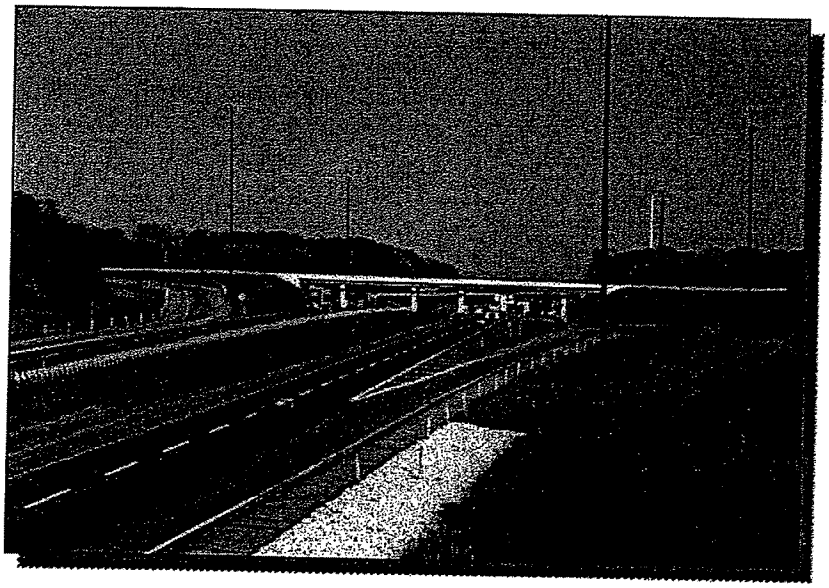
CONCESSION AND LEASE AGREEMENT
FOR THE
INDIANA TOLL ROAD

Volume II of III
OPERATIONS AND PROCEDURES MANUAL



Indiana Finance Authority
One North Capitol Avenue, Suite 900

RQAW Corporation
4755 Kingsway Drive, Suite 400

Indianapolis, Indiana 46204 *Indianapolis, Indiana 46205*

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CHAPTER A: ORGANIZATION AND GENERAL INFORMATION

A.1. Purpose of Manual

The purpose of this Volume II of the Operating Standards is to provide guidelines and criteria to the Concessionaire on the basic development and submission of the Operational Plans (each a "Plan") discussed in the respective Chapters of this Volume. Each Plan shall be drafted to maintain constant operation of the ITR of the highest quality consistent with best highway management practices and the terms and conditions of the Operating Standards.

A.2. Staffing Identification

The Concessionaire shall be solely responsible for each employee of the Concessionaire and each Vendor, contractor, agent or Affiliate of the Concessionaire and his/her actions while on the ITR or performing his/her duties for the Concessionaire regarding the ITR. The number of employees required shall be determined by the needs of the Concessionaire to fulfill its maintenance, operation and contractual obligations consistent with the terms and conditions of the Operating Standards.

The ITR is a 24 hour-per-day, 365 days-per-year operation. For this reason, the Concessionaire shall recognize the need to have variable work shifts, employees, supervisors and personnel so as to maintain constant operations of the highest quality consistent with best highway management practices and the terms and conditions of the Operating Standards.

A.2.1. Essential Staff

The Concessionaire shall identify which staff is essential to the operation of the ITR. These persons may alternate based upon seasonal variations, operation requirements, weather conditions, etc. The essential staff personnel shall be "response-ready" and immediately contactable by the IFA, if and when an event warrants.

A.2.2. Non-Essential Staff

The Concessionaire shall employ persons who perform job duties as needed, but may not respond to an event or situation.

A.2.3. Shift Organization

The Concessionaire shall create work shifts that preserve the continual operation of the ITR. Staff requirements shall be based upon the actual and anticipated needs of the ITR.

A.2.4. Essential Staff Personnel Matrix

The Concessionaire shall create, maintain, submit to the IFA, and update as appropriate,

a personnel matrix of the Concessionaire's essential staff which includes, but is not limited to, the following:

- Employee Name
- Title
- Position/Job Classification
- Basic Job Responsibilities
- Contact Information
  - Cell phone, mobile phone and/or pager number
  - E-mail (if applicable)
  - Home phone number

A.3. Interagency Coordination

The Concessionaire shall be aware that the operation of the ITR requires coordination with multiple agencies, including but not limited to, systems, departments, municipalities, counties, commissions and organizations (collectively for purposes of this Chapter, "Agencies"). The Concessionaire shall establish, maintain and provide coordination with Agencies that pass under, over, or are adjacent to ITR and Agencies that are impacted by the ITR.

It shall be solely the responsibility of the Concessionaire's to coordinate with the Agencies so that the continual operation of the ITR is not disrupted in any manner and that the Concessionaire's operation of the ITR does not unduly impact the Agencies. The Concessionaire shall be aware of, and shall incorporate accordingly into any Plan:

A.3.1. Seven Counties

Concessionaire shall be aware that the ITR is located in the northern part of the State of Indiana, within the limits of the following counties: Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange and Steuben. As a result, the ITR passes over, runs adjacent to, collects traffic and distributes traffic to and from the various state routes, interstates and local routes within the seven counties.

A.3.2. Chicago Skyway Toll Bridge System

The Concessionaire shall be aware that the western end of the ITR Toll System starts and terminates, as appropriate, at the official designated state line between the State of Illinois and the State of Indiana where the Skyway Concession Company, LLC leases, operates and maintains the Chicago Skyway Toll Bridge System, which is owned by the City of Chicago.

A.3.3. Ohio Turnpike Commission (OTC)

The Concessionaire shall be aware that the eastern end of the ITR Toll System starts and terminates, as appropriate, at the official designated state line between the State of Ohio and the State of Indiana where the Ohio Turnpike Commission operates and maintains the property.

A.3.4. Indiana Department of Transportation (INDOT)

The Concessionaire shall be aware that the ITR has many interchanges, overpasses and underpasses with U. S. routes and interstates that are being maintained and operated by LaPorte and Fort Wayne Districts of INDOT.

The Concessionaire shall coordinate its work efforts at those locations per the existing agreements and guidelines stated in the "Policy for Division of Maintenance and Construction Responsibilities at Points of Contact Between ITR and other Department of Transportation Divisions or Local/County Roads".

Any improvements along ITR such as an added travel lane, interchange modification, new interchange, road reconstruction, etc., shall be coordinated with INDOT, as well as included as part of INDOT's State Transportation Improvement Plan (STIP).

A.3.5. Michigan Department of Transportation (MDOT)

The Concessionaire shall be aware that the ITR has many interchanges, overpasses and underpasses with U. S. routes and interstates that are being maintained and operated by MDOT.

The Concessionaire shall coordinate its work efforts at those locations per the existing agreements and guidelines stated in the "Policy for Division of Maintenance and Construction Responsibilities at Points of Contact Between ITR and other Department of Transportation Divisions or Local/County Roads".

A.3.6. City, Town and County Governments

The Concessionaire shall be aware that the ITR has many interchanges, overpasses and underpasses with local routes that are being maintained and operated by appropriate city, town and county governments. The Concessionaire shall coordinate its work efforts at those locations per the existing agreements and guidelines stated in the "Policy for Division of Maintenance and Construction Responsibilities at Points of Contact Between ITR and other Department of Transportation Divisions or Local/County Roads".

Any improvements along ITR such as added travel lane, interchange modification, new interchange road reconstruction, etc., shall be part of Metropolitan Planning Organizations (MPO) and shall meet the Northern Indiana Regional Planning Commission (NIRPC)'s air quality model confirmation requirements.

A.3.7. Army Corps of Engineers

The Concessionaire shall be aware that the ITR has many bridges that span over and has supports in numerous water bodies, in which the Army Corps of Engineers retains jurisdictional rights, and as such the Concessionaire shall also coordinate its work efforts in those water bodies with the Army Corps of Engineers appropriate office.

A.3.8 Railroads

The Concessionaire shall be aware that the ITR Bridge System spans over right-of-way owned and operated by numerous railroad companies at different locations as outlined in the table below.

The Concessionaire shall also be aware that the Chicago South Shore and South Bend Railroad spans over right-of-way owned and operated by ITR at M.P. 9.51, west of Cline Avenue Interchange with ITR (M.P. 10 Interchange).

A.3.8.1 LIST OF RAILROAD CROSSINGS

Milepost	Crossing	Str. No.
Lake County		
1.56	Indiana Harbor Belt Railroad Company	1-3
3.29	Indiana Harbor Belt Railroad Company	2-2
3.29	Indiana Harbor Belt Railroad Company	03(04) ML
3.31	Ramp "B" O - Indiana Harbor Belt RR	03(02) RR
5.35	Baltimore and Ohio Chicago Terminal RR	3/4-3
6.30	Indiana Harbor Belt Railroad Company	5-2
6.31	Elgin, Joliet and Eastern Railway Company	5-2
8.00	Indiana Harbor Belt Railroad Company	6-3
8.01	Consolidated Rail Corporation (Conrail)	6-3
9.51	Chicago South Shore and South Bend Railroad Industrial Lead Track	7-1A - overhead
10.01	Elgin, Joliet and Eastern Railway	7-5
10.05	Ramp "E" O - Indiana Harbor Belt RR	10(01) RR
	Ramp "A" O - Elgin, Joliet and Eastern RR	10(03) EX
	Ramp "B" O - Elgin, Joliet and Eastern RR	10(05) WN
10.08	Ramp "E" O - Elgin, Joliet and Eastern RR	10(07) RR
12.01	Norfolk and Western Railway Company	8-3
15.09	Elgin, Joliet and Eastern Railway Company	9-1
16.25	Elgin, Joliet and Eastern Railway Company	10-2
16.28	Chicago South Shore and South Bend RR	10-2
Porter County		
22.54	Consolidated Rail Corporation (Conrail)	13-3
26.98	Consolidated Rail Corporation (Conrail)	15-3
LaPorte County		
40.86	Consolidated Rail Corporation (Conrail)	18-7
48.17	Consolidated Rail Corporation (Conrail)	20-2
56.91	Chicago South Shore and South Bend RR	22-4
St. Joseph County		
83.55	Grand Trunk Western Rail Road Company	31-1
Elkhart County		
101.97	Consolidated Rail Corporation (Conrail)	37-3
Steuben County		
147.22	Hillsdale Co. Railroad Company	51-6

A.4. Vehicle Permits

The IFA shall continue to review and issue permits for oversized and overweight vehicles that request passage through the ITR. The Concessionaire shall direct all parties requesting such permits to the appropriate IFA departments where the proper application can be obtained and submitted. The Concessionaire is responsible for verifying that all vehicles that request or attempt passage through the ITR are withheld from passage until an approved and current permit is produced by such vehicle.

For this reason the Concessionaire shall inform the IFA as to when and if structures within the ITR become deficient or restricted. The Concessionaire shall also coordinate with the IFA once the permitted vehicle has passed through the ITR, so as to close the permit process.

A.5. Submission and Approval of Plans

Chapters B through J of this Volume require the submission of annual Plans by the Concessionaire to the IFA for Approval by the IFA. The Concessionaire shall submit all such initial Plans to the IFA for Approval no later than 120 days after the Closing Date, unless otherwise agreed to by the IFA and the Concessionaire. The Concessionaire shall submit all such revised Plans annually for Approval by the IFA, as required by Chapters B through J of this Volume. The IFA shall Approve or deny each such Plan within 120 days after submittal by the Concessionaire. If the IFA does not Approve a Plan, such Plan shall be revised by the Concessionaire and re-submitted to the IFA within 30 days for approval.

Chapter B: Safety Plan

B.1. Definitions

Dynamic Message Signs (DMS): Signs which are capable of displaying a visual message by means of light bulbs, plastic tabs, etc.

Emergency: An unforeseen occurrence or combination of circumstances which calls for immediate action or remedy.

Flashpoint: That lowest temperature at which a material gives off enough flammable vapor to ignite in the presence of a flame or spark.

Incident: An occurrence or event, natural or man-made, requiring a response to protect life or property.

Life Safety Systems: Devices and systems that are specifically designed and implemented to assist in the safety and preservation of human life. Examples include breathing apparatus, showers, first-aid kits, emergency call buttons, resuscitation/defibrillation equipment, etc.

Maintenance of Traffic (MOT): A plan for handling traffic through a Work Zone. The MOT may range in scope depending on the complexity of a project and resulting traffic interference.

Warning Sign: A sign that gives notice to road users of a potentially hazardous situation that might not be readily apparent. Examples include STOP AHEAD and LOW CLEARANCE signs.

Work Zone: The area of the ITR in which maintenance or construction operations are taking place which may impinge on the number of lanes available to moving traffic or affect the operational characteristics of traffic flowing through the area.

Work Zone Sign: A sign that gives notice to road users of construction or maintenance activities and revised traffic conditions due to these activities. Work zone signs are required in advance of the site and shall be erected through the work zone. Work zone signs include regulatory signs such as CONSTRUCTION SPEED LIMIT signs; warning signs such as FLAGGER or CONSTRUCTION ZONE AHEAD signs; and directional signs such as DETOUR or LANE CLOSURE signs.

B.2. References

All stated references shall be the most current version or the document known to have succeeded or replaced the original stated herein:

- Occupational Health and Safety Act (OSHA) Guidelines
- Indiana OSHA (IOSHA) Guidelines
- OSHA Publications List via Catalog or Website,
  OSHA (Website: http//:www.osha.gov/pls/publications/pubindex.list)
- "Guidelines for Public Sector Hazardous Materials Training",
  U.S. Department of Transportation and Federal Emergency Management Agency
- "NIOSH Pocket Guide to Chemical Hazards", NIOSH
- "Standard Drawings", INDOT
- "Standard Specifications for Road and Bridge Construction", INDOT
- "Supplemental Specifications and Recurring Special Provisions", INDOT
- "Manual on Uniform Traffic Control Devices (MUTCD)", FHWA
- "Indiana Supplement to the National Manual on Uniform Traffic Control Devices", INDOT
- "Design Manuals, Consultant Bulletins Services, Design and Construction Memos", INDOT
- "A Policy on Geometric Design of Highways and Streets", AASHTO
- "Sign Design Guide", INDOT
- Standard Highway Signs (FHWA & INDOT)
- "Traffic Engineering Handbook", ITE

B.3. Policy for Safety Plan

B.3.1. Objective

The Concessionaire shall prepare and submit to the IFA for Approval a Safety Plan. The objective of the Safety Plan is to ensure that the Concessionaire has considered, trained, addressed, and planned for situations that could be deemed as creating an unsafe situation to the workers and/or the public within or adjacent to the ITR.

It shall be the Concessionaire's focus, policy and purpose to conduct all work with the view of protecting its workers and the public at all times, under all conditions, and in full conformance and consistent with all applicable Laws, the Operating Standards and applicable Plans.

B.3.2. Responsibility of Concessionaire

This Chapter and its contents have been provided as a preparation guideline that addresses the minimum required criteria, and is not intended to be all inclusive. The Safety Plan is to be updated and submitted annually and shall receive approval from the IFA as set forth herein and in the Agreement and, as appropriate, from all other Governmental authorities.

The most important part of the Safety Plan is to protect the workers from traffic, and vice versa, which can be accomplished by including the following principles in the Safety Plan:

- Keeping motorists informed. Accomplished with signs, flags, barricades, cones, flashing amber lights, dynamic message signs, and flashing arrow signs.
- Avoidance of the errant driver by ITR workers. Face traffic; stay aware with your own eyes and ears or those of a look-out who will warn you. Plan an escape route.
- Utilization of protective equipment. Protective vehicles, truck mounted crash headrests, seat belts/shoulder harnesses, hard hats, safety vests, etc.
- Planning work such that it reduces and/or protects employees' exposure to traffic. Accomplished with the use of well conceived, developed, reviewed and approved Traffic Control and Work Zone plans and procedures.

The Concessionaire shall be sure that the Safety Plan includes, and all employees are trained and aware of, the requirements and standards of the federal and state Occupational Safety and Health Administration (OSHA) agencies, so that the proper levels of protection are fulfilled for the potential exposure.

This Chapter includes a general outline of the proposed Plan. This outline is intended only to provide guidance in the preparation of the Concessionaire's Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

B.3.3. Performance Time Frames

The following table establishes the minimum frequency that the Safety Plan is to be written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA.

Plan	Minimum Frequency of Occurrence
Safety Plan	Once Yearly

B.3.4. Acceptance Criteria

The Safety Plan will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA in accordance with the Operating Standards.

B.4. Safety Plan Preparation Requirements

The following is a general outline of the Concessionaire's responsibilities that should be included and addressed when creating the Safety Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that should be included and addressed in the Safety Plan.

The Safety Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

B.4.1. Introduction

This section is to contain a short introduction to the Safety Plan that includes a description of the persons or agencies involved in the preparation, a designated individual who is charged with the implementation and maintenance of the Safety Plan and the overall goals and objectives of the Safety Plan. At a minimum, this section is to contain the following sub-sections:

- Purpose
- Scope and applicability
- The methodology used to develop and implement the Safety Plan

B.4.2. System Location & Emergency Contact Protocol

This section is to provide an overview and system position location of the ITR; a background of the anticipated work activities and hazards; and the protocol and procedures that shall be followed during an event that results in an injury. At a minimum, this section is to contain the following:

- A location plan map of the ITR and all designated Emergency Care Facilities
- A general description of the location of the ITR including its entrance and exit features
- Emergency/Contingency protocol and procedures
- Emergency/Contingency Care Facility Information
- Injury/Illness/Incident Reporting and Notification

B.4.3. First-Aid and Medical Treatment

The Concessionaire is responsible for maintaining a safe environment that may include the need for emergency medical attention. The Safety Plan should include sections that describe the provisions for first-aid and emergency medical treatment, at a minimum, as follows:

- Training for first-aid and emergency medical treatment
- Emergency First Aid
- Emergency Medical Treatment

B.4.4. Safety Roles and Responsibilities

This section shall identify the personnel and responsible staff which will implement, maintain, and enforce the Safety Plan rules and policies. The Plan shall include provisions to ensure that all employees are able to understand their specific assignment and any associated tasks with regards to the Safety Plan. Duties and responsibilities shall be clearly defined for personnel within the ITR, including the following positions:

- Health and Safety Manager
- Project Manager/Site Safety Manager
- Project Personnel
- Construction Foreman
- Contractor's Safety Representative

B.4.5. Training

This section shall identify and include comprehensive provisions for the training of all persons working within the ITR, and shall include the following at a minimum:

- The development of safety related training programs to ensure all employees' receive regular direction.
  - General training to cover hazards basic to all places of employment
  - Specific training to cover hazards that are unique to each employee's job assignment including, but not limited to, execution of work, materials application, and equipment operations.
  - New employee health and safety orientation and training
  - New or updated process training for new or previously unrecognized hazards or when a new or previously unrecognized hazard is identified
- Procedures to ensure that each employee understands and adheres to safe and healthy work practices and procedures
- Recurring training programs to ensure that all employees remain abreast of safety and health regulations affecting the operations they are involved with or supervise.
- Policies that ensure each employee is provided with the equipment necessary to complete assigned tasks safely.
- Policies and procedures that address the counseling and training of employees so as to minimize the human factors that can contribute to injury or illness

B.4.6. Job Hazard & Safe Work Standards

This section shall identify, define the practices and procedures, and detail all hazards and their prevention which may be encountered while performing work within the ITR. Included in this section shall be all anticipated activities (including maintenance, construction and operations), and all unanticipated activities (including Hazardous Material/Incident or Spills). At a minimum the Standards shall contain the following hazards:

- Anticipated Routine Physical Hazards
  - Abrasive Blasting
  - Aerial Lifts
  - Asbestos Operations
  - Back Injury Prevention
  - Cold Stress Recognition and Control
  - Corrosive and Reactive Materials
  - Confined Space Entry
  - Demolition Operations
  - Dust Control
  - Drilling Safety Guidelines
  - Electrical Safety
  - Environmental Material Compliance (MSDS & VOC)
  - Excavation & Trench Safety
  - Fall Protection
  - Fire Prevention
  - General Site Rules and Requirements
  - Flammable and Combustible Liquids and Gases

- Hand and Portable Equipment
- Heat Stress Recognition and Control
- Heavy Equipment Operations
- Housekeeping
- Lead in Construction
- Marine Safety and Boat Operation
- Material Storage & Handling
- Noise and Hearing Conservation
- Nuclear Density Gauge Safety
- Office Ergonomics
- Portable Ladders
- Railroad On-Track Safety
- Respiratory Protection
- Rigging
- Scaffolding
- Subcontractor Health and Safety Requirements
- Utility Clearances and Isolation
- Vehicle Safety program
- Work over Water

❖ Unanticipated Physical Hazards
- Biological Hazards & Exposure
- Chemical Hazards & Exposure
- Environmental Waste Operations & Exposure
- Explosive Atmospheres
- Hazardous Materials/Dangerous Goods Shipping
- Hazardous Material/Incident or Spills: The special procedures for notification, handling and removal of hazardous materials caused by incidents shall reference the specific portions of the Emergency Management and Operation Plans addressed in Volume II - Operations & Procedures Manual, Chapter I, "Emergency Management Plan".
- Radioactive Exposure
- Testing and Sampling Practices

B.4.7. Personal Safety

This section shall address the personal safety procedures that shall be adhered to, along with personal safety devices that shall be provided to complete assigned tasks. Items considered for personal safety include personal protective equipment and include, but are not limited to, reflective vests, hard hats, protective clothing, protective footwear, hearing protection, vision protection, respiratory protection, and any other necessary equipment as specified in the Safety Plan to protect the well being of the worker on the ITR. The Safety Plan shall address the following for each article of personal safety:

❖ Situations that require the personal protective equipment
❖ Limitations of the protective equipment

B.4.8. Decontamination Procedures

This section shall, in the event of a Hazardous Material/Incident or Spill, include directives for decontamination procedures. The Plan shall incorporate the applicable and appropriate sections of Volume III – Environmental Management Manual and shall conform to and work in conjunction with the Environmental Management Plan. Items to be included shall include, but are not limited to, the following tasks:

- Sanitation
- Decontamination - Medical Emergencies
- Decontamination of Tools & Equipment

B.4.9. Work Zone & Site Safety

This section shall identify the tasks, procedures and policies required while Work Zones for construction and/or maintenance activities are present whether in the field or in a Facility. The Safety Plan is to contain, at a minimum, sub-sections addressing the following issues:

- General Work Zone activities and requirements
  - Signs and Bulletin Boards
- Safety Regulations - Vehicles and Drivers
  - Drivers and Operators
    - Parking Vehicles
    - Backing Vehicles
    - Hand Signals
    - Vehicles or Equipment Breakdowns
    - Training
    - Licenses & Certifications
  - Construction Equipment and Vehicles
    - Protective Vehicles (shadow, barrier, and advance warning)
    - Field Equipment
    - Equipment Lights, Warning Signs and Flags
    - Towing and Safety Chains
    - Safety Equipment in Vehicles
- Transporting Equipment & Materials
- Handling Explosive and Flammable Materials
- Access to Median Work Zones
- Night Work
- Shop Equipment
  - Welding Equipment
  - Shop Tools
- Worker Exposure Reduction
  - Planning Work
  - Working Near Moving Traffic
  - Facing Traffic
  - Crowding of Workers

- Crews Working Across From Each Other
- Warning Systems - Signs
- Warning Systems - Flashing Arrow Signs
- Warning Systems - Flashing, Amber Lights
- Warning Systems - Lookouts

B.4.10 Traffic Control

One of the most important items that shall be addressed in the Safety Plan is the requirements, procedures and polices for the control of traffic ("Traffic Control") when work is proposed to occur either on, adjacent to or near areas where traffic is present. The Safety Plan shall either solely address Traffic Control; or make specific reference to the applicable and appropriate sections of Volume II - Operations & Procedure Manual, Chapter G, "Traffic & Travel Management Plan". The Safety Plan shall include the requirement that each operation be reviewed and approved to determine the appropriate Traffic Control Plan prior to the start of work.

The following are required to be included in the Safety Plan as parameters when discussing the requirements for work in or near traffic. This list is not intended to be either representative or all inclusive, therefore the Concessionaire shall address traffic control issues, including, but not limited to:

- Traffic Control Plan documentation requirements
- Warning Signs
- Lanes Closures
- Exceptions to Lane Closure Procedures
  - Limited Work on the Traveled Way, Without Lane Closures
  - Pavement Marking and Relamping Operations
  - Moving Shoulder Operations
- Shoulder Closures
- Moving Lane Closures
- Delay of Vehicles
- Obscured Visibility

CHAPTER C: EQUIPMENT PLAN

C.1. Definitions

Flashing Arrow Board: An electronic device containing multiple lamps which are used to direct traffic in a selected direction and shall be capable of indicating change in direction, and varying intensity of the arrow when required.

Retro-reflective Tape: A material attached to vehicles and equipment to increase visibility of objects during both nighttime and low light conditions. Retro-reflection occurs when a surface returns a portion of directed light back to its source.

C.2. References

All stated references shall be the most current version, or the document known to have succeeded or replaced the original stated herein:

- OSHA Publications List via Catalog or Website,
  OSHA (Website: http//:www.osha.gov/pls/publications/pubindex.list)
- "Manual on Uniform Traffic Control Devices (MUTCD)", FHWA
- "Indiana Supplement to the National Manual on Uniform Traffic Control Devices", INDOT
- "Indiana Vehicle Code", State of Indiana

C.3. Policy for Equipment Plan

C.3.1. Objective

The objective of the Equipment Plan is to ensure that the Concessionaire has addressed the responsibilities for identifying, planning, scheduling, supervising, maintaining, operating and controlling of all equipment utilized within the ITR via a written and Approved Equipment Plan.

C.3.2. Responsibility of Concessionaire

The Equipment Plan is a document to be developed, written and carried out by the Concessionaire, and shall insure that the Concessionaire is solely responsible for the management, operation and maintenance of all equipment that is required for work within the ITR. Further, the Concessionaire's responsibilities include, but are not limited to, the following:

- Equipment Policy Development
- Equipment Status and Inventory
- Warranty Claims
- Operator and Mechanic Training
- Licensing of Vehicles & Equipment
- Equipment, Vehicular and Operator Insurance
- Subcontractor Equipment Conformance

The Concessionaire is responsible for ensuring that all equipment is operated and maintained in accordance with the manufacturer requirements, as well as with well established policies and procedures.

The Concessionaire and its Subcontractors shall obey all traffic Laws including the posted speed limits when utilizing vehicles or other equipment.

This Chapter includes a general outline of the proposed Equipment Plan. This outline is intended only to provide guidance in the preparation of the Concessionaire's Equipment Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

C.3.3. Performance Time Frames

The following table establishes the minimum frequency that the Equipment Plan is to be written and updated by the Concessionaire and submitted to the IFA for its Approval.

Plan	Minimum Frequency of Occurrence
Equipment Plan	Once Yearly

C.3.4. Acceptance Criteria

The Equipment Plan will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA in accordance with the Operating Standards.

C.4. Equipment Plan Requirements

The following is a general outline of the Concessionaire's responsibilities that should be included and addressed when creating the Equipment Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that should be included and addressed in the Equipment Plan.

The Equipment Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

C.4.1. Introduction

This section shall contain a short introduction to the Equipment Plan that includes a description of the equipment needs of the ITR, and shall address all of the maintenance and operational needs of the ITR. In addition, this section should briefly state the overall goals and objectives of the Equipment Plan and discuss the duties and responsibilities of the Concessionaire, the Equipment Manager, and the implementation and maintenance of the Plan.

C.4.2. Leased and Rented Equipment

The Concessionaire is permitted to rent, lease, or outsource equipment and services, which shall be defined in this section of the Equipment Plan. This section shall also include the Concessionaire's provisions and requirements for rented, leased, or outsourced equipment, including that the equipment conforms to all of the requirements stated in the Equipment Plan including demarcation, licensing, registration, and warning systems.

C.4.3. Operators Registration & Licensing

This section of the Equipment Plan shall clearly indicate that equipment Operators meet all current State of Indiana registration and licensing requirements, and that all Operators shall possess valid Operator's and driver's licenses with all special endorsements required for the specific type and classification of vehicle or equipment operated.

C.4.4. Equipment Licensing and Registration

This section of the Equipment Plan shall clearly indicate that the licensing and registration for all vehicles and equipment (either owned by the Concessionaire or by its Contractors) meet all current State of Indiana requirements stated in the Indiana Vehicle Code for registration and licensing.

C.4.5. Vehicle Safety Equipment

The Equipment Plan shall indicate the type, kinds and amounts of vehicle safety equipment for all vehicles used within the ITR. Vehicle safety equipment to be considered may include, but is not limited to, the following: fire extinguishers, pry bars, flares, special mirrors, fuel system protection, safety triangles or markers, slow moving vehicle/warning triangle emblems, and first-aid kits.

C.4.6. Equipment Demarcation

This section shall include a demarcation description for all equipment, either owned by the Concessionaire or its Contractors, that is utilized for or within the ITR. The Concessionaire shall include demarcation information that addresses the following at a minimum:

- Vehicle color(s)
- Equipment numbering
- Vehicle class and category
- Operator/ITR decal placement and design
- Retro-reflective application locations, sizes, etc.

All equipment used for the management, operation or maintenance within the ITR shall be identified with an equipment number.

This section shall include the demarcation present on all equipment types expected in the operation and maintenance of the ITR, including but not limited to the following: passenger vehicles, light-duty utility vehicles, heavy-duty truck vehicles, streetsweepers, construction equipment, and other road equipment including rotary snow plows, snow plow blades, mowers and trailers.

Miscellaneous small equipment such as snow blowers, etc. that are utilized within the ITR are exempt from the demarcation requirements, but shall always present a clean and professional appearance.

C.4.7 Equipment Warning Systems

C.4.7.1. Amber Warning Lights and Flashing Arrow Boards

This section shall include the number, size, location and type of all warning lights and flashing arrow boards attached to the equipment. The information shall address all maintenance and management vehicles, snow removal equipment, and construction equipment. All vehicles that operate within the ITR shall be equipped with at least one amber warning light visible to traffic. The Equipment Plan shall include the information for all other requirements for additional amber warning lights as applicable to Federal, State and Local requirements.

C.4.7.2. Red & Blue Warning Lights

This section of the Equipment Plan shall include the restriction of the use of red and/or blue warning lights, which are prohibited.

C.4.7.3. Back-Up Alarms

This section of the Equipment Plan shall include information for the Back-up alarms, which are required on all of the Concessionaire's vehicles that operate within the ITR. These vehicles include, but are not limited to, pick-ups, vans, Sport Utility Vehicles (SUV's), trucks, construction equipment, etc.

C.4.8. Training

This section of the Equipment Plan shall include the training requirements and certifications for all personnel (whether they are personnel of the Concessionaire or its Contractors) whose duties include operation or supervision of equipment. In addition, this section shall indicate that the personnel have completed the most current training, possess the proper and current license, and possess the current certification and qualifications to operate the particular equipment.

CHAPTER D: TOLL COLLECTION AND OPERATIONS PLAN

D.1. Definitions

Toll Collections and Operations: All activities related to revenue collection from vehicles utilizing the ITR and the recording, auditing and processing of that revenue, including lane operations.

Toll Collection System (TCS): The electrical and electronic equipment, information management, and system to record and verify the revenue and vehicle classification.

Uninterruptible Power Supply (UPS): Power supplies that operate in parallel with the electrical utility sources and supply their load without interruption when and if the utility source fails. Such power supplies shall be utilized to meeting the operating needs of the computers and critical elements of the Toll Collection System (TCS).

D.2. References

All stated references shall be the most current version, or the document known to have succeeded or replaced the original stated herein:

- INDOT Toll Road District Operations/Policy Manual

D.3. Policy for Toll Collection and Operations Plan

D.3.1. Objective

The objective of the Toll Collection and Operations Plan is to ensure that the Concessionaire has considered, trained, addressed, and planned for all toll operation activities and has established protocols, procedures, responsibilities, and guidelines to maintain and operate the ITR Toll Collection System (TCS) in accordance with a written and Approved Plan.

D.3.2. Responsibility of Concessionaire

The Toll Collection and Operations Plan is to be developed, written and carried out by the Concessionaire, and shall be consistent with all applicable Laws, codes and requirements governing the collection of tolls and tollway systems.

The Toll Collection and Operations Plan shall indicate that the Concessionaire provides administrative and operational services at all times, year-round. Technical support personnel shall be available at all times to provide software maintenance and administration, hardware maintenance and/or component replacement, and data and system back-up maintenance.

All TCS operational and technical support services provided shall be in accordance with and in strict adherence to, the Approved TCS user manuals, equipment manufacturer's recommendations and standard operating procedures for computer and network support services, as stated in the Reference Documents.

The TCS and its data storage and archival capabilities shall be operationally checked on a daily basis. The system components shall be maintained and tested as required to ensure that the TCS continually remains fully operational. Redundant or replacement parts shall be available on-site to facilitate immediate replacement of malfunctioning components.

The TCS relies on computer hardware, peripheral equipment and operating system software which are continuously being advanced in technology. Accordingly, technical support services shall include operational planning and upgrade installation of equipment components and operating systems software. The upgrade planning and installation shall include the transfer/recovery of archived data to new storage media, replacement of computer hardware and components systems, and the component part inventory upgrade.

This Chapter includes a general outline of the proposed Toll Collection and Operations Plan. This outline is intended only to provide guidance in the preparation of the Concessionaire's Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

The Concessionaire shall include the following TCS operations in the Toll Collection and Operations Plan:

- Touch Screen Toll Revenue Collection Data by Toll Lane
- Toll Lane Traffic Counting and Vehicle Classification Recognition Data
- Video-based facility surveillance system
- Video image recording and retention
- Toll Plaza Lane Control and Monitoring from the Toll Plaza Control Center
- Toll Plaza Data Center host, storage and back-up data systems
- Uninterruptible power supplies (UPS)
- Security System
- Remote data access, system reporting and back-up
- Communication system

D.3.3 Performance Time Frames

The following table establishes the minimum frequency that the Toll Collection and Operations Plan is to be written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA.

Plan	Minimum Frequency of Occurrence
Toll Collection and Operations Plan	Once Yearly

D.3.4. Acceptance Criteria

The Toll Collection and Operations Plan will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA.

D.4. Toll Collection and Operations Plan Requirements

The following is a general outline of the Concessionaire's responsibilities that should be included and addressed when creating the Toll Collection and Operations Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that should be included and addressed in the Toll Collection and Operations Plan.

The Toll Collection and Operations Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

D.4.1. Introduction

This section shall briefly introduce the purpose of the Toll Collection and Operations Plan, and set out the overall goals and objectives of the Plan. The introduction shall discuss the title, functions, roles, duties and responsibilities of the each person that the Concessionaire identifies as being involved with toll collection and operations.

D.4.2 Toll Operations Control Center

A Toll Operations Control Center is located at each toll plaza building and each is remotely connected to the Toll Operations Central Control Center located at the ITR Administration Building. The Control Centers provide the visual vantage point and information tools to assist the Concessionaire manage and monitor Toll Collections and Operations on a continuous basis.

This section of the Plan shall include a description of the function, equipment, personnel and physical layout of the Control Centers, and the role each performs in Toll Collections and Operations. The Plan shall also include subsections on the following items, at a minimum:

- Video-Displays of Facility Surveillance
- CCTV Video Camera Monitor Station
- Toll Lane Control Monitors
- Toll Collection System Computer Terminal
- Toll Lane Open/Close Indicator Controls
- Intercom Communications with each Toll Booth
- Emergency Response System Monitor and Communications

D.4.3 Toll Operations Data Center

The Toll Operations Data Center is located at the ground level of each toll plaza building and is commonly referred to as the UPS Room. The Data Center houses the TCS and UPS and provides the electronic storage; information; verification; power supply source; and computation tools to assist the Concessionaire manage and monitor Toll Collections and Operations on a continuous basis, in a secure, humidity and climate controlled setting. The Plan shall also include subsections on the following items, at a minimum:

D.4.3.1 General Description and Layout

This section of the Plan shall include a description of the function, equipment, personnel and physical layout of the Data Control Center, and the role each performs in Toll Collections and Operations.

D.4.3.2. **Hardware**

This section of the Plan shall include:

- ❖ a description and inventory of the computer hardware (i.e. the network system, data and processing capabilities, and the failsafe backup and redundant systems) in the Data Center and the upgrade and maintenance procedures
- ❖ procedures for data storage and the capabilities for secure remote access.

D.4.3.3. **Software**

This section of the Toll Collection Plan shall include:

- ❖ the current version information of all software utilized by the TCS, and the upgrades and maintenance procedures
- ❖ the network operating system, server software, and the data collection processes used to produce traffic and financial reports. Currently, the TCS applications are designed to produce the following reports: Audit, Traffic, Administrative, System and Maintenance
- ❖ the procedures and protocol for technical support, which shall be provided on a continuous on-call basis.

D.4.3.4. **UPS and Backup Storage Devices**

This section of the Plan shall include:

- ❖ the description, frequency and protocol utilized for the uninterruptible power source (UPS), and the archival functions of the data collected
- ❖ information and details on how the system functions when the permanent archive capabilities are employed.
- ❖ the maintenance and operation procedures utilized to provide the UPS with continual operation, including during power failures.

D.4.4. Lane Operations

This section of the Toll Collection and Operations Plan shall include the procedures employed and followed with regard to the operation of the toll lanes. The Plan shall address, without limitation, the following procedures, at a minimum:

- ❖ Supervision of the shifts, lanes and plazas
- ❖ General items of responsibility during operating and non-operating toll lanes
- ❖ General toll booth operations and appearance
- ❖ Operation of manual terminal lanes
- ❖ Operation of automatic vehicle identification lanes (if and when implemented)
- ❖ Lane Opening and Closing Procedures

- Traffic Queue supervision and management
- Treadles, light curtain and detector loop operation
- Classification of vehicles
- Transaction receipts/receipt printer operation
- ITR user toll display operation
- Traffic control gate operation
- Lane status gate
- Overhead lane status message sign
- Disabled vehicles/lane accidents
- Overweight/oversized vehicles
- Exceptional vehicles
- Emergency procedures

D.4.5. Attendant Operations

This section of the Toll Collection and Operations Plan shall include the procedures employed and followed with regard to the operation of the toll attendants. The Plan shall address, without limitation, the following procedures, at a minimum:

- General items of responsibility
- Attendant appearance
- Shift management and supervision
- Traffic Queue supervision and management
- General toll booth operations and appearance
- Attendant safety
- Attendant training
- Customer service
- Classification of vehicles
- Non-revenue vehicles
- Overweight/oversized vehicles
- Booth exit and entrance procedures
- Service tunnel usage
- Lane collection deposit preparation
- ITR user toll display operation
- Transaction receipts/receipt printer operation
- Payment verification
- Cash handling
- Change requests and receipting procedures
- Insufficient funds transactions
- Counterfeit money detection
- ITR users requiring/requesting the need for assistance
- Unusual occurrences
- Disabled vehicles/lane accident reporting
- Lane run-through/violation procedures
- Robbery/hold-up reporting
- Emergency procedures

D.4.6. Toll Collection Administration

This section of the Toll Collection and Operations Plan shall include the procedures employed and followed with regard to the collection of tolls; the operations utilized within the counting room and the Safe; the facility protocol during armored car service; and all other administrative duties associated with tolls. The Plan shall address, without limitation, the following procedures, at a minimum:

- General items of responsibility
- Non-revenue vehicles
- Vehicle verification
- Insufficient fund collection and balance due
- Violation reporting
- Cash handling monitoring
- Depository procedures
- Facility lock-down procedure for armored car transfers
- Drawer reconciliation
- Electronic toll collection (if and when implemented)
- TCS training and operation
- Customer service reconciliation
- Security

D.4.7. Toll Accounting

This section of the Toll Collection and Operations Plan shall include the procedures employed and followed with the accounting and reconciliation of the tolls. The Plan shall address, without limitation, the following procedures, at a minimum:

- Vehicle verification
- Traffic volume, type and time reconciliation and reports
- Non-revenue vehicle account
- Banking errors
- Audits
- Funds reconciliation
- Cost accounting
- Deposit preparations and verification
- TCS operations and report generation

D.4.8. Toll Incident Events

This section of the Toll Collection Plan shall include procedures for addressing events and incidents associated with Toll Collections and Operations. At a minimum, the Plan shall address, without limitation, the procedures for handling the following:

- Unusual occurrences
- Disabled vehicles Lane accidents
- Vehicle collisions
- Lane run-through/violation procedures
- Robbery/Hold-ups
- Drunk drivers
- Road rage
- Emergency procedures

CHAPTER E: SNOW AND ICE CONTROL PLAN

E.1. Definitions

Anti-Icer: A chemical freezing point depressor, used to prevent the formation of frost, snow or ice on a driving surface.

ATD's (Automatic Traction Devices): Equipment installed on some vehicles that are driver-deployed to improve the traction of the vehicle in adverse conditions.

Bare Pavement: A condition under which the entire driving surface has been cleared of loose snow and ice. The driving surface may have isolated patches of ice, snow or slush that, when treated with chemicals or abrasives or a combination of these, may be negotiated safely by the average driver at reduced speed.

Consulting Meteorologist: Contract service that provides periodic, frequent, and specific weather forecasts, and predictions, for use by the Concessionaire in order to determine the need for and locations of pre-positioned staff and equipment.

De-icer: Anyone of several common freezing point depressors, such as salt (sodium chloride), CMA (calcium magnesium acetate), liquid potassium acetate, and liquid magnesium chloride. De-icers are used to melt already formed frost, snow or ice, and reduce the temperature whereby reformation can occur.

Driving Surface: The traveled way of the ITR, consisting of all mainline roadway lanes and the entire width of all ramps. For the purpose of snow and ice control, the shoulders, medians, and curb and gutters of the ITR mainline and ramps will not be counted as driving surface, but shall be cleared as the next priority. This definition does not relieve the Concessionaire of any responsibility from insufficient or incomplete snow and ice control of any level surfaces adjoining the normal ITR traveled way that can be encroached upon by an errant vehicle.

Maximum Accumulation: The maximum thickness of ice and/or new snowfall that will be permitted to temporarily build up on the driving surface before the next required snowplow pass. The maximum accumulation does not pertain to the depth of ice and/or snow that falls, blows or is plowed onto the shoulders or median of the ITR mainline.

Pack: Refers to a temporary build-up of ice and/or snow on the Driving Surface, which accumulates between plowings due to continuing snowfall, blowing snow, etc.

RWIS (Road Weather Information System): An installed system of weather and pavement sensors that is used to monitor conditions at remote locations. Some RWIS can use historical data previously gathered to predict local weather as a decision making tool for maintenance and construction operations.

Snow Plow: A truck or vehicle that has been equipped with plow blade device(s), de-icing device(s), lights, radio and related features, that is acceptable to operate on the ITR to plow snow and ice and spread De-icers.

E.2. References

All stated references shall be the most current version, or the document known to have succeeded or replaced the original stated herein:

- "Guide for Snow and Ice Control", AASHTO
- "SHRP-H-320: Snow Fence Guide", FHWA
- "Manual of Practice for an Effective Anti-Icing Program", FHWA
- "SHRP-H-381: Design Guidelines for the Control of Blowing and Drifting Snow", FHWA
- "SHRP-H-385: Development of Anti-Icing Technology", FHWA
- "The Salt Storage Handbook", Salt Institute
- "Standard Drawings, Design Manuals, Design and Construction Memos", INDOT
- "Roadside Design Guide", AASHTO

E.3. Policy for Snow and Ice Control Plan

E.3.1. Objective

The objective of Snow and Ice Control operations is to ensure the expeditious removal and control of snow and ice in order to best facilitate traffic movement during and following inclement winter weather, and to best utilize resources to safeguard ITR users. The Concessionaire shall prepare and annually update its Snow and Ice Control Plan as outlined herein.

The Concessionaire shall perform all snow plowing, removal and ice control work within the ITR. Snow and Ice Control tasks include, but are not limited to, the following general items of work:

- Snow Plowing and Removal operations
- Anti-Icer and De-icer chemical application
- Ice control and drift control
- Snow and ice response planning
- Public and agency communication program

E.3.2. Responsibility of Concessionaire

The Concessionaire shall develop, write and carry-out a Snow and Ice Control Plan (SICP). The SICP shall be developed and written by the Concessionaire, and shall contain detailed operational procedures for performing the Snow and Ice Control work outlined in this Chapter. The SICP shall incorporate the applicable and appropriate sections of Volume III - Environmental Management Manual and shall conform to and work in conjunction with the Environmental Management Plan. The SICP shall comply with all applicable Law, codes and regulations governing the operation of snow removal equipment on public highways, best highway management practices, the requirements specified herein, and the unique needs of the ITR.

The Concessionaire shall annually update and submit the SICP to the IFA prior to July 30 each year, and shall incorporate any changes in strategy, equipment levels, etc., designed to rectify shortcomings identified by the Concessionaire and/or the IFA in the Concessionaire's snow and ice removal operations during the preceding winter season.

The Concessionaire shall assign one individual who shall have primary responsibility for carrying out the SICP and the terms of this Chapter (the "Snow and Ice Control Supervisor"). The Concessionaire shall ensure that the Snow and Ice Control Supervisor shall: plan the equipment and staffing needs for each upcoming storm event; make all advance preparations; supervise the handling of each incident; and communicate information to the public, the press, the IFA, outside agencies, and internal personnel. The Concessionaire is also responsible for managing the Snow and Ice Control Supervisor's efforts associated with providing all the required resources, stockpiling Anti-Icer and de-icing chemicals, pre-positioning equipment, and establishing

transportation to designated removed snow areas, to ensure that the Snow and Ice Control work will be handled on a proactive, rather than a reactive basis.

This Chapter includes a general outline of the proposed SICP. This outline is intended only to provide guidance in the preparation of the Concessionaire's Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

E.3.3. Performance Time Frames

In accordance with E.3.2, the following table establishes the minimum frequency that the Snow and Ice Control Plan is to be written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA.

Plan	Minimum Frequency of Occurrence
Snow and Ice Control Plan	Once Yearly - Prior to July 30

In accordance with E.4.10, the following table establishes the minimum frequency that reports to be created pursuant to the SICP is to be written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA.

Report	Minimum Frequency of Occurrence
Pre-Season Report	30 days prior to the last Sunday in October
Post-Season Report	30 days after the 3rd Sunday in April

E.3.4. Acceptance Criteria

The Snow and Ice Control Plan will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA in accordance with the Operating Standards.

In addition, the Operational Parameters set forth in the following table shall be met or exceeded by the Concessionaire, and shall be addressed by the Concessionaire in the SICP for the snow and ice work and Plan to be considered acceptable.

Operational Parameter	Maximum Time Duration
Maximum allowable driving lane accumulation	1-1/2" (1.5 inches)
Maximum reaction time until first full snowplow pass	1 Hour
Maximum allowable driving lane snow pack time	1 Hour
Maximum time to bare-pavement condition after storm end	4 Hours
Maximum time to bare-shoulder condition after storm end	8 Hours

E.4. Snow and Ice Control Plan Preparation Requirements

The following is a general outline of the Concessionaire's responsibilities that shall be included and addressed when creating the Snow and Ice Control Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that should be included and addressed in the Snow and Ice Control Plan.

The Snow and Ice Control Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

E.4.1. Introduction

This section briefly introduces the need and purpose of the SICP, and sets out the overall goals and objectives of the Snow and Ice Control operations. The introduction should discuss the duties and responsibilities of the Snow and Ice Control Supervisor and that person's role in the implementation and maintenance of the Plan.

The introduction should refer to the methodology used to develop and implement the SICP, and refer to specific agency reference guides and manuals as applicable.

E.4.2. Advance Preparation Procedures

In this section of the SICP, the Concessionaire shall address the specific preparedness procedures that it undertakes in advance of each winter season. It shall contain, at a minimum, the following:

- A storm monitoring, watch and "on-call" procedure so that assigned personnel are monitoring information regarding developing snow and ice storms on a 24-hour-a-day basis, beginning on the last Sunday in October and continuing without interruption to the third Sunday in April.
- An organizational chart showing the titles and duties of all of the Concessionaire's staff who will be responsible for advance preparations for Snow and Ice Control work, as well as operations following commencement of a storm event
- The Concessionaire's preparation and equipment assembly activities before the winter storm season, with maps showing where equipment, staff and stockpiles will be pre-positioned.
- Complete list of available equipment and appurtenances, and the primary assignment during and following a storm event
- Minimum inventories of de-icing chemicals and snow fencing
- Locations, directions and capacities of designated snow storage areas
- Priorities for assignment (i.e. bridge decks, ramps, shoulders, plaza area, etc.). Concessionaire shall consider IFA's stated priorities, if any, when preparing the priorities for assignment.

E.4.3. Call-Out Procedures

In this section of the SICP, the Concessionaire shall address the specific procedures that will be followed each time it mobilizes work forces in response to winter storm or frost warnings. The Call-Out Procedure section shall contain, at a minimum, the following:

- The anticipated outside coordination to be undertaken when scoping the initial call-out, including obtaining frost warnings and notifications or advice from a weather consultant, INDOT, or other agency staff
- The steps by which the Snow and Ice Control Supervisor will perform a call-out of staff and resources following the receipt of a storm or frost warning
- The methodology by which the Snow and Ice Control Supervisor will evaluate the need and scope of the call-out in order to ensure that the appropriate amount of equipment is adequately loaded and staffed and is assigned and pre-staged to the upcoming snow and ice control effort.
- The specific factors evaluated when determining the appropriate level and scope of snow removal crew call-out for each anticipated storm, including the following, as applicable:
  - Anticipated accumulation, duration and winds forecasted for the event.
  - Anticipated travel volume demand during typical or actual snow storm events.
  - Congestion and traffic delay resulting from insufficient snowplowing and

hazardous conditions, and the resulting impact of delays.
- ITR user safety
- Public interest and concern as expressed in complaints, letters, etc.
- Environmental considerations

- The titles and duties of supervisory personnel to be contacted in the call-out and the data to be transmitted during such contact including storm/frost warnings, operational procedures, the required response time for affected work groups to report in, etc.
- The outside contacts such as INDOT, local governmental agencies, MDOT, OTC, IDOT, etc. who will be notified of each call-out
- The means by which the Concessionaire shall document the call-out in a snow storm/frost warning folder for each storm, which shall consist of:
  - Weather consultant's warning, if applicable
  - Procedural instructions
  - Supervisory Personnel Call-Out Sheet
  - City notification and Road Conditions Report
  - Storm Data Report
  - Press Release (when required)

E.4.4 Response Protocol

This section of the SICP is to address the series of pre-planned activities that will be performed in response to each forecasted winter storm or frost event, as may be modified by specific instructions transmitted during each call-out. In this section the Concessionaire shall include, at a minimum, the following:

- The Concessionaire's methodology for ensuring that all snow removal personnel have been alerted and given specific assignments during the call-out
- The incident response steps and general timetable
- Equipment cycling, reloading, downtime, overhaul and related factors.
- The methods and procedures that the Concessionaire's Snow and Ice Control operations will employ to furnish continuous efforts during and after each storm until all Driving Surfaces of ramps, mainline pavements and bridge decks are clear and free of snow or ice, and the shoulders are in usable condition.
- The measures by which Snow and Ice Control operations will promptly remove snow and ice from bridge decks and from any hazard areas identified by the Concessionaire, such as lanes adjacent to walls or guardrail where ramping and drifting may occur.
- The procedures by which the Concessionaire will maintain contact with the Central Command Center and snow removal crews, and how communications will be used to track the progress of all work efforts, promptly deal with any significant problems, and make any adjustments to work assignments, staff levels, operating frequencies, and the like as judgment demands, in order to satisfactorily remove snow and ice.
- The measures to be taken by the Snow and Ice Control Supervisor to maintain communications throughout each snow and ice control operation in consultation

with the Chicago Skyway, INDOT Districts, MDOT, OTC, local governmental agencies, and other agencies regarding severe weather forecasts, the impacts on congestion and travel times, the success of each snow removal response, and other items of mutual interest.

- The method for the Concessionaire's designated spokesperson(s) to furnish information to journalists or reporters, including ITR travel reports, bulletins, delay estimates, and the like. The spokesperson(s) shall comply with requests for verbal reports or estimates regarding travel times, pavement condition, accidents, icy or hazardous areas, and the like to assist reporters to accurately report news, issue bulletins and advisories, and in general inform commuters and the public about regional travel problems.
- The method for the Concessionaire's designated spokesperson(s) to furnish information to ITR users and inquiring members of the public, including reports on ITR conditions during inclement weather, daily snowfall, depth of pack, period of storm, and related matters of public interest.

E.4.5. Operational Requirements

This section of the SICP is to discuss the requirements to be implemented by Snow and Ice Control crews, and the operational adjustments that may be required in response to changing situations during each incident. This section is to contain, at a minimum, the following:

- The Concessionaire's priority during winter storms shall be snow removal and ice control in order to best protect traffic safety and preserve the mobility of motorists. The Concessionaire shall provide a commitment statement and assurance that every effort will be made to keep the ITR open to traffic at all times.
- The actions to be taken if the portion of the ITR becomes blocked due to severe drifting, stalled traffic, or other winter hazards.
- The Plan shall specify the authority of the appropriate Police Department to order the Concessionaire to halt traffic and implement temporary road closures when conditions and situations warrant preserving public safety.

- The communication protocol that will be undertaken with outside agencies, ITR users, etc., whenever it is decided to close the road. The Plan shall list all the contact and notification agencies anticipated by the Concessionaire, including INDOT, IDOT, Skyway, MDOT, OTC, local agencies, the ISP, road user agencies, news media, the Indiana Emergency Management Agency, the Office of Public Affairs, etc. (See also Volume II, Operations & Procedures Manual, Chapter I, "Emergency Management and Operations Plan").
- The methods of how bare-pavement objectives will be met, with specific detail regarding hauling of snow to designated snow storage areas (when necessary), work to open drains covered by snow and ice, mechanical and manual salt application, and the use of solid and/or liquid solution de-icing agents.
- The procedures that the Concessionaire will employ to the Snow and Ice Control operations which will allow adjustment and fine-tuning during each incident to address any response shortcomings, customer complaints, identified safety issues, and other problems that arise.
- An operation plan for applying sufficient De-icer chemicals to bridge decks at the beginning of a storm in order to deter bonding and build-up of pack, and the conditions under which regular plowing and salt spreading on treated decks would resume in order to remove accumulations and restore bare-pavement surface conditions as soon as possible.
- A plan for scheduling special patrols for the detection and correction of slippery conditions whenever freezing conditions are anticipated. Particular attention shall be paid to ramps, curves, large grades and problem locations such as shaded areas and bridge decks.
- Full details of the methodology for applying de-icing chemicals to the ITR pavements and bridge decks, including the following:
  - Application of anti-icing chemicals in advance of a storm to prevent the formation of frost or ice films
  - Successive applications of de-icing chemicals during a storm to weaken or prevent bonding between the snow pack and road surface
  - Application of chemicals and De-icers by snow plowing trucks to increase driver traction and melt new snow that falls
  - Measures to limit the applied de-icing agents to the minimum amount necessary for effective Snow and Ice Control, in order to prevent potentially detrimental effects of de-icing agents to vegetation, water quality and corrosion of metal
  - The protocol to be followed when switching between alternative De-icers
  - Measures by which surveillance of the plowed-off or melted snow will be maintained, to ensure that any freezing on the shoulders and pavement is promptly dealt with before it creates a hazard

E.4.6 Training

In this section of the SICP, the Concessionaire shall discuss the means by which it will identify the annual training requirements for personnel involved in snow and ice control efforts, how such training will be obtained, how snow removal crew persons will be certified, and when refresher training will occur.

E.4.7 Record Keeping

In this section of the SICP, the Concessionaire shall discuss the need for it to maintain accurate records of the locations and quantities where Anti-Icer and De-icers are stored and used. The Concessionaire shall log and analyze the amounts, locations and application rates of De-icers used on the ITR in order to obtain acceptable results from its snow and ice control efforts.

In this section of the SICP, the Concessionaire shall also track the use of, and comment upon the effectiveness of alternate snow and ice control chemicals, De-icers, and other types of de-icing systems.

E.4.8 Environment

In this section of the SICP, the Concessionaire shall discuss the means by which it intends to investigate potentially environmentally sensitive areas that have been identified as directly or indirectly receiving salts and other de-icing chemicals. The Concessionaire shall include, at a minimum, the following:

- Identification of areas that are potentially environmentally sensitive, including landscaped areas and bodies of water.
- The coordination undertaken to seek a determination from the respective governing agencies whether the identified areas may receive the anticipated contaminated discharges, or if mitigation of some form is required.
- The commitments or agreements reached to perform mitigation, control or other strategies, as required, in order to comply with governing agency requirements and restrictions.
- Coordination with the Environmental Management Plan.

E.4.9 Anti-icing and De-icing Chemical Storage

This section of the SICP shall outline the Concessionaire's procedures and requirements for stockpiling of chemicals and materials used in snow and ice control operations, including the following:

- The location of all ITR or additional lands or sites utilized for stockpiling, staging or cycling materials.
- A commitment that all de-icing chemicals are stored in compliance with the National Pollutant Discharge Elimination System (NPDES) standards, in order to prevent any pollution or contamination of local waters by toxins or chemicals.

E.4.10. Equipment

In this section of the SICP, the Concessionaire shall address the following points concerning equipment to be employed for snow removal tasks within the ITR:

- The number, classifications and types of vehicles to be used in the Snow and Ice Control operations
- The types, models, etc. of the devices applied, attached and furnished with each piece of equipment that applies and distributes de-icing chemicals.
- The types, models, etc. of the Two-Way radios and other communication equipment installed in all snow removal equipment
- The type, model, number, location, etc. of all warning and safety devices attached or furnished with Snow and Ice Control equipment, and assurance that all devices conform to all applicable Laws and ordinances.
- The snow removal equipment demarcation which shall include the name, logo and contact phone number of the Concessionaire's organization or operating entity formed to manage the ITR Concession, as appropriate.
- The Concessionaire's methods to ensure that all equipment furnished by outside Contractors for use on the ITR fully complies with the requirements of the SICP.
- The procedures employed to calibrate equipment used to apply anti-icing and/or de-icing chemicals or abrasives.
- Pre-season inspection and verification report of equipment readiness for the approaching winter season shall be submitted to IFA for review and approval 30 days prior to the last Sunday in October.
- Post-season evaluation reports of fleet and snow removal equipment, along with an action plan including a schedule to remediate any shortcomings, shall be submitted to IFA for review and approval 30 days after the 3rd Sunday in April.

CHAPTER F: FACILITIES OPERATIONS PLAN

F.1. Definitions

Electrical Systems: Systems, elements and components that are contained in Facilities, and which supply, distribute and function by the use of electricity. These systems include, but are not limited to: substations, meters, wiring, service panels, individual circuits, generators, transformers, lighting, motor control units, back-up generators and systems, emergency lighting, etc.

Facility: The ITR buildings, houses, and garages that contain administrative, support and logistical services; and the equipment, components, elements and systems that are housed within each such location.

Fire Protection Systems: Systems, elements and components that are intended to assist in the prevention and suppression of fire. These systems include, but are not limited to fire extinguishers, exit signage, fire alarms, sprinkler systems, heat sensors, smoke detectors, etc.

Life Safety Systems: Systems, elements and components that are contained in Facilities, and which promote health, safety, and life preservation. These systems include, but are not limited to communication systems; security systems; fire suppression and prevention systems; and medical attention stations; etc.

Mechanical Systems: Systems, elements and components that are contained in Facilities and which supply and distribute ventilation and climate control. These systems include, but are not limited to HVAC systems and components, thermostats, boilers, combustion chambers, dampers, heat exchangers, furnaces, air handling units, fresh air intakes, ductwork, return fans, zone dampers, exhaust fans, chillers/condensers, pumps, etc.

Plumbing Systems: Systems, elements and components that are contained in Facilities, and which supply, distribute and provide potable water, or dispose of wastewater. These systems include, but are not limited to valves, piping, water heaters, water storage tanks, faucets, toilets, sinks, showers, booster pumps, ejector pumps, sanitary piping, hot/cold water piping, etc.

Security Systems: Systems, elements and components which promote safety and security of the people and facilities from outside parties. These systems include, but are not limited to alarms, cameras, monitor stations, intercoms and radios, access control, etc.

Treatment Plants: The facility that contains the equipment, components, elements and systems to treat the water and wastewater for the other facilities.

F.2. References

All stated references shall be the most current version or the document known to have succeeded or replaced the original stated herein:

- "International Building Code"
- "Indiana Supplement to International Building Code", 675 IAC 22-2.3
- "National Fire Codes", NFPA
- "National Electrical Code", NFPA
- "Indiana Plumbing Code"
- "International Mechanical Code
- Indiana Amendments to International Mechanical Code
- "Boiler and Unfired Pressure Vessel Code", ASME
- Americans with Disabilities Act, U.S. Department of Justice
- Occupational Health and Safety Act (OSHA) Guidelines
- OSHA Publications List via Catalog or Website, OSHA (Website: http//:www.osha.gov/pls/publications/pubindex.list)
- National Standards, Specifications and Regulations as applicable, from the following organizations:
  - National Electrical Manufactures Association (NEMA)
  - American Waterworks Association (AWWA)
  - American National Standards Institute (ANSI)
  - American Society for Testing and Materials (ASTM)
  - Federal Communications Commission (FCC)
  - Underwriters Laboratory (UL)
- Original Equipment Manufacturer's (OEM) specifications, Maintenance Manuals, Handbooks, Procedures Guides, etc. as applicable for all installed equipment, systems and components

F.3. Policy for Facilities Operations Plan

F.3.1. Objective

The objective of the Facility Operations Plan is to ensure that the Concessionaire has established and is implementing predetermined processes and procedures in order to sustain the planned, organized and continuous operation of the facilities within the ITR. The operation of the facilities includes the tasks aimed at supervising and organizing, as well as the short-term and long-term tactical and strategic needs of each facility and its components. Meeting and performing these objectives, expressed through a written Plan, will ensure that the facilities remain safe, habitable, efficient and productive in their function of supporting the operation of the ITR.

F.3.2. Responsibility of Concessionaire

The Facilities Operations Plan is a document to be written, developed and carried out by the Concessionaire, and shall be in compliance with all applicable Laws, codes and requirements governing the operations of facilities, and their components and systems. The Plan shall incorporate the applicable and appropriate sections of Volume III - Environmental Management Manual and shall conform to and work in conjunction with the Environmental Management Plan.

The Plan shall address the operation of the following facilities, and all future facilities, in their support of the ITR:

- ITR Administration Building
- Toll Plaza Buildings
- Maintenance District Buildings and Garages
- Travel Plaza Buildings, Treatment Plants and Parking Lots
- Commuter Parking Lots
- Truck Parking Lots
- State Police Building

The Plan shall address how the Concessionaire will operate the following systems, and how the continual operation impacts the function of the ITR:

- Operation of facilities used for toll collection work
- Operation of facilities used for administration, security, and public access.
- Operation of all systems dedicated to supporting the facilities themselves including: Life Safety, Mechanical, Utility, Plumbing, Electrical, Communication, Emergency, Fire, etc.

Given that the ITR is operational 24 hours-per-day, every day of the year, the continual and efficient operation of the facilities and the systems that support the ITR cannot be compromised. The primary goal in preparing the Facilities Operations Plan shall be the management of facilities operations in a manner that minimizes deterioration and

unforeseen breakdowns of the facilities. The Plan is intended to address the Concessionaire's efforts to manage its facilities operations, and shall reflect the need for :maintenance; advance planning for upgrading or replacement of systems; positioning and maintaining backup or auxiliary equipment; performing timely replacements of unreliable equipment; and anticipating staffing needs to support facilities operations in order that the facilities will continually support all vital ITR operations.

This Chapter includes a general outline of the proposed Plan. This outline is intended only to provide guidance in the preparation of the Concessionaire's Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

F.3.3. Performance Time Frames

The following table establishes the minimum frequency that the Facilities Operations Plan is to be written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA.

Plan	Minimum Frequency of Occurrence
Facilities Operations Plan	Once Yearly

F.3.4. Acceptance Criteria

The Facilities Operations Plan will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA in accordance with the Operating Standards.

F.4. Facilities Operations Plan Preparation Requirements

The following is a general outline of the Concessionaire's responsibilities that should be included and addressed when creating the Facilities Operations Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that should be included and addressed in the Facilities Operations Plan.

The Facilities Operations Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

F.4.1. Introduction

In this section, the Concessionaire shall briefly introduce the purpose of the Facilities Operations Plan, and setout the overall goals and objectives of the Plan. The introduction should discuss the titles, functions, roles, duties and responsibilities of each person that the Concessionaire identifies as being involved with the operation of

systems within the ITR facilities.

F.4.2. Operational Integrity - Life Safety Systems

The continual operation and integrity of the Life Safety Systems within each facility is essential to both the staff of the Concessionaire and the ITR users. These systems provide the safety, communication, and life preserving components that shall be operated for the ITR to function as intended.

The Concessionaire shall address the operational procedures and polices employed by the Concessionaire to ensure that these systems constantly remain functional; are tested on an established schedule; are evaluated for functionality and operation; and perform as designed and intended. This section of the Plan shall include the following subsections, at a minimum:

- Communication Systems
  - Intercoms
  - Telephones
  - Radios
  - Mobile Communications
- Security Systems
  - Access Control
  - Video Surveillance
  - Stations and Personnel
  - Alarms
  - Coordination with the appropriate police departments
  - Security Sweeps
- Fire Suppression and Precaution Systems
  - Fire Alarms
  - Sprinkler Systems
  - Heat Sensors
  - Smoke Detectors
  - Carbon Monoxide Detectors
- Medical Attention Stations
  - First Aid Stations
  - Emergency Call Buttons

F.4.3. Operational Integrity- Energy Distribution

In order for the facilities within the ITR to continually operate at their peak efficiency, the distribution of energy both to and from components shall be provided. The function, integrity, continual supply, and efficient distribution of energy to and from various systems and targets has direct impacts to their operation as individual units, as well as to the ITR as a whole.

This section of the Plan shall address the procedures and polices employed by the Concessionaire to ensure that the energy distribution systems remain fully operational at all times. The Plan shall also address the Concessionaire's plan for enhancing reliability, providing redundancy in depth, arranging for backup equipment, staff, power, etc., and any other action required in order to safeguard continuous operations.

This section of the Plan shall include the following subsections, at a minimum:

- Electrical Supply
  - Substation level
  - Panel level
  - Circuit level
  - Back-up Systems
  - Lighting
  - Emergency Lighting
  - Motor Control Units
- Mechanical Systems
  - Heating, Ventilation, and Air Condition (HVAC) Systems
  - Plumbing Systems
- Computer Systems
  - Uninterruptible Power Supply (UPS)
  - Servers
  - Redundancy in depth measures
- Life Safety Systems
- Coordination and Agreements with Utility Companies/Agencies
  - Electrical
  - Phone
  - Natural Gas
  - Water
  - Sanitary

F.4.4. System Operational Management

The facilities within the ITR contain numerous and unique systems that either support the facility in which they are located, or provide resources to other portions or sections of the ITR. These systems, their continual function, and the management of these systems are essential to the daily and critical operations of the ITR.

This section of the Plan shall address, describe and outline the methods and procedures that the Concessionaire will employ in the operation and management of the facility systems. This section of the Plan shall include, the following subsections concerning the various systems within the Facilities at a minimum:

- Electrical Systems
  - Substations
  - UPS
  - Back-up Systems

- Mechanical Systems
  - HVAC
  - Plumbing
  - Pumping Systems
- Life Safety Systems
- Computer Systems
  - Toll Collection System (TCS)
  - Servers
- Shop Equipment

F.4.5. Occupancy Management

This section of the Plan shall address the procedures employed by the Concessionaire in managing and operating the physical occupants within each facility. This section will need to discuss at a minimum: space programming; health, safety and environmental standards; emergency evacuation; and the function of each defined role of those responsible in the operation of the facilities.

F.4.6. Vendor Management

In this section of the Plan, the Concessionaire shall briefly list the names of vendors, their roles, and their responsibilities if they perform work with or operate systems in the facilities.

F.4.7 Licenses, Fees and Permits

In this section of the Plan, the Concessionaire shall briefly explain the process by which all required licenses, fees and permits will be obtained for the operation of all systems and equipment in the Facilities of the ITR; and shall certify that all such permits and licenses are current.

CHAPTER G: TRAFFIC AND TRAVEL MANAGEMENT PLAN

G.1. Definitions

Average Annual Daily Traffic (AADT): The total volume of traffic passing a point on a highway, in both directions, for one year, divided by the number of days in the year.

Average Daily Traffic (ADT): The average 24-hour volume of traffic; that being the total volume of traffic during a stated period divided by the number of days in that period.

Capacity: The maximum number of vehicles that can pass over a given section of roadway in one or both directions during a given period of time under prevailing roadway and traffic conditions.

Closed-Circuit Television (CCTV): The video camera system used to provide surveillance of the roadway system.

Dynamic Message Signs (DMS): Signs that use electronics or mechanics to vary a visual word, number or symbolic display as traffic conditions warrant.

Highway Advisory Radio (HAR): A low-powered radio (generally AM) station devoted to presenting travel-related information to the public.

Intelligent Transportation Systems (ITS): The application of technologies to improve mobility and transportation productivity, and enhance safety.

Maintenance of Traffic (MOT): A plan for handling traffic through a work zone. The MOT plan may range in scope depending on the complexity of a project and resulting traffic interference.

Peak Hour: The hour during which the maximum amount of travel occurs.

Peak Period: The period during which traffic levels rise from their normal background levels to maximum levels.

Queue: A line of waiting vehicles.

Volume: The number of vehicles passing a given point over a period of time.

Work Zone: An area of a highway in which maintenance and/or construction operations are taking place which may impinge on the number of lanes available to moving traffic or affect the operational characteristics of traffic flowing through the area.

G.2. References

All stated references shall be the most current version, or the document known to have succeeded or replaced the original stated herein:

- "Highway Capacity Manual", TRB
- "Traffic Engineering Handbook", ITE
- "Manual on Uniform Traffic Control Devices (MUTCD)", FHWA
- "Indiana Supplement to the National Manual on Uniform Traffic Control Devices", INDOT
- "A Policy on Geometric Design of Highways and Streets", AASHTO
- "Standard Specifications for Road and Bridge Construction", INDOT
- "Supplemental Specifications and Recurring Special Provisions", INDOT
- "Sign Design Guide", INDOT
- "Standard Highway Signs", FHWA & INDOT
- "Indiana Highway Information System - Roadway Information and Procedure Manual", INDOT
- "Standard Drawings", INDOT
- "Design Manuals, Consultant Bulletins Services, Design and Construction Memos", INDOT

G.3. Policy for Traffic and Travel Management Plan

G.3.1. Objective

The objective of the Traffic and Travel Management Plan is to ensure that the Concessionaire has considered and created processes, procedures and standards to manage traffic and travel throughout the ITR in order to combat congestion and its damaging effects, including driver delay, inconvenience and frustration, reduced safety, and deteriorated air quality.

Another critical objective of the Traffic and Travel Management Plan shall be to create protocols and procedures that need to be taken to quickly identify where congestion is likely to occur and to devise a series of operational plans to prevent delays from occurring, whether they are caused by normal day-to-day operations, maintenance operations, construction operations, and/or emergency operations.

G.3.2. Responsibility of Concessionaire

The Concessionaire shall develop, write and carryout the Traffic and Travel Management Plan and make it consistent with all applicable Local, State and Federal Laws, codes and requirements governing traffic management practices and traffic control policies. The Traffic and Travel Management Plan is to be updated and submitted annually and shall receive Approval from the IFA as set forth herein, and, as appropriate, from all other governing authorities.

The Plan shall address how the Concessionaire will incorporate the following concepts in order to operate the ITR at peak efficiency:

- Active management and monitoring of the decision-support systems
- Active management operations and functions
- Actions taken beyond the capabilities of the automated actions of the computer systems, such as communication with field personnel, emergency responders, and other/adjacent operating agencies

The Concessionaire shall understand that the Plan shall not only address the effective technologies and deployment of systems, but also address the needs of the available staff trained to monitor and control the systems. In addition, the Plan shall illustrate how the management systems function, and how they can be adjusted so that the ITR can continually operate at peak efficiency.

This Chapter includes a general outline of the proposed Plan. This outline is intended only to provide guidance in the preparation of the Concessionaire's Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

G.3.3. Performance Time Frames

The following table establishes the minimum frequency that the Traffic and Travel Management Plan is to be written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA.

Plan	Minimum Frequency of Occurrence
Traffic and Travel Management Plan	Once Yearly

G.3.4. Acceptance Criteria

The Traffic and Travel Management Plan will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and Approved by the IFA in accordance with the Operating Standards.

G.4. Traffic and Travel Management Plan Preparation Requirements

The following is a general outline of the Concessionaire's responsibilities that shall be included and addressed when creating the Traffic and Travel Management Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that shall be included and addressed in the Traffic and Travel Management Plan.

The Traffic and Travel Management Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

G.4.1. Introduction

In this section the Concessionaire shall briefly introduce the purpose of the Traffic and Travel Management Plan, and set out the overall goals and objectives of the Plan. The introduction shall discuss the title, functions, roles, duties and responsibilities of each person that the Concessionaire identifies as being involved with traffic and travel control and management.

G.4.2. Functional Management

In this section of the Plan the Concessionaire shall address the strategies, activities, responsibilities, requirements and procedures that will be implemented for traffic control and travel management operational functions.

Traffic control and travel management functions for the ITR will be comprised of several subsystems, procedures, responsibilities and protocols that will need to interface with each other to accomplish the objectives stated above. The Plan shall address each of these components and discuss how they will interface with one another, and how their functional characteristics enhance the safe and efficient movement of traffic through the ITR.

In this section the Concessionaire shall include the following subsections, at a minimum:

G.4.2.1. Staffing

This section of the Plan shall include descriptions, titles, responsibilities and the roles each person involved with traffic control and travel management will play. The Concessionaire shall identify essential personnel, the call-up protocol, and the measures employed to keep the ITR performing at its peak efficiency.

G.4.2.2. Training

This section of the Plan shall include the specific programs that the Concessionaire has implemented to train, re-train and advance the staff assigned to traffic control and travel management.

G.4.2.3. Monitoring Procedures

This section of the Plan shall include the procedures implemented by the Concessionaire to: monitor the decision-support and surveillance systems; to monitor the information obtained from multi-agency operations; and to monitor the information obtained from ITR users, or other tools, communications and means.

G.4.2.4. Command Center Management

This section of the Plan shall address the operational requirements and functions of the Command Center and management within the Command Center. All traffic control and travel management should be coordinated through the efforts and communications via the Command Center functions, its tools, and its management.

The Plan shall include Command Center operational procedures to address items essential to the operations of the Command Center and the ITR, including but not limited to lane scheduling; traffic congestion management; traffic monitoring; toll collection activities; accident management; disabled vehicle management; construction and maintenance, travel management, etc. The Command Center shall be operated at all times, 24 hours-per-day, 7 days-per-week.

G.4.2.5. **Traffic Control Supervision**

This section of the Plan shall include procedures and responsibilities that the Concessionaire will establish for the supervision and decision making associated with the ITR traffic control and travel management. The Plan shall address the authority that the Traffic Control Supervisor will possess and the procedures that have been established.

The Plan shall include the following items when addressing traffic control supervision, at a minimum:

- Contacts and communication with local and state law enforcement, fire and emergency service agencies.
- Field checking locations and placements of signs and traffic control devices before any work begins, and as it progresses.
- Providing sufficient surveillance of signs, barricades and other traffic control devices and systems, and establishing procedures to ensure that these elements are inspected and properly functioning every calendar day.
- Directing revisions to Work Zone traffic control plans to meet field and weather conditions for traffic control to operate as intended.
- Directing and monitoring all project flaggers.

G.4.2.6. **Records and Data Management**

This section of the Plan shall include processes and procedures for obtaining accurate traffic data for the ITR via the Toll Collection System (TCS) or by other means. The traffic data should include, at a minimum: a record of traffic by direction of travel; type of vehicle as classified by number of axles; and time of day for all vehicles traveling through toll plazas.

This section of the Plan shall also include procedures and frequencies for the collection of traffic data at entrance and exit ramps within the ITR.

G.4.2.7. **Traffic Analysis**

This section of the Plan shall include procedures and frequencies for performing traffic analysis for all sections and portions of the ITR. Traffic data should be analyzed to determine if operational improvements are required to accommodate changes in traffic Volume or patterns. The Concessionaire shall pay special attention to toll and ramp Queue lengths in order to determine the maximum length and the duration of such Queues, and if the mainline traffic flow is impacted.

G.4.2.8. **Traffic Alleviation Plans and Procedures**

This section of the Plan shall address the development and content of the standards, details, communication tree, responsibilities and functions required when implementing each specific traffic alleviation procedure.

The Concessionaire shall always keep in mind that the goals and objective of managing the ITR includes the following:

- Reduction of congestion impacts and occurrences
- Maximize operational safety for ITR users and the public
- Ensure the efficient and pleasant passage of traffic through the ITR
- Provide ITR users accurate and necessary information to aid in making effective use of traveling within the ITR

G.4.2.9. **Information Dissemination**

This section of the Plan shall include descriptions and procedures for the accurate dissemination of necessary, essential and real-time information concerning traffic to ITR users, the public, the community, multi--agencies, and to local, state and federal agencies.

G.4.2.10. **Cooperation with Police Department**

This section of the Plan shall include the practices that are being employed to coordinate enforcement of traffic safety issues with the appropriate Police Department within the ITR.

G.4.3. Decision-Support Systems

Decision-support systems are tools that function by obtaining, analyzing, organizing and presenting information obtained from a variety of sources in order to assist the Concessionaire in making effective and sound traffic control and travel management decisions.

This section of the Plan shall address the functions, operations, and procedures utilized by the Concessionaire when employing these types of systems with traffic control and travel management information. The Plan shall also address how these systems will be coordinated, the control strategies of each system, the operational strategies of each system, and the identification techniques utilized.

The Concessionaire shall include the following subsections, at a minimum:

G.4.3.1. Toll Collection System (TCS)

The Toll Collections System has the ability to store traffic data by time, toll lane, vehicle class, etc. since it is used as a verification system in conjunction with the toll payment process. This system is an extremely valuable tool that can be utilized to analyze the Peak Hour, Peak Period traffic, AADT, ADT, etc. The Plan shall address how this information and its support functions and algorithms are utilized by the Concessionaire in traffic control and travel management.

This section of the Plan shall also include the procedures and process the TCS will utilize in developing historical traffic count databases, and how databases, along with real-time counts can be applied in the Concessionaire's traffic control and travel management functional decision making processes.

G.4.3.2. Communications Systems

Communication systems are another effective tool that can assist the Concessionaire in the decision making process for traffic control and travel management. Communication systems include voice and data information, which includes, but is not limited to, Highway Advisory Radio, agency data reports, travel time listings, interagency radio monitoring, and computer related systems.

This section of the Plan shall include the procedures and process that the Concessionaire will follow when utilizing these systems and how the Concessionaire will release the information from its communication systems to others.

G.4.3.3. **Surveillance & Detection Systems**

Surveillance and detection systems are a developing technology that will be essential in the future for managing traffic and travel within roadways. The systems will be able to collect data on traffic flows and performances through sensor technology and will permit the Concessionaire to monitor conditions as they develop. Currently the Closed-Circuit Television (CCTV) System has been employed at Toll Road ramps with I-65 interchange (M.P. 17 Interchange), at M.P. 15-5, (Toll Road Bridge over Tennessee Street) and at M.P. 19 (Lake Street Bridge over Toll Road) to provide this type of assistance.

This section of the Plan shall include the procedures and process that the Concessionaire will employ when using both current and future surveillance and detection technologies, and how their functions and algorithms will be employed to assist in traffic control and travel management.

G.4.3.4. **Roadway Weather Information Systems (RWIS)**

RWIS have been traditionally employed to assist in making snow and ice control decisions. As technology continues to advance, these systems will also advance so that they are able to provide more accurate locations and durations of weather events. The Concessionaire may choose to utilize these systems and the advantages they provide in traffic control and travel management.

This section of the Plan shall include the procedures and process that the Concessionaire will employ with the use of these types of systems.

G.4.3.5. **Other Systems**

To the extent any other systems are employed or implemented by the Concessionaire on the ITR, or if the Concessionaire plans to implement any other such systems, the Concessionaire shall address such systems in this section of the Plan.

G.4.4. Multi-Agency Operations and Arrangements

An effective technique of ascertaining assistance in the management of traffic and travel within the ITR is by developing agreements and participation with other agencies. These techniques include the coordination and Communication with people, systems and resources available on other highway networks through the sharing of information. These arrangements are typically in a written plan that addresses use, limits, confidentiality, and other terms and conditions related to such information. Such

agreements may include sharing data; voice communication; emergency responders; real-time traffic movements and counts; and CCTV and other surveillance systems.

In this section the Concessionaire shall address the types, terms, relationships and procedures that exist between other agencies and the Concessionaire, including the following subsections, at a minimum:

G.4.4.1. Integrated Systems

Integrated systems are systems where multiple agencies share a single management center, and utilize the systems to share data and communications in a network to assist in a overall decision making policy. The prime example of this type of system is the relationship that the ITR has and shall maintain with INDOT's I-80/94 (Borman Expressway) Corridor ITS Management Center in Gary.

This section of the Plan shall address information on how the Concessionaire and the ITR are integrated into INDOT's I-80/94 system, how the Concessionaire cooperates and functions with other local agencies' emergency management centers; the manner in which it participates in these organizations and systems; and will ensure that the policy of continuing involvement is upheld.

G.4.4.2. Regional Initiatives

These types of initiatives foster communication, coordination and cooperation between agencies over a particular area or region to ease congestion and disseminate information. The prime example of this type of system is the relationship that the ITR has and shall maintain with the INDOT Traffic Management Center in Gary.

This section of the Plan shall address information on how the Concessionaire and the ITR share and participate in these initiatives and the assurance that these initiatives are continuing.

G.4.4.3. Resource Sharing

These types of relationships center on the sharing of informational resources, including such devices as CCTV systems, surveillance systems, real-time traffic counts, Intelligent Transportation System (ITS), dynamic message signs, electronic toll tag readers, communication equipment, and traffic management centers. The prime example of this type of agreement is the relationship that the ITR has with the Skyway, in which some of its CCTV cameras can be accessed and viewed.

This section of the Plan shall address information on how the Concessionaire and the ITR share specific ITR resources, the terms and limits of sharing, and the parties that participate in the sharing agreements.

G.4.5. Standards and Protocols - Work Zone Traffic Control

Maintaining safety for ITR users, the public, the community and workers shall be of paramount importance to the Concessionaire at all times. Notwithstanding the foregoing, the ITR shall be kept open to travel in each direction at all times, and travel shall only be restricted during emergencies, traffic safety hazards, severe weather conditions, maintenance and construction activities and other permitted times.

This section of the Plan shall address the requirements for Work Zone Traffic Control and the development of a series of stand-alone traffic control standards and drawings to be used for ITR Work Zone Traffic Control. The intent of these standards and drawings is to have a series of protocols prepared in anticipation of imminent work; ensure full compliance with the Reference Documents listed in Section G.2 of this Chapter: ensure full compliance with all applicable Laws. Such standards and drawings shall be prepared by a Professional Engineer licensed in the State of Indiana.

This section of the Plan shall also address the policies, procedures and approval requirements developed by the Concessionaire for work conducted by Contractors within the ITR. The intent of these processes is to ensure that a written plan has been developed and approved by a responsible Professional Engineer licensed in the State of Indiana prior to the start of work. Additionally, the Plan shall consider the requirements placed on others for work on facilities adjacent to or crossing over or under the ITR.

The development of all sections, standards, and procedures of the Plan shall consider any proposed work, maintenance, or emergency lane closure or traffic pattern change within the ITR. The plans shall be thoroughly developed to minimize impacts to ITR traffic and adjacent roadways and to minimize dangers to workers present on the project work site. All situations that require temporarily closing one or more lanes shall carefully consider the effect that such an operation will have on traffic.

In addition to the above stated requirements, the Concessionaire shall address, at a minimum the following:

G.4.5.1. Material and Equipment Storage and Parking

This section of the Plan shall include procedures and standards that take into consideration, at a minimum, the following: material supply and storage within a Work Zone site; equipment transport to and within the Work Zone; equipment storage while on site; and the parking of personal vehicles and other equipment.

G.4.5.2. Protection of Hazards

This section of the Plan shall include procedures and drawings for protecting traffic from all potential hazards that may exist during construction or maintenance work, or hazards that may be created or exposed as part of the work.

G.4.5.3. Temporary Lane Closures

This section of the Plan shall include procedures, standards, and drawings for providing temporary lane closures when a portion of the ITR traveled way is needed for construction or maintenance activities. Lane closures shall be kept to a minimum and should occur during off-peak times, unless conditions require otherwise.

G.4.5.4. Temporary Road Closures

This section of the Plan shall address the procedures and protocols to accommodate any temporary road closure as a result of an emergency situation.

G.4.5.5. Flagging in Work Zones

This section of the Plan shall include procedures and requirements for when flagging activities are required within Work Zones. Work Zone flaggers should be qualified, trained and certified to perform their required duties.

G.4.6. Standards and Protocols - Work Zone Traffic Control Devices

This section of the Plan shall address the requirements for Work Zone Traffic Control Devices which are necessary and required to inform and safely guide and direct traffic within and through the designated Work Zones within the ITR. Traffic Control Devices that shall be considered and specified in the Plan include, but are not limited to warning signs, Dynamic Message Signs, barriers, barricades, delineators, and pavement markings to clearly and safely route traffic through any construction or maintenance Work Zone.

The Plan shall also address the maintenance and operation that the Concessionaire will employ to provide continuous and expeditious repair or replacement of all damaged or ineffective traffic control devices. All devices used within the ITR shall remain in good condition and provide the level of visibility and reflectivity required by the most stringent criteria of either the IFA, INDOT, or the Manual on Traffic Control Devices. The Concessionaire should include in the Plan the maintenance activities for replacement of traffic control devices, which are damaged (torn, crushed, discolored), displaced by traffic or other means, or deteriorated beyond effectiveness.

Work Zones shall be delineated with advance warning signs; protective barriers or other appropriate safety devices; and end of Work Zone Signs. The maintenance Work Zones shall meet traffic and worker safety standards and procedures established by the Concessionaire as supplemented by standards presented in the Reference Documents.

G.4.7. Standards and Protocol - Emergency Events

This section of the Plan shall address the procedures and protocols that the Concessionaire will apply during emergency events that occur within the ITR. The Concessionaire shall include, at a minimum, the following subsections:

G.4.7.1. Event Management

This section of the Plan shall include the general responsibilities and management procedures that the Concessionaire and its staff will employ during emergency events.

G.4.7.2. Notification of Lane/Highway Closures

This section of the Plan shall include procedures to be followed to inform ITR users of emergency lane or road closure. The Plan shall use efficient and rapid response procedures to restore normal travel conditions after an incident has occurred. This section shall also include the protocols for information dissemination.

G.4.7.3. Emergency Detouring of Traffic

This section of the Plan shall include procedures and practices for the emergency detouring of ITR traffic in the event of an emergency situation. The Concessionaire shall address the protocols that will exist between other agencies so that traffic will flow effectively and safely through the detour route.

G.4.7.4. Disabled and Abandoned Vehicles

This section of the Plan shall include the traffic control procedures for the safe and efficient removal of disabled or abandoned vehicles within the ITR. The Concessionaire shall address the protocols that will be established with the appropriate police departments when these situations arise.

G.4.8. Standards and Protocol - Unusual Events

This section of the Plan should address the procedures and protocols that have been established to address unusual and special events that may occur within or affect the ITR. This section of the Plan shall include the following subsections, at a minimum:

G.4.8.1. Overweight/Oversized Vehicles

In this section the Concessionaire shall include the procedures established by the Concessionaire for managing Overweight and Oversized vehicles which pass through the traveled way of the ITR. The Plan shall address communication with INDOT, IDOT, MDOT and OTC concerning the permitting of these types of vehicles, and shall address the times and polices that will be employed to handle these situations. In addition, this section of the Plan shall include procedures and protocols to maintain traffic safety in the vicinity of overweight/oversized vehicles.

G.4.8.2. Security Convoys

This section of the Plan shall address the situations that may occur when security or other types of motorcades or special convoys are required to pass through the traveled way of the ITR.

G.4.8.3. Vehicle Peak Capacity Events

This section of the Plan shall address the protocols and procedures, including manpower shifts, employee call-outs, etc. that will be employed when unusual events occur that increase traffic and the number of vehicles passing through the ITR traveled way well beyond that which is considered peak or maximum.

CHAPTER H: CUSTOMER SERVICE PLAN

H.1. Definitions

Customer: Any person or organization outside of the ITR that has contact with the ITR, including but not limited to users, people who make inquiries or complaints to the Concessionaire, the IFA, the State of Indiana, and the like.

H.2. Policy for Customer Service Plan

H.2.1. Objective

The objective of the Customer Service Plan is to ensure that the Concessionaire establishes guidelines for creating and maintaining a uniform, efficient system that documents customer concerns and inquiries, ensures an adequate response, and provides a recoverable record of the concern and the corrective action taken, addressed in a written and Approved Plan.

H.2.2. Responsibility of Concessionaire

The Concessionaire shall develop, write and carry out the Customer Service Plan, and make it consistent with all applicable Laws, codes and requirements.

This Chapter includes a general outline of the proposed Plan. This outline is intended only to provide guidance in the preparation of the Concessionaire's Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

H.2.3. Performance Time Frames

The following table establishes the minimum frequency that the Customer Service Plan is to be written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA.

Plan	Minimum Frequency of Occurrence
Customer Service Plan	Once Yearly

H.2.4. Acceptance Criteria

The Customer Service Plan will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA in accordance with the Operating Standards.

H.3. Customer Service Plan Preparation Requirements

The following is a general outline of the Concessionaire's responsibilities that should be included and addressed when creating the Customer Service Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that should be included and addressed in the Customer Service Plan.

The Customer Service Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

H.3.1. Introduction

In this section the Concessionaire shall include a short introduction to the Customer Service Plan that includes a description of the persons or agencies involved in the preparation of the Plan, an individual who is charged with the implementation and maintenance of the Plan and the overall goals and objectives of the Plan. At a minimum, this section is to contain the following sub-sections:

- Purpose
- Scope and applicability
- The methodology used to develop the Plan

H.3.2. Customer Service

The Plan shall include the requirements that the Concessionaire's staff will be required to follow when communicating with customers. The Plan shall include provisions to ensure proper handling of complaints in order to improve customer satisfaction and responsiveness.

H.3.2.1. Procedure for Handling Customer Complaints and Inquiries

The Concessionaire shall develop this section of the Plan to include a customer service log used when receiving comments and concerns about the ITR. The customer service log shall be maintained in accordance with standards and requirements established in the Customer Service Plan. Provisions shall be made in the Plan to receive, record, and log customer comments verbally by ITR operations or Concessionaire staff member in person, in writing, by telephone, mail, email, web page or any other manner. At a minimum, the record shall include the name and address of the person presenting the complaint or comment, the date and time of the complaint or comment, the ITR operations staff receiving the complaint or comment, and a complete description of the complaint or comment. The Plan shall, at a minimum, address the following:

- Requirements and standards for the Customer Service Log
- Procedures and standards for receiving inquiries or concerns
- Recording of customer inquiries and concerns
- Reviewer protocol of customer service inquiries or concerns
- Exceptions to recording customer service inquiries and concerns

H.3.2.2. Complaint Prioritization Procedures

This section of the Plan shall address a system and procedure to develop criteria for responding to concerns based on priority, degree of deficiency, and schedule to correct.

H.3.2.3. Complaint Reconciliation Procedures

This section of the Customer Service Plan shall establish guidelines and procedures to ensure an adequate response to any complaints or comments received in the Customer Service Log.

The Customer Service Plan shall delineate follow-up procedures and actions which shall be documented by the Concessionaire, and shall include a communication from the Concessionaire to the individual filing the complaint or comment that the complaint or comment was received, and appropriate corrective actions were initiated.

The Plan shall include, at a minimum, the following considerations:

- ❖ Customer Service database requirements and procedures
- ❖ Follow-up procedures and actions
- ❖ Requirements for a formal plan of long term improvements

H.3.2.4. Dissemination of Comments and Concerns

This section of the Plan shall state the policies and procedures developed to ensure all comments or complaints from agencies outside the Concessionaire are obtained, recorded and reconciled. Additionally, directives should be created to ensure the appropriate distribution of comments or complaints to agencies outside the Concessionaire, if requested. Agencies may include, but are not limited to, governmental organizations, local agencies and departments, and the ISP.

H.3.2.5. Analysis of Database

This section of the Plan shall indicate that all complaint logs and corrective actions are required to be recorded in a database providing, at a minimum, a summary of the complaint, date of complaint, date underlying occurrence (if known), date action was taken, summary of action taken and date of notification to the individual filing the complaint or comment.

The complaint database and logs shall be reviewed monthly to reconcile complaints received with actions taken. All outstanding complaints, refund requests, and responses shall be reconciled and processed through closure each month.

To improve customer satisfaction and performance, the database statistics shall be reviewed quarterly to compare performance of the current quarter versus the prior period and the current year versus the prior year.

A formal plan for improvement shall be included if there is a significant increase in the number of complaints received, a significant increase in the number of toll refund requests and/or a significant increase in the number of days taken to initiate an action. The improvement plan shall be prepared by the Concessionaire, and implemented and monitored monthly until improvements are documented. The Plan shall include:

- Identification of recurring deficiencies and policies to develop plans for improvements
- Identification of patterns of problems and concerns, and development of plans to analyze, detect, and rectify deficiencies
- A mechanism to ensure that services and concerns are addressed adequately

H.3.3. Information Services

H.3.3.1. General Requirements and Goals of Information Services

This section of the Plan shall include efforts of the Concessionaire in assisting ITR users with general information. This task shall include providing information services to the ITR users in an effort to achieve a positive overall standard of Customer Service.

H.3.3.2. Information Requirements

This section of the Plan shall include the contents that will be included in every Toll Booth so that they are equipped with a current Information Packet to address requests for information from ITR users. This packet shall contain a base set of information tools for use, in addition to information addressing common requests gathered by Toll Booth attendants. At a minimum the Information Packets shall contain the following:

- Updated current street maps of Illinois, Indiana, Michigan and Ohio
- Updated street maps of the major cities along the ITR
- A quick list of dates for major events for cities along the ITR

- A quick list of various venues (stadiums, museums, concerts, arenas, airports, theaters, etc.) for cities along the ITR
- A quick list of directions to regional Illinois, Indiana Michigan and Ohio cities and suburbs

H.3.3.3. Communication Requirements

Policies and procedures shall be developed for communications protocol with ITR users.

H.3.3.4. Information Updates

The Customer Service Plan shall develop requirements for updating standard information available as an Information Service to ITR users. Updates may be required due to construction activities and road closures, updated street maps or special events.

H.3.4. Lost and Found

The Concessionaire shall establish Lost and Found procedures as a part of the Customer Service Plan. The Concessionaire shall assume custody of all found property, and place such property in a secure and designated location. This section of the Plan shall, at a minimum, address the following:

- Protocols for Found Property
  - Log Book
    - Date of find
    - Description and condition of property
    - Who found and submitted the property
    - Contents of property
    - Location where property was found
  - Tagging and identification of property
  - Contact of property owner if identification is present
  - Placement, storage and security of property
  - Contact with the Indiana State Police
- Protocols for Returning Property
  - Customer Lost property report
  - Claim Form
  - Inventory check procedures against claims and reports
- Disposing of Unclaimed Property
  - Property hold length (90 Day Minimum)
  - Disposal of property
  - Coordination with the Indiana State Police

H.3.5. ITR Web Site

The Concessionaire shall create, maintain and update a specific and independent Web Site solely for ITR information as part of the Customer Service Plan. This section of the Plan shall, at a minimum, address and include the following web pages and their contents:

- Home Page
- Location and Regional Maps
- Toll Schedule
- Current Travel Times
- Current Construction Activities and Locations
- Lane Use Restrictions
- Contact Information (Phone, Address, E-mail, etc.)
- Customer Service Page
- Links to other Agencies and pertinent Web Sites
  - INDOT
  - IDOT
  - Skyway
  - City of Chicago
  - MDOT
  - OTC
  - Weather

This section of the Plan shall also briefly describe the computer hardware and software utilized, and the internet service provider.

CHAPTER I: EMERGENCY MANAGEMENT AND OPERATIONS PLAN

I.1 Definitions

Agency: A division of government with a specific function offering a particular kind of assistance.

Disaster: A dangerous event that causes significant human and/or economic loss and demands a crisis response beyond the scope of any single agency or service. Disasters are distinguished from emergencies by the greater and more complex level of response and recovery required.

"Emergency" as proclaimed by the local governments: Whenever, in the opinion of the person in charge of local governments, the safety of the local governments, boundaries, its citizens, and its assets requires the exercise of extreme measures due to an impending or actual disaster, he (or she) may declare an emergency to exist in the local governments area or in any part of the area in order to prioritize the deployment of the local government to assist in the resolution of the disaster.

Emergency Operations Center (EOC): A centralized facility to be utilized by the local government for the direction, control and coordination of the disaster or emergency.

Emergency Operations Plan (EOP): An EOP is a document that:

- Assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in an emergency that exceeds the capability or routine responsibility of any one agency.
- Sets forth lines of authority and organizational relationships, and demonstrates how all actions will be coordinated.
- Describes how people and property will be protected in emergencies and disasters.
- Identifies personnel, equipment, facilities, supplies and other resources available for use during response and recovery operations
- Identifies steps to address mitigation concerns during response and recovery activities

Emergency Support Foundation (ESF): "ESF" a functional approach to group the types of federal and local assistance available during emergencies. The National Response Plan identifies twelve ESF's. Each ESF is headed by a primary agency that has been selected based on its authorities, resources and capabilities in the particular area.

First Responder: Local police, fire, public works and emergency medical personnel who first arrive on the scene of an incident and take action to save lives, protect property and meet basic human needs.

Incident: An occurrence or event, natural or man-made that requires an emergency response to protect life or property.

Mass Care: Care provided to individuals dislocated during the emergency period. These services are normally provided by volunteer organizations. Services provided normally include lodging, feeding, registration, first aid and other social services.

Major Disaster: Any natural or man-made catastrophe, act of terrorism or other disaster that causes damage of sufficient severity and magnitude as to exceed the efforts and available resources of the local governments sufficiently to warrant disaster assistance under the provisions of the Stafford Act, Public Law 93-288, as amended.

Mitigation: Those activities designed to alleviate the effects of a Major Disaster or Emergency or long-term activities to minimize the potentially adverse effects of future Disaster in affected areas.

National Incident Management System (NIMS): A comprehensive national approach and standardized organizational structure to incident management, applicable at all jurisdictional levels and cross functional disciplines that are intended to further the effectiveness of emergency response providers.

Preparedness: The range of deliberate, critical tasks and activities necessary to build, sustain and improve the operational capability to prevent, protect against, respond to and recover from domestic incidents. It is operationally focused on establishing guidelines, protocols and standards for planning, training and exercises, personnel qualification and certification, equipment certification and publication management.

Recovery: Recovery involves actions needed to assist individuals and communities to return to normal following an incident. Recovery programs are designed to assist victims and their families, restore institutions to sustain economic growth and confidence, rebuild destroyed property and reconstitute government operations and services. Recovery actions often extend long after the incident itself. Recovery programs include mitigation components designed to avoid damage from future incidents.

Response: Response includes activities to address immediate and short-term actions to preserve life, property, environment and the social, economic and political structure of the community.

Stafford Act: Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. This federal enabling legislation was enacted to support state and local government and their citizens when disasters overwhelm them. The law establishes a process for requesting and obtaining a Presidential disaster declaration, defines the type and scope of assistance available from the federal government and sets the conditions for obtaining that assistance. The Federal Emergency Management Agency (FEMA), a part of the Emergency Preparedness and Response Directorate of the Department of Homeland Security, is tasked with coordinating the response.

Terrorism: The unlawful use of force or violence or threatened use of force or violence against persons and places for the purpose of intimidating and/or coercing a government, its citizens, or any segment thereof for political or social goals - U.S. Department of Justice, Federal Bureau of Investigation.

I.2. References

All stated references shall be the most current version, or the document known to have succeeded or replaced the original stated herein:

- The White House, Office of the Press Secretary, "Homeland Security Presidential Directive 5", February 28, 2003.
- U.S. Department of Homeland Security, Office of Homeland Security, "National Strategy for Homeland Security", July 2002.
- U.S. Department of Homeland Security, Office for Domestic Preparedness, "Homeland Security Exercise and Evaluation Program", Volume I, March 2003.
- U.S. Department of Homeland Security, Office of the Secretary, "National Incident Management System", March 1, 2004.
- U.S. Department of Homeland Security, Office of the Secretary, "National Response Plan", first draft, February 25, 2004
- Public Entity Risk Institute (PERI), "Characteristics of Effective Emergency Management Organizational Structures".
- Federal Emergency Management Agency, "Objectives for Local Emergency Management", July 1984.
- U.S. Department of Transportation and Federal Emergency Management Agency, "Guidelines for Public Sector Hazardous Materials Training", March 1998.
- Federal Emergency Management Agency, Publications Catalog, #20

I.3. Policy for Emergency Management and Operations Plan

I.3.1. Objective

The objective of the Emergency Management and Operations Plan is to ensure that the Concessionaire has considered, trained, addressed, and planned for all potential natural and man-made disasters and established protocols, procedures, responsibilities and guidelines to mitigate the potential impacts and respond to and recover from the occurrence of a disaster event, in accordance with a written and approved Plan.

I.3.2. Responsibility of Concessionaire

The Concessionaire shall develop, write and carry out the Emergency Management and Operations Plan (EMOP), which consists of both the Emergency Management Manual (EMM) and Emergency Operation Plan (EOP) and all documents shall be consistent with all applicable Laws, codes and requirements governing emergency planning, response and recovery. The Emergency Management and Operations Plan is to be updated and submitted annually and shall receive Approval from the IFA as set forth herein, and, as appropriate, from all other Governmental authorities.

Whenever the Homeland Security Advisory System (HSAS) is raised to "orange" or "red", the Concessionaire shall have management personnel with decision making authority assigned to be personally present at the IFA designated Emergency Operations Center (911 Center) on a 24 hour per day, seven days per week basis until such threat level is reduced to "yellow" or the IFA determines that such staffing level is no longer required.

It is further understood that the Plans developed by the Concessionaire will be incorporated into the State of Indiana and local agencies' Emergency Operations Plan and accordingly will be required to be consistent with the published State of Indiana and local agencies' criteria to the extent possible notwithstanding the unique characteristics and needs of this asset.

All damages to the ITR caused by emergency situations, as addressed herein, are highly undesirable, and it is necessary to identify and prepare for damages when they render critical components of the ITR inoperable, weakened, or unsafe.

This Chapter includes a general outline of the proposed Plan. This outline is intended only to provide guidance in the preparation of the Concessionaire's Plan and shall be modified, revised or changed, as appropriate, to address specific issues, needs or concerns related to the ITR that develop over time.

I.3.3. Performance Time Frames

The following table establishes the minimum frequency the Emergency Management and Operation Plan (EMOP) is to be written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA.

Plan	Minimum Frequency of Occurrence
Emergency Management and Operations Plan (EMOP):	Once Yearly
Consisting of: Emergency Management Manual (EMM) & Emergency Operations Plan (EOP)	

I.3.4. Acceptance Criteria

The Emergency Management and Operations Plan (EMOP) will be considered acceptable for a particular year when the Plan has been written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA in accordance with the Operating Standards.

I.4. Emergency Management and Operations Plan Preparation Requirements

The following is a general outline of the Concessionaire's responsibilities that shall be included and addressed when creating the Emergency Management and Operation Plan. The outline is not intended to be all-inclusive, but rather, contains the minimum items that should be included and addressed in the Emergency Management and Operations Plan.

The Emergency Management and Operations Plan shall include provisions for annual and periodic updates, training and supervision of staff and adherence to all policies and procedures.

I.4.1. Introduction

This section is to contain a short introduction to the plan that includes a description of the persons or agencies involved in the preparation, the agency or individual who is charged with the implementation and maintenance of the plan and the overall goals and objectives of the Emergency Operations Plan (EOP). At a minimum, this section is to contain the following sub-sections:

- Purpose
- Scope and applicability
- The methodology used to develop and implement the EOP
- Updates to the methodology

I.4.2. Situation

This section shall provide an overview of the ITR, the hazards to which it is exposed, the planning assumptions upon which the Plan is based and the critical facilities required to carry out the plan. At a minimum, this section is to contain the following sub-sections:

I.4.2.1. ITR System Information

Facts and statistics of the System including:

- A plan view map of the system
- A general description of the location of the system
- A description of the geology and geography of the area
- A description of the meteorology of the area
- A description of the Concession and Lease Agreement

I.4.2.2. Hazard Analysis

A detailed hazard analysis of the ITR shall be conducted which shall include a detailed investigation and analysis of the natural and man-made hazards to which the ITR is exposed. It shall also contain a detailed listing of any major incidents that have historically impacted the ITR that required either a complete shut down of the ITR or resulted in an interruption of the revenue stream. The list shall address, at a minimum, the last ten (10) years of operations of the ITR. It shall also include a detailed hazard analysis table that summarizes the hazard exposures.

I.4.2.3 Vulnerability Analysis

A detailed all-hazards vulnerability analysis of the ITR that identifies: the specific hazards that are possible or likely to impact the ITR, the local area adjacent to the ITR, the level of visibility of the hazard, how critical the site is to the local area adjacent to the ITR, the financial impact to the ITR, the impact to nearby agencies, residential areas, commercial and industrial facilities, the accessibility of the ITR and the potential for mass casualties and the site population capacity.

I.4.2.4. Planning Assumptions

A statement indicating the basic planning assumptions upon which the plan is based. It should include lead times, effects of emergencies, when and how an emergency is to be declared, what outside assistance is available and the conditions under which an evacuation may be required.

I.4.2.5. Response Capabilities

A statement describing the current response and recovery capabilities of the Concessionaire. This statement shall summarize the basic capabilities both in-house and from outside sources to deal with response and recovery issues. It shall contain a general description of how resources are currently managed and deployed. It shall also identify shortfalls in response capabilities and strategies to resolve these shortfalls.

I.4.2.6. Critical Facilities

Concessionaire shall identify the critical facilities of the Concessionaire, providing the system name, address, contact person, property classification, primary emergency function, the secondary emergency function, the primary or normal use, the priority for power restoration and the emergency power requirements for each critical facility. A location map indicating the location of all critical facilities shall be included in this section. A detailed map and description of all critical facilities shall be included in the Appendices.

I.4.3. System Management Policies

In this section the Concessionaire shall address the current highway management policies and practices regarding the major factors that can have an impact on the operation of the ITR. Copies of all written policies and procedures are to be included in the Appendices. At a minimum, it shall contain a discussion of the following issues:

- Surveillance and Incident Detection
- Safety Patrols
- Facility Security
- Lane Use Control
- Ramp Control
- Information Dissemination
- Traffic Incident Management Procedures
- Control Center Operations
- Detours and existing alternative traffic routes for each ramp location
- Business Impact and Interruption
- The application of organization design standards for emergency management purposes
- The development of a Concept of Operations Plan (COOP) for recovery following a major incident

I.4.4. ITR Resources

This section shall contain a description of the resources that the ITR and the Concessionaire has available on a day-to-day basis and a listing of the outside resources that are available on an on-call or contract basis. At a minimum, it shall contain the following information:

I.4.4.1. Employee Lists

A complete employee list that includes name, address, telephone contact information, job title and bargaining unit (if applicable). An organization chart shall also be included.

I.4.4.2. Equipment Lists

A listing of all vehicles and equipment owned by the Concessionaire that includes at a minimum, the make, model, year, vehicle, identification number, a general description of the vehicle, the American Trucking Association or American Public Works Association description code, the approximate mileage and use under normal operating conditions.

I.4.4.3. Available Outside Resources

A listing of all outside equipment that is available on-call that includes all of the information listed in the previous paragraph, a 24-hour name and phone number for a principal and two backup contacts, and the approximate response time. An identical list shall be prepared for all firms and equipment currently under contract to the Concessionaire. Copies of all current support contracts are to be included in the Appendices.

I.4.5. Day- To-Day Functions and Responsibilities

This section shall identify and discuss the day-to-day functions and responsibilities of the Concessionaire. It should discuss, in detail, why, when and how the various responsibilities of the Concessionaire are organized and managed. At a minimum, it shall address the following:

- Routine facility surveillance and inspections
- Motorist Safety Patrols
- Facility security for all facilities and structures
- Emergency notification systems
- Traffic incidents/Traffic management
- Delivery of goods and services
- Documentation and recordkeeping

I.4.6. Basic Operations Plan Content

The Basic Operations Plan provides an overview of the Concessionaire's approach to emergency operations. It is intended to detail and describe the response organization and assign specific tasks to the agencies and organizations that may be involved in an incident. It shall be used to guide and direct the development of functional and hazard specific annexes that provide specific direction and responsibilities for various types and magnitudes of incident.

I.4.6.1 Forward

The EOP shall have a forward that contains introductory materials that enhances accountability and ease of use and includes:

- A document that is updated annually, signed and dated by the principal executive of the Concessionaire approving the Plan
- A register for recording changes and entering change dates
- A signature page providing signatory evidence that the highest ranking officials of all governmental departments and private sector organizations with assigned responsibilities, as appropriate, concur with the portions of the Plan applicable to the Concessionaire or entity they represent
- A distribution list of the Plan recipients, indicating whether full copies or specific portions of the Plan were distributed
- A table of contents listing all sections of the Plan
- Cataloging of copies of the EOP that have been provided to other agencies and date of distribution

I.4.6.2. Overview

The EOP shall have a Basic Plan Overview, detailing the agency's approach to emergency management that contains, at a minimum, a general-purpose statement of the EOP that also references information provided in other parts of the overall plan.

I.4.6.3. Concept of Operations

The EOP shall have a Concept of Operations section that describes the day-to-day operational issues of the agency. It shall explain the Concessionaire's overall approach to an emergency situation (i.e. what should happen, when and at whose direction). The EOP shall be written to be in compliance and consistent with the Incident Command System (ICS) and the National Management System (NIMS).

I.4.6.4. Organization and Assignments

The EOP shall have an Organization and Assignment of Responsibilities section that includes all individuals, departments, agencies and political subdivisions that may be involved in an emergency incident. It shall include, at a minimum:

- An Incident/Unified Command basic structure that graphically illustrates the command structure that is typically used for "routine" and "major" emergencies. It shall identify by position and/or job title those persons normally assigned to fill the various roles and have specific responsibilities under various emergency situations. This plan is not intended to be an iron-clad document, but rather provide general guidance and information on how various incidents will typically be managed.
- A general sequence of actions, before, during and after an emergency situation
- Who requests aid and under what conditions. Also, who has the authority to request and/or send aid to other agencies
- An explanation of the relationships (for purposes of emergency management) between the Concessionaire and the State of Indiana, seven counties, cities, towns and the other governmental agencies and entities as appropriate
- An introduction to other issues and concerns that may be dealt with more fully in the annexes
- An explanation of the organization, staffing, location and responsibilities of the Emergency Operations Center (EOC), and the conditions under which it shall be activated

I.4.6.5. Administration and Logistics

The EOP shall have an Administration and Logistics section that covers the general support requirements and the availability and support for all types of emergencies, as well as general policies for managing resources. This section should address, at a minimum:

- A reference to and listing of all current mutual aid agreements (Full copies are to be included in the Appendices)
- All general policies for managing resources
- Policies on:
  - Augmenting staff, if necessary
  - Reassignment of employees, if necessary
  - Financial record keeping
  - Reporting and tracking resource needs
  - Use of available resources
  - Acquiring ownership of resources

- Compensating owners of private property, when used by the Concessionaire

I.4.7. Functional Annex Requirements

Annexes are the parts of the EOP that begin to provide specific information and direction and shall focus on operations. They shall emphasize responsibilities, tasks and operational actions that pertain to the specific function. They shall also clearly define and describe the policies, processes, roles and responsibilities inherent in the various functions before, during and after any emergency situation.

At a minimum, the EOP shall include a functional annex that addresses how the agency will perform each of the following functions.

Each functional annex will be structured to be consistent with the Emergency Support Functions included in the Federal Response Plan and will individually address:

- The purpose of the function
- A description of the situations that trigger implementation of the function
- A description of the assumptions that apply to the function
- The concept of operations for the function
- Assignment of responsibility for annex maintenance, review and updating
- Additional requirements established by the Indiana Emergency Management Agency (IEMA) shall also be addressed.

Concessionaire shall develop and include in the an Emergency Support Function (ESF) matrix of primary and support functions. The Concessionaire shall include in ESF:

I.4.7.1. Direction and Control

The means the Concessionaire will use to direct and control activities during emergency situations.

I.4.7.2. Communications

How information is to flow between responders, the EOC and the IFA.

I.4.7.3. Warning/Emergency Information

How the public will be warned and instructed regarding actual or threatened hazards and emergencies through the public media and other means.

I.4.7.4. Public Information

The means, organization and process by which the Concessionaire will provide timely, accurate and useful information and instructions to ITR users, and impacted (or potentially impacted) residential, commercial and industrial parties, under or adjacent to, or near the ITR.

I.4.7.5. Disaster Intelligence/Damage Assessment

The means the Concessionaire will use to identify, collect, analyze and disseminate information on the extent and impact of the emergency situation.

I.4.7.6. Evacuation

An explanation of the manner in which the Concessionaire will manage, coordinate and conduct the evacuation of persons from the area believed to be at risk, when situations necessitate such action.

I.4.7.7. Mass Care

An explanation of the manner in which the Concessionaire will support and assist in mass care activities that are necessary to be provided as the result of an incident on the ITR.

I.4.7.8. Health and Medical

An explanation of the manner in which the Concessionaire will assist and support health and medical services in emergencies and disasters on or affecting the ITR.

I.4.7.9. Mortuary Services

An explanation of the manner in which the Concessionaire will assist and support in the collection, identification and care of human remains resulting from emergencies and disasters on or affecting the ITR.

I.4.7.10. Resource Management

An explanation of the manner in which the Concessionaire will manage the people, equipment, facilities, supplies and other resources to satisfy the needs generated by the disaster or emergency.

I.4.7.11. **Debris Clearance and Waste Management**

The plan shall indicate how the Concessionaire will manage and coordinate the clearance of debris to allow access by emergency response vehicles, collect and remove debris from an incident and how debris will be disposed. Special guidance should be included to address handling debris from a crime scene.

I.4.7.12. **Rapid Damage Assessment**

The plan shall indicate how the Concessionaire will conduct rapid damage assessments following a major incident including target timeframes and priorities.

I.4.8 Hazard Specific Annex Requirements

Hazard-specific annexes offer a means of extending functional annexes to address special and unique response procedures, notifications, protective actions and other needs generated by a specific hazard.

Hazard-specific annexes are supplements to the functional annexes and should not simply repeat the common planning considerations addressed in the functional annexes. The need for a hazard-specific annex will be determined as a result of the hazard and vulnerability assessments and the development of the functional annexes. Hazard-specific annexes shall follow the same structure and similar content as the Basic Plan and the Functional Annexes. There are, however, a number of specific and unique hazards to which the ITR is exposed due to its climate, location and profile.

At a minimum, the following specific hazards shall be addressed:

- Major Traffic Accidents and/or Incidents
- Hazardous Materials Incidents
- Radiological Incidents
- Terrorism Incidents
- Weather Related Events
  - Major Snow and Ice Conditions
  - Tornados
  - Flooding
  - High winds
- Railroad Incidents: Along the section of the ITR that is paralleled or crossed beneath the structure by passenger and freight rail facilities
- Structural Fires: In such structures under or adjacent to roadway bridge structures.
- Structural Failure: Any part of the ITR bridge structure
- Electrical Power Incidents: Along the ITR, NIPSCO Electrical lines and towers

- Other Utilities Incidents: Along the ITR, nitrogen and oxygen lines, petroleum lines

I.4.9. Recovery Annex Requirements

Following a major emergency or disaster, many critical issues and concerns will need to be addressed requiring coordinated efforts of the Concessionaire, the IFA and possibly local, state and federal governments.

The Recovery Annex is intended to address the methodology and processes that will be implemented during the recovery process and shall include, at a minimum the following issues:

- Identifies the agencies with responsibility for recovery efforts
- Establishes documentation and record keeping requirements following the Disaster
- Establishes financial, accounting and spending authorities
- Establishes the initial post disaster priorities and responsibilities (0-12 hours)
  - Preliminary damage assessment requires
    - Walk through or rapid damage assessment
    - Assessing economic injury
    - Damage survey reports
    - Written damage assessment document
    - Estimates of cost
  - Search and rescue and medical needs
  - Damage impact to critical facilities and structures
  - Establish Direction and Control
- Addresses human needs
- Develops and addresses Mitigation strategies

I.4.10. Training and Exercises

The success of the EOP depends to a large extent upon the level of training and preparedness of the Concessionaire and agencies identified for involvement in an incident.

This section shall identify and address a specific training program and exercise schedule for the Concessionaire. It shall address, at a minimum, the following:

- The types of training required for each employee and Concessionaire involved in a particular incident
- A specific annual training program and schedule for each employee identified
- Establish and implement an exercise program that provides both table-top and full scale training exercises based upon the potential hazards and vulnerabilities to which the ITR is exposed

I.4.11. Definitions

This section shall contain a complete listing of all definitions that are unique to the Emergency Management Section of the Plan. It will also contain a listing of commonly used federal acronyms and a glossary of terms.

I.4.12. References

This section shall contain a listing of Department of Homeland Security, Federal Emergency Management Agency, Indiana Emergency Management Agency, adjacent local agencies and IFA Reference Documents, Laws and regulations and their location. Complete copies of all documents are to be included in the Appendices.

I.4.13. Bibliography

This section shall contain a bibliography of the document, as applicable.

I.4.14. Appendices

All appendices referenced within the document shall be listed in a summary, indexed and tabbed.

I.4.15. Forms and Documentation Guidelines

This section shall contain copies of all forms and documentation guidelines currently in use by the Concessionaire. It shall contain copies of all applicable state/local agencies, DHS/FEMA and other applicable forms for use during and following emergencies.

CHAPTER J: ANNUAL STATE OF THE ITR AND CAPITAL IMPROVEMENT PROGRAM REPORTS

J.1. References

All stated references shall be the most current version or the document known to have succeeded or replaced the original stated herein:

- "National Bridge Inspection Standards", FHWA
- "Bridge Inspection Manual", INDOT
- "Bridge Inspector's Training Manual," FHWA
- "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges," FHWA
- "Manual for Condition Evaluation of Bridges", AASHTO
- "Standard Specifications for Highway Bridges," AASHTO
- "Guide Specifications for Fatigue Evaluation of Existing Steel Bridges", AASHTO
- "NCHRP Report 299: Fatigue Evaluation", NCHRP/FHWA
- "The Maintenance and Management of Roadways and Bridges", AASHTO
- "Sign Design Guide", INDOT
- "Standard Specifications", INDOT
- "Design Manuals, Consultant Bulletin Services, Design Memos", INDOT
- "Pavement Management Guidelines", INDOT
- "Pavement Condition Data Collection Guidelines", INDOT
- "Safety Guidelines for Bridge Inspection", INDOT
- "Work Zone Safety Manual", INDOT
- "2005 Annual Report", INDOT, Toll Road District
- "Traffic Monitoring Guide", FHWA publication FHWA-PL_01_021
- "Highway Capacity Manual", TRB

J.2. Policy for Annual State of the ITR and Capital Improvement Program Reports

J.2.1. Objective

Concessionaire shall develop, write and submit to the IFA Annual State of the ITR and Capital Improvement Program Reports. The objective of the Annual State of the ITR and Capital Improvement Program Reports is to protect the ITR by detecting and correcting weaknesses prior to failure. This objective shall be accomplished by the inspections, reports and requirements of this Chapter. The inspections and reports will provide the IFA current and accurate information on the condition and adequacy of the structures, infrastructure and Facilities within the ITR, in part or in whole. Further, the reports will provide a means of communication and assurance to the IFA that the ITR is adequately maintained and improved.

In addition, the performance of the bridge inspections and the filing of the reports will assist in fulfilling the State and Federal requirements stated in Title 23 Code of Federal Regulation, Section 650, commonly known as the National Bridge Inspection Standards (NBIS).

Also, the inspection and report process fulfills the following additional objectives:

- To update and submit the required biennial State and Federal reports for bridge structures
- To maintain the condition databases of the ITR Infrastructure
- To ensure that the ITR is safe for intended use
- To develop and prioritize specific maintenance, repair and/or rehabilitation work for the ITR bridges, roadways and facilities
- To forecast and plan for anticipated traffic congestion and develop measures to alleviate such projected traffic congestion.

J.2.2. Responsibility of Concessionaire

In order to meet the requirements of this Chapter, the Concessionaire shall engage in practices and measures that ensure that all inspections and reports are performed and completed accurately, professionally, independently and within the timeframes established in Section J.2.3. The work will be administered by the Concessionaire and shall meet the approval of the IFA.

The Concessionaire shall seek and retain an independent and licensed professional consulting engineering firm, not associated, owned or partnered with the Concessionaire, ("Engineering Firm") and an independent, nationally recognized traffic consultant not associated, owned or partnered with the Concessionaire ("Traffic Consultant") to perform the services indicated within this Chapter.

The qualifications of the team that will be performing the inspection and report work

("Inspection and Report Team") are stated in Section J.3.1 of this Chapter.

All bridge and structure inspection procedures and frequencies shall be in accordance with NBIS from Title 23 CFR, as required by INDOT or as amended within this Chapter, whichever is the most stringent. Inspection procedures shall be in accordance with the "Bridge Inspections Training Manual", FHWA, and the relevant approved methods of INDOT.

Inspection forms will include the latest INDOT formats that will need to be completed and submitted as required, and as stated in the requirements of Volume I - Maintenance Manual, Chapter F, "Bridge and Structure Maintenance".

The Concessionaire and the Engineering Firm are responsible for equipment, staffing, traffic control, outside testing services and supervision for all inspections. Material sampling and uncovering of encased members will be performed on a limited basis as recommended by the Engineering Firm.

The Engineering Firm and the Concessionaire are required to coordinate, pay for, and obtain all necessary permits and insurance required for the performance of the work, which may include the following:

- Railroad Right-of-Entry permit and flagging
- Railroad Protective and Marine Liability Insurance

The Concessionaire and the Engineering Firm shall perform the following:

- Perform biennial inspections of all ITR bridge structures and associated structures (See Section J.3.11 for a listing of the structures).
- Perform annual inspections of Fracture Critical Bridges (See Section J.3.8 for a listing of the structures).
- Perform a fatigue analysis for Fracture Critical Bridges and provide load ratings for all structures.
- Perform annual visual inspections of scour critical bridges. (See Section J.3.8. for a listing of structures).
- Perform pin or hinge inspections (5-year inspection cycle). (See Section J.3.8. for a listing of structures).
- Perform underwater inspections for scour and stability (5-year inspection cycle).
- Perform the Roadway Annual Inspection.
- Perform Architectural/Structural/Electrical/Mechanical/Civil inspections of the associated ITR facilities and infrastructure.
- Prepare, develop, and submit an Annual Capital Improvement Program Report that contains recommendations, schedules and capital improvement work that is planned for the upcoming year(s).

The Concessionaire and the Traffic Consultant shall conduct measurements of traffic volumes on the ITR and prepare annually a report setting forth current and forecasted traffic volume on the ITR. Forecasts of traffic growth shall be conducted on a planning

horizon of at least ten years. Traffic volumes shall be measured and reported annually including truck flows and sample weights. At a minimum traffic monitoring will be conducted within the guidelines established by the FHWA in the Traffic Monitoring Guide. The traffic volumes of the mainline between each interchange individually shall be reported in terms of Average Annual Daily Traffic and Average Annual Daily Truck Traffic as a minimum. Sample truck weight distributions shall be measured and reported in a format as determined by the IFA or its designee.

Three different components of the highway flow shall be examined annually within the planning horizon.

1. Basic freeway segment (definition: outside the influence of ramps and weaving areas).

2. Freeway Weaving Zones (definition: where crossing two or more traffic streams travel in the same direction).

3. Ramp Roadways including junction points, the ramp itself and the ramp-to-crossroad junction.

J.2.3. Performance Time Frames

The following table establishes the minimum frequency that a particular Report is to be written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA.

Report	Minimum Frequency of Occurrence
Bridge and Structure Condition Report	Once Every 2 Years
Underwater Condition Report	Once Every 5 Years
Fracture Critical Member Report	Once Yearly
Roadway Condition Report	Once Yearly
Facilities Condition Report	Once Every 4 Years
Treatment Plants	Once Every 2 Years
Capital Improvement Program Report	Once Yearly
Report on Current Traffic Volume and Ten Year Forecast of Traffic Growth	Once Yearly

J.2.4. Acceptance Standards

The Annual State of the ITR and Capital Improvement Reports will be considered acceptable for a particular year when each inspection has been completed by the Concessionaire; each required Condition Report has been written and updated by the Concessionaire based on the latest IFA Organizational Performance Index (OPI) requirements, submitted to the IFA, and approved by the IFA; and the Capital Improvement Program Report has been written and updated by the Concessionaire, submitted to the IFA, and approved by the IFA in accordance with the Operating Standards.

In order to receive approval by the IFA, the following standards shall be met or exceeded:

- All inspections have been performed in accordance with the requirement of this Chapter, and all required documentation and reports have been filed with the appropriate agency.
- The qualifications of the Engineering Firm conducting the inspections conform to the requirements of this Chapter and the Reference Documents, whichever is more stringent.
- Notification has been made to the IFA immediately when inspections determine that the ITR or one or more of its major components is at risk of a localized or large scale failure.
- No component, element, segment, feature, system, etc., of the ITR in part or in whole is considered to be unsafe or has the potential to become unsafe.

- The Concessionaire shall provide a statement and certification that ITR maintenance and operations conform to the guidelines and criteria stated in each Chapter of Volume I - Maintenance Manual and each required Plan of Volume II - Operations and Procedures Manual.
- The ITR shall be continually maintained in accordance with the requirements of Section J.3.11. of this Chapter.

J.3. Requirements for the Annual State of the ITR Condition Inspections and Report Submittals

J.3.1. Inspection and Report Team Qualification Requirements

ROLE	COLLEGE EDUCATION	EXPERIENCE	LICENSE/ CERTIFICATION	NOTES
Project Manager	B.S./B.A. (Minimum)	10 Years (Related)	P.E. (Minimum)	Previous experience with FHWA, NBIS and INDOT Inspection Programs
Structure Inspection Team Leader	B.S.C.E. (Minimum)	5 Years (Related)	P.E.	Previous experience on Highway or Railroad bridge structures and 10 day NBIS Qualification Course.
Fracture Critical Member Inspection Team Leader	B.S.C.E. (Minimum)	5 Years (Related)	P.E.	Previous experience on Fracture Critical bridge structures and Inspection of Fracture Critical Bridge Members NHI Qualification Course,
Underwater Structure Inspection Team Leader	High School Diploma (Minimum)	5 Years (Related)	Certified Diver	Previous experience on Highway or Railroad bridge structures
Roadway Inspection Team Leader	B.S.C.E.	10 Years (Related)	P.E.	Previous experience with Roadway/Civil Inspections
Facility Inspection Team Leader (By Discipline)	B.S. (By Discipline)	10 Years (Related)	P.E. (By Discipline)	Previous experience with Facility and Building Inspections
	BA		AIA	
Inspection Team Members	High School Diploma Minimum	5 Years (Related)	N/A	Previous experience on Highway or Railroad bridge structures.
Structure Evaluation Rating Engineer	B.S. (Minimum)	5 Years (Related)	EIT Minimum P.E. Preferred	10 Day NBIS Qualification Course

J.3.2. Independent Professional Consulting Engineering Firm

The Engineering Firm shall be a registered and licensed Professional Design Firm within the State of Indiana. In order to maintain true independent inspections and reports, the Engineering Firm shall not be teamed, owned or partnered with the Concessionaire or be an affiliate of the Concessionaire. The Concessionaire shall engage firms that have exhibited experience with the kinds of structures and conditions within the ITR, and that meet all of the requirements of this Chapter.

The same Engineering Firm can be retained for a four-year duration with the possibility of one four-year extension at the discretion of the Concessionaire and the IFA, based on performance. Any agreement between the Concessionaire and the Engineering Firm shall provide that the agreement can be terminated by the IFA. At the end of the term of Concessionaire's agreement with the Engineering Firm, as extended, if applicable, the Concessionaire shall advertise for the opportunity to become the new Engineering Firm providing the required services for the ITR. Concessionaire shall retain the most qualified Engineering Firm. A previous Engineering Firm may re-apply to become the Engineering Firm. The IFA shall approve the Engineering Firm on an annual basis, and retains the right to dismiss firms that do not meet the requirements of this Chapter. The Concessionaire shall also annually submit the names, resumes and qualifications of the specific Inspection and Report Team members to the IFA for approval.

J.3.3. Project Management

A senior engineer, serving as Project Manager, shall direct the Inspection Program, review results for conformance with FHWA and INDOT requirements and provide Program Management. The Management Program shall include the following elements:

- Training, mobilization and support of field crews
- Development of inspection schedules and updates, assignments, team scheduling
- Meetings with the Concessionaire, and if required, with other departments of transportation
- Major equipment coordination
- Ongoing coordination with the Concessionaire
- Field reviews of inspection teams
- Field inspection of critical elements
- Inspection form review and submittal
- Bridge database coordination

J.3.4. Mobilization

The Concessionaire shall meet the following requirements:

J.3.4.1 Plan Review

Prior to commencement of the fieldwork, the latest report of inspection information for each structure shall be reviewed by the Engineering Firm. A location map, and a general plan and elevation drawing of the structure shall be provided to each field crew. A review shall be made of the critical elements and anticipated problems that will be encountered in performing the inspection.

J.3.4.2. Site Inspections

A variety of physical conditions and other factors may affect the manner in which site inspection is undertaken. Rail traffic and vehicular traffic will affect the scheduling and equipment needs of the inspection. All permits, insurance and/or access requirements shall be procured by the Concessionaire and the Engineering Firm.

J.3.4.3. Equipment

The Concessionaire and the Engineering Firm shall furnish each field crew with equipment for conducting the inspections. Among these, to the extent necessary, are measuring tapes, chipping hammers, hand tools, ladders, portable lights, cellular phones/pagers, auto-focus cameras (with time and date recorder), traffic vests, traffic cones, arrow-boards, traffic barriers, air-handling equipment for work in enclosed spaces. watercraft, barges, personnel vehicles, man-lifts, bucket-trucks and snoopers. Equipment shall be acquired by the Concessionaire and/or the Engineering Firm.

J.3.4.4. Field Team Orientation

The Engineering Firm shall conduct orientation meetings to train and standardize the field teams.

J.3.5. Safety Manual

Multiple crews performing inspection work throughout the ITR require a consistent safety format for the performance of the work. The INDOT Work Zone Safety Manual establishes the minimum requirements for the performance of the work that will be expected of each team.

The Engineering Firm shall use the Work Zone Safety Manual described above as a basis and compose a complete Safety Manual to be implemented as part of its work. The Manual shall be used to train and monitor crews performing this work. All crews shall be trained in the use of the equipment required by the particular inspection and condition. Safety will be the responsibility of the Engineering Firm. A truck with an arrow board shall be used when personnel are working in or adjacent to traffic. The Concessionaire shall secure required Permits from appropriate agencies.

J.3.6. Bridge, Roadway and Facilities Condition Inspections

The Engineering Firm shall develop a schedule for the annual inspection of the entire ITR infrastructure consisting of roadway, bridges, civil, architectural, electrical and mechanical elements. The Concessionaire will review and approve the final schedule and may alter the schedule to meet its needs.

Field teams shall consist of either two-person or three-person crews, depending upon the type and location of the inspection work. The number of teams is to be dictated by the need to complete all of the inspections.

Traffic control shall be provided by the Engineering Firm and the Concessionaire, when required to protect inspection crews and ITR users. The Concessionaire and the Engineering Firm shall procure all necessary rights-of-entry and protective liability insurance, and arrange for all flagging.

The Engineering Firm shall perform inspections using aerial bucket trucks, snooper trucks or ladders to gain access for close, visual inspection. The Engineering Firm shall use portable lighting to provide necessary illumination. Portable air handling units shall be utilized for all inspections of vaulted abutments.

J.3.6.1. Biennial Bridge Structure Inspections

The biennial bridge inspections shall include supervision and execution of the intermediate level bridge inspection. The inspections shall involve visual observations by approved and experienced bridge engineers and at times may require detailed bridge condition surveys.

J.3.6.2. Annual Roadway Inspections

The annual roadway inspections will be a visual inspection of the earth embankments and retaining walls along the ITR, the pavement and shoulders, bridge approach pavements, drainage system, fencing, landscaping, median barrier, guardrails and railings, signage, sign structures and pavement markings.

An annual inspection of the ITR lighting shall be performed during both daylight hours and during the night. The roadway lighting inspection team shall be accompanied by the Concessionaire to provide access to roadway lighting control cabinets.

J.3.6.3. Facilities and Treatment Plant Inspections

Civil Engineers, Structural Engineers, Mechanical Engineers, Electrical Engineers and Architects shall perform a detailed visual inspection of all the facilities as outlined in Section J.2.3. The facilities inspection team shall be accompanied by the Concessionaire to provide access to all areas of the facilities and equipment.

J.3.7. Underwater Inspections

Bridges with underwater elements shall have a separate and independent underwater inspection performed on them not less than once every 5 years. Elements determined to be susceptible to the effects of scour and erosion shall be inspected at a greater frequency as determined by the Concessionaire's Engineering Firm.

Underwater inspections shall be performed by certified divers who have been trained to identify structural, scour and instability defect characteristics, and shall be under the direct supervision of a Licensed Professional Engineer licensed in the State of Indiana.

TABLE J.3.8.1
Structures Requiring Fracture Critical Inspection

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
045850	1A-1	US 12, US 20, & US 41	I90-45-01A-1	0.08
046480	9-1 EBL	SR 53, 2 STS & EJ&E RR	I90-45-009-1EBL	14.54
046490	9-1 WBL	SR 53, 2 STS & EJ&E RR	I90-45-009-1WBL	14.54
047690	28-1 EBL	ST. JOSEPH RIVER	I90-71-028-1EBL	75.97
047700	28-1 WBL	ST. JOSEPH RIVER	I90-71-028-1WBL	75.97

TABLE J.3.8.2
Structures Requiring Underwater Inspection

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
046190	5-2 EBL	GR CALUMET RIV,DR, 2 RR	I90-45-005-2EBL	6.56
046200	5-2 WBL	GR CALUMET RIV,DR, 2 RR	I90-45-005-2WBL	6.56
046296	10(02)WX	GRAND CALUMET RIVER	I90-45-10-02WX	10.16
046295	10(03)EX	I-90,GR CALUMET RIV & RR	I90-45-10-03EX	10.15
046294	10(04)EN	GRAND CALUMET RIVER	I90-45-10-04EN	10.06
046293	10(05)WN	GR CALUMET RIV & EJ&E RR	I90-45-10-05WN	10.05
047690	28-1 EBL	ST. JOSEPH RIVER	I90-71-028-1EBL	75.97
047700	28-1 WBL	ST. JOSEPH RIVER	I90-71-028-1WBL	75.97
048120	36-1 EBL	CR 25 & ST JOE RIVER	I90-20-036-1EBL	100.14
048130	36-1 WBL	CR 25 & ST JOE RIVER	I90-20-036-1WBL	100.14

TABLE J.3.8.3 Structures Requiring Pin Or Hinge Inspections

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
046190	5-2 EBL	GR CALUMET RIV,DR, 2 RR	I90-45-005-2EBL	6.56
046200	5-2 WBL	GR CALUMET RIV,DR, 2 RR	I90-45-005-2WBL	6.56
046430	9-8	GRAND CALUMET RIVER	I90-45-009-8	13.50
046420	9-7	GRAND CALUMET RIVER	I90-45-009-7	13.50
046480	9-1 EBL	SR 53, 2 STS & EJ&E RR	I90-45-009-1EBL	14.54
046490	9-1 WBL	SR 53, 2 STS & EJ&E RR	I90-45-009-1WBL	14.54

J.3.9. Monitoring Critical Structures

Structures with a Condition Rating of 2 or less are defined as Critical Structures, and the frequency of monitoring shall be every 6 months for each structure unless a more frequent inspection is recommended as being necessary by the Engineering Firm.

J.3.10. Report and Form Submission Requirements

J.3.10.1. Bridge Inspection Forms

The INDOT bridge inspection forms are to be completed and submitted to the IFA as described in Volume I Maintenance Manual, Chapter F, "Bridge and Structure Maintenance".

Structure data will be compiled on structure inventory and appraisal (SI&A) sheets in accordance with the National Bridge Inspection Standards developed by the FHWA.

Inspection forms that in the sole and absolute discretion of the IFA are incomplete, do not show sound analysis of the conditions, or do not contain sufficient detail to track problems, will be returned to the Concessionaire for revision.

J.3.10.2. Condition Reports

The Concessionaire and the Engineering Firm shall submit to the IFA, Bridge and Structure, Roadway and Facilities Condition Reports as defined by the requirements of this Chapter. In addition, the Concessionaire and the Engineering Firm shall submit to the IFA Fracture Critical and Underwater Inspection Reports, as well as Pin or Hinge Inspection Reports on a one-year and five-year basis respectively, as defined by the requirements of this Chapter. The following requirements shall be addressed in such Reports:

- The Concessionaire shall submit to the IFA one (1) copy of each Report and all applicable sets of Inspection Forms (including color reproductions of all photographs). These Reports shall be collated, by bridge number, Facility, and roadway feature, into tabbed three ring binders with indexes.
- Changes in conditions shall be noted in a General Condition and Rating Summary for all Bridges, Roadway and Facilities features, and prepared in a spreadsheet format. For bridge structures the summary shall contain overall ratings for the decks and the Superstructure and Substructure elements.

- A draft of each Report shall be submitted to the IFA for review prior to finalization, after which the final version of each Report shall be submitted to the IFA for approval by the IFA.

J.3.10.3. Capital Improvement Program Report

Upon approval of the Bridge and Structure, Roadway and Facilities Condition Reports by the IFA each year, the Concessionaire and the Engineering Firm shall compose and submit to the IFA the Annual Capital Improvement Program Report, within two (2) months. This Report will define and describe the planned rehabilitation, replacement and reconstruction capital improvement work scheduled to be addressed and completed in the next year, and planned for future years, based upon the inspections and Condition Report findings. The following are the requirements that shall be addressed:

- The Concessionaire shall prepare and submit to the IFA, four (4) copies of the Annual Capital Improvement Program Report, which shall include the following at a minimum:
  - Executive Summary
  - Introduction and discussion of the inspections and Condition Report findings
  - Approach and Methodology
  - Recommendations and Planned Capital Improvement Work
  - Program Schedule
- A draft of the Report shall be submitted to the IFA for review prior to finalization, after which the final version of the Report shall be submitted to the IFA for approval by the IFA.

J.3.11. Criteria of Review and Acceptance

In assessing the condition of the ITR, the Concessionaire and the Engineering Firm shall use sound engineering judgment. In particular, all components, elements, features, systems, etc. that are deemed unsafe or possess the potential to become unsafe shall be clearly identified and noted.

The Concessionaire and the Engineering Firm shall be aware that the IFA will review and approve the Annual Condition Reports and the Annual Capital Improvement Program Report taking into account the requirements stated throughout each individual Chapter of the Operating Standards, the requirements of this Chapter, common industry acceptance criteria, and the condition classification stated below.

The IFA will assess the Condition Reports utilizing the following condition classification terminology to describe the condition of the ITR elements. The terminology is generally consistent with the Record and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges, December 1995 published by the U.S. Department of Transportation/Federal Highway Administration and the INDOT Bridge Inspection Manual.

The Concessionaire shall maintain (or perform the necessary and required Capital Improvement work to maintain) the overall condition of each of the ITR Bridges, Structures, Roadway and Facilities features at "Good" or better. In addition, the Concessionaire shall maintain the condition of each particular item of each ITR Bridge, Structure, Roadway and Facility feature at "Fair" or better, provided, however, that when the overall condition of any particular ITR Bridge, Structure, Roadway or Facility feature declines from "Good" to "Fair", that ITR feature shall be placed in the next Annual Capital Improvement Program Report (as approved by the IFA) with a designation and general description of the work to be performed. The duration that a ITR feature can remain in the Capital Improvement Program shall not exceed ten (10) years from the time such feature is placed in the Program until that feature is brought back to a condition of "Good" or better. In addition, all features (as well as all of the particular items of that feature) placed in the Capital Improvement Program, shall continually be maintained in accordance with the guidelines and criteria of Volume I - Maintenance Manual, the required Plans of Volume II - Operations & Procedure Manual and the latest IFA Guidelines for Organizational Performance Index (OPI) as outlined in the 2005 Annual Report.

The definitions of the condition terms are as follows:

Excellent: New condition. No noticeable or noteworthy deficiencies affecting the condition or function of the elements noted.

Good: Minor deficiencies noted. The element is satisfactorily performing its intended function. No corrective repairs or rehabilitation are required.

Fair: Deficiencies and deterioration present. All primary elements are sound and are satisfactorily performing their intended function. However, the potential exists to justify an improvement program or corrective work.

Poor: Advanced deterioration present. Primary structural elements are seriously affected and are not satisfactorily performing their intended function. An accelerated improvement program and/or immediate corrective work are required.

Critical: Major deterioration of primary elements. These elements are not performing adequately and require urgent corrective work or total replacement. These elements require regular, continual monitoring until corrective action is completed.

J.3.12. ITR Structure Inventory List

TABLE J.3.12.1
ITR STRUCTURE INVENTORY LIST

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
045850	1A-1	US 12, US 20, & US 41	I90-45-01A-1	0.08
045870	1A3-1	108 TH STREET	I90-45-1A3-1	0.10
045880	1A3-2 EBL	108 TH STREET	I90-45-1A3-2EBL	0.34
045890	1A3-2 WBL	108 TH STREET	I90-45-1A3-2WBL	0.34
045900	1-2 EBL	112 TH STREET	I90-45-001-2EBL	0.81
045910	1-2 WBL	112 TH STREET	I90-45-001-2WBL	0.81
045920	1-3 EBL	IND HARBOR BELT RR	I90-45-001-3EBL	1.56
045930	1-3 WBL	IND HARBOR BELT RR	I90-45-001-3WBL	1.56
045940	1-4 EBL	WOLF LAKE	I90-45-001-4EBL	2.14
045950	1-4 WBL	WOLF LAKE	I90-45-001-4WBL	2.14
045960	2-1 EBL	129 TH STREET	I90-45-002-1EBL	2.97
045970	2-1 WBL	129 TH STREET	I90-45-002-1WBL	2.97
045980	2-2 EBL	IND HARBOR BELT RR	I90-45-002-2EBL	3.29
045990	2-2 WBL	IND HARBOR BELT RR	I90-45-002-2WBL	3.29
045977	03(04)ML	I-90, IHB RR, & AVENUE	912)90-45-03-04ML	3.34
045975	03(03)WN	SHEFFIELD AVENUE	912)90-45-03-03WN	0.55
045973	03(02)RR	IND HARBOR BELT RR	912)90-45-03-02RR	0.13
033021	6603J EBL	US 41 (CALUMET AVE)	912-45-06603EBL	0.81
033022	6603J WBL	US 41 (CALUMET AVE)	912-45-06603JWBL	0.81
046000	2-3 EBL	SHEFFIELD AVENUE	I90-45-002-3EBL	3.52
046010	2-3 WBL	SHEFFIELD AVENUE	I90-45-002-3WBL	3.52
046020	2-4 EBL	US 41 (CALUMET AVE)	I90-45-002-4EBL	4.18
046030	2-4 WBL	US 41 (CALUMET AVE)	I90-45-002-4WBL	4.18
046040	2-5	I-90	I90-45-002-5	4.60
046050	4-1 EBL	HUEHN STREET	I90-45-004-1EBL	4.99
046060	4-1 WBL	HUEHN STREET	I90-45-004-1WBL	4.99
046070	4-2 EBL	GOSTLIN STREET	I90-45-004-2EBL	5.15
046080	4-2 WBL	GOSTLIN STREET	I90-45-004-2WBL	5.15
046090	4-3 EBL	COLUMBIA AVENUE & 2 RR	I90-45-004-3EBL	5.35
046100	4-3 WBL	COLUMBIA AVENUE & 2 RR	I90-45-004-3WBL	5.35
046110	4-5 EBL	SR 312 (CHICAGO ST.)	I90-45-004-5EBL	5.49
046120	4-5 WBL	SR 312 (CHICAGO ST.)	I90-45-004-5WBL	5.49
046130	4-6 EBL	HOFFMAN STREET	I90-45-004-6EBL	5.74
046140	4-6 WBL	HOFFMAN STREET	I90-45-004-6WBL	5.74
046150	4-7 EBL	149 TH STREET	I90-45-004-7EBL	5.90
046160	4-7 WBL	149 TH STREET	I90-45-004-7WBL	5.90
046170	5-1 EBL	150 TH STREET	I90-45-005-1EBL	6.04

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
046180	5-1 WBL	150 TH STREET	I90-45-005-1WBL	6.04
046190	5-2 EBL	GR CALUMET RIV,DR, 2 RR	I90-45-005-2EBL	6.56
046200	5-2 WBL	GR CALUMET RIV,DR, 2 RR	I90-45-005-2WBL	6.56
046210	6-1 EBL	US 20, SR 152 (INDY BLV)	I90-45-006-1EBL	7.00
046220	6-1 WBL	US 20, SR 152 (INDY BLV)	I90-45-006-1WBL	7.01
046230	6-2 EBL	NIPSCO ACCESS ROAD	I90-45-006-2EBL	7.52
046240	6-2 WBL	NIPSCO ACCESS ROAD	I90-45-006-2WBL	7.52
046250	6-3 EBL	KENNEDY AVENUE & CONRAIL	I90-45-006-3EBL	8.01
046260	6-3 WBL	KENNEDY AVENUE & CONRAIL	I90-45-006-3WBL	8.01
046270	7-1A	I-90	I90-45-07-1A	9.51
046280	7-5 EBL	EJ&E RAILWAY	I90-45-007-5EBL	10.01
046290	7-5 WBL	EJ&E RAILWAY	I90-45-007-5WBL	10.01
046275	10(01) EBL	EJ&E RAILWAY	I90-45-10-01RREBL	9.86
046276	10(01) WBL	EJ&E RAILWAY	I90-45-10-01RRWBL	9.86
046296	10(02)WX	GRAND CALUMET RIVER	I90-45-10-02WX	10.16
046295	10(03)EX	I-90,GR CALUMET RIV & RR	I90-45-10-03EX	10.15
046294	10(04)EN	GRAND CALUMET RIVER	I90-45-10-04EN	10.06
046293	10(05)WN	GR CALUMET RIV & EJ&E RR	I90-45-10-05WN	10.05
046297	10(06)ML EBL	I-90 EBL	I90-45-10-06MLEBL	10.20
046298	10(06)ML WBL	I-90 WBL	I90-45-10-06MLWBL	10.20
046291	10(07) EBL	EJ&E RAILWAY	I90-45-10-07RREBL	10.02
046292	10(07) WBL	EJ&E RAILWAY	I90-45-10-07RRWBL	10.02
046300	8-2 EBL	DURBIN STREET	I90-45-008-2EBL	11.23
046310	8-2 WBL	DURBIN STREET	I90-45-008-2WBL	11.23
046320	8-3 EBL	US 12, RIV. DR & 2 RR	I90-45-008-3EBL	11.55
046330	8-3 WBL	US 12, RIV. DR & 2 RR	I90-45-008-3WBL	11.55
046340	8-5 EBL	GRAND CALUMET RIVER	I90-45-008-5EBL	12.27
046350	8-5 WBL	GRAND CALUMET RIVER	I90-45-008-5WBL	12.27
046360	8-6 EBL	ABANDONED ROAD TO USS	I90-45-008-6EBL	12.46
046370	8-6 WBL	ABANDONED ROAD TO USS	I90-45-008-6WBL	12.46
046380	8-7 EBL	BRIDGE STREET	I90-45-008-7EBL	12.70
046390	8-7 WBL	BRIDGE STREET	I90-45-008-7WBL	12.70
046430	9-8	GRAND CALUMET RIVER	I90-45-009-8	13.50
046420	9-7	GRAND CALUMET RIVER	I90-45-009-7	13.50
046400	9-6	I-90	I90-45-009-6	13.30
046410	9-5	BUCHANAN STR. + RAMP F	I90-45-009-5	13.69

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
046440	9-4 EBL	BUCHANAN STREET & RAMPS	I90-45-009-4EBL	13.68
046450	9-4 WBL	BUCHANAN STREET & RAMPS	I90-45-009-4WBL	13.68
046460	9-3 EBL	GRAND CALUMET RIVER	I90-45-009-3EBL	13.86
046470	9-3 WBL	GRAND CALUMET RIVER	I90-45-009-3WBL	13.86
046480	9-1 EBL	SR 53, 2 STS & EJ&E RR	I90-45-009-1EBL	14.54
046490	9-1 WBL	SR 53, 2 STS & EJ&E RR	I90-45-009-1WBL	14.54
046500	10-7 EBL	TENNESSEE STREET	I90-45-010-7EBL	15.34
046510	10-7 WBL	TENNESSEE STREET	I90-45-010-7WBL	15.34
046527	10-1T	TAYLOR ROAD	I90-45-10-1T	16.22
046530	10-2 EBL	US 12/20, 2 RR & ROAD	I90-45-010-2EBL	16.24
046540	10-2 WBL	US 12/20, 2 RR & ROAD	I90-45-010-2WBL	16.24
046550	10-3	US 12 & 20	I90-45-010-3	16.39
046560	10-4	I-90 to I-65 RAMP 'H'	I90-45-010-4	16.53
046570	10-5 EBL	I-65 RAMPS 'G' AND 'H'	I90-45-010-5EBL	16.53
046580	10-5 WBL	I-65 RAMPS 'G' AND 'H'	I90-45-010-5WBL	16.53
046582	10-5.5	I-90 to I-65 RAMP 'H'	(I65)I90-45-010-5.5	16.53
046590	10-6	I-90	I90-45-010-6	16.90
046600	10A-1	I-90	I90-45-10A-1	17.07
046610	11-1	I-90	I90-45-011-1	18.06
046620	11-2 EBL	CLAY STREET	I90-45-011-2EBL	18.40
046630	11-2 WBL	CLAY STREET	I90-45-011-2WBL	18.40
046640	11-3	I-90	I90-45-011-3	19.05
046650	11-4 EBL	HOBART ROAD	I90-45-011-4EBL	19.98
046660	11-4 WBL	HOBART ROAD	I90-45-011-4WBL	19.98
046670	11-5 EBL	SR 51 (RIPLEY ST)	I90-45-011-5EBL	20.30
046680	11-5 WBL	SR 51 (RIPLEY ST)	I90-45-011-5WBL	20.30
045820	5262B EBL	I-94	(I90)I80-15-05262BEB	20.74
045840	5263B	BURNS DITCH	(I90)I80-15-05263B	20.74
046690	BHX-B	I-90 + RAMP D	I90-45-BHX-B	20.66
046700	BHX-A	I-90	I90-45-BHX-A	20.68
046710	12-1 EBL	BURNS DITCH	I90-45-012-1EBL	21.13
046720	12-1 WBL	BURNS DITCH	I90-45-012-1WBL	21.13
046730	13-2	I-90	I90-64-013-2	21.93
046740	13-3 EBL	CONRAIL	I90-64-013-3EBL	22.54
046750	13-3 WBL	CONRAIL	I90-64-013-3WBL	22.54
046760	13-5 EBL	CRUIKSHANK ROAD	I90-64-013-5EBL	22.80
046770	13-5 WBL	CRUIKSHANK ROAD	I90-64-013-5WBL	22.80
046780	13-6	I-90	I90-64-013-6	23.56

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
046785	23(01)ML	I-90	I90-64-23-01ML	23.75
046790	14-1 EBL	HAMSTROM ROAD-525W	I90-64-014-1EBL	24.32
046800	14-1 WBL	HAMSTROM ROAD	I90-64-014-1WBL	24.32
046810	14-3 EBL	CENTRAL AVENUE (CR 975N)	I90-64-014-3EBL	25.04
046820	14-3 WBL	CENTRAL AVENUE (CR 975N)	I90-64-014-3WBL	25.04
046830	14-4 EBL	PRAIRIE-DUNELAND BIKE TR	I90-64-014-4EBL	25.09
046840	14-4 WBL	PRAIRIE-DUNELAND BIKE TR	I90-64-014-4WBL	25.09
046850	14-6 EBL	SAMUELSON RD-CR 450W	I90-64-014-6EBL	25.26
046860	14-6 WBL	SAMUELSON RD-CR 450W	I90-64-014-6WBL	25.26
046870	14-5	I-90	I90-64-014-5	25.78
046880	15-1 EBL	SALT CREEK	I90-64-015-1EBL	26.46
046890	15-1 WBL	SALT CREEK	I90-64-015-1WBL	26.46
046900	15-2 EBL	SR 149	I90-64-015-2EBL	26.82
046910	15-2 WBL	SR 149	I90-64-015-2WBL	26.82
046920	15-3 EBL	CSX RR	I90-64-015-3EBL	26.98
046930	15-3 WBL	CSX RR	I90-64-015-3WBL	26.98
046940	15-4 EBL	BABCOCK ROAD	I90-64-015-4EBL	27.91
046950	15-4 WBL	BABCOCK ROAD	I90-64-015-4WBL	27.91
046960	15-5	I-90	I90-64-015-5	28.41
046970	15-8	I-90	I90-64-015-8	29.42
046980	16-1	I-90	I90-64-016-1	29.94
046990	16-2	I-90	I90-64-016-2	30.76
047010	16-5	I-90	I90-64-016-5	31.99
047020	16-8 EBL	SATTLEY RD-250W	I90-64-016-8EBL	32.49
047030	16-8 WBL	SATTLEY RD-250W	I90-64-016-8WBL	32.49
047040	17-1 EBL	JACKSON CTR HWY-200E	I90-64-017-1EBL	33.50
047050	17-1 WBL	JACKSON CTR HWY-200E	I90-64-017-1WBL	33.50
047060	17-2 EBL	COUNTY ROAD 400E	I90-64-017-2EBL	34.01
047070	17-2 WBL	COUNTY ROAD 400E	I90-64-017-2WBL	34.01
047080	17-4	I-90	I90-64-017-4	35.57
047110	17-7	I-90	I90-64-017-7	37.19
047130	18-3	I-90	I90-46-018-3	38.45
047140	18-4	I-90	I90-46-018-4	38.83
032480	18-5	I-90 (TOLL ROAD)	(421)I90-46-018-5	39.01
047160	18-6	I-90	I90-46-018-6	39.99
047170	18-7 EBL	CONRAIL	I90-46-018-7EBL	40.86
047180	18-7 WBL	CONRAIL	I90-46-018-7WBL	40.86
047190	18-8	I-90	I90-46-018-8	41.77

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
047200	19-1 EBL	ROAD 700 WEST	I90-46-019-1EBL	42.60
047210	19-1 WBL	ROAD 700 WEST	I90-46-019-1WBL	42.60
047220	19-2	I-90	I90-46-019-2	43.26
047230	19-3	I-90	I90-46-019-3	43.89
047240	19-4 EBL	PINOLA ROAD	I90-46-019-4EBL	45.04
047250	19-4 WBL	PINOLA ROAD	I90-46-019-4WBL	45.04
047260	19-5	I-90	I90-46-019-5	46.30
047270	20-1 EBL	US 35	I90-46-020-1EBL	47.49
047280	20-1 WBL	US 35	I90-46-020-1WBL	47.49
047290	20-2 EBL	CONRAIL & CSX RR	I90-46-020-2EBL	48.19
047300	20-2 WBL	CONRAIL & CSX RR	I90-46-020-2WBL	48.19
047310	20-3 EBL	SR 39	I90-46-020-3EBL	48.90
047320	20-3 WBL	SR 39	I90-46-020-3WBL	48.90
047330	20-4	I-90	I90-46-020-4	49.32
047340	21-1 EBL	COUNTY ROAD 100 WEST	I90-46-021-1EBL	50.03
047350	21-1 WBL	COUNTY ROAD 100 WEST	I90-46-021-1WBL	50.03
047360	21-2 EBL	RANGE & ROSS ROAD	I90-46-021-2EBL	51.07
047370	21-2 WBL	RANGE & ROSS ROAD	I90-46-021-2WBL	51.07
047380	21-3	I-90	I90-46-021-3	52.08
047400	22-1	I-90	I90-46-022-1	53.37
047410	22-2	I-90	I90-46-022-2	54.58
047420	22-3	I-90	I90-46-022-3	56.31
047430	22-4 EBL	CSS & SB RR	I90-46-022-4EBL	56.91
047440	22-4 WBL	CSS & SB RR	I90-46-022-4WBL	56.91
047450	23-1	I-90	I90-46-023-1	57.50
047460	23-2 EBL	HUNTS ROAD	I90-46-023-2EBL	58.56
047470	23-2 WBL	HUNTS ROAD	I90-46-023-2WBL	58.56
047480	23-3	I-90	I90-46-023-3	59.67
047490	23-4	I-90	I90-46-023-4	61.30
047500	24-AEBL	COUNTY ROAD 900 EAST	I90-46-024-AEBL	61.83
047510	24-AWBL	COUNTY ROAD 900 EAST	I90-46-024-AWBL	61.83
047520	24-B	I-90	I90-71-024-B	62.83
047530	24-C	I-90	I90-71-024-C	63.66
047540	25-A	I-90	I90-71-025-A	65.96
047550	25-BEBL	TAMARACK ROAD	I90-71-025-BEBL	67.07
047560	25-BWBL	TAMARACK ROAD	I90-71-025-BWBL	67.07
047570	25-CEBL	SYCAMORE ROAD	I90-71-025-CEBL	68.08
047580	25-CWBL	SYCAMORE ROAD	I90-71-025-CWBL	68.08
047590	26-A	I-90	I90-71-026-A	69.96
047600	26-B	I-90	I90-71-026-B	70.48
047610	26-C	I-90	I90-71-026-C	71.69

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
010217	6792	US 31	031-71-06792	72.36
047620	WX-1	I-90	I90-71-0WX-1	72.45
047640	27-ANBL	I-90	I90-71-027-ANBL	74.67
047650	27-ASBL	I-90	I90-71-027-ASBL	74.66
047660	27-B	I-90	I90-71-027-B	74.96
047670	27-CEBL	RIVERSIDE DRIVE	I90-71-027-CEBL	75.80
047680	27-CWBL	RIVERSIDE DRIVE	I90-71-027-CWBL	75.80
047690	28-1 EBL	ST. JOSEPH RIVER	I90-71-028-1EBL	75.97
047700	28-1 WBL	ST. JOSEPH RIVER	I90-71-028-1WBL	75.97
047710	29-1 EBL	RAMP TO I-90(SOUTH BEND)	I90-71-029-1EBL	76.56
047720	29-1 WBL	RAMP FROM I-90 (S. BEND)	I90-71-029-1WBL	76.56
047750	29-2 EBL	MCCOMBS ST & ABAN. RR	I90-71-029-2EBL	76.71
047760	29-2 WBL	MCCOMBS ST & ABAN. RR	I90-71-029-2WBL	76.71
047770	29-4 EBL	SR 933	I90-71-029-4EBL	76.84
047780	29-4 WBL	SR 933	I90-71-029-4WBL	76.84
047790	29-7 EBL	JUNIPER ROAD	I90-71-029-7EBL	77.72
047800	29-7 WBL	JUNIPER ROAD	I90-71-029-7WBL	77.72
047805	30-1 SBL	I-90	I90-71-030-1SBL	78.69
047810	30-1 NBL	I-90	I90-71-030-1NBL	78.70
047820	30-2 EBL	SR 23 (EDWARDSBURG)	I90-71-030-2EBL	79.76
047830	30-2 WBL	SR 23 (EDWARDSBURG)	I90-71-030-2WBL	79.76
047840	30-3 SBL	I-90	I90-71-030-3SBL	80.21
047845	30-3 NBL	I-90	I90-71-030-3NBL	80.22
047847	30-3.5	I-90	I90-71-030-3.5	80.70
047850	30-5	I-90	I90-71-030-5	81.50
047860	30-6	I-90	I90-71-030-6	82.07
047867	30-6.5 SBL	I-90	I90-71-030-6.5NB	83.01
047868	30-6.5 NBL	I-90	I90-71-030-6.5SB	83.00
047865	83R	I-90	I90-71-0083R	82.94
047870	31-1 EBL	CURRANT ROAD & GTW RR	I90-71-031-1EBL	83.56
047880	31-1 WBL	CURRANT ROAD & GTW RR	I90-71-031-1WBL	83.56
047890	31-3	I-90	I90-71-031-3	84.55
047900	31-5	I-90	I90-71-031-5	86.08
047910	32-1	I-90	I90-20-032-1	87.06
047920	32-3	I-90	I90-20-032-3	87.67
047930	32-4	I-90	I90-20-032-4	88.09
047940	32-5	I-90	I90-20-032-5	89.50
047950	32-6 EBL	COUNTY ROAD 7	I90-20-032-6EBL	90.98
047960	32-6 WBL	COUNTY ROAD 7	I90-20-032-6WBL	90.98
047970	33-1 EBL	CHRISTIANA CREEK	I90-20-033-1EBL	91.15

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
047980	33-1 WBL	CHRISTIANA CREEK	I90-20-033-1WBL	91.15
048000	34-2	I-90	I90-20-034-2	91.94
048010	34-3	I-90 MAINLINE & RAMPS	I90-20-034-3	92.04
048020	34-5 EBL	COUNTY ROAD 11	I90-20-034-5EBL	93.05
048030	34-5 WBL	COUNTY ROAD 11	I90-20-034-5WBL	93.05
048040	34-8	I-90	I90-20-034-8	94.05
048050	34-9	I-90	I90-20-034-9	94.80
048060	35-1 EBL	COUNTY ROAD 15	I90-20-035-1EBL	95.56
048070	35-1 WBL	COUNTY ROAD 15	I90-20-035-1WBL	95.56
048073	35-1.3	I-90	I90-20-035-1.3	96.07
048076	35-1.6	I-90 (TOLL ROAD)	I90-20-035-1.6	96.10
048080	35-2	I-90	I90-20-035-2	96.99
048090	35-4 EBL	COUNTY ROAD 21	I90-20-035-4EBL	98.50
048100	35-4 WBL	COUNTY ROAD 21	I90-20-035-4WBL	98.50
048110	35-5	I-90	I90-20-035-5	99.53
048120	36-1 EBL	CR 25 & ST JOE RIVER	I90-20-036-1EBL	100.14
048130	36-1 WBL	CR 25 & ST JOE RIVER	I90-20-036-1WBL	100.14
004180	37-1	I-90 (TOLL ROAD)	(15)I90-20-037-1	100.71
048140	101R	I-90	I90-20-0101R	101.22
048150	37-2 EBL	COUNTY ROAD 29	I90-20-037-2EBL	101.57
048160	37-2 WBL	COUNTY ROAD 29	I90-20-037-2WBL	101.57
048170	37-3 EBL	CONRAIL	I90-20-037-3EBL	101.97
048180	37-3 WBL	CONRAIL	I90-20-037-3WBL	101.97
048190	37-4	I-90	I90-20-037-4	102.87
048200	37-6 EBL	COUNTY ROAD 35	I90-20-037-6EBL	104.79
048210	37-6 WBL	COUNTY ROAD 35	I90-20-037-6WBL	104.79
048220	38-1	I-90	I90-20-038-1	106.97
003570	38-2	I-90 (TOLL ROAD)	(13)I90-20-038-2	107.31
048240	38-3	I-90	I90-44-038-3	108.39
048250	39-1	I-90	I90-44-039-1	108.90
048260	39-2	I-90	I90-44-039-2	110.42
048270	39-3	I-90	I90-44-039-3	111.43
048280	39-4	I-90	I90-44-039-4	112.41
048290	40/41-1 EBL	PIGEON RIVER	I90-44-040/41-1EBL	112.55
048300	40/41-1 WBL	PIGEON RIVER	I90-44-040/41-1WBL	112.55
048310	40/41-2	I-90	I90-44-040/41-2	113.43
048320	40/41-3	I-90	I90-44-040/41-3	114.55
048330	40/41-4	I-90	I90-44-040/41-4	116.02
048340	40/41-5	I-90	I90-44-040/41-5	116.78
048350	40/41-6	I-90	I90-44-040/41-6	117.56
048360	42-1 EBL	FAWN RIVER (West)	I90-44-042-1EBL	119.08

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
048370	42-1 WBL	FAWN RIVER (West)	I90-44-042-1WBL	119.08
048400	43-2	I-90	I90-44-043-2	120.33
048410	43-3 EBL	SR 9	I90-44-043-3EBL	120.67
048420	43-3 WBL	SR 9	I90-44-043-3WBL	120.67
048450	43-5 EBL	COUNTY ROAD 50 EAST	I90-44-043-5EBL	121.09
048460	43-5 WBL	COUNTY ROAD 50 EAST	I90-44-043-5WBL	121.09
048470	43-6	I-90	I90-44-043-6	121.67
048480	44-1 EBL	FAWN RIVER (Middle)	I90-44-044-1EBL	122.06
048490	44-1 WBL	FAWN RIVER (Middle)	I90-44-044-1WBL	122.06
048500	45-1	I-90	I90-44-045-1	123.18
048510	45-5	I-90	I90-44-045-5	124.45
048520	45-6	I-90	I90-44-045-6	125.45
048530	46-1	I-90	I90-44-046-1	126.50
048540	46-2 EBL	COUNTY ROAD 700 EAST	I90-44-046-2EBL	127.72
048550	46-2 WBL	COUNTY ROAD 700 EAST	I90-44-046-2WBL	127.72
048560	46-4	I-90	I90-44-046-4	129.33
048570	47-1 EBL	FAWN RIVER (East)	I90-44-047-1EBL	131.41
048580	47-1 WBL	FAWN RIVER (East)	I90-44-047-1WBL	131.41
048590	48-1	I-90	I90-44-048-1	131.70
048600	48-1A	I-90	I90-44-048-1A	132.30
048610	48-2 EBL	SR 327	I90-76-048-2EBL	134.44
048620	48-2 WBL	SR 327	I90-76-048-2WBL	134.44
048630	49-3	I-90	I90-76-049-3	135.49
048640	49-4	I-90	I90-76-049-4	135.99
048650	49-5 EBL	COUNTY ROAD 650 WEST	I90-76-049-5EBL	137.52
048660	49-5 WBL	COUNTY ROAD 650 WEST	I90-76-049-5WBL	137.52
048670	49-6 EBL	COUNTY ROAD 450 WEST	I90-76-049-6EBL	139.41
048680	49-6 WBL	COUNTY ROAD 450 WEST	I90-76-049-6WBL	139.41
048690	50-7	I-90	I90-76-050-7	140.91
048700	50-7A	I-90	I90-76-050-7A	141.67
048710	50-8 EBL	COUNTY ROAD 700 NORTH	I90-76-050-8EBL	142.46
048720	50-8 WBL	COUNTY ROAD 700 NORTH	I90-76-050-8WBL	142.46
048730	50-9 EBL	I-69 & SR 127	I90-76-050-9EBL	143.69
048740	50-9 WBL	I-69 & SR 127	I90-76-050-9WBL	143.69
040960	4820A	I-69	I90)I69-156-04820A	143.69
048750	50-10 EBL	I-90 RAMP (ANGOLA)	I90-76-50-10EBL	144.02
048760	50-10 WBL	I-90 RAMP (ANGOLA)	I90-76-050-10WBL	144.02
048770	51-1	I-90	I90-76-051-1	144.68
048780	51-2 EBL	SR 120	I90-76-051-2EBL	145.36
048790	51-2 WBL	SR 120	I90-76-051-2WBL	145.36
048800	51-5	I-90	I90-76-051-5	146.52

NBI Number	Bridge Name	Intersection	Bridge Number	Milepost
048810	51-6 EBL	IND. NORTHEASTERN RR CO.	I90-76-051-6EBL	147.22
048820	51-6 WBL	IND. NORTHEASTERN RR CO.	I90-76-051-6WBL	147.22
048830	51-7 EBL	SR 827	I90-76-051-7EBL	147.49
048840	51-7 WBL	SR 827	I90-76-051-7WBL	147.49
048850	52-2	I-90	I90-76-052-2	148.33
048860	52-3	I-90	I90-76-052-3	149.53
048870	52-5	I-90	I90-76-052-5	150.67
048880	52-6	I-90	I90-76-052-6	151.32
048890	53-1	I-90	I90-76-053-1	152.10
048900	53-2	I-90	I90-76-053-2	152.65
048910	53-3 EBL	COUNTY ROAD 100 NORTH	I90-76-053-3EBL	153.65
048920	53-3 WBL	COUNTY ROAD 100 NORTH	I90-76-053-3WBL	153.65
048930	53-5 EBL	OLD SR 1	I90-76-053-5EBL	154.55
048940	53-5 WBL	OLD SR 1	I90-76-053-5WBL	154.55
048950	53-6	I-90	I90-76-053-6	155.32
048960	53-7	FISH CREEK	I90-76-053-7	156.06
048970	53-8 EBL	US 20	I90-76-053-8EBL	156.16
048980	53-8 WBL	US 20	I90-76-053-8WBL	156.16
048990	53-9	I-90	I90-76-053-9	156.48