PUBLIC WORKS
Tahlequah
AUTHORITY

TAHLEQUAH, OK

-ESTABLISHED IN 1839 AS THE NEW CAPITAL OF THE CHEROKEE NATION

-FIRST INCORPORATED TOWN OF INDIAN TERRITORY 1852

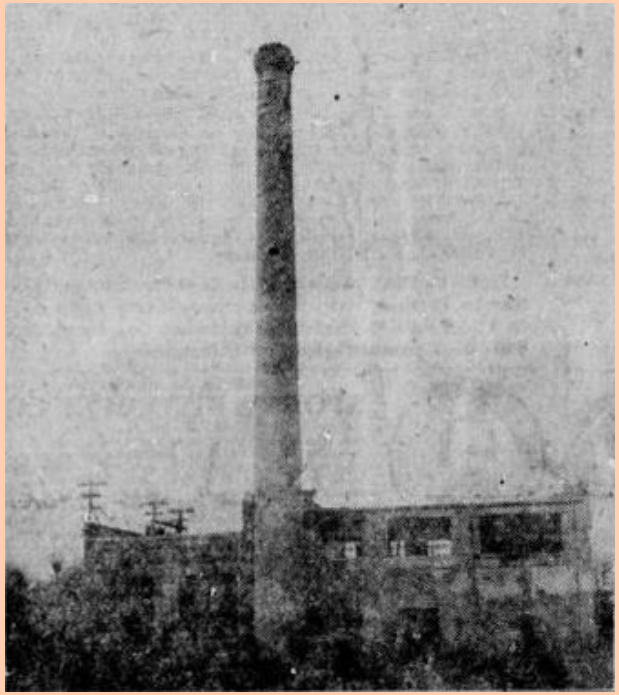
UTILITIES HISTORY

-WATER UTILITY SERVICE ESTABLISHED AROUND 1902; CITY OF TAHLEQUAH BOUGHT THE PRIVATE COMPANY IN 1909

-SANITARY SEWER SERVICE WAS PROVIDED AROUND 1909

-ELECTRICITY FROM COAL POWERED GENERATORS WAS PRODUCED STARTING IN FEBRUARY 1921, CONVERTED TO DIESEL IN 1930.

-TAHLEQUAH PUBLIC WORKS AUTHORITY ESTABLISHED AS A TRUST OF THE CITY IN 1972

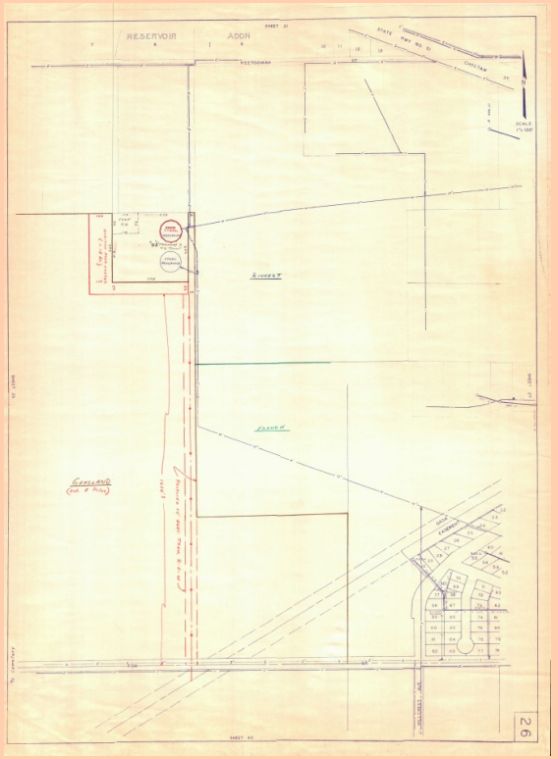


GIS AT TPWA

-LAST UTILITY ATLAS FOR TAHLEQUAH WAS PRINTED IN 1986, BADLY NEEDED UPDATING

-GIS WAS NOT BEING UTILIZED BY TPWA UNTIL 2012

-TPWA HIRED RHONDA BABER AND LARRY SETTERS, EXPERIENCED GIS USERS AND UTILITY MAPPERS



CHALLENGES

-SMALL CUSTOMER BASE = SMALL BUDGET (AVG. 8,600 ACCOUNTS). BULK OF FISCAL BUDGET REQUIRED TO BUILD NEW & MAINTAIN CURRENT UTILITIES (INFRASTRUCTURE, HEAVY EQUIPMENT & ADMINISTRATION)

-SOFTWARE LICENSES

-NO EXISTING DATA BASE

-GPS UNITS

-PRINTING & SCANNING EQUIPMENT

CHALLENGES (cont.)

-MAP DISSEMINATION (MAP BOOKS & ARC READER)

- ARC GIS ONLINE USED WITH MOBILE DEVICES (NO CITYWIDE WIFI, WOULD HAVE TO USE CELLULAR NETWORK; COST OF MOBILE DEVICES)

- ARC READER ON LAPTOPS (ARC READER BEING PHASED OUT; COST OF LAPTOPS)

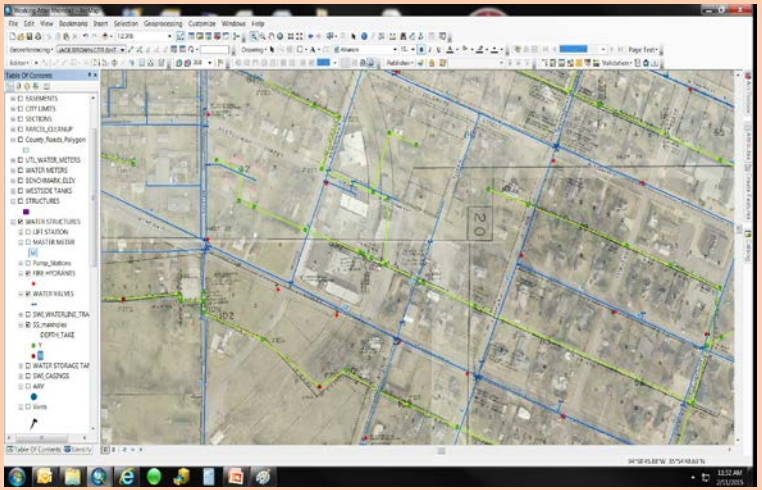
SOLUTIONS

SOFTWARE LICENSES SOLUTION

-STANDARD DESKTOP ESRI LICENSES (NOT USING SERVER)

NO EXISTING DATA BASE SOLUTION

-GEOREFERENCED 1986 ATLAS, CREATED UTILITY SHAPEFILES FROM THOSE DRAWINGS

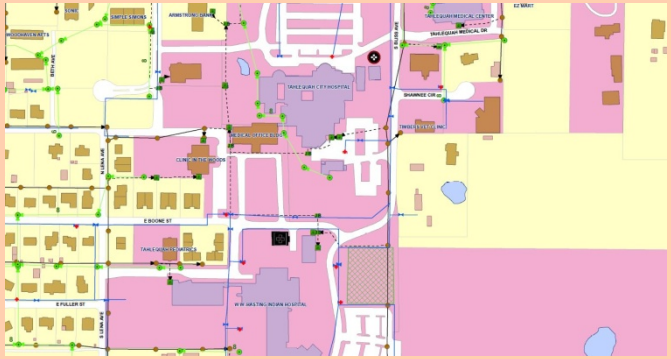


-FIELD DATA COLLECTION WITH SUB-METER GPS

-DOWNLOADED TIGER SHAPEFILES (ROADS & STREAMS), BOUNDARIES, & PLS DATA, AS WELL AS DATA SHARED BETWEEN TPWA & OTHER LOCAL ENTITIES

NO EXISTING DATA BASE SOLUTION

-DIGITIZED BASE DATA FROM PICTOMETRY



GPS UNITS
SOLUTION

-GPS UNITS WITH SUB-METER ACCURACY USING ESRI ARC PAD SOFTWARE

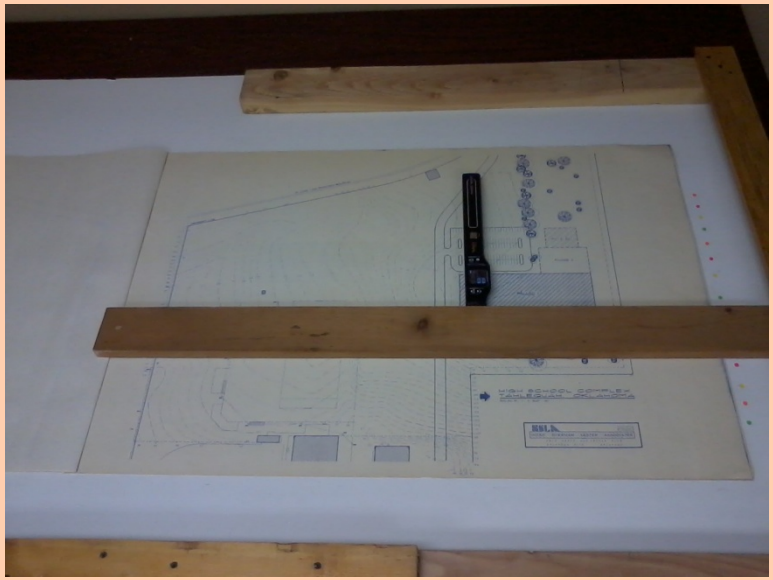
PRINTING & SCANNING EQUIPMENT SOLUTION

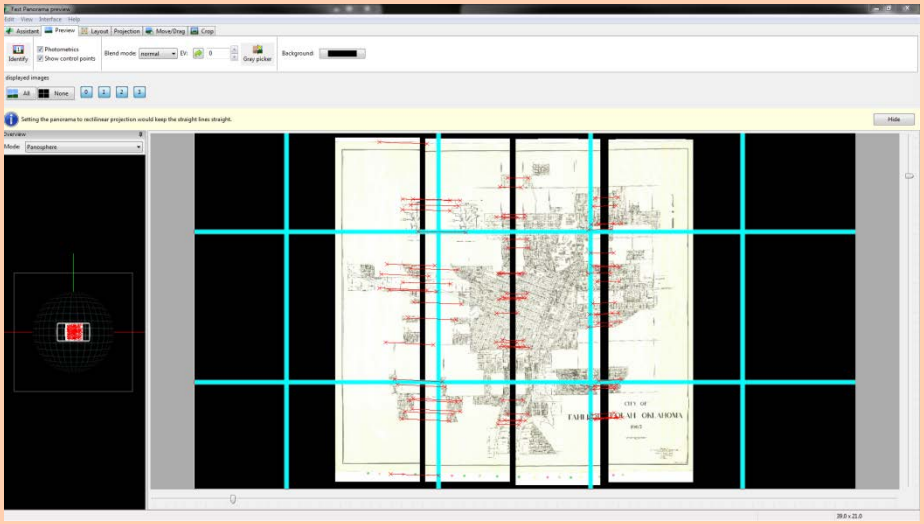
-GIVEN ACCESS TO CITY'S PLOTTER

-CHEROKEE COUNTY EMERGENCY MANAGEMENT DONATED A SECOND-HAND PLOTTER TO TPWA

- 11x17 MULTI-FUNCTION FLAT BED PRINTER

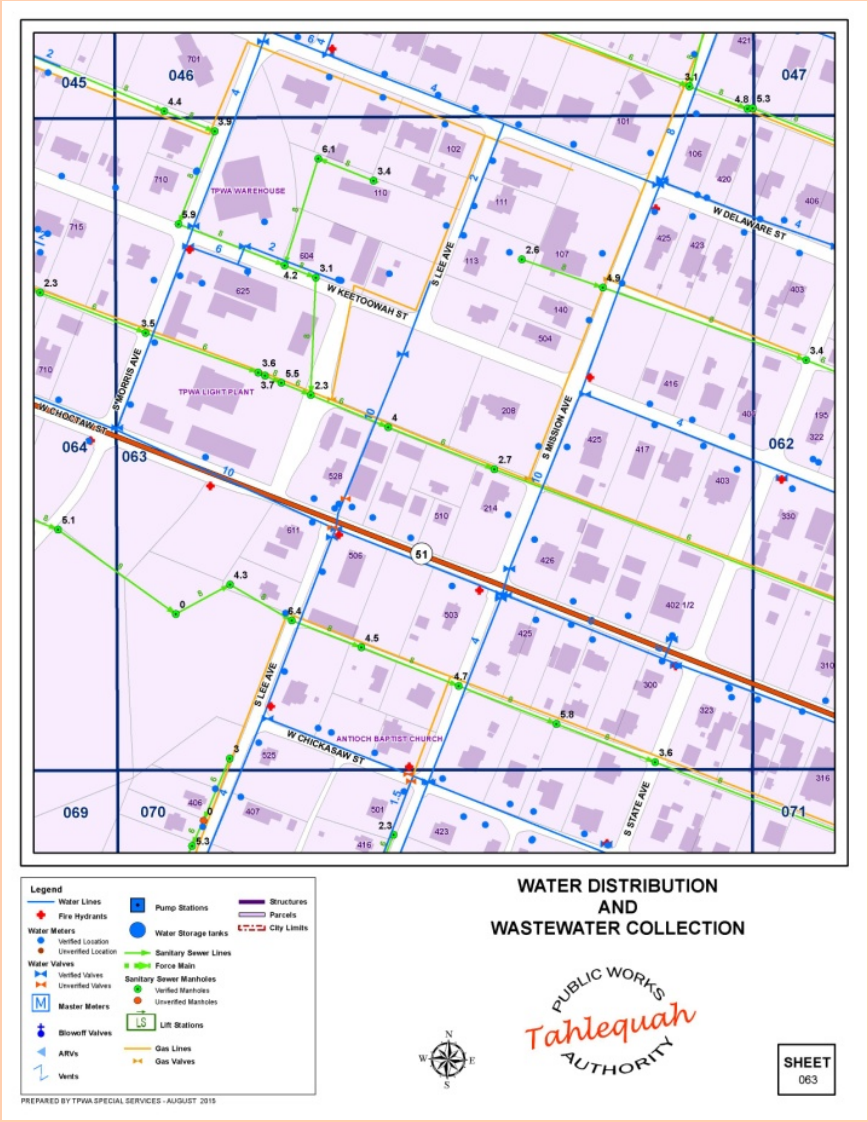
-HAND HELD SCANNER USED IN CONJUCTION WITH FREE SOFTWARE TO "STITCH" SCANNED IMAGES (IN LIEU OF LARGE DOCUMENT SCANNER)



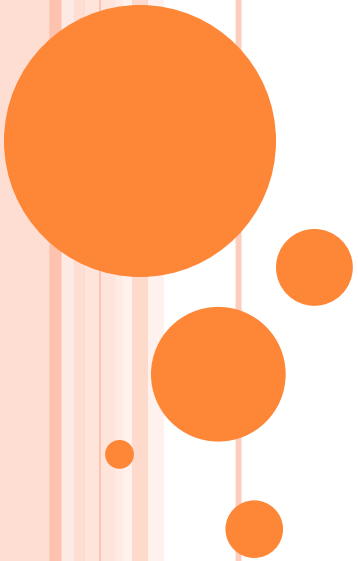


MAP DISSEMINATION SOLUTION

-PAPER MAP BOOKS (FOR FIELD CREWS) &
ARC READER ON EXISTING COMPUTERS



QUESTIONS



PUBLIC WORKS
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