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INDEX OF SHEETS

Cover Sheet... ...CR2A-CR2F General Notes and Details... ...CR3A-CR3D Quantities Tabulation.. ...CR4-CR9 Cable Routing ..

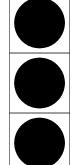
TOTAL SHEETS



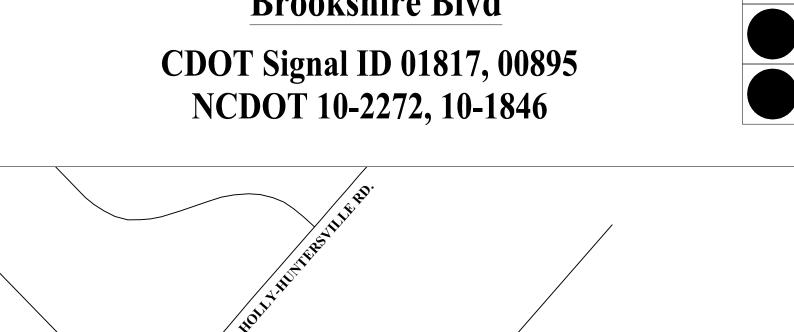
TRANSPORTATION

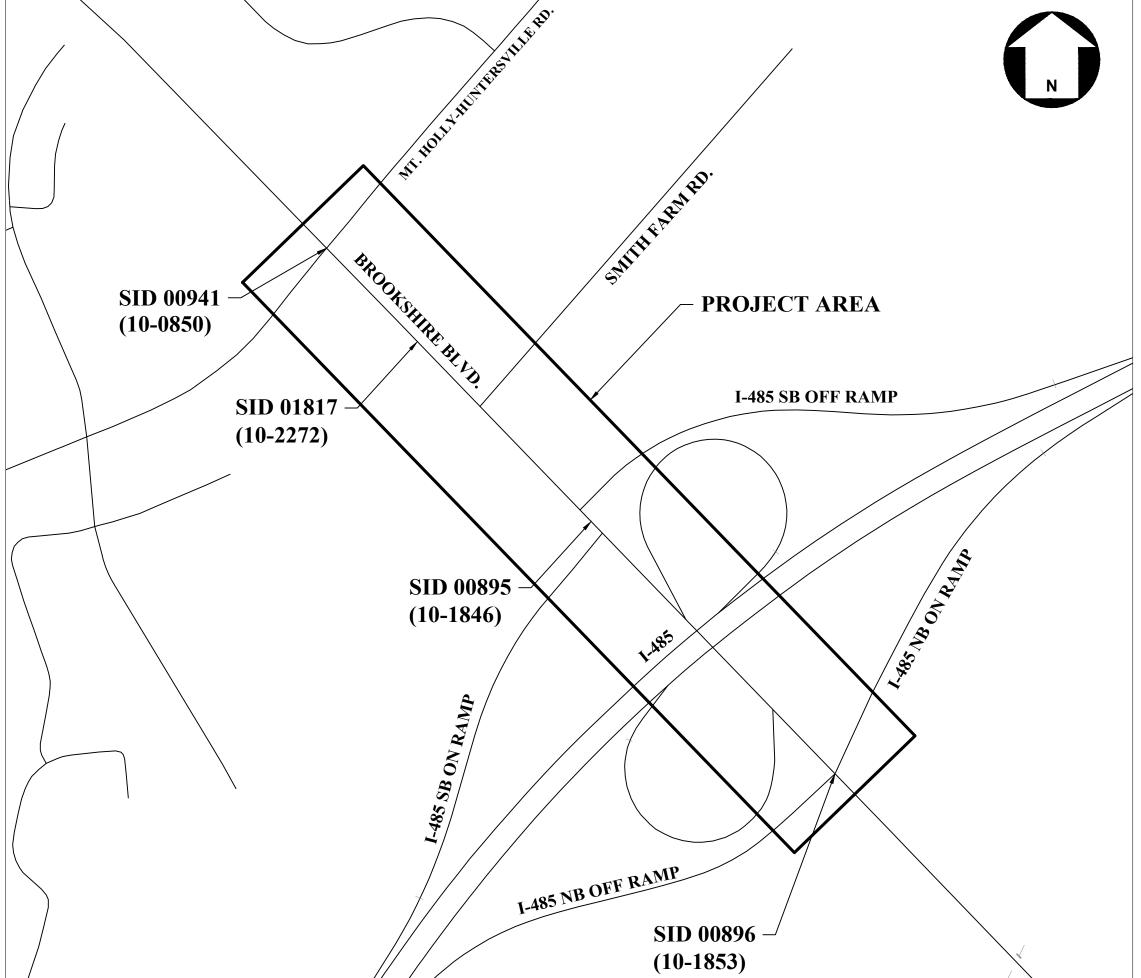
Cable Routing of

Brookshire Blvd









VICINITY MAP (NTS)

PE SEAL

Storm Drainage Easement ____ SDE____ Existing Gas Line Existing Water Line Existing Sanitary Sewer Existing Underground Telecommunications —— ut —— ut —— ut — Existing Underground Electric UE UE UE UE UE UE UE UE **Existing Storm Drainage** Existing Guardrail..... Existing Right-of-Way...... Existing Water Meter **Existing Water Valve Existing Gas Valve Existing Sanitary Sewer Manhole... Existing Storm Drain Manhole...** Existing Telephone Manhole Existing Electric Manhole **Existing Catch Basin Existing Light Pole** Existing/Proposed Utility Pole Guy Wire Existing Fire Hydrant **Existing Drop Inlet.....** Accessible Ramp Tree Protection Silt Fence Proposed Curb & Gutter, Conc. Drive, Sidewalk Proposed Gravel Existing/Proposed Camera Existing/Proposed Traffic Control Box Existing/Proposed Hand Hole ... Existing/Proposed Aerial Splice Enclosure ... Existing/Proposed Aerial Splice Enclosure w/ Slack..... Proposed Bore Pit Existing/Proposed Aerial Slack Storage **Existing Aerial Fiber ...** Proposed Aerial Fiber Proposed Trenching **Existing Conduit ...** Proposed Underground Fiber Curb Marker Proposed Adhesive Fiber Warning Sign . Existing/Proposed Aluminum Camera Pole Existing/Proposed Aluminum Camera Pole

CONVENTIONAL SYMBOLS

LEGEND

Proposed Edge of Pavement

Temporary Construction Easement..

Sidewalk/Utility Easement

Existing Fence

I-5973

SCP1

PLANS PREPARED BY:

Kimley Whorn

NC License #F-0102 421 Fayetteville Street, Suite 600 Raleigh, NC 27601 919-677-2000

PLAN NOTES

CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO

- CONSTRUCTION. CONTRACTOR TO CUT EXISTING CONDUITS IN NEW AND EXISTING HANDHOLE FOR 6 INCH STUB UP.
- ALL UNUSED CONDUITS TO BE CAPPED AND TAPE SEALED. USED CONDUITS TO BE SEALED WITH SEALING COMPOUND (OR DUCT PLUGS).
- CONDUIT AND FIBER QUANTITIES ARE MEASURED AND LABELED FROM HANDHOLE TO HANDHOLE AND/OR POLE TO POLE AND NOT PER SHEET.



23198EDC842A... 2/16/2022

DESIGNER:	MC BURKE
PROJECT MANAGER:	SL PHILLIPS
CABLE ROUTING ENGINEER:	IV VANOSDELL

PROJECT TEAM



3

BROOKSHIRE

1. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT. IN THE EVENT ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OR THE PROGRESSION OF ANY WORK SPECIFIED IN THESE PLANS, THE CONTRACTOR SHALL PROVIDED TO THE

IMMEDIATELY AND PRIOR TO ANY FURTHER WORK ACTIVITY. 2. THE CONTRACTOR IS RESPONSIBLE TO VISIT JOB SITE TO DETERMINE FIELD CONDITIONS WHICH MAY DICTATE THE USE OF SPECIFIC EQUIPMENT NEEDED TO COMPLETE THE CONSTRUCTION SHOWN HEREIN. THE CONTRACTOR SHALL INCLUDE ALL COSTS FOR ANY SPECIALIZED

GENERAL NOTES

EQUIPMENT IN THE BID.

- 3. IN ORDER TO MINIMIZE IMPACT TO LANDSCAPING MATERIAL, THE CONTRACTOR SHALL EXERCISE CAUTION THROUGH LANDSCAPING LIMITS DURING ALL PHASES OF CONSTRUCTION ACTIVITY. ANY LANDSCAPE MATERIAL DAMAGED DURING THE CONSTRUCTION PROCESS SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR SHALL EXERCISE ALL APPROPRIATE SAFETY MEASURES WHEN WORKING IN OR AROUND AREAS OF OVERHEAD ELECTRICAL/TRANSMISSION LINES OR UNDERGROUND UTILITIES. HAND DIGGING SHALL BE USED AROUND ALL KNOWN AND LOCATED UTILITIES.
- 5. THE WORK CORRIDOR SHALL BE RESTORED TO PRE-WORK CONDITIONS. 6. ALL CONCRETE GUTTERS SHALL BE MAINTAINED OR RESTORED TO PRE-WORK CONDITIONS.
- 7. CONTRACTOR SHALL MAKE SURE THAT ALL NECESSARY PROTECTIVE MEASURES ARE TAKEN TO SAFEGUARD EXISTING UTILITIES DURING FIBER/EQUIPMENT INSTALLATIONS.
- 8. ALL ELECTRICAL EQUIPMENT SHALL BE WEATHERPROOF.

9. THE LOCATION OF THE CONDUCTORS, CONDUITS, JUNCTION BOXES, SERVICE POINTS, AND CONTROLLER BOXES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE ENGINEER TO ACCOMMODATE LOCAL CONDITIONS AND EXISTING UTILITY LOCATIONS. CONDUIT SHALL BE PLACED WITHIN EXISTING RIGHT-OF-WAY.

10. THE CONTRACTOR SHALL AVOID AND/OR PROTECT ALL TREES AND ROOTS BY HAND DIGGING AS NECESSARY.

11. VEGETATION SHALL BE REMOVED OR CUT BACK AS DIRECTED BY THE CONSTRUCTION ENGINEER. VEGETATION REMOVAL AND TRIMMING SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE OF THE CAMERA POLE.

- 12. PLACE FIBER OPTIC CURB MARKERS AWAY FROM CURB RETURNS.
- 13. THE CONTRACTOR SHALL USE DISCRETION IN DETERMINING ACTUAL BORE PIT LOCATIONS. BORE PIT LOCATIONS MAY BE ADJUSTED DEPENDING ON CONTRACTOR'S ABILITY TO LENGTHEN BORE DISTANCES BETWEEN BORE PITS. UNDER NO CIRCUMSTANCES SHALL CONTRACTOR
- 14. ALL ELECTRICAL WORK SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, NATIONAL ELECTRIC SAFETY CODE, AND THE NORTH CAROLINA D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL COMPONENTS SHALL BE PROPERLY GROUNDED AND BONDED PER N.E.C. REQUIREMENTS.
- 15. PULLING INSTRUCTIONS FOR POWER CONDUCTORS; CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET AND MEET MANUFACTURES REQUIREMENTS. USE PULLING COMPOUND PER MANUFACTURERS REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY N.E.C. OR N.E.S.C. FOR CABLE USED.
- 16. PRIOR TO ANY EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL OF THE EQUIPMENT SPECIFICATIONS OR DESIGN AND SHOP DRAWINGS, INCLUDING PLAN OF ATTACHMENTS FOR ALL MATERIAL PROPOSED FOR THIS PROJECT NOT DETAILED IN THE PLANS. SUBMITTED PLAN SHALL BE SIGNED AND SEALED AT ENGINEER'S DISCRETION.
- 17. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF CITY-OWNED AND NCDOT-OWNED R/W IN A REGULATORY FLOOD ZONE AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND PER LOCAL CODE. THE COST OF THE MATERIAL DISPOSAL SHALL BE INCIDENTAL TO THE EQUIPMENT INSTALLATION.
- 18. AT LOCATIONS NEAR REINFORCED EARTH WALLS AND EXISTING BARRIER WALLS, THE CONTRACTOR IS TO ASSURE THAT THE WALL IS NOT UNDERMINED DURING FOUNDATION EXCAVATION AND INSTALLATION. METHODS USED TO SHORE UP WALLS SHALL BE APPROVED BY THE ENGINEER. THE COST SHALL BE INCIDENTAL TO THE UNDERGROUND CONDUIT INSTALLATION.
- 19. CONTRACTOR SHALL INSTALL HANDHOLES BEHIND SIDEWALK IF AVAILABLE R/W AS FIRST OPTION, IN PLANTING STRIP AS SECOND OPTION, AND'IN SIDEWALK AS THIRD OPTION.
- 20. CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF NORFOLK SOUTHERN'S NSCE-8 SPECIFICATIONS.
- 21. PIPELINE AND CROSSING TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH LAST APPROVED AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION SPECIFICATIONS FOR PIPELINES CONVEYING FLAMMABLE AND NON-FLAMMABLE SUBSTANCES.
- 22. BLASTING NOT PERMITTED.
- 23. CCTV POLE LOCATIONS MUST BE APPROVED BY CDOT PRIOR TO CONSTRUCTION.
- 24. RETURN OLD CCTV AND EQUIPMENT TO CDOT ELECTRONICS LAB. CONTACT AT 704-336-3919 TO ARRANGE DELIVERY.

TRAFFIC CONTROL:

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (WATCH) AND THE NCDOT STANDARDS AND SPECIFICATIONS.

TRAFFIC CONTROL WILL NOT BE PAID FOR AS A SEPARATE ITEM, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

UTILITIES:

UTILITIES ARE ILLUSTRATED FOR INFORMATION PURPOSES ONLY. THE CITY WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF UTILITY LOCATIONS, SIZES, DEPTHS, OR FOR COMPLETENESS OF UTILITY INFORMATION. INFORMATION.
PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY AND MEET WITH ALL UTILITY OWNERS, THE CITY UTILITY COORDINATOR AND CITY INSPECTOR WHOSE FACILITIES WILL BE AFFECTED TO DETERMINE UTILITY LOCATIONS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE CAUSED BY HIS OPERATIONS OR THOSE OF HIS AGENTS. THE CONTRACTOR SHALL HOLD THE CITY HARMLESS FOR ANY THIRD—PARTY INCONVENIENCE CREATED BY WORK OF HIS OWN FORCES OR THAT OF HIS AGENTS. ANY DAMAGES INCURRED SHALL BE THE CONTRACTORS FINANCIAL RESPONSIBILITY.

GENERAL NOTES

- FOR UTILITY LOCATES CALL NORTH CAROLINA ONE—CALL @ 1-800-632-4949.
- FOR LOCATES OF UTILITIES NOT MEMBERS OF NORTH CAROLINA ONE—CALL CONTACT PROJECT MANAGER & C.E.I.

DRAINAGE STRUCTURES:

GRADES, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE.

DRIVEWAYS AND SIDEWALKS:

PROPOSED DRIVEWAY ENTRANCE DIMENSIONS ARE FROM EXPANSION JOINT TO EXPANSION JOINT. MATCH REPLACEMENT MATERIALS TO THE EXISTING SURFACE ACCORDINGLY:

- CONCRETE- SIX INCH PORTLAND CEMENT CONCRETE (3600 PSI). • ASPHALT — (COMMERCIAL) TWO INCH SF9.5B COURSE AND FOUR INCH 119.0B INTERMEDIATE COURSE. (RESIDENTIAL) TWO INCH SF9.5B COURSE AND FOUR INCH AGGREGATE BASE COURSE.
- GRAVEL SIX INCH INCIDENTAL STONE SIDEWALK SHALL BE FOUR INCHES THICK, AND SIX INCHES THICK AT DRIVEWAY CROSSINGS, PER CITY STD. NO. 10.22

CROSS SLOPES ON SIDEWALKS SHALL NOT EXCEED 2.0%

RUNNING SLOPES ALONG SIDEWALKS SHALL NOT EXCEED 5.0%, OR THE ADJACENT ROADWAY SLOPE AS MEASURED AT THE GUTTER PAN,

A TURNING SPACE (LANDING) SHALL BE PROVIDED AT ALL LOCATIONS WHERE A PEDESTRIAN MIGHT TURN TO CHANGE DIRECTION OF TRAVEL. THE LANDING SHALL BE A MINIMUM OF 4 FEET BY 4 FEET, UNLESS NOTED BY THE ENGINEER. TYPICALLY LANDING DIMENSIONS WILL MATCH SIDEWALK WIDTH. THE LANDING ALSO SHALL NOT EXCEED 2.0% SLOPE MEASURED PERPENDICULAR TO THE ROADWAY. THE LANDING ALSO SHALL NOT EXCEED 2.0% OF ADJACENT ROADWAY SLOPE, WHICHEVER IS GREATER, MEASURED PARALLEL TO THE ROADWAY.

A CROSS SLOPE TRANSITION PANEL MAY BE REQUIRED WHERE PROPOSED SIDEWALK MEETS EXISTING SIDEWALK WITH A CROSS SLOPE GREATER THAN 2.0%. THE TRANSITION PANEL SHALL NOT EXCEED 2.0% ON THE SIDE OF THE PROPOSED SIDEWALK AND OR RAMP, AND SHALL MATCH THE EXISTING CROSS SLOPE ON THE SIDE OF THE EXISTING SIDEWALK.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR MAY MAKE HIS OWN INVESTIGATION TO DETERMINE SUBSURFACE CONDITIONS.

TREES, SHRUBS, AND HEDGES:

1. THE CONTRACTOR SHALL ALSO PROTECT TREES AND SHRUBS OUTSIDE OF CUT/FILL LINES, IN ADDITION TO THOSE THAT RECEIVE TREES/SHRUB PROTECTION BARRIERS. WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER IN ACCORDANCE WITH SECTION 01000 OF THE CITY OF CHARLOTTE LANDSCAPE CONSTRUCTION STANDARDS. PRUNING SHALL BE PER THE LATEST STANDARD OF THE LANDSCAPE CONSTRUCTION STANDARDS MANUAL. TREES SPECIFIED BY THE PLANS TO HAVE PROTECTION SHALL BE IN ACCORDANCE WITH CLD STD. 40.02. WHEN THE TREE IS CLOSE TO THE WORK AREA TREE PROTECTION CLD STD. 40.12 SHALL BE USED.

2. IN ORDER TO MINIMIZE IMPACT TO LANDSCAPING MATERIAL, EXERCISE CAUTION THROUGH LANDSCAPING LIMITS DURING ALL PHASES OF CONSTRUCTION ACTIVITY. THE CONTRACTOR IS REQUIRED TO INSTALL TEMPORARY 4' HIGH ORANGE PLASTIC BARRIER FENCING PRIOR TO WORKINGS AROUND AREAS OF LANDSCAPING. THE FENCE CAN BE MOVED AS THE WORK PROGRESSES. COST OF THE TEMPORARY FENCE IS INCIDENTAL TO INSTALLATION OF CCTV POLES. REPAIR / REPLACE ANY DAMAGED LANDSCAPING AND PLANT BEDS CAUSED BY CONSTRUCTION

PLANS:

- AERIAL PHOTOGRAPHY IN THESE PLANS MAY NOT REPRESENT. CURRENT CONDITIONS. THE CONTRACTOR SHALL REVIEW THE SITE CONDITIONS PRIOR TO BIDDING / CONSTRUCTION.
- 2. THE BASE MAPPING DEPICTED ON ALL LAYOUT SHEETS WAS OBTAINED FROM EXISTING PLANS PROVIDED BY CDOT AND AERIAL PHOTOGRAPHY. THEREFORE, THE ACCURACY OF THE BASE MAPPING IS NOT THAT OF SURVEYED MAPPING TYPICALLY USED WITH ROADWAY DESIGN PROJECTS AND SHOULD ONLY BE RELIED UPON FOR ESTABLISHING GENERAL LOCATIONS FOR EXISTING AND PROPOSED FEATURES.
- 3. BASELINES SHOWN ON THE PLANS ARE FOR INFORMATION PURPOSES ONLY AND ARE NOT STAKED IN THE FIELD.
- 4. THE RIGHT OF WAY DESIGNATIONS SHOWN ON THE PLANS ARE NOT TIED TO A SURVEYED CENTERLINE AND AS SUCH ARE APPROXIMATE.

5. CABINETS AND PULL BOXES ARE DIMENSIONED TO THE CENTER. THE LOCATION OF ALL PROPOSED EQUIPMENT TO BE INSTALLED SHALL BE CONSIDERED TO BE APPROXIMATE AND ADJUSTMENTS MAY BECOME NECESSARY. VARIATIONS FROM THE PROPOSED LOCATIONS MUST BE VERIFIED WITH THE ENGINEER. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND RECEIVE APPROVAL FROM THE ENGINEER PRIOR TO CONSTRUCTION. THE COST FOR STAKING THE POLE LOCATIONS SHALL BE PAID FOR AS PART OF THE POLE INSTALLATION. EROSION CONTROL

THE CONTRACTOR SHALL MAINTAIN EROSION CONTROL DEVICES IN ACCORDANCE WITH THE APPROPRIATE CITY AND STATE EROSION AND SEDIMENT CONTROL ORDINANCES. THE CONTRACTOR SHALL PREVENT STANDING WATER DUE TO CONSTRUCTION. DISTURBED AREAS SHALL BE SEEDED AND MULCHED AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR SHALL FOLLOW APPLICABLE EROSION CONTROL MEASURES SHOWN IN THE 2018 OR CURRENT EDITION OF NCDOT STANDARD SPECIFICATIONS.

GENERAL NOTES

EROSION CONTROL WILL NOT BE PAID FOR AS A SEPARATE ITEM, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

PAVEMENT DEGRADATION FEE:

CDOT HAS DETERMINED THAT NO PAVEMENT DEGRADATION FEE IS TO BE ASSESSED.

CONDUIT:

1. THE FIBER OPTIC CONDUIT NETWORK SHALL BE MAINTAINED AT A CONSTANT HORIZONTAL AND VERTICAL LOCATION.

2. CONDUIT RUN SHALL NOT EXCEED 270 DEGREES OF BENDS BETWEEN

3. MINIMUM REQUIRED CONDUIT BURY DEPTHS SHALL BE MAINTAINED WHERE CONFLICTS OCCUR WITH DRAINAGE OR OTHER UTILITIES PER THESE

4. ALL NEW UNDERGROUND CONDUIT SHALL BE SEALED AT BOTH ENDS TO PREVENT THE ENTRY OF DUST, DIRT OR MOISTURE.

5. ALL CONDUIT TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. THE CONTRACTOR SHALL NOT OPEN ANY AREA THAT CANNOT BE BACKFILLED IN THE SAME DAY/NIGHT OPERATION.

6. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY DIRECTIONAL BORE OR TRENCHING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS. THE CONTRACTOR SHALL HAND DIG THE FIRST 4' TO VERIFY POSSIBLE UTILITY CONFLICT.

7. THE PLANS SHOW THE GENERAL ROUTE AND LOCATION OF CONDUIT AND EQUIPMENT RELATIVE TO MAJOR PHYSICAL FEATURES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL ABOVEGROUND AND UNDERGROUND CONFLICTS IN ADVANCE OF THE PLACEMENT OF ANY CONDUIT OR OTHER FACILITIES. THE CONTRACTOR SHALL FIELD MARK THE PROPOSED ALIGNMENT FOR REVIEW AND CONCURRENCE BY THE ENGINEER PRIOR TO TRENCHING AND/OR PLACEMENT. NO PULL BOXES OR SPLICE VAULTS SHALL BE LOCATED IN DRAINAGE SWALES, DITCHES OR PAVED

EXISTING SANITARY SEWER AND WATER LINE:

THE CONTRACTOR SHALL USE CARE WHEN WORKING AROUND SANITARY SEWERS AND WATER LINES. SHOULD THE CONTRACTOR DAMAGE EXISTING SEWER OR WATER LINES, HE SHALL IMMEDIATELY REPLACE THE LINE AT HIS EXPENSE WITH DUCTILE IRON PIPE. THE CONTRACTOR SHALL REPLACE SANITARY SEWER AND/OR WATER LINE, WITH A MINIMUM TEN FOOT SECTION OF DUCTILE IRON PIPE WHEN DRAINAGE PIPE COMES WITHIN TWO FEET OF SAID LINES, VERTICALLY OR HORIZONTALLY.

CAMERA:

CDOT ELECTRONIC SYSTEMS LAB SHALL APPROVE THE FIRST CAMERA CONTROL BOX BUILT BY THE CONTRACTOR

UNDER NO CIRCUMSTANCES SHALL ENERGIZED CABLE BE PLACED IN THE SAME_CONDUIT AS FIBER OPTIC CABLE UNLESS OTHERWISE APPROVED BY

STANDARDS

THE FOLLOWING STANDARDS AND THE LATEST REVISION THERETO ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE ARE CONSIDERED A PART OF THESE PLANS. NCDOT STANDARDS SHALL BE USED. CHARLOTTE LAND DEVELOPMENT STANDARDS MAY BE USED IF THERE IS NOT AN APPLICABLE NCDOT STANDARD.

CONSTRUCTION TO BE CONSISTENT WITH LATEST EDITION OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. NCDOT:

STD. NO.:	<u>TITLE:</u>
848.01	CONCRETE SIDEWALK
1716.01	JUNCTION BOXES
1720.01	POLES
1721.01	GUY ASSEMBLIES
1730.01	FIBER-OPTIC CABLE SLACK

CHARLOTTE LAND DEVELOPMENT STANDARD:

STD. NO.: TITLE:	
30.06ATEMPORARY SILT FENC	Έ
30.17ASEEDING SCHEDULE	
30.17BSEEDING SCHEDULE	

CHARLOTTE LAND DEVELOPMENT STANDARD:

ABAND..

ABBREVIATIONS

ABANDONED

ABAND ASPH		
APPROX		
B/C	BACK OF CURB	
BIT		
BM BRG		
CB	CATCH BASIN	
C&G		
CL FENCE		
CMP		
CONC	CONCRETE	
CONST		
DI DIA		
DW	DRIVEWAY	
DIM		
E EA	,	
ELEV		
EOP		
ESMT EXIST		
F/C		
FES	FLARED END SECTION	
FH		
FOC GV		
HORIZ	HORIZONTAL	
INT		
INVIP		
L	LENGTH	
LF	LINEAR FOOTAGE	
LT lb		
LP		
MAX		
MIN MONO		
mph		
M TL	METAL	
N	,	
NTS 0/H		
ОС	ON CENTER	
PAVT	PAVEMENT	
PC	POINT OF CURVATURE	
- a	PERMANENT PAGE	
PI	POINT OF INT	
	PK NAIL SET	
	POWER POLE PROPOSED	
PSE	PERM SW ESMT	
PT	POINT OF TANGENCY	
6 [POINT OF VERT INT	
	PERM UTILITY ESMT RADIUS	
RT	RIGHT	
RCP	REINFORCED CONC PIPE	
R/W S	SOLITH	7
SD	STORM DRAIN	
SF	SQUARE FOOT	S
SSSTA	SANITARY SEWER	CONSIDER
STD		_
SW	SIDEWALK	
TAN TCE	TANGLIVI	_
TEMP	TEMP CONST ESMT TEMPORARY	Ź
TP	TRAVERSE POINT	
T/W	TEST WITCE	3
	TYPICAL	ğ
*	UNDER GROUND VERTICAL CURVE	_
	VERTICAL CURVE	
W/	WITH	
	WATER METER W	
0.0	WATER VALVE SIXTY PENNY NAIL SET	
	INCH	
,	FEET	



FINAL UNLESS ALL
SIGNATURES COMPLETED BOUI TTE,

BROOKSHIRE CHARLO SHEET CR2/

Horn

ROJECT REFERENCE N

I-5973

SHEET NO.

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CTOR TO EN IL IS CURRE OF CONSTRU

ONTRACT
DETAIL
TIME OF

A) ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE REQUIREMENTS OF THE MOST CURRENT EDITIONS OF THE CHARLOTTE DEPT. OF TRANSPORTATION(CDOT) WORK AREA TRAFFIC CONTROL HANDBOOK(W.A.T.C.H.), THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION(NCDOT) SUPPLEMENT TO THE M.U.T.C.D., THE NCDOT ROADWAY STANDARD DRAWINGS AND THE CURRENT EDITION OF THE NCDOT STANDARD

TRAFFIC CONTROL NOTES

B) THE CONTRACTOR IS TO NOTIFY CDOT IN WRITING 10 WORKING DAYS IN ADVANCE OF ANY ROAD CLOSURE OR 5 WORKING DAYS PRIOR TO CLOSING ONE OR MORE TRAVEL LANES IN ACCORDANCE WITH THE SECTION "APPROVAL AND NOTIFICATION REQUIREMENT FOR WORK IN THE PUBLIC RIGHT-OF-WAY OF THE W.A.T.C.H. HANDBOOK.

SPECIFICATIONS FOR ROADS AND STRUCTURES.

- C) ALL SIGNAL REVISIONS OR SHIFTS OF SIGNAL HEADS WILL BE THE RESPONSIBILITY OF CDOT; PRIOR TO REVISING TRAFFIC LANES WHICH REQUIRE SIGNAL REVISIONS, THE CONTRACTOR SHALL NOTIFY THE CDOT IMPLEMENTATION SECTION MANAGER (GUS JORDI / 336-7086) OR HIS REPRESENTATIVE A MINIMUM OF 30 CALENDAR DAYS IN ADVANCE. TRAFFIC LANES SHALL NOT BE SHIFTED UNTIL THE REQUIRED SIGNAL REVISION/SHIFT IS COMPLETE AND READY FOR ACTIVATION. ALL COMPLETE RESTRINGS OR NEW TRAFFIC SIGNALS REQUIRE 60 CALENDAR DAYS NOTICE.
- D) THE CONTRACTOR SHALL BE REQUIRED TO FURNISH, INSTALL, RELOCATE, AND MAINTAIN ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, WARNING AND /OR CHANNELIZING DEVICES FOR WORK SITES AND DETOUR ROUTES AS SHOWN IN TRAFFIC CONTROL PLANS UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
- E) CONSTRUCTION PHASING MAY DICTATE THAT TWO OR MORE TYPICAL W.A.T.C.H. DIAGRAMS OR STANDARDS BE USED IN ONE AREA OF CONSTRUCTION. CHANNELIZING DEVICES ASSOCIATED WITH THESE TYPICALS SHALL BE MOVED, SUPPLEMENTED, CHANGED, OR REMOVED AS NECESSARY TO COMPLY WITH THE CONSTRUCTION PHASING OF THE PLANS. THE LOCATION AND POSITIONING OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER TO ENSURE THAT THE MOTORIST DOES NOT RECEIVE FALSE INFORMATION WHEN TWO OR MORE TYPICALS AND/OR ROADWAY STANDARD DRAWINGS OVERLAP.
- F) CONTRACTOR SHOULD BE AWARE THAT WHEN THE CONSTRUCTION AREA IS IN OR NEAR A VERTICAL CREST OR HORIZONTAL CURVE, THE WORK AREA SHALL BE EXTENDED SO THAT LANE CLOSURE BEGINS IN ADVANCE OF THE CURVE AND MINIMUM STOPPING SIGHT DISTANCE IS MET.
- G) OFF-DUTY POLICE OFFICERS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER TO BE PRESENT FOR CONTROLLING TRAFFIC DURING CONSTRUCTION HOURS.
- H) THE CONTRACTOR SHALL IDENTIFY ALL HAZARDS WITHIN THE LÍMITS OF THE PROJECT WITH WELL-MAINTAINED SIGNS, BARRICADES, WARNING AND/OR CHANNELIZING DEVICES. ON CONNECTING ROADS, ALL BARRICADES, SIGNS, WARNING, AND/OR CHANNELIZING DEVICES SHALL BE MOVED, SUPPLEMENTED, CHANGED, OR REMOVED AS REQUIRED DURING THE PROGRESS OF CONSTRUCTION AS APPROVED BY THE ENGINEER.
- I) WORK ON THE PROJECT OR ANY SEPARATE ACTIVITY THEREIN SHALL NOT START UNTIL ALL OF THE REQUIRED SIGNS, BARRICADES, WARNING, AND/OR CHANNELIZING DEVICES ARE INSTALLED AND APPROVED BY THE ENGINEER.
- J) THE CONTRACTOR SHALL CONTACT GUS JORDI, IMPLEMENTATION SECTION MANAGER (704-336-7086) OR REPRESENTATIVE WITH THE CITY OF CHARLOTTE DEPARTMENT OF TRANSPORTATION (CDOT) TWO WEEKS PRIOR TO BEGINNING ANY WORK THAT WILL REQUIRE THE RELOCATION OF SIGNS OR OTHER TRAFFIC CONTROL DEVICES BY THE CITY.
- K. THE CONTRACTOR MUST MAINTAIN DURING ALL PERIODS OF CONSTRUCTION ACTIVITY THE ABILITY TO FLAG TRAFFIC USING QUALIFIED FLAGGERS WHEN NECESSARY OR REQUIRED

TRAFFIC CONTROL NOTES

L. THE CONTRACTOR SHALL INSTALL TEMPORARY PAVEMENT MARKINGS AND ADDRESS CONFLICTING PAVEMENT MARKINGS IN ACCORDANCE WITH THE SECTION "TEMPORARY TRAFFIC CONTROL ZONE DEVICES" OF THE W.A.T.C.H. HANDBOOK OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL MAINTAIN ANY EXISTING PAVEMENT MARKINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

M) THE CONTRACTOR SHALL MAINTAIN TWO WAY TRAFFIC ON ALL PORTIONS OF THIS PROJECT UNLESS OTHERWISE SPECIFIED IN THE PLANS, PROJECT NOTES, OR BY THE ENGINEER. FOR ALL APPROVED ROAD AND LANE CLOSURES, THE CONTRACTOR MUST NOTIFY GUS JORDI, IMPLEMENTATION SECTION MANAGER (704-336-7086) OR REPRESENTATIVE A MINIMUM OF TEN WORKING DAYS PRIOR TO THE ROAD CLOSING, AND FIVE WORKING DAYS PRIOR TO A 24-HOUR/PEAK HOUR LANE CLOSURE.

N) THE CONTRACTOR WILL BE REQUIRED TO PROVIDE PROPERTY OWNERS AND TENANTS ACCESS TO THEIR PROPERTIES THROUGHOUT THE PROJECT LIMITS, INCLUDING REASONABLE INGRESS AND EGRESS FOR BUSINESSES. SPECIAL ATTENTION SHALL BE PAID TO FIRE HYDRANTS.

O) THE CONTRACTOR IS TO NOTIFY (BY MAIL) ALL PROPERTY OWNERS AND OCCUPANTS WHO HAVE DIRECT ACCESS TO THE ROADWAY WITHIN THE PROJECT LIMITS A MINIMUM OF 5 AND A MAXIMUM OF 10 WORKING DAYS PRIOR TO INSTALLING TRAFFIC CONTROL DEVICES IN FRONT OF THOSE PROPERTIES. NOTIFICATIONS SHOULD INCLUDE CONTACT PERSONS NAME, TELEPHONE NUMBER, EMAIL ADDRESS, AND MAILING ADDRESS.

P) THE CONTRACTOR SHALL PATROL THE WORK SITE AT THE BEGINNING AND END OF EACH WORK DAY, AT A MINIMUM, TO ENSURE THAT ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND FUNCTIONING PROPERLY. CONTRACTOR SHALL ENSURE THAT ALL TRAFFIC CONTROL DEVICES ARE IN PLACE AND FUNCTIONING AT ALL TIMES DURING PERIODS OF CONSTRUCTION INACTIVITY.

Q) DURING PERIODS OF INACTIVITY OR AT NIGHT, EQUIPMENT SHALL NOT BE PARKED IN SUCH A MANNER AS TO BLOCK SIDEWALKS, TRAFFIC CONTROL DEVICES, OR THE MOTORISTS' VIEW OF TRAFFIC. EQUIPMENT SHALL BE AT LEAST 10 FEET AWAY FROM THE TRAVEL LANE. EQUIPMENT SHALL NOT BLOCK SIDEWALKS AT ANY TIME UNLESS THE SIDEWALK ITSELF IS UNDERGOING CONSTRUCTION.

R) WHENEVER TRAFFIC MUST BE ROUTED ACROSS THE CENTERLINE DURING CONSTRUCTION ACTIVITY, THE TWO OPPOSING DIRECTIONS MUST BE PHYSICALLY SEPARATED. TRAFFIC CONES CAN BE USED FOR THIS PURPOSE DURING DAYLIGHT HOURS; REFLECTORIZED CONES OR DRUMS MUST BE USED AT NIGHT. TRAFFIC SHALL NOT BE ROUTED ACROSS THE CENTERLINE DURING CONSTRUCTION INACTIVITY UNLESS PAVEMENT MARKING CONFLICTS ARE APPROPRIATELY ADDRESSED AND AGREEMENT ON REMOVAL OR NOT IS WORKED OUT WITH THE ENGINEER IN ACCORDANCE WITH THE SECTION "DURATION OF WORK" OF THE W.A.T.C.H. HANDBOOK. IF THE ENGINEER APPROVES TRAFFIC TO CROSS THE CENTER LINE DURING CONSTRUCTION INACTIVITY, ONLY REFLECTORIZED DRUMS MUST BE USED.

S) THE CITY ENGINEER OR DIRECTOR OF THE CHARLOTTE DEPARTMENT OF TRANSPORTATION OR THEIR APPOINTED REPRESENTATIVES ARE AUTHORIZED TO STOP ANY WORK WITHIN PUBLIC RIGHT OF WAY THAT DOES NOT FOLLOW THIS TRAFFIC CONTROL PLAN OR REQUIREMENTS OF THE W.A.T.C.H. AND THE M.U.T.C.D. UNTIL SUCH REQUIREMENTS ARE MET.

T) ADJACENT LANES TO CONSTRUCTION ZONES MAY REMAIN OPEN IF LATERAL CLEARANCE BETWEEN EDGE OF TRAVEL LANE AND EQUIPMENT IS EQUAL TO OR GREATER THAN 2 FEET (INCLUDING WIDTH OF DRUM). IF A DROPOFF EXISTS WITHIN THE WORK ZONE, CONTRACTOR SHOULD FOLLOW THE SECTION "MISCELLANEOUS CONSIDERATIONS" OF THE W.A.T.C.H. HANDBOOK PERTAINING TO ADJACENT LANE CLOSURES DUE TO DROPOFFS.

U) THE CONTRACTOR SHALL FOLLOW THE PHASING AS DESCRIBED HEREIN. THE CONTRACTOR SHALL COMPLETE THE REQUIREMENTS OF EACH CONSTRUCTION PHASE IN SEQUENCE. WHEN A CONSTRUCTION PHASE IS DIVIDED INTO STEPS, THE CONTRACTOR SHALL COMPLETE THE REQUIREMENTS OF EACH STEP IN SEQUENCE UNLESS OTHERWISE SPECIFIED IN THE PLAN OR APPROVED BY THE ENGINEER, (EXAMPLE: THE REQUIREMENTS OF PHASE I SHALL BE COMPLETED BEFORE PROCEEDING TO PHASE II; THE REQUIREMENTS OF STEP 1 OF PHASE I SHALL BE COMPLETED BEFORE PROCEEDING TO STEP 2 OF PHASE I). ALL WORK DESCRIBED IN THE PROJECT PHASING SHALL BE PERFORMED BY THE CONTRACTOR, EXCEPT WHERE IT IS SPECIFIED FOR CERTAIN

TRAFFIC CONTROL NOTES

V) THE CONTRACTOR SHALL NOT BE ALLOWED TO STOP TRAFFIC FOR MORE THAN 5 MINUTES AT A TIME IN ANY ONE DIRECTION.

WORK TO BE PERFORMED BY OTHERS.

W) CONTRACTOR SHALL NOT BE ALLOWED TO WORK ON BOTH SÍDES OF THE ROAD SIMULTANEOUSLY WITHIN THE SAME AREA EXCEPT WHERE THE ROADWAY IS DIVIDED BY A RAISED MEDIAN AND PEDESTRIAN TRAFFIC IS MAINTAINED ON AT LEAST ONE SIDE UNIMPEDED. IT WILL BE ACCEPTABLE TO CONSTRUCT BORE PITS ON EACH SIDE OF A ROADWAY FOR BORING UTILITIES UNDER THE ROADWAY UNLESS SUPERCEDED BY ENGINEER TO COMPLY WITH PEDESTRIAN RÉQUIREMENTS OR LATERAL CLEARANCE FROM TRAVEL LANES.

X) THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO THE SECTION "PEDESTRIAN CONSIDERATIONS" OF THE W.A.T.C.H. PEDESTRIANS MUST NOT BE REROUTED TO CROSS TO THE OTHER SIDE OF THE ROAD UNLESS THE ENGINEER AGREES THAT THERE IS NO ALTERNATE SAFE ROUTE ON THE SAME SIDE OF THE STREET. THE ALTERNATIVE PEDESTRIAN ROUTE IF APPROVED/USED MUST INCLUDE ACCESSIBILITY AND DETECTABLE FEATURES CONSISTENT WITH THE EXISTING PEDESTRIAN FACILITY.

Y) THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO THE SECTION "TEMPORARY TRAFFIC CONTROL ZONE DEVICES" OF THE W.A.T.C.H. NEITHER PORTABLE NOR PERMANENT SIGNS OR SIGN SUPPORT SHOULD OBSTRUCT SIDEWALKS UNLESS THE SIDEWALK ITSELF IS UNDERGOING CONSTRUCTION. A 4' MINUIMUM CLEAR PATH MUST BE MAINTAINED WHEN A PORTABLE SIGN IS TO BE PLACED IN THE EXISTING SIDEWALK OTHERWISE, ROAD SIGNS SHOULD BE MOUNTED ON A POST WITH A MINIMUM VERTICAL CLEARANCE OF 7' FROM THE SURFACE OF THE SIDEWALK.

WORK ZONE

DETAIL A

N.T.S.

TRAVELWAY

ROJECT REFERENCE N I-5973

> SHEET NO. SCP2B

> > orn

Kimley»H

TOR TO ENSUI IS CURRENT CONSTRUCT CDOT STAN CONTRACT DETAIL I

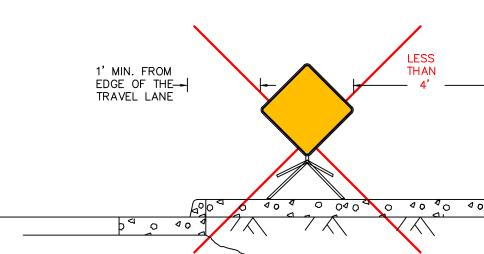
DOCUMENT NOT CONSIDERE FINAL UNLESS ALL SIGNATURES COMPLETED

SHEET CR2B

PORTABLE SIGN BLOCKING SIDEWALK

OTHERWISE, MAY NEED TO POST MOUNT SIGN WITH 7' MINIMUM VERTICAL **CLEARENCE FROM SIDEWALK SURFACE**

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RRRR	



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PORTABLE SIGN IN SIDEWALK

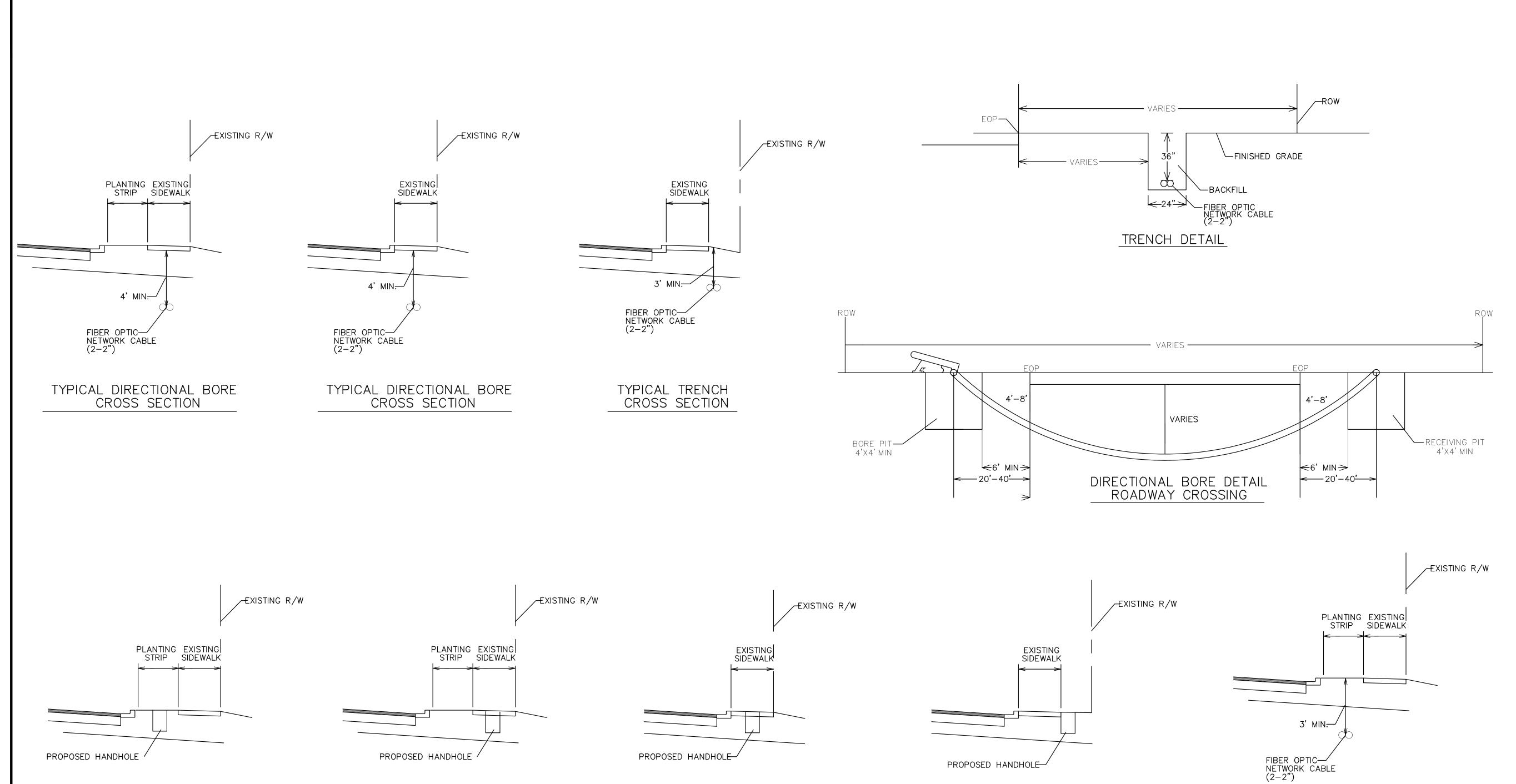
ACCEPTABLE

UNACCEPTABLE
ALTERNATIVE OPTION IS TO PLACE SIGN BEHIND SIDEWALK WHEN POSSIBLE,

TYPICAL DIRECTIONAL BORE HANDHOLE CROSS SECTION

TYPICAL DIRECTIONAL BORE HANDHOLE CROSS SECTION

TRENCH AND DIRECTIONAL BORE DETAILS



TYPICAL DIRECTIONAL BORE HANDHOLE CROSS SECTION

TYPICAL TRENCH HANDHOLE CROSS SECTION

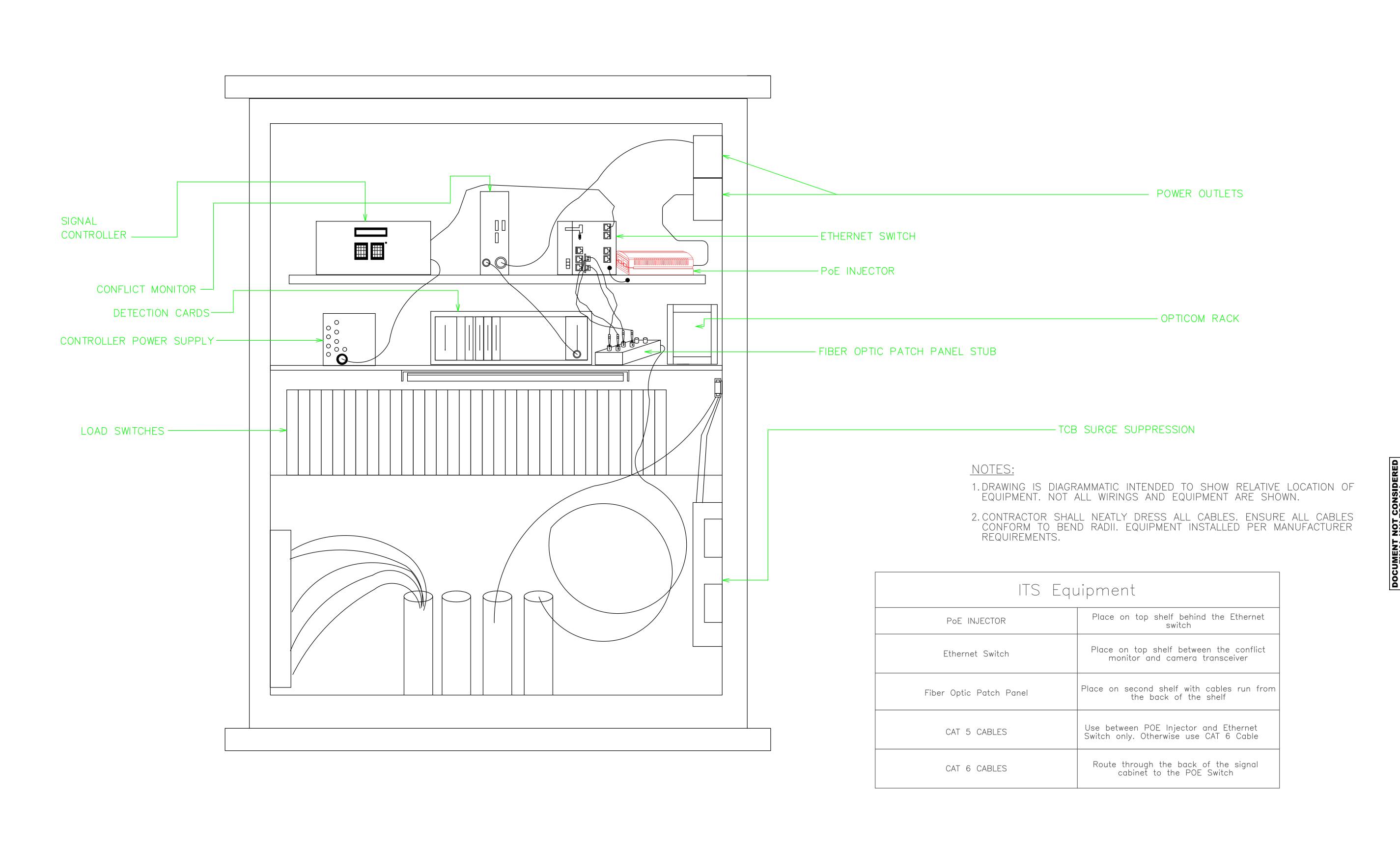
TYPICAL TRENCH CROSS SECTION

I-5973 SHEET NO. SCP2C **Kimley** » Horn

SHEET CR2C

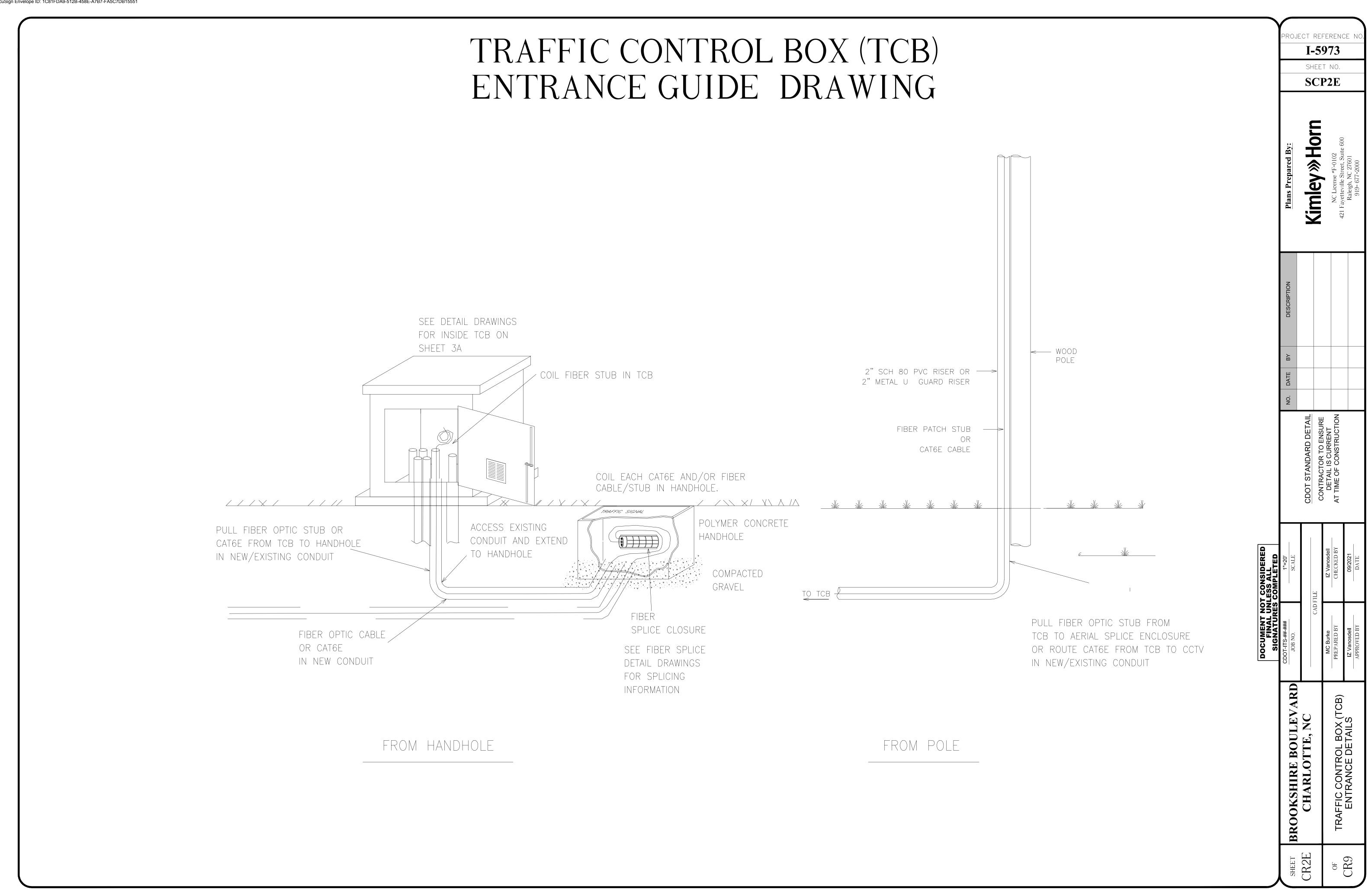
OF CR9

TRAFFIC CONTROL BOX (TCB) TS2 CABINET SHOWN



I-5973 SHEET NO. SCP2D **Kimley** » Horn

SHEET CR2D



NOTES:

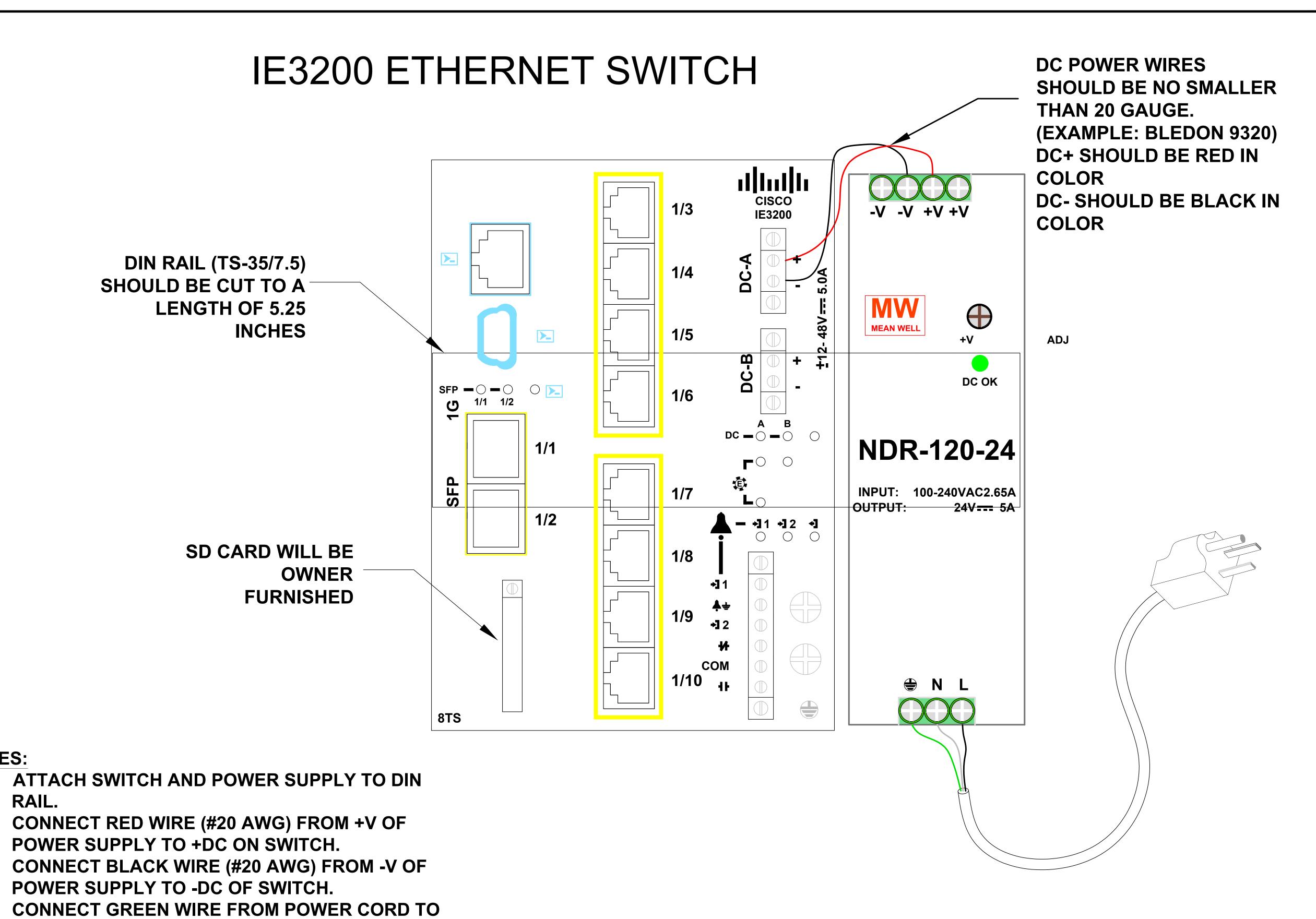
GROUND OF POWER SUPPLY.

NEUTRAL OF THE POWER SUPPLY.

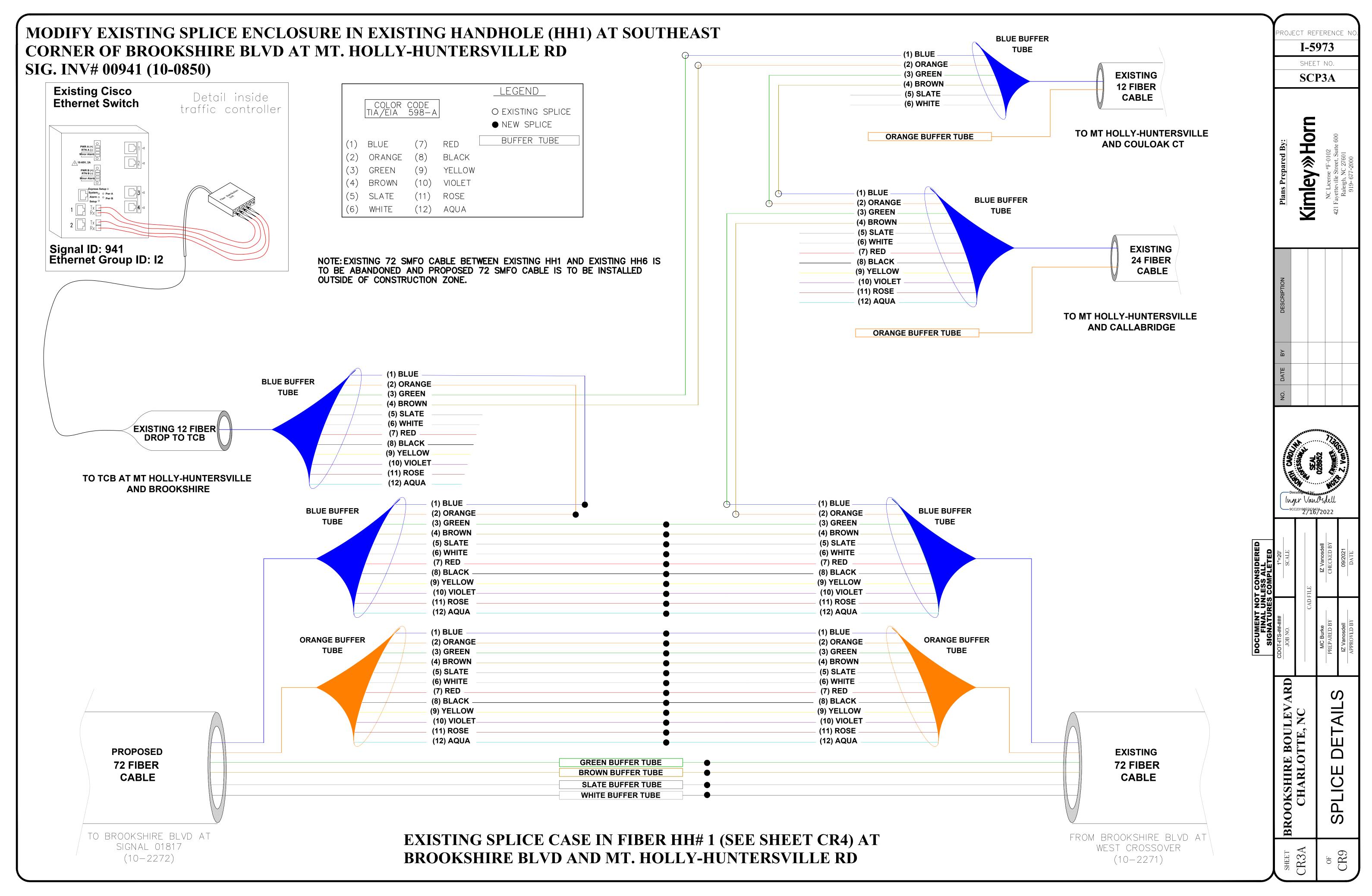
LINE INPUT OF THE POWER SUPPLY.

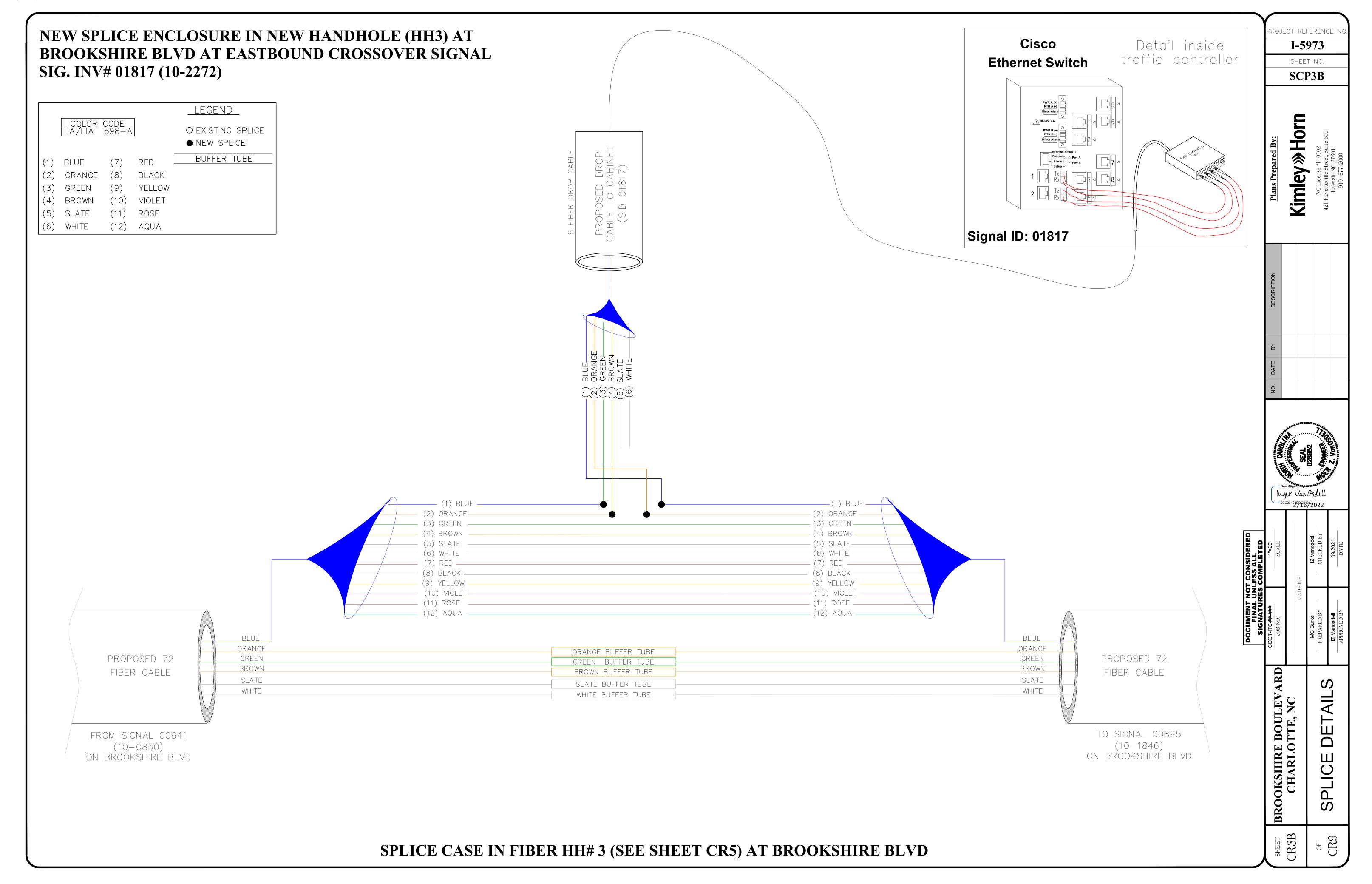
CONNECT WHITE WIRE FROM POWER CORD TO

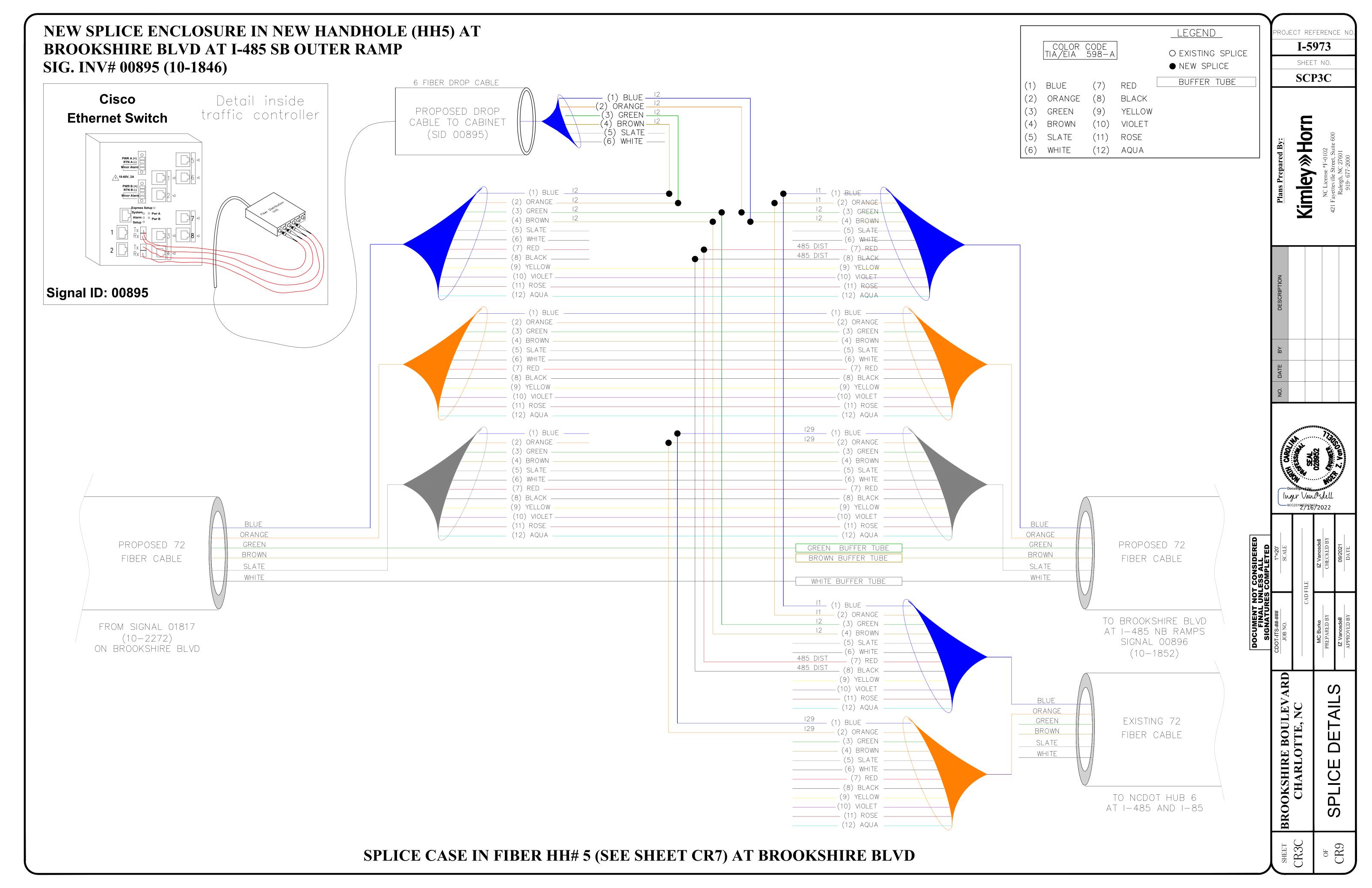
CONNECT BLACK WIRE FROM POWER CORD TO

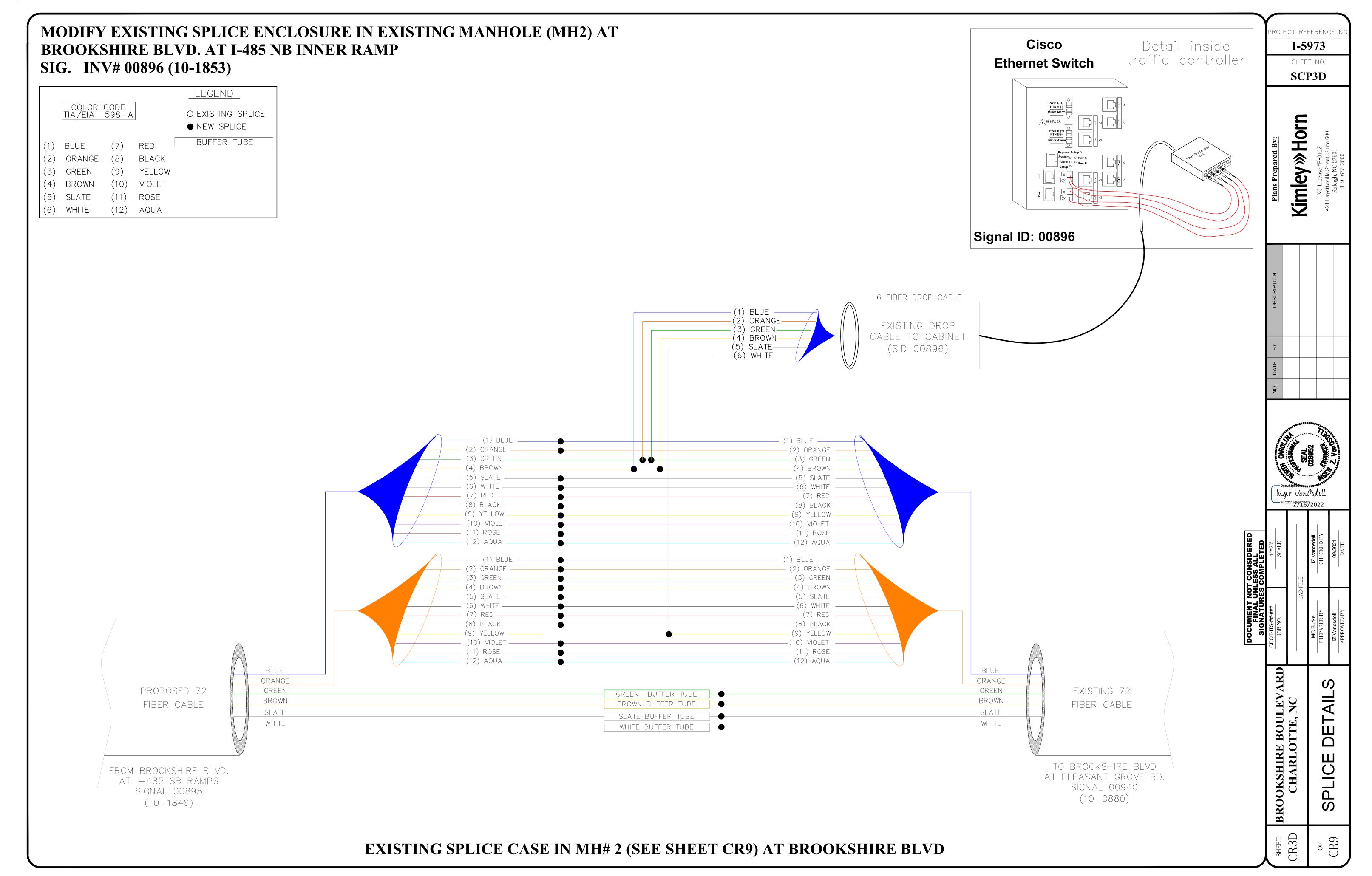


I-5973 SHEET NO. SCP2F Kimley » Horn









ITEM #	DESCRIPTION		CR4	CR5	CR6	CR7	CR8	CR9	TOTAL
BM53CM	FIBER CURB MARKER ASSEMBLY UNIT	EA	0	0	0	2	0	4	6
BM71(DB)	ROCK DRILLING ADDER UNIT	LF	0	0	0	9	25	19	53
BM71(DBSR)	SOLID ROCK DRILLING ADDER UNIT	LF	0	0	0	9	25	19	53
BM71(TR)	ROCK EXCAVATING ADDER UNIT	LF	45	33	38	36	0	0	152
CHO-4(1)ST/LC	FIBER OPTIC JUMPER ASSEMBLY UNIT	EA	0	2	0	2	0	0	4
FOE(TRX)(ESU)CI(3200)	ETHERNET SWITCH UNIT/MODULE -CISCO	EA	0	1	0	1	0	0	2
FOE(TRX)(ESU)(SFP)(GLX-R)	ETHERNET SMALL FORM-FACTOR PLUGGABLE PORT	EA	0	2	0	2	0	0	4
HO-1	FIBER OPTIC SPLICING ASSEMBLY UNIT	EA	72	4	0	12	0	74	162
HO-EML	FIBER OPTICAL POWER LEVEL TEST ASSEMBLY UNIT	EA	0	2	0	2	0	0	4
HO-OTDR	FIBER OPTIC SPLICE TEST ASSEMBLY UNIT	EA	63	2	0	2	0	63	130
HUO(72) G	UNDERGROUND FIBER OPTIC CLOSURE ASSEMBLY UNIT	EA	0	1	0	1	0	0	2
UD(2-2 LW)HD	UNDERGROUND CONDUIT ASSEMBLY UNIT	LF	0	10	0	0	0	0	10
UD(2-2 LW)TR	UNDERGROUND CONDUIT ASSEMBLY UNIT	LF	445	325	375	355	0	0	1500
UD(2-2" LW)DB	UNDERGROUND CONDUIT ASSEMBLY UNIT	LF	0	0	0	0	500	0	0
UD(3-2 LW)DB(B)	UNDERGROUND CONDUIT ASSEMBLY UNIT	LF	0	0	0	170	0	370	540
UD-EX	PROOF EXISTING CONDUIT	LF	215	0	0	0	0	0	215
UD-RP	REPAIR EXISTING CONDUIT UNIT	EA	22	0	0	0	0	0	22
UH-2	UNDERGROUND HANDHOLE ASSEMBLY UNIT	EA	0	1	1	2	1	1	6
UH-EBM	ELECTRONIC BALL MARKER	EA	1	1	1	1	1	1	6
UO(6)PATCH PANEL/ML	FIBER OPTIC PATCH PANEL UNIT	EA	0	1	0	1	0	0	2
UO(6)FIBER/ML	UNDERGROUND FIBER OPTIC CABLE STUB UNIT	LF	0	65	0	90	0	0	155
UO(72)	UNDERGROUND FIBER OPTIC CABLE ASSEMBLY UNIT	LF	745	395	425	525	550	455	3190
(W)CC	ACCESS TO THE TRAFFIC SIGNAL CONTROLLER CABINET	EA	0	1	0	1	0	0	2
(W)HUO(T(6))	UNDERGROUND SPLICE CLOSURE REARRANGEMENT UNIT	EA	1	0	0	0	0	1	2
(W)UO(72)	REMOVE EXISTING FIBER CABLE FROM CONDUIT UNIT	LF	0	0	0	180	0	0	180
(W)UM	PLACING NEW CONDUIT OR CABLE IN EXISTING MANHOLE UNIT	EA	0	0	0	0	0	2	2
(W)UM-CB(2)	MANHOLE CONDUIT ENTRANCE UNIT	EA	0	0	0	0	0	2	2
(W)UH	PLACING NEW CONDUIT OR CABLE IN EXISTING HANDHOLE UNIT	EA	1	0	0	1	0	0	2

	DATE BY DESCRIPTION Plans Prepared By:	I-5	PARENCE *F-0102 NC License *F-0102 A21 Favetteville Street. Suite 600	Raleigh, NC 27601 919- 677-2000	
L ETED	NO.	Eusigned Byan CV Value C23198EPC844	Mice Osdell	09/2021 DATE	
FINAL UNLESS ALL SIGNATURES COMPLETED	CDOT-ITS-##-### JOB NO.	CAD FILE	MC Burke IZ PREPARED BY CI	IZ Vanosdell APPROVED BY	
	SHEET BROOKSHIRE BOULEVARD	CHARLOTTE, NC	TABLIA MOITA II IGAT	ABOLATION STIELT	
	B]				

