

PLANT REPLACEMENT POLICY

Policy Objectives:

The objective of this policy is to ensure South Holland IDB's plant, vehicles and other mechanical equipment are available in good working order so as to achieve the best cost benefits for South Holland IDB. The aim of the Plant Replacement Policy is to:

- Follow replacement guidelines and principle of life cycle costs to assess replacement of the plant and equipment.
- Maximize inputs from operators & the maintenance team to prepare plant replacement requisition
- Optimize the vehicle maintenance program to have a longer replacement cycle.
- Avoid repeated & time consuming evaluation of plant and equipment that is in good working order.
- Project a 5 year Indicative Replacement Program for high value plant and equipment & review the Replacement Program to act in accordance with South Holland IDB's needs.

Policy Statement:

Replacement Requisition:

- Replacement requests must include following:
 - a. Reference to standard replacement cycle
 - b. Specific reasons (if doesn't match with standard replacement cycle)
 - c. Number of hours/ kilometers/miles & years
 - d. Annual maintenance cost since procurement
 - e. Life cycle cost
 - f. Safety related concerns (if any)
 - g. Major maintenance requirements (if any)
 - h. New purchase price/quotes

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Replacement Periods:

- Replacement periods will be set to provide the best economic turnover result for South Holland IDB whilst also taking into account the Board's operational requirements and financial resources. The following plant replacement cycle has been adopted and is based on discussions with the Catchment Engineer, Operations Manager, Working Foreman, Plant Engineer and the Board. This replacement cycle will be reviewed annually or as and when required by the Board.
- All plant (excluding small plant), should be reviewed at least 12 months prior to the Recommended Replacement Cycle or if usage/condition dictates an earlier review.
- Plant and equipment with occasional, limited usage will be individually assessed and recommended for replacement where their one-time maintenance cost reaches 60% of the current value.
- The replacement cycles are to be considered as a guide and plant and vehicles may be replaced earlier or later depending on market value, condition and requirements. The overriding objective is to ensure the maximum return and value for the Board.
- The Catchment Engineer, in consultation with the Operations Manager, will review replacement cycles as outlined below on a case by case basis as part of the Board's 5 year replacement projections, and make appropriate recommendations to the Board for the replacement.
- Consideration may also be given to machines that experience high levels of unplanned maintenance and repair costs.
- Consider extended warranties.

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Plant Replacement Cycles by Plant Category:

Group A - Very High value, hours based work, minimal visible wear and tear, high repair cost.

All plant in group A, are deemed as very high value. The work these machines undertake are repetitive and hardworking, cost can be high when maintaining these machines and it is advisable to replace these items of plant as shown below to ensure the Board gets the best out of this plant. Where applicable it would be advantageous to the Board to agree a buy back deal with the suppliers of the plant to ensure the Board received the best deal, however this would only be applicable if a replacement item of plant is purchased from the same supplier/manufacturers as that being sold.

1. The Board have only 1no. long reach excavator which limits the Board to maintain the larger deeper watercourses. If this excavator fails/breakdowns then this will limit the maintenance carried out on these larger watercourses, that is why the proposed replacement of the long reach excavator should be every 5 years/7000 hours to ensure this excavator is always running efficiently.
2. The Board have 3no. short reach excavators, these carry out the majority of the maintenance on the standard reach watercourses. If one of these excavators fails/breakdown the Board will be able to cover the standard reach watercourses. The proposed replacement for these excavators is 7 years/7000 hours. It has been noted from previous repair and maintenance costs, that the maintenance costs start to accelerate once 7000 hours are reached. The tracks, hydraulic rams, expensive parts etc., tend to need replacing.
3. The Board have only 1no. wheeled excavator which is versatile for picking up the difficult/hard to reach/roadside watercourses. This excavator covers many miles which may affect the maintenance of this machine and is generally used for localized site based work. It is proposed the replacement on the wheeled excavator should be every 5

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years/5000 hours to ensure this excavator is running efficiently and more in line with the tractors.

4. The Board have 5no. tractors. These cover a vast amount of miles in their flailing and carting duties and are key to ensuring the maintenance of the watercourses are carried out. Tractors should be changed every 5 years/5000 hours to ensure the tractors are running efficiently. The oldest tractors will be part exchanged for the new and the next oldest will be handed down for general duties. Any new tractors purchased by the Board should try to get a 5 year extended warranty.
5. Ideally the tractor mounted/self-propelled cutter will be replaced every 7 years/5000 hours.
6. Ideally the weed baskets will be replaced when the machinery is replaced, however a condition survey will be undertaken to decide if it is necessary to change the item of plant at that time or not.
7. Ideally the flails will be replaced when the machinery is replaced, however a condition survey will be undertaken to decide if it is necessary to change the item of plant at that time or not.

Group B - Medium value, visible wear and tear, moderate repair cost, used as site support.

All plant in group B, are deemed as medium value. These vehicles and items of plant assist with transporting, maintenance, and operational duties.

1. Heavy trailers that are used for carting silt, soil, stone, all materials etc. are used to transport materials across the drainage district, assisting with various operations. These trailers are more frequently used in the winter months, the general maintenance costs for these trailers are minor, with mainly replacement tyres being the biggest cost. Providing the state of the trailer is in suitable condition and there is no damage to the trailer, the replacement will be as and when required but a minimum of 10 years as a guide.

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2. The light trailers are used for carting all materials and small plant. These trailers are more susceptible to damage and may require more repairs and maintenance works carried out to them rather than the heavier trailers. Providing the state of the trailer is in suitable condition and there is no damage to the trailer, the replacement will be as and when required but a minimum of 8 years as a guide.
3. The 4x4 Trucks are used for site transport, for supervision and maintenance purposes. These vehicles will be passed down every 3/4 years or 100,000 miles depending on condition, to the workshop or onsite. The old workshop and onsite vehicles will then be part exchanged as and when the vehicles are passed down.
4. The site vans are for the operatives on the tracked excavators during the cutting season and then outside of the cutting season the vans will be used for general duties and maintenance for the pumping stations, hand roding, spraying, etc. These vans will have a minimum usage of 10 years/200,000 miles and will be replaced as and when required, with only a scrappage allowance value at disposal.

Group C - Hours based work, low use, low repair cost, frequent maintenance required. High lump sum value to replace.

All the plant in group C, is more specialist plant that will not necessarily be used for long periods of time, but are essential for the operational procedures to be delivered as part of the maintenance programme. This plant will have an annual conditional assessment and it will be reassessed as to whether it may require changing in the next financial plant renewal year, or it will be replaced if there are unforeseen circumstances why it is not suitable for operational works. Indicative replacement cycle of at least 10 years.

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SUMMARY OF PLANT REPLACEMENT CYCLES

GROUP A	Very High value, hours based work, minimal visible wear and tear, high repair cost.		
ASSET TYPE	YEARS	HOURS	COMMENTS
Long Reach Excavator	5	7000	SHIDB only have 1no. Long reach machine, need to have a 5year service agreement with a buy back option.
Short Reach Excavator	7	7000	SHIDB have 3no. Short reach machines, need to have a 5year service agreement with a buy back option.
Wheeled Excavator 16t	5	5000	SHIDB only have 1no. Wheeled excavator machine, need to have a 5year service agreement with a buy back option.
Tractors	5	5000	SHIDB have 5no. Tractors, the oldest one is part exchanged and the next oldest is past down every time we replace one. Need to have a 5year service agreement with a buy back option.
Tractor mounted/self-propelled cutter	7	5000	
Weed Baskets	5	Replace when excavator or tractors is replaced	
Flails	6	As and when required	

GROUP B	Medium value, visible wear and tear, moderate repair cost, used as site support.	
ASSET TYPE	YEARS	MILES
Heavy Trailer	10	Annually inspected and reviewed
Light Trailer	8	Annually inspected and reviewed
4x4 Truck	3/4	100,000
Site Van	10	200,000

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GROUP C	Hours based work, low use, low repair cost, frequent maintenance required. High lump sum value to replace.	
ASSET TYPE	YEARS	
Tree cutters	10	Annually inspected and reviewed
Pumps	10	Annually inspected and reviewed
JCB	10	Annually inspected and reviewed
Forklift	10	Annually inspected and reviewed
Plant Transport trailer	10	Annually inspected and reviewed
Various Specialist Plant	10	Annually inspected and reviewed