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Governance Support Town Hall Castle Circus Torquay

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Dear Member

# **COUNCIL - THURSDAY, 26 FEBRUARY 2015**

I am now able to enclose, for consideration at the Thursday, 26 February 2015 meeting of the Council, the following reports that were unavailable when the agenda was printed.

Agenda No	Item	1	Page
	8.	Revenue Budget Monitoring 2014/15 Quarter 3	(Pages 386 - 390)
		Recommendations of the Overview and Scrutiny Board	
	9.	Capital Investment Plan Update - 2014/15 Quarter 3	(Pages 391 - 402)
		Recommendations of the Overview and Scrutiny Board	

Yours sincerely

Teresa Buckley Clerk





# **Revenue Budget Monitoring**

# Report of the Overview and Scrutiny Board – February 2015

At its meetings on 18 and 24 February 2015, the Overview and Scrutiny Board considered the Revenue Budget monitoring report for Quarter 3.

The Board requested:

That additional information be prepared and presented to the Council in its consideration of the Quarter 3 Revenue Budget monitoring report in relation to:

- The lessons learnt in respect of Housing Benefit overpayments (in particular those made by Council rather than claimant error)
- The principles by which the Council determines whether to appoint consultants and the costs associated with consultants currently contracted
- The trends (against projections) within Adult Social Care on the numbers of clients receiving Direct Payments and the numbers of clients within residential care

It further agreed the following motion:

The Overview and Scrutiny Board is concerned about the possible calls on the General Fund balance of £4.4 million given the high probability that the Comprehensive Spending Review reserve will be depleted due to the estimated level of redundancy costs, the current projected overspend at year end and the possible outcome of the current Judicial Review.

Therefore the Council requests the Executive Director – Finance and Operations to undertake a further Review of Reserves to identify whether there is spare capacity within the Reserves to replenish the Comprehensive Spending Review reserve.



#### **Additional Information Requested by Overview and Scrutiny Board**

#### **Revenue Budget Monitoring Report**

The lessons learnt in respect of Housing Benefit overpayments (in particular those made by Council rather than claimant error)

Housing and Council Tax Support is paid to just over 18,500 households in Torbay to help them pay their rent, Council Tax or both. In the vast majority of cases people receive the correct amount of Benefit to which they are entitled. However there are occasions when Benefit is paid where there is not an entitlement creating an overpayment.

Overpayments may be made to the person claiming Benefit, their landlord or another nominated person.

The Council recognises that overpayments may occur for a number of reasons including:

- The Council's own action or inaction.
- Deliberate or unintentional errors in the information and evidence they provided for Benefit to be calculated.
- Deliberately or unintentionally delay reporting a change in circumstances so Benefit is paid at a higher rate than it should be.

Many overpayments can either be avoided or reduced if changes in a person's circumstances are reported promptly. Consequently, the Council will encourage people to report changes promptly and, in turn, the Council will act on them promptly. Where all the details of a change are not known but an overpayment is likely to arise, the Council will suspend future payments until the correct payment can be decided unless it is not in the interests of the person claiming Benefit to do so.

The principles by which the Council determines whether to appoint consultants and the costs associated with consultants currently contracted

In terms of consultants, there are no set principles upon which a decision to appoint a consultant are assessed against. Each service's need for such support will be considered on an individual basis, by the relevant team and their Executive Head/Director.

Once a decision is taken to engage a consultant, then the procurement team will (according to the value of the contract) assist in obtaining such support for example through an individual procurement contract or a call off from a framework agreement.

Defining a supplier engaged to undertake a specific piece of work is often subjective. The work undertaken by Social Finance in supporting Childrens Services could be described as consultancy. The Council has paid Social Finance £214,000 of costs to date in 2014/15.

The trends (against projections) within Adult Social Care on the numbers of clients receiving Direct Payments and the numbers of clients within residential care

### **ORDINARY RESIDENCY**

	2012/2013 (YE)	2013/2014 (YE)	2014/2015 (P10)	Total
Number of Clients	28	8	13	49
In Year Cost £'s	676,277	195,004	162,997	1,034,279
Full Year Effect £'s	1,189,285	414,451	488,441	2,092,177

Average Cost £'s

814.62

993.60

720.61

818.90

- Client numbers have dropped since 2012/13 levels.
- 2014/15 in year cost is lowest but the full year effect is greater. This has been caused by an increase of client numbers towards the end of financial year. This is linked to changes arising from the Care Act from the 1st April 2015.

#### **DIRECT PAYMENTS**

	2012/13	2013/14	2014/15
	Actual	Actual	Estimate
Direct Payments £'s	6,255,000	5,801,000	5,506,391
Direct Payments (Snapshot)	440	424	402
Direct Payments - Average Cost	£273	£262	£263

- Year on Year drop in client numbers on average being 4-5%.
- Year on Year drop in cost by 5-7%

## RESIDENTIAL LONG STAY (INCLUDES FULL COST)

	2012/13	2013/14	2014/15
	Actual	Actual	Estimate
Res Long Stay £'s	18,586,000	18,128,000	17,839,000
Res Long Stay (Snapshot)	780	735	704
Res Long Stay - Average Cost	£457	£473	£486

- Year on Year drop in client numbers on average being 4-6%. Note the highest drop of 6% is between 2012/13 and 2013/14.
- Overall year on year expenditure has dropped by on average 2%.

### NURSING LONG STAY (INCLUDES FULL COST)

	2012/13	2013/14	2014/15
	Actual	Actual	Estimate
Nursing Long Stay £'s	2,341,000	2,472,000	2,715,097
Nursing Long Stay (Snapshot)	95	91	98
Nursing Long Stay - Average Cost	£495	£521	£531

- Numbers fluctuate over the period
- Costs increase over period linking to Care Home fee increases and client needs
- Numbers dropped considerably in years prior to above and appear to have levelled out.

## Further information on the shortfall in income within the sports service

- Shortfall on income from concessions and facilities income (the service is looking into whether everything is being charged correctly/why this is not meeting targets).
- Expected saving of £50k not being realised as saving passed on from TOR2 less than expected and leases are taking a long time to get in place.

#### A year-on-year comparison of write offs within the Benefits Debtors system

#### Write Offs

The Council's policy objective is to avoid the creation of overpayments by the effective administration of the statutory Housing Benefit and Council Tax Support schemes. Where overpayments occur, the objective is to maximise recovery and where necessary to write-off unrecoverable debt in a controlled and cost-effective manner, to achieve targets set.

Debts must be considered for writing off in the following circumstances:

- where it is uneconomic to pursue recovery
- where the debtor cannot be traced and there is no prospect of commencing recovery action within one year of the debt being created
- where, in the case of a deceased debtor, there are no funds available from the debtor's estate
- where the debt cannot be recovered due to the insolvency or bankruptcy of the debtor
- where recovery would cause undue hardship to the debtor

In the case of an untraced debtor, recovery action should be considered if the debtor's whereabouts become known within six years of the creation of the overpayment(s).

Financial Year	ncial Year Housing		Discretionary	Total £
	Benefit £	Support £	Housing Payments £	
2014 (to 31/12/14)	207,371	10,644	6,426	224,441
2013	295,093	15,049	7,973	318,115
2012	298,450	23,971	4,833	327,254
2011	330,140	12,035	5,027	347,202
2010	214,881	22,941	6,496	244,318



# **Capital Plan Budget Monitoring**

# Report of the Overview and Scrutiny Board – February 2015

At its meetings on 18 and 24 February 2015, the Overview and Scrutiny Board considered the Capital Plan Budget monitoring report for Quarter 3.

# The Board requested:

That additional information be prepared and presented to the Council in its consideration of the Quarter 3 Capital Investment Plan update report in relation to:

- The business case for the replacement and enhancement of the beach chalets at Oddicombe Beach.
- Confirmation of whether the work on the Oddicombe Beach Chalets has commenced prior to Council approval being given to increasing the Council's level of Prudential Borrowing.
- The return costs associated with the works at the base of Princess Pier.

It further agreed the following motion:

The Overview and Scrutiny Board is concerned that it is recommended that the term of the Prudential Borrowing associated with Meadfoot Beach Chalets be extended from 25 to 35 years. It is also concerned about the lack of detail which was available to it with regard to the business case for the reinstatement and enhancement of the beach chalets at Oddicombe Beach.

The Council re-confirms its position that any Prudential Borrowing must be agreed by the Council and be backed by a clear Business Case and that, at this time, the Council has not seen a full Business Care for Oddicombe beach huts.



# Agenda Item 9 Appendix 3

#### Additional Information Requested by Overview and Scrutiny Board

### **Capital Plan Budget Monitoring Report**

The business case for the replacement and enhancement of the beach chalets at Oddicombe Beach and Confirmation of whether the work on the Oddicombe Beach Chalets has commenced prior to Council approval being given to increasing the Council's level of Prudential Borrowing

In August 2014 more than half of the 18 roof chalets were destroyed by a fire. The chalets were wooden in construction and as assets they were reaching the end of their design life. If the fire event had not happened a capital investment of some £63k was required, over 4 to 5 years, according to a condition survey undertaken by the TDA in August 2011. As a consequence, without the required upgrade in their condition, officers expected that occupancy levels would drop by three chalets per year. The immediate impact of the fire was a direct loss of chalet income, some £11k per year but there would be wider indirect losses from other tenants, a loss of amenity and damage to the Council's reputation. If the fire hadn't happened and future investment wasn't forthcoming, the income from the roof chalets would have disappeared within 7 years as occupancy levels reduced to zero. The building was an insured risk and the agreed claim is currently £58,550. A business plan spreadsheet was formulated (attached) with estimated rebuilding costs, the insurance settlement, additional borrowing costs and other data. Therefore, in early October 2014 the Mayor was consulted on a decision to demolish and rebuild the roof chalets in time for the 2015 summer season. This decision was considered to be urgent because construction needed to be completed by Easter 2015 to safeguard the ongoing income as well as the Council's reputation. Formal approval for the £134k of prudential borrowing was not sought at the time as the early funding of the project was sustained using the insurance settlement. Council is now being asked to amend the capital budget and thereby approve this additional borrowing.

#### The return costs associated with the works at the base of Princess Pier

Further works will be required to ensure the long term future of the pier, these include works to the concrete sea defence structure which acts as the base to the structure and repairs to the steel structure which sits on the base and holds the wooden decking. If these works are carried out in the future almost none of the proposed £250k expenditure would be wasted. Repairs to the concrete structure would be carried out from the sea and repairs to the steel would likely be carried out from underneath with only a small sections of the wooden decking removed and then re-used and replaced.

**Total Cost** 

New Operating Costs	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Repair and Maintenance Prudential Borrowing @ £134,023.46 over 25 years	9,169.11	9,169.11	9,169.11	9,169.11	2,000.00 9,169.11	2,000.00 9,169.11	2,000.00 9,169.11	2,000.00 9,169.11	2,000.00 9,169.11	5,000.00 9,169.11
Total Costs:	9,169.11	9,169.11	9,169.11	9,169.11	11,169.11	11,169.11	11,169.11	11,169.11	11,169.11	14,169.11
Income										
Based on 100% occupency for 18 units for 52 weeks										
18 Roof Chalets @ £1100	<b>Year 1</b> 19,800.00	Year 2 (+3%) 20,394.00	Year 3 (+3%) 21,006.00	Year 4 (+3%) 21,636.00	` '	Year 6 (+3%) 22,950.00	Year 7 (+3%) 23,634.00	Year 8 (+3%) 24,336.00	Year 9 (+3%) 25,056.00	<b>Year 10 (+3%)</b> 25,812.00
Less Bad Debt/Void (Non occupation) @ 2% Less VAT @ 20%	396.00 3,234.00	407.88 3,331.02		432.72 3,533.88		459.00 3,748.50	472.68 3,860.22		501.12 4,092.48	516.24 4,215.96
Total Income:	16,170.00	16,655.10	17,154.90	17,669.40	18,198.60	18,742.50	19,301.10	19,874.40	20,462.40	21,079.80
Operational Surplus	7,000.89	7,485.99	7,985.79	8,500.29	7,029.49	7,573.39	8,131.99	8,705.29	9,293.29	6,910.69
less: Existing income target	(10,510.00)	(10,510.00)	(10,510.00)	(10,510.00)	(10,510.00)	(10,510.00)	(10,510.00)	(10,510.00)	(10,510.00)	(10,510.00)
Increase/(Decrease) in net income	(3,509.11)	(3,024.01)	(2,524.21)	(2,009.71)	(3,480.51)	(2,936.61)	(2,378.01)	(1,804.71)	(1,216.71)	(3,599.31)
Increase/(Decrease) in net income building in effect of decommissioning old chalets no longer fit for purpose, at a rate of three per year	(3,509.11)	(2,159.11)	(809.11)	540.89	1,890.89	3,240.89	4,590.89	5,940.89	7,290.89	8,640.89

134,023.46

131,357.24

# Agenda Item 9 Appendix 5

# **PRINCESS PIER, TORQUAY**

# REPORT INTO CONDITION OF DECKING AND SUPPORT JOIST

# **Executive Summary**

## Introduction

A survey was carried out on the decking and joist which form the promenade structure of Princess Pier on the 8<sup>th</sup> and 13<sup>th</sup> January 2015 at the request of the Council. The attached report outlines the findings, however, the below statement summarises the outcome and options.

# **Summary of survey**

The survey found that a significant number of decking planks require replacement as they are either rotten and at risk of failure or provide a trip hazard.

In one area the joist below the planks have deteriorated and the loss of area would mean that they are at immediate risk of failure should they be subject to crowd loading. In other areas the joists are showing signs of similar deterioration but are currently in a condition to service the area.

## Conclusion

The pier does not need to be closed but immediate action is required to overcome the issues of defective planks and the risk of crowd loading occurring. Crowd loading can be defined as 5 people per m<sup>2</sup>. In order to ensure the pier remains as safe as possible this season the defective planks must be either replaced or covered with plywood and inspected regularly. To remove the risk of crowd loading the numbers accessing the site during events might be restricted and the area marshalled. Alternatively an area of 150m<sup>2</sup> must have some form of barrier to restrict numbers.

However the most cost effective solution would be to carry out the repairs to the joists now as this will prevent further deterioration. The estimated cost for the works is £250k. The minimum cost to ensure the pier remains open with an acceptable risk for the next year is £20k.

Patrick Carney
Group Services Manager – Streetscene & Place

Enc: Report

# Princess Pier, Torquay

# Report into condition of decking and support joists

## Scope

Decking and joists to the majority of the Princess Pier boardwalk have been largely replaced in recent years; this report is limited to assessing the condition of decking support joists currently in use in the public domain at four zones, and as indicated in drawing 10/6/15\_23.

It should be noted that the timber deck is supported on a galvanised steel sub-frame, itself supported off the original masonry/rubble fill pier and steel piles. The steel elements are in such condition requiring repair or installation of a CP system estimated to be within the next 5-10 years.

#### Summary

#### Decking planks

The decking planks over the whole of these areas are in very poor condition, two of the zones having been covered in ply sheeting. The remaining two exposed zones of planking require urgent address to repair, replace, or to similarly sheet cover.

#### **Joists**

A random sampling survey restricted to the area of poor decking to Princess Pier (zones 1 and 2) found joists to be separable into two zones of classification by their apparent condition and differing time of installation.

The first area of around 60 joists' length was found to be apparently of sufficiently good condition to continue in service for the time being. If replacement of planks is undertaken, joists should be fully checked and locally replaced as necessary.

A second area of 16 joists, of older age/previous installation to the first area described above, has enough defective joist potential to suggest consideration of their replacement. This age/condition of joists appears to continue under the seaward ply sheeted area towards the end of the boardwalk, the whole with higher risk of exceeding crowd loaded capacity.

The ply sheeted area at the fenced narrowing of the deck is supported by joists which appear more recent then the areas considered above, and are of narrower width dimension. This set of joists appears to have been designed with little spare capacity under crowd loading, some joists additionally suffering effective loss of section at locations of timber softening. These joists are at high risk of exceeding capacity under crowd loading and should therefore either be replaced, or might for efficiency be doubled up with the installation of new joists adjacent.

#### Survey

A survey of joist condition was made on site on Jan 8th and 13th 2015.

The survey initially covered a span of 78 joists at the seaward side of the pier i.e. the side suspended over the sea by piled-supported framing. The surveyed area is towards the 'banjo' end of the pier and is indicated in drawing 10/6/15\_23.

In the interests of efficiency shorter decking planks were randomly and locally lifted to expose joists and enable an estimate to be made of sectional dimensions of residual sound structural timber at joist-plank connections, after scraping back of loose and decayed material.

In lifting decking planks it was found that odd numbered joist numbers 1-59 had been covered on their upper face with lead strips. These joists were found typically to have lost little section size. Their alternates, and joist numbers 60-78 were found to be covered on their upper face with a bituminous membrane, typically defective with consequent loss of timber section at the joist-plank connection interface due to retained water.

Joists 1-59 appeared to be of more recent installation to nos 60-78.

Further visual inspection from below the deck confirmed that the joists below the ply-surfaced seaward deck were not lead protected and appeared to be in a similar condition and age to joists 60-78.

## **Statistical Analysis**

Sample results, together with calculations of net stress and deflection under crowd loading are displayed in table 1.

In transferring to statistical analysis the estimated height dimension of joists was reduced by 5% to allow for a tolerance in the estimate of section dimensions, where the full removal of defective material may not have been achieved or recorded.

The samples' dimensions were each fed through software, timber grade D30 assumed, to calculate bending stress in the case of 'crowd' loading of 5kN/sq m. Although members would otherwise be theoretically in a shared system, such factor has not been applied since many plank spans cover only one or two joists. Lateral restraint has similarly not been assumed, given the generally poor condition of joist-plank fixities. As the value of joist stress approaches the value 1 its capacity is approached by the applied loading. A stress value greater than 1 then indicates that crowd loaded capacity would theoretically be exceeded.

Theoretical deflection under crowd load was recorded as potentially becoming relevant in the event of dynamic excitation of the joists by synchronised movement of a crowd, although the likelihood of this event would appear to be extremely low and standards apply the same loading value for crowd loading as for dance and drill halls since the latter activities would occur with individuals wider dispersed.

Given their apparent differing age and condition the two samples of joists 1-59 and of joists 60-78 were considered separately.

Joists 1-59

The sampled area is 59 joists long and 34 planks wide, therefore having 2006 joist-plank connections. If 'critical' bending capacity is considered to apply at the middle third of the joists, some 669 connections become significant.

The sample has estimated mean stress of 0.643 under crowd loading, the 669 joist connections apparently being statistically capable of withstanding crowd loaded capacity. Joist no. 8 appears to be an exception, measured/calculated to be beyond capacity under crowd loading.

Joists 60-76

This array without any lead cover to the top face of joists is 19 joists long, and has 646 joist-plank connections. As previous the middle third sees 215 joist-plank connections.

For this sample mean stress under crowd loading is estimated to be 0.822, and by consideration of the standard deviation, 3% of joist-plank connections in the middle third i.e. at 6 locations would reach or exceed crowd-loaded capacity.

It should be noted that standard deviation is simply calculated for a normal distribution where the distribution would be expected to be positive skewed. The estimate of beyond-capacity joist-plank connections is accordingly 'low'.

#### **Conclusions**

The area of joists 1-59 would appear to have insignificant current risk of being subject to crowd loading beyond theoretical capacity (assuming nominal shared loading to the one defective joist found).

However, the area of joists 60-78 appears more critical, with increased theoretical risk of failure in the event of crowd loading. The current condition of joists to this area might reasonably be assumed to continue below the plyed areas, since water tracking and retention at connections would be almost certain below the ply panels,

#### Recommendations

The condition of decking planks over zones 1 and 2 is poor; these should be lifted and replaced. Some efficiency of cost may be achieved by harvesting sound lengths, estimated at 30-50%, but the zones under consideration in this report are the last remaining with planks of differing dimension to those on the zones where full replacement has already taken place.

#### Zone 1

Joists 1-59 appear to currently offer sufficient residual life to remain in service for the time being. At the same time as any replacement of decking planks a waterproof membrane should be placed over even numbered joists, with localised replacement of any significantly defective joists. An estimate is offered, of 10 joists warranting such replacement. Minimally at plank replacement, the alternate joists in this section would usefully be covered in a waterproof membrane to render their degree of protection equal to that of their adjacent lead sheet-covered members. Some lead may be found to require replacement.

### Zones 2 and 3

If the pier surface is to remain open during events of potential crowd loading joists 60-78 and those immediately beyond, extending to the closed area of the banjo and located below ply sheeting, should be replaced. Exposed decking at zone 2 might be temporarily treated with the installation of ply boards to ensure (crowd) loading is spread over more than one joist, but the risk of several adjacent joists exceeding capacity under crowd loading would remain.

#### Zone 4

Since the joists here are calculated at original install section size to be at crowd loaded capacity and are now compromised by timber defects this plied zone at the banjo narrowing should receive additional/replacement joist support.

#### **Photos**



Photo 1 Deck condition typically poor at plank ends, with repairs, traps, and potential trip hazards



Photo 2 Joist with lead sheet over and some defective timber



Photo 3 Joist 26 in fair condition. Stress estimated = 0.543



Photo 4 Joist 40 with moderate section loss. Stress estimated = 0.731



Photo 5 Joist 8 with significant loss. Stress estimated = 0.997

Table 1 Analysis of joist samples Timber grade D30; service class 3

Planks numbered from seaward edge ie no. 1 below edge seating

John No.   Width   Depth   Plank no.   Lead?   factored depth (95%)   bending stress under crowd load   deflection (mm)						r seaward cage ie no. 1 bei	TEDDS analysis:		
1 122 250 24 Y 238 0.566 20.1 2 125 240 24	Joist no.	Width	Depth	Plank no.	Lead?	factored depth (95%)		deflection (mm)	
2 125 240 24	1	122	250						
8 120 180 16	2	125	240			228			
8 120 180 166 171 1.106 52.8 9 120 250 16 Y 238 0.575 20.4 10 130 230 16 219 0.627 23.9 15 120 250 20 Y 238 0.575 20.4 16 125 235 20 223 0.629 23.6 17 125 245 20 Y 233 0.577 20.9 20 126 240 9 228 0.602 22.2 21 125 245 9 Y 233 0.629 23.6 22 125 240 14 Y 238 0.602 22.2 25 125 240 14 Y 238 0.600 22.2 26 125 240 14 Y 238 0.600 22.2 27 122 250 14 Y 238 0.566 20.1 34 125 220 17 209 0.715 28.4 35 125 250 17 Y 238 0.553 19.6 36 115 225 17 209 0.715 28.4 36 36 115 225 17 209 0.715 28.4 39 125 230 7 Y 219 0.652 24,9 40 120 210 7 200 0.811 33.6 49 120 250 18 Y 238 0.550 23.1 49 120 240 7 Y 228 0.602 23.1 49 120 250 18 Y 238 0.553 19.6 50 125 230 18 Y 238 0.575 20.4 41 120 240 7 Y 228 0.626 23.1 49 120 250 18 Y 238 0.555 20.6 51 123 230 18 Y 238 0.575 20.4 41 120 240 7 Y 228 0.626 23.1 49 120 250 18 Y 238 0.555 20.6 50 125 230 18 Y 238 0.575 20.4 41 120 240 7 Y 228 0.626 23.1 49 120 250 18 Y 238 0.575 20.4 41 120 240 7 Y 228 0.662 25.3 51 123 230 18 Y 238 0.575 20.4 50 125 230 18 Y 238 0.575 20.4 51 123 230 18 Y 238 0.575 20.1  mean awaye 123 224 0.663 3.0 55 130 245 13 Y 233 0.555 20.1  mean awaye 123 224 0.663 3.0 660 125 215 14 200 0.846 35.0 660 125 215 14 200 0.846 35.0 660 125 215 14 200 0.846 33.0 660 125 215 15 200 15 200 0.715 28.4 670 125 215 15 200 17 195 0.880 33.0 77 125 225 17 195 0.880 33.0 77 125 225 17 195 0.880 33.0 77 125 225 17 199 0.889 33.0 77 125 220 17 199 0.889 33.0 77 120 200 0.788 33.0 78 120 200 17 190 0.888 33.0 75 120 200 17 190 0.888 33.9  mean awaye 121 209 198 0.822 32.5  std dev: 0.095	3	125	245	24	Υ				
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## Notes

- 1 Joists 1 59 appear to have a lead plate on a every other one basis
- 2 Each joist carries 34no. 'Plank widths' for a total width of 3890mm
- 3 Castellated support beam lies below plank no. 5

# Decking Survey - Jan 15 Princess Pier, Torquay Jan 2015 10/6/15 Colin Peters REVISIONS NOTES لتا Ply sheeting over zone 4 CLOSED ZONE CLOSED ZONE THE REAL PROPERTY OF THE PARTY THE STATE OF THE S THE STATE OF THE S Ply sheeting over Zone3 Joists 60-78 **LOCATION PLAN** Joists 1-59, 59m immediately beyond, extending to the closed area of the banjo and located below ply sheeting, should be replaced. Exposed decking at zone 2 might be temporarily treated with the installation of ply boards to extend (crowd) loading is spread over more than one joist, but the risk of several adjacent joists exceeding contains and or c The condition of decking planks over zones 1 and 2 is poor; these should be lifted and replaced. Some consideration in this report are the last remaining with planks of differing dimension to those on the Joists 1-59 appear to currently offer sufficient residual life to remain in service for the time being. At the 2000 4 On the joists here are calculated at original install section size to be at crowd loaded capacity and are efficiency of cost may be achieved by harvesting sound lengths, estimated at 30-50%, but the zones under same time as any replacement of decking planks a waterproof membrane should be placed over even numbered joists, with localised replacement of any significantly defective joists. An estimate is offered, of 10 joists warranting such replacement. Minimally at plank replacement, the alternate joists in this section would usefully be covered in a waterproof membrane to render their degree of protection equal to that If the pier surface is to remain open during events of potential crowd loading joists 60-78 and those now compromised by timber defects this plied zone at the banjo narrowing should receive of their adjacent lead sheet-covered members. Some lead may be found to require replacement. Decking and joists replaced in recent years zones where full replacement has aiready taken place. additional/replacement joist support. Recommendations Zones 2 and 3 Princess Parade

Theatre