```
000000     A200.11                                              SET        Stopped
(000000)    ┤ ├                                                 ─────
           P_First_C                                            W0.00      <W000.00>
           ycle                                                 Stopped    a008
           ────                                                 _State
           First
           Cycle
           Flag
                                                                RSET       Preliminary
                                                                ─────      Screening
                                                                W0.01      ──────────
                                                                Prelimin   <W000.01>
                                                                ary_Stat   a037 a089 a097
                                                                e
                                                                RSET       Primary
                                                                ─────      Treatment
                                                                W0.02      ─────────
                                                                Primary_   <W000.02>
                                                                State      a047 a052 a103
                                                                RSET       Secondary
                                                                ─────      Treatment 1
                                                                W0.03      ───────────
                                                                Seconda    <W000.03>
                                                                ry_State   a059 a091 a099
                                                                _1
                                                                RSET       Secondary
                                                                ─────      Treatment 2
                                                                W0.04      ───────────
                                                                Seconda    <W000.04>
                                                                ry_State   a069 a074 a095
                                                                _2         a105
                                                                RSET       Tertiary
                                                                ─────      Treatment
                                                                W0.05      ─────────
                                                                Tertiary_  <W000.05>
                                                                State      a081 a093 a101
```
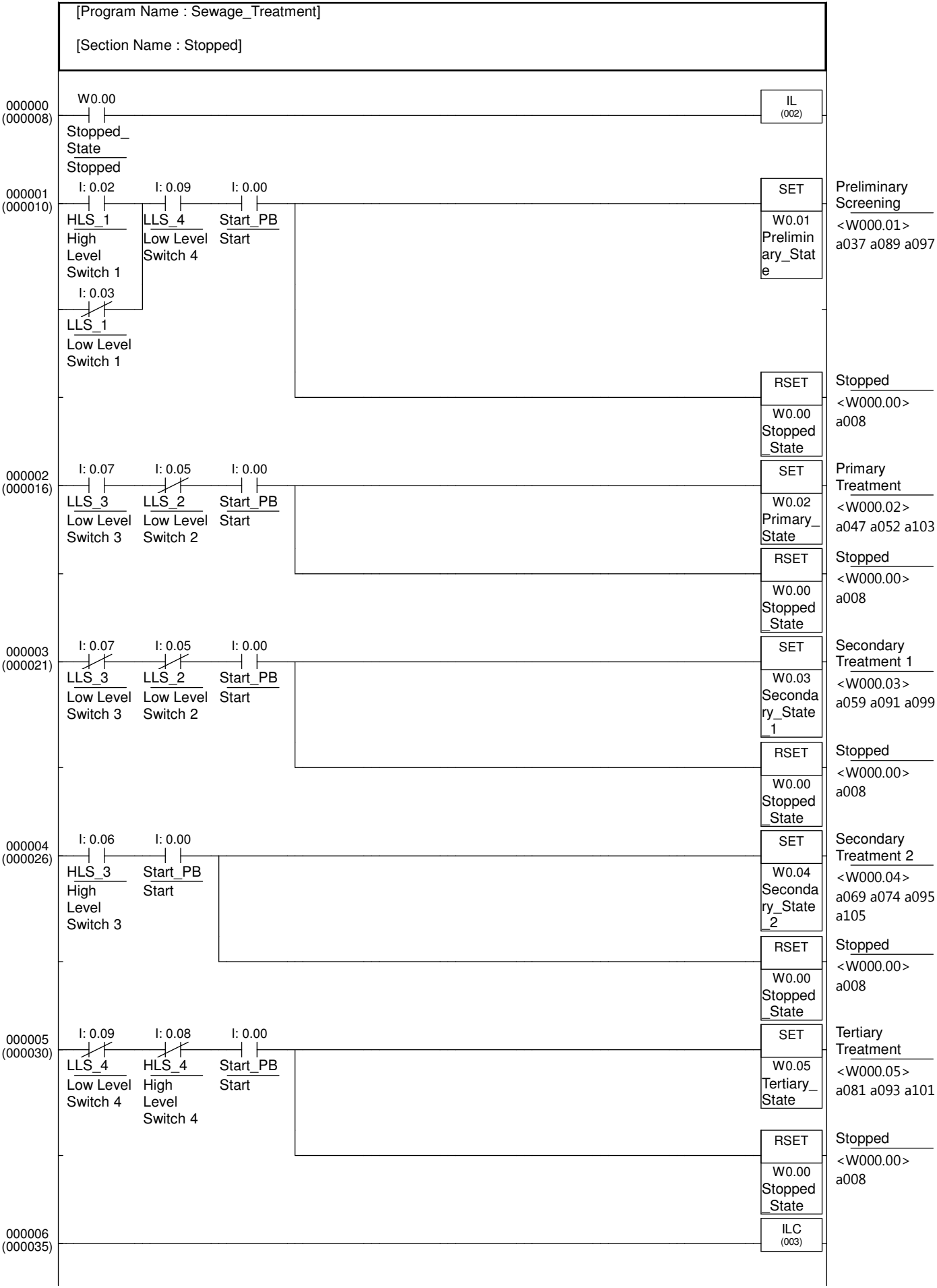
[Program Name : Sewage_Treatment]

[Section Name : Stopped]

000000 (000008)	W0.00 — ┤├ Stopped_ State Stopped			IL (002)

| 000001 (000010) | I: 0.02 ┤├ HLS_1 High Level Switch 1 I: 0.03 ┤/├ LLS_1 Low Level Switch 1 | I: 0.09 ┤/├ LLS_4 Low Level Switch 4 | I: 0.00 ┤├ Start_PB Start | SET W0.01 Preliminary_Stat e | Preliminary Screening <W000.01> a037 a089 a097 |
| | | | | RSET W0.00 Stopped_ State | Stopped <W000.00> a008 |

| 000002 (000016) | I: 0.07 ┤├ LLS_3 Low Level Switch 3 | I: 0.05 ┤/├ LLS_2 Low Level Switch 2 | I: 0.00 ┤├ Start_PB Start | SET W0.02 Primary_ State | Primary Treatment <W000.02> a047 a052 a103 |
| | | | | RSET W0.00 Stopped _State | Stopped <W000.00> a008 |

| 000003 (000021) | I: 0.07 ┤/├ LLS_3 Low Level Switch 3 | I: 0.05 ┤/├ LLS_2 Low Level Switch 2 | I: 0.00 ┤├ Start_PB Start | SET W0.03 Seconda ry_State _1 | Secondary Treatment 1 <W000.03> a059 a091 a099 |
| | | | | RSET W0.00 Stopped _State | Stopped <W000.00> a008 |

| 000004 (000026) | I: 0.06 ┤├ HLS_3 High Level Switch 3 | I: 0.00 ┤├ Start_PB Start | | SET W0.04 Seconda ry_State _2 | Secondary Treatment 2 <W000.04> a069 a074 a095 a105 |
| | | | | RSET W0.00 Stopped _State | Stopped <W000.00> a008 |

| 000005 (000030) | I: 0.09 ┤/├ LLS_4 Low Level Switch 4 | I: 0.08 ┤/├ HLS_4 High Level Switch 4 | I: 0.00 ┤├ Start_PB Start | SET W0.05 Tertiary_ State | Tertiary Treatment <W000.05> a081 a093 a101 |
| | | | | RSET W0.00 Stopped _State | Stopped <W000.00> a008 |

| 000006 (000035) | | | | ILC (003) |

[Program Name : Sewage_Treatment]

[Section Name : Preliminary]

000000 (000037)	W0.01 ⊣⊢ Preliminary_State Preliminary Screening	IL (002)

000001 (000039)	I: 0.01 ⊣⊢ Stop_PB Emergency Stop	SET W0.00 Stopped_State	Stopped <W000.00> a008
		RSET W0.01 Preliminary_State	Preliminary Screening <W000.01> a037 a089 a097

000002 (000042)	I: 0.03 ⊣⊢ LLS_1 Low Level Switch 1	SET W0.02 Primary_State	Primary Treatment <W000.02> a047 a052 a103
		RSET W0.01 Preliminary_State	Preliminary Screening <W000.01> a037 a089 a097

000003 (000045)	ILC (003)

[Program Name : Sewage_Treatment]

[Section Name : Primary]

```
000000     W0.02                                                    IL
(000047)    ┤├                                                     (002)
        Primary_
        State
        Primary
        Treatment

000001     I: 0.01                                                  SET      Stopped
(000049)    ┤├───────┐                                             W0.00     <W000.00>
        Stop_PB      │                                            Stopped    a008
        Emergenc     │                                            _State
        y Stop       │
                     │                                              RSET     Primary
                     │                                             W0.02     Treatment
                     │                                            Primary_   <W000.02>
                     │                                             State     a047 a052 a103

000002     W0.02                                                    TIM      [OP1]
(000052)    ┤├                                                     0000      <T0000(bit)>
        Primary_                                                    #6000     a054
        State
        Primary                                                              [OP2]
        Treatment

000003     T0000                                                    SET      Secondary
(000054)    ┤├───────┐                                             W0.03     Treatment 1
                     │                                            Seconda    <W000.03>
                     │                                            ry_State   a059 a091 a099
                     │                                            _1
                     │
                     │                                              RSET     Primary
                     │                                             W0.02     Treatment
                     │                                            Primary_   <W000.02>
                     │                                             State     a047 a052 a103

000004                                                              ILC
(000057)                                                           (003)
```

[Program Name : Sewage_Treatment]

[Section Name : Secondary_I]

000000 (000059)	W0.03 ⊣⊢ Secondary_State_1 Secondary Treatment 1	IL (002)

000001 (000061)	I: 0.01 ⊣⊢ Stop_PB Emergency Stop	SET	Stopped
		W0.00 Stopped_State	<W000.00> a008
		RSET	Secondary Treatment 1
		W0.03 Secondary_State_1	<W000.03> a059 a091 a099

000002 (000064)	I: 0.06 ⊣⊢ HLS_3 High Level Switch 3	SET	Secondary Treatment 2
		W0.04 Secondary_State_2	<W000.04> a069 a074 a095 a105
		RSET	Secondary Treatment 1
		W0.03 Secondary_State_1	<W000.03> a059 a091 a099

000003 (000067)		ILC (003)

000000 (000069)	W0.04 ⊣ ⊢ Secondar y_State_2 Secondar y Treatment 2		IL (002)	

| 000001
(000071) | I: 0.01
⊣ ⊢
Stop_PB
Emergenc
y Stop | | SET

W0.00
Stopped
_State | Stopped

<W000.00>
a008 |
| | | | RSET

W0.04
Seconda
ry_State
_2 | Secondary
Treatment 2
<W000.04>
a069 a074 a095
a105 |

| 000002
(000074) | W0.04
⊣ ⊢
Secondar
y_State_2
Secondar
y
Treatment
2 | | TIM

0001
#6000 | [OP1]
<T0001(bit)>
a076

[OP2] |

| 000003
(000076) | T0001
⊣ ⊢ | | SET

W0.05
Tertiary_
State | Tertiary
Treatment
<W000.05>
a081 a093 a101 |
| | | | RSET

W0.04
Seconda
ry_State
_2 | Secondary
Treatment 2
<W000.04>
a069 a074 a095
a105 |

| 000004
(000079) | | | ILC
(003) | |

[Program Name : Sewage_Treatment]

[Section Name : Tertiary]

```
000000     W0.05                                                      IL
(000081)    | |                                                      (002)
          Tertiary_S
          tate
          Tertiary
          Treatment

000001     I: 0.01                                                    SET        Stopped
(000083)    | |                                                      W0.00       <W000.00>
          Stop_PB                                                    Stopped     a008
          Emergenc                                                   _State
          y Stop

           I: 0.08
            | |
          HLS_4
          High
          Level
          Switch 4
                                                                      RSET       Tertiary
                                                                                 Treatment
                                                                      W0.05      <W000.05>
                                                                      Tertiary_   a081 a093 a101
                                                                      State

000002                                                                ILC
(000087)                                                             (003)
```

```
000000      W0.01                                              Q: 100.00    Valve 1
(000089)    ┤├                                                    ○
            Preliminar                                         Solenoid_
            y_State_                                           A
            Preliminar
            y
            Screening

000001      W0.03                                              Q: 100.01    Valve 2
(000091)    ┤├                                                    ○
            Secondar                                           Solenoid_
            y_State_1                                          B
            Secondar
            y
            Treatment
            1

000002      W0.05                                              Q: 100.02    Valve 3
(000093)    ┤├                                                    ○
            Tertiary_S                                         Solenoid_
            tate                                               C
            Tertiary
            Treatment

000003      W0.04                                              Q: 100.03    Valve 4
(000095)    ┤├                                                    ○
            Secondar                                           Solenoid_
            y_State_2                                          D
            Secondar
            y
            Treatment
            2

000004      W0.01                                              Q: 100.04    Pump 1
(000097)    ┤├                                                    ○
            Preliminar                                         Motor_A
            y_State_
            Preliminar
            y
            Screening

000005      W0.03                                              Q: 100.05    Pump 2
(000099)    ┤├                                                    ○
            Secondar                                           Motor_B
            y_State_1
            Secondar
            y
            Treatment
            1

000006      W0.05                                              Q: 100.06    Pump 3
(000101)    ┤├                                                    ○
            Tertiary_S                                         Motor_C
            tate
            Tertiary
            Treatment

000007      W0.02                                              Q: 100.07    Fan 1
(000103)    ┤├                                                    ○
            Primary_                                           Motor_D
            State
            Primary
            Treatment

000008      W0.04                                              Q: 101.00    Fan 2
(000105)    ┤├                                                    ○
            Secondar                                           Motor_E
            y_State_2
            Secondar
            y
            Treatment
            2
```

[Program Name : Sewage_Treatment]

[Section Name : END]

000000
(000108)

END
(001)

[Program Name : Sewage_Treatment]

[Section Name : END]