

Southside Network Authority Board Meeting

Design Contract Negotiations

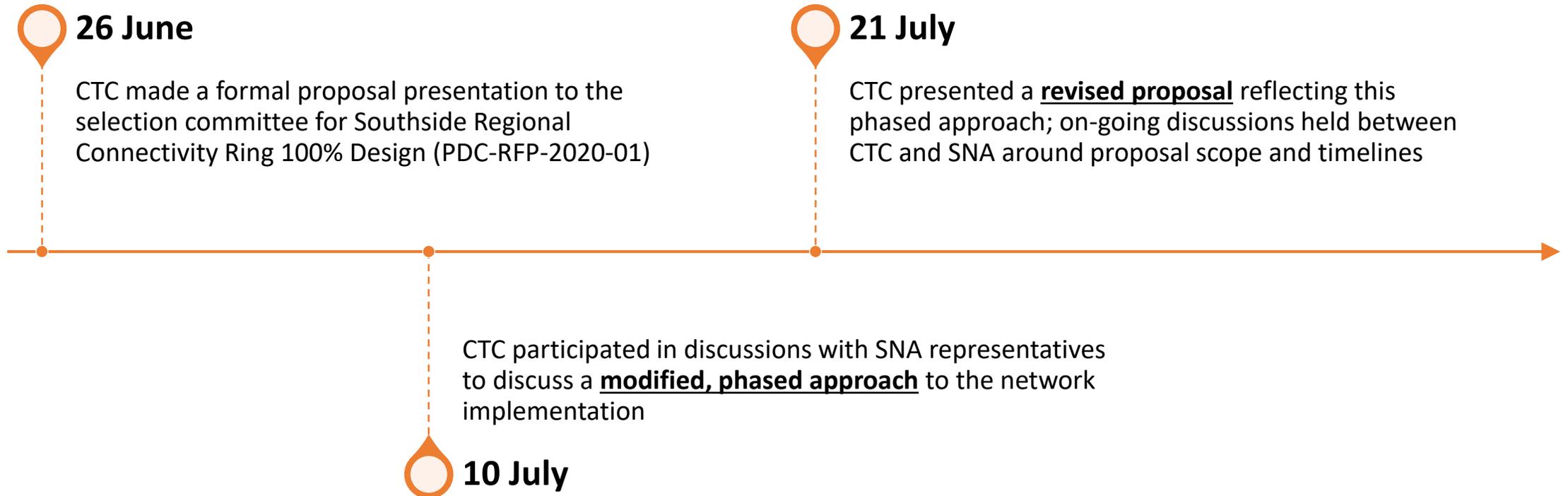
Steven DeBerry

Executive Director, Southside Network Authority

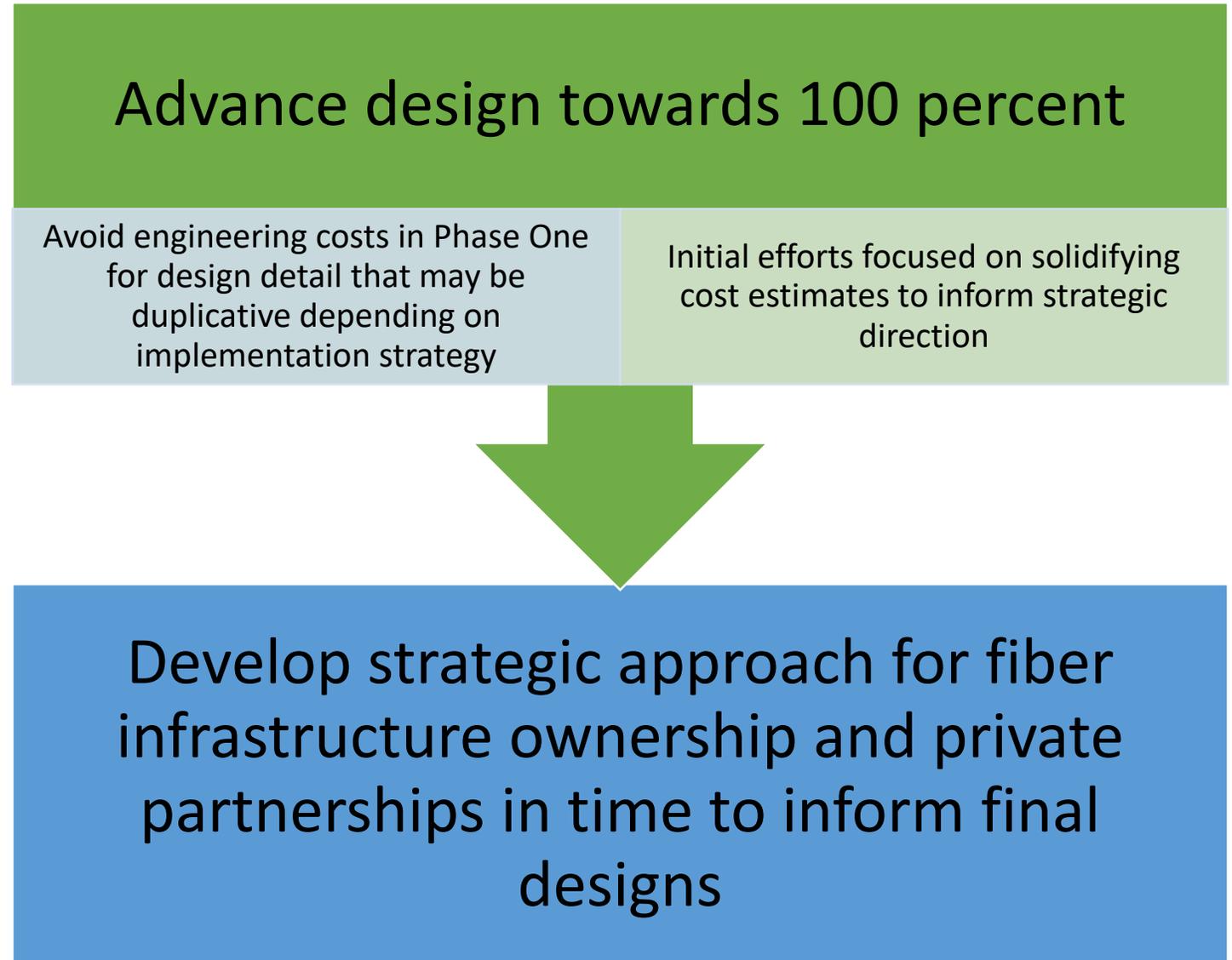
Matthew DeHaven, V.P. for Fiber & Infrastructure
CTC Technology & Energy

July 30, 2020

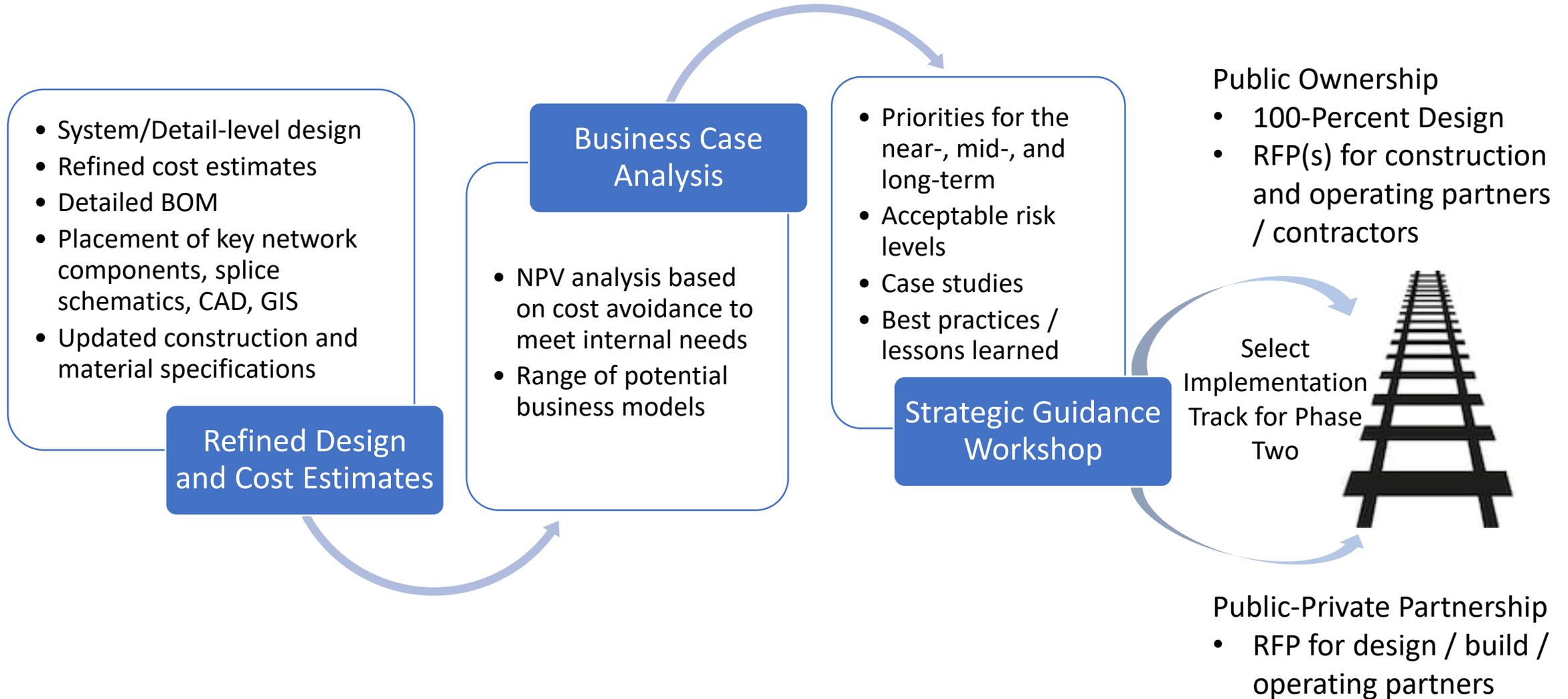
Status of Discussions and Negotiations



Objectives of Phased Design Approach



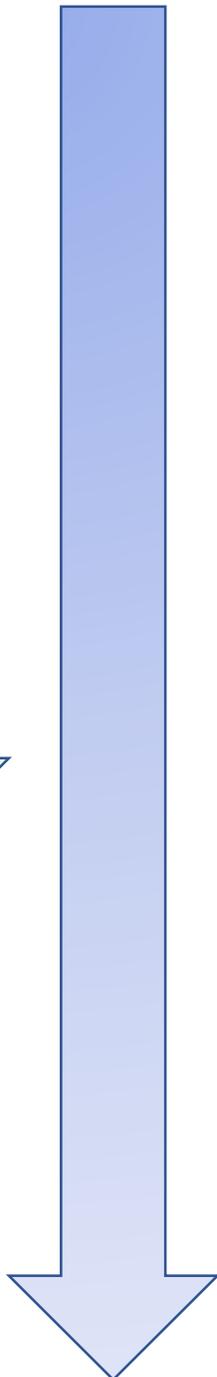
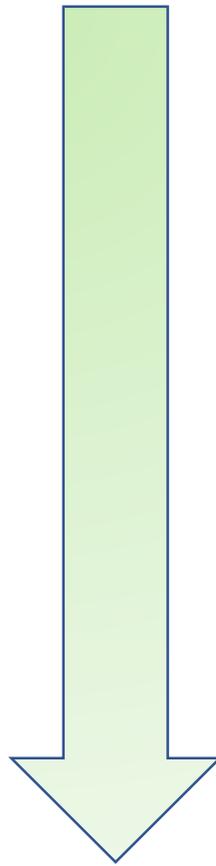
Phase One Outcomes



Comparison of design scope – original vs. revised proposals

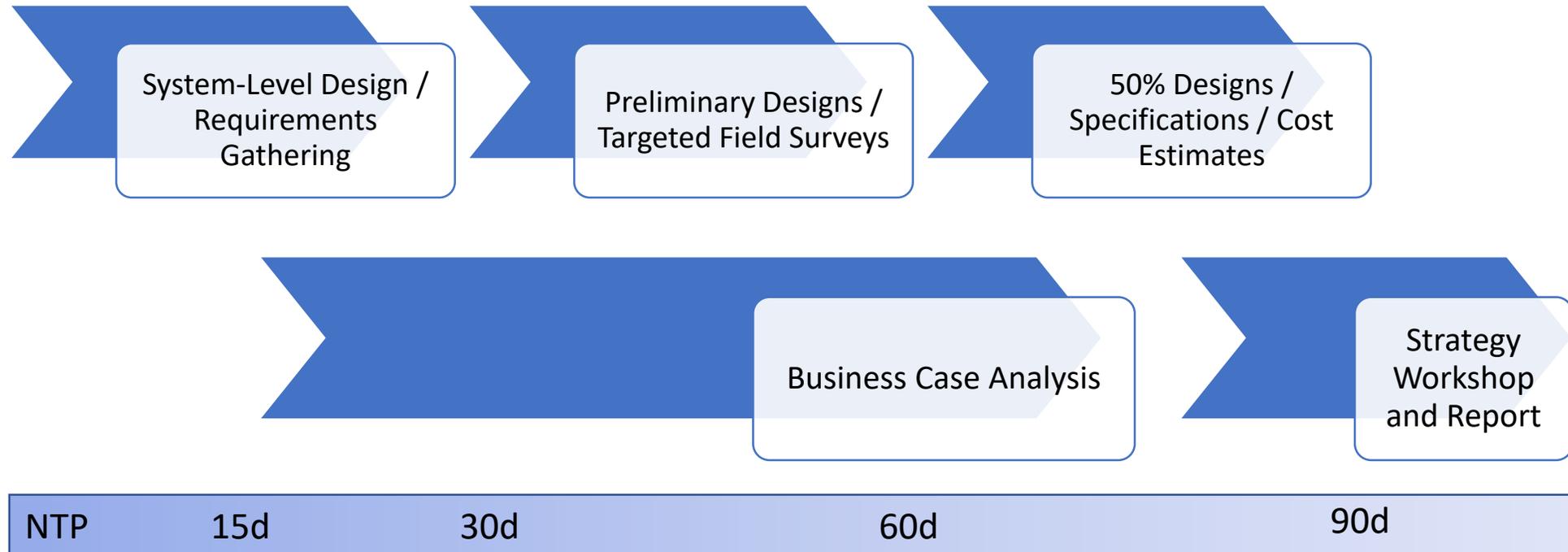
Revised Scope

Original 100% Design Scope



Design Task
Project initiation / requirements gathering
Preliminary designs <ul style="list-style-type: none"> • Ingest 30% routes in GIS, add network elements • Splice schematics / strand allocations
Environmental desk review
Preliminary ROW analysis <ul style="list-style-type: none"> • Identify ROW authorities • Special crossing analysis
Permit authority consultations
Targeted field surveys (~10% of routes)
Develop construction specifications / engineering typicals
CAD / GIS designs / splice schematics
Refined cost estimates / BOM
Field surveys (all remaining segments)
60% CAD / GIS designs
Design review / collect input from stakeholders
90% CAD / GIS designs
Design review / collect input from stakeholders
100% CAD / GIS designs / update BOM / splice schematics and matrices
Prepare permit application packages and tracker

Anticipated Timeline



Back-up Slides

System-Level Design

Requirements Gathering

- Revisit preliminary design & requirements gathering – validate key project technical parameters, goals, & objectives
- Timelines & budgets
- Site priorities, resiliency requirements, security requirements
- Expectations for City permitting
- Economic development / business opportunities

Preliminary Engineering Designs

- Desktop surveys
- GIS-based designs
- Splice schematics and strand allocations

Detailed Designs

Preliminary ROW and Environmental Review and Consultations

- Targeted ROW owner consultations (i.e. railroads, bridges, other special crossings)
- Desk review of endangered species habitats, wetlands, historic preservation, floodplains, etc.
- Consultation with Virginia DEQ / USACE

Field Surveys & Engineering Typicals

- Targeted field surveys for special crossings and congested ROW areas (~10% of total route distances)
- GIS-centric design process
- Field data collection using precision GPS receivers

50-percent Design & Engineering Work Documents (EWDs)

- Draft construction plans (CAD & GIS)
- BOM
- Splice schematics
- Material specifications
- Detailed cost estimates

Business Case Analysis and Strategic Planning

Business Case Analysis

- Analyze current and future avoided costs to ascertain NPV
- Examine off-the-balance sheet benefits of municipally-owned fiber compared to leased serve alternatives
- Present a range of potential business models that align with the business case

Strategic Planning Workshop

- Review business case analysis
- Explore case studies
- Discuss best practices and lessons-learned
- Feedback and guidance from SNA Board compiled in follow-on report and recommendations