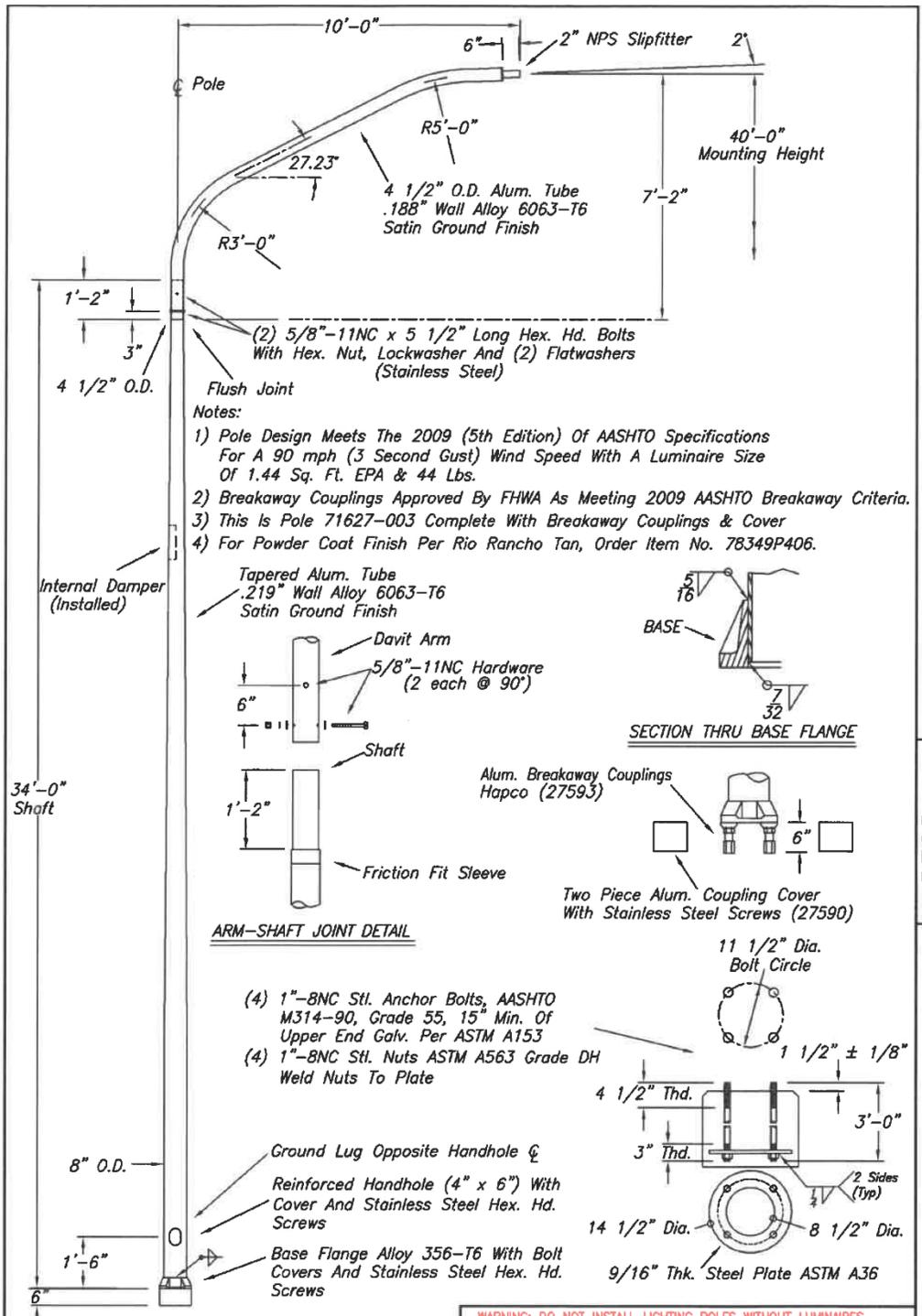
B78349

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE
1	Notes Revised to AASHTO 2001	07/05
2	AASHTO Note Updated; Wall Thk Was 0.219"; Added Damper	02/07
3	Bolt Circle Dia. Note Revised (kdp)	12/08
4	Notes Revised To 2009 AASHTO (kdp)	3/11
5	Was 70593 Couplings, 2.5" Pri. (kdp)	5/12
6	Was 0.188" & 271-001 Anchoraae (kdp)	11/12

**hapco**  
Abingdon, Va.

TITLE 40' LIGHTING POLE	
CUSTOMER N.M. STATE HWY. DEPT.	
SCALE 32	DATE 1/6/99
BY LW	DWG. NO.
CHK'D	B78349



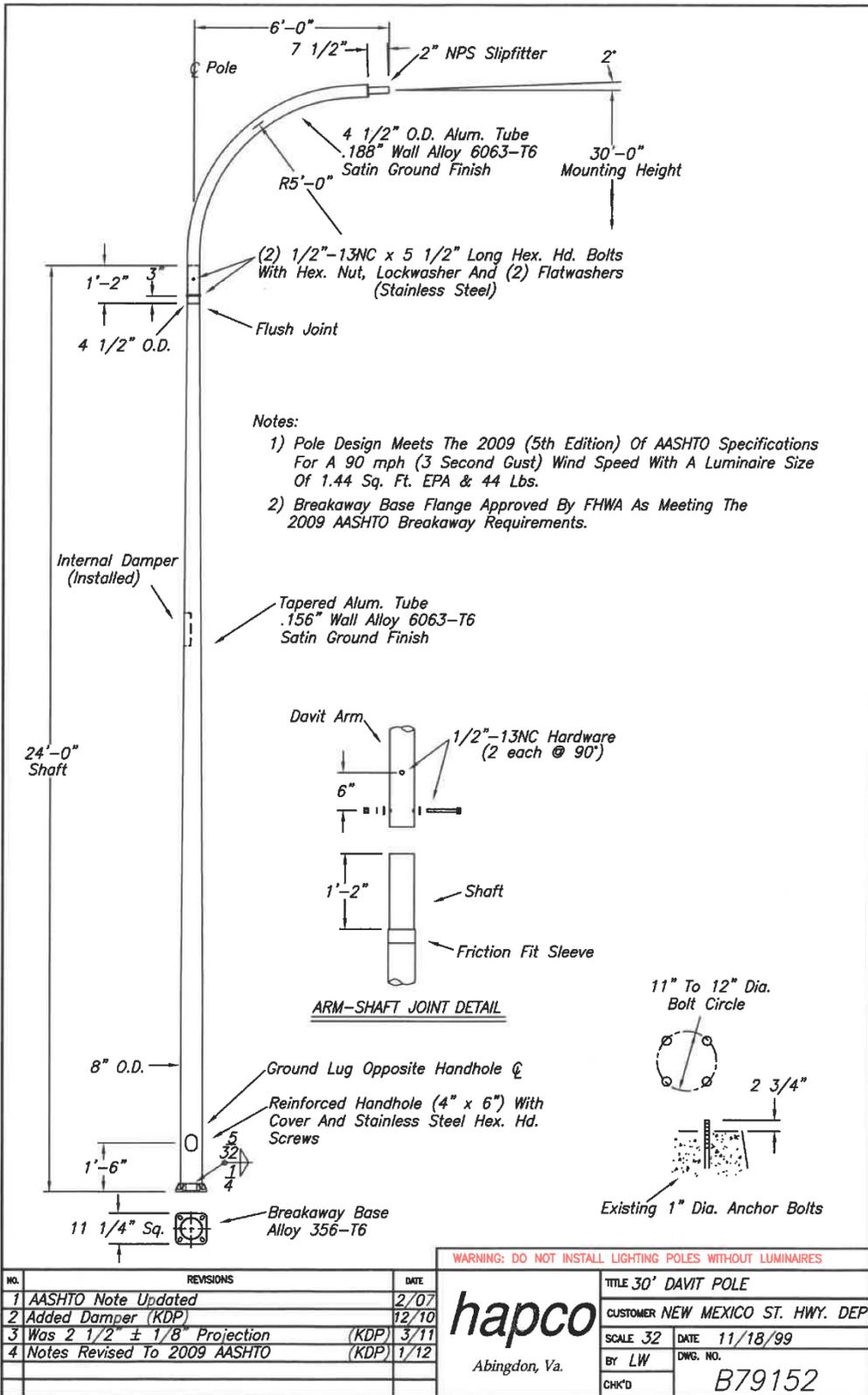
B78349

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

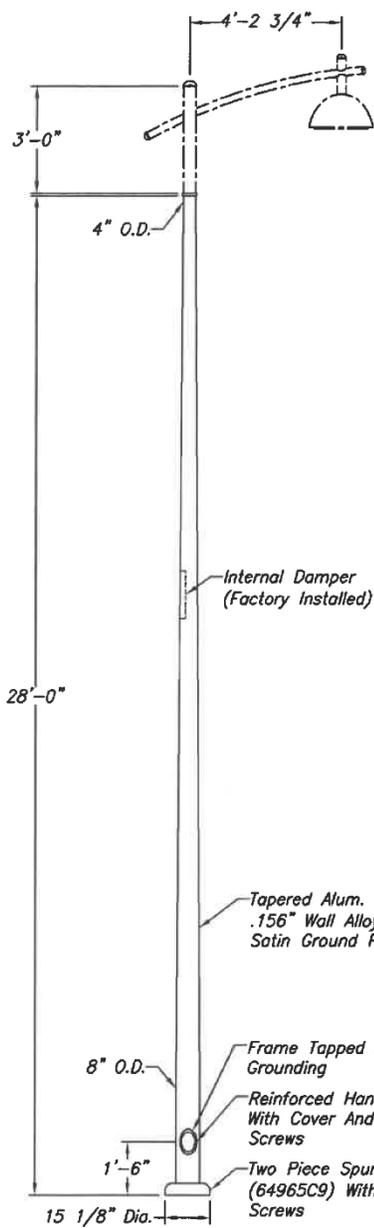
NO.	REVISIONS	DATE
1	Notes Revised to AASHTO 2001	07/05
2	AASHTO Note Updated; Wall Thk Was 0.219"; Added Damper	02/07
3	Bolt Circle Dia. Note Revised (KDP)	12/08
4	Notes Revised To 2009 AASHTO (kdp)	3/11
5	Was 70593 Couplings, 2.5" Pri. (kdp)	5/12
6	Was 0.188" & 271-001 Anchorage (kdp)	11/12

**hapco**  
Abingdon, Va.

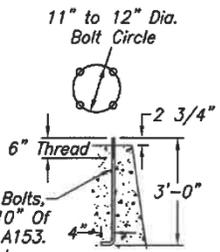
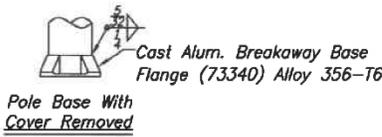
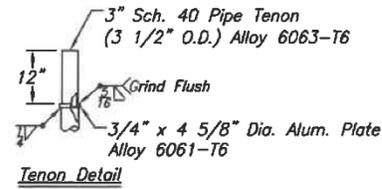
TITLE 40' LIGHTING POLE  
 CUSTOMER N.M. STATE HWY. DEPT.  
 SCALE 3/2 DATE 1/6/99  
 BY LW DWG. NO.  
 CHK'D B78349



B79152



Lead / Coal Green Powdercoat  
RAL6009



- (4) 1"-BNC Galv. Stl. Anchor Bolts, AASHTO M314-90 Grade 55, 10" Of Threaded End Galv. Per ASTM A153.
- (4) 1"-BNC Galv. Stl. Hex. Nuts
- (4) 1" Galv. Stl. Lockwashers
- (4) 1" Galv. Stl. Flatwashers

Ref: SKLW101409A

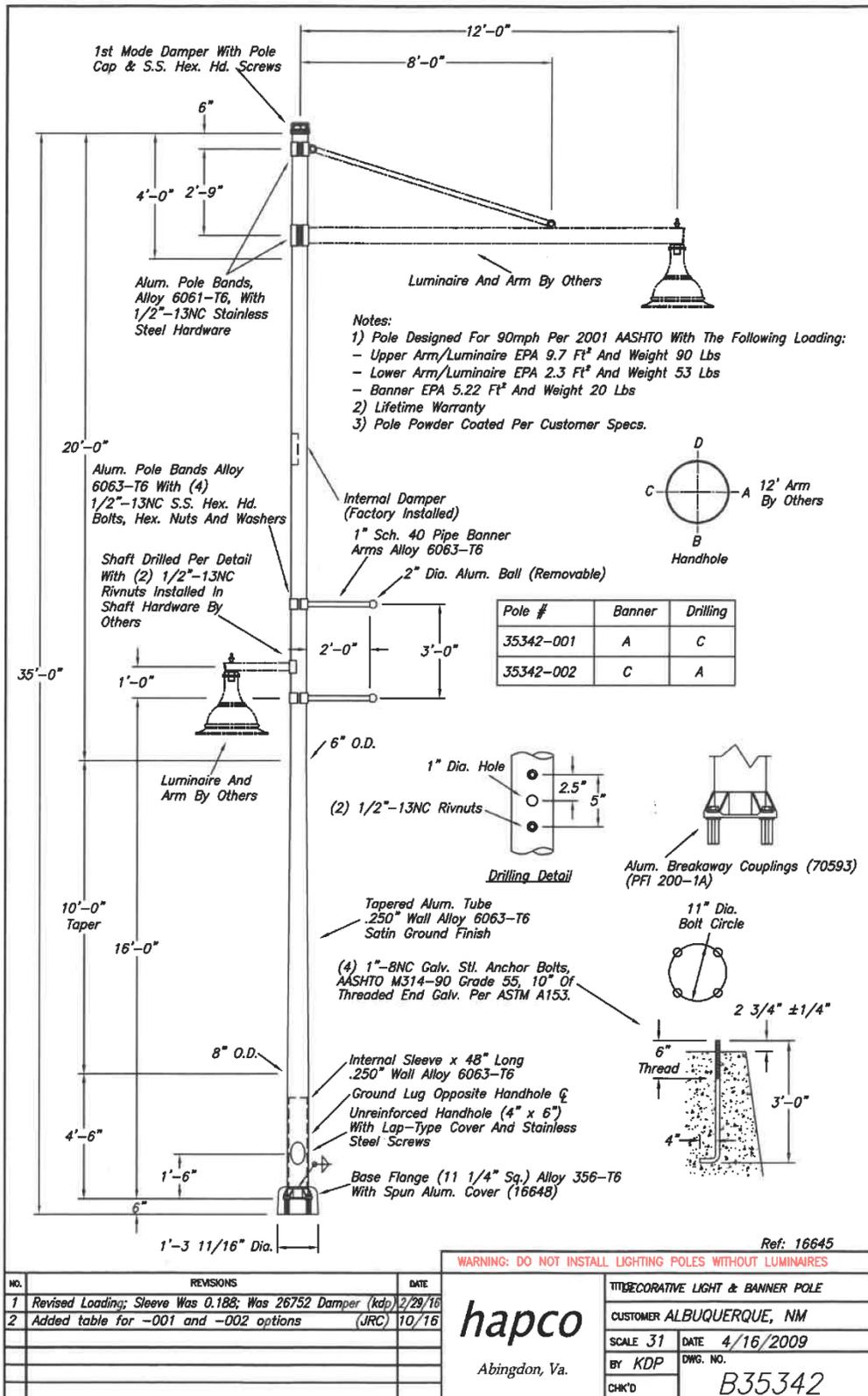
**WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES**

NO.	REVISIONS	DATE	TITLE
			TYPE A ROADWAY POLE
			CUSTOMER City of Albuquerque, NM
			SCALE 3/2 DATE 05/26/2010
			BY TNB DWG. NO.
			CHK'D B18665

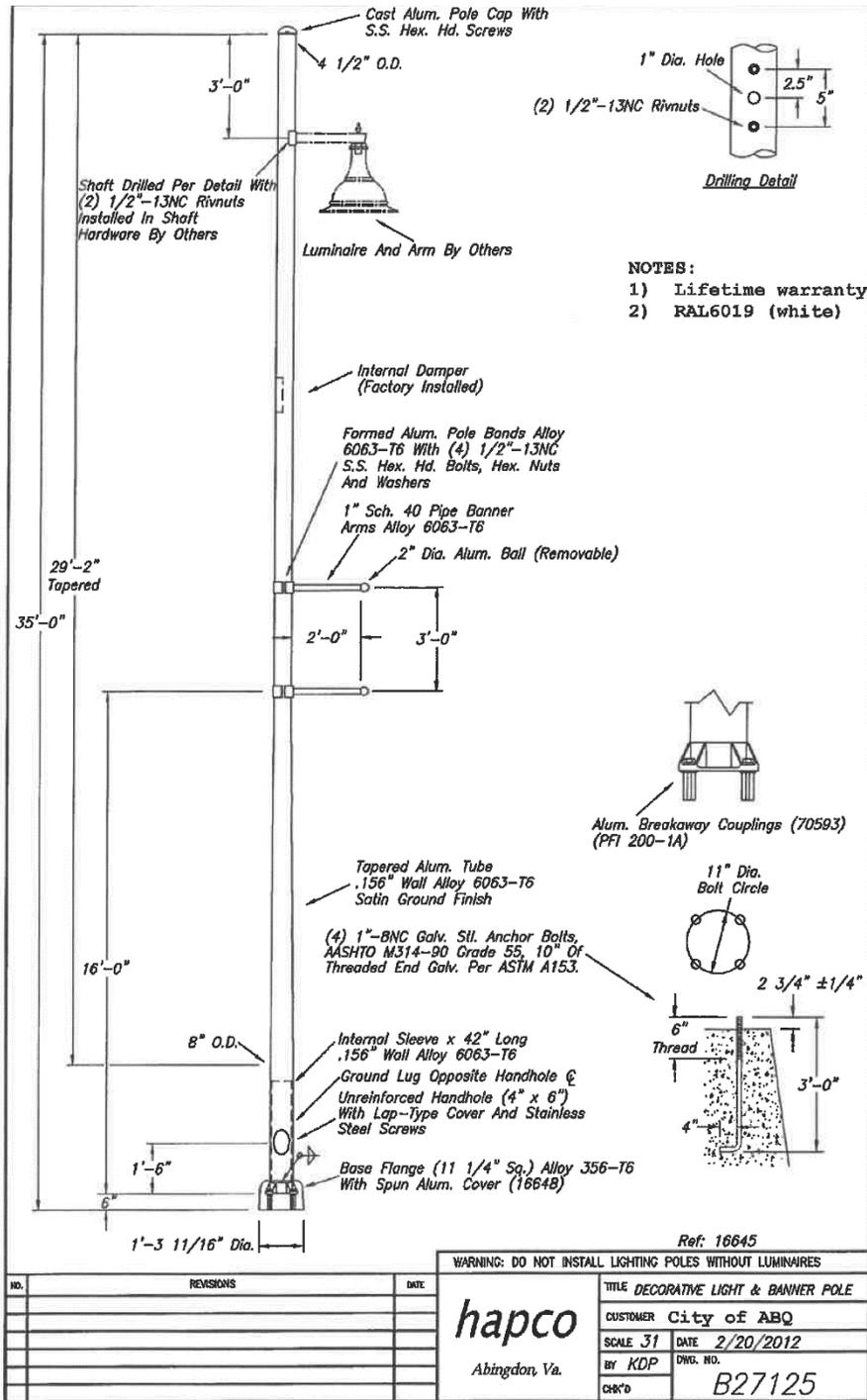
**hapco**  
Abingdon, Va.

B18665

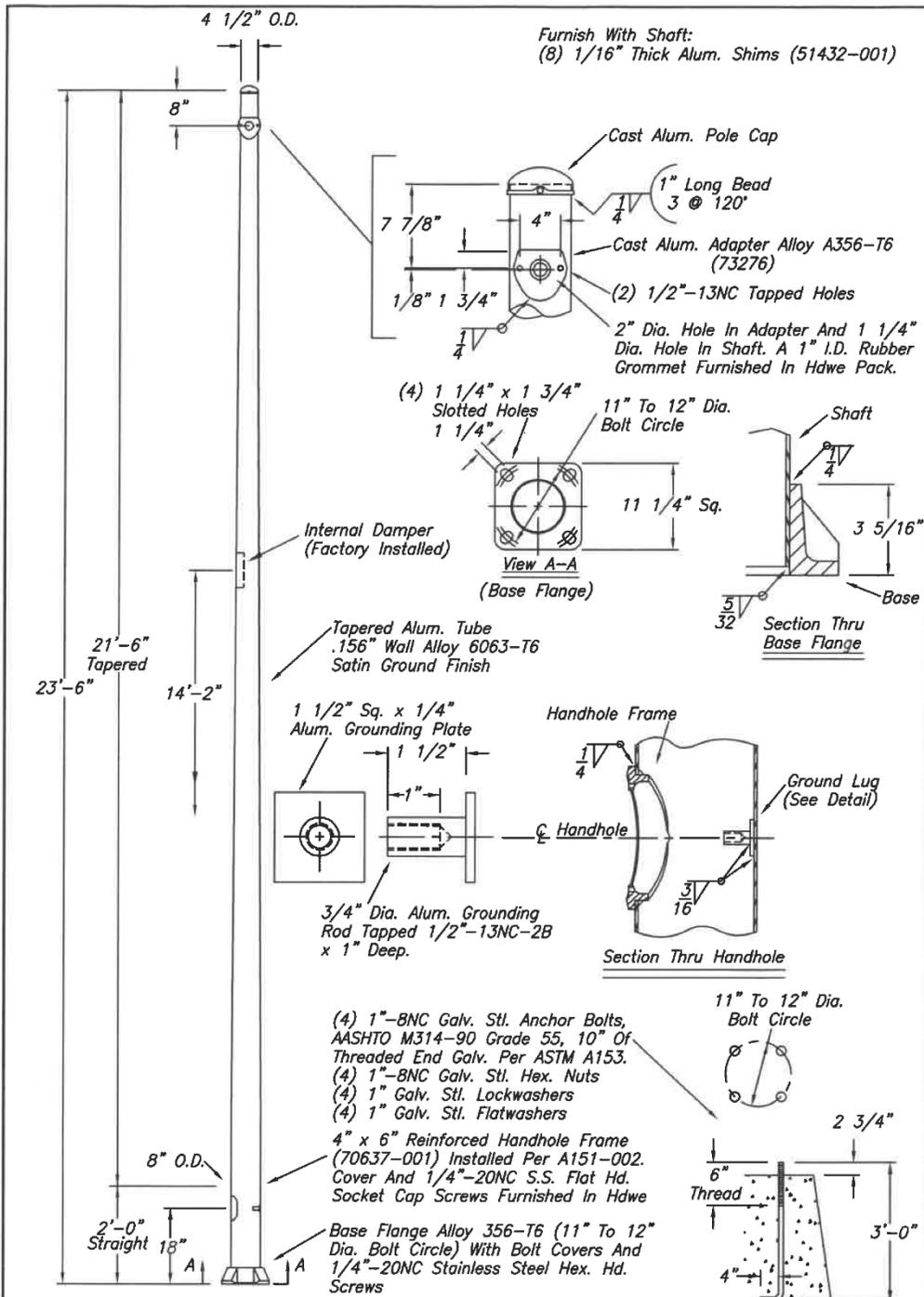




B35342



B27125



PNM Specification SL1(REV. 8)

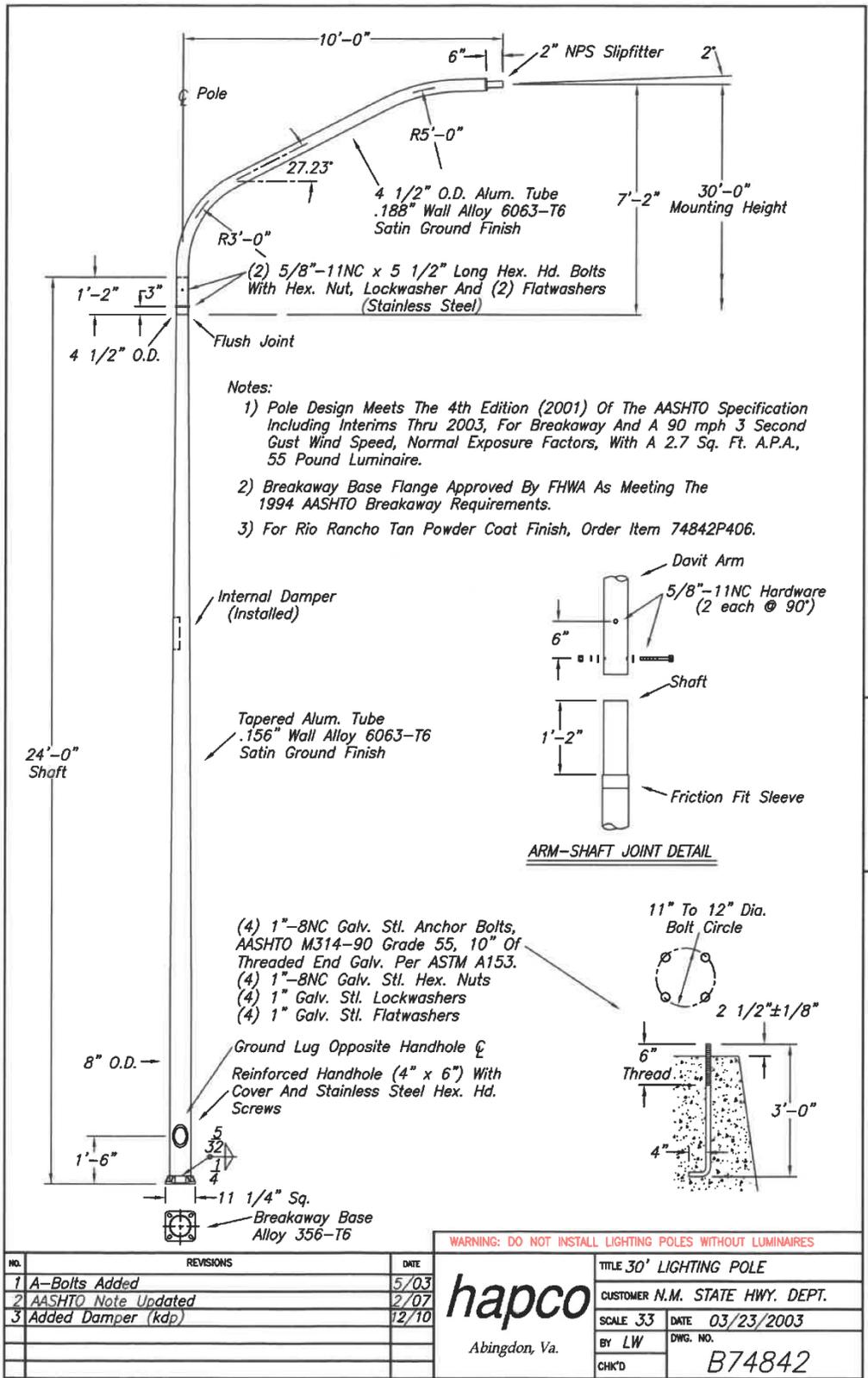
WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE
8.	Was 7" O.D. With Special Base Flange 53477	8/99
9.	79083 Grounding Plate Added	10/99
10	Was 1 1/2" Dia. Wire Hole	07/03
11	Grommet Was Installed	07/03
12	Moved HH Cvr To Hdwe Pack	10/09
13	Added Damper	10/11

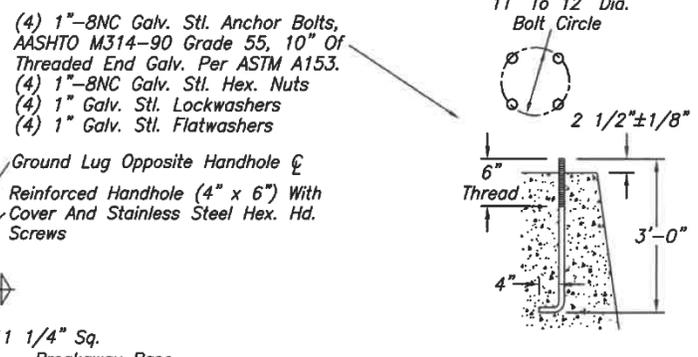
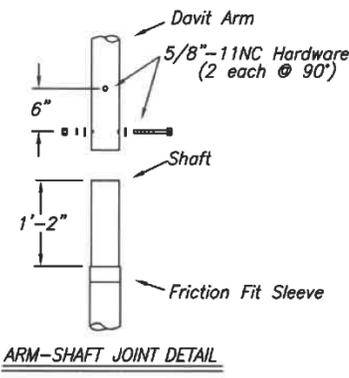
**hapco**  
Abingdon, Va.

TITLE SHAFT ASSEMBLY  
CUSTOMER PUBLIC SERVICE OF N.M.  
SCALE 24 DATE 8/25/93  
BY LW DWG. NO.  
CHK'D B65152

B65152

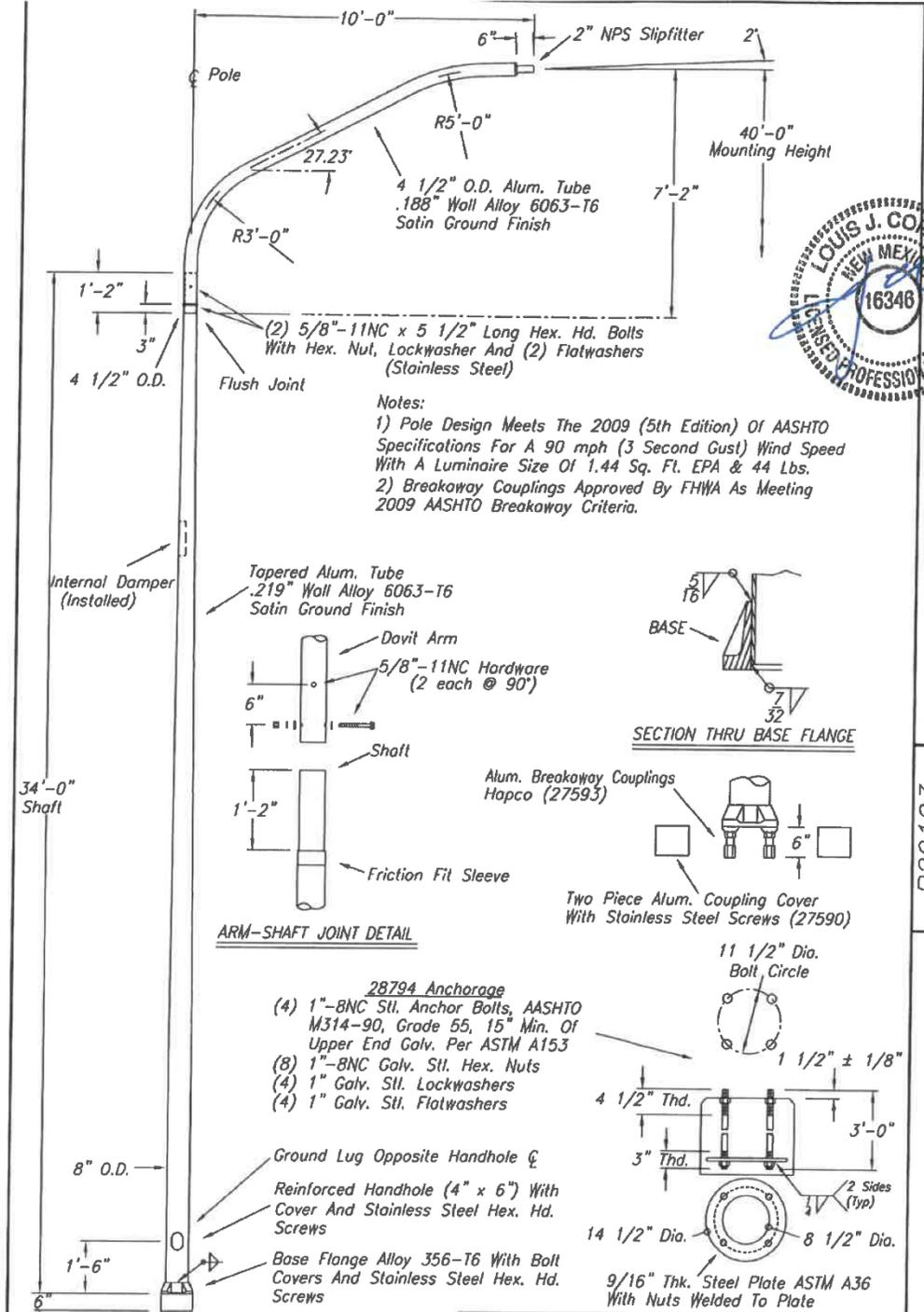


- Notes:
- 1) Pole Design Meets The 4th Edition (2001) Of The AASHTO Specification Including Interims Thru 2003, For Breakaway And A 90 mph 3 Second Gust Wind Speed, Normal Exposure Factors, With A 2.7 Sq. Ft. A.P.A., 55 Pound Luminaire.
  - 2) Breakaway Base Flange Approved By FHWA As Meeting The 1994 AASHTO Breakaway Requirements.
  - 3) For Rio Rancho Tan Powder Coat Finish, Order Item 74842P406.

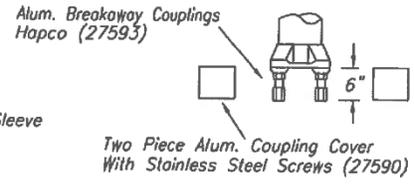
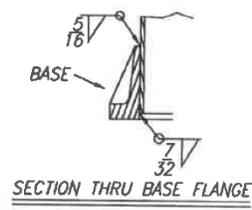
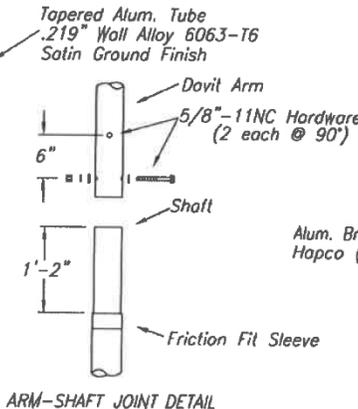


NO.	REVISIONS	DATE	WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES	
1	A-Bolts Added	5/03	<b>hapco</b> Abingdon, Va.	
2	AASHTO Note Updated	2/07		
3	Added Damper (kdp)	12/10		
			<b>TITLE 30' LIGHTING POLE</b> CUSTOMER N.M. STATE HWY. DEPT. SCALE 3/3 DATE 03/23/2003 BY LW DWG. NO. B74842 CHK'D	

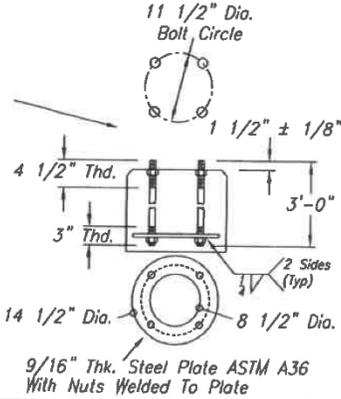
B74842



**Notes:**  
 1) Pole Design Meets The 2009 (5th Edition) Of AASHTO Specifications For A 90 mph (3 Second Gust) Wind Speed With A Luminaire Size Of 1.44 Sq. Ft. EPA & 44 Lbs.  
 2) Breakaway Couplings Approved By FHWA As Meeting 2009 AASHTO Breakaway Criteria.



**28794 Anchorage**  
 (4) 1"-BNC Stl. Anchor Bolts, AASHTO M314-90, Grade 55, 15" Min. Of Upper End Galv. Per ASTM A153  
 (8) 1"-BNC Galv. Stl. Hex. Nuts  
 (4) 1" Galv. Stl. Lockwashers  
 (4) 1" Galv. Stl. Flatwashers



Ground Lug Opposite Handhole  $\phi$   
 Reinforced Handhole (4" x 6") With Cover And Stainless Steel Hex. Hd. Screws  
 Base Flange Alloy 356-T6 With Bolt Covers And Stainless Steel Hex. Hd. Screws

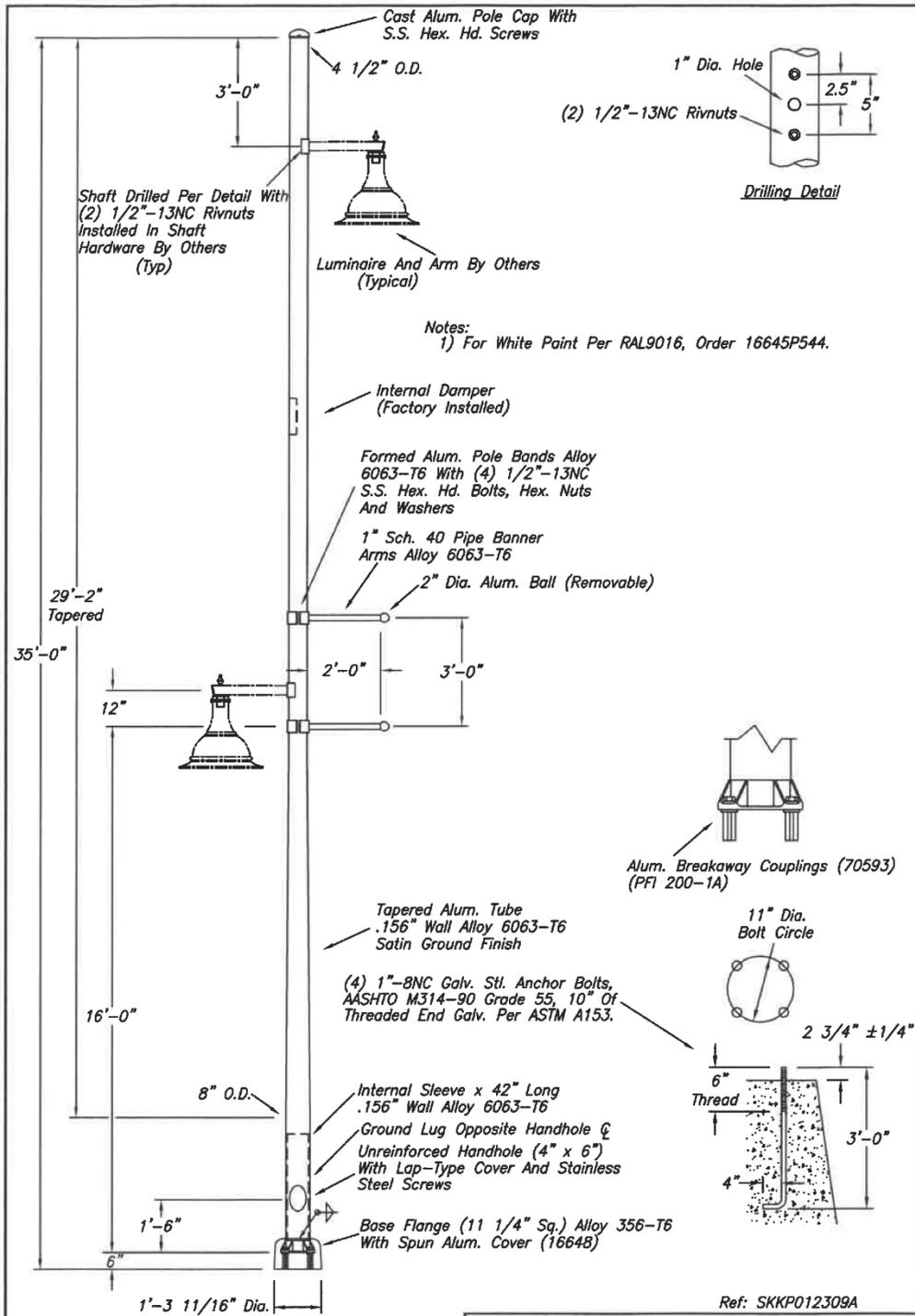
Ref: 78349

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

<b>hapco</b>		TITLE 40' LIGHTING POLE	
Abingdon, Va.		CUSTOMER NEW MEXICO DOT	
SCALE 32	DATE 1/29/2013	BY KDP	DWG. NO.
CHK'D		B29193	

NO.	REVISIONS	DATE

B29193

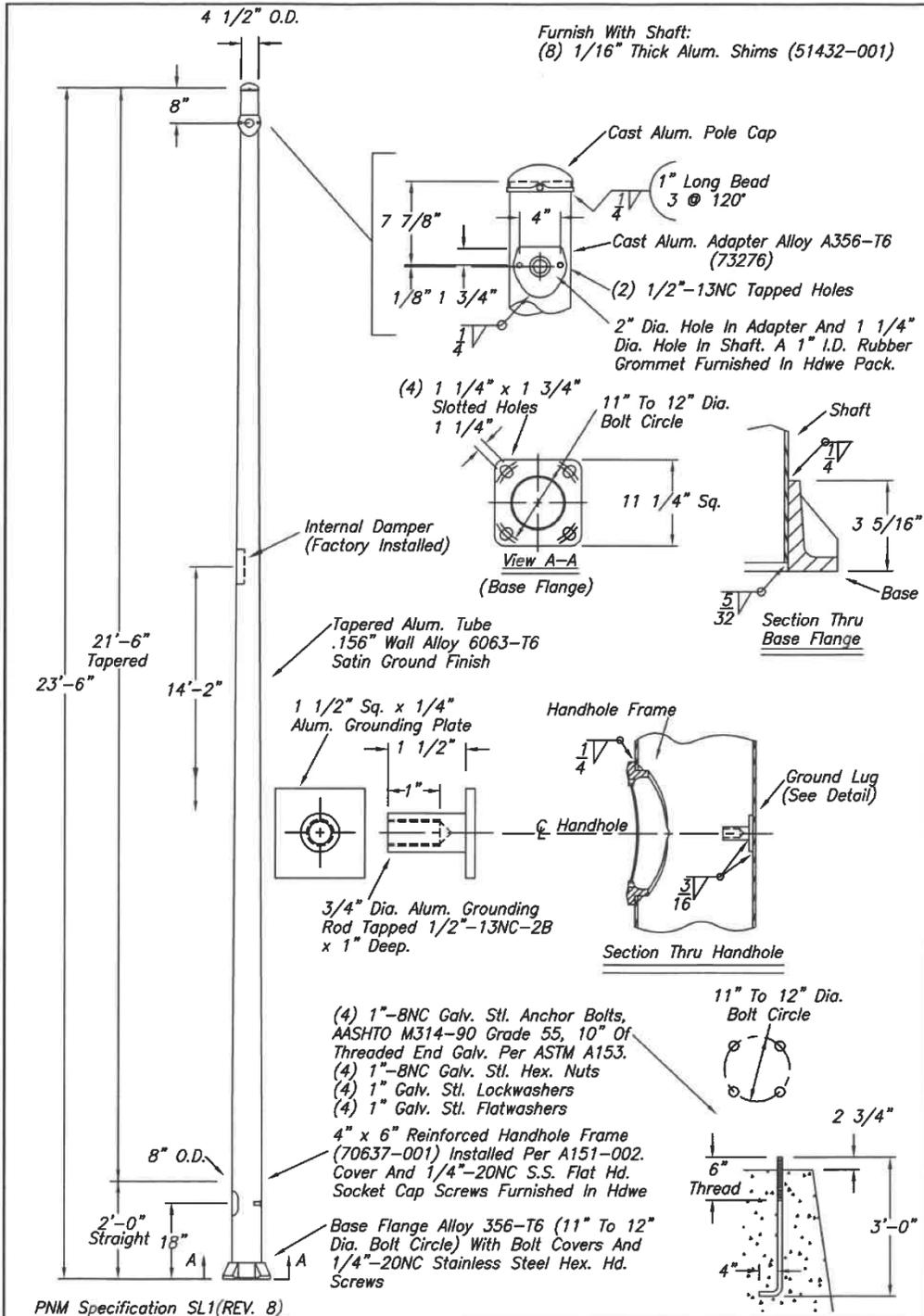


B16645

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE

 Abingdon, Va.		TITLE	DECORATIVE LIGHT & BANNER POLE
		CUSTOMER	ALBUQUERQUE, NM
SCALE	31	DATE	4/16/2009
BY	KDP	DWG. NO.	B16645
CHK'D			



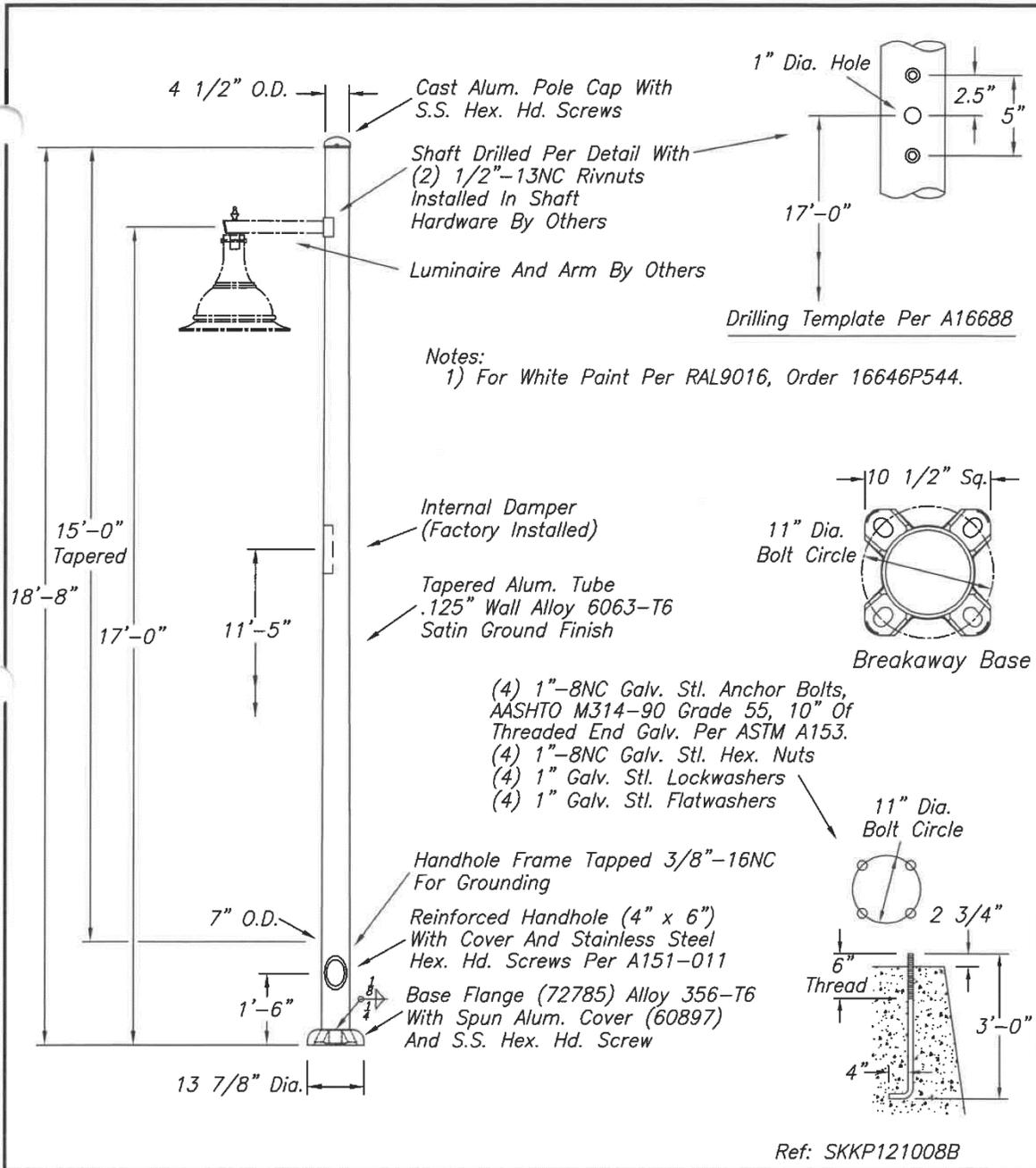
B65152

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

NO.	REVISIONS	DATE
8.	Was 7" O.D. With Special Base Flange 53477	8/99
9.	79083 Grounding Plate Added	10/99
10	Was 1 1/2" Dia. Wire Hole	07/03
11	Grommet Was Installed	07/03
12	Moved HH Cvr To Hdw Pack	10/09
13	Added Damper	10/11

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Abingdon, Va.

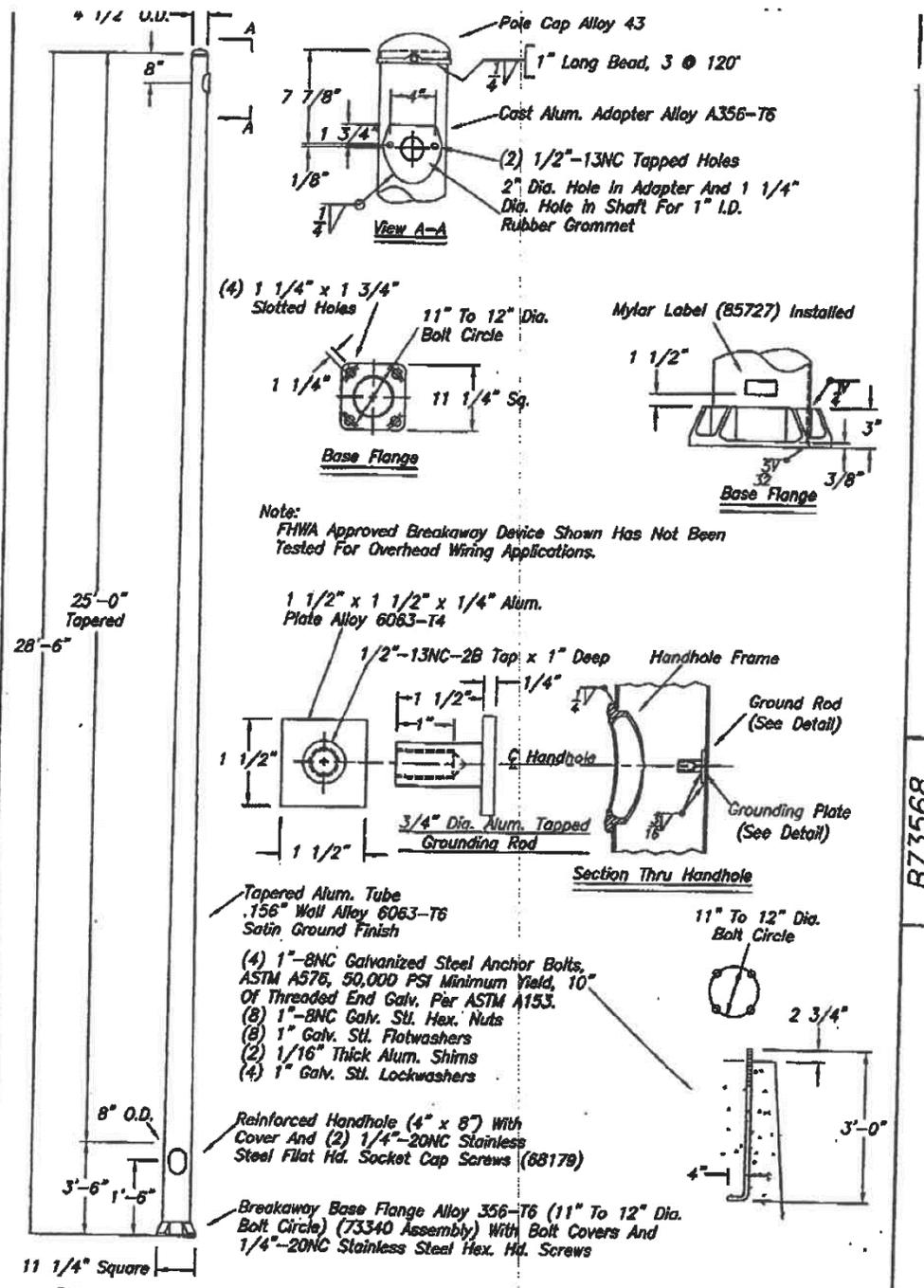
TITLE SHAFT ASSEMBLY  
CUSTOMER PUBLIC SERVICE OF N.M.  
SCALE 24 DATE 8/25/93  
BY LW DWG. NO.  
CHK'D B65152



NO.	REVISIONS	DATE
1	Was 60897 One Pc. Cover (kdp)	8/09
2	Was 87562C9 One Pc. Cover (LW)	8/09

**hapco**  
Abingdon, Va.

TITLE DECORATIVE LIGHTING POLE	
CUSTOMER ALBUQUERQUE, NM	
SCALE 30	DATE 4/16/2009
BY KDP	DWG. NO.
CHK'D	A16646



PNM Specification SL1 (Revision B)

NO.	REVISIONS	DATE
1.	Added Grounding Plate 78083	12/98
2.	Was 1 3/4" Dia. Wire Hole & 1 1/2" ID Grommet Installed	02/01
3.	Was 4" x 6" Handhole	12/02
4.	Grommet Was Installed	07/03
5.	ID Top was 73032 with 73317 screws	10/05

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES

**hapco**  
Abingdon, Va.

TITLE SHAFT ASS'Y (LIGHT DUTY)  
CUSTOMER PUBLIC SERVICE OF N.M.  
SCALE 3/2 DATE 08/21/93  
BY LW  
CHK'D B73568

B73568