Decision Matrix Criteria	Concrete Cantilever Wall	Mechanically Stabilized Earth	Concrete Masonry Unit	Concrete Cantilever Wall	Mechanically Stabilized Earth	Concrete Masonry Unit
Drainage Natrual and with the addition of Weep holes. Determination of the ability to add weep holes	1	1	1	All walls are able to add weep holes during or after the process of building. Drainage of all walls are similar and are determined to drain efficiently.		
Foundation Size Size of foundation as the wall is restricted by the railroad and the FUTS trail for proposed Holiday Inn	0	1	0	This issue with the wall is the toe is too small to not design with an extra anchor.	No foundation is used on an MSE wall as reinforcement is built into the back of the wall, using gravity to anchor it.	This issue with the wall is the toe is too small to not design with an extra anchor.
Required Reinforcement How much rienforcement is required to build the wall based on cost and the ability for contractor to impliment	1	0	0	Rebar will be needed for the reinforcement of the concrete, however, minimal rebar will be needed.	Reinforcement is used through out the wall and is needed to hold the stablized soil together.	Reinforcements are minimum as the foundation is concrete and will have #5 rebar running throughout.
Wall Asthetics How the wall blends with natural surroundings and infrastructure	-1	0	1	Wall is bleak and does not fit in with the landscape surrounding it. This can be painted or dye the concrete, however, is not practice in this application.	The wall will blend into the environment, however, wont match exisiting infrastructure as the wall that is located on the other trax pracel is a CMU wall.	The wall will match exisiting walls and is common in Flagstaff.
Estimated Material Cost The overall cost of materials for the contractor to build the 1500 ft wall	1	-1	0	$88,200 (Doesn't include cost of transporting or rebar cost)	$115,920	$106,162.5 (CMU block can be made locally)
Estimated Construction Time The time it takes to construct the wall and the man hours that are required to impliment the wall	-1	0	1	The estimated time of construction increased with the amount of concrete that is needed to construct the whole wall.	The wall reinforcements are assumed to be assembled easily, this is more time consuming as the reinforcements will take time to impliment.	This is a common wall in Flagstaff and is easily assemble using concrete blocks.
Sum	1	1	3			