

# PIP-II

## Project Director Report

January 2022



### Project Highlights

- CD-3 Independent Cost Estimate review takes place
- Fermilab signs PPDs with WUST
- Prototype HB650 string assembled with international partners
- Site work advances

### Upcoming Events

7–8 Feb	International Neutrino Council (INC)
1–3 March	DOE CD-3 IPR
15 March	P2PEB #11

## Fermilab signs PPDs with WUST

On Jan. 20, Fermilab signed project planning documents with the Wrocław University of Science and Technology in Poland, officially establishing WUST as a PIP-II collaborator. WUST's contributions will build upon the university's expertise in cryogenics and next-generation superconducting accelerator technologies. They plan to contribute design and hardware for the cryogenic transfer lines for the PIP-II linear accelerator.



Rector Professor Arkadiusz Wójs (top photo), Wrocław University of Science and Technology, and Fermilab Director Nigel Lockyer (bottom) signed the project planning documents for work on the PIP-II particle accelerator project.

## CD-3 Independent Cost Estimate review

The DOE Independent Cost Estimate (ICE) Outbrief was held on Jan. 28, concluding the “site visit” portion of the ICE team's work. They will next produce an independent estimate for CD-3, which is the final milestone that authorizes PIP-II to begin full-scale procurement and construction. The ICE team was reported to be very impressed with the PIP-II team and the materials provided. PIP-II is still on track for CD-3 and full construction approval.



## Prototype HB650 assembled with international partners

Half of the prototype HB650 cavity string was completed on Jan. 28. A team from PIP-II collaborating institution CEA (France) visited Fermilab from Jan. 10–21 to witness the first coupler-to-cavity and cavity-to-cavity

connections. A team from STFC-UKRI (UK) visited Fermilab from Jan. 24–28 to witness the HB650 string assembly. Rails and posts are being installed outside the HB650 cleanroom in preparation for the prototype's roll-out.



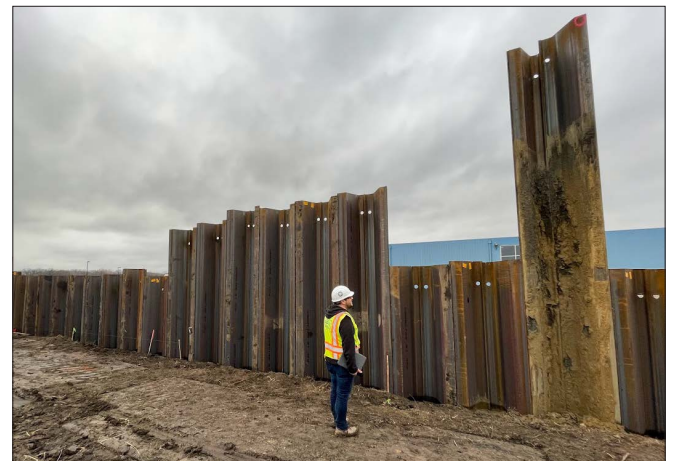
UK and US PIP-II collaborators at Fermilab for the prototype HB650 string assembly. From left to right: Luke Bladen (STFC-UKRI), Tom Hanley (STFC-UKRI), Lia Merminga (Fermilab), Alex Headspith (STFC-UKRI), Paul Hindley (STFC-UKRI), and Saravan Chandrasekaran (Fermilab). Credit: Anna Grassellino.



Three of six cavities in the prototype HB650 cryomodule string after installation of high power RF couplers, interconnect bellows, and cold-to-warm transition. This is the first of its kind string, assembled in a new cleanroom facility. Credit: Saravan Chandrasekaran

## Site work advances

Site work has continued since the subcontractor notice to proceed was issued on Nov. 29, 2021. The latest milestone achievement was the successful completion of the sheet pile wall installation on Dec. 23, 2021. Existing A-Zero Pond sediment removal continues through the winter with a target completion by end of February or early March, weather pending.



PIP-II Fermilab construction coordinator observing the sheet pile wall installation for the site work phase. Credit: Steve Dixon



Workers finalizing sheet pile wall cuts for the PIP-II site work phase. Credit: Mark Leise