

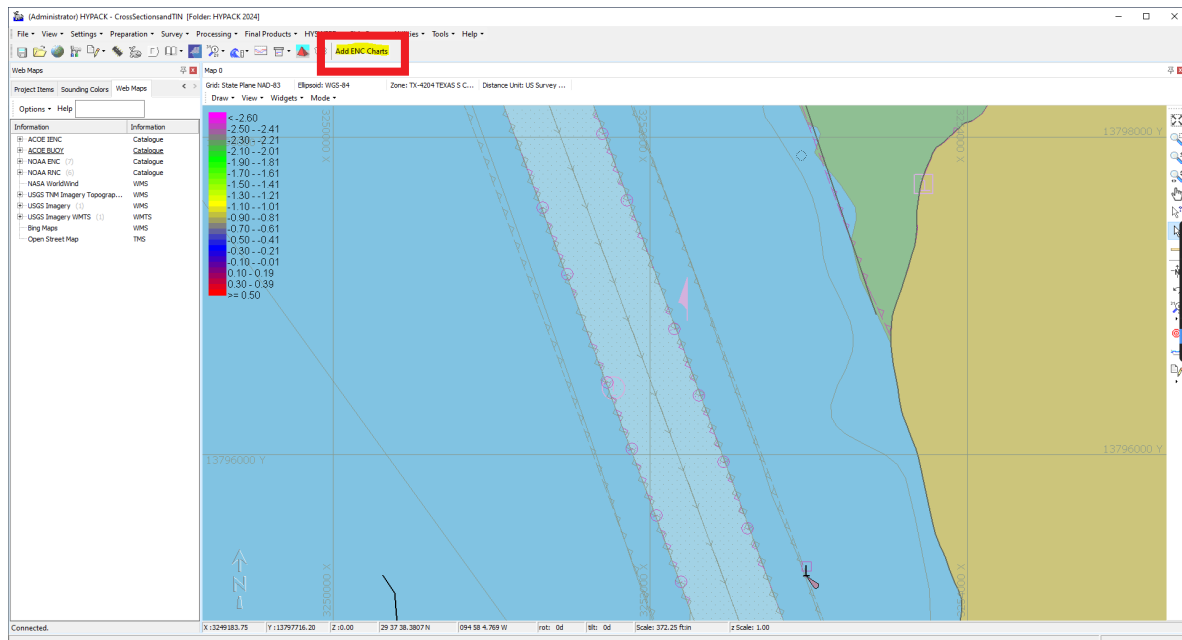


Using ENC Charts to Help With Dredge Projects

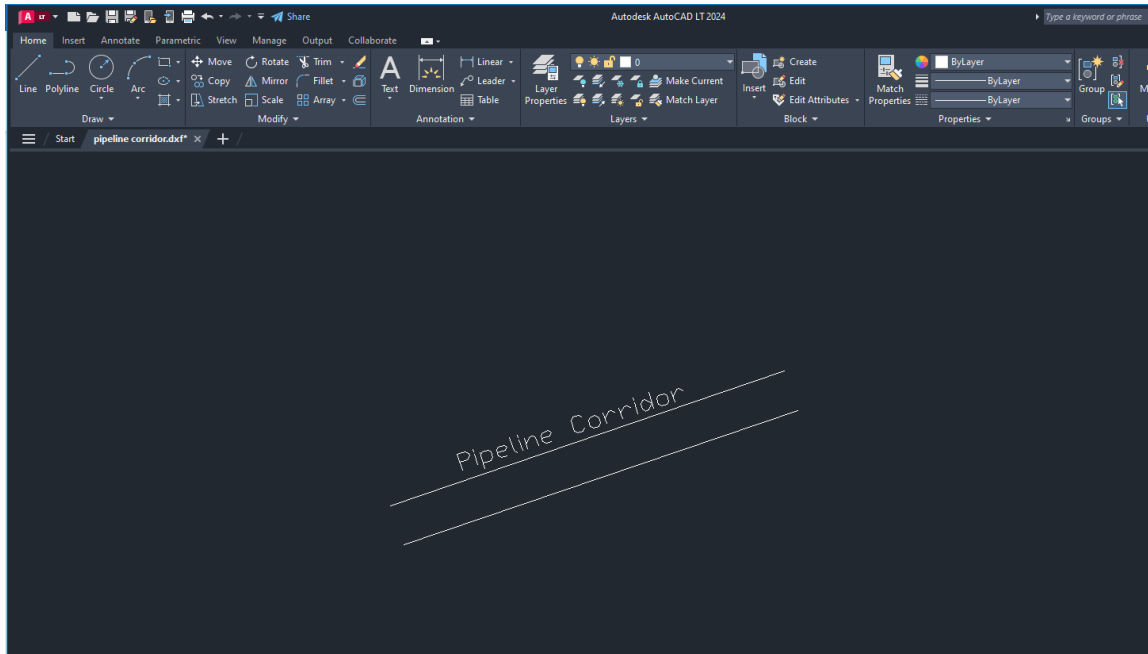
By Thelen Pumford

Creating ENC Charts with project-specific items can be very helpful in dredging projects. This way, even without HYPACK®, your vessels can still see those project-specific items using Coastal Explorer or some other ENC Chart viewing method. For example, do you need to lay some dredge pipe in a specific location? If so, you can create an ENC Chart with those coordinates, load the file on a few work boats, and you don't even need a survey boat out there to help.

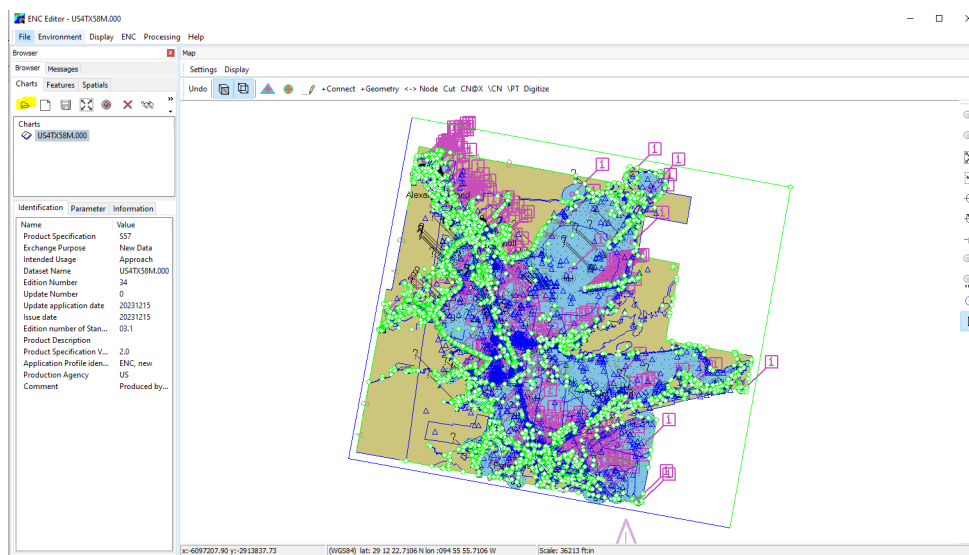
Step 1: Load the ENC Chart for the area. If you are connected to the internet, you can do this by clicking Add ENC Charts in the HYPACK Shell, and this should load all charts that the Shell window is zoomed into. You can also download specific charts from the [U.S. Office of Coast Survey \(noaa.gov\)](https://www.noaa.gov).



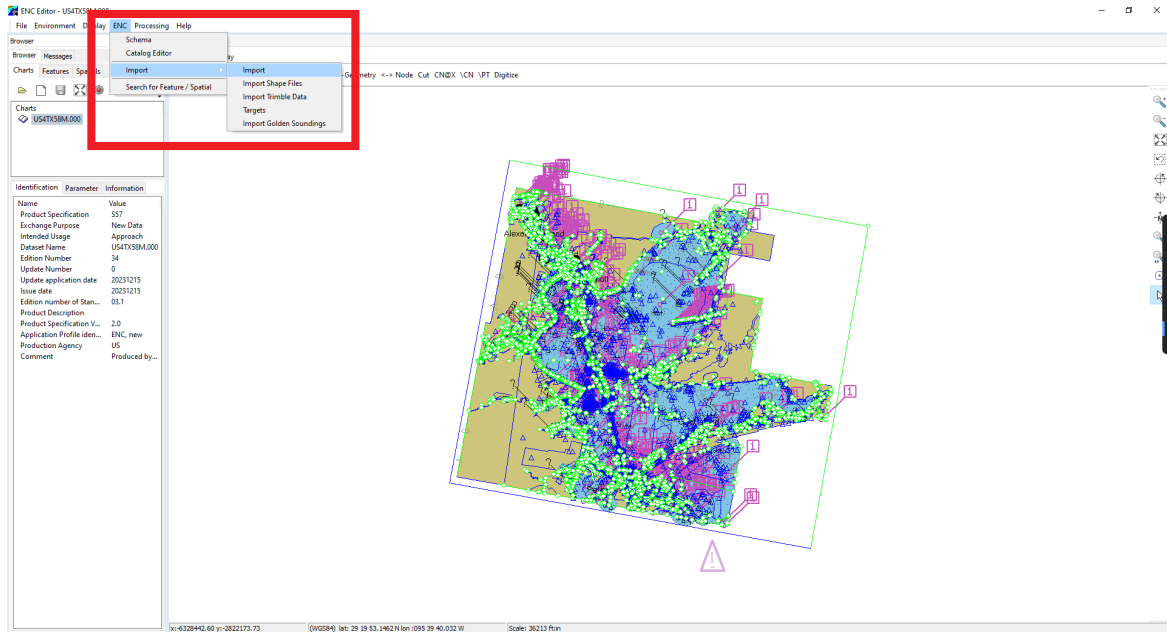
Step 2: Create a DXF file in AutoCAD of the specific zone you want your vessels to see. Save the file as a *.dxf, version 2004 works well. Note that when creating the *.dxf, text will not show up unless the text has been exploded. If you are using the full version of AutoCAD, simply use the command Explode on any text you want to show up in the ENC. If you are using AutoCAD LT, that command does not work unfortunately. I am using AutoCAD LT, so the text in the snip below will not show up in the ENC Chart.



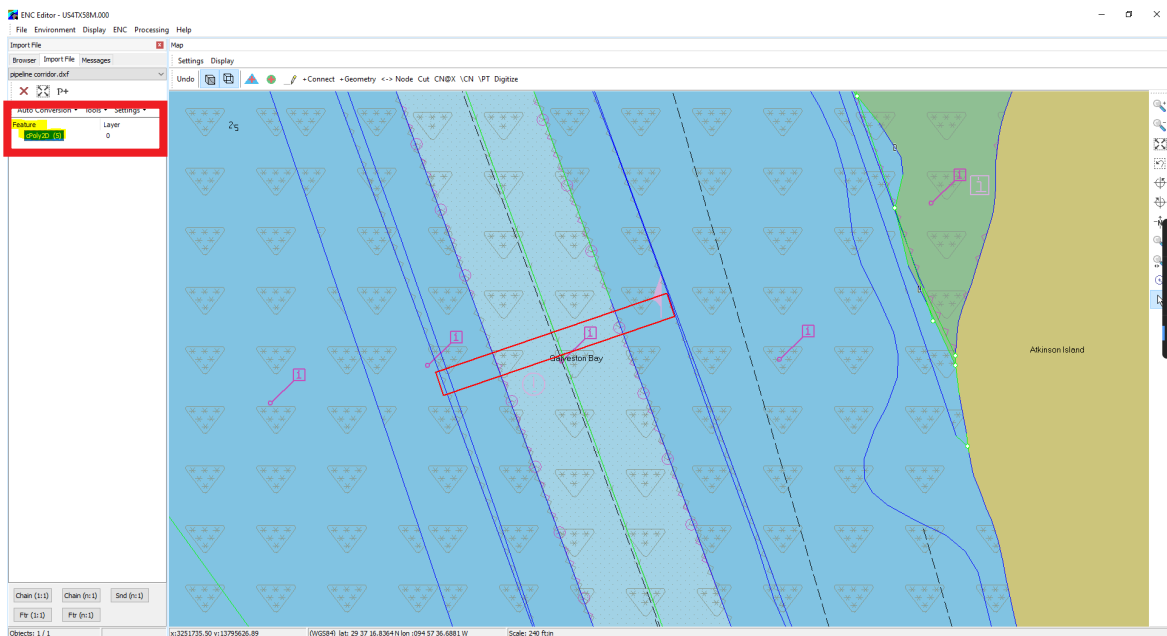
Step 3: Open ENC Editor from Final Products -> ENC Editor, and load your ENC Chart.



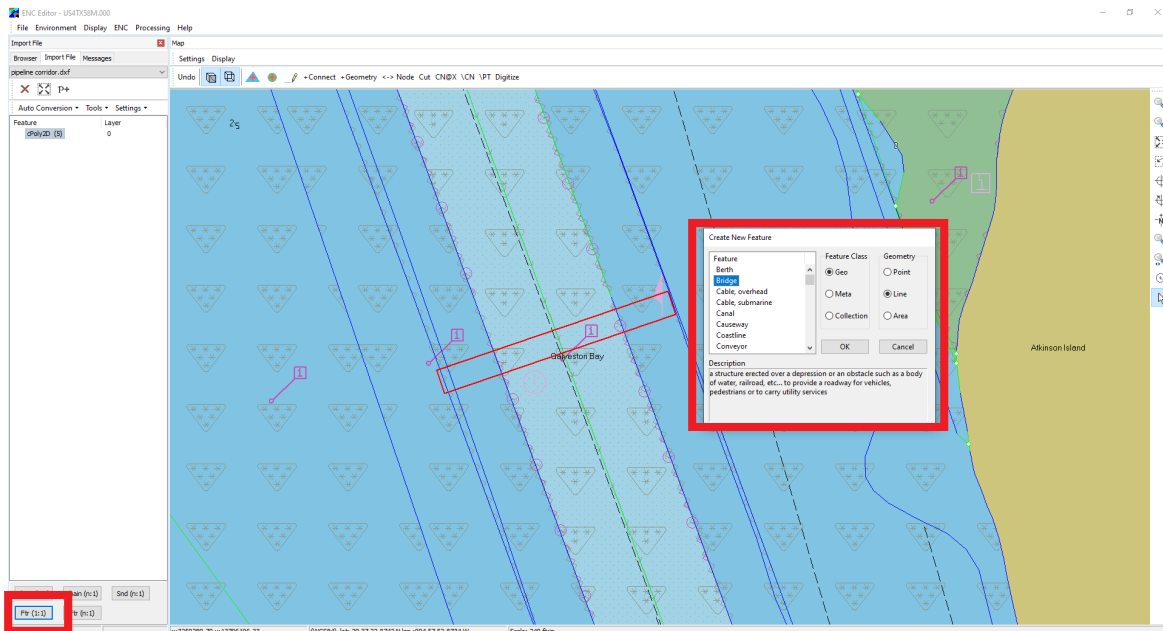
Step 4: Click the ENC tab in the Editor and then select Import, then navigate to your *.dxf file you saved in the previous step.



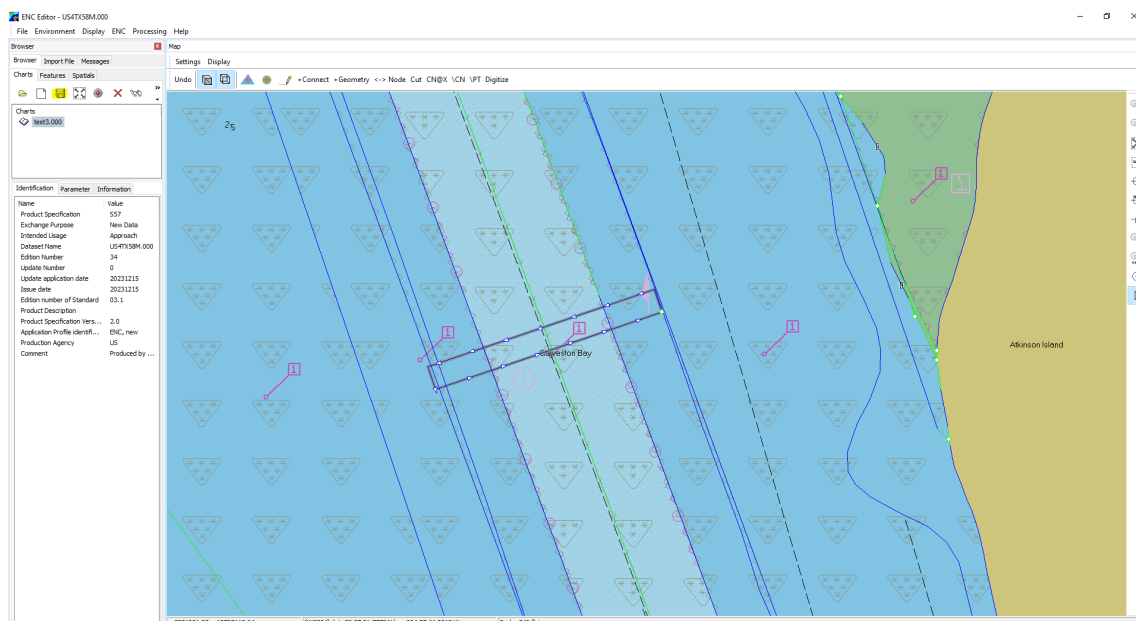
Step 5: Zoom in to the area of your *.dxf file and highlight all of the features you want to save. This example only has one feature, but there may be many more depending on how big your *.dxf file is. Note, the more features your *.dxf has, the bigger your ENC Chart will be, which could make your computer run very slow. It's best to make simple *.dxfs when importing them to an ENC.



Step 6: Once you have selected all features from your *.dxf you want in your ENC, click the button [Ftr (1:1)] in the bottom left. That will pop up a window asking you to define the new feature class. The different classes will shade and color the *.dxf features differently so you can play around with this and find the option you like. I prefer to set Geometry to 'Line' and then use the feature 'Bridge'.



Step 7: After selecting the Feature Class, click [OK]. Navigate to the Browser tab and click Save. Congratulations, you have made your own ENC Chart!



Step 8: Load your ENC Chart onto your vessel's computer. First, save your chart to a thumb drive and bring it with you the next time you're headed out to your project. If your vessels are using Coastal Explorer or Rose Point, you will need to find the folders storing the ENC Charts and paste the ENC you created into the correct folder. The folders should look something like this. The folder name should correspond to the name of the ENC you originally downloaded. For example, the ENC I originally used was 'US4TX58M.000', so I found the folder with that name and pasted the ENC I made into that folder.

US3NY01M	2/20/2024 11:03 AM	File folder
US4CN21M	2/20/2024 11:03 AM	File folder
US4FL50M	12/4/2023 9:49 AM	File folder
US4IL10M	12/18/2023 4:47 PM	File folder
US4LA20M	10/3/2023 10:04 AM	File folder
US4LA21M	10/3/2023 10:04 AM	File folder
US4LA22M	10/3/2023 10:04 AM	File folder
US4LA25M	10/3/2023 10:04 AM	File folder
US4LA29M	10/3/2023 10:04 AM	File folder
US4LA31M	10/3/2023 10:04 AM	File folder
US4LA32M	11/2/2023 12:44 PM	File folder
US4MA13M	3/5/2024 9:35 AM	File folder
US4SC22M	1/9/2024 4:22 PM	File folder
US4TX52M	2/28/2024 11:21 PM	File folder
US4TX58M	3/25/2024 1:29 PM	File folder
US5BOSDD	3/5/2024 9:35 AM	File folder
US5CT1FV	2/20/2024 11:03 AM	File folder
US5CT1FW	2/20/2024 11:03 AM	File folder
US5FL57M	12/4/2023 9:49 AM	File folder
US5GA22M	1/9/2024 4:22 PM	File folder
US5HOUCG	3/25/2024 11:35 AM	File folder
US5HOUCH	11/9/2023 9:42 AM	File folder
US5IL21M	12/18/2023 4:47 PM	File folder
US5LA13M	10/3/2023 10:04 AM	File folder
US5LA23M	10/3/2023 10:04 AM	File folder
US5LA27M	10/3/2023 10:03 AM	File folder
US5LA38M	10/3/2023 10:04 AM	File folder