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Jurnal Pengabdian kepada Masyarakat  
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## Technical Assistance and Renovation Planning, Petompon Sub-district Hall, Gajahmungkur District, Semarang City

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### Abstract

This community service activity is carried out by identifying and inventorying problems with sub-district officials, discussing alternative solutions to problem-solving until the solution is selected, and then making pre-designed drawings, which are then carried out by presenting the results and submitting planning documents. After the pre-design drawings have been discussed and mutually agreed upon, a final renovation design and the required budget plan are created. The results of this Community Service are a Renovation Planning Document for the Petompon Sub-district Hall, which will guide government institutions in building and developing the building.

**Keywords:** Technical Assistance, Petompon Sub-district Hall, Renovation Plan.

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### INTRODUCTION

The sub-district or multi-purpose hall is a cultural and recreational facility used as a forum for community activities. This sub-district hall can be interpreted as a building that accommodates various related and complementary activities in achieving criteria related to the primary function of the building. The sub-district halls can be used as a forum to build the function and physical integration of the social components of society so that they can mutually support, complement and create a new harmonious environment [1] [2].

Apart from that, this building can also function as a building for government facilities and public services so that its use and management can be integrated according to its interests at different times. According to SNI 03-1733-2004 [3], Based on the scope of services, types of cultural and recreational facilities include:

1. community hall/meeting hall (ward unit service scale = 2,500 residents);
2. multipurpose hall (subdistrict unit service scale = 30,000 residents);
3. meeting hall/multipurpose building (sub-district unit service scale = 120,000 residents);

Petompon has provided cultural and recreational facilities like the Petompon Sub-district Hall. However, the current condition needs to be improved, and renovation is needed to meet community needs. This renovation planning needs to be accompanied by an expert. This is related to building design drawings that comply with architectural rules, calculating costs and the construction's technical implementation.

Taking into account the background of this situation, residents in the Petompon area, Gajahmungkur District, Semarang City, hope to be able to carry out excellent and representative planning for the renovation of the Petompon Sub-district Hall with the help of appropriate experts so that it is hoped that they will obtain excellent and representative planning results, as well as technically the construction is also safe and reliable. Regarding the need for experts in this planning, the residents of Petompon Village, through the Petompon Community Empowerment Institute, collaborated with the Faculty of Engineering, Semarang State University, to draw up planning drawings for the renovation of the Petompon Sub-district Hall.

As the Community Service Team of the Faculty of Engineering, Semarang State University, the Tri Dharma of Higher Education activities are carried out by taking these conditions into account, taking part by implementing the Community Service Program. This activity is intended to provide technical assistance and assistance to the residents of Petompon through the Petompon Community Empowerment Institute in the form of planning and designing the renovation of the Petompon Sub-district Hall, Gajahmungkur District, Semarang City.

### METHOD

Petompon Sub-district Hall is located on Kelud Utara IV No.1 Street, Petompon, Gajahmungkur District, Semarang City. This location is approximately 8 km from Semarang State University, a tertiary institution or service team agency. This activity was implemented from May to September 2023.

### **1. Implementation of Activities**

The procedures and implementation stages for this activity can be described as follows:

1. Field survey for data collection and site measurements. Data collection also includes the condition of existing buildings, including electrical installation networks and others. The survey will be carried out with the Petompon administrators who assist students so that their needs and desired development plans can be identified through interviews and discussions.
2. Compile measurement data, photo documentation, videos, etc., as material for the following analysis process.
3. Carry out site analysis and space analysis.  
Site analysis activities are conducting field observations, direct observations related to existing conditions in circulation aspects, external and internal visual aspects, etc. It is essential to analyze outdoor space to obtain design orientation and carry out post-occupancy or post-construction evaluations on the aspects studied[4][5]. Meanwhile, space analysis (programming) includes identifying activities to be accommodated, space requirements, space standards and space programs. This analysis is carried out to determine potential users' goals, needs and concerns. Buildings will function well and efficiently if they follow their function[6].
4. The design stage for implementing various space requirements on the available site is the preparation of zoning and circulation. Zoning or space grouping is needed to organize space according to the nature and group of spaces and circulation patterns to arrange effective and efficient spatial layout patterns. Zoning in multi-purpose buildings is usually divided into 4, namely: private zone, semi-public zone, public zone and service zone. For private areas, namely particular stage areas such as changing rooms, preparation rooms, audio rooms and others. Meanwhile, there is a stage for the semi-public area that directly faces the public area, namely the visitor and seating areas. In contrast, the service area has a toilet and utility room [7]. Then, proceed with making mass compositions from the zoning and circulation concepts that have been prepared so that a building shape that suits the demands and needs of the design can be created.
5. Create pre-design drawings in the form of site plans, plans, and perspectives so that they are visually easy for potential users to understand.
6. From the pre-design materials that have been prepared, a presentation and discussion will be carried out with all teams and potential users to obtain input and suggestions for improving the pre-design.
7. After receiving approval for the pre-design drawings, detailed drawings need to be made immediately for the construction implementation drawings.
8. From the results of the revisions carried out, exposure two and discussion are needed to clarify the design to meet needs and demands

### **2. Partner Participation**

Community Service Partners are actively involved and participate in every service activity, starting from the preparation stage presentation to handing over the results of the renovation design for the Petompon Sub-district Hall, Semarang City;

1. Preparation Stage  
Partners actively provide information on the problems they face.
2. Data Identification and Inventory Survey Stage  
Partners actively accompany the service team during identification surveys and data inventory.
3. Exposure and Discussion Stage of Alternative Problem-solving Solutions  
Partners actively participate in conveying problems and suggestions for solutions.
4. Pre-Design Image Exposure Stage;

Partners are actively involved in providing corrections, input, and suggestions to improve the Sub-district Hall renovation plan drawings.

## **RESULTS AND DISCUSSION**

Based on the background explained above, this community service activity has been carried out and produced the following results:

### **A. Preparation and Problem Identification Stage**

The preparation stage begins with briefing the Community Service team regarding the problems that may be faced when handling the design of the Petompon Sub-district Hall. Next, the Community Service team went to the Petompon Sub-district Hall, Semarang City, to complete the initial stages, namely identifying and inventorying problems. The Community Service Team, consisting of lecturers and students accompanied by the

village head and sub-district staff, visited the hall and identified problems.

Identification and inventory of problems were carried out by surveying the sub-district hall, extracting information regarding the need for technical guidance on renovating the sub-district hall, deepening existing conditions, measuring spaces, and making initial sketches.

The Petompon Sub-district Hall is next to the Petompon Sub-district Office. Accessibility to the Sub-district Hall comes from the direction of the front of the building (main entrance). From the side entrance, there is also accessibility to the hall, but it is not utilized optimally. Accessibility can be interpreted as the ease with which someone can access something, be it an object, service, place, or others. Place accessibility is closely related to the reach and reach of a place's location to other places and public service centres [8]. Accessibility at the Petompon Sub-district Hall is as seen in Figure 1 and Figure 2 below:



*Figure 1. Main Entrance of Petompon Sub-district Hall*



*Figure 2. Side Entrance of Petompon Sub-district Hall*

The condition of the building can also be considered poor. This building, which measures approximately 10 x 21 meters, has many roof leaks and inadequate electrical installation arrangements. So renovation is needed to meet the needs of community activities and be more comfortable to use.

As shown in Figure 1 & 2 above, the walkways around the hall need to be adequately utilised. This corridor is uncomfortable to pass through because it is used for storing goods, so it feels cramped. The interior condition of the building could be better maintained. This building does not use a ceiling, also, goods should be stored separately.



*Figure 3. Exterior condition of the Petompon Sub-district Hall*



*Figure 4. Interior condition of Petompon Sub-district Hall*

The results of the identification and inventory of problems are several things that were realized in the design idea for the renovation of the Petompon Sub-district Hall, including: a). Procurement of ceilings, b). Expansion to the right of the building, c). Repairs to the stage and preparation room, as well as d). Rearrangement (layout) of the supporting rooms of the sub-district hall.

## **B. Initial Stage Discussion**

Presentation and Submission of the Renovation Design for the Petompon Sub-district Hall After the design for the initial stage of the renovation of the Petompon Sub-district Hall, Semarang City, was completed, the service team gave a presentation to partners. The presentation explained the results of the ideas and designs for the renovation of the Petompon Sub-district Hall, which were presented directly to the Petompon Village Head and staff. The presentation was carried out through meetings and discussions between the service team and the

Petompon Village Head and staff at the Petompon Village Office, Semarang City.



Figure 5. Initial Stage Discussion at Petompon Sub-district Hall

### C. Presentation and Submission of Renovation Design for Petompon Sub-district Hall

After going through the initial exposure stage between the service team and partners, the results of the technical guidance for the renovation of the Petompon Sub-district Hall in Semarang City became adequate and in line with what had been expected. The agreements between the service team and partners agreed upon at the final presentation include existing drawings, floor plans, views and sections, and perspective drawings of the renovation plan/design results.



Figure 6. Final Exposure of Petompon Sub-district Hall



Figure 7. Handover of Renovation Design for Petompon Sub-district Hall

#### 1). Existing Drawing

The existing drawing explains the current condition of Patemon Sub-district Hall, Semarang City before it was renovated. The existing drawing is in the form of a floor plan that technically explains the space of the Petompon Sub-district Hall, the dimensions of which were obtained based on the initial survey results. Apart from being a guide in making renovation designs, existing drawings help facilitate an understanding of the differences between initial (existing) conditions and the final result.

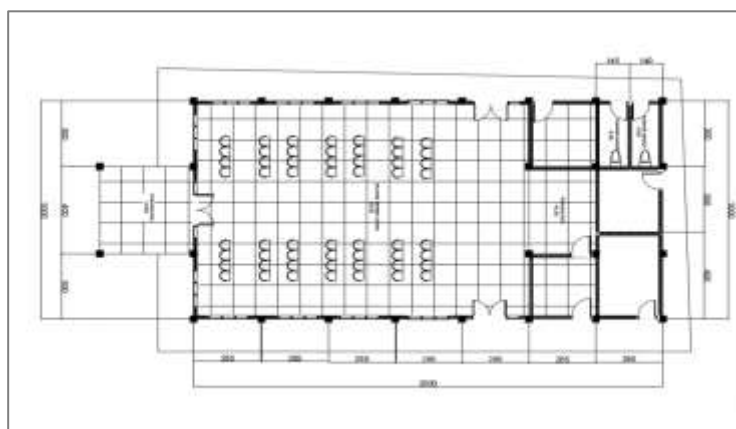


Figure 8. Existing Floor Plan of Petompon Sub-district Hall, Semarang City

#### 2). Floor Plans, Views and Building Sections

The Floor Plan, View and Sectional Drawing is a two-dimensional explanation of the results of the renovation of the Petompon Sub-district Hall design. These drawings make understanding the visual images of



construction observers and actors in future construction implementation easier. They are also used to know every dimension and layout detail of the village hall rooms.

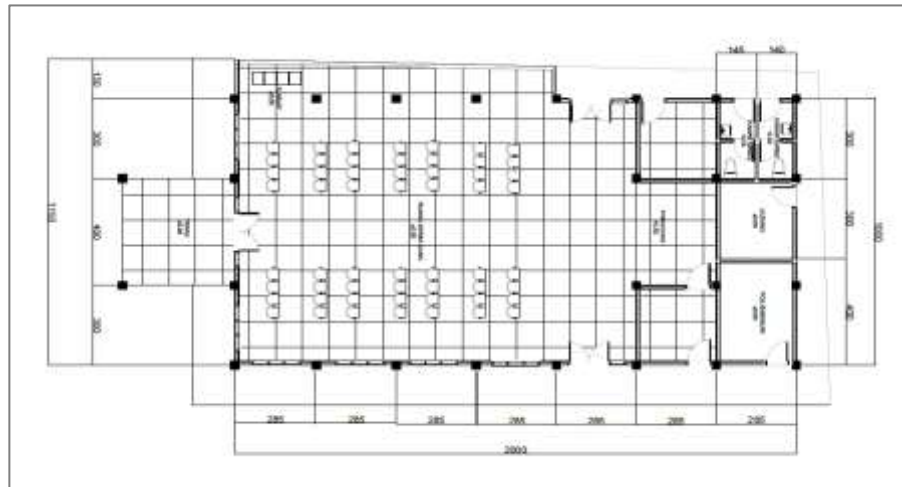


Figure 9. Renovation Floor Plan for Petompon Sub-district Hall, Semarang City



Figure 10. Right Side View



Figure 11. Left Side View

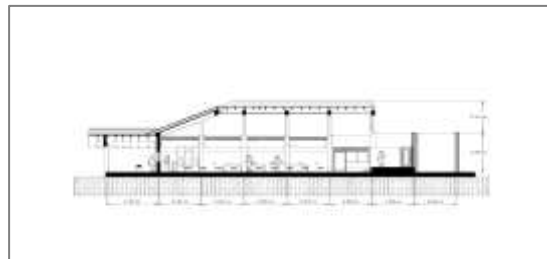


Figure 12. Building Section (1)

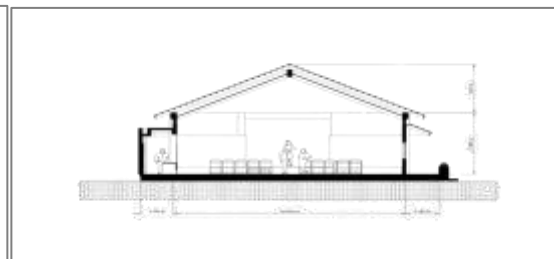


Figure 13. Building Section (2)

### 3). Perspective Drawings

Perspective drawings help observers understand a three-dimensional design depiction. Perspective drawings represent floor plans, views, and building sections that have been made in their entirety so that they are presented from various interior and exterior points of view. Some of the results of the renovation design for the Petompon Sub-district Hall, Semarang City, can be seen and understood through the following perspective drawing.

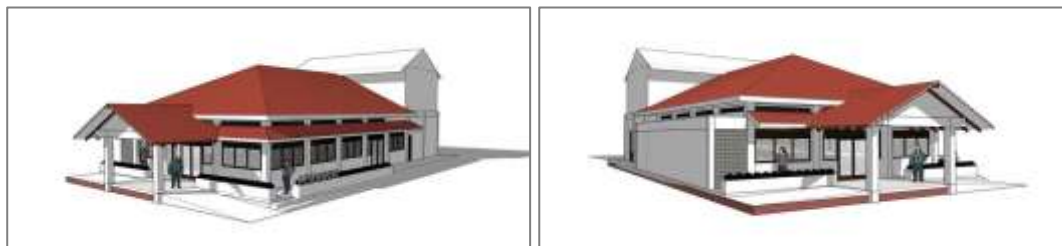


Figure 14. Exterior perspective of Petompon Sub-district Hall, Semarang City

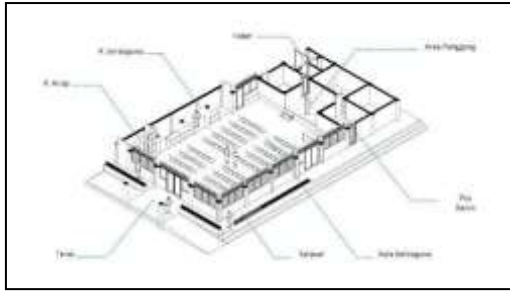


Figure 15. Room Layout Renovation Perspective



Figure 16. Interior Renovation Perspective



Figure 17. Perspective of Archive Room Renovation Plan



Figure 18. Perspective of Toilet Renovation Plan

## CONCLUSION

Through this service activity, it can be concluded that it can support the improvement of public facilities following their functions and needs as well as architectural principles. It can be seen on a planning document for renovating the Petompon Sub-district Hall, Gajahmungkur, Semarang.

## ACKNOWLEDGMENT

Community Service with the title "Technical Assistance and Renovation Planning, Petompon Sub-district Hall, Gajahmungkur District, Semarang City" is a 2023 DPA Funding program, Faculty of Engineering, Universitas Negeri Semarang, Contract Number B/5949/UN37.1.5/PG/2023, which is established with the residents of Petompon through the Community Empowerment Institute. The Service Team would like to thank the UNNES Engineering Faculty and the residents of Petompon through the Community Empowerment Institute for the support and cooperation of all parties, so this service activity could be carried out well.

## REFERENCES

- [1] H. Soegoto *et al.*, "PENDAMPINGAN RENOVASI DESAIN GEDUNG SERBAGUNA KELURAHAN LEBAKGEDE," *Indones. Community Serv. Empower. J.*, vol. 3, no. 3, pp. 242–249, 2022.
- [2] N. Istikaanah, "Optimasi Lama Pemanfaatan Ruang Serbaguna sebagai Sarana Pendidikan dan Keagamaan," *J. MathGram Mat.*, vol. 2, no. 2, 2017.
- [3] SNI 03-1733-2004, "Fasilitas umum dan fasilitas sosial," 2004
- [4] A. Adinda, Sefriyandri, F. S. Angraini, and M. Agustini, "PENGARUH TAPAK PADA GEDUNG KESENIAN BALIKPAPAN," *J. Arsit. Disp.*, vol. 01, no. 02, pp. 66–75, 2022.
- [5] B. Laksito, *Metode Perencanaan & Perancangan Arsitektur (2nd ed.)*. Swadaya Grup., 2014.
- [6] B. Sandi, R. Body, R. Apdeni, and J. Silalahi, "Perencanaan Pembangunan Workshop & Gedung Aula Serbaguna Smk Negeri 4 Pariaman Berdasarkan Standar Nasional Pendidikan," *CIVED (Journal Civ. Eng. Vocat. Educ.*, vol. 5, no. 1, 2018, [Online]. Available: <http://ejournal.unp.ac.id/index.php/cived/article/view/9896%0Ahttp://ejournal.unp.ac.id/index.php/cived/article/viewFile/9896/7366>
- [7] M. G. Maula and W. I. Tyas, "Penerapan Tema Arsitektur Modern pada Rancangan Creative Islamic Center Sambas," in *e-Proceeding Institut Teknologi NasionalBandung*, 2022, vol. 2, no. 2.
- [8] F. H. Hendra and A. N. Ramadhani, "Peningkatan Aksesibilitas dan Perbaikan Fasilitas Umum di Lingkungan RT 02 RW 14 Manukan Subur , Kelurahan Manukan Kulon, Kecamatan Tandes, Kota Surabaya," in *Prosiding Seminar Nasional Sains dan Teknologi Terapan X 2022*, 2022, pp. 1–10.