

CITY OF RIO RANCHO ARTERIAL LIGHTING STANDARDS

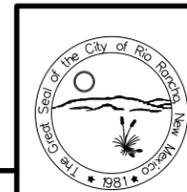
GENERAL NOTES:

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 3 THROUGH 6 OF TSSL-04 FOR APPROVED LUMINAIRES AND POLES BY ROADWAY FUNCTIONAL CLASSIFICATION AND TYPICAL SECTION.
4. UBIQUITA 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. STREET LIGHT CIRCUITS SHALL BE 240 VOLTS. LIGHTING PEDESTALS, CONDUCTORS, CONDUITS, AND COMPONENTS SHALL BE LISTED AND APPROVED FOR USE IN COMPLIANCE WITH NATIONAL ELECTRICAL CODE (NEC) ARTICLE 110. 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. APPROVED RIO RANCHO STANDARD SERVICE PEDESTALS AND CONTROL CABINETS ARE SHOWN IN TABLE 1.
6. EQUIPMENT GROUNDS SHALL BE BONDED TO THE POLE. GROUND RODS SHALL BE INSTALLED IN ALL POLE FOUNDATIONS.
7. 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.
8. A PULL BOX IS REQUIRED WHERE ACCESS POINTS EXCEED 300 FEET. ALUMINUM FLOOD SEAL® MULTI-PORT CONNECTORS SHALL BE USED ON ALL PULL BOX SPLICES.
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 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.

TABLE 1: APPROVED RIO RANCHO STANDARD SERVICE PEDESTAL AND CONTROL CABINETS						
SERVICE TYPE	ROADWAY CLASS	VOLTAGE	CIRCUIT QUANTITY	MANUFACTURER	PART NUMBER	AGENCY STANDARD DRAWING
UNMETERED	ARTERIAL	240	2	TESCO	L2UM	NMDOT 706L-07-2/2
UNMETERED	ARTERIAL	240	6	TESCO	L6UM	NMDOT 706L-08-2/2
METERED	ARTERIAL	240	2	TESCO	L2M	NMDOT 706-07-1/2
METERED	ARTERIAL	240	6	TESCO	L6M	NMDOT 706-L-08-1/2

NOT TO SCALE



City of Rio Rancho
Department of Public Works

ARTERIAL LIGHTING STANDARDS

DATE MODIFIED:

DWG. NO. TSSL-04, SHEET 1 OF 6 April 21, 2025

CITY OF RIO RANCHO ARTERIAL LIGHTING STANDARDS

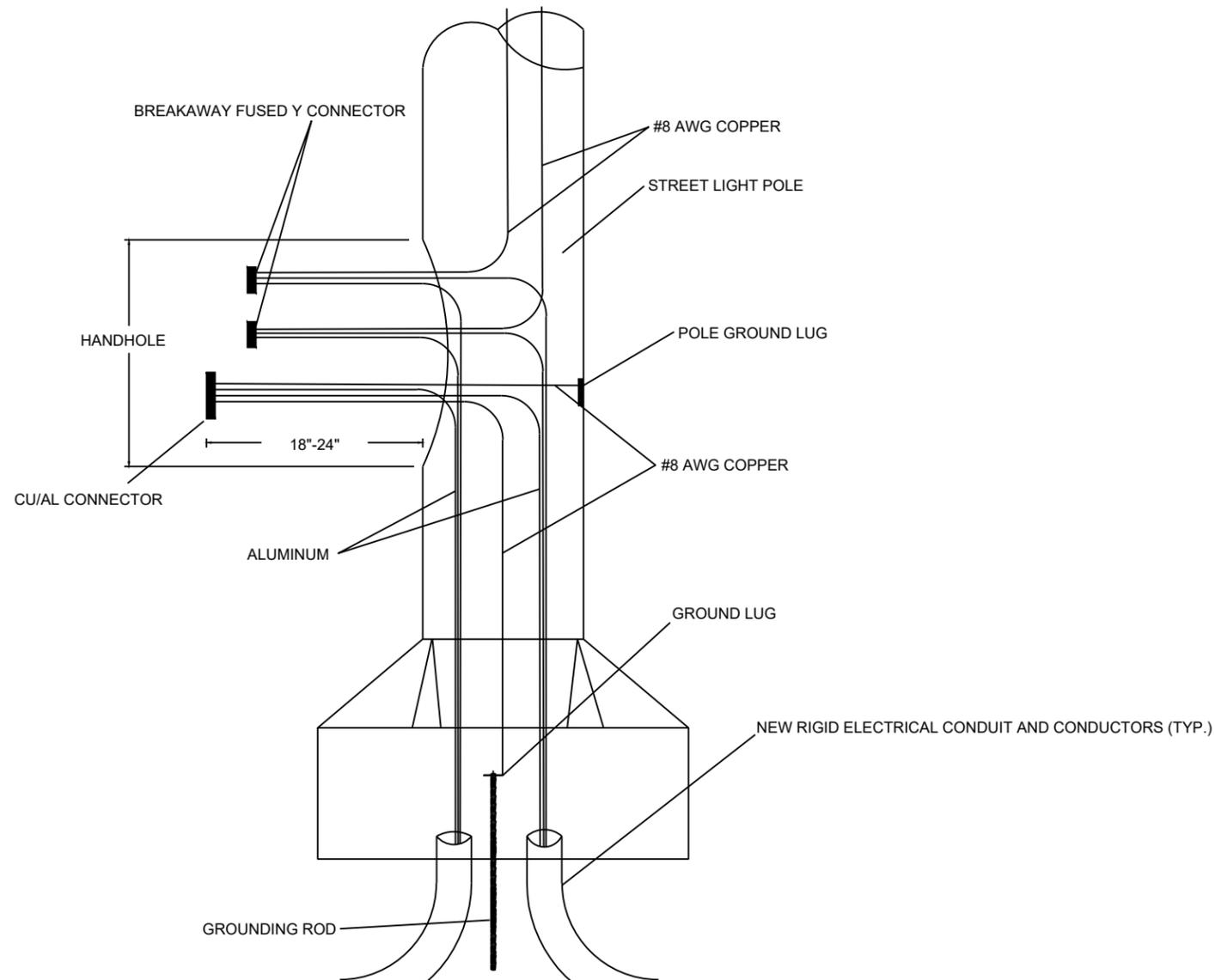
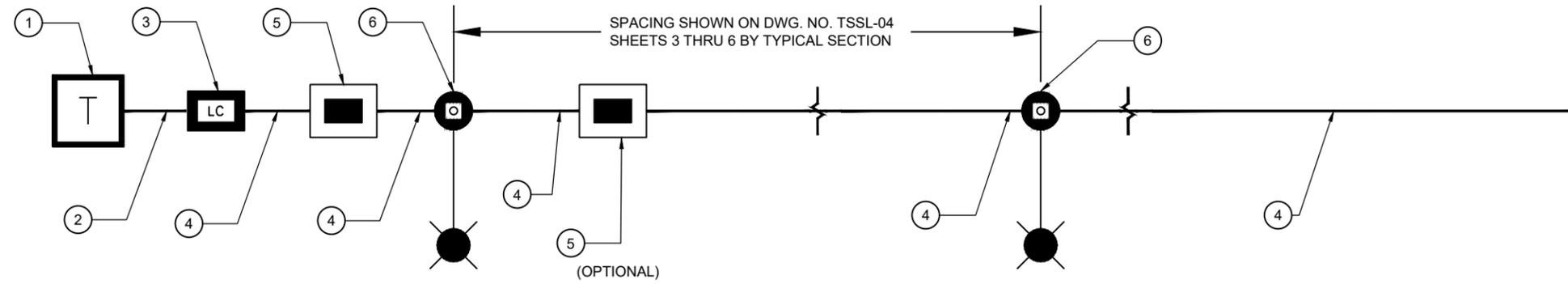
TYPICAL INSTALLATION DETAILED SCHEMATIC

KEYED LIGHTING NOTES

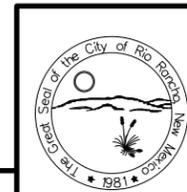
- ① PNM INSTALLED TRANSFORMER OR SECONDARY PEDESTAL. CONTACT PNM FOR LOCATION DETAILS.
- ② INSTALL NEW SCHEDULE 40 PVC ELECTRICAL CONDUIT - 2". INSTALL NEW SINGLE CONDUCTOR #6 AWG MINIMUM INSULATED COPPER. (3 EACH - 2 UNDERGROUND AND 1 GROUNDED).
- ③ INSTALL METERED LIGHTING CONTROL CABINET.
- ④ INSTALL NEW SCHEDULE 40 PVC ELECTRICAL CONDUIT - 2". INSTALL NEW SINGLE CONDUCTOR #2 AWG MINIMUM ALUMINUM (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:

-  TRANSFORMER OR SECONDARY PEDESTAL
-  LIGHTING CONTROL CABINET
-  PULL BOX (LIGHTING)
-  STREET LIGHT STANDARD WITH LUMINAIRE
-  CONDUIT RUN (LIGHTING)



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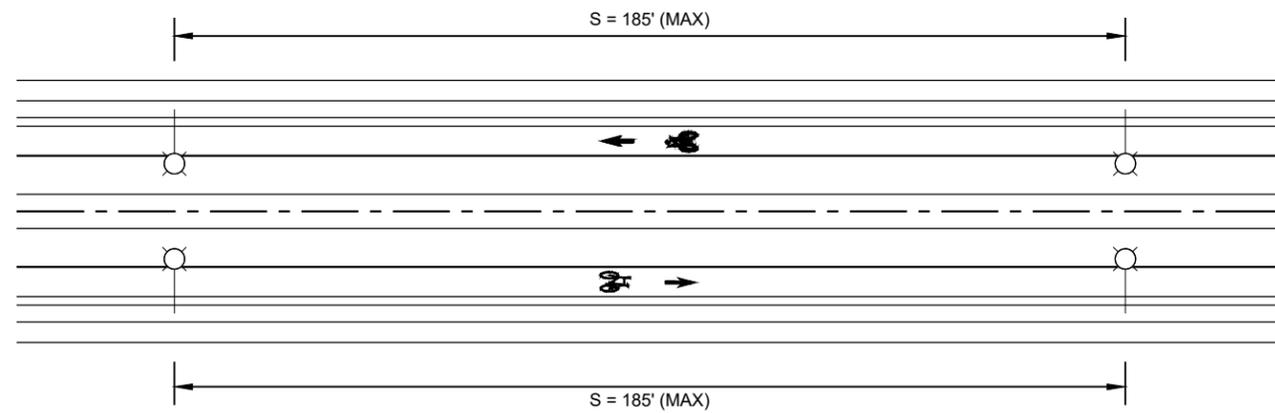


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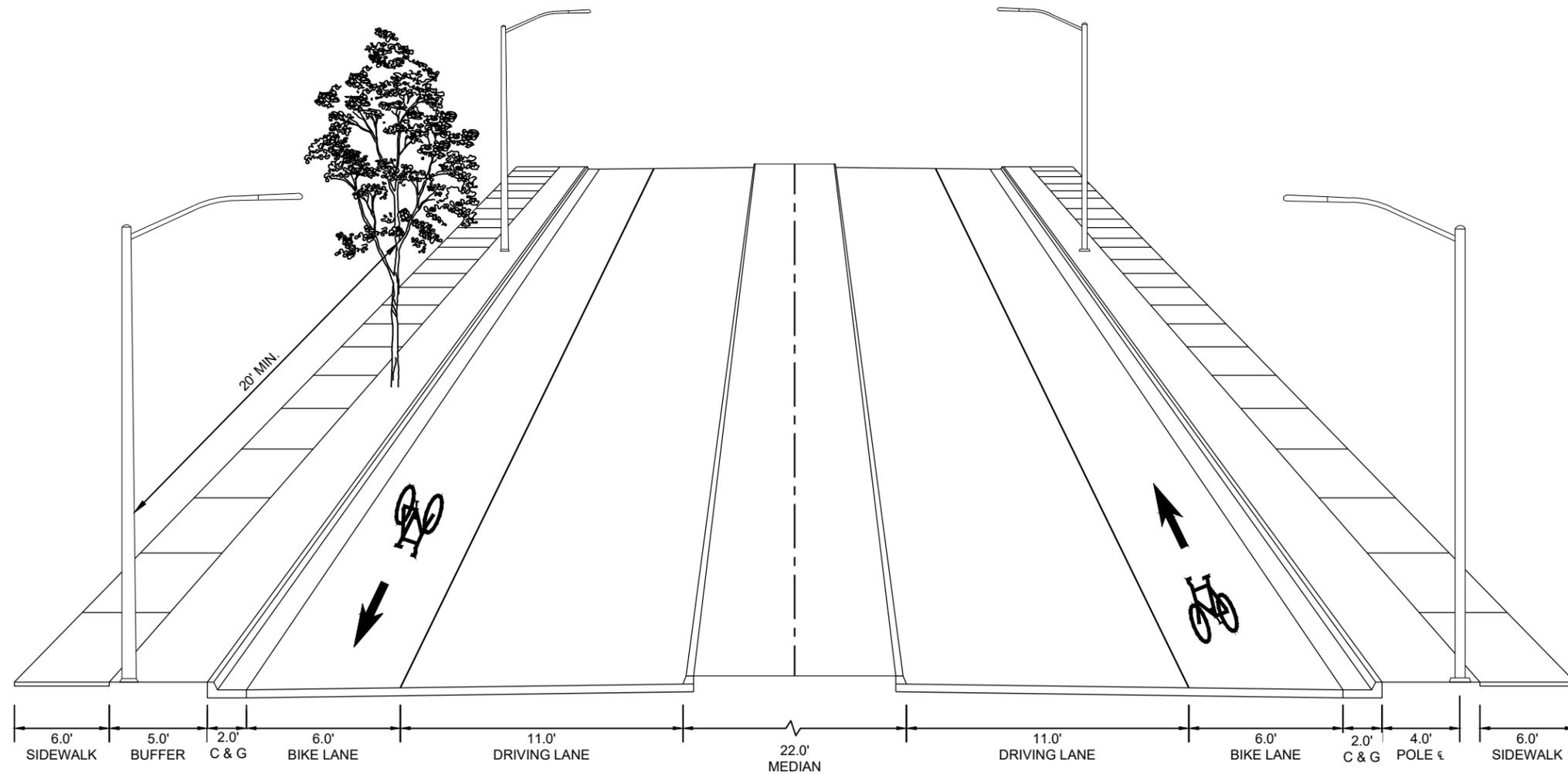
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DWG. NO. TSSL-04, SHEET 2 OF 6 April 21, 2025



ROADWAY LIGHTING STANDARD	
2 LANE MINOR ARTERIAL	
STREET SECTION STANDARD	TS-04
FOUNDATION	2' Standard PNM - 5975-269233
POLE HEIGHT	28.5' Alum - B73568
POLE ARM	6' Alum - A26856
POLE CONFIGURATION	Opposite
SPACING (NEW R.O.W.)	S = 185' (MAX)
LUMINAIRE	ATBS P60 MVOLT R2 4K
SMART CONTROL	Ubicquia Ubicell 3.0
ACCESSORIES	

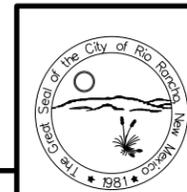
LIGHTING NOTE:
 1. POLES SHALL BE POWDER COATED AS REQUIRED BY THE CITY OF RIO RANCHO. THE CONTRACTOR SHALL SUBMIT COLOR SAMPLES TO THE CITY OF RIO RANCHO PROJECT MANAGER FOR APPROVAL PRIOR TO CONSTRUCTION.



2 LANE MINOR ARTERIAL
 BUFFER PLACEMENT

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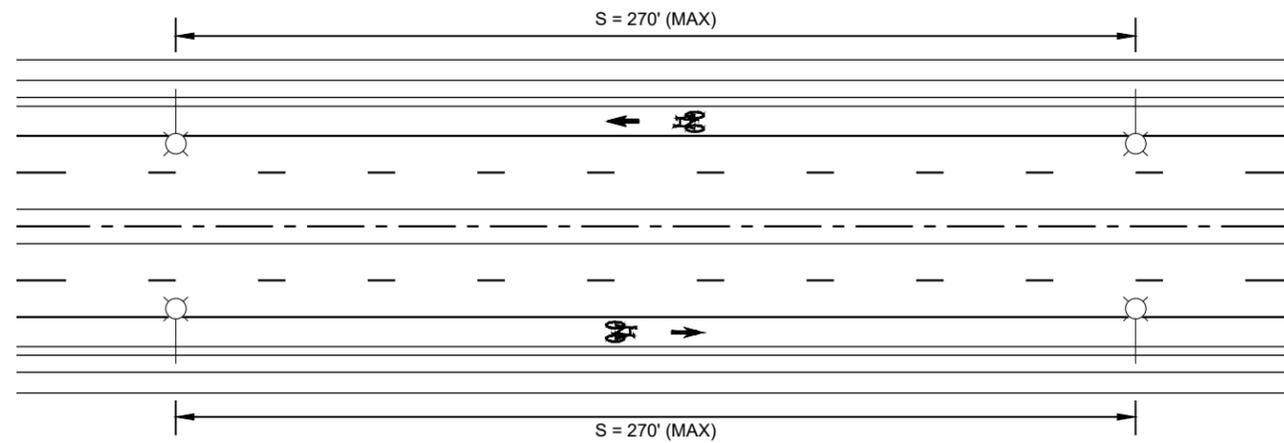
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ROADWAY LIGHTING STANDARD
 2 LANE MINOR ARTERIAL
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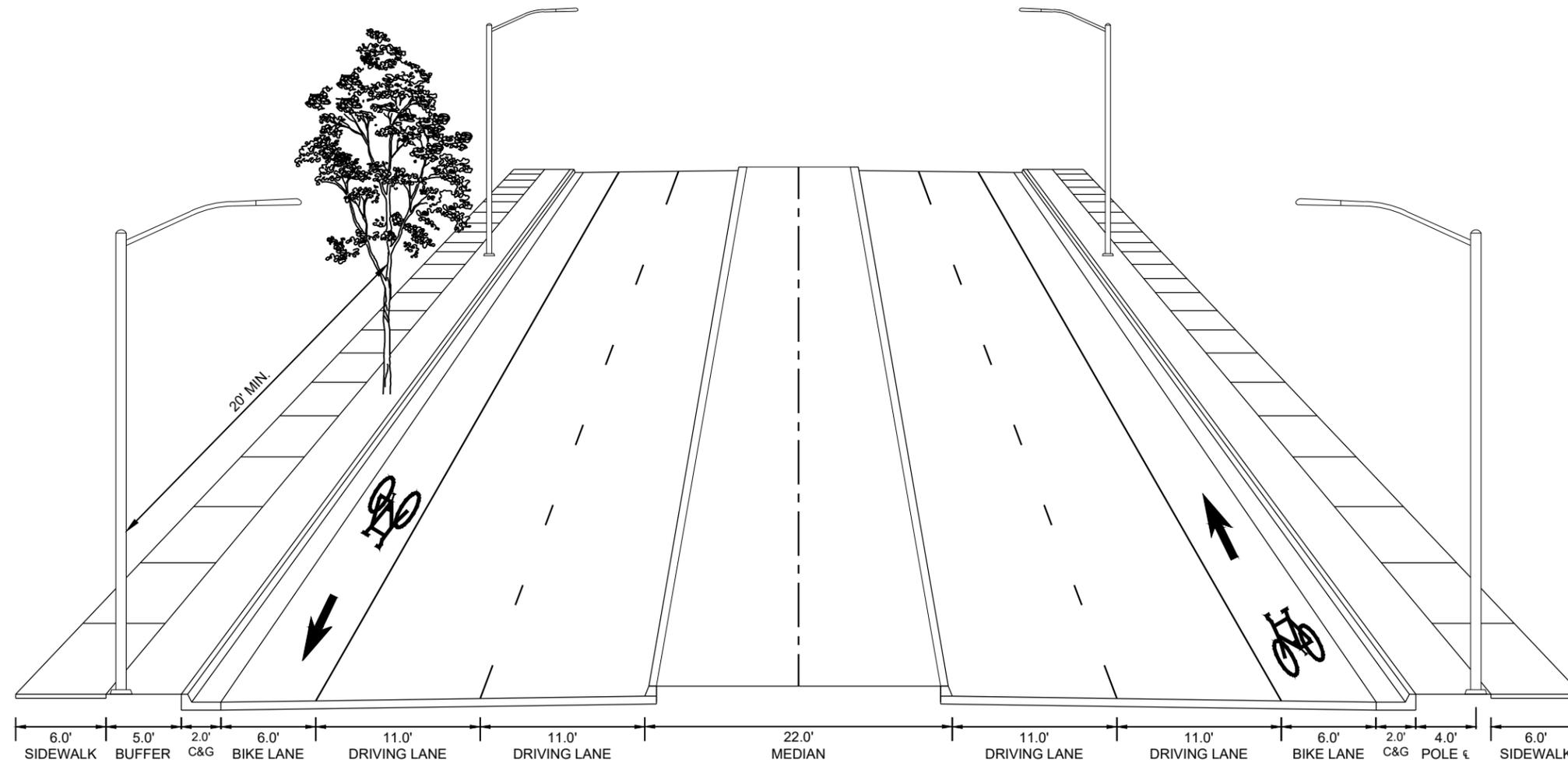
DWG. NO. TSSL-04, SHEET 3 OF 6 April 21, 2025



ROADWAY LIGHTING STANDARD	
4 LANE MINOR ARTERIAL	
STREET SECTION STANDARD	TS-04
FOUNDATION	2' Standard PNM - 5975-269233
POLE HEIGHT	38.5' Alum - B65153
POLE ARM	6' Alum - A26856
POLE CONFIGURATION	Opposite
SPACING (NEW R.O.W.)	S = 270' (MAX)
LUMINAIRE	ATBS P30 MVOLT R2 4K
SMART CONTROL	Ubicquia Ubicell 3.0
ACCESSORIES	Breakaway Bolts & Cover

LIGHTING NOTE:

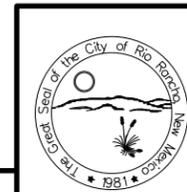
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4 LANE MINOR ARTERIAL
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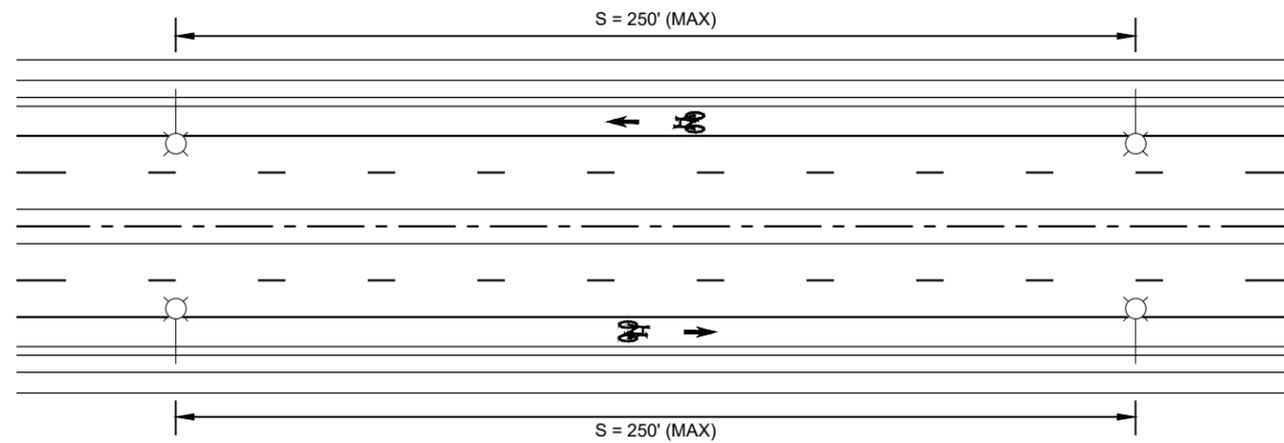
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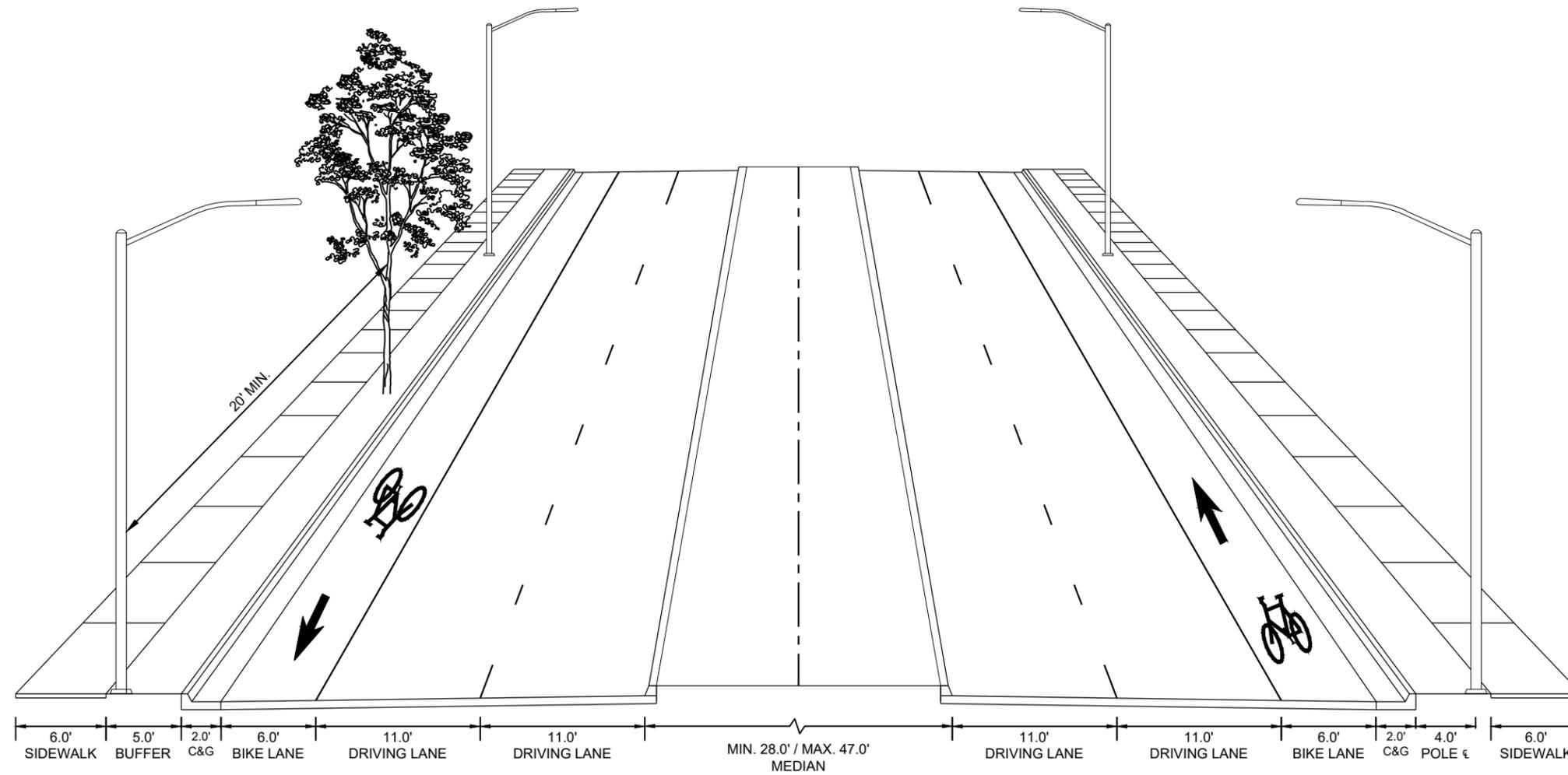
ROADWAY LIGHTING STANDARD
4 LANE MINOR ARTERIAL
BUFFER PLACEMENT

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ROADWAY LIGHTING STANDARD	
4 LANE PRINCIPAL ARTERIAL	
STREET SECTION STANDARD	TS-05
FOUNDATION	2' Standard PNM - 5975-269233
POLE HEIGHT	38.5' Alum - B65153
POLE ARM	6' Alum - A26856
POLE CONFIGURATION	Opposite
SPACING (NEW R.O.W.)	S = 250' (MAX)
LUMINAIRE	ATBS P40 MVOLT R2 4K
SMART CONTROL	Ubicquia Ubicell 3.0
ACCESSORIES	Breakaway Bolts & Cover

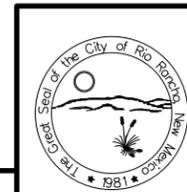
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4 LANE PRINCIPAL ARTERIAL
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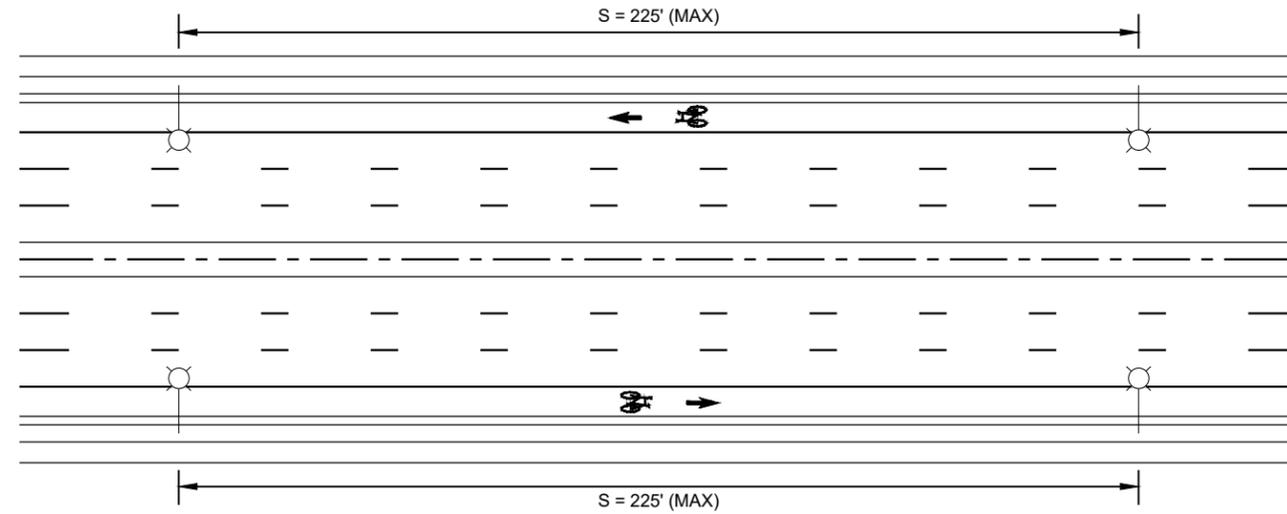
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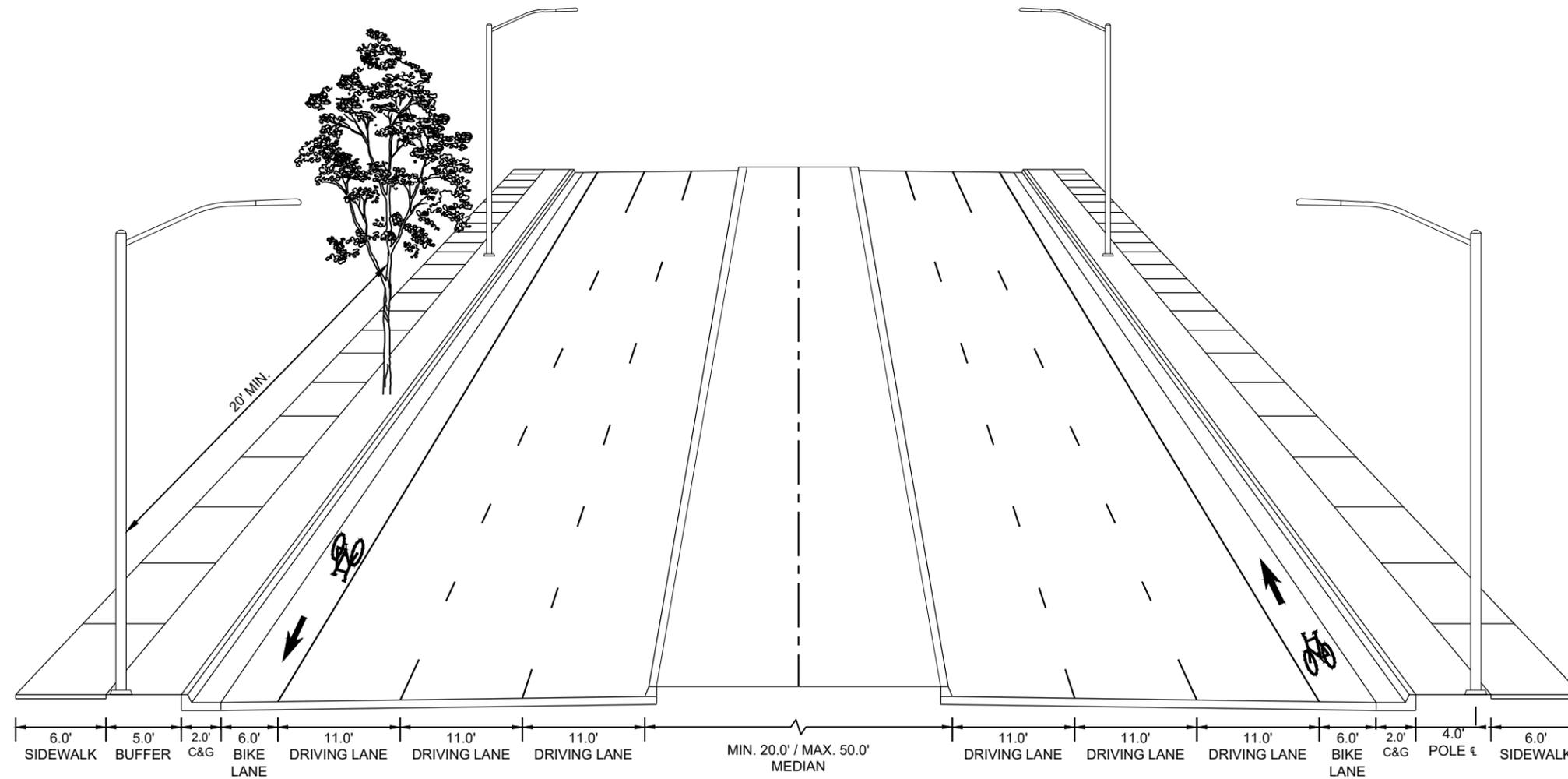
ROADWAY LIGHTING STANDARD
 4 LANE PRINCIPAL ARTERIAL
 BUFFER PLACEMENT

DWG. NO. TSSL-04, SHEET 5 OF 6 April 21, 2025



ROADWAY LIGHTING STANDARD	
6 LANE PRINCIPAL ARTERIAL	
STREET SECTION STANDARD	TS-06
FOUNDATION	2' Standard PNM - 5975-269233
POLE HEIGHT	38.5' Alum - B65153
POLE ARM	6' Alum - A26856
POLE CONFIGURATION	Opposite
SPACING (NEW R.O.W.)	S = 225' (MAX)
LUMINAIRE	ATBS P40 MVOLT R2 4K
SMART CONTROL	Ubicquia Ubicell 3.0
ACCESSORIES	Breakaway Bolts & Cover

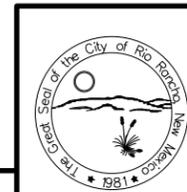
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6 LANE PRINCIPAL ARTERIAL
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ROADWAY LIGHTING STANDARD
 6 LANE PRINCIPAL ARTERIAL
 BUFFER PLACEMENT

DWG. NO. TSSL-04, SHEET 6 OF 6 April 21, 2025