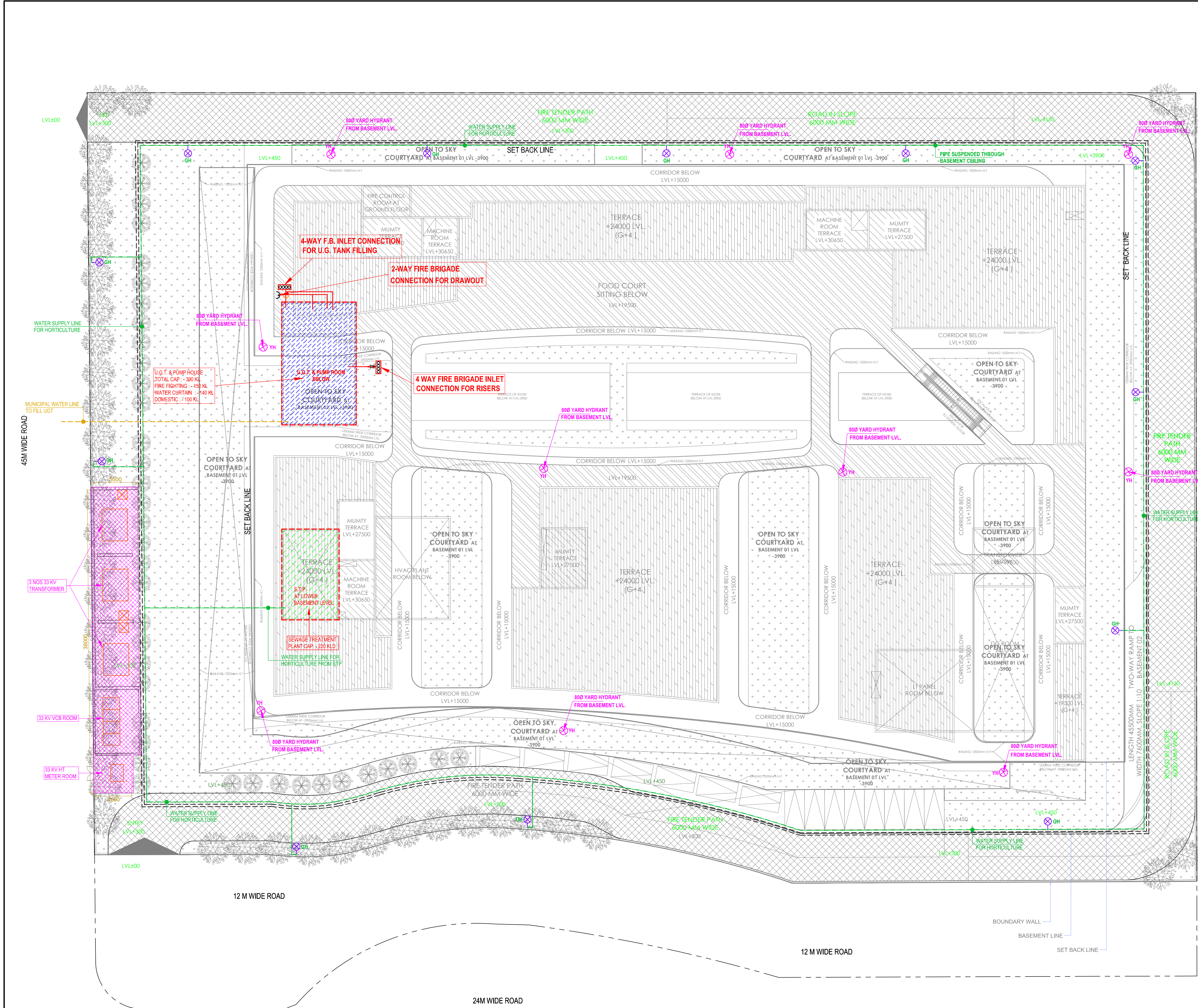




WATER REQUIREMENT CALCULATIONS												
S.No.	Description	Built up Area (Sq.M)	Horticulture Water Requirement (per Sq.M Area)	No. of Units / Seats	Unit Population	Total Population	Domestic Fresh Water Requirement (A)	Domestic Fresh Water Requirement (B)	Domestic Fresh Water Requirement (C)	Domestic Fresh Water Requirement (D)	Domestic Fresh Water Requirement (E)	Domestic Fresh Water Requirement (F)
1	Population (Sales Basement & Street Floors) (Shopping)	11344		3 SqM/person	3790							
2	Population (Upper Sales Floors) (Shopping)	14891		6 SqM/person	2450							
3	Permanent Population (Shopping)			@ 25% of total population of Shopping	1560	25	39000	20	31200	70200	31200	31200
4	Transient Population (Shopping)			@ 75% of total population of Shopping	4680	5	23400	10	46800	70200	18720	46800
5	Restaurant	482		1.8 SqM/person	270	55	14850	15	4050	18900	11880	4050
6	Café	316		1.8 SqM/person	180	25	4500	10	1800	6300	3600	1800
7	Food Court	640		1.8 SqM/person	360	25	9000	10	3600	12600	7200	3600
8	Entertainment Zone	1013		1.4 SqM/person	730	5	3650	10	7300	10950	2920	7300
9	Maintenance Staff				100	25	2500	20	2000	4500	2000	4000
10	Filter Backwash						6000			6000	6000	6000
11	AC Makeup Water								135000	135000		
12	Horticulture	4059	7						28413	28413		
Total							1,02,900		2,60,163	3,63,063	77,520	1,02,750

SUMMARY OF WATER REQUIREMENT / UGT & STP CAPACITY CALCULATION	
Description	Water Requirement (KLD)
Domestic Fresh Water Requirement	103
Recycle Water Requirement	260
Flow to Sewer	180
STP Capacity required	180
STP Capacity provided (by adding 20% as per MOEF)	216
STP Capacity rounded off	220
Additional Fresh Water Required	80
UGT Capacity	
For Domestic Use (24 hrs storage)	100 KL
For Fire Fighting	150 KL
For Water Curtain	140 KL
Total UGT Capacity	390 KL

LEGEND :		
S. No.	SYMBOL	DESCRIPTION
1.	---	MUNICIPAL WATER SUPPLY PIPE LINE
2.	---	RECYCLED WATER SUPPLY LINE FOR HORTICULTURE
3.	GH	GARDEN HYDRANT
4.	---	BASEMENT RETAINING WALL

LEGEND :		
S. No.	SYMBOL	DESCRIPTION
1.	---	FIRE LINE
2.	YH	YARD HYDRANT 63 M.M. DIA. SINGLE HEADED HYDRANT VALVE WITH 2 NOS. 15 M. LONG 63 M.M. DIA. FIRE HOSE PIPE & 1 NO. BRANCH PIPE WITH NOZZLE
3.	---	4 WAY FIRE BRIGADE INLET CONNECTION
4.	---	2 WAY FIRE BRIGADE DRAWOUT CONNECTION
5.	---	BUTTERFLY VALVE
6.	---	NONRETURN VALVE (CHECK VALVE)
7.	---	ISOLATING VALVE WITH MASONARY CHAMBER

rev. no.	date	revision

project
PROPOSED COMMERCIAL DEVELOPMENT
AT PLOT C1 ON PLOT NO. TZ-6,
GREATER NOIDA, UTTAR PRADESH

title
LAYOUT PLAN

subtitle
EXTERNAL WATER SUPPLY SYSTEM

drawing released for
☒ SUBMISSION ☐ APPROVAL
☐ ADVANCE COPY ☐ CONSTRUCTION

drg. no. COMM-C1 / 23B01 / ES-03 drawn by Prem Saini
scale 1 : 260 designed by Badri Vishal
date 20.07.2023 checked by Anand Havelia

Architects :
ACPL
ACPL Design Ltd
www.acplonline.com
Architecture Management Planning
E-24 South Extension -1
New Delhi 110049, India
T: +91 11 24622195
F: +91 11 24646709
E: contact@acplonline.com

services consultant
Consummate Engineering Services (P) Ltd.
Noida Office : B - 67, Sector - 67, Noida - 201 301
Lko. Office : R 006, Rohtas Plumeria, Gomti Nagar, Lucknow
Tel : (0120) 2303500 (30 Lines)
e mail : mail@cespl.in, website : www.cespl.in

