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# Planning Fire Safety Strategy Statement

Date: 7<sup>th</sup> December 2023

Nature of Planning Application Proposal: CONVERSION OF AN EXISTING GARAGE INTO HABITABLE SPACE, ERECTION OF A SINGLE STOREY SIDE, REAR AND FRONT PORCH EXTENSION.

Address: 148 Hamilton Avenue, Tolworth, KT6 7PZ

Planning Reference : 23/03285/HOU Classification of Proposal : C3 Dwelling

Nearest Fire Station: Surbiton Fire Station (31 Ewell Road, Surbiton, KT6 6AT) approximately 1.2miles away. The street scene at the aforementioned property is a residential road with adequate street parking on one side of the road only and accessibility is good. There will be sufficient space for Fire appliances to access the front of the property without blocking the road. Access to the aforementioned address can be gained directly from the north off of A3210 Ewell Road, turning right into Princes Avenue and then right into Hamilton Avenue.

Current emergency and fire assembly point is the front of the aforementioned building, and this will be maintained during the construction phase of the project associated with this application. During the construction phase of this proposal the appointed contractor will need to comply with current health and safety guidelines Workplace health, safety and welfare. Workplace (Health, Safety and Welfare) Regulations 1992 (www.hse.gov.uk).

# **CONSTRUCTION DETAILS**

All work (materials used for the works) is to be in accordance with the requirements of the Local Authority, current Building Regulations, British Standards and to the British Standard Code of Practice, the Construction Products Directive (89/1 OS/EEC), European Standards and Technical Approvals and the recommendations or publications of recognized institutes or trade associations, even where these supersede those shown on the drawing or in these notes.

Where proprietary materials are specified, 'they are to be used in strict accordance with the manufacturer's detailed recommendations.

#### TIMBER NOTES:

- 1. All timber materials and workmanship to be in accordance with BS 5268: Part 2 Structural Use of Timber.
- 2. Timber roof trusses and bracing to be designed and detailed by specialist sub-contractor. Trusses to be designed and fabricated in accordance with BS 5268: Parts 2 and 3.
- 3. All timbers to be a minimum strength class C24 (unless noted otherwise) and have max. Moisture content of 18%.
- 4. Multiple joists / trusses to be bolted together at 600 centres with 12mm dia. bolts and Washers of 50x50x3.
- 5. No notches, holes or rebates etc. to be cut in any member without the written agreement of the Engineers.
- 6. All trusses to be connected to timber wall plate by means of approved truss clips.
- 7. Site storage, handling and erection procedures of trusses are to be in accordance with BS 5269:Part 3.
- 8. All structural timber and trusses to be adequately protected against adverse weather conditions during stacking and after erection.
- 9. All structural timber is to be treated by vacuum pressure impregnation of organic or water borne preservative, to a dry salt retention in accordance with the manufacturer's recommendations.

Type of treatment may be:- 'Tanalith', 'Celcure', 'Protim', or other only with the prior approval of the Architect.

- 10. Finger joints are not acceptable.
- 11. All fixings in roof space (nails, screws, bolts, hangers etc.) are to be galvanised unless noted otherwise.
- 12. Any lateral support system necessary to prevent buckling of compression members in trusses is to be designed, specified, detailed and supplied by the truss designer / fabricator.
- 13. Joist span Rows of Strutting Up to 2.5 None 2.5 to 4.5 1 (located at mid-span)

Over 4.5 2 (located at third points)

Solid strutting should be used instead of herring-bone strutting where the distance between joists is greater than three times the depth of the joists. In all other instances the use of herring-bone strutting is recommended to reduce the risk of creaking floors due to shrinkage.

Timber for herringbone strutting should be at least 38 x 38 mm. Solid strutting should be at least 38mm thick and at least three quarters of the joist depth.

- 14. Strutting should be blocked solidly to perimeter walls.
- 15. Strutting or blocking should not block the ventilation space in cold deck flat roofs.
- 16. Joist should have a minimum end bearing of 50mm.
- 17. Ends of joists built into cavity walls should not project into the cavity, and should be painted with two coats of bituminous primer.

# EXTERNAL WALLS (Facings):(above dpc level)(Achieving a U Value of 0.18W/m2K)

To be constructed of 102mm brickwork (to match existing) with 10mm cavity with 90mm Approved 'Celotex Thermaclass 21' cavity insulation Panel (or similar approved), with 100mm Celcon Block High Strength 7N Blockwork inner leaf (or similar approved) inner leaf, stainless steel cavity wall ties to be used at 450mm centres vertically and 750mm centres horizontally. Internal composite insulation 'Celotex PL4040 (40+12.5mm) fixed to internal skin of blockwork, joints sealed. Plaster skim & scrim. Finally fit new skirting boards. Rendered on completion. All Door, Window openings and cavity ends to be fitted with Thermabate or similar approved closers.

# FLAT ROOF: (warm decking) - (to BS:747/CP144/pt3) (Achieving a U Value of 0.15 W/m2k)

GRP Specialist laid roof covering to BS 476: 2004 Part 3 - AA Fire Rating (Broof(t4) part 4) on top of 18mm thick OSB layed on 150mm CELOTEX XR4000, layed on vapour control layer on 18mm thick WPB (exterior quality) PLY wood laid on flat roof joists at 400mm max. Centers (see calcs). To provide falls to either

guttering/hoppers. (note: No cross-flow ventilation is necessary). Where the new roof meets the existing, 18mm thick WPB PLY BOARD to be laid on existing roof rafters with GRP lapped up this 300mm under existing tiles. 12.5mm 'Gyproc Fireline' plasterboard (with Vapor barrier) lining to be adequately fixed to joists with galv.d plate nails and joints to be skrimmed and skimmed on completion.

ALL INSULATION TO HAVE THE REQUESTED VENTILATION GAPS STATED WITH THAT USED PRODUCT (See manufacturers recommendations)

#### STRUCTURAL STEELWORK SPEC:

- 1. All materials and workmanship to be in accordance with BS5950. The structural use of steelwork in building.
- 2. Structural steelwork sections to be Grade S275 mild steel in accordance with BS 4360.
- 3. Bolts to be grade 8.8 unless noted otherwise.
- 4. Welds to be 6mm continuous fillet, unless noted otherwise.
- 5. Contractor must verify all dimensions on site before commencing any work or making shop drawings which are to be issued to the Engineer. No dimensions to be scaled from drawings. Discrepancies must be reported to the engineer prior to proceeding. 7 working days are required by the Engineer to check and comment on any working drawings prior to fabrication.
- 6. Contractor to design all connections for maximum moments and reactions indicated on drawings or calculations issued to the Contractor. (SEE STEEL CONNECTIONS)
- 7. Steelwork which is not required to be encased in concrete to be blast cleaned / wire brushed\* free from mill scale, rust and other contamination and painted with two coats of approved primer as soon as practicable but not more than four hours after cleaning.
- 8. Generally: Blast cleaning to BS EN ISO 8501-1, preparation grade Sa 2½. Welds/ edges/ areas with surface imperfections: To BS EN ISO 8501-3, preparation grade Generally P1 but P3 for exposed steelwork. Primer: Zinc phosphate two pack epoxy.- Manufacturer: Submit proposals. Product reference: Submit proposals. Dry film thickness: Minimum mean coating thickness of 80 micrometres. Special requirements: Stripe intermediate coat to external angles.
- 9. Uncased stanchions and beams located within an external wall to have a minimum gap of 40mm from face of external brickwork or alternately 25mm min impermeable insulation from face of steel to the external wall, unless galvanised or similar treatment.
- 10. All concrete encased steelwork to be unpainted.

timber plates / brickwork.

- 11. All pockets formed in brickwork or blockwork for steel beams to be made good in Grade c35 concrete.
- 12. Bolted connections to have a minimum connection of 4 №. M16 bolts per member, unless noted otherwise.
- 13. Minimum bearing of steels to be 100mm, unless noted otherwise.
- 14. External steelwork, and where indicated, are to be galvanised steel to a minimum of 140 microns thickness unless noted otherwise in accordance with BS 728.
- 15. Workmanship erection and tolerances to be in accordance with the National Structural Steelwork Specification for building construction.
- 16. HSFG 'High Strength Friction Grip) Bolt connections are to be metal to metal and painted on site after the connection has been completed and load indicating washers are in their final position. Refer to table below for classifications for friction surfaces.
- 17. All beams bearing onto walls are to be built in with brickwork or alternatively encased around with concrete grade C35. The steelworks at roof level where beams cannot be built into brickwork are to have the top flange restrained by metal straps onto the
- 18. No site welding will be accepted without prior permission from the engineer.
- 19. Where site welding has taken place ultrasound and dye penetration tests are to be instigated at the contractor's cost.

#### MATERIALS & WORKMANSHIP:

The specification may change at any time and MUST comply with current British standards and code of practices or Agreement Certification clearly marked with reference numbers available on request.

Workmanship should be generally be in accordance with BS 8000 series of documents and other accepted good practice (e.g quality assured to ISO 9000)

TEST CERTIFICATES will be required (where necessary) and submitted once commissioned.

### WINDOWS & DOORS - BACKGROUND VENTILATION:

### (Achieving a U Value of 1.6W/m2k)

To match existing where possible, to be of standard manufacture, double glazed units to have 16mm min gap with a soft low E coating to current BS requirements, Insulated cavity closers with horizontal and vertical (quality felt) dpc's installed around all openings.

All windows to be Double-glazed and to have trickle vent 5000 sq.mm. To comply with building Regs (Part N) Any glazing in critical locations or less than 800mm above floor level to have toughened Safety Glass to BS: 6206. All glazed doors and adjacent sidelights are to have toughened safety glass up to 1500mm.

# WINDOWS MEANS OF ESCAPE:

All windows to be used as a means of escape and to have a 850mm min. clear height of opening x 450mm clear width and achieving a min of 0.33m2.

Minimum of 800 to max. 1100 to opening window from floor level.

#### **FIRE PRECAUTIONS**

# - HEAT DETECTORS:

A heat detector is to be fitted to the kitchen area and interconnected to the smoke alarm system. It may also be a requirement that smoke detection is required to each of the Bedrooms (to be confirmed by the Building Inspector)

#### SMOKE DETECTORS:

Interconnection smoke alarms are required to each floor. A copy of the 'Installation and Commissioning' certificate for the alarm system and must be deposited with Building Control prior to completion of the works in accordance with Approved Document B1 Section 1.23.

Smoke alarms to be mains powered with battery backup.

All alarms are to be clearly indicated on a floor plan. (Provided by the Building Contractor)

# FURTHER FIRE PRECAUTIONS:

Kitchen Doors to be 1/2 hour fire resisting doors. Each door should be provided with pair and half fire rated hinges with maximum 3mm gaps and smoke brushes/intumescent strips between fire door & frame. Together with approved fire alarms to BS 5839 Pt6.

### ELECTRIC SAFETY:

The proposed extension must have 75% energy efficient light bulbs and must also have provisions for Lighting and extending the Ring Main for additional Power Sockets, Installed and designed and tested and certified by a competent person in accordance with BS:7671 Pt1, Reg 14.

#### FIRE EVACUATION PLAN

#### 1. Get out

- 2. Stay out
- 3. Call 999

This is a recommended proposal and therefore up to the home owner to implement.

The best route is the normal way you come in and out of your home.

Plan a second route in case the first one is blocked – consider windows.

Take a few minutes to practice your escape plan regularly.

Keep door and window keys where everyone you live with can find them – on hooks behind curtains or boxes on window sills perhaps.

A full building regulations package has been scheduled to commence upon receipt of the planning decision. A full material specification along with construction drawings and structural calculation will be provided and are designed to meet with building regulations approval. All building work must be agreed on site with BUILDING CONTROL prior to the Commencement of works.