

# DRAFT

## Notes from Site Visit to New City College Construction and Technical Skills (11th Feb 2026)

### Green and sustainability - skills and training courses

#### **Mastic Asphalt: A Sustainable and Versatile Building Solution**

Mastic Asphalt is an incredibly versatile and time-tested product, ideal for applications ranging from roofing and flooring to tanking and damp-proofing, particularly in basements and flats. Its 100% waterproof nature and carbon-neutral status make it a superior, sustainable choice compared to modern alternatives, such as plastics, which often fail prematurely.

#### **Key Advantages and Longevity**

- **Proven Track Record:** Mastic Asphalt has been used on major landmarks like St. Paul's Cathedral, the Palace of Westminster, and Buckingham Palace, demonstrating its durability with a lifespan often exceeding 50 years.
- **100% Recyclable:** The material is completely recyclable, as waste can be melted down in a recycling unit and reused, resulting in zero waste.
- **Enhanced Safety:** Application can be done without an open flame, significantly increasing safety on site and eliminating the need for difficult-to-obtain "hot work permits."
- **Cost-Effective:** While the initial outlay may be higher, Mastic Asphalt proves to be cheaper over its extended lifespan due to its longevity and ease of maintenance and repair.
- **Eliminates Trip Hazards:** When used on footpaths, it provides a smooth surface, eliminating the trip hazards associated with paving slabs.
- **Adaptability:** Its adaptability allows for use in diverse situations, from general construction and house building to more specific repairs.



## **Industry and Training**

Mastic asphalt is one of the few construction activities still regarded as a 'craft trade'.<sup>1</sup> Apprentices undergo training at the National Centre (NCC), often travelling from across the UK and Ireland for two-week blocks. Uniquely, apprentices create their own finishing tools from different types of wood (e.g., mahogany for a smooth finish, oak for fillets) as part of their training to achieve the perfect application.

Apprentices come from all over the UK and Ireland. E.g. Northern Ireland, Scotland, Yorkshire. They come for two-week blocks. Rarely local, Currently only one from Camden.

## **Market Context**

Although Mastic Asphalt was once the leading roofing product, the industry's reliance on its past success allowed other products to gain market share. However, the industry is now modernising, offering polymer-modified versions that provide better movement and compatibility with modern building structures.

Councils are encouraged to consider Mastic Asphalt for its clear sustainability, carbon neutrality, and long-term cost benefits.



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<sup>1</sup> <https://masticasphaltcouncil.co.uk/news/an-introduction-to-the-mastic-asphalt-council/>

## Plumbing & Electrical

**Air Source Heat Pumps (ASHP):** The centre uses three distinct models to ensure deep understanding:

1. **Working Model:** A live system demonstrating heating for domestic hot water, radiators, and underfloor heating.
2. **Installation Model:** A system designed for complete de-installation and re-installation practice.
3. **Fault-Finding Model:** A "broken" system used specifically for troubleshooting exercises.

All fittings in the ASHP setup are crimped copper, eliminating the need for hot works and fire risk during training. Key principles taught include the necessity for large-diameter pipes (no microbore) and the practical requirement of external unit placement due to noise, as the system is essentially a reverse refrigerator.

## Other Renewable & Smart Technologies

The centre also provides working, installable, and broken examples for:

- **Solar Thermal:** Systems for water heating.
- **EV Charging:** Electric Vehicle charging point setups.

Learners are trained in both installation and troubleshooting across these technologies. The curriculum goes beyond formal qualification requirements, focusing on future - proofing skills. The institution recognises that industry standards, such as those related to pipe diameter for heat pumps, are crucial. Since formal qualifications often lag behind industry innovation, the centre supplements its core curriculum with essential modern modules, including solar thermal, EV charging points, battery storage, and smart home systems like Nest controllers.

## Motor vehicles

NCC is seeing a big growth in motor vehicle learners. NCC aims to train learners on a variety of vehicle types, including electric, hybrid, diesel, and petrol. However, current challenges include the lack of established qualifications for some technologies, such as electric vehicles.

## Current Challenges and Approach to Training:

- **Qualification Gaps:** A challenge exists due to the lack of established, recognised qualifications for newer technologies, such as electric vehicles.
- **Warranty Issues:** New electric vehicles are often maintained under warranty, which complicates the ability to provide learners with hands-on experience that leads to a recognised qualification.
- **Safety-First Training Environment:** NCC prioritises a safe learning environment. The initial training takes place in a dedicated workshop, not a live, active one, to fully control health and safety risks.
- **Practical Progression:** Students begin by working on decommissioned parts. Only when they have demonstrated sufficient responsibility do they progress to working underneath a vehicle.
- **Dedicated Training Vehicles:** Cars are purchased solely for training purposes, where

they are repeatedly dismantled and reassembled, ensuring they are never returned to the road.

### **Employer Engagement and Work Experience:**

- **Partnerships and Limited Opportunities:** While employer partnerships are crucial, immediate work opportunities can be limited.
- **Organised Involvement:** NCC actively organises employer involvement, such as a valuable, though costly, planned site visit to a BMW facility to expose learners to modern manufacturing practices.
- **Local Work Placements:** Established relationships with local garages provide Level 2 learners with work experience. Students typically receive about one week of practical placement, performing basic but genuine tasks.
- **Employment Focus:** NCC focuses on London-wide employment opportunities, giving students choice in where they work. While some secure local jobs, others seek positions further afield, with one former student now working for Tesla in Adelaide.

### **Adult Learning and Funding at NCC**

New City College (NCC) serves a significant number of adult learners, with English for Speakers of Other Languages (ESOL) being the largest area, boasting over 2,300 enrolments this year (specifically 2,377 total). A notable success story is a specific ESOL programme for cab drivers, who needed to improve their English to meet licensing requirements. After successfully gaining their licenses and confidence, many of these drivers returned seeking training for new skills to integrate into other professions. This desire for integration is also common among many women, often driven by the need to support their children's schooling.

NCC has also observed a substantial increase in adults retraining, particularly 'career changers' leaving corporate roles, taxi drivers, and others seeking tangible work. This has resulted in a unique demographic in Hackney, with a significant number of mature adults. A major area of interest is construction, attracting a diverse range of adult learners, including two-thirds with corporate backgrounds, as well as those who have been unemployed. NCC also serves 500–600 learners aged 16–18 in construction and technical skills and has 280 apprentices. Some ESOL learners transition into construction or other trades after completing their language programmes.

### **Funding Challenges and Policy Context**

Adult learning funding is subject to a cap, and despite the current skills agenda, this funding is being simultaneously reduced and 'squeezed.' The rates for adult funding have been static for the past 12 years, remaining unchanged since 2012. For instance, the funding for a functional skills maths exam is still £729, the same rate as in 2012.

The Greater London Authority (GLA) has assisted with an overall 3.8% funding drop by staggering the reduction over three years to ease the adjustment for NCC, though the college recognises that the GLA has been applying pressure for a number of years.

## **College Mergers and Governance**

The New City College was formed through a merger of equals, although it may have been perceived by some as a takeover. This move was a proactive step by Hackney, which approached Tower Hamlets for a partnership, avoiding a forced merger. This action was prompted by a Department for Education (DfE) policy aimed at addressing the financial unsustainability and low quality of smaller colleges, which the government was compelling to merge through 'area plans.'

Colleges own all the land and assets on their premises, which is common in London. The educational landscape changed significantly after a national audit anomaly brought colleges back into the public sector in November 2024, having previously been classified as a charity.

## **Access, Fees, and College Objectives**

NCC has decided to waive the fee for ESOL courses, meaning approximately 85% of its learners are not charged. This decision is based on the recognition that the more removed an individual is from education, the greater the barrier to access, often due to the intrusive nature of required funding forms. By making ESOL free, NCC aims to empower individuals to gain English skills, enabling them to access further educational opportunities, interact more fully in society, and gain a stronger voice.

While increasing charges for adults is a potential consideration, NCC must balance this against viability, as raising fees could make the programmes unsustainable if uptake is too low. Critically, NCC's core objective is to move away from the principle that an individual's financial standing dictates their future opportunities.

## **Collaboration with Hackney**

NCC is keen to collaborate with Hackney rather than working in isolation, acknowledging that Hackney's residents are the ones who learn, teach, and benefit from the skills acquired. The college is hopeful that the scrutiny process will help identify areas for overlap and joint effort with the borough.

## **Qualifications and Industry Relevance**

NCC is committed to pushing their curriculum beyond the minimum standards set by awarding bodies, focusing on the skills required for the future, not the past. To this end, NCC has invested in a dedicated Green Skills Lab to focus on sustainability and renewables.

NCC actively supplements formal qualifications to meet current industry demands. For example, our plumbing students learn the critical role of pipe diameter in heat pump efficiency - a detail often considered "irrelevant" for traditional gas boilers. Similarly, our electricians are trained in smart home technology, such as Nest controllers and Phillips Hue lighting, reflecting the decline of traditional light switches. These skills are integral to the essential London-wide retrofit agenda.

While NCC collaborates with awarding bodies like City & Guilds to develop new qualifications, their pace is often slow. Therefore, NCC provides students with this cutting - edge knowledge, ensuring they can "pick it up and run with it" once official qualifications become available. Their

focus is on "greening" existing trades - like through new brick formulations and concrete mixes - rather than solely creating new "green jobs," as every trade must evolve.

### **Student Success and Diversity**

Our overall achievement rate, including both pass rate and retention, is 90%, which significantly surpasses national averages. Our students progress to exceptional careers; one former student is now a Tesla technician in Adelaide, and another is working at Claridge's. We are dedicated to creating life-changing opportunities for young people, particularly "Hackney boys and others."

### **Careers and Professional Development**

Our core mission is to foster careers, not merely to provide jobs, by actively working to professionalize the trades. While achieving high skill levels in trades like carpentry or bricklaying is a significant accomplishment, we encourage our learners to look beyond the immediate trade and aspire to related fields such as architecture, town planning, and design. As one staff member noted, "I'm bored of other people telling me how to do this. Now, I want to design the building."

### **Staff Expertise and Entrepreneurial Support**

Our tutors are former trade professionals. We equip students with essential entrepreneurial skills, advising them initially to gain stability by working for a large company. However, we also prepare them for self-employment through collaborative projects with the Maths department, focusing on vital skills like estimating and calculating material and product costs.

### **Specialist Training: The National Centre for Mastic Asphalt Training (NCC)**

As the National Centre for Mastic Asphalt Training, we attract apprentices nationally, including from Scotland, Northern Ireland, and Yorkshire, who attend intensive two-week block sessions.

The NCC has heavily invested in this training, demonstrating a strong belief in the product and recognising the industry's need for skilled professionals. NCC recently trained a second endpoint assessor, as our main tutor, Alfred Stefano, cannot assess the learning he provided. The NCC is proactively addressing the qualification's development by working with the Mastic Asphalt Council to train new assessors.

### **Advice on Self-Employment and Progression**

NCC's advice to students is generally to start by gaining experience with a larger company. This provides financial security and support in obtaining qualifications. Once they have a solid foundation and industry understanding, they can then consider self-employment, acknowledging the different stresses it introduces.

NCC wants students to understand that there is no ceiling to their potential. While staying a highly skilled tradesperson is valuable and a source of pride with strong earning potential, a person who starts in bricklaying can progress into architecture or town planning. NCC is dedicated to capturing this progression beyond the traditional trade level, reminding students that they can move in and out of education to reach their ultimate career goals.

## **Valuing All Accomplishments**

It is important to emphasise that leaving education as a highly skilled carpenter or bricklayer is a significant achievement, and there is great value and honour in that accomplishment.

## **Promoting Women in Construction: A Focus on Inclusion and Support**

Active inclusion and representation of women are essential for the construction industry's future. Diverse representation, particularly at events like career fairs, is crucial; female students are more likely to engage with a woman representative than an all-male group. The industry must actively model the inclusion it seeks to achieve.

Role modelling is a key strategy for attracting more females. For example, our own female carpenter and female Construction Student of the Year are vital role models. We are actively working to improve gender balance, with notable progress in areas like carpentry.

NCC actively promotes inclusion and professional behaviours. They provide comprehensive support, including wrap-around care which is crucial for student sustainment. This includes access to mental health counsellors, an on-call principalship, and a system (using QR codes in toilets) for students to report feeling unsafe or distressed.

Pastoral tutors further support students by guiding them through personal difficulties, monitoring their progress towards goals, and delivering training on equality, diversity, and expected workplace culture.

## **Next Steps for the New Sustainability Centre**

NCC is committed to developing a long-term, sustainable Sustainability Centre by consolidating the campus. This new building will serve as a showcase for sustainability, featuring:

- Retrofit laboratories
- Cladding practice areas
- Green technologies

Crucially, NCC aims to collaborate with the borough to ensure the centre aligns with local green skills priorities.