



- THE MANHOLE BASE LINER SHALL BE A FIBERGLASS REINFORCED PLASTIC (FRP) OR POLYPROPYLENE (PP) BASE LINER SYSTEM PER THE ENGINEERING SPECIFICATIONS.
- 2. BASE LINER CHANNEL RECEIVING THE INSIDE DROP FLOW SHALL BE SIZED ONE PIPE SIZE LARGER THAN THE INCOMING PIPE TO ACCOMMODATE THE 90° BEND. BEND TO REST FLUSH IN THE CHANNEL.
- 3. EXISTING MANHOLES SHALL HAVE THE BEND SET ON TOP OF THE EXISTING BENCH, ORIENTED TOWARDS THE DOWNSTREAM OUTLET, AND GROUTED IN-PLACE. ADDITIONAL PVC PIPE MAY BE REQUIRED TO DIRECT FLOW TO THE DOWNSTREAM OUTLET.
- 4. IF PP BASE LINER IS UTILIZED, A MINIMUM SLOPE OF 0.06' IS ACCEPTABLE ACROSS THE INVERT CHANNEL. THE FRP BASE LINER SHALL REQUIRE THE DISTRICT STANDARD MINIMUM SLOPE OF 0.1' ACROSS THE INVERT CHANNEL.
- 5. MARKER POSTS MAY BE REQUIRED IN EASEMENTS.
- ALL PICK HOLES SHALL BE GROUTED ON THE INSIDE AND OUTSIDE OF MANHOLE.
- 7. MANHOLE LID SHALL BE ORIENTED PER THE DISTRICT'S

## **INSIDE DROP MANHOLE W/ BASE LINER**

NOT TO SCALE

**DETAIL APPROVALS** 

SJD

EDITOR TMC

MANAGER

NORTHSHORE UTILITY DISTRICT

2023 STANDARD SEWER DETAILS



LAST UPDATED APRIL 2021