Attachment D-1 - Technical Design Checklist

Connect Maryland: Network Infrastructure Program Round 2 - Strategic Middle-Mile Infrastructure

Applicants should submit this checklist with the Technical Design component of the application. The checklist is intended to help OSB confirm that the application includes the technical information needed to evaluate feasibility, scalability, readiness, resiliency, and alignment with program objectives.

Included	Item	Notes / Applicant Reference
☐	Network diagram or line diagram included	Show route relationships, network elements, traffic flow, endpoints, and interconnection points.
☐	GIS route files provided	Provide .shp, .kml, or .kmz files showing proposed route, nodes, and Service Impact Area.
☐	Proposed route miles identified	Identify total miles and distinguish aerial, underground, and mixed construction where applicable.
☐	Fiber count, conduit count, and construction method identified	Include fiber strand count, conduit/duct count, placement method, and any planned spare capacity.
☐	Interconnection points and endpoints identified	Identify POPs, splice points, huts, colocation locations, exchanges, or other handoff points.
☐	Design capacity at project completion described	Describe initial lit capacity, dark fiber availability, wavelength capacity, or other transport capability as applicable.
☐	Future scalability or upgrade path described	Explain ability to support additional demand, upgraded optics, wavelength services, or additional users without major rebuild.
☐	Resiliency, redundancy, and route diversity approach described	Describe ring/loop design, diverse routing, failover, restoration assumptions, or other continuity features.
☐	Network elements and facilities described	Describe optical systems, electronics, cabinets, huts, shelters, power, backup power, and related facilities as applicable.
☐	Permitting and access approvals identified	Identify pole attachments, rights-of-way, easements, leases, environmental or local approvals, and current status.
☐	Cybersecurity, physical security, disaster recovery, and business continuity considerations	Describe relevant risks and mitigation approaches.

	described	
☐	Automation, analytics, or AI described if applicable	Describe any use of automation, data analytics, or AI for design, monitoring, maintenance, optimization, or operations.

Applicant may attach additional technical narratives, engineering drawings, specifications, maps, diagrams, or supporting documentation as needed.