

Guidelines of Application Procedures and Technical Requirements for Licensing and Modification Works of “Karaoke” Establishments



Macao Government Tourism Office of
the Macao Special Administrative Region of
the People's Republic of China



Land, Public Works and Transport Bureau of
the Macao Special Administrative Region of
the People's Republic of China

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Introduction

Since the establishment of “karaoke” establishments in the Macao Special Administrative Region is regulated by the local laws; in order to assist the applicants to better understand the provisions and requirements, the Macao Government Tourism Office (MGTO) and the Land, Public Works and Transport Bureau (DSSOPT) have jointly developed the Guidelines of Application Procedures and Technical Requirements for Licensing and Modification Works of “Karaoke” Establishments. In the Guidelines, there are also technical opinions and information provided by the other administrative authorities, including the Municipal Affairs Bureau (IAM), the Labour Affairs Bureau (DSAL), the Fire Services Bureau (CB), the Health Bureau (SS), the Cultural Affairs Bureau (IC), the Environmental Protection Bureau (DSPA) and the Public Security Police Force (CPSP) so that applicants can understand the essentials of applying for the relative licenses.

The Guidelines, based on the existing legal provisions in the fields of construction, fire fighting, hygiene and sanitation, environmental pollution and noise, is divided into eight chapters : I - Site Selection, II - Basic Requirements for the “Karaoke” Establishments, III - Project Planning and the Notices, IV - Application for Approval of the Project for the Modification Work^[1], V - Application for the Construction Permit, VI - Application for the Opening of “Karaoke” Establishments /Modification of Facilities, VII - Construction, VIII - Inspection. The relevant legislation contents are attached to the Guidelines for further understanding of the procedure. For suggestions or questions about the Guidelines, please contact MGTO or DSSOPT by telephone, fax, letter, e-mail or heading to the premises of the respective bureaus. Your suggestions will contribute to the improvement and optimization of the licensing procedure.

“Karaoke” Establishments Licensing

Macao Government Tourism Office service counter: Alameda Dr. Carlos d’Assumpção, n.^{os} 335-341, Edifício “Hot Line”, 18^o andar, Macau
Office hours: Monday to Thursday, 9:00-13:00, 14:30-17:45.
Friday: 9:00-13:00, 14:30-17:30.
E-mail: dl@macaotourism.gov.mo
Telephone: (853) 2831-5566
Fax: (853) 2833-0518

Projects Licensing

Land, Public Works and Transport Bureau service center: Floor 13, Estrada de D. Maria II No.33, Macao.
Office hours: Monday to Thursday, 9:00-17:45
Friday: 9:00-17:30
E-mail: cc@dssopt.gov.mo
Telephone: (853) 8590 3800
Fax: (853) 2834 0019

Applicants are reminded that the technical sections of the present Guidelines have summarized the legal provisions and technical requirements of the related areas, as well as frequently asked questions, for a better understanding and observation by the applications. In case of conflict, the prevailing laws and regulations shall prevail. In addition to obeying the requirements specified in the Guidelines, the issuance of the construction permit also depends on all the legal requirements for this type of project in management, fire fighting, safety, hygiene and health. Please be noted that the result of the examination of DSSOPT on the modification works will be considered as the official opinion and this is only considered definitive after the issuance of the construction permit. Thus, for the “karaoke” establishment licensing, it will be depended on the opening application plan that is submitted to the Macao Government Tourism Office. And it is possible that the design of the “karaoke” establishment

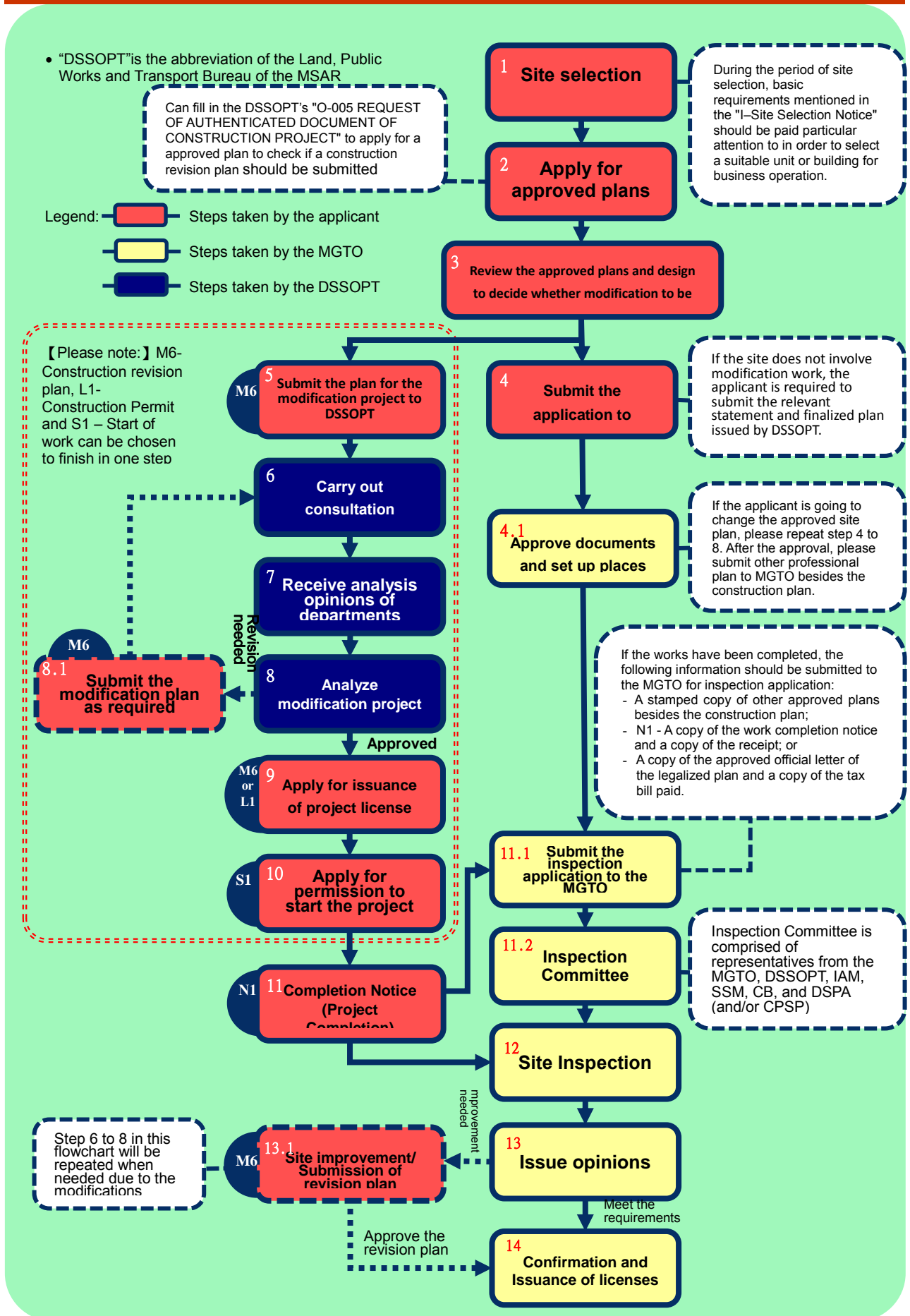
may be required to make changes and adaptations according to the opinions provided by the involving departments.

The updated version of the Guidelines can be downloaded on the website of MGTO (<http://industry.macaotourism.gov.mo>) or DSSOPT (<http://www.dssopt.gov.mo>).

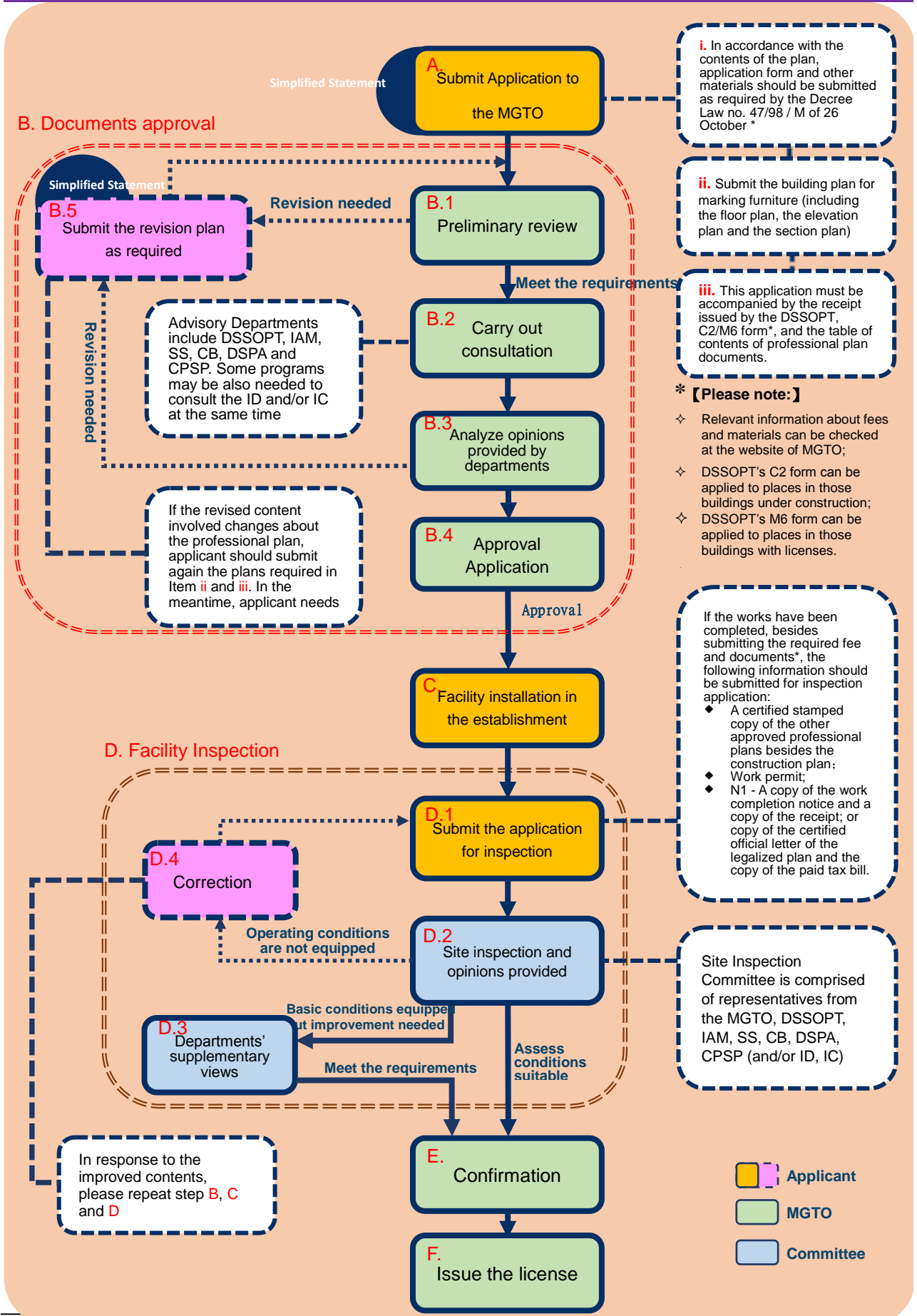
This English translation is for reference only. Should there be any discrepancy between the English translation version and the original in Chinese, the latter shall prevail.

- [1] The Guidelines aim to provide the applicants who intend to establish “karaoke” establishments in Macao with precise knowledge of the procedures of the licensing procedure as well as the application process for the modification works of the “karaoke” establishments. At the stage of design or construction of the building, if the applicant plans to install an establishment such as a “karaoke” establishment etc. in the building and wants this establishment to be ready to open to the public after the completion of the construction/expansion, as well as the examination by DSSOPT and the granting of the occupation permit, the applicant must submit the building construction projects which must include the work of the future “karaoke” establishment, whose contents should be integrated into the construction permit application indicating that project on the construction/expansion of the building to DSSOPT for approval. Thus, the chapter "IV - Application for Approval of the Project for the Modification Work" of the Guidelines is not applicable to the above mentioned situation, whose licensing can be referred to the construction work guidelines issued by DSSOPT in Appendix IV of the Guidelines.

Flowchart of General Application Procedures



Work License Application Process Flowchart



I - Site Selection

1 Site:

Before opening a “karaoke” establishment, the applicant must ensure the location meets the requirements outlined in the existing legislation so as to avoid unnecessary losses arising from the selection of inappropriate location. The applicant should pay attention to the following conditions:

- 1.1 The location can be located in a hotel, an apartment hotel, a tourism complex, a guesthouse, a commercial building and the commercial portion of a non-commercial building*. The location must have its own entrance and exit;

* The commercial portion is the podium used for commercial purpose. A podium is the main body of a building formed by an upper part and a lower part. It is the larger area beneath a building and is the base of a single-block or multiple-block building above the ground.

Remarks: When processing licensing, whether a location meets the legal requirements or not depends on the technical opinions given by the Land, Public Works and Transport Bureau after analysis.

- 1.2 The location must not be in residential buildings, offices, industrial buildings, warehouses, and units used for social services facilities and parking lots;
- 1.3 Permission from the property owner must be obtained before modification works;
- 1.4 The location selection must not involve illegal buildings, occupation or change of public parts of the building. Also, there must not be increase in the unit area or in the number of floors (with the exception of adding mezzanine or semi-mezzanine);
- 1.5 A power supply must be available;
- 1.6 A water supply and well-equipped drainage and sewage systems must be available;
- 1.7 Sufficient fire escapes must be available;
- 1.8 The establishment must be sufficiently far away from any animal rearing area or other place that may affect its hygienic conditions;
- 1.9 If the location selected is a classified immovable property listed under Law No. 11/2013 of the Cultural Heritage Protection Act, for instance it is a memorial site, or a building, complex or site of architectural value; or if the location selected is an immovable property pending classification, or it is in the buffer zones or temporary buffer zones, the Macao Government Tourism Office, and the Land, Public Works and Transport Bureau shall consult with the Cultural Affairs Bureau about the project plan.

(Please refer to Appendix I of the Guidelines for the list of classified immovable property and buffer zones.)

2 Distance of evacuation:

- 2.1 Exits located on the ground floor^[1] :
 - a. The distance of evacuation should not exceed 30m when there is no alternative (single exit);

b. The distance of evacuation should not exceed 45m when there is alternative (multiple exits).

2.2 Exits located on floors other than the ground floor (leading to the escape staircase): The distance of evacuation for indoor common passages with or without natural or mechanical ventilation systems is, respectively:

Ventilation Conditions	No alternative exit of evacuation	With alternative exit of evacuation
With Ventilation System	18 m	40 m
Without Ventilation System	15m	30 m

2.3 The ventilation conditions and related facilities shall comply with the requirements of Article 22 and Article 36 of the revised “Fire Safety Regulations”;

2.4 As for buildings existing before the “Fire Safety Regulations” came into effect, the calculation of the distance of evacuation shall take into account whether the conditions after the change are worse than those before the change. Under the precondition that at a minimum the original distance of evacuation is maintained, the Land, Public Works and Transport Bureau may accept relevant changes.

^[1] As for a unit for commercial use located on the ground floor, connected with the mezzanine or the first floor or the basement, its distance of evacuation shall comply with this provision.

II - Basic Requirements for the “Karaoke” Establishments

A “karaoke” establishment needs to be established in a nightclub, bar or restaurant. Please refer to the relative licensing guidelines.

(I) Minimum requirements for sound insulation and sound absorbing facilities

These recommendations aim to provide practitioners in the hotel industry and other related industries with the minimum requirements for soundproofing and sound absorption so as to prevent noises from being produced during business operation. According to the Noise Law, noise creation is an offence and the offender can be charged. In order to avoid violations and prevent the establishment from becoming the subject of complaint, license holder of the establishment should make sure that the premise strictly adheres to the relevant laws and regulations at all times during the normal business hours and in particular, more emphasis should be placed on the sound level during business operation.

1. Recommendations for sound insulation and coatings for acoustic correction

- 1.1 The suspended ceiling with a thickness no less than 3cm made of the plasterboard should be installed 30cm from the underside of the structural ceiling. On the suspended ceiling, the glass wool with a thickness of no less than 10cm and the specific gravity of no less than 50kg/m³ should be covered;
- 1.2 The walls should be covered with sound absorption materials.

2. Recommendations for the facades

- 2.1 If the facades are glass, the thickness of the glass should not be less than 5mm, the cracks of frame should be tiny as much as possible and the cracks of the frame that can be closed and opened should be covered with rubber sheets. A layer of sound absorption material, such as the glass wool, should be added in curtains or roller shutter grooves;
- 2.2 The opaque facades must be made of single layer of brick wall with the thickness of 22cm or double layers of brick wall (11cm + 7cm), and both sides of the wall should be plastered;
- 2.3 The doors leading to the outside should be kept closed;
- 2.4 The double-layer doors should be used.

3. Recommendations for other walls

- 3.1 If the adjacent premises are similar establishments or if the establishment is located in a hotel, there are no specific requirements for the walls. Otherwise, the recommendations set out in 1.2 should be considered.

4. Recommendations for the audio-video equipment

- 4.1 The speakers, "woofers" or similar equipment (such as video-screen with built-in speaker) should not be fixed or suspended directly on the structure of the building (e.g. ceiling slabs, beams and columns). Such equipment should be installed on brick walls or placed on the floor.
- 4.2 The fixed accessories should be able to reduce the influence caused by the sound vibration, and such accessories can be found in the specialty stores;

- 4.3 Speakers and woofers cannot be placed outside the establishment, even if tables and chairs are put outside;
- 4.4 The sound volume of woofers should be lowered after the midnight.

5. Soundproofing Design Plan as well as Final Inspection and Monitoring

- 5.1 Before installing the soundproofing equipment, the establishment should submit the related designs, including the design details, the design plans, the technical indicators related to the materials, specifications of the soundproofing ability and the manuals, as well as the planned quantity of audio equipment, the technical parameters and the manuals.
- 5.2 The current special regulations should be considered during both the planning phase and the construction phase in the later period. In particular, special attention should be paid on the General Regulations of Urban Construction and the Fire Safety Regulations.
- 5.3 After installing the soundproofing equipment, an application for inspection should be made, which should include sound level and vibration tests at a closest residential unit to determine whether the equipment is effective.

III - Project Planning and the Notices

For the design, aside from paying attention to the basic requirements mentioned in “II – Basic Requirements for the “Karaoke” Establishments” above, applicants should also note that the standards of the internal architecture, structure, fireproofing, environmental hygiene, as well as the other safety facilities and devices are also governed by the current relevant laws and regulations of the Macao Special Administrative Region Government. The various matters are under the supervision of specific competent departments and these specifications and requirements below are laid down in accordance with the current laws and regulations. For the relevant laws and regulations, please refer to Appendix II of the Guidelines.

Meanwhile, in order for better prevention, surveillance and control of environmental pollution, and to ensure the compliance with the environmental laws and regulations, the Environmental Protection Bureau provides the applicant with the Guidelines for Controlling Environmental Pollution; the related guidelines can be found in Appendix III of the Guidelines.

If the “karaoke” establishment is established in the area of classified heritage or protected area, the architecture design should give priority to the universal value of the heritage and should be well integrated with the landscape of the protected area.

1. Architectural Specialty

(1) Requirements on Drawings and Documents

1. Design description;
2. The Location Plan of the establishment at a scale of 1:1000, indicating the street names near the building and the northern orientation;
3. The building’s plan, elevation and section at a scale of 1:100, including:
 - 3.1 Approved drawings;
 - 3.2 Overlaid drawings (Red parts are the rectified parts and the yellow parts are the eliminated parts);
 - 3.3 Rectified drawings;
 - 3.4 The elevations should include the status of all elevations in each position of the establishment;
 - 3.5 The section should include at least one vertical sectional drawing and one horizontal sectional drawing, and one of them should indicate the stairs, kitchen and smoke exhaust pipe etc. (if any).
4. The drawings should contain the following basic information:
 - 4.1 The net height of the corridor, the area opening to public and customers, and staircase (if any);
 - 4.2 The purpose and area of each compartment;
 - 4.3 The position of the projection/billboard/air conditioning compressors, to ensure the compliance with the requirements on projections on the exterior wall;

- 4.4 All inbound and outbound access and the inner path (e.g. entrance for customers, entrance for operations and fire escapes);
- 4.5 Layout of seating and other equipment inside the establishment (such as: cloakroom, television and checkout counter);
- 4.6 Toilets for male and female customers and toilets for staffs;
- 4.7 Storeroom;
- 4.8 All windows, air-extraction/smoke-extraction/ventilation shaft, smoke emission flue or electronic ventilation flue and air-conditioning facilities;
- 4.9 Waste storage and treatment equipment;
- 4.10 Specific facilities to be installed based on the type of establishment.

(2) Technical Requirements

1. The modification project should not involve any increase in the construction area;
2. If the establishment is located in a separate unit of the building registered on horizontal property regime, it should not occupy the common area of building;
3. If a certain area of a hotel or guesthouse is to be used for another purpose other than the original specific purpose, a statement calculating the number of parking spaces shall be submitted with the plan to clarify the influence of these purposes and areas on the requirements of parking spaces after such changes, as well as to ensure that they comply with the current laws and regulations or the relevant guidelines for the calculation of parking spaces, and comply with the terms and conditions of the original land concession contract if applicable;
4. The exit door should open outward, but should not occupy pavement (public road/corridor);
5. If the customer capacity of the establishment is 50 or less than 50, the width of the exit door should not be less than 90cm;
6. When the establishment accommodates more than 50 but up to 100 people, there shall be at least 2 access points. The individual and total widths of the exit doors shall be no less than 110 cm and 230 cm respectively;
7. When the establishment accommodates more than 100 but up to 200 people, there shall be at least 2 access points. The individual and total widths of the exit doors shall be no less than 120 cm and 250 cm respectively;
8. If a twin-door is installed, the width of each door should not be less than 60cm;
9. The establishment shall have direct access to public roads and unobstructed thoroughfares (**the main thoroughfares are considered**), with widths satisfying the requirements in Article 12 Table VII of "Fire Safety Regulations". When the "karaoke" establishment accommodates fewer than or up to 50 people, or more than 50 but up to 500 people, the widths of the thoroughfares shall be no less than 100 cm and 120 cm respectively;
10. As for the requirements on the distance of evacuation, please refer to Section 2 of Chapter I - Site Selection;
11. Between the access point to a establishment located in a Class M or Class P building and the sole access to the adjacent residential unit, there shall be a wall which measures at least 1 m in length for partition purpose, so that smoke and fire will not easily spread to that access point in case of a

fire;

12. Installation of projections on the exterior wall:

- 12.1 Regulation on the signboard on the facade of the ground floor: The signboard must be located in the respective scope of the exterior wall. When the height in relation to the pavement is less than 2.7m, the projections should not exceed 10cm; when the height in relation to the pavement is 2.7m-3.5m, the projections should not exceed 50cm; when the height in relation to the pavement is higher than 3.5m, the projections should not exceed 75cm. The projections on the exterior wall independent of the height must not exceed 10cm in NAPE;
- 12.2 The modification of the exterior wall of the unit (including the modification of the doorway or window opening or installation of projections etc.) must comply with the provisions under Article 1334 of the Civil Code: "If constituting innovations, the works conducted on common parts should depend on the approval by the authorization of the general meeting of the condominium, approved by a number of joint owners representing at least two thirds of the total value of the condominium". In consideration of the operation of the units on the ground floor, mezzanine floor or podium terrace used for commercial purpose, it may not apply in assessing the provisions of Article 1334 of the Civil Code, but the installation of projections should not exceed the limit for the corresponding exterior wall and must comply with other laws. Other units must comply with the provisions of the above-mentioned Civil Code. If there is no central air conditioning system, the outdoor air conditioning compressor can be installed within the scope of corresponding exterior wall, but it has to comply with the provisions on the exterior wall projections.
- 12.3 When a relevant protrusion is installed on a "classified immovable property" or a "to-be-classified immovable property" or is located in a buffer zone and a temporary buffer zone as defined by Law No. 11/2013 on "Cultural Heritage Protection Act", the following should be noted:
- The cultural and historical values of the classified immovable property should be respected and primary consideration should be given to the protection of the authenticity and completeness of the immovable property. The protrusion shall not obscure the elevation details and the unique decorations of the building. Also, the principle of harmonising the overall environment and maintaining the overall urban landscape should be upheld;
 - Installation of an excessive, oversized or unusual protrusion should be avoided on the façade of the building so as to minimise the impact on the overall landscape of the classified zone;
 - Details of the protrusion should be specified on the design plan, including the materials used, colours and dimensions;
 - If the protrusion is a long-term advertisement or signboard, the "Guidelines on the Installation of Signboards within Classified Zones" formulated by the Cultural Affairs Bureau as well as other applicable laws and regulations shall be followed. An application for the "License for Placement of Long-term Advertisements and Signboards" shall also be made to the Municipal Affairs Bureau.
(For the content of the guidelines, please refer to the website of the Municipal Affairs Bureau for the details of long-term advertisements and signboards: <https://www.iam.gov.mo/c/businessplace/adminDefault/45>)

13. Installation of air conditioning compressors:

- 13.1 When determining the locations of the air-conditioning and ventilating systems, the future impact of their operation on the nearby residents should be fully taken into consideration. An appropriate distance shall be kept from the sensitive receivers and such systems should

be installed in locations facing the open area. The owner should also avoid placing the air-conditioning and ventilating systems in building patios or narrow alleys, so as to facilitate noise and heat dissipation, thereby minimising the impact on the surrounding environment and residents. In addition, such systems shall be operated in accordance with Law No. 8/2014 “Prevention and Control on Environmental Noise”;

- 13.2 For the unit above the ground floor, the air conditioning compressor should be installed in the space provided at the time of construction of the building; if such space is not provided, the air conditioning compressor can only be installed within the scope of the exterior wall, and the regulation of the installation is the same as that in 12.1;
 - 13.3 The drainage of the air conditioner system should be connected to original drainage system, and the related connection status should be reflected in the Drainage Plan;
 - 13.4 The outdoor units of air conditioners are also considered permanent protrusions on the external walls of a building. If they are installed on the external walls of a “classified immovable property” or a “to-be-classified immovable property” or of a building in a buffer zone or a temporary buffer zone as defined by Law No. 11/2013 on “Cultural Heritage Protection Act”, the main points in Item 12.3 above should be followed.
14. Regulations on the net height of the establishment:
- 14.1 The net height of the site for the establishment or the height from the floor to the suspended ceiling must be at least 2.60 m. (If an air-conditioning system is to be installed in the establishment, an allowance of 5 cm for the height from the floor to the suspended ceiling is permitted); In addition, if the establishment is located in a five-star or four-star hotel, the height of the site or the height from the floor to the ceiling must be at least 3.50 m; if the establishment is located in hotels and guest houses with three-star or two-star hotel, the height must be at least 3.00 m;
 - 14.2 The net height of staircase for public access should not be less than 2.2m;
 - 14.3 The net height of corridor and sanitary facilities (toilet) should not be less than 2.2m.
15. Installation of suspended ceiling ^[1]:
- 15.1 The suspended ceiling should be made of materials without weight bearing. In case the weight-bearing materials are used, the distance between the suspended ceiling and the floor should not be greater than 1.2m;
 - 15.2 The installation of the suspended ceiling should not affect the ventilation and lighting of the mezzanine or cover the mezzanine;
 - 15.3 As for the installation of the suspended ceiling in a unit with existing fire service sprinklers, in case the distance between the suspended ceiling and the floor slab equals to or is greater than 0.8m, the fire service sprinklers should be installed in both the upper space and the lower space of the suspended ceiling;
 - 15.4 When it is inevitable to install continuous suspended ceiling, the upper space of each compartment should not be connected with that of its adjacent compartment.

^[1] For hygiene reasons, such decorations as suspended ceiling etc. that will obstruct the inspection and cleaning in the area of the establishment are not suggested and encouraged by the Health Authorities. At the establishment that the hygiene of facilities can be guaranteed, and such decorations to be installed in kitchen, storage room or other areas, it should be stated clearly in applying for the license. And the Health Authorities will issue the opinions accordingly.

16. Regulations for the additional construction of mezzanine:

- 16.1 The ground floor of unit should be for commercial purpose;
 - 16.2 The height of the floor should be 4.2m or more;
 - 16.3 The area of the mezzanine (excluding stairwell) should not be greater than half the area of the ground floor whose net height is over 4m;
 - 16.4 The minimum net height of below the mezzanine is 2m;
 - 16.5 The space with the height less than 2.6m may not be opened to the public, except the toilets (the regulations on toilets, please see Item 14.3);
 - 16.6 The mezzanine should not be enclosed and should ensure the good ventilation condition.
- 17 Regulations on the staircase:
- 17.1 The staircase in the establishment should not be made in the arc form and its width should not be less than 1.0m. Each tread of the staircase should be no less than 23cm, with a height not exceeding 18cm. Each span of the staircase should not be more than 16 steps and should not be less than 2 steps. All steps should have the riser, but the staircase to the mezzanine which is only used for storing in the commercial unit on the ground floor is not subject to this provision. However, when conditions permit (the net height, lighting and ventilation meet the requirements), if the mezzanine is changed into the space opened to the public, the staircase should meet the above-mentioned regulations.

2. Civil Engineering

(A) Water-supply specialty:

(1) Requirements on Drawings and Documents

1. Design description;
2. Plan of water supply at the scale of 1:100;
3. Vertical diagram;
4. Detail drawing: Proper scale, e.g.1:20;
5. Hydraulic performance calculation (In case of major alteration).

(2) Technical Requirements

The drawing should clearly indicate the following information:

1. Materials used, diameter, and waterflow direction of the pipes;
2. Description of the water supply position of watermeters and the connection to all water facilities in the establishment;
3. Water supply system diagram should comply with the plans;
4. Pipeline connection with the water supply system;
5. Description of the cold and hot water systems in different ways;

6. Attention to the clarity of the text appeared;
7. The symbols of the water supply system can be found in the Appendix XII of Macao Water Supply and Drainage Regulations.

(B) Drainage specialty:

(1) Requirements on Drawings and Documents

1. Design Description;
2. Plan of rainwater and sewage at the scale of 1:100;
3. Diagram of rainwater and sewage system;
4. If cooking equipment is installed in the establishment, detail drawings of the grease trap on a scale of 1:20 shall be provided: top view, plan and section.

(2) Technical Requirements

The drawing should clearly indicate the following information:

1. Materials used, diameter, waterflow direction and inclination rate of the pipes;
2. Elevation of the manhole of rainwater and sewage;
3. The connection to the public drainage network;
4. The sewage system cannot be connected to the rainwater system;
5. The design of the curves of the drainage pipes should be carried out with transitory curves, and manholes or inspection and repair chambers should be deployed;
6. The drainage of water from air-conditioning facilities must be connected to the water drainage system in the establishment;
7. The water drainage system drawing should comply with the plan; if the wastewater system of the establishment is connected to the existing water drainage system of the building, the pipe diameter, number or manhole etc. should be indicated;
8. Manholes must be closed with appropriate methods to prevent the escaping of smell in subsequent use and ensure that the cover of manhole can be opened at any time after lying floor finishes;
9. The minimum diameter of the draining branch pipes of all drainage equipment must comply with the provisions in Appendix XVIII of "Macao Water Supply and Drainage Regulations";
10. Specifications, installation method, location, inlet and outlet, as well as pipe connection of the grease trap if applicable;
11. Attention to the clarity of the text appeared;
12. The symbols of the water drainage system can be found in the Appendix XVII of Macao Water Supply and Drainage Regulations.

(C) Structure specialty:

(1) Requirements on Drawings and Documents

1. Design description;
2. Floor plan: At the scale of 1:100;
3. Sectional plan: At the scale of 1:10 or 1:20;
4. Detail drawing: Proper scale, e.g.: 1:20;
5. Calculation book.

(2) Technical Requirements

1. The live load to be withstood by the structure of the establishment is determined by Annex IV Table 7 of Decree Law No. 56/96/M. If changes are to be made to the building structure of the establishment, the structural plan shall be submitted by a registered civil engineer to prove its safety in use;
2. Structure plan should include design description, drawings (floor plan, sectional plan and detail drawing) and calculation book;
3. All newly-built metal structure components should be inspected and maintained annually;
4. If the modification of the staircase is involved, the draft structure plan of staircase should be submitted, and the following situations should be paid attention to:
 - 4.1 When there is amendment to the stairwell (new opening, closing, widening or narrowing), further explanation should be made;
 - 4.2 When there is new opening or widening of the stairwell, the reinforcing methods nearby should be considered;
 - 4.3 When there is closing or narrowing of the existing stairwell, the structure pattern of new floor slab should be described;
 - 4.4 The detail drawing of the combination of the new structure components and the existing structure components must be delivered;
 - 4.5 Regulations on the staircase can be found in Item 17 of "**(I) - Architectural Specialty**".
5. When building a steel structure cockloft or mezzanine floor for people to use directly, the fireproofing design of the steel structure materials shall be provided;
6. If the floor of the establishment is to be lifted, the construction method of the lifted floor should be described, and if necessary, the security calculation of the supporting and power transmission components should be provided;
7. If the mezzanine is set up and the level of suspended ceiling is equal to that of mezzanine, the structure framework should be non-weight bearing (e.g. suspended metal bracket), and the detail drawing of structure framework of suspended ceiling and related information should be submitted for approval.

3. Electromechanical Engineering

(A) Power-supply Specialty:

(1) Requirements on Drawings and Documents

1. Design Description;
2. Drawing contents: The whole set of plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
3. Equipment system plan: Describing the structure of the system and the floor distribution etc. (e.g. power supply and distribution, earthing, lightening protection and telecommunications etc.);
4. Floor Plan of the General Framework of the electrical installations: At the scale of 1:100;
5. The information on the equipment specifications of the power supply system;
6. The detail drawing of the electrical equipment.

(2) Technical Requirements

1. The power of the electric meter and the power supply method should comply with "Regulation of Reimbursements for Connection to the Electrical Grid", approved by the Administrative Regulation: No.11/2005, as well as the requirements of CEM;
2. The conductors, protection elements, control elements, circuits, phases, expected power and purposes between upper stream and downstream should be compatible;
3. In case of using three phase power supply, the load of the single-phase should be distributed on each phase as much as possible, to achieve the effect of three phase balance;
4. The electrical tubes/equipment unrelated to the escape staircase or the fire insulation chamber should not be installed in the escape staircase or the fire insulation chamber;
5. Luminaires for emergency lighting and the directional exit signs should be maintained for at least two hours after the loss of normal power;
6. It is better to primarily make use of the energy conservation equipment (e.g. lamps, etc.);
7. The floor plan should clearly describe the circuit design, locations of from electrical boxes to each power supply station and equipment, layout of pipes and cables as well as the source of power supply lines;
8. The power distribution box and the related facilities involved in the project should be marked and described accordingly in the Floor Plan. In the single-line diagram of the power distribution box, the specification of each circuit conductor/bus bar, earthing/protection conductor and protector as well as the source of the power supply, load information, circuit number, phase and expected power etc. should be described;
9. During the process of design, construction and operation of the establishment, the following items should be paid attention to:
 - 9.1 All electrical facilities in the establishment should be installed in the ways neither causing fire nor spreading fire;

- 9.2 The equipment used at the counter for preparing food/drinks should be of the electric type and should operate in accordance with the safety specifications;
- 9.3 The electric meter must be installed in the isolated metal box, which should be kept clean both inside and outside;
- 9.4 The power cutting and isolating equipment must be installed in the appropriate positions of the electrical circuits, such as: Circuit Breaker, Fuse and Automatic Circuit Breaker etc..;
- 9.5 All electrical equipment must be grounded; the shells of all electrical boxes should be grounded properly and the parts with electric current should be covered properly to avoid being contacted by the staffs;
- 9.6 All electrical installations (including electrical cables, electrical wires, plugs and sockets, etc.) must be kept in good order, clean and tidy.

(B) Air Conditioning and Ventilation Specialty:

(1) Requirements on Drawings and Documents

1. Design Description;
2. Calculation book (If any);
3. Equipment specifications (If any);
4. Drawing contents: The whole set of plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
5. Equipment system plan (if any): displaying the structure of the system and the floor distribution etc;
6. Equipment floor plan: displaying the installation position of the equipment and the complete layout of pipelines, with the maximum scale of 1:100;
7. Detail drawing and sectional plan of the equipment installation: proper scale should be adopted so as to indicate the details clearly. (Usually, the detail drawing for the pipes going through fire-insulation components and the drawings of the height for the pipes and the equipment etc. should be submitted).

(2) Technical Requirements

1. The characteristics of the installations and materials to be used as well as the description of methods to be used should be specified;
2. If the air conditioning units to be installed in the establishment are the large units (such as the refrigerating machine, cooling tower and multi-couple units etc.), the draft of the air-conditioning and ventilation plan should be submitted. If the air conditioning units to be installed are only the split-type, they should be listed respectively in the architectural drawings;
3. The place of installation of the air-conditioning and ventilation units (such as the refrigerating machine, cooling tower etc.) should comply with the requirements in "Fire Safety Regulations";
4. The projections on the exterior wall should comply with the requirements in Article 7 of the

Administrative Guidance No. 01/DSSOPT/2009 "Regulation of Conditions Relating to the Height of Buildings and the Constructability of Site". In addition, the cooling tower must not be installed on the exterior wall of the building;

5. If the establishment is located in the NAPE area, the air conditioning outdoor units cannot be installed in the arcades or the exterior walls;
6. When installing the air-conditioning and ventilating equipment (such as cooling towers, condensate pumps, refrigerating and cooling units as well as outdoor units), it must be taken into consideration that in order to avoid affecting the nearby residents, there should be an appropriate amount of space and distance between such systems and the sensitive receivers (such as residential buildings, sanatoriums, care homes, hospitals and schools). One should consider installing such systems in locations facing the open area and avoid locations like building patios or narrow alleys, so as to facilitate noise and heat dissipation. If the hot air/ humid air/ vibration/ noise produced will affect the other people, effective measures (such as noise barriers and vibration isolation equipment) should be adopted in advance to avoid conflicts with the neighbours. For the noise produced by the air-conditioning and ventilating equipment, Law No. 8/2014 "Prevention and Control on Environmental Noise" shall be followed;
7. With regard to the residential units in the horizontal property regime, the outdoor units of the split-type air conditioners should be installed preferably in the area reserved for the air conditioners; However, if such area is not set in the building, the air conditioning units should be installed in the exterior wall within the scope of the residential unit, instead of the patio of the building;
8. The air conditioning and ventilation ducts should be made of and installed with non-combustible materials (class M0);
9. The air conditioning and ventilation ducts unrelated to the escape staircase or the fire insulation chamber should not be installed in the escape staircase or the fire insulation chamber;
10. When going through fire-insulation components, the fire-insulation device should be installed between the ducts and the fire-insulation components, and the fire resistance class (CRF) of the device should not be lower than that of the fire-insulation components;
11. The fire-insulation devices activated by smoke detectors should be installed at the outdoor air inlet;
12. The clearance height of the floor after installing the air conditioning and ventilation ducts/facilities must comply with Article 101 of the General Regulation on Urban Constructions approved by Legislative Regulation No. 1600 and revised by the Decree-Law No. 4/80/M;
13. The water produced during the operation of the air conditioning equipment should be drained to the drainage system of the building;
14. The air conditioning equipment must be supported in a stable way;
15. The energy-efficiency equipment is preferred.

(C) Smoke extraction system specialty:

(1) Requirements on Drawings and Documents

1. Design Description;
2. Calculation book;

3. Equipment specifications: Specifications and certificates of conformity of the materials of the fan coil units, fire/ smoke dampers (FD/FSD) and ducts, among others. Such specifications shall comply with the relevant requirements stipulated in “Fire Safety Regulations”;
4. Drawing contents: The whole set of plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
5. Equipment system plan: displaying the structure of the system, fire safety compartment and floor distribution etc;
6. Equipment plan: Installation locations of the equipment and the complete arrangement of the ducts should be indicated on a plan at a maximum scale of 1:100;
7. Detail drawing and sectional plan of the equipment installation:
 - 7.1 Displaying the distribution of units and pipelines in each floor, the location of extraction/insufflation mouths, in appropriate scale and clear indication in principle;
 - 7.2 Displaying the detail drawing for the pipes going through fire-insulation components and the drawings of the height for the pipes and the equipment.

(2) Technical Requirements

1. If the establishment is located in the basement with total area greater than 300 m², the natural ventilation or mechanical ventilation equipment shall be installed to enable the evacuation of fumes and gases to the outside;
2. The fire resistance class of the equipment and pipes of smoke extraction system should comply with the provisions of Article 36 of the revised Fire Safety Regulations;
3. The smoke extraction/insufflation ducts and smoke extraction/insufflation mouths in all fire safety compartments must be installed independently;
4. The smoke extraction/insufflation fans and pipes should not be installed in the fire insulation chamber and the escape staircases;
5. The smoke extraction/insufflation fans should be installed in compartments separated from other parts of the building;
6. The installation height and location of the smoke extraction/insufflation mouths must be appropriate without interfering other persons;
7. Make-up air and smoke exhaust ducts should be protected by walls with a fire endurance rating of CRF120. Also, these ducts should be equipped with their own make-up air units and smoke exhaust fans to ensure independence of the smoke exhaust systems in different fire compartments;
8. There should be enough horizontal distance between the smoke/ exhaust outlets and any make-up air/ fresh air inlet or building entrance, so that no heat or smoke of outside fire can spread into the building. Also, fire protection devices that are switched on by smoke detectors should be installed;
9. When determining the locations of the smoke exhaust fans/make-up air units, the future impact of their operation on the nearby residents should be fully taken into consideration. An appropriate distance shall be kept from the sensitive receivers and they should be installed in locations facing the open area. The owner should also avoid placing them in building patios or narrow alleys, so as

to facilitate noise and heat dissipation, thereby minimising the impact on the surrounding environment and residents. In addition, it is suggested that the relevant mufflers, soundproofing or vibration isolation equipment (such as spring isolators) should be added to ensure that they operate in accordance with Law No. 8/2014 “Prevention and Control on Environmental Noise”;

10. The clearance height of the floor after installing the air conditioning and ventilation ducts/facilities must comply with Article 101 of the General Regulation on Urban Constructions approved by Legislative Regulation No. 1600 and revised by the Decree-Law No. 4/80/M;
11. In order to avoid the smoke return, the mouths of the smoke extraction system should be located at a distance greater than 5m from the air intake or building inlets. The smoke cannot enter any fire escape or open-air staircase used by firefighters. The height from the bottom part of the smoke extraction mouths should not be less than 3m. The smoke must not be vented downward if the height is less than 6m. No smoke extraction mouths should be set up under the eaves;
12. The operation modes of the equipment under normal circumstances or during a fire should be explained in details;
13. During a fire, the various units of the smoke exhaust system should be switched on by the emergency power supply if normal electricity supply is not available. In the proposal, measures of emergency power supply should be specified or indicated for the various units of the smoke control and exhaust systems;
14. If the units of the smoke exhaust system also serve the purpose of mechanical ventilation, backup smoke exhaust/ make-up air units should be installed.

(D) Gas/Fuel supply system specialty (if applicable):

(1) Requirements on Drawings and Documents

1. Design description;
2. Usage calculation book;
3. Specifications of the equipment: including pipes, fittings, throttle valves, probes, stoves, etc.;
4. Drawing contents: The whole set of gas/fuel supply system plan should be listed out, including number and edition of the drawings; the altered parts in plan should be indicated with the zigzagging line for identification;
5. Equipment system plan: displaying the system structure (including legend description), layout of pipelines and the pressure distribution etc.;
6. Floor plan of equipment: displaying the installation position of the equipment and the complete layout of pipelines, with the maximum scale of 1:100;
7. The detail drawing and sectional plan of installation: appropriate scale should be adopted and the related details should be displayed clearly (including the distance between stoves, routines of elevation of pipes, installation height of throttle valve, types of protection facilities and ventilation conditions etc.).

(2) Technical Requirements

1. The design of the establishment should comply with the provisions of Article 40 of the revised

Decree-Law No. 24/95/M “Fire Safety Regulations”;

2. The storage capacity of the fuel gas should comply with the Administrative Regulation No. 12/2009 Revised “Volume of 200 m³ or Less Single Container of LPG Storage Facility Safety Regulations”. If the portable gas stoves or related equipment are used, their storage capacity should be calculated together with other capacity of fuel gas in the establishment;
3. The installation of the fuel gas system should comply with the provisions of Administrative Regulation No. 30/2002 “Technical Regulation on Gas Line Supply Facilities in Building”;
4. The fuel system should be installed in accordance with the “Regulation of the Security of Combustible Product Facilities” approved by Decree-Law No. 19/89/M and “Storage Facilities and Supply Network for Type-3 Liquid Fuels Used Inside a Building” set out by the Combustibles Security Committee;
5. If the unit power of each fuel gas stove in the establishment exceeds 35 kW or the total power of the stove exceeds 70 kw, the Administrative Regulation No. 11/2009: Revised "Security Regulations on Installation of Gas Equipment with High Power" should be observed;
6. If the related facilities of the fuel gas system have been pre-reserved in the establishment, the related system should give priority to be connected or used, so does the fuel system;
7. During the process of design, construction and operation of the establishment, the following items should be paid attention to:
 - 7.1 All flammable materials such as: liquefied petroleum gas and gasoline, shall be stored in non-flammable compartment with protection and adequate ventilation, and the storage area should be far away from the heating sources, sparks, naked flame and the electrical equipment;
 - 7.2 The materials involving high risks of fire must not be stored in the store room in the establishment (such as: liquefied petroleum gas, gasoline or diesel etc.). And any activity with obvious fire crisis is not allowed to be carried out in the area. The switch signs of the fuel supply system must be clear;
 - 7.3 Liquefied petroleum gas (LPG) and liquid fuels (kerosene or diesel) used in the establishment. Under no circumstances shall the amount of LPG stored be greater than 4 full or empty gas cylinders with a total volume exceeding 120 dm³ (equivalent to 4 13kg gas cylinders for domestic use). Gas cylinders and stoves should be effectively placed in separate locations. The total amount of liquid fuels (diesel/ kerosene) stored shall not exceed 20 L and should be far away from heat sources, open flame or locations where sparks are produced. Besides, the containers should be placed in storage tanks with sufficient separation;
 - 7.4 For the kitchen located in the basement, the use of the liquefied petroleum gas is prohibited;
 - 7.5 The applicants must indicate whether the central gas or central fuel system is available in the building where establishment is located and whether the related gas or fuel pipes are pre-reserved; If so, the stove facilities in the kitchen should use and be connected to the central gas or the central fuel system;
 - 7.6 Unless otherwise specified, whether the central gas or the central fuel system is adopted in the kitchen, the related laws and regulations should be observed;
 - 7.7 The liquefied petroleum gas equipment must be suitable for making use of the natural gas;
 - 7.8 The kitchen should be separated from the other parts by a brick wall with 1-hour fire

resistance (CRF 60). A 45 mm solid wood door with 30-minute fire resistance (CRF 30) and a self-closing device should also be installed;

- 7.9 The opening area of the kitchen and the dining area shall not exceed 0.2 m² and should be additionally protected by manual-closing and self-closing fire dampers with 30-minute fire resistance (CRF 30).

(E) Elevator equipment specialty (if added):

(1) Requirements on Drawings and Documents

1. Design description;
2. The traffic flow calculation book of the equipment installation is (To confirm the number of elevators, rated load and moving speed etc. The calculations can be referred to the technical guidance recognized internationally, such as the related guidance of the Chartered Institution of Building Services Engineers (United Kingdom), Chinese National Standards, etc.);
3. Equipment specifications and types;
4. Related drawings (such as: location plan, detail drawing and sectional plan of the equipment installation as well as the electrical diagram of the electrical circuit and the driving force, etc.)

(2) Technical Requirements

1. If lifting equipment for passengers (such as lifts, escalators and travellers) are to be installed inside the establishment, the lifting equipment plan shall be submitted. For dumb waiters carrying food or dinnerware, they only have to be indicated in the architectural drawings;
2. The characteristics of the equipment and the materials to be used as well as the description of methods to be used should be specified;
3. Before submitting the construction plan, the owner should hire the professional technicians to design and to verify if the submitted construction plan complies with the related conditions of the elevator equipment;
4. Before the conclusion of the construction, the "Installation Record of the Elevator Equipment" (Monthly Report of Installation Record) signed by the registered professional technicians, as well as the "Preliminary Inspection Report of the Elevator Equipment" and "Preliminary Inspection Security Operation Certificate of the Elevator Equipment" signed for installation quality confirmation should be delivered.

4. Firefighting Specialty

(1) Requirements on Drawings and Documents

1. Design Description;
2. Location Plan at the scale of 1:1,000;
3. The design drawing of the firefighting system, installations and equipment at the scale of 1:100 (Plans and the firefighting system drawing plan(vertical diagram)), the firefighting system drawing should be made according to Article 46 of Fire Safety Regulations and the pipe diameters should

be indicated in different colors;

4. In case of a project of modifying the architecture and the firefighting system, it should be clearly stated in the memorandum, which should be submitted together with the overlapping drawing of the architecture (red-yellow drawing) or the modified parts indicated with the zigzagging line on the modified drawing of the architecture and the firefighting system;
5. If the smoke extraction system is required in the establishment, the related drawing at the scale of 1:100 should be submitted;
6. The drawings of architecture design, the firefighting system and smoke extraction system etc. should not be shown in the same drawing.

(2) Technical Requirements

1. The firefighting system:

- 1.1 The installation of the firefighting system equipment in the establishment shall be complied with the provisions of the Fire Safety Regulations. Meanwhile, the firefighting system should be constructed and maintained by the qualified personnel so as to ensure the normal operation of the system. And the Fire Services Bureau should be notified to conduct the inspection and testing, and a valid certificate of sound operation should be submitted to the Fire Services Bureau;
- 1.2 Design and construction of the fire protection system shall be done by the relevant professional engineering technicians who have registered with the Land, Public Works and Transport Bureau and comply with the Qualification Regime for the Discipline of Urban Construction and Planning, or by registered engineering firms in accordance with the technical specifications stipulated in the "Fire Safety Regulations", and shall be inspected and tested by the staff of the Fire Services Bureau to verify that its implementation complies with the approved plan; (Article 63 of the "Fire Safety Regulations")
- 1.3 If the firefighting system (fixed automatic sprinkler fire extinguishing system, automatic fire detection system or fire hydrants etc.) has been already installed, it should be maintained by the qualified personnel to ensure the system can output the specified pressure and flow, and the certificate of sound operation of the system should be submitted every 12 months; (Article 63 of the "Fire Safety Regulations")
- 1.4 If the firefighting system does not exist, the appropriate firefighting system should be installed according to the following specifications:
 - 1.4.1 If the establishment is located in one part of a building: with the total area of over 400m² or total volume of over 1,400m³, the fixed automatic sprinkler fire extinguishing system should be installed; or with the total area of over 200m², but equal to or less than 400m² or total volume of over 700m³, but equal to or less than 1400 m³, the automatic fire detection system should be installed. (For other situations, see Articles 52 and 53 of the "Fire Safety Regulations")
 - 1.4.2 If the establishment is located in a standalone building: with the total area of over 2000 m² or total volume of over 7,000m³, the fixed automatic sprinkler fire extinguishing system should be installed; or with the total area of over 800m², but equal to or less than 2,000 m² or total volume of over 2,800m³, but equal to or less than 7,000 m³, the automatic fire detection system should be installed. (For other situations, see Articles 52 and 53 of the "Fire Safety Regulations").

2. The firefighting equipment and the measures that should be adopted:
 - 2.1 The staircase access to the mezzanine should be constructed with the materials of class M0 by fire (such as: masonry, metal, etc.) and the minimum width of the staircase should comply with the relevant specifications (Article 12 and 17 of the “Fire Safety Regulations”);
 - 2.2 The staircase access to the first floor (mezzanine) or the basement should be constructed with the materials of class of M0 by fire (Article 12 and 17 of the “Fire Safety Regulations”);
 - 2.3 If the electrically-operated door/sliding door is installed in the establishment, the door must provide the easily-operated manual opening way, and in case of fire/electricity interruption, the exit door must be ensured to be always open;
 - 2.4 Compartments should be constructed with non-combustible materials (e.g. brickwork, etc.). If the partition walls, ceilings or decorations are built with flammable materials, such parts must be protected properly with qualified and certified fire resistant products (F.R.P.) so as to increase the fire-resistance capacity and to decrease the combustibility; (Article 3 of the “Fire Safety Regulations”)
 - 2.5 If mirrors are equipped in the establishment, the area and position of the mirrors should not mislead people about the exits and the evacuation way;
 - 2.6 All exits (evacuation paths) must have long-term working safety signs (see the Appendix I of the “Fire Safety Regulations” - green background, white symbols or letters) and emergency lighting; the indication should be clear and in eye-catching place so that users can get to the exit without any error; (Articles 23 and 24 of the “Fire Safety Regulations”)
 - 2.7 All electrical facilities in the establishment should be installed in the ways neither causing fire nor spreading fire; (Article 32 of the “Fire Safety Regulations”)
 - 2.8 The equipment used at the pantry for preparing food/drinks should be of the electric type and should operate in accordance with the safety specifications; (Article 32 of the “Fire Safety Regulations”)
 - 2.9 A fire alarm and warning system should be installed in the establishment; (Article 54 of the “Fire Safety Regulations”)
 - 2.10 If the independent compartments are installed in the establishment and the estimated capacity of them exceeds 20 people, the sound alarm system should be installed in such compartments; (Article 54 of the “Fire Safety Regulations”)
 - 2.11 There must be appropriate number of fire extinguishers in the establishment (at least 2 fire extinguishers in one establishment), and there should be one fire extinguisher every 200 m². The fire extinguishers should be placed in a proper way that the distance from any position to the fire extinguisher should be less than 15m; (Article 55 of the “Fire Safety Regulations”)
 - 2.12 If there are independent compartments (eg. VIP rooms) in the establishment, the sound broadcasting and fire-alarming system should be installed in such compartments, in case of fire, all people in the establishment can be notified by broadcasting, especially for the users in these independent compartments;
 - 2.13 The installation of the suspended ceilings, luminaries and hanging decorations etc. in the establishment (if any) should not affect the sprinkling scope of the fixed automatic sprinkler fire extinguishing system;
 - 2.14 The installation of the food elevator should not affect the fire safety (partitioning). (For

example, connecting the kitchen of using the liquefied petroleum gas or other areas or going through the fire insulation partitioning etc.);

- 2.15 One manual switch should be installed at the exit of the cold storage chamber so as to ensure that the user can open the door of the cold storage chamber if the door is closed or locked;
 - 2.16 Position direction should be posted in each compartment and places near the passageway, in order to direct the evacuation way;
 - 2.17 The site should be protected by the automatic fire detection system in conjunction with the whole environment.
3. Material certification
- 3.1 If the certified fire-resistant materials such as the fire-resistant glass or fire door etc. are used in the establishment, the fire resistance testing report of these materials and products should be submitted, which must meet the following requirements:
 - 3.1.1 The submitted inspection reports should meet the requirements of the “Fire Safety Regulations” and should be issued by qualified institutions. Besides, these inspection reports should be the original or certified copies;
 - 3.1.2 The design description should be prepared by the technicians, which should list clearly the information such as the materials used, product name and model, location of use, fire resistance class and number of use etc.
 - 3.1.3 The applicant should attach the order form, delivery note or receipt etc. to confirm that the materials or products installed on site are consistent with those in the report;
 - 3.1.4 Submit a statement signed by a technician to declare that the fire resistance performance of the materials or products used in the current establishment is not weaker than traditional brick walls or concrete walls if approval is necessary for the fire-resistant glass;
 - 3.1.5 Submit a statement signed by a technician to declare that the fire resistance performance of the fire doors used in the current establishment is not weaker than the CRF60 or CRF30 fire doors and wired glass required by law if approval is necessary for the fire-rated wood doors.
 - 3.2 If carpets are to be installed in establishment, their samples should be submitted to the Fire Services Bureau for examination and approval of the quality. Otherwise, the fire resistance treatment is required (with the fire-retardant paint applied by the qualified firefighting company and the valid certificate);
4. If the establishment is located in a building designed with application of non-local existing laws (e.g. IBC) approved by the Land, Public Works and Transport Bureau (DSSOPT), the building design drawing/firefighting system design drawing should be first evaluated by the third-party certification body acknowledged by DSSOPT. And the related evaluation report must be submitted, indicating the number and date of the certified drawings;
5. Notes on future operation:
- 5.1 All evacuation exits and routes should be kept unhindered; (Article 10 of the “Fire Safety Regulations”)
 - 5.2 All personnel in the establishment must clearly understand the measures to be taken in fire alarming and the correct method of use of the fire extinguishers; (Article 55 of the “Fire Safety Regulations”)
 - 5.3 The substances stored in the storage chamber should not be of high fire risk, and the

activities with obvious fire risk should not be carried out in the storage chamber. Especially, the containers storing liquid or gaseous fuels are prohibited to be placed in the chamber. (Article 83 of the “Fire Safety Regulations”)

- 5.4 A set of contingency plan for emergencies should be drawn up, exercised periodically and reviewed;
- 5.5 The storage of materials should not impede the operation or application of any firefighting facilities;
- 5.6 The flammable or chemical materials should be stored in appropriate containers, and on the outside of the containers, the material names and reaction in water etc. should be clearly indicated;
- 5.7 The equipment for fume-removal, oil and smoke filtering and odors eliminating should be cleaned regularly so as to reduce the fire risks.

5. Environmental and Sanitary Conditions

(A) Sanitary facilities:

1. All sanitary facilities should always be kept clean and in good working condition;
2. All sanitary facilities must be equipped with the running water and its operating area should be suitable and free from danger;
3. The doors of the sanitary facilities should have self-closing system;
4. The toilets should have direct or artificial ventilation facilities to ensure the constant renewal of the air;
5. The walls, floors and ceilings of the sanitary facilities shall be covered with the materials that are waterproof, anticorrosive and easy to be cleaned and disinfected;
6. The walls of the sanitary facilities and the paths access to the sanitary facilities should be paved with tiles, marble or any other smooth, waterproof, light-colored materials with a height of not less than 1.50m. And the connection between walls and floors or other surfaces must be arch shaped;
7. There should be no ornaments which can obstruct the inspection, cleaning and disinfection, such as wall liners;
8. There should be effective drainage systems;
9. The liquid soap, disposable paper towels (or instead, the electric dryer) as well as the necessary personal-care products, lightings and the fixed mirror should always be available in the toilet, and the tissue paper should be always available for all lavatory compartments;
10. The sanitary facilities should not have direct connection with any area used for storing, reserving and preparing food, and also should be properly installed so as not to open directly to the customer area;
11. The Health Services Authorities does not recommend the situation that the toilets for customers and staffs are not installed in the establishment. If the establishment to be opened cannot provide toilets, but the public toilets for staffs and customers are available in the commercial building or the shopping malls where the establishment is located, the applicant should clearly state the

situation in the business license application. And the Health Services Authorities will issue its opinion depending on the situations;

12. If the public toilets in commercial building or the shopping malls need to be used by the establishment, such public toilets have to be located on the same floor, and can only be used by the staffs and the customers of the establishment exclusively.

(B) Lighting and ventilation system:

1. All establishments must have adequate lightings and ventilations; natural ventilations and lightings are preferable, but artificial lightings and ventilation equipment and devices can also be used to improve the environmental conditions;
2. If the natural ventilation is insufficient or impossible, the establishment must be equipped with an enforced artificial ventilation system to renew the air constantly. It is suggested that the location of the fresh air inlet and the exhaust air outlet should be set outside of the establishment with a height of no less than 2.5m;
3. The enforced artificial ventilation must have a minimum capacity of 17m³/hour/person, and the independent air inlet and outlet should be set up in different positions of each compartment in the establishment;
4. In order to prevent reflux of the exhaust air, the fresh air inlet and the exhaust air outlet must not be too close;
5. The installation of all air ducts should be able to prevent rats from entering;
6. The ventilation system should not be installed in the positions that may disturb or cause inconvenience to the public.

(C) Air-extraction equipment:

1. The air extractor must be equipped with the protective cover (outer cover for the fan).

(D) Sewage system:

1. The sewage in the establishment should be drained directly to the public sewage network and all sewage drainage equipment (such as: sinks, washbasins, toilets, urinals and bathtubs) should be installed with the siphon trap;
2. During business operation, if food with high fat content is provided and processed at the establishment, the waste water produced when processing such food shall only be disposed into the public sewage system after the fat in the water has been filtered out by a suitable grease trap. For the relevant specifications of the grease trap, please refer to the "One-stop Licensing Service for Food and Beverage Establishments – Application Guidelines" of the Municipal Affairs Bureau and the "Guidelines of Application Procedures and Technical Requirements for Licensing and Modification Works of Restaurants" of the Macao Government Tourism Office.

(E) Drainage system:

1. The floors of the bar counter, area for preparing and making food and sanitary facilities must be tilted slightly to the side of the drain mouth which has the cover or similar devices.

(F) Water supply system:

1. The establishment should be equipped with the public tap water supply system.

(G) Solid waste storage facilities:

1. Appropriate and adequate space should be reserved for placing waste containers with lids in the establishment. The quantity and volume should correspond to the number and frequency of customers in the establishment;
2. Solid waste produced by the establishment shall be transported to the Macao Refuse Incineration Plant in the Taipa Pac On Industrial Zone for treatment to ensure environmental hygiene conditions within the establishment and in the public area;
3. Solid waste produced by business operation may not be left in or near garbage rooms or bins in a public place; the collection times of garbage containers of the establishment shall be arranged with the cleaning service company, to avoid leaving such containers in the street, where they might affect the environment and block the way of pedestrians.

(H) Requirements for Soundproofing and Sound Absorbing Equipment:

For the noise control requirements, please refer to “I. Minimum requirements for sound insulation and sound absorbing facilities” in **Chapter II** - Basic Requirements for the “Karaoke” Establishments.

(I) Disease vectors preventive measures

1. All compartments must be equipped with barriers to prevent disease vectors (rats, cockroaches, etc.) from breeding, reproducing and entering from windows, doors, ducts or other openings of floors, walls and ceilings;
2. The electrical de-insectization system should be set up in the kitchen, other area for preparing and cooking food and even in the customer area, and the number should be suitable to the target area.

(J) Storage chamber, passages or any other compartments

1. Ceilings, walls and floors should be covered with the materials that are firm, nonflammable, anti-corrosive and easy to clean;
2. The ornaments which can obstruct the inspection, cleaning and disinfection, such as wall liners should not be installed.

The applicant may personally go to the Land, Public Works and Transport Bureau and the Macao Government Tourism Office to handle Engineering Change Plan or the application procedure of the “karaoke” establishment license, after preparing “karaoke” establishment plan by referring to the Chapters I to III of the Guidelines.

IV Application for Approval of the Project for the Modification Work

1. The application for approval of the project for the modification work should be submitted to the Land, Public Works and Transport Bureau.

1.1 Documents that should be submitted:

(1)	"M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C)
(2)	The original or certified copy of the Written Information of Real Estate Registration
(3)	In the case of a lessee, submit the original or certified copy of the statement of consent by the owner (U038C)
(4)	In the case of an attorney, submit the original or certified copy of the power of attorney
(5)	Statement of responsibility for project planning ^[1] (U002C)
(6)	Project description (for each specialty, the relevant project description must be submitted individually, along with the copy of the Statement of responsibility for project planning)
(7)	^[1] Location Plans
(8)	^[1] Approved Drawings
(9)	^[1] Overlaid Drawings
(10)	^[1] Drawings to be Altered
(11)	^[1] Water Supply Drawings / Calculation Book ^[2]
(12)	^[1] Water Drainage Drawings / Calculation Book ^[2]
(13)	^[1] Structure Drawings / Calculation Book ^[2]
(14)	^[1] Firefighting Drawings / Calculation Book ^[2]
(15)	^[1] Power Supply Drawings / Calculation Book ^[2]
(16)	^[1] Air Conditioning / Ventilation / Smoke Extraction Drawings / Calculation Book ^[2]
(17)	^[1] Gas/Fuel Supply System Drawings / Calculation Book ^[2]
(18)	^[1] Elevator Equipment Drawings / Calculation Book ^[2]

^[1] Documents must be signed by an engineer or a technician registered in the Land, Public Works and Transport Bureau;

^[2] Documents involved in the project that are required to be submitted.

- 1.2 Number of copies: The submission of the application, should include one original copy as well as the number of copies according to the amount indicated in the notes column "Documents to be submitted" from pages 3/5 to 5/5 of the form in "M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C).

- 1.3 Pagination made by the applicant: The pagination of documents must be made by the applicant himself with the application form as the first page.

2. The application for construction permit issuance can be made at the time of completion of "M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C) with the simultaneous submission of the "S1-Application for starting work", details of which can be found in **Chapter V** - Application for Construction Permit and **Chapter VII** - Construction.
3. In choosing the "legalization" item in the form of "Application for approval of the project for the modification (change) work", the following situations should be paid attention to: The statement of the technician and builder/construction company should indicate that the project performed on site is consistent with the submitted project plan.
4. Taxes (involving the Land, Public Works and Transport Bureau):
 - 4.1 The planning of each specialty plan: MOP 600.00 (should be paid when the plan is submitted);
 - 4.2 Taxes for the legalization of the project should be charged by three times of the value of the standard taxes (excluding taxes for project planning and execution of the project) (should be paid when the plan is approved).
5. Application examination period: 75 days.

The above-mentioned period includes 15 days for document preparation, 30 days for advisory opinions from other agencies, and 30 days for examination by the Land, Public Works and Transport Bureau. (The period of examination by the Land, Public Works and Transport Bureau starts from the time receiving the last response of opinion, that is, the procedure for the examination by the Land, Public Works and Transport Bureau does not begin until receiving the last piece of response of opinion.)
6. Other relevant applications, e.g.:
 - 6.1 Application for the approval of the changed plan: When change of the project content is made according to the opinions advised by the administrative authorities or by the applicant on its own initiative, the applicant must submit an application for approval of the project of modification before the issuance of the construction permit and prior to the completion of the project, and should submit the documents basically consistent with the list in section 1.1;
 - 6.2 Before the issuance of the construction permit, the application for the replacement of the technician responsible for planning the project must submit the following documents:
 - 6.2.1 The application;
 - 6.2.2 Statement of the previous technician for abdicating the relevant responsibility, indicating the date of resignation;
 - 6.2.3 Statement of the new technician for taking the relevant responsibility, indicating the date of taking responsibility. (U002C)

V - Application for the Construction Permit

- 1 The application for the construction permit should be submitted to the Land, Public Works and Transport Bureau.
 - 1.1 The application for the construction permit can be made along with the completion of the "M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C);
 - 1.2 In a case not belonging to the situation indicated in section 1.1, the application should be made independently by completing form "L1 - Application for the issuance of construction permit "; (U011C)
 - 1.3 The basic conditions for obtaining construction permit issuance are as follows:
 - a. The project was approved or conditionally approved (not including the issuance of the feasible opinion);
 - b. Responsibility statements for the direction and execution of the project by qualified person or company has been submitted;
 - c. The insurance policy for work accidents and occupational disease consistent with the provisions of the Decree-Law No. 40/95/M (hereinafter referred to as "labor insurance") has been submitted. Special attention should be paid to the following:
 - The policyholder should be the owner of the project or the builder/construction company responsible for executing the project;
 - The policy should indicate the nature of the project (consistent with the description in the application);
 - The policy should indicate the location of the project (consistent with the description in the application);
 - The policy should indicate the beginning and termination of the term of the labor insurance;
 - The policy should indicate the coverage of the labor insurance;
 - The policy should indicate the relevant applicable laws;
 - The labor insurance policy should not be cover note.
 - 1.4 Required Documents:
 - a. "M6- Application for approval of the project for the modification (change) work" (special for establishment with license issued by the Macao Government Tourism Office) (U068C) or "L1 - Application for the issuance of construction permit " (U011C);
 - b. Formal insurance policy for work accidents and occupational diseases, and cover note shall not be accepted;
 - c. Statement of responsibility by the technician directing the project;(U019C);
 - d. Statement of responsibility by the builder/construction company responsible for executing the project. (U020C).
- 2 Taxes (involving the Land, Public Works and Transport Bureau):
 - 2.1 The direction of each project: MOP 600.00; (should be paid when the construction permit is issued);
 - 2.2 The execution of each project: MOP 600.00; (should be paid when the construction permit is issued);
 - 2.3 The term of the construction permit, for every 60 days or a fraction thereof: MOP 1,200.00. (Should be paid when the construction permit is issued).

- 3 Application examination period: 15 days.
- 4 Other relevant applications, e.g.:
 - 4.1 Revalidation and renewal of the construction permit
 - a. In the case of modification project: Filling in the form "L2 - Application for revalidation/renewal of the construction permit" (U012C), and deliver the documents listed in the form as well as compliance with the Notes in the form.
 - 4.2 After the issuance of the construction permit, the application for the replacement of the technician or builder must submit the following documents:
 - a. The application;
 - b. Statement of the previous technician or builder for abdicating the relevant responsibility, indicating the date of resignation;
 - c. Statement of the new technician or builder for taking the relevant responsibility, indicating the date of taking responsibility; (U002C / U019C / U020C)
 - d. The original copy of the construction permit for the purpose of registration.

VI - Application for the Opening of “Karaoke” Establishments /Modification of

Facilities

1. Application for the opening of “karaoke” establishments/modification of facilities should be submitted to the Macao Government Tourism Office.

1.1 Documents that should be submitted:

(1)	Format C application form
(2)	If the applicant is a company, the application forms must be signed by the legal representative of the company in accordance with the signature on his or her identification document, along with a copy of the identification document (front and back on the same page)
(3)	If the applicant is an individual, the application forms must be signed by the applicant in accordance with the signature on his or her identification document, along with a copy of the identification document (front and back on the same page)
(4)	If the application is made by a person appointed by the applicant, the original or certified copy of the power of attorney with signature notarized shall be submitted, along with a copy of the authorized person's identification document (front and back on the same page)
(5)	Original copies of the Certificates of Criminal Record for the applicant or all the current members of the executive committee of the applying company (Please specify that the certificate is for the purpose of applying to operate a health club), or the equivalent documents ^[1]
(6)	Certificate of Business Registration of the company issued by the Commerce and Movable Property Registry in the past 3 months. ^[1]
(7)	A copy of the form "M/1 - Application for Starting Business" from the Financial Services Bureau ^{[1][2]}
(8)	Price list of the establishment ^[1]
(9)	Memorandum of description and illustration of the project
(10)	Architectural specialty design, see "(I) architectural specialty" of Chapter III of the Guidelines
(11)	Statement of simplified procedure for license application
(12)	Copy of receipts issued by the Land, Public Works and Transport Bureau, Application form C2 together with of the index of documents ^[3]
(13)	Copy of receipts issued by the Land, Public Works and Transport Bureau, Application form M6 together with of the index of documents ^[4]
(14)	If the establishment is equipped with audio system, the design for sound insulation and sound absorption devices, including a detailed description of the design, drawings, technical characteristics and manuals of relevant materials to be used, should be submitted. a. If there is an audio equipment such as speakers, karaoke machines, etc., the following information must be submitted: (a) Floor plan of the equipment;

	<p>(b) Sound frequency spectrum characteristics produced by the equipment;</p> <p>(c) Drawings and information regarding the measures, devices and materials etc. for insulation and sound absorption;</p> <p>b. If there is an audio equipment for outdoor music or shows (for example, devices for outdoor light shows, music fountains and other equipment for outdoor events etc.), the relevant drawings and information must be submitted.</p>
(15)	Plans and information of the shop front signboard, decorative lighting and outdoor electronic display screen. ^[5]

^[1] Applicable to the application for commencement of business;

^[2] Can be submitted when applying for inspection;

^[3] Applicable to establishments located in a building under construction;

^[4] Applicable to establishments located in a building for which the occupation permit has been issued;

^[5] Documents to be submitted when such things are involved in the plan (including: brightness of the equipment; brightness control function and the relevant range of adjustment if applicable; speakers, audio facilities and the related acoustic insulation/ sound muffling and vibration isolation equipment and materials if applicable).

1.2 Number of copies: When the application is submitted, in addition to an original copy, there should be 6 copies in the case of the establishment to be opened in a building under construction ^[1]; or 4 copies in the case of the establishment to be installed in a building that has been granted with occupation permit ^[1].

^[1] If the establishment is located on a classified immovable property (i.e. “monuments”, “buildings of architectural interest”, “building complex” or “sites”), a “to-be-classified immovable property” or in a buffer zone and a temporary buffer zone as defined by Law No. 11/2013 on “Cultural Heritage Protection Act”, an additional copy shall be submitted to the Macao Government Tourism Office for the purpose of seeking opinion from the Cultural Affairs Bureau.

1.3 Memorandum of description and illustration of the project, including:

- a). Architectural characteristics of the building;
- b). Materials used for facing and decoration;
- c). General characteristics of the establishment, special characteristics of the public and service areas;
- d). Anticipated date of starting and completion for the project.

1.4 When filling out the Format C application form, the business hours of the establishment should also be written down.

1.5 When reviewing the application, the Macao Government Tourism Office shall listen to the opinions of different competent departments in different affairs, including: the Land, Public Works and Transport Bureau, the Fire Services Bureau, the Municipal Affairs Bureau, the

Health Bureau, the Environmental Protection Bureau and the Public Security Police Force. If the establishment is located on a classified property asset (i.e. “monuments”, “buildings of architectural interest”, “building complex” or “sites”), a “to-be-classified immovable property” or in a buffer zone and a temporary buffer zone as defined by Law No. 11/2013 on “Cultural Heritage Protection Act”, the Cultural Affairs Bureau shall be consulted for its binding opinion on the relevant construction plan of the establishment. The consultation period lasts for 15 working days.

VII - Construction

1. With the approval of the project by the Macao Government Tourism Office, and having obtained the construction permit and approval of the application for starting the project granted by the Land, Public Works and Transport Bureau, the applicant can begin the works in accordance with the approved plan.
 - 1.1 The application for starting the project should be submitted to the Land, Public Works and Transport Bureau.
 - a). The application for starting the project can be made along with the submission of the form "M6-Application for approval of the project for the modification (change) work" (For establishment license issued by the Macao Government Tourism Office) (U068C), through the form "S1 - Application for starting the project", and submit the documents listed in the form as well as compliance with the Notes in the form; (U017C)
 - b). The application for starting the project can be made along with the submission of the form "L1-Application for the issuance of construction permit", through the form "S1 - Application for starting the project", and submit the documents listed in the form as well as compliance with the Notes in the form; (U017C)
 - c). In cases other than situations in section 1.1 a) or 1.1 b), the application for starting the project can be made independently through the form "S1 - Application for starting the project", and submit the documents listed in the form as well as compliance with the Notes in the form. (U017C)
 - 1.2 Application examination period: 8 days.
 - 1.3 Construction of the establishment shall comply with Law No. 8/2014 "Prevention and Control on Environmental Noise", in particular Article 3 and 4.
2. The decoration and equipment installation projects must be carried out within 6 months. If the establishment is located in a building under construction, these works should be done within 18 months.
3. During the execution of decorative works or modification if there is any amendment to the approved project, the applicant must submit the project amendment to the Macao Government Tourism Office and the Land, Public Works and Transport Bureau.
4. During the construction, the contractor shall comply with the provisions provided for in Decree-Law No. 44/91/M "Regulation of Health and Safety in the Civil Construction Work" and Law No. 3/2014 "Regime of Occupational Safety Card in Construction".

VIII - Inspection

- 1 When the project is completed, a completion notice should be submitted to the Land, Public Works and Transport Bureau:
 - 1.1 The form "N1 - Project completion notice" should be submitted (U033C), along with the following documents:
 - a. Statement by the technician directing the project (U036C);
 - b. Statement by the builder/construction company responsible for executing the project (U037C);
 - c. Record book of the project;
 - d. If the project involves the installation of new elevator equipment, the project completion notice should be submitted according to the requirements defined in the instructions called "Private projects - Instructions for Approval, Inspection and Operation of Elevator equipment." Please go to the website of the Land, Public Works and Transport Bureau (www.dssopt.gov.mo) for information about or downloading such instructions.
 - 1.2 If you need to submit the project for the modification (change) work along with the submission of the form "N1 - Project completion notice", the project should be submitted according to the description in Chapter III - "Project Planning and the Notices", with the mention of "the project for the modification (change) work was also submitted on DD-MM-YY" in the "Other Information" column of the form "N1 - Project completion Notice." (However, it is suggested that the applicant should submit the form, if necessary, 30 days before completion, so as not to hinder the preparations for the inspection).
 - 2 The applicant should apply for the inspection of facilities within 6 months after receiving the notification of the Macao Government Tourism Office about the approval of the project. The applicant should understand that non-submission of the application for inspection within the stipulated time period may result in the revocation of the approval of the project, and in this case, the applicant must resubmit the project for the Opening for business/changing facilities to the Macao Government Tourism Office for reconsideration.
 - 3 The inspection is organized by the Macao Government Tourism Office, and will be conducted along with the acceptance of the project and the facilities of the establishment. The applicant must submit the following documents to the Macao Government Tourism Office for arranging for inspection:
 - 3.1 Application form for establishment inspection;
 - 3.2 Photocopy of Form "M/1-Application for Starting Business of the establishment" ^[1];
 - 3.3 The construction permit, copy of the "N1 - Project Completion Notice" and its receipt, or copy of the approval letter on the project legalization and receipt of tax payment issued by the Land, Public Works and Transport Bureau;
 - 3.4 Verified and stamped copies of approved projects (no need to submit again as the architectural specialty has already been delivered by the applicant to the Macao Government Tourism Office);
- ^[1] Applied to the case of application for Opening business.
- 4 The inspection will be carried out upon the receipt of the application for inspection by the Macao Government Tourism Office, with prior notification of the date and time of the inspection to the

applicant for preparation. On the day of inspection, the Macao Government Tourism Office and representatives of relevant agencies, as a committee, come to the establishment to make verification, and the applicant or its representative together with the technician of the project must be present at the inspection. Upon the completion of the inspection, a joint inspection record will be issued immediately, and a copy of the record will be given to the applicant for information and compliance.

- 5 If it is verified by the inspection committee that the project fully complies with the approved project, duly fulfill the opinions of the agencies involved, and the facilities and equipment of the establishment legally meets required parameters, the Macao Government Tourism Office will issue the license after the pass of the inspection.
- 6 The licensing fee shall be paid after the application has been approved and the establishment has passed the inspection:
Whole year fee: MOP1,000.00 for each hall or room (plus a 10% stamp duty)
Half a year fee: MOP750.00 for each hall or room (plus a 10% stamp duty)
- 7 If the establishment does not pass the inspection, the applicant should make improvements in accordance with the recommendations given by the committee within the grant period of time. Upon completion of the improvements, the applicant must inform the committee to carry out a new inspection.
- 8 The establishment can only be opened for business after obtaining the license issued by the Macao Government Tourism Office and completion of the registration of opening for business in the Financial Services Bureau.

Note:

- ✧ If the number of staff working in a restaurant, bar or nightclub exceeds 30 since karaoke business operates in such restaurant, bar or nightclub, representatives from the Labour Affairs Bureau will conduct on-site inspection at the establishment;
- ✧ License renewal fees for “karaoke” establishments:

Whole year fee: MOP1,000.00 for each hall or room (plus a 10% stamp duty)
Half a year fee: MOP750.00 for each hall or room (plus a 10% stamp duty)
- ✧ License renewal application is suggested to be submitted up to 60 days before the expiry date.
- ✧ Please be noted that in any situation the establishment cannot be used for housing purposes, even if it is temporary in nature (e.g., dormitory for workers).

Appendix I

List of classified immovable property and buffer zones

Appendix I

Classified immovable property

Classified "monument sites"

A. Macao

- St. Augustine's Church (St. Augustine)
- St. Antonio's Church and the square (St. Antonio)
- St. Dominic's Church (St. Dominic)
- St. Lazarus' Church and the square
- St. Lawrence's Church and the square
- Cathedral
- Seminary and St. Joseph's Church, the square and stone stairs
- The Ruins of St. Paul's, the square and stone stairs
- Mong Ha Fortress
- Fortress of Our Lady of Bom Parto
- Guia Fortress and Lighthouse
- Fortress of Our Lady of Penha
- São Tiago da Barra Fortress
- Dona Maria II Fortress
- St. Francisco Barracks
- Border Gates
- Chief Executive's Office (Government House)
- Na Tcha Temple, near Ruins of St. Paul's
- Lou Pan Si Fu Temple
- Tin Hau Temple
- Sam Kai Vui Kun Temple
- Tou Tei Temple
- Section of the Old City Walls
- Camões Grotto
- Stone plaque at Lin Fong Temple
- Engraved Plaque at the steps leading up to Mong Ha Housing Estate
- Municipal Affairs Bureau Building (former Leal Senado Building)
- Holy House of Mercy
- A-Ma Temple
- Bazaar Temple
- Kun Iam Tchai Temple
- Kun Iam Tong Temple
- Lin Fong Temple
- Na Tcha Temple on Calçada das Verdades
- Pao Gong Temple
- Lin Kai Temple

B. Taipa

- Church of Our Lady of Carmel
- Kun Iam Tong Temple
- Kun Iam Small Temple
- I Leng Temple
- Pek Tai Temple
- Sam Po Temple
- Kuan Tai (Cheoc Ka) Temple
- Taipa Fortress, at the quay
- Tin Hau Temple

C. Coloane

- Church of São Francisco Xavier
- Tam Kong Temple
- Tin Hau Temple
- Kun Iam (Ka Ho) Temple
- Sam Seng Kong Temple
- Tai Wong (Hac Sa) Temple
- Kun Iam (Coloane) Temple

Classified buildings of "architectural value"

A. Macao

- Santa Sancha Palace
- Chapel of Our Lady of Penha and Bishop's Palace
- St. Joseph's Seminary building
- House at No. 29, Rua do Campo
- Company of Jesus Square at No. 4 and No. 6
- House on Rua Pedro Nolasco da Silva, nos

- Casa do Jardim da Gruta de Camões 26-28
 - Sir Robert Ho Tung Library building - Casa Jardines
 - Military Club building - House at No. 6, Avenida da República
 - Moorish Barracks building - Pawnbroker's Tower at No. 64, Rua 5 de Outubro
 - Fire Services Bureau building - Pawnbroker's Tower at No. 6, Rua de São Domingos
 - Post Office Building - Pawnbroker's Tower at Rua de Camilo Pessanha
 - Red Market Building - Pawnbroker's Tower at No. 3, Travessa das Virtudes
 - Lou Lim Iok Pavilion - Building at Avenida Horta e Costa, nos. 14 and 16
 - BNU Head Office - Building cornering Praça de Ponte de Horta and Rua das Lorchas
 - Pedro Nolasco da Silva Government Primary School - Court Building
 - Leng Nam School at Estrada dos Parsees - Lok Kok Restaurant at No. 159, Rua 5 de Outubro
 - Pui Tou School at No. 107, Rua da Praia Grande - Mandarin's House at Travessa de António da Silva
 - Pui Cheng School (Lou Lim Iok Pavilion) - Cathedral Square at Nos. 1, 3, 5, Largo da Sé
 - Ricci School, at Rua da Praia Grande do Bom Parto - Lou Kau Mansion at No. 7, Travessa da Sé
 - Dom Pedro V Theatre - House on Estrada do Engenheiro Trigo at No. 4, Estrada do Engenheiro Trigo
 - St. Raphael Hospital and Garden - House at No. 83, Avenida Praia Grande
 - Bela Vista Hotel building - Caixa Escolar
 - Convent of the Precious Blood building - Chinese Pharmacy at No. 146, Rua 5 de Outubro
- B. Taipa**
- Museum of Taipa and Coloane History (former Island Council Building) - Pawnbroker's Tower at No.1, Rua da Felicidade

C. Coloane

- Coloane Library building

Classified "complexes of architectural value"

A. Macao

- Avenida de Almeida Ribeiro/Largo do Leal
- Senado/Largo de S. Domingos
- St. Lazarus Quarter
- Avenida do Conselheiro Ferreira de Almeida, from the building cornering Estrada do Cemitério up to No. 95G
- Rua and Beco da Felicidade
- Lilau Square and Beco do Lilau
- St. Augustine's Square
- Travessa de São Paulo
- Travessa da Paixão

B. Taipa

- Largo do Carmo/Avenida da Praia
- Camões Square/Rua dos Negociantes

C. Coloane

- Largo Eduardo Marques/Rua dos Megociantes/Largo do Presidente Ramalho Eanes

Classified "sites of architectural value"

A. Macao

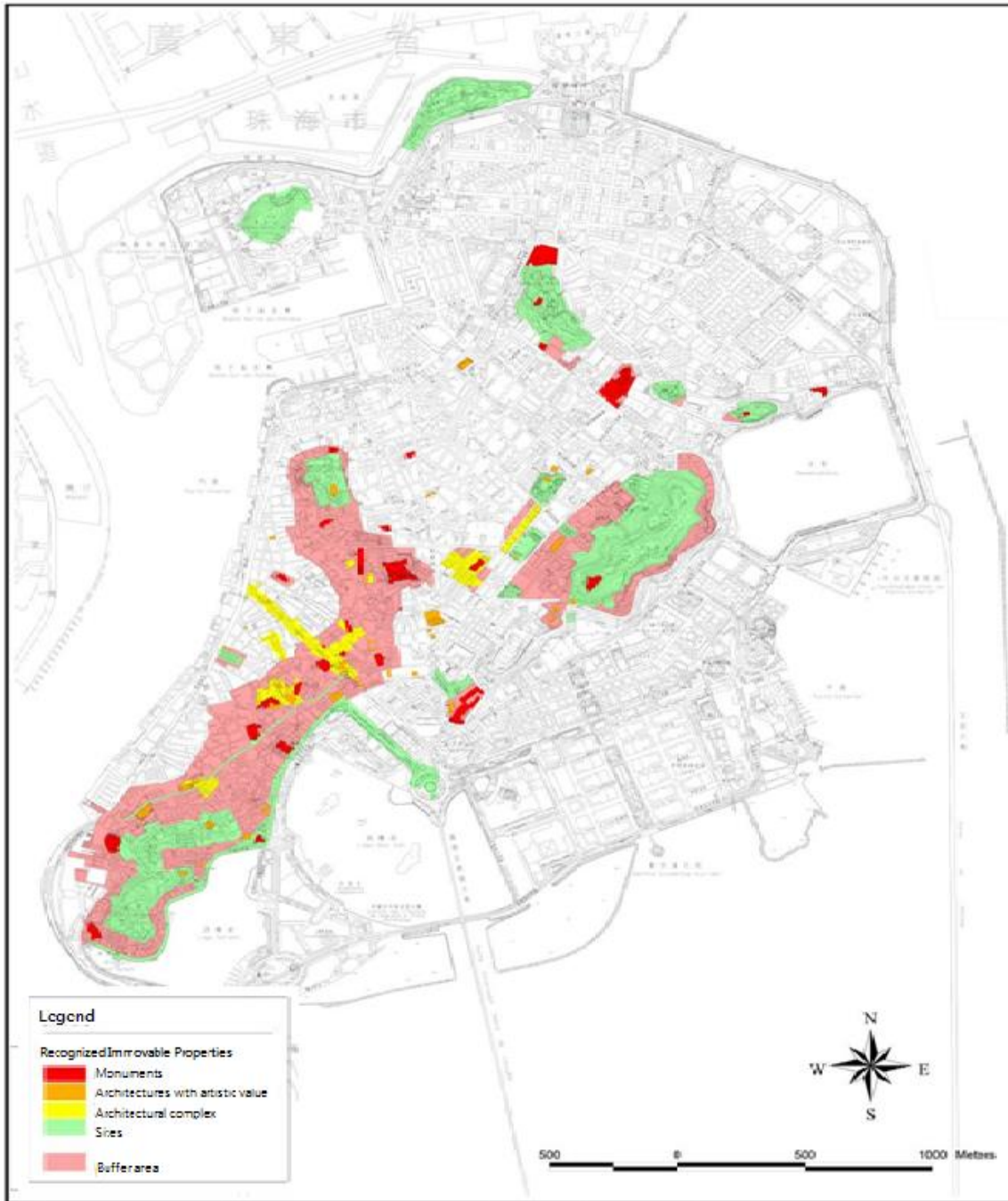
- Coronel Mesquita Sports Ground
- Barra Hill
- Penha Hill
- Guia Hill
- Dona Maria II Hill
- Mong Ha Hill
- Green Island Hill
- Lou Lim Iok Gardens
- Camões Park
- Parsee Cemetery
- Sun Yat Sen Municipal Park
- Montanha Russa Park
- São Francisco Gardens
- Vitória Park
- Vasco da Gama Park
- Coast road from Macao-Taipa Bridge, to São Tiago da Barra Fortress
- Rua Central/Rua de São Lourenço/Rua do Padre António/Rua da Barra/Calçada da Barra
- Praça de Ponte e Horta

B. Taipa

- Municipal Park

C. Coloane

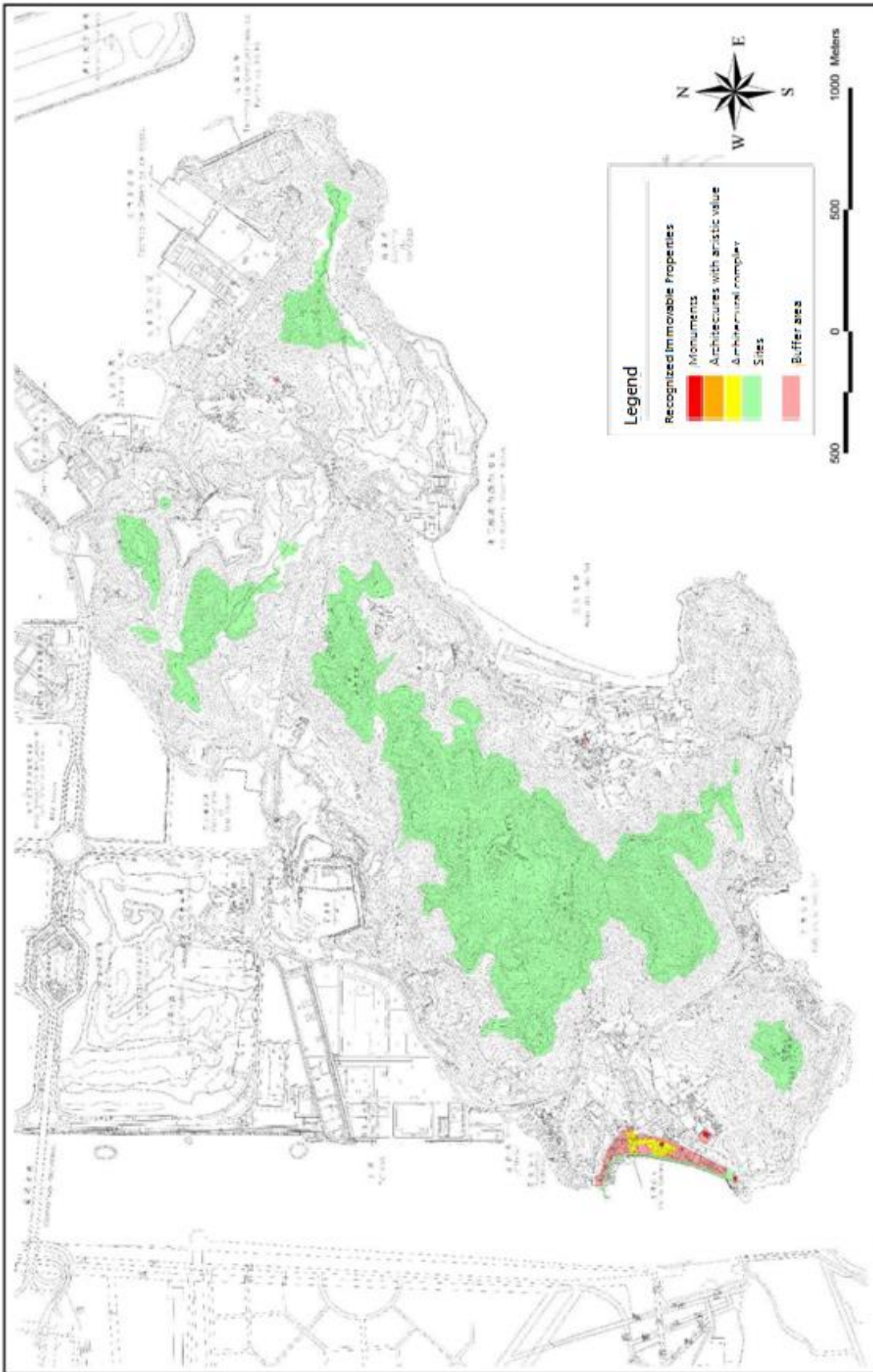
- Avenida 5 de Outubro, Coloane
- Coloane Island, 80 metres above sea level



Distribution of the Recognized Immovable Properties and the Buffer Area (Macao Peninsula)
 In accordance with Article 115 and Clause 2 of Article 117 of No.11/2013 "Cultural Heritage Protection Act"



Distribution of the Recognized Immovable Properties and the Buffer Area (Taipa)
 In accordance with Article 115 and Clause 2 of Article 117 of No.11/2013 "Cultural Heritage Protection Act"



Distribution of the Recognized Immovable Properties and the Buffer Area (Coloane)
 In accordance with Article 115 and Clause 2 of Article 117 of No.11/2013 "Cultural Heritage Protection Act"

Appendix II

Related Legislation Contents

Appendix II

Related Legislation Contents

- Administrative Regulation No. 31/2018 of November 19 – List and graphic delimitation of classified immovable properties and their protection zones;
- Law No. 9/2018 of August 2 – IAM was Established;
- Law No. 6/2015 of June 29 – Amendment to Decree-Law No. 40/95/M "Compensation for damages arising from accidents at work and occupational diseases"
- Dispatch of the Chief Executive No. 248/2014 of September 1 – Approved the "Norms on Noise Pollution"
- Law No. 8/2014 of August 25 – "Prevention and Control of Environmental Noise";
- Law No. 3/2014 of April 8 – "Regime of Occupational Safety Card in Construction";
- Law No. 11/2013 of September 2 – "Cultural Heritage Protection Act";
- Law No. 5/2013 of April 22 – "Food Safety Law";
- Law No. 5/2011 of May 3 – "Regime of Tobacco Prevention and Control";
- Administrative Regulation No. 12/2009 of May 4 – Revised "Volume of 200 m³ or Less Single Container of LPG Storage Facility Safety Regulations";
- Administrative Regulation No. 11/2009 of May 4 – Revised "Security Regulations on Installation of Gas Equipment with High Power";
- Administrative Regulation No. 28/2004 of August 16 – General Regulations of Public Area;

- Law No. 2/2004 of March 8 – Law on Infectious Disease Prevention and Control;
- Administrative Regulation No. 38/2003 of December 1 – Fuel Safety Commission was Established;
- Administrative Regulation No. 3/2003 of March 10 – “The Conditions for Project Preparation, Management and Implementation of Gas Networks, Installation and Maintenance of Gas Equipment”;
- Administrative Regulation No. 31/2002 of December 16 – Approved Technical Regulations for Gas Distribution Network;
- Administrative Regulation No. 30/2002 of December 16 – Approved “Technical Regulation on Gas Line Supply Facilities in Building”;
- Administrative Regulation No. 28/2002 of December 16 – Approved "Volume of 200m³ or Less Single Container of LPG Storage Facility Safety Regulations";
- Administrative Regulation No. 26/2002 of December 16 – Approved "Security Regulations on Installation of Gas Equipment with High Power";
- Dispatch of the Chief Executive No. 218/2001 of October 29 – Republished the full content of "Stamp Duty Regulations" and the relevant overall table approved by the Law No. 17/88/M on June 27;
- Law No. 6/99/M of December 17 – Regulations of Using Urban Real Estate;
- Decree-Law No. 81/99/M of November 15 – Restructuring the structure of Macao Health Services and the Council of Health was cancelled. – Several items Repealed;
- Decree-Law No. 47/98/M of October 26 – Administrative Procedures for licensing of saunas and massage parlours, health clubs and karaoke lounges;
- Dispatch No. 104/GM/98 of November 16 – Administrative license issuance and renewal fee for saunas and massage parlours, health clubs and karaoke lounges;

- Decree-Law No. 56/96/M of September 16
 - Approved the "Regulations of Safety and Actions in Building and Bridge Structures"---Repealed Ordinance No. 19053 of March 1, 1962, extended to Order No. 44041 of November 18, 1961;

- Decree-Law No. 46/96/M of August 19
 - Approved "Macao Water Supply and Drainage Regulations";

- Law No. 6/96/M of July 15
 - Approved the Legal Regime of activity to offense against public health and economy. –Several items Repealed;

- Decree-Law No. 40/95/M of August 14
 - "Legal Regime of Reparation for Damage Arising from Accidents at Work and Occupational Diseases";

- Decree-Law No. 24/95/M of June 9
 - Approved "Fire Safety Regulations";

- Decree-Law No. 34/93/M of July 12
 - Approving "Occupational Noise Juridical System"

- Decree-Law No. 44/91/M of July 19
 - Approved "Regulation on Health and Safety in Civil Construction"

- Ordinance No. 62/91/M of April 1
 - The period prescribed in Article 3 of Ordinance No. 2/89/M of Jan 9 extended for two years (Fees to be charged on the occasion of issuing licenses for works and performing inspections);

- Ordinance No. 7/91/M of January 14
 - Regulated the fees to be charged under the General Regulation of Urban Construction. - Repealed Ordinance No. 150/85/M of August 21;

- Decree-Law No. 37/89/M of May 22
 - Approved "General Regulations of Health and Safety in Commercial Establishments, Offices and Services";

- Decree-Law No. 19/89/M of March 20
 - Approved the Regulation of Security in Installation of Fuels Products—Several items Cancelled;

- Decree-Law No. 79/85/M of August 21
 - Approved "General Regulation of Urban Construction." - Repealed regulation relating to the administration, the Legislature Regulation No. 1600 of July 31, 1963;

- Law No. 9/83/M of October 3
 - Established the standards of suppression of architectural barriers;

- Decree-Law No. 4/80/M of January 26
 - Revised paragraph e) of Article 73 and Article 101 of the General Regulation of Urban Construction, approved by Legislative Regulation No. 1600 of July 31, 1963.

Appendix III

Guidelines for controlling environmental pollution

Appendix III

Guidelines for controlling environmental pollution

1. "General guidelines for controlling noise pollution", "Guidelines for controlling oily fumes, black fumes, and bad smells pollution in the catering industry and similar establishments", "Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and LED monitors in the Exterior of the Building", and "Guidelines for controlling sewage pollution" are applicable to general establishments such as cafés and restaurants, etc.
2. "General guidelines for controlling noise pollution", "Special guidelines for controlling noise pollution", "Guidelines for controlling oily fumes, black fumes, and bad smells pollution in the catering industry and similar establishments", "Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and LED monitors in the Exterior of the Building", and "Guidelines for controlling sewage pollution" are applicable to general establishments equipped with open-air performance or heavy hi-fi equipment (continuous output power of loudspeakers exceeds 150 watts), such as cafés and restaurants etc.
3. "General guidelines for controlling noise pollution", "Special guidelines for controlling noise pollution", "Guidelines for controlling oily fumes, black fumes, and bad smells pollution in the catering industry and similar establishments", "Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and LED monitors in the Exterior of the Building", and "Guidelines for controlling sewage pollution" are applicable to karaoke lounges, discos, nightclubs, ballrooms and bars equipped with open-air performance or heavy hi-fi equipment (continuous output power of loudspeakers exceeds 150 watts).
4. Meanwhile, if there are boilers or stoves in the above-mentioned establishments, the "Guidelines for the pollution control of black fumes and particulate emitted from boiler or stove" are applicable.
 - (1) "General guidelines for controlling noise pollution"
 - It is recommended that proper environmental assessment of the area chosen for the setup of the establishment should be carried out, in order to avoid possible complaints resulting from disturbances of places nearby sensitive to noise (e.g. residential buildings, nursing homes, convalescent homes, hospitals and schools).
 - The operation of the establishment should comply with the requirements of Law No.8/2014 "Prevention and Control of Environmental Noise".
 - The establishment must take into consideration about the impact caused by the sound produced by speakers on the surrounding residents. If necessary, sound insulation/elimination of noise and anti-vibration devices must be installed in order to comply with the requirements of Law No. 8/2014 "Prevention and Control of Environmental Noise".
 - To avoid disturbing nearby residents, loudspeakers must not be used outside.
 - The establishment must take into consideration about the impact caused by the noise produced by air-conditioning, ventilation equipment on the surrounding residents. If necessary, sound insulation/elimination of noise/anti-vibration devices must be installed in order to comply with the requirements of Law No. 8/2014 "Prevention and Control of Environmental Noise".
 - The installation of air conditioning and ventilation equipment, cooling system and ventilation outlet of the engine room in establishments must take into consideration about the impact caused by the noise on the surrounding residents. Thus the

appropriate distance must be kept in relation to areas sensitive to noise (e.g. residential buildings, nursing homes, convalescent homes, hospitals and schools), and the relevant equipments or systems should be installed in the open area faced by the establishment as much as possible to facilitate the diffusion of noise and heat, minimizing the impact on the surrounding environment caused by noise and heat produced; the installation of such equipment in the yards, narrow roads, or places with little noise diffusion must be avoided.

- It is recommended that periodic inspection, repairs, and maintenance of air conditioning systems, water towers and ventilation inlet and outlet should be carried out, in order to comply with the requirements of Law No. 8/2014 "Prevention and Control of Environmental Noise".

(2) Special guidelines for controlling noise pollution

- The choice of the location of the establishment shall take into consideration about possible disturbances by noise in the sensitive surrounding areas (e.g. residential buildings) in order to lower the likelihood of complaints. The karaoke lounges, bars, discos, ballrooms or other relevant establishments those are most likely to produce disturbing noises and other disturbances originating from human conducts with impacts on the surrounding environment. Thus, it is recommended that these establishments should not be located in residential buildings, but in hotels, buildings dedicated for entertainments, or commercial buildings, to reduce the likelihood of disturbances and possible complaints.
- Attention should be paid to the surrounding environment to avoid noise problems resulting from numerous similar establishments in the district, including disturbing noises and other disturbances originating from human.
- Establishments must install sound insulation/elimination of noise and anti-vibration materials so that operation may meet requirements of Law No.8/2014 "Prevention and Control of Environmental Noise".
- The establishment must make an acoustic evaluation of the surrounding environment and adopt effective measures to ensure that the sound of speakers perceived by the residents of the nearby buildings is minimal, especially the sound of outdoor speakers or outdoor concerts, as well as sounds of low frequency rhythms.
- Main door of an establishment must open inwards. If main door opens outwards, proper design is required (e.g. double doors with a buffer zone in between). Signage must be positioned in eye-catching place at the entrance to remind customers not to make any noise when leaving the establishment at night;
- When selecting sound insulation or noise elimination materials, the establishment must use materials with different ranges of sound insulation capability that can effectively dampen sound frequency emitted from loudspeaker. Submitted information must include ranges and coefficients of sound insulation materials of different frequencies, as well as highest sound pressure for different frequency of loudspeakers;
- It is not suitable to directly install hi-fi equipment on building structures. It is recommended that vibration isolation materials with transfer ratio (T) of 0.01-0.05, isolation efficiency (η) at 95% - 99%, and at frequency ratio (f/f_0 - the ratio of driving frequency of the vibrating facilities to the fixed frequency of vibration isolation system) of 5.5-15 should be used;
- During the installation of windows in establishment, the use of glasses with high efficiency insulation (e.g. double glazing or insulated glass) should be considered to

reduce the spread of noise to the outside (especially low frequency noise), or take other effective and feasible measures to have better sound insulation effect, in order to comply with the requirements of law No. 8/2014 "Prevention and Control of Environmental Noise" to minimize the impacts on surrounding objects (e.g. residential buildings, nursing homes and schools).

- Doors and windows should be closed during the operations of an establishment in order to avoid the impact of noise from speakers on the surrounding environment, particularly places likely to be affected by noise.

(3) "Guidelines for controlling oily fumes, black fumes, and bad smells pollution in the catering industry and similar establishments"

i. General principles

- According to the principles of pollution prevention, suitable approaches should be adopted to avoid possible conflicts with existing places (such as residential buildings etc.) and residents prior to the setup of an establishment of the catering industry and similar establishments. Thus, before deciding on the location of the establishment, a proper assessment on the surrounding environment should be done and practical control measures should be taken to ensure the quality of air and avoid any complaints about the operation of the establishment and air quality in the future.
- The establishment must prevent the discharge of things that cause air pollution, such as visible oily fumes, flying ash and bad disturbing smells from stoves cooking food etc.
- Black fumes emission must neither exceed over 6 minutes in any 4 hours; nor continue for more than 3 minutes at one time. Emitting black fumes is defined as discharging smoke which is consistent with the black color shown in Ringelmann Chart Shade No.1 or even darker than that color.

ii. The design of exhaust outlet

- The treated waste gas should emit through a specific outlet. Adequate distance between exhaust outlet and sensitive objects (such as residential buildings) and residents should be set so that the exhaust gas can be properly diffused in open area. The exhaust outlet should not be installed at the courtyards of the building or in narrow alleys, etc.
- When possible, it is recommended that the oily fumes outlet should be primarily installed in the building's roof, in a place where the gases can spread more easily, avoiding thus affect on adjacent buildings. For exhaust outlets installed on the roof of buildings of the establishment, it is recommended that the height should be at least 3 meters above the highest point of the adjacent building, within a surrounding area of 20 meters in diameter. In general, the exhaust should be emitted in a vertical upward direction.

iii. Requirements for controlling the emission of oily fumes

- The concentration level of oily fumes emissions from an establishment of the catering industry and similar establishments should be controlled to levels below $1.5\text{mg}/\text{m}^3$ *

- iv. Regulation of the management of the processing equipment of oily fumes
- Gas Exhaust system
 - Establishments must install suitable gas exhaust system that allows the exit of treated oily fumes through exhaust pipes.
 - A gas hood with pre-processing capacity, and an exhaust system with sufficient capacity for the collection of gases, should be installed above the work table; the gas speed in the mouth of the hood must be greater than 0.6 m/sec; the area of the horizontal plane of the projection of the hood should be 20 cm in excess of the perimeter of the work table and exhaust velocity in the pipes must be higher than 7 m/sec.
 - The processing equipment of oily fumes
 - The establishment must install oily fumes processing equipment with exhaust capacity no less than 90%, along with supporting documents, in order to minimize the emission of pollutants such as oily fumes, smells and furnace gases produced during the preparation of food. Such pollutants should emit by chimney dedicated for this purpose.
 - If there are bad smells in the oily fumes emission, processing equipment of high efficiency for smells processing should be installed, along with the relevant supporting documents.
 - The selection of oily fumes processing equipment must take into consideration about the projected maximum capacity load of emission by the establishment (the most serious situation).
 - The design must take into consideration about the continuous operation of oily fumes processing equipment and provide a safe and easy access for verification, maintenance and repair purposes.
 - During the operation of the establishment, oily fumes processing equipment must be in operating condition and maintain normal operation.
 - The person in charge of the establishment must keep the supporting document of exhaust processing efficiency and instructions for operation properly, maintenance and repair, should also be able to provide, at any time, at the request of the licensing authority and enforcement personnel when necessary.
 - To prevent noise, during the installation of oily fumes processing equipment and other related equipment, the use of sound insulation and vibration isolation materials should be considered, in order to meet the requirements of Law No. 8/2014 "Prevention and Control of Environmental Noise".
 - Cleaning and maintenance of oily fumes processing equipment and other related equipment
 - The efficiency of oily fumes processing equipment should be checked and monitored regularly and appropriate maintenance measures should be adopted, such as periodic cleaning, testing, maintenance and repairs of equipment by technical personnel should be taken to ensure the efficiency of processing.
 - We recommend the following frequency of cleaning and maintenance:
 - ◆ General requirements

- The cleaning, inspection and maintenance of oily fumes processing equipment and related equipment should be conducted at least once a week, with proper record of such cleaning, inspection and maintenance.
- ◆ Front retaining plates or filters
 - Should be cleaned or replaced at least once a week.
- ◆ Hydraulic hood or other similar processing equipment
 - The cleaning, inspection and maintenance of such equipment should be conducted at least once a week. The verification of gas outlets should be conducted at least twice a day (especially during emission of large quantities of oily fumes). If it is found that the processing of oily fumes is not working well, cleaning and maintenance should proceed immediately. Furthermore, periodically check the pumps, and the quantity and operation of detergent should be conducted, in order to ensure the proper functioning of processing equipment.
- ◆ Electrostatic equipment for the exhaust of oily fumes
 - If the equipment does not have a self-cleaning system, its cleaning and maintenance should be conducted at least once a week. It is recommended that the verification of gas outlets should be conducted at least twice a day (especially during emission of large quantities of oily fumes). If it is found that the processing of oily fumes is not working well, cleaning should proceed immediately.
 - If the equipment has a self-cleaning system, the verification of gas outlets should be conducted at least once a day (especially during emission of large quantities of fumes). If it is found that the treatment of fumes is not working well, proper cleaning should proceed immediately.
- ◆ Smoke exhaust pipe
 - The cleaning, inspection and maintenance of the flue should be conducted at least once every six months.
- The head of the establishment must maintain in good condition the records of cleaning, inspection and maintenance, and should also be able to provide, at any time, at the request of the licensing authority and enforcement personnel.
- Clear procedures and guidelines with detailed information of relevant operation, cleaning, inspection, and maintenance of oily fumes processing equipment should be developed and available to the staff for the ease of their execution.

v. Fuel usage

- To minimize the impact on the environment, it is recommended that the relevant establishments use clean fuels, particularly petroleum gas, natural gas or other cleaner alternative energy, and avoid the consumption of industrial scrap, kerosene and firewood, etc.

- The control of pollution from catering establishment and similar establishments where scrap, kerosene and firewood are used as fuel, must also refer to "Guidelines for the pollution control of black fumes and particulate emitted from boiler or stove".
- vi. Secondary pollution control
- Waste resulting from the cleaning or maintenance of pollution control devices, namely, flying ash particles, collected waste grease, waste water from cleaning, discarded absorbing materials, etc., must be properly collected and processed so as not to cause secondary pollution.
- vii. Complaint handling mechanism
- It is recommended to develop a complaint handling mechanism for environmental pollution issues. In case any environmental pollution complaint is noted, the above developed procedures or mechanism should be followed so as to improve the situation as soon as possible.

The methods to be used for oily fumes density level tests in the exhaust flue must refer to the Appendix of national standards of PRC, GB 18483-2001: "Emission standard of cooking fume (preliminary)".

- (4) "Guidelines for the pollution control of black fumes and particulate emission from boiler or stove"
- i. General principles
- Black fumes emission from boiler or stove must neither exceed 6 minutes in any 4 hours; nor continue for more than 3 minutes at one time. Emitting black fumes is defined as discharging smoke which is consistent with the black color shown in Ringelmann Chart Shade No.1 or even darker than that color.
 - Exhaust emission of carbon black particles from the boiler or stove should be controlled at a level lower than 22mg/m³.
 - According to the principles of pollution prevention, suitable approaches should be adopted to avoid possible conflicts with existing places (such as residential buildings etc.) and residents prior to the setup of the boiler or stove and of the chimney discharging waste gas. Assessment of the surrounding environment and effective control measures should be considered and incorporated at the planning stage. Pollutants discharged from the boiler or stove should be minimized to ensure the air quality of the surrounding area.
- ii. The design of pollution control facilities
- The combustion of industrial diesel and fuel with high impurities could easily lead to the discharge of pollutants and adversely affect air quality. Thus, it is recommended to install effective black fumes and particulate pollution control facilities at the relevant establishments to reduce the discharge of pollutants. Meanwhile, it is necessary to maintain proper functioning of the relevant pollution control facilities during operation.

- iii. The design of chimney or exhaust outlet
 - The treated waste gas should emit through a dedicated venting system. Appropriate distance between exhaust outlet and sensitive objects (such as residential buildings) and residents should be set so that the exhaust gas can be properly diffused in open area.
 - In general, the exhaust outlet should be set above the top of the building. However, consideration should be given to relative height of surrounding buildings for the purpose of minimizing the adverse effect to the neighboring sensitive objects. Regarding to the exhaust outlet which locates above the top of building, it is recommended that it should be situated at least 3m higher than the topmost point of the building or surrounding buildings. Generally the waste gas should be expelled in a vertical upward direction.

- iv. The operation and management of pollution control facilities
 - The boiler and stove should be maintained in good operating condition during daily operations in order to avoid carbon debris deposited inside the pipes.
 - The jet burner of boiler or stove should be inspected and cleaned frequently. A correct ratio between air and fuel should be maintained according to the relevant operating manual. The blower filter screen should always keep unblocked.
 - Operation and functioning of the boiler or stove should be conducted in accordance with the appropriate procedure or the procedure recommended by the manufacturer to prevent any air pollution caused by improper operation.
 - It is recommended to regularly monitor the efficiency of pollution control facilities and the emission of black fumes and particulate from the chimney or exhaust outlet. Appropriate maintenance measures such as regular cleaning of the chimney and relevant exhaust ducts and particulate control facilities should be taken. Inspection, repair and maintenance of related facilities should be conducted by professionals so as to ensure the treatment efficiency. Besides, it is necessary to record the relevant inspection, repair and maintenance information and the above records should be kept properly.
 - If any particulate pollution control facilities are installed, it is recommended to conduct the cleaning and inspection at least twice every week. Meanwhile, it is also recommended to examine the chimney or exhaust outlet at least once every day (especially when the boiler reaches its maximum load). The frequency of cleaning of the chimney or exhaust duct should depend on the actual operation of the boiler or stove. It is recommended to conduct the cleaning, inspection or maintenance at least once every three months.
 - Clear procedures and guidelines with detailed information of relevant operation, cleaning, maintenance and routine inspection of boiler or stove should be developed and available to all involved staff for the ease of their execution.

- v. Fuel usage
 - In order to reduce the impact on the environment, appropriate use of environmentally friendly fuels, such as liquefied petroleum gas (LPG), natural gas, diesel and gasoline of which the sulphur content is equal or lower than 0.5%, is highly recommended to reduce the possibility of discharging black fumes and

particulate through the boiler or stove exhausts.

vi. Secondary pollution control

- The byproducts including ash particles and sewage produced during the process of cleaning or maintenance of relevant pollution control facilities should be collected and treated properly to prevent secondary pollution.

vii. Complaint handling mechanism

- It is recommended to develop a complaint handling mechanism for environmental pollution issues. In case any environmental pollution complaint is noted, the above developed procedures or mechanism should be followed so as to improve the situation as soon as possible.

(5) "Guidelines for controlling light pollution originating from advertising panels, decorative illuminations and electronic monitors in the exterior of the building"

- i. The use of illuminated advertising panels, such as light boxes advertising and neon light advertising, LED advertising, and electronic monitors etc., is subject to the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment;
- ii. The use of decorative spotlights, which are designed for illuminating facades of establishments or the advertising panels, should comply with not only the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment, but also the guidelines for controlling light pollution from decorative spotlights;
- iii. The use of LED lights as the decorative lights of advertising panels should comply with not only the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment, but also the guidelines for controlling light pollution from LED light advertising;
- iv. The use of electronic monitors in an establishment should comply with not only the general guidelines for controlling light pollution from illuminated advertising panels and similar equipment, but also the guidelines for controlling light pollution from electronic monitors.

➤ "General guidelines for controlling light pollution from illuminated advertising panels and similar equipment"

- The application of the proper amount of decorative lights serves can not only beautify the advertising panels, but also prevent light pollution and save energy. The head of an establishment must have a thorough knowledge and assessment of the site before installing illuminated advertising panels. Moreover, the simultaneous operation of similar lighting facilities effectively contributes to the illumination of the area's environment, even leading to excessive lighting. Therefore, the head of an establishment must take these factors into consideration before such installation and take effective measures to avoid light pollution in the future.
- The installation of lighting devices should be designed to prevent the light from directly hitting the residential buildings and similar sites that are easily affected by lighting. Meanwhile, the positions and angles of lighting devices should be adjusted to ensure that the vertical

illumination projecting over the windows or doors of the neighboring residential houses is not more than 4 lx.

- It is suggested that advertising panels or decorative lighting should be set to a lower intensity level or turned off in the period between 23 p.m. and 6 a.m. the next day. Avoid projecting highlights or dynamic images that blink or change very frequently. Moreover, all the lighting equipment used in advertising panels or for decorative purposes should have the function of adjusting light levels. It is recommended to set a lighting adjustment mechanism for common days and public holidays, in order to reduce the environmental impact on the surrounding areas and save energy.
 - It is suggested that an establishment should properly store the lighting data and technical information of all the lighting equipment, for the information of the competent authorities as required.
- "Guidelines for controlling light pollution from decorative spotlights"
- Before the installation of spotlights, it is essential to properly define the position and angle of the spotlight, as well as consider about taking suitable measures, such as installing cover or baffle to ensure that light is actually projected at the indicated points.
 - The number of spotlights and their positions should be planned properly in order to avoid the situation that there are many lights lighting the same point.
 - Avoid installing spotlights or floor lights with elevation angle, to prevent the emission of light that can reach the neighboring residential buildings, and to reduce the impact on the sky at night, especially on astronomical observations.
 - Avoid the focus of lighting directly on materials with high levels of reflection (such as metal or stainless steel).
- Guidelines for controlling light pollution from LED light advertising.
- Since the LED lights are highly focused, resulting in great contrast lights that may cause discomfort to residents, the lighting level of this type of advertising lights at night should not exceed 400 cd/m².
 - It is recommended that the interval between two blinks of the LED lights should be no less than 1 second. It is also recommended to use less red and white lights.
 - It is recommended to install a suitable insulation board upon advertising panels, for example, plastic plate with low transparency, or other optical dispersion devices in order to avoid dazzling lights.
 - For LED advertising installed close to residential buildings or sensitive objects, it is recommended to make a full consideration and evaluation before installation, and adopt effective measures to avoid the impact by the lights on the surrounding sensitive objects.
- Guidelines for controlling light pollution from electronic monitors
- Given the fact that frequent change of pictures of electronic monitors may lead to light pollution and have been the subject of complaints, it is recommended that before the installation of monitors due

consideration and evaluation should be made. The lighting level of monitors at night should not exceed 400 cd/m².

- For electronic monitors installed near residential buildings or sensitive objects, it is suggested that the monitors should be turned off in the period between 23 p.m. and 6 a.m. the next day.
- Electronic monitors equipped with speakers should comply with the requirements of Law No.8/2014 "Prevention and Control of Environmental Noise". Appropriate measures should also be taken to ensure residents of neighboring buildings or places that are more susceptible to noise, are not affected by disturbing noises emitted by the speakers, especially the low-frequency sounds.

(6) Guidelines for controlling sewage pollution

- Establishments must install proper equipment to ensure the water quality of sewage that discharged into sewage drainage conforms to requirements of Decree-Law No. 46/96/M of 19 August, Macao Water Supply and Drainage Regulations.
- Periodical inspection, clearance, maintenance and repair of relevant pollution controlling equipment must be carried out to ensure equipment efficiency.
- To avoid environmental pollution, establishments must not discharge sewage and waste oil into rain pipes or nearby streets, and must gather and handle waste oil in a proper and effective way.
- When it is feasible, it is recommended that water saving equipment, such as water saving tap, defroster, toilet, etc., should be installed; water saving measures, such as avoiding prolonged opening of the tap for cleaning food or thawing, taking advantage of the water used in cleaning food and thawing etc., should be adopted in order to conserve water and reduce costs.

Notes: The contents related to the environmental protection legislation and pollution control guidance of Macao contained in the Guidelines, may be timely revised, updated and adjusted according to the concrete situations, so it is suggested that applicants consult, if necessary, the website of the Environmental Protection Bureau (www.dspa.gov.mo), for the latest information.

Appendix IV

Licensing List of Construction/Extension Project

1. Instruction for Approval Criteria and Administrative Procedure of the Construction/Extension Plan
2. Regulation of Conditions Relating to the Height of Buildings and the Constructability of Site (Executive guideline No.01/DSSOPT/2009)
3. Notices for Completing Description of the Separate Unit
4. Instructions for Preparing the Technical Softcopy
5. Instructions for Preparing the Spreadsheet Softcopy of Areas of Each Floor
6. Net Floor Area and Utilization Ratio ----Definitions and Concept
7. Private Projects - Instructions for Approval, Inspection and Operation of Elevator Equipment
8. Instructions for the Preparation of Construction/Extension Plan - Architecture
9. Instructions for the Preparation of Construction/Extension Plan - Electromechanical Engineering
10. Instructions for the Preparation of Construction/Extension Plan - Gas/Fuel
11. Instructions for the Preparation of Construction/Extension Plan - Civil Engineering
12. Instruction for Approval and Inspection System of Large Entertainment Facilities

Note: The architectural project guidelines and instructions in this appendix might be revised, altered or changed according to the concrete situations, so it is suggested that applicants refer to the website of DSSOPT (<http://www.dssopt.gov.mo>) for the latest information.

Appendix V

Occupational Safety and Health Checklist for “Karaoke” Establishments

Workplace		
1	Keep the workplace clean, tidy and dry.	
2	Clear corridor or passageway of obstructions.	
3	Fire escape routes and emergency exits must be kept clear.	
4	Goods must be stacked tidily and not too high.	
5	Should not work or store objects in public areas.	
6	Walls should be easy to clean and painted in non reflective and soft colors.	
7	Wall surface should be laid with waterproof ceramic tiles.	
8	Install a good drainage system in kitchen.	
9	Floor surface should be laid with non-slip tiles.	
10	Repair uneven floor.	
11	Water and spilled oil should be cleared up.	
12	Remove broken utensils immediately.	
13	Rubbish, broken glass, metal containers and food dregs should be disposed in durable, easy to clean and covered rubbish bins.	
14	Drinking water must be provided.	

First Aid Equipment		
15	Provide first aid box which contains specified quantities of first aid items in sufficient number.	
16	The names and contact numbers of persons responsible for the first aid box should be affixed to that facility. Such information should be written in Chinese and Portuguese. The responsible persons should regularly check the quantity and expiration date of items in the first aid box.	
17	First aid box should locate in a prominent location or easy of access.	

Electrical Safety		
18	Install/replace the electric plug/socket/cover.	
19	Waterproof plug should be used.	
20	Should not use adaptors with cracks or overheating signs.	
21	Avoid overloading the socket.	
22	Should not use electrical appliances which are over 220 volts in moist areas inside kitchen.	
23	All electrical appliances should be earthed.	
24	All electrical installations including electric cable, electric wire, socket (plug) and wall-mounted socket etc should be in good condition, clean and tidy.	
25	Ammeter should install in insulating metal case. Ammeter case should keep clean and tidy.	
26	Outer cover of electric cases should be earthed and properly covered the bare area so as to prevent electrical hazard.	
27	Apparatus which can cut and isolate voltage effective, such as circuit-breaker, fuse, automatic circuit breaker, etc, should be suitably located in the circuit.	
28	Mal-functioning appliance or damaged electric switch/wire should be taken out of service, put on warning sign and replaced or removed immediately.	
29	Electrical installations should be regularly checked and repaired. Have the records on file.	

Machinery Safety		
30	Install suitable machine guarding in dangerous parts (such as revolving shafts, calendar drums, the rotating parts of machinery, projections on revolving parts, cutting tools, press tools and dies and grinding wheels, etc).	
31	Operating instructions and safety guidelines should be displayed prominently.	
32	Machines should be turned off and unplugged during cleaning, checking and repairing.	

		Warning sign should be put up.
	33	Only people who have been formally trained and authorized, should be allowed to operate the machines.
	34	Machines should be regularly checked and repaired. Have the records on file.

Work at height		
	35	Use suitable work platforms when working at height
	36	Use safe ladders appropriately according to international standards.
	37	Use mobile elevating work platforms appropriately according to international standards.
	38	Use safety belt when working at height

Gas Cylinders		
	39	Gas cylinders should be put straight up and tighten.
	40	Replace the gas tube and pressure gauge.
	41	Gas cylinders should be appropriately labeled or painted in different colors.
	42	Check whether the liquefied petroleum gas-fired equipment is properly installed.
	43	All gas cylinders and accessories should be checked daily and keep record.

Fire Prevention		
	44	Inflammable materials, clothes and paper should be stored appropriately and away from sources of heat.
	45	Switches of the fuel supply system should be clearly labeled.
	46	All fire service installation and equipment should be regularly checked and repaired by qualified person. Have the records on file.
	47	The fuel supply system must be checked and maintained regularly. Have the records on file.
	48	Provide sufficient and appropriate fire extinguishers.
	49	Smoke lobby doors , emergency doors and fire escape routes must be kept clear.
	50	Smoke lobby doors should be closed at all the times, but not locked. Do not lock the emergency doors.

Cold Rooms		
	51	Cold rooms should have sufficient interior lighting.
	52	Cold rooms should incorporate safety design so that they can be opened from inside. Emergency call equipment should be fitted such as an alarm for contacting persons on duty.
	53	If employees need to work inside the cold room for long periods, they must wear sufficient clothing and gloves to withstand the low temperatures.
	54	The floor of cold rooms should be kept clean and dry.

Food Elevators		
	55	Should develop safety guidelines for the use of food elevators - these guidelines should be displayed prominently.
	56	There should be a safety signaling system for communication between different floors.
	57	The food elevator should have an interlock safety device, that is, the elevator can only be activated when door is closed.
	58	The door of food elevators should be kept closed at all times except when handling food.
	59	The food elevator should be checked and repaired regularly. Have the records on file.

Use and Store of Knives		
60	Knives should be placed on a suitable knife shelf when not in use.	
61	Knives should be placed properly. Edge of Knives should be covered.	
62	Knives should not be washed together with other utensils or instruments.	
63	Employees should wear protective clothing (gloves/aprons).	
64	Cutting should be done on a suitable cutting board placed on a firm table.	

Hot Objects		
65	Containers for hot objects should not be overfilled. Containers should be properly placed and avoid putting near the passageway.	
66	Saucepan handles should be kept away from aisles or out from hot stoves.	
67	Chefs should wear appropriate protective work clothes, aprons, shoes and gloves.	
68	Microwaves and ovens should be checked daily.	

Ventilation		
69	Install ventilation fan for better ventilation.	
70	Install ventilation system in poor ventilation area.	
71	Install local ventilation system to remove the interruptive or harmful pollutants in air.	
72	The hot environment (especially kitchen) should have an efficient ventilation system.	
73	Install local exhaust ventilation alongside stoves and ovens to facilitate heat removal.	
74	Install machine guarding at ventilator.	
75	Clean exhaust ventilation and exhaust pipe regularly.	

Chemical Use		
76	Chemicals should be properly stored.	
77	Containers should be covered securely.	
78	Labels showing the chemicals' names, their hazard classification and symbols, the hazardous conditions, and the safety measures must be affixed to the containers holding the chemicals.	
79	Use chemicals in well-ventilated area.	
80	Wear suitable personal protective equipment (mask/gloves) when using chemicals.	
81	Places where chemicals are stored should be away from high temperature or heat sources.	
82	No eating, drinking or smoking in places where chemicals are used or stored.	

Lighting		
83	Sufficient lighting must be provided	
84	More electronic lighting equipment must be installed	
85	Broken lighting equipment must be repaired	
86	Lighting equipment must be installed with protective covers	
87	The lighting equipment protective covers must be kept clean	

Noise		
88	Use quieter kitchen appliances.	
89	Isolate noisy machines and working procedures.	
90	Install muffler to the exhaust system	
91	In accordance with Decree-Law No. 34/93/M, Carry out the assessment of noise exposure at workplace.	

Personal Hygiene Facilities		
	92	Install ventilation fan at washroom.
	93	Install hand basin/toilet bowl.
	94	Repair hand basin/toilet bowl.
	95	Do not place other items in washroom.
	96	Washroom must be kept clean and dry.
	97	Covered rubbish bins, liquid soap, paper towels or hand-dryer must be provided.

Provide Suitable Personal Protective Equipment and Put Up Safety Signs		
	98	Provide suitable respirators.
	99	Provide suitable masks.
	100	Provide suitable eye protectors.
	101	Provide suitable ear protectors (earmuffs/earplugs).
	102	Provide suitable protective gloves.
	103	Provide suitable safety footwear.
	104	Provide suitable safety belts.
	105	Put up safety signs.

Occupational Health Medical Examination		
	106	In accordance with Decree-Law No. 34/93/M, should provide pre-employment and periodic medical examinations to workers who work in areas involving exposure to excessive noise.

In case of any discrepancy between English and Chinese versions of contents, the Chinese version shall prevail.