



Limerick Digital Strategy (Draft)

# Building Ireland's First Digital City

Towards a Sustainable Smart Limerick  
City, Region and Communities

Limerick Hinterland Report

## Smart CCTV Pilot

P06-056CCTVSD

February 2018 Update

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# Smart CCTV Pilot

Based on the Limerick Hinterland Study installation of up to 50 CCTV Cameras in 14 towns of county Limerick

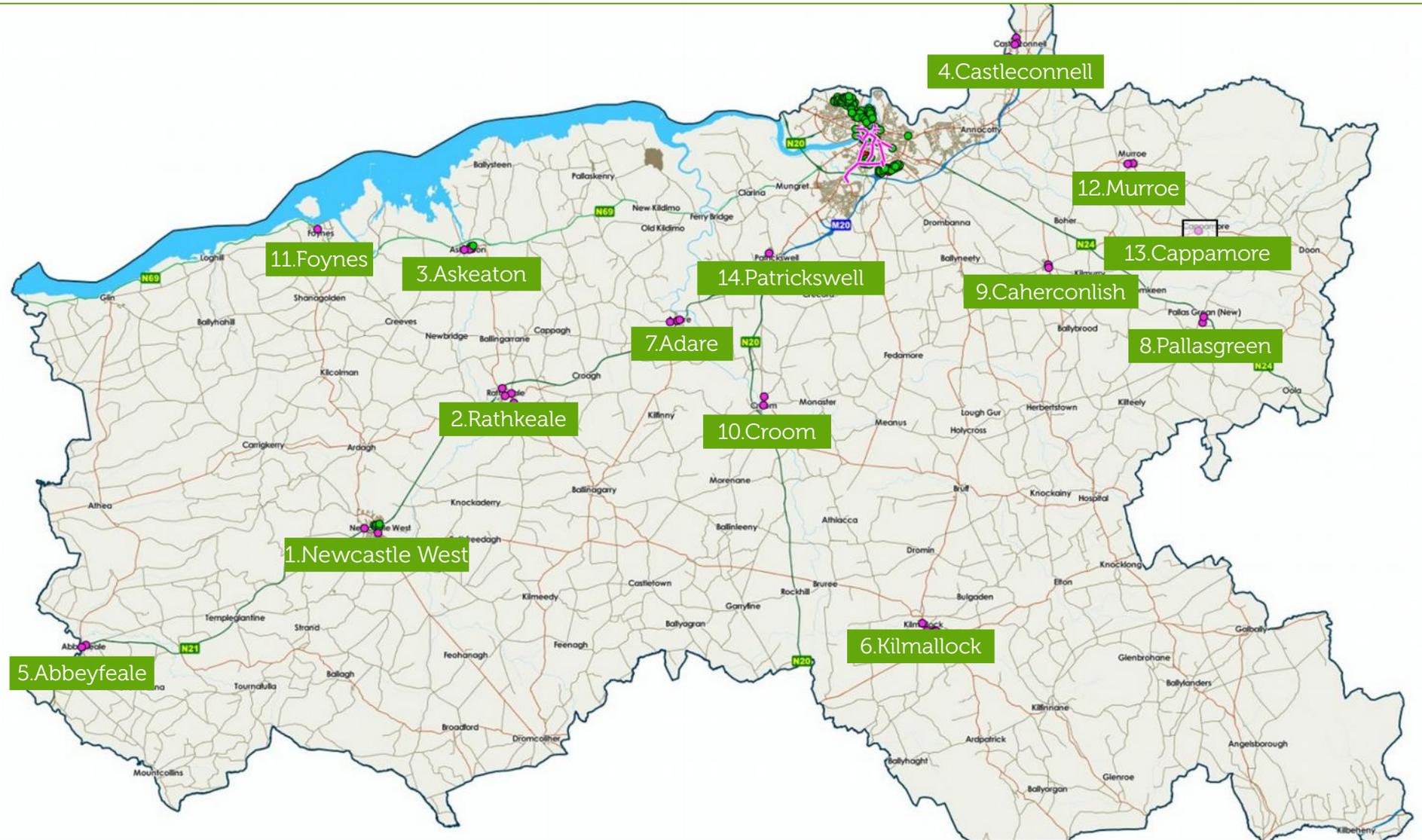
- €500,000 Funding
  - €250,000 DoHPCLG
  - €250,000 LCCC Development Contributions
- Planned investment
  - €350,00 Capital Costs
  - €150,000 Operations costs for 3 years

Monitoring will be enabled in Moyross Community Enterprise Centre – MCEC

To be completed by 30<sup>th</sup> of November 2017



# Smart CCTV - Proposed Locations



# Smart CCTV Pilot – Project Status

## Project Status: Installation in progress

1. Procurement Completed – September 14<sup>th</sup> (3 proposals received)
2. Civil costs are 50%-60% of the CCTV installations
3. Costs range from €7,000 to €23,000 per location, depending on location
4. Pre-contract works / negotiations started - October 13<sup>th</sup>
5. Extension to funding time-line from DoHPCLG secured **until March 2018**
6. Contract awarded to **Roadbridge Ltd** - November 10<sup>th</sup> - **€540,397.53**
7. **Wave 1:** started in November
8. **Wave 2:** subject to funding

# Smart CCTV Pilot – Wave 1

## Project Status: Installation in progress

1. **Wave 1 Budget - €440,000** (by reducing costs for maintenance year 1 / comms)
2. **ALL 14 communities** included in the Hinterland Report will see the installation of the latest generation of Smart CCTV systems
3. **14 Local CCTV Hubs** - local NVR (video recording servers) with smart analytics capabilities, networking, communications and power management;
4. **44 High Spec / High Quality cameras** (or the equivalent of at least 88 cameras) will be installed in **24 new locations** in the 14 towns, as follows:
  - 11 x 360' Panoramic PTZ cameras
  - 9 x 270' Panoramic PTZ cameras
  - 3 x 180' Panoramic PTZ cameras
  - 18 x ANPR cameras for number plate recognition
  - 3 x PTZ cameras for Live Streaming (Newcastle West, Adare and Kilmallock)

Quality vs Quantity

# Smart CCTV Pilot – Wave 1

Project Status: Installation in progress:

1. **CCTV monitoring upgrades** in the MCEC
2. **Smart features** for pattern/footfall recognition are included in all cameras and systems
3. **28 broadband connections**, where available, between the local CCTV hubs and MCEC.
4. **Remote access** on mobile phones (demonstration only) – Linked to An Garda Mobility Project
5. There are **13 locations** that will be enabled in **Wave 2**, subject to funding
6. **Applications for funding** under the Department of Justice Community CCTV scheme
7. **Privacy Impact Assessment** in Progress



# Smart CCTV Pilot – Wave 1

Project Status: Installations completed in: Rathkeale, Askeaton, Newcastle West, Abbeyfeale, Adare, Kilmallock, Castleconnell, etc.



*Figure 8 - Base excavation at RTK 003*

# Smart CCTV Pilot – Time-frame

Installations in progress in 5 clusters: November 2017 – March 2018

1. CLUSTER 1 - Rathkeale, Askeaton & Foynes
2. CLUSTER 2 - NCW, Abbeyfeale & Kilmallock
3. CLUSTER 3 - Croom, Patrickswell\* & Adare
4. CLUSTER 4 - Pallasgreen, Caherconlish\* & Cappamore
5. CLUSTER 5 - Castleconnell & Murroe
6. Moyross Control Room

Patrickswell\* - to be aligned with town redevelopment works

Caherconlish\* - to be aligned with town redevelopment works

Safer communities



Figure 6 - Installed Base Plate

# 360° Panoramic CCTV – RTK001



8 cameras in 1

# CCTV Poles – Foundations Castleconnell



# 360° Panoramic CCTV – RTK001 Sample

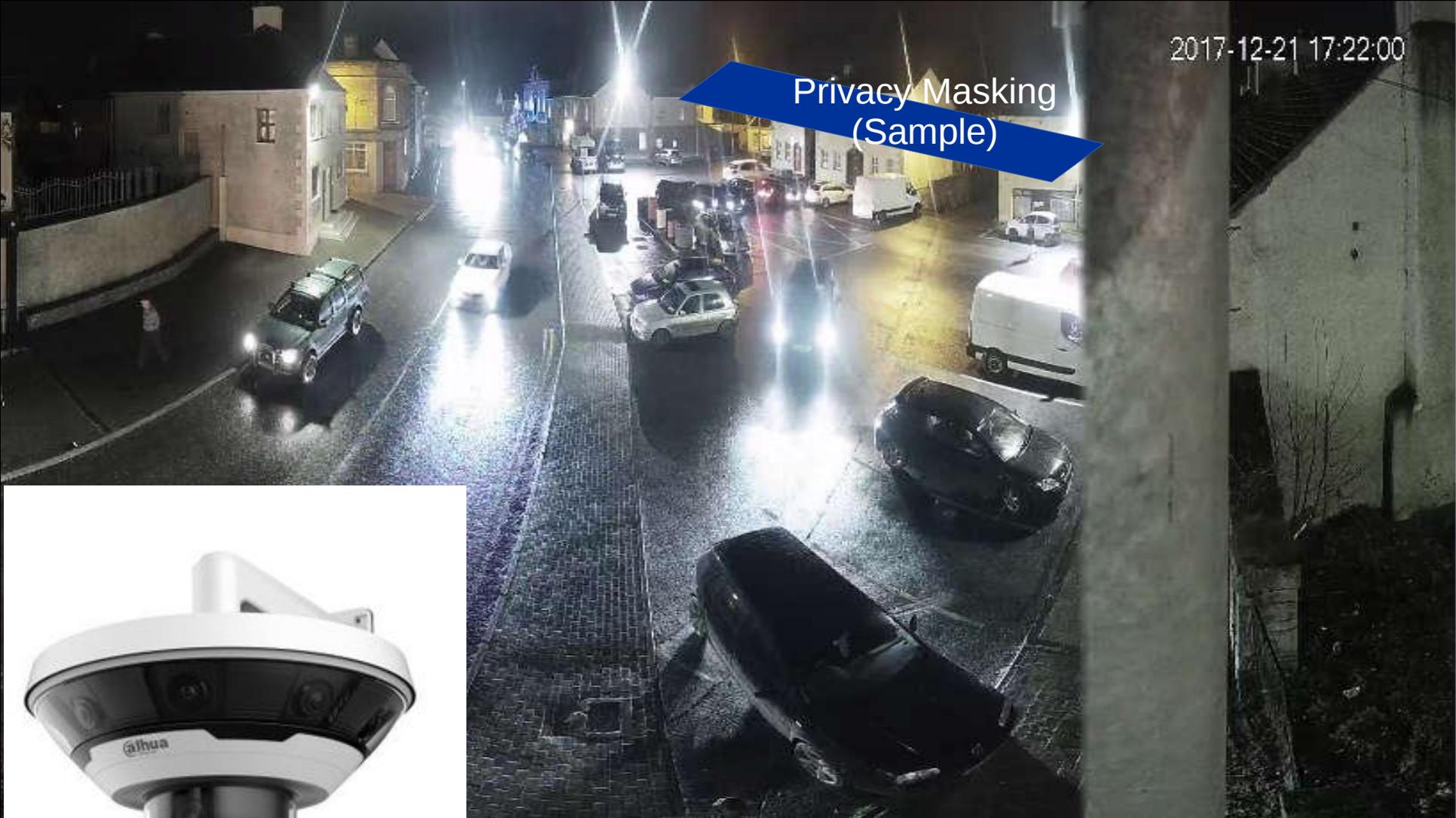
2017-12-21 17:22:44

Privacy Masking  
(Sample)



3 x Emergency Response Pan Tilt Zoom 45x  
(Live Streaming) - NCW008, ADR001, KIL001

# 360° Panoramic CCTV – RTK001 Sample



# 180° Panoramic CCTV – RTK002 Sample



8 cameras in 1

# Automatic Number Plate Recognition (Sample)

Search, Alarms, Traffic

Live Query Setup Alarm Logout  
ANPR Receive Record Type dav [Icons] Install



Obtain Plate Info  
H 2

Real Plate Info  
[Close-up of license plate H 2]

Index	Event Type	Capture Time	Plate	Country	Plate Size
13	ANPR	2018-01-03 15:33:34	HG	GBR	142x40
12	ANPR	2018-01-03 15:33:32	EY	GBR	124x40
11	ANPR	2018-01-03 15:33:27	M6	GBR	168x40
10	ANPR	2018-01-03 15:33:06	KC	GBR	109x40
9	ANPR	2018-01-03 15:33:00	YM	GBR	105x40



ANPR - subject to legal advice

# Analytics: Pedestrian & Traffic Counting, Alarms

Artificial Intelligence, Deep Learning

Live Query Setup Alarm Logout

ANPR Receive Record Type dav     Install

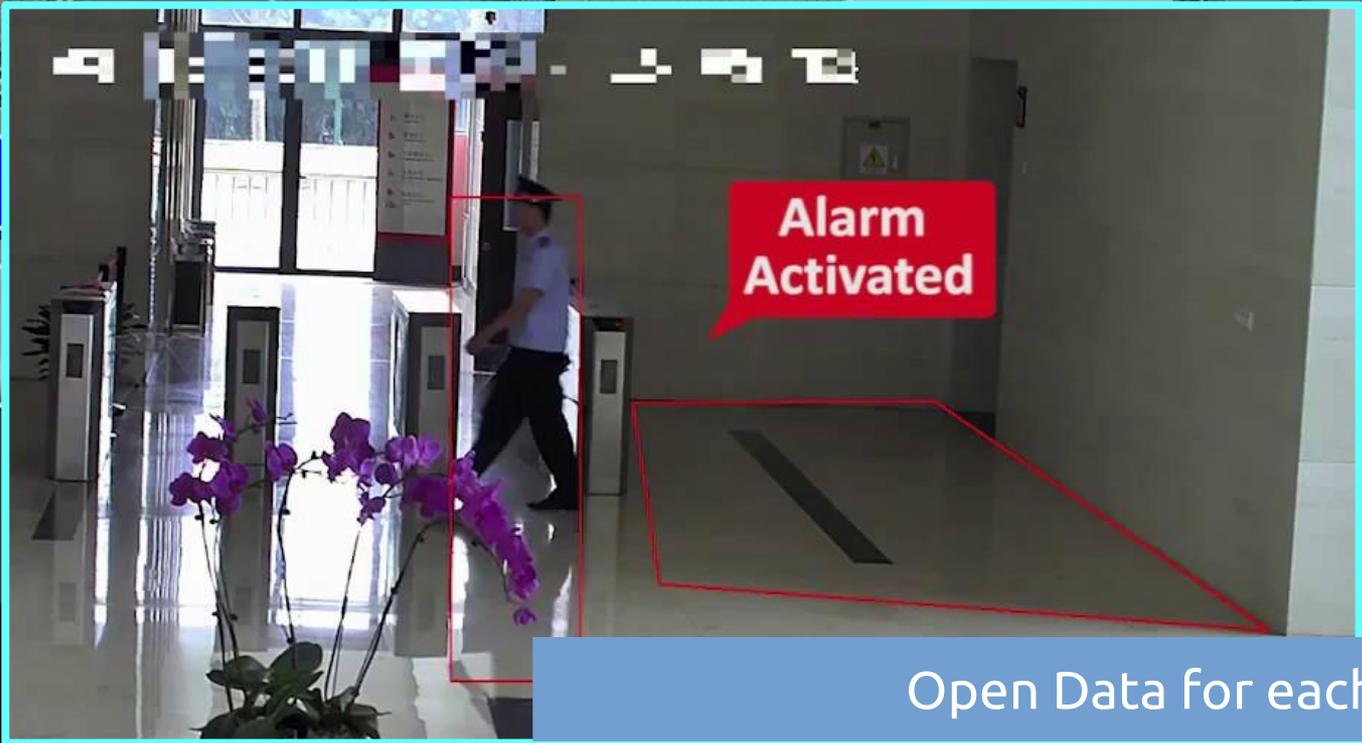
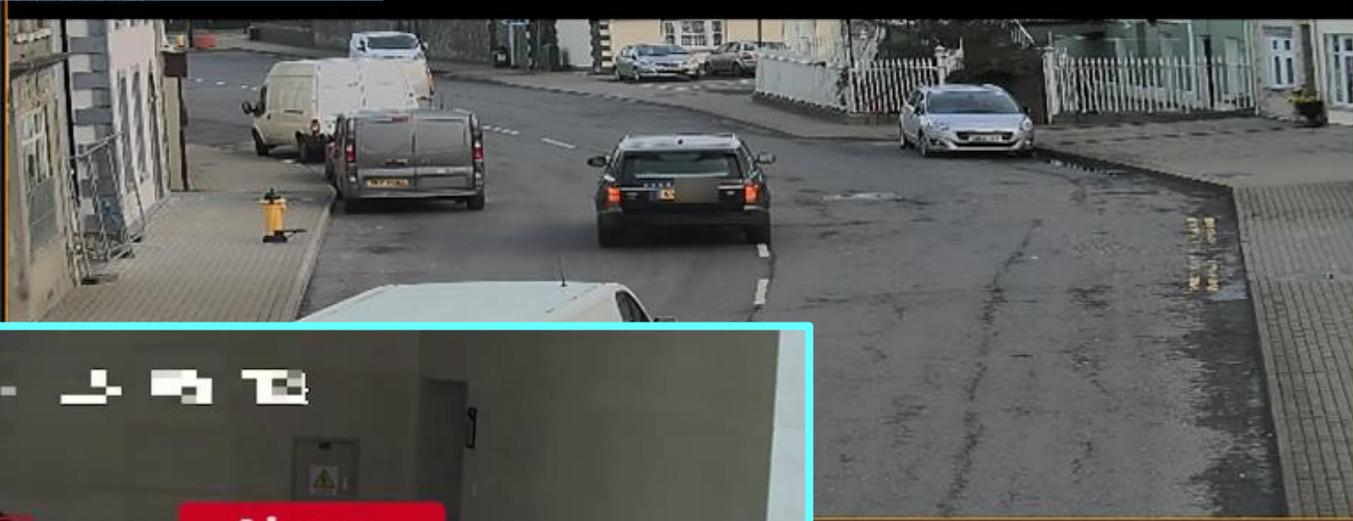
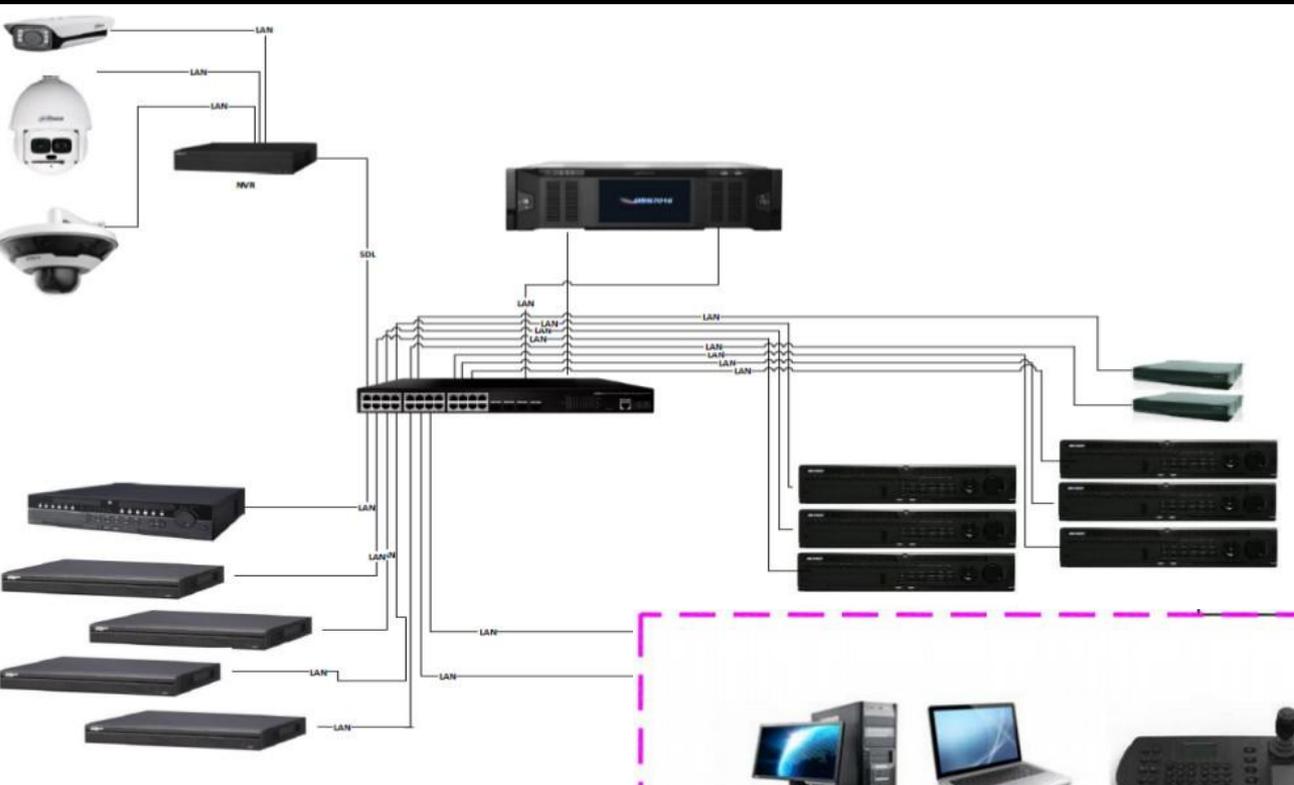


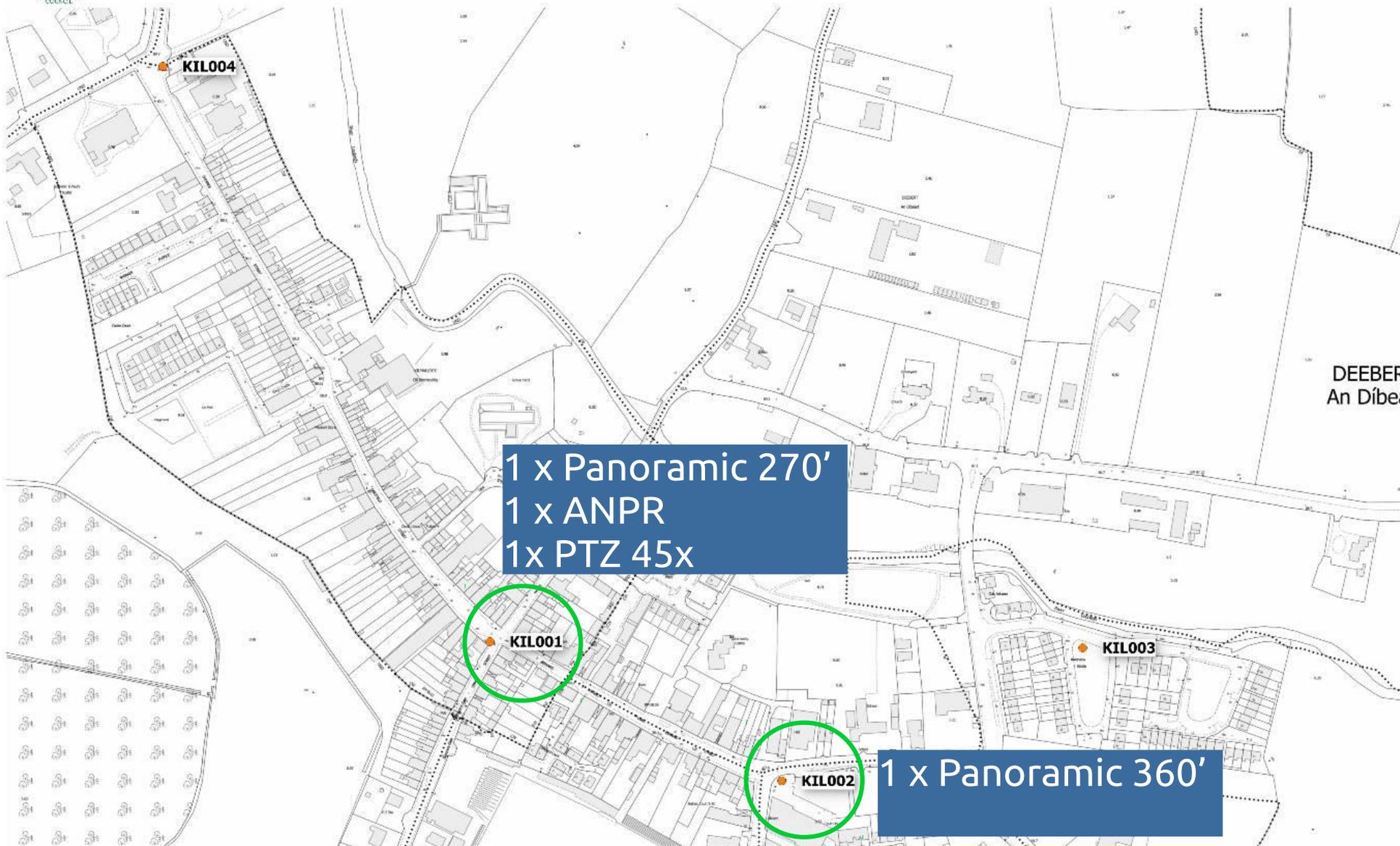
Plate	Country	Plate Size
HG	GBR	142x40
EY	GBR	124x40
M6	GBR	168x40
KK	GBR	109x40
YM	GBR	105x40

Open Data for each Town

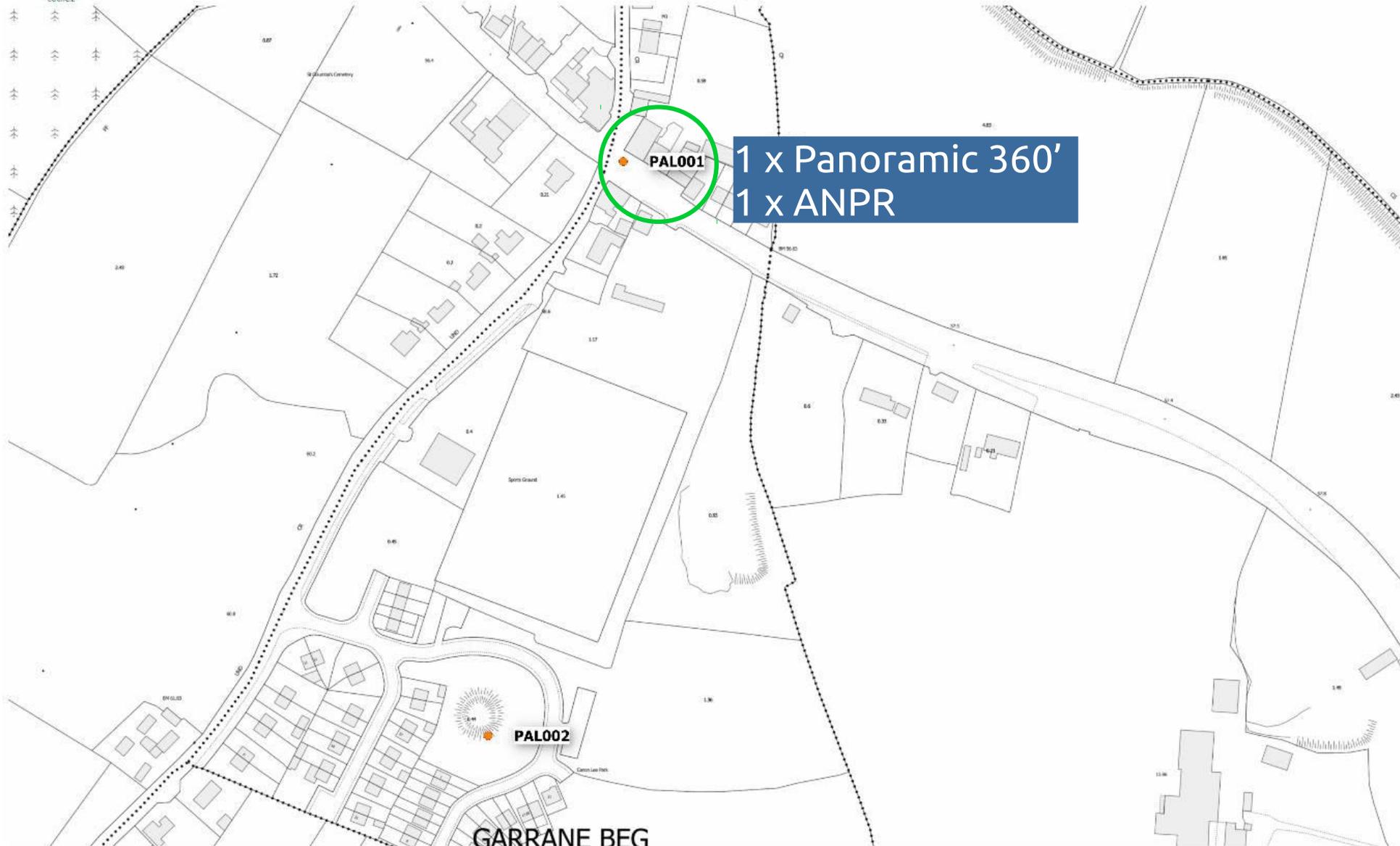
# CCTV Hub in each town connected to MCEC



# Proposed Smart CCTV 06 Kilmallock

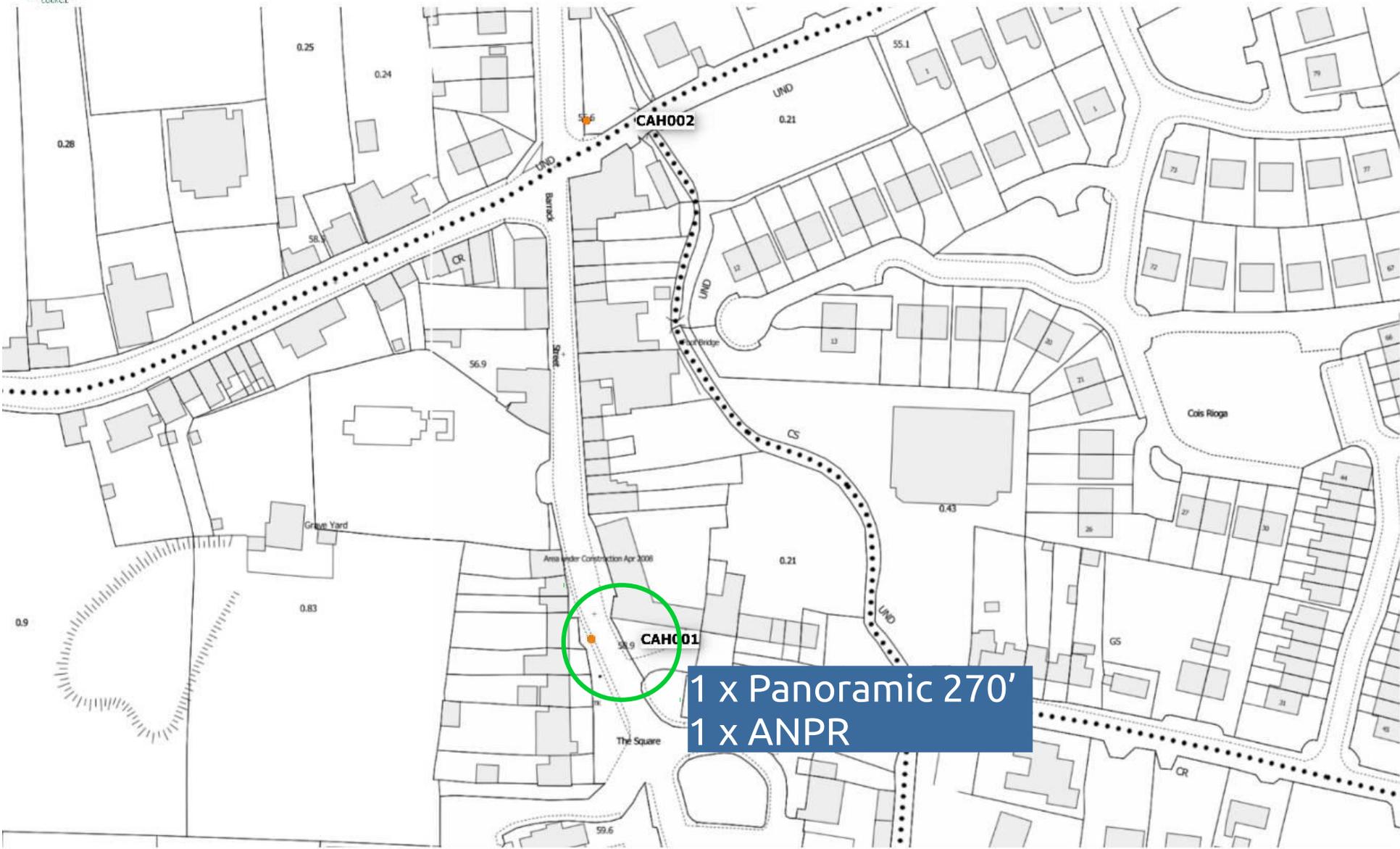


# Proposed Smart CCTV 08 Pallasgreen

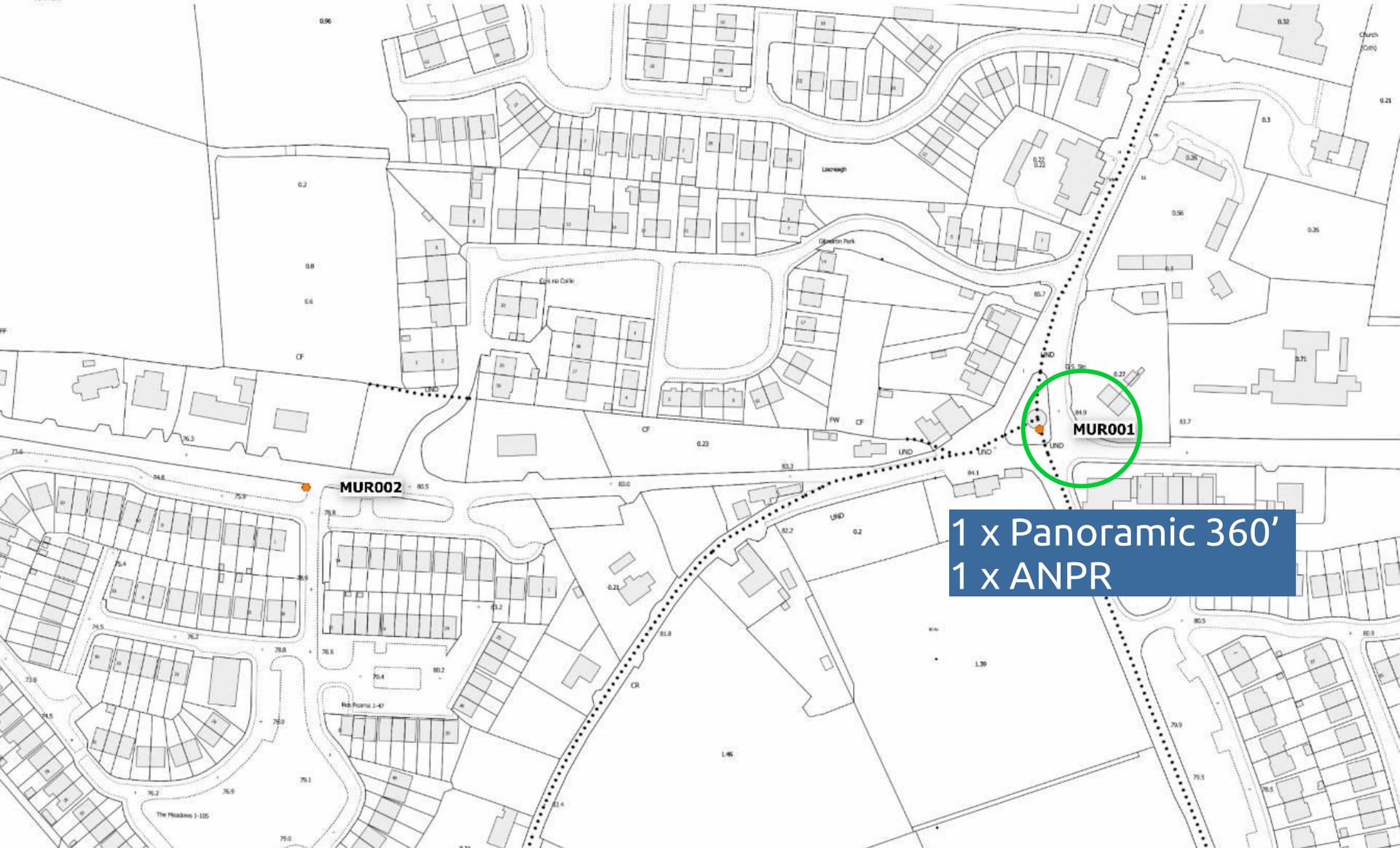


1 x Panoramic 360'  
1 x ANPR

# Proposed Smart CCTV 09 Caherconlish

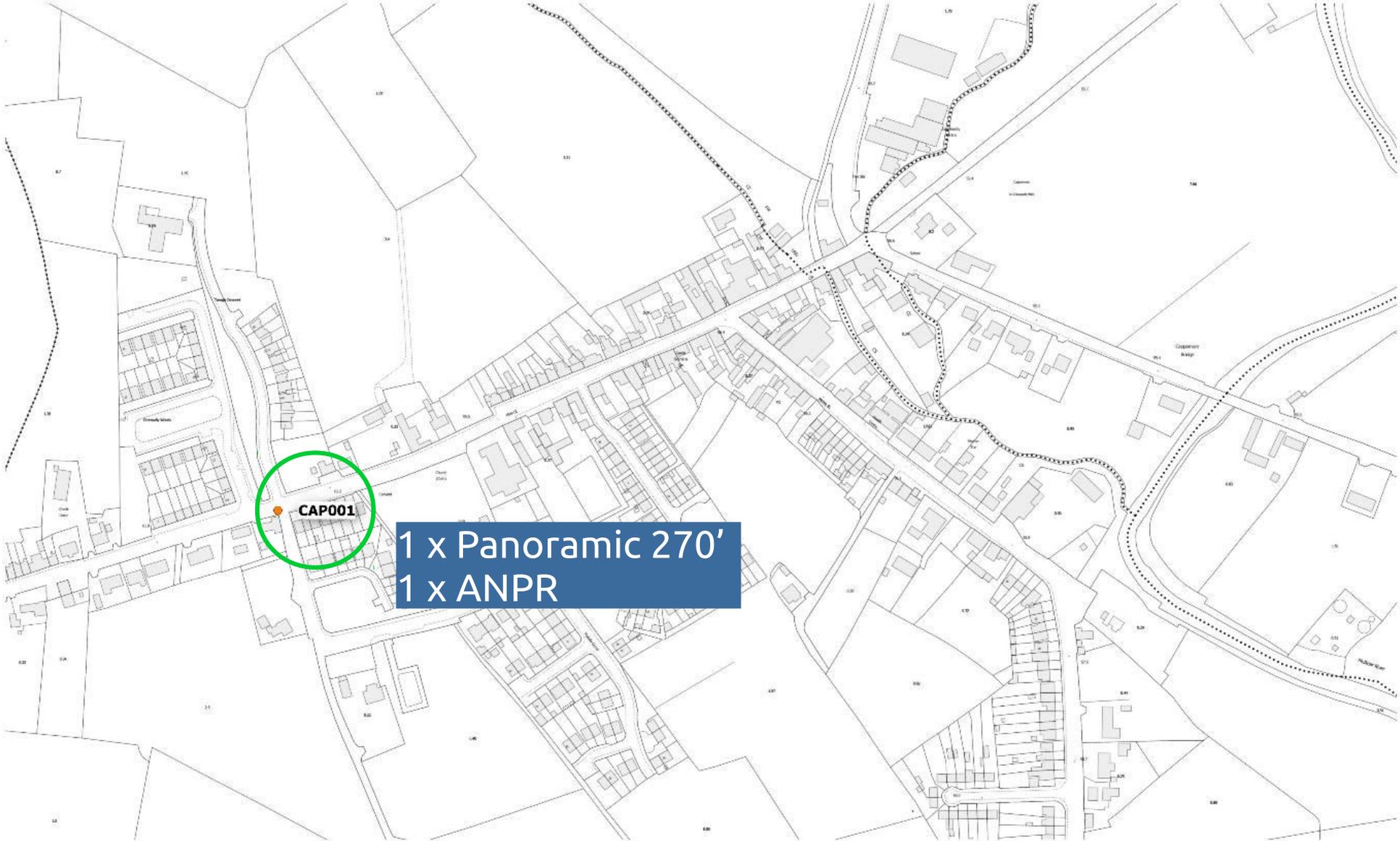


# Proposed Smart CCTV 12 Murroe



1 x Panoramic 360'  
1 x ANPR

# Proposed Smart CCTV 14 Cappamore



● CAP001

1 x Panoramic 270'  
1 x ANPR

# Smart CCTV Pilot Project

## Benefits to local communities

- 1) Improve community safety. **Combat and further reduce crime.** Enable off-line and live access to CCTV for An Garda Síochána
- 2) Improve emergency response e.g. accidents, fire, major emergency or severe weather incidents;
- 3) Better traffic management and control, traffic counting & categorization, traffic flow and parking;
- 4) Reduce damage to private and public properties & infrastructure; evidence for public liability claims
- 5) Combat & Reduce antisocial behavior
- 6) Cleaner environment and public spaces, combating illegal dumping, better animal control and an overall better environmental control;
- 7) Smart CCTV: access to near real-time open data such as traffic flows, pedestrian flows, Automatic Number Plate Recognition, line crossing, intrusion detection,
- 8) Help promote tourism and the events organised in town centres by live streaming
- 9) Improve civic engagement - City / Town Engage program

Safer communities

# Proposed Privacy Principles

## Privacy & Data Protection are paramount

- 1) Use of a camera system must be for a specified purpose and necessary to meet an identified pressing need.
- 2) The use of a camera system must take into account its effect on the privacy of individuals, with regular reviews
- 3) There must be transparency, including a published contact point for access to information and complaints.
- 4) There must be clear responsibility and accountability for all system activities.
- 5) Clear rules, policies and procedures must be in place.
- 6) No more than the required images or information should be stored.
- 7) Access to retained images and information should be restricted with clearly defined rules on who can gain access and for what purpose.

Safer communities

# Proposed Privacy Principles

## Privacy & Data Protection are paramount

- 8) Surveillance camera system operators should consider any approved operational, technical and competency standards relevant to a system and its purpose and work to meet and maintain those standards.
- 9) Images and information should be subject to appropriate security measures to safeguard against unauthorised access and use.
- 10) There should be effective review and audit mechanisms to ensure legal requirements, policies and standards are complied with in practice, and regular reports should be published.
- 11) Any reference databases should be accurate and kept up to date.
- 12) Camera systems should be used in the most effective way to support public safety and law enforcement to evidential standard.

**Safer communities**

# Next Steps

A strategic approach - respond to increased demand from all communities

- 1) Secure additional funding – Wave 2
- 2) Installation & Maintenance Framework – 2018
- 3) Review Governance/Procedures
- 4) Increase Monitoring Capability / Capacity - MCEC
- 5) Image Quality – Lighting
- 6) Ensure Value for money



**CCTV STRATEGY**

# Smart CCTV Pilot - Feedback

## Consultations

- Feedback on proposed locations for CCTV, and
- New potential locations for CCTV for future funding

to be sent to

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