



LOUISIANA NATURAL AND SCENIC RIVERS SYSTEM

PERMIT APPLICATION

Permit # 1427 (Assigned by Department)

The Louisiana Department of Wildlife and Fisheries' Scenic Rivers program is authorized by LRS title 56, Chapter 8 Part II. This law requires permits authorizing activities in or affecting rivers that have been designated by the Louisiana Legislature as Natural and Scenic. Information provided on this form will be used in evaluating the application for a permit. Information in this application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary, however, the data requested necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

APPLICANT INFORMATION

Name of Applicant RBL Fiber Grid	Name of Agent (if any) Joseph Cortez
Address 10000 Energy Drive	Address 10000 Energy Drive
City, State, Zip Spring, Tx 77389	City, State, Zip Spring, Tx 77389
Phone 832.634.0010	Phone 713.396.5452
Email Address Allen.Hemrich@rblfibergrid.com	Email Address Joseph.Cortez@Canacre.com

DESCRIPTION OF THE PROPOSED ACTIVITY

Brief summary of the description and purpose of the proposed activity (details to be attached as a separate document)

See Attached bore cables

Is any portion of the activity complete? YES or NO (If yes, indicate month and year of completion)

LOCATION OF PROPOSED ACTIVITY

Stream Name	Little River
Address	LA-165
City, State, Zip	Georgetown, LA, 71432
Parish	LaSalle Parish
Sec/Township/Range	
Latitude/Longitude	31°47'33.3"N 92°21'39.9"W

ADJACENT LANDOWNERS

Names, Addresses, Phone Numbers of Adjacent Landowners
Hunt Forest Products, LLC
P.O Box 1263, Ruston, LA 71270

ENVIRONMENTAL ASSESSMENT

Must be a separate document. See the attached instruction sheet for completing the assessment.

CONFIRMATION OF INFORMATION ACCURACY

Application is hereby made for a Scenic River Permit to authorize the activities described herein. I certify that I am familiar with the information contained in this application and that, to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities, or I am acting as the duly authorized agent of the applicant.

Signature

05/01/2026

Date

JEFF LANDRY
GOVERNOR



TYLER M. BOSWORTH
SECRETARY

PO BOX 98000 | BATON ROUGE LA | 70898

Dear Scenic River Permit Applicant:

Please review and concur on the following statement regarding the issuance of permits by the Louisiana Department of Wildlife and Fisheries. This agreement must be signed and returned before a Scenic River Permit can be issued.

"I have been advised and do understand that by applying for and accepting a Scenic Rivers permit issued by the Louisiana Department of Wildlife and Fisheries, I am being allowed to engage in an activity which would otherwise be prohibited by law or for which a permit is required. I understand that the permit is not a license and confers no property right upon me. I specifically agree to abide by all State and Federal fish and wildlife laws and regulations, and all State and Federal laws and regulations which relate to this permit or the permitted activity, and by all other terms and conditions of this permit. I understand that the permit for which I am applying may be suspended, annulled, withdrawn or revoked and that I may be assessed civil penalties, all in accordance with the provision of the Louisiana Administrative Procedure Act, and that I may be denied future permits as a consequence of my failure to fully and completely comply with the terms and conditions of the permit, as well as other laws and regulations pertinent thereto. If served with or notified of a cease and desist order signed by the Scenic Rivers Administrator, I agree to immediately and without delay cease all activities and operations which relate to the permitted activity or which are impacting the Scenic River, until such time as the matter can be resolved in an adjudicatory hearing pursuant to the Louisiana Administrative Procedure Act. I understand and agree that any permit issued to me by the Louisiana Department of Wildlife and Fisheries is in the nature of a privilege which is being voluntarily extended to me by the Department and the failure on my part to cooperate with the Department can result in the loss of the privilege conferred and the denial of future requests for permits. By accepting this permit, I evidence my agreement to be bound by all conditions and stipulations set forth herein."

A handwritten signature in black ink, appearing to read "Allan Henry", is written over a horizontal line.

Authorized Signature

05/01/2026

Date

REV. 5/23/25



**LDWF Natural and Scenic Rivers System
Permit Application, Environmental
Assessment**

Little River and LA-162,
Georgetown, LA 71432

RBL Telecommunications Conduit

Date: 04/27/2026

Prepared for: Louisiana Department of Wildlife & Fisheries

Prepared by: Joseph Cortez

APPENDIX A: LDWF Natural and Scenic Permit EA

LDWF Natural and Scenic Rivers System Permit Application – Environmental Assessment

Site photographs – Little River

APPENDIX B: Supporting Documentation

Exhibit 1 – Vicinity Map

Exhibit 2 – Aerial Map

Proposed Fiber Optic Installation Design File – Little River Crossing

APPENDIX A

LWDF Natural and Scenic Rivers System Permit Application – Environmental
Assessment

Site photographs – Little River

Project Description

The project proposes to install telecommunications conduits exclusively within pre-existing roadway right-of-way (ROW). The proposed project starts from a Control Panel Shelter located approximately at 32.379003, -91.899060 and follows a general southeastern direction and ends at a Control Panel Shelter located approximately at 31.255683, -92.776785. A trench method will be used to install conduits, with horizontal directional drilling (HDD) used for crossing sensitive areas such as rivers. Construction HDD activities will require bore holes approximately 5 feet in width and length and 1 foot depth on either side of a crossing. Bore locations will be restored to pre-construction condition with cast grass seed at installation completion. In contrast, handholes will be maintained after construction along the complete Project route, which will be approximately 30 x 48 x 36 inches. Handholes will be necessary at each inflection point along the route, as well as in regular intervals in straight sections to a spacing of no more than 0.75 miles or approximately 3,900 feet. Construction is anticipated to last approximately one week.

The proposed project will utilize HDD to bore underneath water crossings, including the Little River. All bore locations and associated handholes will be sited within uplands at sufficient distances from these waterways to avoid impacts to the waterway and adjacent wetlands. As designed, the project will not result in any discharge of dredged or fill material into WOTUS, including wetlands. Therefore, no impacts to WOTUS are anticipated as a result of the proposed project. A review was conducted by Canacre to evaluate environmental constraints across the entire project. No significant environmental constraints were identified, as the use HDD for all stream crossings will avoid direct impacts to waterways and associated resources.

Existing Land Use

The land is owned by the Louisiana Department of Transportation & Development and used as public right-of-way (ROW) along Louisiana State highway 165 (LA-165), located east of Georgetown, Louisiana.

Wilderness Qualities

All project activities will occur within existing ROW, and no clearing of vegetation or natural habitat is proposed. The proposed work, including HDD, is designed to avoid direct impacts to aquatic resources and associated habitats. Temporary disturbances will occur at HDD entry and exit boring locations within the ROW; however, these areas will be restored to pre-construction conditions upon project completion. No impacts to scenic river resources or wilderness qualities are anticipated.

Scenic and Aesthetic Values

The proposed project is not expected to adversely affect scenic or aesthetic values. All construction activities will be confined to existing ROW, minimizing visibility and disturbance to the surrounding natural landscape. Construction is anticipated to last approximately one week. Temporary impacts will occur at HDD entry and exit (boring) locations within the ROW; however, these areas will be restored to pre-construction conditions upon completion. No tree clearing or habitat removal is proposed. No impacts to visual character and natural features of the area are anticipated.

Ecological Regimes

The proposed project is not anticipated to impact the ecological regimes of the scenic river system. The project will be constructed via HDD beneath the channel, avoiding direct disturbance to the riverbed, banks, and associated habitats. No in-stream work, dredging, or vegetation removal is proposed. No impacts to natural flow patterns, water quality, or aquatic habitat conditions are anticipated.

Recreational Use/Opportunities

The proposed project will not require any in-stream work and will avoid direct disturbance to the riverbed, or banks through the use of HDD. The project will also avoid an existing boat ramp located north of LA-165. No impacts to recreational use of the river are anticipated.

Fish and Other Aquatic Life

The proposed project is not expected to adversely affect fish or aquatic life. The proposed project will be constructed using HDD, avoiding direct disturbance to the riverbed, banks, or in-stream habitats. No in-stream work, dredging, or vegetation removal will occur, thereby preventing disruption to spawning areas or migration pathways. Temporary surface disturbances will be limited to HDD entry and exit boring locations located within the existing roadway ROW and will be restored to pre-construction conditions following completion of construction activities. Impacts to aquatic species or their habitats are not anticipated.

Wildlife

The proposed project will utilize HDD beneath the Little River, with bore pits located within existing ROW but outside of jurisdictional waters and wetlands. No in-stream work, vegetation clearing, or permanent habitat alteration is proposed. No impacts to wildlife or their habitats are anticipated.

Historical and Archeological Resources

Canacre conducted a preliminary cultural resources archival background check consistent with the standards and guidelines of Section 106 of the National Historic Preservation Act.

Results of the preliminary desktop cultural review indicate that there are no intersections with historic sites, districts or archeological sensitive areas within a 50-foot buffer of the Project location, no impacts to historical and archeological resources are anticipated.

Geological Resources

Impacts to geological resources are not anticipated as a result of the proposed project. The project will be constructed using HDD beneath the Little River, avoiding direct disturbance to the riverbed, banks, and underlying geological formations within the channel. No excavation, dredging, or alteration of in-stream or bank geology is proposed.

Botanical Resources

All project activities will occur within existing ROW, and no clearing of vegetation is proposed. Temporary disturbances will occur at HDD entry and exit boring locations within the ROW; however, these areas will be restored to pre-construction conditions upon project completion. No impacts to scenic river resources or wilderness qualities are anticipated.

Water Quality and Quantity

The proposed project is not anticipated to impact water quality or water quantity. The Little River crossing will be constructed using HDD, eliminating the need for in-stream work and preventing direct disturbance to the river channel, banks, or aquatic substrate. No dredging, excavation, or discharge of fill material into the waterbody is proposed. There is no anticipated increase in turbidity, or sedimentation. Natural flow conditions and overall water quantity will remain unchanged. Temporary surface disturbance will be limited to HDD entry and exit boring points within the ROW and will be restored to pre-construction conditions following completion of construction activities.

Hydrologic Features

The proposed project is not anticipated to impact the hydrologic features of the Little River. The Little River crossing will be constructed using HDD, eliminating the need for in-stream work and preventing direct disturbance to the river channel, banks, or aquatic substrate. No dredging, excavation, or discharge of fill material into the waterbody is proposed. There is no anticipated increase in turbidity, or sedimentation. Natural flow conditions and overall water quantity will remain unchanged.

Cultural Resources

Canacre conducted a preliminary cultural resources archival background check consistent with the standards and guidelines of Section 106 of the National Historic Preservation Act.

Results of the preliminary desktop cultural resources review identified two sites located near the project area. The first site, situated approximately 0.23 mile southwest of the Little River crossing along the south side of LA-165, consists of prehistoric ceramics and a historic artifact scatter. This site has been determined ineligible for listing and is located outside of the project ROW; therefore, no impacts are anticipated as all work will occur within the LA-165 ROW.

The second site is located immediately west of the Little River crossing and is associated with a 20th-century railroad bridge. The proposed project will utilize HDD at this crossing, thereby avoiding any impacts to this resource.

In the event that previously unidentified cultural resources are encountered during construction, work will cease in the immediate area and coordination with the State Historic Preservation Office (SHPO) will be initiated.

Economic Impact of Project

The proposed project is not anticipated to result in any adverse economic impacts to the general public. Road closures along LA-165 are not anticipated, and access will be maintained throughout construction. By utilizing HDD for all crossings, disruptions to transportation routes, local commerce, and emergency services will be minimized. As a result, no significant impacts to regional economic activity or public mobility are anticipated.

Steps taken to Minimize Impacts

All crossings of Little River will be constructed using HDD, avoiding any in-stream work, disturbance to the riverbed, or impacts to banks and riparian areas. The project will not alter the river channel or impact aquatic or terrestrial wildlife. All entry and exit boring locations will be situated within the existing ROW, and no vegetation clearing within riparian habitat is proposed. Best management practices, including erosion and sediment controls and drilling fluid containment measures, will be implemented to prevent off-site impacts. Temporary disturbances at HDD sites will be restored to pre-construction conditions following completion of work, resulting in no anticipated temporary or permanent impacts to Little River.

Alternatives

Various alternatives were evaluated during the early planning phases of the proposed project. The selected alternative was determined to be the most practicable, minimizing impacts to the environment while meeting project objectives.

Applicants Compliance History

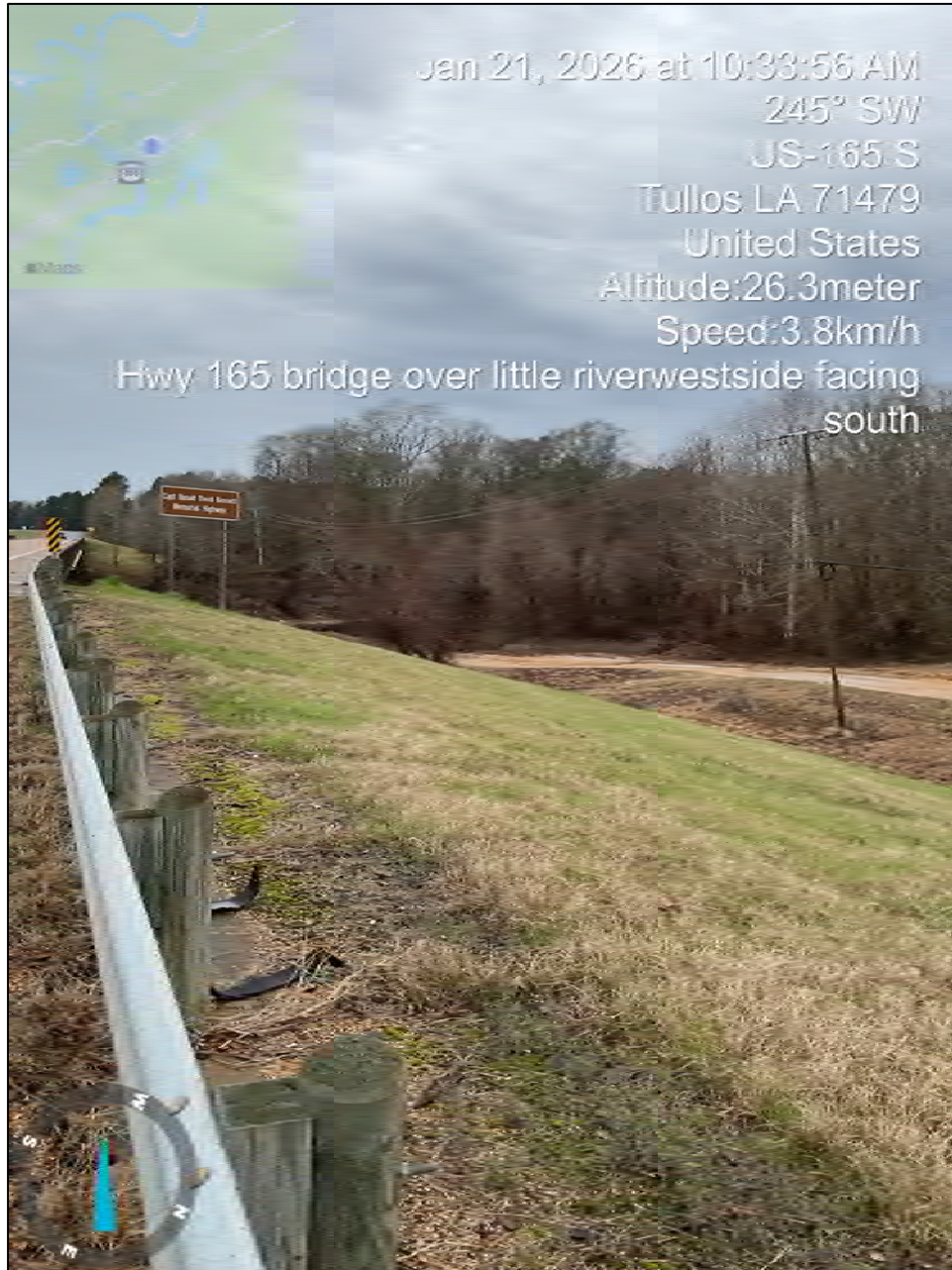
There is no history of compliance violations by the applicant.

List of Permits

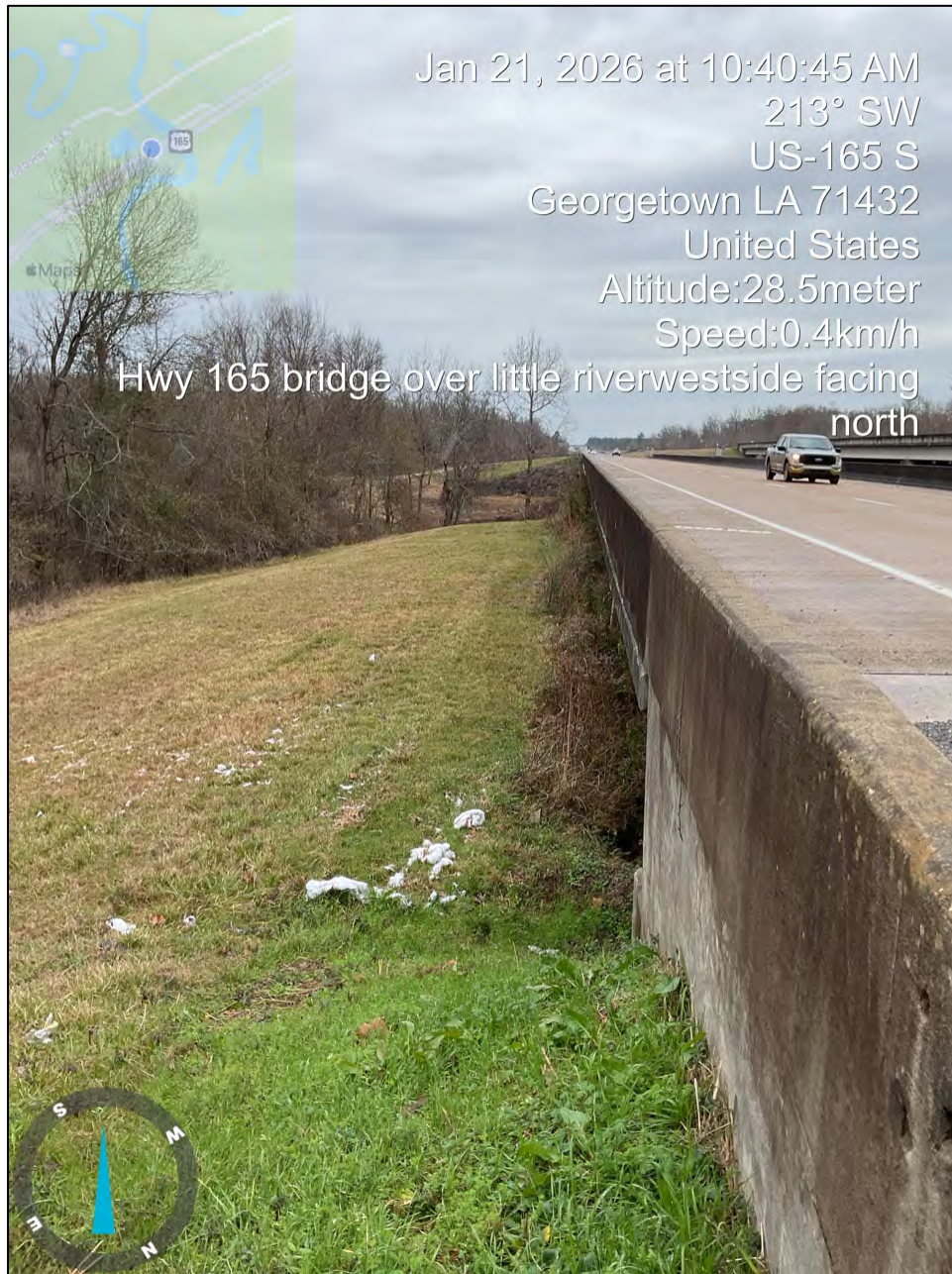
No other permits are required for the Little River crossing.

Site Photographs

Photograph 1



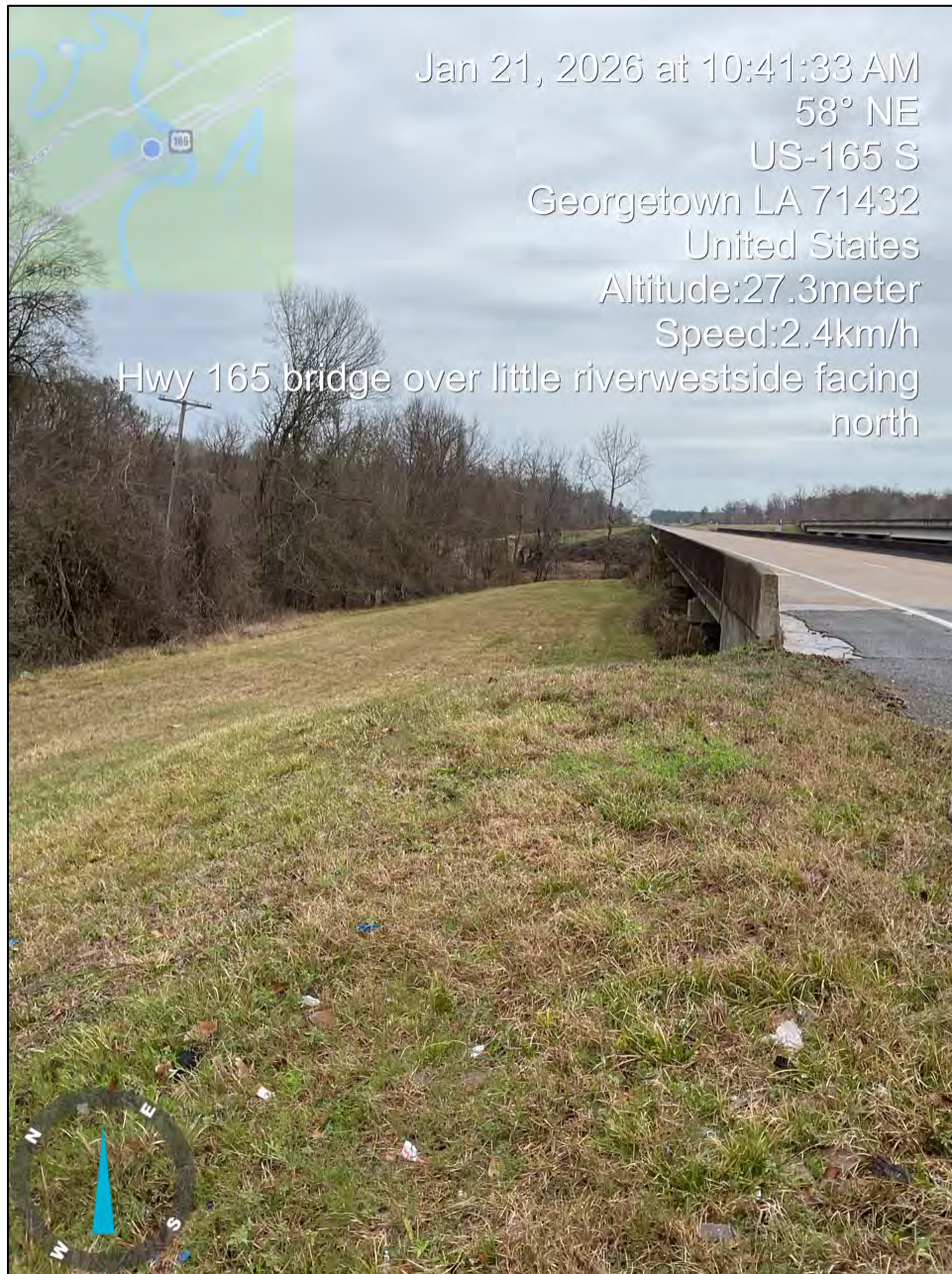
Photograph 2



Photograph 3



Photograph 4



Appendix B

Exhibit 1 – Vicinity Map

Exhibit 2 – Aerial Map

Proposed Fiber Optic Installation Design File – Little River Crossing

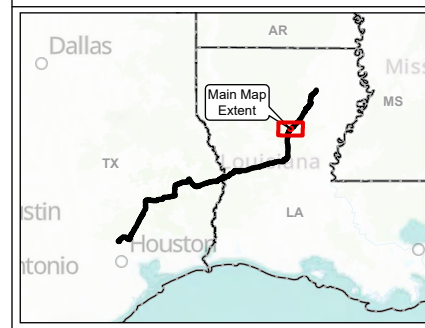
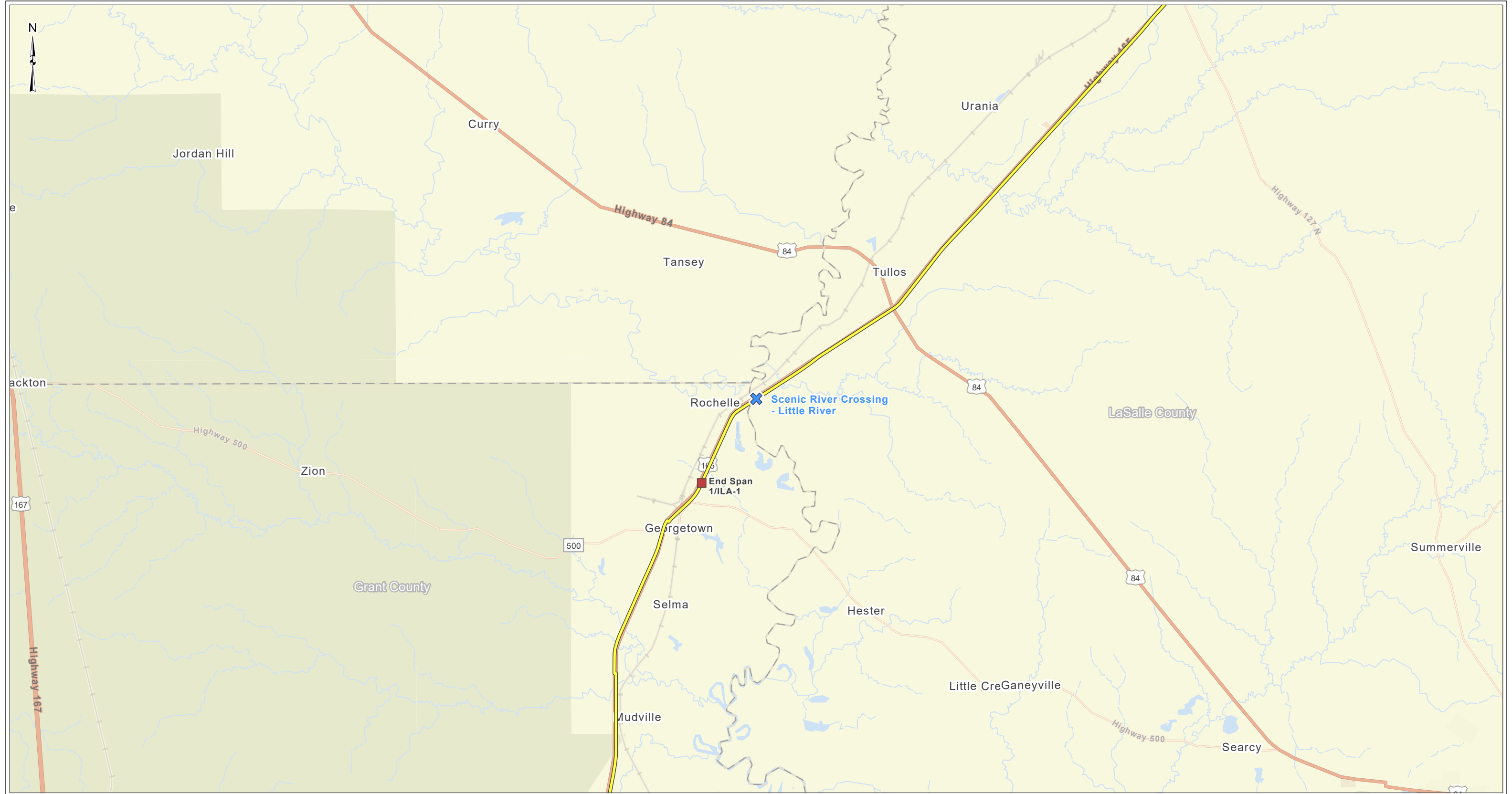


Exhibit 1
 Vicinity Overview
 Scenic River Crossing - Little River
 RBL
 Fiber Grid Project

<p>Basemap Source: Esri 2025, USGS/National Geographic Society, 2013 Layer Sources: Project Data: RBL 2026</p>
<p>Disclaimer: The information contained herein is compiled from our clients, various government and industry sources, subject to copyright. Canacre and its data suppliers provide no warranty regarding the accuracy or completeness of this information and assume no liability for the interpretation or use thereof.</p>

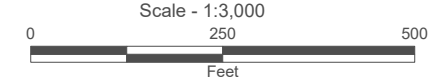
Scale - 1:100,000
 0 8,200 16,400
 Feet

Date: April 2026
 State: Louisiana
 Coordinate System: NAD 1983 BLM Zone 15N ftUS
 Projection: Transverse Mercator
 Datum: North American 1983
 Units: Foot US



Exhibit 2
 Aerial Overview
 Scenic River Crossing - Little River
 RBL
 Fiber Grid Project

- Scenic River Crossing
- Bore Pit
- Handhole
- Proposed Centerline



Date: April 2026
 State: Louisiana
 Coordinate System: NAD 1983 BLM Zone 15N ftUS
 Projection: Transverse Mercator
 Datum: North American 1983
 Units: Foot US

Basemap Source: Esri 2025, USGS/National Geographic Society, 2013
 Layer Sources: Project Data: RBL 2026

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PROPOSED FIBER OPTIC CONDUIT INSTALLATION
ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE
TULLOS, LOUISIANA

SITE LOCATION MAP



INDEX TO SHEETS

SHEETS	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	LEGEND
4-7	STANDARD CONSTRUCTION DETAILS
8	PLAN VIEW
9-15	TRAFFIC CONTROL PLAN

ENGINEER'S ESTIMATE OF MATERIALS

QUANTITY	ITEM
657	LINEAR FEET OF 1.25" HDPE CONDUIT
339	LINEAR FEET OF FIBER CABLE WITH SLACK
1	30"X48"X36" FIBERGLASS COMMUNICATIONS HANDHOLE

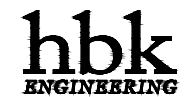
METHODS OF CONSTRUCTION

QUANTITY	ITEM
219	LINEAR FEET OF DIRECTIONAL BORE

SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:



921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT
OF PROFESSIONAL REGULATION.
LICENSE NO. 184-002308

OWNER/DEVELOPER:



CONTRACTOR:



QUANTA
TELECOM
SOLUTIONS

TITLE:
PROPOSED FIBER
OPTIC INSTALLATION
ON US 165 N .074 MILES NORTH
OF ROCHELLE TO GRANT PARISH LINE
TULLOS, LOUISIANA

REVISIONS

REV	DATE	DESCRIPTION	BY
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			



PROFESSIONAL ENGINEER
EXPIRES 03-31-2027

Donald N. Kleyweg Jr.

SIGNATURE

03-20-2026

DATE

DRAWN BY:	CHECKED BY:	APPROVED BY:
TMH	GF	GF

PROJECT NUMBER:	25-1048
FILE NAME:	25-1048
DATE DRAWN:	03/03/2026
SCALE:	N.T.S.

SHEET:
1 OF 15

DEVELOPER: RBL FIBER
800-979-0549
Info@RBLFiberGrid.com

CONTRACTOR(S): QUANTA TELECOMMUNICATION SOLUTIONS, LLC
832-634-0010
info@quantatelecom.com

PROJECT MANAGER: HBK ENGINEERING, LLC
GARY FRAHN
921 WEST VAN BUREN STREET
SUITE 100
CHICAGO, ILLINOIS 60607
(312) 432-0076
GARY.FRAHN@HBKENGINEERING.COM

ALL CONDUIT AND MANHOLE INSTALLATIONS, REMOVALS, MODIFICATIONS, AND TEMPORARY WORK SHALL BE DONE ACCORDING TO THE FOLLOWING NON-INCLUSIVE CONDITIONS:

SECTION 1.0 SCOPE OF WORK

- 1.01 INSTALLATION DESCRIPTION: INSTALL CONDUIT AND ALL RELATED APPURTENANCES FOR FIBER OPTIC CABLE INSTALLATION. SEE PLANS FOR EXACT LOCATION, LENGTHS, QUANTITIES, AND DIMENSIONS OF PROPOSED IMPROVEMENTS.
- 1.02 SEE COVER FOR LOCATION OF ENGINEER'S ESTIMATE OF MATERIALS.
- 1.03 THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, EQUIPMENT, LABOR, INSTALLATION, RESTORATION, UTILITY RELOCATION CHARGES, JOB SITE DELIVERY COSTS AND INCIDENTALS TO COMPLETE THE DESCRIBED OR ILLUSTRATED WORK, UNDER THIS CONTRACT.
- 1.04 ANY CHANGE-ORDER REQUEST MUST BE PRESENTED IN WRITING TO THE OWNER'S REPRESENTATIVE AND APPROVED PRIOR TO PROCEEDING WITH THE REQUESTED CHANGE. DOCUMENTATION CONCERNING ANY AND ALL CHANGE ORDERS WILL BE REDUCED TO FORMAL RECORD, FILED WITH THE OWNER'S REPRESENTATIVE, AND BE MADE AVAILABLE FOR FUTURE REFERENCE.
- 1.05 THE ENGINEER WILL NOT BE RESPONSIBLE NOR ASSUME ANY LIABILITY FOR NEGLIGENT ACTS OR ERRORS OF OMISSIONS OF ANY CONTRACTOR, ANY SUBCONTRACTOR, OR ANY OF THE CONTRACTOR'S OR SUBCONTRACTORS' AGENTS OR EMPLOYEES OR ANY OTHER PERSONS (EXCEPT ENGINEER'S OWN EMPLOYEES) AT THE PROJECT SITE OR OTHERWISE PERFORMING ANY OF THE WORK OF THE PROJECT. ANY CONTRACTOR OR SUBCONTRACTOR, AS WELL AS THE ENGINEER, WILL BE RESPONSIBLE FOR HIS OWN SAFETY PROGRAM. NEITHER THE PROFESSIONAL ACTIVITIES OF THE ENGINEER, NOR THE PRESENCE OF THE ENGINEER OR HIS OR HER EMPLOYEES AND SUBCONSULTANTS AT THE CONSTRUCTION SITE, SHALL RELIEVE ANY CONTRACTOR OF HIS OR HER OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. THE ENGINEER AND HIS OR HER PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH ANY HEALTH OR SAFETY PRECAUTIONS.

SECTION 2.0 MATERIALS

- 2.01 ALL MATERIALS INSTALLED WITHIN THE LIMITS OF THIS PROJECT SHALL BE IN CONFORMANCE WITH STANDARD RECOMMENDATIONS OF THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
- 2.02 ALL TRENCHED CONDUIT, ELBOWS, AND COUPLINGS SHALL BE SCHEDULE 40 PVC UNLESS NOTED OTHERWISE.
- 2.03 ALL HORIZONTALLY DRILLED CONDUIT, ELBOWS, AND COUPLING SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) SDR-11, UNLESS NOTED OTHERWISE.
- 2.04 JOB SITE MATERIAL WILL BE DELIVERED TO AND MAINTAINED AT THE STREET WORK AREAS IN A WELL MANAGED MANNER, TO MINIMIZE CONGESTION OR INCONVENIENCE TO OTHER WORKERS, OR CONTRACTORS WORKING UNDER ALTERNATE PERMITS.

SECTION 3.0 GENERAL NOTES

- 3.01 CONTRACTOR IS ADVISED TO READ ALL NOTES ON DRAWINGS, CAREFULLY.
- 3.02 THE OWNER/ENGINEER SHALL PROVIDE SUCH PLANS, SPECIFICATIONS, DRAWINGS, COMPLETED APPLICATION FORMS AND INFORMATION NECESSARY TO SECURE ALL PERMITS; AS REQUIRED BY THE MUNICIPALITY, COUNTY, AND LADOT. WORK WILL NOT BE STARTED PRIOR TO ACQUISITION OF ALL REQUIRED PERMITS.
- 3.03 THE ENGINEER HAS FORWARDED COPIES OF THE PLANS, INSTRUCTIONS AND SPECIFICATIONS TO THE MUNICIPALITY AND COUNTY FOR EVALUATION AND COMMENTS. CONTRACTOR TO VERIFY THAT ALL REQUIRED ALTERATIONS AND SUGGESTED CHANGES HAVE BEEN RESOLVED, PRIOR TO THE START OF ANY WORK UNDER THIS PROJECT.
- 3.04 USE OF PUBLIC WAY AND/OR TEMPORARY PUBLIC WAY CLOSURE AND STREET OPENING PERMITS SHALL BE OBTAINED PRIOR TO ANY WORK REQUIRING SUCH ACTION.
- CONSTRUCTION ALONG EXISTING ROADWAYS SHALL BE COORDINATED WITH ALL CONTROLLING JURISDICTIONS AND THE OWNER TO ENSURE THAT THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND OF RESIDENTS ALONG THE ROADWAY SHALL BE PROVIDED FOR IN AN ADEQUATE AND SATISFACTORY MANNER. AT NO TIME SHALL THE EXISTING ROADWAYS BE CLOSED TO TRAFFIC, UNLESS APPROVED BY THE OWNER, THE ENGINEER OR THE MUNICIPALITY/COUNTY. DURING CONSTRUCTION OPERATIONS, ACCESS SHALL BE PROVIDED TO PRIVATE PROPERTY ALONG EXISTING ROADWAYS.
- THE CONTRACTOR(S) SHALL ADHERE TO THE MUNICIPALITY AND COUNTY'S STANDARDS AND PRACTICES AND SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, BARRICADES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC. AT A MINIMUM, ALL TRAFFIC CONTROL PRACTICES SHALL BE CONSISTENT WITH THE PART 6 OF THE FEDERAL HIGHWAY ADMINISTRATION'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO PREVENT INJURY OR DAMAGE TO PERSONS OR PROPERTY AND TO MINIMIZE DISRUPTIONS TO EFFICIENT PEDESTRIAN AND VEHICULAR TRAFFIC. THE COST OF FURNISHING AND MAINTAINING SIGNS, BARRICADES, AND WARNING DEVICES SHALL BE INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 3.05 THE CONTRACTOR SHALL VERIFY EXISTING STREET RIGHTS OF WAY TO THE EXTENT NECESSARY TO VERIFY PROPOSED WORK REMAINS WITHIN THESE RIGHTS OF WAY AND DOES NOT INFRINGE ONTO PRIVATE PROPERTY NOT OWNED BY THE OWNER.
- 3.06 SCALE FOR DRAWINGS IS FOR GENERAL INFORMATION ONLY. LOCATIONS AND DIMENSIONS SHALL BE TAKEN AS SHOWN AND THE DRAWINGS SHALL NOT BE SCALED.
- 3.07 THE CONTRACTOR SHALL MAINTAIN ALL PERMITS ON SITE AND COMPLY WITH THE REQUIREMENTS OF ALL AGENCIES HAVING JURISDICTION OVER THE WORK AND SHALL COORDINATE HIS WORK WITH THE WORK PERFORMED BY OTHERS FOR THE PROPOSED INSTALLATION.
- 3.08 CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL PUBLIC AND PRIVATE UTILITIES AS WELL AS CITY, COUNTY, AND STATE AGENCIES.

SECTION 4.0 EXISTING UTILITIES

- 4.01 EXISTING CONDITIONS, STRUCTURES, UTILITIES AND SURFACE FEATURES SHOWN WERE OBTAINED FROM UTILITY ATLASES AND FROM DRAWINGS FURNISHED BY THE VARIOUS UTILITIES AND ARE ASSUMED TO BE ACCURATE AND CORRECT. THE CONTRACTOR SHALL PERFORM HIS OWN SURVEY AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS OF EXISTING STRUCTURES PRIOR TO STARTING ANY WORK.
- 4.02 FOR BORED INSTALLATIONS, THE CONTRACTOR SHALL PERFORM TEST HOLES AT ALL UTILITY CROSSINGS TO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION, AND TO LOCATE ANY POSSIBLE OBSTRUCTIONS. ALL TEST HOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 4.03 FOR TRENCHED INSTALLATIONS, THE CONTRACTOR SHALL PERFORM TEST HOLES PER PLAN OR AS DEEMED NECESSARY TO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION, AND TO LOCATE ANY POSSIBLE OBSTRUCTIONS. ALL TEST HOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 4.04 THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL OVERHEAD OBSTRUCTIONS PRIOR TO THE COMMENCEMENT OF WORK.
- 4.05 EXISTING UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION. THE CONTRACTOR SHALL CONTACT LOUISIANA 811 AT (800)-272-3020 A MINIMUM OF 48 HOURS (EXCLUDING WEEKENDS AND GOVERNMENT HOLIDAYS) PRIOR TO COMMENCEMENT OF ANY PAVEMENT CUTS OR EXCAVATION TO REQUEST LOCATING AND MARKING OF EXISTING UTILITIES PRIOR TO PERFORMING ANY EXCAVATION WORK IN OR AROUND ANY UTILITY.
- 4.06 ALL EXCAVATION WORK NEAR AND AROUND EXISTING STRUCTURES AND UTILITIES SHALL BE BY HAND METHOD.
- 4.07 ALL DISCREPANCIES SHOULD BE REPORTED TO ENGINEER OF RECORD AT HBK ENGINEERING (312-432-0076). ANY QUESTIONS OR COMMENTS THE CONTRACTOR MAY HAVE ARE TO BE DISCUSSED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
- 4.08 FURTHER, THE CONTRACTOR SHALL RECORD THE LOCATION AND ELEVATION OF ALL UTILITIES ENCOUNTERED, AND INSTALLATION OF NEW WORK, AS THE WORK PROGRESSES AND SHALL PREPARE RECORD DRAWINGS (RED-LINES) BASED ON HIS RECORDS. AS PART OF THE RECORD DRAWINGS, CONTRACTOR SHALL ALSO PROVIDE HORIZONTAL AND VERTICAL CONFIGURATION OF CONDUITS WHERE MULTIPLE CONDUITS ARE INSTALLED. THESE RECORDS TO BE SUPPLIED TO HBK ENGINEERING, LLC AT COMPLETION OF WORK.
- 4.09 MAINTAIN MORE THAN 2'-0" VERTICAL CLEARANCE AND MORE THAN 4'-0" HORIZONTAL CLEARANCE BETWEEN EXISTING SEWER OR SEWER STRUCTURES AND UTILITY. THE CONTRACTOR IS TO RESTORE ALL DAMAGED STRUCTURES AND UTILITIES TO THE SATISFACTION OF THE OWNERS' REPRESENTATIVE AND THE GOVERNING AGENCY.
- 4.10 CONTRACTOR SHALL SUPPORT ALL WATER MAINS IN EXCESS OF 12" IN DIAMETER WITH A PERMANENT TYPE OF STRUCTURE UNLESS OTHERWISE NOTIFIED BY THE WATER COMPANY, AND IS INCLUDED IN COST FOR DOING THE WORK. AT NO TIME DURING CONSTRUCTION SHALL WATER MAINS GO UNSUPPORTED FOR A SPAN GREATER THAN 8'-0".
- 4.11 CONTRACTOR RESPONSIBLE FOR OBTAINING AND PROVIDING REVIEW AND DESIGN OF ANY AND ALL TEMPORARY UTILITY SUPPORT SYSTEMS PRIOR TO CONSTRUCTION.
- 4.12 CONTRACTOR SHALL NOTIFY POWER UTILITY IN SITUATIONS WHERE STEEL PIPE CONDUCTOR IS NICKED DURING EXCAVATION. IN THESE INSTANCES, POWER UTILITY WILL EVALUATE THE EXTENT OF THE DAMAGE SO AS TO DETERMINE WHETHER REPAIR IS REQUIRED PRIOR TO BACKFILL AND GRADE SURFACE RESTORATION.
- 4.13 LOUISIANA 811 IS TO BE NOTIFIED NO LESS THAN 48 HOURS/TWO BUSINESS DAYS PRIOR TO THE START OF ANY WORK.
- 4.14 THE PLANS SHOW THE LOCATIONS OF WATER MAINS, GAS MAINS, COMMUNICATION LINES, ELECTRIC LINES, SEWERS, AND OTHER UTILITY LINES ACCORDING TO INFORMATION PROVIDED BY COUNTY, STATE, AND LOCAL AGENCIES, AND GIS DATA. THIS INFORMATION IS NOT DEEMED TO BE COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING FACILITIES, PIPES, AND LINES, AND TO PROVIDE FOR THEIR PROPER PROTECTION, SUPPORT AND MAINTENANCE PRIOR TO ALL CONSTRUCTION OPERATIONS WITHIN PUBLIC RIGHT-OF-WAY. WHENEVER EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION OR ELEVATION WITH PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, WHO WILL PROVIDE ANY ENGINEERING REQUIRED TO AVOID THE CONFLICT.
- 4.15 ALL NEW FACILITIES SHALL BE INSTALLED AND CONSTRUCTED WITHIN THE PUBLIC RIGHT OF WAY AND IN NO WAY SHALL NEW FACILITIES BE INSTALLED IN TRESPASS OF ADJACENT LAND OWNERS WITHOUT PRIOR WRITTEN CONSENT FROM THE LAND OWNER AND HBK ENGINEERING, LLC.

SECTION 5.0 WORK

- 5.01 THE CONTRACTOR SHALL INVESTIGATE THE PROJECT, PLANS, SPECIFICATIONS, INSTRUCTIONS, SITE, UTILITIES, TRAFFIC CONDITIONS, MATERIAL, LABOR, EXCAVATION, RESTORATION AND REQUIRED SAFETY PRECAUTIONS INVOLVED WITH THIS PROJECT. ANY QUESTIONS OR CONCERNS THE CONTRACTOR MAY HAVE ARE TO BE DISCUSSED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
- 5.02 NO STORAGE OF EQUIPMENT OR MATERIALS IN THE ROADWAY IS PERMITTED UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE CITY, COUNTY, STATE, AND/OR GOVERNING BODY.
- 5.03 THE CONTRACTOR SHALL MARK ALL OPENINGS ON THE SURFACE PRIOR TO THE COMMENCEMENT OF EXCAVATION. ALL OPENINGS ON PAVED SURFACES SHALL BE SAW CUT OR CORE DRILLED PRIOR TO REMOVAL OF PAVEMENT.
- 5.04 CONTRACTOR TO EXCAVATE ± 0'-3" DEPTH AND WIDTH OF EXCAVATIONS SHOWN ON THESE PLANS.
- 5.05 ALL EXCAVATIONS SHALL BE INSPECTED BY THE CONTRACTOR PRIOR TO PLACING ANY PIPE, UTILITY OR STRUCTURE. ALL UTILITIES SHALL BE INSPECTED, TESTED AND SHALL BE ACCEPTED PRIOR TO PLACING ANY BACKFILL FOR SHORING OF EXCAVATION.
- 5.06 CONTRACTOR RESPONSIBLE FOR OBTAINING AND PROVIDING REVIEW AND DESIGN OF ANY AND ALL SHORING SYSTEMS PRIOR TO CONSTRUCTION.
- 5.07 CONTRACTOR SHALL ASSUME ALL ELECTRICAL CABLES ARE ENERGIZED AND SHALL BE SUPPORTED SO AS NOT TO STRESS ANY PORTION OF THE CABLE.
- 5.08 CONTRACTOR SHALL PROVIDE APPROPRIATE DE-WATERING MEASURES, IF NECESSARY, TO ENSURE GROUNDWATER TABLE REMAINS AT A DEPTH BELOW THE BASE OF THE EXCAVATION AT ALL TIMES DURING EXCAVATION, INSTALLATION AND BACKFILLING OPERATIONS.
- 5.09 THE ENGINEER SHALL BE NOTIFIED FOR RESOLUTION OF SITUATIONS WHERE DUCT PACKAGE DEPTH BELOW GRADE EXCEEDS DEPTH CURRENTLY SHOWN ON PLAN/PROFILE DRAWINGS.
- 5.10 THE ENGINEER SHALL ALSO BE NOTIFIED FOR DISPOSITION OF SITUATIONS WHERE DUCT PACKAGE CANNOT MAINTAIN 18" VERTICAL AND 3'-0" GENERIC SEPARATION (CONCRETE TO CONCRETE) BETWEEN NEW AND EXISTING DUCT PACKAGES.

SECTION 6.0 SAFETY

- 6.01 CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT UTILITIES, PEDESTRIANS, WORKERS AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCES, BARRICADES, ETC. AS REQUIRED TO PROTECT ADJACENT PROPERTY AND THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.
- 6.02 THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY BARRICADES, SIGNAGE, WARNING LIGHTS AND OTHER DEVICES AND KEEP ALL TRAFFIC CONTROL OPERATIONAL 24 HOURS A DAY AT ALL OPEN TRENCH LOCATIONS AND AT LOCATIONS WHICH DO NOT HAVE A FINISHED SURFACE OR ROAD PLATES.
- 6.03 THE CONTRACTOR SHALL COORDINATE INGRESS AND EGRESS TO ADJACENT PROPERTIES AND/OR CONSTRUCTION AFFECTED BY THE PROPOSED WORK.

SECTION 7.0 RESTORATION

- 7.01 THE CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM ALL RESTORATION WORK IN THE CONTRACTOR'S NAME. ALL PAVING SHALL BE COMPLETED WITHIN 15 WORKING DAYS AFTER EXCAVATION IS BACKFILLED UNLESS OTHERWISE ARRANGED IN ADVANCE WITH GOVERNING AGENCY.
- 7.02 WHERE REQUIRED CONTRACTOR SHALL BREAK OUT SIDEWALK, DRIVEWAY, CURB AND GUTTER, PAVEMENT AND RESTORE TO PERMANENT CONDITION. CONTRACTOR TO CONFORM CONCRETE TO COLOR, FINISH, AND TEXTURE OF EXISTING SIDEWALKS, CURB AND GUTTER.
- 7.03 STREETS AFFECTED BY EXCAVATION SHALL BE RESTORED PER LADOT'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES" LATEST EDITION, AND OTHER DOCUMENTS, AS APPLICABLE. AREA SURROUNDING THE EXCAVATION SHALL NOT BE CLEANED INTO THE TRENCH.
- 7.04 THE CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION OF THE AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR TO PAY ALL FEES AND OBTAIN ALL PERMITS FOR RESTORATION.
- 7.05 THE CONTRACTOR IS TO NOTIFY FACILITY OWNERS OF ANY AND ALL DAMAGE IN THE EVENT THAT DAMAGE OCCURS.

SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:



OWNER/DEVELOPER:



CONTRACTOR:



TITLE:
PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

REVISIONS

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DRAWN BY:	CHECKED BY:	APPROVED BY:
TMH	GF	GF

PROJECT NUMBER:	25-1048
FILE NAME:	25-1048
DATE DRAWN:	03/03/2026
SCALE:	N.T.S.

SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:
hbk
ENGINEERING
921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT
OF PROFESSIONAL REGULATION
LICENSE NO. 184-002308

OWNER/DEVELOPER:
RBL
FIBER GRID

CONTRACTOR:
QUANTA
TELECOM
SOLUTIONS

TITLE:
**PROPOSED FIBER
OPTIC INSTALLATION
ON US 165 N .074 MILES NORTH
OF ROCHELLE TO GRANT PARISH LINE
TULLOS, LOUISIANA**

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TMH	GF	GF

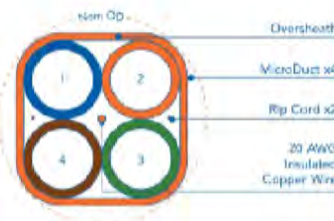
PROJECT NUMBER:	25-1048
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DATE DRAWN:	03/03/2026
SCALE:	N.T.S.

SHEET: **4 OF 15**

MICRODUCES TECHNICAL DATA SHEET

FUTUREPATH

4-way 22/16 mm



MicroDuct OOD	22/16 mm
Nominal OD	2.23 in
MicroDuct Min ID	16 mm
Oversheath	0.07 in
Weight	0.649 lb/ft
Bend Radius Sup	28 in
Bend Radius Unsup	47 in
Conduit SWP	3269 lbs

STANDARD DETAILS/SPECIFICATIONS

DETAILS	FuturePath is a unit of bundled MicroDucts. Manufactured from flexible HDPE (High Density Polyethylene). FuturePath dimensions and performance meet or exceed the requirements of Telcordia GR-3155 and are compliant with ASTM D3350.
INSTALLATION TYPES	Subdivided Conduit, Overhead, Plow, Trench, Directional Bore, MicroTrench, Tray
FILL RATIO	Choose the correct MicroDuct size based on the Outer Diameter (OD) of desired MicroCable. Dura-Line recommends a fill ratio of 50% to 75% for optimal cable placement performance. Several factors impact jacking distance including the condition of route, bends, and equipment.
COLORS	Oversheath: Orange MicroDucts: (1) Blue, (2) Orange, (3) Green, (4) Brown
CONDUIT MARKINGS	Permanent marking along FuturePath includes: material, relevant standards, production info, and sequential feet or meter markings. Custom options available.
CO-EXTRUDED LINING	SILICORE® ULF (Ultra-Low Friction) is co-extruded inside the HDPE wall creating a slick, permanent, interior lining. SILICORE® ULF exhibits no loss in performance over time or in extreme temperature conditions.
INTERNAL RISERS	Standard (except 3.5mm ID MicroDucts which are designed with a standard smooth interior)
LOCATE WIRE	Includes a 20 AWG Insulated copper wire
RIP CORD(S)	For easy opening of the oversheath

REEL SPECIFICATIONS

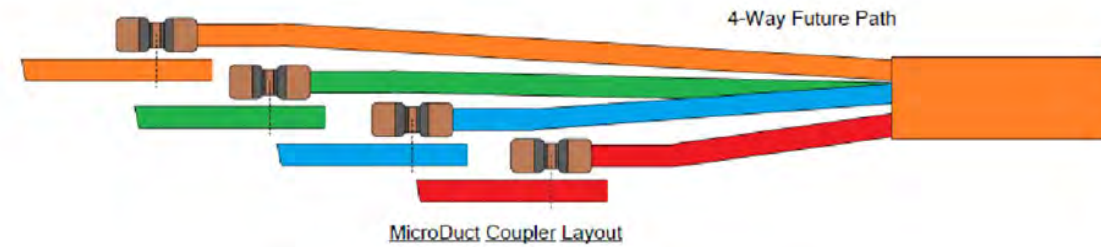
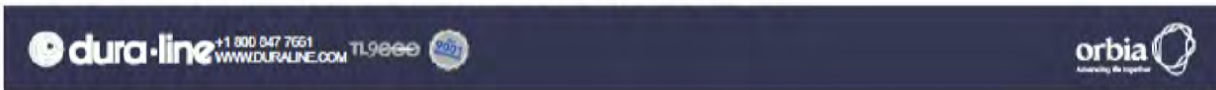
REEL SIZE	STANDARD LENGTH	REEL TYPE
96 x 46 in	4000 ft	Steel

PRODUCT COMPLIANCE

We offer an extensive portfolio of US-made conduit products and accessories that conform with several domestic preference standards, including Buy America (BAA), Build America, Buy America (BABA), and DOT Buy American requirements. Any products including a locate wire or pre-installed cables, will need to be specifically evaluated. Fire Retardant Resins may also require additional evaluation to meet program guidelines. Please contact your Dura-Line representative for more information.



† Safe working pull strength is calculated at 80% of tensile at breaking strength
‡ Unsupported Bend Radius guidelines should be followed during the installation process. The Supported Bend Radius are post-installation measurements.



Ring cut outer sheath of the MicroDuct and remove approximately 36" of outer sheath using the internal Rip Cord. Move the tracer wire out of the way, but do not cut at this time. Fan out the MicroDuct and measuring from the sheath, mark and cut the Red duct at 12", the Green duct at 18", the Blue duct at 24" and the Orange duct at 30" from the sheath. Insert each cut MicroDuct into a coupler until seated.

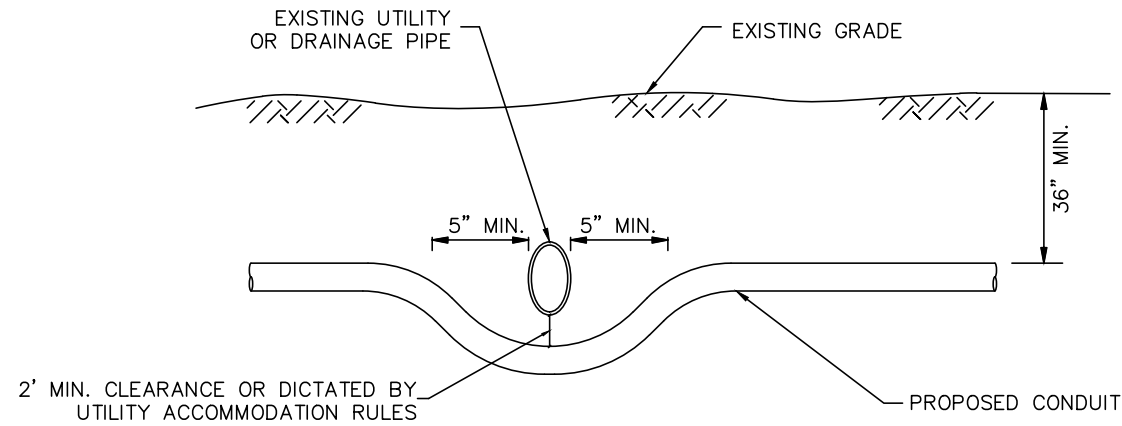
As illustrated, lay the opposing MicroDuct along side the matching color duct; using a PVD Conduit Cutter, cut the duct flush and square at the center of the coupler. Insert the MicroDuct into the coupler until seated. Repeat this action for each MicroDuct. Couplers should be staggered at least 6" apart, as shown.

Temporarily secure the bundle with black tape. Cut and splice the Tracer Wire using the appropriate coupler for 20 AWG solid copper conductors.

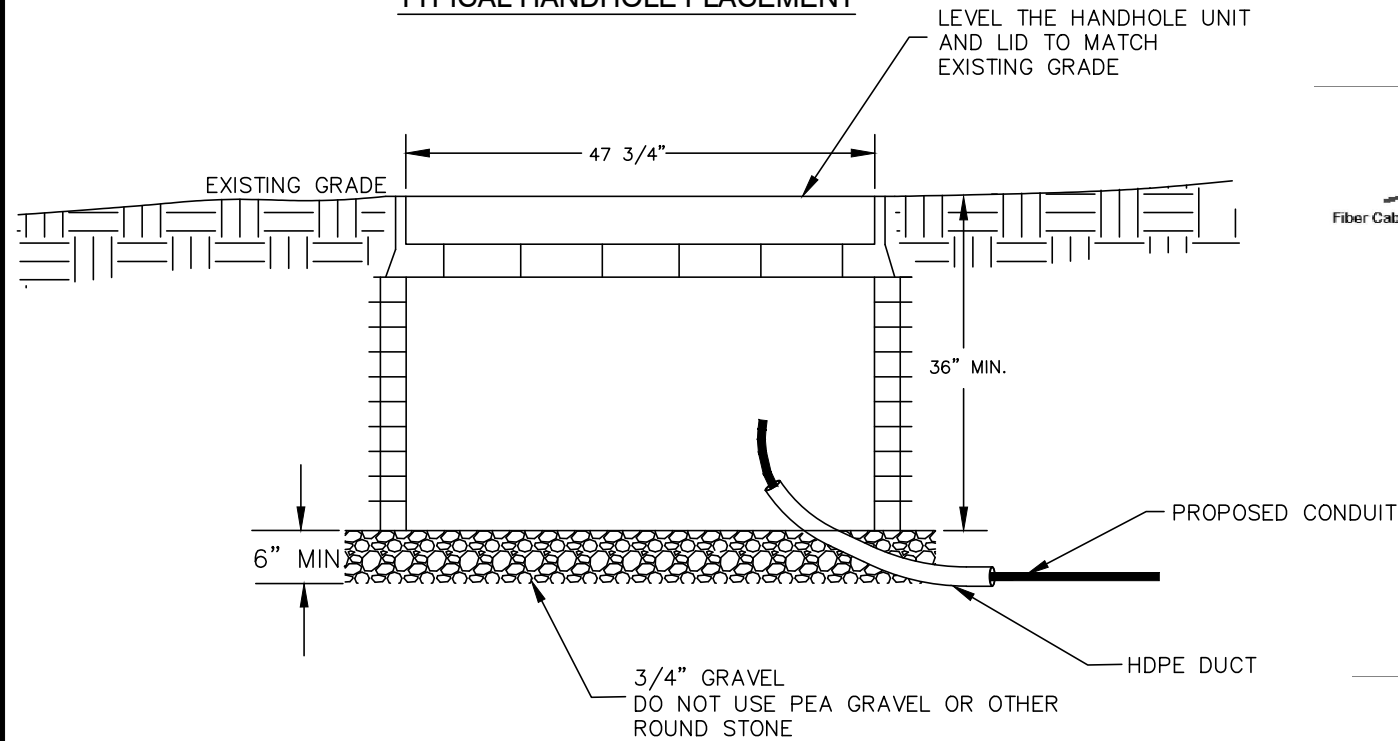
Secure the bundle using 2-1.4" PVC Split Duct. Seal the duct ends with a water blocking sealant and wrap with 3" wide Duct tape or Black tape.

STANDARD REQUIREMENTS FOR UTILITY CROSSINGS

CROSSING CLEARANCE BELOW



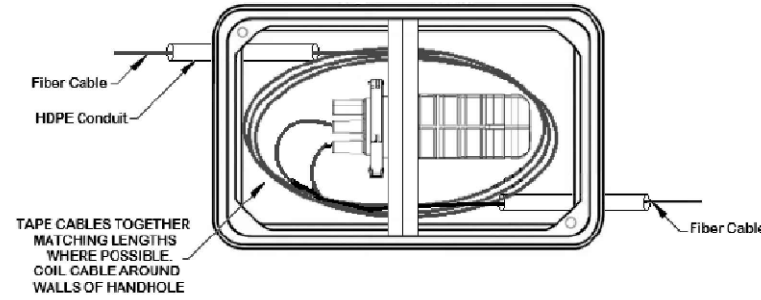
TYPICAL HANDHOLE PLACEMENT



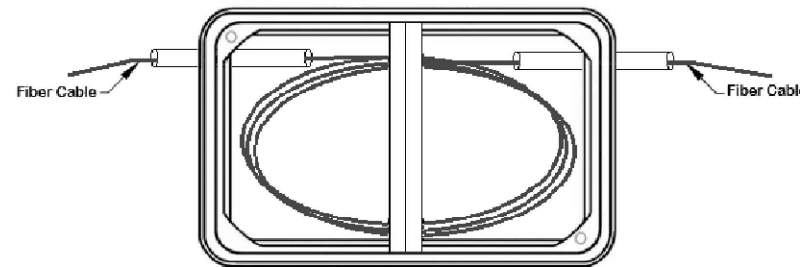
NOTES:

1. PLAN THE EXCAVATION APPROXIMATELY 12 TO 16 INCHES IN LENGTH AND WIDTH LARGER THAN THE ACTUAL DIMENSIONS OF THE HANDHOLE TO BE INSTALLED.
2. EXCAVATE THE HOLE 6 TO 8 INCHES IN DEPTH MORE THAN THE OVERALL HEIGHT DIMENSION OF THE HANDHOLE WITH THE COVER IN PLACE.
3. PLACE 5 TO 6 INCHES OF 3/4" CRUSHED ROCK OVER THE ENTIRE FLOOR. THE ROCK SHOULD BE FREE OF SOIL AND OTHER ORGANIC MATTER. PLACE THE HANDHOLE BODY INTO THE PIT.
4. PLACE THE COVER ON THE HANDHOLE BODY TO PREVENT THE BACKFILL DIRT FROM ENTERING THE INSIDE OF THE HANDHOLE.
5. THE EXCESS SOIL REMOVED FROM THE EXCAVATED PIT SHALL BE USED DURING THE BACKFILL OF THE PIT. THE BACKFILL SHALL BE TAMPED CONTINUOUSLY DURING THE FILLING PROCESS TO PREVENT SETTLING AROUND THE SIDES OF THE HANDHOLE.

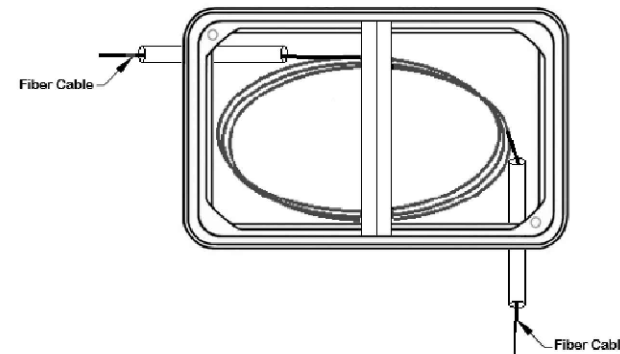
SPLICE STORAGE



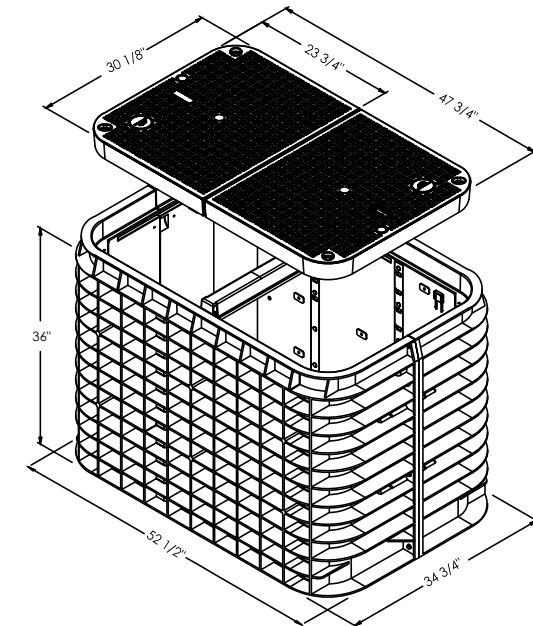
SLACK STORAGE (STRAIGHT THROUGH)



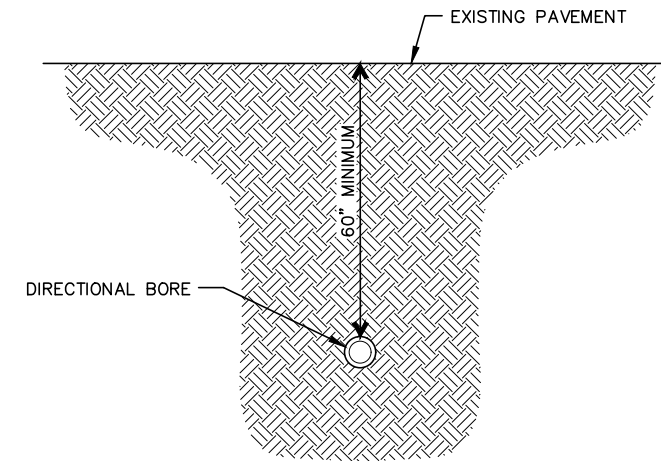
SLACK STORAGE (90° CORNER)



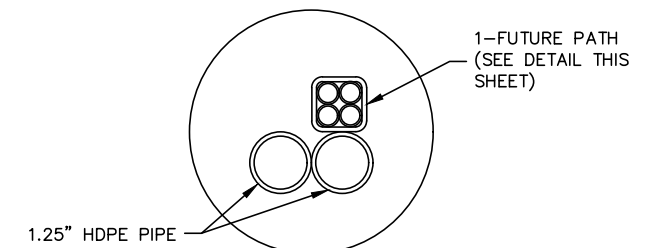
PROPOSED 30"X48"X36" CHANNEL COMPOSITE COMMUNICATIONS HANDHOLE WITH A DUAL LID



DIRECTIONAL BORING DETAIL



CONDUIT CONFIGURATION (TYPICAL)



SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:
hbk ENGINEERING
921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION
LICENSE NO. 184-002308

OWNER/DEVELOPER:
RBL FIBER GRID

CONTRACTOR:
QUANTA TELECOM SOLUTIONS

TITLE:
PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

REVISIONS			
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DRAWN BY: TMH
CHECKED BY: GF
APPROVED BY: GF

PROJECT NUMBER: 25-1048
FILE NAME: 25-1048
DATE DRAWN: 03/03/2026
SCALE: N.T.S.

58008467



SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:



921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT
OF PROFESSIONAL REGULATION.
LICENSE NO. 184-002308

OWNER/DEVELOPER:



CONTRACTOR:



QUANTA
TELECOM
SOLUTIONS

TITLE:

**PROPOSED FIBER
OPTIC INSTALLATION
ON US 165 N FROM LASALLE PARISH LINE
TO 1.61 MILES SOUTH OF OIL FIELD RD
TULLOS, LOUISIANA**

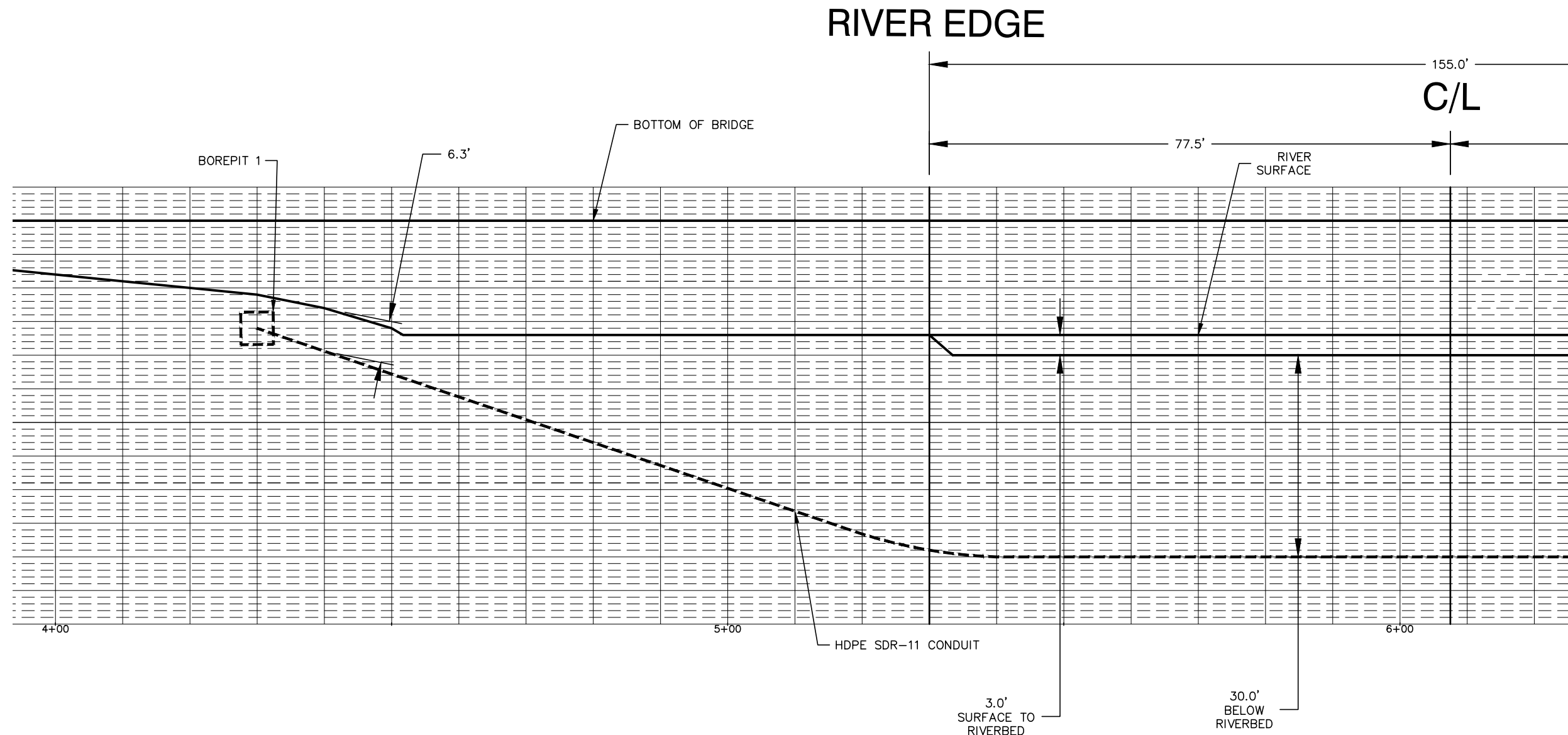
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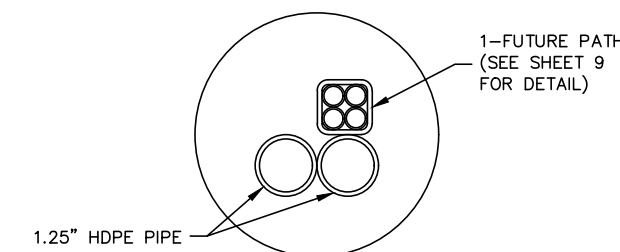
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TMH	GF	GF

PROJECT NUMBER:	25-1048
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DATE DRAWN:	03/03/2026
SCALE:	N.T.S.

SHEET: **10 OF 18**



PROFILE VIEW
FACING NORTH



CONDUIT CONFIGURATION
(TYPICAL)

UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR SHALL CONTACT 811 LOUISIANA AND LOCAL GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION FOR ALL UTILITY LOCATIONS.

58008467



SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:



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QUANTA
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SOLUTIONS

TITLE:
**PROPOSED FIBER
OPTIC INSTALLATION
ON US 165 N FROM LASALLE PARISH LINE
TO 1.61 MILES SOUTH OF OIL FIELD RD
TULLOS, LOUISIANA**

REVISIONS

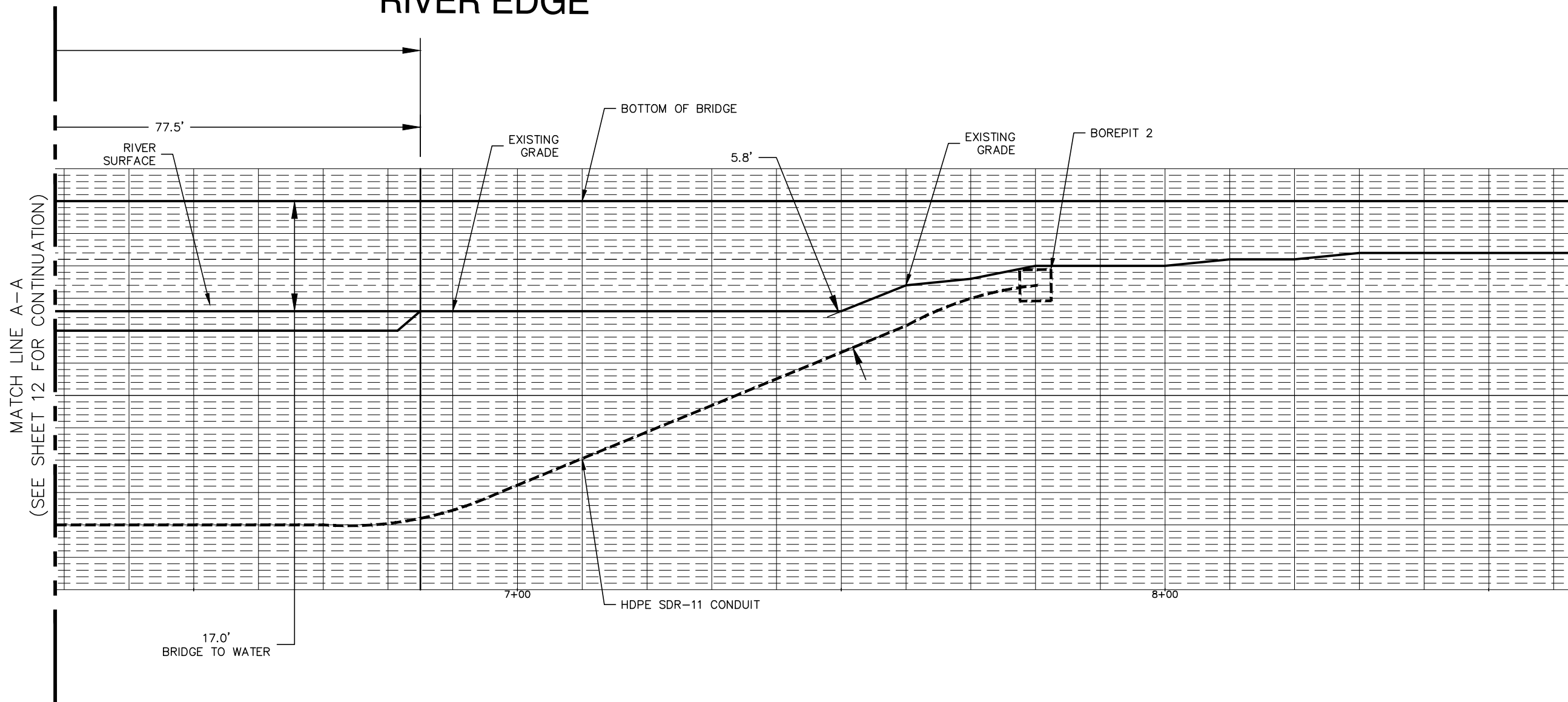
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TMH	GF	GF

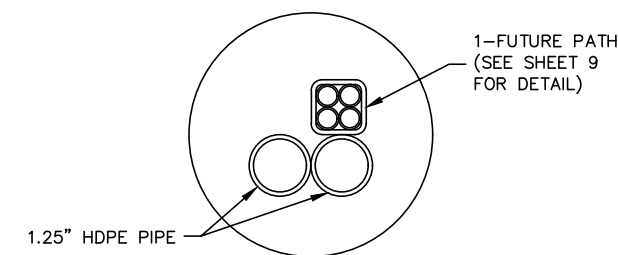
PROJECT NUMBER:	25-1048
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DATE DRAWN:	03/03/2026
SCALE:	N.T.S.

SHEET: **11 OF 18**

RIVER EDGE



PROFILE VIEW
FACING NORTH



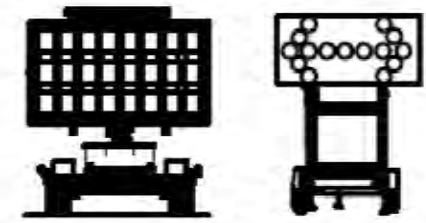
CONDUIT CONFIGURATION
(TYPICAL)

UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR SHALL CONTACT 811 LOUISIANA AND LOCAL GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION FOR ALL UTILITY LOCATIONS.

GENERAL PROVISIONS

- All temporary traffic control (TTC) devices used shall be in accordance with the Louisiana Standard Specifications for Roads and Bridges, the MUTCD, and shall meet the NCHRP Report 350 or MASH requirements for Test Level 3 devices where applicable.
- Materials used for TTC shall be in accordance with the Louisiana Standard Specifications for Roads and Bridges and, when applicable, the LADOTD AML.
- Placement of TTC devices shall not commence without the approval of the Engineer and until work is about to begin, unless they are covered.
- No lane closures, lane shifts, diversions or detours shall occur without the approval of the Engineer.
- Responsibility is hereby placed upon the contractor for the installation, maintenance and operation of all TTC devices called for in these plans or required by the Engineer for the protection of the traveling public as well as all LADOTD and construction personnel.
- The contractor shall also be responsible for the maintenance of all permanent signs, pavement markings, and traffic signals left in place as essential to the safe movement and guidance of traffic within the project limits unless noted in the plans.
- The DTOE shall serve as a technical advisor to the Engineer for all traffic control matters.
- The Chief Construction Engineer or his appointed designee shall approve all signs and situations not addressed in the plans based on the recommendations of the Project Engineer and the DTOE. All changes shall be noted in all project traffic control diaries.
- The Chief Construction Engineer or his appointed designee shall approve all design speeds of diversions or shifts, if it differs from design plans, based on the recommendations of the Project Engineer and the DTOE.
- All temporary traffic control plans shall comply with the Transportation Management Plan.
- Any additional signs shown in the MUTCD and required by the Engineer shall be installed under Item 713-01-00100.
- Neither work activity nor storage of equipment, vehicles, TMAs, or materials shall occur within the buffer space.
- When a work area has been established on one side of the roadway only, there shall be no conflicting operations or parking on the opposite shoulder within 500 feet of the work area.
- A lighting plan shall be submitted to the Engineer 30 days prior to night work for approval. (See section 713.10 of the Louisiana Standard Specifications for Roads and Bridges.)
- Parking of vehicles or unattended equipment or storage of materials, within the work zone clear zone shall not be permitted unless protected by guardrail or barriers. If the work zone clear zone is not defined on the plan sheets, the Engineer shall verify.
- Immediately upon removal of existing guardrail, the contractor shall install and maintain an NCHRP Report 350 or MASH approved device to protect the blunt end of the bridge or column until new guardrail is installed. After removal of the existing guardrail, new guardrail should be installed within seven (7) days. On non-NHS routes with shoulders less than 8 feet wide: If an NCHRP 350 Report Test Level 3 or MASH device is required but the field conditions of the roadway cannot support a Test Level 3 device, then a Test Level 2 device can be substituted in its place upon approval by the Engineer. If utilized, a TMA is allowed for a maximum of 72 hours.
- All costs associated with temporary crash devices are to be included under the appropriate NS-700 pay item.
- Sight distance should be considered when placing traffic control devices.
- On all mainline Interstates, a minimum of 1.5 feet of paved shoulder on the left and right side shall be maintained at all times.

- On Interstates, a minimum of 11 foot lanes shall be maintained. On all other roadways, a 10 foot minimum travel lane should be maintained where practical.
- TTC Standards are not drawn to scale.
- The contractor shall develop an internal traffic control plan approved by the Engineer prior to each phase.
- Truck restrictions such as (but not limited to) restricting lanes, oversize loads or times of travel, may be required for narrow lanes or other field conditions.
- Temporary concrete barrier shall be placed on a paved surface. This paved surface should follow current design criteria used for paved embankment widening for guardrails.
- Flare rates for temporary concrete barriers should follow the most current guidance in the AASHTO Roadside Design Guide.
- PAVEMENT MARKINGS (see AML)
 - All pavement markings within the limits of the project or adjacent to the project limits that are in conflict with the project signing or the required traffic movements shall be removed from the pavement by blast cleaning or grinding. (Existing striping shall not be painted over with black paint or covered with tape.)
 - If special pavement markings are needed, they shall be reflectorized, removable and accompanied by the proper signage.
 - Temporary Raised Pavement Markers may be added to supplement temporary striping in areas of transition, in tapers, in diversions and in other areas of need as shown in the plans or as directed by the Engineer.
 - Temporary markings installed in the permanent configuration shall comply with LADOTD pavement marking standard plans, MUTCD and/or the permanent striping plans.
- PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)
 - PCMS shall be used on all Interstate Highways. PCMS shall be used on all other roadways (where space is available) with an ADT greater than 20,000.
 - When used in advance of a lane closure or a lane shift, the PCMS should be placed on the right hand side of the road a minimum distance of 2 miles in advance of the taper for interstates and to be determined by the Engineer on other highways.
 - For interstates and multi-lane highways, if vehicles are queuing beyond the 2 mile PCMS, an additional PCMS should be placed on the right hand side of the road approximately 5 miles in advance of the taper or at the end of the queue, whichever is greater.
 - PCMS messages shall be approved by the Engineer. Messages shall be no more than 3 lines and 2 screens.
 - Messages shall display only traffic operational, regulatory, warning, and guidance information. PCMS messages shall not display advertising or safety messages. Messages should only convey information concerning the problem/situation, location, and recommended driver action.
 - PCMS should be placed as far from the traveled lane as possible. They shall be shielded by guardrail or barriers. If this is not possible they shall be delineated with a min. 3 drum taper spaced at 20ft with a 4th drum alongside the PCMS.
 - If the PCMS encroaches on the improved shoulder then the contractor shall install a shoulder closure.
 - When the PCMS is not displaying a work zone appropriate message pertaining to the ongoing construction project it shall be shielded by guard rail or barriers, or removed from the work zone clear zone.



ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
 ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
 CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SPEED LIMITS

- The Engineer may approve a 10 mph drop in the speed limit for posted speeds of 45 mph or greater and for any construction, maintenance or utility operation that requires one or more of the following:
 - (A) The condition of the traveled way is degraded due to milled surfaces or uneven travel lane lines greater than 1.5 inches.
 - (B) Work is in progress in the immediate vicinity of the travel way requiring lane closures or lane width reductions less than 11 feet.
 - (C) Workers present on the shoulder within 2 feet of the edge of the traveled way without barrier protection.
- The reduced speed zone shall only apply to those portions of the project limits affected. The Engineer may allow SPEED LIMIT WHEN FLASHING signs to supplement reduced speed zones.
- If the speed limit is reduced, speed limit signs shall be placed:
 - (A) beyond major intersections;
 - (B) at one mile intervals in rural areas;
 - (C) at half mile intervals in urban areas.
- At the end of the reduced speed zone, a speed limit sign displaying the original speed limit prior to construction shall be installed.
- For all other speed limit reductions not listed above, the Project Engineer and the DTOE shall recommend the speed reduction to the Chief Construction Engineer or his appointed designee for approval.
- If the speed limit is reduced more than 10 mph, placement of the signs shall be re-evaluated according to the MUTCD.

FLASHING ARROW BOARDS

- All Flashing Arrow Boards shall be 4 feet by 8 feet and Type C.
- Flashing Arrow Boards should be placed on the shoulder. When there is no shoulder or median area, the arrow board shall be placed within the closed lane behind the channelizing devices and as close to the beginning of the taper as practical.
- Flashing arrow boards shall be delineated with retroreflective TTC devices.
- At no time shall the arrow board encroach in the traveled way. When Flashing Arrow Board signs are not being used, they shall be shielded by guard rail or barriers, or removed.
- Arrow boards shall only be used for lane reduction tapers and shall not be used for lane shifts.

ABBREVIATIONS

- AASHTO American Association of State Highway and Transportation Officials
- ADT Average Daily Traffic
- AGC Associated General Contractors of America
- AML Approved Materials List
- ANSI American National Standards Institute
- ATSSA American Traffic Safety Services Association
- B.O.P. Beginning of Project
- DTOE District Traffic Operations Engineer
- E.O.P. End of Project
- LADOTD Louisiana Department of Transportation and Development
- MASH AASHTO Manual for Assessing Safety Hardware
- MUTCD Manual on Uniform Traffic Control Devices
- NCHRP National Cooperative Highway Research Program
- NHS National Highway System
- PCMS Portable Changeable Message Sign
- TMA Truck Mounted Attenuator
- TMC Traffic Management Center
- TTC Temporary Traffic Control
- TTC Standards .. Temporary Traffic Control Standard Plans

TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET

DOTD
 LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

APPROVED BY: GARY FRAHN
 DATE: Feb 7, 2025

REVISIONS

REV	DATE	DESCRIPTION	BY
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DRAWN BY: TMH
 CHECKED BY: GF
 APPROVED BY: GF

PROJECT NUMBER: 25-1048
 FILE NAME: 25-1048
 DATE DRAWN: 03/03/2026
 SCALE: N.T.S.

SHEET: 9 OF 15

SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:

hbk
 ENGINEERING

921 WEST VAN BUREN STREET, SUITE 100
 CHICAGO, ILLINOIS 60607
 STATE OF ILLINOIS DEPARTMENT
 OF PROFESSIONAL REGULATION
 LICENSE NO. 184-002308

OWNER/DEVELOPER:

RBL
 FIBER GRID

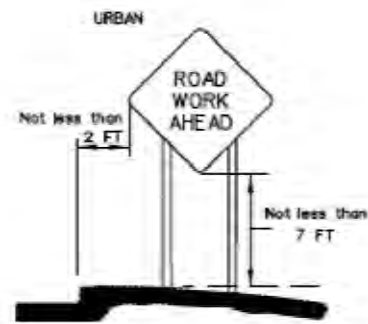
CONTRACTOR:

QUANTA
 TELECOM
 SOLUTIONS

TITLE:
 PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

SIGNS

- All signs used for temporary traffic control shall follow the plans, the LADOTD TTC Standards and the MUTCD.
- Signs shown in the TTC illustrations are typical and may vary with each specific condition.
- One Type B High Intensity light shall be used to supplement the first sign (or pair of signs) that gives warning about a lane closure during nighttime operations (See AML).
- Mesh rollup signs shall not be allowed on any project.
- Contractor shall use caution not to damage existing signs which remain in place. Any LADOTD signs damaged by work operations shall be replaced by the contractor under item 713-01-00100.
- All signs (permanent and temporary) shall be removed or completely covered with a strong, lightweight, opaque material when no longer applicable. (Burlap is not an acceptable material to cover signs).
- At no time shall signs warning against a particular operation be left in place once the operation has been completed or where the condition has been removed.
- Warning signs used for temporary traffic controls shall meet the following guidelines unless otherwise noted in the plans:
 - (A) size shall be 48 inches by 48 inches.
 - (B) see the Louisiana Standard Specifications for Roads and Bridges and the AML for sheeting information.
 - (C) lateral distance of signs shall be a minimum of 6 feet from the edge of shoulder or edge of pavement if no shoulder exists and 2 feet from the back of curb in urban areas (see diagram).
- When portable sign frames are not in use, they shall be moved to an area inaccessible to traffic and not visible to the driver.
- Left side mounted signs will not be required for roadways with a center left turn lane and for undivided roadways.
- Vinyl rollup signs and 1 foot portable sign stands may be used if work zone is in place for 3 days or less. Signs or stands may not be used if there are more than 2 lanes in each direction and if signs do not meet all size, color, retroreflectivity and NCHRP 350 Report or MASH requirements.
- All signs shall be visible to the drivers (i.e. no obstructions such as on street parking or other traffic control devices shall block the sign).
- On divided highways, signs shall be placed on the right and the left as shown on the TTC standards.
- Sign posts:
 - Signs measuring 10 square feet or less shall be mounted on 1 rigid post
 - Signs over 10 square feet shall be mounted on 2 rigid posts
 - Signs over 20 square feet shall be mounted on at least 3 rigid posts
- Rigid sign supports shall be driven to a minimum depth of 3 feet. (If splicing is required, see Allowable Lap Splice U-channel Post.)
- For sign height, see the Rural and Urban diagrams:

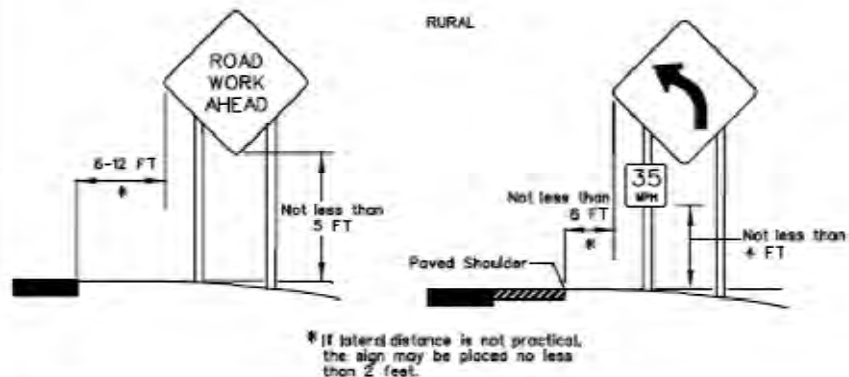
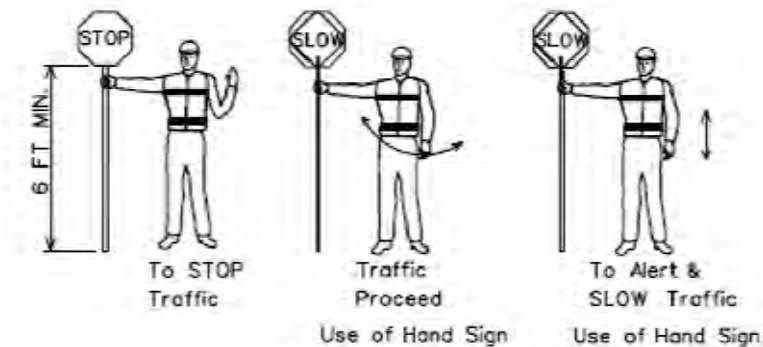


LANE CLOSURES

- All proposed lane, road or shoulder closures shall be reviewed by the DTOE and approved by the Engineer.
- Two lane, two-way highways shall have a maximum work area of two miles; all other roadways shall have a four mile maximum work area.
- A queue analysis shall be performed prior to approval of lane closures on all Interstates according to Section 6A.1 of the Traffic Engineering Manual.
- Closure plans and times shall be turned in to the Engineer for review according to the following:
 - (A) 5 working days minimum if traffic control plan has been approved or is contained in the plans.
 - (B) 10 working days minimum and a traffic control plan must be submitted for lane closures not addressed in the plans.
- Weekly updates to the DTOE, Project Engineer, the LADOTD TMC operator and the regional TMC operator (if applicable) will be required for all ongoing lane closures to update the closure status.
- Daily updates to the DTOE, Project Engineer and TMC operator (if applicable) will be required for all projects where active closures are in place.

FLAGGERS

- All flaggers shall be qualified.
- The contractor shall be responsible for training or assuring that all flaggers are qualified to perform flagging duties.
- A Qualified Flagger is one that has completed courses such as those offered by ATSSA or other courses approved by the LADOTD Work Zone Task Force. The contractor shall be responsible for getting the flagger course approved.
- When utilized, a flagger shall use a minimum 18 inch octagonal shape sign on a minimum 6 foot stop/slow paddle and wear ANSI Class 2 Lime Green vest during day time operations and ANSI Class 3 Lime Green ensemble during night operations.
- In all flagging operations, the flagger must be visible from the flagger advance warning sign.
- Flaggers shall not be used on the Interstate.



PEDESTRIAN CONSIDERATIONS

- If the TTC zone affects the movement of pedestrians, adequate pedestrian access and walkways shall be provided either through the TTC zone or a designated alternate route.
- Pedestrians should be provided with a convenient and accessible path that replicates as nearly as practical the most desirable characteristics of the existing sidewalk(s) or footpath(s).
- Advance notification of sidewalk closures shall be provided by the maintaining agency.
- No storage of construction materials, equipment, and/or vehicles will be permitted on permanent or temporary bicycle, pedestrian, or transit facilities for any duration of time.

REFERENCES

- The contractor shall be responsible for understanding all rules and requirements in the current edition of the following documents:
 - Louisiana Standard Specifications for Roads and Bridges. http://www.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications
 - Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD). <http://mutcd.fhwa.dot.gov/>
 - LADOTD Approved Materials List (AML) Manual. http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_QPL.aspx
 - LADOTD Traffic Engineering Manual. http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc/20Documents/Traffic/20Engineering/20Manual.pdf
 - National Cooperative Highway Research Program (NCHRP) Report 350: "Guidelines for Work Zones Traffic Control Devices". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_350-a.pdf
 - NCHRP Report 475: "A Procedure for Assessing and Planning Nighttime Highway Construction and Maintenance". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_475.pdf
 - NCHRP Report 476: "Guidelines for Design and Operation of Nighttime Traffic Control for Highway Maintenance". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_476.pdf
 - NCHRP Report 498: "Illumination Guidelines for Nighttime Highway Work". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_498.pdf
 - American Association of State Highway and Transportation Officials (AASHTO) Roadside Design Guide.
 - American Traffic Safety Services Association (ATSSA) Quality Guidelines for Work Zone Traffic Control Devices and Features.
 - U.S. Department of Transportation Federal Highway Administration Traffic Control Handbook for Mobile Operations at Night. <http://www.dot.state.il.us/blr/1023.pdf>

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING. ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER. CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET

TTC-00 (B)

APPROVED BY: GARY FRAHN

DATE: FEB 7, 2025

DESIGNED BY: GARY FRAHN

CHECKED BY: GARY FRAHN

PROJECT NUMBER: 25-1048

FILE NAME: 25-1048

DATE DRAWN: 03/03/2026

SCALE: N.T.S.

DOT LOUISIANA DEPARTMENT OF TRANSPORTATION & INFRASTRUCTURE

TRAFFIC ENGINEERING

SEGMENT: RBL-DB-142-WTR

NOTES:

ENGINEER:

hbk ENGINEERING

921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION
LICENSE NO. 184-002308

OWNER/DEVELOPER:

RBL FIBER GRID

CONTRACTOR:

QUANTA TELECOM SOLUTIONS

TITLE: PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

REVISIONS

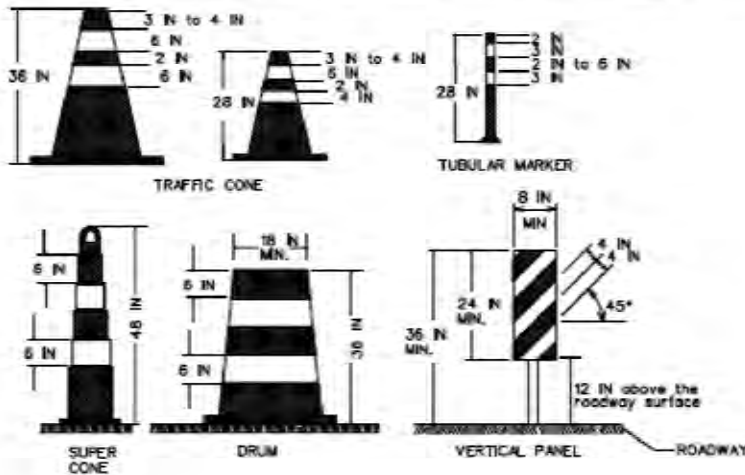
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DRAWN BY:	CHECKED BY:	APPROVED BY:
TMH	GF	GF

PROJECT NUMBER:	25-1048
FILE NAME:	25-1048
DATE DRAWN:	03/03/2026
SCALE:	N.T.S.

CHANNELIZING DEVICES

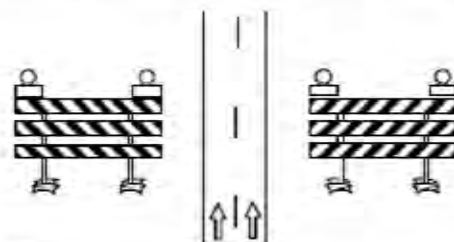
- The following devices may be used as channelizing devices: Tubular Markers, Vertical Panels, Cones, Drums and Super Cones.
- 28 inch traffic cones are not allowed on:
 - Interstates
 - Highways with speeds greater than 40 mph.
- During nighttime operations, 28 inch and 36 inch cones are not allowed.
- Retroreflective material pattern used on super cones shall match that used on drums.
- Tangent Areas:**
 - Standard Spacing:** See Standard Device Spacing and Buffer Space table.
 - Daylight Operations:** Drums and super cones are spaced at standard spacing. All other devices are at 1/2 standard spacing.
 - Nighttime Operations:** Drums and supercones at standard spacing are the only devices allowed.
- Taper Areas:**
 - Standard Spacing:** See Standard Device Spacing and Buffer Space table.
 - Daylight Operations:** Drums are spaced at standard spacing. All other devices are 1/2 standard spacing.
 - Nighttime Operations:** Drums (at standard spacing) are the only devices allowed.
- Downstream Locations & Flaggers:** Drums or supercones at 20' max spacing. The length of taper shall be between 50' - 100' with a minimum of 6 devices.
- Type C steady burn lights shall be used on all channelizing devices in the taper as well as the first two devices in the tangent at night, (see the AML).
- Typical channelizing device lateral placement (do not include when it is used as a divider for opposing directions of traffic) shall be 2 feet off the lane line in the closed lane or shoulder.
- Devices may be adjusted laterally to accommodate ongoing work in the immediate vicinity but must be returned to the closed lane after the work activity has moved.
- Channelizing devices on the lane line shall be of the same type.
- Channelizing devices in each taper shall be of the same type.



ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING. ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER. CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

TYPE III BARRICADES

- Only Type III Barricades shall be used in the roadway or shoulder.
- All barricades shall use Type 3 High Intensity Sheeting on both sides of the barricade.
- All barricades shall be a minimum of 8 feet in length and must meet NCHRP Report 350 or MASH requirements.
- When used for overnight closures, two Type B High Intensity Lights shall supplement all barricades that are placed in a closed lane or that extend across a highway. Two Type A Low Intensity Lights may be used in urban areas if approved by the Engineer (See AML).
- When signs and lights are to be mounted to a barricade, they must meet NCHRP Report 350 or MASH requirements.
- A truck with a TMA may be substituted for a barricade when workers are present.
- Barricades shall be placed:
 - at the beginning of a closed lane or shoulder and at 1,000 foot intervals where no active work is ongoing and the lane must remain closed. A minimum of 2 barricades shall be placed if the lane or shoulder closure is less than 2,000 feet. (One barricade shall be placed at the beginning of the lane closure after the buffer space and one shall be placed in the middle of the lane closure.)
 - before each or group of unfilled holes or holes filled with temporary material.
 - before uncured concrete.
 - in the closed lane on each side of every intersection and crossover. (Do not block sight distance.)
 - in front of piles of material (dirt, aggregate, broken concrete), culverts and equipment which is near the work zone.



TTC for DROP-OFFS

Average Drop-off	Current Posted Speed (Prior to Construction)	
	> 45 MPH	≤ 45 MPH
≤ 3 IN	Low Shoulder Sign (Optional)	Low Shoulder Sign (Optional)
> 3 IN	Shoulder Drop Off Sign & Edge Lines or Shoulder Drop Off Sign & Channelizing Device	Shoulder Drop Off Sign
> 6 IN	No Shoulder Sign, Edge Lines & Vertical Panel	No Shoulder Sign & Channelizing Device
> 10 IN	Concrete Barrier (if drop off is < 12 FT from edge of travel lane) & Edge Lines	No Shoulder Sign & Vertical Panel

INTERSTATE	
Average Drop-off	Requirement
≤ 2 IN	Low Shoulder Sign (Optional)
> 2 IN	Shoulder Drop Off Sign & Edge Lines or Shoulder Drop Off Sign & Channelizing Device
> 6 IN	Concrete Barrier (if drop off is < 12 FT from edge of travel lane), Shoulder Drop Off Sign, & Edge Lines

- If a portable concrete barrier will be required then the deflection shall be considered in the design.
- For Interstate ramps, refer to non-Interstate drop offs.

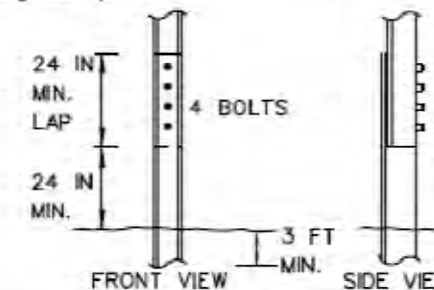
STANDARD DEVICE SPACING AND BUFFER SPACE

SPEED LIMIT (prior to construction)	MERGING TAPER LENGTH (L)				STANDARD DEVICE SPACING IN FEET		BUFFER SPACE FT
	Lane Width (FT)				Along Taper	Along Tangent	
25	9	10	11	12	20	40	155
30	94	105	115	125	30	60	200
35	164	205	225	245	35	70	250
40	240	267	294	320	40	80	305
45	405	450	495	540	40	80	360
50	450	500	550	600	40	80	425
55	495	550	605	660	40	80	495
60	540	600	660	720	40	80	570
65	585	650	715	780	40	80	645
70	630	700	770	840	40	80	730
75	675	750	825	900	40	80	820

SPEED LIMIT (prior to construction)	SHIFTING TAPER LENGTH (1/2) L						STANDARD DEVICE SPACING IN FEET		BUFFER SPACE FT
	Lane Shift (FT)						Along Taper	Along Tangent	
25	2	4	6	8	10	12	20	40	155
30	11	21	32	42	52	63	30	60	200
35	15	30	45	60	75	90	35	70	250
40	21	41	62	82	102	123	40	80	305
45	27	54	80	107	134	160	40	80	360
50	34	68	102	136	170	204	40	80	425
55	41	82	123	164	205	246	40	80	495
60	49	98	147	196	245	294	40	80	570
65	58	116	175	230	285	340	40	80	645
70	67	134	200	266	332	396	40	80	730
75	77	154	225	297	363	432	40	80	820

SPEED LIMIT (prior to construction)	SHOULDER TAPER LENGTH (1/3) L						STANDARD DEVICE SPACING IN FEET		BUFFER SPACE FT
	Shoulder Width (FT)						Along Taper	Along Tangent	
25	2	4	6	8	10	12	20	40	155
30	7	14	21	28	35	42	30	60	200
35	10	20	30	40	50	60	35	70	250
40	14	28	41	55	68	82	40	80	305
45	18	36	54	72	89	107	40	80	360
50	24	48	72	96	120	144	40	80	425
55	30	60	90	120	150	180	40	80	495
60	37	74	110	147	184	220	40	80	570
65	44	88	132	176	220	264	40	80	645
70	51	102	153	204	255	306	40	80	730
75	59	118	177	236	295	354	40	80	820

- See MUTCD for taper formulas.
- ALLOWABLE LAP SPLICE FOR U-CHANNEL POST**
U-Channel posts may be spliced where long lengths are required. The upper section shall overlap the lower section by at least 24 inches. The bottom edge of the upper section of the splice shall be a minimum of 24 inches above the ground. The spliced sections shall be secured with at least four 3/8 inch diameter hex bolts spaced equally along the splice.



DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & INFRASTRUCTURE

TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET

TTC-00 (C)

APPROVED BY: GARY FRAHN, PROJECT MANAGER

DATE: FEB. 7, 2025

REVISIONS:

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DRAWN BY: TMH, CHECKED BY: GF, APPROVED BY: GF

PROJECT NUMBER: 25-1048
FILE NAME: 25-1048
DATE DRAWN: 03/03/2026
SCALE: N.T.S.

SEGMENT: RBL-DB-142-WTR

ENGINEER: hbk ENGINEERING
921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION
LICENSE NO. 184-002308

OWNER/DEVELOPER: RBL FIBER GRID

CONTRACTOR: QUANTA TELECOM SOLUTIONS

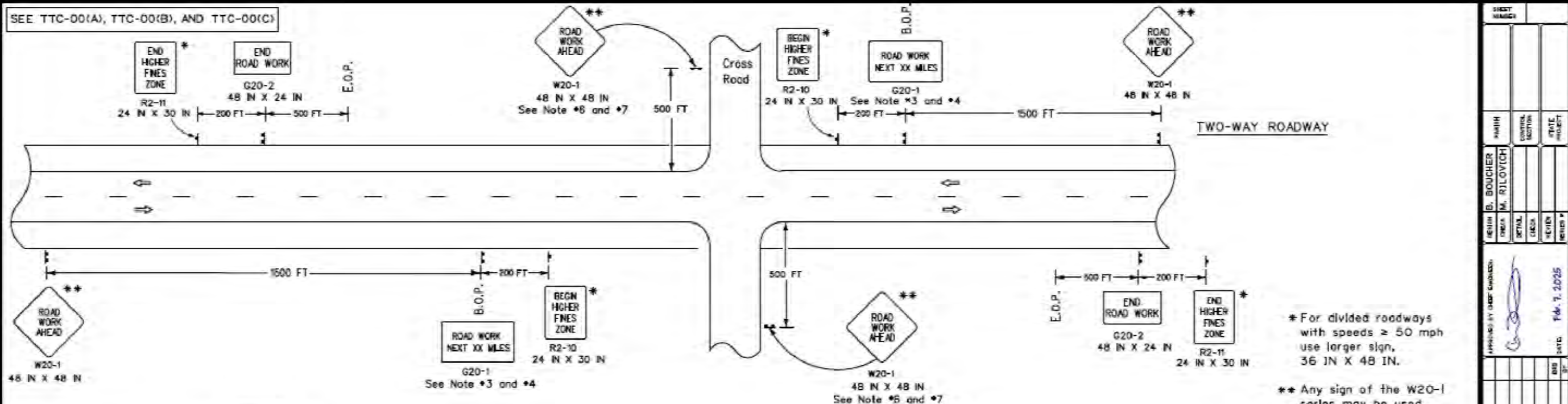
TITLE: PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

REVISIONS:

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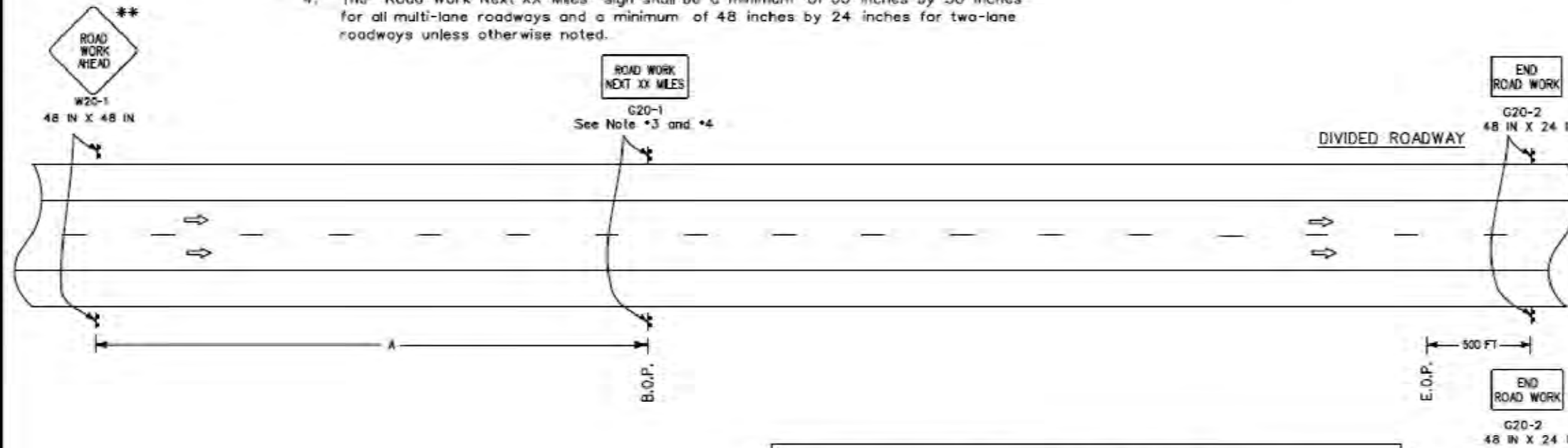
NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), TTC-00(C), and other Temporary Traffic Control Sheets as appropriate.

- This layout represents the minimum traffic controls required for placement of "Road Work Next XX Miles" and "End Road Work" signs.
- This layout does not replace other TTC Standard Sheets, but is intended as a supplement to the required signing.
- The distance on the "Road Work Next XX Miles" sign shall be rounded up to the nearest whole mile. This sign shall be placed at the Beginning of Project (B.O.P.) limits. This sign may be omitted if work zone is less than 0.5 miles.
- The "Road Work Next XX Miles" sign shall be a minimum of 60 inches by 36 inches for all multi-lane roadways and a minimum of 48 inches by 24 inches for two-lane roadways unless otherwise noted.
- The "End Road Work" sign shall be placed 500 feet past the End of Project (E.O.P.) limits.
- If "Road Work Ahead" sign is used on a cross road to warn of road work on another route, then "End Road Work" sign is not required.
- When projects are separated by less than 1 mile, they shall be signed as one project; this may require coordination.

LEGEND

- Traffic Sign
- Direction of Travel



ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING. ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER. CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SPEED LIMIT (prior to construction)	SPACING 'A'
≤ 40 mph	1500 FT
45 mph	2640 FT
> 45 mph	5280 FT

Sign spacing to be adjusted for Horizontal and Vertical curves. For work outside of the traveled way, see TTC-01 and TTC-02.

STATE OF MISSISSIPPI
TEMPORARY TRAFFIC CONTROL
LAYOUT FOR PLACEMENT OF ROAD WORK
NEXT XX MILES AND END ROAD WORK SIGNS
TTC-00 (D)

DESIGNED BY: GARY FRAHN
CHECKED BY: M. RILOVICH
DATE: Feb. 7, 2025

APPROVED BY: GARY FRAHN
DATE: Feb. 7, 2025

DOTD
MISSISSIPPI DEPARTMENT OF
TRANSPORTATION & INFRASTRUCTURE
TRAFFIC ENGINEERING

SEGMENT: RBL-DB-142-WTR

NOTES:

ENGINEER:

hbk
ENGINEERING
921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT
OF PROFESSIONAL REGULATION
LICENSE NO. 184-002308

OWNER/DEVELOPER:

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CONTRACTOR:

QUANTA
TELECOM
SOLUTIONS

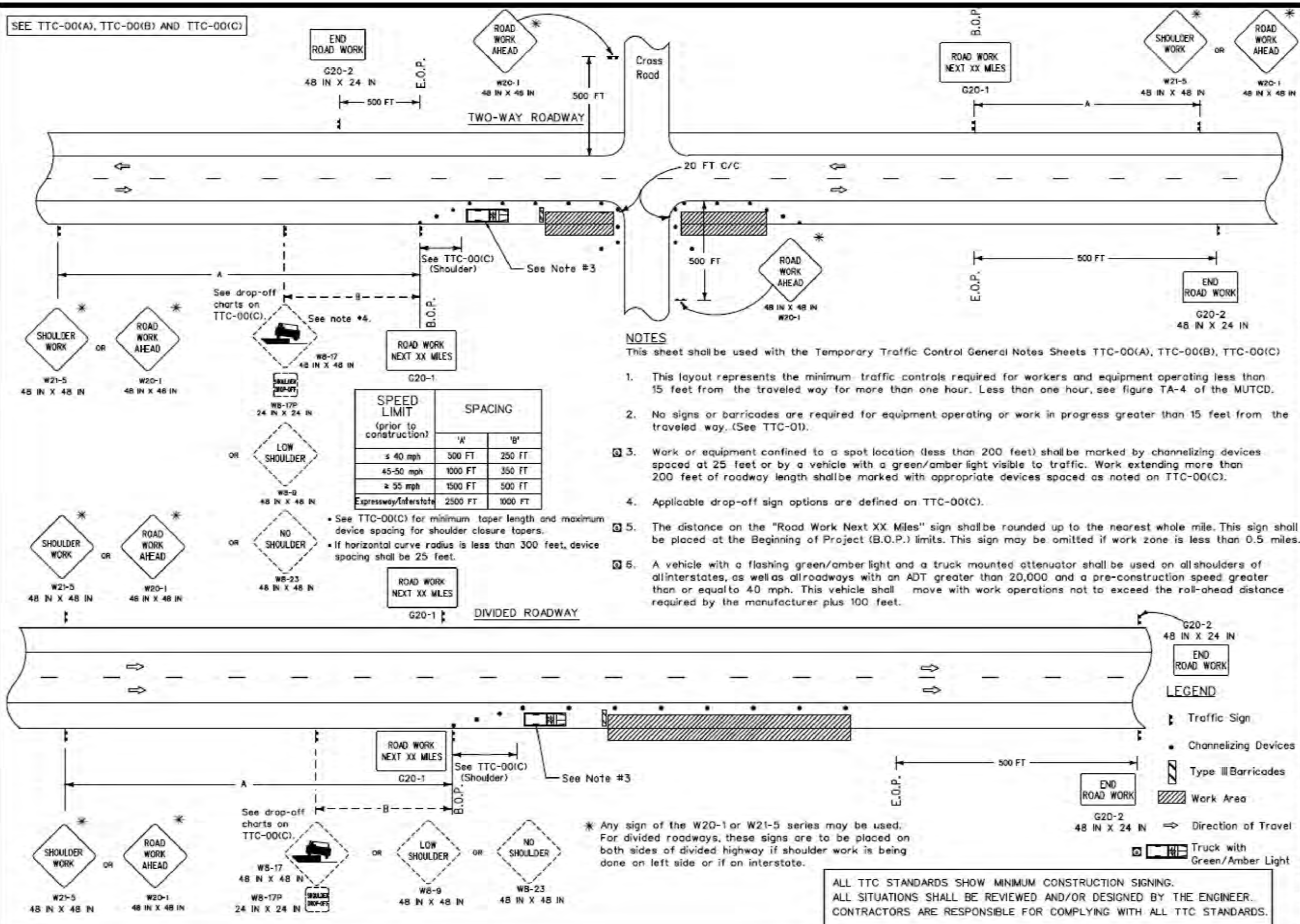
TITLE: PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

REVISIONS

REV	DATE	DESCRIPTION	BY
01			
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DRAWN BY:	CHECKED BY:	APPROVED BY:
TMH	GF	GF

PROJECT NUMBER:	25-1048
FILE NAME:	25-1048
DATE DRAWN:	03/03/2026
SCALE:	N.T.S.



- NOTES**
- This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), TTC-00(C)
1. This layout represents the minimum traffic controls required for workers and equipment operating less than 15 feet from the traveled way for more than one hour. Less than one hour, see figure TA-4 of the MUTCD.
 2. No signs or barricades are required for equipment operating or work in progress greater than 15 feet from the traveled way. (See TTC-01).
 3. Work or equipment confined to a spot location (less than 200 feet) shall be marked by channelizing devices spaced at 25 feet or by a vehicle with a green/amber light visible to traffic. Work extending more than 200 feet of roadway length shall be marked with appropriate devices spaced as noted on TTC-00(C).
 4. Applicable drop-off sign options are defined on TTC-00(C).
 5. The distance on the "Road Work Next XX Miles" sign shall be rounded up to the nearest whole mile. This sign shall be placed at the Beginning of Project (B.O.P.) limits. This sign may be omitted if work zone is less than 0.5 miles.
 6. A vehicle with a flashing green/amber light and a truck mounted attenuator shall be used on all shoulders of all interstates, as well as all roadways with an ADT greater than 20,000 and a pre-construction speed greater than or equal to 40 mph. This vehicle shall move with work operations not to exceed the roll-ahead distance required by the manufacturer plus 100 feet.

SPEED LIMIT (prior to construction)	SPACING	
	'A'	'B'
≤ 40 mph	500 FT	250 FT
45-50 mph	1000 FT	350 FT
≥ 55 mph	1500 FT	500 FT
Expressway/Interstate	2500 FT	1000 FT

- See TTC-00(C) for minimum taper length and maximum device spacing for shoulder closure tapers.
- If horizontal curve radius is less than 300 feet, device spacing shall be 25 feet.

- LEGEND**
- Traffic Sign
 - Channelizing Devices
 - Type III Barricades
 - Work Area
 - Direction of Travel
 - Truck with Green/Amber Light

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

STATE OF LOUISIANA
TEMPORARY TRAFFIC CONTROL LAYOUT FOR WORK LESS THAN 15 FEET FROM THE TRAVELED WAY
TTC-02

DOTD
TRAFFIC ENGINEERING

APPROVED BY: GARY FRAHN, DATE: Feb. 7, 2026

REVISIONS

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SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:

hbk ENGINEERING
921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION
LICENSE NO. 184-002308

OWNER/DEVELOPER:

RBL FIBER GRID

CONTRACTOR:

QUANTA TELECOM SOLUTIONS

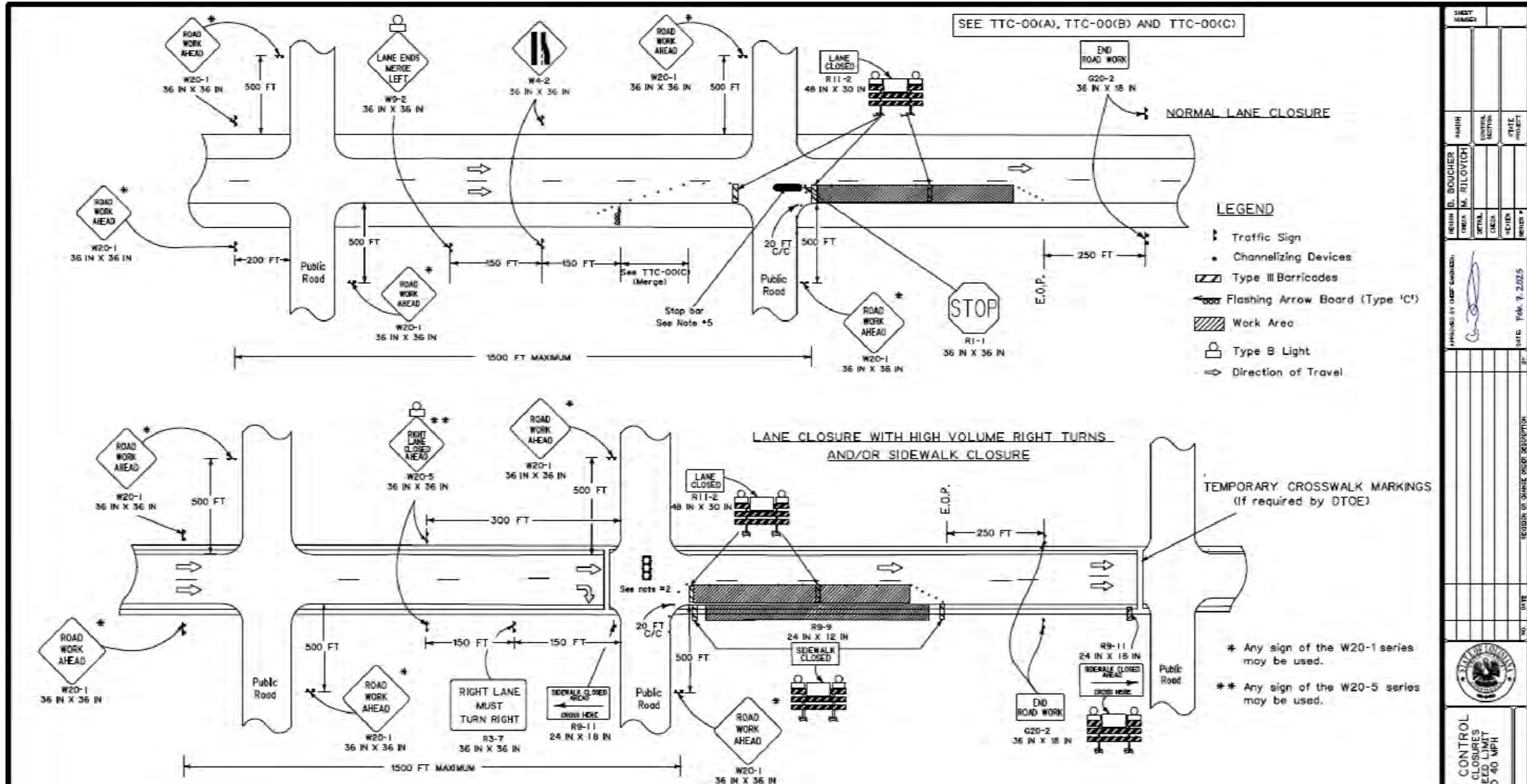
TITLE:
PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

REVISIONS

REV	DATE	DESCRIPTION	BY
01			
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DRAWN BY: TMH, CHECKED BY: GF, APPROVED BY: GF

PROJECT NUMBER: 25-1048
FILE NAME: 25-1048
DATE DRAWN: 03/03/2026
SCALE: N.T.S.



- LEGEND**
- ⊠ Traffic Sign
 - Channelizing Devices
 - ▨ Type III Barricades
 - ⚡ Flashing Arrow Board (Type 'C')
 - ▨ Work Area
 - ⊡ Type B Light
 - ➔ Direction of Travel

NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B) and TTC-00(C).

1. This layout represents the minimum traffic controls required for lane closures in areas with a grid layout and with speed limits of 40 mph and below. This layout illustrates roadwork near a signal or a major intersection with or without sidewalks.
2. If a signal is involved in the construction zone, a specific temporary traffic signal timing and phasing plan for each phase of construction shall be developed.

3. Bicyclists and pedestrians, including those with disabilities, should be provided with access and reasonably safe passage through the TTC zone.
4. The sign height shall be at least 7 feet in business, commercial, and residential areas and also near parking, pedestrians, bicyclists, or other obstructions.
5. Place stop bars if work duration is greater than 3 days.

6. Place "Road Work Ahead" sign prior to an intersecting alternate route, no more than 1500 feet from the work area.
7. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features in the existing pedestrian facility as defined in the MUTCD.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SHEET NUMBER	
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
TTC-10	
TEMPORARY TRAFFIC CONTROL FOR LANE AND SIDEWALK CLOSURES IN URBAN AREAS WITH SPEED LIMIT LESS THAN OR EQUAL TO 40 MPH	
TRAFFIC ENGINEERING	

SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:

hbk ENGINEERING

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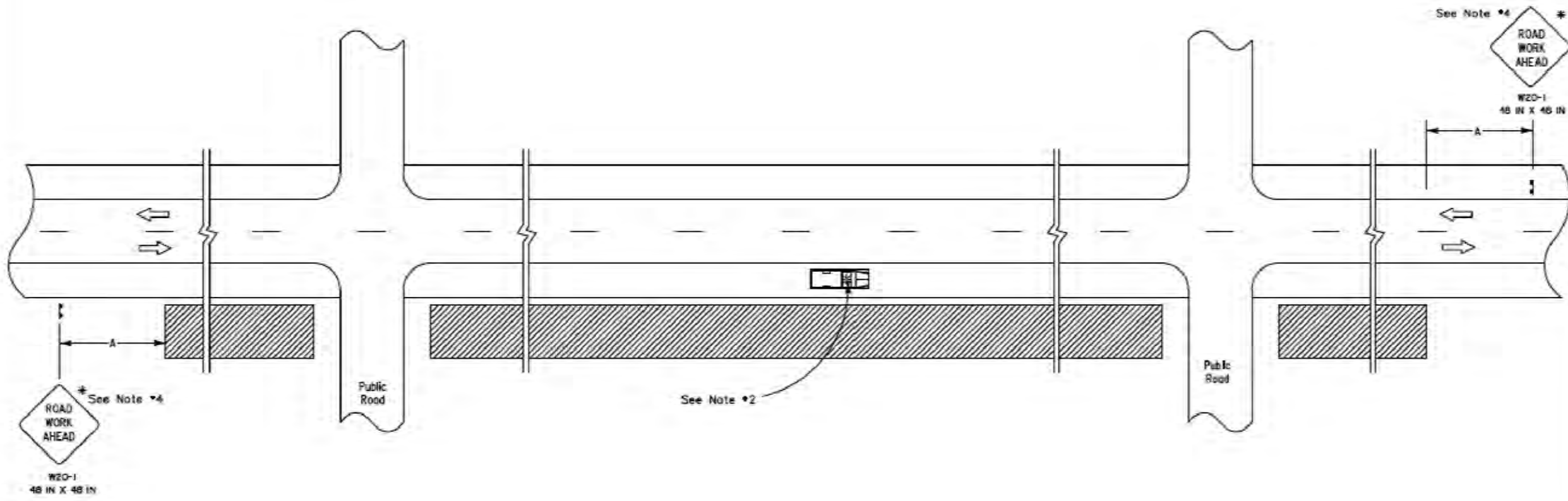
TITLE:
PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

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TMH	GF	GF

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SEE TTC-00(A), TTC-00(B) AND TTC-00(C)



- LEGEND**
- Traffic Sign
 - Work Area
 - Direction of Travel
 - Truck with Green/Amber Light

SPEED LIMIT (prior to construction)	SPACING
≤ 40 mph	500 FT
45-50 mph	1000 FT
≥ 55 mph	1500 FT

- NOTES**
- This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B) and TTC-00(C).
1. This layout represents the minimum traffic controls required for workers and equipment operating more than 15 feet from the travel way.
 2. If the operation results in equipment or other vehicles being parked closer than 15 feet to the travelway, but not within the roadway, each vehicle shall have an green/amber light.
 3. When a work area has been established on one side of the roadway only, there shall be no parking on the opposite shoulder within 500 feet of the work area.
 4. Other signs may be used in place of the "Road Work Ahead" sign, such as W21-8 (Mowing), W21-7 (Utility), or W21-6 (Survey) when applicable.

* Any sign of the W20-1 series may be used.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
 ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
 CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SHEET NUMBER	
DESIGNER D. BOUCHIER	PROJECT RBL-DB-142-WTR
CHECKER M. RILOVICH	DATE Feb. 7, 2025
APPROVED BY: GARY FRAHN	
TITLE TEMPORARY TRAFFIC CONTROL FOR WORK GREATER THAN 15 FEET FROM THE TRAVELED WAY	
TTC-01	
TRAFFIC ENGINEERING	

SEGMENT:
RBL-DB-142-WTR

NOTES:

ENGINEER:

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TITLE:
PROPOSED FIBER OPTIC INSTALLATION ON US 165 N .074 MILES NORTH OF ROCHELLE TO GRANT PARISH LINE TULLOS, LOUISIANA

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