

Proposal for Terminal 4 at O'Hare

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Purpose

The major airlines at O'Hare airport do not want the proposed western terminal built as described in the master plan. This mainly has to do with not wanting additional competition, as the major airlines are fronting great sums of money for O'Hare expansion. Other issues are at hand, such as access from the western terminal from the terminal core area (both passengers and baggage), and many others. However, if the airport authority wishes to explore adding additional gate capacity, a proposed terminal 4 could fit the bill.

The master plan has a proposed terminal 4 which takes concourse L from terminal 3, and adds a wing which extends north behind the H&R building up to the tram line. This proposal removes gates from terminal 3, and the new wing is allocated mainly for gates that fit WB, jumbo, and/or "new large" aircraft (NLA). According to the master plan, the proposed terminal 4 would have 12 gates.

The proposal in this document differs from the master plan proposal in order to keep as much of concourse L intact for terminal 3, but creates a new terminal 4 which can support gate space for upwards of 20 aircraft. Concourse L would stay with terminal 3, and retain most of its current gates (up to 10). The proposed new terminal 4 would allow other airline entrants into O'Hare, or a possibility of moving Delta from Terminal 2 to the new terminal 4 (to which United can take Delta's current gates). Most airlines will not be flying jumbo jets or NLA into O'Hare for domestic purposes. International traffic, which mainly uses jumbo jets, is mostly confined to Terminal 5. Thus, the gates at terminal four should be catered towards RJ or NB aircraft.

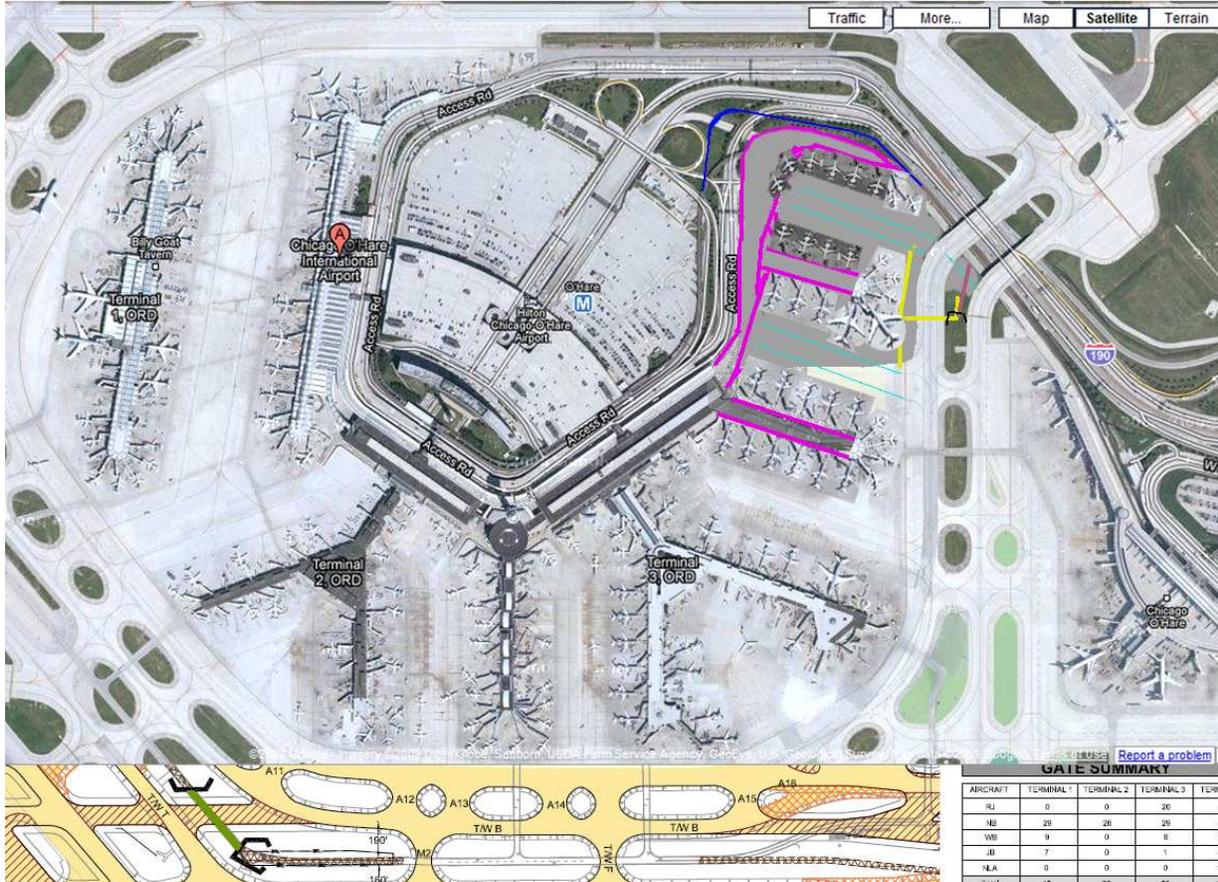
The proposal as outlined below is merely an attempt to consider other possibilities for O'Hare. Should the airport directors find that this proposal has possibilities, the directors can task an airport consulting firm for further analysis and refinement. This proposal is the workings of an airport enthusiast, not from a aviation consulting firm.

Terminal 4 Proposal

The new terminal 4 proposal would destroy the current H&R building and its associated adjunct buildings. The space would be reclaimed for use for terminal 4. The terminal may extend beyond the fire station, and reach until the tram line.

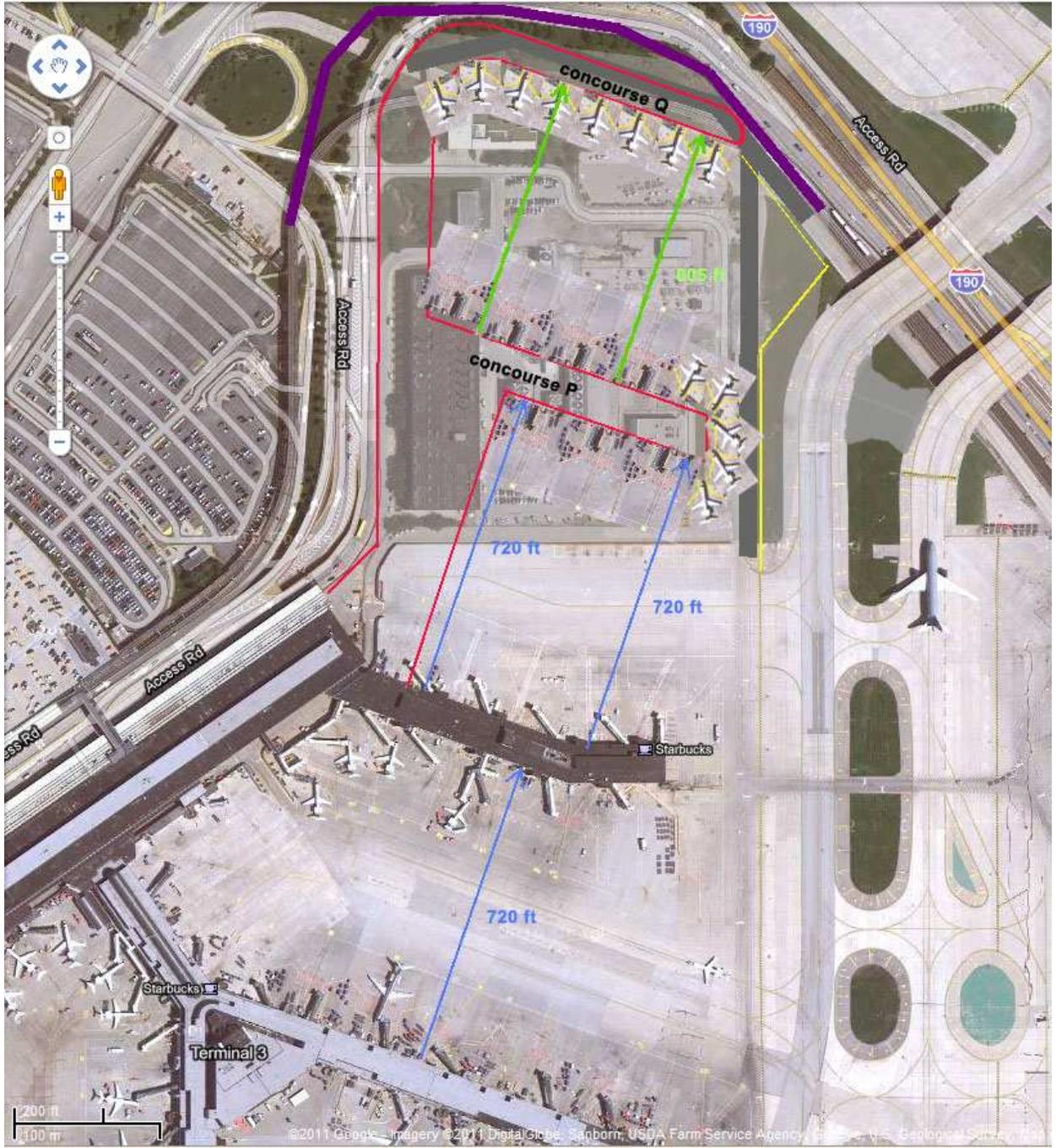
Initial concept

The following image was an initial thought of how terminal 4 could be placed. Concourse L would remain with terminal 3.

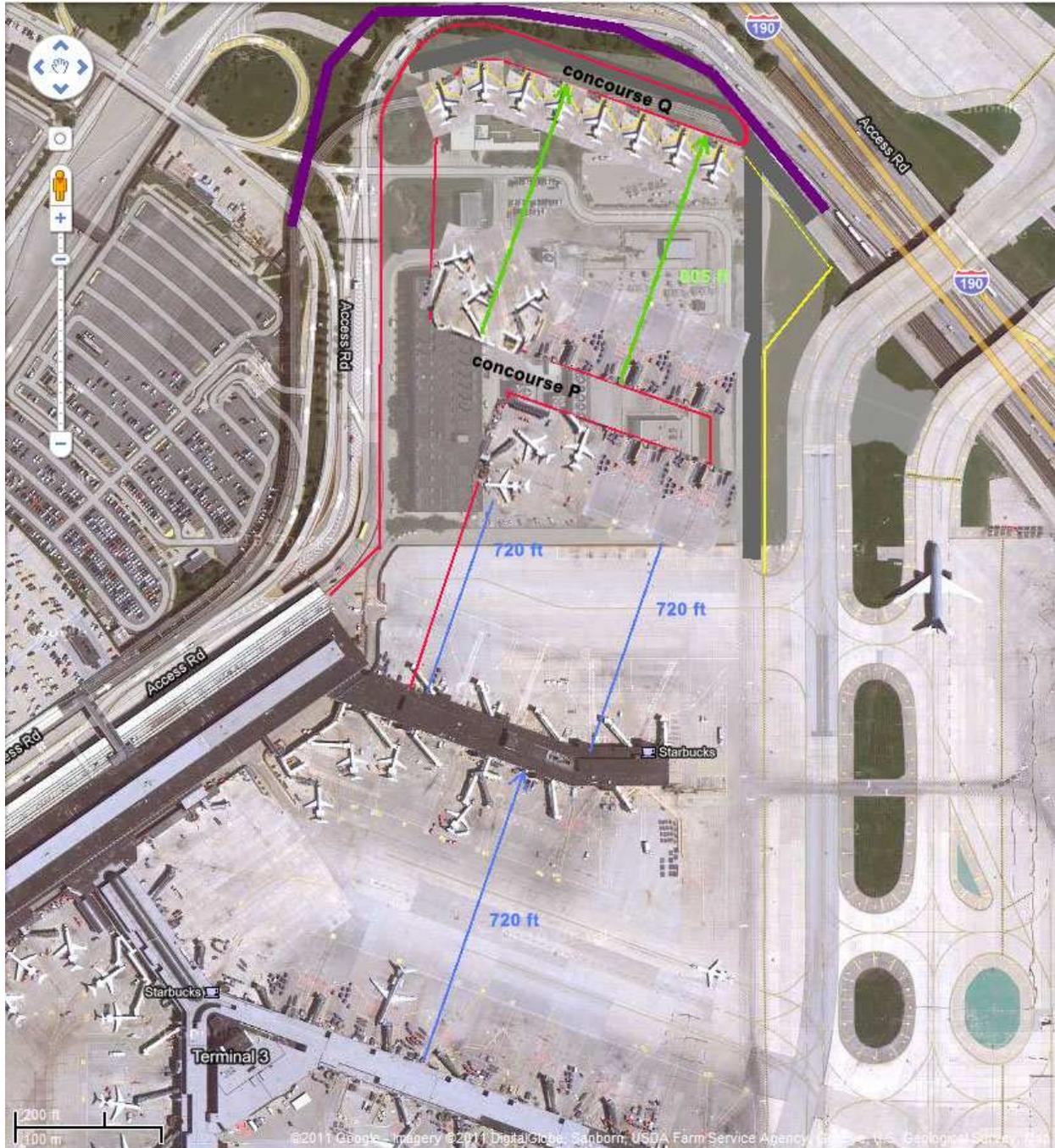


Close up refinement

This is a secondary drawing with a close up of terminal 4. This diagram would remove one gate from concourse L, and allow for a spacious terminal 4. Concourses P and Q are created, with the letter "N" reserved for a future addition to terminal 5.



An alternative gate configuration:



Terminal layout and other gate configurations are possible from an aviation specialist firm.

Terminal 4 would be spaced away from concourse L, using the same distance as the distance between concourses K and L. The distance number was not readily available. However, using satellite imagery, the distance is estimated to be 720ft. This would allow a double taxiway for NB jets between concourse piers. In order to allow a true double taxiway for concourse P, a

portion of concourse L would have to be reconstructed to extend straight, instead of having the elbow segment.

The distance between concourse P and Q is based on a proposed distance metric used in the master plan for the RJ piers on the western terminal. This is estimated to be 605ft, which is shown using the green lines. Concourse Q would host RJ only. The north side of concourse P could host NB or RJ. A new taxiway juncture A22 would be built just south of the taxiway bridges to allow northbound traffic to access the gate area of concourse P and Q.

Terminal 4 arrival and departure stations are located at the southern part of the terminal. This should allow enough distance for the arrival and departure roads to merge together further north, as well as any roadway required to circle again. The airport highway would need to be reconfigured for terminal 4. These improvements are not shown in the diagrams.

Terminal 4 could be built in two phases, with concourse P first, and then concourse Q. Concourse P occupies the location of the current H&R building, and many fan unit buildings. Construction for concourse P does not require moving the internal access road, the tram line, and relocation of the fire station. Once concourse P has been finished, the next phase would reconfigure the internal access road and tram line, and move the current fire station. Concourse Q would be built once these facilities have been moved.

Terminal 4 could be used as a hybrid terminal and have additional floors to perform the H&R building functions. The fire station could even be built into terminal 4, depending on what access is required of the fire department.

What Isn't Covered

This section identifies elements that an engineering firm must consider when designing this proposed terminal:

- Replacement of the H&R facility, along with any ancillary buildings.
- Realignment of the airport departure and arrival lanes. The realignment affects the roadway design regarding any traffic needing to circle the arrival and departure lanes.
- Placement of a new fire station.
- Parking garage underground passageway to terminal 4.
- New placement for heavy equipment, which is used for snow removal and other uses. Some of this equipment is currently parked at the H&R building area.
- Airport vehicle access roadway is not designed properly in the diagram, and will have to be reengineered.

Credits

Satellite imagery: © of Google.

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