

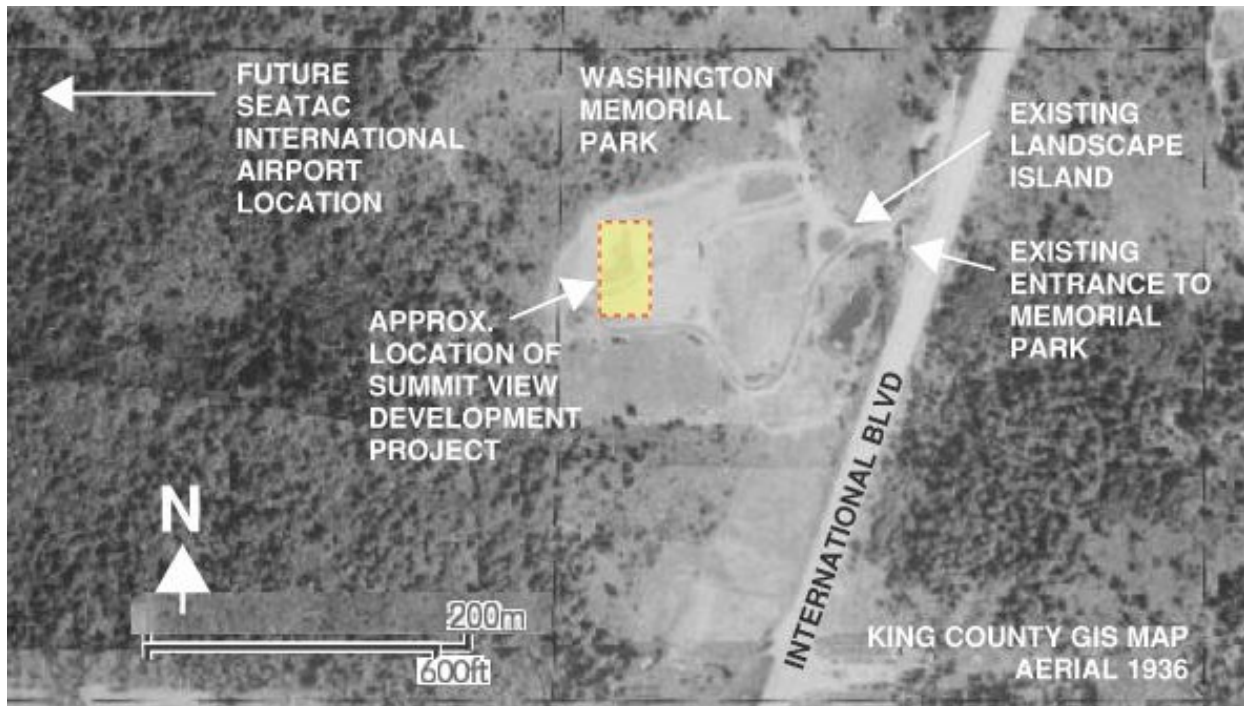
PROJECT SCOPE DESCRIPTION

BONNEY WATSON | Washington Memorial Park, 16445 International Boulevard, SeaTac, WA

RE: Major Conditional Use Permit Application for the Summit View Development within the Washington Memorial Park | BONNEY WATSON
16445 International Boulevard, SeaTac, WA 98188
Parcel No.: 2823049054 plus 2823049052 & 2823049080

The Project is for the continued internal property development of the Washington Memorial Park with the proposed Summit View Development Project. This project will include the construction of a 7,500 square foot Celebration of Life Pavilion, relocation of the existing POW/MIA Memorial, extending site utility infrastructure (including providing Fire Flow to the Washington Memorial Park), a stacked parking arrangement for 54 vehicles, and the creation of a variety of interment memorial options.

The Washington Memorial Park has been in continuous operation since 1931 and predates the construction of the SeaTac International Airport which occurred in 1944 (please see below). Per the Revised Code of Washington Chapter 68.24, the existing cemetery use is required to be maintained for perpetuity on the property. In 1990 when the City of SeaTac incorporated as a municipal government, it designated the existing Funeral Home and Cemetery property under a 'Park' zoning designation, resulting in making the pre-existing 57-year old use and operations into an Allowed Conditional Use. Even though the proposed Summit View Development is a continuation of the previously approved use as a Funeral Home and Cemetery, the City of SeaTac has interpreted the scope of work – including the interment of human remains and cremains – as an 'expansion' of the existing previously approved use within the Washington Memorial Park and thus triggering a Major Conditional Use Permit process.



Since the current property is not served by an approved system of fire hydrants to provide the required 'Fire Flow' for any new building construction and/or the remodel of any of the existing buildings, a fire line extension will be necessary to provide the required 'Fire Flow' to the Summit View Development (the preliminary engineering of this fire line has been reviewed by the Puget Sound Fire Authority and Highline Water District to assure its feasibility – the Preliminary Fire Line Diagram is included in this application). The cost to bring this required site infrastructure to the property is significant with the financing needing to be allocated over multiple projects within the Washington Memorial Park. Upon completion of the proposed Summit View Development project, the long-range plans for the Washington Memorial Park includes the remodel of their existing 1957 Chapel and Funeral Home, the remodel of the 1937 Flower Shop and Office Building, the incorporation of a sustainable alkaline hydrolysis system as an alternative to cremation, the creation of additional parking to support the Funeral Home and Flower Shop/Office Building, and the addition of entrance canopies to their existing Mausoleum – all of which appear to trigger additional Conditional Use Permits.

Description of the Current Property

Washington Memorial Park is a 70-acre property whose layout reflects the design tenets of the Garden Cemetery Movement of John Claudius Loudon (please see attached historical excerpt and news article). Landscaping materials are limited in size and location to keep the open expanse of the lawns and allow for long-range views across the park. There are no critical areas within 200-feet of the proposed Summit View Development.



View of Project Site looking SE within the Washington Memorial Park. Rear elevation of the existing Mausoleum is to the left with the existing POW-MIA Memorial is to the right.



View of Project Site looking North within the Washington Memorial Park. Existing POW-MIA Memorial with the existing Columbarium beyond.



View of Project Site looking North within the Washington Memorial Park. Existing Columbarium is on the left.

Scope of the Proposed Project Scope

Summit View Development: This development is centrally located within the Washington Memorial Park directly West of the Existing Mausoleums along the main N/S Driveway connecting S. 160th Street to S. 170th Street. This existing lawn area is proposed to include:

1. POW/MIA Memorial Relocation: The existing POW/MIA Memorial at the SW Corner of the site will be relocated to the NW Corner of the site so it will have closer proximity to the Military Gravesite Areas of the Memorial Park.
2. Memorial Lawn: Regrading of the existing Memorial Lawn area to achieve improved and controlled surface water drainage. This lawn area will incorporate future gravesite and cremation interment memorials (this lawn area is currently used for exterior memorial services).
3. Stacked Parking: Development of a 'stacked parking area' for serving the existing mausoleums, the existing and new gravesites and the new Celebration of Life Pavilion. This stacked parking surface area is proposed to be located along the back of the existing mausoleums in order to visually screen the parked cars from within the Washington Memorial Park. Total designated parking spaces will exceed 67 parking spaces > 58 parking spaces required by the City of SeaTac (2,300 sf chapel space/40 sf per space = 58 spaces). Employee parking is existing and is located adjacent to the existing Funeral Home and Office Building. The cemetery layout also allows for unstripped parking along the crisscrossing driveways within the Memorial Park (with an estimated parking capacity of over 600-vehicles).
4. Celebration of Life Pavilion: To allow for greater flexibility in types of ceremonial rites and to allow additional time for family and friends to commune before and after a service, a new Celebration of Life Pavilion is proposed. Currently there is only one enclosed assembly space to have funeral or memorial services within the Memorial Park. Having a singular assembly space puts undue time burdens and limitations on the services being held for family and friends. With the development of an additional assembly space within the Washington Memorial Park, funeral and memorial services can be held on an alternating schedule. This new assembly space will be designed for greater flexibility in the type of services to be held allowing BONNEY WATSON to meet the needs of a wider ethnic and religiously diverse community. Upon completion and occupancy of this new assembly space, the existing Chapel can then be renovated to incorporate improved accessibility and restroom provisions without having to suspend indoor funeral services at the Memorial Park during the renovation.

Summit View Development Area: 56,800 sf (1.86% of the WA Memorial Park.)

Existing Lot Coverage: 1350 sf (2.3% of the Summit View Development Area).

Proposed Lot Coverage: 8,850 sf (15.6% of the Summit View Development Area).

Existing Impervious Coverage: 4,842 sf (8.5% of the Summit View Development Area).

Proposed Impervious Coverage: 22,205 sf (39% of the Summit View Development Area).

Proposed Use: Continuation of the existing Cemetery and Funeral Home Use.

Landscaping: The City of SeaTac Municipal Code Chapter 15.445 Landscaping Standards Chart specially exempts Cemetery uses from having to comply with all landscaping requirements except for street frontage locations. Since none of the

proposed Summit View Development is within 200-feet of the street frontage, there are no applicable landscaping requirements for the project. The site will have landscaping around the building and to screen the stacked parking area from the West.

Property Infrastructure Improvements: Some of the proposed site improvements are required to be developed simultaneously with items above while others can be phased-in over time. The infrastructure improvements include:

1. Fire Flow: Bringing a Fire Flow Water System to the property from the East side of International Boulevard to the Funeral Home and up the hillside to the Summit View Development. This effort will also provide Fire Flow to the existing Funeral Home, Chapel and Crematorium.
2. Surface Water System: Developing an underground Surface Water Collection System for the Summit View Development tied into the existing City of SeaTac Storm Drainage System through an easement previously provided to the City of SeaTac by BONNEY WATSON.
3. Electrical System Upgrades: Provide an improved site electrical system to support the Summit View Development.
4. Funeral Home Parking: Reconfiguration of the Visitor and Staff Parking Area adjacent to the existing Funeral Home.
5. Driveway Improvements: Enhancement of the Existing Driveway Access to provide greater clarity and improved safety.

BONNEY WATSON | Washington Memorial Park appreciates the consideration of this request for a Major Conditional Use Permit. Such an approval will allow BONNEY WATSON to offer improved service accommodations for families within the Washington Memorial Park

End of Project Scope Description

Attachments:

1. John Claudius Loudon and the Garden Cemetery Movement

John Claudius Loudon and the Garden Cemetery Movement.

The influence of the prolific and indefatigable Scot on the design of cemeteries.

'A garden cemetery, and monumental decoration afford the most convincing token of a nation's progress in civilization and the arts, which are its result.'

'A garden cemetery is the sworn foe to preternatural fear and superstition.'

'A garden cemetery and monumental decoration, are not only beneficial to public morals, to the improvement of manners, but are likewise calculated to extend virtuous and generous feelings.'

JOHN STRANG: *Necropolis Glasguensis: with Observations (sic) on Ancient and Modern Tombs and Sepulture Glasgow, 1831*

'Churchyards and cemeteries are scenes not only calculated to improve the morals and the taste, and by their botanical riches to cultivate the intellect, but they serve as *historical records*.'

JOHN CLAUDIUS LOUDON: 'Principles of Landscape-Gardening applied to Public Cemeteries'
The Gardener's Magazine 1843

John Claudius Loudon (1783–1843) was an industrious Caledonian who, in the words of John Gloag, 'lived a full, varied, and occasionally adventurous life, unencumbered by any misgivings about his personal abilities'. He was 'sustained through many misfortunes and disappointments by the blissful self-confidence and iron certitudes of the well-educated Scot'.¹ Indeed, there can be no Scot who has exercised a greater influence on landscape, popular architecture, and gardening than Loudon. His *Encyclopaedia of Cottage, Farm and Villa Architecture and Furniture*, published in 1833, had an enormous effect on taste, and helped to change the appearance of English houses and landscape from the first half of the nineteenth century.

Loudon embraced many innovations with enthusiasm, and the new cemeteries generally met with his approval. 'Cemeteries', he wrote, 'are increasing throughout the country; and, though many of these are not laid out in the manner which we think they ought to be, yet, as they multiply, they will excite the attention and criticism of thinking persons which will in the end lead to the adoption of a better taste.'²

From the beginnings of the cemetery movement, Loudon tried to influence developments, and his writings are full of references to cemeteries. In 1842 he wrote approvingly of the 'New Calton Burying-Ground' in Edinburgh. Here, 'scientific skill and good taste have contributed much to heighten the beauty of the place. The walks are neatly formed of gravel,

tastefully edged with grass, kept smooth and firm by rolling, and frequently mown to keep it short. A circular-built watch-house, commanding a full view of the whole cemetery, which at night is lighted with gas, and the many ornamental tombstones, with the nicely planted roots and flowers showing the affectionate regards of surviving friends, fill the visitor with a pleasing and tender melancholy.³ Yet what appealed to the practical Loudon most of all was 'Lamb's Receiving-Box', seven feet long, four feet broad, and thirty-two inches deep, in which earth from the grave was placed. The sides of the box were removable, so that when the coffin was placed in the grave, a side could be removed so that the earth ran freely into the grave. The tidiness of this invention ensured that there was no mess of soil around the new grave.

Loudon collated his notes, and in 1843 *The Gardener's Magazine* carried a series of articles on 'The Principles of Landscape-Gardening and of Landscape-Architecture applied to the Laying out of Public Cemeteries and the Improvement of Churchyards; including Observations on the Working and General Management of Cemeteries and Burial-Grounds'. This series was later published as a book.⁴

The stimulus for the work on cemeteries appears to have been a commission from the directors of a cemetery company at Cambridge to form a plan for the arrangement of the grounds. The main object of a burial-ground is, of course, 'the disposal of the remains of the dead in such a manner that their decomposition and return to the earth shall not prove injurious to the living, either by affecting health or by shocking feelings, opinions, or prejudices'. To Loudon a secondary object was 'the improvement of the moral sentiments and general taste of all classes and more especially of the great masses of society'.⁵

Decomposition was best achieved by interring a body in a wooden coffin in the free soil, in a grave five or six feet deep. This grave should be rendered secure from violation, and no body should have been placed in it previously. Loudon deplored the practice of burying several bodies in the same grave, and poured scorn on the modes of sepulture by which decomposition of a body or its union with the earth were prevented. He abhorred the use of leaden or iron coffins, and the practice of 'burying' in catacombs, vaults, and mausolea. 'We are of the opinion', he wrote, 'that the modes of burial which prevent the body mixing with the soil, which, for the sake of distinction, we shall call the sepulchral modes, cannot, on account of the danger to the living, be continued much longer in a highly civilized country, yet, in considering the conditions requisite for a complete cemetery suited to the present time, the various modes of sepulchral burial at present in use must be kept in view.'⁶

Loudon objected strongly to the re-use of graves after a limited time, which is surprising. He quoted Jewish, Quaker, and Moravian custom with approval, where single burial was usual, with no subsequent disturbance. He was more scathing about the practice of depositing bodies in leaden coffins in catacombs, owing to the dangers of putrefaction, and the tendency of gases to accumulate in lead coffins. 'Even in some of the public catacombs of the new London cemeteries explosions have been known to take place, and the undertaker obliged to be sent in order to resolder the

coffin; which shows the disgusting nature of this mode of interment, and its danger to the living.⁷

The security of graves was very important, until it became possible for surgeons to obtain cadavers legally. In some cases, security was effected by surrounding a graveyard with walls or railings; sometimes it was achieved by constructing watch-houses (Pl. 1); occasionally bodies were buried in walled graves covered with an iron grating or mort-safe over them (Pl. 2); sometimes great iron cases were erected over the grave; and occasionally iron boxes were dropped over the coffin until sufficient time had passed to render the body useless to the 'Resurrection Men'. In Scotland, where the medical schools had a voracious appetite for corpses, watchmen were employed to guard the burial-grounds. The entrance-gates to the churchyard of S. Michael, Dumfries, are flanked by gigantic gate-posts which are hollow to accommodate the watchmen (Pl. 3).

'The secondary object of cemeteries, that of *improving the moral feelings*,



Plate 1 Watch-house in the old graveyard of Cathcart, Glasgow (*The Author*)



Plate 2 Mort-safe in the old graveyard of Cathcart, Glasgow (*The Author*)

was of great concern to Loudon, 'for it must be obvious that the first step to rendering a churchyard a source of amelioration or instruction is to render it attractive'.⁸ In Loudon's day, churchyards were often covered with a 'black unearthly-looking surface, so frequently disturbed by interments', that no grass would grow on it.⁹ In the crowded cities, churchyards were often further disgraced by the emptying of chamber-pots out of adjoining houses. It was little wonder that Blair would state that his task was to 'paint the gloomy horrors of the tomb'.¹⁰ He described the grave as a 'dread thing'. Of it, he wrote:

Men shiver when thou'rt nam'd: Nature appall'd,
Shakes off her wonted firmness. Ah! how dark
Thy long-extended realms, and rueful wastes!
Where nought but silence reigns, and night, dark night,
Dark as was chaos, ere the infant sun
Was roll'd together, or had try'd his beams
Athwart the gloom profound! The sickly taper,
By glimm'ring through thy low-brow'd misty vaults,
(Furr'd round with mouldy damp, and ropy slime)
Lets fall a supernumerary horror,
And only serves to make thy night more irksome.



It was the revolting horrors of the unsavoury vault and parish graveyard that Loudon sought to dispel. Washington Irving could ask why death should be clothed with unnecessary terrors, and why horrors should be spread around the tombs of those we love. According to him, the 'grave should be surrounded by every thing that might inspire tenderness and veneration for the dead, or that might win the living to virtue. It is the place, not of disgust and dismay, but of sorrow and meditation'. Coleridge, too, compared the 'unsightly manner in which our monuments are crowded together in the busy, noisy, unclean, and almost grassless churchyard of a large town' with the 'still seclusion of a Turkish cemetery'. Picton warned against a tendency 'in our anxiety to escape from gloom and horror', to 'run into the opposite extreme of meretricious gaudiness', a warning that might be heeded by the perpetrators of tombstone design today. 'Death and the grave are solemn and awful realities; they speak with a powerful and intelligible voice to the heart of every spectator, as being the common lot of all. Our cemeteries, then, should bear a solemn and soothing character, equally remote from fanatical gloom and conceited affectation.'¹¹

It is clear that Loudon and most contemporary opinion approved of the cemetery of Père-Lachaise in Paris as a model, although Loudon noted that

Plate 3 Hollow gate-posts at the entrance to the churchyard of S. Michael, Dumfries, gave shelter to night-watchmen (*The Author*)

a report to the French Government of 1842 stated that much ground had been lost in consequence of the cemetery's not having been originally laid out on a rigid systematic plan, and the want of walks, of roads, and of drainage was noted, as was the dilapidated state of some of the monuments. These faults were shortly to be remedied.

Loudon quoted extensively from, indeed shamelessly plagiarized, *Necropolis Glasguensis*, a seminal work by his fellow-Scot, John Strang.¹² This book obviously provided Loudon with much of his material, even his inspiration, and Strang's insistence on the moral, improving, and educational aspects of cemeteries struck a chord in Loudon. Strang's prolix and lugubrious tome was really a tract to persuade public opinion of the wisdom of forming a large commercial cemetery on a hill adjacent to S. Mungo's Cathedral in Glasgow. Loudon acknowledged that churchyards had had little influence (up to that time) in 'improving the taste'. Yet a 'general cemetery in the neighbourhood of a town, properly designed, laid out, ornamented with tombs, planted with trees, shrubs, and herbaceous plants, all named, and the whole properly kept, might become a school of instruction in architecture, sculpture, landscape-gardening, arboriculture, botany, and in those important parts of general gardening, neatness, order, and high keeping'.¹³ Indeed, some of the new London cemeteries at that time might be referred to as answering 'in some degree these various purposes, and more particularly the Abney Park Cemetery'. The latter contained 'a grand entrance in Egyptian Architecture; a handsome Gothic chapel; a number, daily increasing, of sculptural monuments; and one of the most complete arboretums in the neighbourhood of London, all the trees and shrubs being named'.¹⁴ Thus instruction and education, so important in Strang's reasoning, became part of the general cemetery movement. Strang himself declared that the 'tomb has, in fact, been the great chronicler of taste throughout the world'.¹⁵

While Loudon's moral and educational arguments have a certain period charm, his practical views on the layout of cemeteries are of considerable interest, for he influenced the design of cemeteries and was responsible for laying out a few in his time. He also designed a curious monument to his father in the churchyard at Pinner that consists of an obelisk with a sarcophagus projecting from it.

Cemeteries, according to Loudon, should be at a distance from human dwellings, and should be situated 'in an elevated and airy' place, with a southern aspect, so that the surface should be dried by the sun. He considered subsoils to be of great importance, for cemeteries draining into public wells were a menace to health. He favoured a chalky or gravelly soil, where decomposition would be rapid. The London clays, with their moisture content, preserved bodies rather than allowed their rapid dissolution. All cemeteries should be secured by boundary walls or fences, ten or twelve feet high, 'to give the wall an architectural character'. Walls and piers would also carry the numbers and letters used as indexes to lines for the identification of plots. There ought to be one main entrance and one subsidiary gate.

In the laying out of the grounds the position of chapels, the road plan, and

the accessibility to the whole of the cemetery were important. No part of the cemetery should be remote, either from the point of view of upkeep or of the desirability of graves. Good drainage was essential, and Loudon deplored the sodden parts of Kensal Green in winter. All cemeteries should be divided into sectors that could be easily identified, and these should in turn be subdivided into plots. Loudon emphasized the necessity of a coherent system of marking plots (sector A, plot 3, etc.), not only for ease of management, but for the keeping of records. He advocated a layout of 'double beds with green paths between', to facilitate ease of access to each grave, and to help the problem of surface drainage.

Chapels should be in conspicuous positions, as focal points. He was highly critical of Norwood Cemetery because both chapels were 'placed equally near the eye'. Lodges were important, for here there could be the residence of the superintendent and the records office. One lodge should be enough, and Loudon was critical of the two lodges at Nunhead Cemetery. He seems to have approved of the lodges at Abney Park, at Tower Hamlets, at Kensal Green, and at Brompton.

Trees and shrubs were important, but they should not 'impede the free circulation of the air and the drying effect of the sun'. Loudon advocated the planting of trees with 'conical shapes, like the cypress . . . associated with places of burial from time immemorial'. He favoured evergreens because the 'variety produced by deciduous and flowering trees is not favourable to the expression either of solemnity or grandeur'.¹⁶ Deciduous trees also created problems in autumn, when the leaves had to be cleared. Loudon suggested that pines and firs, cypress, Irish yew, Swedish juniper, and other species would be most appropriate. Only evergreens with 'naturally dark foliage and narrow conical heads, or which admit of being pruned with little difficulty' should be planted.

Loudon disapproved of the planting in most cemeteries as being too much like 'pleasure-grounds'. He advocated the planting of 'no flowers at all' because he abhorred any ground that 'had the appearance of being dug or moved for the purpose of cultivation'. A state of quiet repose was essential.

He then turned his attention to the buildings of a cemetery. Chapels were important because the burial service was often read under cover, and thus bad weather could be avoided. It was necessary to have a bier in the chapel that could be fitted with rollers so that a coffin could be rotated after the ceremony. In Kensal Green Loudon described the catafalque there that could be turned round or lowered, depending on whether the coffin was to descend to the vaults or be carried outside. This machine was built by 'Mr Smith, Engineer, Princes Street, Leicester Square'.¹⁷ In Norwood Cemetery, the catafalque was controlled, not by a screw mechanism, but by 'Bramah's hydraulic press', manufactured by Bramah, Prestage, and Ball, of 124 Piccadilly.

On gate-lodges, Loudon was adamant. 'The *entrance lodge* to a cemetery ought to comprise a room to serve as an office to contain the cemetery books, or, at least, the order book and register, and the map book, where, from the system of squares being employed, such a book is rendered necessary.' He

was particularly impressed by the lodge at Tower Hamlets Cemetery, designed by Wyatt and Brandon, which he thought very convenient. The most appropriate cemetery lodge, according to Loudon, was that at Newcastle by 'Mr Dobson'. This lodge could 'never be mistaken either for an entrance to a public park or to a country residence'.¹⁸

Loudon then discussed other buildings. Vaults, he said, should be constructed in the face of a steep rock, where no drainage would be required, as at S. James's Cemetery in Liverpool. Catacombs above ground, as in Brompton or Kensal Green, were in 'bad taste'. When vaults were constructed with subdivisions into cells 'like bins in a wine-cellar', Loudon describes the cells as 'catacombs', though that term is also given to vaults or crypts not subdivided into cells. Each cell, once a coffin had been inserted, was sealed with brickwork or by a tablet on which there would be an inscription. Loudon noted with disapproval that in many new London cemeteries the cells or catacombs were often only closed with an open iron grating, the ends of the coffins being exposed to view. In the Brompton Cemetery, the whole of the side of the coffin was so exposed, as the cells were literally shelves. Loudon felt these modes of 'interment' were fraught with danger to the living.

He tells us much about the methods of construction of individual buildings within cemeteries. Private vaults, for example, could have steps leading down to the floor. The stair-well was covered with a flat stone, level, or slightly above the surface. In some cases, where the steps were under a path, the stone was concealed under this. Over the vault itself was a monument, most commonly a square tomb, or an altar-tomb. It is particularly interesting that Loudon should advocate such a big foundation for the headstone. He admired the regular verticality of headstones in Scotland and suggested good foundations for headstones in England.

A brick-lined grave is a substitute for a vault, but unlike the latter it differs from an ordinary grave in having the sides and ends constructed of brickwork or masonry, and in being covered by a large flat stone, technically called a ledger-stone. Brick-lined graves can be sufficiently wide for two coffins, but are generally only wide enough for one, and vary in depth from ten to twenty feet or more. The side walls have to be constructed as arches to take the strain of the soil outside, and engineering bricks are often used, as they are impervious to damp. When an interment takes place, the stone is loosened by levers, and removed on rollers. The coffin is then let down as in common graves. The sides of many brick graves have ledges that project from each side for retaining a flag-stone or slate between each coffin; in most cases there are no projections, but one coffin is prevented from resting on another by the insertion of two bars of iron in the side walls to support each coffin. Needless to say, time and rust have played havoc with most graves of this type. Loudon disapproved of this method, too, for hygienic reasons. He illustrated a typical brick grave, with openings in the side walls 'to permit the lateral diffusion of moisture and mephitic vapour'. Adjacent is a normal grave, so that the headstone would suffice for both graves, being inscribed on each side.

In respect of sepulchral monuments, Loudon was most particular. They

ought, he wrote, 'whether mausoleums (which is a term only applied to the most sumptuous description of tombs), square tombs, ledger-stones with inscriptions, sarcophagi, pedestals, vases, urns, columns, obelisks, pillars, crosses, &c., to have the appearance of security and permanence, to exhibit two features: they ought to be perfectly erect or perpendicular, and they ought to rise from an architectural base'.¹⁹ Such a foundation would have to be as deep as the adjoining grave or graves. In the case of vaults and brick graves, this foundation was supplied by the structure itself, but in most cemeteries, 'even in Père-Lachaise and Kensal Green', the greater part of the monuments had no other foundation than the moved soil. The consequence of this was, of course, that monuments started to lean, and gave any impression but that of permanence. Loudon recommended two brick or stone piers at the head of each grave, carried up from the bottom, and from twenty centimetres to over half a metre square, according to the depth. The lintel capping these piers would be the foundation of the headstone. Where a pedestal ornament of any kind was to be erected, one foundation-pier eighteen inches square should suffice, or, where there was no danger of the ground being moved, a nine-inch square pier would stop the memorial sinking. Loudon recommended a space half a metre wide between each double row of graves. When a suggestion was made to have a double line of brick graves, or to fill up a cemetery regularly, without allowing choice, then Loudon recommended a foundation-wall two feet in width, regularly carried up along the middle space, from one end of the line to the other, to support head-stones.

Loudon suggested that memorial-tablets, busts, reliefs, and other sculptures could serve to beautify chapels, boundary walls, and colonnades. All boundary walls should have letters and numbers set into them to identify the runs of graves and to facilitate plot identification. Drainage of cemeteries was most important to make grave-digging easier and to avoid the scandal of water-filled graves or vaults. Loudon advised cesspools under gratings for retaining sand and gravel, so that these could be cleaned each year. He discussed everything, from tools to grave-boards, and no aspect of cemetery design and management escaped his eagle eye. Grave-boards were necessary where a grave was to be dug more than five or six feet deep, to prevent the sides from caving in. The grave-boards, designed by 'Mr Northern, superintendent of the Tower Hamlets Cemetery', were illustrated by Loudon. The sides were hinged, so as to form a concave side to resist the lateral pressure of the earth in the manner of an arch. The boards and end-pieces were joined together, and let down from the top, one above the other, as in well-sinking. The shuttering was then removed as the grave was filled in. One side was hinged, and the other was retained in its angular position by strong iron plates. Both boards were fastened to the ends by iron pins which dropped into eyes at the angles.

Loudon's concern with detail is astonishing, and his practical mind approved of all sorts of gadgets invented to ease the running of cemeteries. He advocated no burials in land that had been used for interment before, unless two metres of soil lay between the first burial and the second. This obsession with hygiene led him to suggest filling brick graves with earth in

exactly the same manner, although he grudgingly admitted that if each coffin were hermetically sealed in compartments, separated from its neighbours by flagstones or slate panels set in cement, then a great many coffins might be got into one grave. However, with characteristic foresight, he said 'there is always the possibility of desecration at some future period', and advocated earth burial only. He was right, as any visitor to the London cemeteries in the 1960s and 1970s can testify. Loudon would 'allow of few or no catacombs or vaults in buildings, and certainly none in or under churches, or other places where assemblies of human beings were held'. Indeed, he felt that the boxing up of dead bodies 'as if in defiance to the law of nature' was 'disgusting and in bad taste'. He advocated a heavy tax on this mode of interment, and that all bodies then in vaults or catacombs should be taken out and buried in the free soil. Loudon felt he would 'encourage the erection of handsome monuments, and the inscription on them of moral sentiments, the former to improve the taste, and the latter to cultivate the heart and affections'. Cemeteries should at all times be kept in the best possible order. The grass should be kept short and smooth by regular mowing, and all paths, drains, buildings, and planting should be kept in thorough repair. In order to ensure the keeping of monuments in good condition, Loudon advocated the payment of a sum to the cemetery companies for upkeep in perpetuity. Currency in Victorian England was stable.

Loudon was confident that, if his ideas were implemented, all cemeteries would be as healthy as gardens or pleasure-grounds, and indeed would form the most interesting of all places for 'contemplative recreation'. Cemeteries could be 'rendered inviting' by being ornamental and 'highly kept', and it would be desirable to 'have a considerable display of monuments on the borders of roads and main walks, and along the boundary wall'. To Loudon, the finest of ancient monuments in the churchyards of Scotland were the sepulchral structures projecting from the walls of Greyfriars churchyard in Edinburgh, and in the cathedral graveyard in Glasgow. Yet these themselves celebrated interments in the free soil, and were 'superb architectural and sculptural compositions'. He contrasted these splendid Jacobean memorials with the monuments over brick vaults in the London cemeteries. Loudon felt it should be a general rule that handsome monuments should be placed at particular points of view, such as at angles formed by the junction of roads, as eye-catchers.

The need for the keeping of orderly records is stressed in Loudon's work. The 'curator' of a cemetery 'ought to be a man of intelligence, and of cultivated feelings, with a taste for and some knowledge of gardening'; for all which reasons Loudon thought 'the situation one well adapted for a middle-aged gardener'.²⁰ Loudon was practical about cemeteries, for he wrote that 'the greater the number of present cemeteries, the greater the number of future public gardens'. All cemeteries, once filled, should be closed as burial grounds, and in a few years opened as public walks or gardens, *but all gravestones and all architectural or sculptural monuments should be retained and kept in repair at public expense*. He was therefore mindful of the future need to conserve cemeteries.

No human dwellings should be built within cemeteries, except the entrance lodge. Once again, Loudon argued vehemently against the building of vaults and catacombs, not only for reasons of expense, where such burial modes were seen as being 'high-class', but from the point of view of hygiene. The inevitability of eventual desecration is stressed, and the examples of the crypts of London churches adds weight to Loudon's arguments.

Loudon was much concerned with the burial of the poor; on health grounds he was opposed to common graves being sunk in the London clay. He advocated the burial of London's poor outside London, as the price of land within ten miles of London was much too high to allow their burial in the London cemeteries. With remarkable foresight he suggested the purchase of eight hundred hectares of poor land at Woking, where the gravelly soil was ideal, and would enable yews, junipers, pines, and firs to grow. This idea was obviously the beginning of Brookwood Cemetery, near Woking. As an alternative, he suggested 'temporary cemeteries' for paupers that, once filled, could revert to agriculture, subject to safeguards concerning the future use of the land. Such cemeteries would preferably, or even essentially, be on a railway line, so that large numbers of bodies could be moved at any one time. Loudon could see no reason why this concept of funerals by train could not be an encouragement to companies to set up large monumental cemeteries, as well as temporary ones, on poor soils at great distances from London, along the railway lines. Union workhouses could have portions of their gardens used for burial, to be restored to cultivation eventually. Loudon also suggested that landowners should be encouraged to bury on their own grounds in the free soil, provided proper records were kept.

The cemeteries of Frankfurt-am-Main and Munich were observed to 'add greatly to the convenience, economy, and salubrity of persons having only small dwelling-houses, and moderate incomes'. In Frankfurt the cemetery was entered through an open propylaeum between two wings. In one wing was the residence of the overseer and his assistants, while in the other were ten cells in which confined bodies were deposited for some days before interment. As a precaution against premature inhumation, cords communicating with bells were fixed to fingers of the dead, so that the least movement would be detected. In Munich, the *Leichenhaus* held the dead in open coffins for forty-eight hours before interment.

After this examination of Loudon's opinions on cemeteries, it is all the more interesting to turn to his design for a cemetery at Cambridge, based on his report to the directors of the cemetery company. The ground, just over one hectare in extent, was inspected by Loudon in November 1842. The site was flat and well drained, the soil being a blue clay. The object of the cemetery company was to form a cemetery for the middle classes at a cost, including the purchase price, of £2,000. Loudon proposed a scheme, the most important part of which was that no part of a coffin or its contents should ever be exposed to view after burial. Since the cemetery was intended for all sects, Loudon opposed consecration by any one party. He proposed a lodge, a shed, a yard, and a chapel as essential. He further suggested that the frontage, and a portion of the land along the Histon Road, should not be

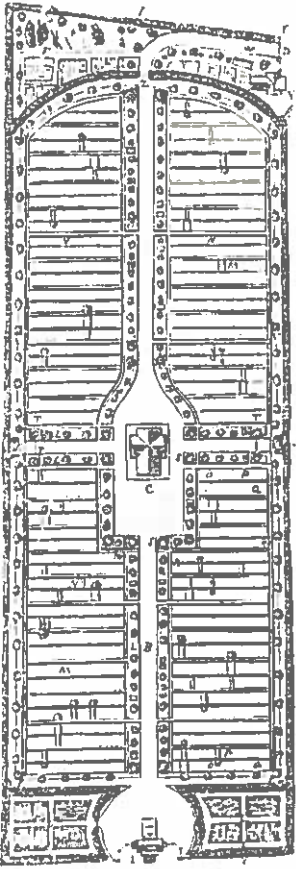


Plate 4 Plan of Loudon's design for the Cambridge Cemetery (*Author's Collection*)

included in the plan in the first instance, in case the cemetery should fail commercially, but that the frontage should be added later. Since the site was rectangular, he proposed an orderly rectilinear arrangement of paths and plots with trees planted around the perimeter and along the main walks. Trees with narrow conical shapes, such as cypress, were preferable, and indeed all varieties should be evergreen, to avoid maintenance problems and so that light and air could get to the surface of the ground. Loudon reluctantly allowed for ample space for vaults, but recommended against the construction of any catacombs above ground.

The designs, estimates, and plans of the lodges and chapel were by E. Buckton Lamb, architect, and Loudon's collaborator, who estimated the costs of buildings at £1,000. The 'proposed general arrangement of the grounds' (Pl. 4) shows the entire site surrounded by a holly hedge. The main entrance is at the west end, opening into the Histon Road, and a secondary entrance is shown on the New Huntingdon Road. On either side of the main entrance is a garden for the cultivation of flowers for sale. The chapel is in the centre, and turning space for hearses is provided. The ground at the top left-hand corner is reserved for superfluous earth, and for the storage of bricks and other materials. Borders were formed, six metres wide, planted with trees at regular distances. Spaces in the borders could be let as the most desirable plots for burial. Between every two trees there could be one burial-space, rendered ornamental by monuments. This space is divided into beds six metres wide, with paths between them just over a metre wide, and a space under a metre wide, raised about eight centimetres, is shown in the middle of each bed, on which space all headstones could be erected on a foundation of brickwork carried up from the bottom of each grave. Thus the verticality of monuments was assured, and each monument would stand independent of each grave. The paths between the beds are connected with a common path of under two metres' width which surrounds the beds and communicates with the main or central road. A funeral could thus be performed at any point without once deviating from the path or treading on the graves.

The planting consists of Taurian pines along the main avenue. This species was chosen because of its dark and solemn air, and the tree could easily be trimmed to form a conical shape. The trees at the corners of the space around the chapel are Cedars of Lebanon, the trees bordering the terrace walk being Irish yews. Around the ground at the top are Taurian or black Austrian pines. Should catacombs be demanded later, Loudon suggested that a range of these could be substituted for the curved walk, thus forming a 'handsome arcade with vaults behind and underneath'.

The designs for the entrance lodge and chapel were provided by Lamb 'both in the Gothic and Italian styles'. The directors chose Gothic, but Loudon preferred to illustrate the Italian design. The entrance gates and lodge contained a porch, an office, a living-room, kitchen, and an open court and shed. The first floor contained three bedrooms and closets (Pl. 5). The chapel itself was to be a pretty little building, to be constructed of stone, with dressed quoins, plinth, entablature, and aedicules, but with rubble walls (Pl. 6).

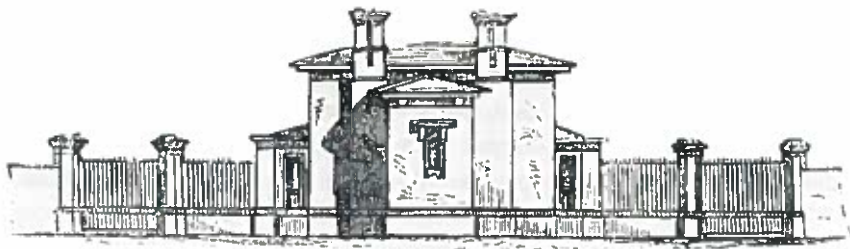


Plate 5 Entrance lodge in the Italian style, designed by E. B. Lamb for the Cambridge Cemetery (*Author's Collection*)

Loudon envisaged deep graves, some eight metres deep, to allow for two metres of earth over each coffin, and thus he calculated the cemetery would be full in sixty years. It is clear that his preoccupation with hygiene was not likely to provide a good economic basis, and the directors do not appear to have adhered to his recommendations in this respect.

After Cambridge, Loudon designed a cemetery on hilly ground, but with grave layouts based on the same principles as those he had adopted at Cambridge. The great extent of the borders in this cemetery rendered it 'particularly eligible for being planted as an arboretum' (Pl. 7).

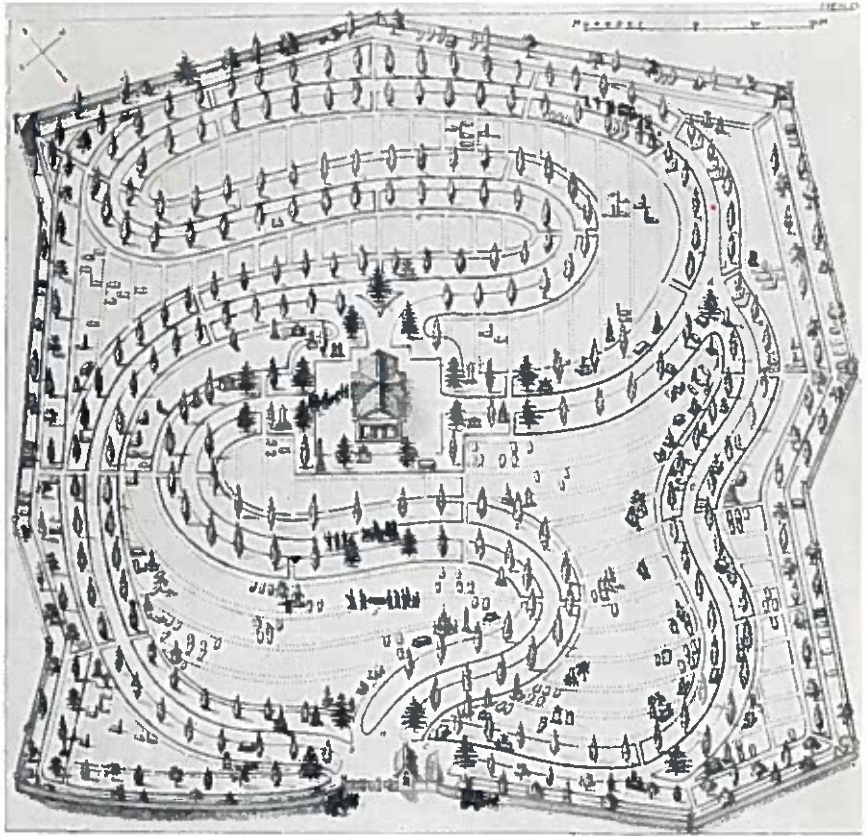
From a consideration of his own designs, it was logical that he should turn his attention to a criticism of the eight cemeteries that had so far been laid out in London. He reiterated his objection to catacombs, and to all interments therein. In the cemeteries of London, he declared, 'so great an expense has been incurred in the catacomb department, that it must operate as a serious drawback to the profits of the shareholders'. This was wisdom indeed, as all catacombs are wasting assets that are expensive to maintain. Loudon also criticized the laying bare of coffins in new interments, and emphasized the offensiveness and dangers of disturbing the earth less than two metres above a recent burial. Loudon suggested that graves should be as deep as wells to ensure that layers of soil between coffins were adequate.

He objected to the system of laying out cemeteries in imaginary squares, for it did not allow of an obvious order and arrangement of graves, and made mapping and registration difficult. Frequently graves could only be found with the assistance of a member of the cemetery staff. All the London cemeteries appeared confused in their layout; most, being on clay, were inadequately drained, and Loudon advocated a clear, logical system of layout, where drains would be placed under paths.



Plate 6 Chapel in the Italian style, designed by E. B. Lamb for the Cambridge Cemetery (*Author's Collection*)

Plate 7 Design for Laying Out and Planting a Cemetery in Hilly Ground (*Author's Collection*)



The planting of all the cemeteries was 'highly objectionable' to Loudon, as being 'too much in the style of a common pleasure-ground, both in regard to the disposition of trees and shrubs, and the kinds planted'. Clumps of trees should be avoided, he declared, as it was impracticable to form graves in clumps and belts of trees. The South Metropolitan Cemetery at Norwood was advertised in an engraving, of which Loudon made a copy (Pl. 8),

Plate 8 South Metropolitan Cemetery, Norwood, planted in the Pleasure-Ground Style (*Author's Collection*)





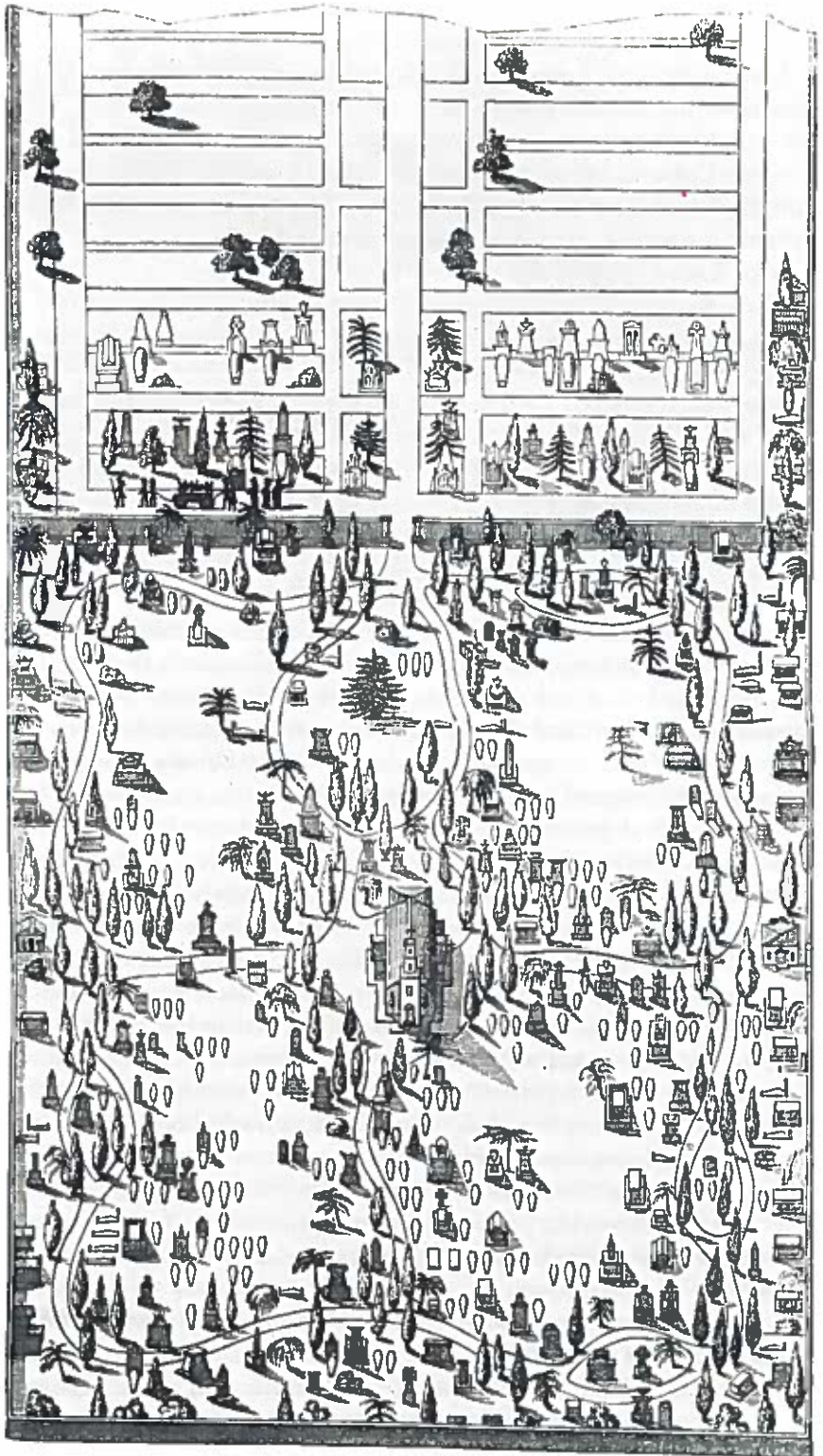
Plate 9 The South Metropolitan Cemetery, Norwood, planted in the Cemetery Style, as proposed by Loudon (*Author's Collection*)

showing the cemetery 'Planted in the Pleasure-Ground style'. Loudon published his own version of this view 'Planted in the Cemetery Style', showing his ideals of evergreen trees that were more like continental and eastern cemetery designs (Pl. 9). The cemetery at Eyub, near Constantinople, had planting of cypress-like trees. Turkish cemeteries were generally places of public resort, and the chief promenade in the evenings for the inhabitants of Pera was the cemetery, 'planted with noble cypresses', and 'thickly set in many places with Turkish monuments'. Opulent Turks had their graves railed in, and often a building over them, in some of which lights were kept constantly burning. Turkish cemeteries were generally out of cities, on rising ground, planted with cedars, cypresses, and odoriferous shrubs. Graves of males were usually adorned with turbans at the heads of the flat tombstones, and nearly all had plants growing from the centres of the stones.

Persia was celebrated for its mausolea, but Loudon found the cemetery of Hafiz particularly pleasing. This was square and spacious, shaded by poplars (a rare tree in Persia) and surrounded by a brick wall. Individual tombs covered the ground. In China, the high lands where rice could not be cultivated were set aside for burial, and Loudon illustrated two examples of Chinese cemeteries. From these examples he felt he could further justify his advocacy of evergreen trees in cemeteries on historical precedent.

From cemeteries he turned his attention to churchyards. 'The intellectual and moral influence which churchyards are calculated to have on the rural population', he felt, would not be disputed. Loudon deplored the unkempt condition of churchyards in his own day, and observed that the cause of their untidiness was that they had never been laid out to a systematic plan. He demonstrated how paths could be laid in a churchyard without removing any headstones or other monuments. Disused churchyards could be planted as a cemetery garden, and new grounds could be added for burial (Pl. 10).

Plate 10 Churchyard no longer used for burial, planted as a cemetery garden, with a new piece of ground added and laid out (*Author's Collection*)



Adequate drainage, records, foundations, and upkeep were advised, much on the lines of his cemetery recommendations.

Loudon designed a churchyard 'adapted for an agricultural Parish'. He illustrated the ground plan of this, which shows an 'isometrical' view (Pl. 11). A wall protects the enclosure, and there is only one entrance. The trees are Cedar of Lebanon, yews, thorns, and cypresses. Irish yew, Irish juniper, Swedish juniper, and other varieties were recommended. Burials without memorials were to be encouraged in the borders. In all this Loudon's sense of order and symmetry is displayed.

Throughout his writings, Loudon's sense of practicality is emphasized. Styles, and arguments about styles, were of little importance to him, except in that they could have an educational purpose. As education improved and became available to everyone, Loudon felt that styles as such would cease to be of any relevance. In any case, fitness for function was infinitely more important to Loudon than style, as the illustrations to his copious works should demonstrate. The great nineteenth-century cemeteries were laid out to satisfy a need, and though the first cemeteries were highly ornamental and picturesque, their style was soon superseded by the huge, almost rural, cemeteries of Brookwood and Little Ilford. Brookwood might be seen as the final realization of Loudon's philosophy, for this huge cemetery is on its own in country surroundings, and is planted in line with Loudon's theories. The fact that Brookwood was designed to be served by railway would have appealed to the practical Scot. Only twenty-five years lie between the founding of Kensal Green and the laying out of Brookwood, yet the differences in scale and in style are immense.

Loudon's ideas were strongly moral. He had faith in education and in liberal-humanitarian ideas of progress, social reform, education, and moral improvement. Like Archibald Alison, he had a firm belief in the value of common sense, and in the ability of the ordinary man to discern beauty. Education could give all men limitless associations: the function of the artist was to awaken responses to those associations. The cult of the associations of a place with a person, so much a concern of the Italian Renaissance, was important to Alison and to Loudon. The association of a house with the place of residence of a person 'whose memory we admire' would start a sequence of improving thoughts. 'The delight with which we recollect the traces of their lives, blends itself insensibly with the emotions which the scenery excites; and the admiration which these recollections afford, seems to give a *kind of sanctity* [my italics] to the place where they dwelt, and converts everything into beauty which appears to have been connected with them.'²¹

The idea of associations with the dead, and with worthy memories, was central to much of the thinking behind nineteenth-century cemetery design. Loudon believed that architecture, beauty, scale, and style were not concerned with aesthetics, but with fitness for function.

Some twenty pages of Loudon's tome on cemeteries were devoted to lists of plants that he felt were appropriate for use in burial-grounds. It is also interesting to note that he considered the lodge to the cemetery at Newcastle-upon-Tyne as 'peculiarly appropriate for a cemetery, on account

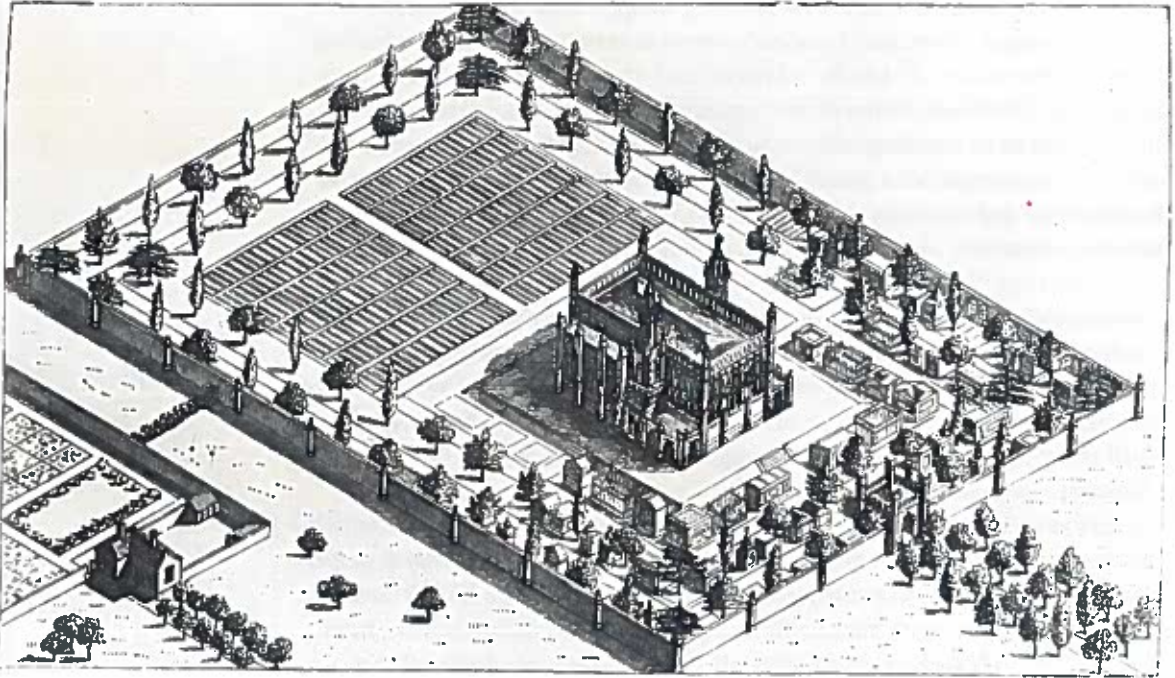


Plate 11 'Isometrical' view of a churchyard adapted for an agricultural parish (*Author's Collection*)

of its church-like towers'. The design was by John Dobson, who contributed to Loudon's *Encyclopaedia of Cottage Architecture*.

Loudon greatly admired the urban effect of the Glasgow Necropolis, and particularly the verticality of the monuments. He recognized that adequate foundations were necessary, and found Scotland greatly superior to England in this respect. He drew attention to Edinburgh, Glasgow, and Dumfries as examples where fine monuments had an added dignity by remaining sound and upright. The great Parisian cemetery of Père-Lachaise had been an influential example to the founders of the British cemeteries, and John Strang was a fervent admirer of this magnificent necropolis, but Loudon was critical of the haphazard way in which graves were laid out and sold, and felt the cemetery would be difficult to maintain.

In 1843 Loudon was employed by the Town Council of Southampton to make a plan for a general cemetery.²² For this he devised a plan to provide for the superfluous earth dug out of graves. The pile of superfluous earth at Kensal Green was 'enormous', and could not be sold, as it was consecrated ground. Loudon devised a system where alternate beds were to be used first, the soil being spread over the cemetery so that levels were everywhere adjusted and raised to the heights of the beds already used. Eventually the surfaces of the compartments would be raised above the natural surface, and ramps would be provided. Of course, individual headstones would have to be raised continually 'at a moderate expense' as the ground level was raised.

Loudon's commission to prepare plans for Southampton Cemetery was his only one for a public cemetery. It will be recalled that he had submitted plans and a report for the new Cambridge Cemetery, a private concern, and months before his death he was to design a cemetery for the Rector of Bath

Abbey. These three cemeteries, one public, one private and speculative, and one ecclesiastical, constitute Loudon's *oeuvre* in cemetery design, excluding those cemeteries on which he advised, and those where his ideas were influential. The Bath Abbey Cemetery is by far the most beautiful of the three, owing to its planting and to the idyllic views from it. The Cambridge Cemetery is recognizable from the original designs, with some changes to the planting and considerable demolition. The Southampton Cemetery, however, is scarcely identifiable from Loudon's Report to the Committee of 31 August 1843.²³ As Miss Melanie Simo has pointed out, the history of the planning and development of the cemetery stresses the wide gap between Loudon's ideas about cemeteries and those of contemporary received opinion. Loudon's arguments and designs were difficult to accept for two reasons: they were not conducive to the picturesque, and they were not based on 'Christian' premises. His approach was hygienic and essentially utilitarian.

The Corporation of Southampton submitted a petition for a municipal cemetery which received the Royal Assent on 6 July 1843.²⁴ Only a week later Mr Doswell, Surveyor, was instructed to identify some six hectares in the south-west corner of Southampton Common, and on 24 July Loudon explained his ideas before the Committee. He was then instructed to proceed with the plans. Drainage was Loudon's first concern, and he based his scheme on Captain James Vetch's reply to Edwin Chadwick.²⁵ The layout of the cemetery differed only slightly from his earlier design for the smaller Cambridge cemetery. However, the central avenue would be intersected by several cross-walks rather than two, as at Cambridge. The site for the chapels was about a third of the distance from the main entrance lodge on the south, as opposed to the centrally sited Cambridge chapel (now demolished). With economy in mind, Loudon had planned the Southampton chapels in one block, orientated east-west, with an arcaded gallery around the building to house the memorials. Areas for vaults were planned along the east and west boundaries of the cemetery, facing the respective Anglican and Nonconformist chapels, and Loudon suggested that if catacombs were to be provided under the chapels, they should only be used for the temporary storage of coffins.

The character of the cemetery was to be like that of a solemn garden. The ground was to be sown with rye-grass and with white clover. Trees, hollies, and thorns existing on the site were to be conserved. The borders of the main walks were to be planted with cypresses or with Irish yews.

Loudon was paid £34 3s 4d for his travel expenses, Report, and Plans. He did not live to see his designs realized, however. The committee members seem to have had a good opinion of Loudon, but they did not adopt his advice unreservedly. In February 1844 they considered alternative plans for the cemetery by W. Page and by W. H. Rogers. They accepted Rogers's plan on 27 February with some reservations. However, the original conception by Loudon, and Rogers's amendments, were arbitrarily altered by the committee. In addition, the Bishop of Winchester ordered the chapels to be built separately on sites completely surrounded by their respective consecrated and unconsecrated portions. Indeed, the cemetery

John Claudius Loudon and the Garden Cemetery Movement
today hardly fits the description given in a local paper two days after it had
been consecrated:

No site ever selected for a Cemetery has been so favourably situated as
this, being backed by a dense mass of wood, having in front some of the
finest park scenery in England, and disclosing in all directions, save the
Hill Lane side, a variety of views, yet in quietness of tone, which
harmonises most agreeably with the associations belonging to the
place . . .

Mr W. H. Rogers has contrived to unite all the requirements of a cemetery,
as regards plotting out of the ground, giving easy access by paths to every
part, and yet has deprived it of all formal character, and contrived to retain
the fine trees which were already on the land.²⁶

Loudon's design was too rigidly planned, and perhaps too urban in
character for contemporary taste. His cemetery was intended for use by the
living as well as a depository for the dead. Fairly big, open areas, devoid of
memorials and tall plants, would allow the ground to dry easily, and so aid
decomposition of the interred corpses. The cypresses and yews, that were
intended to flank the perimeter and the smaller walks, would not impede the
free passage of air, while the borders that were to be laid out with varieties of
plants would become a veritable arboretum. Here, the committee appears to
have shared Loudon's enthusiasm for trees. In May 1846 *The Hampshire
Advertiser* waxed almost lyrical on the planting of the cemetery:

Here are to be seen, for instance, the largest oak, thorn and holly on the
Common. The shrubs are so disposed as to form vistas, and each plot or
subdivision is an arboretum in itself, consisting of hundreds of varieties,
among which are to be found some of the handsomest of the Coniferae
tribe, as *Pinus Cambra*, *Excelsa Douglasii*, *Cephalonia*, *Norinda*, *Cedar
of Lebanon*, and *Laricis*. Here are all the weeping trees of the lime,
willow, birch, Chinese ash, elm, poplar, and oak, also the Irish junipers,
arbor vitae, new hollies, the elegant *juniperus*, *repandus*, ditto *chinense*,
cyprus, *laburnums* (six varieties), flowering acacias, almonds, thorns,
many sorts of *arbutus*, scarlet and yellow chestnuts, hemlock spruce,
hybrid rhododendrons and magnolias and others. These are all planted
twenty feet apart along the borders of the walks, and when they have
grown to a proper size will have a most beautiful effect.

Loudon would no doubt have objected to the weeping willows. These
lugubrious trees were associated with water, and so were inappropriate for a
cemetery that was supposed to be properly drained. He would have
approved of the arboretum, however, especially since it was to be
maintained by the municipality 'at the expense of all, for the benefit of all'.

In his description of his works at Southampton we find a startling side to
Loudon, for he refers to the suffering of 'bodies to be decomposed in the
soil' giving way to the 'practice of burning'. Loudon was convinced that
cremation would be adopted for the disposal of 'the great mass of the dead

. . . much sooner than even the most enlightened people' of his time could imagine. 'Every large town will have a funeral pile, constructed on scientific principles, instead of a cemetery; and the ashes may be preserved in urns, or applied to the roots of a favourite plant.'²⁷

Loudon was not to see his prophecy fulfilled, for he died on 14 December 1843, shortly after completing his book on cemeteries, and was buried in the General Cemetery of All Souls, Kensal Green. His work on cemeteries had enormous and lasting influence, however, not only in respect of the mode of layout of grave-plots, but especially in relation to the planting of evergreens. His advocacy of cemeteries outside London to be reached by train eventually gave rise to Brookwood Cemetery and to the Great Northern Cemetery. His amazing far-sightedness has been proved right in regard to cremation too, although what he would have said about the design of contemporary crematoria remains a matter for agreeable speculation.