Wyes
Field Kit
1. Basics - Conduit Fittings & Tie Marking

**Conduit Boxes**
- Type LB
- Type C
- Type T

- One 2” Fender Washer at Foul Point
- Two 2” Fender Washers at Switch Point

**Washers Locate Boxes**
- Two 2” Fender Washers means a Type T box is nearby.
- One 2” Fender Washer means a Type C or Type LB box between the tracks
- One 1” Washer means an Expansion Joint nearby

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Optional 2x4 Connection Box

2” Conduit pieces under Conduit

T

Expansion Joint

T

Optional 2x4 Connection Box

C

Foul Point

Switch Point

LB

C
6. Wyes - Install 3 Switch Stands First

Switch Bar

Switch Stand Mechanism

40’ of Metal EMT Conduit & Rod to Switch Stand

Switch Stand Conduit normally runs away from Signal Conduit
6. Wyes - Install 10 Track Insulators

- **160' Minimum Switch to End of Wye**
- **SP = Signal Point**
- There must be at least 9' between these 2 Signal Points to allow the Signal to be set back 4' from each Track.

**Switch Stand 40'‡**

**Switch Stand fl 40'**
6. Wyes - Install 2 Signal Foundations

• Signal Foundation 4’ from Center Line of Track
• Conduit on top of Plastic

On this Side, There must be at least 9’ between these 2 Signal Points to allow the Signal to be set back 4’ from each Track.
6. Wyes - Install 5 Track Boxes, 2 Flex Conduit

= 2x4 Connection Box
= Type LB Boxes

No Track Box needed Here
6. Wyes - Where the Wires Go

For Your Information -- No Action required
6. Wyes - Install 2 Push Buttons

On this side, there must be at least 9 feet between these 2 Signal Points to allow the Signal to be set back 4 feet from each Track.

- Push Buttons
  - 40 feet from Signal Foundation
  - Post 27 inches from track center line
  - All parts 24 inches from track center line
  - 5 feet Post, Set in Concrete, 3 feet above ground
  - Bottom out of round so it won’t rotate
6. Wyes - Install

Type LB or C Track Boxes
2x4 Connection Boxes

One Conduit from Enclosure to each end of Siding
Expansion Joints every 20'
Whatever Route Works
6. Wyes - Pull Wire

**Cat 5 Pulls**
- Enclosure to S Signal - Blue & Other
- S Signal to Push Button - Black
- S Signal to South End Track Box - Other
- Enclosure to N Signal - Blue & Other
- N Signal to Push Button - Black
- N Signal to North End Track Box - Other

**Pull a String with the Cat5**
Leave 2’ Wire & String at Ends

**Note:** The Track Team pulls all the wire that goes through an Expansion Joint. The Signal Team pulls the rest of the wire which includes all the 18 AWG wire. If there is a Remote Solar Panel, the Track Team pulls Red and Black 18AWG From the Solar Panel to the CP Board Enclosure.
6. Wyes - Pre Ballast Checklist

Wye
___ 160' plus tail to Wye
___ Three 100' radius Switches

Switch Stands
___ Switch Stands on all 3 Switches
___ Switch Stands 40' from Switch Boxes
___ Metal EMT Conduit & Rod in
___ “Back In Only” on Yellow Switch Stand Disk

Insulators
___ 10 Track Insulators per diagram

Track Boxes
___ 5 Track Boxes
___ All Type C or Type LB
___ All on 2” pieces of conduit

Connection Boxes
___ 2 Connection Boxes (2”x4”)

Fender Washers (FWs)
___ Expansion Joints - 1” FW on Top of Tie at End
___ Track Boxes - 2” FW on Top of Tie at End
___ T Boxes - Two 2” FWs on top of Ties at End
___ Foul Points - 2” FW on Top of Tie at Center
___ Signal Points - Two 2” FWs on Top of Tie at Center

Signal Foundations
___ 4 Foundation Blocks
___ All at Signal Points
___ All 4’ from Center Line(s) of Track(s)
___ 18” threaded Mast in each Foundation Block

Push Buttons
___ 2 Push Button Posts
___ 40’ from Signal
___ No part <24” from Center Line Track

Flex Conduit
___ Flex Conduits per diagram

Conduit
___ Enclosure to N End
___ Enclosure to S End
___ Enclosure to Remote Solar Panel (If Any)
___ Connects to 5 Track Boxes
___ Connects Signals to Push Buttons
___ Type C or LB Track Boxes between rails
___ Type C or LB Track Boxes on 2” pieces of conduit
___ Conduit on top of Plastic
___ Expansion Joints every 20’
___ 8’-10” from Tie Ends

Wire Pull
___ Enclosure to S Signal - Blue & Other
___ S Signal to Push Button - Black
___ S Signal to South End Track Box - Other
___ Enclosure to N Signal - Blue & Other
___ N Signal to Push Button - Black
___ N Signal to North End Track Box - Other
___ String in every Conduit
___ 2’ wire & string at each end

Wire Pull - If Remote Solar Panel
___ White & Black 18AWG wire
___ String
___ 2’ wire & string at each end

Plywood
___ Plywood over Type C box

As Built
___ Map of Conduit
___ All Changes Noted
___ Delivered to Ross