

KARACHI NEIGHBORHOOD IMPROVEMENT PROJECT (KNIP)

REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL & GIZRI SPORTS GROUND

PUBLIC HEALTH TENDER DRAWINGS

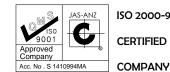
VOL-III

AUGUST - 2021



G3 ENGINEERING CONSULTANTS (PVT.) LTD.

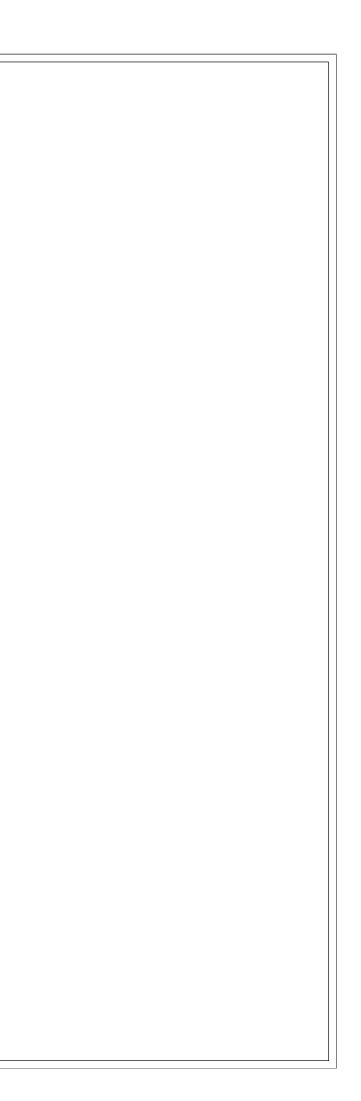
Consulting Engineers – Architects – Planners



ISO 2000-9001

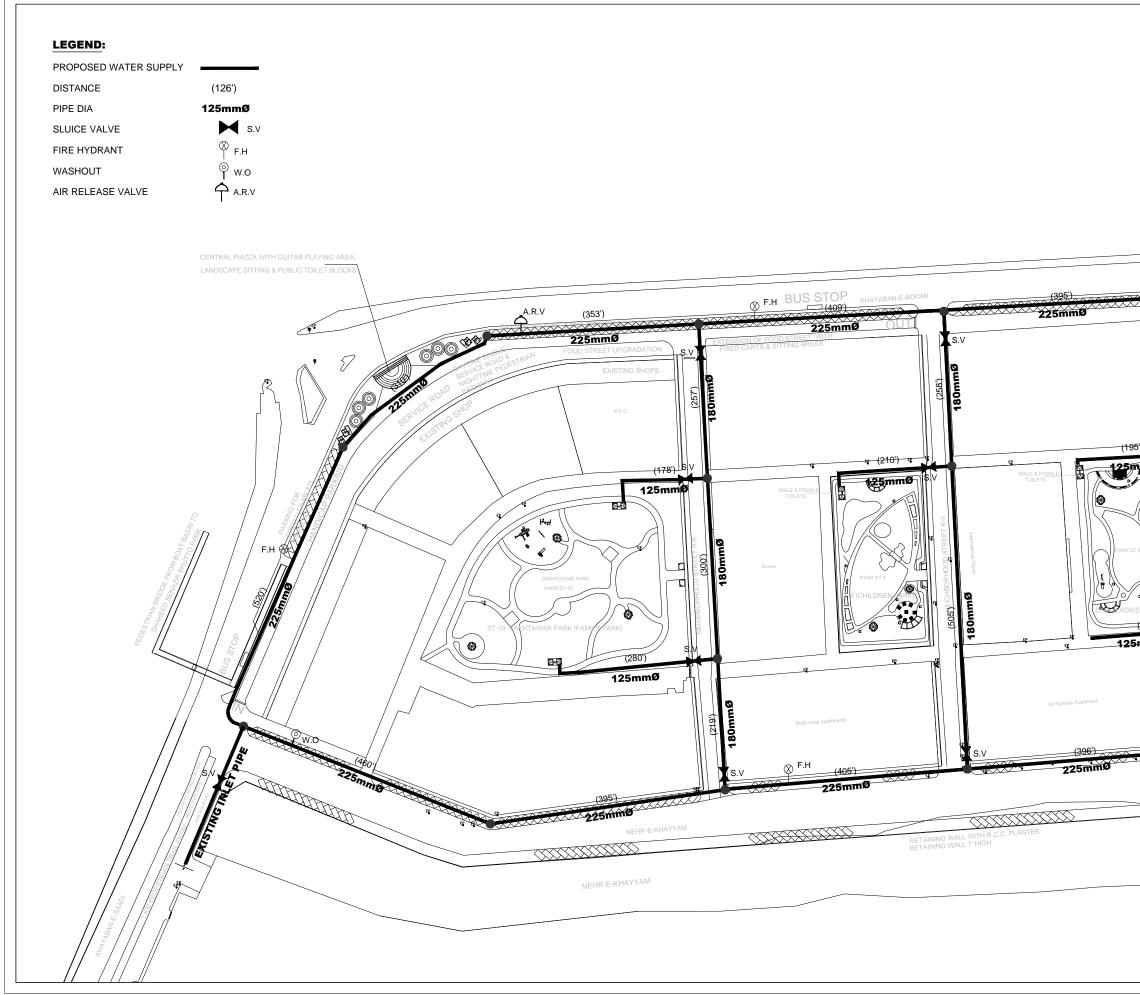
COMPANY

PUBLIC HEATH DRAWINGS MASTER PLAN

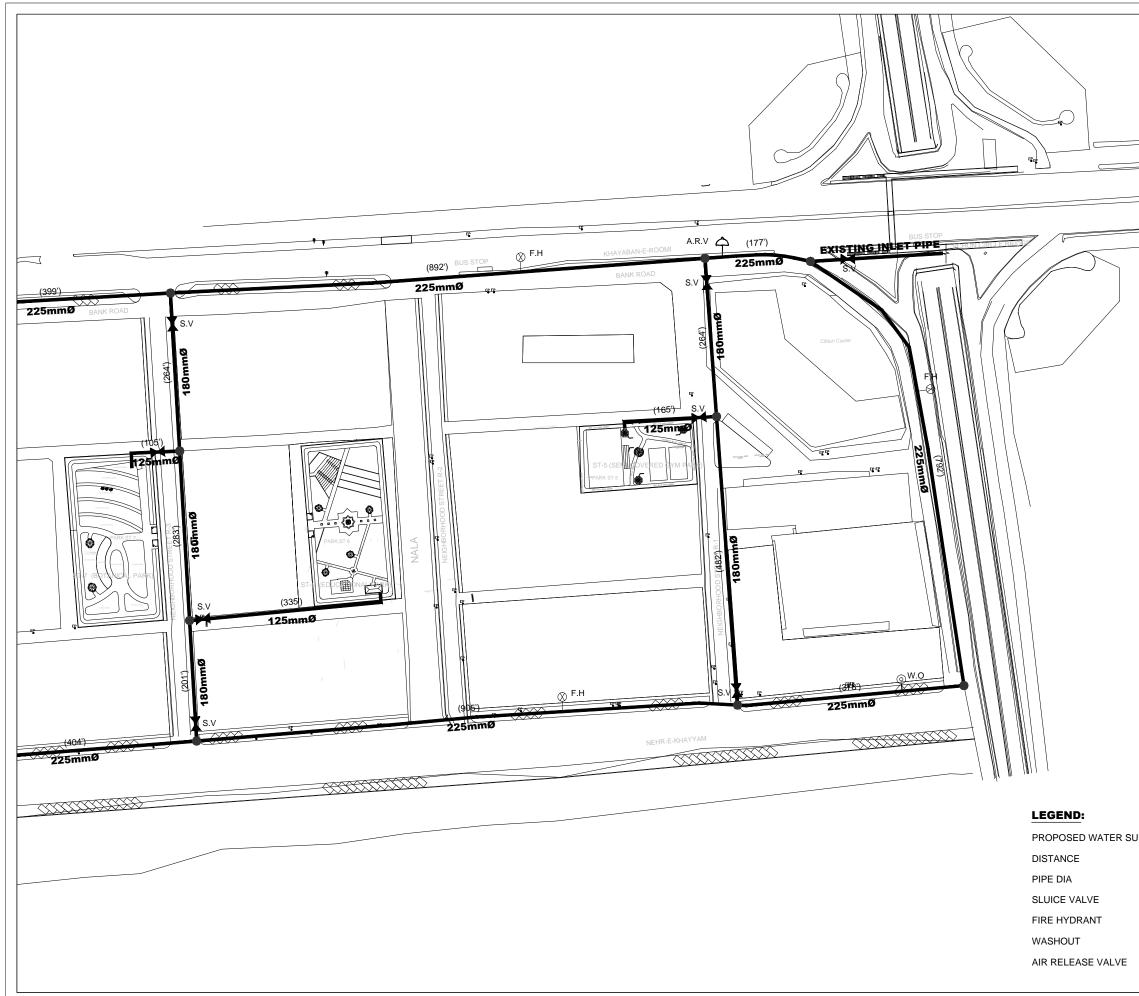


| S.NO | DESCRIPTION | DRG.NO: |
|------|------------------------------------|---------|
| | WATER SUPPLY SYSTEM | |
| 01 | LIST OF DRAWING (01 / 04) | LD-00 |
| 02 | WATER SYSTEM LAYOUT PLAN (02/04 | WS-01 |
| 03 | WATER SYSTEM LAYOUT PLAN (03 / 04) | WS-02 |
| 04 | MISCELLANEOUS DETAILS (04 / 04) | WS-03 |

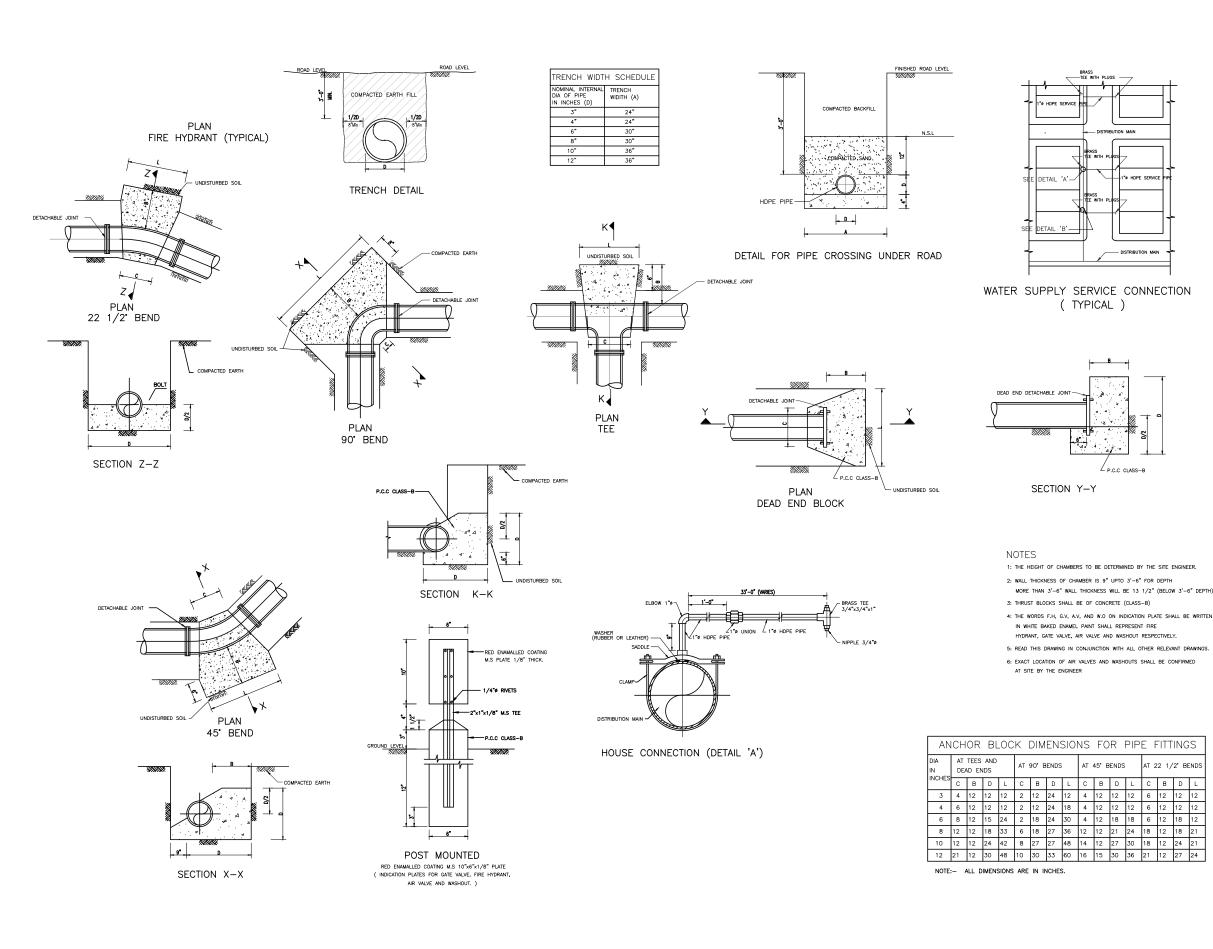
| CLIEN | NT: | | | | | |
|--|--|-----------------|--|--|--|--|
| | PROJECT | | | | | |
| | IMPLEMENT | | | | | |
| " acado | UNIT (PIU) ŀ | (NIP | | | | |
| | | | | | | |
| 610 | CONSULTANTS: | | | | | |
| | CONSULTANTS (PVT House No.57-M Gulberg-III, Laho Tel : (92-42) 35441641, | re, Pakistan | | | | |
| Approved Company Acc. No . 5 1410894MA | Fax : (92-42) 35441645 E-mail : info@g3ec.com URL : www.g3ec.com | | | | | |
| | JECT: | | | | | |
| | TATION & UPGRADAT SIN TO SCHON CHOWF AN TRAIL | | | | | |
| | | | | | | |
| | N | | | | | |
| | ENSIONS ARE IN FEET UNLE | ss | | | | |
| 2. THIS DR OF G3 E AND CA | VISE SPECIFIED. AWING IS AN INTELLECTUAL NGINEERING CONSULTANTS NNOT BE REPRINTED OR RE | S (PVT.) LTD. | | | | |
| WITHOU | IT PRIOR APPROVAL OF G3. | | | | | |
| | | | | | | |
| | | | | | | |
| REVISIO | | | | | | |
| No. | DESCRIPTION | DATE | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| TEN | TENDER DRAWINGS | | | | | |
| DRAWIN | G TITLE: | | | | | |
| _ | LIST OF DRAWINGS | | | | | |
| DRAWN M. Imra | an AL | JG. 2021 | | | | |
| Engr.W | PPLY & SEWERAGE ENG | | | | | |
| 100000 | /asif Ali | | | | | |
| Syed A | Vasif Ali /ED BY: li Abbas Gillani | ale | | | | |
| Syed A DRAWIN | Vasif Ali /ED BY: li Abbas Gillani G NO: REV: /ATER/LD-00 | <u>al.</u> 4 | | | | |



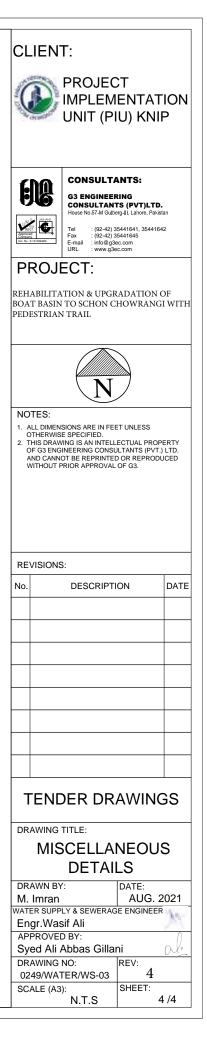
| | CLIENT: | | | |
|-----------------------------|---|--|--|--|
| | PROJECT | | | |
| | | | | |
| | UNIT (PIU) KNIP | | | |
| | | | | |
| | CONSULTANTS: | | | |
| | G3 ENGINEERING CONSULTANTS (PVT)LTD. House No.57-M Gulberg-III, Lahore, Pakistan | | | |
| | Tel : (92-42) 35441641, 35441642 Fax : (92-42) 35441645 E-mail : info@g3ec.com | | | |
| | PROJECT: | | | |
| | REHABILITATION & UPGRADATION OF | | | |
| | BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL | | | |
| 225mm@ | | | | |
| | | | | |
| (262 ¹⁾ 80mmØ | N | | | |
| 180 | NOTES: | | | |
| | ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. | | | |
| ; <u>)</u> \$.v | AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. | | | |
| 9 mg | | | | |
| | | | | |
| | | | | |
| 8 (12341) | REVISIONS: | | | |
| | No. DESCRIPTION DATE | | | |
| S PARK) | | | | |
| (180) | | | | |
| mmØ S.V | | | | |
| 4 | | | | |
| (200) 80mr | | | | |
| S.V | | | | |
| 225mmø | | | | |
| | TENDER DRAWINGS | | | |
| | DRAWING TITLE: | | | |
| | PROPOSED WATER SUPPLY SYSTEM | | | |
| | DRAWN BY: DATE: | | | |
| | M. Imran AUG. 2021 | | | |
| | Engr.Wasif Ali | | | |
| | Syed Ali Abbas Gillani J. DRAWING NO: REV: | | | |
| | 0249/WATER/WS-01 4 SCALE (A3): SHEET: | | | |
| | N.T.S 2/4 | | | |



| | CLIENT: |
|---|---|
| | |
| | PROJECT IMPLEMENTATION |
| | UNIT (PIU) KNIP |
| | |
| | |
| | CONSULTANTS: G3 ENGINEERING |
| | CONSULTANTS (PVT)LTD. House No.57-M Gulberg-III, Lahore, Pakistan |
| | Tel : (92-42) 35441641, 35441642 Fax : (92-42) 35441645 E-mail : info@gaec.com |
| | URL : www.g3ec.com |
| | REHABILITATION & UPGRADATION OF |
| | BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL |
| | |
| | |
| | N |
| | NOTES: |
| | 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. |
| | 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED |
| | |
| | WITHOUT PRIOR APPROVAL OF G3. |
| | WITTOUT FRIOR AFFROVAL OF GD. |
| | WINDOFFRIGRAFFROME OF OS. |
| | |
| | REVISIONS: |
| | |
| | REVISIONS: |
| | REVISIONS: No. DESCRIPTION DATE I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII |
| | REVISIONS: |
| | REVISIONS: No. DESCRIPTION DATE D D D D D D D D D D D D D D DRAWING TITLE: |
| | REVISIONS: No. DESCRIPTION DATE DESCRIPTION DATE |
| (126') | REVISIONS: No. DESCRIPTION DATE D D D D D D D D D D D D D D DRAWING TITLE: |
| 125mmØ | REVISIONS: No. DESCRIPTION DATE Image: Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system |
| (126') 125mmØ S.V | REVISIONS: No. DESCRIPTION DATE Image: Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system Image of the system |
| (126') 125mmØ ♥ s.v ♥ F.H | REVISIONS: No. DESCRIPTION DATE Image: Construction of the second sec |
| (126') 125mmØ S.V | REVISIONS: No. DESCRIPTION DATE Image: Constraint of the second secon |

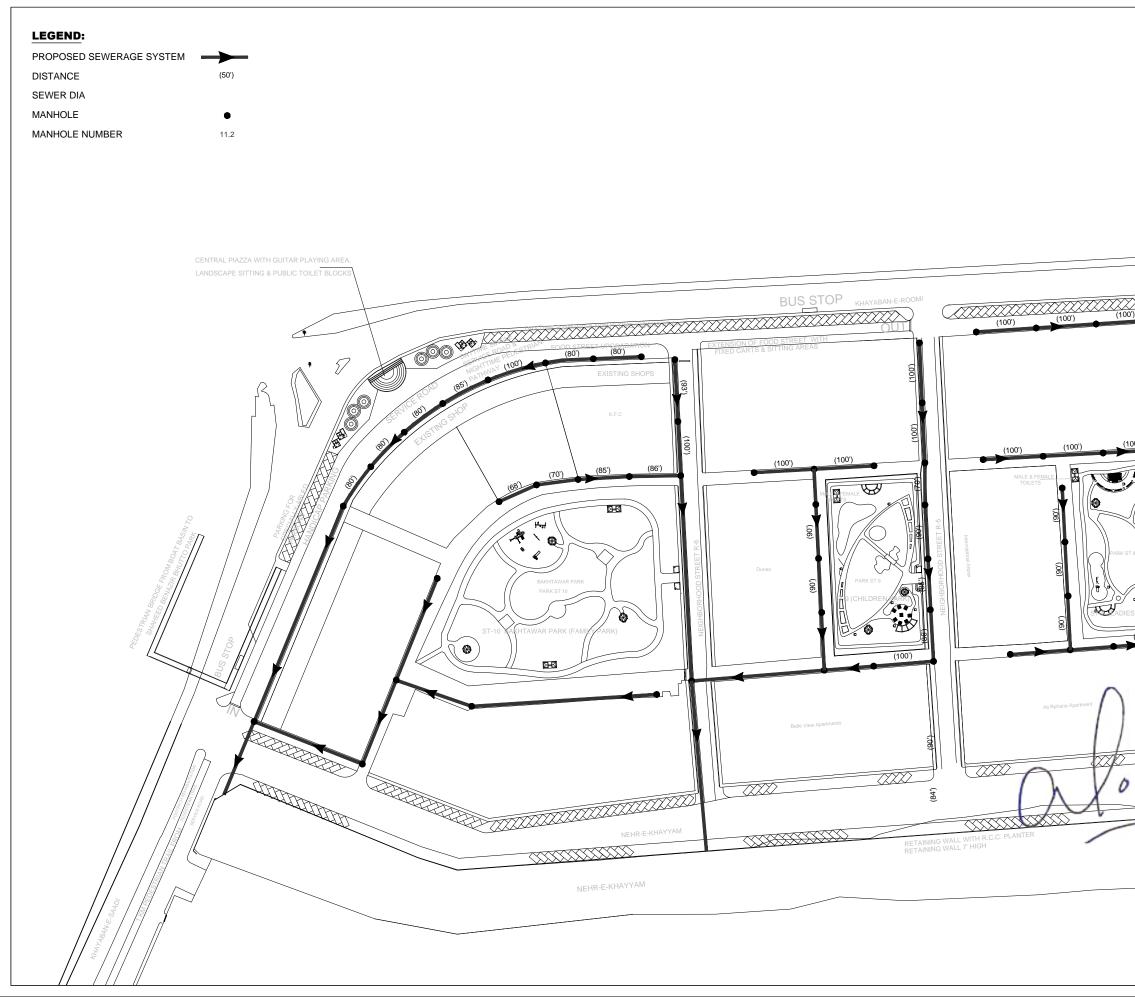


| PIPE FITTINGS | | | | | | |
|---------------------|----|----|----|----|----|--|
| DS AT 22 1/2" BENDS | | | | | | |
| | L | С | в | D | L | |
| | 12 | 6 | 12 | 12 | 12 | |
| | 12 | 6 | 12 | 12 | 12 | |
| | 18 | 6 | 12 | 18 | 12 | |
| | 24 | 18 | 12 | 18 | 21 | |
| | 30 | 18 | 12 | 24 | 21 | |
| | 36 | 21 | 12 | 27 | 24 | |
| | | | | | | |

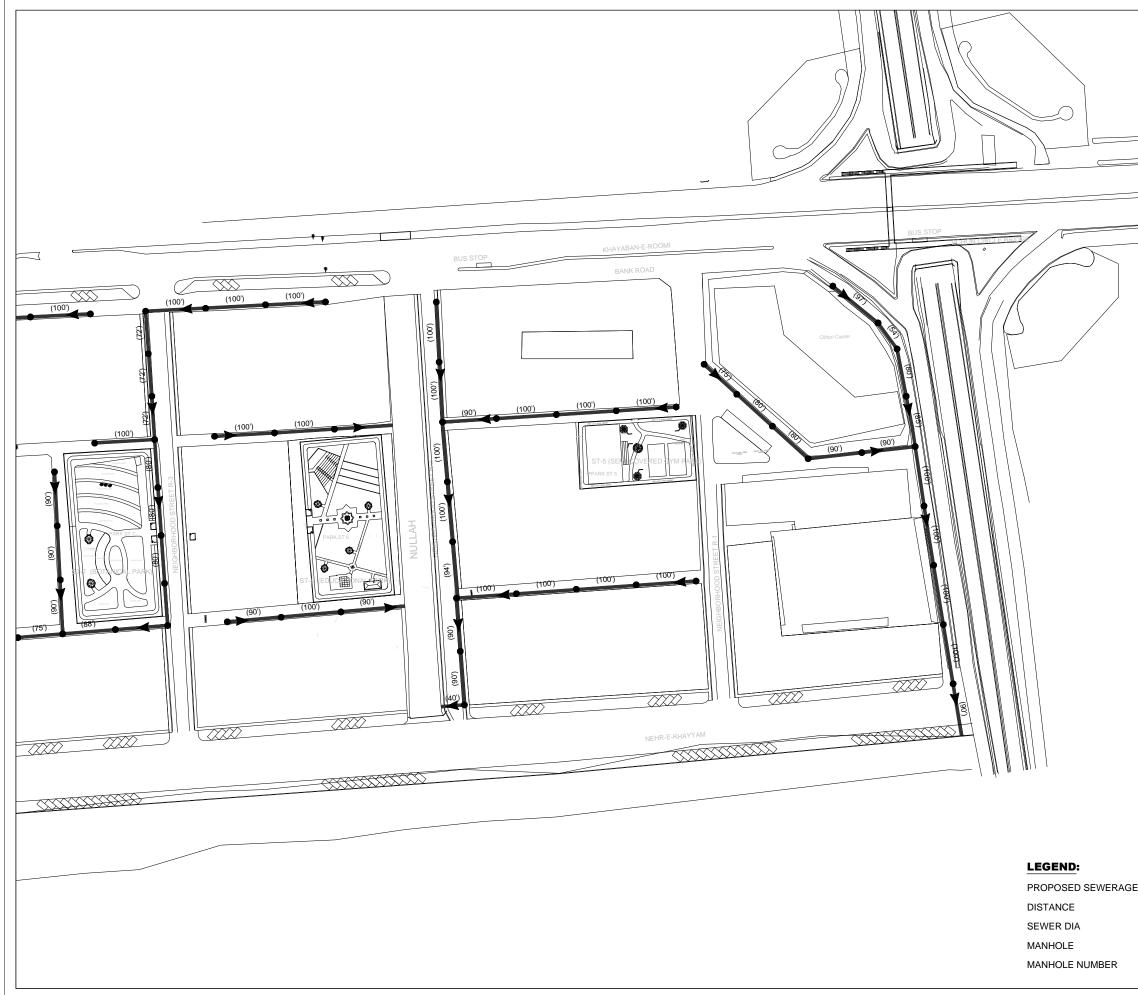


| S.NO | DESCRIPTION | DRG.NO: |
|------|---|---------|
| | SEWERAGE SYSTEM | |
| 01 | LIST OF DRAWING (01 / 05) | LD-00 |
| 02 | SEWERAGE SYSTEM LAYOUT PLAN (02 / 05) | SW-01 |
| 03 | SEWERAGE SYSTEM LAYOUT PLAN (03 / 05) | SW-02 |
| 04 | TRENCH AND R.C.C. PIPE DETAIL (04 / 05) | SW-03 |
| 05 | MANHOLE & MISCELLANEOUS (05 / 05) | SW-04 |

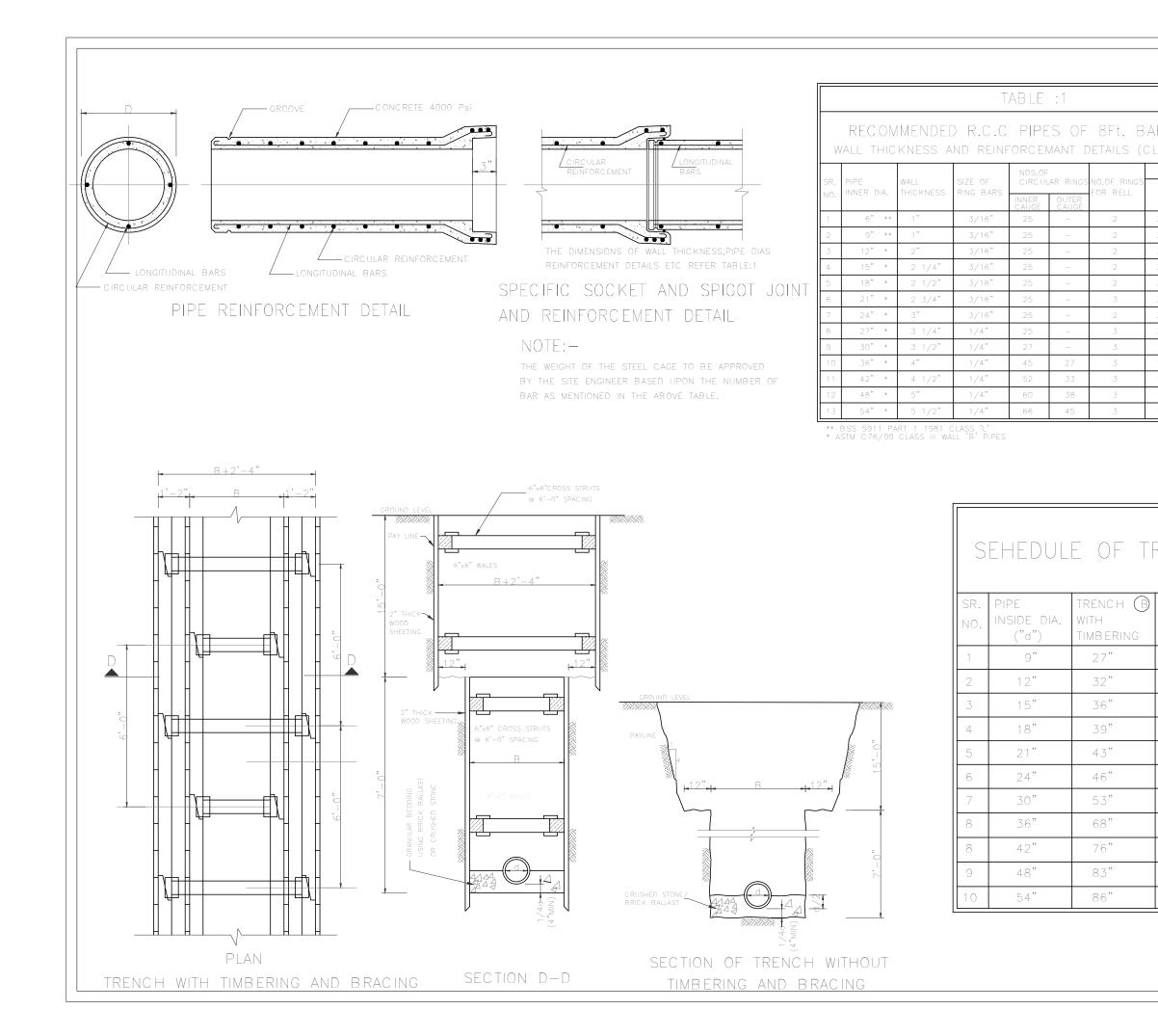
| CL | .IEN ⁻ | Г: | | | |
|-------------------|--|--|--|--------------------|-----------|
| G | D | PROJI IMPLE UNIT (| MEN | | |
| REH. BOA' | | Fax : (92 E-mail : info URL : ww ECT: TION & UI TO SCHOI | EERING ANTS (I Gulberg-III, 42) 354411 42) 354411 @g3ec.con w.g3ec.con | ATION | 42 OF |
| 1. A C 2. T | THERWISI HIS DRAW | SIONS ARE IN ESPECIFIED ING IS AN IN NEERING CC | FELLECT | UAL PROF | |
| | | OT BE REPRI RIOR APPRC | | | UCLD |
| RE | VISIONS | | | | |
| RE` No. | VISIONS | : DESCRI | PTION | | DATE |
| | VISIONS | | PTION | | DATE |
| | VISIONS | | PTION | | DATE |
| | VISIONS | | PTION | | DATE |
| | VISIONS | | PTION | | DATE |
| | VISIONS | | PTION | | DATE |
| | VISIONS | | PTION | | DATE |
| No. | | | | | |
| No. | | DER D | | | |
| No. | | DER D | RA | | GS |
| No. | ENC AWING LIST WN BY: mran ER SUPP | DER D TITLE: OF D | | | G 2021 |
| No. | ENC AWING LIST mran ER SUPP gr. Wasi ROVED ad Ali A WING N | DESCRI DER D TITLE: OF D LY & SEWE f Ali BY: bbas Gil | | WIN TE: AUG. | G 2021 |



| | CLIENT: PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
|----------------------|--|
| (92) BANK ROAD (100) | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. House No.57-M Gulberg-III, Lahore, Pakistan Tel :: (92-42) 35441641, 35441642 F-mail: Info@gole.com URL :: www.gole.com PROJECT: REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| | REVISIONS: No. DESCRIPTION DATE I I I I I I I I I |
| | |
| | TENDER DRAWINGS DRAWING TITLE: PROPOSED DROPOSED SEWERAGE SYSTEM DRAWN BY: DATE: M. Imran AUG. 2021 WATER SUPPLY & SEWERAGE ENGINEER Image: Colspan="2">Image: Colspan="2">Colspan="2"C |



| | CLIENT: |
|--------------|--|
| | PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
| | |
| | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. House No.57-M Gulberg-III, Lahore, Pakistan |
| | Tel : (92-42) 35441641, 35441642 Fax : (92-42) 35441645 Fax : (92-42) 35441645 E-mail : info@g3ec.com URL : www.g3ec.com |
| | PROJECT: REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAI |
| | N |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| | |
| | REVISIONS: |
| | No. DESCRIPTION DATE |
| | |
| | |
| | |
| | TENDER DRAWINGS |
| | |
| | DRAWN BY: DATE: |
| SYSTEM (50') | M. Imran AUG. 2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: |
| ● 11.2 | Syed Ali Abbas Gillani Mr. DRAWING NO: REV: 0249/SEWER/SW-02 4 SCALE (A3): SHEET: N.T.S 03 /05 |
| | N.T.S 03/05 |

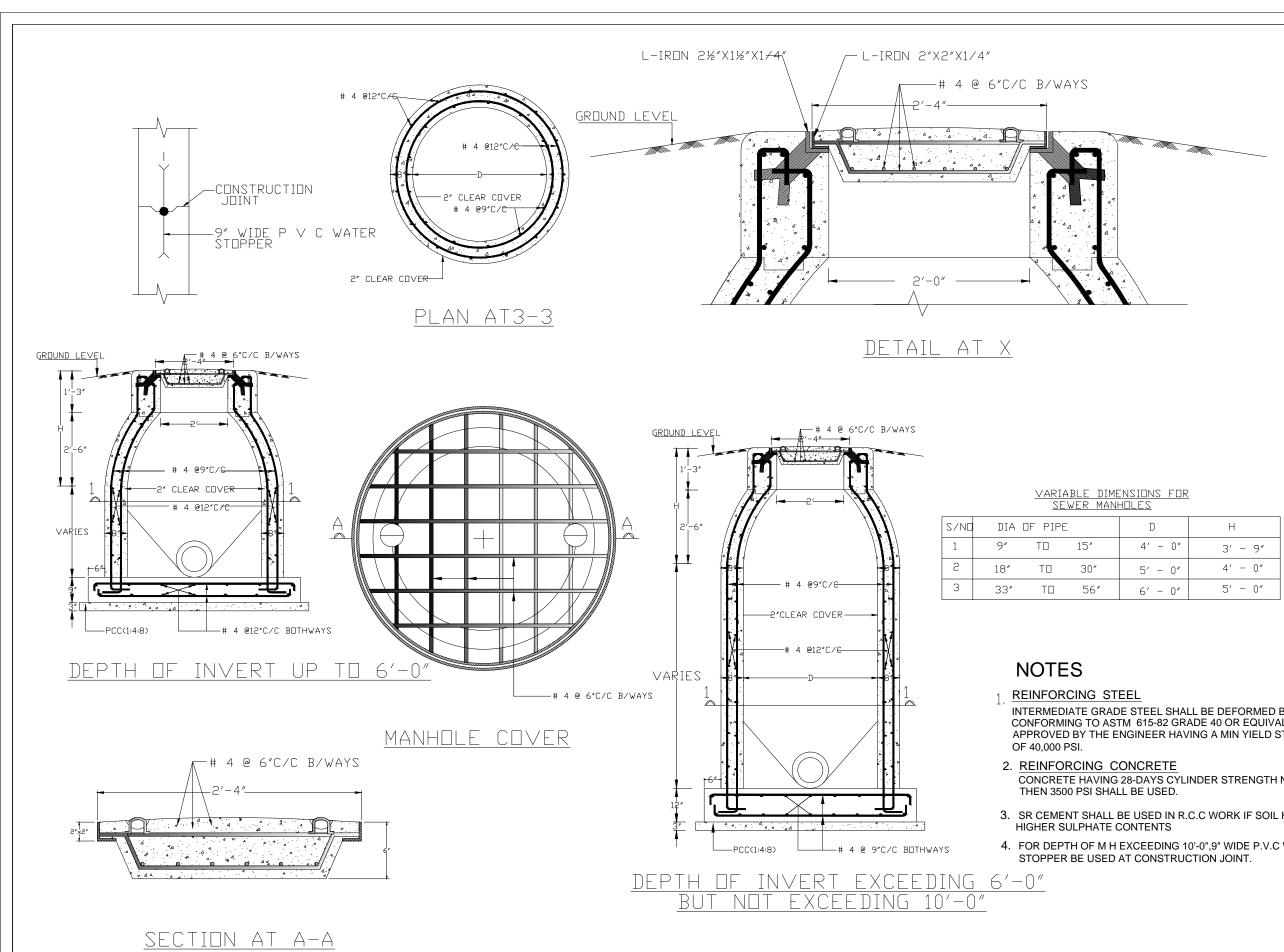


| | L LEN III WAI | |
|-------|---------------------------|-----------------------|
| STRA | ight bar | S |
| DIA. | NO.OF E INNER CAUGE | ARS OUTER CAUGE |
| 3/16" | 4 | - |
| 3/16" | 4 | _ |
| 3/16" | 4 | _ |
| 3/16" | 4 | _ |
| 3/16" | 4 | — |
| 3/16" | 4 | - |
| 3/16" | 4 | - |
| 3/16" | 4 | - |
| 1/4" | 8 | _ |
| 1/4" | 8 | 8 |
| 1/4" | 8 | 8 |
| 1/4" | 8 | 8 |
| 1/4" | 8 | 8 |

| RENCH |
|---------------------------------|
| WIDTH B WITHOUT TIMBERING |
| 36" |
| 36" |
| 42" |
| 46" |
| 50" |
| 54" |
| 62" |
| 67" |
| 72" |
| 88" |
| 98" |

CLIENT: **PROJECT** IMPLEMENTATION UNIT (PIU) KNIP CONSULTANTS: ß G3 ENGINEERING CONSULTANTS (PVT)LTD. louse No.57-M Gulberg-III, I Approved Company Acc. No. 5 1410094MA Tel : (92-42) 35441641, 35441642 Fax : (92-42) 35441645 E-mail : info@g3ec.com URL : www.g3ec.com PROJECT: REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL NOTES: ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. **REVISIONS:** No. DESCRIPTION DATE **TENDER DRAWINGS** DRAWING TITLE: TRENCH AND R.C.C. **PIPE DETAIL** DRAWN BY: DATE M. Imran AUG. 2021 WATER SUPPLY & SEWERAGE ENGINEER Sec. Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani No DRAWING NO: REV: 4 0249/SEWER/SW-03 SCALE (A3): SHEET: 04 /05

N.T.S



| | CL | IEN | T: | | |
|----------------------------|----------------------------|---|--|--|--------------------|
| | Q | D | PROJE(IMPLEM UNIT (P | IENTA | |
| | REI BO/ | AT BASI | Fax : (92-42) 3 E-mail : info@g3 URL : www.g3e | RING TS (PVT)LTI rrg-III, Lahore, Pak 15441641, 354416 15441645 sec.com re.com | istan i42 DF |
| | 1. A C 2. T C | OTHERWIS THIS DRAW OF G3 ENG AND CANNO | SIONS ARE IN FEE E SPECIFIED. ING IS AN INTELL INEERING CONSL DT BE REPRINTED RIOR APPROVAL | ECTUAL PROF ILTANTS (PVT) OR REPROD | .) LTD. |
| | | VISIONS | | | |
| | No. | | DESCRIPT | ION | DAT |
| | | | | | |
| BARS LENT AS TRENGTH | | | | | |
| NOT LESS | | | | | |
| HAS | | | | | |
| WATER | | | | AVVIN | 65 |
| | DR | | NHOLE | DETA | IL |
| | M. CH En AP SY | PROVE | BY: SIF ALI D BY: I ABBAS G | DATE: AUG 2 | 2021 |
| | | 0249/SEW | ER/SW-04 | SHEET: | 4 |

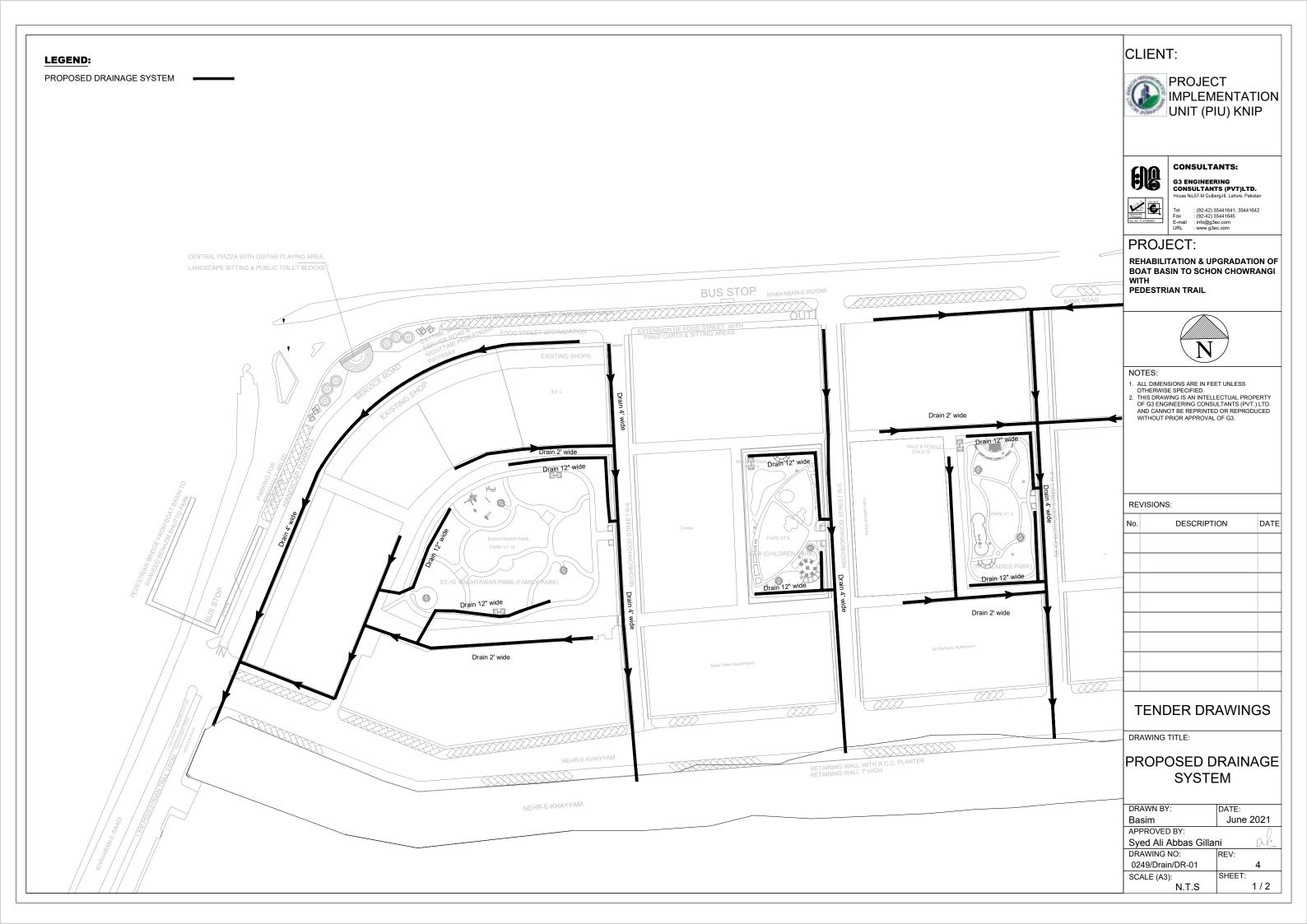
N.T.S

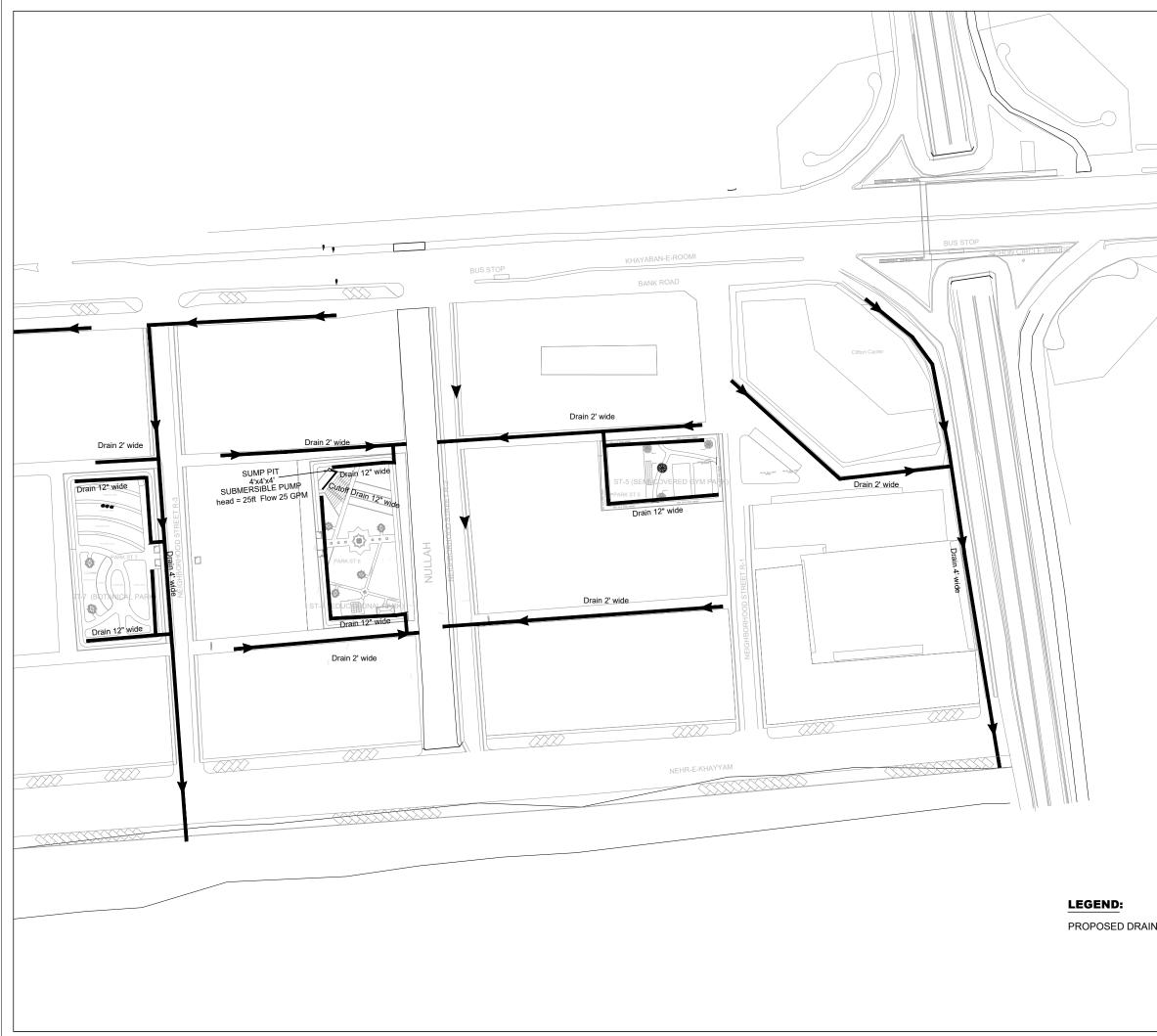
1/2

| | Н |
|---|---------|
| " | 3′ – 9″ |
| " | 4' - 0" |
| " | 5' - 0" |

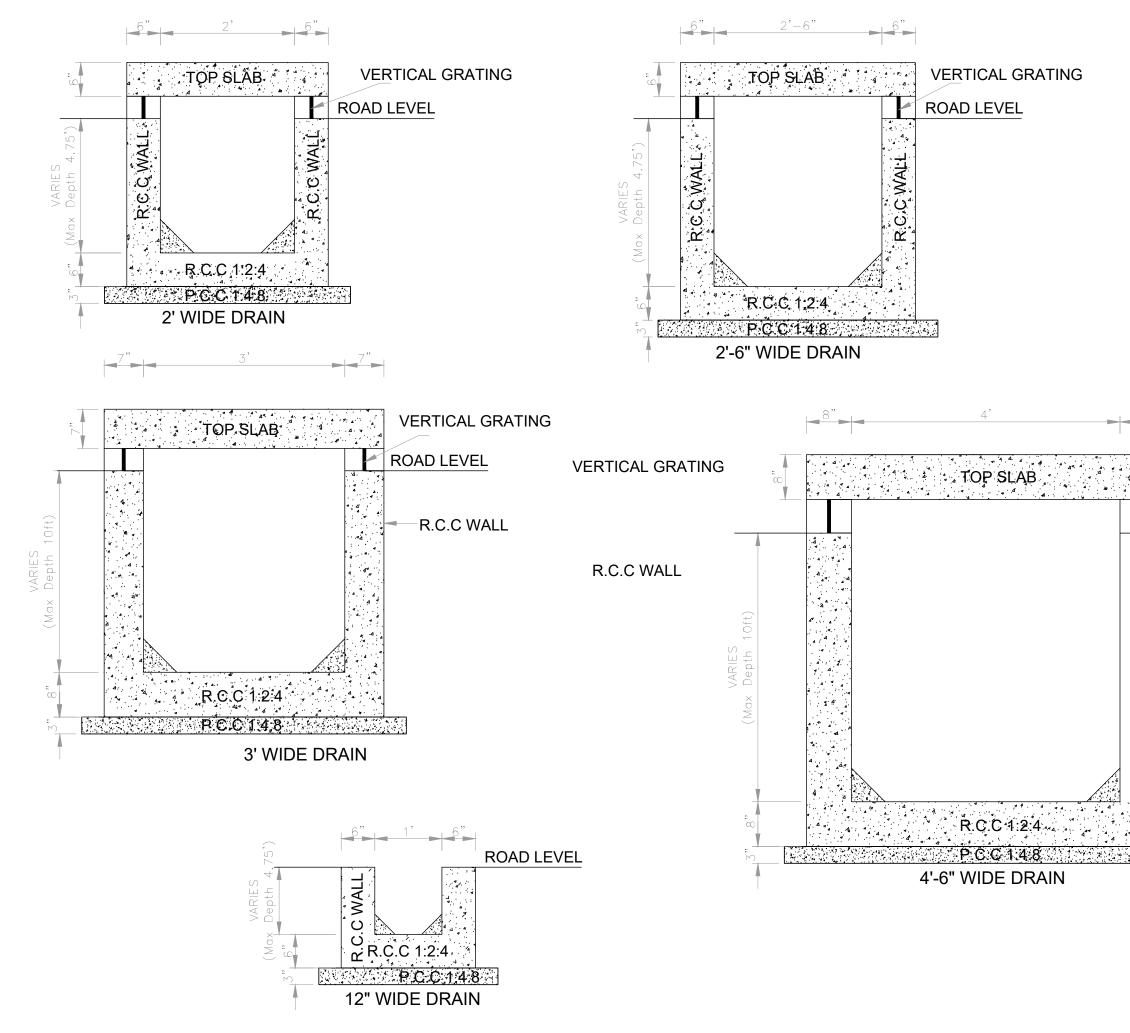
| S.NO | DESCRIPTION | DRG.NO: |
|------|---------------------------------------|---------|
| | DRAINAGE SYSTEM | |
| 01 | LIST OF DRAWING (01 / 04) | LD-00 |
| 02 | DRAINAGE SYSTEM LAYOUT PLAN (02 / 04) | DR-01 |
| 03 | DRAINAGE SYSTEM LAYOUT PLAN (03 / 04) | DR-02 |
| 04 | DRAIN DETAILS (04 / 04) | DR-03 |

| | | г. | | |
|--|--|--|---|-------------|
| | IEN | | | |
| Ç | \mathbf{D} | | CT //ENTAT //U) KNII | |
| EÌ | M | CONSULT | | |
| Across 14 | | CONSULTAN House No.57-M Gu Tel : (92-42) Fax : (92-42) E-mail : info@g | NTS (PVT)LTD. berg-III, Lahore, Pakist 35441641, 3544164 35441645 3ec.com | lan |
| PR | ROJE | | 3ec.com | |
| BOAT | BASIN | | RADATION (CHOWRANG | |
| | | N | | |
| 2. TH OF AN | HERWISI IS DRAW G3 ENG D CANNO | INEERING CONS | LECTUAL PROP SULTANTS (PVT.) ED OR REPRODU | LTD. |
| REV | ISIONS | : | | |
| No. | | DESCRIPT | ΓΙΟΝ | DATE |
| - | | | | |
| + | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| TI | ENC | DER DR | AWING | |
| | | | AWING | GS |
| DRA | WING . | TITLE: | RAWING | |
| DRAV DRAV M. In WATE | WING - LIST WN BY: mran R SUPP | TITLE: OF DF | RAWIN(| G . 2021 |
| DRAV DRAV M. In WATE Engr | WING T LIST WN BY: nran R SUPP Wasi ROVED | TITLE: OF DF LY & SEWERA f Ali BY: | | G . 2021 |
| DRAV DRAV M. In WATE Engr APPR Syec | WING T LIST WN BY: nran R SUPP Wasi ROVED | TITLE: OF DF LY & SEWERA f Ali BY: bbas Gilla | | G . 2021 |
| DRAV DRAV M. In WATE Engr APPF Syec DRAV 024 | WING LIST WN BY: mran R SUPP Wasi ROVED d Ali A WING N | TITLE: OF DF ILY & SEWERA f Ali BY: bbas Gilla IO: /ER/LD-00 | | G . 2021 |



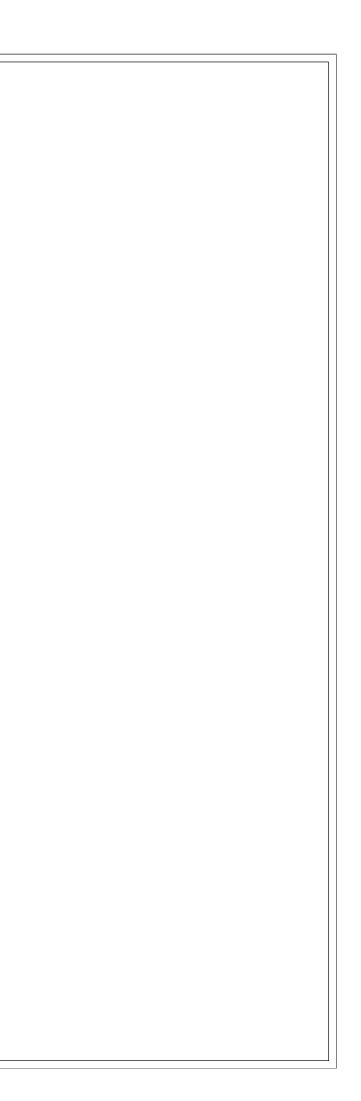


| | CLIENT: |
|-------------|---|
| | PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
| | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. How Ro.57-M Gulberg-III, Lahore, Pakistan Tel ::(92-42) 35441641, 35441642 Fax :(92-42) 35441641, 35441642 Fax ::(92-42) 35441641, 35441642 Fax ::(92-42) 35441641, 35441642 Fax :::(92-42) 35441645 E-mail ::Info@g3ec.com URL ::www.g3ec.com |
| | PROJECT: REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL |
| | N |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| | REVISIONS: |
| | No. DESCRIPTION DATE |
| | |
| | |
| | |
| | TENDER DRAWINGS |
| | DRAWING TITLE: |
| | PROPOSED DRAINAGE SYSTEM |
| NAGE SYSTEM | DRAWN BY: DATE: Basim June 2021 APPROVED BY: June 2021 Syed Ali Abbas Gillani Image: Comparison of the system of th |



| | | T: PROJEC IMPLEM UNIT (PI | ENTAT | |
|------------|--|--|---|--------------------|
| | | E-mail :: (92-42) 3 E-mail :: info@g3A URL :: www.g3e ECT: TATION & UP SIN TO SCHO | RING TS (PVT)LTD Prg-III, Lahore, Pakis 1544 1641, 3544 164 8c.com PGRADATIO | tan 42 ON OF |
| | OTHERWIS 2. THIS DRAW OF G3 ENG AND CANN WITHOUT F | SIONS ARE IN FER E SPECIFIED. ING IS AN INTELL INEERING CONSU DT BE REPRINTED RIOR APPROVAL | ECTUAL PROF JLTANTS (PVT. D OR REPROD |) LTD. |
| | | | | |
| | REVISIONS | DESCRIPTI | ON | DATE |
| R.C.C WALL | | | | |
| | | | | |
| | | | | |
| | TEND | DER DR | AWIN | GS |
| | DRAWING | TITLE: | | |
| | DR | AIN DE | TAILS | |
| | DRAWN BY Basim APPROVED Syed Ali <i>J</i> DRAWING 0249/DR- SCALE (A3 |) BY: Abbas Gilla NO: 03 | DATE: June 2 ni REV: SHEET: | 021 A. |
| | | .,. N.T.S | | 2/2 |

PUBLIC HEATH DRAWING FOOD STREET TOILET BLOCK



| Sr.# | DESCRIPTION | DRG. # | | | |
|------|---|------------|--|--|--|
| 01 | LIST OF DRAWINGS | 0249/PH-00 | | | |
| 02 | GENERAL NOTES | 0249/PH-01 | | | |
| | WATER SUPPLY SYSTEM | | | | |
| 03 | WATER SUPPLY SYSTEM (GROUND FLOOR PLAN) | 0249/PH-02 | | | |
| 04 | WATER SUPPLY SYSTEM (ROOF PLAN) | 0249/PH-03 | | | |
| | SEWERAGE & DRAINAGE SYSTEM | | | | |
| 05 | SEWERAGE SYSTEM (GROUND FLOOR PLAN) | 0249/PH-04 | | | |
| 06 | DRAINAGE SYSTEM (ROOF PLAN) | 0249/PH-05 | | | |
| | MISCELLANEOUS DETAILS | | | | |
| 07 | TYPICAL SEPTIC TANK PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-06 | | | |
| 08 | TYPICAL GULLY TRAP & MANHOLE PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-07 | | | |
| 09 | MISCELLANEOUS DETAILS-01 | 0249/PH-08 | | | |
| 10 | MISCELLANEOUS DETAILS-02 | 0249/PH-09 | | | |
| 11 | MISCELLANEOUS DETAILS-03 | 0249/PH-10 | | | |

| CLIEN | IT: | |
|---|---|-------------------------|
| ٨ | PROJECT IMPLEMENTA UNIT (PIU) KN | - |
| | ATION & UPGRADATION N TO SCHON CHOWRAN | akistan 1642 N OF |
| 2. THIS DRA OF G3 EN AND CAN | NSIONS ARE IN FEET UNLESS SE SPECIFIED. WING IS AN INTELLECTUAL PR GINEERING CONSULTANTS (P) NOT BE REPRINTED OR REPRC PRIOR APPROVAL OF G3. | /T.) LTD. |
| REVISION | | |
| No. | DESCRIPTION | DATE |
| | | |
| | | |
| | | |
| | | |
| | | |
| TEN | DER DRAWIN | IGS |
| DRAWING | G TITLE: | |
| LIST | OF DRAWIN | GS |
| Engr.Wa | PLY & SEWERAGE ENGINE | G. 2021 |
| APPROVE Syed Ali DRAWING 0249/PH-(SCALE (A | Abbas Gillani NO: REV: 00 4 | <u>d.</u> |

PUBLIC HEALTH GENERAL NOTES

- 1. THESE GENERAL NOTES ARE PROVIDED TO SUPPLEMENT THE WRITTEN SPECIFICATION FOR THIS PROJECT. REFER TO THE SPECIFICATIONS FOR MORE DETAILED REQUIREMENTS OF THIS PROJECT.
- 2. PERFORM ALL WORK IN A WORKMAN LIKE MANNER, IN COMPLIANCE WITH THE LATEST ADOPTED EDITIONS OF ALL GOVERNING CODES AND STANDARDS. IF CONFLICTS ARISE, REQUEST RESOLUTION FROM THE ARCHITECT. IF REQUIRED INFORMATION IS MISSING FROM THIS DRAWING (I.E, DUCT SIZE OR PIPE SIZE), REQUEST WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO THE EXECUTION
- 3. PROVIDE ALL MINOR INCIDENTAL ITEMS SUCH AS OFFSETS, FITTINGS, ETC, REQUIRED AS PART OF THE WORK EVEN THOUGH NOT SPECIFICALLY SHOWN ON DRAWINGS. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ITEMS OF EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEMS.
- 4. THE PLUMBING DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING, DUCT WORK. MECHANICAL EQUIPMENT AND APPURTENANCES, AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF THEIR TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE PLUMBING DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK AND PROVIDE SUCH FITTINGS, VALVES AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
- 5. VERIFY DIMENSIONS GOVERNING PLUMBING WORK AT THE BUILDING. DO NOT SCALE THE PLUMBING DRAWINGS FOR DIMENSIONS. TAKE DIMENSIONS. MEASUREMENTS, LOCATIONS, LEVELS, ETC, FROM THE ACTUAL FIELD CONDITIONS AND ARCHITECTURAL DRAWINGS.
- 6. EXAMINE ALL ADJOINING WORK ON WHICH THE PLUMBING WORK IS DEPENDENT OF MAXIMUM EFFICIENCY AND REPORT DESIGN CONFLICTS WHICH MUST BE CORRECTED PRIOR TO EXECUTION. NO WAIVER OF RESPONSIBILITY SHALL BE CLAIMED OR ALLOWED DUE TO FAILURE TO REPORT UNFAVORABLE CONDITIONS AFFECTING THE PLUMBING WORK
- 7. CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPING, VALVES, CONTROLS, INSULATION ETC. TO ALL PLUMBING EQUIPMENT SCHEDULED OR INDICATED ON PLANS REGARDLESS OF WHETHER PIPING, VALVES, CONTROLS, INSULATION ETC. ARE SPECIFICALLY SHOWN OR NOT PLUMBING EQUIPMENT INSTALLATION SHALL BE 100% COMPLETE FOR PROPER EQUIPMENT FUNCTION AND/OR OPERATION AT COMPLETION OF PROJECT
- 8. THE ARCHITECTURAL AND ENGINEERING DRAWINGS ARE COMPLEMENTARY. CONTRACTORS SHALL ACKNOWLEDGE THE ARCHITECTURAL AS WELL AS ALL THE ENGINEERING DRAWINGS AND INCLUDE ALL WORK NECESSARY TO ACHIEVE A COMPLETE WORKING, INSTALLATION FOR ANY DEVICE OR EQUIPMENT WHICH MAY BE SHOWN ON ONE DRAWING BUT NOT SHOWN ON ANOTHER.

- 9. LOCATION OF PIPES, DUCTS, SWITCHES, PANELS, EQUIPMENT AND FIXTURES SHALL BE ADJUSTED TO ACCOMMODATE THE WORK OR INTERFERENCES ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH PIPE AND DUCT PRIOR TO EABRICATION
- 10. LOCATION OF EXISTING UTILITIES AND EXISTING UNDERGROUND PLUMBING ARE BASED ON THE SITE INFORMATION AVAILABLE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES AND EXISTING UNDERGROUND PLUMBING PRIOR TO FABRICATION AND ERECTION OF WORK TO AVOID ALL INTERFERENCES. VERIFICATION SHALL BE BY SITE INSPECTION, EXCAVATION, OR WHATEVER MEANS NECESSARY TO DETERMINE EXACT LOCATIONS.
- 11. CONTRACTOR SHALL OBTAIN BUILDING PERMIT AND ARRANGE ALL REQUIRED INSPECTIONS WITH THE APPROPRIATE REGULATORY AGENCY. ALERT CONSULTANT OF ALL ITEMS NOT DEPICTED ON DRAWINGS. DO NOT PROCEED WITH FURTHER WORK UNTIL WRITTEN RESPONSE IS RECEIVED FROM CONSULTANT

12 CONTRACTOR SHALL VERIFY GAS PRESSURE DELIVERED BY METER AT BUILDING.

13. TEST THREADED NATURAL GAS PIPING AT 20 PSIG FOR A TEST PERIOD OF 2 HOURS. TEST PRESSURE SHALL NOT FALL OVER 5% DURING TEST PERIOD TO PASS. IF PIPING FAILS TEST, INVESTIGATE AND REPAIR THE SOURCE OF

14. PROVIDE SLEEVES AT ALL PIPING PENETRATIONS OF CONCRETE OR MASONRY FLOOR, WALL OR ROOF CONSTRUCTION.

15. PROVIDE GLASS WOOL INSULATION TO ALL HOT WATER (EXPOSED) AND COLD WATER (AT ROOF) PIPE LINE INCLUDING PROTECTIVE COATINGS.

16.USE NEAREST FLOOR TRAP FOR THE AC DRAINAGE.

- 17. TEST ALL PIPING SYSTEMS IN WHICH ANY ALTERATIONS HAVE BEEN MADE FOR COMPLIANCE WITH THE LATEST EDITION OF GOVERNING BUILDING CODE DOMESTIC HOT AND COLD WATER PIPING SHALL BE SUBJECT TO 100 PSIG FOR A MINIMUM 2 HOURS. DOMESTIC WASTE AND VENT PIPING SHALL BE TESTED AT 10' STATIC HEAD FOR A PERIOD GREATER THAN 15 MINUTES. IF REQUIRED PRESSURE DROPS BY MORE THAN 3% DURING ITS TEST DURATION, INVESTIGATE THE SOURCE OF LEAK, REPAIR THE LEAK, AND RETEST THE SYSTEM FOR THE REQUIRED TEST PERIOD. INSPECT ALL W & V JOINTS WHILE UNDER PRESSURE AND REPAIR ALL LEAKS.
- 18.INSTALL ALL PLUMBING FOUIPMENT IN COMPLETE COMPLIANCE WITH MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS, ARRANGE ALL FOUIPMENT TO PERMIT FASY REMOVAL OF COLLS MOTORS FILTERS AND ALL OTHER PARTS WHICH REQUIRE PERIODIC REPLACEMENT OR MAINTENANCE. 19. COORDINATE ALL ELECTRICAL VOLTAGE CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING PLUMBING EQUIPMENT.

LEGEND FOR WATER SUPPLY SYSTEM COLD WA

| COLD | WATE | ER PIPE (C.W) | | | 3 | | INTE | ERNAL |
|---------|--------|-------------------------------------|-------------|-----|---|-----------|--------|-------|
| NORMAL | . PRES | SURE COLD WATER (N.P.C.W) | * | _ | 3 | OUTER DIA | | DIA |
| HOT W | ATE | R PIPE (H.W) | <u> </u> | | - | (mm) | (mm) | INCH |
| RE-CIRC | ULAT | ON HOT WATER (R.H.W) | <u> </u> | - | - | 20 | 13.2 | 0.52 |
| GAS P | | | └─── | _ | # | 25 | 16.4 | 0.65 |
| | | VALVE (A.R.V) | 6 | | | 32 | 21.2 | 0.83 |
| BALL V | | | | | | 40 | 26.6 | 1.05 |
| | | E SLICE VALVE (G.V / S.V) | | | | 50 | 33.2 | 1.31 |
| | | REDUCER VALVE (P.R.V) ATION PUMP | R | | | 63 | 42 | 1.65 |
| | | NAL GEYSER | * | | | 75 | 50 | 1.97 |
| CHECK | | | - Ver | | | 90 | 60 | 2.36 |
| BOOST | | | 8 | | | 110 | 73.2 | 2.88 |
| SUBME | ERSIE | BLE PUMP | đ | | | | | |
| H.W.G | = | HOT WATER GENERATO | R | L.D | = | LIST OF | DRAV | VING |
| T.A | = | TO ABOVE | | G.N | = | GENER | AL NO | TES |
| T.B | = | TO BELOW | | W.S | = | WATER | SUPP | LY |
| F.A | = | FROM ABOVE | | G.S | = | GAS SY | STEM | |
| F.B | = | FROM BELOW | | S.W | = | SEWER | RAGE S | SYSTE |
| D-1 | = | DUCT - 1 | | D.R | = | DRAINA | GE SY | STEM |

M.D = MISCELLANEOUS DETAILS T/W = TUBE WELL

1. ALL WATER SUPPLY PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONE ARE EXTERNAL DIAMETERS. ALL WATER SUPPLY PIPES ARE OF PPRC UNLI NOTED OTHERWISE

2. ALL GAS PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONED ARE INTERNAL DIAMETERS.

3. ALL WATER SUPPLY PIPES ENTERING THE WALLS SHALL BE PROVIDED WIT ISOLATION VALVES.

LEGEND FOR SEWERAGE & DRAINAGE SYSTEM

| | PIPE DIA | & SLOPE |
|-----------------|---------------------------|---|
| | | |
| <u> </u> | 3" | 1:75 |
| с.о о —— | 4" | 1:100 |
| F.T 🕸 | 6" | 1:150 |
| G.T | 8" | 1:175 |
| M.H | 10" | 1:250 |
| R.W.C.P | 12" | 1:300 |
| | F.Т Ф G.Т [] М.Н [] | C.O O 4" F.T O 6" G.T D 8" M.H D 10" |

1. ALL PIPE DIAMETERS ARE IN INCHES UNLESS OTHERWISE MENTIONED. 2. VENT PIPES SHALL BE EXTENDED UP TO ONE FT ABOVE FINISHED ROOFLEVEL

3. SOIL, WASTE AND VENT PIPES UP TO 6" DIA. ARE uPVC (NON PRESSURIZE) TYPE-B CONFIRMING TO ISO 3633:2002 EXTERNAL SEWER PIPES SHALL BE OF FLOW LINE CONFIRMING TO EN 1401 UNLESS OTHERWISE NOTED

4. SLOPE OF ROOF VALLEY LINE SHOULD BE BETWEEN 0.01 TO 0.02

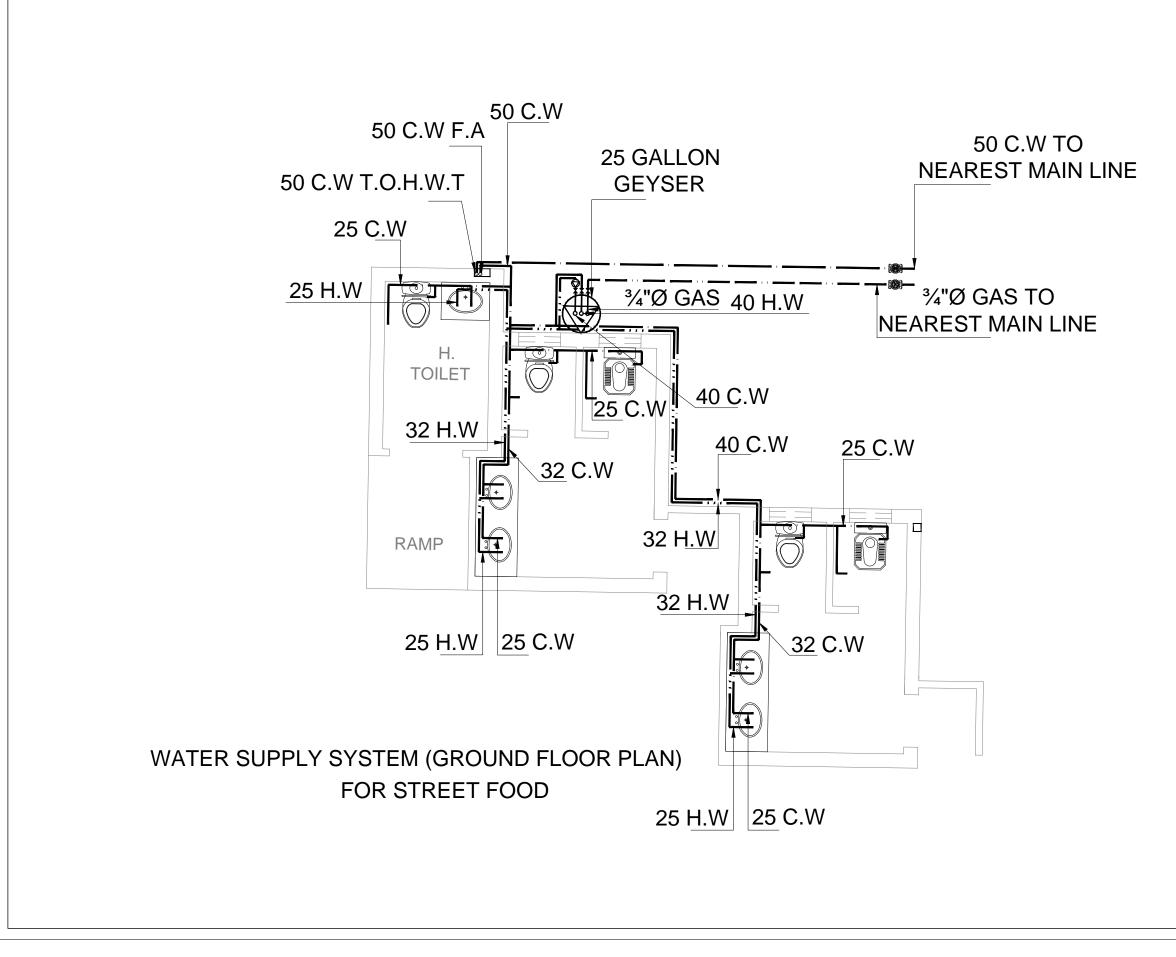
5. BOTTLE TRAP SHALL BE USED WITH ALL WASH BASIN.

6. R.C.C PIPES SHALL BE SHALIMAR OR EQUIVALENT MAKE

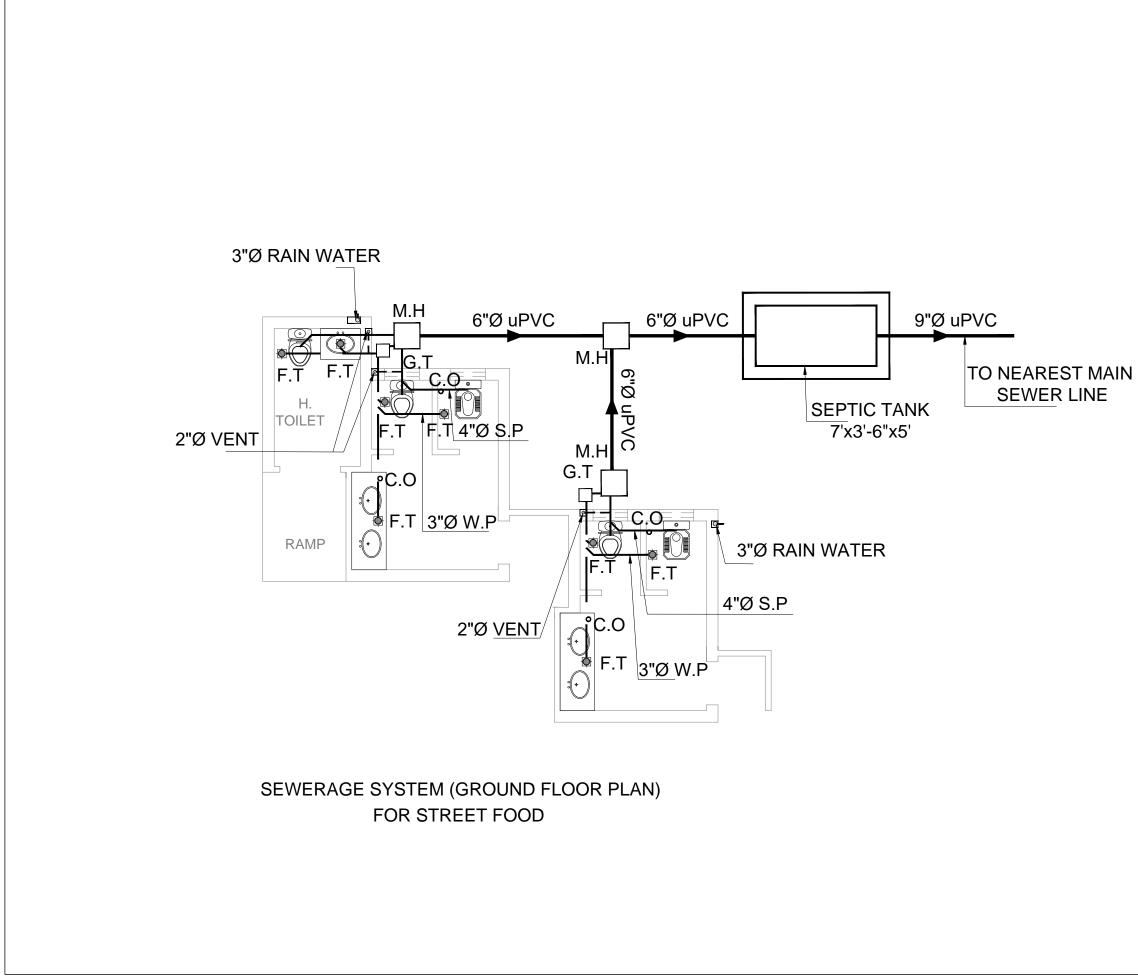
7. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER

- 4. ALL WATER SUPPLY PIPES ARE PPR (PN 20) UNLESS OTHERWISE MENTION 5. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS,
- ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED.
- 6. ALL GAS PIPES ARE G.I. UNLESS OTHERWISE MENTIONED.
- 7. ALL WATER SUPPLY AND GAS PIPES ARE IN DUCTS, OR CONCEALED IN WAI BURIED IN FLOORS
- 8. ALL PIPING SHALL BE TESTED FOR LEAKAGE BEFORE THE JOINTS ARE CO

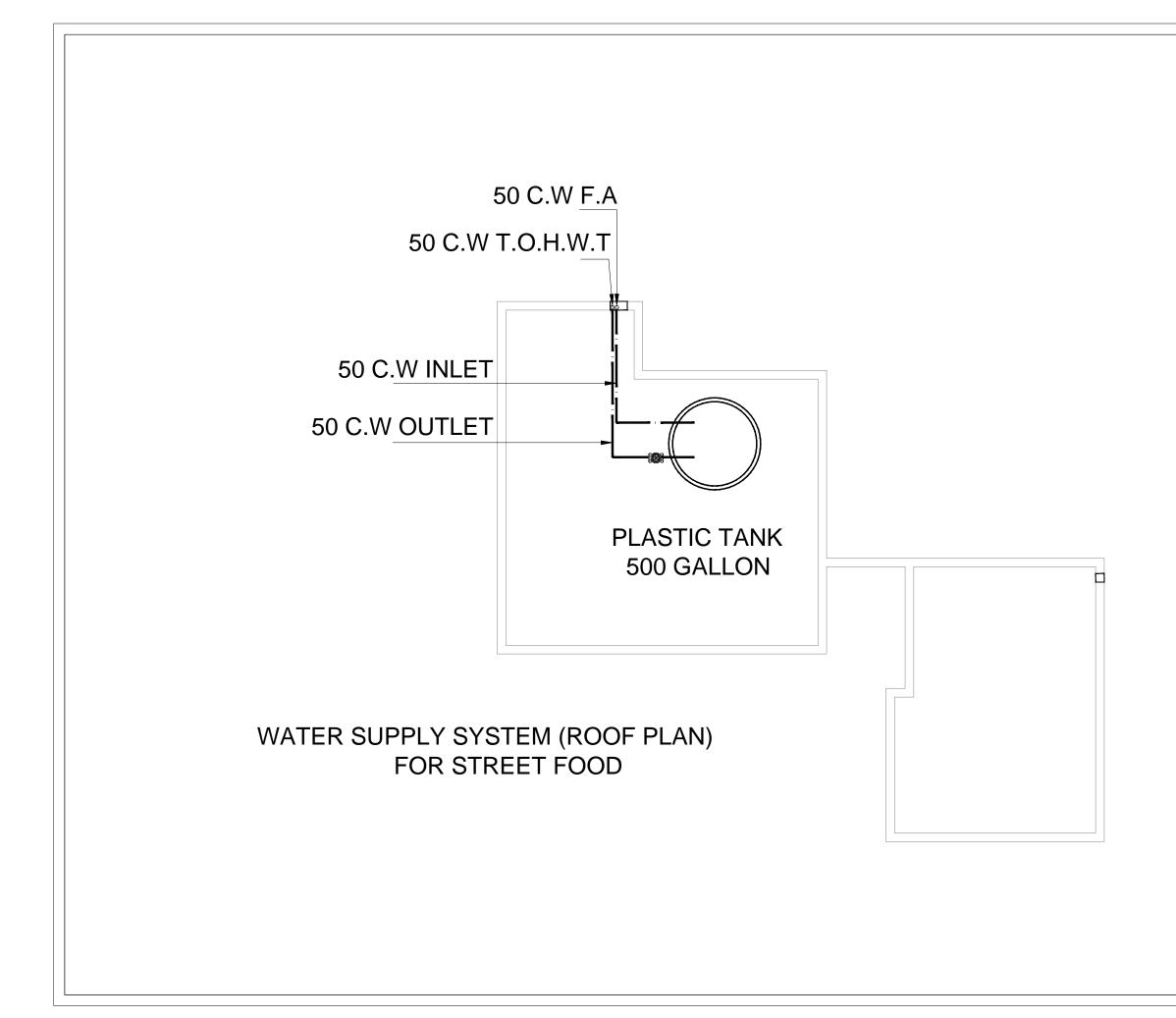
| | CLIENT: |
|--|--|
| | PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
| SCHEDULE OF PIPE DIA | CONSULTANTS: CONSULTANTS CONS |
| WATER SUPPLY GAS SYSTEM SEWERAGE SYSTEM DRAINAGE SYSTEM TUBE WELL ETERS AND MENTIONED PES ARE OF PPRC UNLESS MENTIONED ARE HALL BE PROVIDED WITH | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| EM | REVISIONS: |
| PIPE DIA & SLOPE 3" 1:75 4" 1:100 6" 1:150 8" 1:175 10" 1:250 12" 1:300 RWISE MENTIONED. DVE FINISHED | No. DESCRIPTION DATE |
| VC (NON PRESSURIZE) EWER PIPES SHALL BE HERWISE NOTED 1 0.01 TO 0.02 N. IAKE. UNDER. OTHERWISE MENTIONED. S, TEES, SOCKETS, | TENDER DRAWINGS |
| ONED. OR CONCEALED IN WALL OR | DRAWING TITLE: |
| E THE JOINTS ARE COVERED. | General Notes DRAWN BY: DATE: M. Imran AUG. 2021 WATER SUPPLY & SEWERAGE ENGINEER Image: Colspan="2">Colspan="2"C |

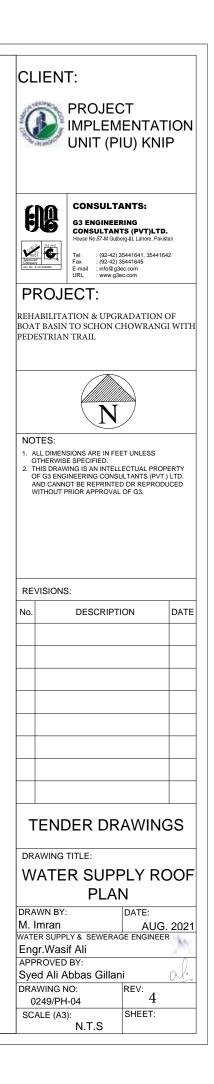


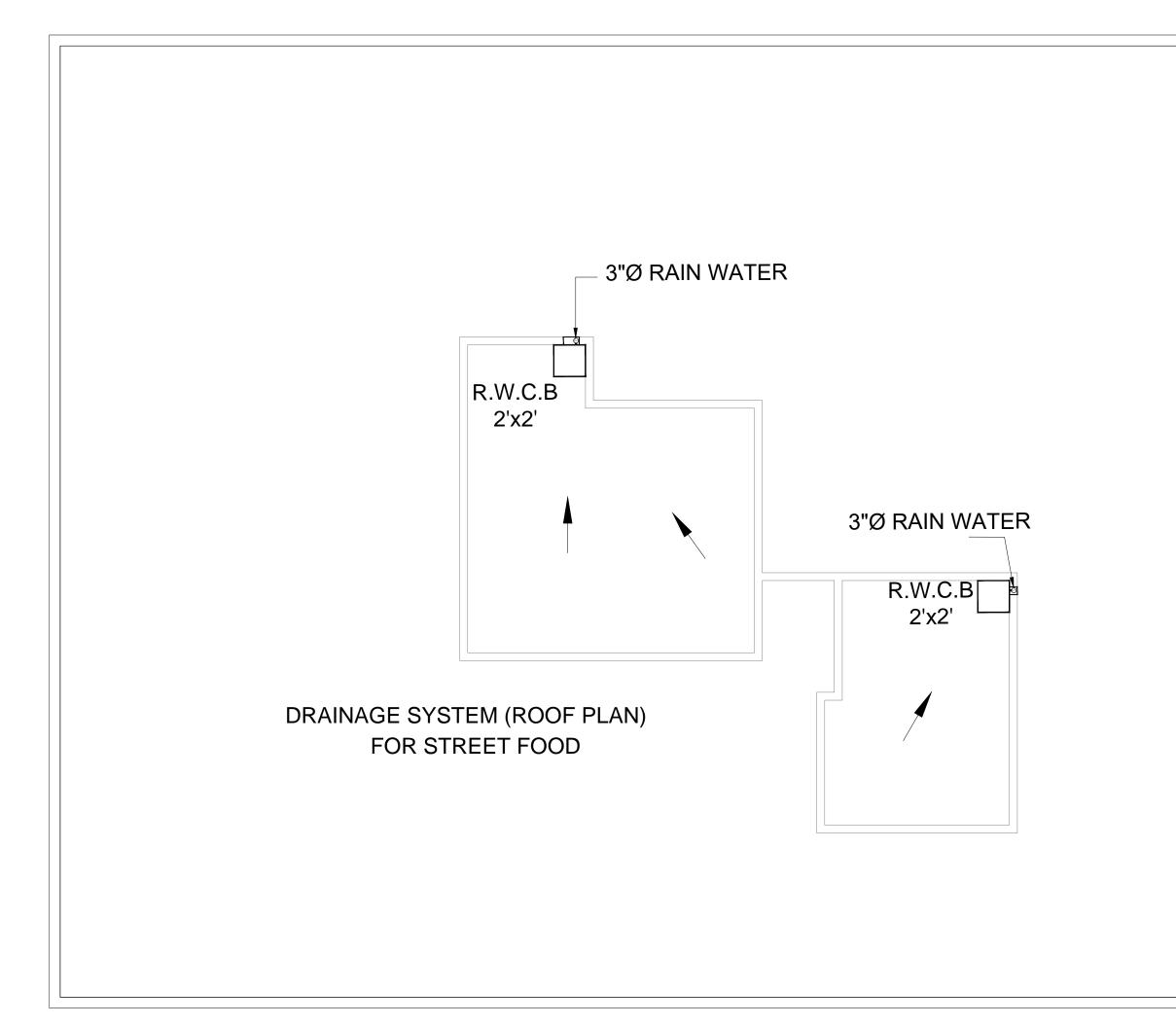
| CLIE | NT: | |
|--------------------------------------|--|------------------------|
| | PROJECT IMPLEMENTA UNIT (PIU) KN | - |
| REHABIL BOAT BA | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LT House No.57.4 Guibargili, Lahore, Pa Tel : (22-42) 35441641 Fax : (22-42) 354416415 E-mail : info@gaec.com URL : www.gaec.com DJECT: ITATION & UPGRADATION SIN TO SCHON CHOWRAN IAN TRAIL | kistan 1642 J OF |
| | N | |
| OTHER 2. THIS D OF G3 AND C | : MENSIONS ARE IN FEET UNLESS WISE SPECIFIED. RAWING IS AN INTELLECTUAL PRC ENGINEERING CONSULTANTS (PV ANNOT BE REPRINTED OR REPRO UT PRIOR APPROVAL OF G3. | T.) LTD. |
| REVISIO | DNS: | |
| No. | DESCRIPTION | DATE |
| | | |
| | | |
| | | |
| | | |
| | | |
| TEN | | GS |
| | NG TITLE: VATER SUPPL' | Y |
| Engr.W | An AU(JPPLY & SEWERAGE ENGINE /asif Ali | G. 2021 ER |
| DRAWIN 0249/F | G NO: REV: PH-02 | 4 |
| SCALE | (A3): SHEET: N.T.S | |

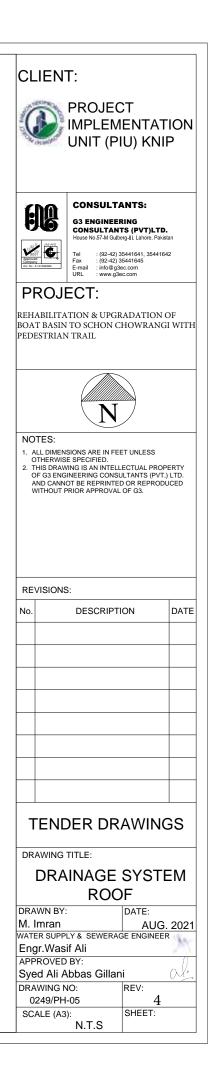


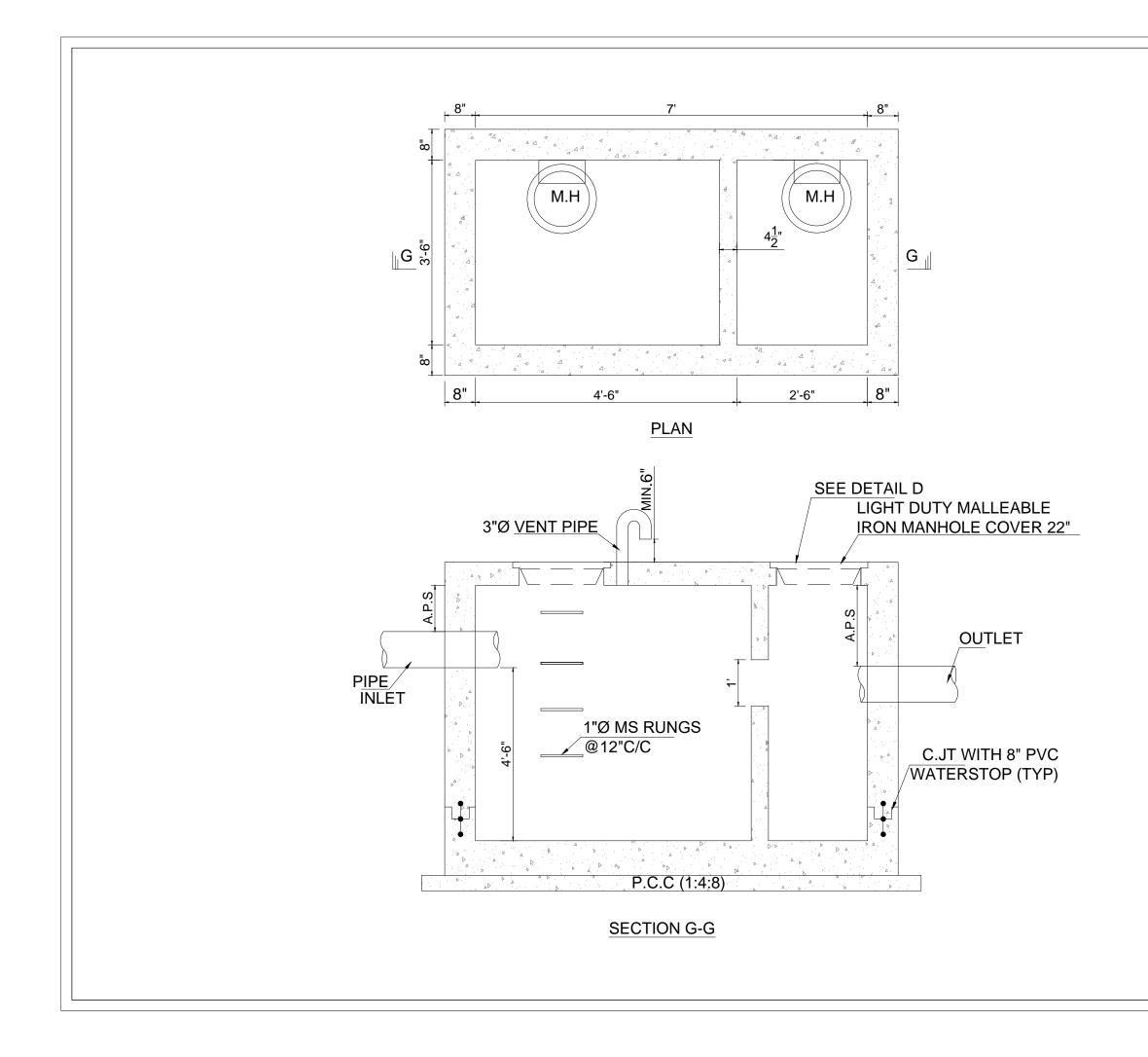
| 1 | | ı |
|------------------------|---|---------|
| CL | IENT: | |
| Q | PROJECT IMPLEMENTAT UNIT (PIU) KNII | |
| REH BOA | CONSULTANTS: G ENGINEERING CONSULTANTS (PVT)LTD. Hose No.57-4 Gubergill, Lahone, Paiket Dise No.57-4 Gubergill, Lahone, Paiket Tel : (22-42) 35441641, 3544164 Fax : (22-42) 35441641, 3544164 Fax : (22-42) 35441641, 3544164 Exercise State | 2 DF |
| | N | |
| 1. A C 2. T C | TES: LL DIMENSIONS ARE IN FEET UNLESS THERWISE SPECIFIED. HIS DRAWING IS AN INTELLECTUAL PROP FG 32 ENGINEERING CONSULTANTS (PVT.) IND CANNOT BE REPRINTED OR REPRODU VITHOUT PRIOR APPROVAL OF G3. | LTD. |
| RE | VISIONS: | |
| No. | DESCRIPTION | DATE |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| ד | ENDER DRAWING | SS |
| DR | AWING TITLE: | |
| | SEWER SYSTEM | 1 |
| M. WATI Enç | WN BY: DATE: Imran AUG. ER SUPPLY & SEWERAGE ENGINEER gr.Wasif Ali PROVED BY: ad Ali Abbas Cilloni | |
| DRA | ed Ali Abbas Gillani WING NO: REV: 0249/PH-03 4 ALF (A3): SHEET: | W°_ |
| SC | ALE (A3): SHEET: N.T.S | |



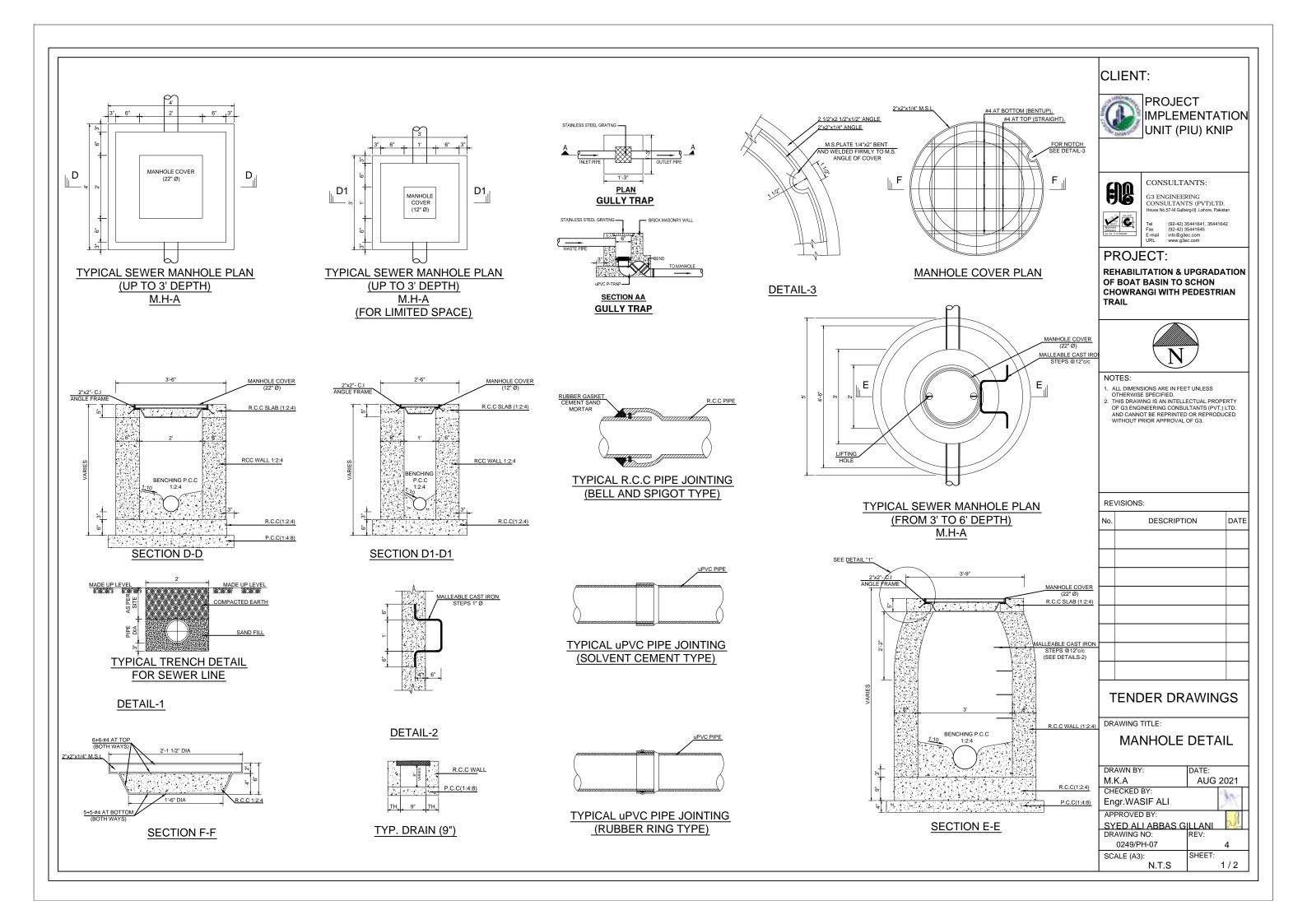


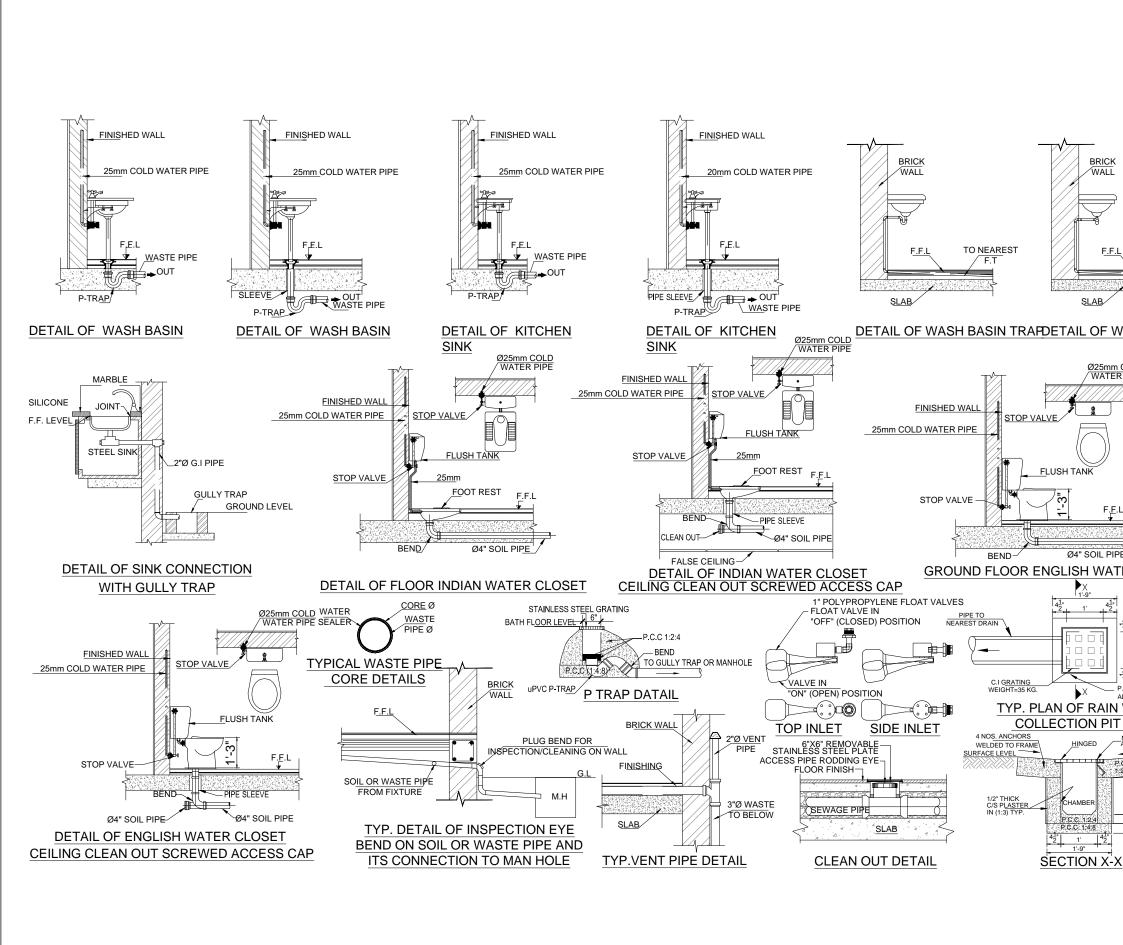




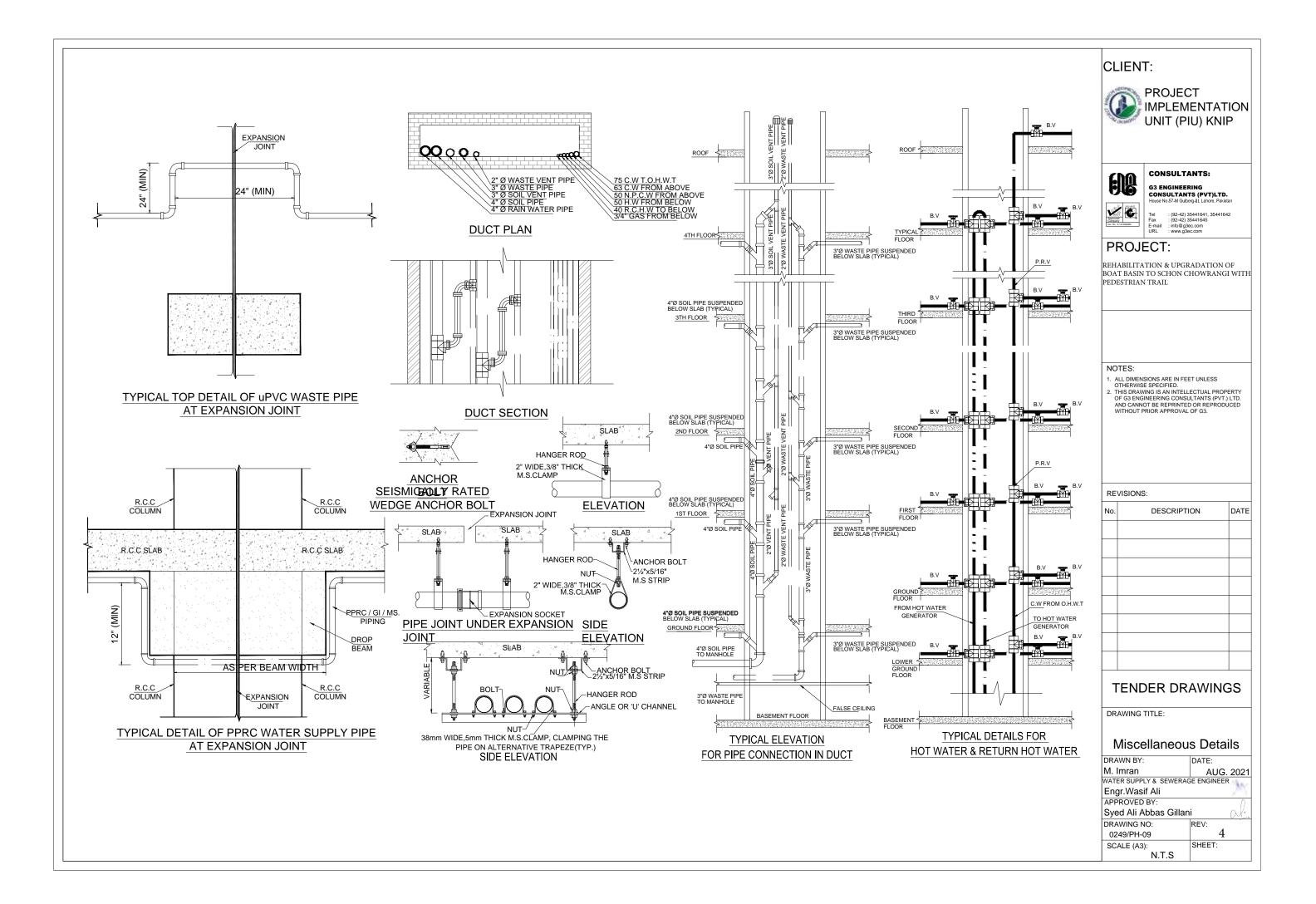


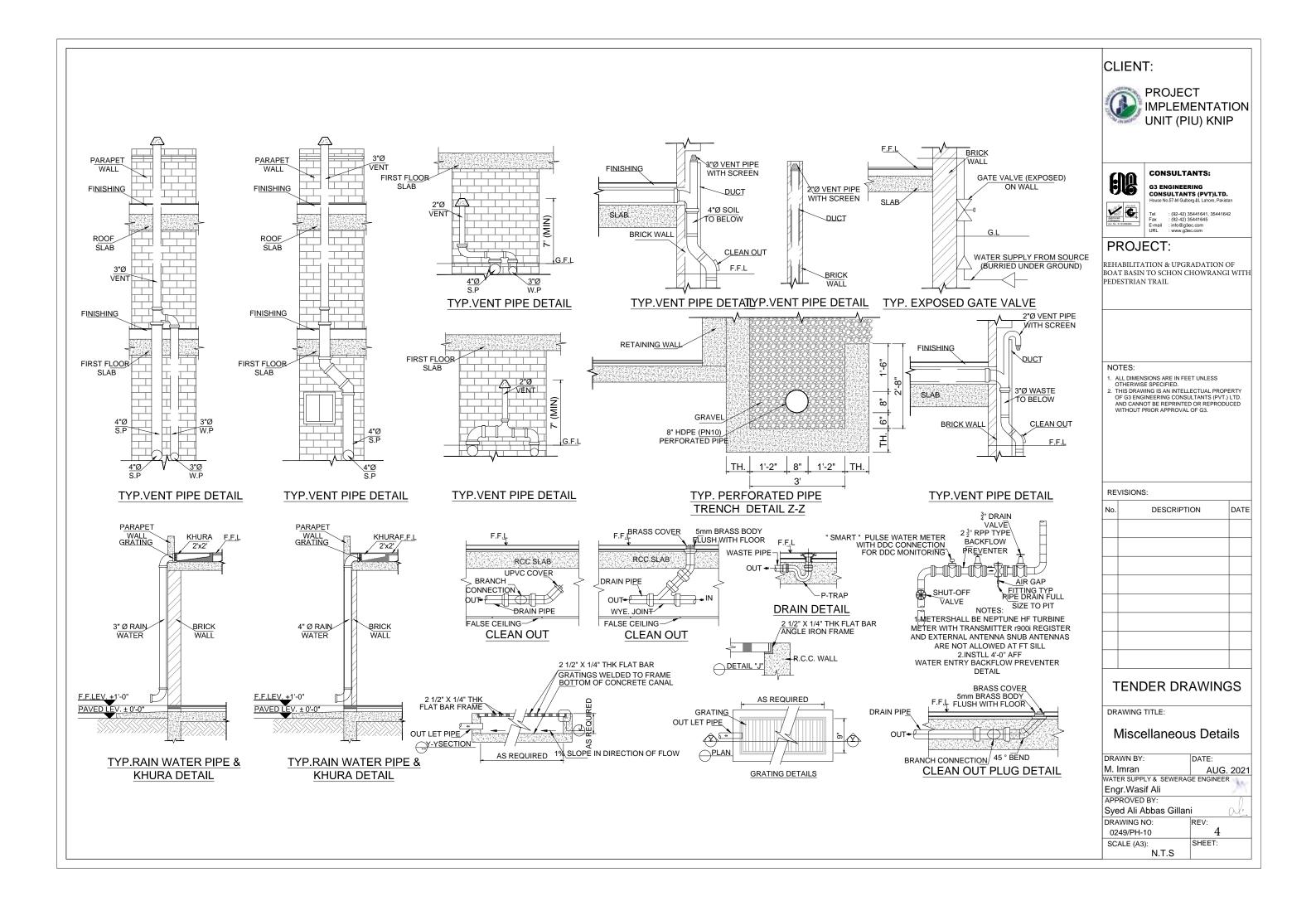
| | CLIEN | Т: | |
|---|---|--|-----------------------------|
| BERNEL BARNER BARN | ٨ | IMPLEMENT | - |
| ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. REVISIONS: No. DESCRIPTION DATE DESCRIPTION DATE TENDER DRAWINGS DRAWING TITLE: SEPTIC TANK | REHABILITA BOAT BASIN | G3 ENGINEERING CONSULTANTS (PVT)I House No.57-M Guilerg-III. Lahore, Tel : (92-42) 35441641, 35 Fax : (92-42) 35441641, 35 E-mail : info@gac.com URL : www.gac.com URL : www.gac.com ECT: ATION & UPGRADATIC TO SCHON CHOWRA | Pakistan 441642 DN OF |
| No. DESCRIPTION DATE Image: Constraint of the second seco | ALL DIMEN OTHERWIS THIS DRAU OF G3 ENC AND CANN WITHOUT I | JE SPECIFIED. VING IS AN INTELLECTUAL P INFERING CONSULTANTS (I OT BE REPRINTED OR REPF PRIOR APPROVAL OF G3. | ROPERTY PVT.) LTD. |
| TENDER DRAWINGS DRAWING TITLE: SEPTIC TANK | | | |
| DRAWING TITLE: | NO. | DESCRIPTION | DATE |
| DRAWING TITLE: | | | |
| SEPTIC TANK | TEN | DER DRAWII | NGS |
| | DRAWING | TITLE: | |
| | S | EPTIC TANK | K |
| M. Imran AUG. 2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: | WATER SUPP Engr.Was | AL PLY & SEWERAGE ENGIN | |
| APPROVED BY: Syed Ali Abbas Gillani DRAWING NO: 0249/PH-06 SCALE (A3): | - | | d |



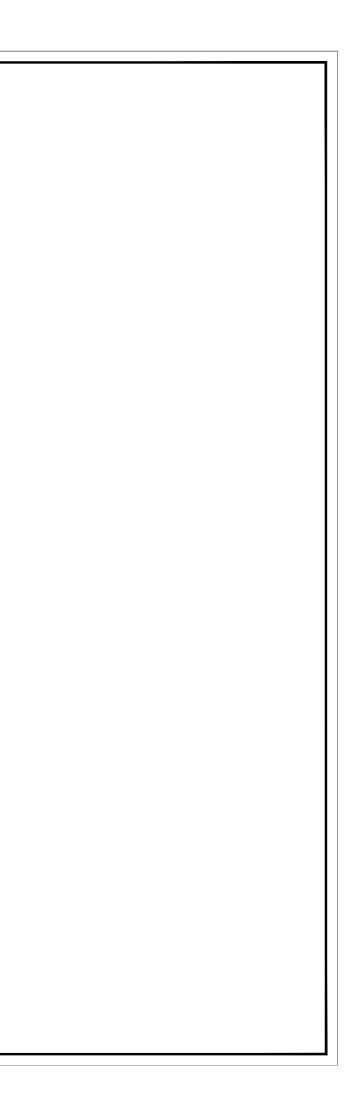


| | CLIENT: PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
|--|--|
| TO NEAREST | CONSULTANTS: CONSULTANTS: CONSULTANTS CON |
| IASH BASIN TRAP | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| ER CLOSET | REVISIONS: No. DESCRIPTION DATE |
| The second secon | TENDER DRAWINGS |
| | DRAWN BY: DATE: M. Imran AUG. 2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani DRAWING NO: 0249/PH-08 SCALE (A3): SHEET: N.T.S SHEET: |





PUBLIC HEALTH DRAWING Park-St-5



| Sr.# | DESCRIPTION | DRG. # | | | |
|------|---|------------|--|--|--|
| 01 | LIST OF DRAWINGS | 0249/PH-00 | | | |
| 02 | GENERAL NOTES | 0249/PH-01 | | | |
| | WATER SUPPLY SYSTEM | | | | |
| 03 | WATER SUPPLY SYSTEM (GROUND FLOOR PLAN) | 0249/PH-02 | | | |
| 04 | WATER SUPPLY SYSTEM (ROOF PLAN) | 0249/PH-03 | | | |
| | SEWERAGE & DRAINAGE SYSTEM | | | | |
| 05 | SEWERAGE SYSTEM (GROUND FLOOR PLAN) | 0249/PH-04 | | | |
| 06 | DRAINAGE SYSTEM (ROOF PLAN) | 0249/PH-05 | | | |
| | MISCELLANEOUS DETAILS | | | | |
| 07 | TYPICAL SEPTIC TANK PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-06 | | | |
| 08 | TYPICAL GULLY TRAP & MANHOLE PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-07 | | | |
| 09 | MISCELLANEOUS DETAILS-01 | 0249/PH-08 | | | |
| 10 | MISCELLANEOUS DETAILS-02 | 0249/PH-09 | | | |
| 11 | MISCELLANEOUS DETAILS-03 | 0249/PH-10 | | | |

| CL | IEN | T: | |
|--------------|--|---|--|
| Q | D | PROJEC ⁻ IMPLEME UNIT (PIL | NTATION |
| REH BOA | | Fax : (92-42) 354 E-mail : info@g3ec. URL : www.g3ec. ECT: TION & UPGRA TO SCHON CH | NG (PVT)LTD. III, Lahore, Pakistan 41641, 35441642 41645 oom oom |
| 1. / 2. T | OTHERWIS THIS DRAW OF G3 ENG AND CANNO | SIONS ARE IN FEET E SPECIFIED. ING IS AN INTELLEG UNEERING CONSUL ⁻ DT BE REPRINTED (RIOR APPROVAL O | CTUAL PROPERTY FANTS (PVT.) LTD. OR REPRODUCED |
| RE | VISIONS | S: | |
| RE No. | VISIONS | DESCRIPTIO | N DATE |
| | VISIONS | | N DATE |
| | | | N DATE |
| | VISIONS | | N DATE |
| | | | |
| | | DER DRA | |
| | | DER DRA | WINGS |
| | | DER DRA DER DRA TITLE: OF DRA | WINGS WINGS WINGS |
| | TENE AWING LIST WIN BY: IMITAN ER SUPP gr. Wasi ROVED ad Ali A | DER DRA DER DRA DER DRA TITLE: OF DRA LY & SEWERAGE f Ali BY: bbas Gillani | WINGS WINGS WINGS WINGS DATE: AUG .2021 ENGINEER |
| | TENE AWING LIST | DER DRA | WINGS WINGS WINGS |

PUBLIC HEALTH GENERAL NOTES

- 1. THESE GENERAL NOTES ARE PROVIDED TO SUPPLEMENT THE WRITTEN SPECIFICATION FOR THIS PROJECT. REFER TO THE SPECIFICATIONS FOR MORE DETAILED REQUIREMENTS OF THIS PROJECT.
- 2. PERFORM ALL WORK IN A WORKMAN LIKE MANNER, IN COMPLIANCE WITH THE LATEST ADOPTED EDITIONS OF ALL GOVERNING CODES AND STANDARDS. IF CONFLICTS ARISE, REQUEST RESOLUTION FROM THE ARCHITECT. IF REQUIRED INFORMATION IS MISSING FROM THIS DRAWING (I.E, DUCT SIZE OR PIPE SIZE), REQUEST WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO THE EXECUTION
- 3. PROVIDE ALL MINOR INCIDENTAL ITEMS SUCH AS OFFSETS, FITTINGS, ETC, REQUIRED AS PART OF THE WORK EVEN THOUGH NOT SPECIFICALLY SHOWN ON DRAWINGS. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ITEMS OF EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEMS.
- 4. THE PLUMBING DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING, DUCT WORK. MECHANICAL EQUIPMENT AND APPURTENANCES, AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF THEIR TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE PLUMBING DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK AND PROVIDE SUCH FITTINGS, VALVES AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
- 5. VERIFY DIMENSIONS GOVERNING PLUMBING WORK AT THE BUILDING. DO NOT SCALE THE PLUMBING DRAWINGS FOR DIMENSIONS. TAKE DIMENSIONS. MEASUREMENTS, LOCATIONS, LEVELS, ETC, FROM THE ACTUAL FIELD CONDITIONS AND ARCHITECTURAL DRAWINGS.
- 6. EXAMINE ALL ADJOINING WORK ON WHICH THE PLUMBING WORK IS DEPENDENT OF MAXIMUM EFFICIENCY AND REPORT DESIGN CONFLICTS WHICH MUST BE CORRECTED PRIOR TO EXECUTION. NO WAIVER OF RESPONSIBILITY SHALL BE CLAIMED OR ALLOWED DUE TO FAILURE TO REPORT UNFAVORABLE CONDITIONS AFFECTING THE PLUMBING WORK
- 7. CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPING, VALVES, CONTROLS, INSULATION ETC. TO ALL PLUMBING EQUIPMENT SCHEDULED OR INDICATED ON PLANS REGARDLESS OF WHETHER PIPING, VALVES, CONTROLS, INSULATION ETC. ARE SPECIFICALLY SHOWN OR NOT PLUMBING EQUIPMENT INSTALLATION SHALL BE 100% COMPLETE FOR PROPER EQUIPMENT FUNCTION AND/OR OPERATION AT COMPLETION OF PROJECT
- 8. THE ARCHITECTURAL AND ENGINEERING DRAWINGS ARE COMPLEMENTARY. CONTRACTORS SHALL ACKNOWLEDGE THE ARCHITECTURAL AS WELL AS ALL THE ENGINEERING DRAWINGS AND INCLUDE ALL WORK NECESSARY TO ACHIEVE A COMPLETE WORKING, INSTALLATION FOR ANY DEVICE OR EQUIPMENT WHICH MAY BE SHOWN ON ONE DRAWING BUT NOT SHOWN ON ANOTHER.

- 9. LOCATION OF PIPES, DUCTS, SWITCHES, PANELS, EQUIPMENT AND FIXTURES SHALL BE ADJUSTED TO ACCOMMODATE THE WORK OR INTERFERENCES ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH PIPE AND DUCT PRIOR TO EABRICATION
- 10. LOCATION OF EXISTING UTILITIES AND EXISTING UNDERGROUND PLUMBING ARE BASED ON THE SITE INFORMATION AVAILABLE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES AND EXISTING UNDERGROUND PLUMBING PRIOR TO FABRICATION AND ERECTION OF WORK TO AVOID ALL INTERFERENCES. VERIFICATION SHALL BE BY SITE INSPECTION, EXCAVATION, OR WHATEVER MEANS NECESSARY TO DETERMINE EXACT LOCATIONS.
- 11. CONTRACTOR SHALL OBTAIN BUILDING PERMIT AND ARRANGE ALL REQUIRED INSPECTIONS WITH THE APPROPRIATE REGULATORY AGENCY. ALERT CONSULTANT OF ALL ITEMS NOT DEPICTED ON DRAWINGS. DO NOT PROCEED WITH FURTHER WORK UNTIL WRITTEN RESPONSE IS RECEIVED FROM CONSULTANT

12 CONTRACTOR SHALL VERIFY GAS PRESSURE DELIVERED BY METER AT BUILDING.

13. TEST THREADED NATURAL GAS PIPING AT 20 PSIG FOR A TEST PERIOD OF 2 HOURS. TEST PRESSURE SHALL NOT FALL OVER 5% DURING TEST PERIOD TO PASS. IF PIPING FAILS TEST, INVESTIGATE AND REPAIR THE SOURCE OF

14. PROVIDE SLEEVES AT ALL PIPING PENETRATIONS OF CONCRETE OR MASONRY FLOOR, WALL OR ROOF CONSTRUCTION.

15. PROVIDE GLASS WOOL INSULATION TO ALL HOT WATER (EXPOSED) AND COLD WATER (AT ROOF) PIPE LINE INCLUDING PROTECTIVE COATINGS.

16.USE NEAREST FLOOR TRAP FOR THE AC DRAINAGE.

- 17. TEST ALL PIPING SYSTEMS IN WHICH ANY ALTERATIONS HAVE BEEN MADE FOR COMPLIANCE WITH THE LATEST EDITION OF GOVERNING BUILDING CODE DOMESTIC HOT AND COLD WATER PIPING SHALL BE SUBJECT TO 100 PSIG FOR A MINIMUM 2 HOURS. DOMESTIC WASTE AND VENT PIPING SHALL BE TESTED AT 10' STATIC HEAD FOR A PERIOD GREATER THAN 15 MINUTES. IF REQUIRED PRESSURE DROPS BY MORE THAN 3% DURING ITS TEST DURATION, INVESTIGATE THE SOURCE OF LEAK, REPAIR THE LEAK, AND RETEST THE SYSTEM FOR THE REQUIRED TEST PERIOD. INSPECT ALL W & V JOINTS WHILE UNDER PRESSURE AND REPAIR ALL LEAKS.
- 18.INSTALL ALL PLUMBING FOUIPMENT IN COMPLETE COMPLIANCE WITH MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS, ARRANGE ALL FOUIPMENT TO PERMIT FASY REMOVAL OF COLLS MOTORS FILTERS AND ALL OTHER PARTS WHICH REQUIRE PERIODIC REPLACEMENT OR MAINTENANCE. 19. COORDINATE ALL ELECTRICAL VOLTAGE CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING PLUMBING EQUIPMENT.

LEGEND FOR WATER SUPPLY SYSTEM

| | | ER PIPE (C.W) SURE COLD WATER (N.P.C.W) | | | - | OUTER DIA | | ERNAL DIA |
|---------|-------|--|----------|------|----|-----------|--------|--------------|
| | | R PIPE (H.W) | = : : | ; == | 3 | (mm) | (mm) | INCH |
| RE-CIRC | ULATI | ON HOT WATER (R.H.W) | | _ | ⇒ | 20 | 13.2 | 0.52 |
| GAS P | | | L | | \$ | 25 | 16.4 | 0.65 |
| | | VALVE (A.R.V) | 6 | | | 32 | 21.2 | 0.83 |
| BALL V | | | | | | 40 | 26.6 | 1.05 |
| | | E SLICE VALVE (G.V / S.V) REDUCER VALVE (P.R.V) | | | | 50 | 33.2 | 1.31 |
| | | ATION PUMP | R | | | 63 | 42 | 1.65 |
| | | NAL GEYSER | * | | | 75 | 50 | 1.97 |
| CHECK | (VAL | VE | Ŏ | | | 90 | 60 | 2.36 |
| BOOST | FER P | PUMP | 8 | | | 110 | 73.2 | 2.88 |
| SUBME | ERSIE | BLE PUMP | 4 | | | | | |
| H.W.G | = | HOT WATER GENERATO | R | L.D | = | LIST OF | - DRAV | VING |
| T.A | = | TO ABOVE | | G.N | = | GENER | AL NO | TES |
| T.B | = | TO BELOW | | W.S | = | WATER | SUPP | LY |
| F.A | = | FROM ABOVE | | G.S | = | GAS SY | 'STEM | |
| F.B | = | FROM BELOW | | S.W | = | SEWEF | RAGES | SYSTE |
| D-1 | = | DUCT - 1 | | D.R | = | DRAINA | GE SY | STEM |
| M.D | = | MISCELLANEOUS DETA | LS - | T/W | = | TUBE \ | NELL | |

- 1. ALL WATER SUPPLY PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONE ARE EXTERNAL DIAMETERS. ALL WATER SUPPLY PIPES ARE OF PPRC UNLI NOTED OTHERWISE
- 2. ALL GAS PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONED ARE INTERNAL DIAMETERS.
- 3. ALL WATER SUPPLY PIPES ENTERING THE WALLS SHALL BE PROVIDED WI ISOLATION VALVES.

LEGEND FOR SEWERAGE & DRAINAGE SYSTEM

| SOIL PIPE (S.P) | 2 | PIPE DIA | & SLOPE |
|---------------------------|------------------|----------|---------|
| WASTE PIPE (W.P) | r = 3 | | |
| VENT PIPE (V.P) | | 3" | 1:75 |
| CLEANOUTS | с.о о — — | 4" | 1:100 |
| FLOOR TRAP | FT 🔯 | 6" | 1:150 |
| GULLY TRAP | G.T 🔲 | 8" | 1:175 |
| MANHOLE | M.H | 10" | 1:250 |
| RAIN WATER COLLECTION PIT | R.W.C.P | 12" | 1:300 |

1. ALL PIPE DIAMETERS ARE IN INCHES UNLESS OTHERWISE MENTIONED. 2. VENT PIPES SHALL BE EXTENDED UP TO ONE FT ABOVE FINISHED ROOFLEVEL

3. SOIL, WASTE AND VENT PIPES UP TO 6" DIA. ARE uPVC (NON PRESSURIZE) TYPE-B CONFIRMING TO ISO 3633:2002 EXTERNAL SEWER PIPES SHALL BE OF FLOW LINE CONFIRMING TO EN 1401 UNLESS OTHERWISE NOTED

4. SLOPE OF ROOF VALLEY LINE SHOULD BE BETWEEN 0.01 TO 0.02

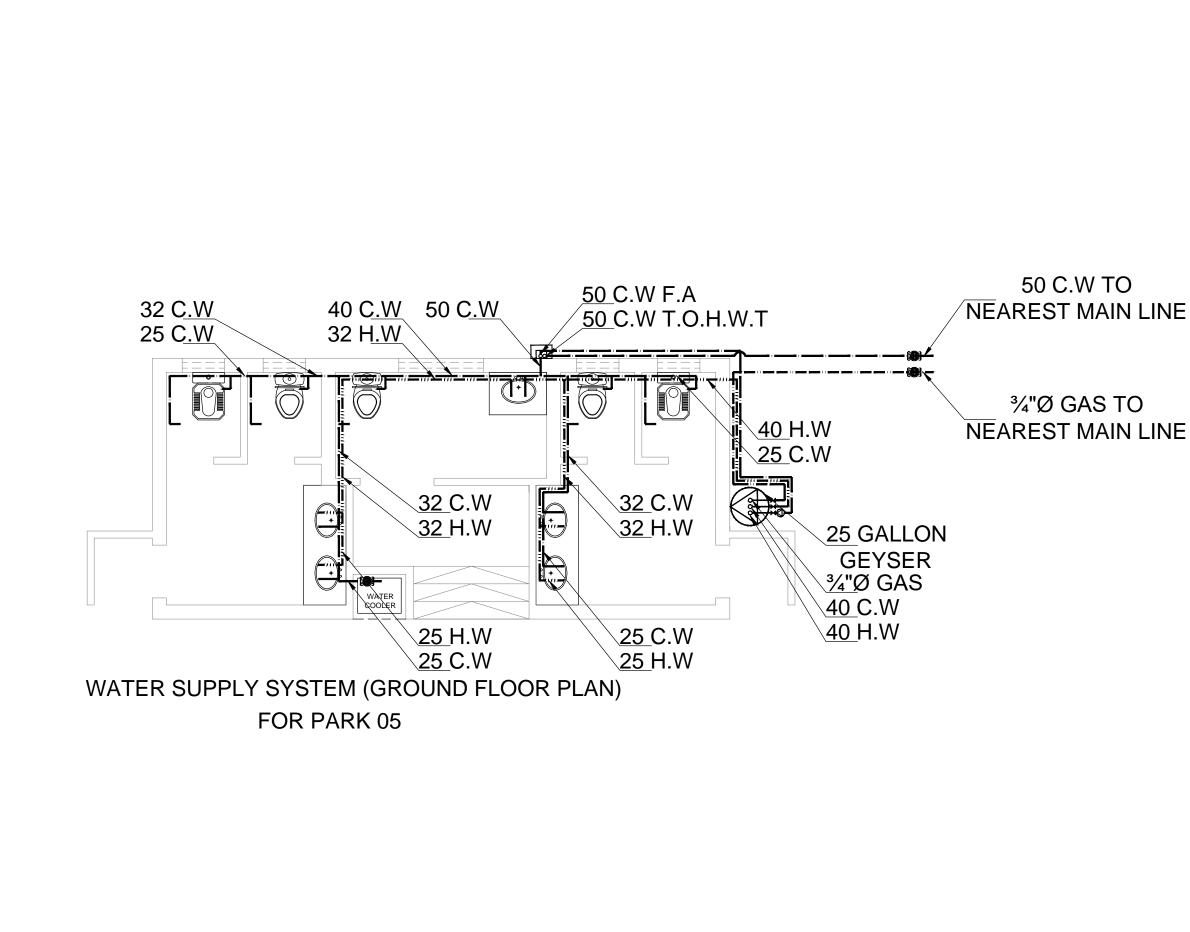
5. BOTTLE TRAP SHALL BE USED WITH ALL WASH BASIN.

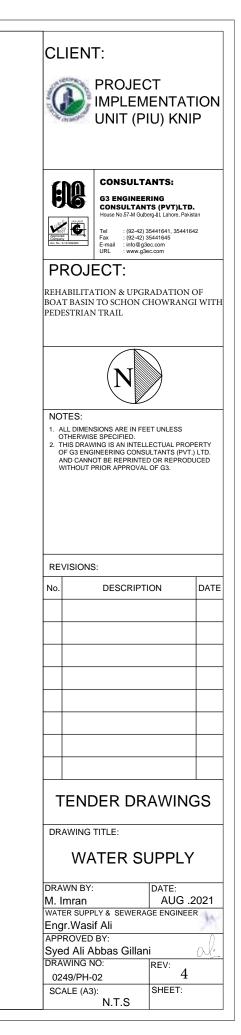
6. R.C.C PIPES SHALL BE SHALIMAR OR EQUIVALENT MAKE

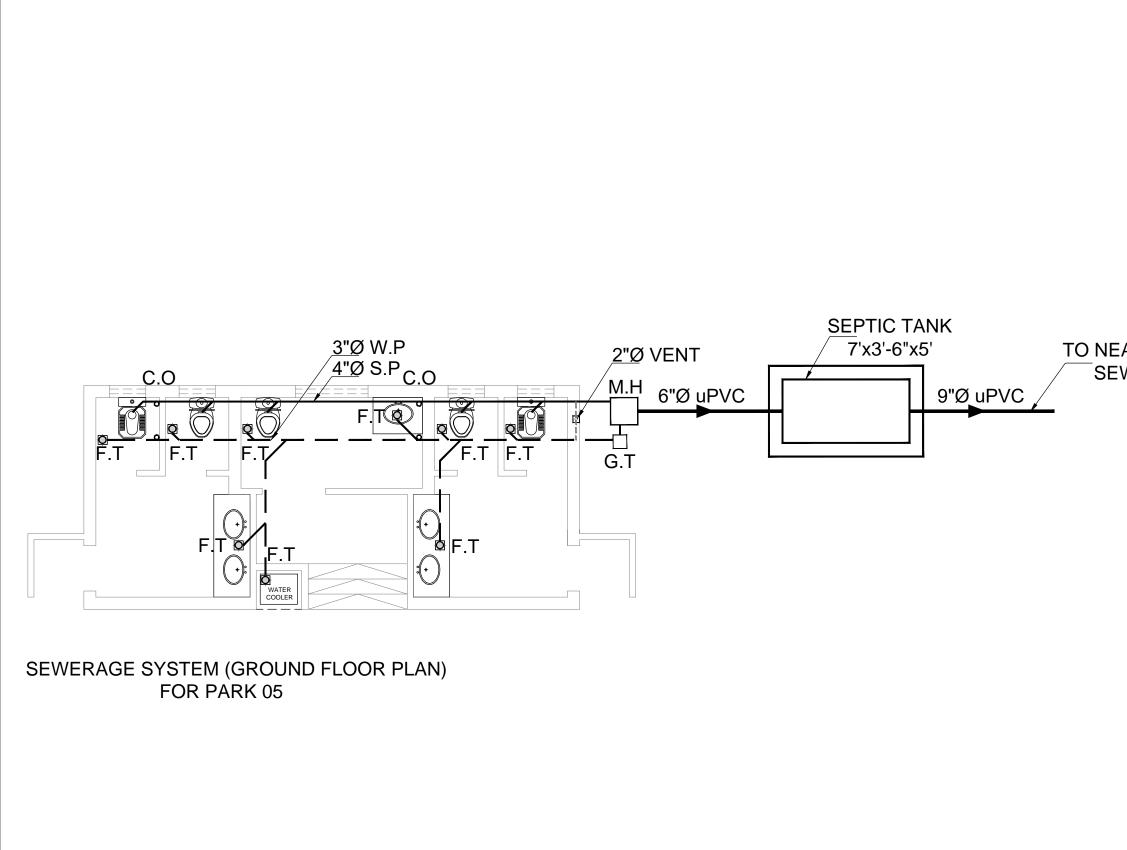
7. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER

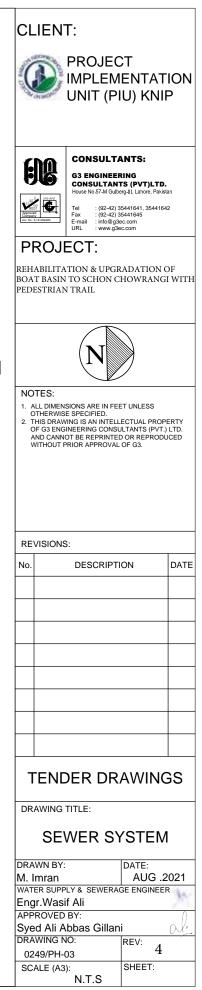
- 4. ALL WATER SUPPLY PIPES ARE PPR (PN 20) UNLESS OTHERWISE MENTION 5. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS,
- ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED.
- 6. ALL GAS PIPES ARE G.I. UNLESS OTHERWISE MENTIONED.
- 7. ALL WATER SUPPLY AND GAS PIPES ARE IN DUCTS, OR CONCEALED IN WAI BURIED IN FLOORS
- 8. ALL PIPING SHALL BE TESTED FOR LEAKAGE BEFORE THE JOINTS ARE CO

| | CLIENT: |
|---|--|
| | PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
| SCHEDULE OF PIPE DIA | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. House No.57-M Gulberg-III. Lahore, Pakistan Tel : (92-42) 35441641, 35441642 Fraz : (92-42) 35441645 E-mail: Info@g3ec.com URL : www.g3ec.com |
| 25 16.4 0.85 32 21.2 0.83 40 26.6 1.05 50 33.2 1.31 63 4.2 1.85 75 50 1.97 90 60 2.36 110 73.2 2.88 | REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL |
| LIST OF DRAWING GENERAL NOTES WATER SUPPLY GAS SYSTEM SEWERAGE SYSTEM DRAINAGE SYSTEM TUBE WELL ETERS AND MENTIONED PPES ARE OF PPRC UNLESS MENTIONED ARE | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| HALL BE PROVIDED WITH | |
| TEM PIPE DIA & SLOPE 3 3" 1:75 4" 1:100 6" 1:150 8" 1:175 10" 1:250 | REVISIONS: No. DESCRIPTION DATE |
| 12" 1:300 RWISE MENTIONED. OVE FINISHED | |
| VC (NON PRESSURIZE) EWER PIPES SHALL BE HERWISE NOTED I 0.01 TO 0.02 N. AKE. UNDER. OTHERWISE MENTIONED. S, TEES, SOCKETS, | TENDER DRAWINGS |
| ONED. OR CONCEALED IN WALL OR | DRAWING TITLE: |
| E THE JOINTS ARE COVERED. | GENERAL NOTES |
| | DRAWN BY: DATE: M. Imran AUG .2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani |

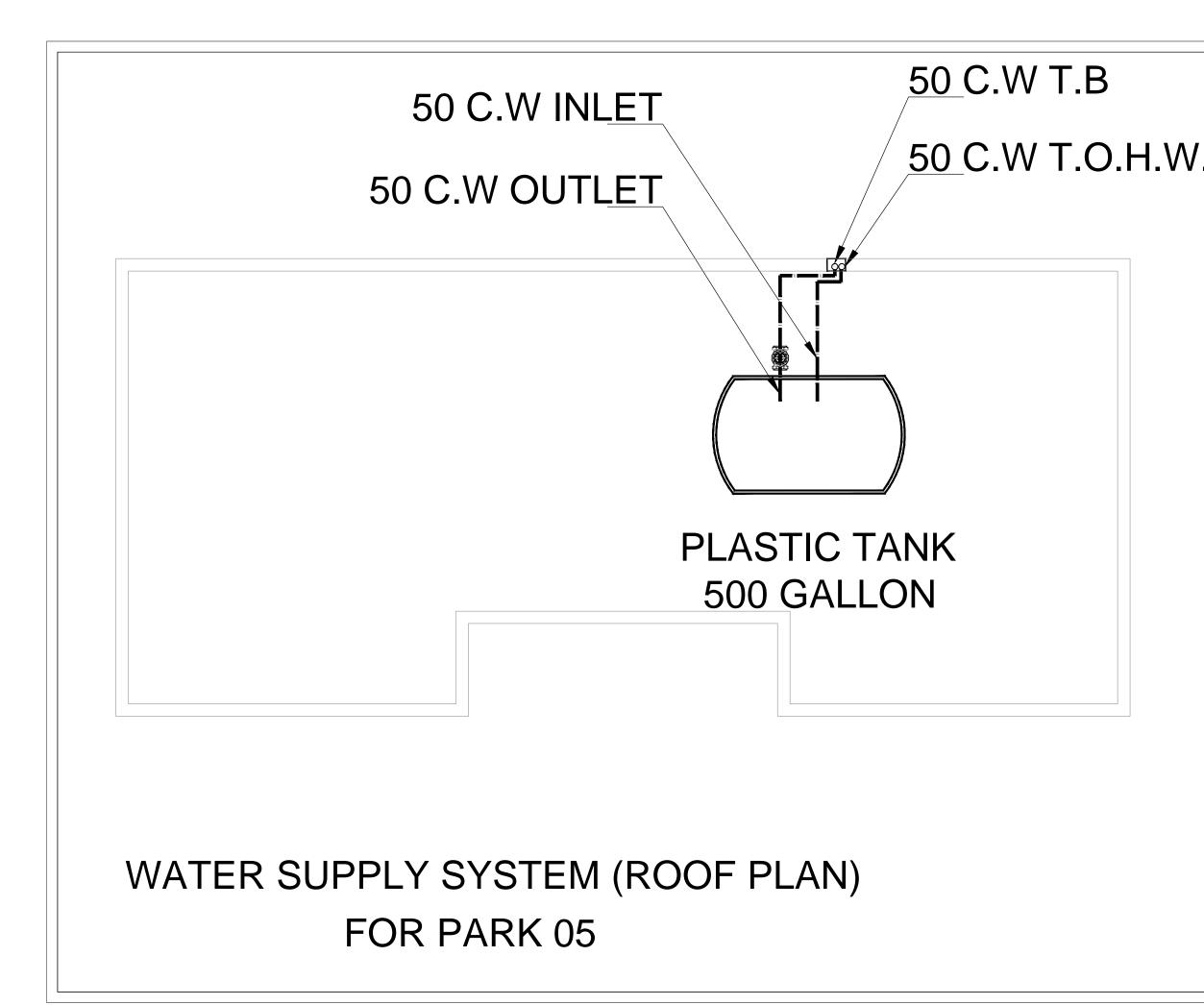




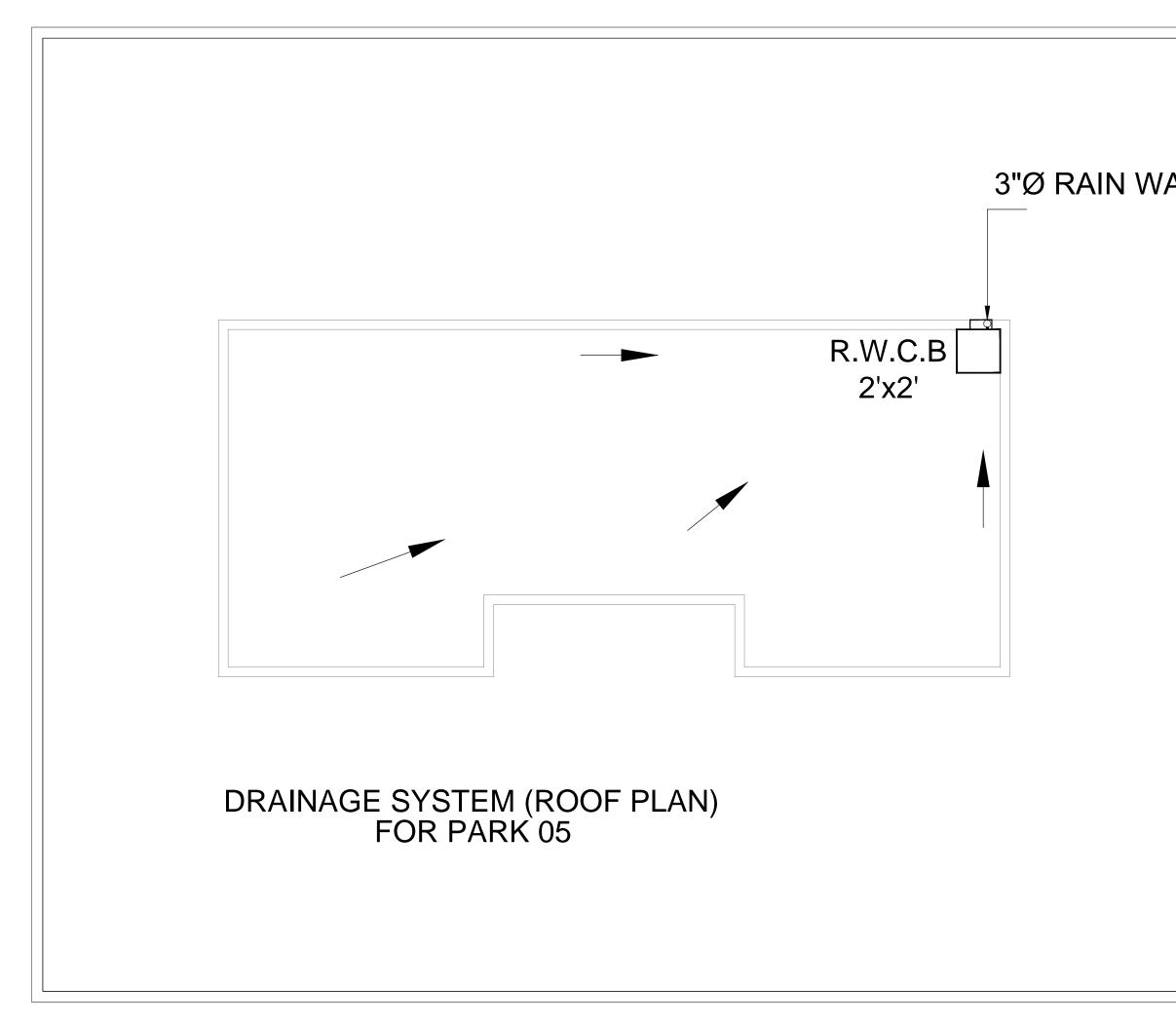




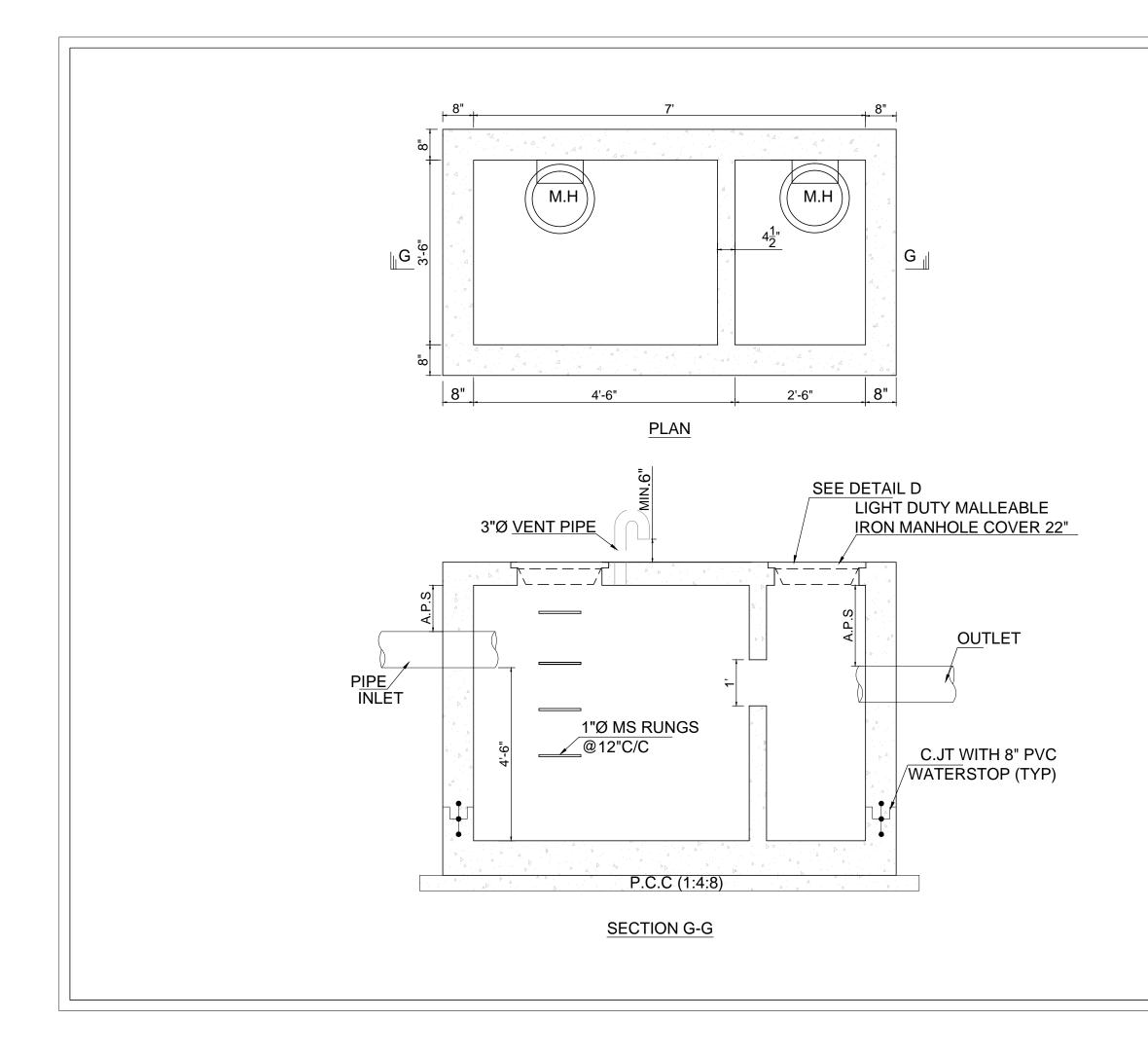
TO NEAREST MAIN



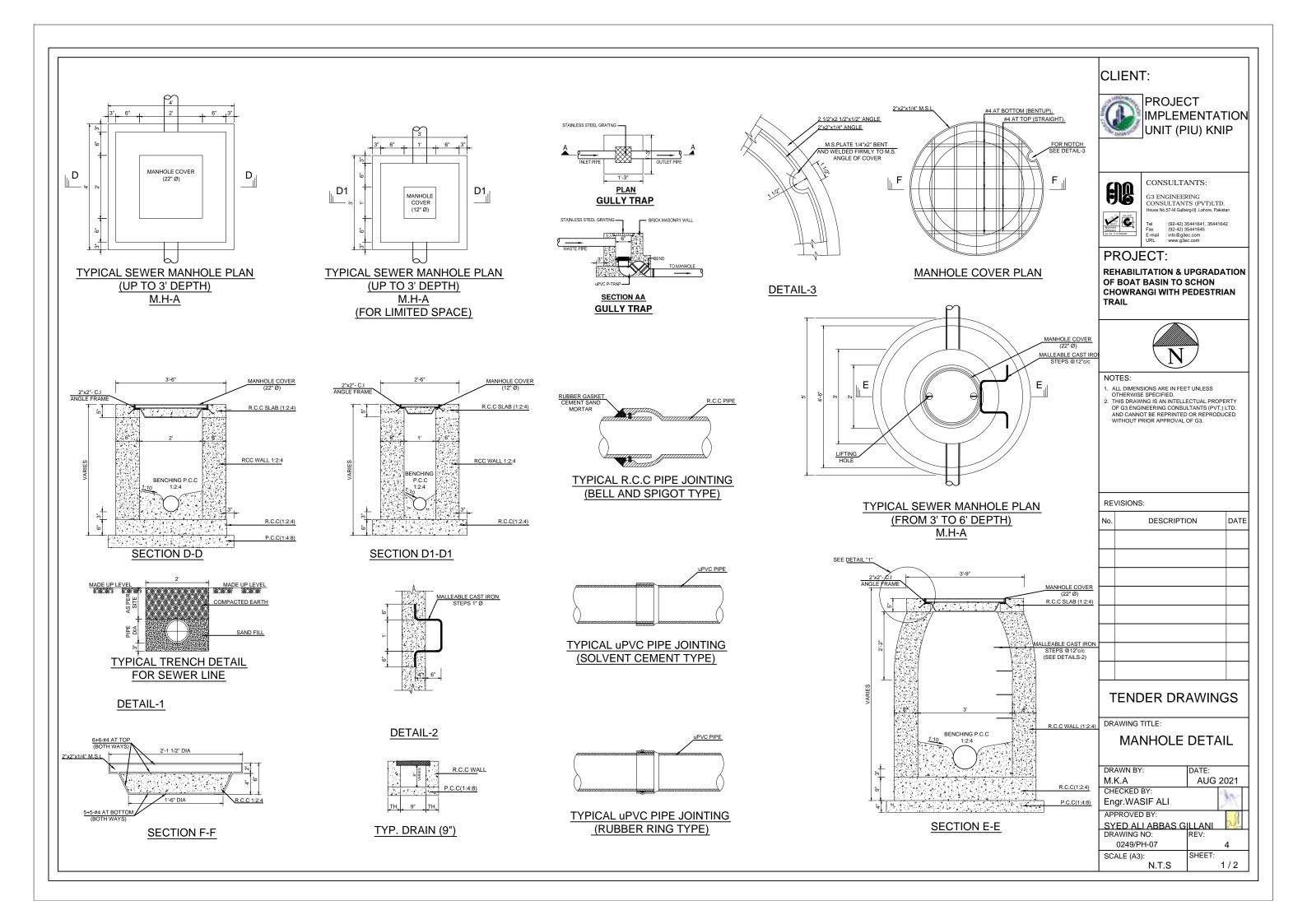
| | CLIENT: | |
|----|---|---------|
| .т | PROJECT IMPLEMENTAT UNIT (PIU) KNII | |
| | | |
| | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. House No.57-M Guibergill, Lahore, Pakiel Tol :: (92-42) 35441641, 3544164 For :: (92-42) 35441641, 3544164 For :: (92-42) 35441641, 3544164 For :: (92-42) 35441641, 100 (100 (100 (100 (100 (100 (100 (10 | 2 DF |
| | PEDESTRIAN TRAIL | |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROP OF G3 ENGINEERING CONSULTANTS (PVT.) AND CANNOT BE REPRINTED OR REPRODU WITHOUT PRIOR APPROVAL OF G3. | LTD. |
| | | DATE |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | TENDER DRAWING | SS |
| | DRAWING TITLE: | |
| | WATER SUPPLY RC PLAN | OF |
| | DRAWN BY: DATE: | |
| | M. Imran AUG .2 WATER SUPPLY & SEWERAGE ENGINEER | |
| | Engr.Wasif Ali | |
| | APPROVED BY: Syed Ali Abbas Gillani | d. |
| | DRAWING NO: REV: | |
| | 0249/PH-04 4 | |
| | SCALE (A3): SHEET: N.T.S | |

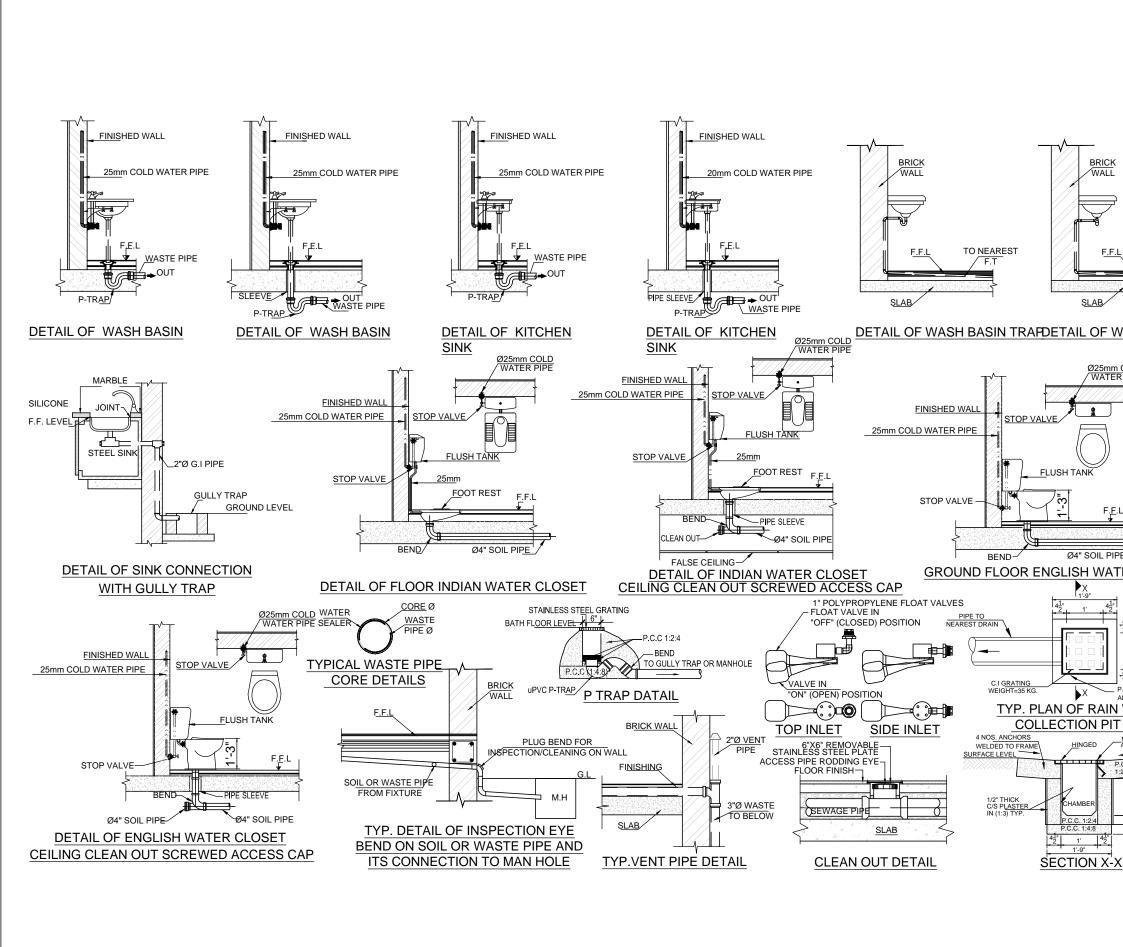


| | CLIENT: PROJECT IMPLEMENTATI UNIT (PIU) KNIF | |
|------|---|------|
| ATER | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. Huse No.57-M Gulberg-III, Lahore, Pakista Tel : (22-42) 35441641, 35441642 E-mail : info@g3ec.com URL : www.g3ec.com PROJECT: REHABILITATION & UPGRADATION O BOAT BASIN TO SCHON CHOWRANGI PEDESTRIAN TRAIL | F |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPE OF G3 ENGINEERING CONSULTANTS (PVT.) AND CANNOT BE REPRINTED OR REPRODUC WITHOUT PRIOR APPROVAL OF G3. | _TD. |
| | REVISIONS: | |
| | No. DESCRIPTION | DATE |
| | | |
| | | |
| | | |
| | | |
| | TENDER DRAWING | is |
| | | |
| | DRAINAGE SYSTEI | VI |
| | DRAWN BY: DATE: M. Imran AUG .20 | |
| | WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali | Je- |
| | APPROVED BY: Syed Ali Abbas Gillani | rl. |
| | DRAWING NO: REV: 0249/PH-05 4 | |
| | SCALE (A3): SHEET: N.T.S | |

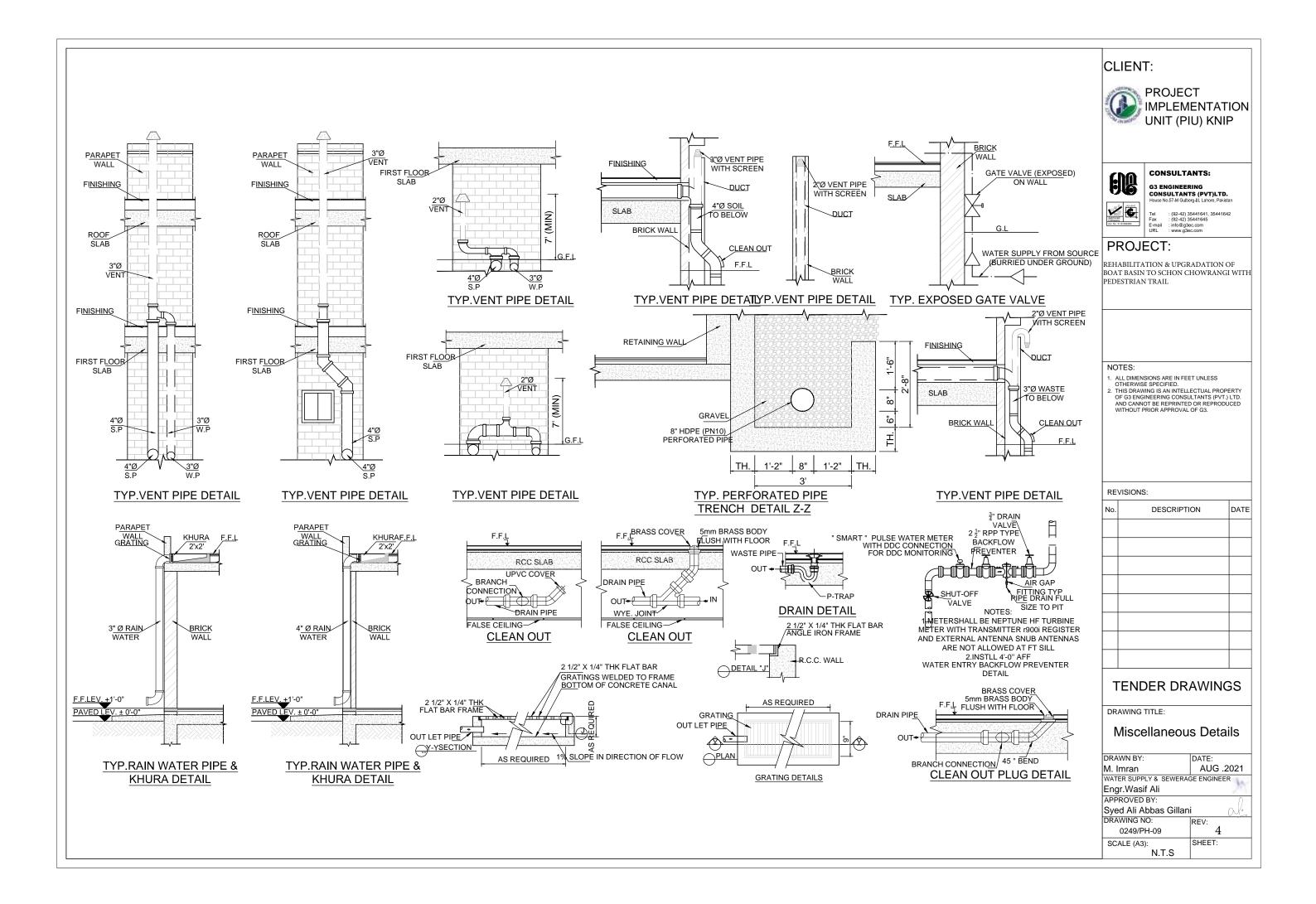


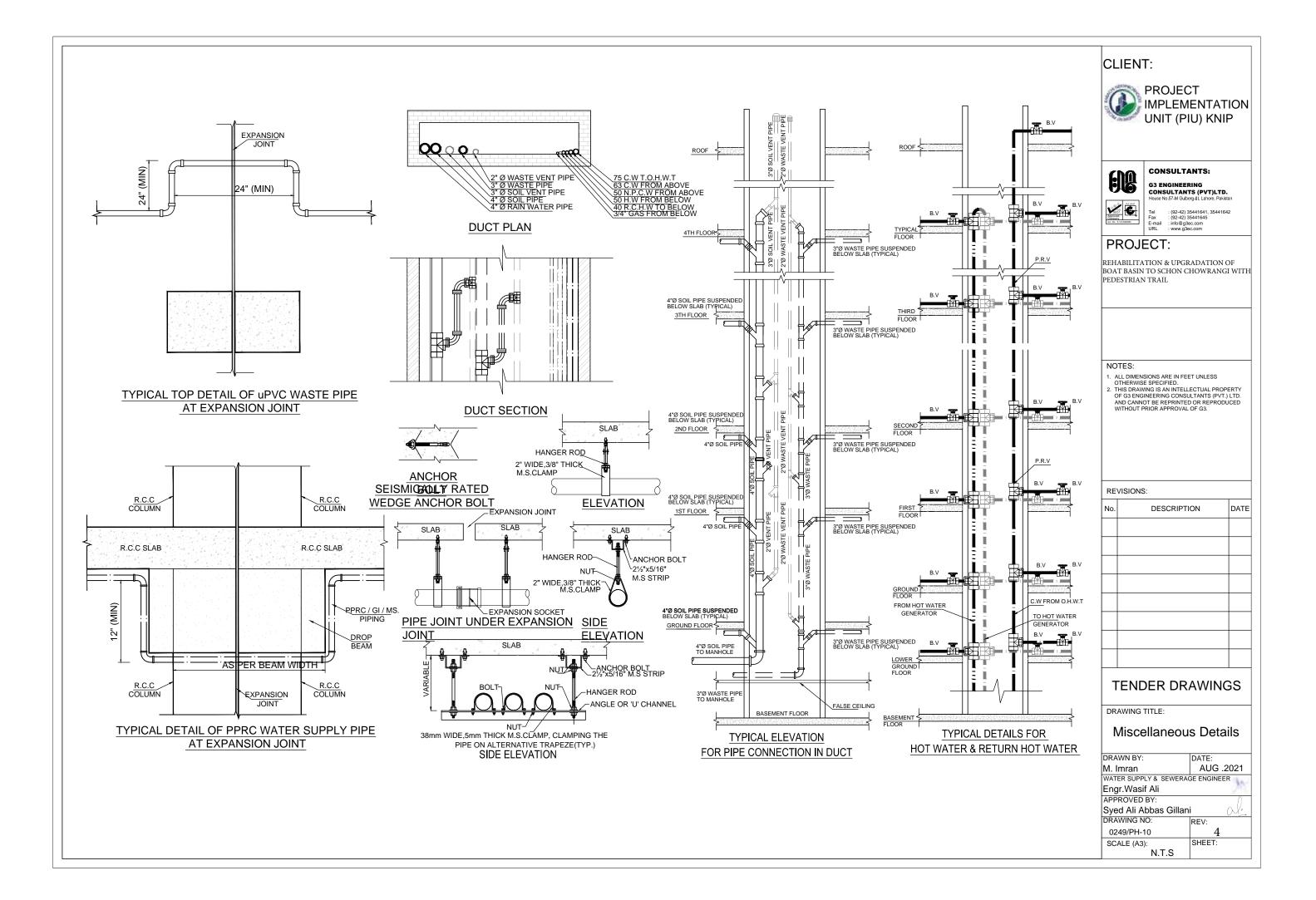
| CL | .IEN ⁻ | Г: | | |
|-------------------|--|--|--|-----------------|
| Q | | PROJE(IMPLEN UNIT (P | IENTAT | |
| REH BOA | | House No.57-M Gult Tel : (92-42) Fax : (92-42) E-mail : info@g URL : www.g3 ECT: TION & UPGI TO SCHON C | RING TS (PVT)LTD reg-III. Lahore, Pakis 35441641, 35441645 35441645 state.com ec.com | tan 42 OF |
| 1. / C 2. T | OTHERWISI THIS DRAW OF G3 ENG AND CANNO | SIONS ARE IN FE E SPECIFIED. ING IS AN INTELI INEERING CONS T BE REPRINTE RIOR APPROVAL | LECTUAL PROF ULTANTS (PVT. D OR REPROD |) LTD. |
| | | | | |
| RE | VISIONS | 3: | | |
| RE No. | VISIONS | DESCRIPT | ION | DATE |
| | VISIONS | | ION | DATE |
| | | | ION | DATE |
| | | | ION | DATE |
| | | | | DATE |
| | | | | DATE |
| | | | | DATE |
| No. | | | | |
| No. | | DER DR | | |
| No. | | DER DR | AWING | |
| | TEND AWING SI WN BY: Imran ER SUPP gr. Wasi ROVED | DER DR DER DR TITLE: EPTIC T | AWINC | 3S 2021 |
| | TEND AWING SI WN BY: Imran ER SUPP gr. Wasi ROVED | DER DR DER DR TITLE: EPTIC T LY & SEWERA f Ali BY: bbas Gillar O: | AWINC | 3S 2021 |



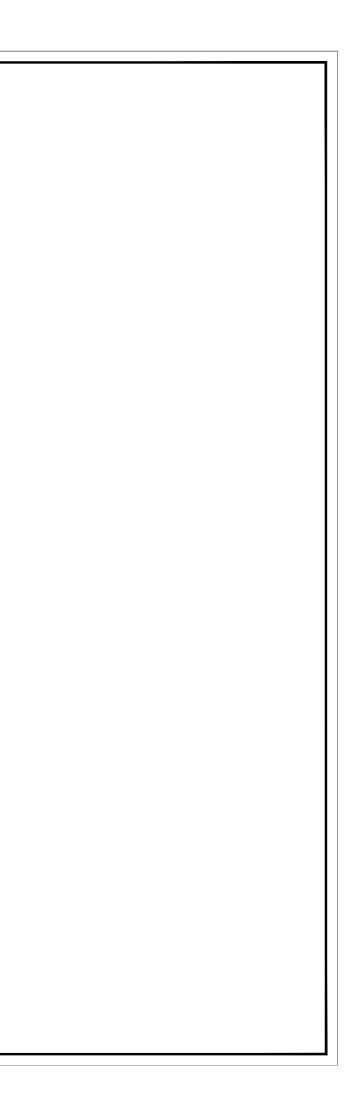


| | CLIENT: |
|--------------------|---|
| | |
| | PROJECT |
| | |
| | UNIT (PIU) KNIP |
| | |
| | |
| | CONSULTANTS: |
| | G3 ENGINEERING CONSULTANTS (PVT)LTD. |
| | House No.57-M Gulberg-III, Lahore, Pakistan |
| | Approval Tel : (92-42) 35441641, 35441642 Fax : (92-42) 35441645 E-mail : info@g3ec.com |
| | URL : www.g3ec.com |
| | PROJECT: |
| TO NEAREST | REHABILITATION & UPGRADATION OF |
| | BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL |
| | |
| | |
| ASH BASIN TRAP | |
| | |
| | |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS |
| 4 | OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY |
| | OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| | WITTOOT TRICK ALL ROVAE OF OD. |
| | |
| | |
| | |
| - | |
| | REVISIONS: |
| | No. DESCRIPTION DATE |
| ER CLOSET | |
| | |
| | |
| | |
| | |
| | |
| P.C.C 1:2:4 | |
| | |
| (C.P) | |
| M.S ANGLE FRAME | |
| SURFACE LEVEL | TENDER DRAWINGS |
| 2:4 | |
| ÷ | DRAWING TITLE: |
| | Miscellaneous Details |
| | |
| | DRAWN BY: DATE: |
| <u>-</u> | M. Imran AUG .2021 WATER SUPPLY & SEWERAGE ENGINEER |
| | Engr.Wasif Ali |
| | APPROVED BY: Syed Ali Abbas Gillani |
| | DRAWING NO: REV: |
| | 0249/PH-08 4 SCALE (A3): SHEET: |
| | |
| | N.T.S |





PUBLIC HEALTH DRAWING Park-St-6



LIST OF DRAWINGS

| Sr.# | DESCRIPTION | DRG. # |
|------|---|------------|
| 01 | LIST OF DRAWINGS | 0249/PH-00 |
| 02 | GENERAL NOTES | 0249/PH-01 |
| | WATER SUPPLY SYSTEM | |
| 03 | WATER SUPPLY SYSTEM (GROUND FLOOR PLAN) | 0249/PH-02 |
| 04 | WATER SUPPLY SYSTEM (ROOF PLAN) | 0249/PH-03 |
| | SEWERAGE & DRAINAGE SYSTEM | |
| 05 | SEWERAGE SYSTEM (GROUND FLOOR PLAN) | 0249/PH-04 |
| 06 | DRAINAGE SYSTEM (ROOF PLAN) | 0249/PH-05 |
| | MISCELLANEOUS DETAILS | |
| 07 | TYPICAL SEPTIC TANK PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-06 |
| 08 | TYPICAL GULLY TRAP & MANHOLE PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-07 |
| 09 | MISCELLANEOUS DETAILS-01 | 0249/PH-08 |
| 10 | MISCELLANEOUS DETAILS-02 | 0249/PH-09 |
| 11 | MISCELLANEOUS DETAILS-03 | 0249/PH-10 |

| CL | IEN | Т: | | |
|--------------|--|--|--|-----------------|
| Q | D | | CT /IENTAT PIU) KNI | |
| REH BOA | | House No.57-M Gu Tel : (92-42) Fax : (92-42) E-mail : info@g URL : www.g ECT: TION & UPG TO SCHON (| ERING ITS (PVT)LTD. Iberg-III, Lahore, Pakis 35441641, 3544164 35441645 3ec.com | tan 12 DF |
| 1. / 2. T | OTHERWIS THIS DRAW OF G3 ENG AND CANNO | INEERING CONS | LECTUAL PROP SULTANTS (PVT.) ED OR REPRODI |) LTD. |
| RE | VISIONS | S: | | |
| RE No. | VISIONS | DESCRIPT | ΓΙΟΝ | DATE |
| | VISIONS | | ΓΙΟΝ | DATE |
| | | | FION | DATE |
| | | | FION | DATE |
| | | | FION | DATE |
| | | | | DATE |
| | | | FION | DATE |
| | | | FION | DATE |
| No. | | DESCRIP | | |
| | | | | |
| | | | | |
| | | DER DR DER DR TITLE: OF DR | AWING | 3S 2021 |
| | TENE AWING LIST WIN BY: IMITAN ER SUPP gr. Wasi ROVED ad Ali A | DER DR DER DR DER DR TITLE: OF DR LY & SEWER/ f Ali BY: bbas Gilla | AWINC AWINC DATE: AUG .2 AGE ENGINEE | 3S 2021 |
| | TENE AWING LIST | DER DR DER DR DER DR TITLE: OF DR LY & SEWER/ f Ali BY: bbas Gilla IO: | | 3S 2021 |

PUBLIC HEALTH GENERAL NOTES

- 1. THESE GENERAL NOTES ARE PROVIDED TO SUPPLEMENT THE WRITTEN SPECIFICATION FOR THIS PROJECT. REFER TO THE SPECIFICATIONS FOR MORE DETAILED REQUIREMENTS OF THIS PROJECT.
- 2. PERFORM ALL WORK IN A WORKMAN LIKE MANNER, IN COMPLIANCE WITH THE LATEST ADOPTED EDITIONS OF ALL GOVERNING CODES AND STANDARDS. IF CONFLICTS ARISE, REQUEST RESOLUTION FROM THE ARCHITECT. IF REQUIRED INFORMATION IS MISSING FROM THIS DRAWING (I.E, DUCT SIZE OR PIPE SIZE), REQUEST WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO THE EXECUTION
- 3. PROVIDE ALL MINOR INCIDENTAL ITEMS SUCH AS OFFSETS, FITTINGS, ETC, REQUIRED AS PART OF THE WORK EVEN THOUGH NOT SPECIFICALLY SHOWN ON DRAWINGS. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ITEMS OF EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEMS.
- 4. THE PLUMBING DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING, DUCT WORK. MECHANICAL EQUIPMENT AND APPURTENANCES, AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF THEIR TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE PLUMBING DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK AND PROVIDE SUCH FITTINGS, VALVES AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
- 5. VERIFY DIMENSIONS GOVERNING PLUMBING WORK AT THE BUILDING. DO NOT SCALE THE PLUMBING DRAWINGS FOR DIMENSIONS. TAKE DIMENSIONS. MEASUREMENTS, LOCATIONS, LEVELS, ETC, FROM THE ACTUAL FIELD CONDITIONS AND ARCHITECTURAL DRAWINGS.
- 6. EXAMINE ALL ADJOINING WORK ON WHICH THE PLUMBING WORK IS DEPENDENT OF MAXIMUM EFFICIENCY AND REPORT DESIGN CONFLICTS WHICH MUST BE CORRECTED PRIOR TO EXECUTION. NO WAIVER OF RESPONSIBILITY SHALL BE CLAIMED OR ALLOWED DUE TO FAILURE TO REPORT UNFAVORABLE CONDITIONS AFFECTING THE PLUMBING WORK
- 7. CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPING, VALVES, CONTROLS, INSULATION ETC. TO ALL PLUMBING EQUIPMENT SCHEDULED OR INDICATED ON PLANS REGARDLESS OF WHETHER PIPING, VALVES, CONTROLS, INSULATION ETC. ARE SPECIFICALLY SHOWN OR NOT PLUMBING EQUIPMENT INSTALLATION SHALL BE 100% COMPLETE FOR PROPER EQUIPMENT FUNCTION AND/OR OPERATION AT COMPLETION OF PROJECT
- 8. THE ARCHITECTURAL AND ENGINEERING DRAWINGS ARE COMPLEMENTARY. CONTRACTORS SHALL ACKNOWLEDGE THE ARCHITECTURAL AS WELL AS ALL THE ENGINEERING DRAWINGS AND INCLUDE ALL WORK NECESSARY TO ACHIEVE A COMPLETE WORKING, INSTALLATION FOR ANY DEVICE OR EQUIPMENT WHICH MAY BE SHOWN ON ONE DRAWING BUT NOT SHOWN ON ANOTHER.

- 9. LOCATION OF PIPES, DUCTS, SWITCHES, PANELS, EQUIPMENT AND FIXTURES SHALL BE ADJUSTED TO ACCOMMODATE THE WORK OR INTERFERENCES ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH PIPE AND DUCT PRIOR TO EABRICATION
- 10. LOCATION OF EXISTING UTILITIES AND EXISTING UNDERGROUND PLUMBING ARE BASED ON THE SITE INFORMATION AVAILABLE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES AND EXISTING UNDERGROUND PLUMBING PRIOR TO FABRICATION AND ERECTION OF WORK TO AVOID ALL INTERFERENCES. VERIFICATION SHALL BE BY SITE INSPECTION, EXCAVATION, OR WHATEVER MEANS NECESSARY TO DETERMINE EXACT LOCATIONS.
- 11. CONTRACTOR SHALL OBTAIN BUILDING PERMIT AND ARRANGE ALL REQUIRED INSPECTIONS WITH THE APPROPRIATE REGULATORY AGENCY. ALERT CONSULTANT OF ALL ITEMS NOT DEPICTED ON DRAWINGS. DO NOT PROCEED WITH FURTHER WORK UNTIL WRITTEN RESPONSE IS RECEIVED FROM CONSULTANT

12 CONTRACTOR SHALL VERIFY GAS PRESSURE DELIVERED BY METER AT BUILDING.

13. TEST THREADED NATURAL GAS PIPING AT 20 PSIG FOR A TEST PERIOD OF 2 HOURS. TEST PRESSURE SHALL NOT FALL OVER 5% DURING TEST PERIOD TO PASS. IF PIPING FAILS TEST, INVESTIGATE AND REPAIR THE SOURCE OF

14. PROVIDE SLEEVES AT ALL PIPING PENETRATIONS OF CONCRETE OR MASONRY FLOOR, WALL OR ROOF CONSTRUCTION.

15. PROVIDE GLASS WOOL INSULATION TO ALL HOT WATER (EXPOSED) AND COLD WATER (AT ROOF) PIPE LINE INCLUDING PROTECTIVE COATINGS.

16.USE NEAREST FLOOR TRAP FOR THE AC DRAINAGE.

- 17. TEST ALL PIPING SYSTEMS IN WHICH ANY ALTERATIONS HAVE BEEN MADE FOR COMPLIANCE WITH THE LATEST EDITION OF GOVERNING BUILDING CODE DOMESTIC HOT AND COLD WATER PIPING SHALL BE SUBJECT TO 100 PSIG FOR A MINIMUM 2 HOURS. DOMESTIC WASTE AND VENT PIPING SHALL BE TESTED AT 10' STATIC HEAD FOR A PERIOD GREATER THAN 15 MINUTES. IF REQUIRED PRESSURE DROPS BY MORE THAN 3% DURING ITS TEST DURATION, INVESTIGATE THE SOURCE OF LEAK, REPAIR THE LEAK, AND RETEST THE SYSTEM FOR THE REQUIRED TEST PERIOD. INSPECT ALL W & V JOINTS WHILE UNDER PRESSURE AND REPAIR ALL LEAKS.
- 18.INSTALL ALL PLUMBING FOUIPMENT IN COMPLETE COMPLIANCE WITH MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS, ARRANGE ALL FOUIPMENT TO PERMIT FASY REMOVAL OF COLLS MOTORS FILTERS AND ALL OTHER PARTS WHICH REQUIRE PERIODIC REPLACEMENT OR MAINTENANCE. 19. COORDINATE ALL ELECTRICAL VOLTAGE CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING PLUMBING EQUIPMENT.

LEGEND FOR WATER SUPPLY SYSTEM

| | | ER PIPE (C.W) SURE COLD WATER (N.P.C.W) | | | - | OUTER DIA | | ERNAL DIA |
|---------|-------|--|----------|------|----|-----------|--------|--------------|
| | | R PIPE (H.W) | = : : | ; == | 3 | (mm) | (mm) | INCH |
| RE-CIRC | ULATI | ON HOT WATER (R.H.W) | | _ | ⇒ | 20 | 13.2 | 0.52 |
| GAS P | | | L | | \$ | 25 | 16.4 | 0.65 |
| | | VALVE (A.R.V) | 6 | | | 32 | 21.2 | 0.83 |
| BALL V | | | | | | 40 | 26.6 | 1.05 |
| | | E SLICE VALVE (G.V / S.V) REDUCER VALVE (P.R.V) | | | | 50 | 33.2 | 1.31 |
| | | ATION PUMP | R | | | 63 | 42 | 1.65 |
| | | NAL GEYSER | * | | | 75 | 50 | 1.97 |
| CHECK | (VAL | VE | Ŏ | | | 90 | 60 | 2.36 |
| BOOST | FER P | PUMP | 8 | | | 110 | 73.2 | 2.88 |
| SUBME | ERSIE | BLE PUMP | 4 | | | | | |
| H.W.G | = | HOT WATER GENERATO | R | L.D | = | LIST OF | - DRAV | VING |
| T.A | = | TO ABOVE | | G.N | = | GENER | AL NO | TES |
| T.B | = | TO BELOW | | W.S | = | WATER | SUPP | LY |
| F.A | = | FROM ABOVE | | G.S | = | GAS SY | STEM | |
| F.B | = | FROM BELOW | | S.W | = | SEWEF | RAGE S | SYSTE |
| D-1 | = | DUCT - 1 | | D.R | = | DRAINA | GE SY | STEM |
| M.D | = | MISCELLANEOUS DETA | LS - | T/W | = | TUBE \ | VELL | |

- 1. ALL WATER SUPPLY PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONE ARE EXTERNAL DIAMETERS. ALL WATER SUPPLY PIPES ARE OF PPRC UNLI NOTED OTHERWISE
- 2. ALL GAS PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONED ARE INTERNAL DIAMETERS.
- 3. ALL WATER SUPPLY PIPES ENTERING THE WALLS SHALL BE PROVIDED WI ISOLATION VALVES.

LEGEND FOR SEWERAGE & DRAINAGE SYSTEM

| SOIL PIPE (S.P) | 2 | PIPE DIA | & SLOPE |
|---------------------------|------------------|----------|---------|
| WASTE PIPE (W.P) | | | |
| VENT PIPE (V.P) | = $=$ $=$ | 3" | 1:75 |
| CLEANOUTS | C.O O — — | 4" | 1:100 |
| FLOOR TRAP | FT 🔯 | 6" | 1:150 |
| GULLY TRAP | G.T | 8" | 1:175 |
| MANHOLE | М.Н | 10" | 1:250 |
| RAIN WATER COLLECTION PIT | R.W.C.P | 12" | 1:300 |

1. ALL PIPE DIAMETERS ARE IN INCHES UNLESS OTHERWISE MENTIONED. 2. VENT PIPES SHALL BE EXTENDED UP TO ONE FT ABOVE FINISHED ROOFLEVEL

3. SOIL, WASTE AND VENT PIPES UP TO 6" DIA. ARE uPVC (NON PRESSURIZE) TYPE-B CONFIRMING TO ISO 3633:2002 EXTERNAL SEWER PIPES SHALL BE OF FLOW LINE CONFIRMING TO EN 1401 UNLESS OTHERWISE NOTED

4. SLOPE OF ROOF VALLEY LINE SHOULD BE BETWEEN 0.01 TO 0.02

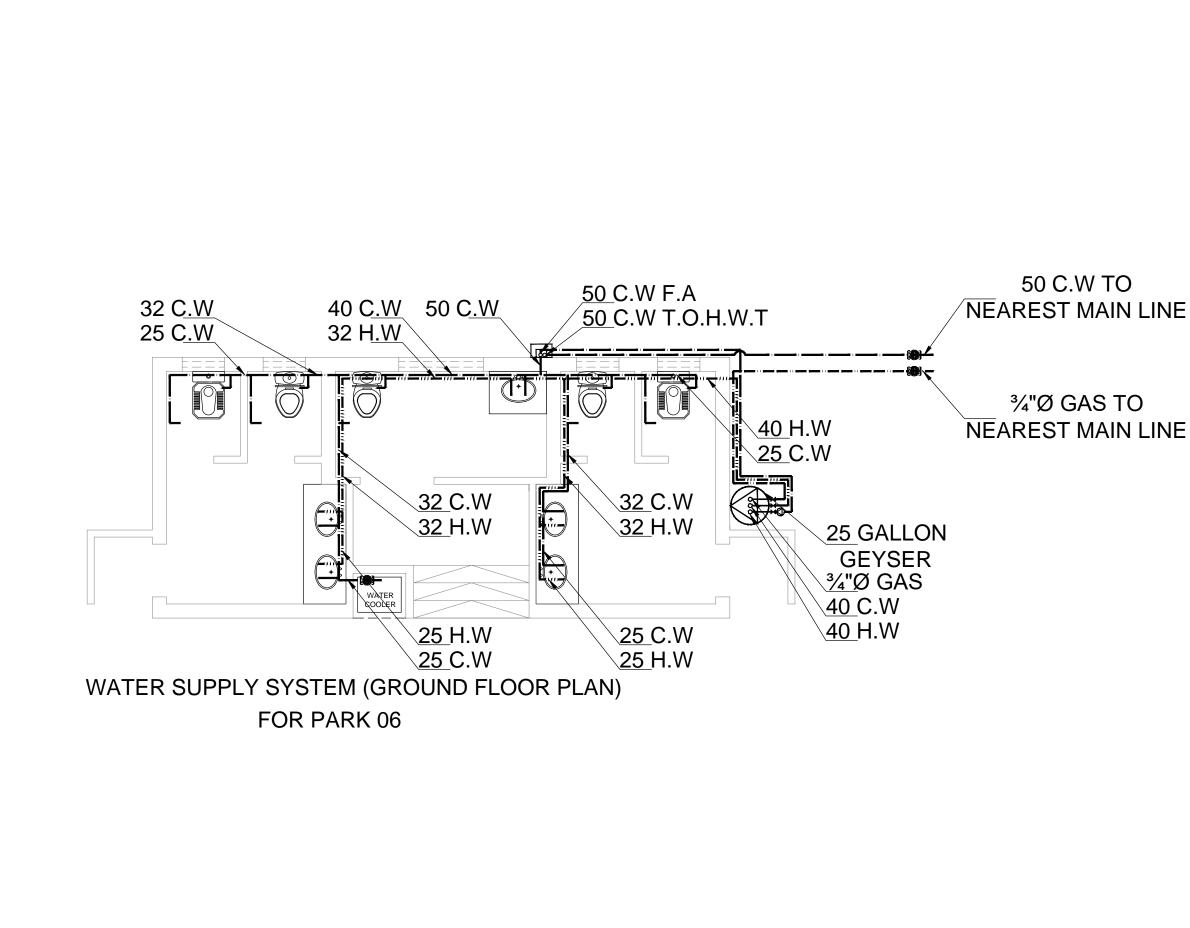
5. BOTTLE TRAP SHALL BE USED WITH ALL WASH BASIN.

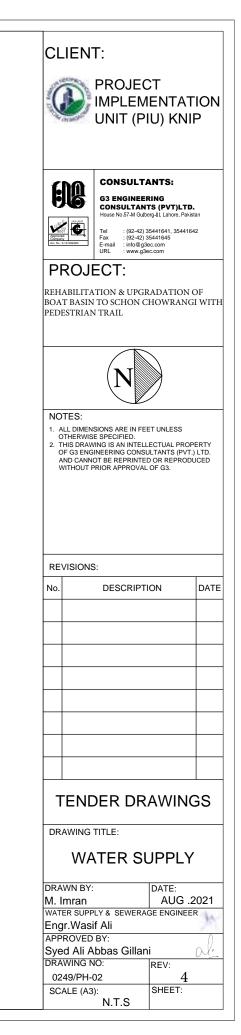
6. R.C.C PIPES SHALL BE SHALIMAR OR EQUIVALENT MAKE

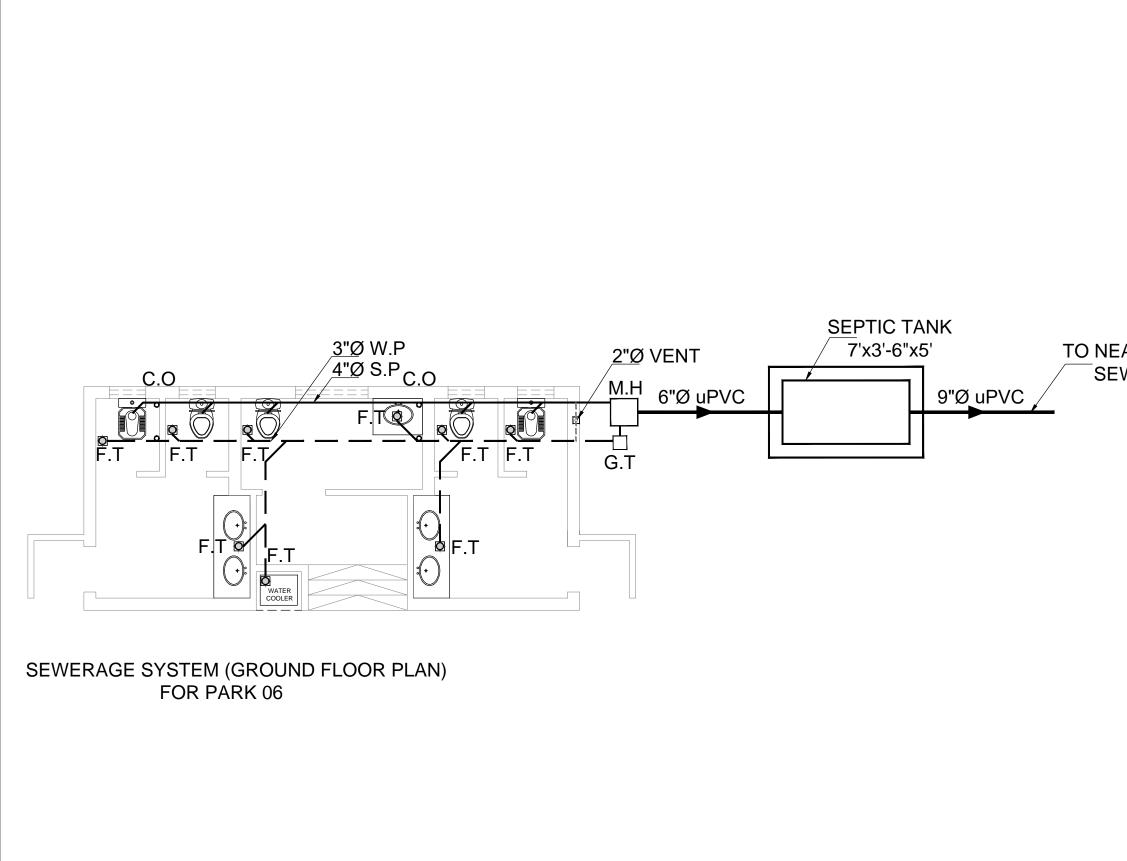
7. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER

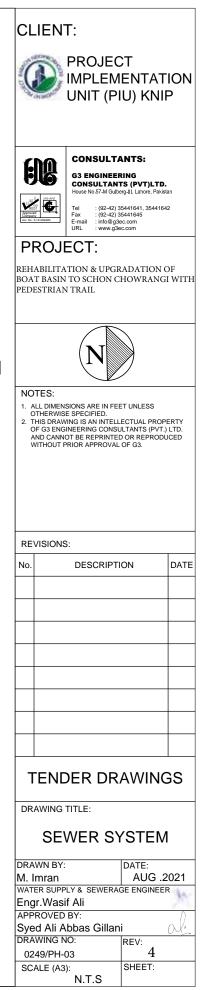
- 4. ALL WATER SUPPLY PIPES ARE PPR (PN 20) UNLESS OTHERWISE MENTION 5. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS,
- ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED.
- 6. ALL GAS PIPES ARE G.I. UNLESS OTHERWISE MENTIONED.
- 7. ALL WATER SUPPLY AND GAS PIPES ARE IN DUCTS, OR CONCEALED IN WAI BURIED IN FLOORS
- 8. ALL PIPING SHALL BE TESTED FOR LEAKAGE BEFORE THE JOINTS ARE CO

| | CLIEN | T: |
|--|---|---|
| | ٨ | PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
| SCHEDULE OF PIPE DIA $ \frac{1}{(rm)} \overline{) 1100} + 10000 + 1000 + 1000 + 100000 + 1000000 + 1000000 + 100000 + 100000 + 1000000 + 100000 + 1000000 + 1000000 + 1000000 + 100000000$ | BOAT BASIN PEDESTRIAN NOTES: 1. ALL DIMEN OTHERWIS 2. THIS DRAV OF G3 ENG AND CANN | ATION & UPGRADATION OF J TO SCHON CHOWRANGI WITH |
| EM | | |
| S PIPE DIA & SLOPE | REVISIONS | S: DESCRIPTION DATE |
| ■ 3" 1:75 – 4" 1:100 6" 1:150 8" 1:175 10" 1:250 12" 1:300 RWISE MENTIONED. OVE FINISHED | | |
| VC (NON PRESSURIZE) EWER PIPES SHALL BE HERWISE NOTED 0.01 TO 0.02 N. IAKE. | | |
| UNDER. OTHERWISE MENTIONED. S, TEES, SOCKETS, | TEN | DER DRAWINGS |
| ONED. OR CONCEALED IN WALL OR | DRAWING | |
| E THE JOINTS ARE COVERED. | DRAWN BY M. Imran WATER SUPF Engr.Was APPROVED | AUG .2021 PLY & SEWERAGE ENGINEER if Ali PBY: Abbas Gillani NO: 01 REV: 4 |

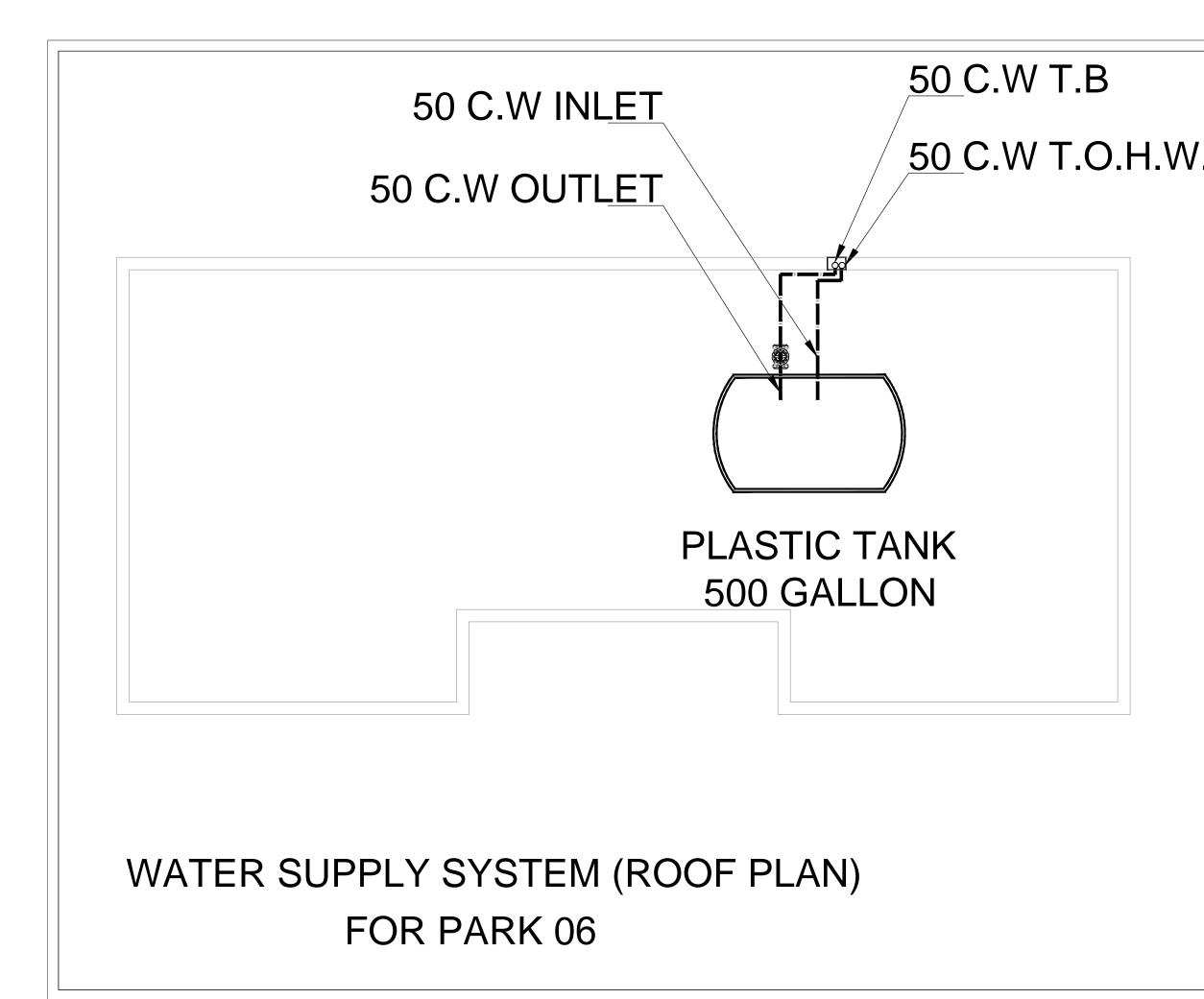




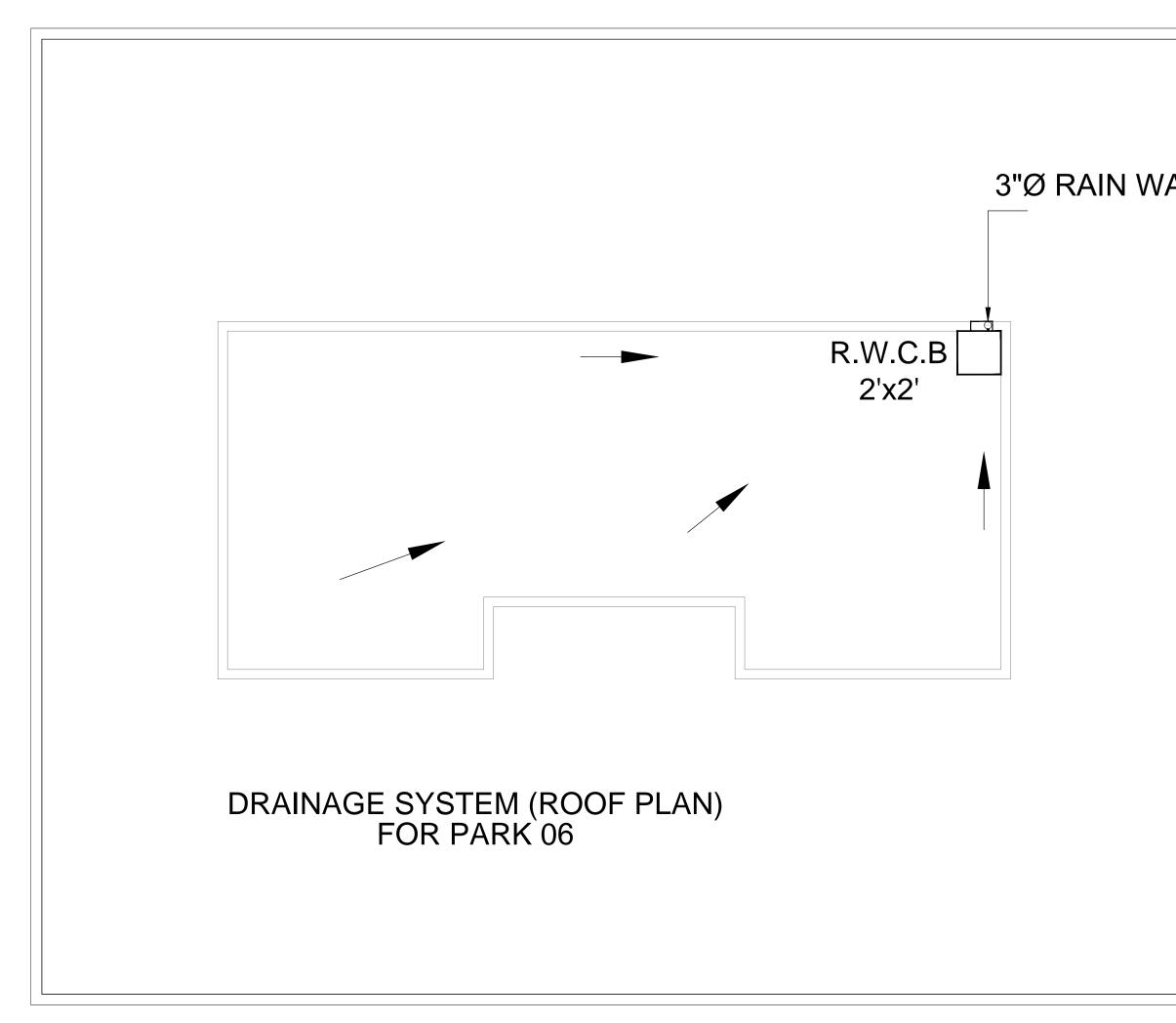




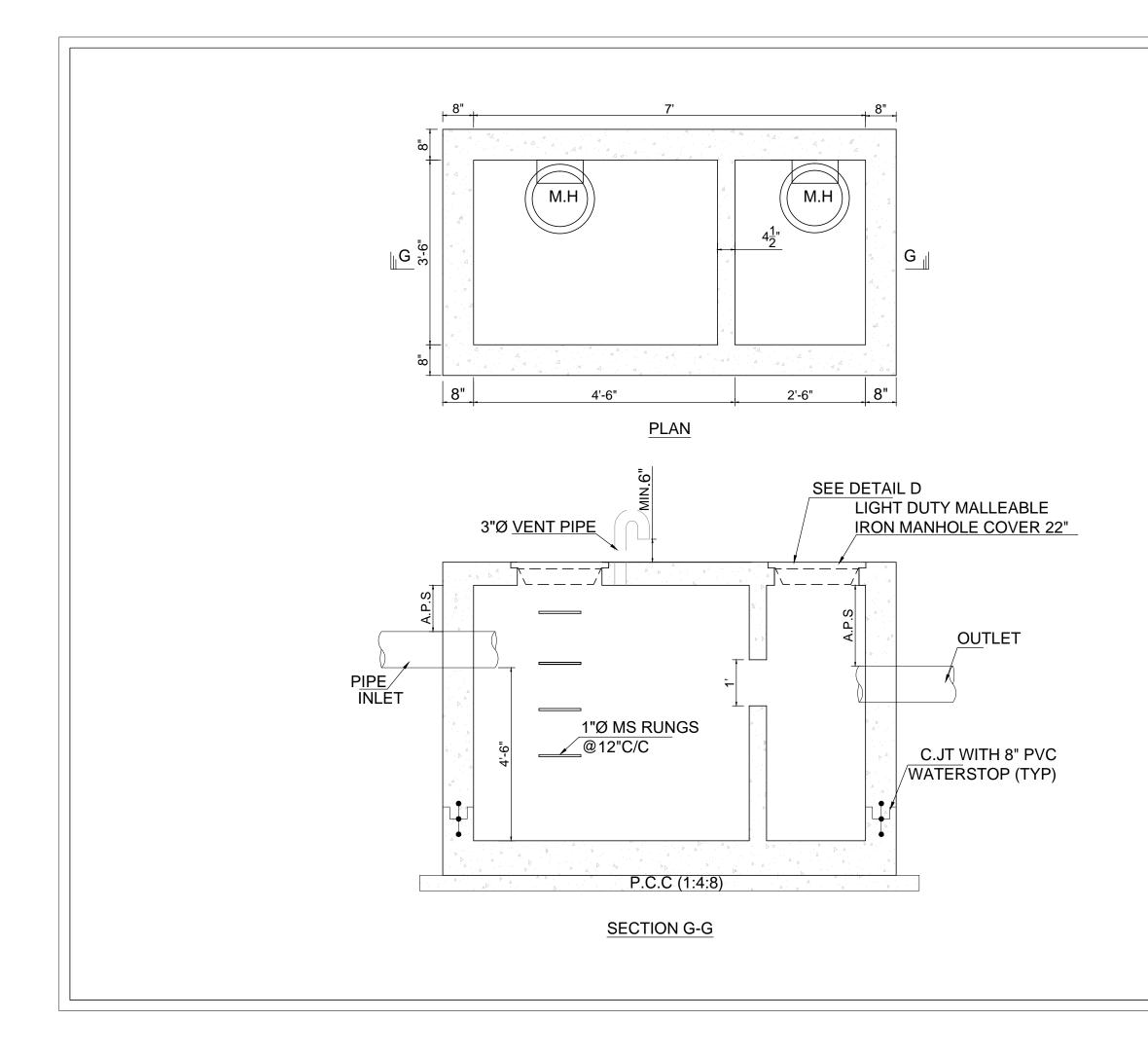
TO NEAREST MAIN



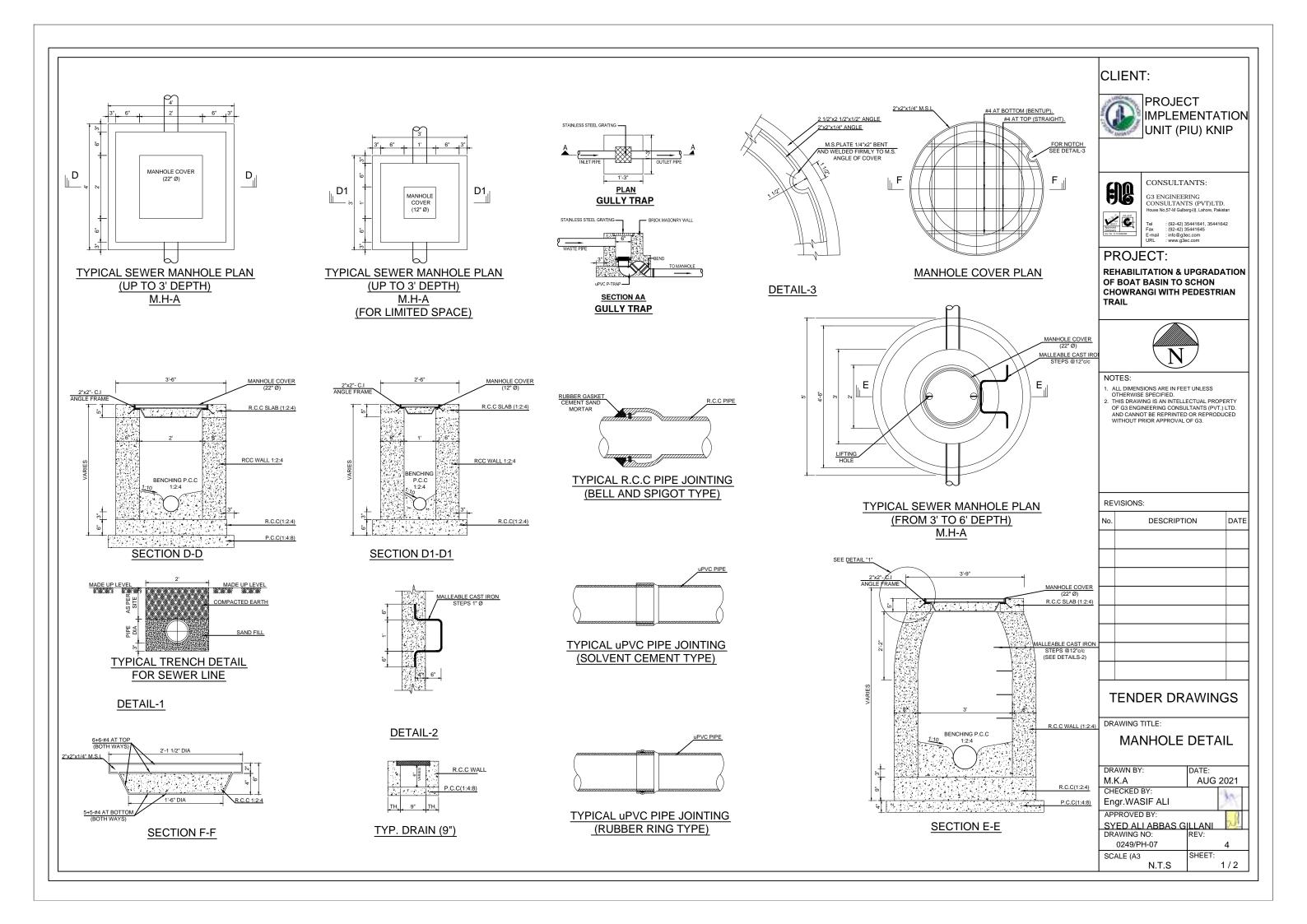
| | CLIENT: | |
|----|--|-----------------|
| .т | PROJECT IMPLEMENTATIO UNIT (PIU) KNIP | |
| | | |
| | CONSULTANTS: | |
| | G3 ENGINEERING CONSULTANTS (PVT)LTD. House No.57-M Gulberg-III, Lahore, Pakistan | |
| | Tel : (92-42) 35441641, 35441642 | |
| | Image: Constraint of the second of | |
| | | |
| | PROJECT: | |
| | REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI PEDESTRIAN TRAIL | |
| | | |
| | | |
| | NOTES: | |
| | 1. ALL DIMENSIONS ARE IN FEET UNLESS | |
| | OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPER OF C2 ENCINEERING CONSULTANTS (D)(T) (1) | RTY |
| | OF G3 ENGINEERING CONSULTANTS (PVT.) L' AND CANNOT BE REPRINTED OR REPRODUC WITHOUT PRIOR APPROVAL OF G3. | ED |
| | WITHOUT FRIOR AFFROVAL OF GS. | |
| | | |
| | | |
| | | |
| | | |
| | REVISIONS: | |
| | | |
| | No. DESCRIPTION | DATE |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | -+ |
| | | |
| | | |
| | TENDER DRAWING | s |
| | DRAWING TITLE: | |
| | WATER SUPPLY ROO | ∩⊏ |
| | | |
| | PLAN | |
| | DRAWN BY: DATE: | |
| | | |
| | M. Imran AUG .20 | 21 |
| | WATER SUPPLY & SEWERAGE ENGINEER | 21 |
| | | 021 |
| | WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani | 021 J. |
| | WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani | 121 J. |
| | WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani |)21 |

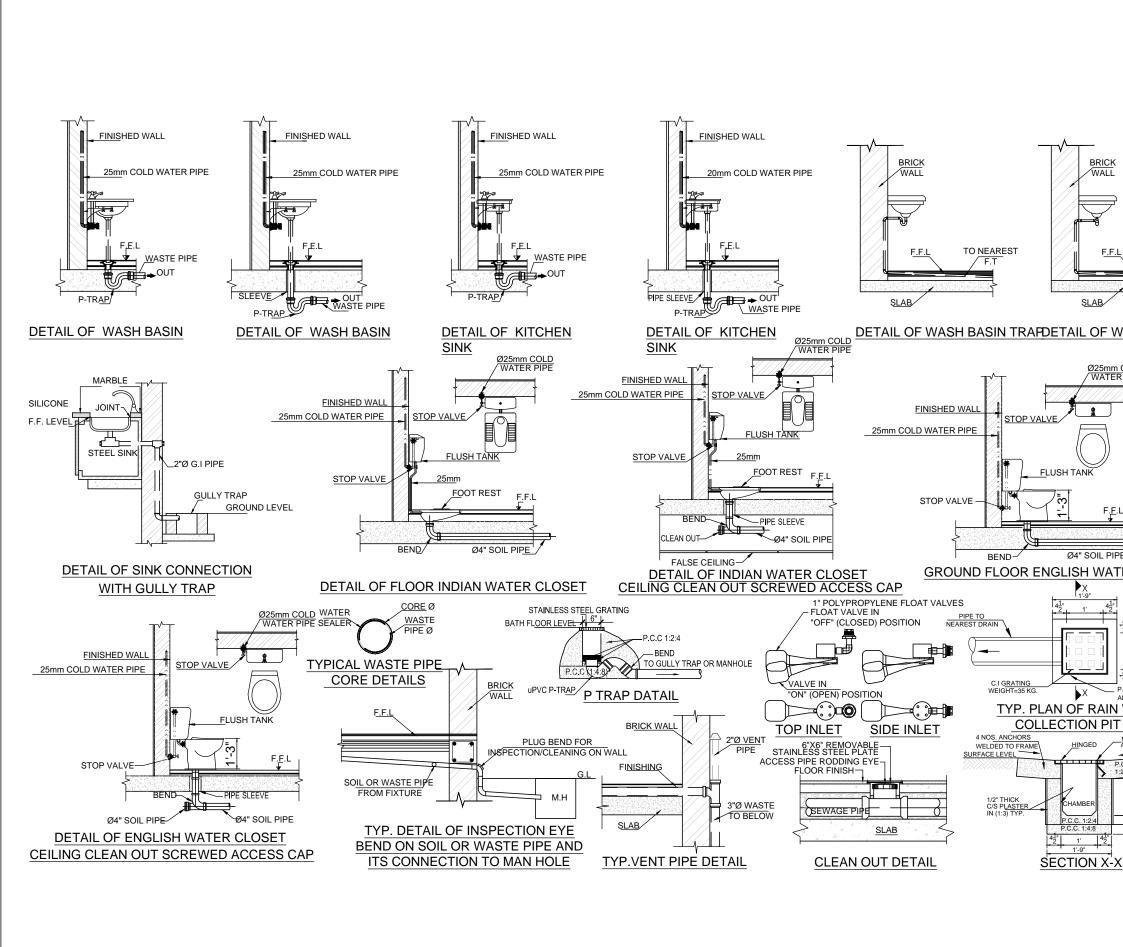


| | CLIENT: PROJECT IMPLEMENTATIO UNIT (PIU) KNIP | N |
|------|--|--------|
| ATER | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. HOUSE NO.574 (Gubergill, Lahore, Paisian HOUSE NO.574 (Guber | TH |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. | |
| | REVISIONS: | |
| | No. DESCRIPTION DA | TE |
| | | |
| | | |
| | | \neg |
| | TENDER DRAWINGS | |
| | DRAWING TITLE: | |
| | DRAINAGE SYSTEM ROOF | |
| | DRAWN BY: DATE: M. Imran AUG .202 | 1 |
| | WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali | |
| | APPROVED BY: Syed Ali Abbas Gillani | V. |
| | 0249/PH-05 <u>4</u> SCALE (A3): SHEET: | |
| | N.T.S | |

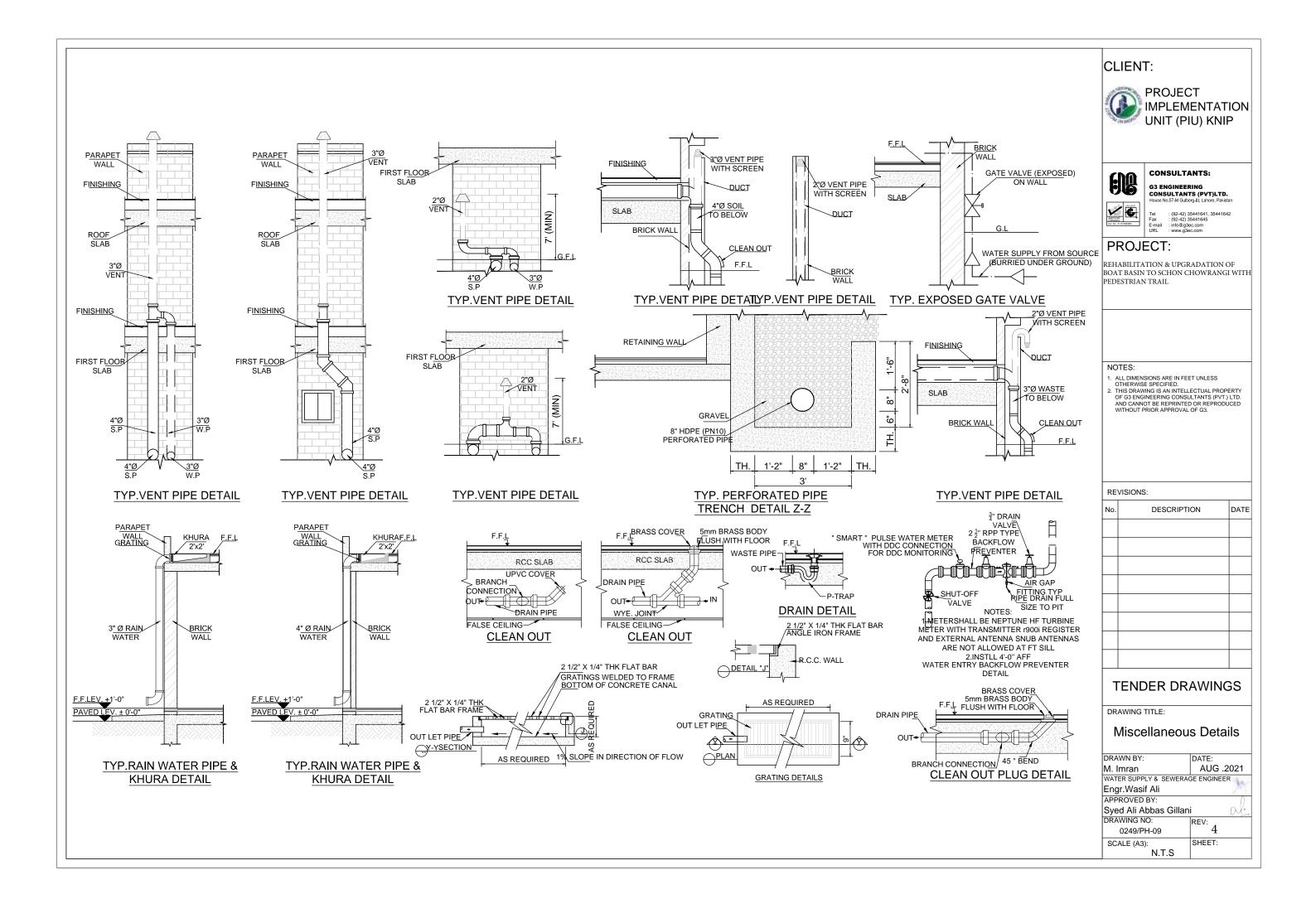


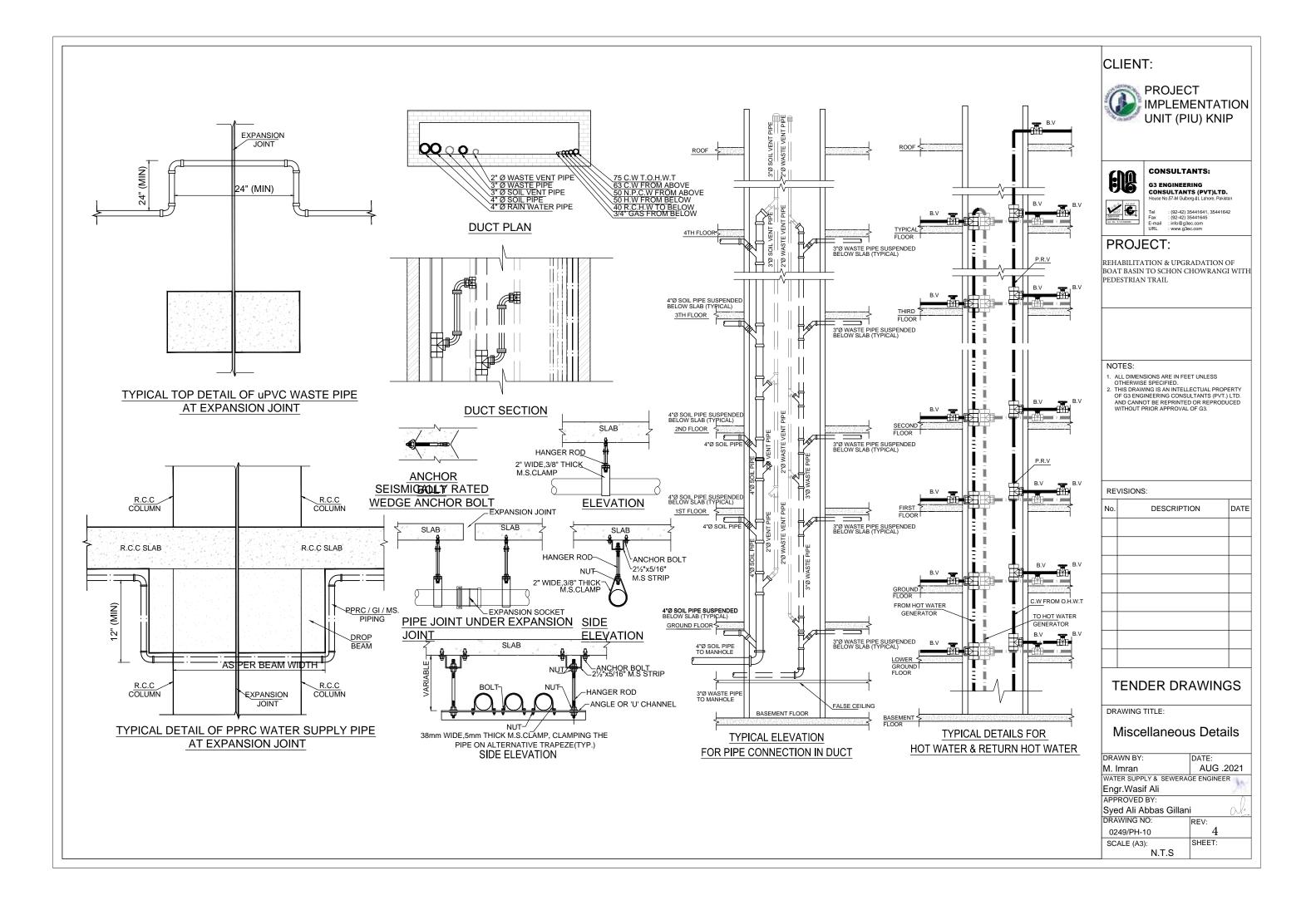
| | IEN | T: | | |
|--------------|--|--|--|---------|
| Q | D | PROJEC ⁻ IMPLEME UNIT (PIL | NTAT | - |
| REH BOA | | Fax : (92-42) 354 E-mail : info@g3ec. URL : www.g3ec. ECT: TION & UPGRA TO SCHON CH | NG (PVT)LTD. IIII, Lahore, Pakisti 41641, 3544164: 41645 com com | 2 DF |
| 1. / 2. 1 | OTHERWIS THIS DRAW OF G3 ENG AND CANNO | SIONS ARE IN FEET E SPECIFIED. ING IS AN INTELLE (INEERING CONSUL- TO BE REPRINTED (PRIOR APPROVAL O | CTUAL PROPI FANTS (PVT.) DR REPRODU | LTD. |
| RE | VISIONS | 2. | | |
| | | | | |
| No. | | DESCRIPTIC | N | DATE |
| No. | | - | N | DATE |
| No. | | - | N | DATE |
| No. | | - | N | DATE |
| No. | | - | N | DATE |
| No. | | - | N | DATE |
| No. | | - | N | DATE |
| | | - | | |
| | | DER DRA | | |
| | AWING | DER DRA | WING | |
| | AWING SI WN BY: Imran ER SUPP gr.Wasi | | WING ANK AUG .2 | |
| | AWING SI AWN BY: Imran ER SUPP gr. Wasi PROVED | DER DRA DER DRA TITLE: EPTIC TA EPTIC TA LY & SEWERAGE f Ali BY: bbas Gillani IO: F | WING ANK AUG .2 | |



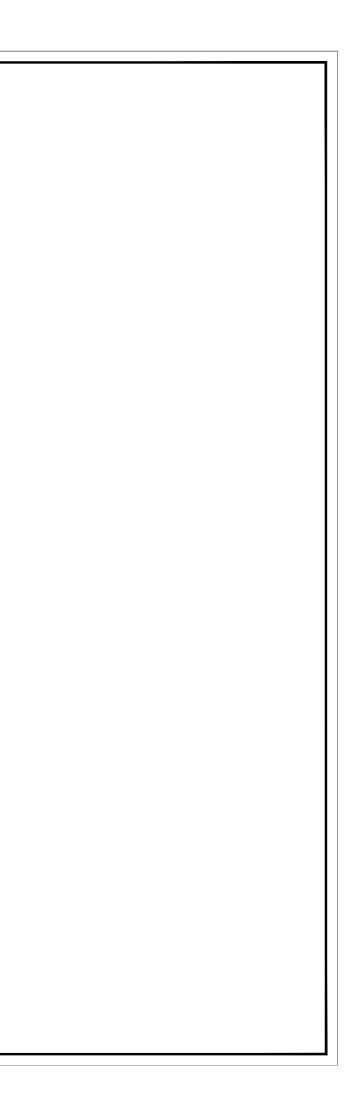


| | CLIENT: |
|-----------------------------|---|
| | |
| | PROJECT |
| | IMPLEMENTATION |
| | UNIT (PIU) KNIP |
| | |
| | |
| | CONSULTANTS: |
| | G3 ENGINEERING |
| | CONSULTANTS (PVT)LTD. House No.57-M Gulberg-III, Lahore, Pakistan |
| | 1 1 |
| | Email : info@g3ec.com URL : www.g3ec.com |
| | PROJECT: |
| TO NEAREST | REHABILITATION & UPGRADATION OF |
| F.T | BOAT BASIN TO SCHON CHOWRANGI WITH |
| | PEDESTRIAN TRAIL |
| | |
| | |
| ASH BASIN TRAP | |
| | |
| | NOTES: |
| | 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. |
| 4 | 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. |
| | AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| | |
| | |
| | |
| | |
| - | |
| | REVISIONS: |
| | No. DESCRIPTION DATE |
| ER CLOSET | |
| | |
| | |
| | |
| | |
| | |
| P.C.C 1:2:4 | |
| LL AROUND | |
| WATER (C.P) | |
| (C.P) M.S ANGLE FRAME | |
| SURFACE LEVEL | TENDER DRAWINGS |
| C.C. 2:4 | I ENDER DRAVVINGS |
| - | DRAWING TITLE: |
| | Missollansous Dataila |
| | Miscellaneous Details |
| <u> </u> | DRAWN BY: DATE: |
| , <u>-</u> | M. Imran AUG .2021 |
| | WATER SUPPLY & SEWERAGE ENGINEER |
| | APPROVED BY: |
| | Syed Ali Abbas Gillani |
| | DRAWING NO: REV: |
| | 0249/PH-08 4 |
| | 0249/PH-08 4 SCALE (A3): SHEET: N.T.S |





PUBLIC HEALTH DRAWING Park-St-8



LIST OF DRAWINGS

| Sr.# | DESCRIPTION | DRG. # |
|------|---|------------|
| 01 | LIST OF DRAWINGS | 0249/PH-00 |
| 02 | GENERAL NOTES | 0249/PH-01 |
| | WATER SUPPLY SYSTEM | |
| 03 | WATER SUPPLY SYSTEM (GROUND FLOOR PLAN) | 0249/PH-02 |
| 04 | WATER SUPPLY SYSTEM (ROOF PLAN) | 0249/PH-03 |
| | SEWERAGE & DRAINAGE SYSTEM | |
| 05 | SEWERAGE SYSTEM (GROUND FLOOR PLAN) | 0249/PH-04 |
| 06 | DRAINAGE SYSTEM (ROOF PLAN) | 0249/PH-05 |
| | MISCELLANEOUS DETAILS | |
| 07 | TYPICAL SEPTIC TANK PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-06 |
| 08 | TYPICAL GULLY TRAP & MANHOLE PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-07 |
| 09 | MISCELLANEOUS DETAILS-01 | 0249/PH-08 |
| 10 | MISCELLANEOUS DETAILS-02 | 0249/PH-09 |
| 11 | MISCELLANEOUS DETAILS-03 | 0249/PH-10 |

| CL | IEN | T: | |
|--------------|--|---|---|
| Q | D | PROJECT IMPLEMENT UNIT (PIU) ł | |
| REH BOA | | TION & UPGRADAT TO SCHON CHOWF | r)LTD. we, Pakistan 35441642 'ION OF |
| 1. / 2. T | OTHERWIS THIS DRAW OF G3 ENG AND CANNO | SIONS ARE IN FEET UNLE E SPECIFIED. ING IS AN INTELLECTUAL INEERING CONSULTANT3 OT BE REPRINTED OR RE RIOR APPROVAL OF G3. | PROPERTY 8 (PVT.) LTD. |
| RE | VISIONS | 8: | |
| RE No. | VISIONS | DESCRIPTION | DATE |
| | | | DATE |
| | VISIONS | | DATE |
| | | | |
| | | DER DRAW | |
| | | DER DRAW | INGS |
| | | DER DRAW | INGS NGS |
| | TENE AWING LIST WIN BY: IMITAN ER SUPP gr. Wasi ROVED ad Ali A | DESCRIPTION DER DRAW DER DRAW TITLE: OF DRAWI DATE ALI SEWERAGE ENC f Ali BY: bbas Gillani | INGS NGS |
| | TENE AWING LIST | DESCRIPTION DER DRAW DER DRAW TITLE: OF DRAWI LY& SEWERAGE ENC f Ali BY: bbas Gillani IO: REV: D | INGS INGS IG .2021 JINEER A 4 |

PUBLIC HEALTH GENERAL NOTES

- 1. THESE GENERAL NOTES ARE PROVIDED TO SUPPLEMENT THE WRITTEN SPECIFICATION FOR THIS PROJECT. REFER TO THE SPECIFICATIONS FOR MORE DETAILED REQUIREMENTS OF THIS PROJECT.
- 2. PERFORM ALL WORK IN A WORKMAN LIKE MANNER, IN COMPLIANCE WITH THE LATEST ADOPTED EDITIONS OF ALL GOVERNING CODES AND STANDARDS. IF CONFLICTS ARISE, REQUEST RESOLUTION FROM THE ARCHITECT. IF REQUIRED INFORMATION IS MISSING FROM THIS DRAWING (I.E, DUCT SIZE OR PIPE SIZE), REQUEST WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO THE EXECUTION
- 3. PROVIDE ALL MINOR INCIDENTAL ITEMS SUCH AS OFFSETS, FITTINGS, ETC, REQUIRED AS PART OF THE WORK EVEN THOUGH NOT SPECIFICALLY SHOWN ON DRAWINGS. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ITEMS OF EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEMS.
- 4. THE PLUMBING DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING, DUCT WORK. MECHANICAL EQUIPMENT AND APPURTENANCES, AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF THEIR TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE PLUMBING DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK AND PROVIDE SUCH FITTINGS, VALVES AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
- 5. VERIFY DIMENSIONS GOVERNING PLUMBING WORK AT THE BUILDING. DO NOT SCALE THE PLUMBING DRAWINGS FOR DIMENSIONS. TAKE DIMENSIONS. MEASUREMENTS, LOCATIONS, LEVELS, ETC, FROM THE ACTUAL FIELD CONDITIONS AND ARCHITECTURAL DRAWINGS.
- 6. EXAMINE ALL ADJOINING WORK ON WHICH THE PLUMBING WORK IS DEPENDENT OF MAXIMUM EFFICIENCY AND REPORT DESIGN CONFLICTS WHICH MUST BE CORRECTED PRIOR TO EXECUTION. NO WAIVER OF RESPONSIBILITY SHALL BE CLAIMED OR ALLOWED DUE TO FAILURE TO REPORT UNFAVORABLE CONDITIONS AFFECTING THE PLUMBING WORK
- 7. CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPING, VALVES, CONTROLS, INSULATION ETC. TO ALL PLUMBING EQUIPMENT SCHEDULED OR INDICATED ON PLANS REGARDLESS OF WHETHER PIPING, VALVES, CONTROLS, INSULATION ETC. ARE SPECIFICALLY SHOWN OR NOT PLUMBING EQUIPMENT INSTALLATION SHALL BE 100% COMPLETE FOR PROPER EQUIPMENT FUNCTION AND/OR OPERATION AT COMPLETION OF PROJECT
- 8. THE ARCHITECTURAL AND ENGINEERING DRAWINGS ARE COMPLEMENTARY. CONTRACTORS SHALL ACKNOWLEDGE THE ARCHITECTURAL AS WELL AS ALL THE ENGINEERING DRAWINGS AND INCLUDE ALL WORK NECESSARY TO ACHIEVE A COMPLETE WORKING, INSTALLATION FOR ANY DEVICE OR EQUIPMENT WHICH MAY BE SHOWN ON ONE DRAWING BUT NOT SHOWN ON ANOTHER.

- 9. LOCATION OF PIPES, DUCTS, SWITCHES, PANELS, EQUIPMENT AND FIXTURES SHALL BE ADJUSTED TO ACCOMMODATE THE WORK OR INTERFERENCES ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH PIPE AND DUCT PRIOR TO EABRICATION
- 10. LOCATION OF EXISTING UTILITIES AND EXISTING UNDERGROUND PLUMBING ARE BASED ON THE SITE INFORMATION AVAILABLE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES AND EXISTING UNDERGROUND PLUMBING PRIOR TO FABRICATION AND ERECTION OF WORK TO AVOID ALL INTERFERENCES. VERIFICATION SHALL BE BY SITE INSPECTION, EXCAVATION, OR WHATEVER MEANS NECESSARY TO DETERMINE EXACT LOCATIONS.
- 11. CONTRACTOR SHALL OBTAIN BUILDING PERMIT AND ARRANGE ALL REQUIRED INSPECTIONS WITH THE APPROPRIATE REGULATORY AGENCY. ALERT CONSULTANT OF ALL ITEMS NOT DEPICTED ON DRAWINGS. DO NOT PROCEED WITH FURTHER WORK UNTIL WRITTEN RESPONSE IS RECEIVED FROM CONSULTANT

12 CONTRACTOR SHALL VERIFY GAS PRESSURE DELIVERED BY METER AT BUILDING.

13. TEST THREADED NATURAL GAS PIPING AT 20 PSIG FOR A TEST PERIOD OF 2 HOURS. TEST PRESSURE SHALL NOT FALL OVER 5% DURING TEST PERIOD TO PASS. IF PIPING FAILS TEST, INVESTIGATE AND REPAIR THE SOURCE OF

14. PROVIDE SLEEVES AT ALL PIPING PENETRATIONS OF CONCRETE OR MASONRY FLOOR, WALL OR ROOF CONSTRUCTION.

15. PROVIDE GLASS WOOL INSULATION TO ALL HOT WATER (EXPOSED) AND COLD WATER (AT ROOF) PIPE LINE INCLUDING PROTECTIVE COATINGS.

16.USE NEAREST FLOOR TRAP FOR THE AC DRAINAGE.

- 17. TEST ALL PIPING SYSTEMS IN WHICH ANY ALTERATIONS HAVE BEEN MADE FOR COMPLIANCE WITH THE LATEST EDITION OF GOVERNING BUILDING CODE DOMESTIC HOT AND COLD WATER PIPING SHALL BE SUBJECT TO 100 PSIG FOR A MINIMUM 2 HOURS. DOMESTIC WASTE AND VENT PIPING SHALL BE TESTED AT 10' STATIC HEAD FOR A PERIOD GREATER THAN 15 MINUTES. IF REQUIRED PRESSURE DROPS BY MORE THAN 3% DURING ITS TEST DURATION, INVESTIGATE THE SOURCE OF LEAK, REPAIR THE LEAK, AND RETEST THE SYSTEM FOR THE REQUIRED TEST PERIOD. INSPECT ALL W & V JOINTS WHILE UNDER PRESSURE AND REPAIR ALL LEAKS.
- 18.INSTALL ALL PLUMBING FOUIPMENT IN COMPLETE COMPLIANCE WITH MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS, ARRANGE ALL FOUIPMENT TO PERMIT FASY REMOVAL OF COLLS MOTORS FILTERS AND ALL OTHER PARTS WHICH REQUIRE PERIODIC REPLACEMENT OR MAINTENANCE. 19. COORDINATE ALL ELECTRICAL VOLTAGE CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING PLUMBING EQUIPMENT.

LEGEND FOR WATER SUPPLY SYSTEM

| | | ER PIPE (C.W) SURE COLD WATER (N.P.C.W) | | | - | OUTER DIA | | ERNAL DIA |
|---------|-------|--|----------|------|----|-----------|--------|--------------|
| | | R PIPE (H.W) | = : : | ; == | 3 | (mm) | (mm) | INCH |
| RE-CIRC | ULATI | ON HOT WATER (R.H.W) | | _ | ⇒ | 20 | 13.2 | 0.52 |
| GAS P | | | L | | \$ | 25 | 16.4 | 0.65 |
| | | VALVE (A.R.V) | 6 | | | 32 | 21.2 | 0.83 |
| BALL V | | | | | | 40 | 26.6 | 1.05 |
| | | E SLICE VALVE (G.V / S.V) REDUCER VALVE (P.R.V) | | | | 50 | 33.2 | 1.31 |
| | | ATION PUMP | R | | | 63 | 42 | 1.65 |
| | | NAL GEYSER | * | | | 75 | 50 | 1.97 |
| CHECK | (VAL | VE | Ŏ | | | 90 | 60 | 2.36 |
| BOOST | FER P | PUMP | 8 | | | 110 | 73.2 | 2.88 |
| SUBME | ERSIE | BLE PUMP | 4 | | | | | |
| H.W.G | = | HOT WATER GENERATO | R | L.D | = | LIST OF | - DRAV | VING |
| T.A | = | TO ABOVE | | G.N | = | GENER | AL NO | TES |
| T.B | = | TO BELOW | | W.S | = | WATER | SUPP | LY |
| F.A | = | FROM ABOVE | | G.S | = | GAS SY | STEM | |
| F.B | = | FROM BELOW | | S.W | = | SEWEF | RAGE S | SYSTE |
| D-1 | = | DUCT - 1 | | D.R | = | DRAINA | GE SY | STEM |
| M.D | = | MISCELLANEOUS DETA | LS - | T/W | = | TUBE \ | VELL | |

- 1. ALL WATER SUPPLY PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONE ARE EXTERNAL DIAMETERS. ALL WATER SUPPLY PIPES ARE OF PPRC UNLI NOTED OTHERWISE
- 2. ALL GAS PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONED ARE INTERNAL DIAMETERS.
- 3. ALL WATER SUPPLY PIPES ENTERING THE WALLS SHALL BE PROVIDED WI ISOLATION VALVES.

LEGEND FOR SEWERAGE & DRAINAGE SYSTEM

| SOIL PIPE (S.P) | 2 | PIPE DIA | & SLOPE |
|---------------------------|------------------|----------|---------|
| WASTE PIPE (W.P) | | | |
| VENT PIPE (V.P) | = $=$ $=$ | 3" | 1:75 |
| CLEANOUTS | C.O O — — | 4" | 1:100 |
| FLOOR TRAP | FT 🔯 | 6" | 1:150 |
| GULLY TRAP | G.T | 8" | 1:175 |
| MANHOLE | М.Н | 10" | 1:250 |
| RAIN WATER COLLECTION PIT | R.W.C.P | 12" | 1:300 |

1. ALL PIPE DIAMETERS ARE IN INCHES UNLESS OTHERWISE MENTIONED. 2. VENT PIPES SHALL BE EXTENDED UP TO ONE FT ABOVE FINISHED ROOFLEVEL

3. SOIL, WASTE AND VENT PIPES UP TO 6" DIA. ARE uPVC (NON PRESSURIZE) TYPE-B CONFIRMING TO ISO 3633:2002 EXTERNAL SEWER PIPES SHALL BE OF FLOW LINE CONFIRMING TO EN 1401 UNLESS OTHERWISE NOTED

4. SLOPE OF ROOF VALLEY LINE SHOULD BE BETWEEN 0.01 TO 0.02

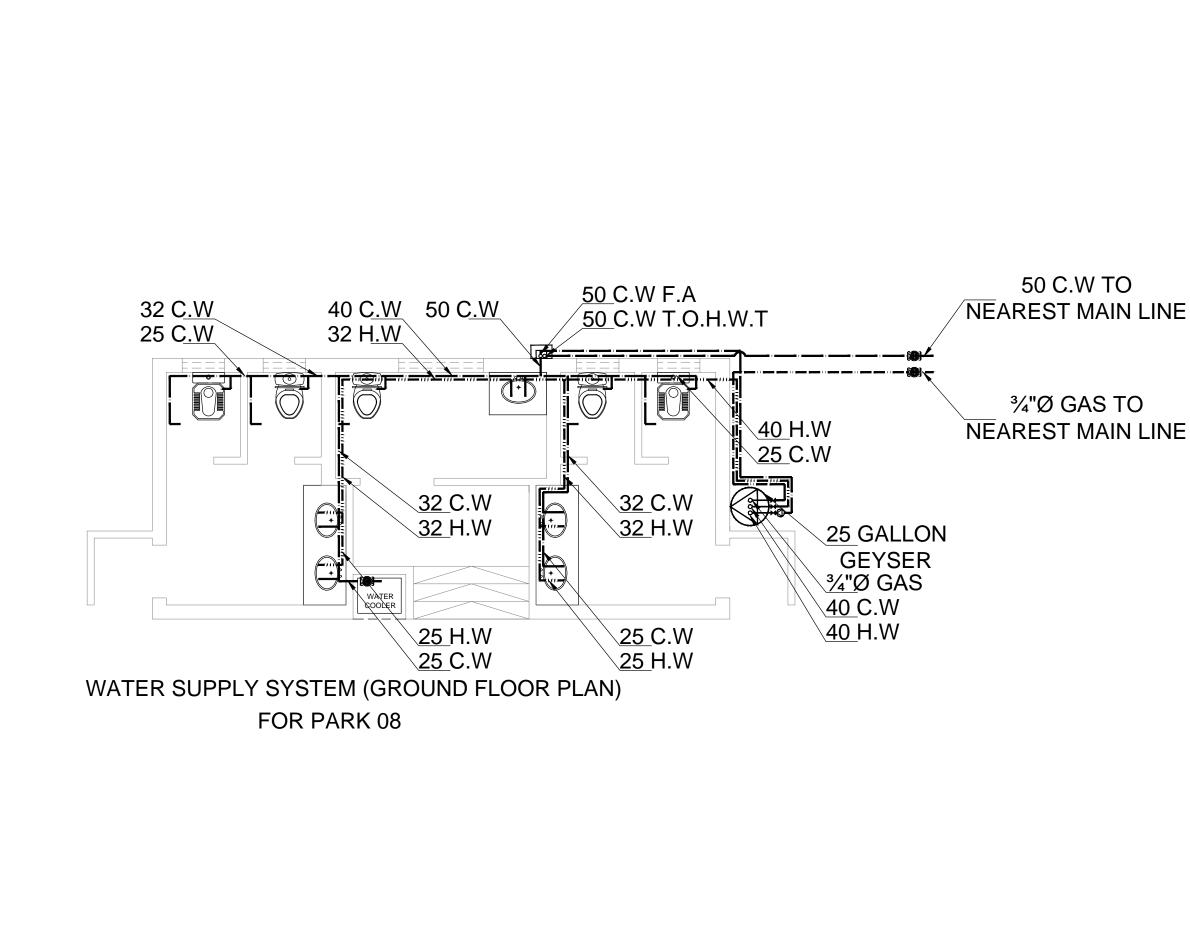
5. BOTTLE TRAP SHALL BE USED WITH ALL WASH BASIN.

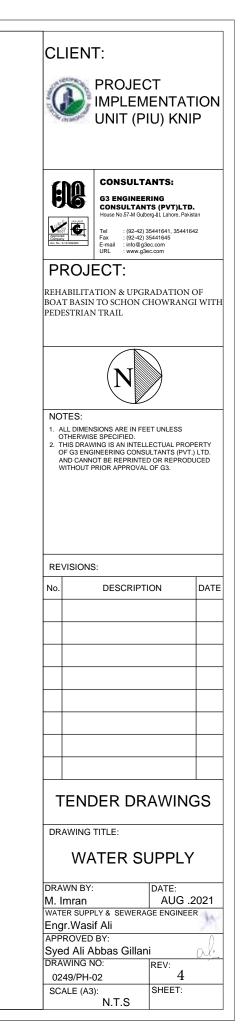
6. R.C.C PIPES SHALL BE SHALIMAR OR EQUIVALENT MAKE

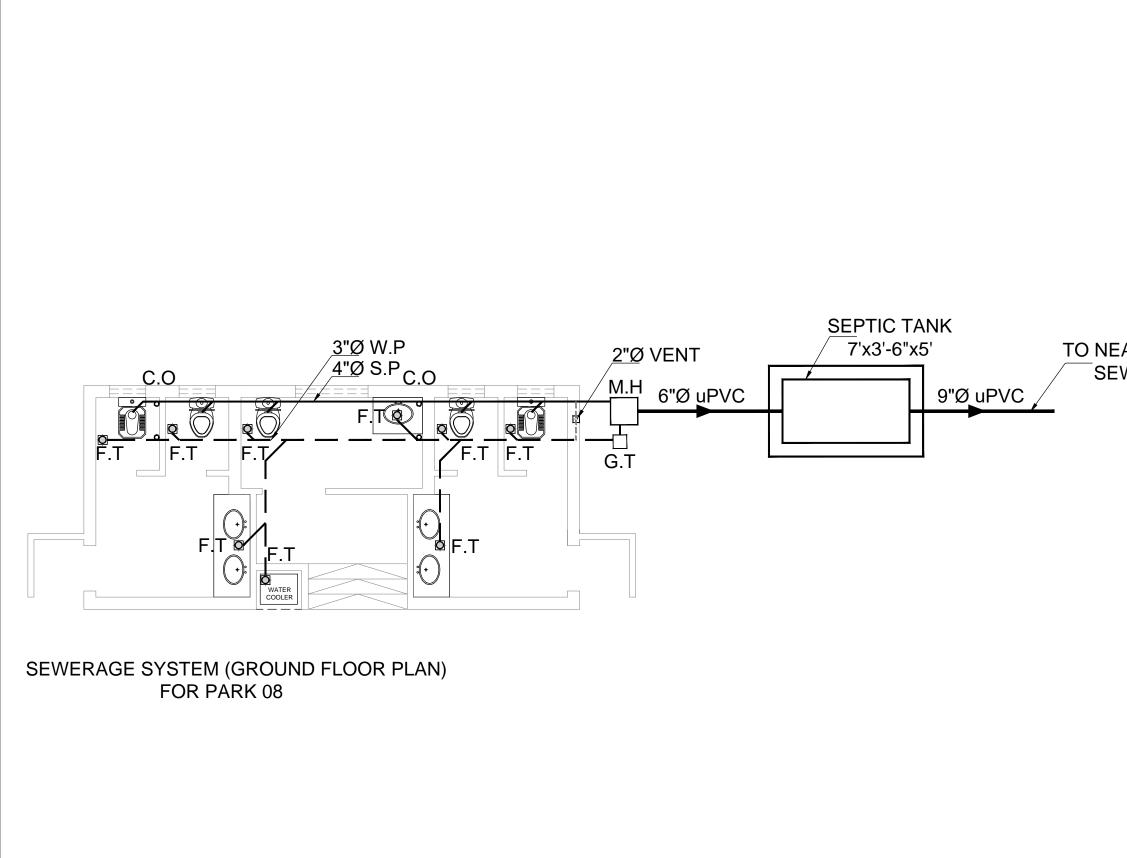
7. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER

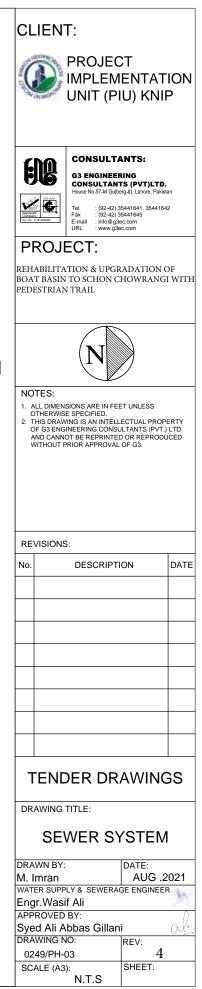
- 4. ALL WATER SUPPLY PIPES ARE PPR (PN 20) UNLESS OTHERWISE MENTION 5. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS,
- ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED.
- 6. ALL GAS PIPES ARE G.I. UNLESS OTHERWISE MENTIONED.
- 7. ALL WATER SUPPLY AND GAS PIPES ARE IN DUCTS, OR CONCEALED IN WAI BURIED IN FLOORS
- 8. ALL PIPING SHALL BE TESTED FOR LEAKAGE BEFORE THE JOINTS ARE CO

| | CLIEN | T: |
|--|---|---|
| | ٨ | PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
| SCHEDULE OF PIPE DIA $ \frac{1}{(rm)} \overline{) (rm)} $ | BOAT BASIN PEDESTRIAN NOTES: 1. ALL DIMEN OTHERWIS 2. THIS DRAV OF G3 ENG AND CANN | ATION & UPGRADATION OF J TO SCHON CHOWRANGI WITH |
| EM | REVISION | s. |
| PIPE DIA & SLOPE 3 3" 1:75 4" 1:100 6" 8" 1:175 10" 1:250 12" 1:300 | | DESCRIPTION DATE |
| RWISE MENTIONED. OVE FINISHED VC (NON PRESSURIZE) EWER PIPES SHALL BE HERWISE NOTED 10.01 TO 0.02 N. IAKE. UNDER. OTHERWISE MENTIONED. S, TEES, SOCKETS, | TENI | DER DRAWINGS |
| ONED. OR CONCEALED IN WALL OR E THE JOINTS ARE COVERED. | DRAWING | TITLE: NERAL NOTES |
| | Engr.Was | AUG .2021 PLY & SEWERAGE ENGINEER if Ali PBY: Abbas Gillani NO: 01 REV: 4 |

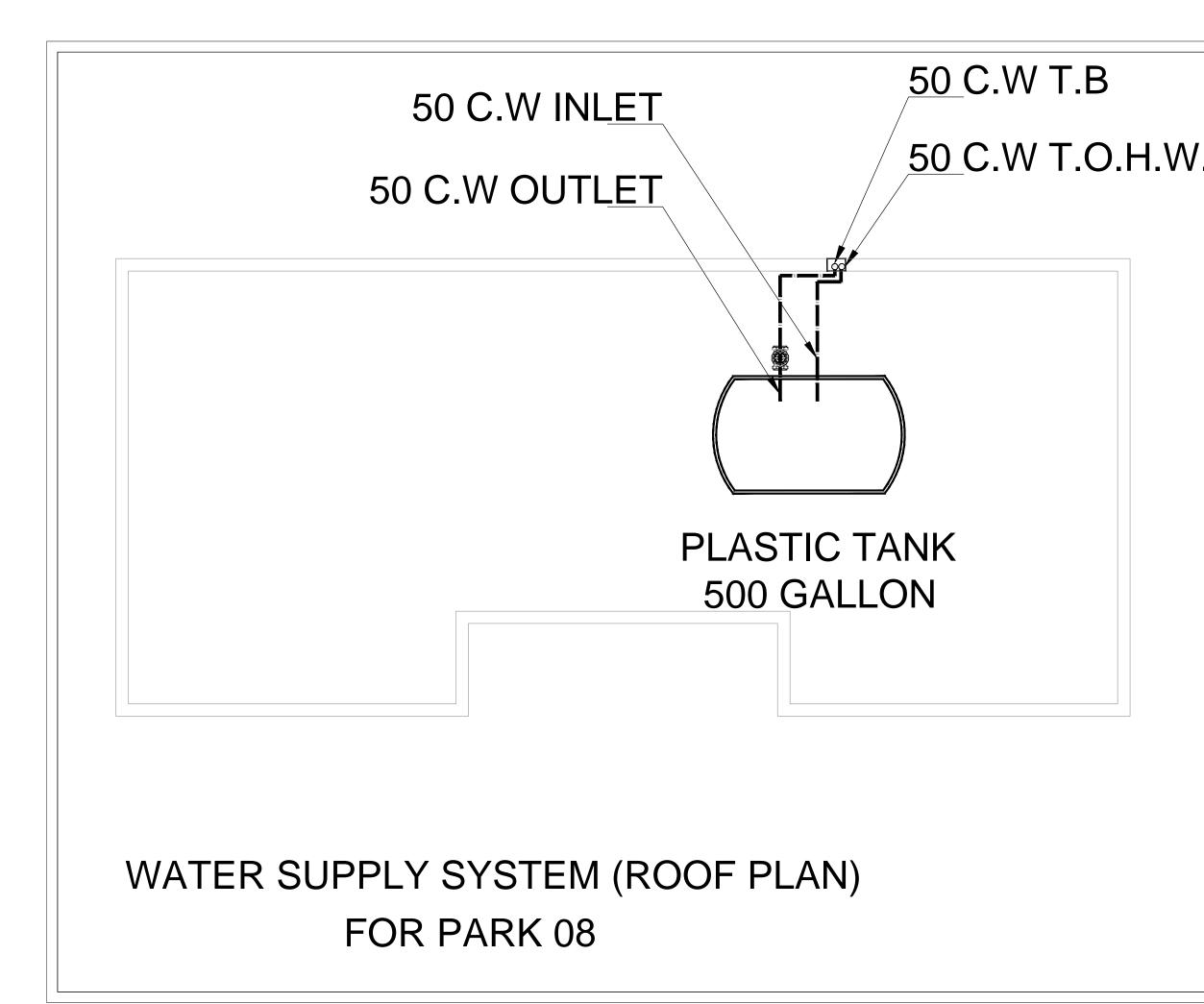




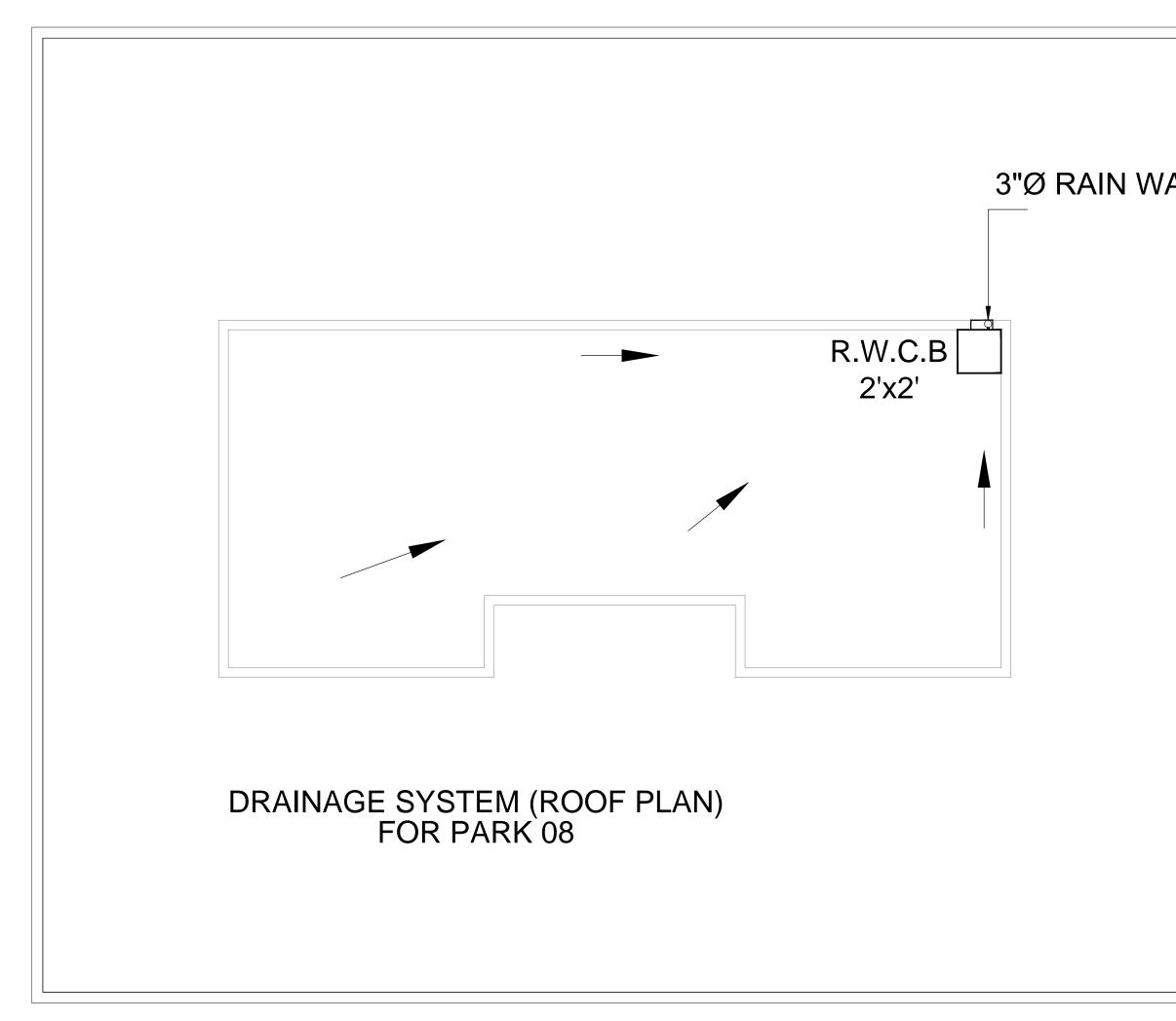




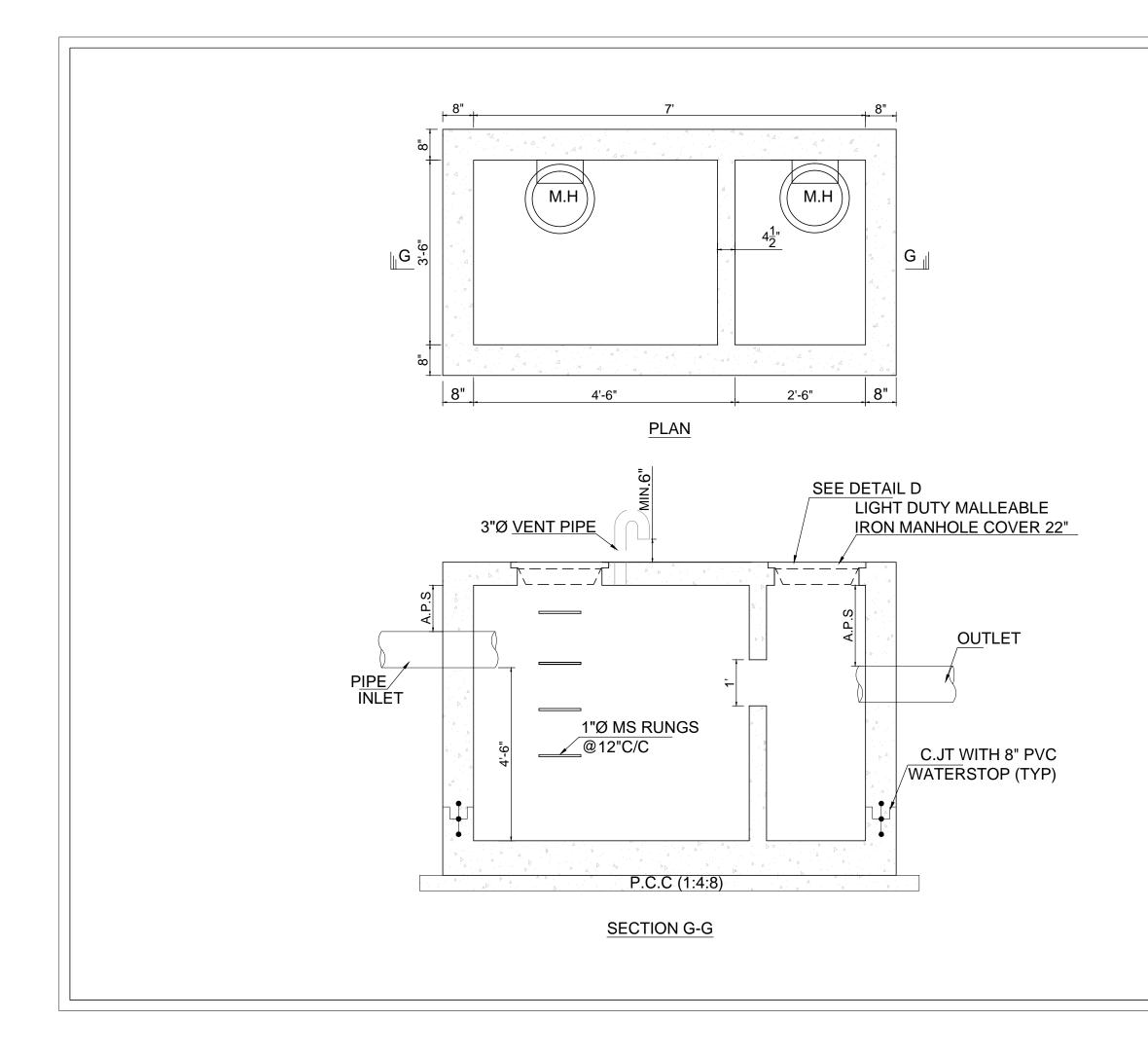
TO NEAREST MAIN



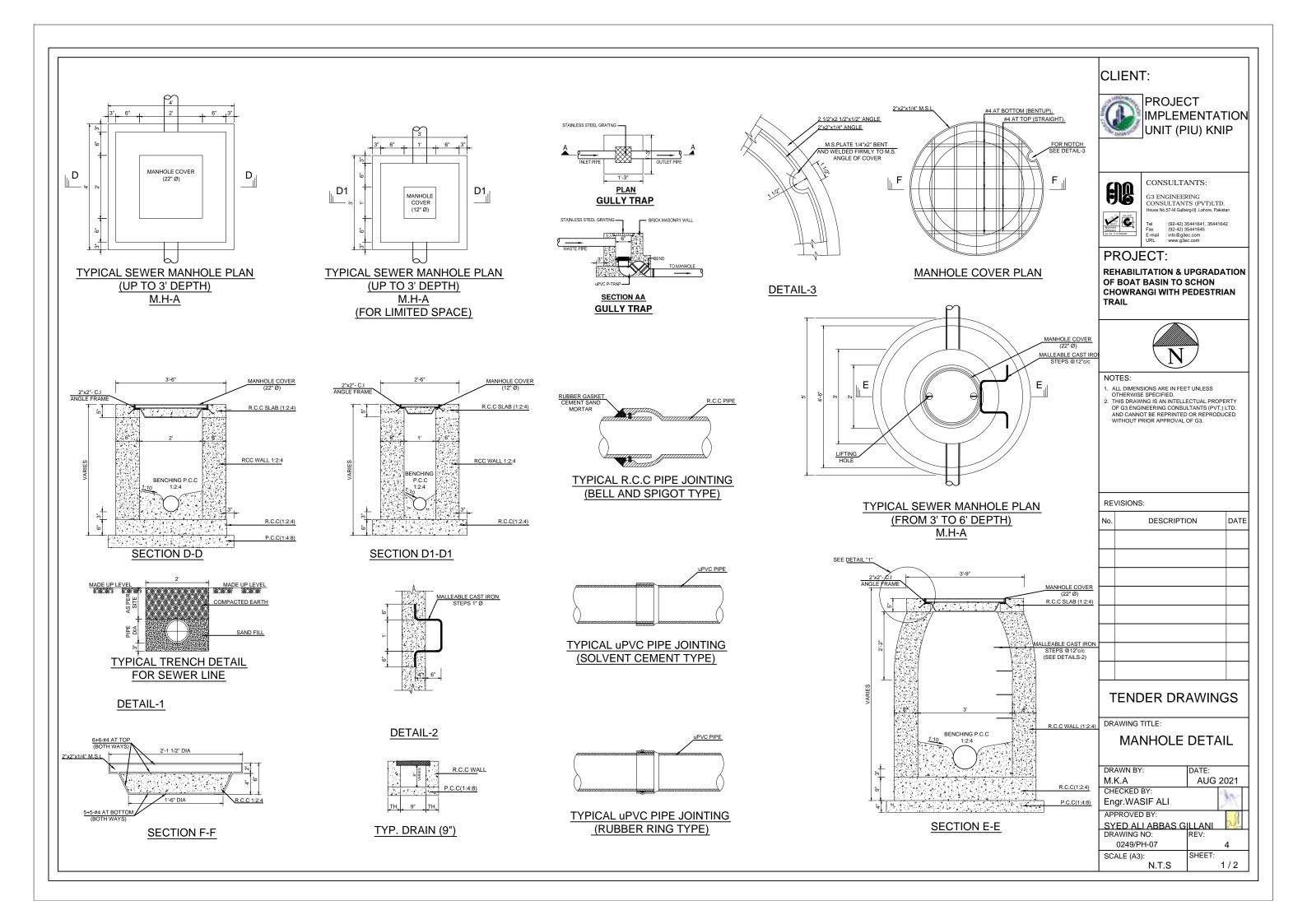
| | CLIEN | Г: | | |
|----|--|--|---|------|
| .т | | PROJEC IMPLEM UNIT (PI | ENTAT | |
| | | | | |
| | | Fax : (92-42) 3 E-mail : info@g3e URL : www.g3e | RING (PVT)LTD. rg-III, Lahore, Pakist 5441641, 3544164 5441645 | an |
| | PROJE | ECT: | | |
| | | TION & UPGR TO SCHON C TRAIL | | |
| | NOTES: | | | |
| | OTHERWISE 2. THIS DRAW OF G3 ENGI AND CANNO | IIONS ARE IN FEE SPECIFIED. ING IS AN INTELL NEERING CONSU T BE REPRINTEE RIOR APPROVAL | ECTUAL PROP ILTANTS (PVT.) O OR REPRODU | LTD. |
| | REVISIONS | : | | |
| | No. | DESCRIPTI | ON | DATE |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | ER DR | AWING | S S |
| | | | | |
| | | | | |
| | VVATEI | R SUPP PLAN | | |
| | DRAWN BY: | | DATE: | |
| | M. Imran WATER SUPPI Engr.Wasit | LY & SEWERAG | AUG .2 | |
| | APPROVED | | | 0 |
| | Syed Ali A | bbas Gillan | | al |
| | DRAWING N 0249/PH-0 | - | REV: 4 | |
| | SCALE (A3) | : | SHEET: | + |
| | , | N.T.S | | |

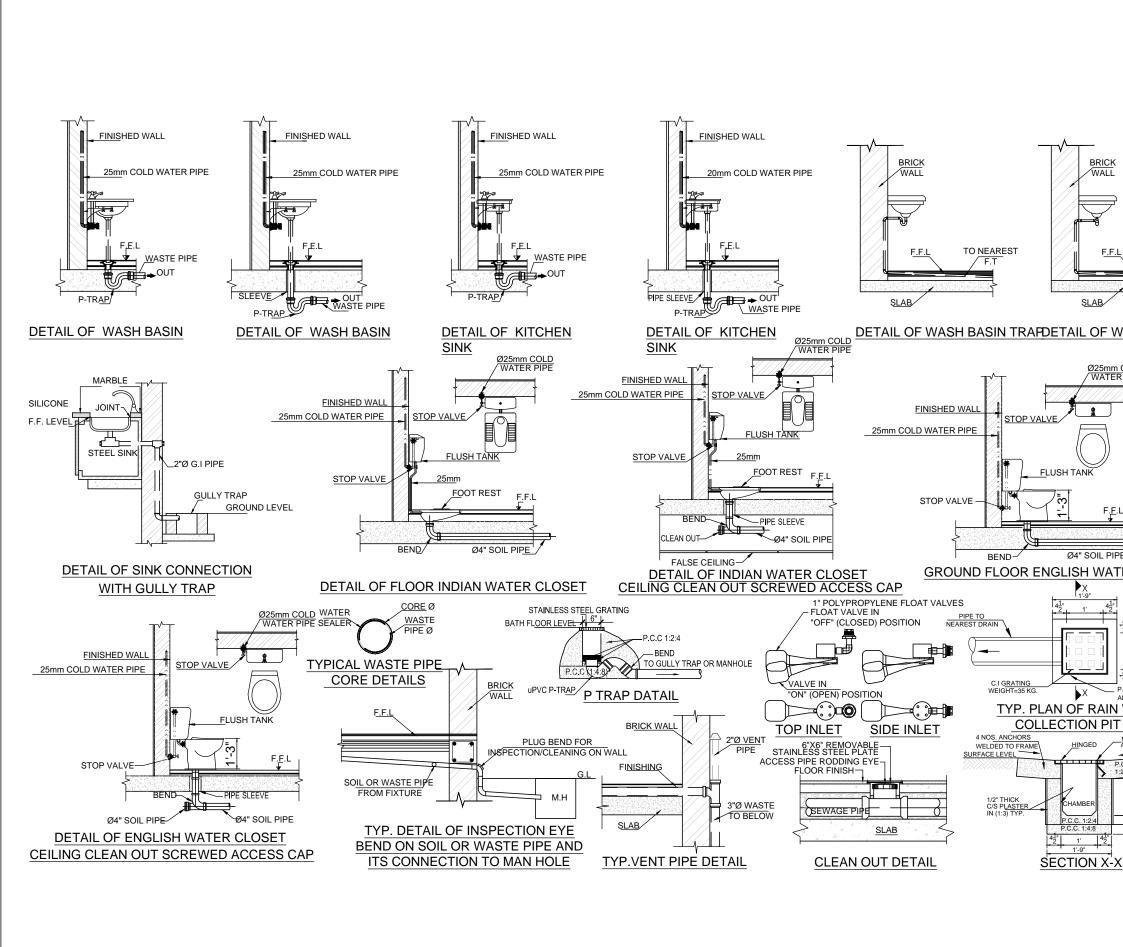


| | CLIENT: PROJECT IMPLEMENTATION UNIT (PIU) KNIP | N | | | | |
|------|---|--------|--|--|--|--|
| ATER | CONSULTANTS: G3 EngineEring CONSULTANTS (PVT)LTD. Huse No.57-M Gulberg-III, Lahore, Pakistan Tel : (92-42) 35441641, 35441642 Farad :: (92-42) 35441645 Farad :: (92-42) 35441645 Farad :: (1016 936c.com URL :: www.g36c.com URL :: www.g36c.com BOAT BASIN TO SCHON CHOWRANGI WIT PEDESTRIAN TRAIL | ГН | | | | |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. | | | | | |
| | REVISIONS: | | | | | |
| | No. DESCRIPTION DATE | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | \neg | | | | |
| | TENDER DRAWINGS | | | | | |
| | DRAWING TITLE: | | | | | |
| | ROOF | | | | | |
| | M. Imran AUG .2021 | | | | | |
| | Engr.Wasif Ali |) | | | | |
| | Syed Ali Abbas Gillani | - | | | | |
| | 0249/PH-05 4 SCALE (A3): SHEET: | \neg | | | | |
| | N.T.S | | | | | |

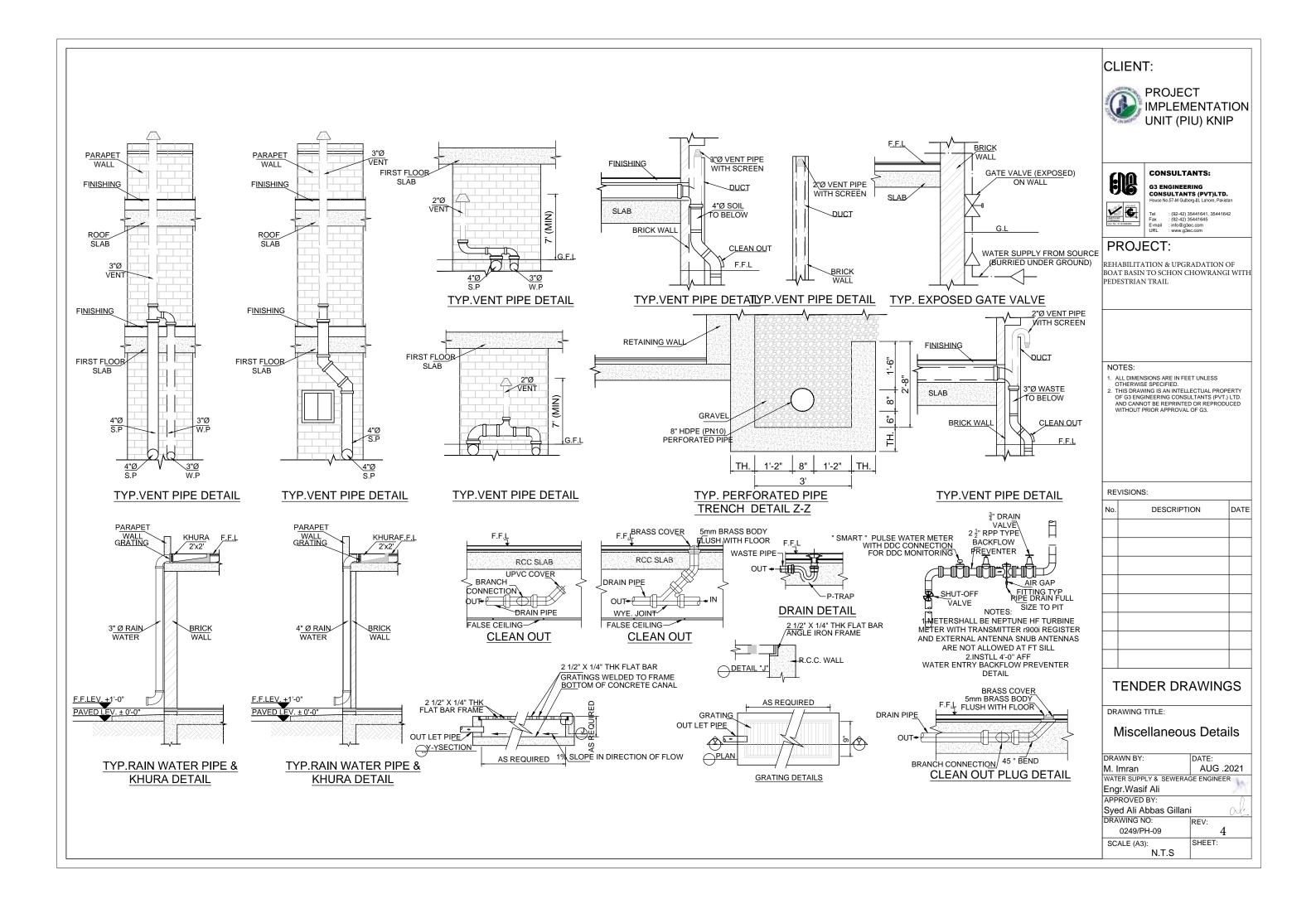


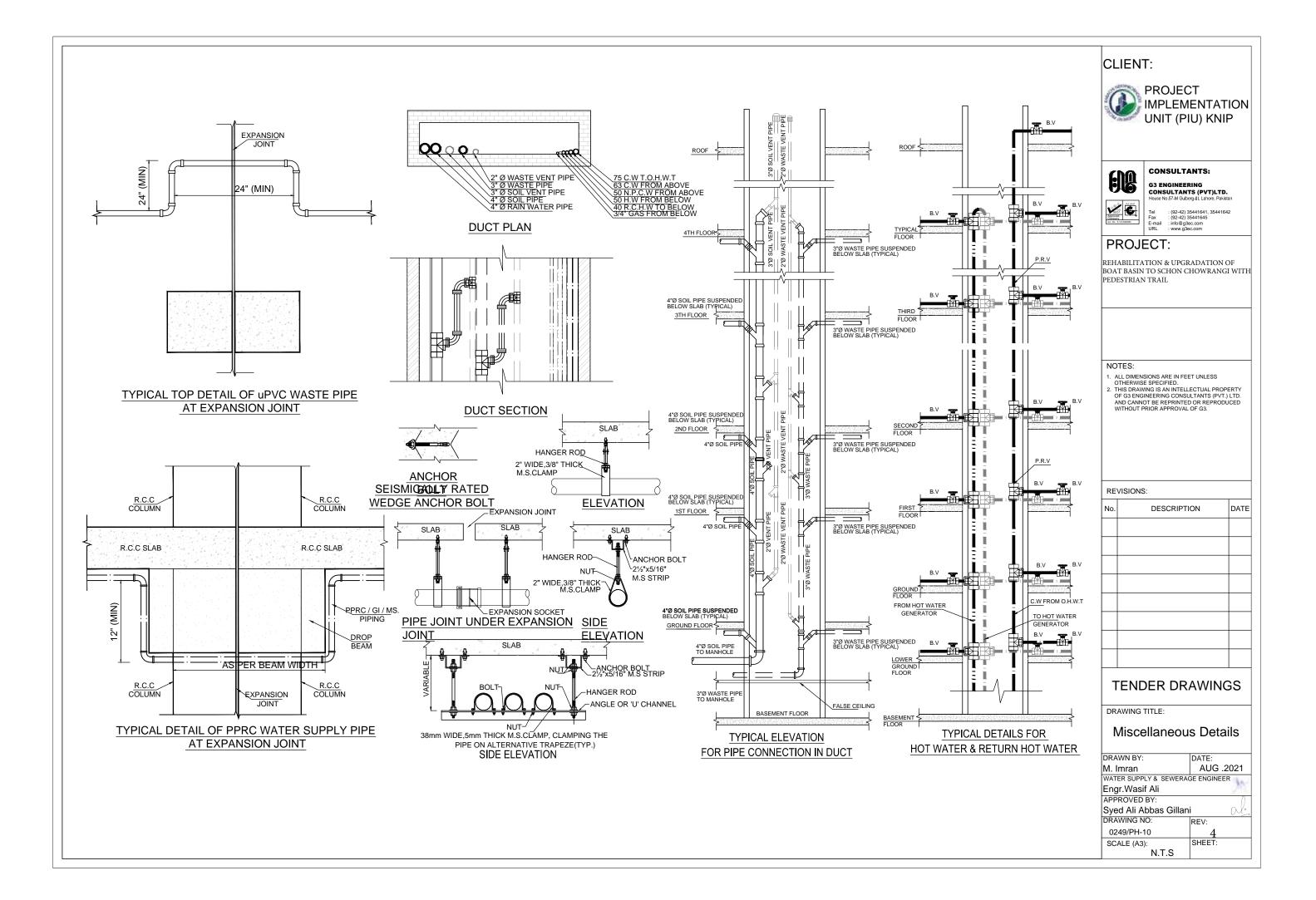
| CLI | ENT: PROJECT IMPLEMENTA UNIT (PIU) KN | |
|---|---|----------|
| REHA BOAT | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LT House No.57-M Gulbergill, Lahore, Pa Tel : (92-42) 35441641, 3544 Faz: (92-42) 35441645 E-mail : info@g3ec.com URL : www.g3ec.com BILITATION & UPGRADATION BASIN TO SCHON CHOWRAN TRIAN TRAIL | i642 |
| 2. THI OF AN | ES: DIMENSIONS ARE IN FEET UNLESS HERWISE SPECIFIED. S DRAWING IS AN INTELLECTUAL PRO G3 ENGINEERING CONSULTANTS (PV O CANNOT BE REPRINTED OR REPRO THOUT PRIOR APPROVAL OF G3. | T.) LTD. |
| REVI | SIONS: | |
| No. | DESCRIPTION | DATE |
| | | |
| $\left \right $ | | |
| | | |
| | | |
| | | |
| | | |
| | ENDER DRAWIN | GS |
| DRA | SEPTIC TANK | |
| M. Im WATER Engr. APPR Syed | IN BY: DATE: AUG R SUPPLY & SEWERAGE ENGINE Wasif Ali OVED BY: Ali Abbas Gillani /ING NO: REV: 9/PH-06 | |



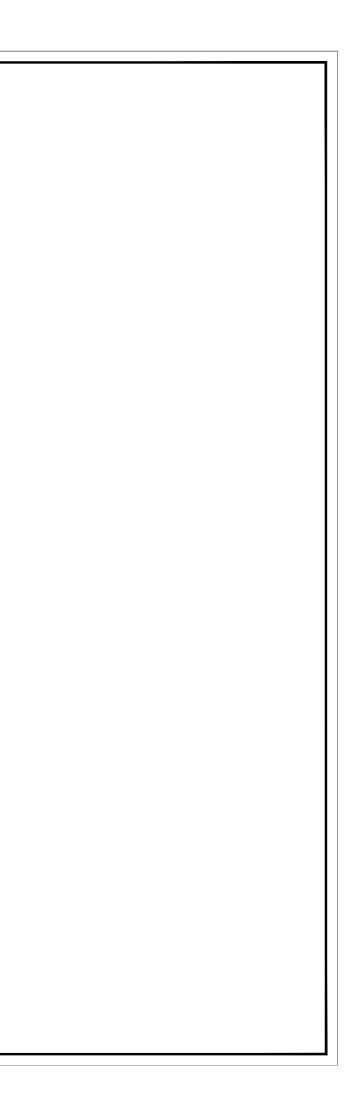


| | CLIENT: PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
|--|--|
| TO NEAREST | CONSULTANTS: GargineEring Goodultants (pvr)LTD. Huse No.57-M GulbergHI, Lahore, Pakistan Huse No.57-M GulbergH |
| VASH BASIN TRAP | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| - | REVISIONS: |
| ER CLOSET | No. DESCRIPTION DATE |
| The second secon | TENDER DRAWINGS |
| | DRAWING TITLE: Miscellaneous Details |
| ' - | DRAWN BY: DATE: M. Imran AUG .2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani DRAWING NO: REV: 0249/PH-08 4 SCALE (A3): SHEET: N.T.S |





PUBLIC HEALTH DRAWING Park-St-9



LIST OF DRAWINGS

| Sr.# | DESCRIPTION | DRG. # | | | | |
|------|---|------------|--|--|--|--|
| 01 | LIST OF DRAWINGS | 0249/PH-00 | | | | |
| 02 | GENERAL NOTES | 0249/PH-01 | | | | |
| | WATER SUPPLY SYSTEM | | | | | |
| 03 | WATER SUPPLY SYSTEM (GROUND FLOOR PLAN) | 0249/PH-02 | | | | |
| 04 | WATER SUPPLY SYSTEM (ROOF PLAN) | 0249/PH-03 | | | | |
| | SEWERAGE & DRAINAGE SYSTEM | | | | | |
| 05 | SEWERAGE SYSTEM (GROUND FLOOR PLAN) | 0249/PH-04 | | | | |
| 06 | DRAINAGE SYSTEM (ROOF PLAN) | 0249/PH-05 | | | | |
| | MISCELLANEOUS DETAILS | | | | | |
| 07 | TYPICAL SEPTIC TANK PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-06 | | | | |
| 08 | TYPICAL GULLY TRAP & MANHOLE PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-07 | | | | |
| 09 | MISCELLANEOUS DETAILS-01 | 0249/PH-08 | | | | |
| 10 | MISCELLANEOUS DETAILS-02 | 0249/PH-09 | | | | |
| 11 | MISCELLANEOUS DETAILS-03 | 0249/PH-10 | | | | |

| СГ | LIENT: | |
|---|---|----------|
| Q | PROJECT IMPLEMENTAT UNIT (PIU) KNIF | |
| REH BOA | CONSULTANTS: G ENGINEERING CONSULTANTS (PVT)LTD. House No.57-M Gubergill, Lahore, Pakist House No.57-M Gubergill, Lahore, Pakist Pakist (92-42) 3541641, 354164 E-mail : (92-42) 354164 E-mail : (92-42) 354164 E-mail : www.gae.com ROJECT: ABILITATION & UPGRADATION CONTAINED ESTRIAN TRAIL | 2 DF |
| 1. / (2. 1 ()))) | DTES: ALL DIMENSIONS ARE IN FEET UNLESS DTHERWISE SPECIFIED. FHIS DRAWING IS AN INTELLECTUAL PROPI OF G3 ENGINEERING CONSULTANTS (PVT.) NUD CANNOT BE REPRINTED OR REPRODU WITHOUT PRIOR APPROVAL OF G3. | LTD. |
| No. | DESCRIPTION | DATE |
| | | |
| | | |
| | | |
| - | | |
| | | |
| | | |
| _ | | |
| ן ן | | S |
| | WING TITLE: | S |
| DR L | AWING TITLE: LIST OF DRAWING | |
| DR L DRA M. WAT Enç | AWING TITLE: LIST OF DRAWING WN BY: Imran ER SUPPLY & SEWERAGE ENGINEEF gr.Wasif Ali | S 021 |
| DRA DRA M. WAT Eng APF System | AWING TITLE: LIST OF DRAWING WN BY: Imran ER SUPPLY & SEWERAGE ENGINEEF | S 021 |
| DRA M. WAT Eng APF Sye DRA 024 | AWING TITLE: LIST OF DRAWING WN BY: Imran ER SUPPLY & SEWERAGE ENGINEER Gr.Wasif Ali PROVED BY: ad Ali Abbas Gillani | S 021 |

PUBLIC HEALTH GENERAL NOTES

- 1. THESE GENERAL NOTES ARE PROVIDED TO SUPPLEMENT THE WRITTEN SPECIFICATION FOR THIS PROJECT. REFER TO THE SPECIFICATIONS FOR MORE DETAILED REQUIREMENTS OF THIS PROJECT.
- 2. PERFORM ALL WORK IN A WORKMAN LIKE MANNER, IN COMPLIANCE WITH THE LATEST ADOPTED EDITIONS OF ALL GOVERNING CODES AND STANDARDS. IF CONFLICTS ARISE, REQUEST RESOLUTION FROM THE ARCHITECT. IF REQUIRED INFORMATION IS MISSING FROM THIS DRAWING (I.E, DUCT SIZE OR PIPE SIZE), REQUEST WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO THE EXECUTION
- 3. PROVIDE ALL MINOR INCIDENTAL ITEMS SUCH AS OFFSETS, FITTINGS, ETC, REQUIRED AS PART OF THE WORK EVEN THOUGH NOT SPECIFICALLY SHOWN ON DRAWINGS. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ITEMS OF EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEMS.
- 4. THE PLUMBING DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING, DUCT WORK. MECHANICAL EQUIPMENT AND APPURTENANCES, AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF THEIR TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE PLUMBING DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK AND PROVIDE SUCH FITTINGS, VALVES AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
- 5. VERIFY DIMENSIONS GOVERNING PLUMBING WORK AT THE BUILDING. DO NOT SCALE THE PLUMBING DRAWINGS FOR DIMENSIONS. TAKE DIMENSIONS. MEASUREMENTS, LOCATIONS, LEVELS, ETC, FROM THE ACTUAL FIELD CONDITIONS AND ARCHITECTURAL DRAWINGS.
- 6. EXAMINE ALL ADJOINING WORK ON WHICH THE PLUMBING WORK IS DEPENDENT OF MAXIMUM EFFICIENCY AND REPORT DESIGN CONFLICTS WHICH MUST BE CORRECTED PRIOR TO EXECUTION. NO WAIVER OF RESPONSIBILITY SHALL BE CLAIMED OR ALLOWED DUE TO FAILURE TO REPORT UNFAVORABLE CONDITIONS AFFECTING THE PLUMBING WORK
- 7. CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPING, VALVES, CONTROLS, INSULATION ETC. TO ALL PLUMBING EQUIPMENT SCHEDULED OR INDICATED ON PLANS REGARDLESS OF WHETHER PIPING, VALVES, CONTROLS, INSULATION ETC. ARE SPECIFICALLY SHOWN OR NOT PLUMBING EQUIPMENT INSTALLATION SHALL BE 100% COMPLETE FOR PROPER EQUIPMENT FUNCTION AND/OR OPERATION AT COMPLETION OF PROJECT
- 8. THE ARCHITECTURAL AND ENGINEERING DRAWINGS ARE COMPLEMENTARY. CONTRACTORS SHALL ACKNOWLEDGE THE ARCHITECTURAL AS WELL AS ALL THE ENGINEERING DRAWINGS AND INCLUDE ALL WORK NECESSARY TO ACHIEVE A COMPLETE WORKING, INSTALLATION FOR ANY DEVICE OR EQUIPMENT WHICH MAY BE SHOWN ON ONE DRAWING BUT NOT SHOWN ON ANOTHER.

- 9. LOCATION OF PIPES, DUCTS, SWITCHES, PANELS, EQUIPMENT AND FIXTURES SHALL BE ADJUSTED TO ACCOMMODATE THE WORK OR INTERFERENCES ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH PIPE AND DUCT PRIOR TO EABRICATION
- 10. LOCATION OF EXISTING UTILITIES AND EXISTING UNDERGROUND PLUMBING ARE BASED ON THE SITE INFORMATION AVAILABLE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES AND EXISTING UNDERGROUND PLUMBING PRIOR TO FABRICATION AND ERECTION OF WORK TO AVOID ALL INTERFERENCES. VERIFICATION SHALL BE BY SITE INSPECTION, EXCAVATION, OR WHATEVER MEANS NECESSARY TO DETERMINE EXACT LOCATIONS.
- 11. CONTRACTOR SHALL OBTAIN BUILDING PERMIT AND ARRANGE ALL REQUIRED INSPECTIONS WITH THE APPROPRIATE REGULATORY AGENCY. ALERT CONSULTANT OF ALL ITEMS NOT DEPICTED ON DRAWINGS. DO NOT PROCEED WITH FURTHER WORK UNTIL WRITTEN RESPONSE IS RECEIVED FROM CONSULTANT

12 CONTRACTOR SHALL VERIFY GAS PRESSURE DELIVERED BY METER AT BUILDING.

13. TEST THREADED NATURAL GAS PIPING AT 20 PSIG FOR A TEST PERIOD OF 2 HOURS. TEST PRESSURE SHALL NOT FALL OVER 5% DURING TEST PERIOD TO PASS. IF PIPING FAILS TEST, INVESTIGATE AND REPAIR THE SOURCE OF

14. PROVIDE SLEEVES AT ALL PIPING PENETRATIONS OF CONCRETE OR MASONRY FLOOR, WALL OR ROOF CONSTRUCTION.

15. PROVIDE GLASS WOOL INSULATION TO ALL HOT WATER (EXPOSED) AND COLD WATER (AT ROOF) PIPE LINE INCLUDING PROTECTIVE COATINGS.

16.USE NEAREST FLOOR TRAP FOR THE AC DRAINAGE.

- 17. TEST ALL PIPING SYSTEMS IN WHICH ANY ALTERATIONS HAVE BEEN MADE FOR COMPLIANCE WITH THE LATEST EDITION OF GOVERNING BUILDING CODE DOMESTIC HOT AND COLD WATER PIPING SHALL BE SUBJECT TO 100 PSIG FOR A MINIMUM 2 HOURS. DOMESTIC WASTE AND VENT PIPING SHALL BE TESTED AT 10' STATIC HEAD FOR A PERIOD GREATER THAN 15 MINUTES. IF REQUIRED PRESSURE DROPS BY MORE THAN 3% DURING ITS TEST DURATION, INVESTIGATE THE SOURCE OF LEAK, REPAIR THE LEAK, AND RETEST THE SYSTEM FOR THE REQUIRED TEST PERIOD. INSPECT ALL W & V JOINTS WHILE UNDER PRESSURE AND REPAIR ALL LEAKS.
- 18.INSTALL ALL PLUMBING FOUIPMENT IN COMPLETE COMPLIANCE WITH MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS, ARRANGE ALL FOUIPMENT TO PERMIT FASY REMOVAL OF COLLS MOTORS FILTERS AND ALL OTHER PARTS WHICH REQUIRE PERIODIC REPLACEMENT OR MAINTENANCE. 19. COORDINATE ALL ELECTRICAL VOLTAGE CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING PLUMBING EQUIPMENT.

LEGEND FOR WATER SUPPLY SYSTEM

| | | ER PIPE (C.W) SURE COLD WATER (N.P.C.W) | | | - | OUTER DIA | | ERNAL DIA |
|---------|-------|--|----------|------|----|-----------|--------|--------------|
| | | R PIPE (H.W) | = : : | ; == | 3 | (mm) | (mm) | INCH |
| RE-CIRC | ULATI | ON HOT WATER (R.H.W) | | _ | ⇒ | 20 | 13.2 | 0.52 |
| GAS P | | | L | | \$ | 25 | 16.4 | 0.65 |
| | | VALVE (A.R.V) | 6 | | | 32 | 21.2 | 0.83 |
| BALL V | | | | | | 40 | 26.6 | 1.05 |
| | | E SLICE VALVE (G.V / S.V) REDUCER VALVE (P.R.V) | | | | 50 | 33.2 | 1.31 |
| | | ATION PUMP | R | | | 63 | 42 | 1.65 |
| | | NAL GEYSER | * | | | 75 | 50 | 1.97 |
| CHECK | (VAL | VE | Ŏ | | | 90 | 60 | 2.36 |
| BOOST | FER P | PUMP | 8 | | | 110 | 73.2 | 2.88 |
| SUBME | ERSIE | BLE PUMP | 4 | | | | | |
| H.W.G | = | HOT WATER GENERATO | R | L.D | = | LIST OF | - DRAV | VING |
| T.A | = | TO ABOVE | | G.N | = | GENER | AL NO | TES |
| T.B | = | TO BELOW | | W.S | = | WATER | SUPP | LY |
| F.A | = | FROM ABOVE | | G.S | = | GAS SY | STEM | |
| F.B | = | FROM BELOW | | S.W | = | SEWEF | RAGE S | SYSTE |
| D-1 | = | DUCT - 1 | | D.R | = | DRAINA | GE SY | STEM |
| M.D | = | MISCELLANEOUS DETA | LS - | T/W | = | TUBE \ | VELL | |

- 1. ALL WATER SUPPLY PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONE ARE EXTERNAL DIAMETERS. ALL WATER SUPPLY PIPES ARE OF PPRC UNLI NOTED OTHERWISE
- 2. ALL GAS PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONED ARE INTERNAL DIAMETERS.
- 3. ALL WATER SUPPLY PIPES ENTERING THE WALLS SHALL BE PROVIDED WI ISOLATION VALVES.

LEGEND FOR SEWERAGE & DRAINAGE SYSTEM

| SOIL PIPE (S.P) | 2 | PIPE DIA | & SLOPE |
|---------------------------|------------------|----------|---------|
| WASTE PIPE (W.P) | | | |
| VENT PIPE (V.P) | = $=$ $=$ | 3" | 1:75 |
| CLEANOUTS | C.O O — — | 4" | 1:100 |
| FLOOR TRAP | FT 🔯 | 6" | 1:150 |
| GULLY TRAP | G.T | 8" | 1:175 |
| MANHOLE | М.Н | 10" | 1:250 |
| RAIN WATER COLLECTION PIT | R.W.C.P | 12" | 1:300 |

1. ALL PIPE DIAMETERS ARE IN INCHES UNLESS OTHERWISE MENTIONED. 2. VENT PIPES SHALL BE EXTENDED UP TO ONE FT ABOVE FINISHED ROOFLEVEL

3. SOIL, WASTE AND VENT PIPES UP TO 6" DIA. ARE uPVC (NON PRESSURIZE) TYPE-B CONFIRMING TO ISO 3633:2002 EXTERNAL SEWER PIPES SHALL BE OF FLOW LINE CONFIRMING TO EN 1401 UNLESS OTHERWISE NOTED

4. SLOPE OF ROOF VALLEY LINE SHOULD BE BETWEEN 0.01 TO 0.02

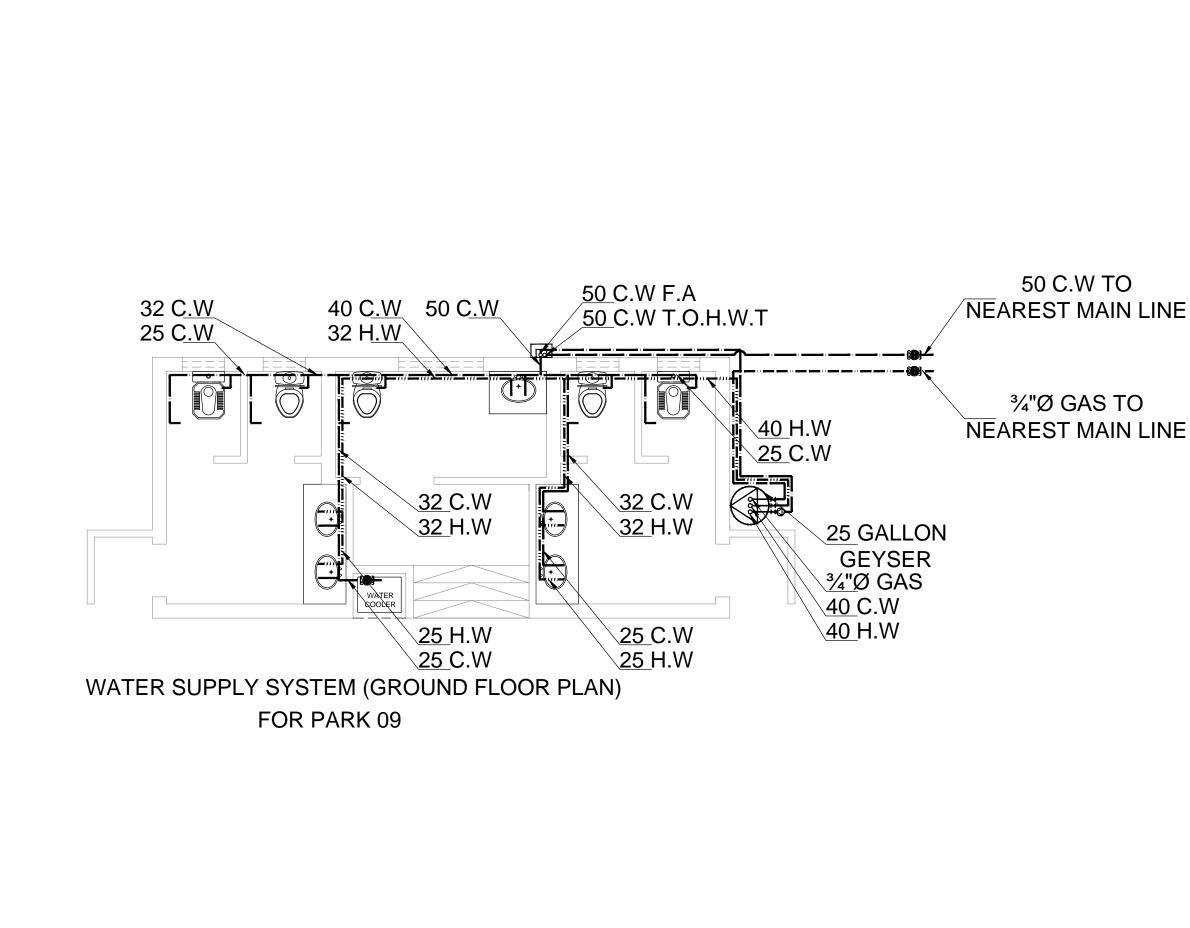
5. BOTTLE TRAP SHALL BE USED WITH ALL WASH BASIN.

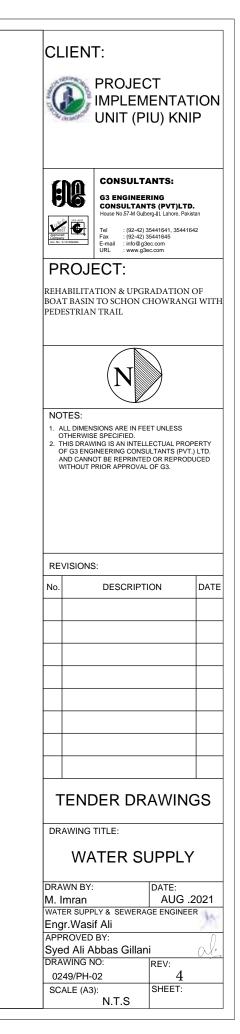
6. R.C.C PIPES SHALL BE SHALIMAR OR EQUIVALENT MAKE

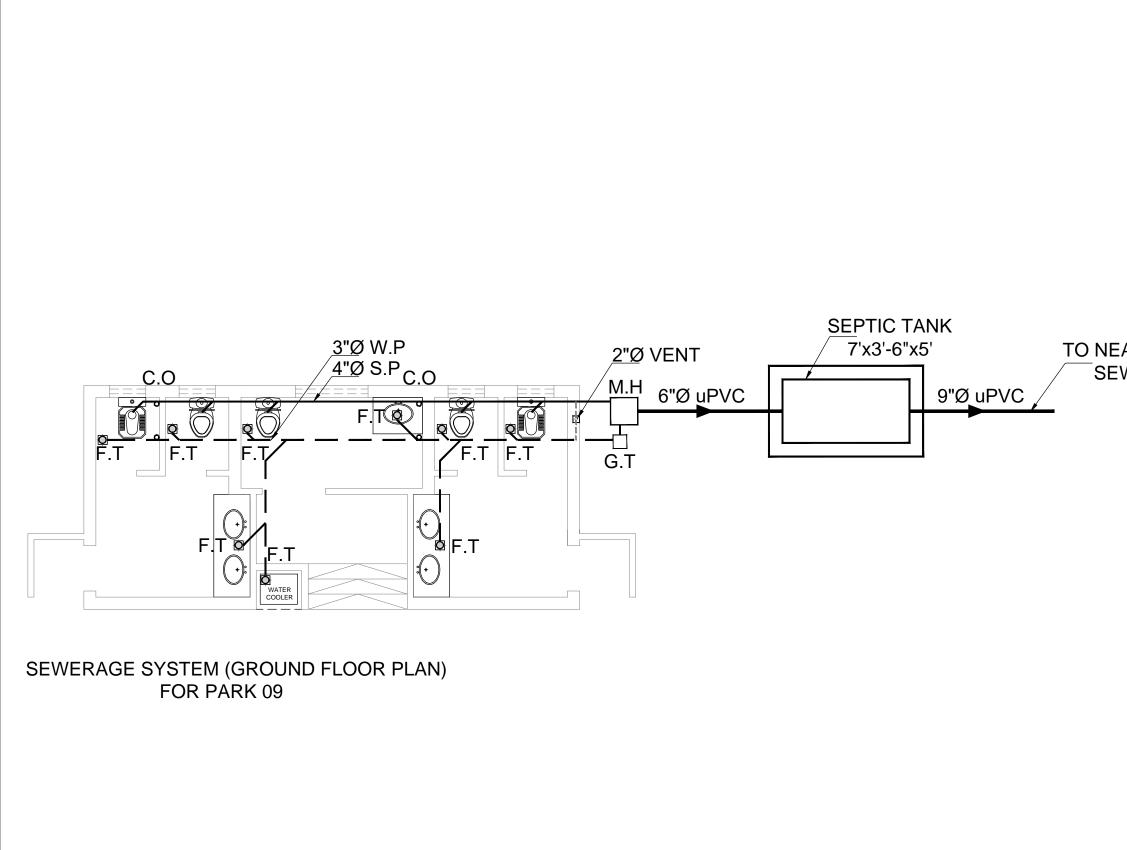
7. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER

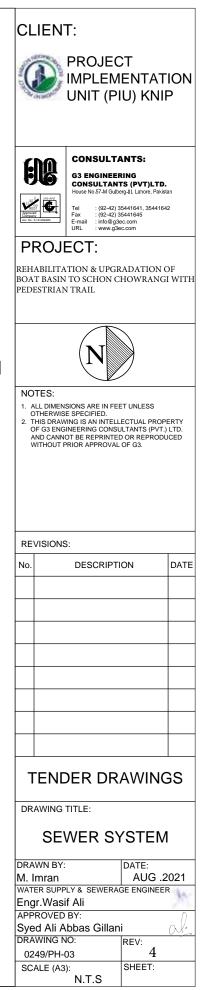
- 4. ALL WATER SUPPLY PIPES ARE PPR (PN 20) UNLESS OTHERWISE MENTION 5. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS,
- ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED.
- 6. ALL GAS PIPES ARE G.I. UNLESS OTHERWISE MENTIONED.
- 7. ALL WATER SUPPLY AND GAS PIPES ARE IN DUCTS, OR CONCEALED IN WAI BURIED IN FLOORS
- 8. ALL PIPING SHALL BE TESTED FOR LEAKAGE BEFORE THE JOINTS ARE CO

| | CLIEN | T: | |
|--|---|---|---|
| | ٨ | PROJECT IMPLEMENTATION UNIT (PIU) KNIP | 1 |
| SCHEDULE OF PIPE DIA $ \frac{1}{(rm)} \overline{) 112(rm)} \overline{) 100H} \overline{) 20} \overline{) 13.2} 0.52 \overline{) 25} \overline{) 16.4} 0.65 \overline{) 32} 2.1.2 0.83 \overline{) 40} 2.6.6 1.05 \overline{) 32} 2.1.2 0.83 \overline{) 40} 2.6.6 1.05 \overline{) 32} 2.1.3 \overline{) 63} 4.2 1.6.5 \overline{) 75} \overline{50} 1.97 \overline{) 90} 6.0 2.3.6 \overline{) 100} 7.3.2 2.88 \overline{) 100} \overline{) 100} 7.3.2 2.88 \overline{) 100} \overline{) 100} \overline{) 2.3.6} \overline{) 100} \overline{] 100}] 10$ | NOTES: 1. ALL DIMEN OTHERWIS 2. THIS DRAW OF G3 ENG AND CANN | TION & UPGRADATION OF TO SCHON CHOWRANGI WIT | |
| EM | | _ | _ |
| PIPE DIA & SLOPE 3 1:75 4" 1:100 | REVISIONS | DESCRIPTION DAT | E |
| 6" 1:150 8" 1:175 10" 1:250 12" 1:300 | | | |
| RWISE MENTIONED. OVE FINISHED | | | |
| VC (NON PRESSURIZE) EWER PIPES SHALL BE HERWISE NOTED I 0.01 TO 0.02 N. AKE. UNDER. OTHERWISE MENTIONED. S, TEES, SOCKETS, | | DER DRAWINGS | _ |
| ONED. | DRAWING | | |
| OR CONCEALED IN WALL OR E THE JOINTS ARE COVERED. | | NERAL NOTES | |
| | Engr.Was | AUG .2021 PLY & SEWERAGE ENGINEER if Ali BY: bbas Gillani IO: 01 REV: 4 | ~ |

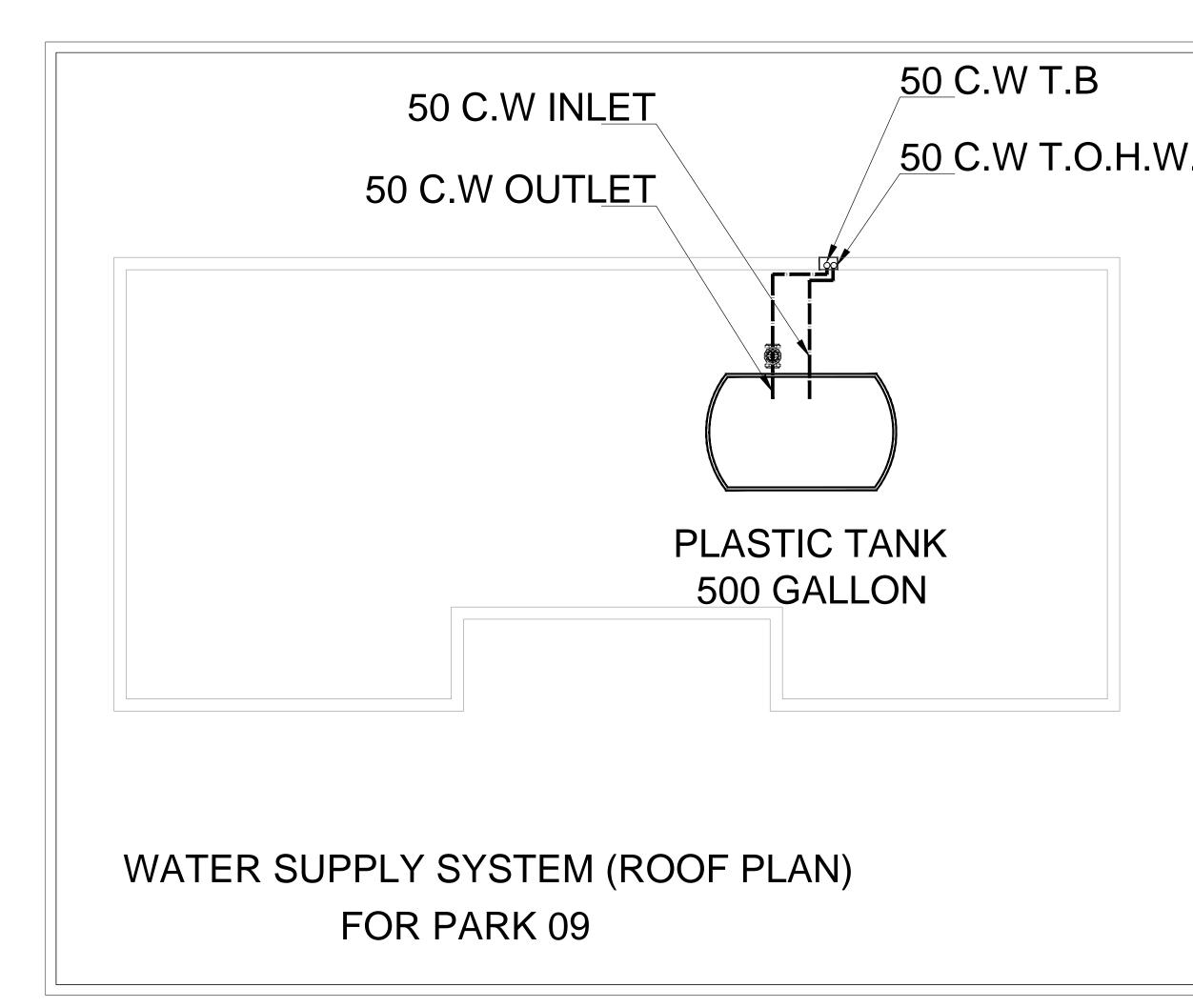




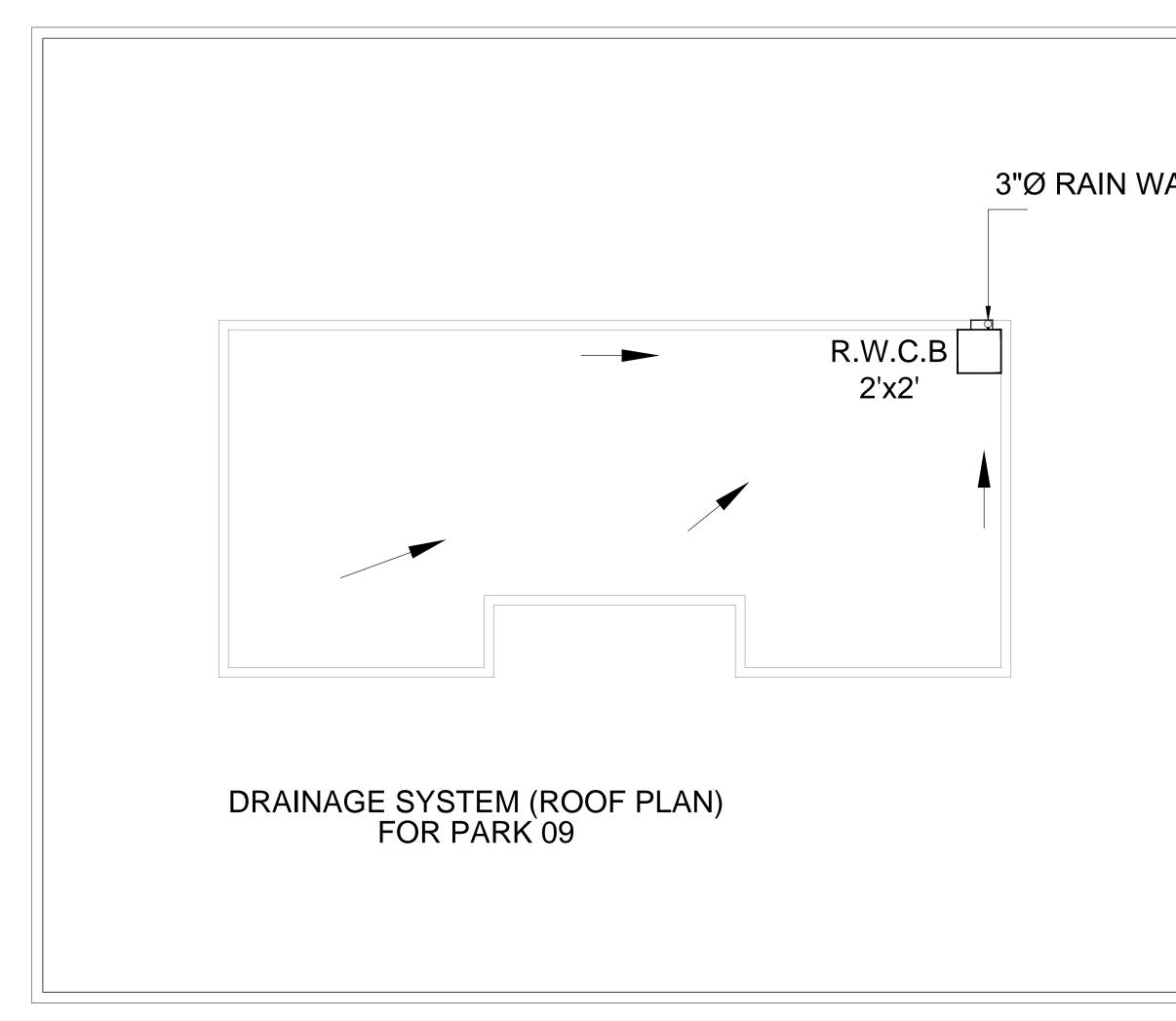




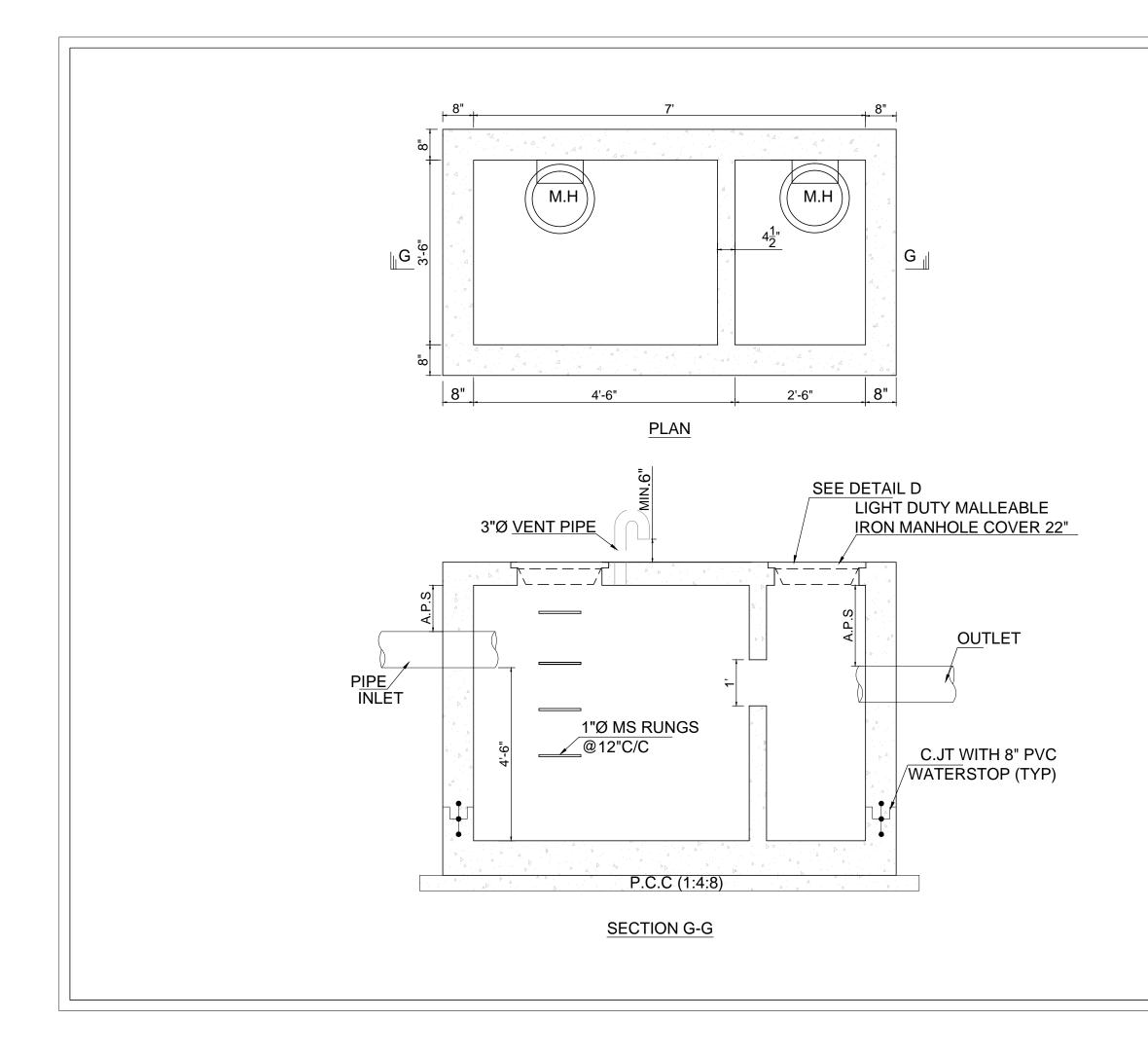
TO NEAREST MAIN



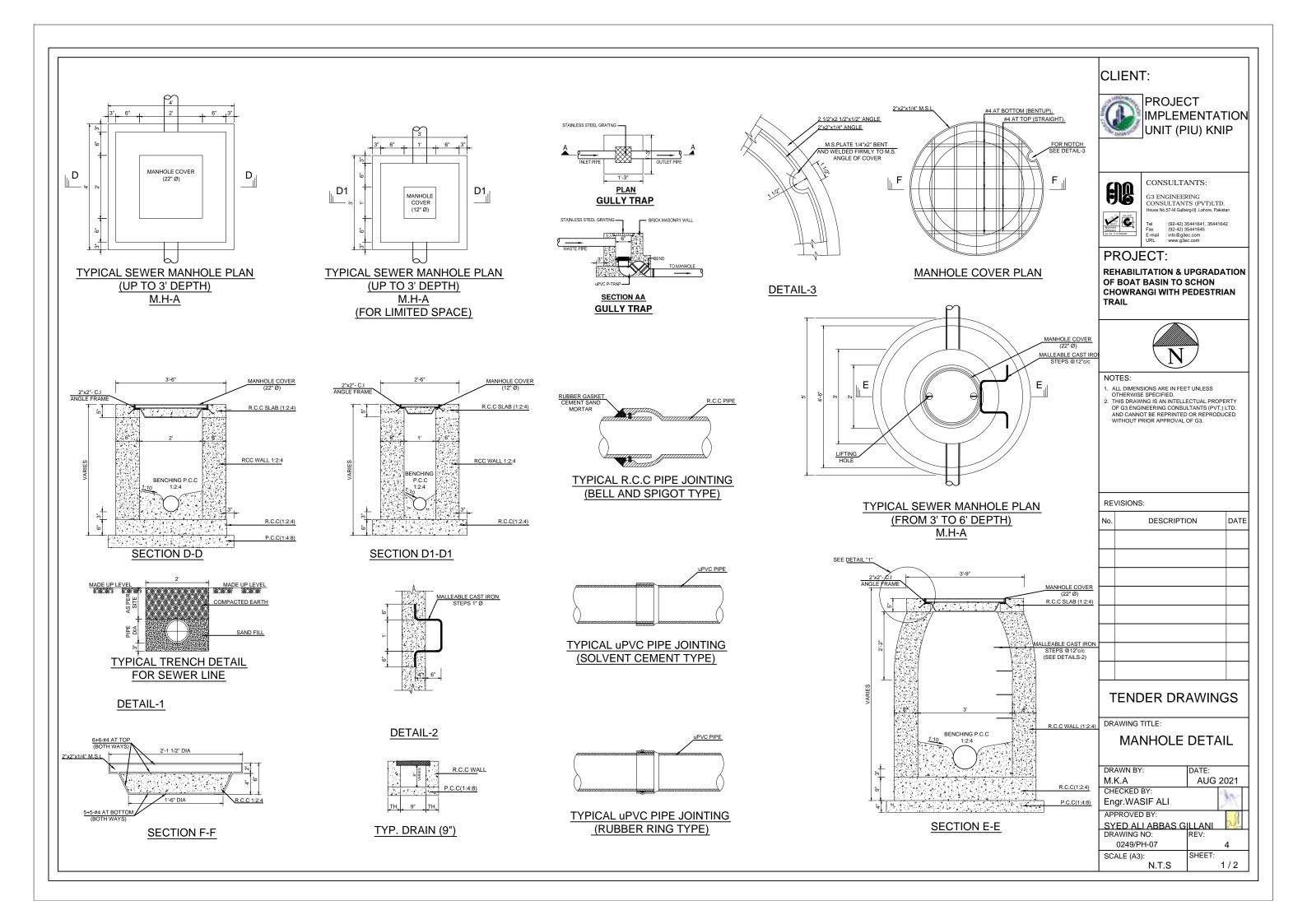
| | CL | | PROJE | | | |
|---|---|------------------|--|--|------|--|
| т | C | | IMPLEN UNIT (P | | | |
| | | | | | | |
| | E Solution Approved Act. No. 5 | | CONSULT. G3 ENGINEE CONSULTAN House No.57-M Gult Tel : (92-42) Fax : (92-42) E-mail : info@g3 URL : www.g3 | RING TS (PVT)LTD verg-III, Lahore, Pakis 35441641, 354416- 35441645 kec.com | itan | |
| | PF | ROJI | ECT: | | | |
| | BOAT | Г BASIN | TION & UPG TO SCHON (TRAIL | | | |
| | | | | | | |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED | | | | | |
| | w | ITHOUT F | RIOR APPROVAI | _ OF G3. | | |
| | | | | | | |
| | | | | | | |
| | REVISIONS: | | | | | |
| | No. | | DESCRIPT | ION | DATE | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | Щ | | | | | |
| | | | | | | |
| | | | | | | |
| | TENDER DRAWINGS | | | | | |
| | | | | | | |
| | W | ATE | | | DOF | |
| | DRA | WN BY: | PLA | N DATE: | | |
| | M. Ir | mran | | AUG .2 | | |
| | Eng | r.Wasi | | GE ENGINEE | ĸ | |
| | | ROVED d Ali A | BY: bbas Gillar | ni | ol. | |
| | | WING N | | REV: | M. | |
| | | 49/PH-0 | | 4 SHEET: | | |
| | SUP | ¬∟≃ (A3 |): N.T.S | | | |

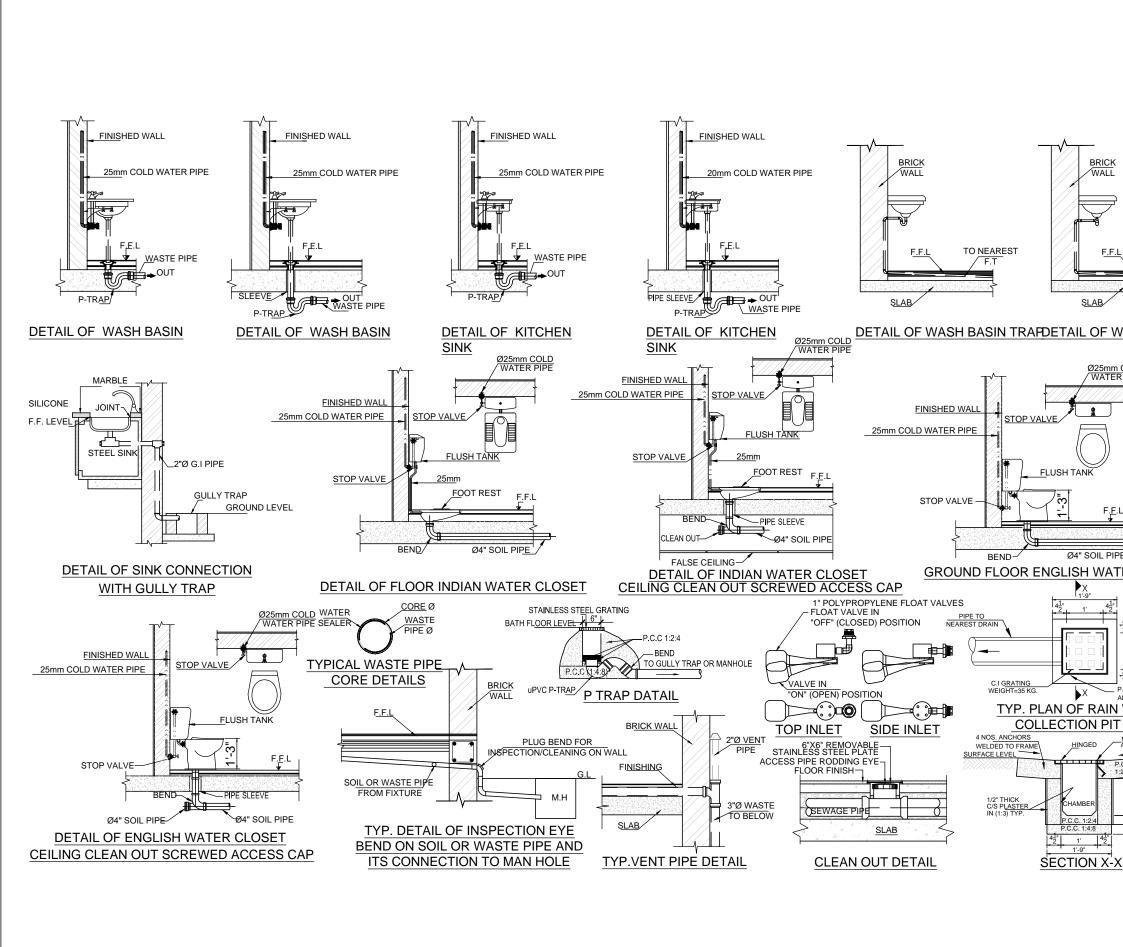


| | CLIENT: PROJECT IMPLEMENTATION | | | | |
|------|---|---|--|--|--|
| ATED | UNIT (PIU) KNIP | - | | | |
| ATER | CONSULTANTS: G3 Engineering G3 Engineering G3 Engineering G3 Engineering G3 Engineering House No.57-M Guiberg-III. Lahore, Pakistan Tel : (02-20) 35441641, 35441642 Fax : (02-20) 35441641, 35441642 Fax : (02-20) 35441643 E-mail : info@g3ec.com URL : www.g3ec.com | | | | |
| | PROJECT: REHABILITATION & UPGRADATION OF BOAT BASIN TO SCHON CHOWRANGI WITH PEDESTRIAN TRAIL | | | | |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. | | | | |
| | REVISIONS: | | | | |
| | No. DESCRIPTION DATE | | | | |
| | | _ | | | |
| | | _ | | | |
| | | _ | | | |
| | DRAWING TITLE: DRAINAGE SYSTEM ROOF | | | | |
| | | | | | |
| | DRAWN BY: DATE: M. Imran AUG .2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali | | | | |
| | APPROVED BY: Syed Ali Abbas Gillani DRAWING NO: 0249/PH-05 REV: 4 | ~ | | | |
| | SCALE (A3): SHEET: N.T.S | | | | |

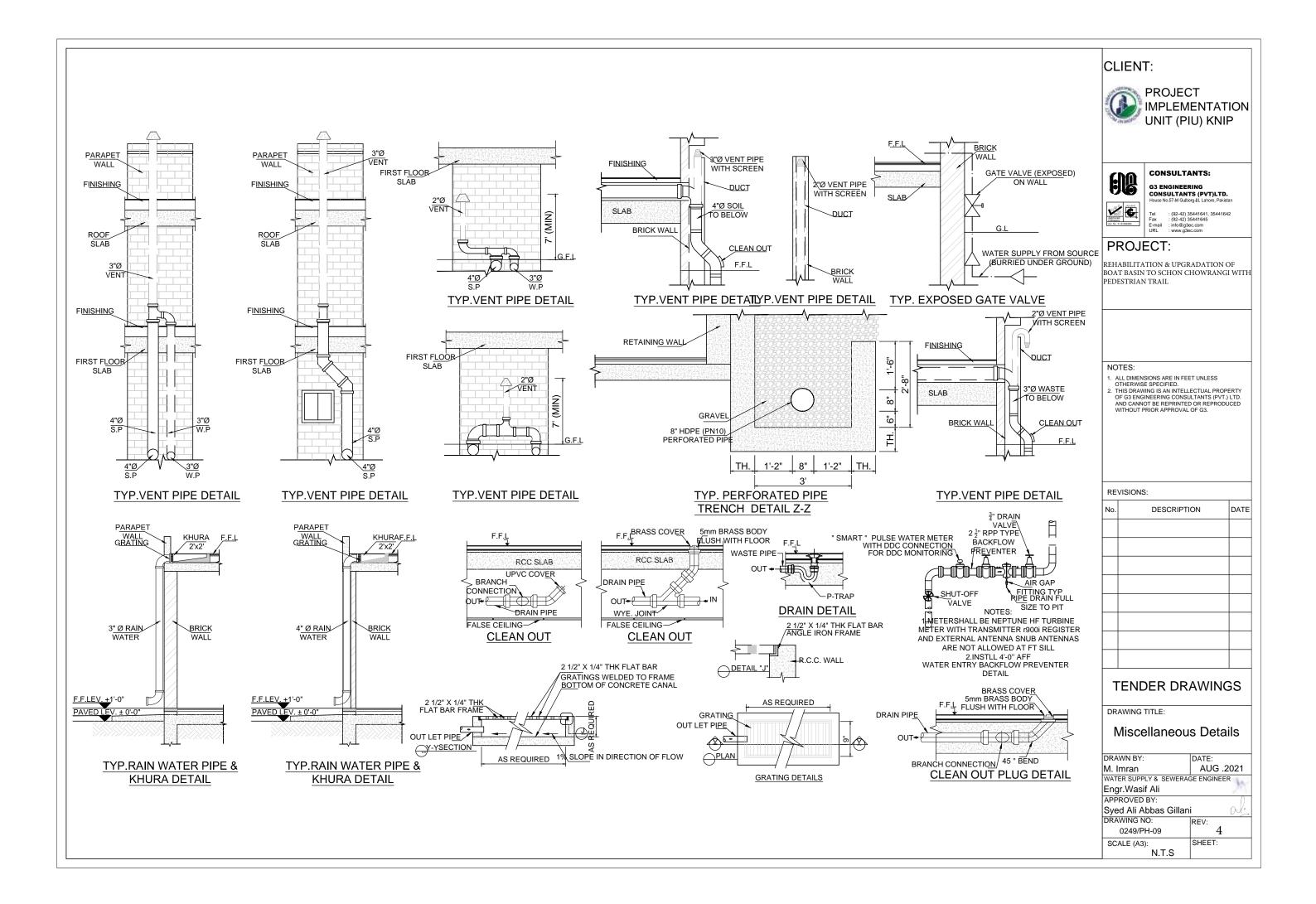


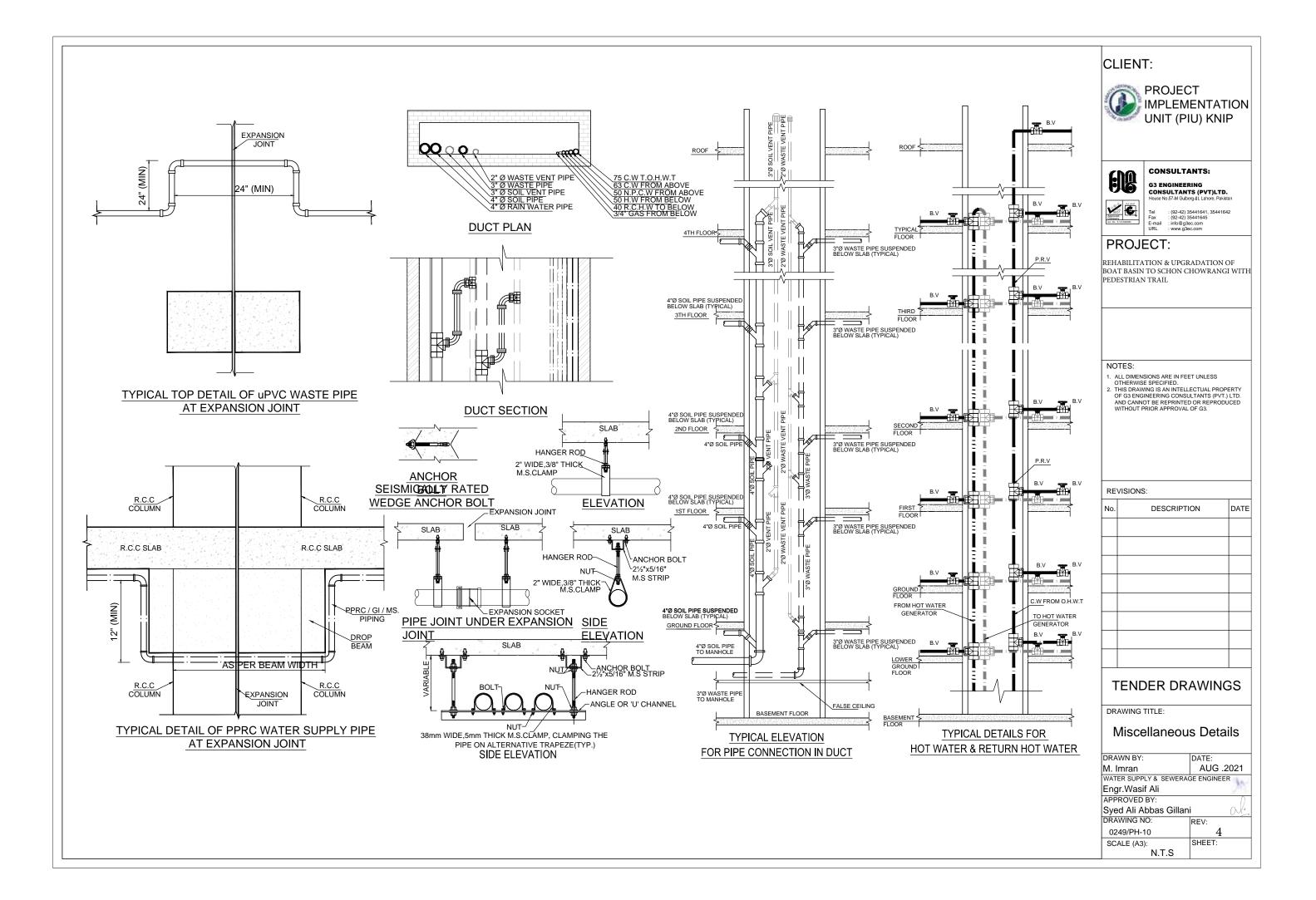
| CLIENT: PROJECT IMPLEMENTATION UNIT (PIU) KNIP | | | | | |
|--|--|-----------------------------|--|--|--|
| | ATION & UPGRADATIONN TO SCHON CHOWRA | Pakistan 141642 NN OF | | | |
| NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. | | | | | |
| REVISION | IS: | | | | |
| No. | DESCRIPTION | DATE | | | |
| | | _ | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | _ | | | |
| | TENDER DRAWINGS | | | | |
| DRAWING TITLE: | | | | | |
| SEPTIC TANK | | | | | |
| DRAWN BY M. Imran WATER SUP Engr.Was | AUG PLY & SEWERAGE ENGIN sif Ali | 5.2021 EER | | | |
| - | Abbas Gillani NO: REV: -06 | <u>al.</u> 4 | | | |



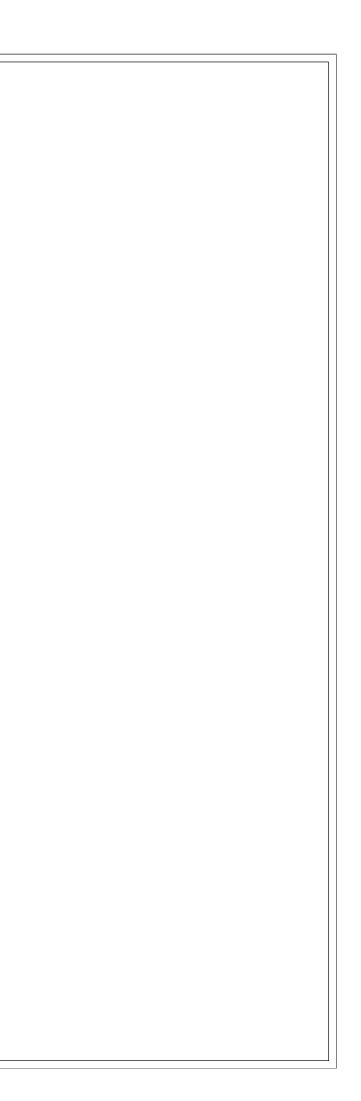


| | CLIENT: PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
|--|--|
| TO NEAREST F.T | CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. Couse No.57-M Gulberg-III. Lahore, Pakistan Couse No.57-M Gulberg-III. Lahore, Pakistan Tel : (20-42) 35441641, 35441642 :: (20-42) 35441645 :: (20-42) 354641645 :: (20-42) 354645 :: (20-42) 354645 :: (20-42 |
| ASH BASIN TRAP | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| ER CLOSET | REVISIONS: No. DESCRIPTION DATE |
| The second secon | TENDER DRAWINGS |
| | Miscellaneous Details DRAWN BY: DATE: M. Imran AUG .2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: Syed Ali Abbas Gillani DRAWING NO: REV: 0249/PH-08 4 SCALE (A3): SHEET: |



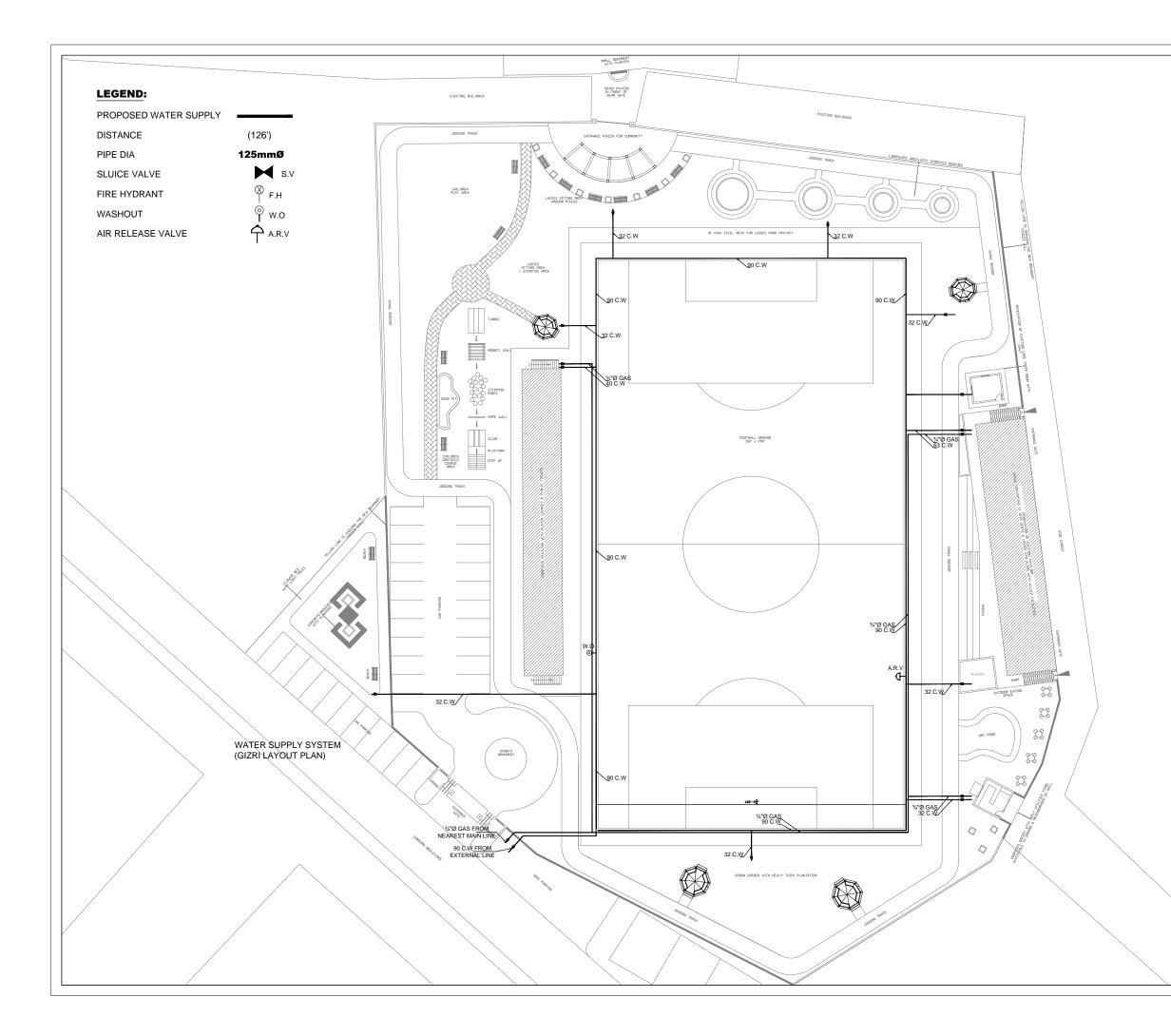


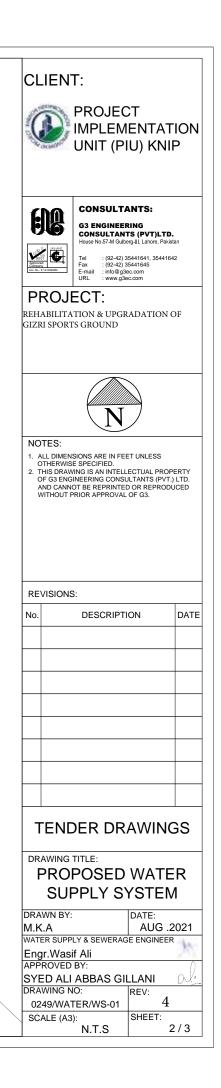
PUBLIC HEATH DRAWINGS MASTER PLAN REHABILITATION AND UPGRADATION OF GIZRI SPORTS GROUND

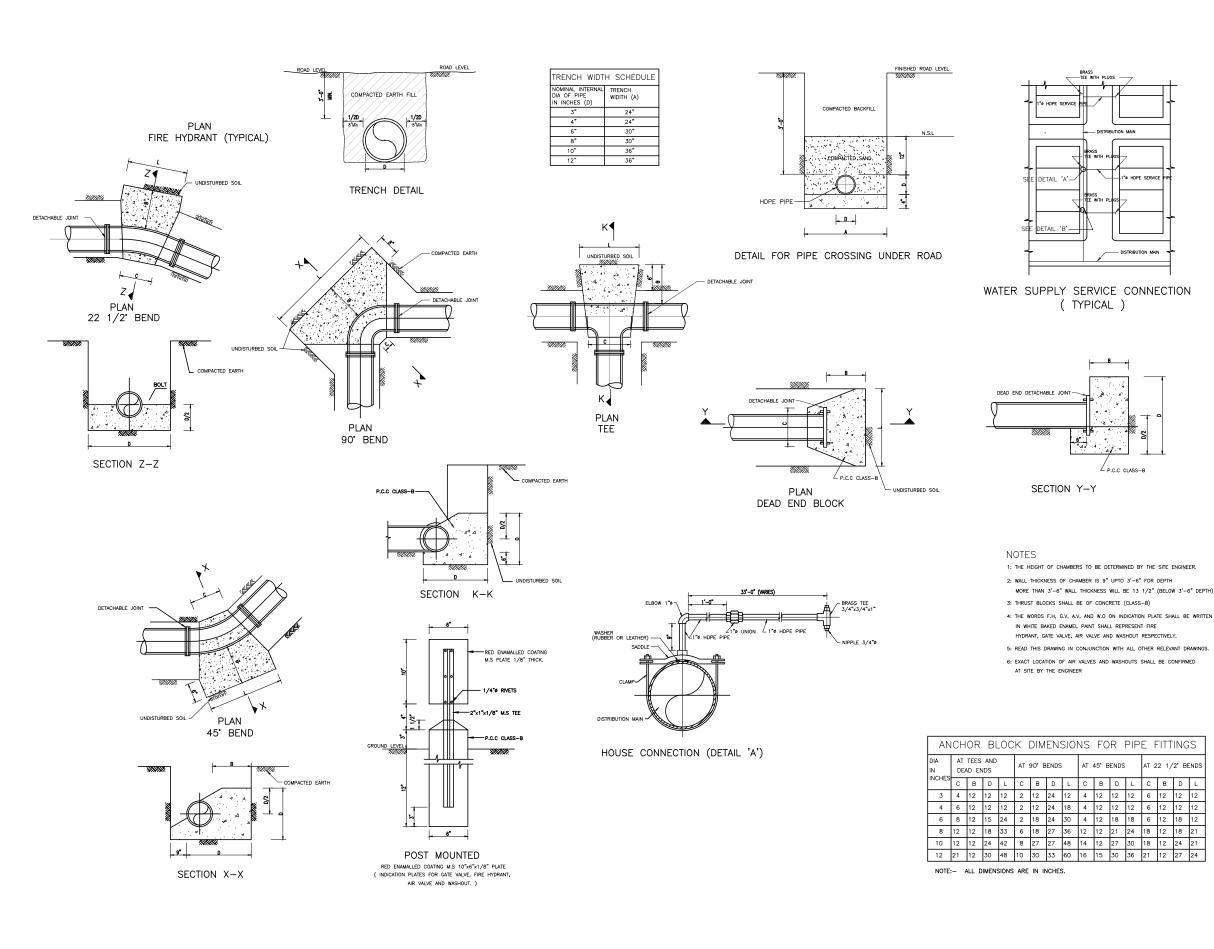


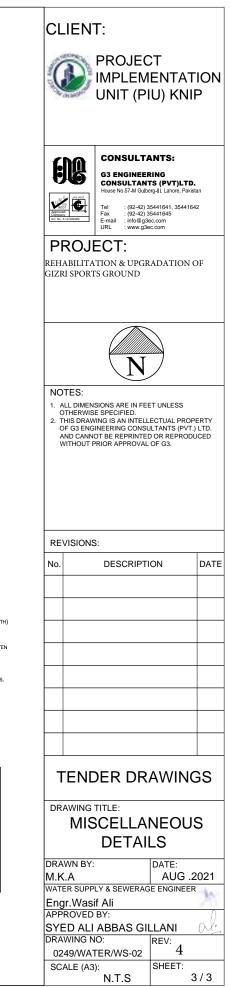
| S.NO | DESCRIPTION | DRG.NO: |
|------|-----------------------------------|---------|
| | WATER SUPPLY SYSTEM | |
| 01 | WATER SYSTEM LAYOUT PLAN (01 / 2) | WS-01 |
| 02 | MISCELLANEOUS DETAILS | WS-02 |

| 1 |
|--|
| CLIENT: |
| PROJECT IMPLEMENTATION UNIT (PIU) KNIP |
| CONSULTANTS: GAUGE CONSULTANTS: CONSULTANTS (PV7)LTD. House No.57.4 Gulberg-III, Lahore. Pakistan Tel (22-42) 35.441641, 35.441642 (22-42) 35.441641, 35.441642 E-mail (22-42) 35.441643 (22-42) 35.441641 (22-42) 35.441641 (22-42) 35.441641 (22-42) 35.441642 E-mail (22-42) 35.441642 E-mail (22-42) 35.441642 E-mail (22-42) 35.441642 E-mail (22-42) 35.441643 (22-42) 35.441641 (22-42) 35.441641 (2 |
| N |
| NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. |
| REVISIONS: |
| No. DESCRIPTION DATE |
| |
| |
| |
| |
| TENDER DRAWINGS DRAWING TITLE: LIST OF DRAWINGS |
| DRAWN BY: DATE: M.K.A AUG .2021 |
| WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: |
| SYED ALI ABBAS GILLANI DRAWING NO: REV: 0249/WATER/WS-00 4 SCALE (A3): SHEET: N.T.S 1 / 3 |







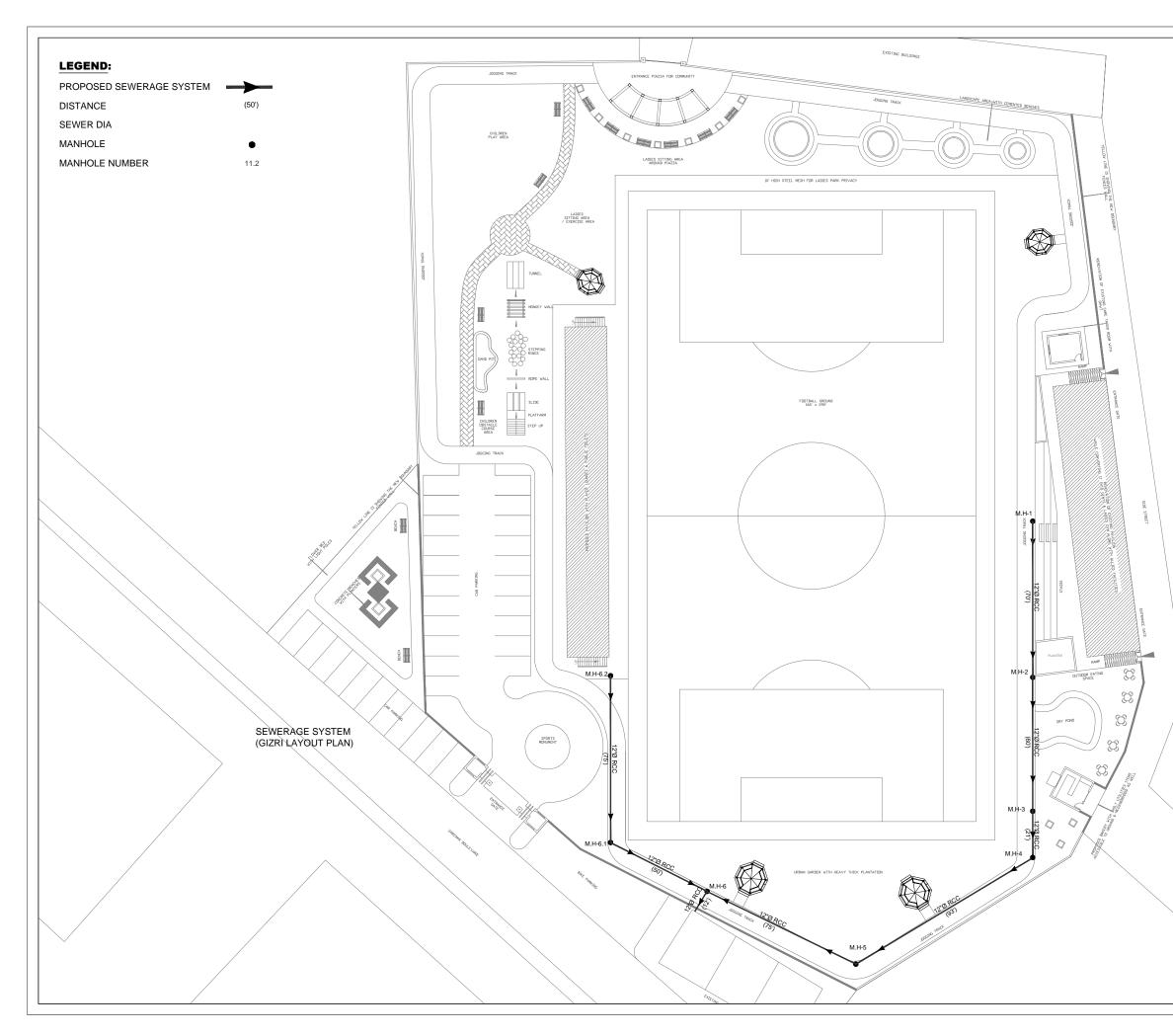


| | PIPE FITTINGS | | | | | |
|----|---------------------|----|----|----|----|--|
| DS | DS AT 22 1/2" BENDS | | | | | |
|) | L | С | в | D | L | |
| | 12 | 6 | 12 | 12 | 12 | |
| | 12 | 6 | 12 | 12 | 12 | |
| 1 | 18 | 6 | 12 | 18 | 12 | |
| | 24 | 18 | 12 | 18 | 21 | |
| | 30 | 18 | 12 | 24 | 21 | |
| | 36 | 21 | 12 | 27 | 24 | |

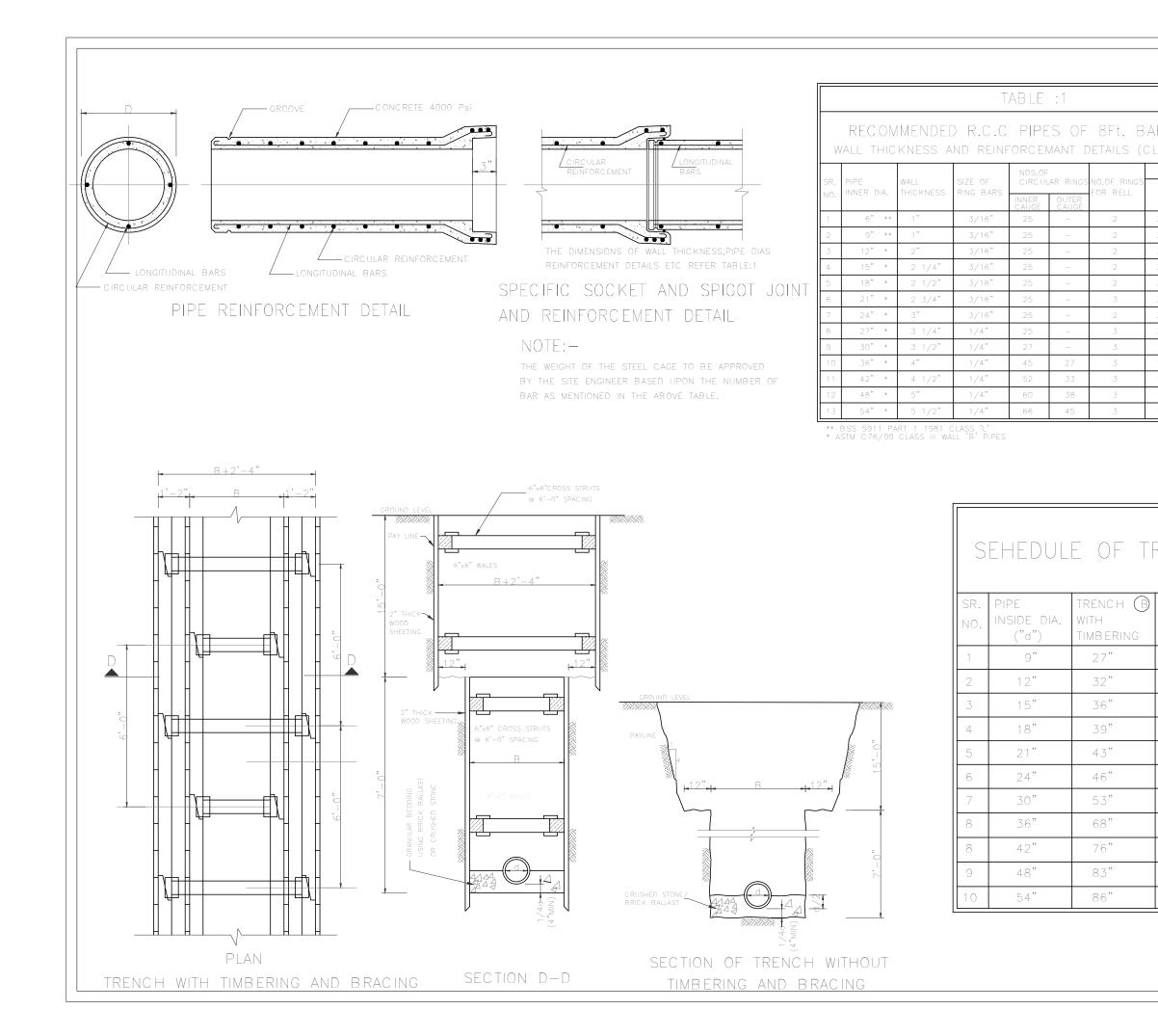
| S.NO | DESCRIPTION | DRG.NO: |
|------|-------------------------------|---------|
| | SEWERAGE SYSTEM | |
| 01 | SEWERAGE SYSTEM LAYOUT PLAN | SW-01 |
| 02 | TRENCH AND R.C.C. PIPE DETAIL | SW-02 |
| 03 | MANHOLE & MISCELLANEOUS | SW-03 |

| CLIEI | NT: | | | |
|--|--|---|---------|--|
| ٢ | PROJEC IMPLEM UNIT (P | IENTAT | | |
| REHABILI | House No.57-M Gulb | RING TS (PVT)LTD. erg-III, Lahore, Pakist 35441641, 3544164 35441645 iec.com ec.com | an 2 | |
| OTHER 2. THIS DF | 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. | | | |
| REVISIC No. | NS: DESCRIPT | ION | DATE | |
| | | | | |
| | | | | |
| | IDER DR | AWINC | S | |
| LIS | ST OF DF | DATE: | _ | |
| Engr.Wa APPROV SYED A DRAWING | ED BY: ALI ABBAS GI | | | |
| SCALE (| | SHEET: | | |



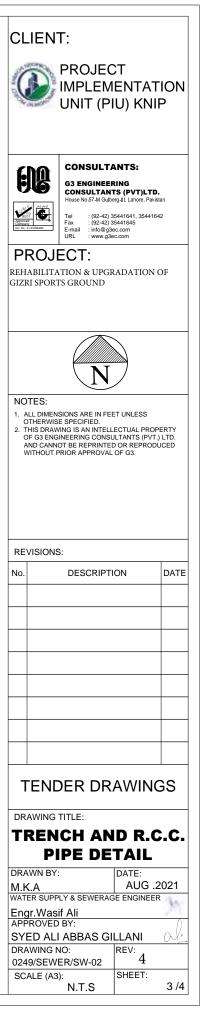


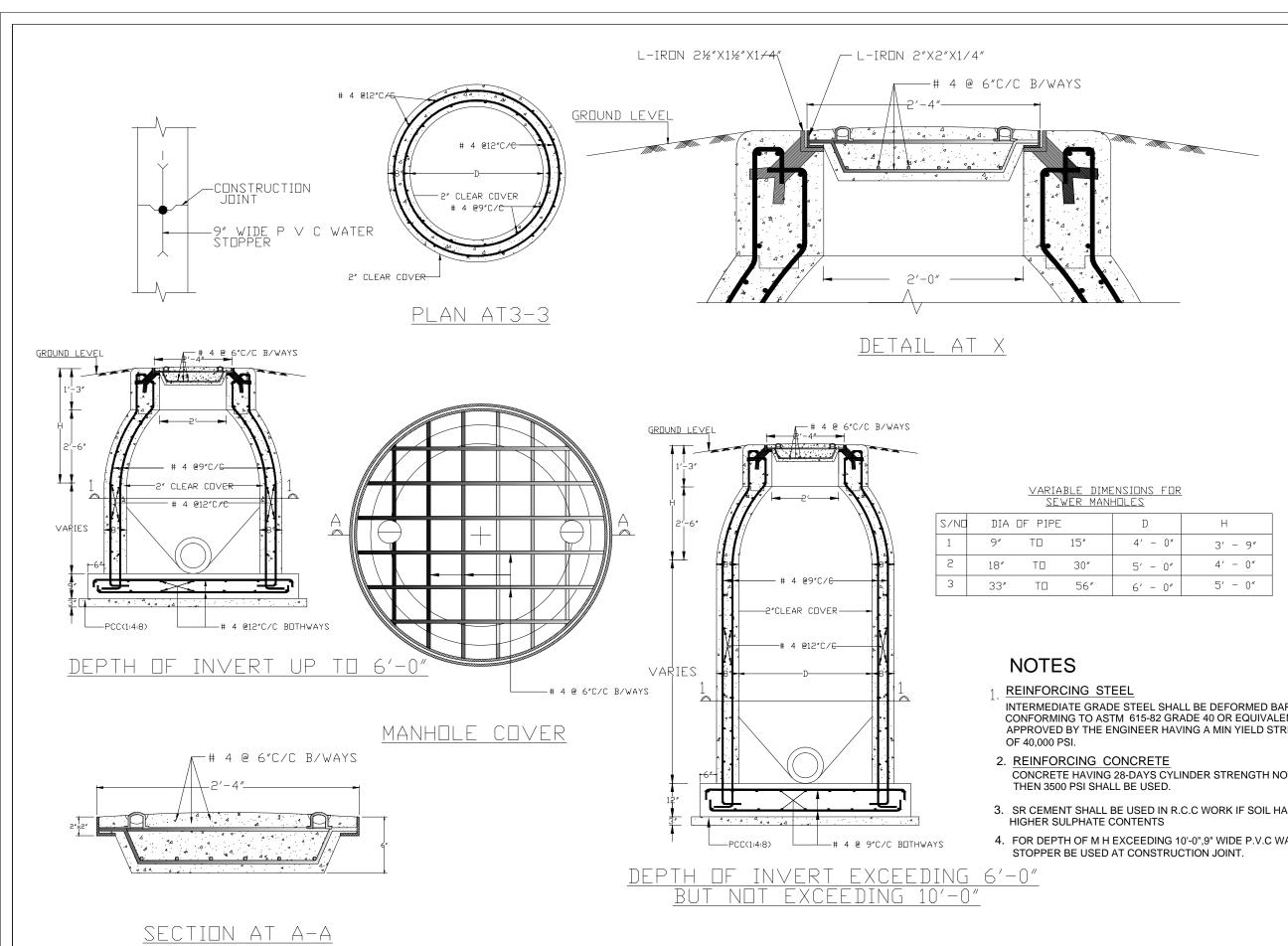
| | CLIENT: | | |
|--------------|--|-------|--|
| | PROJECT | | |
| | | | |
| | UNIT (PIU) KNI | | |
| | | | |
| | | | |
| | CONSULTANTS: | | |
| | G3 ENGINEERING CONSULTANTS (PVT)LTD | | |
| | House No.57-M Gulberg-III, Lahore, Pakis | stan | |
| | Image: Constant Tel : (92-42) 35441641, 354416 Fax : (92-42) 35441645 Fax : (92-42) 35441645 E-mail : info@g3ec.com URL : www.g3ec.com | 42 | |
| | PROJECT: | | |
| | REHABILITATION & UPGRADATION | OF | |
| | GIZRI SPORTS GROUND | | |
| | | | |
| | | | |
| | | | |
| | N | | |
| | | | |
| | NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS | | |
| | OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROF | | |
| | OF G3 ENGINEERING CONSULTANTS (PVT AND CANNOT BE REPRINTED OR REPROD WITHOUT PRIOR APPROVAL OF G3. | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | REVISIONS: | | |
| | No. DESCRIPTION | DATE | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| / | | | |
| | | | |
| | | | |
| | | ~ ~ | |
| | | 33 | |
| | DRAWING TITLE: | | |
| | PROPOSED | | |
| | SEWERAGE SYST | EM | |
| | DRAWN BY: DATE: MKA AUG | 2021 | |
| \ \ | WATER SUPPLY & SEWERAGE ENGINEE | | |
| \mathbf{i} | Engr.Wasif Ali APPROVED BY: | 0 | |
| | SYED ALI ABBAS GILLANI | al | |
| | DRAWING NO: REV: 0249/SEWER/SW-01 4 | | |
| | SCALE (A3): SHEET: N.T.S | 2/4 | |
| | N.1.0 | - ' ' | |



| RREL LENGTH Lass III wall 'b') | | | |
|-----------------------------------|---------------------------|-----------------------|--|
| STRA | ight bar | S | |
| DIA. | NO.OF B INNER CAUGE | ARS OUTER CAUGE | |
| 3/16" | 4 | - | |
| 3/16" | 4 | _ | |
| 3/16" | 4 | - | |
| 3/16" | 4 | _ | |
| 3/16" | 4 | - | |
| 3/16" | 4 | - | |
| 3/16" | 4 | - | |
| 3/16" | 4 | - | |
| 1/4" | 8 | _ | |
| 1/4" | 8 | 8 | |
| 1/4" | 8 | 8 | |
| 1/4" | 8 | 8 | |
| 1/4" | 8 | 8 | |

| RENCH |
|---------------------------------|
| WIDTH B WITHOUT TIMBERING |
| 36" |
| 36" |
| 42" |
| 46" |
| 50" |
| 54" |
| 62" |
| 67" |
| 72" |
| 88" |
| 98" |



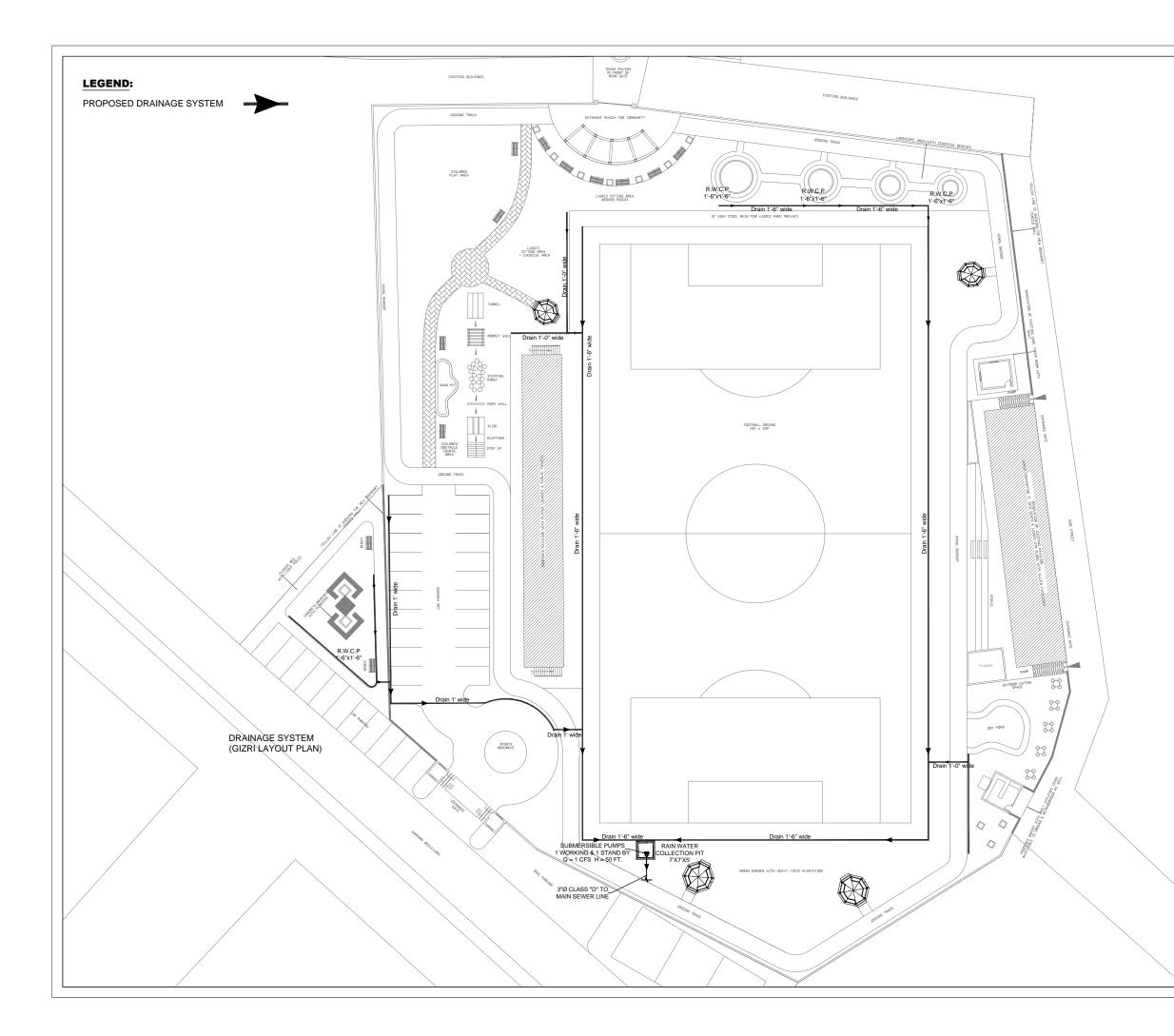


| | CLIEN | T: | | |
|------------------------------------|---|--|--|-------|
| | Ø | PROJE(IMPLEM UNIT (P | 1ENTAT | |
| | | Fax : (92-42) 3 E-mail : info@g3 URL : www.g3e | RING TS (PVT)LTD. erg-II, Lahore, Pakis i5441641, 3544164 i5441645 sec.com sec.com | 2 |
| | OTHERWIS 2. THIS DRAV OF G3 ENG AND CANN | ISIONS ARE IN FEE SE SPECIFIED. VING IS AN INTELL SINEERING CONSL IOT BE REPRINTEE PRIOR APPROVAL | ECTUAL PROPE ILTANTS (PVT.) O OR REPRODU | LTD. |
| | REVISION: | S: DESCRIPT | ION | DATE |
| ARS ENT AS RENGTH DT LESS | | | | |
| /ATER | DRAWING | DER DR TITLE: NHOLE | | |
| | DRAWING | BY: SIF ALI D BY: LABBAS G NO: //ER/SW-04 | REV: SHEET: | 021 |

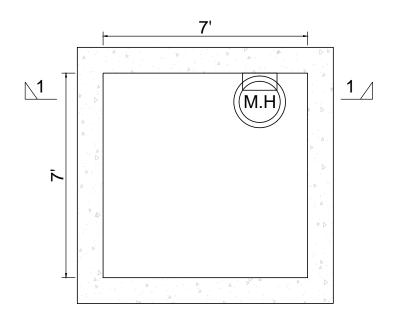
| | Н |
|----|---------|
|)″ | 3′ – 9″ |
| " | 4' - 0" |
| // | 5′ - 0″ |

| S.NO | DESCRIPTION | DRG.NO: |
|------|---|---------|
| | DRAINAGE SYSTEM | |
| 01 | DRAINAGE SYSTEM LAYOUT PLAN (01 / 2 | DR-01 |
| 02 | RAIN WATER COLLECTION PIT PLAN & DETAIL | DR-02 |
| 03 | DRAIN DETAILS | DR-03 |

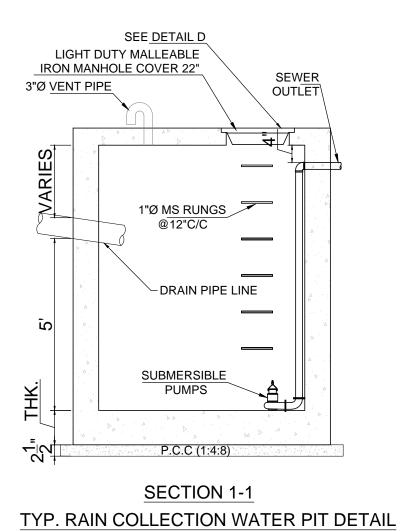
| CLIENT: | | | |
|---|--|------|--|
| PROJECT IMPLEMENTATION UNIT (PIU) KNIP | | | |
| | | | |
| Assert Assert Assert Assert Fax | NSULTANTS: ENGINEERING VSULTANTS (PV1)LTD No.57-M Gulterg-III, Lahore, Paki : (92-42) 35441641, 354416 : (92-42) 35441645 | stan | |
| URL | | | |
| PROJECT: REHABILITATION & UPGRADATION OF GIZRI SPORTS GROUND | | | |
| | | | |
| | | | |
| NOTES: | | | |
| NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PUT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED | | | |
| WITHOUT PRIOR | APPROVAL OF G3. | | |
| | | | |
| | | | |
| | | | |
| REVISIONS: | | | |
| No. DE | SCRIPTION | DATE | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| TENDER DRAWINGS | | | |
| DRAWING TITLI | Ξ: | | |
| LIST OF DRAWING | | | |
| DRAWN BY: M.K.A | DATE: AUG .: | 2021 | |
| WATER SUPPLY & | SEWERAGE ENGINEER | ۲ | |
| Engr.Wasif Ali APPROVED BY: | | 0 | |
| SYED ALI ABBAS GILLANI | | | |
| 0249/SEWER/ SCALE (A3): | | 4 | |
| | | 1/4 | |



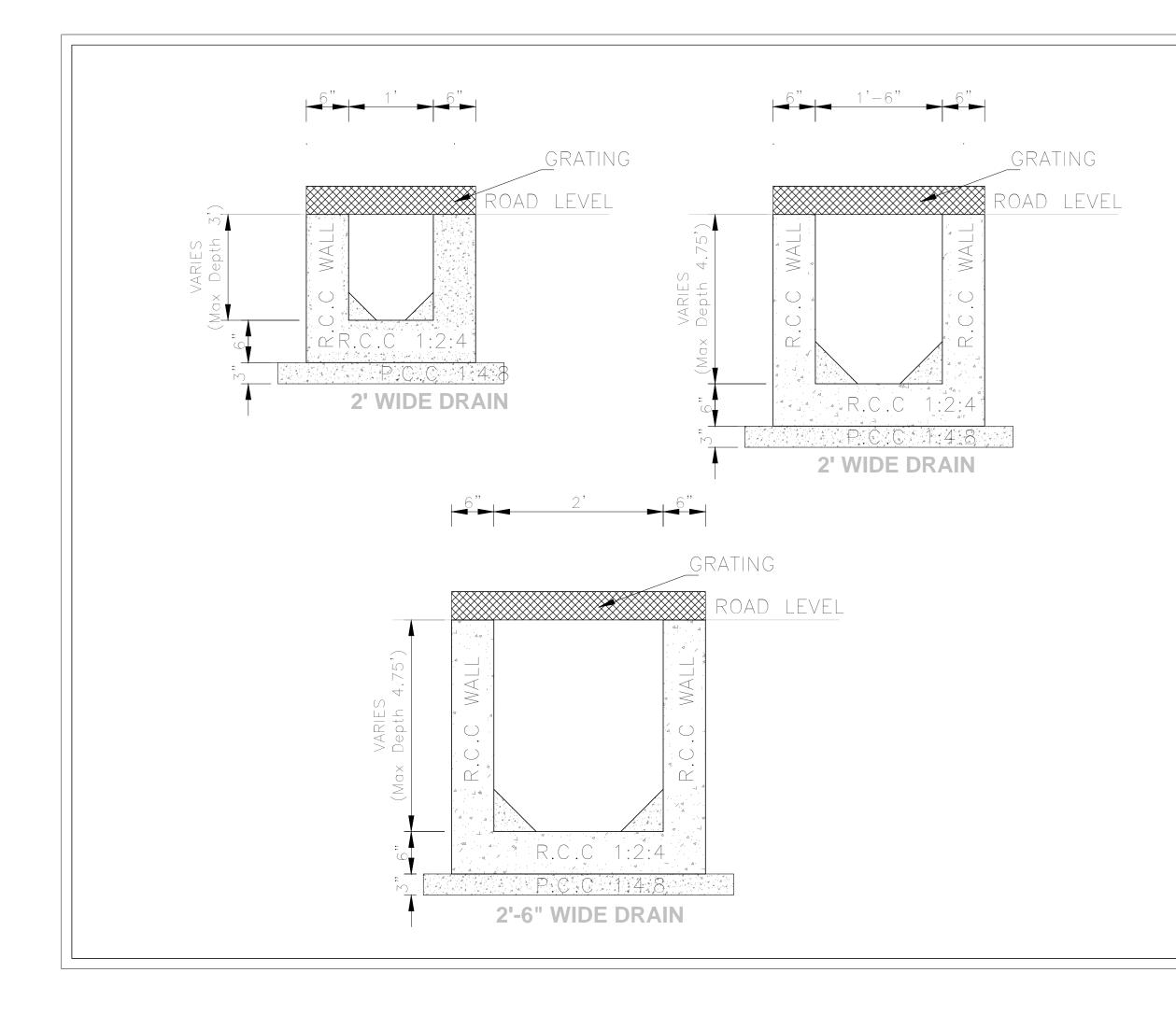
| CL | CLIENT: | | | |
|---|---|--|--|------------------|
| 10 | COPIE OF | PROJEC | די | |
| (| | IMPLEM | | ION |
| 100 | acaste | UNIT (PI | IU) KNII | > |
| | | | | |
| | | | | |
| ſ | M | CONSULTA G3 ENGINEER | | |
| | AS-ANZ | CONSULTAN House No.57-M Gulbo | erg-III, Lahore, Pakist | |
| Approv Compa Acc. No . | 150 01 ad ny 5 1410894MA | E-mail : info@g3i | 85441641, 3544164 85441645 ec.com | 2 |
| P | ROJI | | ec.com | |
| REH | ABILITA | TION & UPGF | RADATION (| OF |
| GIZI | RI SPORT | IS GROUND | | |
| | | | | |
| | | | \sim | |
| | | NI | | |
| | | | | |
| 1. A | | SIONS ARE IN FEE | ET UNLESS | |
| 2. 1 C | THIS DRAW OF G3 ENG | E SPECIFIED. /ING IS AN INTELL INEERING CONSL | JLTANTS (PVT.) | LTD. |
| | | OT BE REPRINTEI PRIOR APPROVAL | | ICED |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| RE No. | VISIONS | DESCRIPTI | | B 4 7 5 |
| 140. | | | | |
| | | | | DATE |
| | | | | DATE |
| | | | | DATE |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | END | DER DR | AWING | |
| DR | AWING | TITLE: | | |
| DR | AWING | | RAINA | |
| DR PF DRA | AWING ROP(| TITLE: DSED D | PRAINA EM | |
| DR PF | AWING ROP(WN BY: | TITLE: DSED D | DRAINA EM | SS GE |
| DR PF DRA M.H WAT Enç | AWING ROPC | TITLE: DSED D SYSTE | DRAINA EM | 3S (GE 021 |
| DRA DRA M.K WAT Enc APF SY | AWING COPC WN BY: (.A ER SUPP gr.Wasi PROVED ED ALI | TITLE: DSED D SYSTE LY & SEWERAG If Ali BY: ABBAS GI | DATE: AUG .2 ENGINEER | SS GE |
| DRA DRA M.K WAT Eng APF SYI | AWING ROPC WN BY: C.A ER SUPP gr.Wasi ROVED ED ALI WING N | TITLE: DSED D SYSTE LY & SEWERAG If Ali BY: ABBAS GI | PRAINA M DATE: AUG .2 E ENGINEER LLANI REV: 4 | SS GE |
| DRA M.K WAT Eng SYI DRA 02 | AWING ROPC WN BY: C.A ER SUPP gr.Wasi ROVED ED ALI WING N | TITLE: DSED D SYSTE LY & SEWERAG if Ali BY: ABBAS GI IO: n/DR-01 | DATE: AUG .2 SE ENGINEER LLANI REV: 4 SHEET: | SS GE |



RAIN COLLECTION WATER PIT PLAN

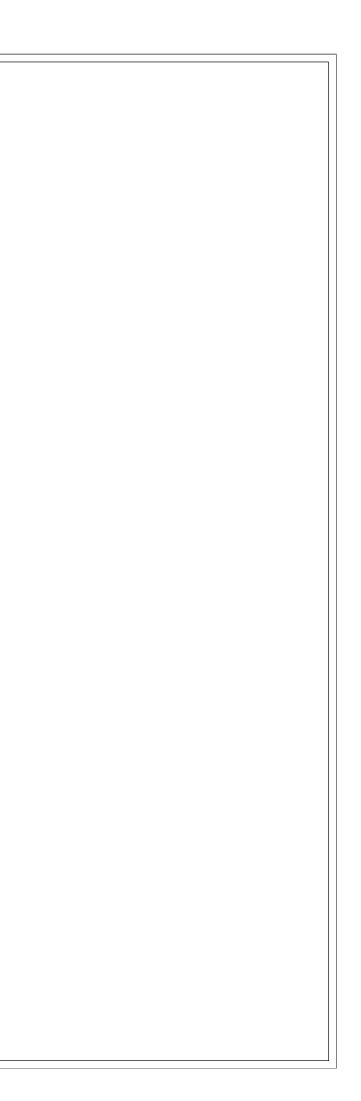


| CLIENT: | | | |
|---|--|------------|--|
| PROJECT IMPLEMENTATION UNIT (PIU) KNIP | | | |
| REH | CONSULTANTS: G Engineering G Consultants (pvr)LTD House No.57-M Gulberg-III, Lahore, Pakit House No.57-M Gulbe | stan 42 | |
| 1. A 0 2. T | OTHERWISE SPECIFIED. | | |
| AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. REVISIONS: No. DESCRIPTION DATE | | | |
| | | | |
| | | | |
| | | | |
| TENDER DRAWINGS | | | |
| DRAWING TITLE: RAIN WATER COLLECTION PIT PLAN & DETAIL | | | |
| DRAWN BY: M.K.A MIG .2021 WATER SUPPLY & SEWERAGE ENGINEER Engr.Wasif Ali APPROVED BY: SYED ALI ABBAS GILLANI DRAWING NO: DEEV: | | | |
| DRAWING NO: REV: 0249/DR-03 4 SCALE (A3): SHEET: N.T.S 3 / 4 | | | |

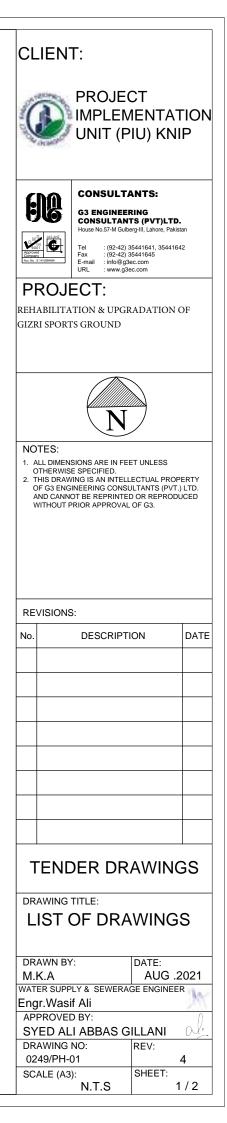


| CLIENT: | | | |
|--|----------|--|--|
| PROJECT IMPLEMENTATION UNIT (PIU) KNIP | | | |
| CONSULTANTS: G3 ENGINEERING CONSULTANTS (PVT)LTD. House No.57.M Gulberg-III. Lahore, Pakistan House No.57.M Gulberg-III. Lahore, Pakistan Tel :: (92-42) 35441641, 35441642. Ermail :: (92-42) 35441641. Ermail :: (92-42) 35441641. Erma | | | |
| N | | | |
| NOTES: 1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 2. THIS DRAWING IS AN INTELLECTUAL PROPERTY OF G3 ENGINEERING CONSULTANTS (PVT.) LTD. AND CANNOT BE REPRINTED OR REPRODUCED WITHOUT PRIOR APPROVAL OF G3. | | | |
| | | | |
| REVISIONS: | | | |
| | (TE | | |
| | ATE | | |
| | ATE | | |
| | ١TE | | |
| | \TE | | |
| | NTE | | |
| | \TE | | |
| | | | |
| No. DESCRIPTION DA | | | |
| No. DESCRIPTION DA | | | |
| No. DESCRIPTION DA Image: Constraint of the second | <u> </u> | | |
| No. DESCRIPTION DA Image: Description DA Ima | <u> </u> | | |

PUBLIC HEATH DRAWING REHABILITATION AND UPGRADATION OF GIZRI SPORTS GROUND



| Sr.# | DESCRIPTION | DRG. # | | | |
|------|---|------------|--|--|--|
| 01 | LIST OF DRAWINGS | 0249/PH-01 | | | |
| 02 | GENERAL NOTES | 0249/PH-02 | | | |
| | WATER SUPPLY SYSTEM | | | | |
| 03 | WATER SUPPLY SYSTEM (LEVEL-1)(EXISTING PAVILION) | 0249/PH-03 | | | |
| 04 | WATER SUPPLY SYSTEM (LEVEL-1)(PROPOSED PAVILION) | 0249/PH-04 | | | |
| 05 | WATER SUPPLY SYSTEM (LEVEL-1)(PROPOSED PAVILION) | 0249/PH-05 | | | |
| | SEWERAGE & DRAINAGE SYSTEM | | | | |
| 06 | SEWERAGE SYSTEM (LEVEL-1)(EXISTING PAVILION) | 0249/PH-06 | | | |
| 07 | SEWERAGE SYSTEM (LEVEL-1)(PROPOSED PAVILION) | 0249/PH-07 | | | |
| 08 | SEWERAGE SYSTEM (LEVEL-1)(PROPOSED PAVILION) | 0249/PH-08 | | | |
| | MISCELLANEOUS DETAILS | | | | |
| 09 | TYPICAL SEPTIC TANK PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-09 | | | |
| 10 | TYPICAL GULLY TRAP & MANHOLE PLAN, PIPE & SECTIONAL DETAILS | 0249/PH-10 | | | |
| 11 | MISCELLANEOUS DETAILS-01 | 0249/PH-11 | | | |
| 12 | MISCELLANEOUS DETAILS-02 | 0249/PH-12 | | | |
| 13 | MISCELLANEOUS DETAILS-03 | 0249/PH-13 | | | |



PUBLIC HEALTH GENERAL NOTES

- 1. THESE GENERAL NOTES ARE PROVIDED TO SUPPLEMENT THE WRITTEN SPECIFICATION FOR THIS PROJECT. REFER TO THE SPECIFICATIONS FOR MORE DETAILED REQUIREMENTS OF THIS PROJECT.
- 2. PERFORM ALL WORK IN A WORKMAN LIKE MANNER, IN COMPLIANCE WITH THE LATEST ADOPTED EDITIONS OF ALL GOVERNING CODES AND STANDARDS. IF CONFLICTS ARISE, REQUEST RESOLUTION FROM THE ARCHITECT. IF REQUIRED INFORMATION IS MISSING FROM THIS DRAWING (I.E, DUCT SIZE OR PIPE SIZE), REQUEST WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO THE EXECUTION.
- 3. PROVIDE ALL MINOR INCIDENTAL ITEMS SUCH AS OFFSETS, FITTINGS. ETC, REQUIRED AS PART OF THE WORK EVEN THOUGH NOT SPECIFICALLY SHOWN ON DRAWINGS. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ITEMS OF EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEMS.
- 4. THE PLUMBING DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING, DUCT WORK. MECHANICAL EQUIPMENT AND APPURTENANCES, AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF THEIR TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE PLUMBING DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK AND PROVIDE SUCH FITTINGS, VALVES AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
- 5. VERIFY DIMENSIONS GOVERNING PLUMBING WORK AT THE BUILDING. DO NOT SCALE THE PLUMBING DRAWINGS FOR DIMENSIONS. TAKE DIMENSIONS. MEASUREMENTS, LOCATIONS, LEVELS, ETC. FROM THE ACTUAL FIELD CONDITIONS AND ARCHITECTURAL DRAWINGS.
- 6. EXAMINE ALL ADJOINING WORK ON WHICH THE PLUMBING WORK IS DEPENDENT OF MAXIMUM EFFICIENCY AND REPORT DESIGN CONFLICTS WHICH MUST BE CORRECTED PRIOR TO EXECUTION. NO WAIVER OF RESPONSIBILITY SHALL BE CLAIMED OR ALLOWED DUE TO FAILURE TO REPORT UNFAVORABLE CONDITIONS AFFECTING THE PLUMBING WORK.
- 7. CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPING, VALVES, CONTROLS. INSULATION ETC. TO ALL PLUMBING EQUIPMENT SCHEDULED OR INDICATED ON PLANS REGARDLESS OF WHETHER PIPING, VALVES, CONTROLS, INSULATION ETC. ARE SPECIFICALLY SHOWN OR NOT PLUMBING EQUIPMENT INSTALLATION SHALL BE 100% COMPLETE FOR PROPER EQUIPMENT FUNCTION AND/OR OPERATION AT COMPLETION OF PROJECT.
- 8. THE ARCHITECTURAL AND ENGINEERING DRAWINGS ARE COMPLEMENTARY. CONTRACTORS SHALL ACKNOWLEDGE THE ARCHITECTURAL AS WELL AS ALL THE ENGINEERING DRAWINGS AND INCLUDE ALL WORK NECESSARY TO ACHIEVE A COMPLETE WORKING. INSTALLATION FOR ANY DEVICE OR EQUIPMENT WHICH MAY BE SHOWN ON ONE DRAWING BUT NOT SHOWN ON ANOTHER

- 9. LOCATION OF PIPES, DUCTS, SWITCHES, PANELS, EQUIPMENT AND FIXTURES SHALL BE ADJUSTED TO ACCOMMODATE THE WORK OR INTERFERENCES ANTICIPATED AND ENCOUNTERED. DETERMINE THE EXACT ROUTE AND LOCATION OF EACH PIPE AND DUCT PRIOR TO FABRICATION.
- 10. LOCATION OF EXISTING UTILITIES AND EXISTING UNDERGROUND PLUMBING ARE BASED ON THE SITE INFORMATION AVAILABLE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES AND EXISTING UNDERGROUND PLUMBING PRIOR TO FABRICATION AND ERECTION OF WORK TO AVOID ALL INTERFERENCES. VERIFICATION SHALL BE BY SITE INSPECTION. EXCAVATION. OR WHATEVER MEANS NECESSARY TO DETERMINE EXACT LOCATIONS.
- 11. CONTRACTOR SHALL OBTAIN BUILDING PERMIT AND ARRANGE ALL REQUIRED INSPECTIONS WITH THE APPROPRIATE REGULATORY AGENCY. ALERT CONSULTANT OF ALL ITEMS NOT DEPICTED ON DRAWINGS. DO NOT PROCEED WITH FURTHER WORK UNTIL WRITTEN RESPONSE IS RECEIVED FROM CONSULTANT.
- 12. CONTRACTOR SHALL VERIFY GAS PRESSURE DELIVERED BY METER AT BUII DING
- 13. TEST THREADED NATURAL GAS PIPING AT 20 PSIG FOR A TEST PERIOD OF 2 HOURS. TEST PRESSURE SHALL NOT FALL OVER 5% DURING TEST PERIOD TO PASS. IF PIPING FAILS TEST, INVESTIGATE AND REPAIR THE SOURCE OF
- 14. PROVIDE SLEEVES AT ALL PIPING PENETRATIONS OF CONCRETE OR MASONRY FLOOR, WALL OR ROOF CONSTRUCTION.
- 15. PROVIDE GLASS WOOL INSULATION TO ALL HOT WATER (EXPOSED) AND COLD WATER (AT ROOF) PIPE LINE INCLUDING PROTECTIVE COATINGS.

16.USE NEAREST FLOOR TRAP FOR THE AC DRAINAGE.

- 17. TEST ALL PIPING SYSTEMS IN WHICH ANY ALTERATIONS HAVE BEEN MADE FOR COMPLIANCE WITH THE LATEST EDITION OF GOVERNING BUILDING CODE. DOMESTIC HOT AND COLD WATER PIPING SHALL BE SUBJECT TO 100 PSIG FOR A MINIMUM 2 HOURS. DOMESTIC WASTE AND VENT PIPING SHALL BE TESTED AT 10' STATIC HEAD FOR A PERIOD GREATER THAN 15 MINUTES. IF REQUIRED PRESSURE DROPS BY MORE THAN 3% DURING ITS TEST DURATION, INVESTIGATE THE SOURCE OF LEAK, REPAIR THE LEAK, AND RETEST THE SYSTEM FOR THE REQUIRED TEST PERIOD INSPECT ALL W & V JOINTS WHILE UNDER PRESSURE AND REPAIR ALL LEAKS.
- 18.INSTALL ALL PLUMBING EQUIPMENT IN COMPLETE COMPLIANCE WITH MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS. ARRANGE ALL EQUIPMENT TO PERMIT EASY REMOVAL OF COILS, MOTORS, FILTERS AND ALL OTHER PARTS WHICH REQUIRE PERIODIC REPLACEMENT OR MAINTENANCE. 19. COORDINATE ALL ELECTRICAL VOLTAGE CHARACTERISTICS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING PLUMBING EQUIPMENT

LEGEND FOR WATER SUPPLY SYSTEM

| OLD | WATE | ER PIPE (C.W) | <u> </u> | | | |
|-------------------------|-------|---------------------------|----------------|-------|-----------|----|
| ORMAL | PRES | SURE COLD WATER (N.P.C.W) | <u> </u> | | OUTER DIA | |
| OT W | /ATEF | R PIPE (H.W) | r — | | (mm) | |
| E-CIRC | ULATI | ON HOT WATER (R.H.W) | <u> </u> | | 20 | 1 |
| AS P | | | <u> </u> | | 25 | 1 |
| IR RELIEF VALVE (A.R.V) | | | | 32 | 2 | |
| ALL \ | /ALVE | E (B.V) | | | 40 | 2 |
| ATE \ | /ALVE | E SLICE VALVE (G.V / S.V) | | | | - |
| RESS | URE | REDUCER VALVE (P.R.V) | <u><u></u></u> | | 50 | 3 |
| | | ATION PUMP | R | | 63 | |
| | | | * | | 75 | |
| HECK VALVE | | | | 90 | | |
| OOSTER PUMP 8 | | | | 110 | 7 | |
| UBM | ERSIE | BLE PUMP | d | | | |
| .W.G | = | HOT WATER GENERATO | DR – | L.D = | LIST OF | D |
| .A | = | TO ABOVE | | G.N = | GENER. | AL |
| .В | = | TO BELOW | | W.S = | WATER | รเ |
| .A | = | FROM ABOVE | | G.S = | GAS SY | ST |
| .В | = | FROM BELOW | | S.W = | SEWER | A |
| -1 | = | DUCT - 1 | | D.R = | DRAINA | GI |

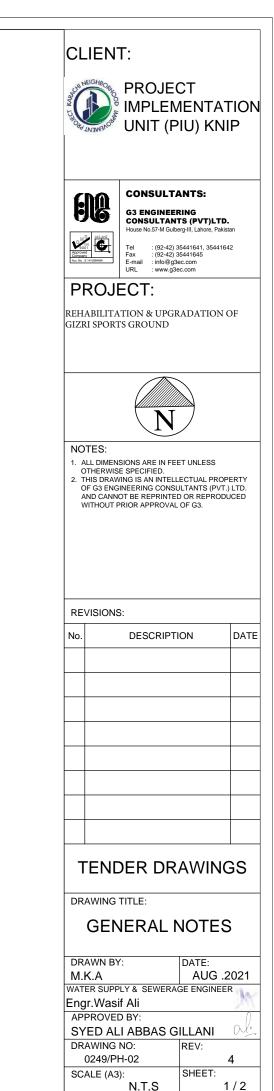
- MISCELLANEOUS DETAILS M.D T/W = TUBE WELL
- 1. ALL WATER SUPPLY PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONED ARE EXTERNAL DIAMETERS. ALL WATER SUPPLY PIPES ARE OF PPRC UNLESS NOTED OTHERWISE.
- 2. ALL GAS PIPE DIAMETERS ARE IN MILLIMETERS AND MENTIONED ARE INTERNAL DIAMETERS.
- 3. ALL WATER SUPPLY PIPES ENTERING THE WALLS SHALL BE PROVIDED WITH ISOLATION VALVES.

LEGEND FOR SEWERAGE & DRAINAGE SYSTEM

| SOIL PIPE (S.P) | | PIPE DIA 8 |
|---------------------------|--------------|------------|
| WASTE PIPE (W.P) | | |
| VENT PIPE (V.P) | <u> </u> | 3" |
| CLEANOUTS | C.O O | 4" |
| FLOOR TRAP | F.T 🔯 | 6" |
| GULLY TRAP | G.T 🔲 | 8" |
| MANHOLE | М.Н | 10" |
| RAIN WATER COLLECTION PIT | R.W.C.P | 12" |

1. ALL PIPE DIAMETERS ARE IN INCHES UNLESS OTHERWISE MENTIONED.

- 2. VENT PIPES SHALL BE EXTENDED UP TO ONE FT ABOVE FINISHED ROOF LEVEL
- 3. SOIL, WASTE AND VENT PIPES UP TO 6" DIA, ARE uPVC (NON PRESSURIZE) TYPE-B CONFIRMING TO ISO 3633:2002 EXTERNAL SEWER PIPES SHALL BE OF FLOW LINE CONFIRMING TO EN 1401 UNLESS OTHERWISE NOTED
- 4. SLOPE OF ROOF VALLEY LINE SHOULD BE BETWEEN 0.01 TO 0.02
- 5. BOTTLE TRAP SHALL BE USED WITH ALL WASH BASIN.
- 6. R.C.C PIPES SHALL BE SHALIMAR OR EQUIVALENT MAKE
- 7. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER.
- 4. ALL WATER SUPPLY PIPES ARE PPR (PN 20) UNLESS OTHERWISE MENTIONED. 5. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS,
- ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED. 6. ALL GAS PIPES ARE G.I. UNLESS OTHERWISE MENTIONED
- 7. ALL WATER SUPPLY AND GAS PIPES ARE IN DUCTS, OR CONCEALED IN WALL OR
- BURIED IN FLOORS
- 8. ALL PIPING SHALL BE TESTED FOR LEAKAGE BEFORE THE JOINTS ARE COVERED.



SCHEDULE OF PIPE DIA

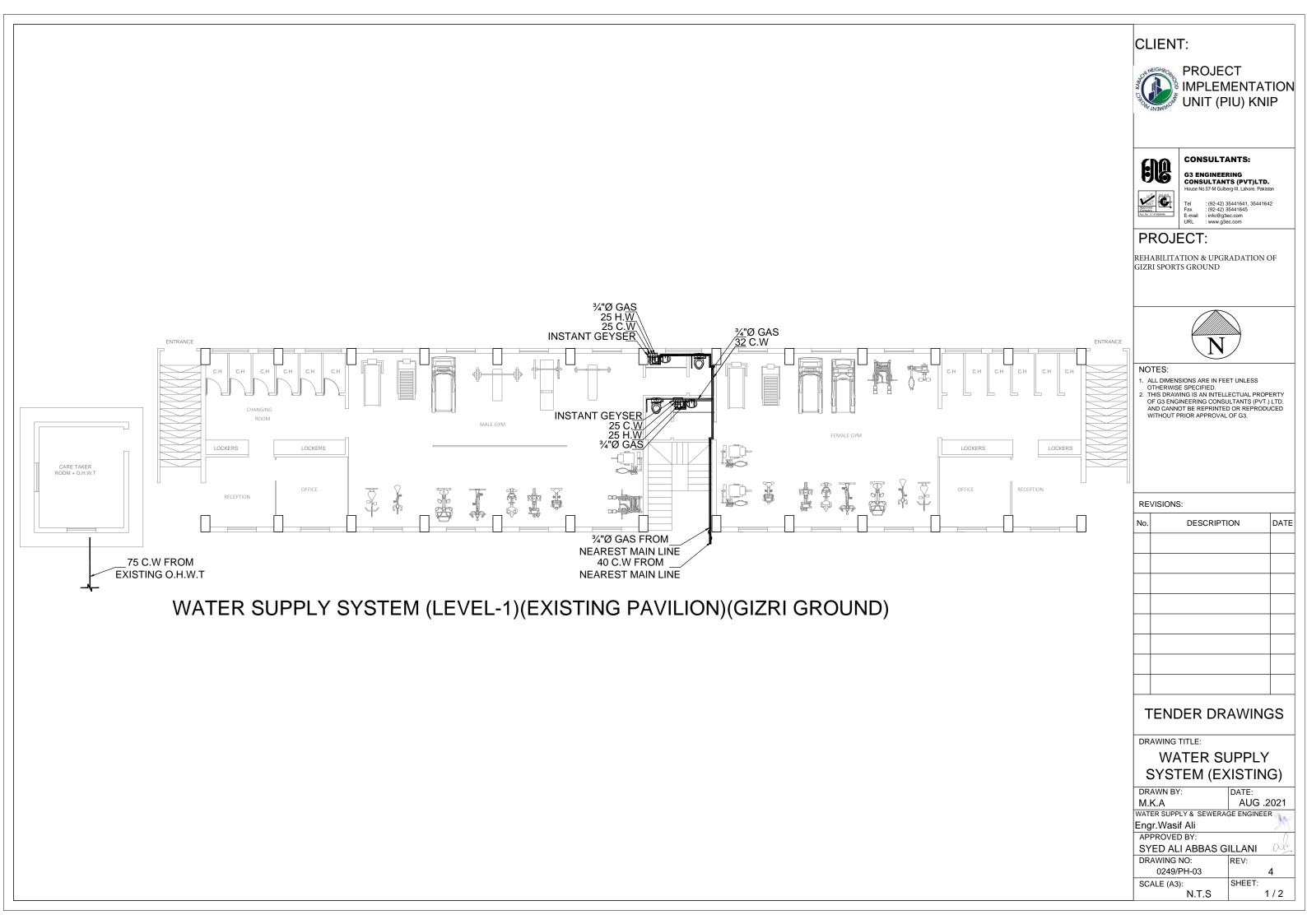
| INTERNAL DIA | | |
|-----------------|------|--|
| (mm) | INCH | |
| 3.2 | 0.52 | |
| 6.4 | 0.65 | |
| 1.2 | 0.83 | |
| 6.6 | 1.05 | |
| 3.2 | 1.31 | |
| 42 | 1.65 | |
| 50 | 1.97 | |
| 60 | 2.36 | |
| 3.2 | 2.88 | |

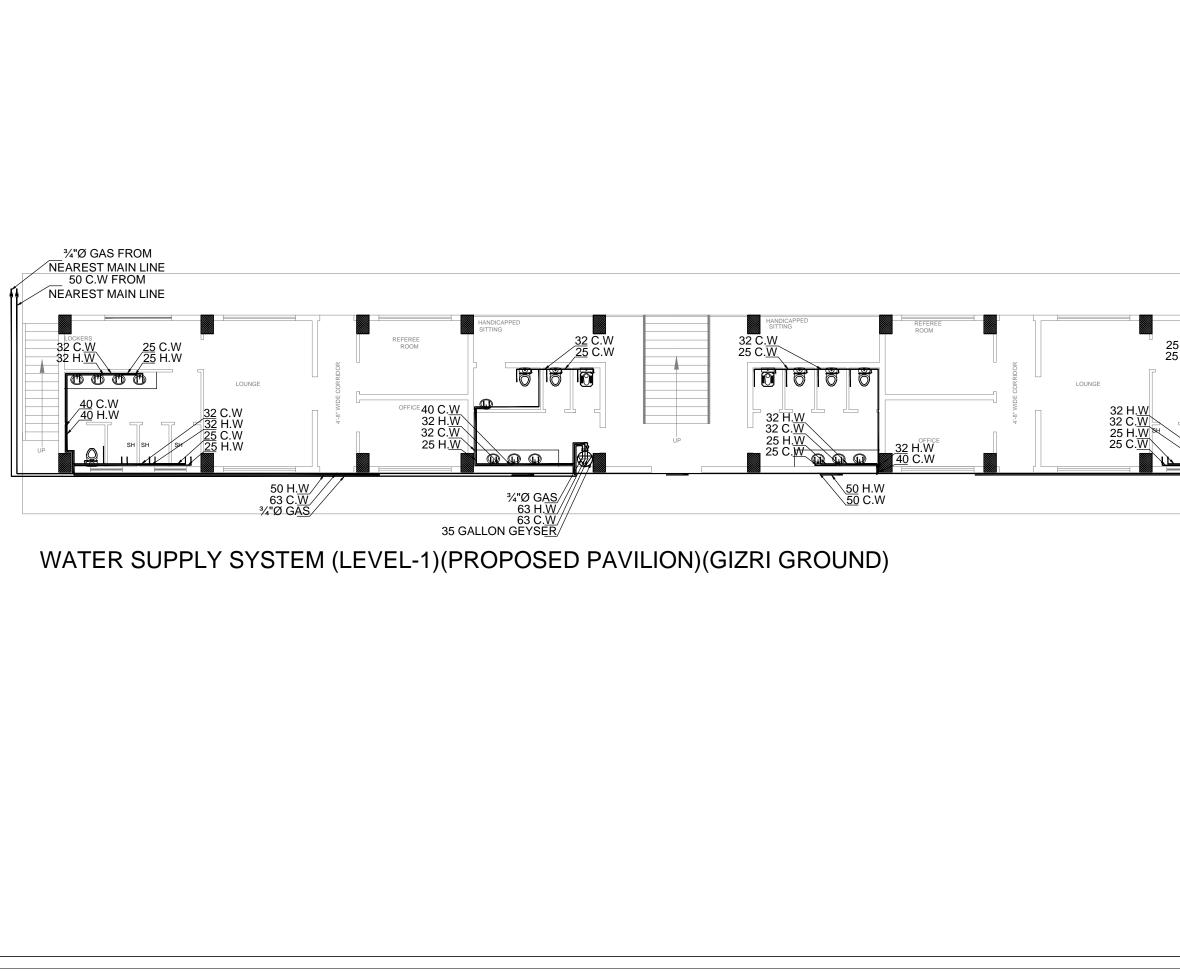
DRAWING

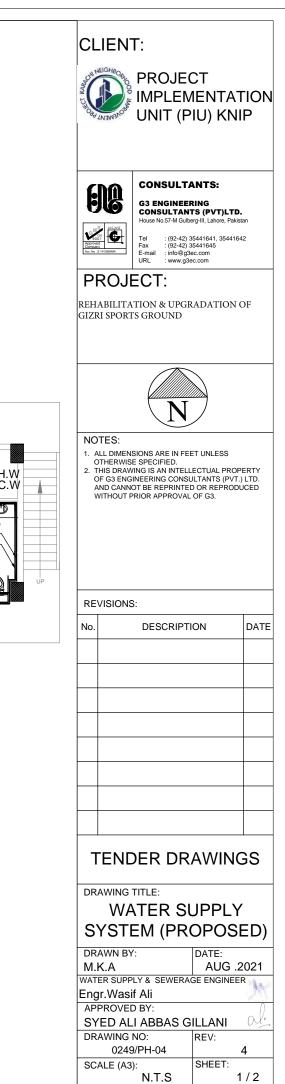
NOTES UPPI Y TEM GE SYSTEM **SE SYSTEM**

& SLOPE

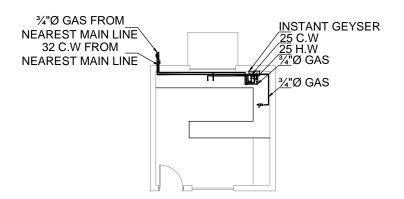
- 1:75 1:100 1:150
- 1.175 1:250
- 1:300



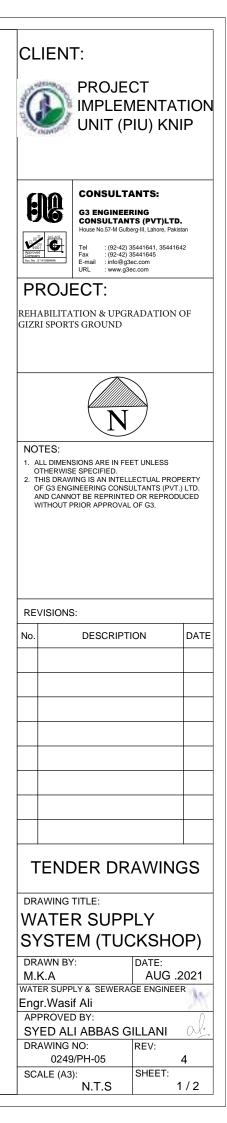


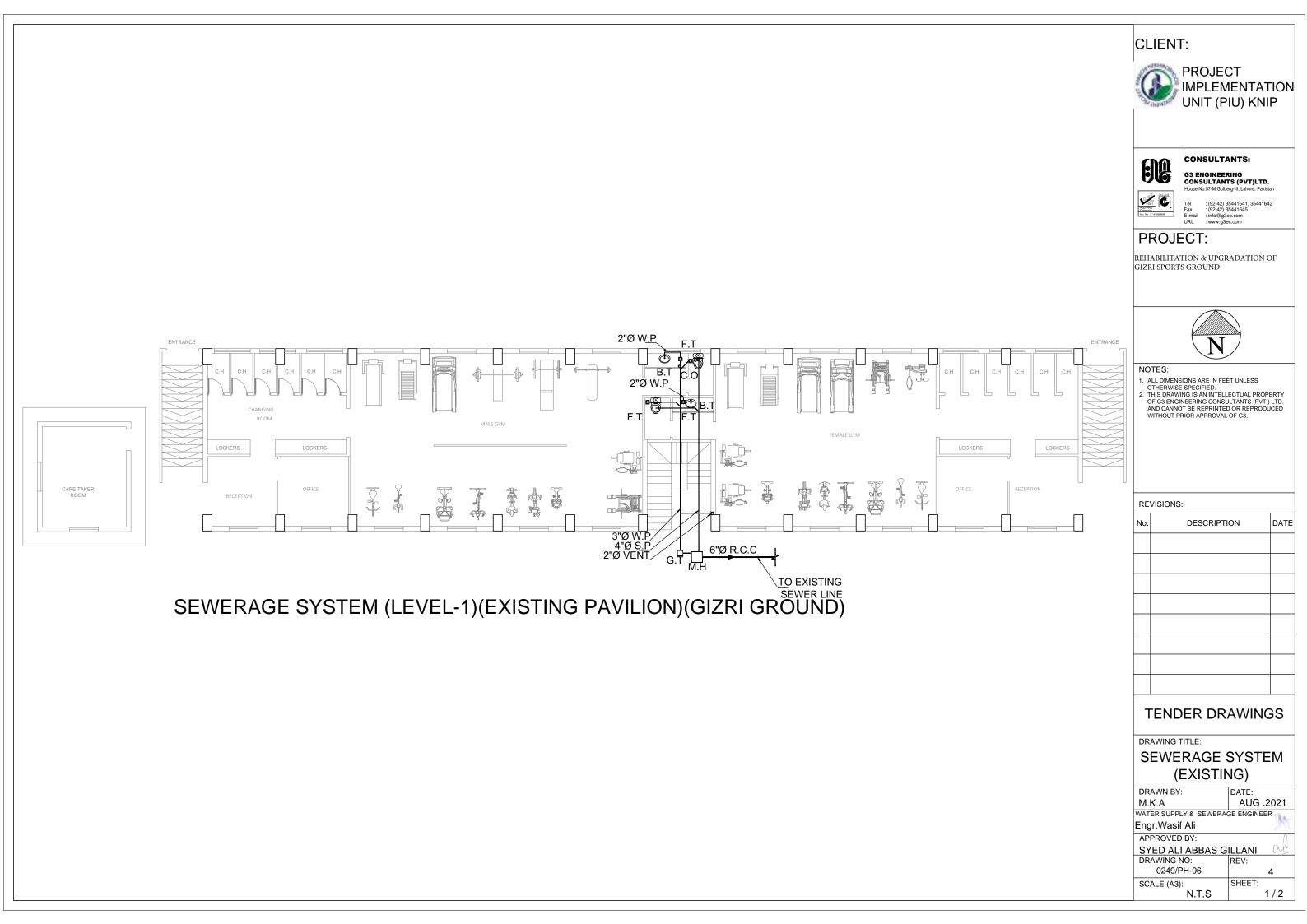


25 H.W 25 C.W 32 C.W 40 H.W 40 C.W 50 H.W 50 C.W

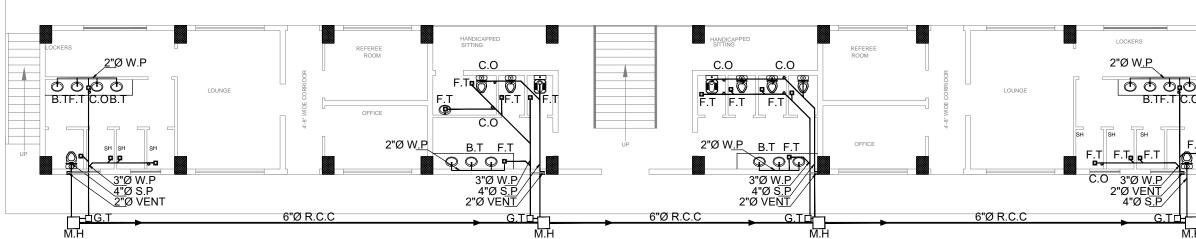


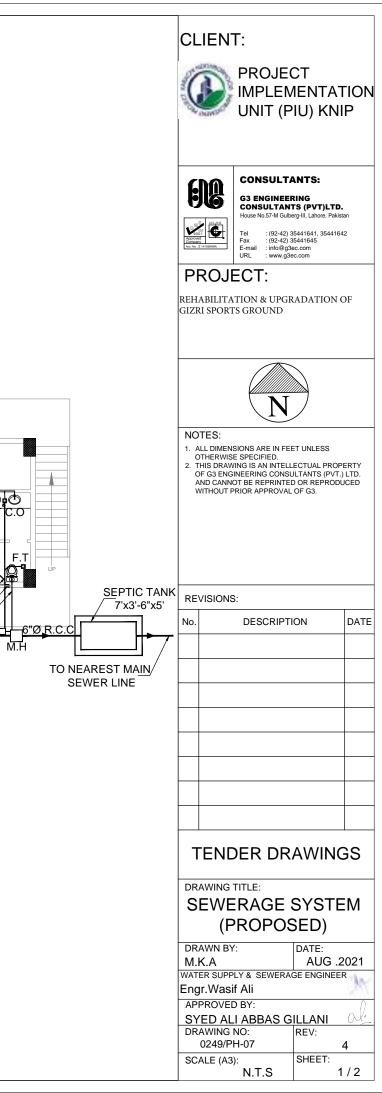
WATER SUPPLY SYSTEM (PROPOSED TUCK SHOP)(GIZRI GROUND)

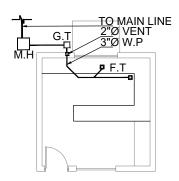




SEWERAGE SYSTEM (LEVEL-1)(PROPOSED PAVILION)(GIZRI GROUND)







SEWERAGE SYSTEM (PROPOSED TUCK SHOP)(GIZRI GROUND)

