



Top Hat

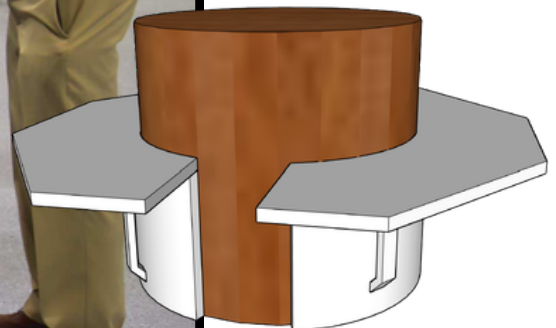
Submitted by: Preston Lavender (D7/Bridge Maintenance)
Manager: Drew Vartenisian

Description:

The "Top Hat" Support System is a lightweight, fabricated aluminum assembly that creates a stable platform for installing steel collar repairs on deteriorated timber bridge piles, improving safety, alignment, and efficiency while reducing manpower requirements.

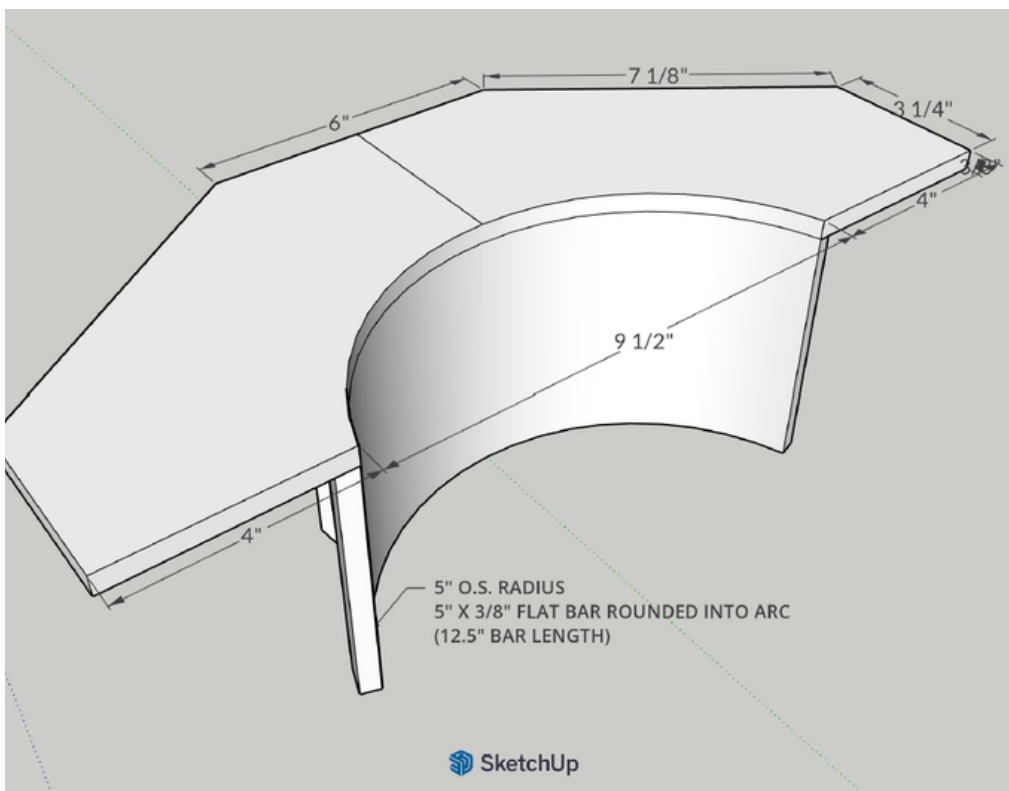
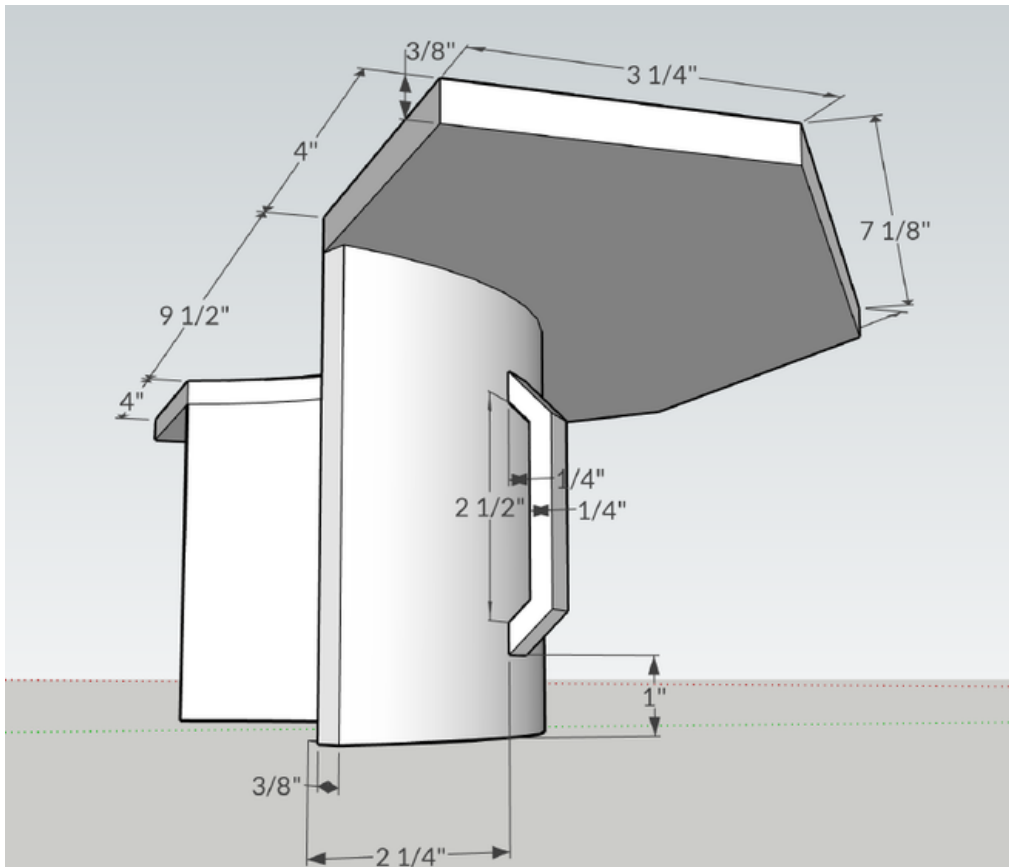
How does this Innovation benefit SCDOT:

The Top Hat Support System improves safety and efficiency during timber pile repairs by stabilizing heavy steel collar sections, reducing manual lifting, minimizing manpower needs, and speeding up bridge repair operations.





Top Hat





Top Hat



1) Cutting Pile



2) Planing pile



3) Measuring for new pile



4) Splicing in new pile



Top Hat



5) Installing Top Hat 2; below joint



6) securing Top Hat



7) Top Hat ready for collars



8) Placing Collar on Top Hat



Top Hat



9) Two collars placed



10) Tightening Bolts



11) Removing Top Hat



12) Collars installed