

Crime Prevention Through Environmental Design

ICA Regional CPTED Forum 21-22 June 2011

Rebuilding Christchurch – CPTED Considerations

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Phil Dean, New Zealand Police, Christchurch

Sue Ramsay, Christchurch City Council



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Presentation outline

- Background
- Workshops April 2011
 - Rebuild measures and strategies
 - CPTED Considerations
- Round table discussions



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22 February 2011



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Harsh reality



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Christchurch

- NZ second largest city
- Garden city
- Canterbury Plains
- Earthquake September 2010
- February – aftershock
 - Many more since



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Christchurch

- Deaths and injuries
- CBD 'munted'
- Businesses and homes to be demolished
- Red, yellow and green certification
- Lives changed forever
- Rebuilding process



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Before and after



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Before and after



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Police concerns

- Temporary Accommodation Parks
 - Residential
 - Workers
- Campervan Park
- CBD



Police concerns

- Campervan Park
 - Not happening



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Workshop

- Multi agency
 - Police
 - Council
 - Fire
- 4-5 April 2011
- Included walk through red zone and tour of eastern suburbs



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The focus for CPTED

“Identifying conditions of the physical and social environment that provide opportunities for or precipitate criminal acts... and the alteration of those conditions so that no crimes occur...”

Brantingham & Faust, 1976



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CPTED specifically aimed at...

- Changing the environment to reduce opportunity
- Reducing fear of crime
- Increasing the aesthetic quality of the environment
- Improving quality of life (normal users)
- Reducing propensity of physical environment to support criminal behaviour

Clarke, 1995; Crowe 1991



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Main considerations

- What will our legacy be?
- What will people think of Christchurch in 50 years time?
- How do we reduce crime opportunities and increase the quality of life?
- How do we create an overall crime prevention strategy?



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Temporary accommodation

- Kaipoi
- Linwood Park
- Rawhiti Domain



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NO.		DESCRIPTION
1		ALL LOWER LATERAL JOINTS TO BE WRAPPED IN FILTER FABRIC, BROWN A14 OR SIMILAR.
2		ALL STORMWATER & SEWER MAINS IN LIQUEFIABLE MATERIAL TO HAVE BEDDING WRAPPED IN FABRIC.
3		ALL MANHOLES NOT IN NATURAL GRAVE TO BE UNDERCUT & BACKFILLED WITH COMPACTED MATERIAL.
4		ALL STORMWATER & SEWER FITTINGS TO HAVE ENLARGED COLLARS. INSURE JOINTS ARE NOT FULLY PUSHED HOME.
5		ALL ROAD PAVEMENTS TO HAVE BEDDING A14 FABRIC TO SUBGRADE.
6		ALL ROAD TO PIPE & TO BE 200mm TYPE P WITH A14 OR A WELL GRADED GRANULAR SACCETEL WITH WEAR GRADING.

LEVELS	
LEVEL 1	PROPOSED LEVEL OF FIN.
LEVEL 2	PROPOSED FIN. OVER DECK.
LEVEL 3	PROPOSED FIN. OVER PATIO AREA OVER LEVEL.
LEVEL 4	PROPOSED FIN. OVER DECK & PATIO OVER LEVEL.
LEVEL 5	TOP OF BANK LEVEL.
LEVEL 6	BOTTOM OF BANK LEVEL.
LEVEL 7	BOTTOM GRADE.

STANDARD SYMBOLS		PROPOSED SYMBOLS	
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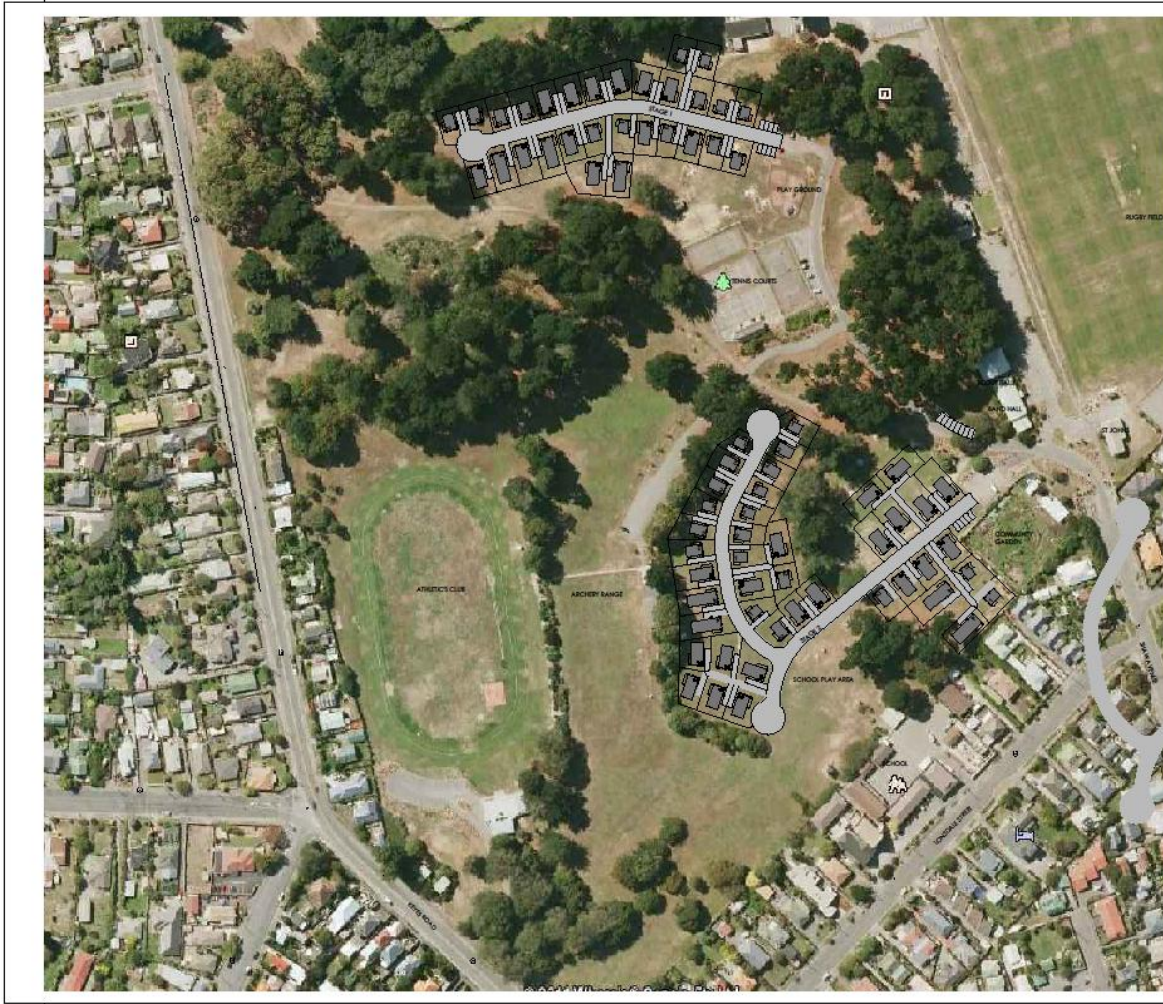
DATE	USER	STATUS	REV

Fulton Hogan	
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FULTON HOGAN LTD	
KAIPOI TEMPORARY HOUSING	
CONCEPT PLAN	
For Information	
SCALE: 1:500@A1	DATE: May 2011
SCALE: 1:1000@A3	
E.17718-1.CP01	
R7	

Kaipoi



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NO.	DATE	REVISION

- NOTES:**
- 1) ALL GUTTER LATERAL JOINTS TO BE WRAPPED IN FELT FABRIC 300MM A14 GSE DRAINS
 - 2) ALL STORMWATER & GUTTER MARKS IN LIQUEFIABLE MATERIAL TO HAVE BEDDING WRAPPED IN FABRIC.
 - 3) ALL MANHOLES NOT IN NATURAL GRAVEL TO BE UNDERCUT & BACKFILL WITH COMPACTED METAL.
 - 4) ALL STORMWATER & GUTTER PIPES TO HAVE EDWARDS COLLARS. ENSURE JOINTS ARE NOT FULLY FLUSHED TO GAGE.
 - 5) ALL ROAD PAVEMENTS TO HAVE BEDM A14 FABRIC TO SUBGRADE.
 - 6) BACKFILL TO PIPES TO BE 50MM TYPE F WITH ANGS OR A WELL GRADED GRANULAR BACKFILL WITH SIMILAR GRADING.

DATE	ISSUE	ISSUE
20/05/11	REVISED	APRIL 2011



PLANNING CONSULTANTS

Relationship Name: F1000B11 (Subcontract 1) See Detail
 Version or revision: 00 (20/05/11) www.fultonhogan.com

CLIENT
FULTON HOGAN LTD
RAWHITI DOMAIN
TEMPORARY HOUSING

PROJECT
LAYOUT CONCEPT

FOR INFORMATION

SCALE: T:5000B11 D:1:1000B11 DATE: May 2011

PROJECT NO: E.17718-2.CP01 **RB**



Rawhiti Domain





Plans are illustrative of the finished units, however internal colour schemes may differ, as may surrounding landscaping and deck designs. Loose furniture has been shown to indicate potential use of tenant provided items.



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Housing types



CPTED Considerations

- CPTED - Situational Crime Prevention - People, Environment, Target Hardening.
- Secure by design.
- Access control
 - ability to get in and out - outlaw cul de sacs (pros and cons).
 - Emergency Services access.
- Density - controlled - more eyes and ears v public space.
- Body corporate - idea of overseeing group - residence group - communication.
- More use - shops not accessible.
- Displace of current users - gangs - park part of patch - sports.
- Open fronts and private backs - orientation / kitchen on the street.
- Vehicle safety - on street / off street parking.
- Storage personal property.
- Furnished / unfurnished.
- Fenced or not - if fenced see through fencing.
- Connectivity - streets going through.
- Leave the parks alone → as need to keep legacy.
- Can people - plant a tree, pets.
- Common community gardens, green space.
- Make it look pretty - nice.
- Signage - create a street number.



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CBD

- Temporarily replace demolished buildings with green space



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CBD Considerations

* We are creating a place NOT a design!

- Night time community needs v day time community needs.
- Empower community - let them develop concept - watch and see what worked and did not work.
- Don't forget the flowers - plant the grass - first stage something is being done!
- Skip days - encourage clean up.
- Public toilets.



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CBD Considerations

Green space

- Natural Surveillance
 - Sightlines.
 - 2' x 7'
 - landscaping
 - fencing (pool style, dark colour)
 - Activity (something going on)
 - Lighting (pedestrian standard)

Go to local New Zealand artist to design building, show piece of art - shows.
Markets - Arts and Craft.



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CBD Considerations

- Access control
 - Flow through - if one safe area to another otherwise fence off.
 - Dead zone and blank walls. Avoid. Consider murals.
 - Adopt a wall / park by students, school kids, community groups, etc., police.
 - Business groups.
 - Legibility, way-finding, signage (clear and unambiguous).
 - Connectivity with area adjacent.



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CBD Considerations

- Layout and Orientation
 - Recognise needs of different user groups - multi case - range of users.
 - Separate vehicles and pedestrians.
 - Consider help points, eg, Camera - depends on sightline and lighting
 - phones in isolate pts (CCTV) - response - bikeway - loud speakers.
 - Avoid isolated locations.



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CBD Considerations

- Why public spaces fail.
 - Not having good places to sit - creates informal surveillance.
 - Gathering pts - playground equipment, etc.
 - Visibility, poor entrance.
 - Dysfunctional features.
 - Nothing happening, going on.
 - Approach - community not approached until too late - tap into community strengthens.



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Other considerations

- Resource Consent process
- NZ National CPTED Guidelines
- Whole of City approach
- Develop cycle network
- Public transport
- Community hubs, mixed use
- Involvement of the community



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Round table discussions

- CPTED considerations for
 - Temporary accommodation
 - CBD
 - Residential areas
 - Green space



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Questions?

- Tony Lake
 - ICA
- Phil Dean
 - NZ Police



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