NOTES:

1. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle lane movements in the cycle file. The installer shall verify that signal heads flash in accordance with the Signal Plans.

2. Enable Simultaneous Drop-Out for all Phases.

3. Program phases 2 and 6 for Red Flash Green.

4. Program phases 2, 4, and 6 for Skip-Up Red Call.

5. Program phases 2 and 6 for Yellow Flash.

6. The cabinet and controller are part of the Concord Signal System.

INPUT FILE POSITION LAYOUT

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This intersection features accessible pedestrian signals which shall supersede these values.

"Don't Walk" time only.

Structures" dated January 2018.

This intersection features accessible pedestrian signals utilizing a push button indication. Note is section A11 of the MUTCD for this signal operation. This intersection features Sensys Vehicle Detection System.
1. Program phases 2, 4, 6, and 8 for Startup Ped Call.

2. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plan.

3. Program phases 2 and 5 for Street In Green.

4. Program phases 2, 5, and 6 for Non-Aux Ped Call.

5. Program auxiliary Ped for Yellow Flash.

6. The cabinet and controller are on part of the Concord Signal System.

**NOTES**

1. Install push buttons and APS equipment per manufacturer's instructions.

2. Programs are installed in accordance with manufacturer's instructions.

3. APS equipment is mounted in cabinet, use filtered power. Controller Receptacle to power APS equipment. Do not use Equipment Receptacle, which is a GFCI outlet.

4. Never attempt to operate a standard contact closure push button with the APS system unless cabinet is rewired for standard push button operation or unless explicitly allowed by the manufacturer.

5. Install push buttons and APS equipment per manufacturer's instructions.

**INPUT FILE POSITION LAYOUT**

**INPUT FILE CONNECTION & PROGRAMMNG CHART**

**INPUT FILE POSITION LEGEND**

**SENSORS ACCESS BOX**

**WIRELESS DETECTION SYSTEM**

1. Ensure the Wireless Vehicle Detection System is fully compatible with equipment manufactured in accordance with the specifications for the type 2016 controller.

2. Ensure the Wireless Vehicle Detection System is fully compatible with equipment manufactured in accordance with the specifications for the type 2016 controller.
NOTES

1. To prevent "home-control" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify red signal heads flash in accordance with the Signal Plans.

2. Program phase 4 for dual entry.

3. Program controller to switch in phases 2 and 6 only.

4. The cabinet and controller are part of the Concord Signal System.

ACCESSIBILITY PEDESTRIAN SIGNAL (APS) INSTALLATION NOTES

1. Install push buttons and APS equipment per manufacturer's instructions.

2. Provide a dedicated cable to each push button per manufacturer's instructions.

3. If APS equipment is mounted in cabinet, use filtered power (120 vac). Control the power APS equipment.

4. Do not use Equipment Controllers within a 600 volt circuit.

5. Never attempt to operate a standard contact closure push button with an APS system unless cabinet is provided for power APS equipment.

6. Follow programming as shown below. On the ENABLE BACKUP PRESET screen move cursor to the appropriate file and press "ENE" on the controller keypad to toggle field value between "ON" and "OFF".

INPUT FILE POSITION LAYOUT

1. Place manufacturer's instructions in cabinet with cabinet.

OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE CABINET.................332 W/AUX

REFERENCES

1..INPUT FILE CONNECTION & PROGRAMMING CHART

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Red Signals are required to display 40msec only during Red Clearance Interlock. Consult Red Signal Module User's manual for instructions on selecting the feature.
PHASING DIAGRAM

TABLE OF OPERATION

<table>
<thead>
<tr>
<th>SIGNAL #</th>
<th>PHASE 1</th>
<th>PHASE 2</th>
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<td>B</td>
<td>R</td>
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<tr>
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<td>R</td>
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<td>G</td>
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<tr>
<td>3</td>
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<td>R</td>
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<td>G</td>
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SIGNAL FACE I.D.

Accessible Pedestrian Signal

ASB 2070L TIMING CHART

OASIS 2070L TIMING CHART

FEATURE

<table>
<thead>
<tr>
<th>Signal</th>
<th>Init</th>
<th>Opt</th>
<th>Spec. Weight</th>
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ACCESSIBLE PEDESTRIAN SIGNAL OPERATION

SIGNAL FACE

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<th>SIGNAL</th>
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<th>SPEC. WEIGHT</th>
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NOTES


3. Dual Arrow signals and directional movement signalsז

4. Omit WALK and flashing DON'T WALK with signal protection lights.

5. Program pedestrian heads to countdown the flashing "DON'T WALK" and "WALK" with no phase protection.

8. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

9. Volume should be set to 5dB over ambient noise level.

10. This intersection features accessible pedestrian signals, including a pedestrian lane and speech text indication. Refer to section A.1.1 of the 2011 MUTCD for tone rate and frequency requirements.

11. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

12. Volume should be set to 5dB over ambient noise level.

13. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

14. Volume should be set to 5dB over ambient noise level.

15. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

16. Volume should be set to 5dB over ambient noise level.

17. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

18. Volume should be set to 5dB over ambient noise level.

19. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

20. Volume should be set to 5dB over ambient noise level.

21. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

22. Volume should be set to 5dB over ambient noise level.

23. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

24. Volume should be set to 5dB over ambient noise level.

25. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

26. Volume should be set to 5dB over ambient noise level.

27. These values may be field adjusted. Do not adjust MTG and extension times for pedestrian protected movements.

28. Volume should be set to 5dB over ambient noise level.
EDM MODEL 2010ECL-NC CONFLICT MONITOR
PROGRAMMING DETAIL

**NOTES**
1. To prevent "flash-cancellation" problems, insert red flash program blocks for all unused vehicle test times in the output file. The Ped 9 block further helps to prevent sign heads flash in accordance with the Signal Plans.
2. Ensure that Ped 9 is activated at all times during normal operations. To prevent the Ped 9 on an unused non-channel, a unused red monitor input 1-5, 6, 40, 58, 85, 23, 14, 15, 16. No booth is set for per the cabinet manufacturer's instructions.
3. Enable Simultaneous Ped 9 for all phases.
4. Program phase 2 and 6 for Start Up In Green.
5. Program phases 2 and 6 for yellow flash.
6. Program phase 5 for "STARTUP PED CALL".
7. The cabinet controller is part of the Concord Signal System.

**INPUT FILE POSITION LAYOUT**

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<tr>
<td>PED 9</td>
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**INPUT FILE CONNECTION & PROGRAMMING CHART**

1. **INSTALL PED DETECTOR**
   - Place the red monitor input in the appropriate place.
   - Ensure all cold jumpers are present on the monitor board.

2. **INPUT FILE POSITION LEGEND**
   - **FILE**
   - **O**
   - **PED 9**

3. **COUNTDOWN PEDESTRIAN SIGNAL OPERATION**
   - Countdown Ped Signals are required to display flashing only during Ped Clearance Interval. Consult Ped Signal Module User's manual for instructions on selecting this feature.

**ACCESSIBLE PEDESTRIAN SIGNAL (APS) INSTALLATION NOTES**

1. Install push buttons and APS equipment per manufacturer's instructions.
2. Provide a dedicated cable to each push button per manufacturer's instructions.
3. If APS equipment is mounted in cabinet, use filtered power (e.g., Panel) to power APS equipment. Do not use equipment receptacle, which is a power source.
4. Never attempt to operate a standard contact closure push button with the APS system unless cabinet is rewired for standard operation or use equipment modified by the manufacturer.
5. Follow manufacturer's instructions in selecting cabinet fittings, signal colors, and electrical details.

**SPECIAL DETECTOR NOTE**

Install a radar detection system for vehicle detection. Perform installation according to manufacturer's instructions and NCDOT engineering-maintenance mounting instructions for adding the detection scheme shown on the Signal Design Plan.