

An aerial photograph showing a long, straight runway extension under construction. The ground is mostly bare earth and gravel, with some construction equipment visible. The runway is flanked by green fields and some buildings in the distance.

# PORTLAND AIRPORT RUNWAY EXTENSION: CHALLENGES AND SUCCESSSES

MARCH 15, 2023



Purdue Road School Transportation Conference & Expo

# PRESENTATION AGENDA



- Project Overview
- Airport History
- Extension Justification
- Airport Layout Plan Update
- Environmental Study
- Land Acquisition
- Stream Mitigation
- Design
- Construction Phase 1
- Construction Phase 2
- Summary



# PROJECT OVERVIEW



## CHALLENGES

- Runway Extension Justification
- Airport Layout Plan Approval
- FAA Environmental Approval
- Land Acquisition
- Stream Mitigation
- Construction Funding



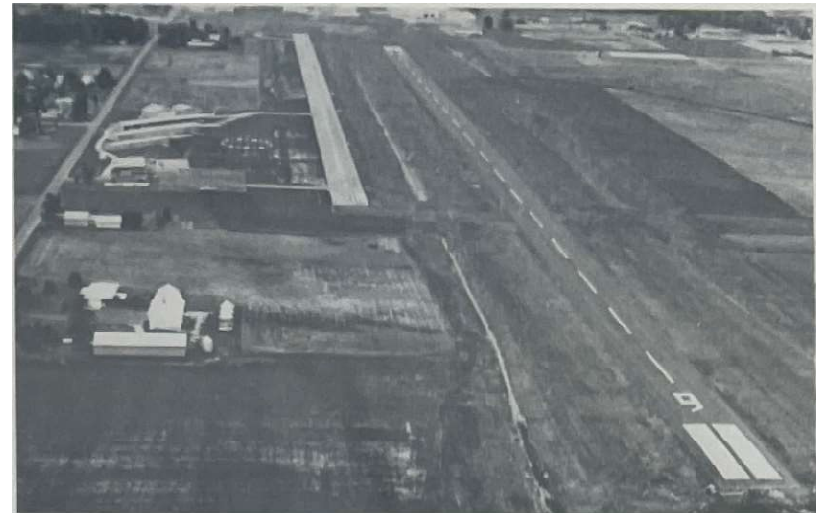
# AIRPORT HISTORY



1947 – Three Turf Runways



1982 – 4,000' Paved



# RUNWAY EXTENSION JUSTIFICATION **BF&S**

## CHALLENGES

- Started November 2013
- Multiple Rounds of FAA Comments
- Trip to Chicago ADO
- Conference Calls with Operators
- 788 Annual Operations that Justified 5,500' Runway Length
- Approved January 2015



# RUNWAY EXTENSION JUSTIFICATION **BFS**

Saturday, January 31, 2015

## The Commercial Review

Portland, Indiana 47371

www.thecr.com

75 cents

### ISTEP sparks alarm

CRAWFORDSVILLE, Ind. (AP) — Some Indiana educators say they're concerned that young students won't have the stamina to complete the more rigorous tests being rolled out this spring to measure student achievement.

Their alarm stems from testing schedules for a revamped ISTEP+ test, Indiana's standardized test for grades 3 through 8. The exam will be administered to about 450,000 students to assess their mastery of new math and English benchmarks.

Educators say they were told last year that the new test would be more rigorous. But several told The Journal Review that they weren't prepared for the new assessments to take significantly longer than the former test.

An estimate of testing times provided to The Associated Press by the Department of Education Friday shows students in all grade levels spent an average of 5 hours and 9 minutes to complete all sections in 2014.

The total time for the

*"That's been my No. 1 objective for the airport ... getting the runway extension. My initial reaction was joy."*

—Hal Tavzel, Portland Municipal Airport manager

### Extension approved



The Commercial Review/Ray Cooney

Plans can now move forward on a 1,500-foot runway extension at Portland Municipal Airport (pictured) after the Federal Aviation Administration notified Portland Board of Aviation Friday that it approved a justification study for the project. The city must now acquire land for the extension, for which construction is not likely to begin until at least 2017.

### FAA gives OK to longer airport runway

# AIRPORT LAYOUT PLAN UPDATE



## CHALLENGES

- The current approved Airport Layout Plan was for a future runway length of 5,000'
- Full ALP update completed and submitted in 2015.
- Final approval was issued in 2019 which held up the project design.



# ENVIRONMENTAL STUDY



## CHALLENGES

- FAA issued a Finding of No Significant Impact (FONZI) in 2007.
- However, it was for only a 1,000' extension of the runway and taxiway.
- In 2016, we re-coordinated with agencies, Section 106, and submitted written re-evaluation request to FAA.



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Great Lakes Region  
Illinois, Indiana, Michigan,  
Minnesota, North Dakota,  
Ohio, South Dakota,  
Wisconsin

2300 East Devon Avenue, Suite 312  
Des Plaines, Illinois 60018

City of Portland  
Portland Municipal Airport  
C/O David Miller  
Airport Manager  
661 W 100 N  
Portland, IN 47371

September 13, 2007

RE: Portland Municipal Airport  
Portland, Indiana  
Finding of No Significant Impact

Dear Airport Sponsor:

On the basis of an Environmental Assessment, the Chicago Airports District Office has issued a Finding of No Significant Impact (FONSI) for proposed Federal actions associated with the extension of Runway 09/27. Enclosed for your use is a copy of the approved environmental decision document. Please refer to the document for a summary of the proposed actions/development items and any required mitigation.



# LAND AQUISITION



## CHALLENGES

- 41.2 Acres needed for 1,500' Extension
- Purchase entire Runway Protection Zone (RPZ)
- \$652,000 (\$15,825/ac) closed on 9/30/2016



# STREAM MITIGATION



# STREAM MITIGATION



## STREAM AND WETLAND MITIGATION PROGRAM

- Indiana DNR In-Lieu Fee (ILF) Program started in 2018
- Statewide program to purchase stream and/or wetland mitigation credits
- Applicable for permitted impacts authorized under 404/401 of the Clean Waters Act and other authorizations
- Developers can purchase credits in-lieu of performing mitigation themselves
- Transfers legal obligation to provide mitigation to Indiana DNR
- Regulated by the Corps of Engineers & EPA under 2008 Federal Rule 33 CFR Part 332



**DNR**  
Indiana Department  
of Natural Resources



# STREAM MITIGATION



## FOR THE DEVELOPER

- Comparable cost of mitigation construction and monitoring
- Eliminates construction, maintenance, monitoring, and liability for mitigation efforts
- Speeds up permitting timeframe by nearly 50 percent

## FOR THE STATE

- Allows for flexibility to combine mitigation needs into larger, more sustainable aquatic resource restoration projects
- Better opportunity for mitigation success by having DNR complete restoration projects and mitigation plans
- Better selection of mitigation project sites using a watershed approach



# STREAM MITIGATION

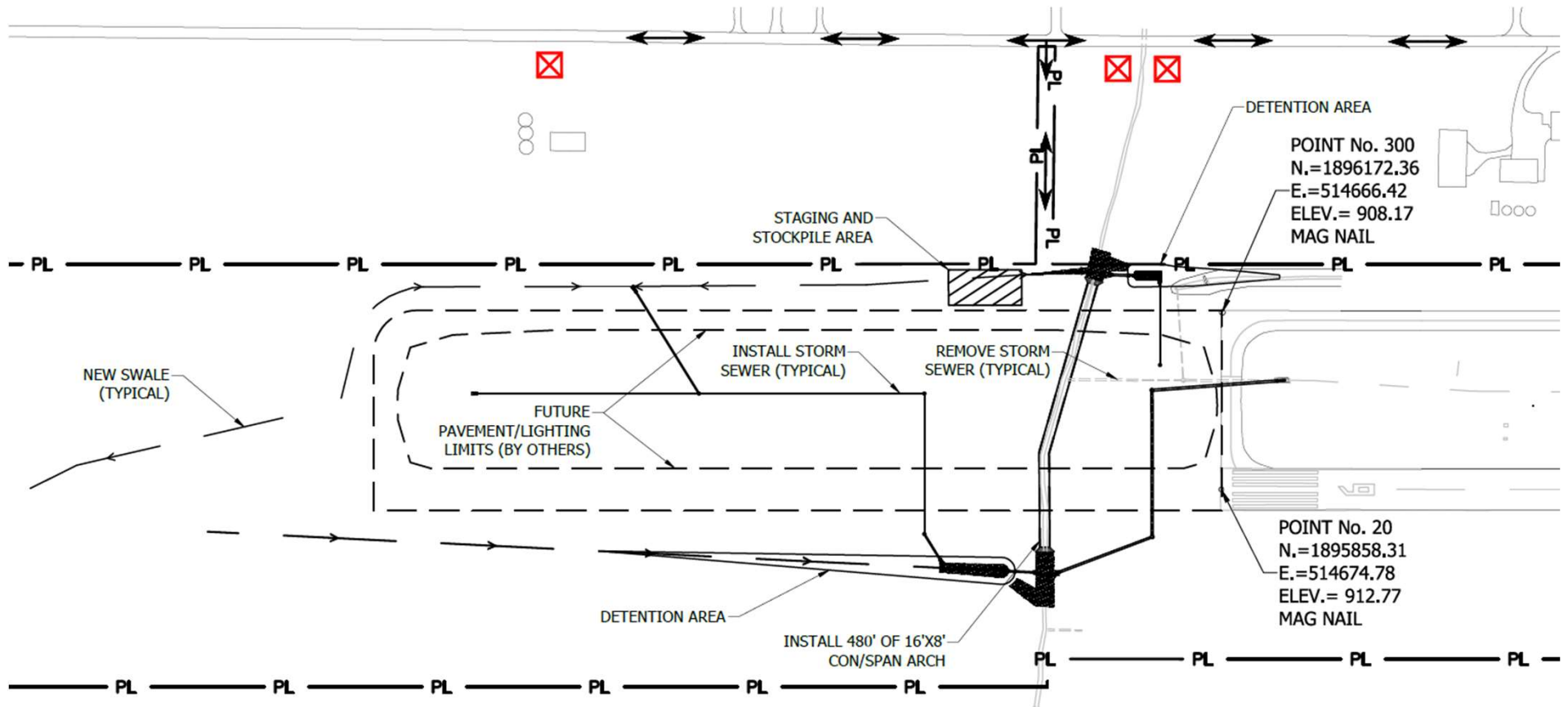


## PORTLAND MUNICIPAL AIRPORT

- Required to perform 666 linear feet of stream mitigation
- The airport opted to purchase stream mitigation credits @ \$400 a credit for a total of \$266,400
- Legal obligation to identify, scope, construct, monitor, and maintain stream mitigation was transferred from the airport to the State



# DESIGN



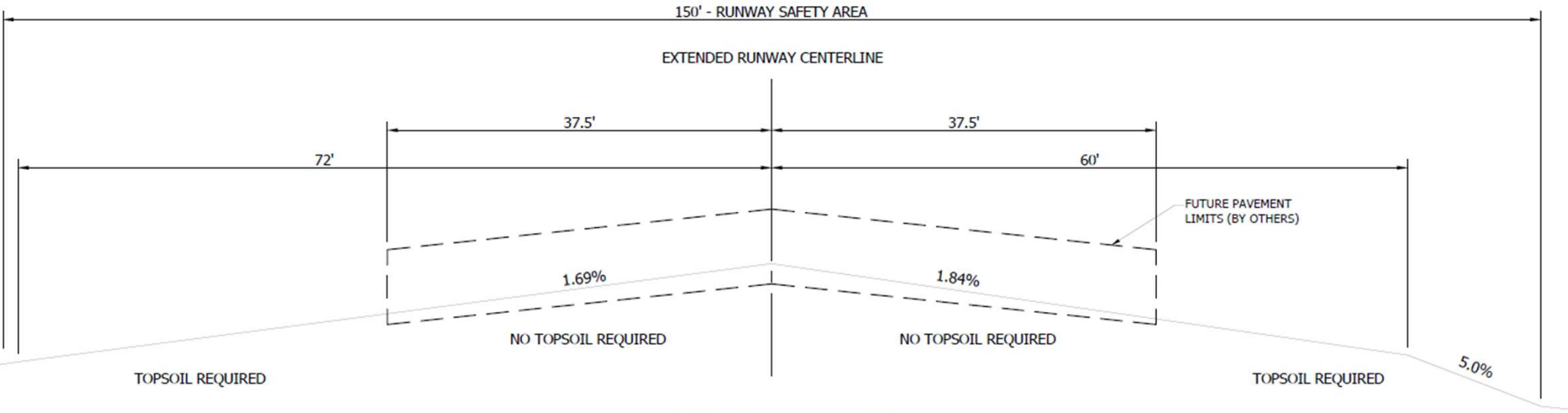
# DESIGN – GRADING AND DRAINAGE



- Earthwork grading: 112,000 CYS of earthwork, including 101,000 CYS of borrow material
- Storm Sewer: 2,150 LFT of new storm sewer pipe, 11,000 LFT of new underdrain pipe
- Box Culvert: 480 LFT of 16' x 8' box culvert



# DESIGN – GRADING AND DRAINAGE



RUNWAY SECTION DETAIL

SCALE: NONE



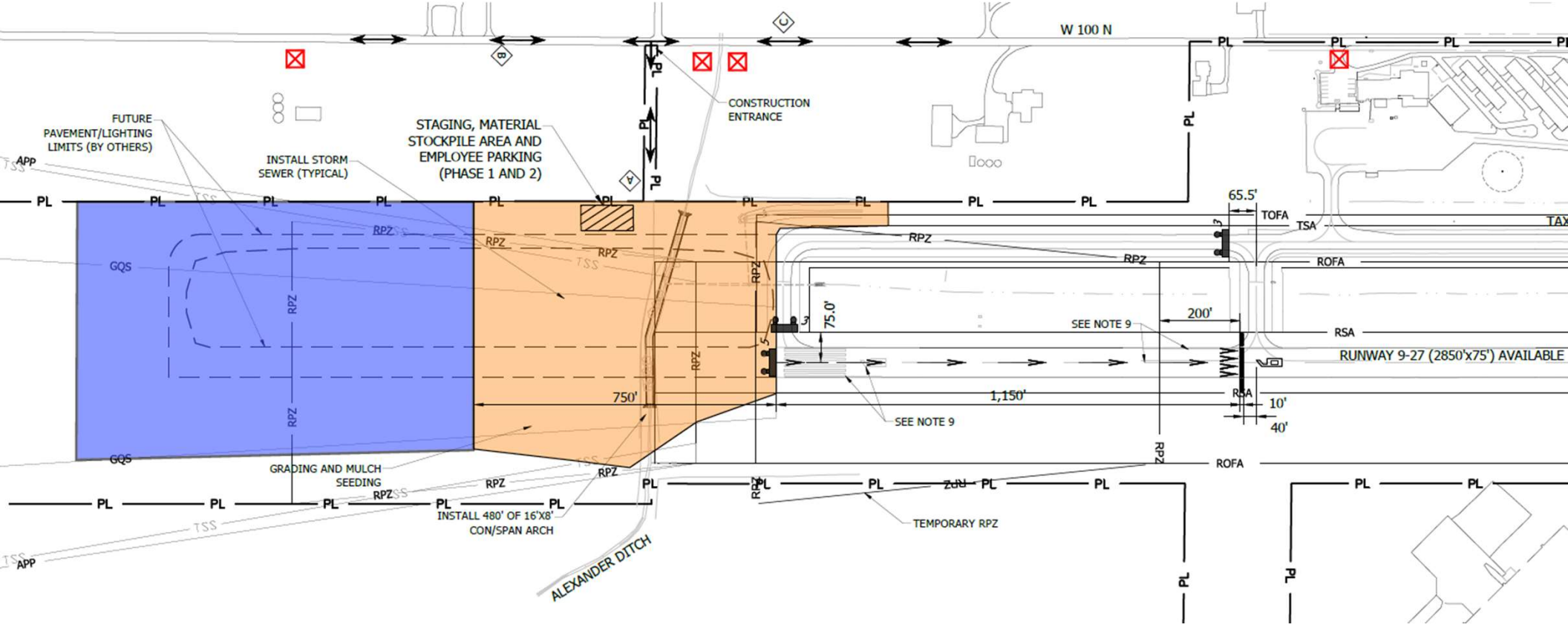
# DESIGN – GRADING AND DRAINAGE



# CONSTRUCTION - PHASE 1



# CONSTRUCTION – PHASE 1



# CONSTRUCTION – PHASE 1



# CONSTRUCTION – PHASE 1



# DESIGN – PAVING AND LIGHTING



- Cement Treated Subgrade: 24,300 SYS
- Aggregate Base: 3,950 CYS
- Asphalt: 7,700 tons

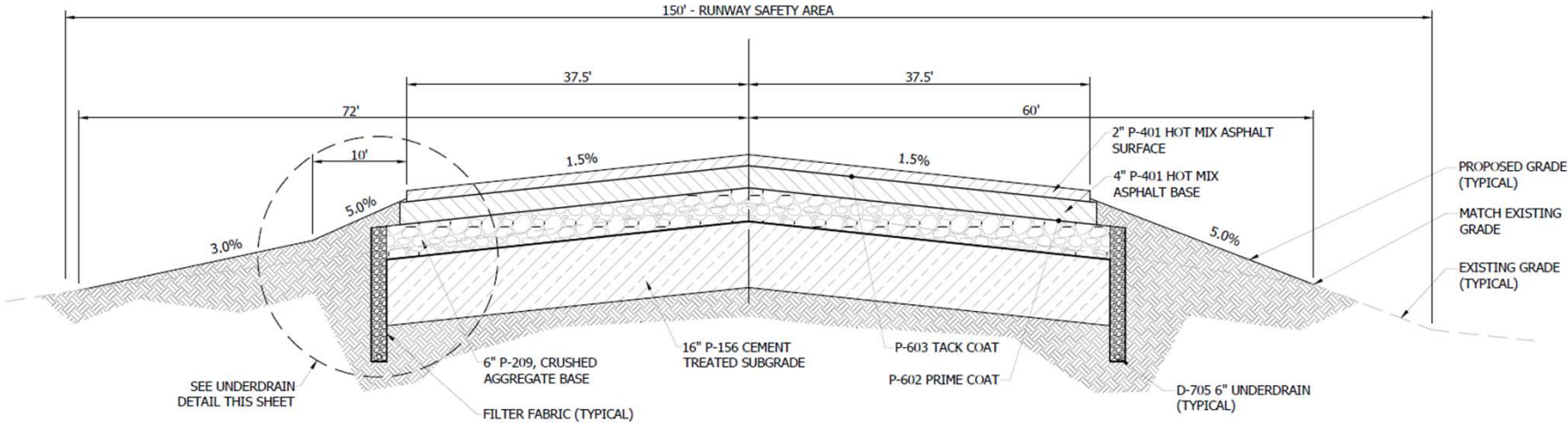
- Electrical Conduit: 6,500 LFT
- Electrical Cable: 12,500 LFT
- Electrical Fixtures: 55 lights/signs



# DESIGN – PAVING AND LIGHTING



- 6" FAA P-401 Hot Mix Asphalt
- 6" FAA P-209 Crushed Aggregate Base Course
- 16" FAA P-156 Cement Treated Base Course



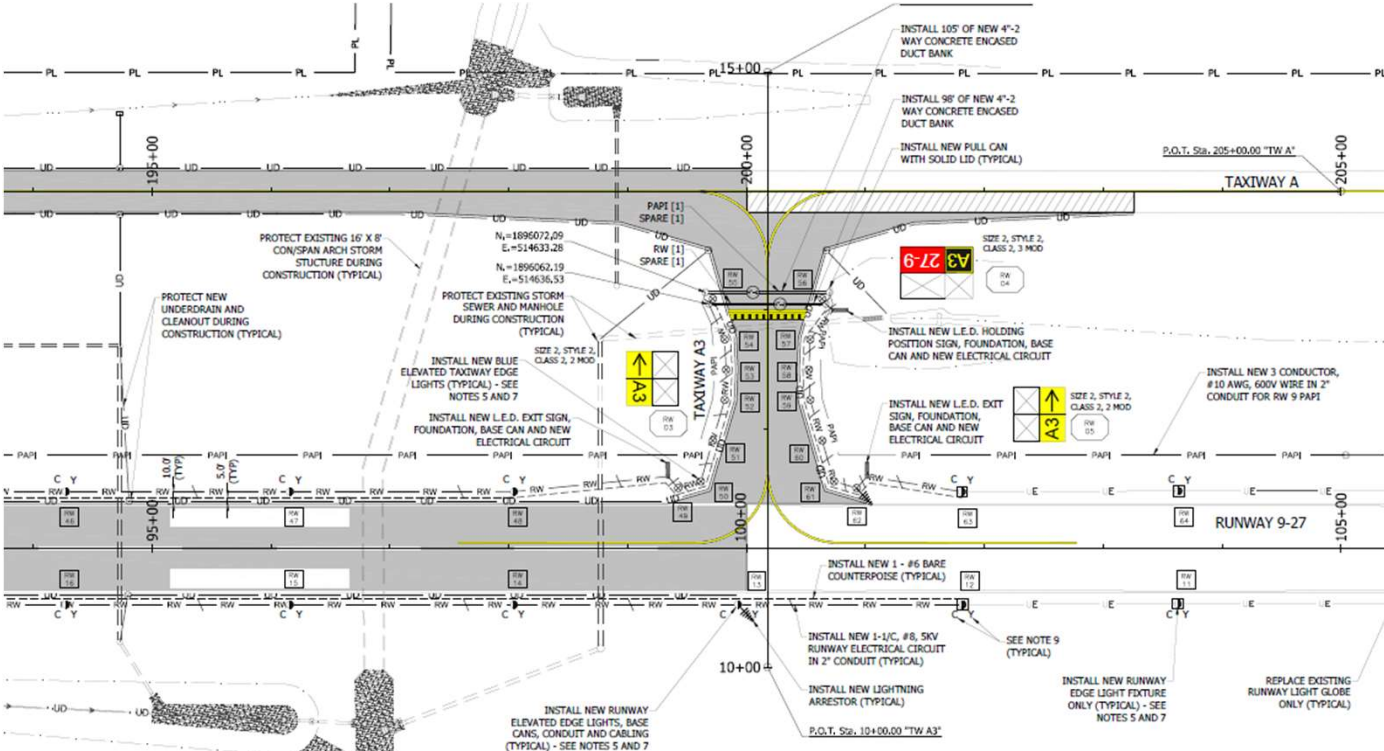
RUNWAY SECTION DETAIL

SCALE: NONE

# DESIGN – PAVING AND LIGHTING



- Reconfigure old end connector
- Transitions
- Circuit Extensions

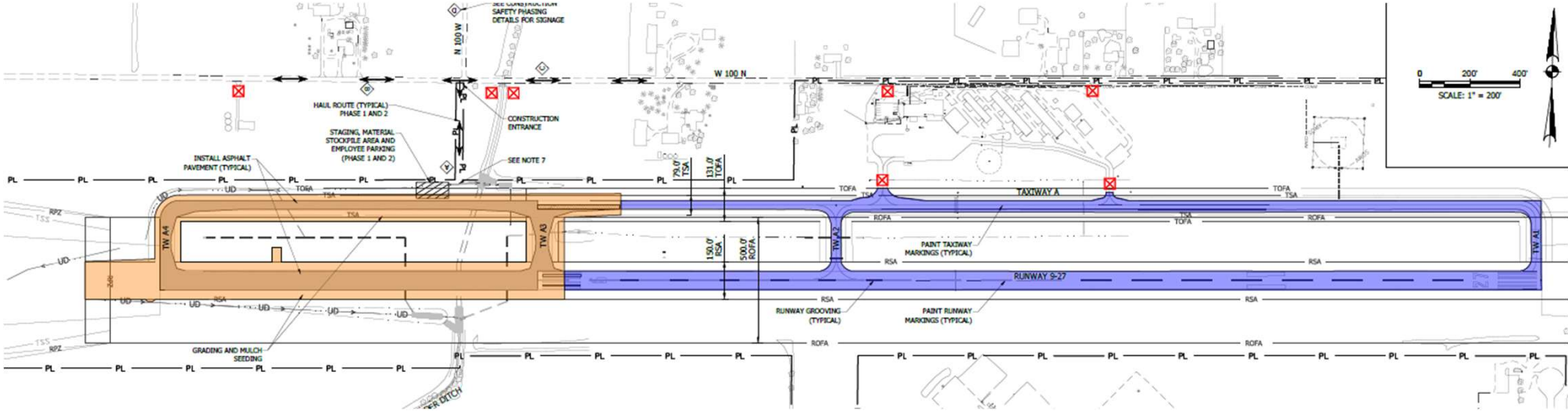




# CONSTRUCTION - PHASE 2



# CONSTRUCTION - PHASE 2



- Phase 1
- 75 Calendar Days

- Phase 2
- 5 Calendar Days

# CONSTRUCTION - PHASE 2



# PANDEMIC IMPACTS



- Due to the pandemic, the FAA issued AIP grants in 2020 and 2021 at 100% Federal Share
- Portland's 2020 grant for Grading and Drainage Construction was \$2,971,245
- Portland's 2021 grant for Paving and Lighting Construction was \$3,266,521
- The result was the local community saved \$311,888 (the 5% match)



# THE FUTURE...



WHAT A 5,500' RUNWAY DOES FOR THE AIRPORT



# BY THE NUMBERS



- 1999** Runway extension idea proposed
- 2007** Environmental Assessment (EA) document approved by FAA
- 2015** FAA approves the runway length of 5,500 ft (extension of 1,500 ft)
- 2016** 41.2 acres of land acquired for \$652,000
- 2017** EA Re-Evaluation Request approved by FAA
- 2018** Runway and Taxiway Extension Design Begins
- 2019** Airport Layout Plan approved by FAA
- 2020** Portland Municipal Airport purchases 666 stream credits to mitigate impacts
- 2021** June 6th Groundbreaking Ceremony and Phase I Construction begins
- 2022** Phase I Construction completed and Phase II Construction begins



# BY THE NUMBERS



Planning & Design Costs • \$717,926

Enabling Project Costs (Land and ILF credits) • \$948,875

Construction Cost (Phase I and Phase II) • \$5,323,300  
*100% Federally Funded*

Construction Inspection Costs • \$490,679  
*100% Federally Funded*

Total Project Cost • \$7,480,780



# QUESTIONS?



## PRESENTERS



Jason Clearwaters, PE, PS  
Airport Production Manager



John Feister, PE  
Airport Project Manager



Hal Tavzel  
Portland Airport Manager  
Sonrise Aviation  
Tavzel Aviation

**Butler, Fairman & Seufert, Inc.**  
317.713.4615 | [bfsengr.com](http://bfsengr.com)

