

CITY OF RIO RANCHO RESIDENTIAL AND COLLECTOR LIGHTING STANDARDS

LIGHTING NOTES:

1. THE CONTRACTOR SHALL SUBMIT PERMITS TO THE DEVELOPMENT SERVICES BUILDING DIVISION AND PROJECT MANAGER AND COMPLETE INSPECTIONS AS REQUIRED BY THE DEVELOPMENT SERVICES BUILDING DIVISION AND NEW MEXICO ADMINISTRATIVE CODE (NMAC). SUBMITTALS SHALL BE PROVIDED TO THE PROJECT MANAGER AND APPROVED BY THE BUILDING DIVISION PRIOR TO CONSTRUCTION. SUBMITTALS SHALL INCLUDE PROPOSED EQUIPMENT AND A SITE MAP SHOWING LOCATIONS OF PEDESTALS, POLES, LUMINAIRES, CONDUIT, CONDUCTORS, ETC. SUBMITTALS SHALL ALSO INCLUDE A ONE-LINE DIAGRAM WITH ALL PERTINENT INFORMATION INCLUDING, BUT NOT LIMITED TO, GROUNDING DETAIL, VOLTAGE DROP CALCULATION, OVERCURRENT PROTECTION, ETC.
2. EXCEPT WHERE LIGHTING IS APPROVED BY THE CITY TRAFFIC SECTION MANAGER AS AN ADDITION TO AN EXISTING METERED CIRCUIT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PNM SERVICE APPLICATIONS IN THEIR OWN NAME AND SHALL RETAIN RESPONSIBILITY FOR THE STREET LIGHTS, INCLUDING ALL COSTS FOR PNM TO PROVIDE POWER SERVICE, UNTIL THE CITY HAS:
 - GRANTED FINAL ACCEPTANCE, AND
 - RECEIVED THE CONTRACTOR'S CLOSE OUT PACKET INCLUDING A LIST OF STREET LIGHT SERVICE ADDRESSES FOR TRANSFER TO THE CITY.

THE CITY WILL ASSUME RESPONSIBILITY FOR THE STREET LIGHT POWER SERVICE UPON RECEIPT OF THE CONTRACTOR'S FINAL CLOSE OUT PACKET AND WILL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH THE POWER SERVICE THEREAFTER.
3. REFER TO SHEETS 2 THROUGH 4 OF TSSL-03 FOR APPROVED LUMINAIRES AND POLES BY ROADWAY FUNCTIONAL CLASSIFICATION AND TYPICAL SECTION.
4. UBICQUA UBICELL 3I SMART NODES SHALL BE INSTALLED ON ALL LUMINAIRES. THE CONTRACTOR SHALL REQUEST THE NODES BE PREPROGRAMMED TO THE CITY OF RIO RANCHO NM PANEL AT POINT OF PURCHASE.
5. ALL LIGHTING DISCONNECT PEDESTALS SHALL BE MILBANK 5200-XL (UNMETERED SMALL CLOSING PLATE SINGLE PEDESTAL DIRECT BURY) OR EQUIVALENT. THESE PEDESTALS SHALL BE LISTED AS SUITABLE FOR USE AS SERVICE EQUIPMENT PER NEC 230.66. EQUIPMENT AND CONDUCTORS SHALL BE LISTED, INSTALLED, AND APPROVED FOR USE IN COMPLIANCE WITH THE NEC. ELECTRICAL CONNECTIONS SHALL ADHERE TO NEC ARTICLE 110.14.
6. EQUIPMENT GROUNDS SHALL BE BONDED TO THE POLE. GROUND RODS SHALL NOT BE INSTALLED IN POLE FOUNDATIONS.
7. TOTAL CONDUCTOR RUNS FOR 120 VOLTS SHALL BE NO LONGER THAN 500 FEET FROM THE PNM PEDESTAL/TRANSFORMER/POWER SOURCE TO THE STREET LIGHT POLE BASE. A PULL BOX IS REQUIRED WHERE ACCESS POINTS EXCEED 300 FEET. IF CONDUCTOR RUNS OR VOLTAGE EXCEEDS THESE PARAMETERS OR MULTIPLE LUMINAIRES ARE TO BE INSTALLED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE A VOLTAGE DROP CALCULATION AND SELECT THE APPROPRIATE WIRE GAUGE AS PART OF THE ELECTRICAL PERMIT APPLICATION.
8. UNDERGROUND WIRING SHALL BE INSTALLED IN 2 INCH PVC CONDUIT, SCHEDULE 40, BELOW GRADE AND SCHEDULE 80 PVC ABOVE GRADE. BURIED CONDUIT RUNS SHALL NOT BE LESS THAN 24 INCHES BELOW THE GROUND SURFACE. MAXIMUM DEPTH SHALL BE 48 INCHES. ANY DEVIATIONS SHALL BE PROVIDED TO THE PROJECT MANAGER AND APPROVED BY THE CITY TRAFFIC SECTION MANAGER. ALL 45- AND 90-DEGREE CONDUIT BENDS SHALL HAVE A RADIUS GREATER THAN 18 INCHES. ONLY FACTORY BENDS SHALL BE USED. ALL JOINTS BETWEEN THE PVC CONDUITS (COUPLINGS AND FITTINGS) SHALL BE PREPARED WITH PURPLE PRIMER AND CEMENTED WITH GRAY PVC CEMENT.
9. OPEN TRENCHING WILL NOT BE PERMITTED WHERE STREET LIGHT CONDUITS ARE REQUIRED TO CROSS EXISTING SIDEWALKS, ROADWAYS, OR TURNOUTS.
10. LOCATIONS OF CONDUITS, FOUNDATIONS, PULL BOXES, AND CONTROL CABINETS SHOWN ON THE PLANS SHALL BE ADJUSTED IN THE FIELD TO AVOID UTILITIES AND TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. ANY DEVIATIONS FROM THE SUBMITTED PLANS OR LIGHTING LETTER SHALL BE PROVIDED TO THE PROJECT MANAGER AND APPROVED BY THE CITY'S TRAFFIC SECTION MANAGER.
11. ALL STREET LIGHT EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT IN A MANNER THAT DOES NOT CONFLICT WITH UTILITIES. SERVICE EQUIPMENT SHALL BE INSTALLED BEHIND SIDEWALK WITHIN THE RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT. DISCONNECT/OVERCURRENT PROTECTION SHALL MEET ALL CLEAR SPACE REQUIREMENTS PER PNM AND NEC CODES.
12. EARTH SURROUNDING FOUNDATIONS, DISCONNECT PEDESTALS, PULL BOXES, CONDUITS, AND ALL OTHER COMPONENTS SHALL BE COMPACTED PER NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SECTION 203: EXCAVATION, BORROW, AND EMBANKMENT.

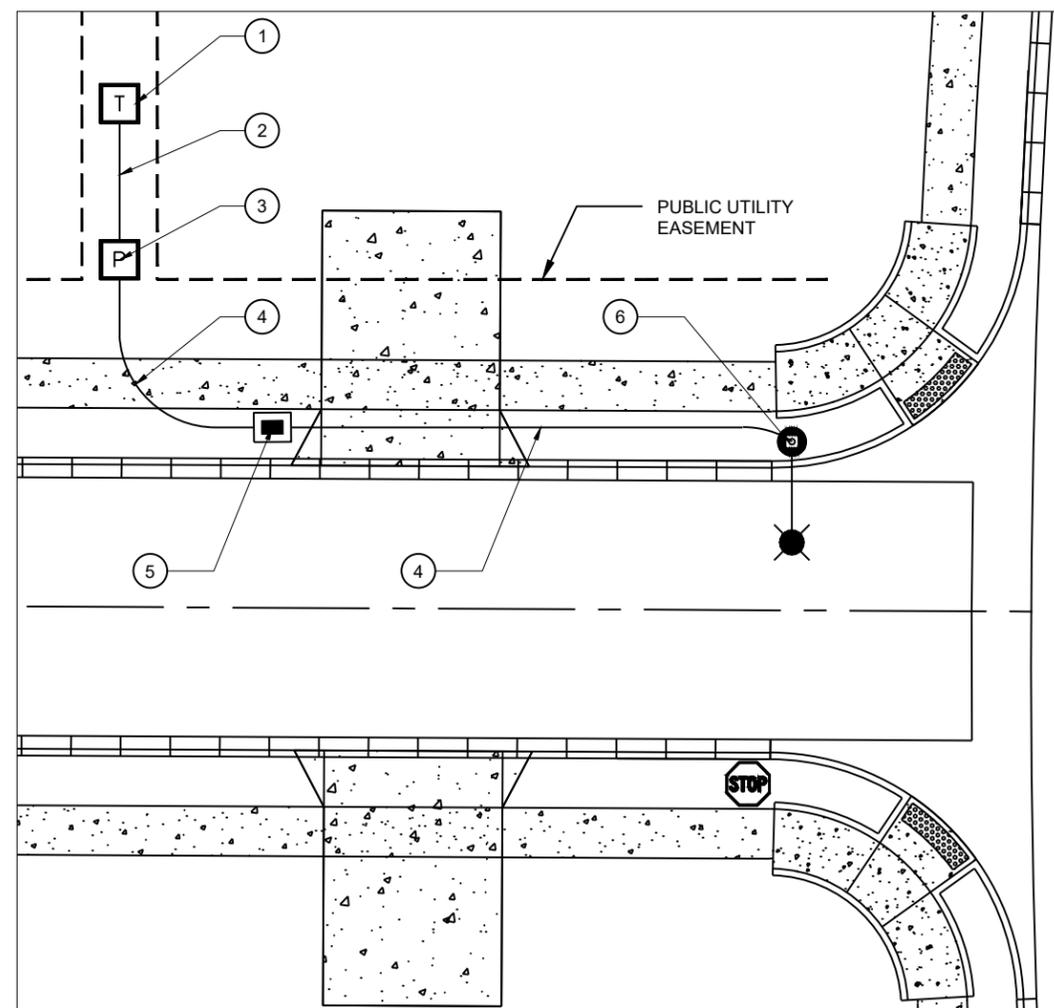
KEYED LIGHTING NOTES:

- ① PNM INSTALLED TRANSFORMER OR SECONDARY PEDESTAL. CONTACT PNM FOR LOCATION DETAILS.
- ② INSTALL NEW SCHEDULE 40 PVC ELECTRICAL CONDUIT - 2". INSTALL NEW SINGLE CONDUCTOR #6 AWG MINIMUM INSULATED COPPER. (3 EACH - 2 UNGROUNDED, 1 GROUNDED).
- ③ INSTALL NEW UNMETERED LIGHTING DISCONNECT PEDESTAL.
- ④ INSTALL NEW SCHEDULE 40 PVC ELECTRICAL CONDUIT - 2". INSTALL NEW SINGLE CONDUCTOR #10 AWG. MINIMUM COPPER (3 EACH).
- ⑤ INSTALL NEW ELECTRICAL PULL BOX (STANDARD) ONLY WHERE ACCESS RUNS EXCEED 300'. REFER TO DWG. NO. TSSL-06.
- ⑥ INSTALL NEW FOUNDATION, STREET LIGHT POLE, AND LED LUMINAIRE WITH SMART NODE.

LEGEND:

- | | |
|-------------|--------------------------------------|
| T | TRANSFORMER OR SECONDARY PEDESTAL |
| P | DISCONNECT PEDESTAL |
| [] | PULL BOX (STANDARD) |
| [] --- [] | STREET LIGHT STANDARD WITH LUMINAIRE |
| --- | PUBLIC UTILITY EASEMENT (PUE) |
| --- | CONDUIT RUN (LIGHTING) |

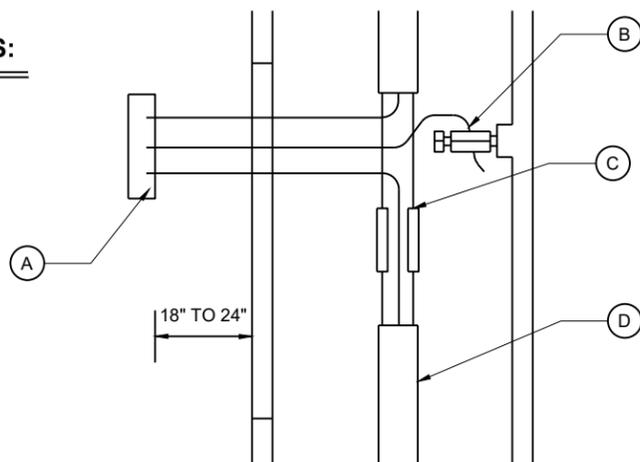
TYPICAL INSTALLATION DETAIL



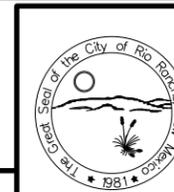
POLE GROUNDING DETAIL

GROUNDING DETAIL KEYED NOTES:

- | | |
|---|---------------------------------|
| A | CONNECTOR |
| B | STREET LIGHT POLE GROUND LUG |
| C | INSULATED CONNECTOR |
| D | #10 AWG MINIMUM COPPER (3 EACH) |



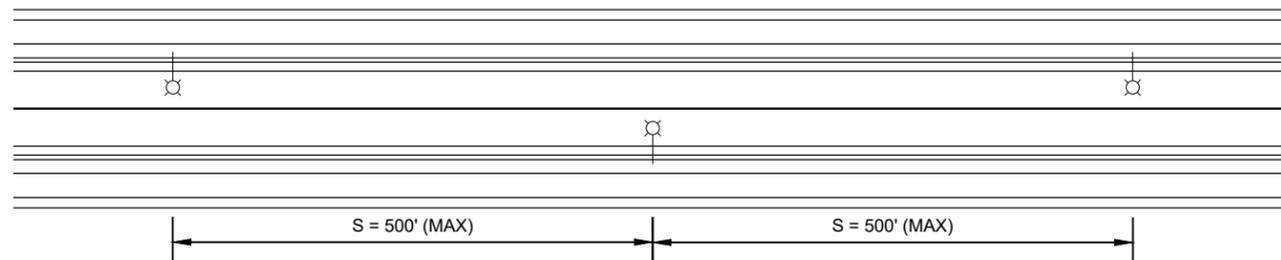
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City of Rio Rancho
Department of Public Works

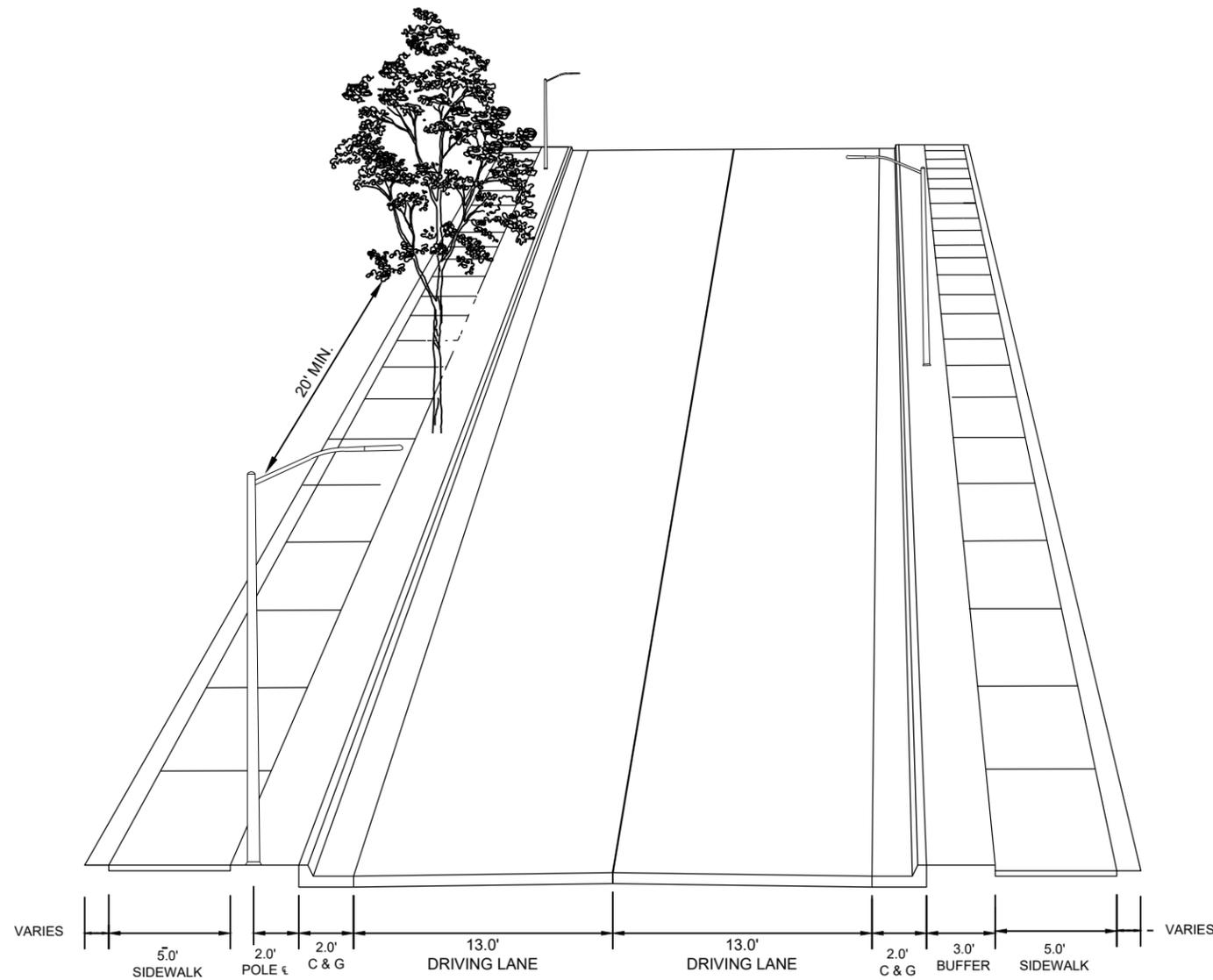
RESIDENTIAL AND COLLECTOR LIGHTING
STANDARDS

DWG. NO. TSSL-03, SHEET 1 OF 3 April 21, 2025



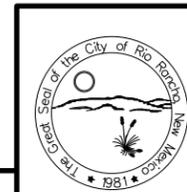
ROADWAY LIGHTING STANDARD	
RESIDENTIAL STREET	
STREET SECTION STANDARD	TS-01
FOUNDATION	18" Standard PNM - 5975-258780
POLE HEIGHT	23.6' Alum - 5680-000014
POLE ARM	6' Alum - A26856
POLE CONFIGURATION	Staggered
SPACING (NEW R.O.W.)	S = 500' (MAX)
LUMINAIRE	ATBX P40 MVOLT R2 3K P7
SMART CONTROL	Ubicquia Ubicell 3.0
ACCESSORIES	

LIGHTING NOTE:
 1. POLE COLOR SHALL BE BARE SPUN ALUMINUM.



RESIDENTIAL STREET SECTION
 BUFFER PLACEMENT

NOT TO SCALE

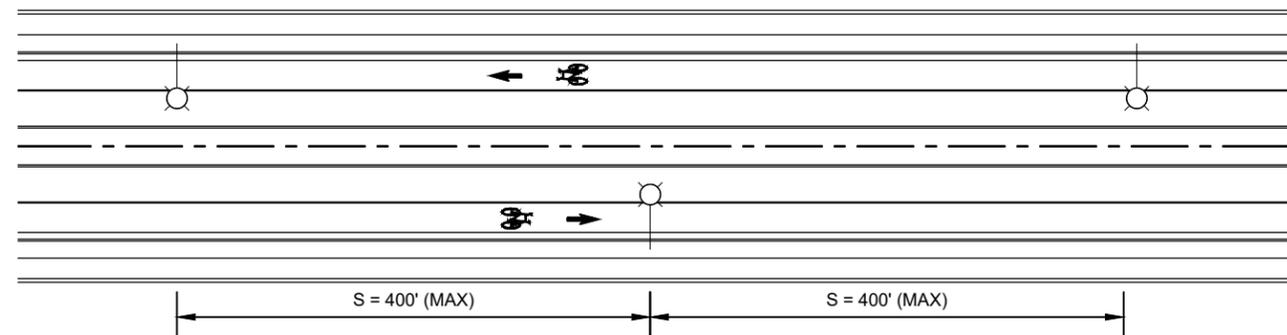


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 Department of Public Works

ROADWAY LIGHTING STANDARD
 TYPICAL STREET SECTION
 RESIDENTIAL STREET

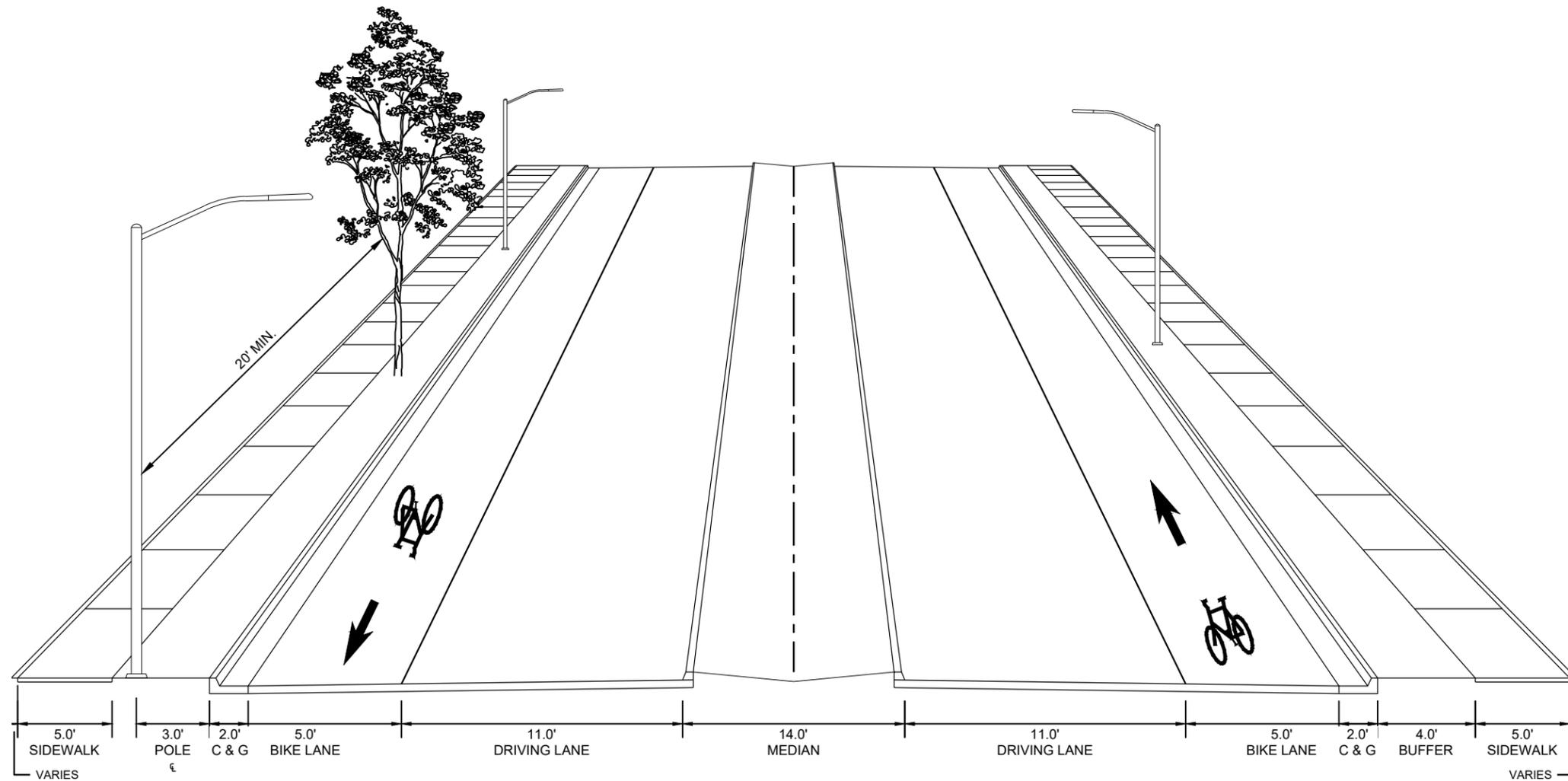
DWG. NO. TSSL-03, SHEET 2 OF 3 April 21, 2025

DATE MODIFIED:



ROADWAY LIGHTING STANDARD	
COLLECTOR STREET	
STREET SECTION STANDARD	TS-02
FOUNDATION	2' Standard PNM - 5975-269233
POLE HEIGHT	28.5' Alum - 5680-000014
POLE ARM	6' Alum - A26856
POLE CONFIGURATION	Staggered
SPACING (NEW R.O.W.)	S = 400' (MAX)
LUMINAIRE	ATBS P20 MVOLT R2 4K P7
SMART CONTROL	Ubicquia Ubicell 3.0
ACCESSORIES	

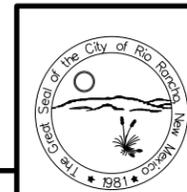
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COLLECTOR STREET SECTION
 BUFFER PLACEMENT

NOT TO SCALE

DATE MODIFIED:



City of Rio Rancho
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ROADWAY LIGHTING STANDARD
 TYPICAL STREET SECTION
 COLLECTOR STREET

DWG. NO. TSSL-03, SHEET 3 OF 3 April 21, 2025