Verizon Communications

New Construction & Service Connection Planning

Steve Shylanski & Kirk Moir, Verizon Access Engineering – MD/DC

5/30/2019

Agenda

1. Preliminary Communication
2. Planning Process
3. Minimum Point of Entry / Rate Demarcation Point
4. Structure / Diverse Entrances
5. Telephone Room and Power Requirements
6. Typical Fios Requirements
7. Summary
8. Verizon Contacts
9. Additional Documentation

Preliminary Communication

- Contact Verizon **early** during site design
- Provide Verizon preliminary site plan showing proposed area of construction
- Verizon will provide approximate location of existing communications structures and cables in order to identify conflicts with proposed construction
- Special Construction Charges may apply in the event that existing Utilities must be relocated

Planning Process

Requirements

- Approved site plan
- Specific location and addresses
- Total number and types of units
- Architectural drawings (electronic preferred)
- Proposed construction start date
- Initial Service Date (Alarms, Elevators, Etc.)
- Planned completion and occupancy dates by phase
- Contact names and numbers

Minimum Point of Entry/Rate Demarcation Point
(non-Fios Installations)

- **Single Buildings**
  - The RDP will be located at the minimum point of entry (MPOE) of the building, regardless of whether the building is single or multi-tenant
- **Multi-Building, Single-Tenant Campuses**
  - The RDP for all service on the campus will be the MPOE of one building on the property as determined by Verizon.

Minimum Point of Entry/Rate Demarcation Point
(non-Fios Installations) (cont.)

- **Multi-Building, Multi-Tenant Campuses**
  - Property owners will be offered three options:
    1) Verizon will install and maintain network cabling at the MPOE of the property or one building on the property as determined by Verizon. The property owner then builds, owns and maintains the cabling beyond the established RDP
    2) Verizon will install and maintain network cabling to a single point of interface at the MPOE of the property or one building on the property (regulated). The property owner then contracts with Verizon to design and install non-regulated cabling beyond the RDP (non-regulated). The property owner then owns and maintains the cabling beyond the RDP.

Minimum Point of Entry/Rate Demarcation Point
(non-Fios Installations) (cont.)

Multi-Building, Multi-Tenant Campuses (cont.)

3) Verizon will install and maintain network cabling (regulated) to the MPOE of each building on the property. The property owner then owns and maintains cabling beyond the MPOE of each building.

- For all three options, the property owner is required to provide structure throughout the campus.

Structure Requirements

- Owner/Developer to provide structure from the telephone room to the property line to meet Verizon facilities
- Conduit requirements vary from (2) 4” conduits to as many as (4) 4” conduits
- Verizon will review the proposed service requirements to determine the number of conduits needed and the optimum connection point

Diverse Entrance Facilities

- Developers may opt to construct multiple, diverse entrance conduit into a building or campus
- Provides structure to support diverse fiber facilities feeding Hi-Capacity Services (i.e. DS-3, OC-12, Ethernet, etc.)
- Diversified, redundant fibers provide increased survivability in the event of damage to either the main or protect fibers
- Equipment at Verizon’s central office and the customer premise will continue to provide service on the non-damaged facility
- Additional Special Construction charges may apply

Telephone Room and Power Requirements

- Verizon will determine the space and power requirements within the building to support their equipment
- The telephone room must be accessible, secure, lighted, climate controlled and kept free of debris
- The telephone room must be equipped with ¾" , fire-retardant plywood on at least one wall
- A 6 AWG ground must be provided within the room connected to the building's electrical service ground; a buss bar is preferred
- A minimum of (1) 110 volt duplex grounded outlet is required. Often, multiple circuits are required to support electronics. Amperage may vary.
- Commercial power supplied to support communication facilities should be wired to the building's uninterruptible power supply (UPS), if available.

Typical Fios Requirements

- Premises Access License (PAL), aka Verizon Property Agreement, required to allow Verizon to install, maintain, and operate fiber cabling and equipment beyond MPOE within each building
- Owner/Developer provided structure from the main telephone room to the property line to meet Verizon facilities
- Conduit requirements vary from (2) 4” conduits to as many as (4) 4” conduits
- Builder-provided vertical pathway within each building to riser closets
- See additional documentation at end of presentation

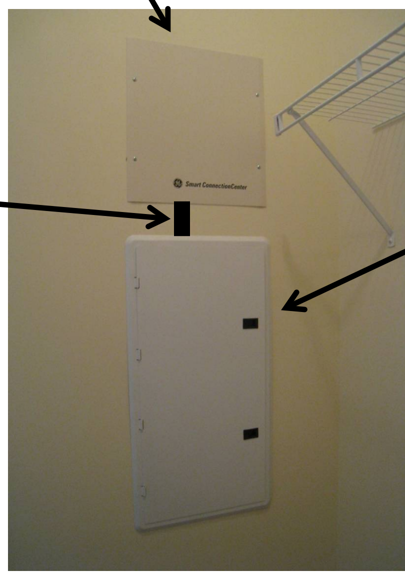
Typical Fios Requirements (cont.)

- Adequate space provided on each floor and within each living unit to allow for placement of distribution terminal, optical network terminal (ONT) and battery back-up.
- Electrical outlet available within each unit to power the ONT.

New Construction - Structured Wiring Interface

Structured Wiring Cabinet
(Bldr Provided)

Chase
inside
wall
for x-
conn



Suttle S-ONE
Interface
Cabinet
(VZ Provided,
Bldr Installed,
incl. elec outlet)

Microduct & Fiber
Drop

110V Circuit
(Bldr Wired)

Summary

- Early communication and coordination between the Designer, Builder and Verizon is key to providing timely, quality service
- Allow for realistic utility construction intervals within the overall project timeline

Verizon Contacts

DC: VZ-Builder-Info-DC@verizon.com

MD: VZ-Builder-Info-MD@verizon.com

Additional Documentation

Telephone Entrance Facilities

Verizon FTTP irements for Greer

Standard DC PAL

Verizon Communications

Questions & Comments

Steve Shylanski & Kirk Moir, Verizon Access Engineering – MD/DC

5/30/2019