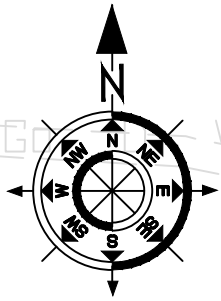


- KEY**
- SITE BOUNDARY
 - PROPOSED LEVELS
 - SLOPE OF GROUND (GRADIENT VARIES)
 - RETAINING WALL/RETAINING FEATURE
 - PERMEABLE PAVING
 - SURFACE WATER DRAIN
 - THRESHOLD DRAINS
 - RODDING EYE
 - COLLECTOR PIPE
 - ROAD GULLY
 - FOUL WATER DRAIN
 - EXISTING FOUL WATER SEWER



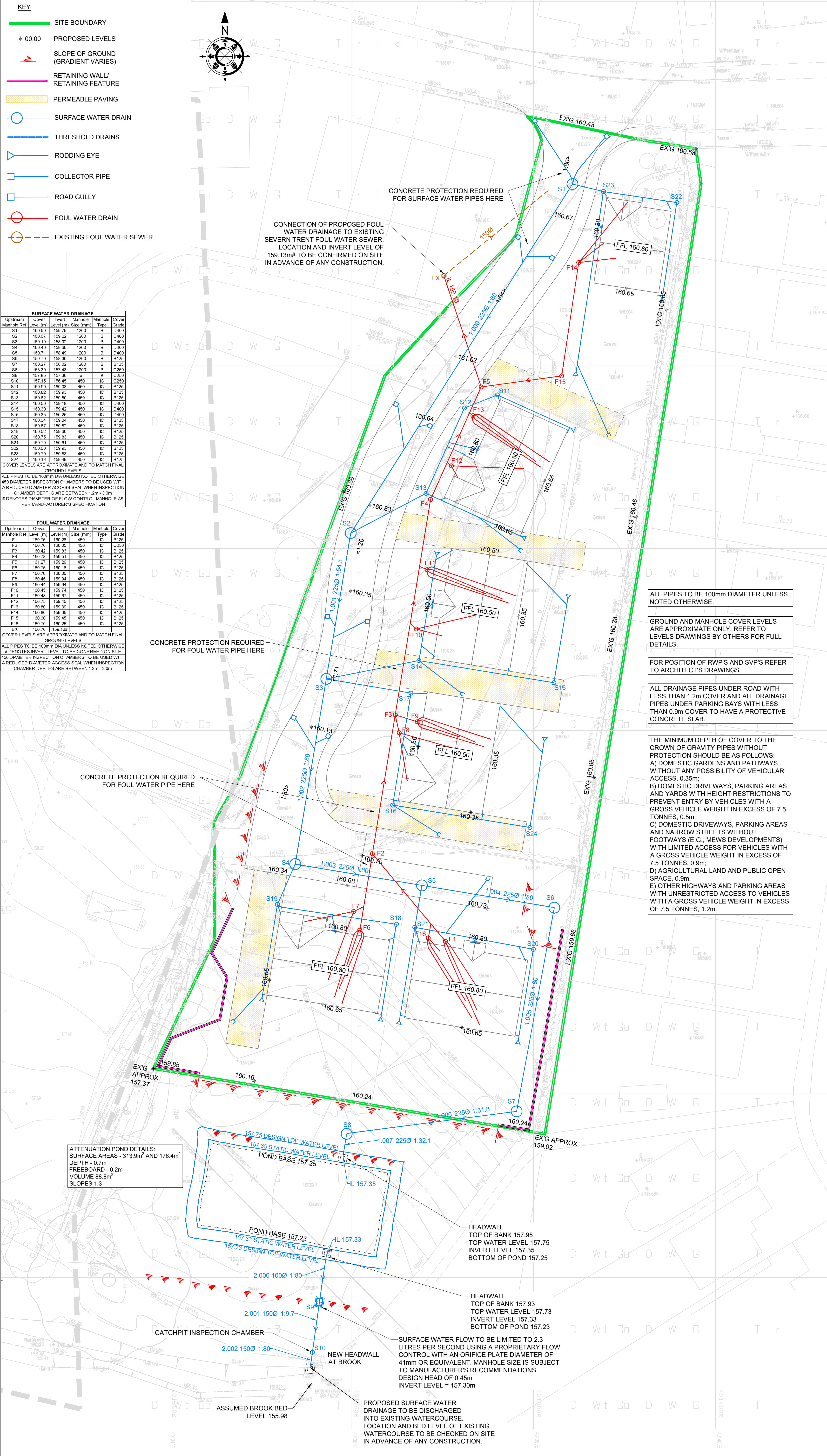
SURFACE WATER DRAINAGE						
Upstream Manhole Ref	Cover Level (m)	Invert Level (m)	Manhole Size (mm)	Manhole Type	Grade	Cover
S1	160.62	159.78	1200	B	D400	
S2	160.67	159.22	1200	B	D400	
S3	160.19	158.92	1200	B	D400	
S4	160.40	158.66	1200	B	D400	
S5	160.71	158.49	1200	B	D400	
S6	158.70	158.30	1200	B	D125	
S7	160.27	158.02	1200	B	B125	
S8	158.30	157.43	1200	B	C250	
S9	157.85	157.30	#	#	C250	
S10	157.15	156.45	450	IC	B125	
S11	160.90	160.03	450	IC	B125	
S12	160.82	159.93	450	IC	B125	
S13	160.82	159.80	450	IC	B125	
S14	160.50	159.18	450	IC	D400	
S15	160.30	159.42	450	IC	D400	
S16	160.35	159.25	450	IC	D400	
S17	160.34	159.04	450	IC	B125	
S18	160.67	159.82	450	IC	B125	
S19	160.52	159.60	450	IC	B125	
S20	160.75	159.83	450	IC	B125	
S21	160.70	159.61	450	IC	B125	
S22	160.60	159.03	450	IC	B125	
S23	160.70	159.83	450	IC	B125	
S24	160.13	159.49	450	IC	B125	

COVER LEVELS ARE APPROXIMATE AND TO MATCH FINAL GROUND LEVELS.
ALL PIPES TO BE 100mm DIA UNLESS NOTED OTHERWISE.
450 DIAMETER INSPECTION CHAMBERS TO BE USED WITH A REDUCED DIAMETER ACCESS SEAL WHEN INSPECTION CHAMBER DEPTHS ARE BETWEEN 1.2m - 3.0m.
DENOTES DIAMETER OF FLOW CONTROL MANHOLE AS PER MANUFACTURER'S SPECIFICATION.

FOUL WATER DRAINAGE						
Upstream Manhole Ref	Cover Level (m)	Invert Level (m)	Manhole Size (mm)	Manhole Type	Grade	Cover
F1	160.76	160.26	450	IC	B125	
F2	160.70	160.05	450	IC	C250	
F3	160.42	159.86	450	IC	B125	
F4	160.78	159.51	450	IC	B125	
F5	161.27	159.29	450	IC	B125	
F6	160.75	160.16	450	IC	B125	
F7	160.76	160.06	450	IC	B125	
F8	160.45	159.94	450	IC	B125	
F9	160.44	159.94	450	IC	B125	
F10	160.45	159.74	450	IC	B125	
F11	160.48	159.67	450	IC	B125	
F12	160.75	159.46	450	IC	B125	
F13	160.80	159.39	450	IC	B125	
F14	160.80	159.68	450	IC	B125	
F15	160.60	159.45	450	IC	B125	
F16	160.70	160.25	450	IC	B125	
EX	160.70	159.18				

COVER LEVELS ARE APPROXIMATE AND TO MATCH FINAL GROUND LEVELS.
ALL PIPES TO BE 100mm DIA UNLESS NOTED OTHERWISE.
DENOTES INVERT LEVEL TO BE CONFIRMED ON SITE.
450 DIAMETER INSPECTION CHAMBERS TO BE USED WITH A REDUCED DIAMETER ACCESS SEAL WHEN INSPECTION CHAMBER DEPTHS ARE BETWEEN 1.2m - 3.0m.

ATTENUATION POND DETAILS:
SURFACE AREAS - 313.9m² AND 176.4m²
DEPTH - 0.7m
FREEBOARD - 0.2m
VOLUME 88.8m³
SLOPES 1:3



ALL PIPES TO BE 100mm DIAMETER UNLESS NOTED OTHERWISE.

GROUND AND MANHOLE COVER LEVELS ARE APPROXIMATE ONLY. REFER TO LEVELS DRAWINGS BY OTHERS FOR FULL DETAILS.

FOR POSITION OF RWP'S AND SVP'S REFER TO ARCHITECT'S DRAWINGS.

ALL DRAINAGE PIPES UNDER ROAD WITH LESS THAN 1.2m COVER AND ALL DRAINAGE PIPES UNDER PARKING BAYS WITH LESS THAN 0.9m COVER TO HAVE A PROTECTIVE CONCRETE SLAB.

THE MINIMUM DEPTH OF COVER TO THE CROWN OF GRAVITY PIPES WITHOUT PROTECTION SHOULD BE AS FOLLOWS:
A) DOMESTIC GARDENS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS, 0.35m;
B) DOMESTIC DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.5m;
C) DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (E.G., MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.9m;
D) AGRICULTURAL LAND AND PUBLIC OPEN SPACE, 0.9m;
E) OTHER HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 1.2m.

- NOTES**
- © This drawing is copyright and may not be reproduced or used except with written permission
- PRIVATE DRAINAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS PART H AND DRAINAGE PRODUCT MANUFACTURERS' INSTRUCTION.
 - GROUND AND COVER LEVELS OF MANHOLES WHERE SHOWN ARE APPROXIMATE AND ARE INTENDED FOR GUIDANCE ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS' AND ENGINEERS' DRAWINGS.
 - REFER TO ARCHITECTS DRAWINGS FOR RAINWATER PIPE LOCATIONS AND INTERNAL DRAINAGE DETAILS PLUS POSITIONS OF OUTLETS.
 - ALL CONNECTIONS TO ADAPTABLE SEWERS SHALL BE MANUFACTURED JUNCTION PIPES. SADDLE CONNECTIONS WILL NOT BE PERMITTED, UNLESS SPECIFIED OR ACCEPTED BY THE WATER COMPANY.
 - POSITIONS AND LEVELS OF ALL EXISTING DRAINS AND SEWERS ARE TO BE CONFIRMED ON SITE BY THE CONTRACTOR IN ADVANCE OF ANY CONSTRUCTION, INCLUDING THOSE PIPELINES WHICH ENTAIL ADVANCE TRIAL PITTING TO CONFIRM DETAILS. ANY VARIATION FOUND TO THE INFORMATION ON THIS DRAWING IS TO BE REPORTED TO THIS OFFICE FOR FURTHER INSTRUCTION.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE WATER COMPANY OF THE COMMENCEMENT OF ANY DRAINAGE WORKS AND TO COMPLETE ANY REQUIRED SEWER CONNECTION FORMS, INCLUSIVE OF PAYING ANY REQUIRED FEES. THE CONTRACTOR MUST ALLOW FOR THE SUPERVISION OF ALL SEWER CONSTRUCTION WORKS BY THE WATER COMPANY AND NOTIFY THE SUPERVISING OFFICER, GIVING NOTICE WHICH SHALL BE IN ACCORDANCE WITH THE COMPANY'S REQUIREMENTS.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY FOR ANY REQUIRED ROAD OPENING PERMITS WITH THE HIGHWAY AUTHORITY, INCLUDING THE PAYMENT OF ALL FEES.
 - BEFORE COMMENCING ANY WORKS ON SITE, THE CONTRACTOR MUST CONTACT THE RELEVANT UTILITY COMPANY AND BE IN POSSESSION OF THE LATEST AVAILABLE DRAWINGS DETAILING THEIR SERVICES APPARATUS. THE CONTRACTOR MUST CONFIRM THE EXACT LOCATION AND DEPTH OF ALL SERVICES APPARATUS BY UTILISING ELECTRO-LOCATION OR SIMILAR DEVICES AND WHERE NECESSARY BY HAND DUG TRIAL HOLES. IN ACCORDANCE WITH THE AFFECTED UTILITY COMPANY'S SAFETY PROCEDURES, MECHANICAL EXCAVATORS, POWER TOOLS ETC. MUST NOT BE USED TO LOCATE EXISTING SERVICES APPARATUS.
 - PIPES, PRIVATE DRAINAGE ALL PIPES TO BE SUPERSTRENGTH CLAYWARE TO BS EN 285-1991 PART 1 UNLESS OTHERWISE NOTED. 100mm DIA SUPERSLEEVE OR SIMILAR APPROVED, 150mm DIA SUPERSLEEVE OR SIMILAR APPROVED AND FOR ALL CONNECTIONS TO SEWERS/MANHOLES AND WHERE NOTED.
 - ALL PART-CONSTRUCTED, UNCOVERED AND SHALLOW DRAINS AND SEWERS ARE TO BE PROTECTED FROM LOADING DURING THE CONSTRUCTION PERIOD AS PART OF THE CONTRACTOR'S TEMPORARY WORKS REQUIREMENTS.
 - CHAMBERS - PRIVATE DRAINAGE - 475mm DIAMETER POLYPROPYLENE INSPECTION CHAMBER (PPIC) WHERE DEPTH TO INVERT IS A MAXIMUM OF 1200mm. 475mm DIAMETER HEPPWORTH REDUCED ACCESS TELESCOPIC PPIC WHERE DEPTH TO INVERT IS A MAXIMUM OF 3000mm. WHERE CHAMBERS ARE IN DRIVEWAYS/TRAFFICKED AREAS COVERS MUST BE GRADE D400.
 - WHERE A PIPE TRENCH IS WITHIN 1m OF A BUILDING'S FOUNDATION THE PIPELINE IS TO BE PROVIDED WITH CONCRETE PROTECTION AND THE TRENCH PART-BACKFILLED WITH CONCRETE UP TO A LEVEL BELOW THE FLOOR OF THE BUILDING EQUAL TO THE DISTANCE FROM THE FOUNDATION LESS 150mm.
 - SPECIAL CARE IS REQUIRED WHEN WORKING IN THE VICINITY OF EXISTING TREES, HEDGES AND OTHER VEGETATION TO BE RETAINED AND PROTECTED. IT IS NOT INTENDED THAT ANY TREE ROOTS ARE TO BE SEVERED OR DAMAGED. SPECIALIST ADVICE MUST BE SOUGHT WHEN MAJOR ROOTS ARE ENCOUNTERED. CARE IS TO BE TAKEN TO AVOID DAMAGE TO BRANCHES AND FOLIAGE. REFER TO THE ARBORICULTURAL REPORT FOR FURTHER DETAILS AND INSTRUCTION.
 - ALL NEW DRAINAGE CONSTRUCTED IN THE VICINITY OF NEW EXISTING TREES, HEDGES AND OTHER VEGETATION IS TO BE PROTECTED FROM ROOT ACTIVITY USING ROOT CONTROL, ROOT BARRIER BY GREEN-TECH. BARRIER INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 - INTERNAL DRAINAGE WITH NO WC CONNECTED SHALL BE LAID NO FLATTER THAN 1:40. DRAINS SERVING WCs SHALL BE LAID PREFERABLY AT 1:40 BUT NO FLATTER THAN 1:80.

REV	DATE	AMENDMENT	BY
STATUS			
PRELIMINARY			
31 Greenlands Business Centre Studley Road Redditch, B98 7HD Tel: (01527) 903938 Email: mail@csge.co.uk			
CLIENT			
MOUNT PLEASANT HOUSING LTD			
PROJECT			
TURNERS PASTURE CHEADLE			
TITLE			
DRAINAGE LAYOUT			
DATE	NOVEMBER 2024	DRAWN	SSD
SCALE	1:200	SIZE	A1
CHECKED	KW	APPROVED	KW
DRAWING NUMBER	1983-001	REVISION	-