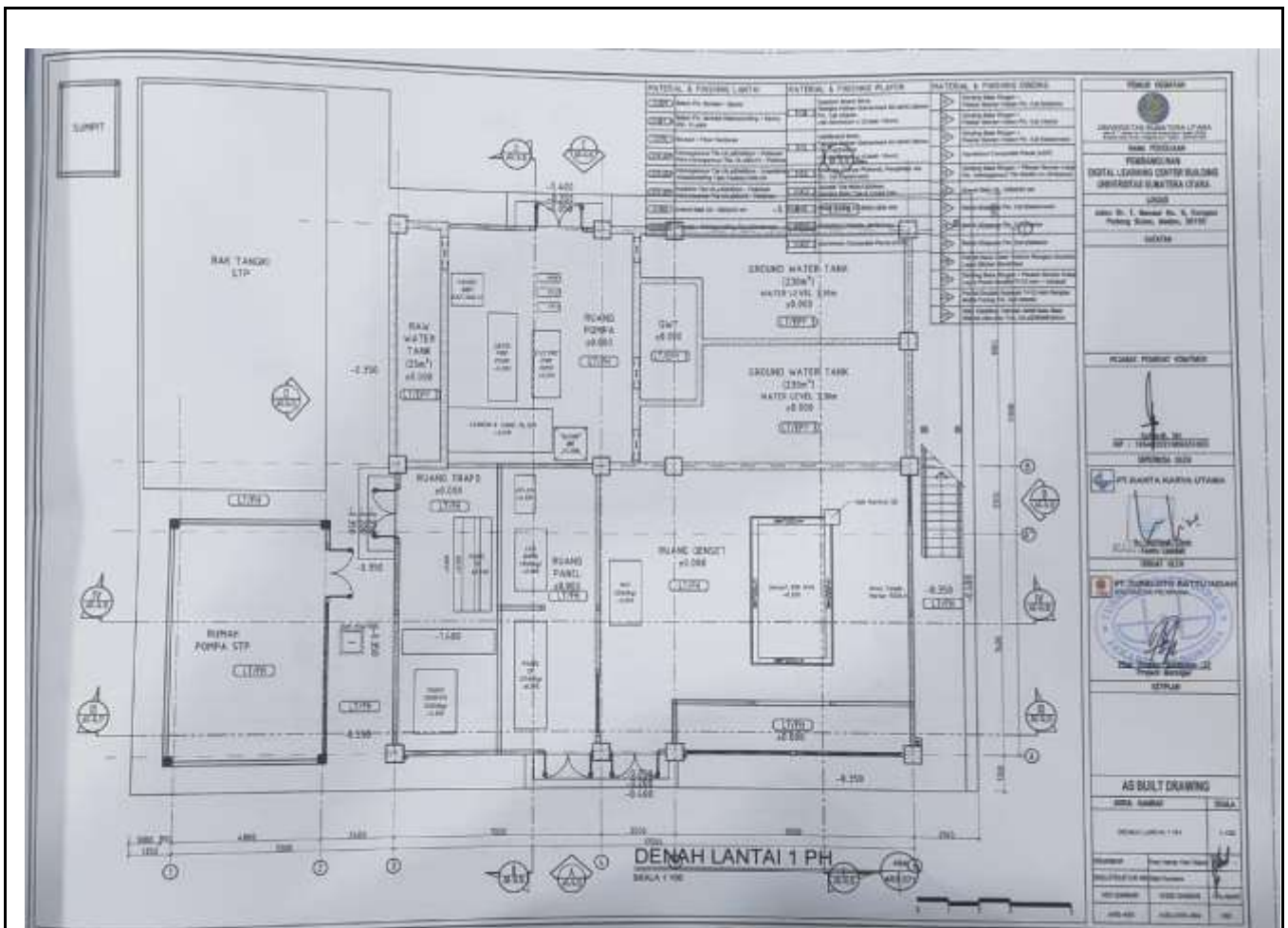


Template for Evidence(s)

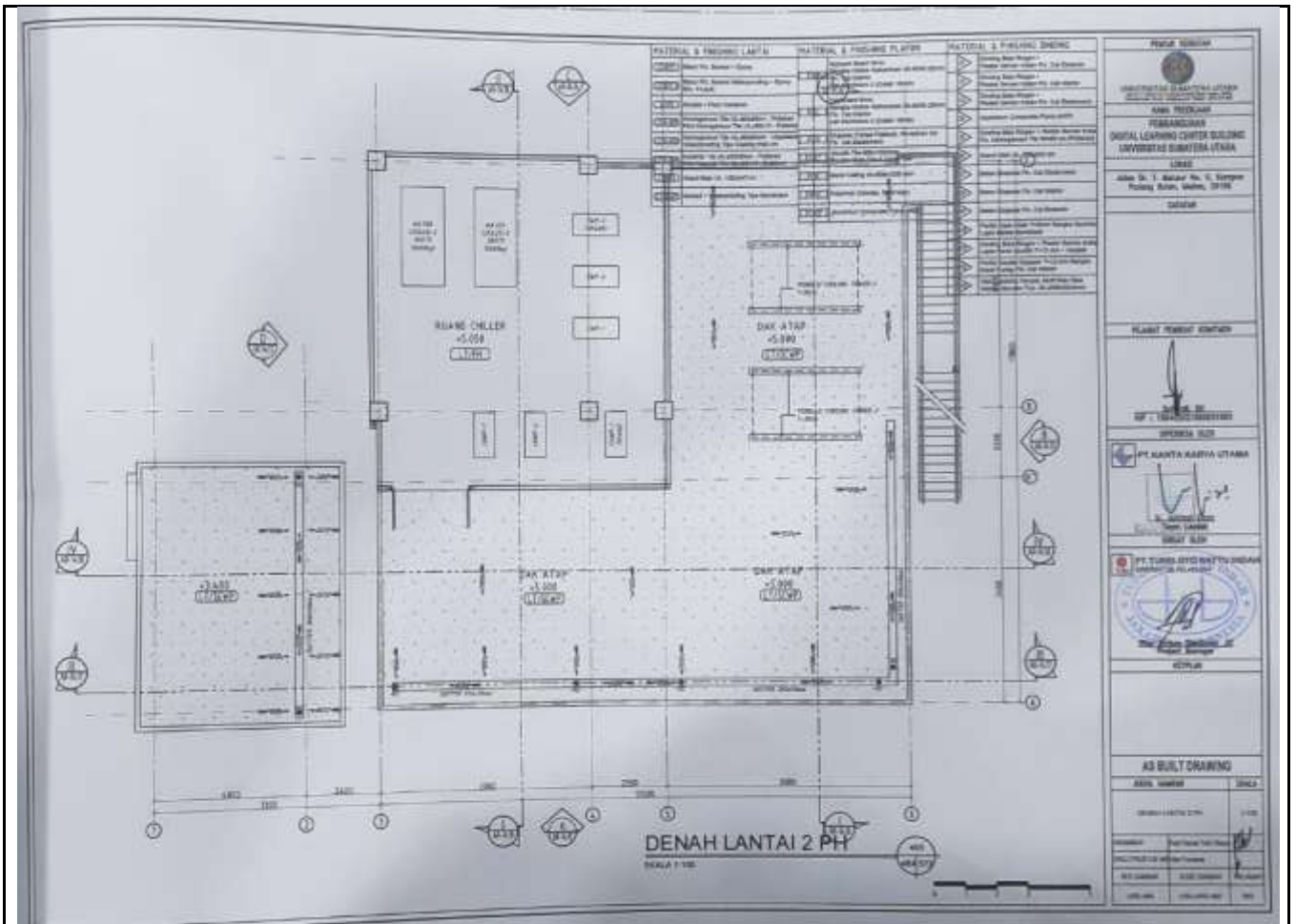
University : Universitas Sumatera Utara
 Country : Indonesia
 Web Address : <https://www.usu.ac.id>

[4] Water (WR)

[4.5] Water pollution control in campus area



1a. 1st Floor Plan of Sewage Treatment Plant (STP) Digital Learning Center Building



1b. 2nd Floor Plan of Sewage Treatment Plant (STP) Digital Learning Center Building



2. Monitoring of wastewater quality at STP Digital Learning Center Building in June 2023, namely SUCOFINDO

Laporan No. 052814CLACAG
Tanggal: 19 Juni 2023

SUCOFINDO
LAPORAN ANALISIS

Contoh uji ini diserahkan dan diidentifikasi oleh pelanggan sebagai:

PELANGGAN : PT. SATRIA NUSA ENGINEERING
J. RA Kartini Dalam II No. 11 Madras Hulu, Medan Polonia

JENIS CONTOH : AIR LIMBAH

TANGGAL PENERIMAAN : 07 Juni 2023

TANGGAL ANALISA : 07 Juni 2023 sampai 15 Juni 2023

ANALISA / UJI : pH di Laboratorium, Amoniak (NH₃-N), Total Padatan Tersuspensi, Minyak dan Lemak, COD dgn K₂Cr₂O₇, BOD 5 hari 20 °C, Total Coliform

KETERANGAN CONTOH : Bentuk : Cairan
Vol : 1,0 liter
Kemasan : Botol plastik bersel
1 (satu) contoh

IDENTIFIKASI CONTOH : OUTLET-STP USU GEDUNG DIGITAL CENTER BUILDING

REFERENSI : -

Hasil:

PARAMETER	SATUAN	HASIL	METODA*
pH di Laboratorium	-	7,04	4500-IF-B
Amoniak (NH ₃ -N)	mg/l	0,47	4500-NH ₃ -F
Total Padatan Tersuspensi	mg/l	23	2540 G
Minyak dan Lemak	mg/l	<2	SNI 6989-10 2011
COD dgn K ₂ Cr ₂ O ₇	mg/l	50,76	5220 C
BOD 5 hari 20 °C	mg/l	21,8	5210 B
Total Coliform	CFU/100ml	490	9222 B

* Standard methods, 23rd edition 2017, APHA-AWWA-WEF
* Isih keef dari MDL

Hasil uji ini hanya berlaku dengan contoh uji yang diserahkan hasil uji, apa dan kapan / verifikasi hasil uji total, dapat dipertimbangkan dengan cara lain. Hasil dalam bentuk print-out dan dengan penandaan terdapat selubung dari Laboratorium SUCOFINDO.

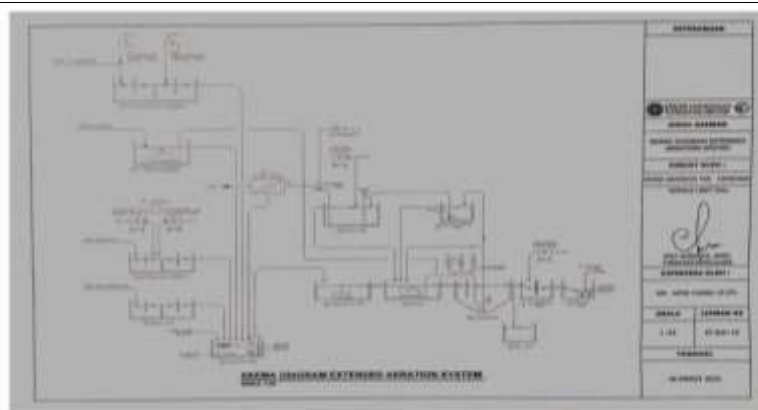
Persediaan Fasilitas/Laporan ini berlaku pada Tanggal dan Keterangan Lamin laporan jasa PT SUCOFINDO, yang selubungnya dapat dipertimbangkan dan penandaan ini dapat dilihat pada www.sucofindo.co.id

1701.03.23.002062

Bidang Pengujian
Kualitas Insan
SUCOFINDO

4477707
SC1-20074

3. The results of sampling the wastewater quality of STP Digital Learning Center Building in July 2023



Sumber : Rumah Sakit USU, 2022

Keterangan :

- | | | |
|-------------------------------------|-------------------------|------------------|
| 1. Neutralization Chamber 1 | 7. Aeration | 13. Mixing Tank |
| 2. Aeration Laundry (Pre-treatment) | 8. Sedimentation | 14. Filter Press |
| 3. Neutralization Chamber 2 | 9. Chlorination Tank | |
| 4. Grease Trap | 10. Fish Pond | |
| 5. Collecting Tank | 11. Sludge Holding Tank | |
| 6. Equalization Tank | 12. Effluent Tank | |

4a. USU Hospital wastewater treatment diagram schematic



4b. Monitoring of wastewater quality at USU Hospital IPAL conducted by a third party, namely SUCOFINDO and inspection conducted by North Sumatra DLH

Description:

1. The presence of STP Digital Learning Center Building USU functions as a wastewater treatment site generated by activities at USU, after the wastewater has been treated it will be discharged into water bodies around USU. This STP Digital Learning Center Building processes feces, urine, and gray water which is used for laundry and bathrooms
2. STP Digital Learning Center Building wastewater quality monitoring will be carried out in June 2023, the monitoring is carried out by PT SUCOFINDO.
3. USU monitors the quality of wastewater from the STP Digital Learning Center Building in June 2023 with the pollutant parameters tested are pH, Ammonia (NH₃), Total Suspended Solids, Oil and Fat, COD, BOD and Total Coliform. The results of sampling the quality of wastewater from the STP Digital Learning Center Building in June 2023 show that all parameters still meet the quality standards of the Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P.68/Menlhk/Setjen/Kum.1/8/2016 concerning Water Quality Standards Domestic Waste.



4. The existence of WWTPs for USU Hospital is to treat wastewater before being discharged into water bodies to maintain surface water quality.
5. Monitoring the quality of wastewater from the USU Hospital is carried out by a third party, namely Sucofindo and an inspection has also been carried out by the DLH North Sumatra Province which states that the results of the effluent test parameters from the USU Hospital WWTP still meet the wastewater quality standards

Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):

<https://greencampus.usu.ac.id/index.php/id/green-campus/bidang/bidang-air>