#### **Great Lakes Basin Route Narrative**

The Great Lakes Basin Railroad (GLBR) is designed to provide a by-pass for railroad freight traffic that currently moves through the Chicago region without originating or terminating there. GLBR's route will connect all six Class 1 railroads serving the region, as well as several regional and short line railroads, accelerating the flow of interchange between carriers without the delays and weather-related breakdowns that plague the Chicago terminal today. GLBR is being designed as a completely new 21<sup>st</sup> century railroad with current technology and management practices to provide capacity, velocity, reliability, service, safety, and sustainability in an environmentally friendly manner.

## **Key Design Objectives**

The GLBR route design process started in 2011 and has evolved through several iterations over the past five years. The following are GLBR's key design objectives:

- 1. **Safety**: Locate the route away from existing town populations (of any size) by one half mile to two miles. Govern operations with a Centralized Traffic Control signal system interfaced with Positive Train Control to prevent train to train collisions, ensure compliance with permanent and temporary speed restrictions, and eliminate intrusion by trains into work zones where personnel and maintenance equipment occupy the track.
- 2. Environment: Reduce diesel locomotive exhaust emissions from idling locomotives by providing a faster alternative route for traffic currently moving through Chicago. Avoid environmentally sensitive areas. Grade-separate major road crossings at interstates and state Highways, and protect level grade crossings with gates and red flashing lights. Design the grade crossings to qualify as quiet zones. GLBR's overall environmental goals are to improve safety, minimize traffic delays, minimize idling time, and reduce noise levels from minimal locomotive whistling.
- 3. **Community**: Minimize the relocation of existing homes or farmsteads along the mainline and branches. Provide a utility corridor for improved electricity, water, natural gas, fiber optics, and wireless coverage, both to support railroad operations and to provide new options for our neighbors.
- 4. **Reliability**: Utilize the latest technology for track, train dispatching, information system support and communications to support train operations, customer information, planning, and processes. Avoid interfering with train operations of existing railroads by having 100% flyovers at major rail junctions, improving velocity, reducing emissions, and increasing reliability to keep trains moving. Adopt engineering standards for track and structures such as bridges to keep the railroad operating during periods of high rainfall and snowfall, keeping weather interference to a minimum.
- 5. Capacity: Secure a dedicated 200 foot right of way for the 243.48 miles of mainline from Pinola, IN to Milton, WI, plus staging tracks near interchange points and lead tracks to terminals and to serve industries. Staging Track areas will be designed with 15,000-foot-long tracks to accommodate the variety of train lengths being operated by the Class 1 railroads. Design main tracks to accommodate train operations up to 70 mph, with crossovers permitting train speeds up to 50 mph, and other switches permitting train speeds from 30 to 50 mph, depending on location and operating needs.
- 6. **Velocity**: Dramatically reduce the time it currently takes a rail freight shipment to pass through the Chicago terminal. GLBR will link new interchange points with the six Class 1 railroads serving

Chicago (and regional and short line connections) to accelerate the movement of unit trains, intermodal trains, and carload trains that do not have Chicago destined traffic. GLBR also will link multiple lines of individual Class 1 carriers that will allow them to market new connections to other traffic lanes and regions on their respective networks. Published examples of rail traffic velocity across the Chicago rail hub show average delays of 30 hours. To move a train over the 243-mile GLBR mainline at 70 mph would take 4 hours, at 55 mph 5 hours, and at 45 mph 6 hours, representing an improvement of 24 to 26 hours in one-way velocity. Over a one-year period, this improvement would allow at least one more round trip of existing rail equipment moving through the region, creating more efficiency and revenue for the railroads.

#### **Glossary of terms**

At Grade Road Crossing: A level crossing between a railroad and a road or highway, usually protected by flashing red lights, automatic safety gates that go down on the approach of a train, and a bell.

At Grade Railroad Crossing: An at grade same level crossing between two railroads designed to let trains cross over tracks on what is called a "diamond".

The Class 1 railroads serving Chicago are BNSF Railway (BNSF), Canadian National (CN), Canadian Pacific (CP), CSX, Norfolk Southern (NS), and Union Pacific (UP). GLBR plans to connect with the following short line and regional railroads: Chicago, Fort Wayne, and Eastern, City of Rochelle (IL) Railway, Illinois Railway, Chicago South Shore & South Bend (South Shore Freight), and Wisconsin and Southern Railroad.

Crossover: A single crossover (consisting of two switches) allows for the movement between one track and another in one direction. A double crossover (consisting of four switches) allows for the movement between one track and another in either direction. This also applies to more than two tracks at certain locations where there are more than two tracks to move between.

CTC (Centralized Traffic Control): A color light signal system used to govern the movement of trains from a centralized office under the management of a train dispatcher certified to control occupancy of the track by trains, on track equipment, inspection vehicles, and workers within a defined territory.

FRA: The Federal Railroad Administration is an agency within the Department of Transportation that has jurisdiction over railroad operations, track standards, bridge standards, and infrastructure inspection.

Interchange: One or more tracks to connect two railroads and allow for the exchange of individual cars, groups of cars or complete trains between them.

MP: Mile post

MT: Main track used primarily for the movement of trains (as opposed to switching cars or delivering cars to industries).

Private Road Crossing: A railroad crossing of a road used as a driveway for a home, farm, or business that is protected by a railroad crossbuck sign and stop signs. Where the GLBR will divide farm fields a farm crossing would be built with dual locked manual gates on both sides to allow farm equipment to cross over and protected by railroad crossbuck sign and stop signs.

PTC (Positive Train Control): A communication-based/processor-based train control technology designed to prevent train-to-train collisions, over speed derailments, incursions into established work zone limits, and the movement of a train through a main line switch in the improper position.

Railroad Flyover: A railroad bridge built over another railroad to allow free flow of traffic over both railroads.

Railroad Overpass: Railroad bridge to pass over a road, highway, or interstate highway.

Road Overpass: Road or Highway bridge to pass over a railroad track or tracks.

Staging Tracks: Specific tracks designated for trains to change crews, undergo mechanical inspections, fuel locomotives and temperature controlled cars, or hold for maintenance work ahead, weather delays, or service interruptions.

Switch: A specialized track structure enabling trains to move from one track to another, such as at a railway junction or where a spur, siding, or staging tracks branches off.

## SPECIFIC DESIGN CONSIDERATIONS FOR THE GLBR

## **Mainline Operating Design Parameters**

The GLBR Mainline runs from Milepost 0.00 near Pinola, IN to Milepost 243.48 near Milton, WI, and is comprised of the Indiana, Illinois, and Wisconsin Subdivisions. The Mainline will be built to the following operating design parameters.

- 1. All mainline track will be built to FRA Class 5 standards, permitting maximum operating speeds of 70 mph.
- 2. All crossover switches, terminal entrance/exit switches and staging track entrance/exit speeds will be 50 mph. The majority of the Class 1 railroad interchange entrance/exit switches will have a speed of 50 mph and will range down to 20 mph with some of the shortline railroads.
- 3. Maximum ruling grade is 1%.
- 4. All operations will be controlled at a central dispatching office with computer assisted Centralized Traffic Control.
- 5. All trains will operate under the safety protocol required by the FRA for Positive Train Control.
- 6. The railroad will have flyovers of all Class 1 railroads along the route.
- 7. The railroad will have at grade crossings and interchanges with all shortlines and regional railroads, except the CFER will be a flyover.
- 8. The railroad will crossover seven Interstate Highways with overpasses built by the railroad.
- 9. The railroad will interface with US Highways, State Highways, County Highways, and some county roads with overpasses, depending on geography and operating characteristics of the railroad at specific locations.
- 10. The railroad will cross other roads, most of which are two lane paved or gravel, at grade, with the crossings protected by flashers, gates, bell, and appropriate roadway appurtenances to create quiet zones and eliminate whistling for crossings except in emergencies.
- 11. Where the railroad route divides farms, private crossings will be created for farmer access to manage the acreage.

## **Detailed Discussion of Design Considerations**

#### MP 0.00 to MP 10.00

<u>Route Segment Description:</u> The Great Lakes Basin Railroad mainline of 243.48 miles starts at milepost 0.00 west of Pinola, IN over an all greenfield route. From the starting point, GLBR would head southwest from Pinola to avoid small lakes, wetlands, residential areas, and the population center of Westville, IN. On the west side of Westville, IN the route turns south to MP 10.00. The railroad would stay at grade level from MP 0.00 to just before MP 9.20 for this segment.

<u>Route Operations Description:</u> GLBR starts at MP 0.00 west of Pinola, IN, with two main tracks connecting to the two main tracks of Norfolk Southern's (NS) Chicago Line. GLBR's two main tracks will continue to milepost 56.30. The connection between NS and GLBR at milepost 0.00 (point of switch on NS for measurement references) would include a flyover from NS main track 1 over the NS right of way and coming down on GLBR right of way to start GLBR main track 1, and an at grade connection between NS main track 2 and GLBR main track 2. The design enables entry/exit speeds of up to 50 mph. At MP 2.40 a double crossover would facilitate access to three 15,000-foot-long staging tracks, extending to MP 5.85 with another double crossover to allow flexibility of train movement. At MP 9.00 there will be a junction between the GLBR's Indiana Subdivision and the Kingsbury Subdivision. At MP 9.20 GLBR would fly over CSX's Garrett Subdivision with an interchange in the southeast quadrant.

<u>Route Public Interface:</u> At the following locations GLBR would build road overpasses: MP 3.20 (S Wozniak Road), MP 3.90 (Indiana Highway 2), MP 5.70 (US Highway 421), MP 7.20 (US Highway 6), and MP 8.10 (Indiana Highway 2). At MP 9.10 the railroad will build an overpass over Road E600N/W600S due to the CSX flyover at MP 9.20. GLBR would request consideration of two changes in local roads: (1) shift S Holmesville to the east where it intersects with Indiana Highway 2, and (2) stub S900W road where it would intersect GLBR's the staging tracks. All other road crossings in this segment would be protected with gate and flashers and in a quiet zone, subject to regulatory approval.

<u>Route Alternatives Considered:</u> Several alternatives were considered west of the proposed alignment to reach CSX's Grand Rapids Subdivision west of Michigan City, IN. These alternatives encountered open water, excessive grades, residential areas, state hunting and conservation areas, and a county wildlife park, and would have required a less desirable operating interface with the NS. Because of these obstacles, GLBR determined that starting the line with a connection to the CSX Grand Rapids Subdivision not a viable option. Instead, GLBR proposes that the line begin at a connection with the NS Chicago Line, as described above.

<u>Route Environmental interface:</u> The route as presented allows GLBR to stay away from population areas, keep vehicle traffic flowing, and establish quiet zones to make whistling unnecessary except in emergencies or as prescribed by railroad operating rules.

## MP 10.00 to MP 20.00

<u>Route Segment Description</u>: This segment would have two main tracks aligned to meet interchange points with Canadian National's (CN) South Bend Subdivision, Chicago Fort Wayne and Eastern (CFER) and Norfolk Southern's (NS) Chicago District. The route runs north-south through farmland between Crooked Creek on the west and a drainage channel on the east from MP 11.80 to MP 18.10, where the

railroad curves west and crosses Crooked Creek. The curve at MP 18.10 ends at MP 19.20 aligning the route to the west to MP 20.00.

<u>Route Operations Description</u>: At MP 10.20 a double crossover would manage the flow of train traffic for the CSX interchange and the Kingsbury Subdivision. At MP 11.70 GLBR will construct a flyover of the CN with an interchange track on the southeast quadrant at grade. At MP 12.70 will install a double crossover to manage traffic for the CSX Interchange. At MP 14.90 GLBR will install a flyover and interchange with the CFER with an interchange in the southeast quadrant at grade. At MP 15.90 GLBR will install a flyover and interchange with the NS Chicago District with an interchange track in the southeast quadrant at grade.

A single crossover from MT 2 to MT 1 will be installed at MP 16.00 for access to three staging tracks starting at MP 17.00 on the west side of MT 1. The staging tracks will be 15,000 feet long, extending to MP 20.10.

<u>Route Public Interface</u>: This segment will have three interchanges and three staging tracks to support connections with three railroads. To minimize vehicle traffic delays and provide a safe interface with the railroad, GLBR would install road overpasses at county road E200N, and county roads E 100S, E200S, and E300S. GLBR also will construct a rail overpass over US Highway 30, E Division Road and E 100S. GLBR would request consideration of stubbing county road 525E at MP 18.20. The crossing of county road E400N at grade would be protected with flashers and gates and built for Quiet Zone certification.

<u>Route Alternatives Considered</u>: The goal of connecting three railroad points of interchange dictated the preferred alignment in this segment. No other alignments fulfilled GLBR's key design objectives and parameters.

<u>Route Environmental interface:</u> This segment goes through greenfield farmland and most of it is aligned with a drainage channel to minimize the splitting of farm properties, reducing the need for private crossings. Road overpasses would allow most vehicle traffic to continue to flow as it does today, without creating train-related delays and increased idling. The route is not close to any residential or city areas and there is only one road crossing to certify for Quiet Zone operation.

## MP 20.00 to MP 30.00

<u>Route Segment Description</u>: This segment stays at grade, going west to MP 22.00, angling southwest to MP 25.00, and turning more southwest at MP 27.00 to MP 29.00. The segment goes through greenfield properties and is aligned where possible with existing fence and property lines.

<u>Route Operations Description</u>: This segment consists of two main tracks with a double crossover at MP 20.20 and MP 29.40 for managing the flow of traffic.

<u>Route Public Interface</u>: At MP 21.70 GLBR will construct a road overpass for Indiana Highway 49. At MP 20.70 GLBR would request consideration of stubbing S300E Road due to low population and the availability of nearby grade crossings. An additional seven at grade road crossings on this segment would be protected by flashers, gates, and bell and designed for regulatory approval as a Quiet Zone.

<u>Route Alternatives Considered:</u> The alignment of this segment was chosen after examining alternatives further south and west, but those alternatives would have put the route closer to the Kankakee River

basin, increasing potential impacts on wetlands. This segment was also designed to keep the railroad north of population centers at Boone Center, IN and Hebron, IN.

<u>Route Environmental interface:</u> The area of the segment is all greenfields with no major waterways, wetlands, or wooded areas to mitigate. Indiana Highway 49 traffic will keep flowing with a road overpass. The other roads crossing this segment of the route do not have major vehicle flows or delay impacts and would be protected with flashers, gates, and bells.

## MP 30.00 to MP 40.00

<u>Route Segment Description</u>: The segment stays at grade until a railroad overpass of Interstate 65 at MP 39.20. The route avoids Hebron, IN to the west by continuing southwest from MP 30.00 to MP 33.00. It then curves to the south and southwest to avoid Dinwiddie, IN and Orchard Grove, IN. At MP 37.00 GLBR would curve to the west to pass over Interstate 65.

<u>Route Operations Description</u>: This segment consists of two main tracks and has a double crossover at MP 38.00 to manage the flow of traffic.

<u>Route Public Interface:</u> GLBR will build road overpasses at MP 31.20 (Indiana State Road 2), MP 32.90, and US Highway 231. Nine roads would be crossed at grade, protected by flashers, gates, and bell and designed for Quiet Zone certification.

<u>Route Alternatives Considered:</u> Alternative routes were considered adjacent to the selected one by 100 to 1,000 feet variations to avoid residences, farmsteads, and wetlands. GLBR also examined going south of Hebron, IN. The southern alternative would have put the railroad closer to the Kankakee River basin, increasing potential impacts on wetlands. The selected route parallels existing property lines where possible.

<u>Route Environmental interface:</u> This alignment is an all greenfield route that should have no impact on wetlands, woods, or rivers. The southern portion of one borrow pond just west of Interstate 65 will require mitigation. Vehicle traffic flow would be maintained with construction of three road overpasses and safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 40.00 to MP 50.00

<u>Route Segment Description</u>: This segment is at grade except for flyovers of two railroad interchange points. The segment would pass west/southwest of Lowell, IN, then turn northwest to north of Belshaw, IN and then turn due west at MP 48.00 to 50.00.

<u>Route Operations Description</u>: The route consists of two main tracks with a flyover of the CSX Monon Subdivision at 44.70 with an interchange in the northwest quadrant. Continuing on to MP 48.00, GLBR will fly over of the NS Kankakee Line with an interchange in the northeast quadrant. At MP 48.90 a double crossover would manage the flow of traffic around the two interchange locations. Any staging of trains for these two interchanges will be at the Manteno Railport, described below.

<u>Route Public Interface</u>: Vehicle traffic flow would be maintained with three road overpasses at Indiana Highway 55, 197<sup>th</sup> Avenue, and US Highway 41. Seven at grade road crossings would be protected by flashers, gates, and bell and in a quiet zone, subject to regulatory approval. At MP 43.90 GLBR would

propose moving 191<sup>st</sup> Avenue south 100 feet to improve the flow of traffic. This segment was aligned to avoid populated areas but would pass some residences and farmsteads.

<u>Route Alternatives Considered</u>: Slight variations of the alignment were considered, but the route is influenced by the location of Lowell, IN and Belshaw, IN and GLBR's objective of avoiding population centers. Taking the route farther south would necessitate relocation of several pockets of residences. The preferred alternative will not require removal of any homes or farmsteads.

<u>Route Environmental interface:</u> This alignment traverses a greenfield area and will not impact wetlands, woods, or rivers. Vehicle traffic flow would be maintained with construction of three road overpasses and safety at grade crossings would be maintained by flashers, gates, and bell. The area will benefit from a quiet zone reducing noise exposure from rail operations.

## MP 50.00 to MP 60.00

<u>Route Segment Description</u>: This segment remains at grade until a flyover of Union Pacific's Villa Grove Subdivision (over which CSX also operates) at MP 57.7. It starts with a curve to the northwest at MP 50.00, turns west at MP 51.50, curves southwest at MP 57.00, and then turns west at MP 58.00, slightly southwest at MP 59.00, and west at MP 60.00. The Indiana-Illinois border is at MP 52.10 of the Indiana Subdivision.

<u>Route Operations Description:</u> The route consists of two main tracks to MP 52.70 where a crossover goes from MT 1 to MT 2 and extends to add a third main track (MT 3) that continues west to MP 60.00. MT 3 will add capacity and increase velocity for trains moving through the Manteno Railport segment, which extends to MP 70.60. At MP 57.00 an interchange track would interface with the UP/CSX Villa Grove Subdivision in the southeast quadrant. At MP 57.30 there would be a crossover from MT 3 to MT 2 to MT 1 to manage traffic flow at the interchange point. The flyover of the UP/CSX Villa Grove Subdivision would be at MP 57.7. The eastern boundary of the Manteno Railport is at MP 58.10. GLBR would request consideration of stubbing the N15000E and N14000E roads at the railroad's property line, due to few area residences and available alternative routes.

<u>Route Public Interface:</u> Vehicle traffic flow will be maintained by the construction of road overpasses at Calumet Avenue and Illinois State Highway 1. Four at grade road crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval.

<u>Route Alternatives Considered</u>: Alternatives considered for this segment were alignments adjacent to County Line Road. Those alignments were eliminated from further consideration due to the number of homes and farmsteads that would have been impacted by construction, which would not have been consistent with GLBR's objective of minimizing home relocation. The preferred alternative does not have any residences in the path of the route.

<u>Route Environmental interface:</u> This alignment passes through greenfields and would not impact wetlands, woods, or rivers. Several drainage channels would be crossed by short bridges or large culverts as appropriate. Vehicle traffic flow would be maintained with construction of two road overpasses and safety at grade crossings provided by flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

#### MP 60.00 to MP 70.00

<u>Route Segment Description</u>: This all greenfield route segment runs virtually straight east to west. On the west end, the route passes north of the City of Manteno at grade. The Manteno Railport (terminal area) extending from MP 58.2 to MP 67.4 would provide facilities for train staging, blocking, switching, inspection, mechanical servicing, mechanical repairs, and engineering maintenance, as well as housing the operating headquarters of the railroad. The planned footprint for the Manteno Railport is bordered by the UP Villa Grove Subdivision on the east, Illinois State Highway 50 on the west, West County Line Road on the North, and East 9000 North road on the south.

<u>Route Operations Description</u>: This segment would have three main tracks, extending west of MP 70.00. At MP 60.00 a crossover from MT 1 to MT 2 to MT 3 would lead into/out of the Manteno Railport. At MP 66.2 another crossover from MT 3 to MT 2 to MT 1 would lead into/out of the Manteno Railport. The flyover and interchange with the CN would be located at MP 67.80, with the interchange in the northwest quadrant. At MP 69.40 a crossover from MT 1 to MT 2 to MT 2 to MT 3 would provide access to the CN interchange and manage train traffic.

Initially, the Manteno Railport would have six 15,000-ft. staging/inspection/ fueling tracks, six yard tracks for classification/blocking of traffic, two tracks for locomotive servicing, two tracks for railcar repair and servicing, two tracks for engineering (track, structure and signal) maintenance cars and equipment, one track for other GLBR equipment, and a running lead around the south side of the Railport.

<u>Route Public Interface:</u> The footprint of the Manteno Railport would require stubbing of the N12000E, N11000E, N10000E, N9000E, N8000E, N7000E, N6000E, N5000E, E11000N, E10000E Roads and Sycamore Road. GLBR would construct road overpasses for Illinois State Highway 50, Interstate 57, and Interstate 57 Frontage Road. Three at grade road crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. The Manteno Railport will impact homes and farmsteads in the central portion of the footprint.

<u>Route Alternatives Considered</u>: Alternatives considered for this segment were alignments adjacent to County Line Road. Those alignments were eliminated from further consideration due to the number of homes and farmsteads impacted by initial construction, which would not have been consistent with GLBR's objective of minimizing home relocation.

<u>Route Environmental interface</u>: This segment traverses relatively flat farmland with residences and farmsteads. Several drainage channels require mitigation for runoff and drainage with bridges or culverts. No rivers would be crossed, and wetland impacts appear minimal. Vehicle traffic flow would be maintained with construction of road overpasses, and safety at grade crossings would be promoted with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 70.00 to MP 80.00

<u>Route Segment Description</u>: This segment is at grade and heads due west at MP 70.00. At MP 71.00 the route turns southwest to MP 74.00 and curves to the west and southwest to MP 78.00. At that point the route curves south, descending into the Kankakee River valley to a bridge crossing the river at MP

78.80. West of the bridge, the route would climb out of the river valley and turn southwest to MP 80.00.

<u>Route Operations Description</u>: The segment starts with three main tracks. At MP 70.60 MT 3 ends, with a crossover from MT 3 to MT 2 to MT 1 managing train flow on and off MT 3. The rest of the route would have two main tracks with no crossovers or switches to MP 80.00.

<u>Route Public Interface:</u> To maintain vehicle traffic flow across the segment, GLBR will construct one road overpass at US Highway 52. Seven at grade road crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. One private crossing would be protected by crossbucks and stop signs. The grade into and out of the Kankakee River valley for railroad operations should be limited to 1%. The Kankakee River bridge would parallel the existing County Road 20/N7000 Road West bridge across the river. To accomplish this gradient and crossing level, GLBR would pass under County Road 102, Illinois State Highway 113, and N7000 Road West.

<u>Route Alternatives Considered:</u> Multiple alternative routings were considered to cross the Kankakee River and to position the route to connect with the CN and the Manteno Railport. The preferred route from the west to route to the MP 80 area allowed GLBR to cross the river in the mid portion of the Kankakee State Park, as opposed to alignments that crossed the river in south of the State Park to go around the southern end of Kankakee. Going south of Kankakee was deemed infeasible because it would impact multiple brownfield sites and require a second crossing of the Kankakee River north of Kankakee, in addition to changing the Manteno Railport alignment and relocating the interchange with the CN to the south side of Kankakee. This routing would also put the railroad closer to population areas and would require more infringement on the Kankakee State Park than the route under consideration.

<u>Route Environmental interface:</u> The route segment is designed to link to the Manteno Railport on the east, accomplish the Kankakee River crossing and point the railroad west toward other railroad connections. The route is designed to follow fence lines and pass, without encroaching on, several small residential areas. To maintain the maximum gradient standard of 1% and minimize the impact on the roads on both sides of the river, GLBR would bore underpasses on both sides of the river and keep the roads and intersections as is. The north underpass would require the removal of the one residence on the northeast corner of the intersection of County Road 102 and 20. The bridge over the river would have support piers in line with the existing road bridge piers and would not impact the flow of the river. Vehicle traffic flow would be maintained with construction of one road overpass and the tunnels near the Kankakee River bridge. Safety at grade crossings would be promoted with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 80.00 to MP 90.00

<u>Route Segment Description:</u> GLBR's route continues at grade southwest from MP 80.00 to 82.00, then turns west/southwest to MP 85.00 and directly west to MP 90.00. This segment has no interchange points.

<u>Route Operations Description</u>: The segment will have two main tracks with a double crossover at MP 80.10 to manage the flow of train traffic.

<u>Route Public Interface</u>: This segment would have eleven at grade road crossings protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval.

<u>Route Alternatives Considered:</u> An alternative route south of the selected alignment to match up with the two alternative crossings of the Kankakee River discussed above was considered, but was rejected along with the alternative Kankakee River crossings.

<u>Route Environmental interface</u>: The segment is designed to avoid residential and farmstead locations. No wetlands, major wooded areas, or waterways would be impacted by this segment. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 90.00 to MP 100.00

<u>Route Segment Description</u>: This segment runs at grade and positions the railroad to interchange with UP near Gardner, IL, with a flyover and a rail overpass of Interstate 55. Heading west from MP 90.00 to MP 95.00 the route curves to the northwest, maintaining that bearing to MP 100.00.

<u>Route Operations Description</u>: This segment would have two main tracks with a double crossover at MP 90.40 to manage traffic flow. At MP 97.40 another crossover from MT 2 to MT 1 would provide access to the UP interchange at MP 98.20. At MP 98.75 the railroad would fly over the UP Joliet Subdivision and the Amtrak Chicago-St. Louis High Speed Route. At MP 99.10 a crossover from MT 1 to MT 2 would be installed.

<u>Route Public Interface</u>: To maintain vehicle flow, <u>GLBR</u> will build road overpasses of Historic US Highway 66, Interstate 55, and South Gorman Road. Ten at grade crossings would be protected by flashers, gates, and bell in a quiet zone subject to regulatory approval. One private road crossing would be protected by crossbucks and stop signs.

<u>Route Alternatives Considered:</u> Several alternatives for this segment were considered north and south of the preferred alternative. The north alternative was not selected because it would have involved increased effects on open water, wetlands, and residential areas. The southern alternatives would have aligned with an alternative route south of Kankakee, IL (discussed above), but they were encumbered by two river crossings, brownfield areas, and residential density. The preferred alignment for this segment does not interfere with any existing residential housing or farmsteads.

<u>Route Environmental interface</u>: The segment is designed to avoid residential and farmstead locations. No wetlands, major wooded areas, or waterways would be impacted by this segment. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 100.00 to MP 110.00

<u>Route Segment Description</u>: This segment runs at grade and is designed to intersect with BNSF's Chillicothe Subdivision at MP 106.80 with a flyover and interchange and continue beyond toward the next interchange point. Starting at MP 100.00, the route would track northwest to MP 106.00 and then curve farther north to MP 110.00.

<u>Route Operations Description</u>: This line segment would have two main tracks with a single crossover at MP 101.40 from MT 1 to MT 2, leading to two staging tracks of 15,000 feet in length to MP 105.00. At MP 105.50 a double crossover would move trains to the BNSF interchange at MP 106.80 and access the staging tracks at this location. At MP 106.00 an interchange track in the southwest quadrant of the flyover would connect with BNSF's Chillicothe Subdivision. The railroad will fly over the BNSF at MP 106.80.

<u>Route Public Interface:</u> To maintain vehicle flow, GLBR will build road overpasses at Illinois Highway 47, West Mine Road, County Road 5000S, and County Road 2000W. Seven at grade crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval.

<u>Route Alternatives Considered</u>: Multiple alignments were considered with minor variations as this interchange point is in an area not influenced by any large population centers and relies more on GLBR's approach to the Illinois River crossing for direction. The preferred alignment was thus determined by the preferred alternative for crossing the Illinois River, described below.

<u>Route Environmental interface</u>: The segment is designed to avoid residential and farmstead locations. No wetlands, major wooded areas, or waterways would be impacted by this segment. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 110.00 to MP 120.00

<u>Route Segment Description</u>: The route continues at grade northwest from MP 110.00 to MP 115.00 and then curves to the north, crossing the Illinois River and continuing north to MP 120.00.

<u>Route Operations Description</u>: The segment would operate on two main tracks and bridge the Illinois River at MP 114.60 would install a single crossover from MT 1 to MT 2 to position traffic for the CSX/IAIS Interchange. At MP 115.80, GLBR would install another single crossover from MT 2 to MT 1 to position trains around the CSX/IAIS Interchange. At MP 116.20 there will be a flyover of the CSX New Rock Subdivision (also used by Iowa Interstate).

<u>Route Public Interface:</u> The segment passes east of a chemical plant at MP 115.40 and east of Seneca, IL. To maintain vehicle flow, GLBR will build road overpasses of Old Stage Road and US Highway 6. GLBR also will build an overpass over Interstate 80, which will require raising the height of the high voltage electrical transmission line on the south side of Interstate 80. Six at grade crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. One private road crossing would be protected by crossbucks and stop signs. GLBR would request consideration of stubbing West Indian Trail at MP 112.30 and Long Point Road at MP 117.40 due to low population and alternative routes in the vicinity.

<u>Route Alternatives Considered</u>: GLBR considered three alignments to cross the Illinois River from the south and four alignments from the north. The preferred alignment takes advantage of an area where the river narrows and provides a more favorable gradient in and out of the river valley to connect with the route north from the river valley. The other potential crossings were less advantageous from both environmental and engineering perspectives.

<u>Route Environmental interface</u>: This route segment passes through farmland areas and avoids residential areas and farmsteads. The Illinois River approach from the south minimizes impacts on wooded areas and wetlands, compared to the other alternatives discussed above. On the north side of the river the railroad will be elevated to pass over the roads and CSX in the river valley, exiting northbound over the ridge of US Highway 6. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 120.00 to MP 130.00

<u>Route Segment Description</u>: This line segment is at grade. Starting at MP 120.00, the route proceeds north to MP 122.00. It then curves to the northwest and back to the north from MP 125.00 to MP 126.00, where it turns northwest to MP 130.00. The west end of the segment enters the alignment for a crossing of the Fox River.

<u>Route Operations Description</u>: This segment would have two main tracks with a double crossover at MP 120.50 to manage the flow of traffic. There are no interchange points or other major physical attributes within this segment.

<u>Route Public Interface:</u> This segment would pass some residences, farmsteads and one large cattle operation at MP 128.70. To maintain vehicle flow over this segment, GLBR would construct two road overpasses for US Highway 52 at MP 127.10 and Illinois State Highway 71 at MP 128.80. Six at grade crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. One private road crossing would be protected by crossbucks and stop signs.

<u>Route Alternatives Considered</u>: Multiple alternatives (described below) were considered with respect to the Fox River crossing. The preferred alternative for this crossing influenced the alignment of the west end of this segment. Other alignments resulted in a less favorable river crossing from both an environmental and an operational perspective.

<u>Route Environmental interface</u>: This segment crosses greenfield farmland, passing some residences and farmsteads. No wetlands, wooded areas, or waterways would be affected by this segment. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 130.00 to MP 140.00

<u>Route Segment Description</u>: The segment curves to the northwest and then west over the Fox River at MP 132.00 and at MP 136.00 curves northwest to MP 140.00.

<u>Route Operations Description</u>: This segment consists of two main tracks at grade. GLBR would cross the Fox River at MP 132.20. A crossover from MT 2 to MT 1 would tie into the interchange track to the Illinois Railway. At MP 133.20 GLBR will cross the Illinois Railway at grade, with the aforementioned interchange track in the northeast quadrant. A crossover from MT 1 to MT 2 at MP 133.50 would manage the flow of traffic around the interchange site. The rest of the segment would have two main tracks to MP 140.00.

<u>Route Public Interface</u>: The segment alignment takes the railroad between the north side of the residential area of Sheridan, IL and the prison at that location. Seven at grade crossings would be

protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. Two private road crossings would be protected by crossbucks and stop signs. GLBR would request consideration of stubbing E20th Road at MP 137.00 due to low population and alternative routes in the vicinity. GLBR would build a road overpass at MP 138.85 for County Road 23.

<u>Route Alternatives Considered:</u> An alternate Fox River Crossing alternative was considered south of Sheridan in the Dayton area. This alternative could have interfered with the Dayton/Sky Dive Chicago Airport, would have passed through a campground, and involved a much longer crossing of the river, necessitating a higher level bridge and cutting a path through a large wooded area. In addition, an alignment at this location would make it impossible to create an interchange with the Illinois Railway. Thus, GLBR determined that this potential alternative was less preferable for both environmental and operational reasons.

<u>Route Environmental interface:</u> The greenfield segment has more wooded area and water features than any of the other ten-mile segments discussed in this narrative. The preferred alignment removes fewer trees and involves a much shorter crossing of the Fox River than the alternative Fox River crossing described above. From MP 132.5 to MP 140.00 water may be present in the farm fields within or adjacent to the right of way after heavy rainfalls. This drainage issue could be mitigated during the grading process by channeling the water into an improved drainage arrangement. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a quiet zone reducing noise exposure from rail operations.

## MP 140.00 to MP 150.00

<u>Route Segment Description</u>: This at grade segment heads northwest from MP 140.00 to MP 143.00. The route passes Earlville, IL to the east and north, then vectors northwest to MP 149.00, where it curves due north to MP 150.00.

<u>Route Operations Description</u>: This segment consists of two main tracks and has two interchange points. At MP 142.20 a crossover from MT 1 to MT 2 will manage the flow of traffic. At MP 144.25 GLBR will fly over BNSF's Mendota Subdivision, with an interchange track in the southwest quadrant. Another flyover will be built at MP 145.70 to cross UP's Troy Grove Subdivision, with an interchange track in the southwest quadrant. At MP 147.80 a crossover from MT 2 to MT 1 would be constructed. The rest of the segment is two main tracks to MP 150.00.

<u>Route Public Interface</u>: To facilitate the flow of vehicles around the vicinity of Earlville, IL, GLBR would construct road overpasses for US Highway 34 and railroad overpasses of E1401st Road and E1351st Road. Seven at grade crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. One private road crossing would be protected by crossbucks and stop signs.

<u>Route Alternatives Considered:</u> Two alternative alignments were considered for this segment, one passing west of Earlville, IL that added more miles to the route and did not permit a good operational interchange with the UP Troy Gove Subdivision. The other tracked farther east of Earlville, IL but was rejected due to potential environmental impacts. GLBR accordingly determined that these alignments were less preferable than the selected alternative.

<u>Route Environmental interface</u>: This segment traverses farmland and passes some residences and farmsteads. No wetlands, wooded areas, or waterways would be affected by this segment. Safety at

grade crossings would be maintained by with flashers, gates, and bell. The area will benefit from a quiet zone reducing noise exposure from rail operations.

## MP 150.00 to MP 160.00

<u>Route Segment Description</u>: The route continues at grade due north at MP 150.00 and at MP 153.00 to MP 154.00 goes into an S curve to the northwest and turns north to position the railroad around the west side of Paw Paw, IL. The route continues north to MP 160.00.

<u>Route Operations Description</u>: The segment consists of two main tracks and has a double crossover at MP 155.10 to manage traffic flow. At MP 158.4 there is a double crossover to position trains in and out of a 5 track staging yard starting at MP 158.85 on the east side of the main tracks.

<u>Route Public Interface:</u> For uninterrupted flow of highway traffic, GLBR would install an overpass of the railroad at MP 154.00 for County Road 10/Chicago Avenue and MP 158.70 for US Highway 30. There are 5 at grade crossings protected by flashers, gates, and bell and in a quiet zone subject to regulatory approval. Would want to consider stubbing Mittan Road at MP 157.60 due to low population and alternative routes in vicinity.

<u>Route Alternatives Considered</u>: Alternatives were considered for the alignment on the west side of Paw Paw and one further east of Paw Paw that was blocked by environmental concerns. The original alignment studied would curve around the north of Paw Paw and turn north about 2 miles east of Interstate 39 and go north. After engineering research of this route it was found the ruling grade exceeded the maximum of 1%, the route would go through a wind farm and the alignment to interchange with the BNSF Aurora subdivision was not optimal. The alignment presented goes approximately 0.5 miles east of Interstate 39, is in an area that meets the gradient profile, and impacts four fewer roads with crossings at grade. It also improves the interchange alignment with the BNSF and approach to Rochelle, IL.

<u>Route Environmental interface</u>: The all greenfield route goes through farmland and is adjacent to some residences and farmsteads. There are no wetlands, wooded areas, or waterways affected by this segment. Safety at grade crossings is created with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 160.00 to MP 170.00

<u>Route Segment Description</u>: The segment starts at grade and continues north with two main tracks to MP 162.8 where the railroad curves to the northeast to align for a point of interchange and flyover with the BNSF, then curves back to the north west turning north at MP 166.00. From there the railroad stays north to MP 170.00.

<u>Route Operations Description</u>: The segment consists of two main tracks for the ten miles and is positioned to manage traffic in a staging yard and two points of interchange. At MP 160.00 to MP 162.00 the two main tracks and 5 staging tracks continue and the staging tracks end and rejoin the number 1 MT and there will be a double crossover at MP 162.20 to manage the flow of traffic in and out of the staging yard. At MP 162.85 an interchange track will come off MT 2 going to the northwest to interchange with the BNSF Aurora Subdivision. At MP 164.20 the GLBR will flyover the BNSF Aurora Subdivision. At MP 164.20 the GLBR will flyover the City of Rochelle

Railroad and start the 1.96-mile long GLBR's CORR Subdivision. The wye track north leg will rejoin MT 2 at MP 168.20. At MP 169.40 there will be a double crossover to manage the flow of traffic with the interchange between the GLBR and UP's Geneva Subdivision at MP 170.00. There will be two interchange tracks for east and west traffic on the southwest and southeast quadrants of the interchange. The GLBR will flyover the UP's two main tracks.

<u>Route Public Interface</u>: To facilitate movement of traffic in this rail segment, GLBR would construct road overpasses of the railroad at MP 162.80, McGirr Road at MP 162.80 and an overpass of Interstate 88 at MP 168.90. There are 5 at grade crossings protected by flashers, gates, and bell and in a quiet zone subject to regulatory approval.

<u>Route Alternatives Considered:</u> Multiple routes were considered through Rochelle to the west around the UP Global 3 facility which added extra miles to the route and conflicted with some of the residences around Flagg Center. A route several miles east of Rochelle was considered but there were environmental concerns blocking the route. The alignment under consideration has looked at going on either side of the landfill on the north side of Rochelle and the west side alignment improved access to the points of interchange in the area. The preferred alignment also creates a connection opportunity with the City of Rochelle Railroad.

<u>Route Environmental interface</u>: The all greenfield route goes through farmland and is adjacent to some residences and farmsteads. There are no wetlands, wooded areas, or waterways affected by this segment. Safety at grade crossings is created with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 170.00 to MP180.00

<u>Route Segment Description</u>: This segment is at grade and is headed due north at MP 170.00 to MP 171.00 then starts an S curve to the northeast and turns due north from MP 174.00 to MP 180.00.

<u>Route Operations Description</u>: The segment is the start of the Wisconsin Subdivision and consists of 2 main tracks to MP 180.00. At MP 170.50 there is a double crossover to manage train flow and access to the UP Geneva Subdivision with a point of interchange in all four quadrants and a flyover of the UP. At MP 176.15 is a double crossover to access 3 staging tracks, 15,000 ft. long each, from MP 176.20 to MP 179.30. At MP 178.70 there is a double crossover to allow access to the staging tracks and manage train flow.

<u>Route Public Interface:</u> For vehicle flow in this segment GLBR would construct road overpasses of the railroad at MP 171.00 Illinois Highway 38, MP 176.30 Illinois State Highway 64, MP 177.20 E Mowers Road, 178.30 E Gibson Road. There are 4 at grade crossings protected by flashers, gates, and bell and in a quiet zone subject to regulatory approval. There is one private road crossing to be protected by crossbucks and stop signs.

Route Alternatives Considered: See the discussion under MP 160.00 to MP 170.00.

<u>Route Environmental interface</u>: The all greenfield route goes through farmland and is adjacent to some residences and farmsteads. There are no wetlands, wooded areas, or waterways affected by this segment. Safety at grade crossings is created with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

#### MP 180.00 to MP 190.00

<u>Route Segment Description</u>: This segment starts at grade, curving northeast from MP 180.00 to the northeast and then north to MP 186.00, where to the route turns east and at MP 187.50 goes east to MP 190.00.

<u>Route Operations Description</u>: The route consists of two main tracks from MP 180.00 to MP 187.00 where MT 2 ends. From this point west, GLBR would have one main track and sidings, which would provide enough capacity for the expected traffic volume. At MP 180.30 a double crossover would manage the flow of traffic and position trains for interchange with Canadian Pacific. A flyover of CP's Chicago Subdivision at MP 182.80 would connect with an interchange track in the southwest quadrant of the resulting crossing. At MP 186.00 GLBR will install a double crossover to manage train traffic and access the junction with GLBR's Rockford Subdivision. At this location, a north leg of a wye connection between the Wisconsin and Rockford Subdivisions would be constructed to move trains and maintenance equipment between the two Subdivisions, and to turn locomotives and railcars. At MP 187.00 the railroad transitions to one main track for the rest of the main line to MP 243.48 east of Milton, WI.

<u>Route Public Interface:</u> To maintain vehicle flow, GLBR will install a road overpass for Illinois State Highway 72. Nine at grade crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. One private road crossing would be protected by crossbucks and stop signs. GLBR would request consideration of stubbing E Telephone Road at MP 180.70 due to low population and alternative routes in the vicinity.

<u>Route Alternatives Considered:</u> The alternative alignment considered for this route followed some of the Rockford Subdivision footprint and beyond to a connection with the Wisconsin and Southern east of Broadhead, WI in two different locations. Several impediments precluded this alternative, including adjacent wetlands and hunting areas, and a gradient issue on the Illinois-Wisconsin border. To reach a connection with the WSOR, GLBR's preferred alignment is a route going east of Rockford, IL and Belvidere, IL then north to reach the WSOR.

<u>Route Environmental interface:</u> The route goes through greenfield farmland and passes some residences and farmsteads. No wetlands, wooded areas, or waterways would be affected by this segment. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 190.00 to MP 200.00

<u>Route Segment Description</u>: The segment proceeds east to MP 192.00, then curves northeast to east at MP 193.00 to MP 195.00 and northeast to MP 198.00, turning north from MP 199.00 to MP 200.00.

<u>Route Operations Description</u>: This entire segment has a single main track. At MP 192.10 the route would fly over of CN's Freeport Subdivision. Moving westward, a siding from MP 196.20 to MP 199.90 would permit train meets and passes.

<u>Route Public Interface:</u> To maintain vehicle traffic flow, GLBR will build three road overpasses at MP 197.20 (Spring Center Road), MP 198.30 (Shattuck Road), and MP 198.50 (Carlson Road). Five at grade crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval.

GLBR would suggest consideration of stubbing Kirkland Road at MP 190.80 and Scrivins Road at MP 194.70 due to low population and alternative routes in the vicinity.

<u>Route Alternatives Considered</u>: As described above, the alternative alignment GLBR considered would have gone around the west side of Rockford, IL to reach the WSOR in Wisconsin, but it was deemed less preferable as a result of environmental and operating issues.

<u>Route Environmental interface:</u> This segment traverses greenfield farmland and is passes some residences and farmsteads. No wetlands, wooded areas, or waterways would be affected by this segment. Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a quiet zone reducing noise exposure from rail operations.

## MP 200.00 to MP 210.00

<u>Route Segment Description</u>: The segment is at grade and continues north at MP 200.00 to MP 201.00 when it S curves to the northwest and north to MP 202 and continues north to MP 210.00.

<u>Route Operations Description</u>: The railroad continues as a single main track to MP 203.15 to flyover the UP Belvidere Subdivision and interchange in the northwest quadrant of the crossing point. At MP 206.30 will install a siding extending to MP 209.50.

<u>Route Public Interface:</u> To keep vehicle traffic flowing GLBR would install 4 road overpasses of the railroad starting at MP 200.20 Fruit Farm Road, MP 207.20 Woodstock Road, MP 208.20 Orth Road, and MP 209.30 Angling Road. In addition, GLBR will build an overpass of Interstate 90 at MP 200.10. There are 3 at grade crossings protected by flashers, gates, and bell and in a quiet zone subject to regulatory approval.

<u>Route Alternatives Considered</u>: This route segment alternative was chosen after not being able to make a connection with the WSOR on the west side of Rockford, IL. The design took into account the residential areas and farmsteads along the segment, positioning west of Garden Prairie, IL and east of Belvidere, IL.

<u>Route Environmental interface:</u> The all greenfield route goes through farmland and is adjacent to some residences and farmsteads. There are two creek crossings and two small wooded areas this segment crosses over and goes through. Safety at grade crossings is created with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 210.00 to MP 220.00

<u>Route Segment Description</u>: Then segment is at grade level and curves slightly at MP 210.00 to the northwest and turning north at MP 211.00, then curving slightly east and turning north at 213.00 to MP 215.00 then curving to the west and back east to turn north again at MP 216.00 then going north to MP 218.00, and curving northwest to MP 220.00. This curving action is designed to stay away from some small residential areas, some farmsteads, and the city of Capron, IL located east of MP 223.00.

<u>Route Operations Description</u>: The route continues as a single main track railroad to MP 220.00 and has a siding located between MP 215.40 to MP 218.50.

<u>Route Public Interface:</u> For vehicle flow GLBR will construct road overpasses of the railroad at MP 216.20 Blaine Road, MP 217.30 Randall Road, and MP 218.30 Coon Trail Road. In addition, will build a

trail overpass of the railroad at MP 212.50 the Long Prairie Trail. There are 8 at grade crossings protected by flashers, gates, and bell and in a quiet zone subject to regulatory approval.

<u>Route Alternatives Considered</u>: This route segment alternative was chosen after not being able to make a connection with the WSOR on the west side of Rockford, IL.

<u>Route Environmental interface</u>: The all greenfield route goes through farmland and is adjacent to some residences and farmsteads. There are no wetlands, wooded areas, or waterways affected by this segment. Safety at grade crossings is created with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

## MP 220.00 to MP 230.00

<u>Route Segment Description</u>: At MP 220.00 the railroad enters Wisconsin at grade and is going northwest to MP 221 then curving north to MP 222.00 then curving northwest to MP 224.00 then curving north to MP 226.00, then curving northwest to MP 228.00, then curving west to MP 229.00, and then curving northwest to MP 230.00. This is done to position the railroad west of Sharon, WI, parallel the UP Harvard Subdivision from MP 222.00 to MP 225.00, cross the UP and stay east of Clinton, WI to position the railroad to continue north.

<u>Route Operations Description</u>: The route continues as a single main track to MP 230.00. At MP 224.50 there will be an interchange in the southwest quadrant and flyover of the UP Harvard Subdivision

<u>Route Public Interface:</u> For vehicle flow there are 2 overpasses to be built by GLBR at MP 221.05 County Highway W 67 and MP 228.70 Wisconsin Highway 140. In addition, GLBR would build an overpass of Interstate 43 at MP 227.00 and two railroad overpasses of East County Road J at MP 224.80 and E Lake Shore Road at MP 225.00. There are 8 at grade crossings protected by flashers, gates, and bell and in a quiet zone subject to regulatory approval. There is one private road crossing to be protected by crossbucks and stop signs. At MP 226.20 GLBR would build a trail overpass over the railroad for the Pelishek Nature Trail.

<u>Route Alternatives Considered:</u> Two alignments were considered on this segment with one parallel considerably closer to the Union Pacific Harvard Subdivision which would have made the alignment much harder to flyover the railroad near Clinton, WI and to build an interchange track. The alignment we are proposing allows for an interchange and flyover of the UP. This alignment does not interfere with any residences or farmsteads.

<u>Route Environmental interface</u>: The all greenfield route goes through farmland and is adjacent to some residences and farmsteads. There are two creeks to cross but, no wetlands, wooded areas, or waterways affected by this segment. Safety at grade crossings is created with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

# MP 230.00 to MP 243.48

<u>Route Segment Description</u>: The last segment of the mainline route runs at grade and at MP 230.00 is curving to the northwest, curving back to the east at MP 231.00, then northeast to MP 232.00, then north to MP 234.50, with an S curve to the northeast at MP 235.00, turning north to MP 239.00, then curving to east and west while traversing north from MP 240.00 to MP 243.41 to miss ponds, wetlands,

and position a curve to tie into the Wisconsin and Southern at MP 243.48. At MP 234.5 the line goes to the west of a cemetery and to the west of Emerald Gove, WI.

<u>Route Operations Description</u>: The railroad continues as a single main track operation to connect with the Wisconsin and Southern at MP 243.41. At MP 230.00 to MP 233.40 there will be a 15,000-foot-long siding. At MP 233.70 there will be an interchange and an at grade crossing of the Wisconsin and Southern, with interchange in the southwest quadrant. At MP 236.00 to MP 239.40 there will be 1 siding and 3 staging tracks, each 15,000 ft. long. This will allow for meets and passes of trains along with staging of trains and maintenance equipment at the west end of the railroad. At MP 243.10 would install a switch to allow for a wye connection to the west on the Wisconsin and Southern, to allow turning of locomotives, cars, and maintenance equipment for positioning between the two railroads.

<u>Route Public Interface:</u> For vehicle traffic flow, GLBR would build 4 overpasses for roads to go over the railroad at MP 232.20 E Maple Lane Road, MP 233.10 E Avalon Road, MP 234.80 US Highway 14, and MP 242.80 Wisconsin Highway 59. There are 6 at grade crossings protected by flashers, gates, and bell and in a quiet zone subject to regulatory approval. There is one private road crossing to be protected by crossbucks and stop signs.

<u>Route Alternatives Considered:</u> There were alternative routes for this segment that were less preferable in approach for ruling grade, proximity to residences, and the curve to approach the interchange with the WSOR.

<u>Route Environmental interface:</u> The all greenfield route crosses over one creek goes through farmland and is adjacent to some residences and farmsteads. There route passes to some wetland/pond areas beginning at MP 240.8 to MP 243.41 and wooded areas from MP 238.90 to MP 239.80. No waterways are affected by this segment. Safety at grade crossings is created with flashers, gates, and bell. The area will benefit from a whistle quiet zone reducing noise exposure from rail operations.

# GLBR Kingsbury Subdivision from Milepost 0.00 near Kingsbury Industrial Park to Milepost 15.63 connecting at Mainline Milepost 9.00 of the Indiana Subdivision

<u>Route Segment Description</u>: The subdivision is designed to connect GLBR with Chicago South Shore & South Bend ("South Shore Freight"), which in turn provides access to the Illinois International Port on Lake Calumet and railroad connections in the Chicago and northwest Indiana area. This line also would create another market outlet for the Kingsbury industrial area served by South Shore Freight. Starting at MP 0.00, the Kingsbury Subdivision goes due west to MP 5.50, utilizing the abandoned grade of an old Wabash Railroad line, then enters S curves to avoid a residence and a business, returning to the historic Wabash alignment to MP 10.60. From that point, the Kingsbury Subdivision would curve southwest and west at MP 12.00, head west to MP 14.50, enter an S curve northwest to west at MP 15, then curve to the southwest to join the GLBR Indiana Subdivision at MP 15.63 (Indiana Subdivision MP 9.00).

<u>Route Operations Description</u>: This single main track subdivision starts at the South Shore Freight interchange connection at MP 0.00. The railroad would be operated under Track Warrant Control (TWC) with a maximum speed limit of 49 mph. At MP 0.10 GLBR will install a siding extending to MP 1.75. An existing railroad bridge would be used to fly over the CN South Bend Subdivision after being rebuilt to handle 315,000 lb. railcars. At MP 14.60 GLBR will install a siding to MP 15.50 to move trains on and off the GLBR Indiana Subdivision, which the Kingsbury Subdivision joins at MP 15.63.

<u>Route Public Interface</u>: This line would have limited traffic, with two to six trains operating per day, and would manage vehicle flow at twelve at grade road crossings with flashers and gates. At MP 4.90 a private road crossing would be protected with crossbucks and stop signs. A private crossing at MP 6.50 would be. A house occupying the historic Wabash alignment at MP 3.60 would be relocated or removed.

<u>Route Alternatives Considered:</u> GLBR considered three alternative routes for the Kingsbury Subdivision, along with combinations of the three. The alternatives would have interrupted several crop circle irrigation systems, passed through the middle of farms, and encountered population barriers around Westville, IN blocking the connection with the GLBR Indiana Subdivision. The preferred alignment utilizes the historic Wabash roadbed for a majority of the route and follows current farm property lines to form the least disruptive route.

<u>Route Environmental interface:</u> Safety at grade crossings would be maintained with flashers, gates, and bell. The area will benefit from a quiet zone reducing noise exposure from rail operations.

# GLBR Rockford Subdivision from Milepost 0.00 connecting at Mainline Milepost 186.35 to Milepost 22.50

<u>Route Segment Description</u>: This subdivision is designed to interchange with the Illinois Railway, provide the potential for a connection to a proposed industrial development area south/southwest of the Rockford International Airport, and connect with the CN Freeport Subdivision west of Rockford. The atgrade, all greenfield single track route starts from a wye junction off the GLBR Wisconsin Subdivision at MP 186.35, curving west to MP 7.30. The single main track route curves northwest from MP 7.30 to MP 11.00, then turns north to MP 12.00, then west to MP 13.00, then northwest and north to MP 14. From that point, the route continues north to MP 17.00 and northwest to MP 19.61, ending at an interchange connection with the CN Freeport Subdivision. At MP 13.10 the railroad would cross the Rock River.

<u>Route Operations Description:</u> The 19.61-mile-long subdivision consists of one single main track operated with a 50 mph maximum speed. Train operations would be controlled with CTC signals and Positive Train Control Protection. A wye connection with the GLBR Wisconsin Subdivision would allow traffic to flow onto the Rockford Subdivisions from both main line directions, as well as repositioning maintenance equipment and turning engines and cars. At MP 4.20 a 15,000 ft. long siding will be installed for meeting/passing trains and staging interchange with the Illinois Railway. The Rockford Subdivision would cross the Illinois Railway at grade at MP 7.30, with an interchange track in the northeast quadrant. At MP 19.61 the Rockford Subdivision will connect with the CN Freeport Subdivision on a track curving to the northwest.

<u>Route Public Interface:</u> To maintain vehicle flow, GLBR will construct a railroad overpasses of Interstate 39 at MP 4.00. BR will construct a State Highway overpass of the railroad for Illinois State Highway 251 at MP 6.80. The bridge over the Rock River at MP 13.10 will be extended to pass over Illinois State Highway 2 at MP 13.10. Sixteen at grade crossings would be protected by flashers, gates, and bell in a quiet zone, subject to regulatory approval. GLBR would request consideration of stubbing Harrisville Road, as there is an alternate route to the north that accesses an interchange with Interstate 39. A private road crossing at MP 6.00 would be realigned towards another road, since the driveway otherwise would intersect the railroad's main track, siding, and two storage tracks.

<u>Route Alternatives Considered:</u> As discussed above, an alignment was considered that would have located the Wisconsin Subdivision main line west of Rockford, connecting with WSOR near Brodhead, WI. Multiple routes were considered north of the Illinois State line into the Brodhead, WI area, all of which were eventually rejected due to the railroad gradient, wetland impacts, and hunting areas blocking access to WSOR. Instead, GLBR decided to route the main line east of Rockford to reach the WSOR near Milton, WI, and to propose this alternate alignment west of Rockford to connect with the CN Freeport Subdivision and Illinois Railway. The preferred alignment for this segment minimizes effects on wetland and waterway areas, as well as homes and farmsteads southwest of Rockford.

<u>Route Environmental interface:</u> The proposed route goes through wooded areas away from farmland from MP 12.00 to MP 13.00 and from MP 15.00 to MP 15.50. The Rock River bridge alignment is perpendicular to the river and is one of the narrower crossing locations GLBR explored.

## GLBR CORR Subdivision from Milepost 0.0 connecting to Mainline Milepost 168.00 to Milepost 1.96

<u>Route Segment Description</u>: The CORR subdivision is a 1.96-mile connection from the GLBR Illinois Subdivision at MP 168.00 to connect with the City of Rochelle Railroad. The switching railroad serves several major industries in Rochelle and has existing interchanges with the BNSF Railway and Union Pacific Railroad. The CORR extends directly west to connect with the City of Rochelle Railroad at MP 1.96.

<u>Route Operations Description:</u> The CORR starts with a wye connection at MP 168.0 of the Illinois Subdivision to allow the movement of trains in both directions on the mainline. At MP 0.50 there is a 4 track switching and staging yard to move cars to and from the City of Rochelle Railroad and allows for cars to be picked up and set out, and for staging Maintenance of Way activities.

<u>Route Public Interface:</u> At MP 0.40 GLBR would construct an overpass over Interstate 39. At MP 1.50 GLBR would build an overpass for Steward Road to Passover the CORR main track and yard.

<u>Route Alternatives Considered:</u> Three alternatives were considered for the CORR Subdivision, one north of the current choice that would parallel East Creston Road and would interchange at close to the same point the Union Pacific does now. There is a drainage channel that would require an extensive bridge, the interchange location with UP is already busy, and there would be no practical room for a switching/staging yard on this segment. The other alternative was a wye off of Illinois Subdivision MP 166 going west to join with the City of Rochelle Railroad. This connection alternative is dependent on an unfunded proposal to extend the City of Rochelle Railroad south to this area, build an underpass under Interstate 39 for a road and the GLBR. There is not enough room to build a switching/staging yard at this location.

<u>Route Environmental interface:</u> The route is all greenfield with two-thirds of the line within an existing industrial park in the City of Rochelle, IL. The wye and overpass approach to Interstate 39 is through a farm field.