

OMNNI Associates

Construction Materials Testing Services



Asphalt Mix

- Mix Design (WisDOT or commercial)
- Laboratory compacted specimens (SuperPave and Marshall)
- Bulk Specific Gravity
- Maximum Theoretical Specific Gravity
- Mix voids determination
- Extracted asphalt content
- Gradation of extracted aggregate
- Tensile Strength Ratio
- Field mix sampling
- Cored pavement sampling
- WisDOT QMP testing
- Pavement distress review
- Engineering analysis and review

Concrete Mix

- Mix Design (WisDOT, BOA or commercial)
- Laboratory trial batching
- Slump
- Air content
- Temperature
- Unit weight/yield
- Water/cement ratio
- Aggregate air correction
- Casting of cylinders & beams
- Compressive strength
- Flexural strength
- Splitting tensile strength
- Maturity curve development
- Core sampling
- Dry shrinkage determination
- Batch plant inspection
- WisDOT QMP testing
- Distress review
- Engineering analysis and review
- Air meter calibration and repair

Structural Steel

- Rebar placement documentation
- Structural steel placement documentation
- Fire-proofing thickness, density & adhesion

Aggregates

- Grain size analysis
- Moisture content
- Specific gravity/absorption
- Sodium sulfate soundness
- Freeze/thaw resistance
- LA Abrasion (wear)
- Lightweight pieces
- Deleterious materials
- Flat & elongated particles
- Unit weight
- Uncompacted void content
- Sand Equivalency
- Organic impurities
- Falling head permeability
- WisDOT QMP testing
- WisDOT aggregate source quality testing

Soils

- Geotechnical exploration and engineering
- Unconfined compression
- Nuclear density testing
- Standard and Modified Proctors
- Grain size analysis (sieve & hydrometer)
- Atterberg limits
- Unit weight/moisture
- Specific gravity
- Static and dynamic cone penetrometer
- Thin-walled tube sampling
- Electrical resistivity
- pH

Masonry

- Compressive strength of mortar and grout
- Compressive strength of masonry units
- Absorption
- Unit weight

