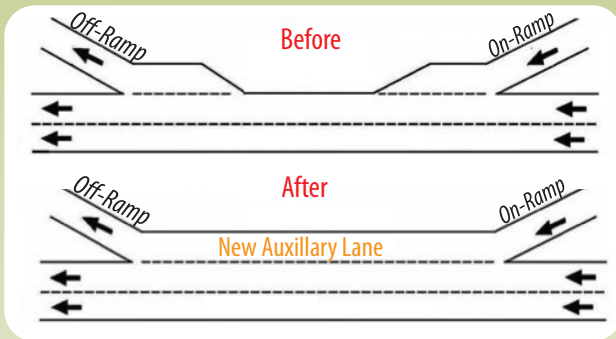


**Asphalt** – a mixture of dark bituminous pitch with sand or gravel, used for surfacing roads, flooring, roofing, etc.

**Auxiliary Lane** – Portion of the roadway adjoining the traveled way for speed change, turning, weaving, truck climbing, maneuvering of entering and leaving traffic, and other purposes supplementary to through-traffic movement.



**Backfill** – Soil or rock material placed to return a site to finish grade

**Compaction** – The act increasing of the density of a material, such as concrete, by applying compactive effort and removing the air present, i.e. decreasing air voids content.

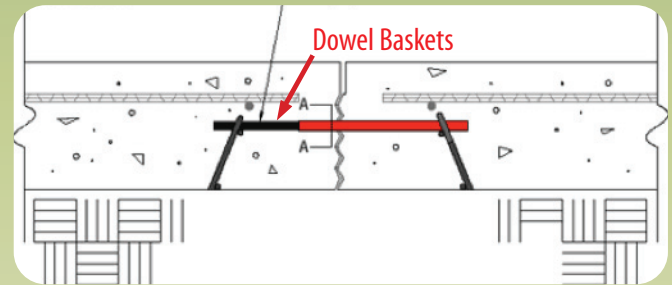
**Consolidation** - the increasing of soil density by the removal of water from the soil. Consolidation occurs through a combination of different factors, such as vibration. Suitable mix design and correct placement technique are critical to achieve the sought out consolidation level.

**Curing of Concrete** - adequate moisture, temperature, and time to allow concrete to achieve the desired properties for its intended use. Usually, maintaining a relative humidity in the concrete of greater than 80 percent, a temperature greater than 50 degrees Fahrenheit, and for a time typically ranging from three to 14 days depending on the specific application, helps achieve the desired concrete curing state.

**Dowel Basket** – Equipment with dowel bars embedded in concrete pavements that transfer the load across the construction joints and provide reinforcement between

## Construction Terms

concrete slabs. When aligned properly, they help reduce faulting and improve the pavement's performance.

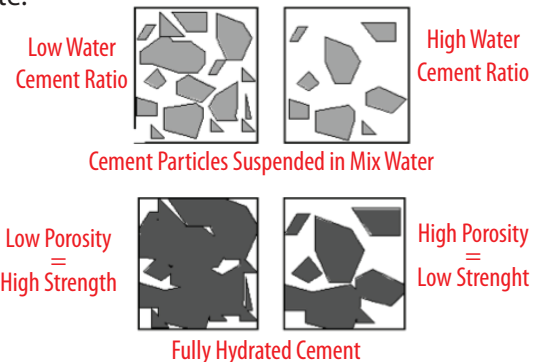


**Drum Roller** – is a compactor type engineering vehicle used to compact soil, gravel, concrete, or asphalt in the construction of roads and foundations



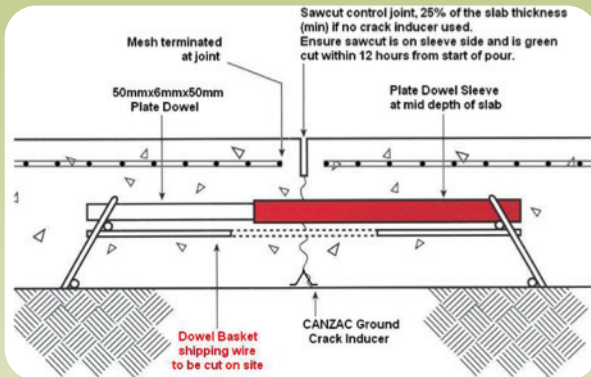
**Finished Grade** - Any surface, which has been cut to or built to the elevation indicated for that point. Surface elevation after completion of grading operations.

**Hydration Process** – A chemical reaction in which the major compounds in cement form chemical bonds with water molecules, causing the hardening of concrete.



## Construction Terms

**Joint** – The contact between the placed concrete and concrete surfaces, against or upon which concrete is to be placed and to which new concrete is to adhere, that has become so rigid that the new concrete cannot be incorporated integrally by vibration with that previously placed.



**Lean Concrete Base (LCB)** – A mix where the amount of cement is lower than the amount of liquid present in the strata. This makes it ideal as a base layer where other kinds of concrete are placed on top. Concrete with high water content is considered lean because it has a lower concentration of cement compared to other kinds of paving and building materials of that class. Lean concrete is commonly used in road construction as the lowest level under the pavement on which vehicles travel. It serves as a sub-base thereby giving roads a stable platform on which to rest.

**Monolithic Slabs** – A concrete slab which is cast as a single continuous slab of concrete, without any casting or control joints



**Native Soil** – Unaggregated or uncemented deposits of mineral and/or organic particles or fragments derived from the breakdown of massive rocks or decay of living matter

**Portland Cement Concrete (PCC)** – Concrete used as a construction material in everything from sidewalks to bridges to skyscrapers, as well as concrete pavement. Concrete is made by combining coarse and fine aggregates, Portland cement and water. The water hydrates the cement to form a gel that holds all the aggregate together.

**Saw Cutting** – Saw cutting concrete that has been placed generates concrete joints that produce predetermined spacing to control cracking on the concrete. Slabs crack directly beneath saw cut contraction joints and transfer load between panels by aggregate interlock. Saw cutting concrete facilitates future individual slab replacement without impacting additional slabs that don't need replacement.



**Screed Roller** – equipment used to compress material, such as concrete, during the compaction stage of the material placement process.





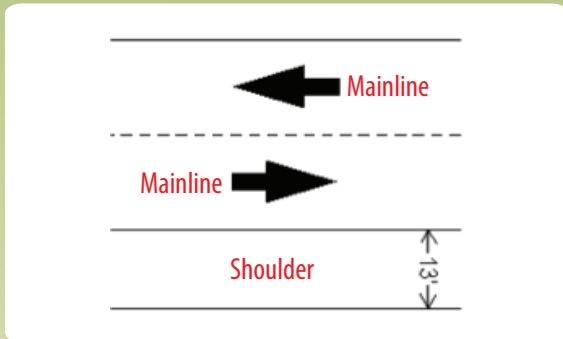
# Wilmington Avenue

## Interchange Modification

ROADWAY AND BRIDGE RETROFIT

## Construction Terms

**Shoulder** – Often serving as an emergency stopping lane, is a reserved lane by the verge of a road or motorway, typically on the right side of a road



**Structural Backfill** - Structural fill that is typically a screened earthen material used to create a strong, stable base. For example, the native soil at a site may be too weak to support a structure. Instead, structural fill is used and it's compacted (normally compacted to a relatively high percent compaction) to provide the needed bearing capacity so the compaction properties (optimum water content and maximum dry density), of the material are achieved; these properties are very important to the performance and support of, for example, roadways.