

TIP PROJECT: I-5014

CONTRACT: C202052

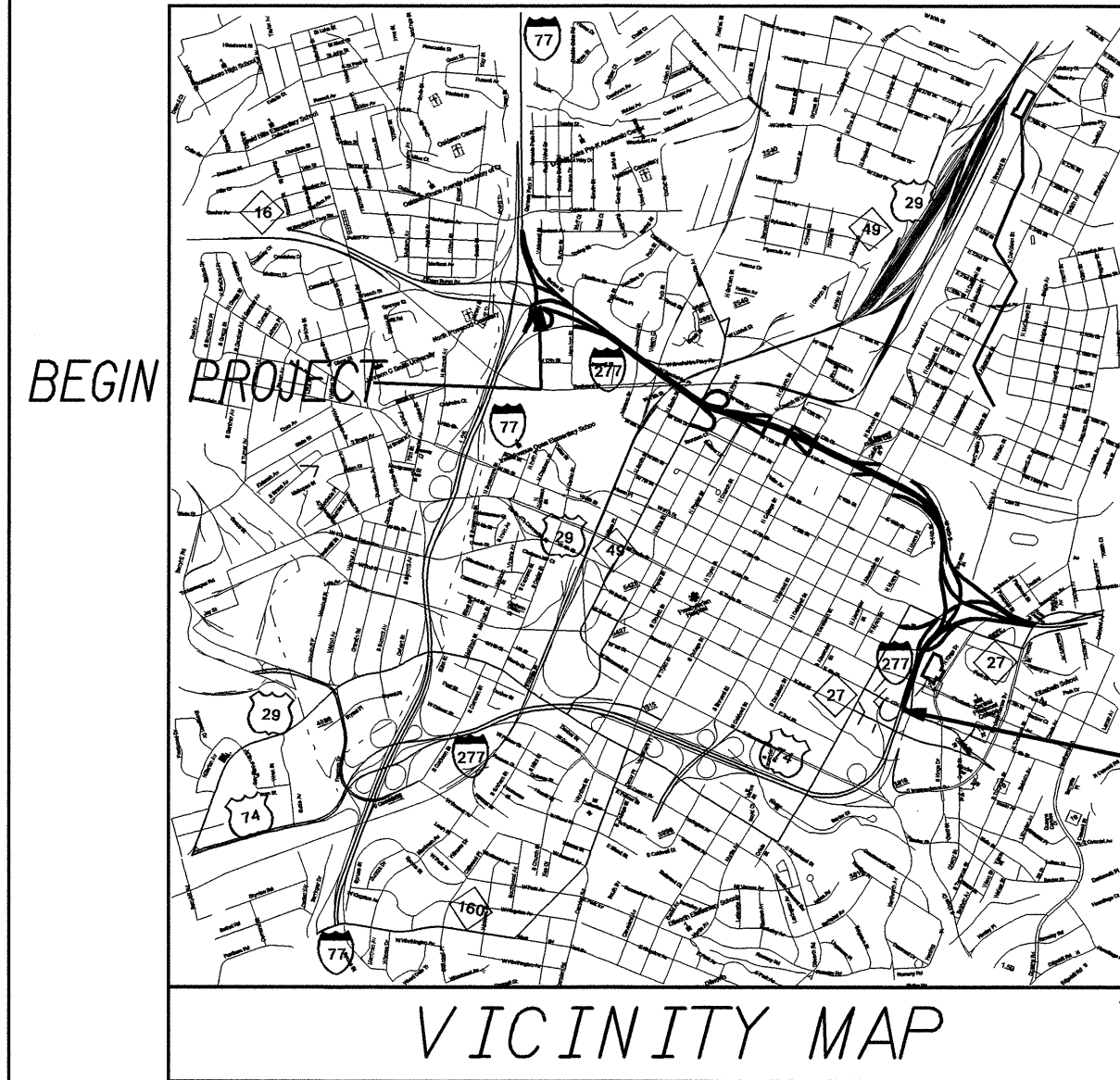
See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

MECKLENBURG COUNTY

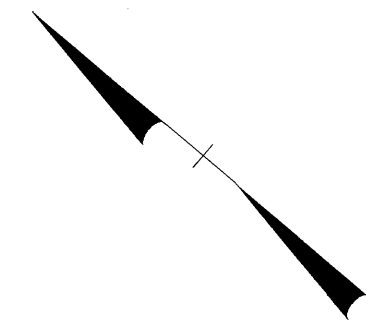
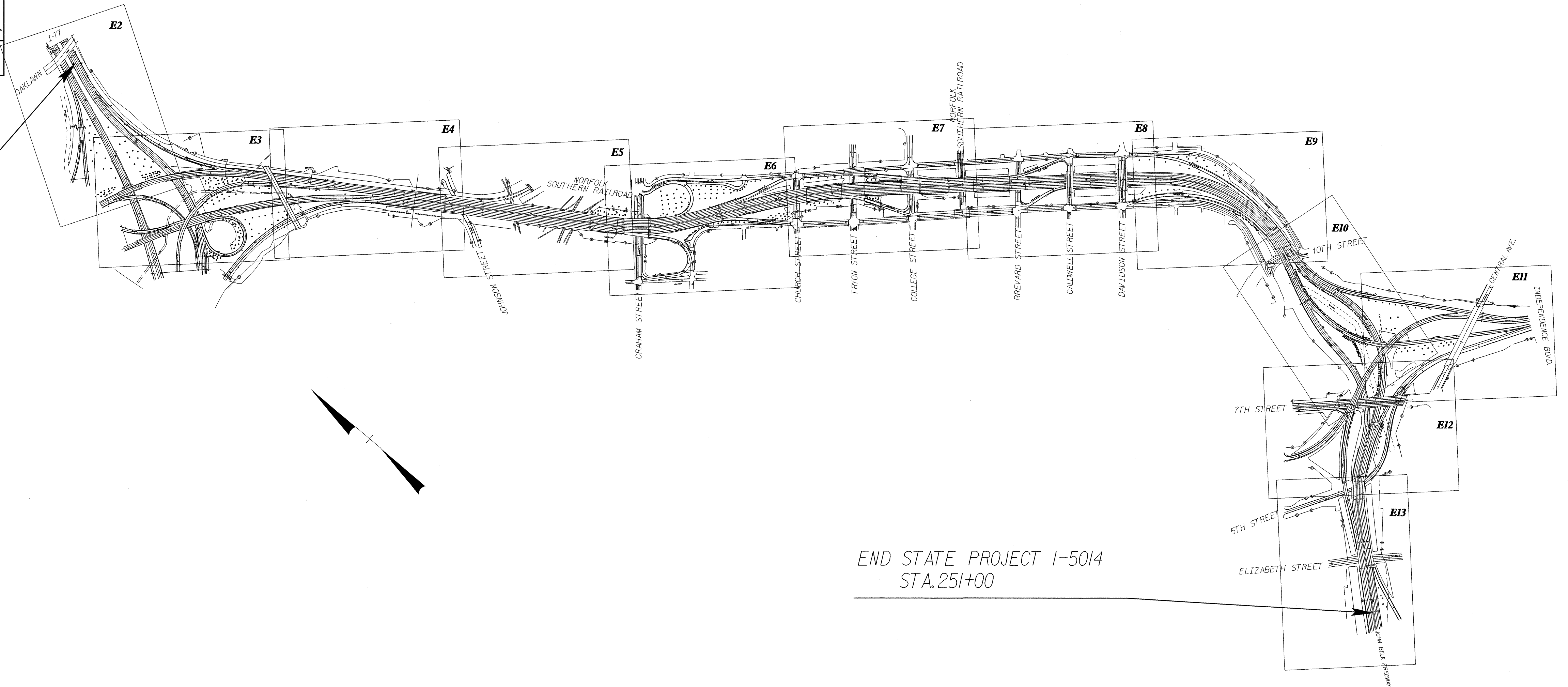
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5014	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42006.1.1		P.E.	
42006.3.1	IMS-0277(9)2	CONSTRUCTION	



LOCATION: CHARLOTTE - I-277 (BROOKSHIRE FREEWAY) FROM I-77 TO US 74 (INDEPENDENCE BLVD.)

TYPE OF WORK: LIGHTING RENOVATION

BEGIN STATE PROJECT I-5014
STA.700+00 -I77 NB-



GRAPHIC SCALE



PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT I-5014 = 2.5 MILES
TOTAL LENGTH TIP PROJECT I-5014 = 2.5 MILES

Prepared In the Office of:

DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
N/A

LETTING DATE:
MAY 20, 2008

CHRISTOPHER K. HAIRE, PE
PROJECT ENGINEER

JAY A. STANCIL
PROJECT DESIGN ENGINEER

Jay A. Stancil

LIGHTING DESIGN ENGINEER



Paul J. Chan 2/18/08
P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR

DATE

INDEX OF SHEETS

SHEET NUMBER

1
1-A
1-B
2
TCP-1 THRU TCP-5
E-1A THRU E-14

SHEET

TITLE SHEET
INDEX OF SHEETS
CONVENTIONAL SYMBOLS
SUMMARY OF QUANTITIES
TRAFFIC CONTROL PLANS
LIGHTING PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

*S.U.E = SUBSURFACE UTILITY ENGINEER

CONVENTIONAL SYMBOLS

ROADS & RELATED ITEMS

Edge of Pavement	
Curb	
Prop. Slope Stakes Cut	
Prop. Slope Stakes Fill	
Prop. Woven Wire Fence	
Prop. Chain Link Fence	
Prop. Barbed Wire Fence	
Prop. Wheelchair Ramp	
Exist. Guardrail	
Prop. Guardrail	
Equality Symbol	
Pavement Removal	

RIGHT OF WAY

Right of Way Marker	
Exist. Right of Way Line w/Marker	
Prop. Right of Way Line (Iron Pin & Cap Set By Others)	
Prop. Right of Way Line (Standard Concrete Marker Set By Contract)	
Exist. Control of Access Line	
Prop. Control of Access Line	
Exist. Easement Line	
Prop. Temp. Construction Easement Line	
Prop. Temp. Drainage Easement Line	
Prop. Perm. Drainage Easement Line	

HYDROLOGY

Stream or Body of Water	
Flow Arrow	
Disappearing Stream	
Spring	
Swamp Marsh	
Shoreline	
Falls, Rapids	
Prop Lateral, Tail, Head Ditches	

STRUCTURES

MAJOR	
Bridge, Tunnel, or Box Culvert	
Bridge Wing Wall, Head Wall and End Wall	

MINOR	
Head & End Wall	
Pipe Culvert	
Footbridge	
Drainage Boxes	
Paved Ditch Gutter	

UTILITIES

Exist. Pole	
Exist. Power Pole	
Prop. Power Pole	
Exist. Telephone Pole	
Prop. Telephone Pole	
Exist. Joint Use Pole	
Prop. Joint Use Pole	
Telephone Pedestal	
Cable TV Pedestal	
Hydrant	
Satellite Dish	
Exist. Water Valve	
Sewer Clean Out	
Power Manhole	
Telephone Booth	
Water Manhole	
Light Pole	
H-Frame Pole	
Power Line Tower	
Pole with Base	
Gas Valve	
Gas Meter	
Telephone Manhole	
Power Transformer	
Sanitary Sewer Manhole	
Storm Sewer Manhole	
Tank; Water, Gas, Oil	
Water Tank With Legs	
Traffic Signal Junction Box	
Fiber Optic Splice Box	
Television or Radio Tower	
Utility Power Line Connects to Traffic Signal Lines Cut Into the Pavement	

Recorded Water Line	
Designated Water Line (S.U.E.*)	
Sanitary Sewer	
Recorded Sanitary Sewer Force Main	
Designated Sanitary Sewer Force Main(S.U.E.*)	
Recorded Gas Line	
Designated Gas Line (S.U.E.*)	
Storm Sewer	
Recorded Power Line	
Designated Power Line (S.U.E.*)	
Recorded Telephone Cable	
Designated Telephone Cable (S.U.E.*)	
Recorded U/G Telephone Conduit	
Designated U/G Telephone Conduit (S.U.E.*)	
Unknown Utility (S.U.E.*)	
Recorded Television Cable	
Designated Television Cable (S.U.E.*)	
Recorded Fiber Optics Cable	
Designated Fiber Optics Cable (S.U.E.*)	
Exist. Water Meter	
U/G Test Hole (S.U.E.*)	
Abandoned According to U/G Record	
End of Information	

BOUNDARIES & PROPERTIES

State Line	
County Line	
Township Line	
City Line	
Reservation Line	
Property Line	
Property Line Symbol	
Exist. Iron Pin	
Property Corner	
Property Monument	
Property Number	
Parcel Number	
Fence Line	
Existing Wetland Boundaries	
Proposed Wetland Boundaries	
Existing Endangered Animal Boundaries	
Existing Endangered Plant Boundaries	

BUILDINGS & OTHER CULTURE

Buildings	
Foundations	
Area Outline	
Gate	
Gas Pump Vent or U/G Tank Cap	
Church	
School	
Park	
Cemetery	
Dam	
Sign	
Well	
Small Mine	
Swimming Pool	

TOPOGRAPHY

Loose Surface	
Hard Surface	
Change in Road Surface	
Curb	
Right of Way Symbol	
Guard Post	
Paved Walk	
Bridge	
Box Culvert or Tunnel	
Ferry	
Culvert	
Footbridge	
Trail, Footpath	
Light House	

VEGETATION

Single Tree	
Single Shrub	
Hedge	
Woods Line	
Orchard	
Vineyard	

RAILROADS

Standard Gauge	
RR Signal Milepost	
Switch	

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Project: I-277, shudgn

STATE OF NORTH CAROLINA
SUMMARY OF QUANTITIES

PROJECT REFERENCE No.	SHEET No.
I-5014	2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C202052

ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION
0000970000-E	SP	0.8	ACR	GENERIC MISCELLANEOUS ITEM SUPPLEMENTARY CLEARING & GRUB-BING
4405000000-E	1110	548	SF	WORK ZONE SIGNS (PORTABLE)
4415000000-N	1115	6	EA	FLASHING ARROW PANELS, TYPE C
4420000000-N	1120	4	EA	CHANGEABLE MESSAGE SIGN
4430000000-N	1130	150	EA	DRUMS
4480000000-N	1165	4	EA	TMIA
4510000000-N	SP	288	HR	POLICE
5005000000-E	1401	1	EA	80' HIGH MOUNT STANDARD
5015000000-E	1401	6	EA	120' HIGH MOUNT STANDARD
5020000000-N	1401	1	EA	PORTABLE DRIVE UNIT
5025000000-E	1402	61	CY	HIGH MOUNT FOUNDATIONS
5030000000-N	1403	6	EA	HIGH MOUNT LUMINAIRES ***** (400W HPS)
5030000000-N	1403	48	EA	HIGH MOUNT LUMINAIRES ***** (750W HPS)
5070000000-N	1405	7	EA	STANDARD FOUNDATION ***** (TYPE R1)
5120000000-N	1407	1	EA	ELECTRIC SERVICE POLE ***** (35' CLASS 4)
5125000000-E	1407	285	LF	ELECTRIC SERVICE LATERAL ***** (3 #1/0 USE)
5145000000-N	1408	4	EA	LIGHT CONTROL EQUIPMENT, TYPE RW ***** (240/480 VOLT)
5155000000-E	1409	655	LF	ELECTRICAL DUCT, TYPE BD, SIZE ***** (2")
5160000000-E	1409	305	LF	ELECTRICAL DUCT, TYPE JA, SIZE ***** (2")
5160000000-E	1409	1,105	LF	ELECTRICAL DUCT, TYPE JA, SIZE ***** (3")

ItemNumber	Sec #	Quantity	Unit	Description
5160000000-E	1409	330	LF	ELECTRICAL DUCT, TYPE JA, SIZE ***** (4")
5170000000-E	1410	4,594	LF	** #8 W/G FEEDER CIRCUIT (2)
5175000000-E	1410	1,430	LF	** #6 W/G FEEDER CIRCUIT (2)
5180000000-E	1410	1,688	LF	** #4 W/G FEEDER CIRCUIT (2)
5205000000-E	1410	16,038	LF	** #8 W/G FEEDER CIRCUIT IN ***** CONDUIT (2, 1.5")
5210000000-E	1410	4,563	LF	** #6 W/G FEEDER CIRCUIT IN ***** CONDUIT (2, 1.5")
5215000000-E	1410	10,360	LF	** #4 W/G FEEDER CIRCUIT IN ***** CONDUIT (2, 1.5")
5220000000-E	1410	641	LF	** #2 W/G FEEDER CIRCUIT IN ***** CONDUIT (2, 1.5")
5240000000-N	1411	58	EA	ELECTRICAL JUNCTION BOXES ***** (PC18)
5240000000-N	1411	7	EA	ELECTRICAL JUNCTION BOXES ***** (PC36)
5255000000-N	1413	Lump Sum		PORTABLE LIGHTING
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT BREVARD ST, UPL 5
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT CHURCH ST, UPL 2
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT COLLEGE ST, UPL 4
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT ELIZABETH ST, UPL 8
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT GRAHAM ST, UPL 1
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT TRYON ST, UPL 3

ItemNumber	Sec #	Quantity	Unit	Description
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT 10TH ST, UPL 6
5260000000-N	SP	Lump Sum		GENERIC LIGHTING ITEM UNDERPASS CIRCUITRY AT 5TH ST, UPL 7
5270000000-N	SP	37	EA	GENERIC LIGHTING ITEM CI JUNCTION BOX, ENDWALL
5270000000-N	SP	7	EA	GENERIC LIGHTING ITEM CI JUNCTION BOX, OUTRIGGER
5270000000-N	SP	67	EA	GENERIC LIGHTING ITEM LIGHT STANDARD JUNCTION BOX
5270000000-N	SP	7	EA	GENERIC LIGHTING ITEM RELOCATE LIGHT STANDARD
5270000000-N	SP	4	EA	GENERIC LIGHTING ITEM REMOVE CONTROL SYSTEM
5270000000-N	SP	72	EA	GENERIC LIGHTING ITEM REMOVE LIGHT STANDARD
5270000000-N	SP	95	EA	GENERIC LIGHTING ITEM REMOVE LIGHT STANDARD FOUNDATION
5270000000-N	SP	24	EA	GENERIC LIGHTING ITEM REMOVE LUMINAIRE, 250W HPS, 35' MH
5270000000-N	SP	57	EA	GENERIC LIGHTING ITEM REMOVE LUMINAIRE, 400W HPS, 50' MH
5270000000-N	SP	52	EA	GENERIC LIGHTING ITEM REMOVE UNDERPASS LUMINAIRE
5270000000-N	SP	9	EA	GENERIC LIGHTING ITEM REPLACE DOOR
5270000000-N	SP	24	EA	GENERIC LIGHTING ITEM REPLACE LUMINAIRE, 250W HPS, 35' MH
5270000000-N	SP	57	EA	GENERIC LIGHTING ITEM REPLACE LUMINAIRE, 400W HPS, 50' MH
5270000000-N	SP	4,225	EA	GENERIC LIGHTING ITEM RIGID GALVANIZED CONDUIT, 1-1/2"
5270000000-N	SP	180	EA	GENERIC LIGHTING ITEM RIGID GALVANIZED CONDUIT, 2"
5270000000-N	SP	52	EA	GENERIC LIGHTING ITEM UNDERPASS LUMINAIRE
6135000000-E	SP	0.8	ACR	GENERIC EROSION CONTROL ITEM SEEDING & MULCHING

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