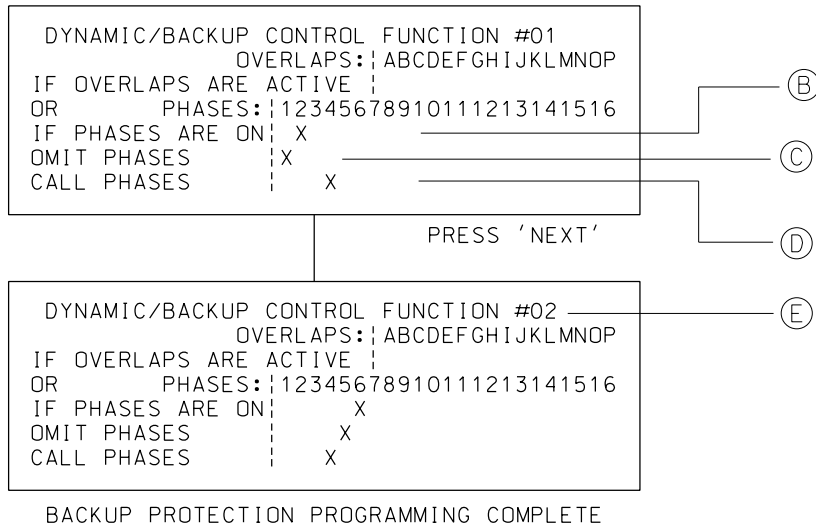


(OPTION #1)

DYNAMIC BACK-UP CONTROL PROGRAMMING

(program controller as shown below)

1. FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE DYNAMIC/BACKUP CONTROL FUNCTIONS 1 AND 2. — (A)
2. FROM PHASE CONTROL FUNCTIONS MENU PRESS '2' (DYNAMIC/BACKUP CONTROL FUNCTIONS).



BACKUP PROTECTION PROGRAMMING COMPLETE

(OPTION #2)

BACKUP PROTECTION NOTE

(program controller as shown below)

From Main Menu press '2' (Phase Control), then '1' (Phase Control Functions). Program phase 2 for 'Backup Protect'. Make sure the Red Revert times shown on the Signal Design Plans are programmed in the 'Phase Timing' menu.

Back-Up Protection Programming Detail

When a signal design requires the use of back-up protection to eliminate a yellow trap situation, two options are available.

Option #1 uses the Dynamic Back-Up function. The upper left image is an exact duplication of the dynamic back-up programming display found on a 2070 controller running Oasis control software.

The controller accomplishes "dynamic back-up protection" by omitting the left turn phase while the opposite through movement is "ON". Phase "ON" is a controller function that is active during the phase green, yellow change, and red clearance intervals.

Below is a brief explanation of dynamic back-up protection features and functionality:

- (A) Activation note - this note directs the installer to the phase control page of the controller programming. At the bottom of this page there is a parameter listed called "Dynamic/Backup". The installer is directed to flag the Dynamic/Backup functions that will be in use, otherwise the back-up programming will not function. See function number below in note (E).
- (B) Phase "ON" line - phases selected here determine when an "omit" is placed during the signal sequence.
- (C) Phase "Omit" line - phases selected here determine where an omit is placed during the selected phase "ON".
- (D) "Call" phases line - phases selected here determine the phase that the omitted phase detectors will call while that phase is omitted. The call placed is a special "dynamic call" that will be released when the selected phase switches to green. This dynamic call produces a minimum recall type operation (dynamic call will not max out a phase).
- (E) Function number - the controller is capable of up to sixteen dynamic functions. For normal back-up protection, one function should be used for each left turn that is being omitted. The example shown to the left shows phases 1 and 5 being omitted by phases 2 and 6 respectively. The phase calls will cycle the controller through the side street through movements before serving phases 1 and/or 5. Please note that each left turn omit is accomplished in a separate function.

Option #2 uses the Backup Protect function. This function puts the through phases in All Red before serving the left turns. This function is typically used in conjunction with increased Red Revert times on the concurrent through phase.

2070 OASIS Back-Up Protection Programming Detail

SIGNALS MANAGEMENT SECTION
TRANSPORTATION MOBILITY AND SAFETY DIVISION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STD. NO.

5.0

SHEET 1 OF 1