CITY OF WILMINGTON, NORTH CAROLINA

PROJECT PLANS FOR THE CONSTRUCTION OF

RED TRAFFIC LIGHT MONITORING FACILITIES

AT THE INTERSECTION OF

## DAWSON ST / US 76 AT S. 16TH ST
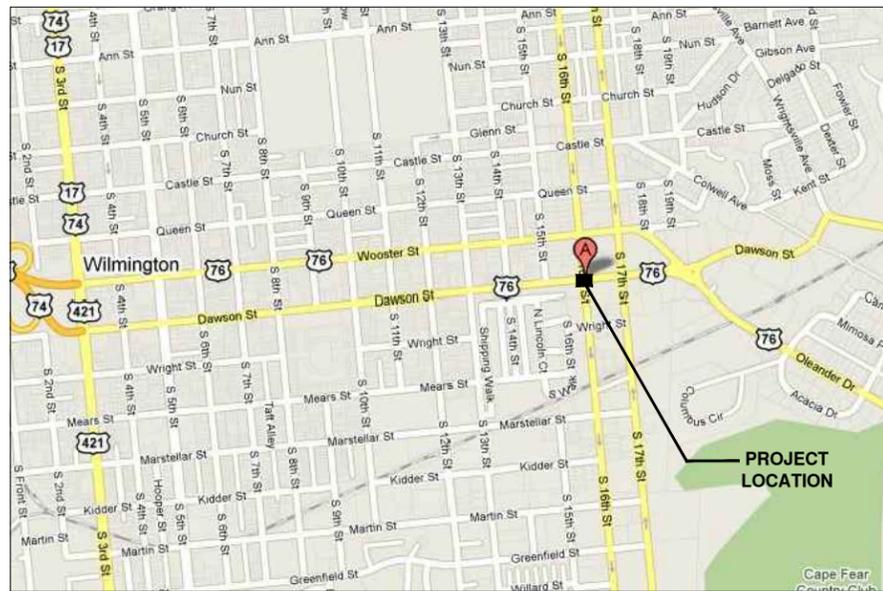
SHEET INDEX

PROJECT LOCATION

| | American Traffic Solutions | 7681 E. GRAY RD
SCOTTSDALE, AZ 85260 USA
TEL: (480)443-7000 FAX: (480)607-0901
WWW.ATSOL.COM | | **COVER SHEET**
DAWSON ST / US 76 AT S. 16TH ST
Wilmington, NC | NO. | BY | DATE | REVISION | NO. | BY | DATE | REVISION | **1ST SUBMITTAL**
DESIGNED BY: SM
DATE: 08-03-10
APPROVED BY:
APPROVAL DATE: | JOB NUMBER
1259
SITE ID(S)
WI509 | SHEET
NUMBER
1
OF **4** SHEETS |

RED LIGHT PHOTO ENFORCEMENT PROGRAM

LEGEND

———	CONDUIT
====	DIRECTIONAL BORE
📷	REAR MONITOR CAMERA ON ATS POLE
⊡)	WIRELESS VEHICLE DETECTION SENSORS
□	PULL/ JUNCTION BOX
▽	PHOTO ENFORCEMENT SIGN
– – –	EXISTING CONDUIT

CONTROLLER CABINET, REAR SCENE CAMERA, AXSIS LIVE CAMERA, WVD ANTENNA, AND 300 WATT FLASH MOUNTED ON POLE. CONTAINS EVDO MODEM. SEE DETAIL "A" ON SHEET 3 OF 4.

3' F/C

AERIAL SPAN 1-7/c #14

SEE NOTE 1 & 2

WIRELESS VEHICLE DETECTION SENSORS. SEE DETAIL "B" ON SHEET 3 OF 4.

AERIAL SPAN 1-7/c #14

119'

5'

10'

VIOLATION POINT

DAWSON ST / US 76

SEE NOTE 3

S. 16TH ST
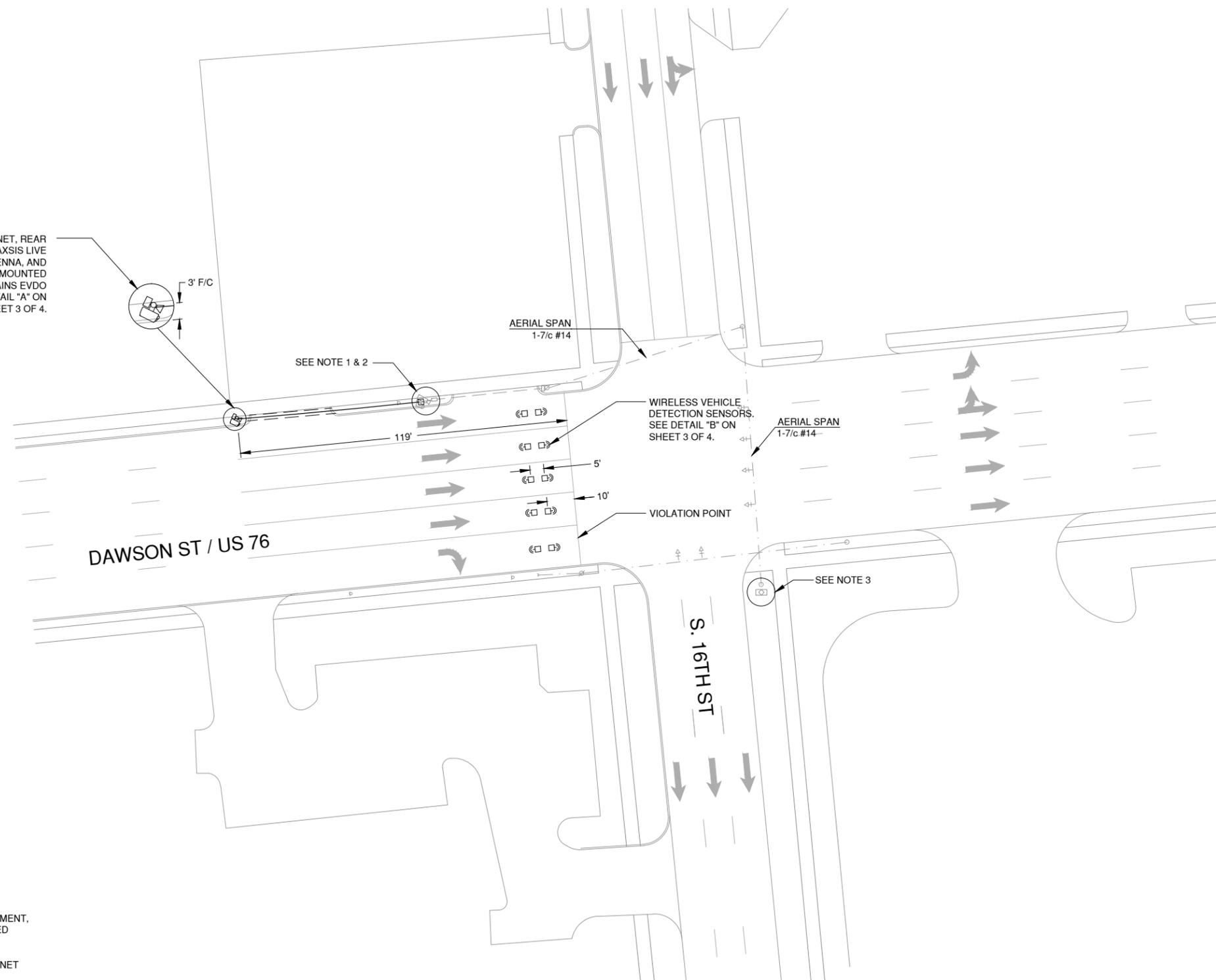
NOTES:

1. CONTRACTOR SHALL REMOVE POLE, EQUIPMENT, AND CABLING. FOUNDATION TO BE REMOVED AND NEW ATS PULL BOX TO BE INSTALLED.

2. TERMINATE AT EXISTING TRAFFIC PAX CABINET FOR POWER.

3. CONTRACTOR SHALL REPLACE EXISTING TRAFFIC PAX PHASE DETECTION WITH APPROVED CR9350-ACA PHASE DETECTION.

ONE CALL
DIGALERT
Dig Safely
811
KNOW WHAT'S BELOW
CALL BEFORE YOU DIG!!

20 0 20 40
SCALE: 1"=20'

INTERSECTION PLAN
DAWSON ST / US 76 AT S. 16TH ST
Wilmington, NC

| NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

1ST SUBMITTAL
DESIGNED BY: SM
DATE: 08-03-10
APPROVED BY:
APPROVAL DATE:

JOB NUMBER
1259
SITE ID(S)
WI509

SHEET NUMBER
2
OF 4 SHEETS
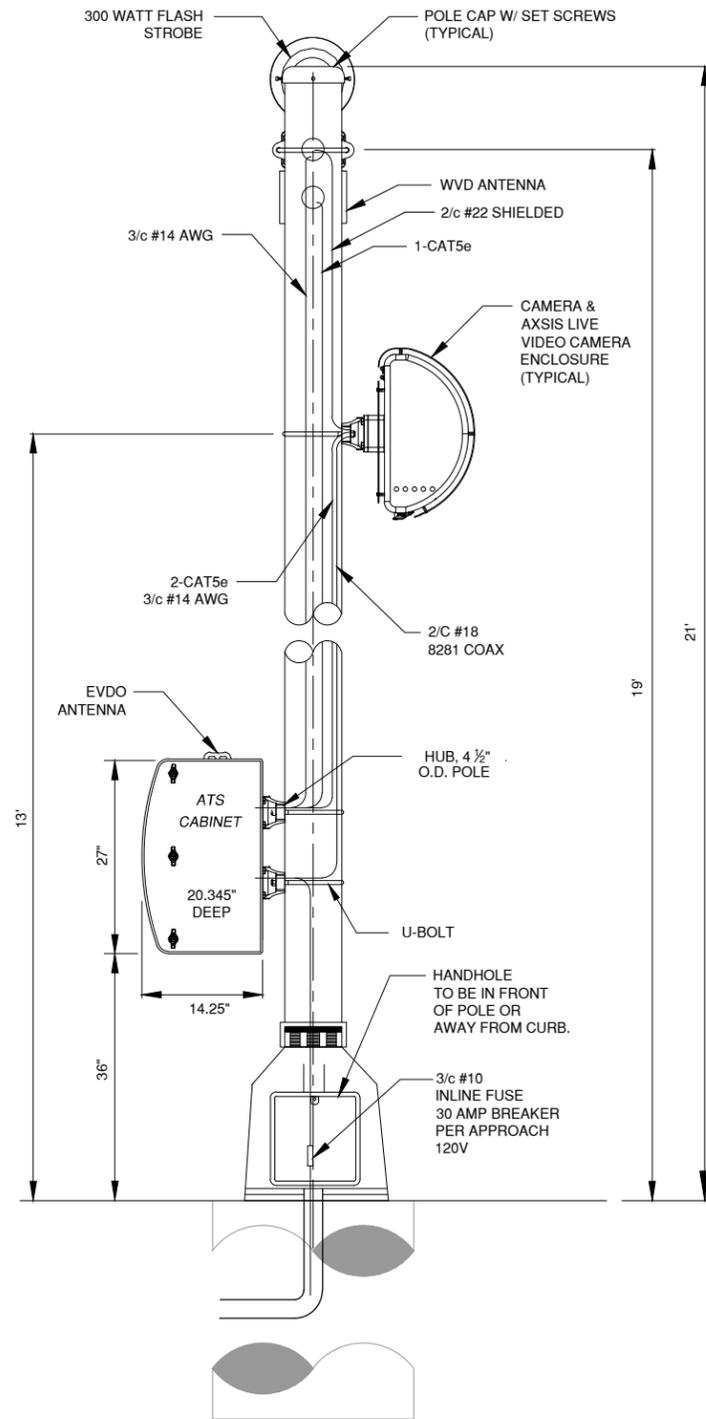
DETAIL "A"
20'-4.5" O.D. SCHEDULE 80
(6061 T6 ALUMINUM ALLOY

Labels:
- 300 WATT FLASH STROBE
- POLE CAP W/ SET SCREWS (TYPICAL)
- WVD ANTENNA
- 2/c #22 SHIELDED
- 3/c #14 AWG
- 1-CAT5e
- CAMERA & AXSIS LIVE VIDEO CAMERA ENCLOSURE (TYPICAL)
- 2-CAT5e
- 3/c #14 AWG
- 2/C #18 8281 COAX
- EVDO ANTENNA
- HUB, 4 ½" O.D. POLE
- ATS CABINET
- 20.345" DEEP
- U-BOLT
- HANDHOLE TO BE IN FRONT OF POLE OR AWAY FROM CURB.
- 3/c #10 INLINE FUSE 30 AMP BREAKER PER APPROACH 120V
- 27"
- 14.25"
- 36"
- 13'
- 19'
- 21'
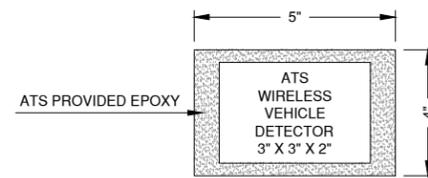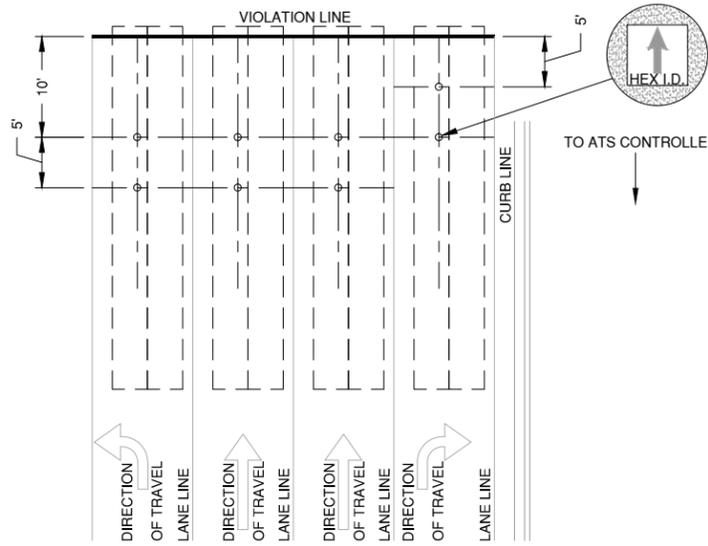
DETAIL "B"
WIRELESS VEHICLE DETECTION
SENSOR DETAIL

Labels:
- VIOLATION LINE
- 5'
- 10'
- 5'
- HEX I.D.
- TO ATS CONTROLLER
- CURB LINE
- DIRECTION OF TRAVEL LANE LINE
- ATS PROVIDED EPOXY
- 5"
- 4"
- ATS WIRELESS VEHICLE DETECTOR 3" X 3" X 2"

ATS WIRELESS VEHICLE DETECTORS (WVD) INSTALLATION:

TRAILING WVD'S 10' FROM VIOLATION LINE, MIDDLE OF THE LANE.
LEADING WVD'S 15' FROM VIOLATION LINE, MIDDLE OF THE LANE.

* DEDICATED RIGHT TURNS ONLY -
TRAILING WVD'S 5' FROM VIOLATION LINE, MIDDLE OF THE LANE.
LEADING WVD'S 10' FROM VIOLATION LINE, MIDDLE OF THE LANE.

1. MEASURE & MARK DEAD CENTER OF EACH LANE FROM VIOLATION LINE. (SEE DETAIL "B")

2. MEASURE AND MARK 10', 15' & 5' FOR DEDICATED RIGHT TURN LANES FROM VIOLATION LINE. (SEE DETAIL "B")

3. 4" CORE DRILL CENTER OF MARKS @ A DEPTH PF 2.25". JACK HAMMER/CHISLE OUT ASPHALT AS REQUIRED. (SEE IMAGES 1-4 ON SHEET 4 OF 4.)

4. RECORD HEX ID FOR EACH WVD IN EXACT LOCATION PER LANE. RECORD (RED HEX ID INPUT) ON THE DRAWING TO THE LEFT. (SEE IMAGE5 ON SHEET 4 OF 4.)

5. VACUUM, WASH AND HEAT HOLE PRIOR TO EPOXY FILL. (SEE IMAGE 6 ON SHEET 4 OF 4.)

6. USE MANUFACTURERS EPOXY FILLER ONLY (TO BE SUPPLIED BY ATS).
   A. FILL BOTTOM OF 4" CORE DRILLER HOLE #1 / 8" WITH EPOXY. (SEE IMAGE 7 ON SHEET 4 OF 4.)
   B. INSERT WVD WITH ORIENTATION ARROW IN THE SAME DIRECTION AS VEHICLE TRAVEL. (SEE IMAGES 8 & 9 ON SHEET 4 OF 4.)
   C. STEP BACK AND VIEW ARROW ORIENTATION IS PARALLEL TO DIVIDER STRIPING.
   D. INSURE YOU HAVE HEX ID RECORDED. (SEE IMAGE 5 ON SHEET 4 OF 4.)
   E. FILL HOLE WITH REMAINING EPOXY TO ROAD SURFACE LEVEL. (SEE IMAGES10, 11 ON SHEET 4 OF 4.)

NOTE: THIS EPOXY WILL CURE "HARD" IN APPROXIMATELY 3 MINUTES.
7. ATS WVD SHALL NOT BE PLACED SO AS TO DAMAGE VEHICLE DETECTION LOOP WIRES.

ATS DETAILS
DAWSON ST / US 76 AT S. 16TH ST
Wilmington, NC

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

1ST SUBMITTAL
DESIGNED BY: SM
DATE: 08-03-10
APPROVED BY:
APPROVAL DATE:

JOB NUMBER
1259
SITE ID(S)
WI509

SHEET NUMBER
3
OF 4 SHEETS

IMAGE #1

IMAGE #2

IMAGE #3

IMAGE #4

IMAGE #5

IMAGE #6

IMAGE #7
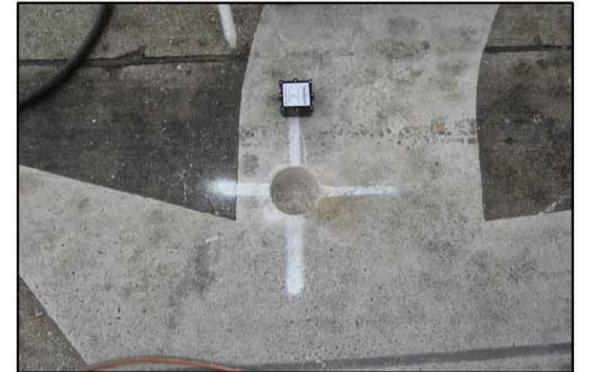
IMAGE #8

IMAGE #9

IMAGE #10

IMAGE #11

ATS DETAILS
DAWSON ST / US 76 AT S. 16TH ST
Wilmington, NC

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

1ST SUBMITTAL
DESIGNED BY: SM
DATE: 08-03-10
APPROVED BY:
APPROVAL DATE:

JOB NUMBER
1259
SITE ID(S)
WI509

SHEET NUMBER
4
OF **4** SHEETS