

LIGHT WEIGHT PROFILER VERIFICATIONS AND OPERATOR CERTIFICATIONS



LWP devices have been acquired by RITU, Engineering District offices, contractors, and subcontractors for use on Department construction/maintenance projects. The Department wants to be assured that each individual LWP device is operated proficiently and provides accurate and precise results. With this in mind, a program has been developed to verify that all LWP devices are calibrated and operated properly. This program is directed and controlled by RITU, and is described in detail in the “Light Weight Profiling System Calibration Verification and Operator Certification Manual.” All LWP devices,

used by the Department or contractors, on Department construction or maintenance projects shall be verified prior to use on such projects each year. Furthermore, all operators of LWP devices shall be certified prior to using the LWP devices on such projects each year.

All LWP devices are required to meet the definitions and requirements of Pennsylvania Test Method (PTM) #428 – Method of Test for Measuring Pavement Profile Using A Light Weight Profiler. The devices and operators shall be capable of providing results accordingly and in the defined formats.

A verification/certification site has been established at a Pennsylvania Rails to Trails site in Newville, Cumberland County. RITU will annually determine a reference International Roughness Index (IRI) value for the site.

To determine a reference IRI value ten passes of the site will be made with the SurPRO Walking Profiler. If the standard deviation of the ten passes (determined with each device) is within +/- 1% of their mean, then ten passes with an LWP device will be made. If the standard deviation of the ten LWP passes is within +/- 1% of the mean values determined by the Walking Profilers mean, then a mean IRI value (using LWP values) will be established as the reference value.



Concrete Test Section at Newville

To verify/certify a device and operator, five pavement profiles (passes) shall be taken in each wheelpath of the test section. The precision and bias of the test results must meet the following requirements:

- Precision: The standard deviation of the five passes' IRI results shall be within $\pm 3\%$ of the mean IRI value.
- Bias: The mean IRI value, based on the five passes, shall be within $\pm 5\%$ of the reference IRI value.

All LWP devices with acceptable test results will be designated with a decal to be applied by RITU, and all certified LWP operators will be provided a certification card. Regardless of when a LWP device is verified, it will only be valid through March 31st of the following year. Operator certifications are valid through March 31st of the third year after issuance. For example, an operator certification issued in 2005 is valid through March 31, 2008.

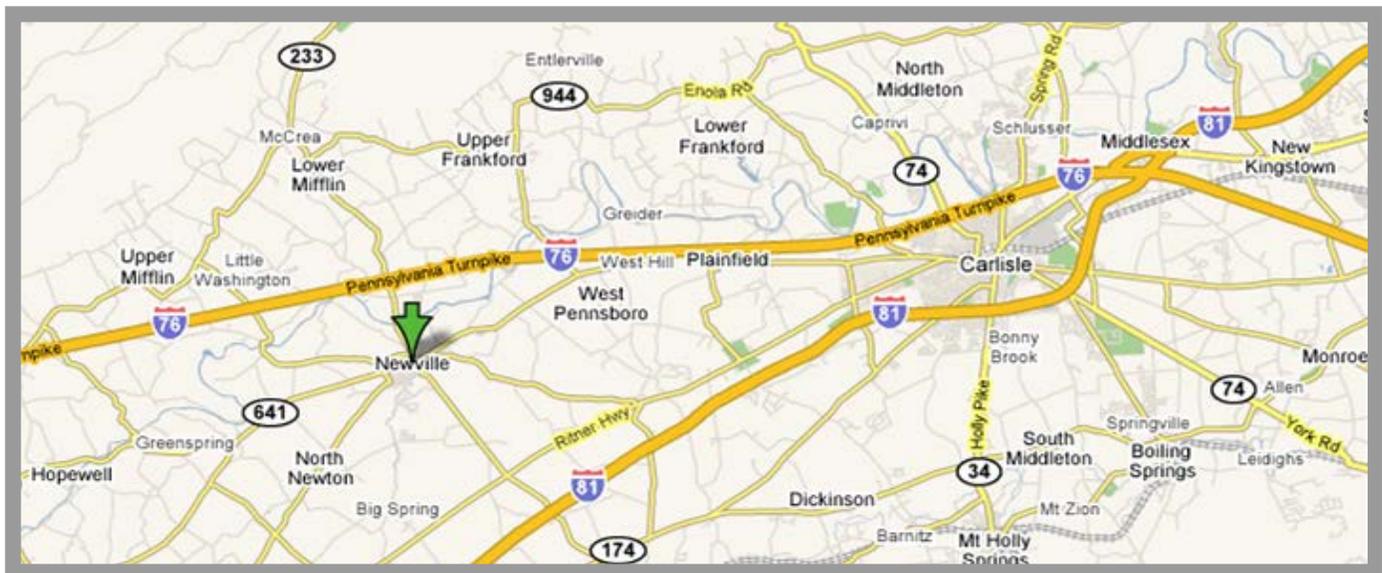
RITU will begin each year's operations of the LWP Calibration Verification and Operator Certification program in the Spring of each year, typically March or April. However, verifications/ certifications may be performed throughout the Summer and Fall. It is the responsibility of the LWP device owner to contact RITU for scheduling.



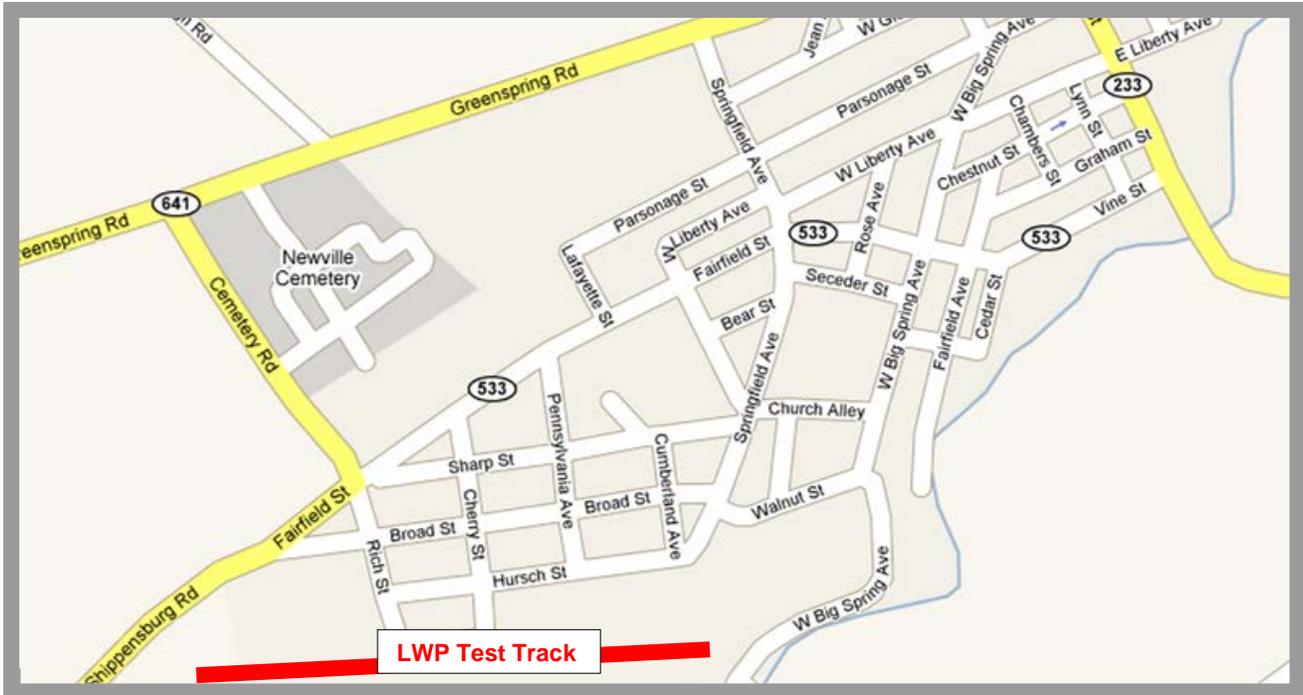
Bituminous Test Section

To schedule a LWP Calibration Verification and Operator Certification, please contact RITU at (717) 787-7291.

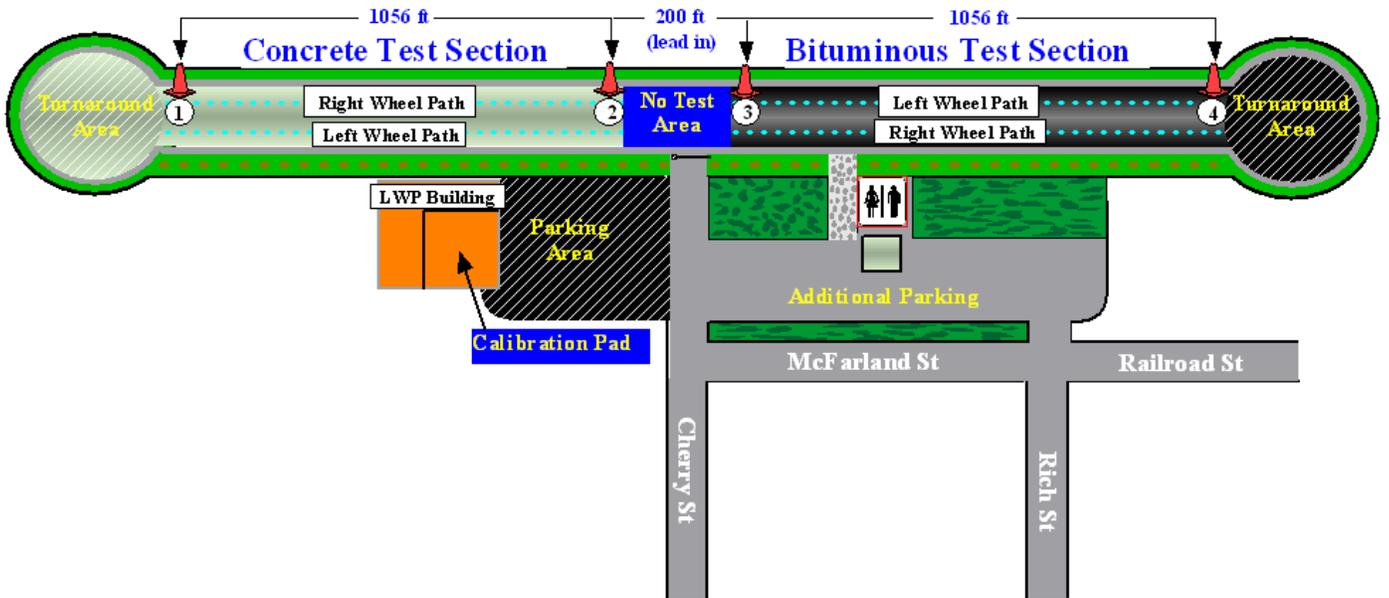
- When scheduling verifications/certifications, state how many operators are to be certified during the session. Do not send additional operators to the procedure without prior RITU approval.
- If time constraints arise, RITU reserves the right to deny the opportunity to certify all operators during a given day.



Newville, PA



Newville LWP Track Location



Newville LWP Certification Course Layout