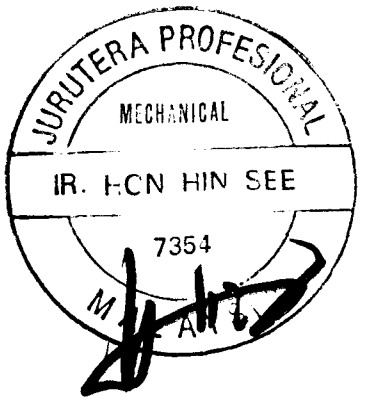
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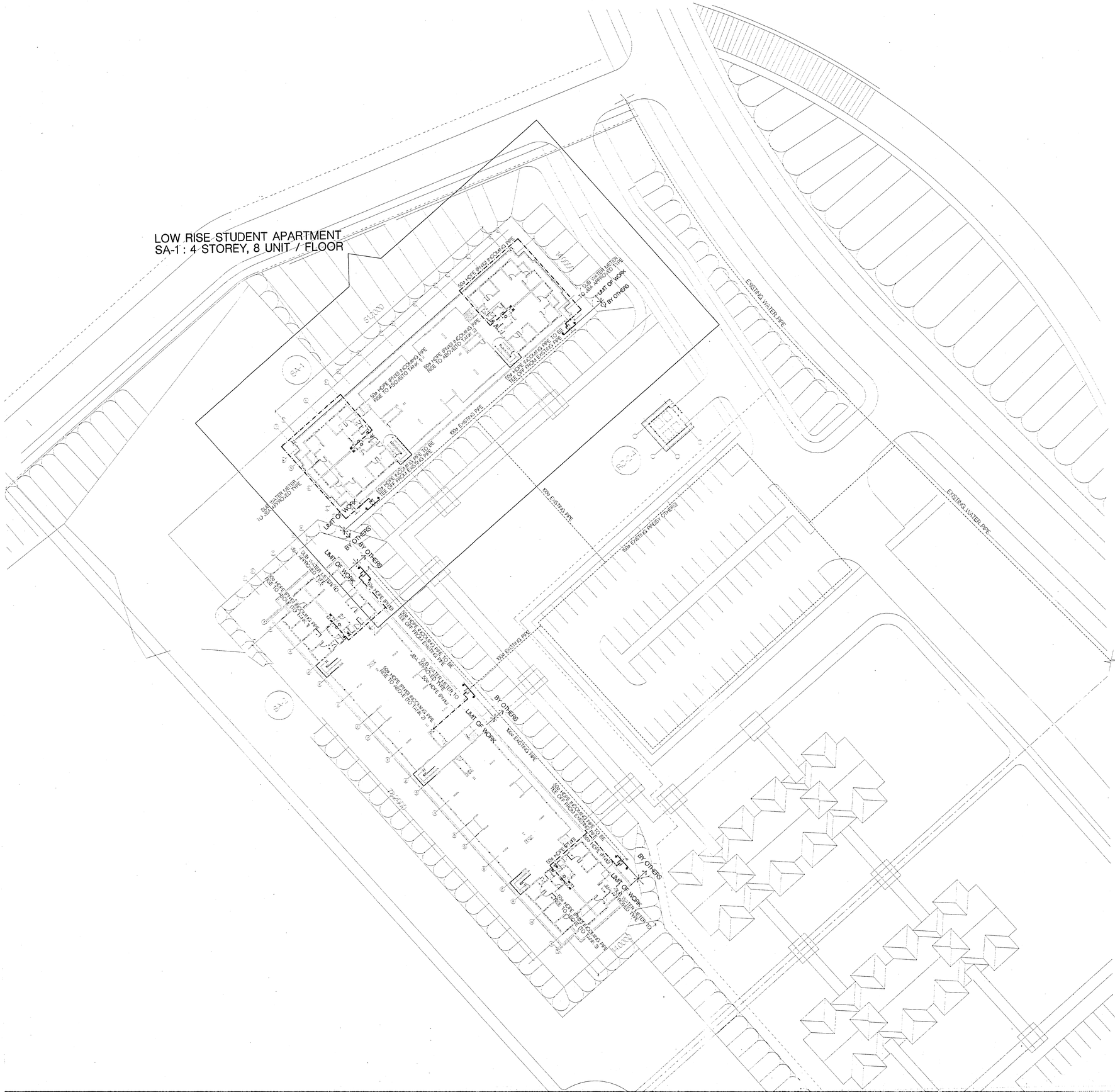
B) AS-BUILT DRAWINGS

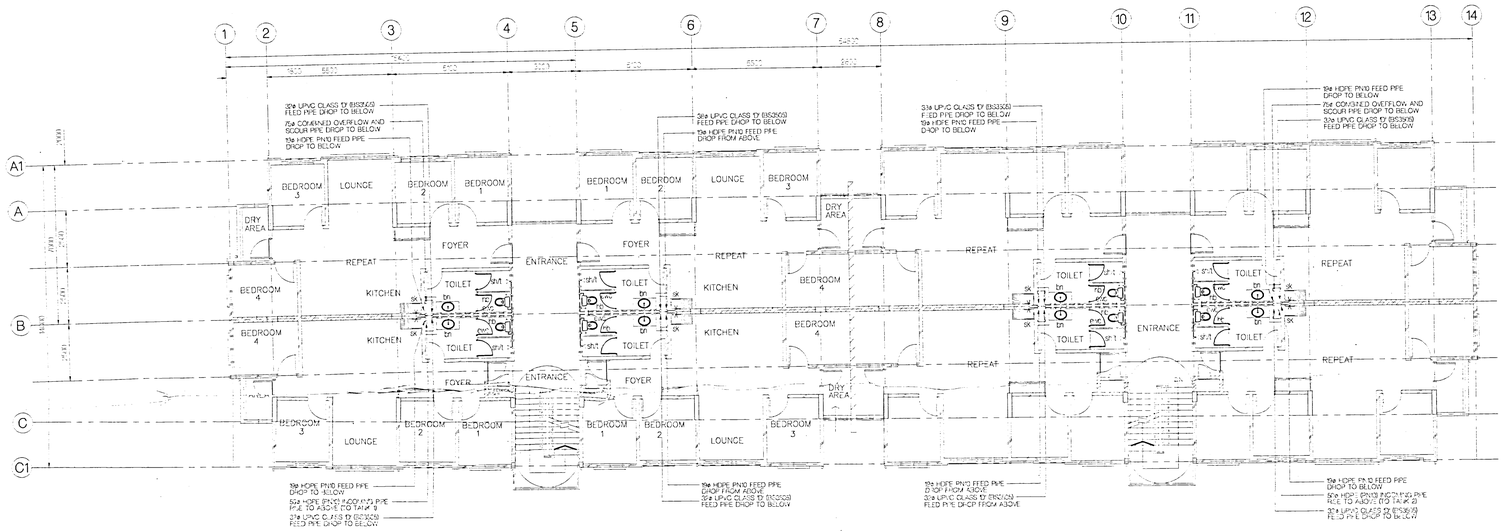
i) As-Built Drawings

ii) Testing & Commissioning Result

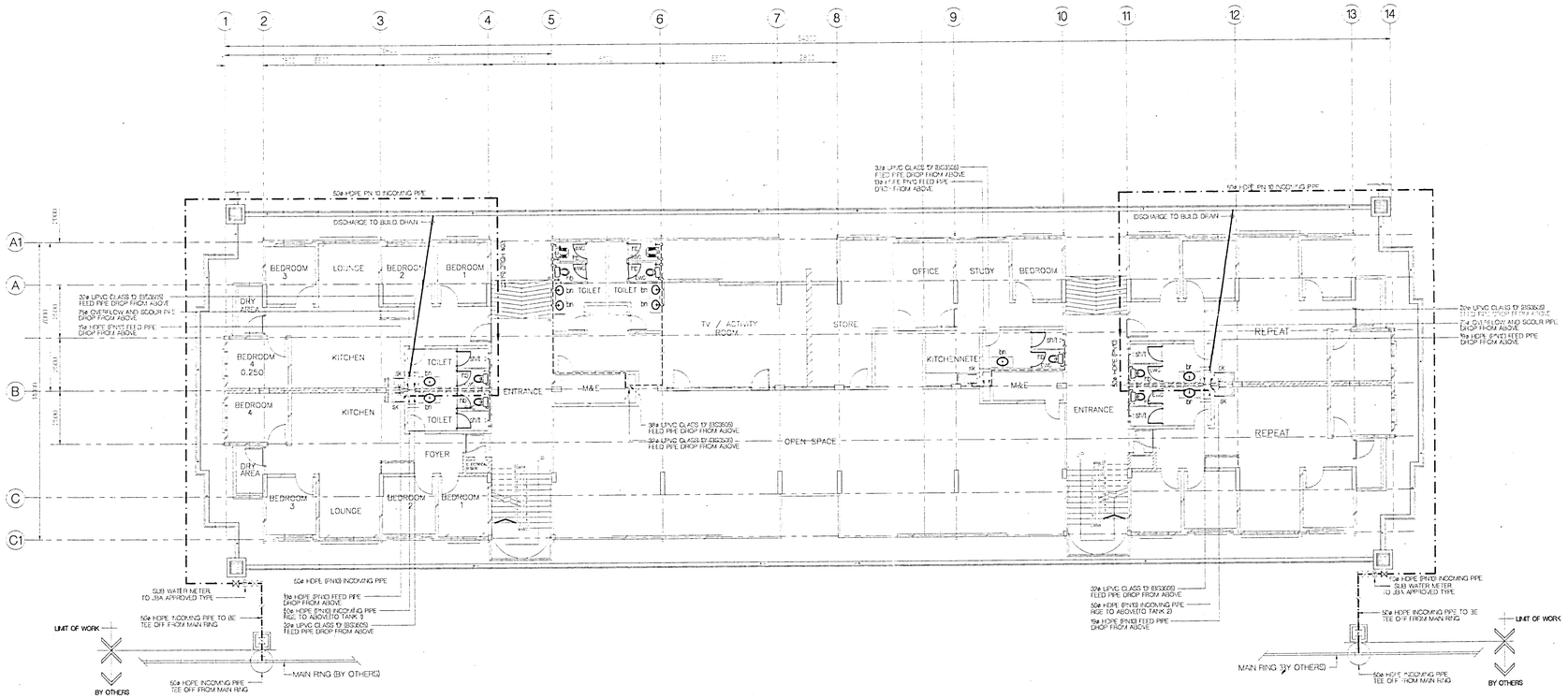


i). As-Built Drawings


LOW RISE STUDENT APARTMENT
SA-1 : 4 STOREY, 8 UNIT / FLOOR
EXISTING WATER PIPE
100ø EXISTING PIPE
50ø EXISTING PIPE BY OTHERS
LIMIT OF WORK BY OTHERS
50ø WATER METER TO BE APPROVED TYPE
50ø HDPE (PN10) INCOMING PIPE FROM EXISTING PIPE
50ø HDPE (PN10) INCOMING PIPE TO BE LEFT OFF FROM EXISTING PIPE
50ø HDPE (PN10) INCOMING PIPE TO BE LEFT OFF FROM EXISTING PIPE
50ø HDPE (PN10) INCOMING PIPE RISE TO ABOVE ROOF TANK
50ø HDPE (PN10) INCOMING PIPE RISE TO ABOVE ROOF TANK
SA-1
SA-2
SA-3
SA-4
SA-5
SA-6
SA-7
SA-8
SA-9
SA-10
SA-11
SA-12
SA-13
SA-14
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SA-16
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SA-36
SA-37
SA-38
SA-39
SA-40



FIRST AND SECOND FLOOR PLAN



GROUND FLOOR PLAN

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TANDATANGAN PENTUK

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD.

Tingkat 14, Plaza Perangsang, Persiaran Perbandaran, 40000 Shah Alam Tel:03 550 3552 Fax:03 550 3642

PEMBEKAL TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD.

Tingkat 14, Plaza Perangsang, Persiaran Perbandaran, 40000 Shah Alam Tel:03 550 3552 Fax:03 550 3642

Dengan Kerjasama : Ellis-Don

PENDAFTARAN AKITEK

MOHD NAZRIN BIN MD KASSIM
Dip.Arch.(Hons), (TM) Master Urban Planning (Urban Design Emphasis) (RAPI)
APEK (Lan No: A.N. 23)

"Saya mengesahkan bahawa segala butiran dalam pelan/lukisan ini mematuhi keperluan Undang-undang Kecil Bangunan Seragam 1984 dan saya setuju terima tanggungjawab penuh dengan tandatangan"

JCC
JURUTERA, ARKITEK, JURUUKUR & PERUNDING

Suite 3.03 and 3.04, Level 3, Menara Pelangi Jalan SS 7/19A, Kelana Jaya 47301 Petaling Jaya Selangor Darul Ehsan Tel:03-732 0128 Fax:03-732 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)

No.9, Jalan SS 15/4G, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel: 03 733 5599 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELETRIKAL

PERUNDING HASHIM & NEH SDN. BHD(Juruteta Perunding)

62 & 63 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 705 8188 Fax:03 705 8524

PERUNDING LANSKAP

NR CONSULTANTS SDN. BHD.

Unit Dekorasi dan Landskap Perunding 19-B, Jalan KS 12/24, Kelana Sri Subang 46000 Petaling Jaya Selangor Darul Ehsan Tel:03 735 8339 Fax: 03 731 2805

SUB CONTRACTOR :

SUB CONTRACTOR (L.G.C.)
SINAR SELASEH (Co. No: 163301-T)
NO.2, JALAN KASTURI 9, BANDAR SRI AMPANG, 68000 AMPANG, SELANGOR DARUL EHSAN.
TEL: 03-4252 1122 FAX: 03-4252 1121

TAJUK LUKISAN

AS BUILT DRAWING
PLUMBING SERVICES

SA - 1 : LOW RISE STUDENT APARTMENT
4 STOREY, 8 UNIT / FLOOR

GROUND & TYPICAL FLOOR PLAN (1ST - 2ND)

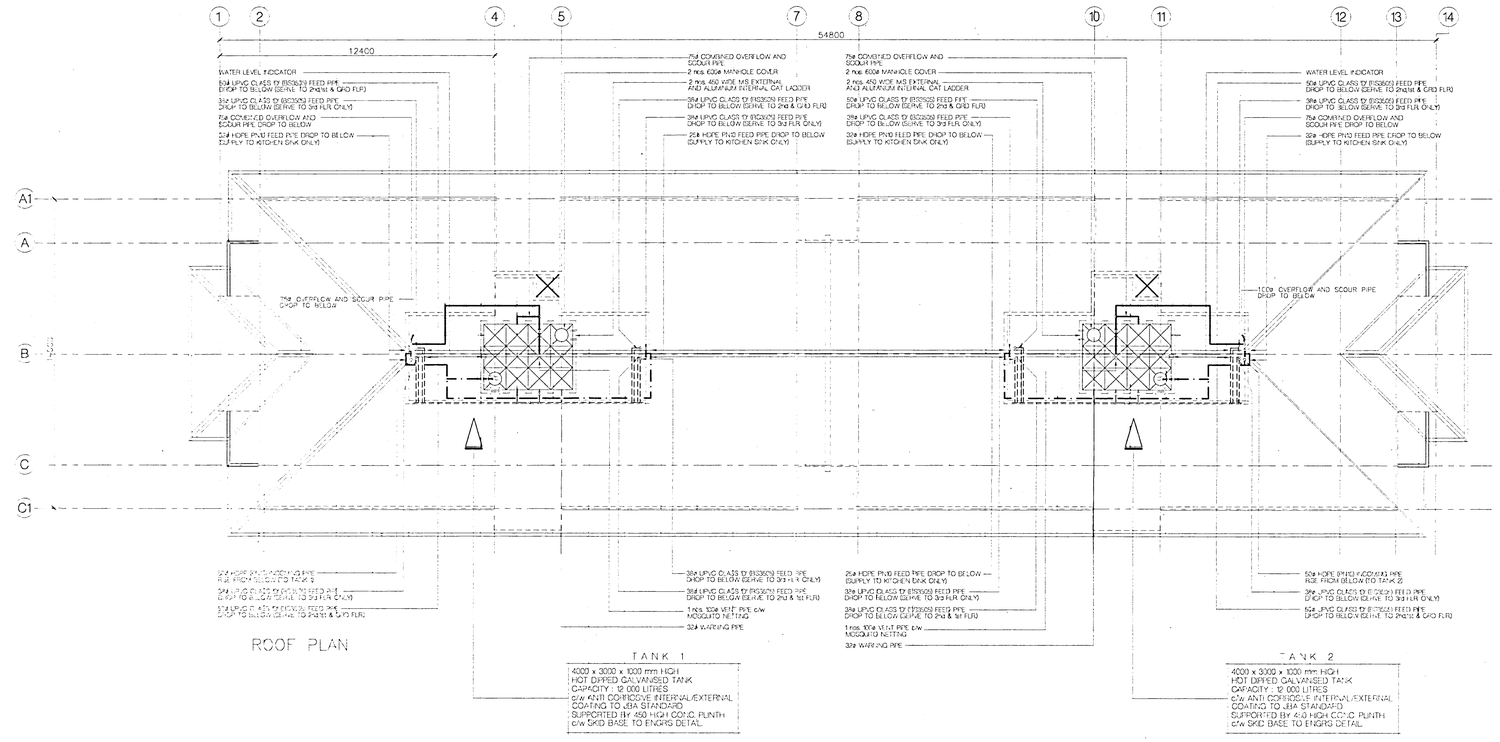
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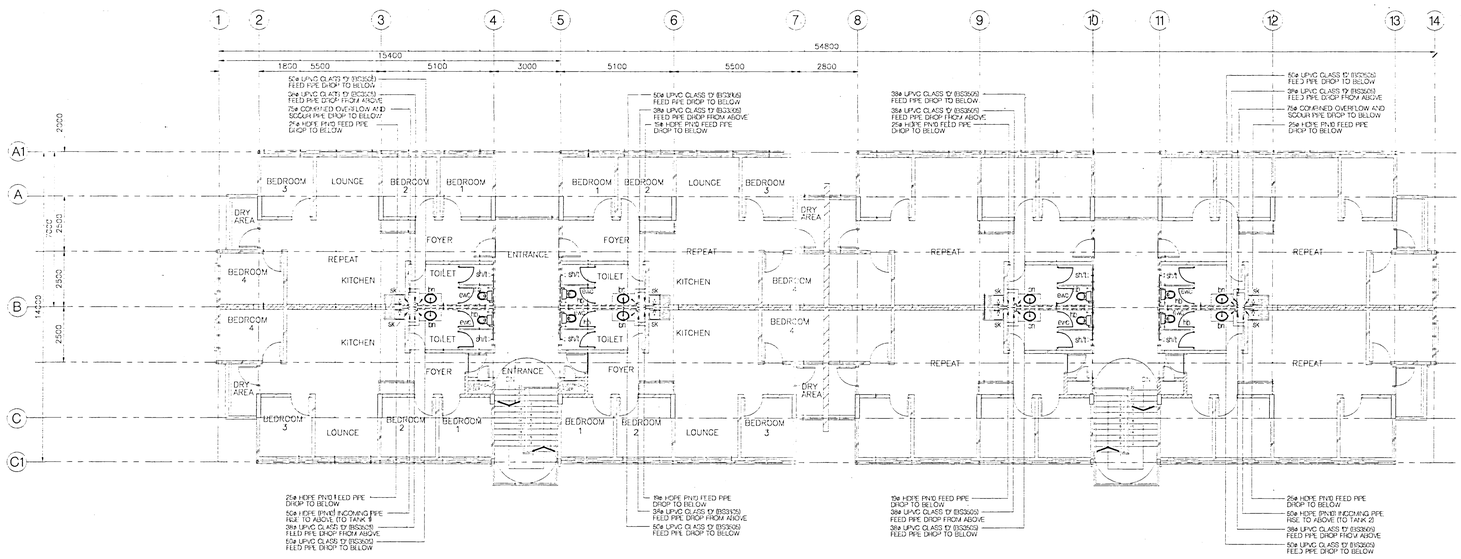
NO. LUKISAN

KSS 97 - PPL - 001 - SA-1 - CW - 02

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ROOF PLAN



THIRD FLOOR PLAN

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL	TARIKH	PERKARA

PENDAFTARAN PENULIS

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD

Tingkat 3, Blok C, Tenaga,
Pusat Bandar Damansara,
50490 Kuala Lumpur
Tel:03 255 6577 Fax:03 255 6769

PEMBEKAL TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD.

Tingkat 14, Plaza Perangsang,
Persiaran Perdamaian,
46200 Petaling Jaya, Selangor.
Tel:03 550 3352 Fax:03 551 3042

Dengan kerjasama :
Ellis-Don

PENDAFTARAN JURUTEK

MOHD NAZAN YO KASSIM
Dip.Arch.Adv.Dip.(UTM) Master in Urban Planning (Japan) Dip.Eng.M.Inst. ARAM
AIA (JAA) Ltr. Ap.No.427

"Saya memperakui bahawa segala butiran dalam pelan/lukisan ini adalah menurut keterangan yang saya berikan sendiri dan betul setakat pengetahuan saya"

Suite A-18 Jln Pju 1A/41 Aman Suria
47301 Petaling Jaya
Selangor Darul Ehsan
Tel:03-732 0128 Fax:03-732 0129

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)

No.9, Jalan SS 15/4, Subang Jaya,
47500 Petaling Jaya,
Selangor Darul Ehsan
Tel:03 733 6699 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & YEH SDN. BHD.(Juruterd Perunding)

62 & 63, Jalan SS 2/72,
47300 Petaling Jaya,
Selangor Darul Ehsan
Tel:03 705 6166 Fax:03 705 6524

PERUNDING LANDSKAP
KR CONSULTANTS SDN. BHD.

No.2A(1st Floor), Jalan Kenari 17/KS,
Bandar Puchong Jaya,
47100 Puchong,
Selangor Darul Ehsan
Tel:03 735 6939 Fax: 03 731 2516

SUB CONTRACTOR :
SINAR SELASEH ENTERPRISE (Co.No.553003-T)

TAJUK LUKISAN

AS BUILT DRAWING
PLUMBING SERVICES

SA-1 : LOW RISE STUDENT APARTMENT
4 STOREY, 8 UNIT / FLOOR

THIRD & ROOF FLOOR PLAN

TARIKH : JUNE 1998 SKALA : 1 : 100

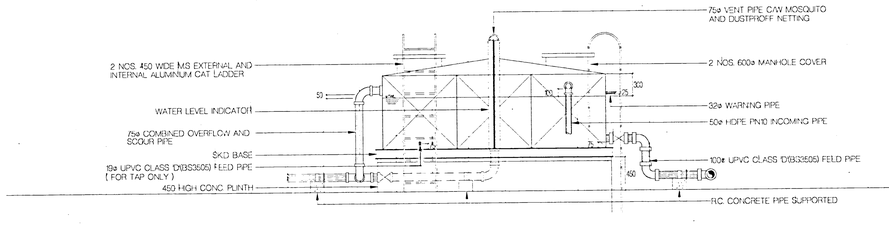
DILUKIS : DIPERIKSA OLEH :

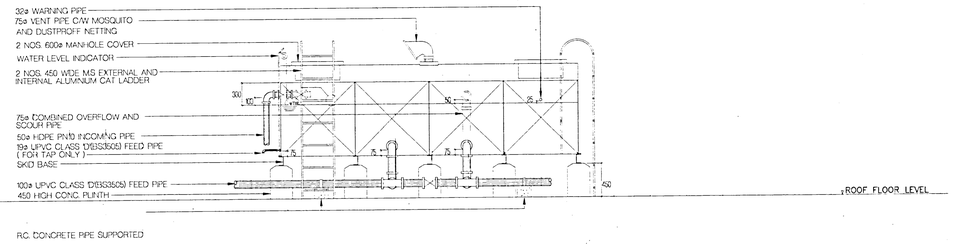
NO. LUKISAN
KSS 97 - PPL - 001 - SA-1 - CW - 03

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TANK 1

4000 X 3000 X 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGE TANK
CAPACITY : 15 000 LITRES(3333 GALLS)
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
C/W SKID BASE TO ENGRS DETAIL

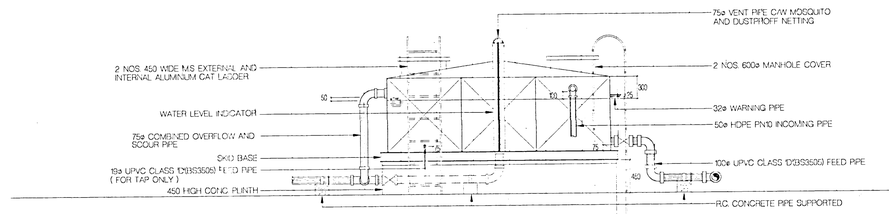


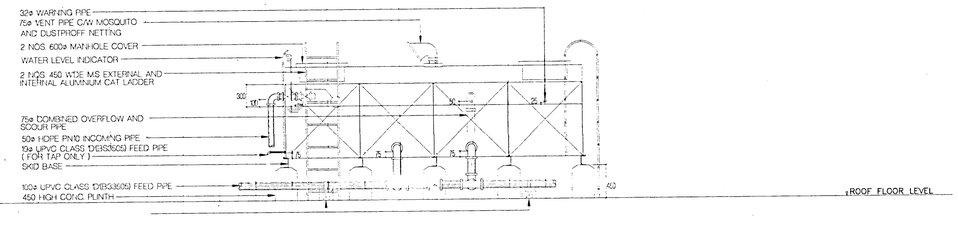


DETAIL OF WATER TANK 1

TANK 2

4000 X 3000 X 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGE TANK
CAPACITY : 15 000 LITRES(3333 GALLS)
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
C/W SKID BASE TO ENGRS DETAIL





DETAIL OF WATER TANK 2

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TANDATANGAN PEMILIK

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD
Tingkat 3, Blok C, Tenaga, Pusat Bahagi Pemangkin, 50460 Kuala Lumpur. Tel:03 255 8377 Fax:03 255 8747

PEMBEKAL TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD.
Tingkat 14, 4 Jaya Perangsang, Persiaran Perbandaran, 40300 Shah Alam, Tel:03 5513 3322 Fax:03 550 3044
Dengan Kerjasama :
Ellis-Don

TANDATANGAN AK/TEK

MOHD NAZAM MD KASSIM
Diploma Arch.(TM) Master in Urban Planning (Urban Design/Malaysia) APAM
APA LAM No: AAM 43
"Saya memperakui bahawa segala ukuran adalah mematuhi peruntukan undang-undang Kecil Bangunan Seragam 1984 dan saya setuju terima tanggungjawab penuh dengan sewajarnya"

Unit 33, 1st Floor, Suasana Jaya, 47600 Petaling Jaya, Selangor Darul Ehsan. Tel:03-732 0428 Fax:03-730 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
MEKAR SDN. BHD.
No. 9, Jalan SS 15/4G, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan. Tel:03 733 6569 Fax:03 734 7521

JURUTERA MEKANIKAL DAN ELETRIKAL
PERUNDING HASHIM & NEH SDN. BHD.(Jurutera Perunding)
62 & 64, Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan. Tel:03 705 3088 Fax:03 705 5924

PERUNDING LANSKAP
NR CONSULTANTS SDN. BHD.
Unit 2, Level 2, Block A, Kelana Square, 17, Jalan SS 7/26, Kelana Jaya, 47301 Petaling Jaya, Selangor Darul Ehsan. Tel:03 735 3829 Fax: 03 731 2838

SUB CONTRACTOR :
SINAR SELASEH (M) SDN BHD (Co.No:183310-T)
NO.2,JALAN PJS 7/19,BANDAR SUNWAY,46150 PETALING JAYA,SELANGOR DARUL EHSAN.
TEL:03-56393737,56357 FAX: 03-7875777

TAJUK LUKISAN
AS BUILT DRAWING
PLUMBING SERVICES
SA-1 : LOW RISE STUDENT APARTMENT
4 STOREY, 8 UNIT / FLOOR
DETAIL'S WATER TANK

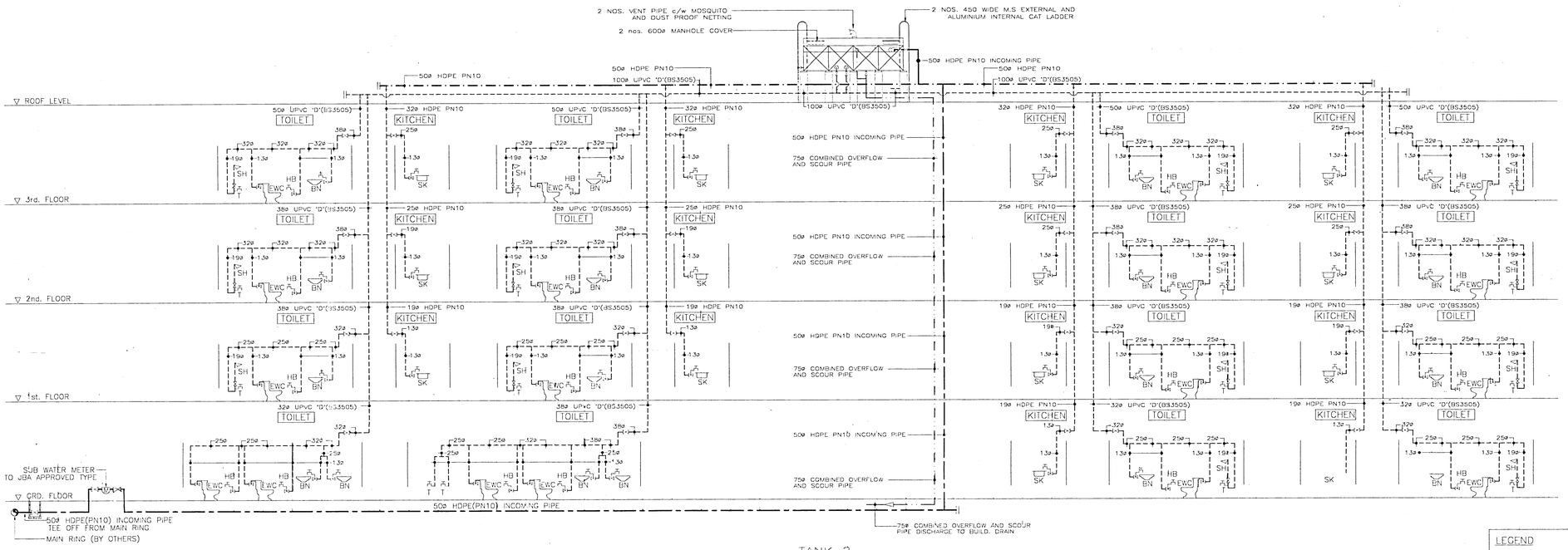
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DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN
KSS 97 - PPL - 001 - SA-1 - CW - 04

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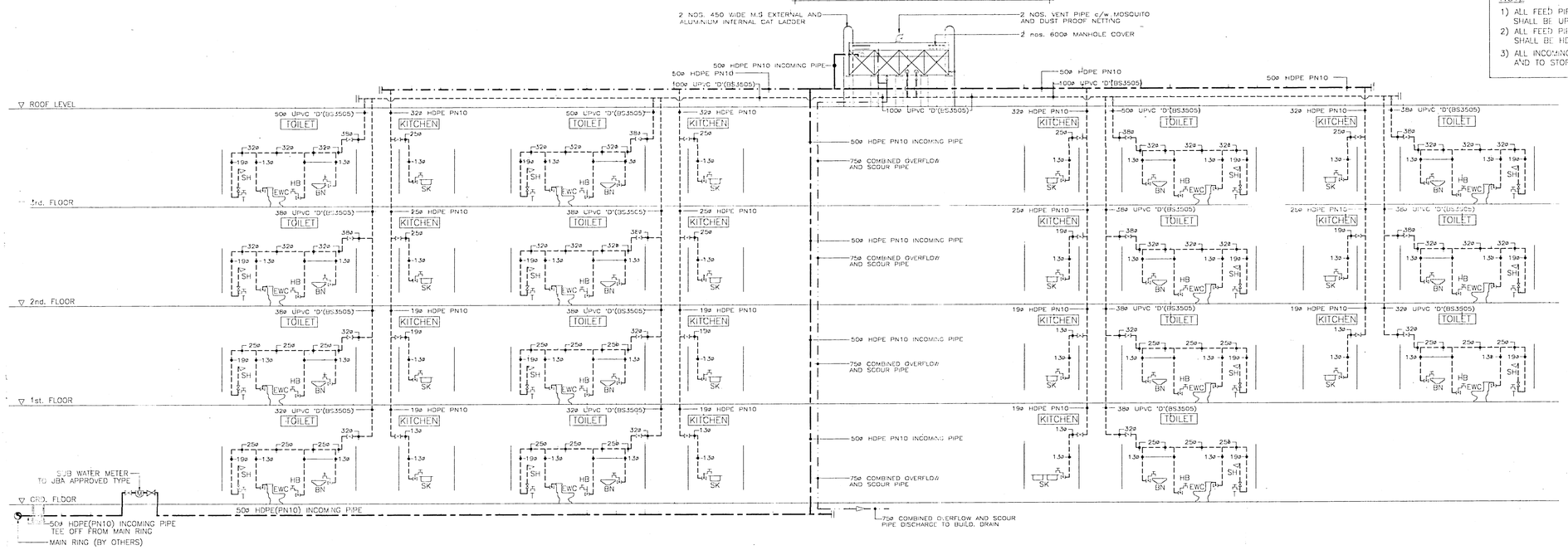
TANK 1

4000 x 3000 x 1000mm HIGH
HOT DIPPED GALVANISED TANK
CAPACITY : 12 000 LITRES
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGR'S DETAIL



TANK 2

4000 x 3000 x 1000mm HIGH
HOT DIPPED GALVANISED TANK
CAPACITY : 12 000 LITRES
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGR'S DETAIL



DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION

LEGEND

EWC	–	EUROPEAN WATER CLOSET
AWC	–	ASIAN WATER CLOSET
HB	–	HAND BIDET
SH	–	SHOWER
BN	–	BASIN
SK	–	SINK
T	–	TAP

NOTE

1) ALL FEED PIPE FROM STORAGE TANK TO FITTING SHALL BE UPVC CLASS 'D' (BS3505) PIPE
2) ALL FEED PIPE BURIED UNDER GROUND SHALL BE HDPE (PN10)
3) ALL INCOMING PIPE FROM WATER MAIN TO FITTINGS AND TO STORAGE TANK SHALL BE HDPE (PN10)

PROJEK

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) – INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TANDATANGAN PENUH

PEMILIK PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD
Tingkat 3, Blok C, Tenaga, Pusat Bandar Damansara, 50490 Kuala Lumpur. Tel:03 253 6577 Faks:03 255 8732

PEMBEKAL TURNKEY
PERANGSANG INTERNATIONAL SDN BHD
Tingkat 14, Plaza Perangsang, Persiaran Perbandaran, 40300 Shah Alam. Tel:03 550 3382 Fax:03 550 3642
Dengan kerjasama : Ellis–Don
TANDATANGAN PENUH

MOHD HAZAM MD KASSIM
Diploma Ap(Arch.)(UK) Master in Urban Planning (Urban Design)(Kingston) APAM APA (AM No. A/P 23)
"Saya memperoleh, simpan & segala butiran peribadi pelanggan adalah menurut keperluan Undang-undang Kepil Berkuatkuasa Seragam 1984 dan saya setuju terima tanggungjawab dalam bentuk sesalahnya"
FOCUS PLANNERS
Suite 2.28 Tkt 2 Fr Wisma Perfect, No. 2, Jln Perbandaran, Selayang Baru, Selangor. Tel:03-6252 0428 Fax:03-6252 0426

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No. 2, Jalan SS 19/1A, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan. Tel:03 733 6899 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELETRIKAL
PERUNDING HASHIM & NEH SDN. BHD(Juruterа Perunding)
62 & 64, Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan. Tel:03 795 5088 Fax:03 705 5524

PERUNDING LANSKAP
NR CONSULTANTS SDN. BHD.
Unit 2A(Tingkat Atas) No.2, Jalan PJS 11/24, Bandar Sri Sunway, 46150 Petaling Jaya, Selangor Darul Ehsan. Tel:03 736 5579 Fax: 03 731 2805

SUB CONTRACTOR :
SINAR SELASEH (SMJ) SDN. BHD. (Co. No. 555010-T)
NO.3 JALAN PJS 7/18 BANDAR SUNWAY, PETALING JAYA, SELANGOR DARUL EHSAN. TEL: 03-5636 3388 FAX: 03-5636 3177

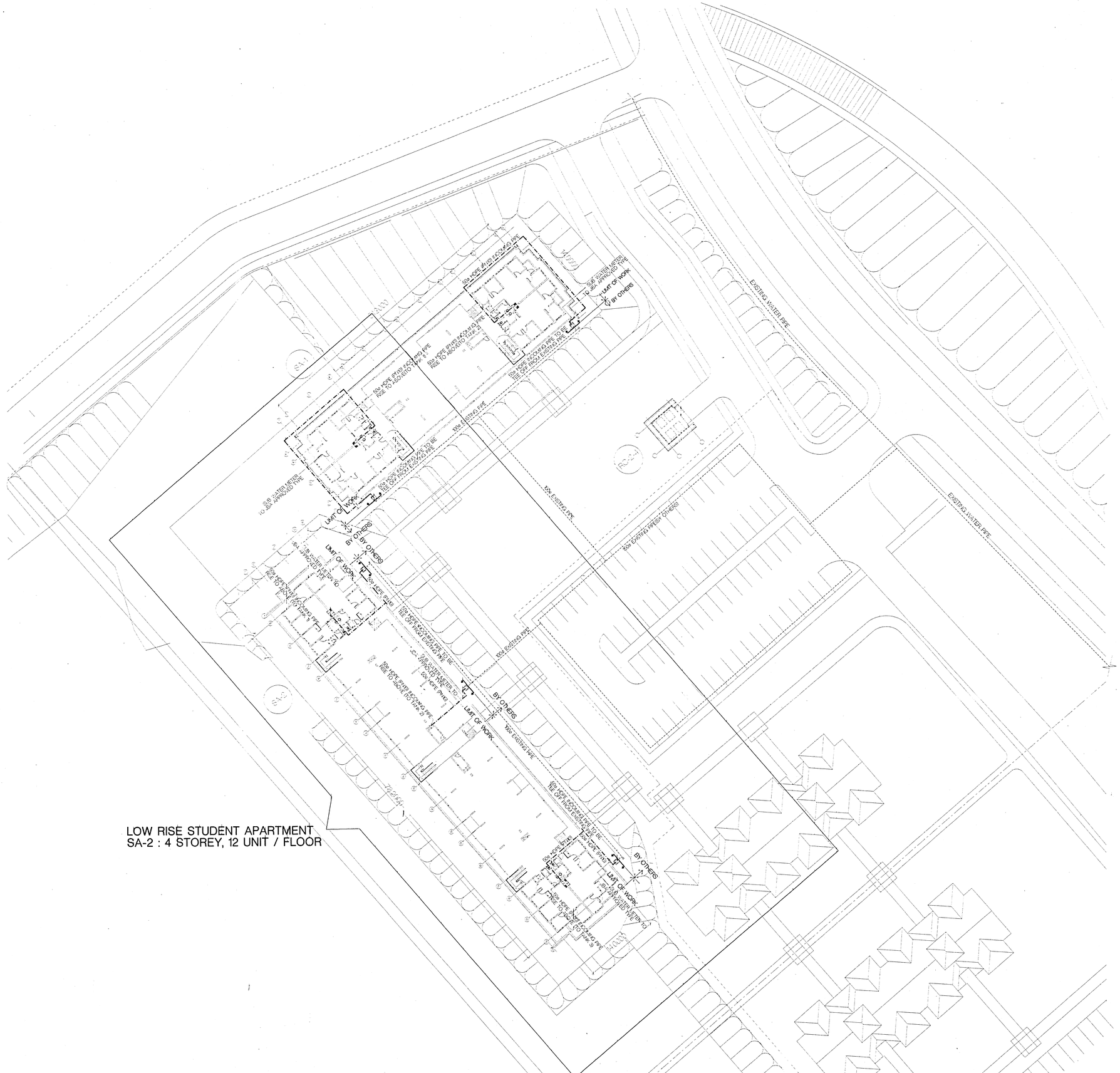
TAJUK LUKISAN
AS BUILT DRAWING
PLUMBING SERVICES
SA - 1 : LOW RISE STUDENT APARTMENT
4 STOREY, 8 UNIT / FLOOR

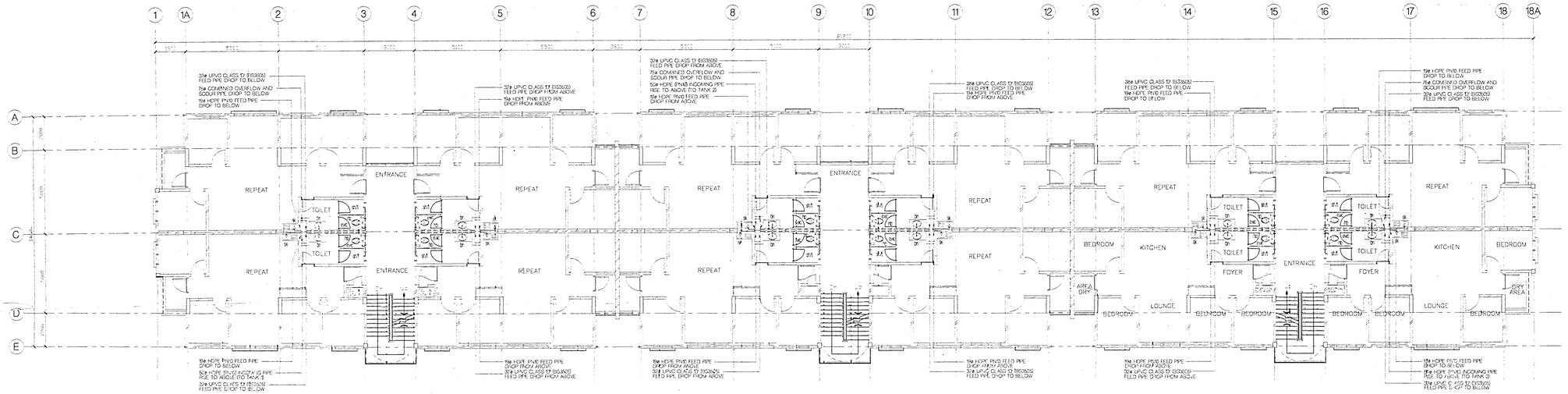
DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION

TARIKH	: JUNE 1998	SKALA	: N.T.S
DILUKIS	:	DIPERIKSA OLEH	:

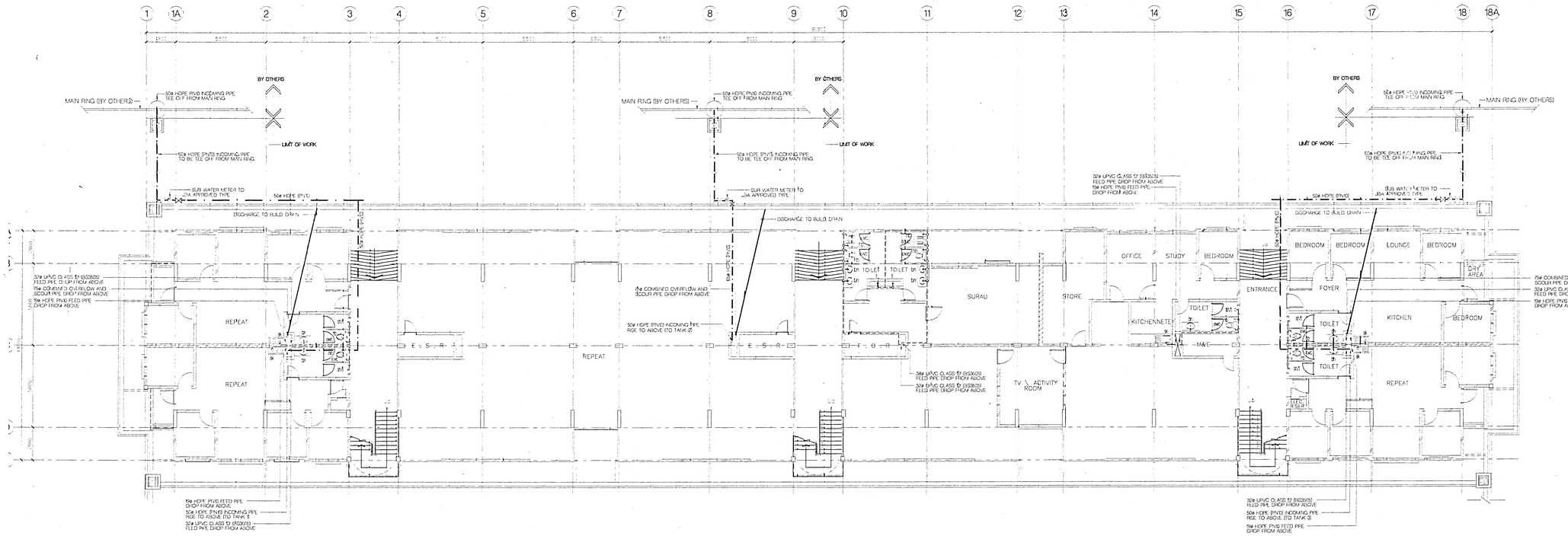
NO. LUKISAN
KSS 97 - PPL - 001 - SA-1 - CW - 05

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EXISTING WATER PIPE
100ø EXISTING PIPE
100ø EXISTING PIPE BY OTHERS
EXISTING WATER PIPE
100ø EXISTING PIPE
100ø EXISTING PIPE
100ø EXISTING



TYPICAL FLOOR PLAN (1ST – 2ND)



GROUND FLOOR PLAN

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN Untuk TENAGA NASIONAL BERHAD

NOTA

BIL	TARIKH	PERKARA

TANDATANGAN PEMUK

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD
Tingkat 3A, Blok G, Tenaga, Pusat Bandar Damansara, 50490, Kuala Lumpur. Tel:03 255 6677 Fax:03 255 6779

PEMBORONG TURNKEY
PERANGSANG INTERNATIONAL SDN BHD
Tingkat 1A, Plaza Perangsang, Persiaran Perbandaran, 40300, Shah Alam. Tel:03 550 3352 Fax:03 550 3042
Dengan Kerjasama : Ellis-Don

TANDATANGAN AKITEK

MOHD NAZIM YD YUSOFF
(Dip.Arch Adv.Arch.(UTM) Master in Urban Planning (Urban Design Workplan) AIPAM
APA Lay No: A/V 28
"Saya memestikan bahawa segala butiran dalam pelan/lukisan ini mematuhi Akta Perancangan Kod Bangunan Seragam 1984 serta segala terma tambahan/ubahan dalam pelan kebenaran"

FOJ PLANNERS
A-27-55, Jln. Suasa 3, Jaya 33, Seksyen 33, 40400 Petaling Jaya, Selangor Darul Ehsan. Tel:03-732 6128 Fax:03-732 6128

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15/4J, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan. Tel:03 733 6899 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & NEW SDN. BHD.(Juruteru Perunding)
d2 & d3 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan. Tel:03 705 5086 Fax:03 705 5924

PERUNDING LANDSKAP
NR CONSULTANTS SDN. BHD.
No.2 Jln Dato Abdullah Tahir, Taman Tun Dr. Ismail, 60000 Petaling Jaya, Selangor Darul Ehsan. Tel:03 7725 3673 Fax: 03 771 2815

SUB KONTRAKTOR :
SINAR SELASEH (M) SDN. BHD.

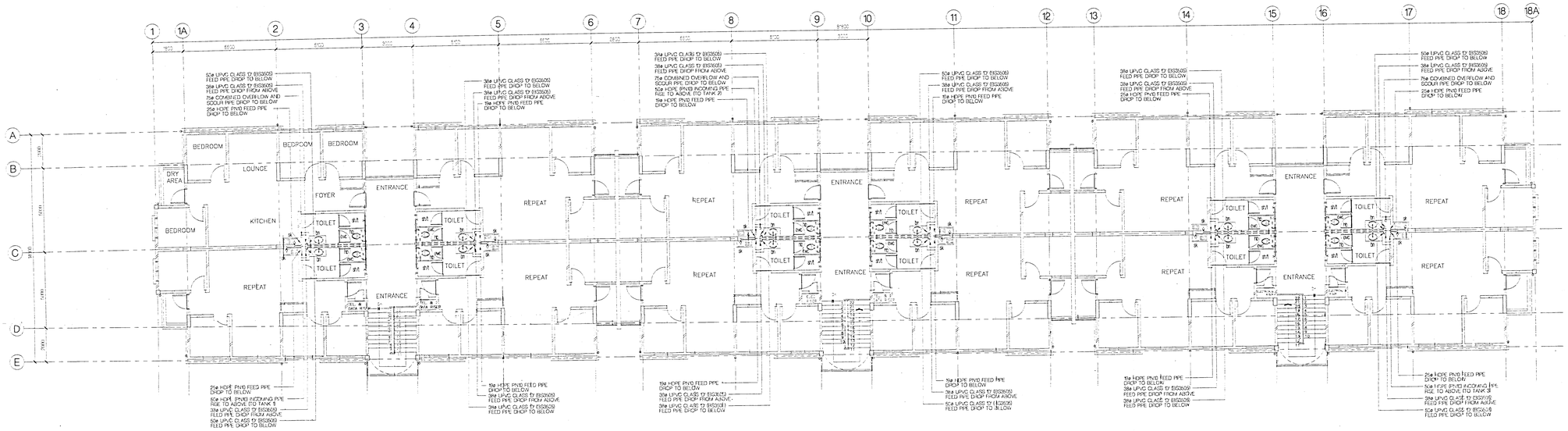
TAJUK LUKISAN
AS BUILT DRAWING
PLUMBING SERVICES
SA - 2 : LOW RISE STUDENT APARTMENT
4 STOREY, 12 UNIT / FLOOR

GROUND & TYPICAL FLOOR PLAN (1ST - 2ND)

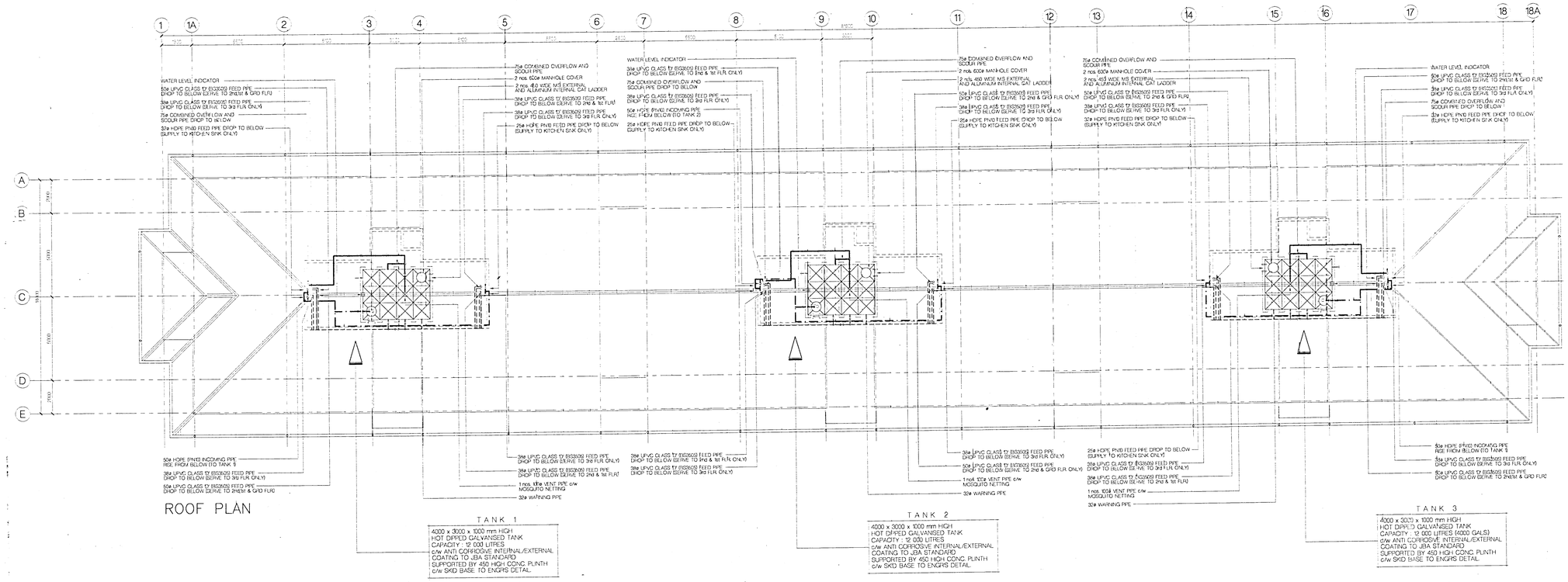
TARIKH : JUNE 1998 SKALA : 1 : 100
DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN
KSS 97 - PPL - 001 - SA-2 - CW - 02

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THIRD FLOOR PLAN



ROOF PLAN

TANK 1

4000 x 3000 x 1000 mm HIGH
HOT DIPPED GALVANISED TANK
CAPACITY : 12 000 LITRES
c/w ANTI CORROSIVE INTERNAL/EXTERNAL COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGRS DETAIL

TANK 2

4000 x 3000 x 1000 mm HIGH
HOT DIPPED GALVANISED TANK
CAPACITY : 12 000 LITRES
c/w ANTI CORROSIVE INTERNAL/EXTERNAL COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGRS DETAIL

TANK 3

4000 x 3000 x 1000 mm HIGH
HOT DIPPED GALVANISED TANK
CAPACITY : 12 000 LITRES (4000 GALS)
c/w ANTI CORROSIVE INTERNAL/EXTERNAL COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGRS DETAIL

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559
JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL	TARIKH	PERKARA

TANDATANGAN PEMAJU

PEMAJU PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD

Tingkat 3, Blok C, Tenaga, Pusat Bandar Damansara, 50490 Kuala Lumpur
Tel 03 255 6877 Faks 03 255 6759

PEMBORONG TURNKEY
SERANGSANG INTERNATIONAL SDN. BHD.

Tingkat 14, Plaza Perangsang, Jalan Perbandaran, 47301 Petaling Jaya
Tel 03 550 3562 Fax 03 550 3642

Dengan Kerjasama :
Ellis-Don

TANDATANGAN AKITEK

MOHD NAZAM MD KASSIM
Ketua Arkitek(KTV) Master Architect
Seri Perunding (Juru Perunding) Sdn Bhd
AKEA LAM No: A/M 23

"Saya mengesahkan bahawa segala butir-butir mengenai perkara-perkara yang dinyatakan dalam Borang Kelulusan Bangunan 1984 dan yang berkaitan dengannya telah dipenuhi"

Jalan BS 17/1a Bukit Jaya
47500 Petaling Jaya
Selangor Darul Ehsan
Tel 03-732 0126 Fax 03-732 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)

No 5, Jalan BS 15/4a, Bdr Sg Buloh
47500 Petaling Jaya
Selangor Darul Ehsan
Tel 03 733 6939 Fax 03 734 7921

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & NEH SDN. BHD(Jurutera Perunding)

62 & 63, Jalan BS 2/7a
47500 Petaling Jaya
Selangor Darul Ehsan
Tel 03 733 6268 Fax 03 735 1924

PERUNDING LANSKAP
NR CONSULTANTS SDN. BHD.

No 2, Jalan 19/1, Off Jalan Sg Besi
46300 Petaling Jaya
Selangor Darul Ehsan
Tel 03 756 5838 Fax 03 731 2815

SUB CONTRACTOR :
SINAR SELASEH (M) SDN BHD (Co No 155300-T)
MENGURUSKAN PENTADBIRAN BANGUNAN MENGIKUT PERATURAN-PERATURAN DAERAH SEPANG
TEL: 03-8076 5555 FAX: 03-8076 5577

TAJUK LUKISAN

AS BUILT DRAWING
PLUMBING SERVICES

SA - 2 : LOW RISE STUDENT APARTMENT
4 STOREY, 12 UNIT / FLOOR

THIRD AND ROOF FLOOR PLAN

TARIKH : JUNE 1998 SKALA : 1 : 100

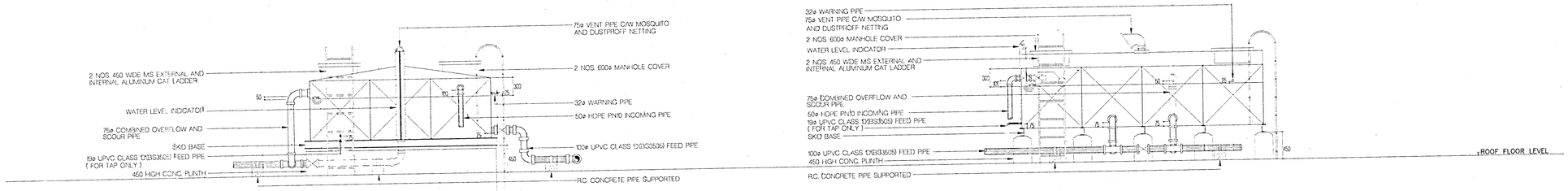
DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN
KSS 97 - PPL - 001 - SA-2 - CW - 03

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TANK 1

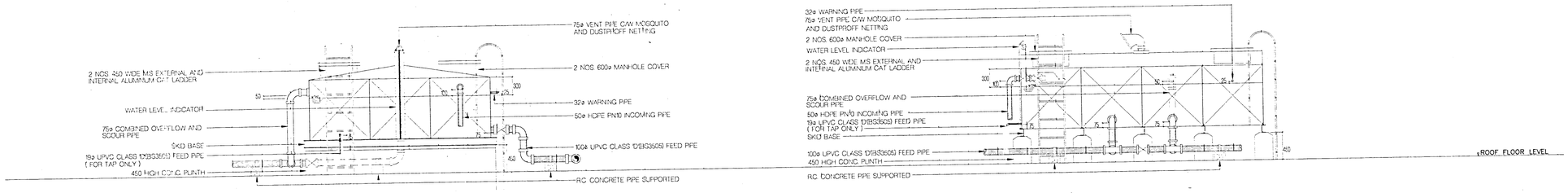
4000 X 3000 X 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGE TANK
CAPACITY : 15 000 LITRES(3333 GALLS)
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
C/W SKID BASE TO ENGRS DETAIL



DETAIL OF WATER TANK 1

TANK 2

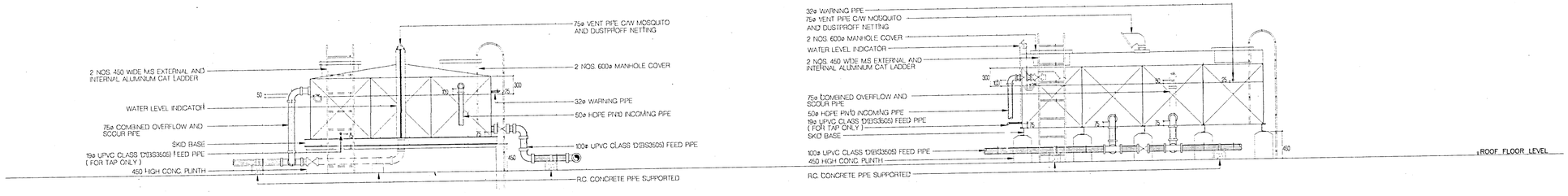
4000 X 3000 X 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGE TANK
CAPACITY : 15 000 LITRES(3333 GALLS)
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
C/W SKID BASE TO ENGRS DETAIL



DETAIL OF WATER TANK 2

TANK 3

4000 X 3000 X 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGE TANK
CAPACITY : 15 000 LITRES(3333 GALLS)
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
C/W SKID BASE TO ENGRS DETAIL



DETAIL OF WATER TANK 3

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL	TARIKH	PERKARA

PENERBITAN PEMBAK

PEMAJU PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD

Tingkat 3, Blok D, Tenaga, Pusat Bandar Damansara, 50490 Kuala Lumpur Tel:03 255 5677 Fax:03 255 6759

PEMBEKAL TURNKEY
PERANGSANG INTERNATIONAL SDN BHD

Tingkat 1A, Pejabat Perniagaan, Persiaran Perbandaran, 40000 Shah Alam Tel:03 5513 3322 Fax:03 550 3642

Dengan kerjasama :
Ellis-Don

PENDAFTARAN JURUTEK

MOHD NAZAM MD YASSIN
Diploma in Arch.(TCA) Master in Urban Planning (Urban Design/Michigan) AMAA
AMA LAM No: A/M 23

"Saya memberikan tempoh tempoh 18 bulan dari tarikh perakuan siap memuaskan (Interim/Kerja Luarsang Kecil Bangunan Sempurna 1984 dan saya setuju terima tanggungjawab sebagai dengan tempoh tersebut"

Suite 38 1st/fl Bukit Jaya Jalan 33 1/7A Bukit Jaya 47600 Petaling Jaya Selangor Darul Ehsan Tel:03-732 0126 Fax:03-732 0726

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No.9 Jalan SS 15/4G Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 735 8599 Fax:03 734 7821

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & NEH SDN BHD(Juruteri Perunding)
62 & 63 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 705 5088 Fax:03 705 5924

PERUNDING LANSKAP
NR CONSULTANTS SDN. BHD.
Unit 24(Tingkat Atas) No.2 Jalan Pemaju PJ 15, Off Jalan Tun Sambanthan, 46000 Petaling Jaya Selangor Darul Ehsan Tel:03 705 8539 Fax: 03 571 2875

SUB CONTRACTOR :
SINAR SELASEH Sdn. Bhd. (Co. No. 165010-T)

TAJUK LUKISAN
AS BUILT DRAWING
PLUMBING SERVICES
SA-2 : LOW RISE STUDENT APARTMENT
4 STOREY, 12 UNIT / FLOOR
DETAILS WATER TANK

TARIKH : JUNE 1998 SKALA : 1 : 30
DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN
KSS 97 - PPL - 001 - SA-2 - CW - 04

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TANK 1

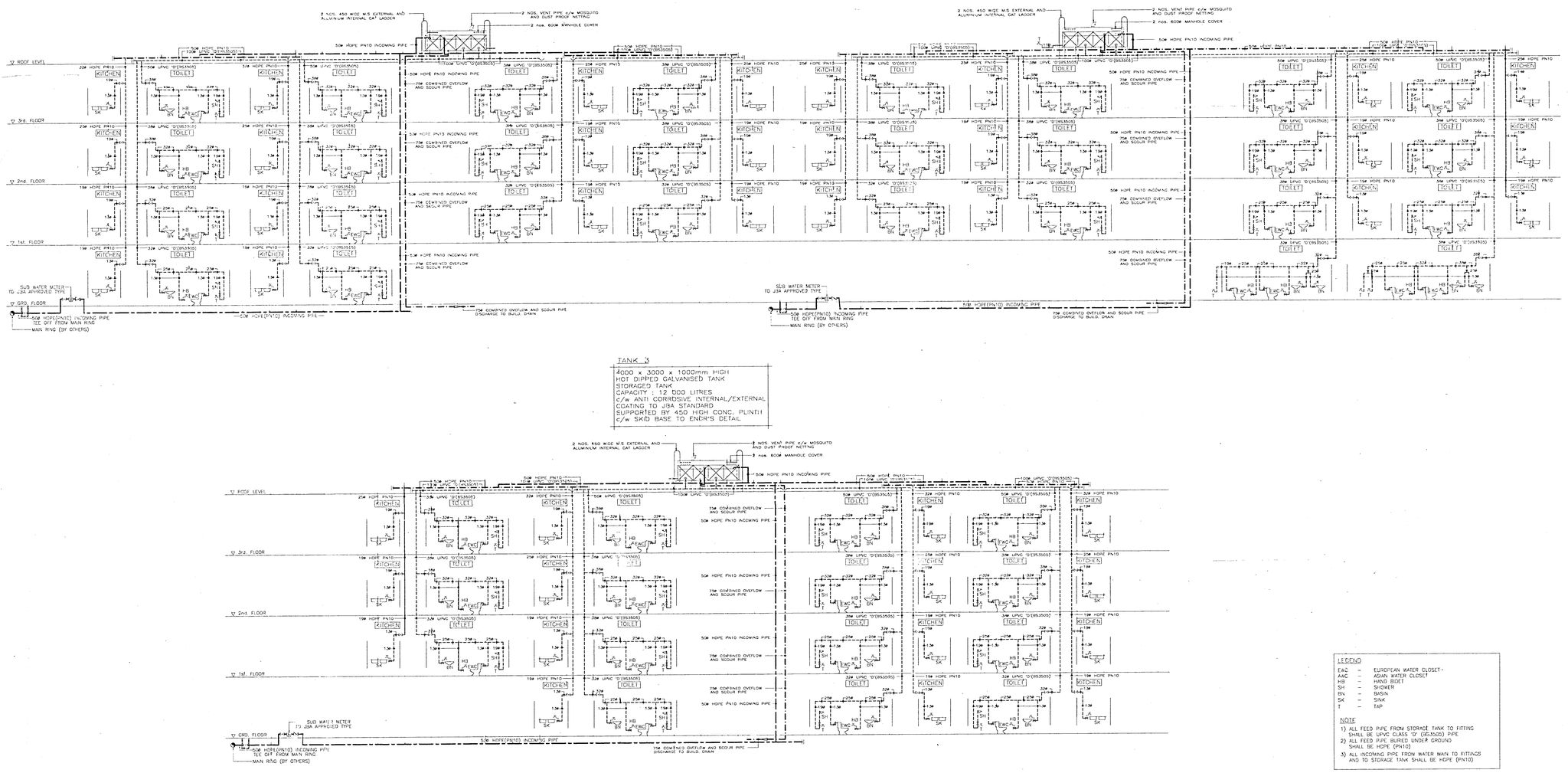
4000 x 3000 x 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGED TANK
CAPACITY : 12 000 LITRES
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGR'S DETAIL

TANK 2

4000 x 3000 x 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGED TANK
CAPACITY : 12 000 LITRES
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGR'S DETAIL

TANK 3

4000 x 3000 x 1000mm HIGH
HOT DIPPED GALVANISED TANK
STORAGED TANK
CAPACITY : 12 000 LITRES
c/w ANTI CORROSIVE INTERNAL/EXTERNAL
COATING TO JBA STANDARD
SUPPORTED BY 450 HIGH CONC. PLINTH
c/w SKID BASE TO ENGR'S DETAIL



DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION

LEGEND

EWC	–	EUROPEAN WATER CLOSET
AWC	–	ASIAN WATER CLOSET
HB	–	HAND BIDET
SH	–	SHOWER
BN	–	BASIN
SK	–	SINK
T	–	TAP

NOTE

1) ALL FEED PIPE FROM STORAGE TANK TO FITTING SHALL BE UPVC CLASS 'D' (BS.3505) PIPE
2) ALL FEED PIPE BURIED UNDER GROUND SHALL BE HDPE (PN10)
3) ALL INCOMING PIPE FROM WATER MAIN TO FITTINGS AND TO STORAGE TANK SHALL BE HDPE (PN10)

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

PENGATARAH PROJEK

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD
Tingkat 3, Blok C, Tenaga...
Pusat Bandar Damansara...
50490 Kuala Lumpur
Tel:03 255 8377 Faks:03 255 8783

PERUNDING PERKHIDMATAN
PERANGSANG INTERNATIONAL SDN BHD
Tingkat 14, Blok Perangsang
Pusat Bandar Damansara
50200 Shah Alam
Tel:03 550 3322 Fax:03 550 3342
Ellis-Don

PENGATARAH ARKITEK

MOHD NAZAM MD KASSIM
Diploma Architecture (Dip), Master in Urban Planning (Urban Design, Kingston), Japan
SBA Lic. No: A/M 23
Tidak dibenarkan mengambil gambar atau pun melukiskan semula rekabentuk ini kecuali dengan kebenaran bertulis terlebih dahulu dari pihak-pihak di atas tertera.

SDC
Unit 1, Tingkat 1
Jalan 19/1, Seksyen 19
47800 Petaling Jaya
Selangor Darul Ehsan
Tel:03-755 0128 Fax:03-756 7421

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15/4G, Subang Jaya,
47500 Petaling Jaya,
Selangor Darul Ehsan
Tel:03 733 6899 Fax:03 734 7621

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & NEH SDN. BHD. (Jurutera Perunding)
62 & 62 Jalan SS 6/7A,
47301 Petaling Jaya,
Selangor Darul Ehsan
Tel:03 705 8588 Fax:03 705 8924

PERUNDING LANDSKAP
NR CONSULTANTS SDN. BHD.
Unit 24(1st floor) Block A(Medini Apartment Room) Jalan PJS 11/14, Bandar Sri Sudan, 46200 Petaling Jaya, Selangor Darul Ehsan
Tel:03 705 8533 Fax:03 731 2854

SUB CONTRACTOR :
SINAR SELASEH (M) SDN BHD (Co No:155001-T)
NO.2, JALAN PJS 11/19, BANDAR SRI SUDAN, 46150 PETALING JAYA, SELANGOR DARUL EHSAN
TEL:03-5637 5288 FAX:03-5637 5277

TAJUK LUKISAN:

AS BUILT DRAWING
PLUMBING SERVICES

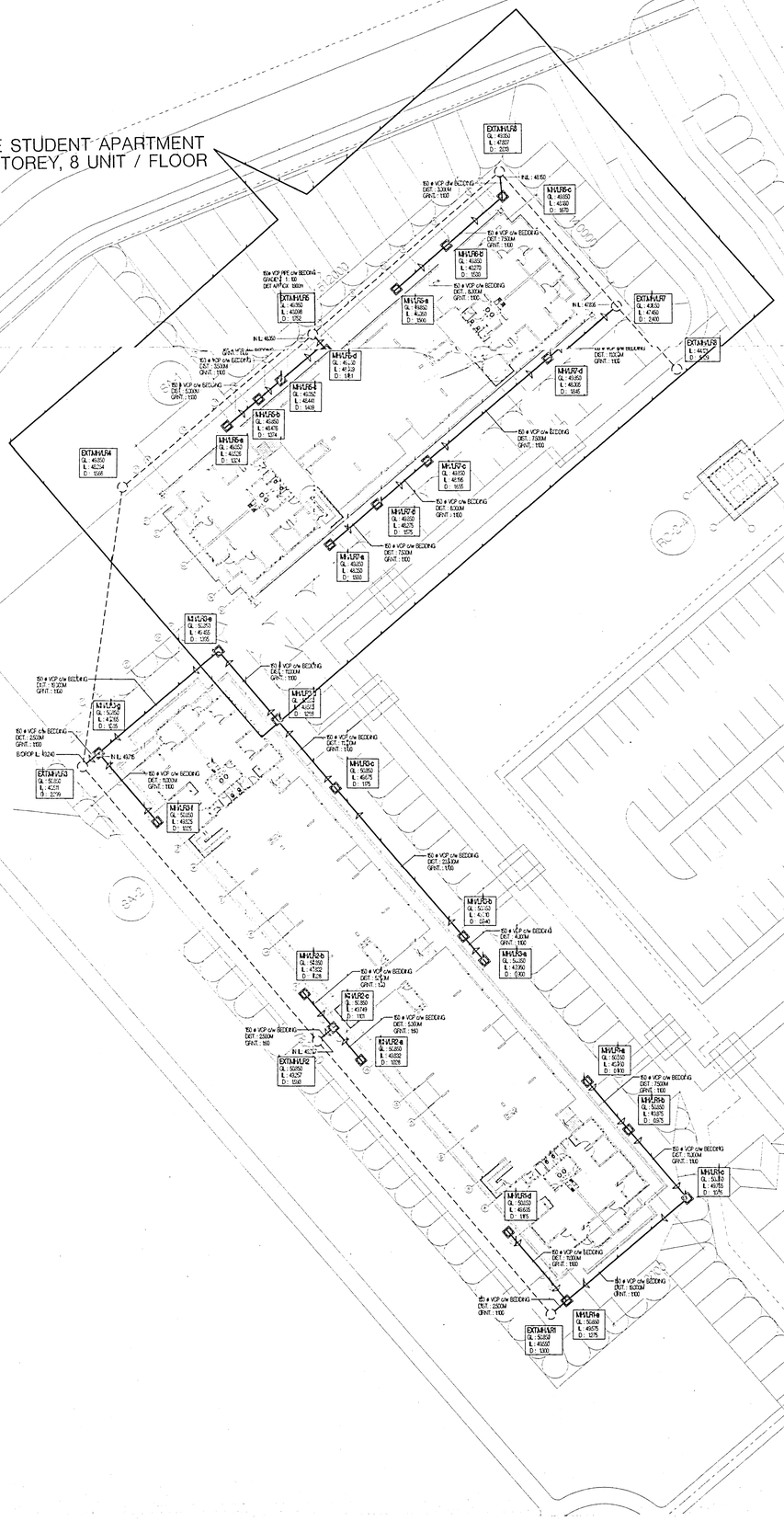
SA - 2 : LOW RISE STUDENT APARTMENT
4 STOREY, 12 UNIT / FLOOR

DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION

TARIKH	: JUNE 1998	SKALA	: N.T.S.
DILUKIS	:	DIPERIKSA OLEH	:

NO. LUKISAN
KSS 97 - PPL - 001 - SA-2 - CW - 05

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N.O.T.E :

1. THE INSTALLATION OF PIPEWORK AND FITTINGS SHALL COMPLY WITH CURRENT EDITION OF SEWERAGE BY LAW.
2. SANITARY FITTINGS:
   TO FIXING BY SUITABLE SUPPORTS EXACT POSITIONING TO RESPONSIBILITY OF CONTRACTOR
3. TYPE OF MATERIALS IN GANERAL:
   a) ALL SOIL PIPE FROM 75mm (3") DIA TO 150mm (6") DIA. ABOVE GROUND SHALL BE UPVC WHITE TO B.S 4514 : 1969
   b) ALL WASTE PIPE FROM 32mm (1 1/4") DIA. TO 50mm (2") DIA. SHALL BE MUPVC WHITE TO B.S 5255 : 1976
   c) ALL UNDERGROUND SOIL PIPE FROM 100 TO 150 SHALL BE UPVC BROWN TO B.S 4660 1975.
4. ALL EXTERNAL SEWERAGE PIPES SHALL BE VITRIFIED CLAY PIPE TO B.S 65 AND 540 AND SHALL BE STANDARD PIPE BEDDING APPROVED BY AUTHORITY.
5. ALL PIPE SHALL BE SUITABLE SUPPORTED AND PROVIDED WITH CLEANING EYES FOR SERVICING AND CLEANING
6. ALL PIPE PASSING THRO'S ROOF STRUCTURE SHALL BE COLLORS AND FLASHING TO FORM WATER TIGHT JOINT.
7. ALL SANITARY PIPE SHALL BE TESTED IN PRESENT OF ENGINEER FOR WATER LEAKAGE BEFORE CONCEALMENT.
8. ALL MANHOLE LOCATED IN BUILDING AREA SHALL BE PROVIDED WITH AIR TIGHT MANHOLE COVER.
9. THE WALLS OF DRAINS WITH BUILD-UP COFING LEVELS INSIDE OR ADJACENT TO PAVED AREAS SHALL BE FROM REINFORCED CONCRETE: WEEPHOLES HAVE TO BE PROVIDED AT 5' OF C/C TO ENSURE DRAINAGE OF BLANKET COURSE
10. BLANKET COURSE OF ROADS AND PAVED AREAS HAS TO BE EXTENDED RIGHT TO THE COPING OF DRAINS.
11. FURTHER DETAIL OF SETTING – OUT FOR ROADS AND BUILDING ETC. ARE AVAILABLE AT CONSULTANTS SITE OFFICE UPON REQUEST.
12. EXISTING COVERS MANHOLES, VALVE CHAMBER ETC. INCLUDE FAILAH HYDRANT SHALL BE ADJUSTED ACCORD TO FINAL GROUND OR ROAD LEVEL.

LEGEND :–

EWC	–	EUROPEAN WATER CLOSET
AWC	–	ASIAN WATER CLOSET
BN	–	BASIN
SK	–	SINK
SH	–	SHOWER
U	–	URINAL
FT	–	FLOOR TRAP
GT	–	GULLY TRAP
GRT	–	GREASE TRAP
MH	–	MANHOLE

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN

Untuk

TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

PANDANGAN PENULIS

PEMAJU/JABATAN PROJEK

TENAGA NASIONAL PROPERTIES SDNBHD.

Tingkat 14, Akaun Perangsang, Bangunan Pertandangan, 46200 Kuala Lumpur. Tel:03 255 3332 Fax:03 255 3642

PEMBEKAL KHIDMAT :

Ellis–Don

PANDANGAN ARKITEK

MOHD NAZAM MD KASSIM
Dip Arch, B.Sc.Arch., (Hons) Master in Urban Planning (Urban Design Principle) (USA)
APA LAM No. A/P 23

"Saya memperakui bahawa segala butiran dalam pelan/lukisan adalah mengikuti garis panduan Undang-Undang Kecil Bangunan Seragam 1984 dan saya setuju terima tanggungjawab penuh dengan sewajarnya."

Suite 2.28, 2nd Flr Wisma Perdana, Jalan SS 17/1A, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan. Tel:03-733 6148 Fax:03-7[illegible]

JURUTERA AWAM DAN STRUKTUR

PERUNDING (Consulting Engineers)

No 9, Jalan 33/14C, Seksyen 33, 47400 Petaling Jaya, Selangor Darul Ehsan. Tel:03 733 6699 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELEKTRIKAL

PERUNDING HASHIM & NEH SDN. BHD.(Jurutera Perunding)
62 & 63, Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan. Tel:03 705 6068 Fax:03 705 6924

PERUNDING LANDSKAP

MR CONSULTANTS SDN. BHD.

Unit Pengurusan Arkitektur Bersama Sdn. Bhd. 19-B, Jalan PJS 10/24, Bandar Sri Sunway, 46000 Petaling Jaya, Selangor Darul Ehsan. Tel:03 736 5629 Fax: 03 731 2606

K.O. CONTRACTOR :

SINAR SELASEH (M) SDN. BHD. (Co. No 165300-T)
NO 30, JALAN PJS 7/19, BANDAR SUNWAY, 46150 PETALING JAYA, SELANGOR DARUL EHSAN.
TEL: 03-7494 8833 FAX: 03-7494 8877

TAJUK LUKISAN

AS BUILT DRAWING
SANITARY SERVICES

SA-1 : LOW RISE STUDENT APARTMENT
4 STOREY, 8 UNIT / FLOOR
LOW RISE STUDENT APARTMENT
SITE PLAN

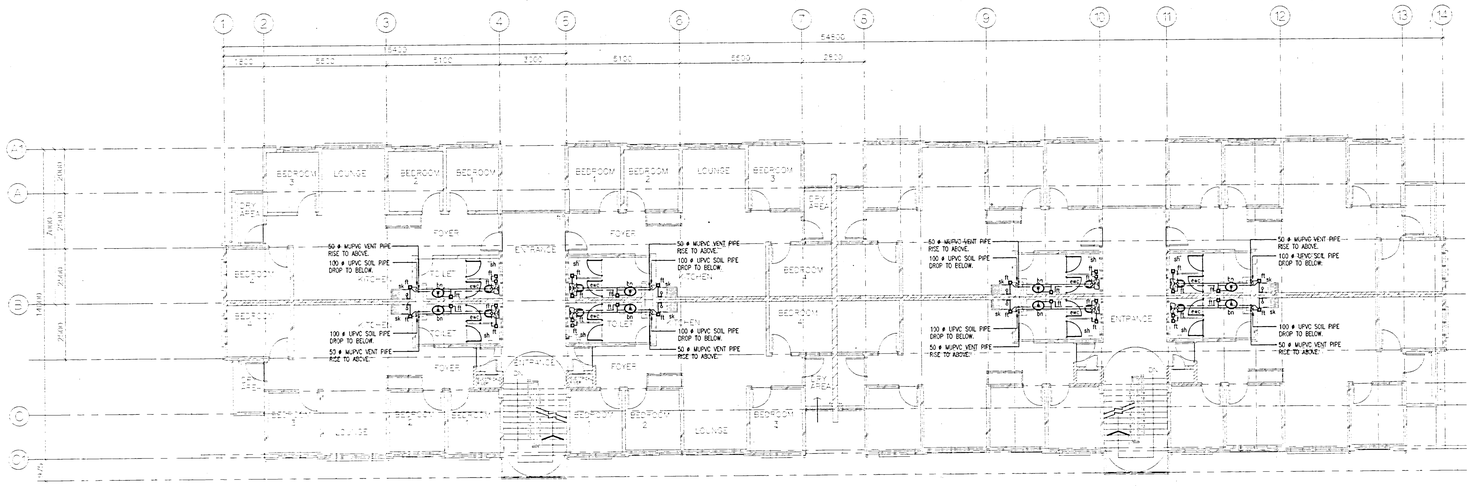
TARIKH : JUNE 1998 SKALA : 1 : 250

DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN

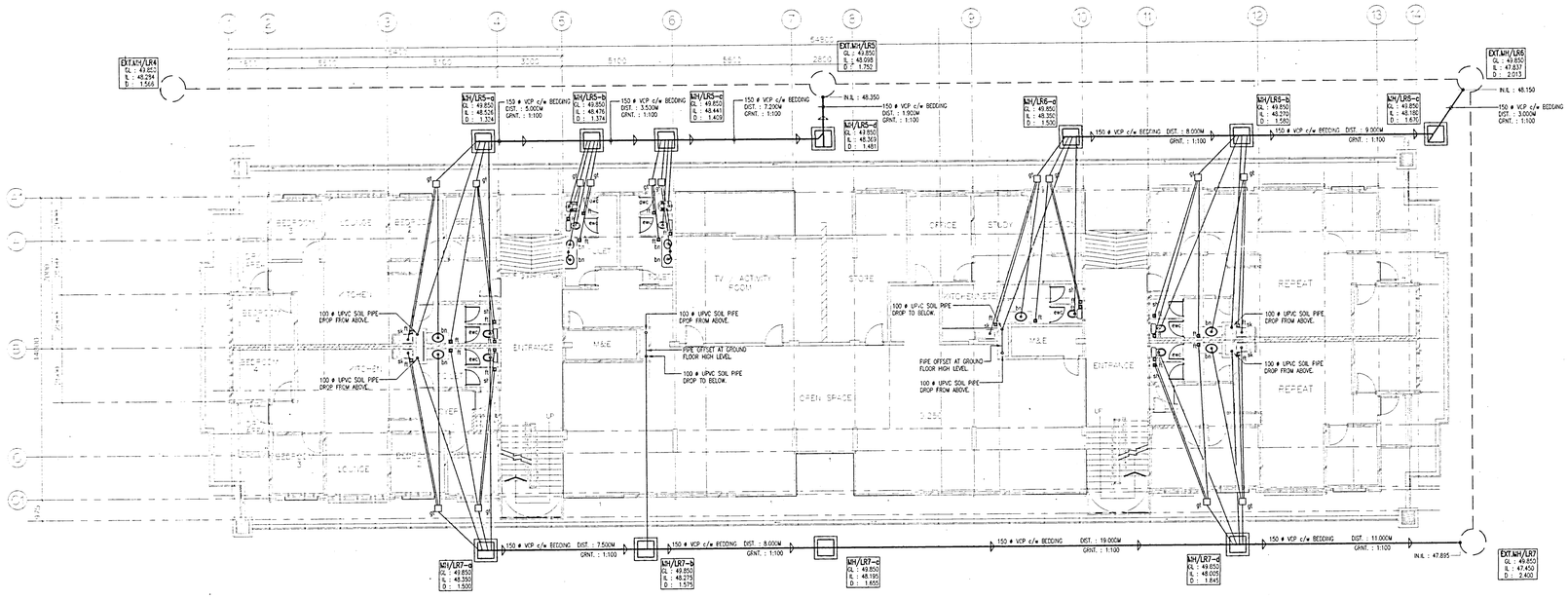
KSS 97 - PPL - 001 - SA-1 - SWV - 01

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TYPICAL FLOOR PLAN (1ST - 2ND)

SCALE 1 : 100



GROUND FLOOR PLAN

SCALE 1 : 100

LEGEND :-

EWC	-	EUROPEAN WATER CLOSET
AWC	-	ASIAN WATER CLOSET
BN	-	BASIN
SK	-	SINK
SH	-	SHOWER
U	-	URINAL
FT	-	FLOOR TRAP
GT	-	GULLY TRAP
GRT	-	GREASE TRAP
MH	-	MANHOLE

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TAMBAHAN/PEMBETULAN

PENDUDUK PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD

Tingkat 3, Blok D, Tenaga Nasional Berhad Complex, 59490 Kuala Lumpur
Tel 03 255 6677 Fax 03 255 6767

PEMBINA TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD.

Tingkat 14, Pusat Perangsang Perniagaan Perangsang, 46 1/2 Jln Sri Bahari, 50450 Kuala Lumpur
Tel 03 292 3322 Fax 03 662 7642
Ellis-Don

Dengan Kerjasama :

TANDATANGAN AKITEK

MOHD NAZRI MD KASSIM
Dip.Arch.Adv.Arch.(UM), Master in Urban Planning (Urban Design)(Hawaii), AMIA
SRV. LAM Reg. No. A/23

"Saya memperakui bahawa pelan bulan dalam pelantaran adalah menurut keterangan Undang-Undang Kecil Bangunan Seragam 1984 dan segala butir-butir berkaitan telah dipatuhi dalam perancangan saya."

Suite 2.05 2nd Fl. Wisma Perkasa Jalan SS 17/14, Subang Jaya 47500 Petaling Jaya Selangor Darul Ehsan
Tel:03-732 0128 Fax:03-732 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)

No.A, Jalan SS 18/4C, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan
Tel:03 735 6693 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & NEH SDN BHD (Jurutera Perunding)

62 & 63, Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan
Tel:03 735 6188 Fax:03 735 1924

PERUNDING LANDSKAP
MP CONSULTANTS SDN BHD

Unit Perunding Mutiara Damansara Kamp. Tengah, No.1, Jln 51/A4, Section 51, 46000 Petaling Jaya, Selangor Darul Ehsan
Tel:03 734 5613 Fax: 03 731 2835

SUB CONTRACTOR :

SINAR SELASEH (M) SDN. BHD. (CIVIL & MECHANICAL ENGINEERING CONTRACTORS)
NO.1, JALAN PUTRA PERMAI 3, TAMAN PUTRA PERMAI, 43300 SERI KEMBANGAN, SELANGOR DARUL EHSAN.
TEL: 03-7958 9955 (4 LINES) FAX: 03-7958 9966

TAJUK LUKISAN :

AS BUILT DRAWING
SANITARY SERVICES

SA-1 : LOW RISE STUDENT APARTMENT
4 STOREY , 8 UNIT / FLOOR

GROUND FLOOR PLAN AND
TYPICAL FLOOR PLAN (1ST. - 2ND.)

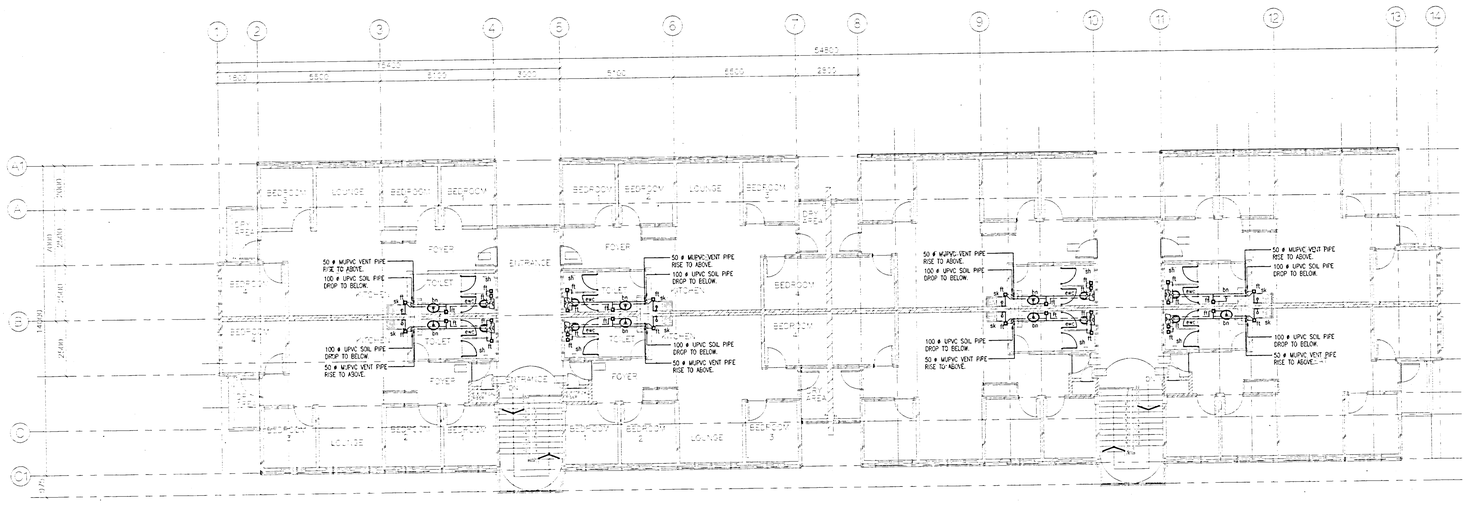
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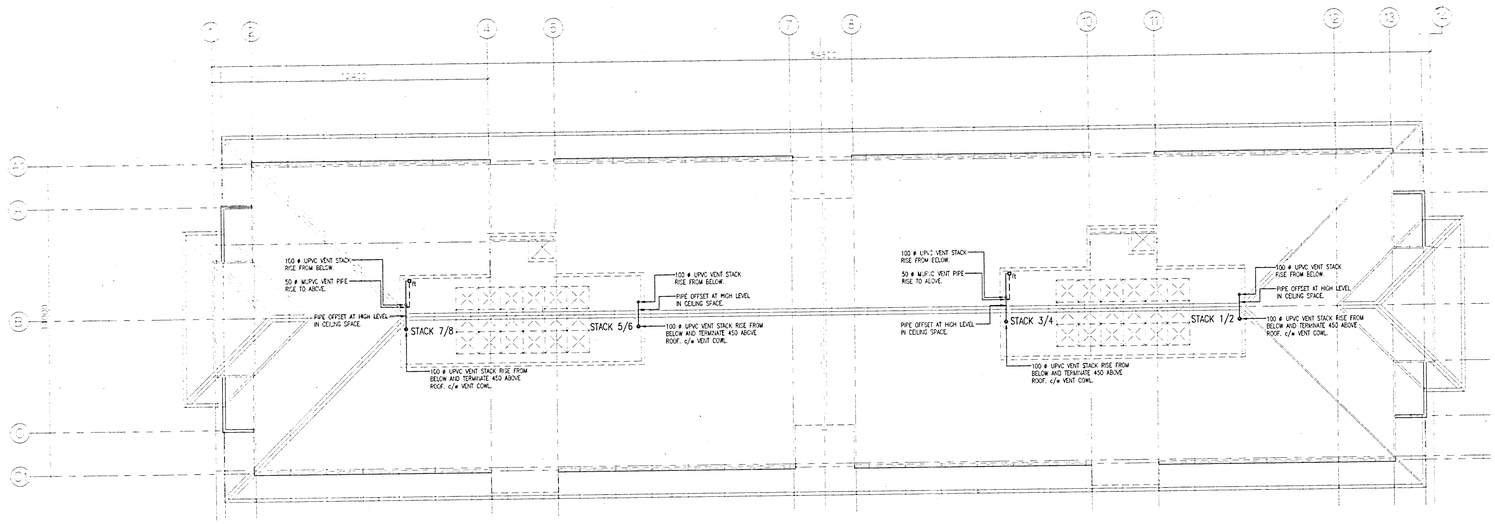
NO. LUKISAN

KSS 97 - PPL - 001 - SA-1 - SWV - 02

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THIRD FLOOR PLAN



ROOF PLAN

LEGEND :-

EWC	-	EUROPEAN WATER CLOSET
AWC	-	ASIAN WATER CLOSET
BN	-	BASIN
SK	-	SINK
SH	-	SHOWER
U	-	URINAL
FT	-	FLOOR TRAP
GT	-	GULLY TRAP
GRT	-	GREASE TRAP
MH	-	MANHOLE

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA :

BIL.	TARIKH	PERKARA

TANDATANGAN PENUH :

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD.
Tingkat 3, Blok G, Tenaga Platz, Bandar Damansara, 50490 Kuala Lumpur Tel:03 255 8877 Fax:03 255 8755

PENYELIA PROJEK :
PERUNDING INTERNATIONAL SDN BHD
Tingkat 14, Plaza Perangsang, Persiaran Perbandaran, 40675 Shah Alam Tel:03 551 3322 Fax:03 551 3042
Ellis-Don

PENGARAH / ARKITEK :
JABATAN KERJA RAYA MALAYSIA
Bachelor Architecture(UM) Master in Urban Planning Universiti Sains Malaysia (USM) Pulau Pinang
"Saya mempersilakan sebarang kritik dalam usaha untuk saya memberi kepuasan pada pelanggan"
"Kepuasan pelanggan adalah matlamat kami"

Suite 3.05 2nd Flr Kerma Perdana Jalan SS 17/1A Subang Jaya 47500 Petaling Jaya Selangor Darul Ehsan Tel:03-732 0128 Fax:03-732 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15 4C/Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 733 6599 Fax:03 734 7521

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HISHAM & NEW SDN BHD (Jurutera Perunding)
62 A, 63 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 78 5168 Fax:03 78 5624

PERUNDING LANDSKAP
NR CONSULTANTS SDN BHD
No 2nd Floor Kompleks Kumpulan Fortuna 1 & 3 Jln PJS 7/3 24, Bandar Sri Sunway 46000 Petaling Jaya Selangor Darul Ehsan Tel:03 735 8633 Fax:03 731 2815

SUB CONTRACTOR :
SINAR SELASEH (M) SDN. BHD. (Co. No. 103220-T)
PENGUSAHA PUSTAKA BERKOMPUTER, MENGHASILKAN PERANCANGAN LANDSKAP, BERSAMA PELANGGAN DAN PERUNDING

TAJUK LUKISAN :
AS BUILT DRAWING
SANITARY SERVICES

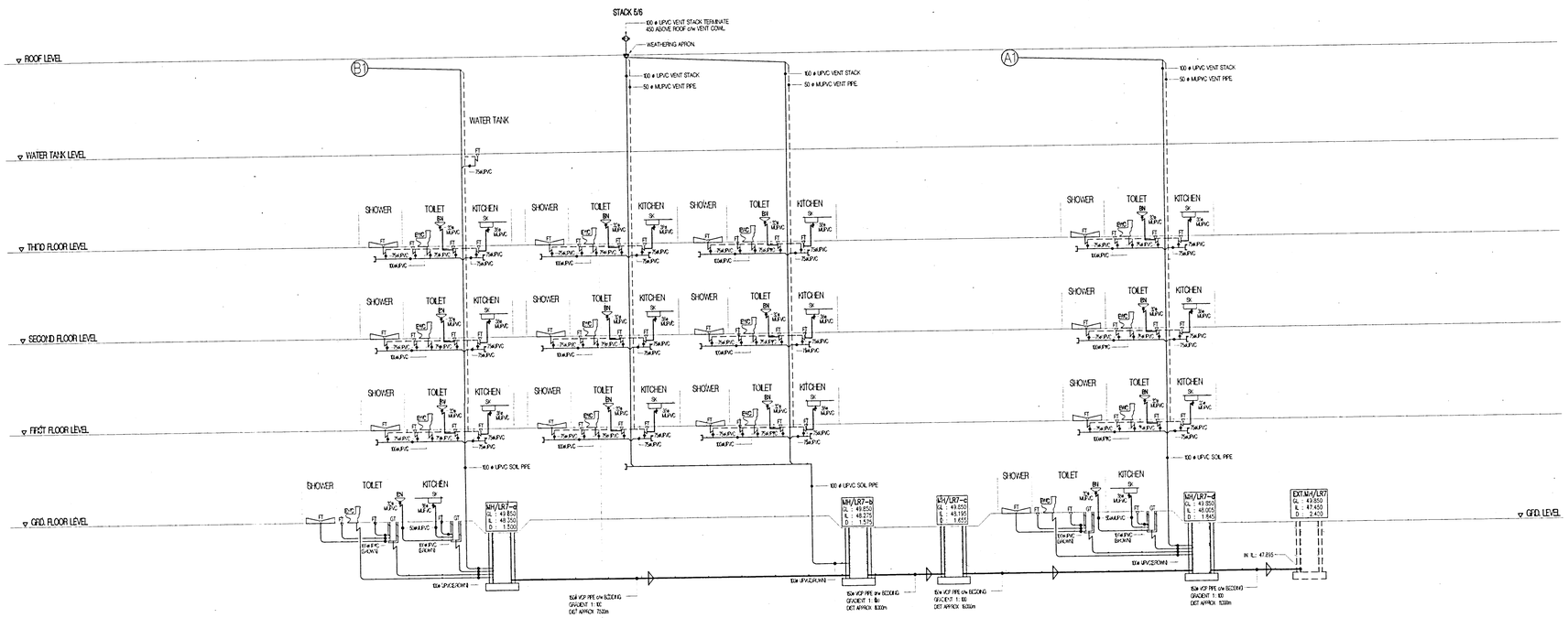
SA-1 : LOW RISE STUDENT APARTMENT
4 STOREY , 8 UNIT / FLOOR

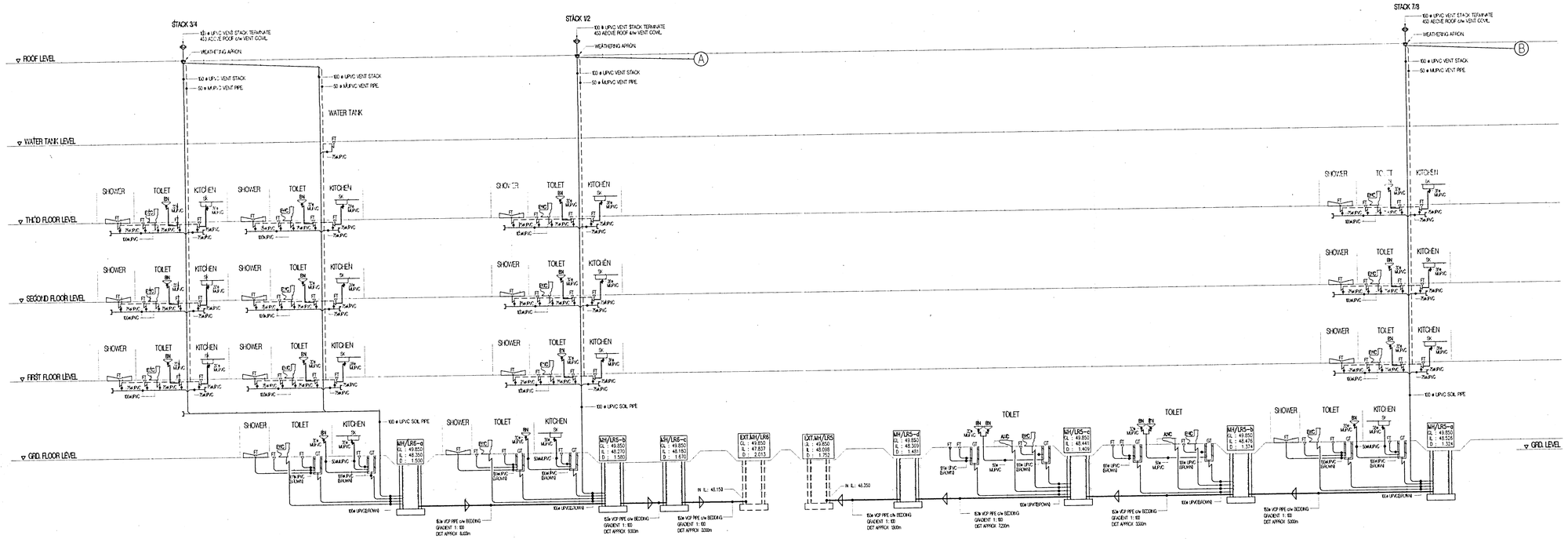
THIRD FLOOR PLAN AND ROOF PLAN

TARIKH : JUNE 1998 SKALA : 1 : 100
DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN :
KSS 97 - PPL - 001 - SA-1 - SWV - 03

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LEGEND :-

EWC	-	EUROPEAN WATER CLOSET
AWC	-	ASIAN WATER CLOSET
BN	-	BASIN
SK	-	SINK
SH	-	SHOWER
U	-	URINAL
FT	-	FLOOR TRAP
GT	-	GULLY TRAP
GRT	-	GREASE TRAP
MH	-	MANHOLE

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN

Untuk

TENAGA NASIONAL BERHAD

NOTA :

BIL.	TARIKH	PERKARA

TANDATANGAN PEMILIK

PEMBUAT PERTAMA :

TENAGA NASIONAL PROPERTIES SDN BHD

Tingkat 14, Plaza Perdagangan, Persiaran Perbandaran, 40675 Shah Alam Tel:03 550 3722 Fax:03 550 3642

Dengan Kerjasama :

Ellis-Don

TANDATANGAN ARKITEK

DATO' HAJAH HAZIAH MD KASIM

Director Advisory(DTM) Master in Urban Planning Urban Design(MIP,RAM) APA (AM) No. AP/23

"Saya memberikan consent secara bertulis kepada pihak Tenaga Nasional Berhad untuk menggunakan nama saya sebagai Perunding Utama Projek ini dan tidak akan menarik balik consent ini sehingga projek siap dengan sempurna"

ISM

Architecture Planning Interiors

No 16 Aras 3 & 4, Jln Kenari 23, Bandar Sri Damansara, 52200 Kuala Lumpur Tel:03 6277 1888 Fax:03 6277 1889

JURUTERA AWAM DAN STRUKTUR

PERUNDING (Consulting Engineers)

No 9, Jalan SS 15/4G, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 733 6556 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELEKTRIKAL

PERUNDING HASHIM & NEH SDN BHD (Jurutera Perunding)

62 A & B, Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 705 4188 Fax:03 705 1924

PERUNDING LANDSKAP

NA CONSULTANTS SDN BHD

No 2A (1st Floor), Jalan Kenari 23, Bandar Sri Damansara, 52200 Kuala Lumpur Tel:03 6145 5529 Fax: 03 6731 2805

SUB CONTRACTOR :

SINAR SELASEH (M) SDN BHD (Co. No. 155201-T)

PENGUBAHSUAI, PENCETAKAN DAN PENJUAL AKSESORI GAS DAN AIR

TAJUK LUKISAN

AS BUILT DRAWING
SANITARY SERVICES

SA-1 : LOW RISE STUDENT APARTMENT
4 STOREY , 8 UNIT / FLOOR

DIAGRAMMATIC

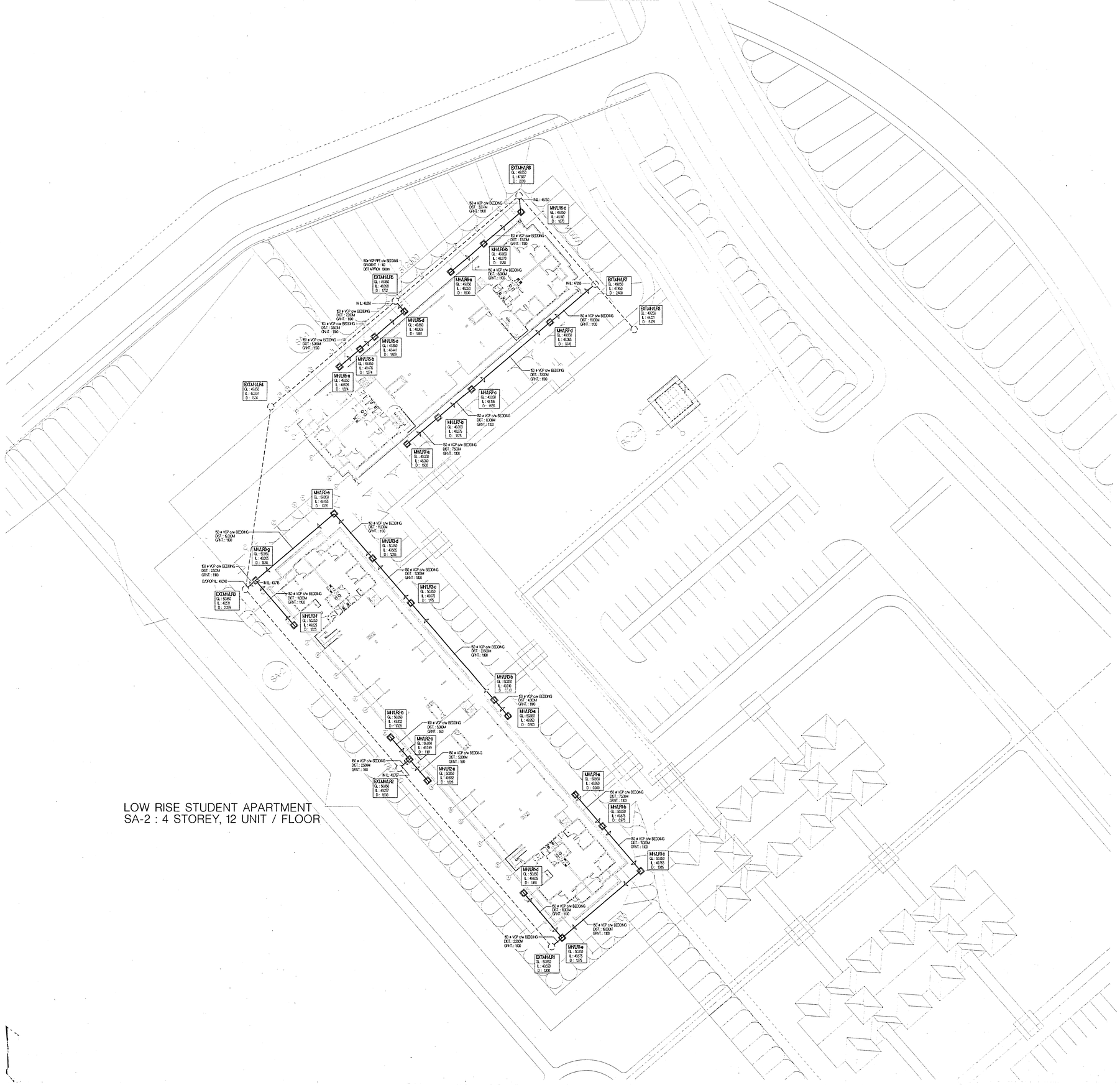
TARIKH : JUNE 1998 SKALA : N.T.S

DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN

KSS 97 - PPL - 001 - SA-1 - SWV - 04

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LOW RISE STUDENT APARTMENT
SA-2 : 4 STOREY, 12 UNIT / FLOOR

N.O.T.E :

1. THE INSTALLATION OF PIPEWORK AND FITTINGS SHALL COMPLY WITH CURRENT EDITION OF SEWERAGE BY LAW.
2. SANITARY FITTINGS:
   TO FIXING BY SUITABLE SUPPORTS EXACT POSITIONING TO RESPONSIBILITY OF CONTRACTOR
3. TYPE OF MATERIALS IN GANERAL:
   a) ALL SOIL PIPE FROM 75mm (3") DIA TO 150mm (6") DIA. ABOVE GROUND SHALL BE UPVC WHITE TO B.S 4514 : 1969
   b) ALL WASTE PIPE FROM 32mm (1 1/4") DIA TO 50mm (2") DIA. SHALL BE MUPVC WHITE TO B.S 5255 : 1976
   c) ALL UNDERGROUND SOIL PIPE FROM 100 TO 150 SHALL BE UPVC BROWN TO B.S 4660 1975.
4. ALL EXTERNAL SEWERAGE PIPES SHALL BE VITRIFIED CLAY PIPE TO B.S 65 AND 540 AND SHALL BE STANDARD PIPE BEDDING APPROVED BY AUTHORITY.
5. ALL PIPE SHALL BE SUITABLE SUPPORTED AND PROVIDED WITH CLEANING EYES FOR SERVISING AND CLEANING
6. ALL PIPE PASSING THRO'S ROOF STRUCTURE SHALL BE COLLORS AND FLASHING TO FORM WATER TIGHT JOINT.
7. ALL SANITARY PIPE SHALL BE TESTED IN PRESENT OF ENGINEER FOR WATER LEAKAGE BEFORE CONCEALMENT.
8. ALL MANHOLE LOCATED IN BUILDING AREA SHALL BE PROVIDED WITH AIR TIGHT MANHOLE COVER.
9. THE WALLS OF DRAINS WITH BUILD-UP COPING LEVELS INSIDE OR ADJACENT TO PAVED AREAS SHALL BE FROM REINFORCED CONCRETE: WEEPHOLES HAVE TO BE PROVIDED AT 5' 0" C/C TO ENSURE DEWATERING OF BLANKET COURSE
10. BLANKET COURSE OF ROADS AND PAVED AREAS HAS TO BE EXTENDED RIGHT TO THE COPING OF DRAINS.
11. FURTHER DETAIL OF SETTING – OUT FOR ROADS AND BUILDING ETC. ARE AVAILABLE AT CONSULTANTS SITE OFFICE UPON REQUEST.
12. EXISTING COVERS MANHOLES, VALVE CHAMBER ETC. INCLUDE PILLAR HYDRANT SHALL BE ADJUSTED ACCORD TO FINAL GROUND OR ROAD SURFACE.

LEGEND :–

EWC	–	EUROPEAN WATER CLOSET
AWC	–	ASIAN WATER CLOSET
BN	–	BASIN
SK	–	SINK
SH	–	SHOWER
U	–	URINAL
FT	–	FLOOR TRAP
GT	–	GULLY TRAP
GRT	–	GREASE TRAP
MH	–	MANHOLE

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TANDATANGAN PEMILIK

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD.
Tingkat 7, Blok D, Tenaga, Pusat Bandar Damansara, 50490 Kuala Lumpur, Tel:03 255 611 Faks:03 255 6119

PEMBEKAL TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD
Lot 1174, Fasa Perangsang, Kawasan Perindustrian Kota, 40000 Shah Alam Tel:03 551 3362 Fax:03 551 3942
Dengan Kerjasama :
IJM-DOF

TANDATANGAN ARKITEK

MOHD HAZAMI BIN HASSAN
Dip.Arch, Adv.Arch.(UTM), Master in Urban Planning (Universiti Teknologi Malaysia), AKPAM
"Saya memperoleh semua soal - selidik dalam bangunan ini untuk memulih kerangka, mengenalpasti segala ketidakpatuhan terhadap Undang-Undang Kecil Bangunan Seragam 1984 dan saya berpuas hati tentang tanggungjawab telah dengan sewajarnya."

Suite 3.06 3rd Floor Wisma Goldhill, 67 Jalan Raja Chulan, 50200 Kuala Lumpur, Tel:03 2032 2288 Fax:03 2032 2299

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15/4, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 733 4699 Fax:03 734 7211

JURUTERA MEKANIKAL DAN ELETRIKAL
PERUNDING HASHIM & NTH SDN. BHD(Jurutera Perunding)
62 & 63 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 705 5268 Fax:03 705 5924

PERUNDING LANSKAP
N.P. CONSULTANTS SDN. BHD.
No.2 Jalan Kenari 5, Bandar Puchong Jaya, 47100 Puchong, Selangor Darul Ehsan Tel:03 745 8619 Fax:03 701 2825

SUB CONTRACTOR :
SINAR SELASEH (M) SDN BHD (Co No 169901-T)
No.26, Jalan 5/118, Off Jalan Kuchai Lama, 58200 Kuala Lumpur, Tel: 03-7980 3388 Fax: 03-7980 3399

TAJUK LUKISAN
AS BUILT DRAWING
SANITARY SERVICES

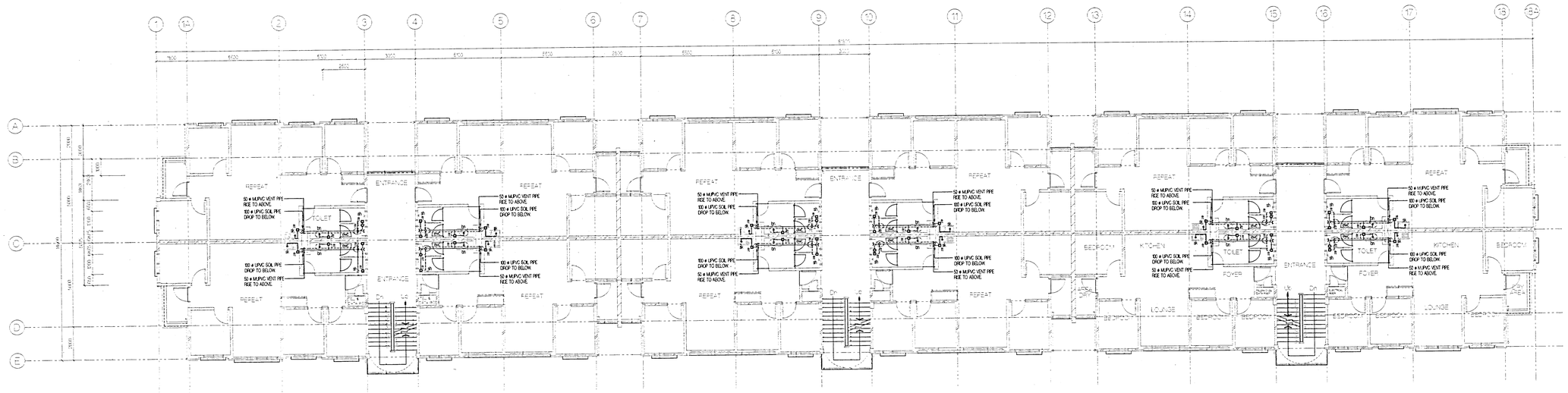
SA-2 : LOW RISE STUDENT APARTMENT
4 STOREY, 12 UNIT / FLOOR

SITE PLAN

TARIKH : JUNE 1998 SKALA : 1 : 250
DILUKIS : DIPERIKSA OLEH :

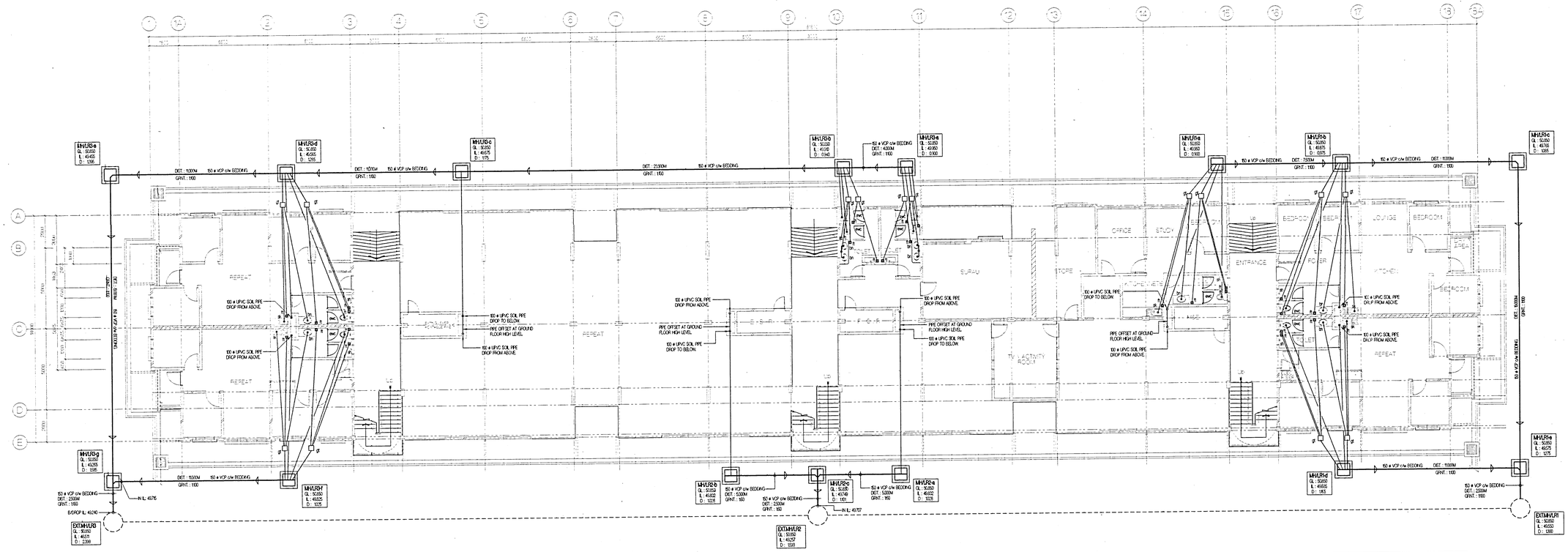
NO. LUKISAN:
KSS 97 - PPL - 001 - SA-2 - SWV - 01

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TYPICAL FLOOR PLAN (1ST - 2ND)

SCALE 1 : 100



GROUND FLOOR PLAN

SCALE 1 : 100

LEGEND :-		
EWC	-	EUROPEAN WATER CLOSET
AWC	-	ASIAN WATER CLOSET
BN	-	BASIN
SK	-	SINK
SH	-	SHOWER
U	-	URINAL
FT	-	FLOOR TRAP
GT	-	GULLY TRAP
GRT	-	GREASE TRAP
MH	-	MANHOLE

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559
JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TANDATANGAN REVISI

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD.
Tingkat 3, Blok G, Terajah, Pusat Bandar Damansara, 50490 Kuala Lumpur. Tel:03 255 561** Fax:03 255 6755

PEMBEKAL/S TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD.
Tingkat 14, Plaza Perangsang, Pertiagan Perdanajaya, 40200 Shah Alam, Tel:03 550 3363 Fax:03 550 3642

Dengan Kerjasama :
Ellis-Don

TANDATANGAN AKITEK

MOHD. NAZAM MD YASEEN
Dip.Arch.Aus.Arch.(UTM) Master Urban Planning (Urban Design)Michigan, AAPAM
APA LAM No: A/P 23

"Saya memperakukan bahawa kerja-kerja ini telah dijalankan oleh saya atau dibawah seliaan saya dan dengan sesungguhnya dan sebenarnya mematuhi kehendak-kehendak Kaedah-kaedah Bangunan Seragam 1984 dan/atau Undang-undang kecil yang berkaitan dengannya."

FOCUS
Lot 51, 52, 53 Jln Suasa Jaya 47610 Petaling Jaya Selangor Darul Ehsan Tel:03-732 0128 Fax:03-732 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15/4G,Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 733 6993 Fax:03 734 74..

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & NEH SDN BHD (Juruteta Perunding)
82 & 83 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 705 5088 Fax:03 705 6924

PERUNDING LANSKAP
NR CONSULTANTS SDN. BHD.
Tel:03 736 5639 Fax: 03 731 2575

SUB CONTRACTOR :
SINAR SELASEH (Co. No:

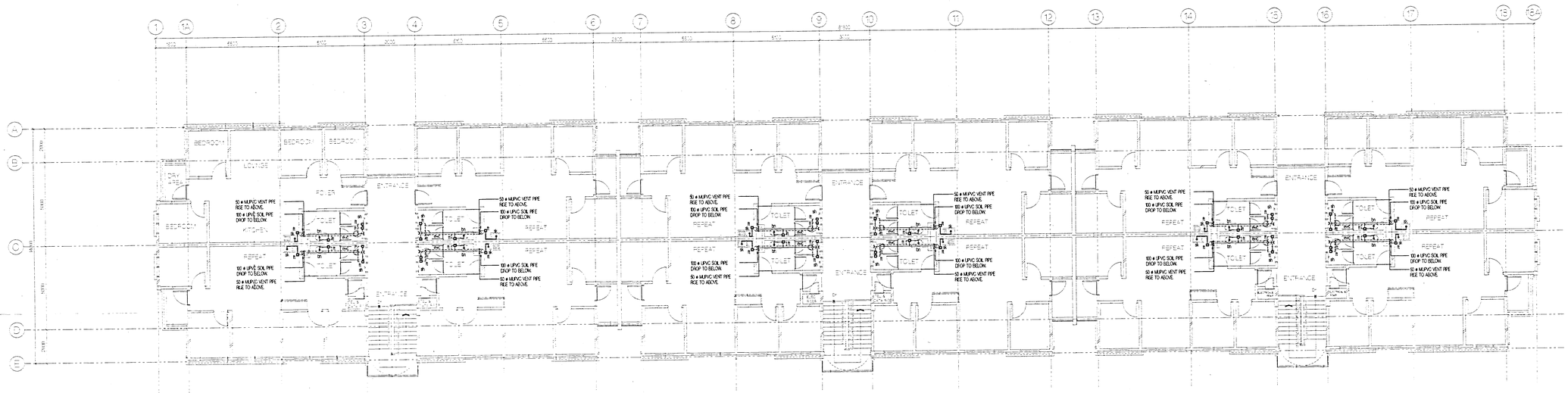
TAJUK LUKISAN

AS BUILT DRAWING
SANITARY SERVICES
SA -2 : LOW RISE STUDENT APARTMENT
4 STOREY 12 UNIT
GROUND FLOOR PLAN
TYPICAL FLOOR PLAN (1ST - 2ND)

TARIKH : JUNE 1998 SKALA : 1 : 100
DILUKIS : DIPERIKSA OLEH :

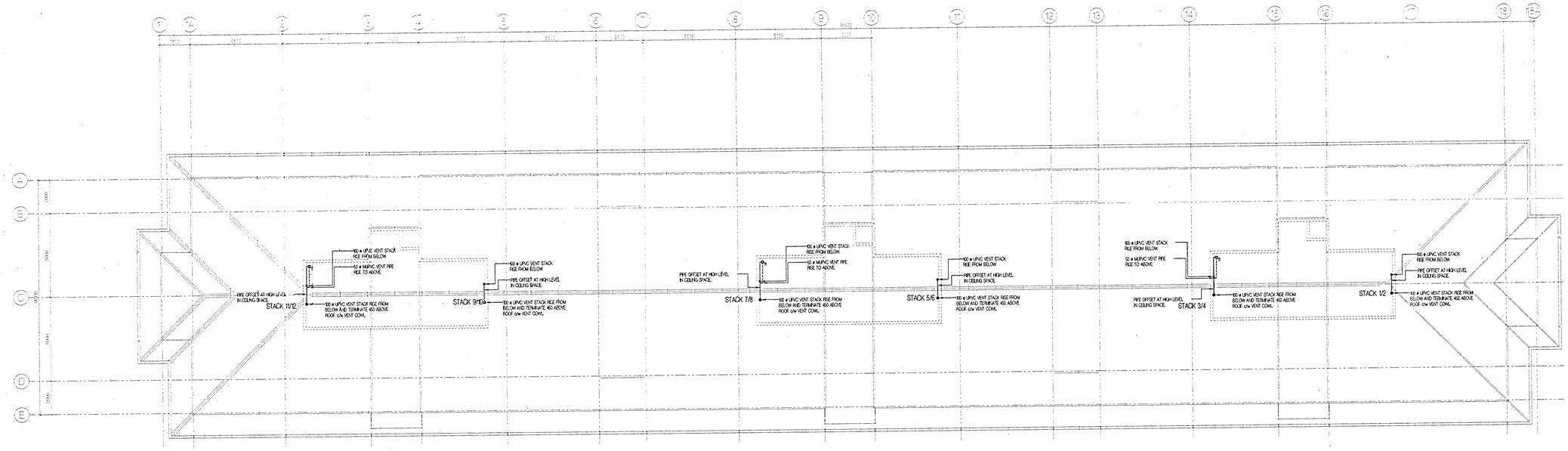
NO. LUKISAN
KSS 97 - PPL - 001 - SA-2 - SWV - 02

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THIRD FLOOR PLAN

LEGEND :-		
EWC	-	EUROPEAN WATER CLOSET
AWC	-	ASIAN WATER CLOSET
BN	-	BASIN
SK	-	SINK
SH	-	SHOWER
U	-	URINAL
FT	-	FLOOR TRAP
GT	-	GULLY TRAP
GRT	-	GREASE TRAP
MH	-	MANHOLE



ROOF PLAN

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TANDATANGAN PEMILIK

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN.BHD.
Tingkat 3, Blok C, Tenaga, Pusat Bandar Damansara, 50490 Kuala Lumpur
Tel:03 255 5677 Fax:03 255 6759

PEMBORONG TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD.
Tingkat 14, Plaza Perangsang, Persiaran Perbandaran, 42000 Shah Alam, Selangor
Tel:03 550 3362 Fax:03 550 3642
Dengan Kerjasama :
Ellis-Don

TANDATANGAN ARKITEK

MOHD NAZAM MD KASSIM
Dip.Arch Adv.Arch.(ITM) Master in Urban Planning (Urban Design)(Michigan) APAM
AFA LAM No. AM 23
"Saya mempersuai bahawa segala butiran dalam pelan-pelan ini adalah mematuhi keperluan Undang-Undang Kecil Bangunan Seragam 1984 dan segala tatiuh terima tanggungjawab penuh dengan sewajarnya"

FOCUS
Suite 17.01, 17th Floor, Menara Olympia, Jalan SS 17/1a, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan
Tel:03-732 0128 Fax:03-732 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15/4d, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan
Tel:03 733 8899 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELETRIKAL
PERUNDING HASHIM & NEH SDN BHD (Jurutera Perunding)
62 & 63 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan
Tel:03 703 8385 Fax:03 704 6924

PERUNDING LANSKAP
NR CONSULTANTS SDN. BHD.
No1 Tingkat Satu Antara Enterprise Perniaga 19-B, Jalan PJS 11/24, Bandar Sri Subang, 46000 Petaling Jaya, Selangor Darul Ehsan
Tel:03 733 3633 Fax: 03 731 2806

SUB CONTRACTOR :
SINAR SELASEH (Co. No:163010-T)
NO.1 TINGKAT SATU ANTARA ENTERPRISE PERNIAGA 19-B, JALAN PJS 11/24, BANDAR SRI SUBANG, 46000 PETALING JAYA, SELANGOR DARUL EHSAN.
TEL: 03-7036 8807/7036 8807 FAX: 03-7731 2771

TAJUK LUKISAN

AS BUILT DRAWING
SANITARY SERVICES

SA -2 : LOW RISE STUDENT APARTMENT
4 STOREY 12 UNIT

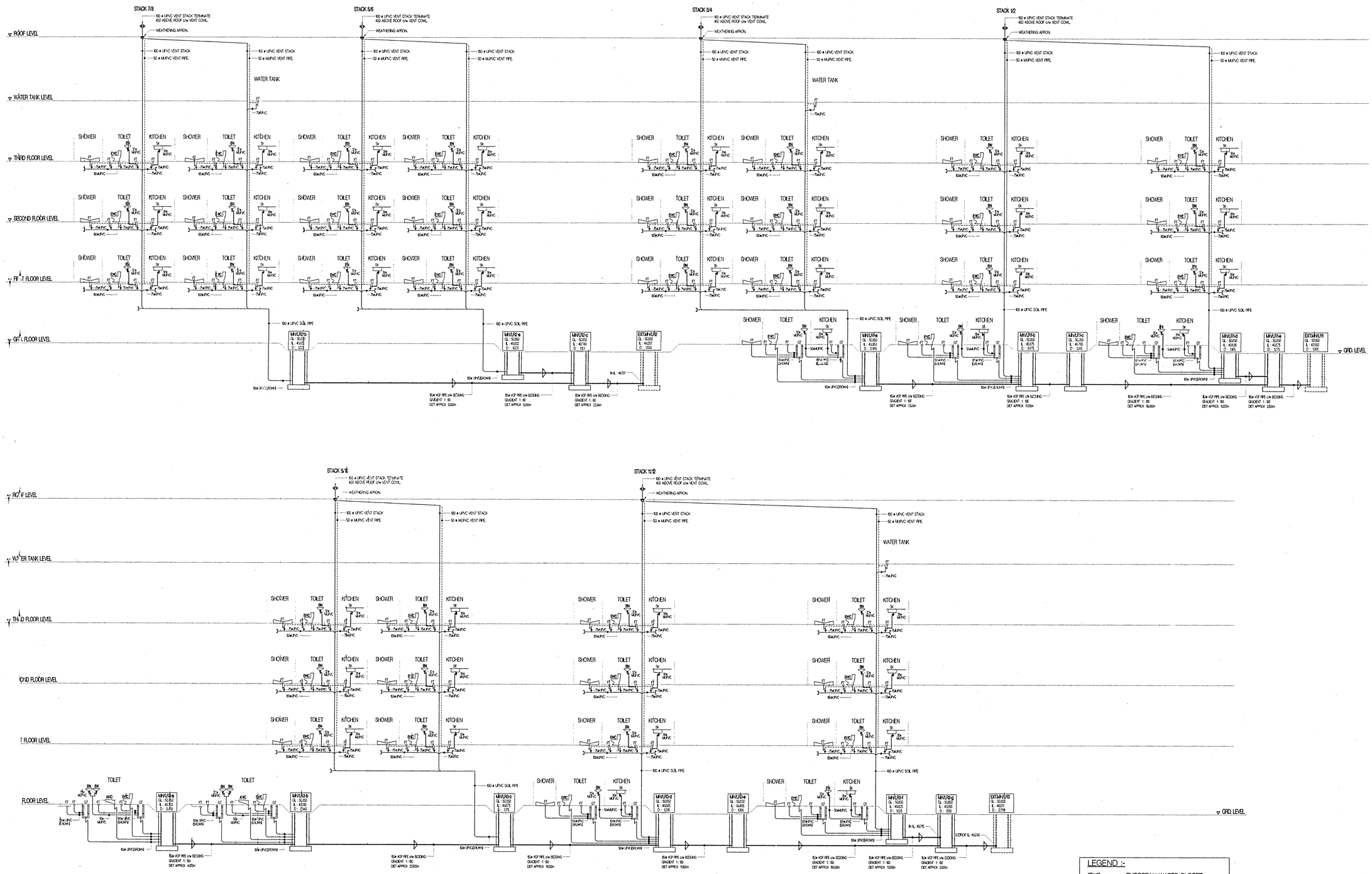
THIRD FLOOR PLAN & ROOF PLAN

TARIKH : JUNE 1995 SKALA : 1 : 100

DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN
KSS 97 - PPL - 001 - SA-2 - SWV - 03

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LEGEND :-

EWC	-	EUROPEAN WATER CLOSET
AWC	-	ASIAN WATER CLOSET
BN	-	BASIN
SK	-	SINK
SH	-	SHOWER
U	-	URINAL
FT	-	FLOOR TRAP
GT	-	GULLY TRAP
GRT	-	GREASE TRAP
MH	-	MANHOLE

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN Untuk TENAGA NASIONAL BERHAD

NOTA

BIL	TARIKH	PERKARA

TANDATANGAN PEMILIK

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD.
Tingkat 3, Blok G, Tenaga, Pusat Bandar Damansara, 50490 Kuala Lumpur Tel:03 255 5611 Fax:03 255 6733

PEMBEKRONG TURNKEY
PERANGSANG INTERNATIONAL SDN. BHD.
Tingkat 14, Plaza Perangsang, Perbadanan Perindustrian, 40000 Shah Alam Tel:03 550 3332 Fax:03 550 3642
Dengan Kerjasama :
Ellis-Don

TANDATANGAN ARKITEK

MOHD NAZAM MD KASSIM
Dip.Arch, Adj.Arch.(UTM) Master in Urban Planning (Urban Design Michigan) APAM
APA LAM No: A/M 23
"Saya memperakui bahawa segala butiran adalah sebenar dan segala maklumat termasuk Ukuran-ukuran Kasar Bangunan Serapam 1984 dan saya setuju terima tanggungjawab penuh dengan sewajarnya"

FOCUS
Suite 2.05 2nd Flr Kima Factory Jalan SS 17/1a Subang Jaya 47500 Petaling Jaya
Tel:03-56 ... Fax:03-56 ...

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15/4G Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 733 6899 Fax:03 734 7521

JURUTERA MEKANIKAL DAN ELEKTRIKAL
PERUNDING HASHIM & NEH SDN. BHD. (Jurutera Perunding)
62 & 63 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 705 6388 Fax:03 705 5924

PERUNDING LANSKAP
NR CONSULTANTS SDN. BHD.
Unit 8-1, Level 8, Menara Mutiara Subang, Jalan SS 16/1, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 735 8639 Fax:03 731 2856

SUB CONTRACTOR :
SINAR SELASEH (BRO(0) BHD) (Co. No:166210-T)

TAJUK LUKISAN
AS BUILT DRAWING
SANITARY SERVICES

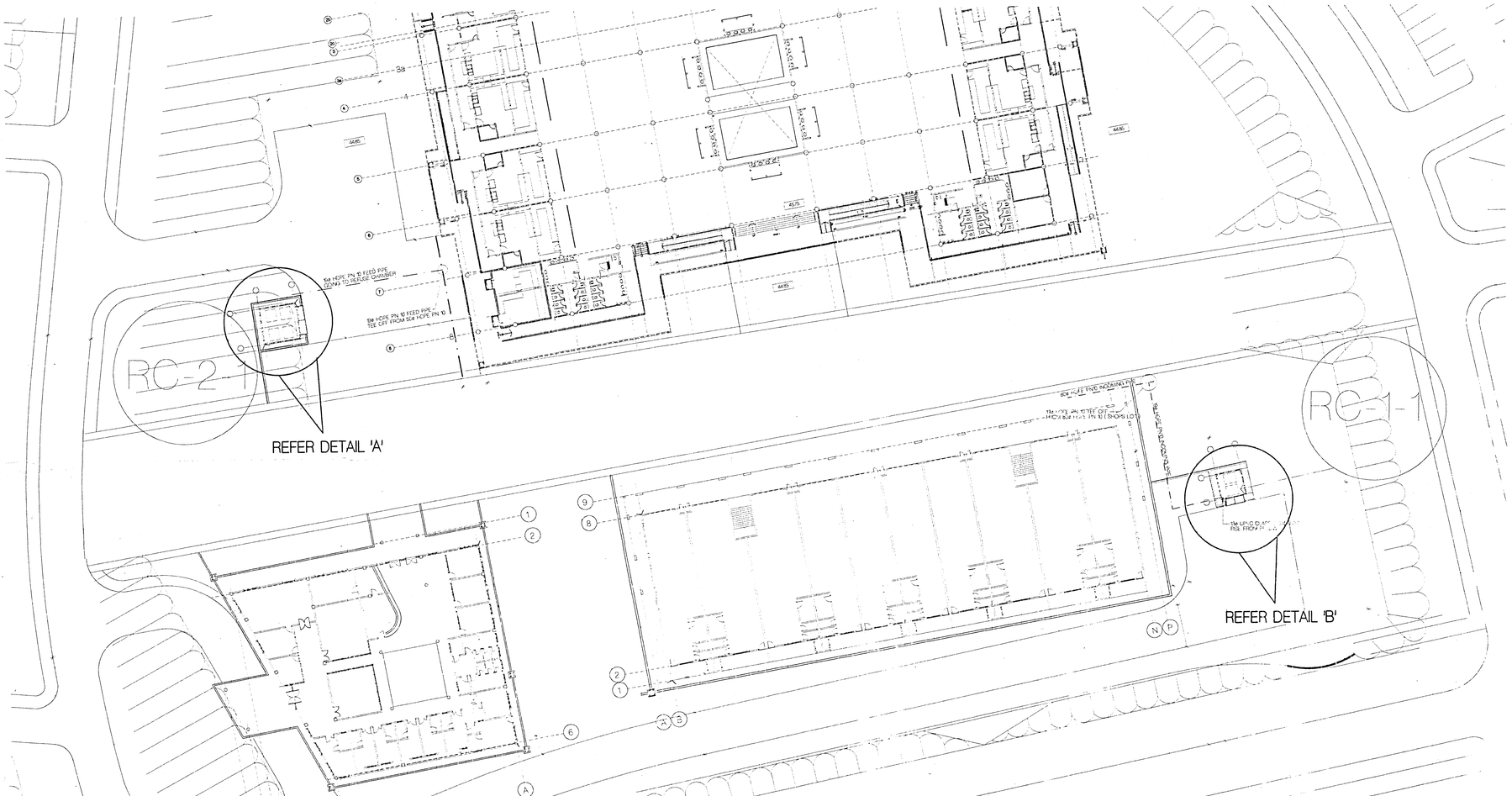
SA -2 : LOW RISE STUDENT APARTMENT
4 STOREY 12 UNIT

DIAGRAMMATIC

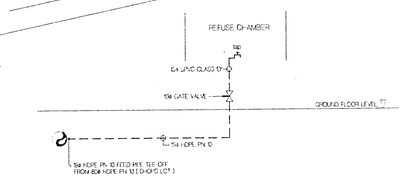
TARIKH : JUNE 1998 SKALA : N.T.S
DILUKIS : DIPERIKSA OLEH :

NO. LUKISAN
KSS 97 - PPL - 001 - SA-2 - SWV - 04

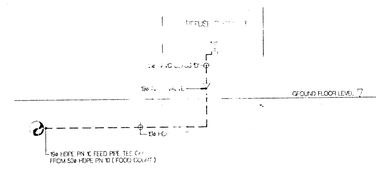
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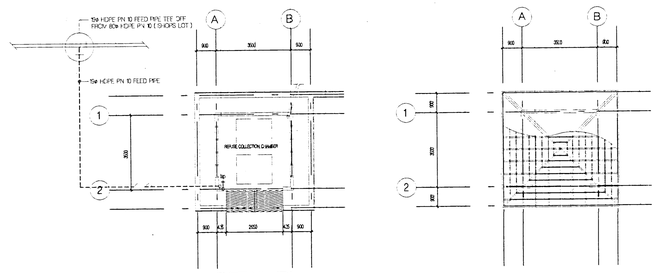
SITE PLAN
SCALE : 1 : 250



DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION
SCALE : NTS



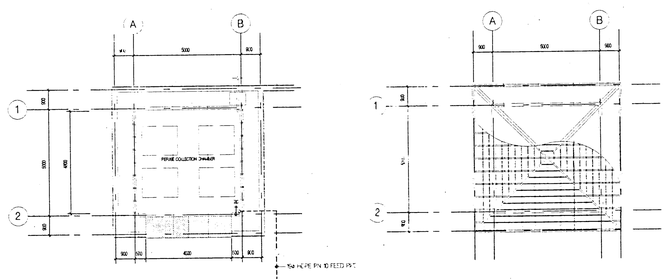
DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION
SCALE : NTS



DETAIL 'B'
GROUND FLOOR PLAN

ROOF PLAN

RC-1 :REFUSE COLLECTION CHAMBER
SCALE : 1 : 100



DETAIL 'A'
GROUND FLOOR PLAN

ROOF PLAN

RC-2 :REFUSE COLLECTION CHAMBER
SCALE : 1 : 100

1. THE INSTALLATION OF PIPE WORK AND FITTINGS SHALL COMPLY WITH CURRENT EDITION OF WATER SUPPLY RULES AND REGULATION.
2. PIPEWORK AND FITTINGS IN GENERAL :
   a) FIXING AND COORDINATION BY EXACT POSITIONING OF SERVICES TO FITTINGS SHALL BE RESPONSIBLITY OF THE PLUMBING CONTRACTOR.
   b) ALL VISIBLE AND ACCESSIBLE PIPE AND FITTING SHALL BE NEATLY AND SUITABLE SUPPORTED.
   c) ALL BURIED/CHASED AND CONCEALED PIPEWORK AND FITTINGS SHALL TESTED PRIOR TO MAKING GOOD.
3. ALL NECESSARY CHASING OF WALL FOR SERVICES AND MAKING GOOD SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. TYPE OF MATERIALS IN GENERAL :
   a) ALL INCOMING PIPE FROM WATER MAIN TO FITTINGS AND TO STORAGE TANK SHALL BE HIGH DENSITY POLYETYLENE PIPE PN10(HDPE PN10)
   b) ALL FEED PIPE FROM STORAGE TANK TO FITTINGS SHALL BE UPVC CLASS 'D'
   c) ALL FEED PIPE BURIED UNDERGROUND SHALL BE HIGH DENSITY POLYETYLENE PIPE PN10 (HDPE PN10)
   d) ALL HOT WATER PIPING SHALL BE PRE INSULATED COPPER PIPES AND ALL CONNECTION BY MEANS OF AUTOGENOUS WELDING.
5. PIPE JOINT WHICH WILL UNAVOIDABLY BE BURIED OVER OR OTHERWISE DIFFICULT FOR ACCESS SHALL BE OF WELD ONLY AND SATISFACTORILY TESTED BEFORE CONCEAL.
6. WATER TANK SHALL BE PROVIDED WITH [illegible] PLASTIC NETTING COMPLETE WITH DUST PROOF.
7. ALUMINUM CAT LADDER SHALL BE INSTALLED BESIDE THE SECTIONAL TANK NEAR MANHOLE COVER.
8. STORAGE TANK(CISTERN) SHALL BE FITTED WITH AN EFFICIENT OVERFLOW AND WARNING PIPE TO DISCHARGE WHEN THE WATER IN THE CISTERN RISES TO NOT LESS THAN 50mm (2") BELOW THE OVERFLOW LEVEL OF THE OVERFLOW PIPE.
9. THE INLET PIPE OF THE CISTERN SHALL BE FITTED WITH THE BALL TAP/FLOAT OPERATED VALVE TO CONTROL THE INFLOW OF WATER SO TO PREVENT OVERFLOW CAPABLE OF WATER TIGHT CLOSING AGAINST THE PRESSURE TO WHICH IT WILL BE SUBJECT UNDER NORMAL CONDITION.
10. SCOUR PIPE SHALL BE FITTED TO THE LOWEST PART OF THE TANK(CISTERN)STOP VALVES FOR SCOUR SHALL BE LOCATED AT PIPE TO BE SUITABLE FOR EMPTYING THE STORAGE TANK(CISTERN) IN 3 HOURS [illegible] LOT.
11. STOP VALVE SHALL BE PROVIDED ON THE INLET AND OUTLET OF STORAGE TANK(CISTERN) [illegible].
12. ALL EXPOSED PIPE SHALL BE CHROME PLATED.

LEGEND

EWC	:	EUROPEAN WATER CLOSET
AWC	:	ASIAN WATER CLOSET
UR	:	URINAL
HB	:	HAND BASIN
ST	:	STAND TAP
SHT	:	SHOWER
FD	:	FLOOR DRAIN

NOTE
1. ALL FEED PIPE FROM STORAGE TANK TO FITTINGS SHALL BE UPVC CLASS 'D' (BS3505) PIPE
2. ALL FEED PIPE BURIED UNDER GROUND SHALL BE HDPE PN10
3. ALL HOT WATER PIPE FROM WATER HEATER TO FITTINGS AND TO STORAGE TANK SHALL BE HDPE PN10

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

	TARIKH	PERKARA

PERUNDING

[illegible]

PERUNDING LANDSKAP

PERUNDING MEKANIKAL & ELEKTRIK

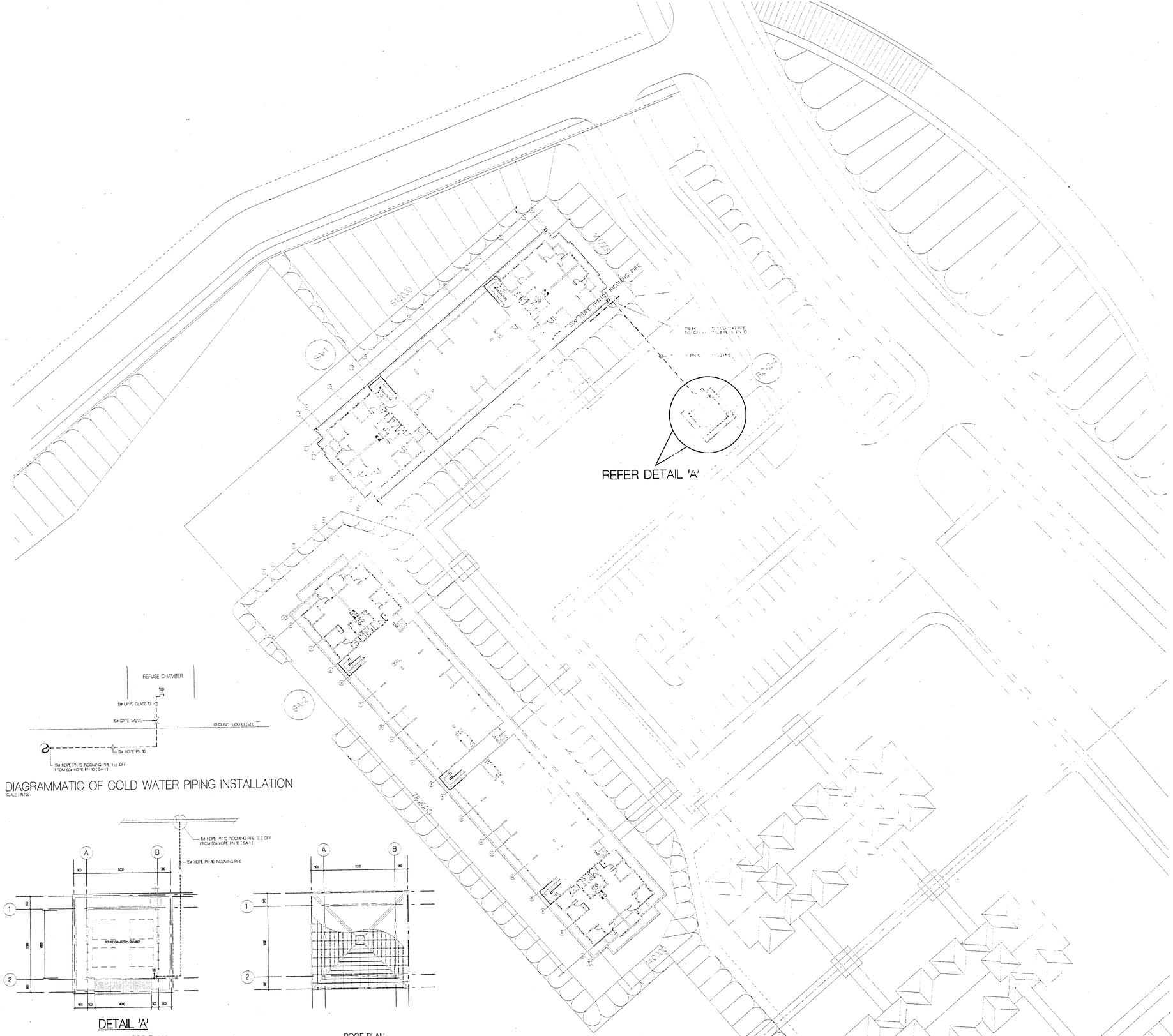
SUB CONTRACTOR :
SINAR SELASEH

TAJUK LUKISAN :
AS BUILT DRAWING
PLUMBING SERVICES

SECTOR A : REFUSE COLLECTION CHAMBER

SITE PLAN
GROUND FLOOR PLAN
DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION

NO. LUKISAN :
KSS 97 - PPL - 001 - RC - CW - 01



1. THE INSTALLATION OF PIPE WORK AND FITTINGS SHALL COMPLY WITH CURRENT EDITION OF WATER SUPPLY RULES AND REGULATION.

2. PIPEWORK AND FITTINGS IN GENERAL :
   a) FIXING AND COORDINATION BY EXACT POSITIONING OF SERVICES TO FITTINGS SHALL BE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.
   b) ALL VISIBLE AND ACCESSIBLE PIPE AND FITTING SHALL BE NEATLY AND SUITABLE SUPPORTED.
   c) ALL BURIED/CHASED AND CONCEALED PIPEWORK AND FITTINGS SHALL TESTED PRIOR TO MAKING GOOD.

3. ALL NECESSARY CHASING OF WALL FOR SERVICES AND MAKING GOOD SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4. TYPE OF MATERIALS IN GENERAL :
   a) ALL INCOMING PIPE FROM WATER MAIN TO FITTINGS AND TO STORAGE TANK SHALL BE HIGH DENSITY POLYETYLENE PIPE PN10(HDPE PN10)
   b) ALL FEED PIPE FROM STORAGE TANK TO FITTINGS SHALL BE UPVC CLASS 10'
   c) ALL FEED PIPE BURIED UNDERGROUND SHALL BE HIGH DENSITY POLYETYLENE PIPE PN10 (HDPE PN10)
   d) ALL HOT WATTER PIPING SHALL BE PRE INSULATED COPPER PIPES AND ALL CONNECTION BY MEANS OF HOMOGENOUS WELDING.

5. PIPE JOINT WHICH WILL UNAVOIDABLY BE BUILT OVER OR OTHERWISE DIFFICULT FOR ACCES SHALL BE OF WELDED TYPE AND SATISFACTORILY TESTED BEFORE CONCEALMENT.

6. WATER TANK SHALL BE PROVIDED WITH MOSQUITO PROOF VENTILATION WITH DUST PROOF.

7. [illegible] SHALL BE INSTALLED INSIDE THE [illegible] NEAREST TO ITS COVER.

8. STOP VALVE SHALL BE FITTED WITH AN EFFECTIVE OVERFLOW AND WASTING PIPE AS TO INDICATE WHEN THE WATER IN THE CISTERN REACHES A LEVEL NOT LESS THAN 25mm BELOW THE OVER FLOWING LEVEL OF THE OVERFLOW PIPE.

9. THE [illegible] CISTERN SHALL BE FITTED WITH THE BALL FLOAT OPERATED VALVES TO CONTROL THE SUPPLY OF WATER TO PREVENT OVERFLOW AND LEAKAGE OF WATER AND CLOSING AGAINST TWICE THE PRESSURE [illegible] TO IT WILL BE SUBJECT UNDER WORKING CONDITION.

10. [illegible] SHALL BE PROVIDED TO THE LOWEST POINT OF [illegible] INSTALLATION. VALVES FOR SCOUR PIPE SHALL BE LOCATED AT [illegible] TO BE SIZED SUCH THAT IT EMPTIES [illegible] STORAGE [illegible] WITHIN 3 HOURS (SIZE AS INDICATED)

11. STOP VALVE SHALL BE PROVIDED ON EVERY INLET AND OUTLET OF STORAGE TANK. [illegible] (TERN AS INDICATED)

12. ALL EXPOSED PIPE SHALL BE CHROME PLATED STEEL PIPE

DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION
SCALE : NTS

DETAIL 'A'
GROUND FLOOR PLAN

ROOF PLAN

RC-2 :REFUSE COLLECTION CHAMBER
SCALE 1 : 100

SITE PLAN
SCALE 1: 250

KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL.	TARIKH	PERKARA

TANDATANGAN PEMUNYA

PENGUSUL PROJEK
TENAGA NASIONAL BERHAD

PEMBORONG TURNKEY
FERANGSANG ENGINEERING SDN BHD

Dengan Kerjasama :

TANDATANGAN AKITEK

MOHD NAJIB MD KHIR
Diploma Aquantity
Pelajar Degree Part Time
Year 4 Semester 8

Tesis memperoleh pointer [illegible]
Kredit Bertarikh 29 Disember 1994 [illegible]
tanggungjawab penuh pengarah [illegible]

[illegible]
ARCHITECTS PLANNERS

[illegible]
Tel : [illegible]

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Tamburi Engineers)
SDN BHD

JURUTERA MEKANIKAL DAN ELEKTRIK

PERUNDING HASHIM & REH (Building Perunding)
BOX

PERUNDING LANDSKAP
NR CONSULTANTS SDN. BHD.

SUB CONTRACTOR :
SINAR SELASEH

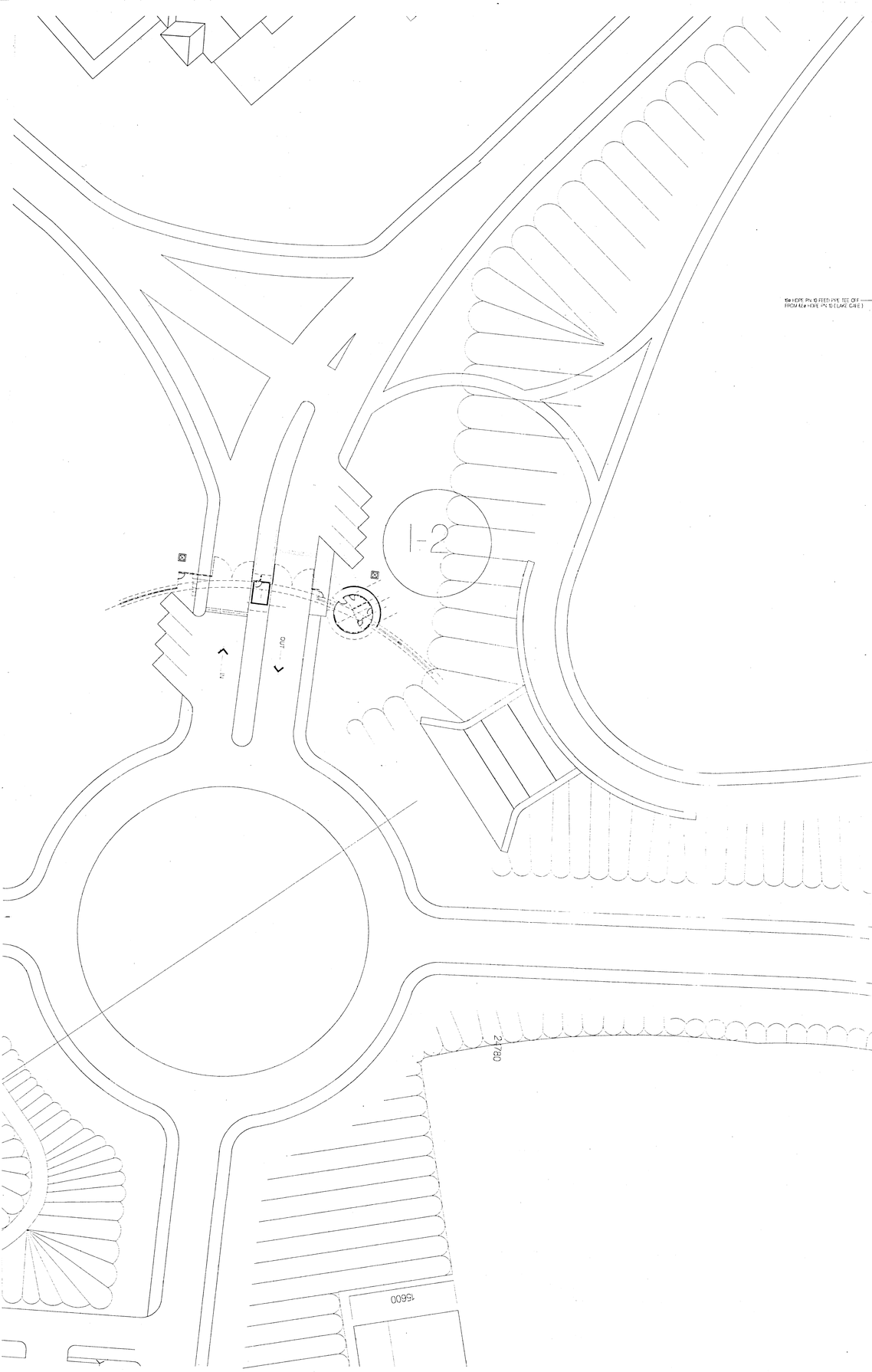
TAJUK LUKISAN
AS BUILT DRAWING
PLUMBING SERVICES
SECTOR E : REFUSE COLLECTION CHAMBER

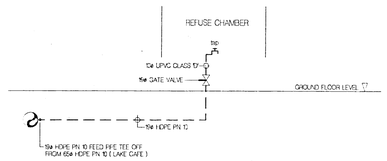
SITE PLAN
GROUND FLOOR PLAN
DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION

TARIKH : JUNE 1998 SKALA : AS SHOWN
DILUKIS : DISEMAK OLEH :

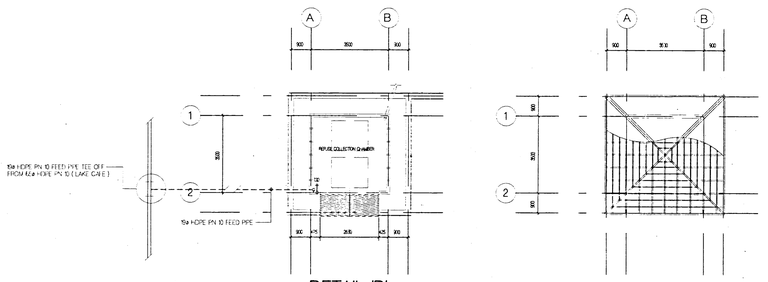
NO. LUKISAN
KSS 97 - PPL - 001 - RC - CW - 01

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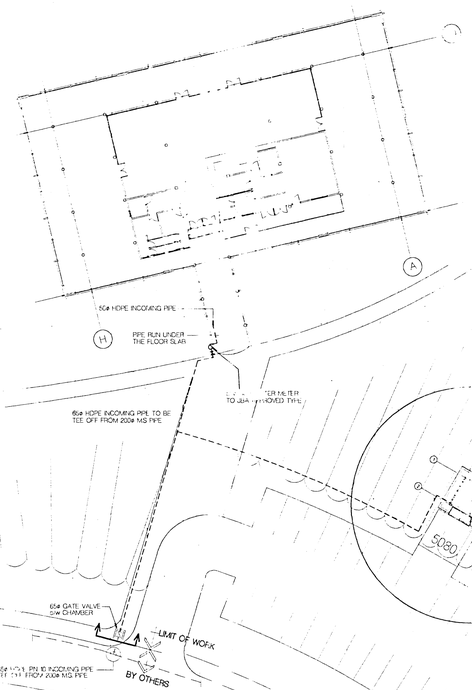
DIAGRAMMATIC OF COLD WATER PIPING INSTALLATION
SCALE : N.T.S.



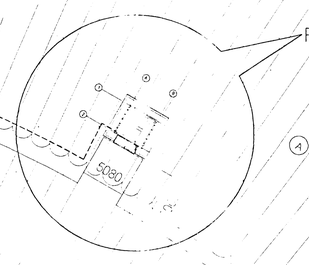
DETAIL 'B'

GROUND FLOOR PLAN ROOF PLAN

RC-1 :REFUSE COLLECTION CHAMBER
SCALE : 1:100



RC-1 :REFUSE COLLECTION CHAMBER



1. THE INSTALLATION OF PIPE WORK AND FITTINGS SHALL COMPLY WITH CURRENT EDITION OF WATER SUPPLY RULES AND REGULATION.
2. PIPEWORK AND FITTINGS IN GENERAL :
   a) FIXING AND COORDINATION BY EXACT POSITIONING OF SERVICES TO FITTINGS SHALL BE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.
   b) ALL VISIBLE AND ACCESSIBLE PIPE AND FITTING SHALL BE NEATLY AND SUITABLE SUPPORTED.
   c) ALL EXPOSED, CHASED AND CONCEALED PIPEWORK AND FITTINGS SHALL TESTED PRIOR TO MAKING GOOD.
3. ALL NECESSARY CHASING OF WALL FOR SERVICES AND MAKING GOOD SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. TYPICAL MATERIALS IN GENERAL :
   a) ALL PIPING FROM WATER MAIN TO FITTINGS TO STORAGE TANK SHALL BE HIGH DENSITY POLYETHYLENE PIPE PN10 (HDPE PN10)
   b) ALL FEED PIPE FROM STORAGE TANK TO FITTINGS SHALL BE GALVANISED CLASS 'D'
   c) ALL WATER PIPE BURIED UNDERGROUND SHALL BE HIGH DENSITY POLYETHYLENE PIPE PN10 (HDPE PN10)
   d) HOT WATER PIPING SHALL BE FIRE INSULATED
   e) ALL PIPES AND FITTINGS CONNECTION BY MEANS OF BUTT WELDING
5. WHERE PIPEWORK UNAVOIDABLY BE BUILT OVER CONCRETE SLAB, ALL JOINTS SHALL BE OF WELDED ONLY AND PROPERLY TESTED BEFORE CONCEALMENT.
6. WATER TANK SHALL BE PROVIDED WITH MOSQUITO NETTING AT OVERFLOW PIPE.
7. MINIMUM CAPACITY SHALL BE INSTALLED INSIDE THE UNDERGROUND TANK MANHOLE COVER.

STORAGE TANK STEPLADDER SHALL BE FITTED WITH AN EFFICIENT OVERFLOW PIPE AS TO INDICATE WHEN THE WATER IN THE CISTERN IS AT A LEVEL NOT MORE THAN 25 mm BELOW THE OVER FLOWING LEVEL OF THE CISTERN.

INLET VALVE OF THE CISTERN SHALL BE FITTED WITH THE BALL FLOAT OPERATED VALVES TO CONTROL THE INFLOW OF WATER TO PREVENT OVERFLOW AND CAPABLE OF WITHSTANDING AGAINST PRESSURE THE PRESSURE TO BE SUBJECT UNDER WORKING CONDITION.

SCOUR PIPE SHALL BE FITTED TO THE LOWEST POINT OF THE CISTERN. VALVES FOR SCOUR PIPE SHALL BE OF SIZE AS SIZED SUCH THAT IT EMPTIES THE STORAGE TANK MOST WITHIN 3 HOURS (SIZE AS INDICATED)

OVERFLOW PIPE SHALL BE PROVIDED ON EVERY INLET AND CISTERN WHERE NECESSARY AS INDICATED.

12. ALL EXPOSED PIPE SHALL BE CHROME PLATED STEEL PIPE

P R O J E K

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN Untuk TENAGA NASIONAL BERHAD

NOTA

PENDAFTARAN PERUNDING

PENGURUS PROJEK

TENAGA NASIONAL PROJECT MANAGEMENT SDN. BHD.

PEMBORONG TURNKEY

PERANGSANG INTERNATIONAL SDN. BHD.

Dengan Kerjasama :

TANDATANGAN AKITEK

FOCUS

JURUTERA AWAM DAN STRUKTUR

PERUNDING

JURUTERA MEKANIKAL DAN ELEKTRIK :

PERUNDING MEKANIKAL & ELEK SDN. BHD.

PERUNDING LANDSKAP

VR CONSULTANTS SDN. BHD.

SUB CONTRACTOR :

SINAR SELASEH

TAJUK LUKISAN :

AS BUILT DRAWING
PLUMBING SERVICES
RC-1 : REFUSE COLLECTION CHAMBER
SECTOR 'A'
SITE PLAN/FLOOR PLAN/ROOF PLAN
AND DIAGRAMMATIC

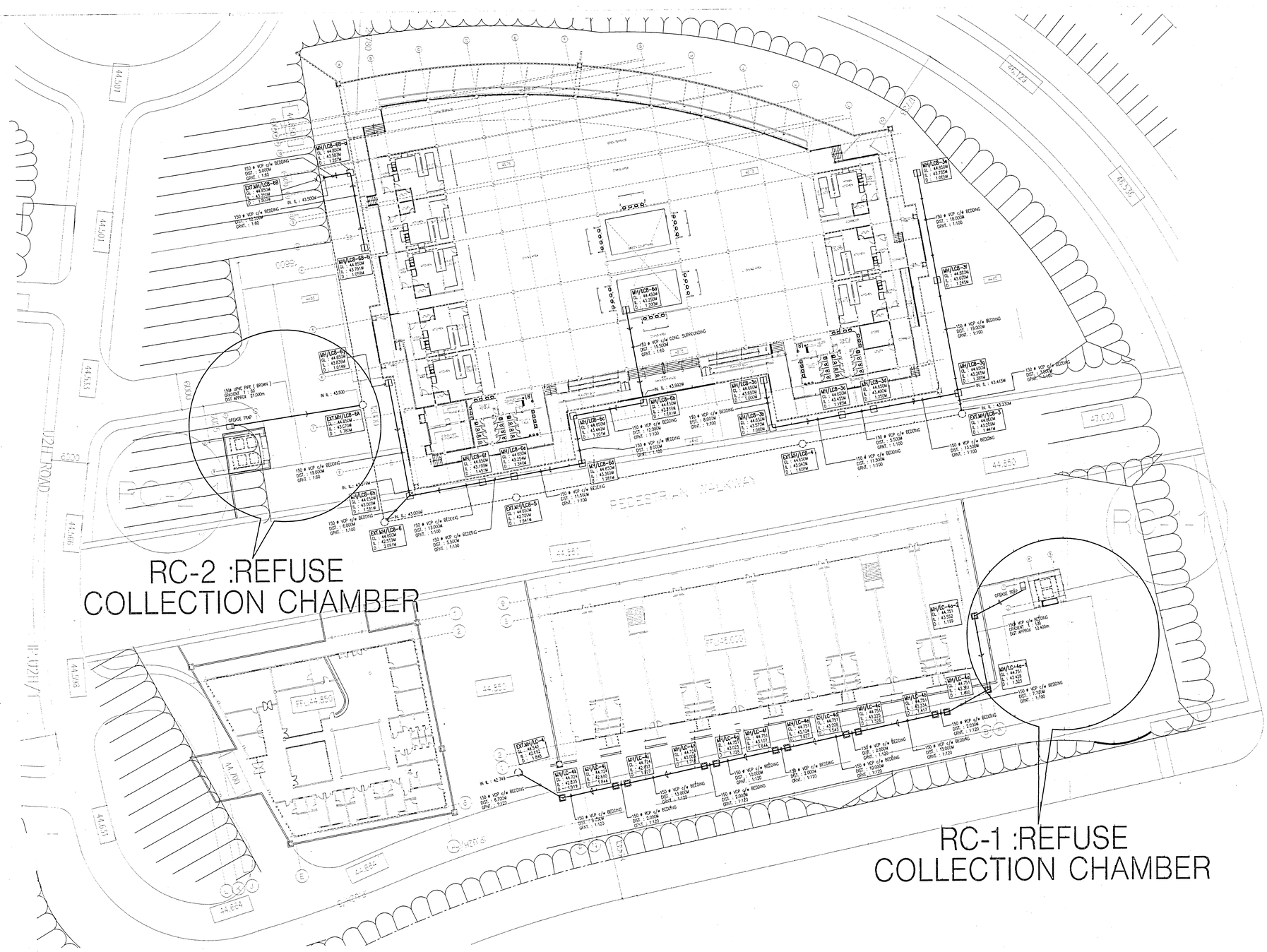
TARIKH : JUNE 1999 SKALA : AS SHOWN

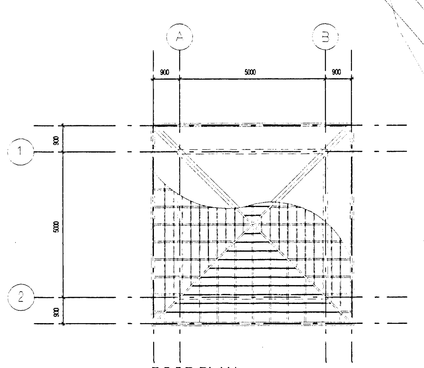
LUKIS : DIPERIKSA OLEH :

NO. LUKISAN :

KSS 97 - PPL - 001 - RC-1 - CW - 01

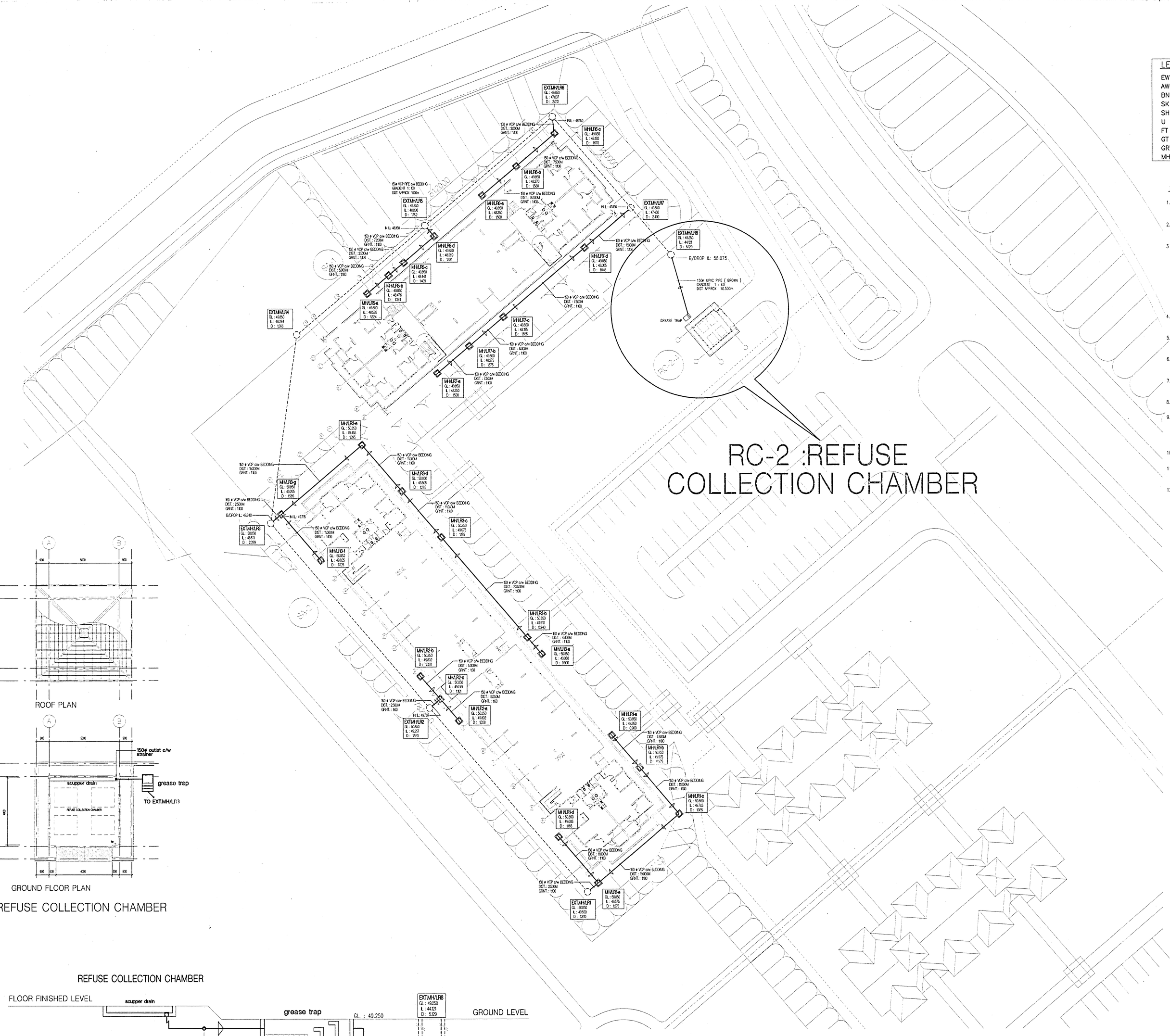
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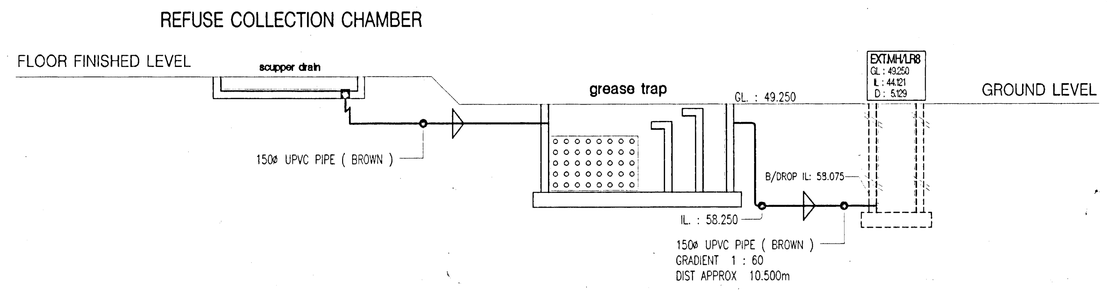

RC-2 :REFUSE COLLECTION CHAMBER
RC-1 :REFUSE COLLECTION CHAMBER
PEDESTRIAN WALKWAY
UZIR ROAD
FFL 44.850
FFL 45.000
GREASE TRAP
150ø UPVC PIPE (BROWN) GRADIENT 1 : 50 DIST APPROX 21.000m
150 ø VCP c/w BEDDING DIST : 5.000M GRAD : 1:60
150 ø VCP c/w BEDDING DIST : 15.000M GRAD : 1:60
150 ø VCP c/w BEDDING DIST : 13.500M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 11.500M GRAD : 1:100
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150 ø VCP c/w BEDDING DIST : 8.000M GRAD : 1:100
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150 ø VCP c/w BEDDING DIST : 2.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 15.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 8.500M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 3.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 1.500M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 1.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 3.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 11.500M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 2.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 15.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 11.500M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 13.500M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 13.500M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 5.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 15.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 19.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 3.000M GRAD : 1:100
150 ø VCP c/w BEDDING DIST : 1



RC-2 : REFUSE COLLECTION CHAMBER

SCALE : 1 : 100





DIAGRAMMATIC OF SANITARY PIPING INSTALLATION

NOT TO SCALE

SITE PLAN

SCALE : 1 : 250

LEGEND :-

EWC	–	EUROPEAN WATER CLOSET
AWC	–	ASIAN WATER CLOSET
BN	–	BASIN
SK	–	SINK
SH	–	SHOWER
U	–	URINAL
FT	–	FLOOR TRAP
GT	–	GULLY TRAP
GRT	–	GREASE TRAP
MH	–	MANHOLE

N.O.T.E. :

1. THE INSTALLATION OF PIPEWORK AND FITTINGS SHALL COMPLY WITH CURRENT EDITION OF SEWERAGE BY LAW.
2. SANITARY FITTINGS:
   TO FIXING BY SUITABLE SUPPORTS EXACT POSITIONING TO RESPONSIBILITY OF CONTRACTOR
3. TYPE OF MATERIALS IN GANERAL:
   a) ALL SOIL PIPE FROM 75mm (3") DIA TO 150mm (6") DIA ABOVE GROUND SHALL BE UPVC WHITE TO B.S 4514 : 1969
   b) ALL WASTE PIPE FROM 32mm (1 1/4") DIA TO 50mm (2") DIA. SHALL BE MUPVC WHITE TO B.S 5255 : 1976
   c) ALL UNDERGROUND SOIL PIPE FROM 100 TO 150 SHALL BE UPVC BROWN TO B.S 4660 1975.
4. ALL EXTERNAL SEWERAGE PIPES SHALL BE VITRIFIED CLAY PIPE TO B.S 65 AND 540 AND SHALL BE STANDARD PIPE BEDDING APPROVED BY AUTHORITY.
5. ALL PIPE SHALL BE SUITABLE SUPPORTED AND PROVIDED WITH CLEANING EYES FOR SERVISING AND CLEANING
6. ALL PIPE PASSING THRO'S ROOF STRUCTURE SHALL BE COLLORS AND FLASHING TO FORM WATER TIGHT JOINT.
7. ALL SANITARY PIPE SHALL BE TESTED IN PRESENT OF ENGINEER FOR WATER LEAKAGE BEFORE CONCEALMENT.
8. ALL MANHOLE LOCATED IN BUILDING AREA SHALL BE PROVDED WITH AIR TIGHT MANHOLE COVER.
9. THE WALLS OF DRAINS WITH BUILD-UP COPING LEVELS INSIDE OR ADJACENT TO PAVED AREAS SHALL BE FROM REINFORCED CONCRETE. WEEPHOLES HAVE TO BE PROVIDED AT 5' 0" C/C TO ENSURE DEWATERING OF BLANKET COURSE
10. BLANKET COURSE OF ROADS AND PAVED AREAS HAS TO BE EXTENDED RIGHT TO THE COPING OF DRAINS.
11. FURTHER DETAIL OF SETTING – OUT FOR ROADS AND BUILDING ETC. ARE AVAILABLE AT CONSULTANTS SITE OFFICE UPON REQUEST.
12. EXISTING COVERS MANHOLES, VALVE CHAMBER ETC. INCLUDE PILLAR HYDRANT SHALL BE ADJUSTED ACCORD TO FINAL GROUND OR ROAD SURFACE.

PROJEK

CADANGAN PEMBANGUNAN KOMPLEKS BARU (FASA 2) INSTITUT KEJURUTERAAN TEKNOLOGI TENAGA NASIONAL (IKATAN) DI ATAS LOT - LOT PT 566, 567, 568, 569, 570, 572, 573, 1050, 1051, 1054, 1067, 1165, 1166, 1168, 1169, 1170, 1171, 1172, 1173, 1174 DAN SEBAHAGIAN LOT PT 559 JALAN PUCHONG, MUKIM DENGKIL, DAERAH SEPANG SELANGOR DARUL EHSAN
Untuk
TENAGA NASIONAL BERHAD

NOTA

BIL	TARIKH	PERKARA

TANDATANGAN PEMAJU

PENGURUS PROJEK
TENAGA NASIONAL PROPERTIES SDN BHD.
Tingkat 3, Blok C, Tenaga, Pusat Bandar Damansara, 50490 Kuala Lumpur. Tel:03 255 6177 Fax:03 255 6719

PEMBEKOD TURNKEY
PERANGSANG INTERNATIONAL SDN BHD
Tingkat 14, Plaza Perangsang, Bersiaran Perdanabran, 46200 Petaling Jaya. Tel:03 757 3382 Fax:03 550 3842
Dengan Kerjasama :
Ellis–Don

TANDATANGAN ARITEK

MOHD HAZAMI MD KASSIM
Dip.Arch Adv.Arch.(UTM) Master in Urban Planning (Urban Design/Malaysia) SPAP/ APA LAM No. A/M 23
"Saya mengesahkan bahawa segala butiran dalam pelan/lukisan adalah mematuhi keperluan undang-undang Kecil Bangunan Seragam 1984 dan saya setuju terima tanggungjawab penuh dengan sewajarnya"

ZOOM
ARKITEKTUR PERANCANG PLANNERS
47800 Petaling Jaya Selangor Darul Ehsan Tel:03-78 0128 Fax:03-78 0126

JURUTERA AWAM DAN STRUKTUR
PERUNDING (Consulting Engineers)
No 9, Jalan SS 15/4G, Subang Jaya, 47500 Petaling Jaya, Selangor Darul Ehsan Tel:03 733 6899 Fax:03 734 7921

JURUTERA MEKANIKAL DAN ELETRIKAL
PERUNDING HASHIM & YEH SDN. BHD(Jurutera Perunding)
62 & 63 Jalan SS 2/72, 47300 Petaling Jaya, Selangor Darul Ehsan Tel:03 705 6288 Fax:03 705 6924

PERUNDING LANSKAP
MR CONSULTANTS SDN. BHD.
Urban Design Landscape Architecture Environment Planning No 19-B, Jalan PJS 10/24, Bandar Sri Sunway, 46200 Petaling Jaya Selangor Darul Ehsan Tel:03 735 5539 Fax: 03 731 2858

SUB CONTRACTOR :
SINAR SELASEH (M) SDN BHD (Co. No 103010-T)
NO 30-1A,1ST FLR,TMN BAYU KARI,SEKSYEN 4,68100 BATU CAVES,JLN KELANG LAMA,SELANGOR DARUL EHSAN
TEL:03-61274618 FAX:03-61274619

TAJUK LUKISAN

AS BUILT DRAWING
SANITARY SERVICES
RC-2 : REFUSE COLLECTION CHAMBER SECTOR 'E'

SITE PLAN, FLOOR PLAN, ROOF PLAN AND DIAGRAMMATIC

TARIKH : JUNE 1998	SKALA : AS SHOWN
DILUKIS :	DIPERIKSA OLEH :

NO. LUKISAN
KSS 97 - PPL - 001 - RC-1 - SWV - 01

This drawing is copyright. All dimensions must be checked on site. Only figured dimensions are to be worked on. Discrepancies must be reported immediately to the Architect before proceeding.

ii). Testing & Commissioning Result

SANITARY WARES & FITTINGS

INSPECTION REPORT

Project : TNB Ikatan Phase II Block : SA-1 Report No. : SA/1 Date : 30/6/98

INSPECTION STATUS :	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Correction Action	CA

Architect Signature : _____
(Focus)
Date : _____

Sub. Co. Signature : _____
Sinar Sebaeh
Date : 30/6/98

PISB Signature : _____
Date : 30/6/98

Consultant Signature : _____
(Hashim & Neh)
Date : _____

Inspection Description	Quantity	Location/ Grid - line	Inspection Status	Comments
Inspection of sanitary wares at SA-1				Floor slab FFL uneven.
1st Floor				which effect new basin inlet &
Basin & Sink	8 + 8		3	outlet FFL.
EWC	8		3	
2nd Floor :				
Basin & Sink	8 + 8		3	
EWC	8		3	
3rd Flr				
Basin & Sink	8 + 8		3	
EWC	8		3	

* M = Material, E = Electrical, C = Civil, S = Structure

SANITARY WARES & FITTINGS

INSPECTION REPORT

Project : TNB Ikafen Phase II Block : SA - 1 Report No. : SA/1 Date : 26/6/98

INSPECTION STATUS :	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Correction Action	CA

Architect Signature : Haidar (Focus)
Date : 29/6/98
Sub. Co. Signature : Rafiq
Date : 26/6/98

PISB Signature :
Date : 29/6/98
Consultant Signature : Akmar (Hashim & Neh)
Date : 29/06/98

Inspection Description	Quantity	Location/ Grid - line	Inspection Status	Comments
Inspection of sanitary wares, fittings &				
(mock-up unit) at SA-1 :-				
Basin	1	B-C/3-4	3	→ Basin Height should be (850mm)
Floor Trap	1	"	3	NO comment (o.k)
WC	1	"	3	
Shower	1	"	3	
"				

* M = Material, E = Electrical, C = Civil, S = Structure

*(M /E/C/S)

INSPECTION / TEST REPORT

Project: TNB Ikatan Phase II

Report No.: SA-1/2

Date: 05/6/98

INSPECTION STATUS:	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Corrective Action	CA

TEST STATUS:	
Pass	P
Fail	F

Sub. Co. Signature : [signature]

Date : 05/6/98

Consultant Signature : [signature]

Date : 03/05/98

Inspection / Test Description	Inspection Status	Test Status	Comments
Inspection of the water tanks	3	P	OK
piping installation & pipe supports			
at SA-1			

* M = Mechanical, E = Electrical, C = Civil, S = Structure

INSPECTION / TEST REPORT

*(M / ~~E / C / S~~)

Project: TNB Ukaiia Phase II Report No.: SA-1/1 Date : 23/6/98

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	3		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature] Consultant Signature : [signature]

Date : 23/6/98 Date : 26/06/98

Inspection / Test Description	Inspection Status	Test Status	Comments
Pressure test for the chappra (as per	3	P	~~Ukaun~~ OK
attached drawings) from water tanks			
to ground floor at SA-1			
(Test Pressure = 75 psi)			

* M = Mechanical, E = Electrical, C = Civil, S = Structure

PRESSURE

INSPECTION / TEST REPORT

•(M / ~~E / C / S~~)

Project: Kelantan TNB. SA1

Report No.: 5

Date: 9/2/98

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	3		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : _____
Sinar Selasih
Date : 9/2/98

Consultant Signature : _____
Date : 11/02/98

Inspection / Test Description	Inspection Status	Test Status	Comments
To Test the Cold Water Piping at	P		— O K —
3rd Floor		80psi	No leaks in joint areas

Vivian. Please file in testing page

• M = Mechanical, E = Electrical, C = Civil, S = Structure

Pressure

INSPECTION / TEST REPORT

•(M / E / C / S)

Project: Kedah TNB. SA 1

Report No.: 4

Date: 6/2/98

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	3		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature]
Sinar Selasih

Date : 6/2/98

Consultant Signature : [signature]

Date : 06/02/98

Inspection / Test Description	Inspection Status	Test Status	Comments
Cold Water Pressure Test at	P	80psi	OK
Toilet Area. (2nd Floor)			No leak found

• M = Mechanical, E = Electrical, C = Civil, S = Structure

Pressure

INSPECTION / TEST REPORT

•(M / E / C / S)

Project: Ikatan TNB – SA 1

Report No.: 3.

Date: 5/2/98

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	3		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature]

Date : Sinar Sebaran 5/2/98

Consultant Signature : [signature]

Date : 06/02/98.

Inspection / Test Description	Inspection Status	Test Status	Comments
Cold Water (PVC pipeworks) at toilet	P	80 psi	– OK –
area. – 1st Floor			No leaks found in the joints

• M = Mechanical, E = Electrical, C = Civil, S = Structure

SANITARY WARES & FITTINGS

INSPECTION REPORT

Project : TNB Ikatan Phase II Block : SA - 2 Report No. : SA/2 Date : 27/6/98

INSPECTION STATUS :	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Correction Action	CA

Architect Signature : _____ (Focus)
Date : _____

Sub. Co. Signature : _____
Sinar Selasih
Date : 27/6/98

PISB Signature : _____
Date : 30/6/98

Consultant Signature : _____
(Hashim & Neh)
Date : _____

Inspection Description	Quantity	Location/ Grid - line	Inspection Status	Comments
Inspection of sanitary wares at SA-2				Floor ~~slab~~ slab FFL uneven.
1 st floor :				which effected Basin, outlet + inlet FFL.
Basin & Sink	12+12	A-E/1-18	3	
WC	12	A-E/1-18	3	
2nd floor :				
Basin & Sink	12+12	A-E/1-18	3	
WC	12	A-E/1-18	3	
3rd floor :				
Basin & Sink	12+12	A-E/1-18	3	
WC	12	A-E/1-18	3	

* M = Material, E = Electrical, C = Civil, S = Structure

INSPECTION / TEST REPORT

*(M / ~~E / C / S~~)

Project: TNB Tkatan Phase II Report No.: SA-1 & SA-2 / 1 Date : 26/6/98

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	3		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature] Consultant Signature : [signature]

Date : 26/6/98 Date : 26/6/98

Inspection / Test Description	Inspection Status	Test Status	Comments
Rectification of faulty sanitary piping	3	P	OK
at SA-1 & SA-2 as indicated in			
the M & E meeting no 13 Item 9.7			

* M = Mechanical, E = Electrical, C = Civil, S = Structure

INSPECTION / TEST REPORT

*(M / ~~E / C / S~~)

Project: TNB Ikatan Phase II

Report No.: SA1 - 0/2

Date : 05/6/98

INSPECTION STATUS:	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Corrective Action	CA

TEST STATUS:	
Pass	P
Fail	F

Sub. Co. Signature : [signature]

Date : 05/6/98

Consultant Signature : [signature]

Date. : 16/06/98

Inspection / Test Description	Inspection Status	Test Status	Comments
Inspection of the water tank	3	P	C 6
piping installation & pipe supports			
at SA-0			

* M = Mechanical, E = Electrical, C = Civil, S = Structure

INSPECTION / TEST REPORT

*(M/E/C/S)

Project: [illegible]

Report No.: [illegible]

Date : [illegible]

INSPECTION STATUS:	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Corrective Action	CA

TEST STATUS:	
Pass	P
Fail	F

Sub. Co. Signature : [illegible]

Consultant Signature : [illegible]

Date : [illegible]

Date : [illegible]

Inspection / Test Description	Inspection Status	Test Status	Comments
Pressure test for the [illegible]		P	
[illegible]			
[illegible]			
[illegible]			

* M = Mechanical, E = Electrical, C = Civil, S = Structure

INSPECTION / TEST REPORT

*(M / ~~E / C / S~~)

Project: JKR Jkalan Pinjar

Report No.: SA/B/1

Date : 19/6/18

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	3		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature]

Date : 19/6/18

Consultant Signature : [signature]

Date : 19/6

Inspection / Test Description	Inspection Status	Test Status	Comments
Verification of pile supports & brackets	3	P	O.K.
at ground floor SA1 & SA2			

* M = Mechanical, E = Electrical, C = Civil, S = Structure

Pressure

(M/E/C/S)*

INSPECTION / TEST REPORT

Project: Hatan TNB. SA2 Building

Report No.: 6.

Date: 13/2/98

INSPECTION STATUS:	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Corrective Action	CA

TEST STATUS:	
Pass	P
Fail	F

Sub. Co. Signature : [signature]
Sinar Sebach
Date : 13/2/98.

Consultant Signature : [signature]
Date : 13/02/98

Inspection / Test Description	Inspection Status	Test Status	Comments
Cold Water pipework at toilet area - 3rd Flr (attached duty)		80psi	OK - No leaks found

* M = Mechanical, E = Electrical, C = Civil, S = Structure

Pressure.

~~INSPECTION~~ / TEST REPORT

*(M / E / C / S)

Project: Hatan TNB CSA 2.

Report No.: 2.

Date: 23/1/98.

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	3		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature]
Sinar Selaseh
Date : 23/1/98

Consultant Signature : [signature]
Date : 23/01/98

Inspection / Test Description	Inspection Status	Test Status	Comments
Cold Water (PVC pipework) at toilet area - 2nd Floor	P	80psi	- No leak found in joint areas.

* M = Mechanical, E = Electrical, C = Civil, S = Structure

Sinar Selasih

INSPECTION / ~~TEST~~ REPORT

*(M / ~~E/C/S~~)

Project: Kafari TNB (II)

Report No.: RC - 005

Refuse chamber (Turbine Cafe)

Date : 26/9/98

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	(3)		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature]

Date : 26/9/98

Consultant Signature : [signature]

Date. : 26/9/98

Inspection / Test Description	Inspection Status	Test Status	Comments
To inspect the incoming HDPE pipe c/w bedding	3.	P	OK

* M = Mechanical, E = Electrical, C = Civil, S = Structure

Pressure

~~INSPECTION~~ / TEST REPORT

*(M / ~~E / C / S~~)

Project: Ilatan TNB (SA2).

Report No.: 1

Date: 21/1/98.

INSPECTION STATUS:	
Pre-Installation Inspection	1
In-Process Inspection	2
Final Inspection	3
Non-Compliance Notice Issued	NC
Corrective Action	CA

TEST STATUS:	
Pass	P
Fail	F

Sub. Co. Signature : _____
Sinar Sekseh
Date : 21/1/98

Consultant Signature : _____
Date : 21/01/98.

Inspection / Test Description	Inspection Status	Test Status	Comments
Cold Water (PVC pipe) at toilet area - 1st Flr		80 psi	- O.K
(attached dwg.)			- No leaks found.

* M = Mechanical, E = Electrical, C = Civil, S = Structure

✓ Sinar Selaseh

INSPECTION / ~~TEST~~ REPORT

*(M / ~~E / C / S~~) –

Project: Ibadan TNB (2)

Report No.: RC (SA1&SA2)-001

Refuse Chamber at SA1&SA2

Date : 16/10/98

INSPECTION STATUS:		TEST STATUS:	
Pre-Installation Inspection	1	Pass	P
In-Process Inspection	2	Fail	F
Final Inspection	③		
Non-Compliance Notice Issued	NC		
Corrective Action	CA		

Sub. Co. Signature : [signature]

Date : 16/10/98

Consultant Signature : [signature]

Date : 16/10/98.

Inspection / Test Description	Inspection Status	Test Status	Comments
To check & inspect the Grease Trap at		P	O.K
Refuse Chamber (SA1&SA2 - Area E)	3		

* M = Mechanical, E = Electrical, C = Civil, S = Structure