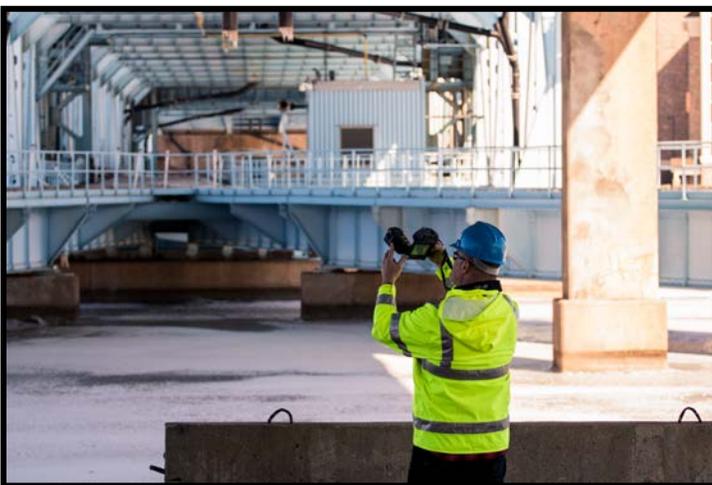




**GS Infrastructure strives to be a leading service provider of Non-Destructive Inspection.** Collection is performed at highway speeds for bridge decks and pavements utilizing a vehicle mounted system to capture images. Collection for substructure and superstructures is by land and marine vessel. Images are captured using Ground Penetrating Radar (GPR), Infrared Thermography (IRT) and HD Visual scoping. These innovative methods ultimately save client costs, time and reduce risks. Our service applications utilize Non-Destructive Inspection tools for bridge decks, substructures and superstructures, airport runways and taxiways, tunnels and roads.



### 3-DIMENSIONAL RADAR

#### The Next Generation of GPR Technology

- 3D visualization shows depth.
- High resolution 3D sub-surface imagery.
- Optimum resolution at each investigative depth.
- Large surface area acquisition and efficiency.
- Range of antenna arrays permits uniform response over various elements.



GS Infrastructure 3-dimensional GPR collection and analysis produces a real-time sliced visual of elements to depths up to 6 feet. Our patented IRT process captures the thermal, electromagnetic and visible indicators of deteriorations, voids, delaminations, patches, cracks and spalls. Information received is compiled through our proprietary analysis program, with output produced in native CAD formats. When combined with our state of the art GPR and HD IRT visual cameras, we offer a complete package of scoping services from real-time problem identification to detailed advanced data analysis for management systems.



### Ground Penetrating Radar- ASTM D5087-08

- Ground penetrating radar with multi-antenna array penetrates multiple feet through various materials. GPR uses electromagnetic energy to sense differing dielectric constants of materials or voids.
- High Speed condition assessments for delamination indication, rebar depth, deck and overlay thickness measurements.
- Air-Coupled antenna arrays are used for optimal scoping of bridge decks, roadways, sidewalks/R.O.W., tunnel, abutments and substructure elements.
- Report deliverables in native CAD formats.

### Infrared Thermography-ASTM D4733-02

- Infrared thermography imaging utilizing natural diurnal cycle for detection of defects by temperature differential through materials.
- Scoping of concrete surfaces and various overlays.
- Underdeck and sub/superstructure scanning from ground or maritime platform up to 100' away.
- Work performed at highway speeds, no need for lane closures.
- ASNT TC-1A Level I Thermographers.
- Report deliverables in native CAD formats.

