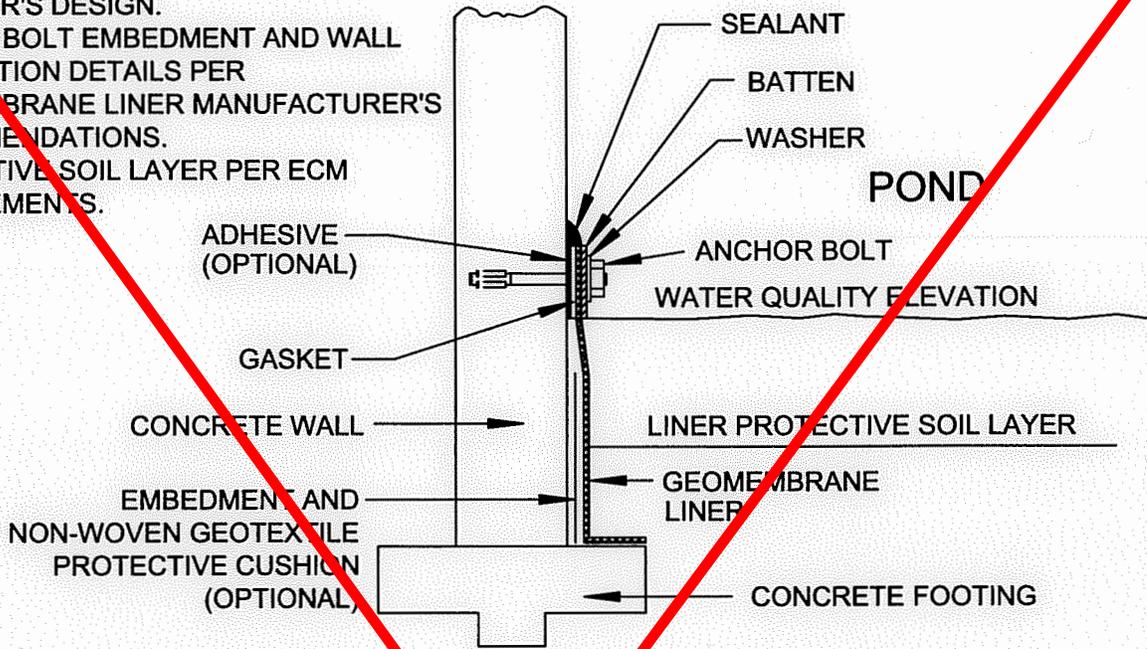


REMOVE

NOTES:

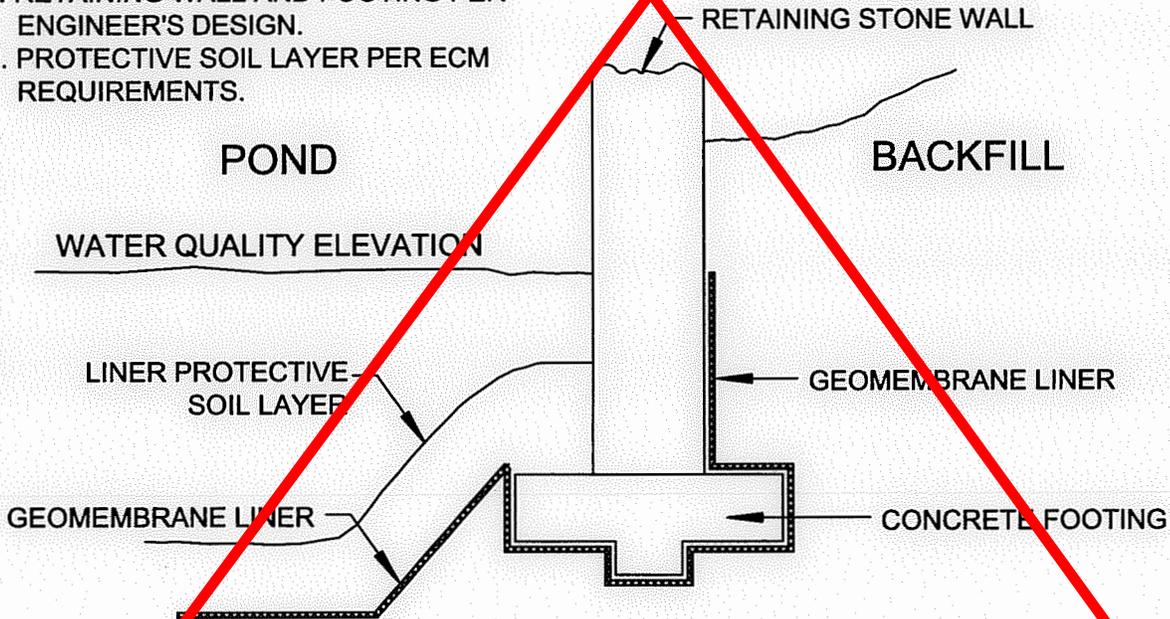
- 1. CONCRETE WALL AND FOOTING PER ENGINEER'S DESIGN.
- 2. ANCHOR BOLT EMBEDMENT AND WALL CONNECTION DETAILS PER GEOMEMBRANE LINER MANUFACTURER'S RECOMMENDATIONS.
- 3. PROTECTIVE SOIL LAYER PER ECM REQUIREMENTS.



CONCRETE WALL GEOMEMBRANE ATTACHMENT

NOTES:

- 1. RETAINING WALL AND FOOTING PER ENGINEER'S DESIGN.
- 2. PROTECTIVE SOIL LAYER PER ECM REQUIREMENTS.



RETAINING WALL GEOMEMBRANE CONNECTION

CITY OF AUSTIN  
WATERSHED PROTECTION DEPARTMENT

GEOMEMBRANE LINER ATTACHMENT DETAILS

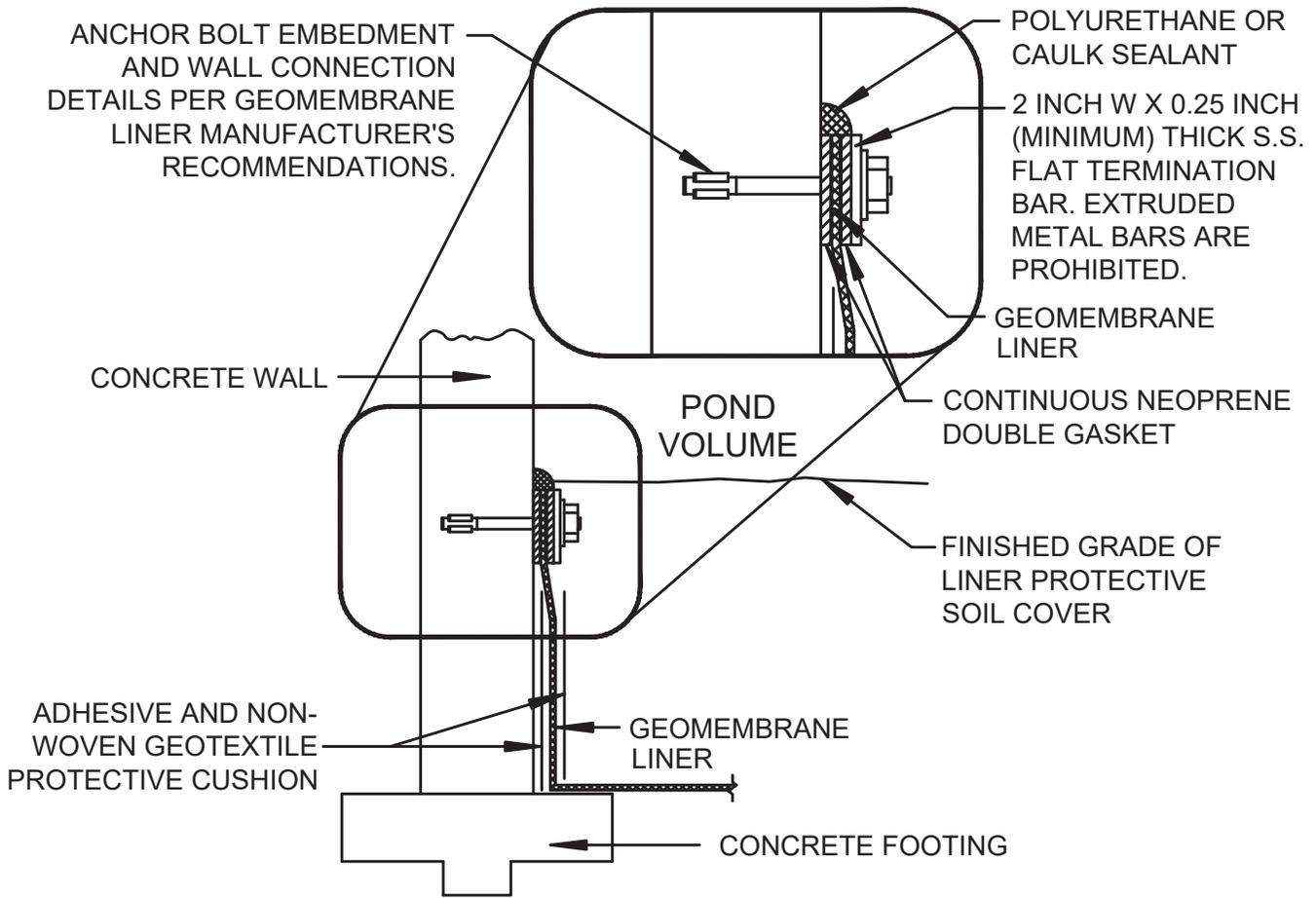
*Myky P.E.* 12/30/14  
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES  
RESPONSIBILITY FOR APPROPRIATE USE  
OF THIS STANDARD.

STANDARD NO.

661-4

# ADD NEW DETAIL



## NOTES:

1. THIS SPECIFICATION IS FOR SUBMERGED GEOMEMBRANE LINER TERMINATIONS ON CONCRETE WALLS ONLY.
2. ALL TERMINATION BATTENS AND FASTENERS MUST BE STAINLESS STEEL (SS). THE TERMINATION BAR MUST HAVE A MINIMUM THICKNESS OF 1/4" (ONE QUARTER INCH) AND MINIMUM WIDTH OF 2" (TWO INCHES). EXTRUDED METAL BARS ARE PROHIBITED.
3. GEOMEMBRANE LINERS MUST MEET THE MINIMUM GUIDELINES OF ECM 1.6.2 AND BE INSTALLED PER THOSE GUIDELINES UNDER THE SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER.
4. ALL GASKETS, SEALANTS, CONCRETE WALL PREPARATION, AND ANCHORS MUST BE INSTALLED PER SPECIFICATIONS BY A CERTIFIED TECHNICIAN FOR THAT SPECIFIC MANUFACTURER.
5. PROTECTIVE SOIL COVER MUST MEET THE GUIDELINES OF ECM 1.6.2. THE TERMINATION BAR SHOULD BE ANCHORED JUST BELOW THE FINISH GRADE OF THE PROTECTIVE COVER.
6. GEOTEXTILE SHALL MEET MINIMUM MANUFACTURERS GUIDELINES AND ECM 1.6.
7. CONCRETE RETAINING WALLS MUST BE WATER-TIGHT AND PROVIDE WATERSTOPS PER STANDARD SPECIFICATION 414S.
8. DEVIATIONS FROM THIS DETAIL MAY BE PERMITTED PER MANUFACTURER GUIDELINES IF APPROVED BY THE CITY INSPECTOR AND A LICENSED GEOTECHNICAL ENGINEER.

CITY OF AUSTIN  
WATERSHED PROTECTION DEPARTMENT

CONCRETE WALL GEOMEMBRANE LINER ATTACHMENT

*Loose*

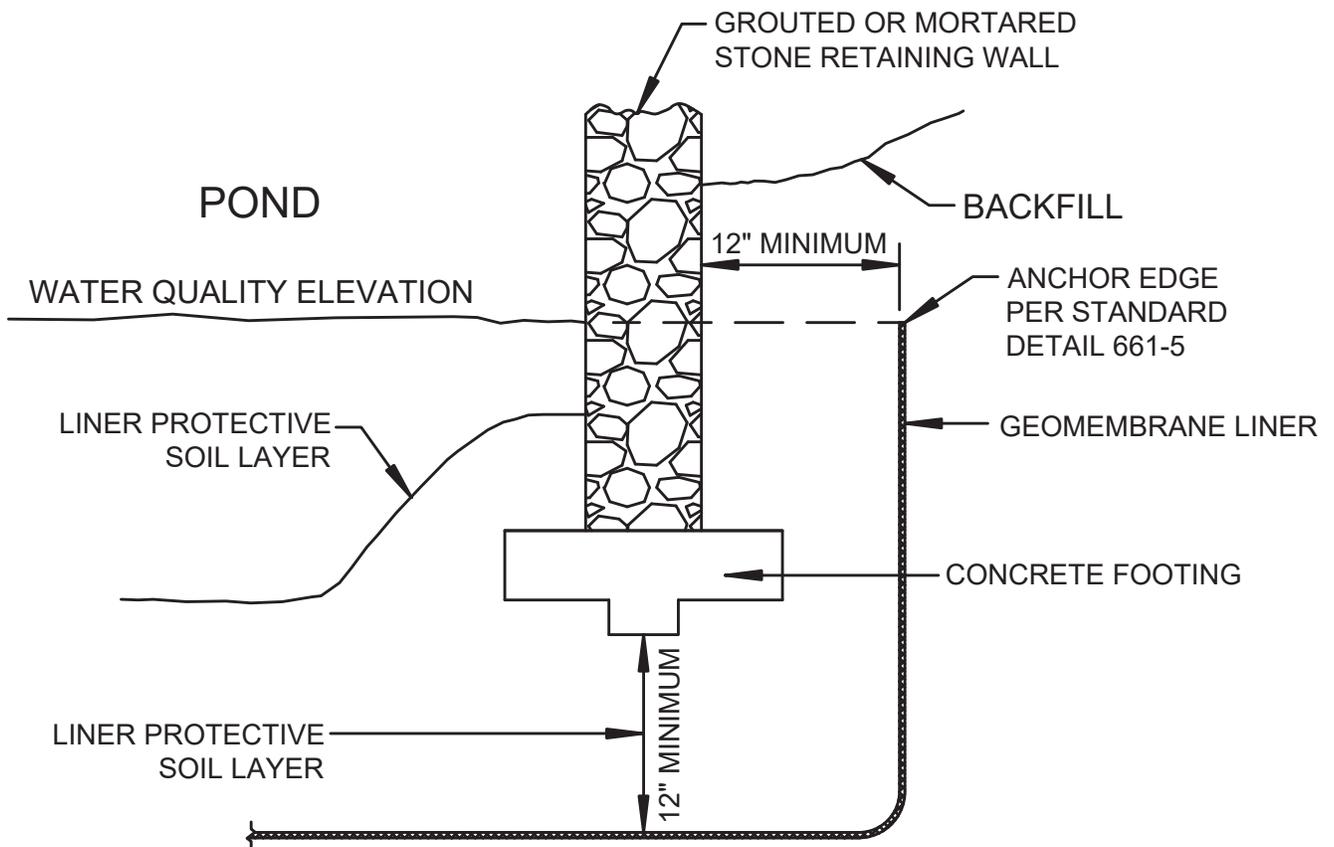
3/23/2023

ADOPTED

THE ARCHITECT/ENGINEER ASSUMES  
RESPONSIBILITY FOR APPROPRIATE USE  
OF THIS STANDARD.

STANDARD NO.

661-4A



NOTES:

1. RETAINING WALL AND FOOTING PER ENGINEERING DESIGN.
2. PROTECTIVE SOIL LAYER PER ECM 1.6.2.
3. GEOMEMBRANE LINER MUST BE LOCATED UNDERNEATH THE FOOTING AND BEHIND THE RETAINING WALL.
4. AT A MINIMUM, THE GEOMEMBRANE LINER MUST EXTEND UP TO THE WATER QUALITY ELEVATION BEHIND THE RETAINING WALL.
5. GEOMEMBRANE LINER MUST BE ANCHORED BEHIND THE WALL USING ACCEPTABLE METHOD SHOWN IN STANDARD DETAIL 661-5.
6. FREE STANDING DRY STACKED ROCK WALLS ARE NOT ACCEPTABLE.

<p>CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT</p>	<p>GROUTED OR MORTARED STONE RETAINING WALL GEOMEMBRANE LINER</p>	
<p><i>[Signature]</i></p>	<p>3/23/2023 ADOPTED</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p> <p style="text-align: right;">STANDARD NO. <b>661-4B</b></p>