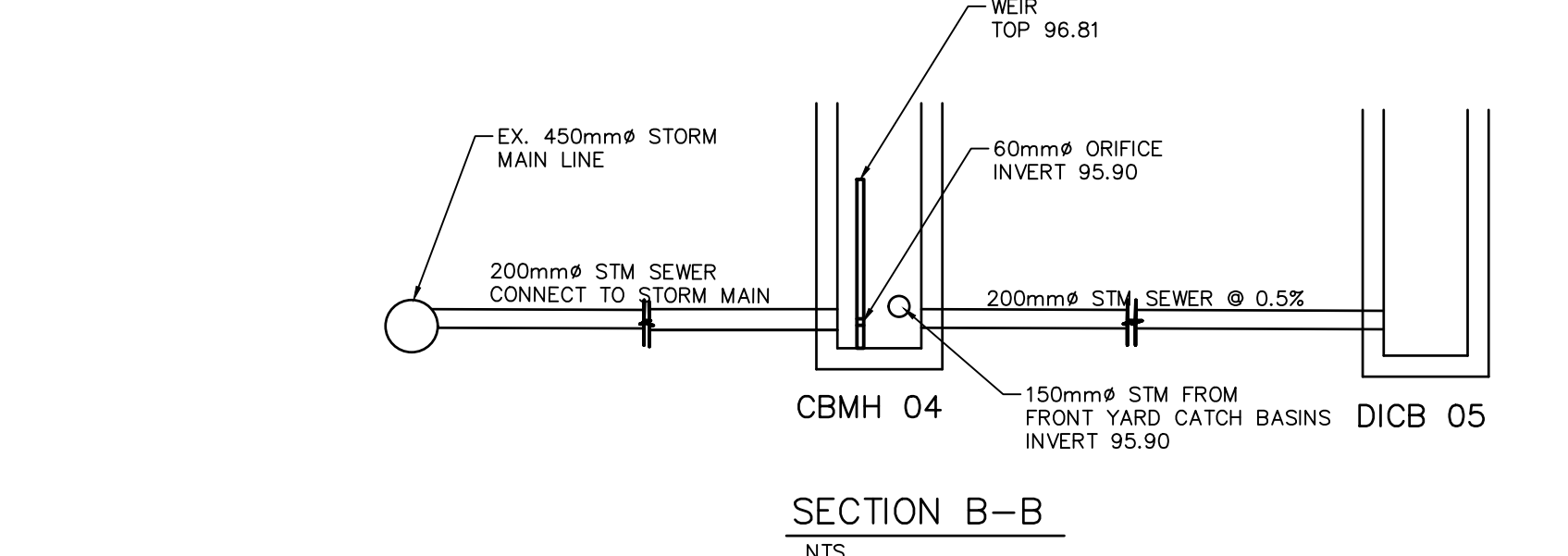
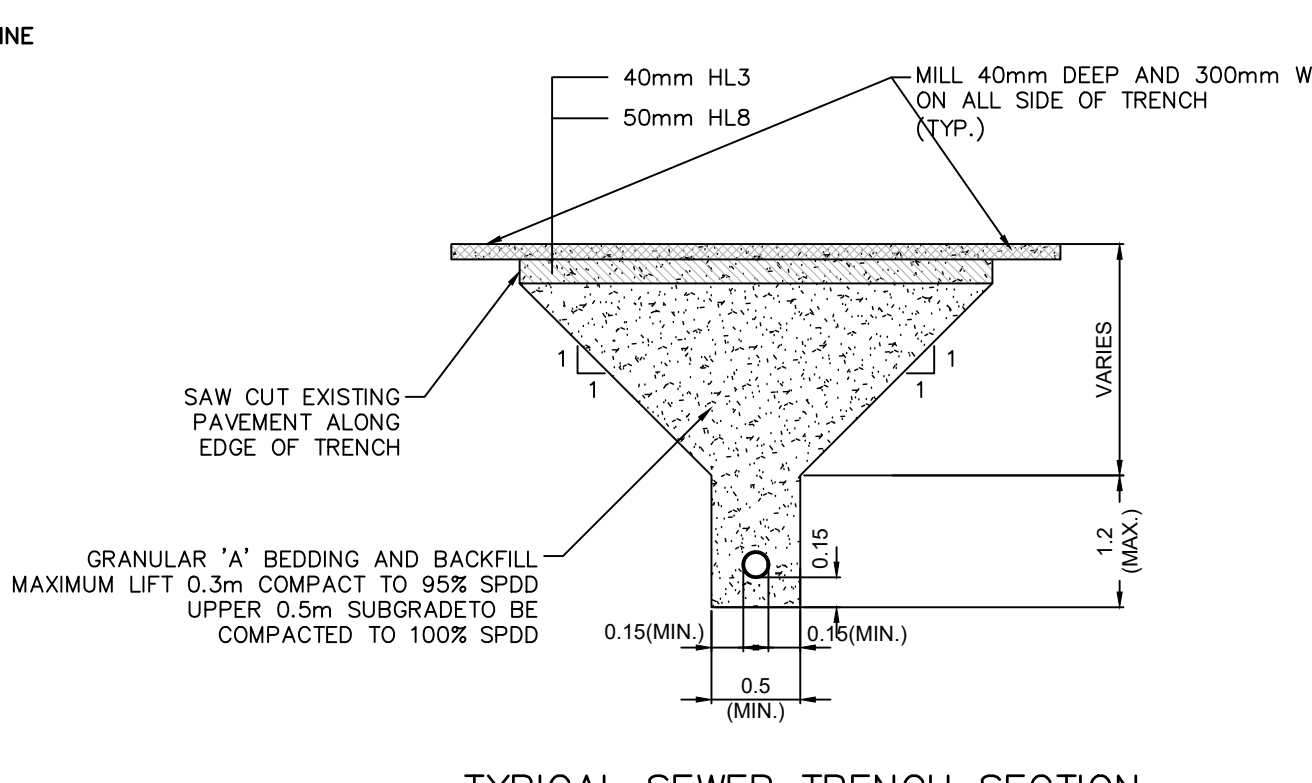
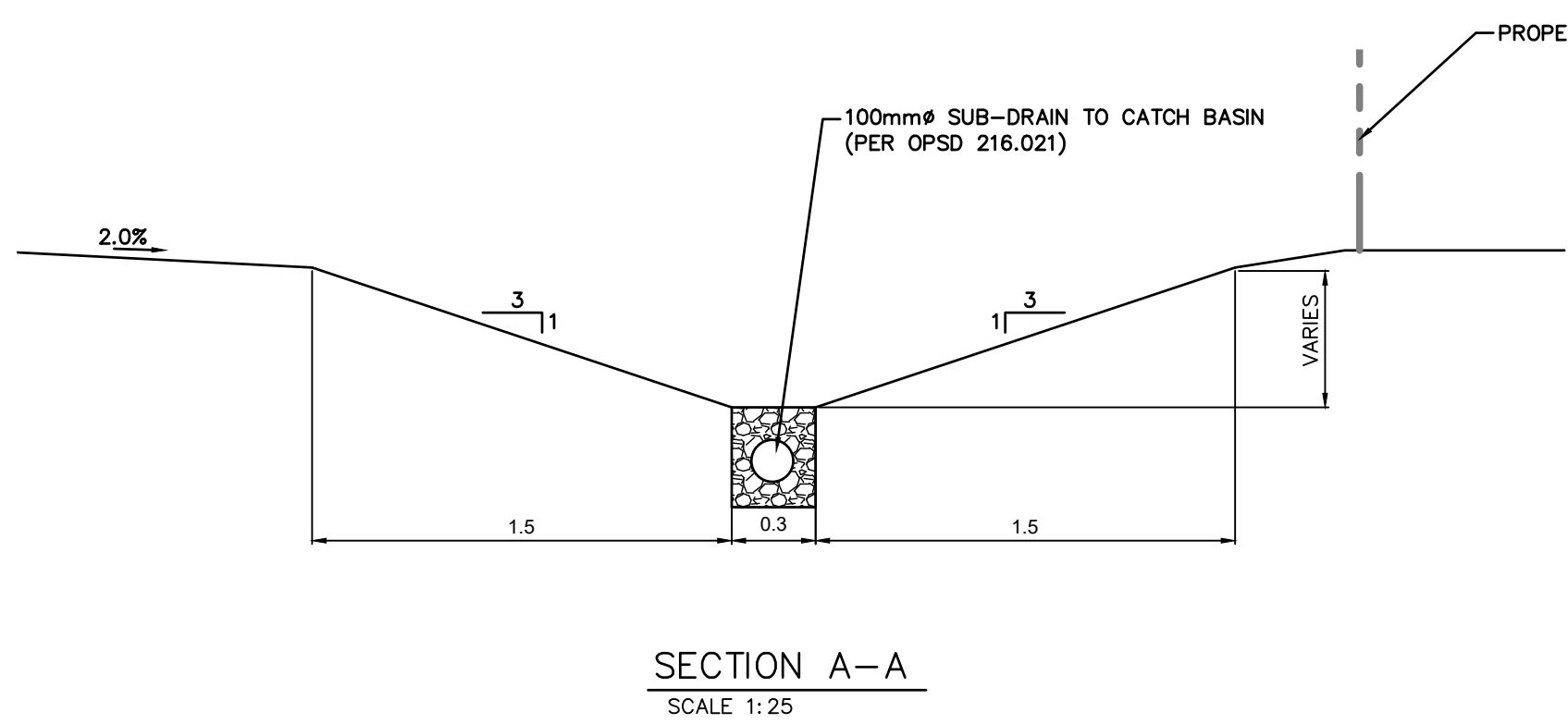
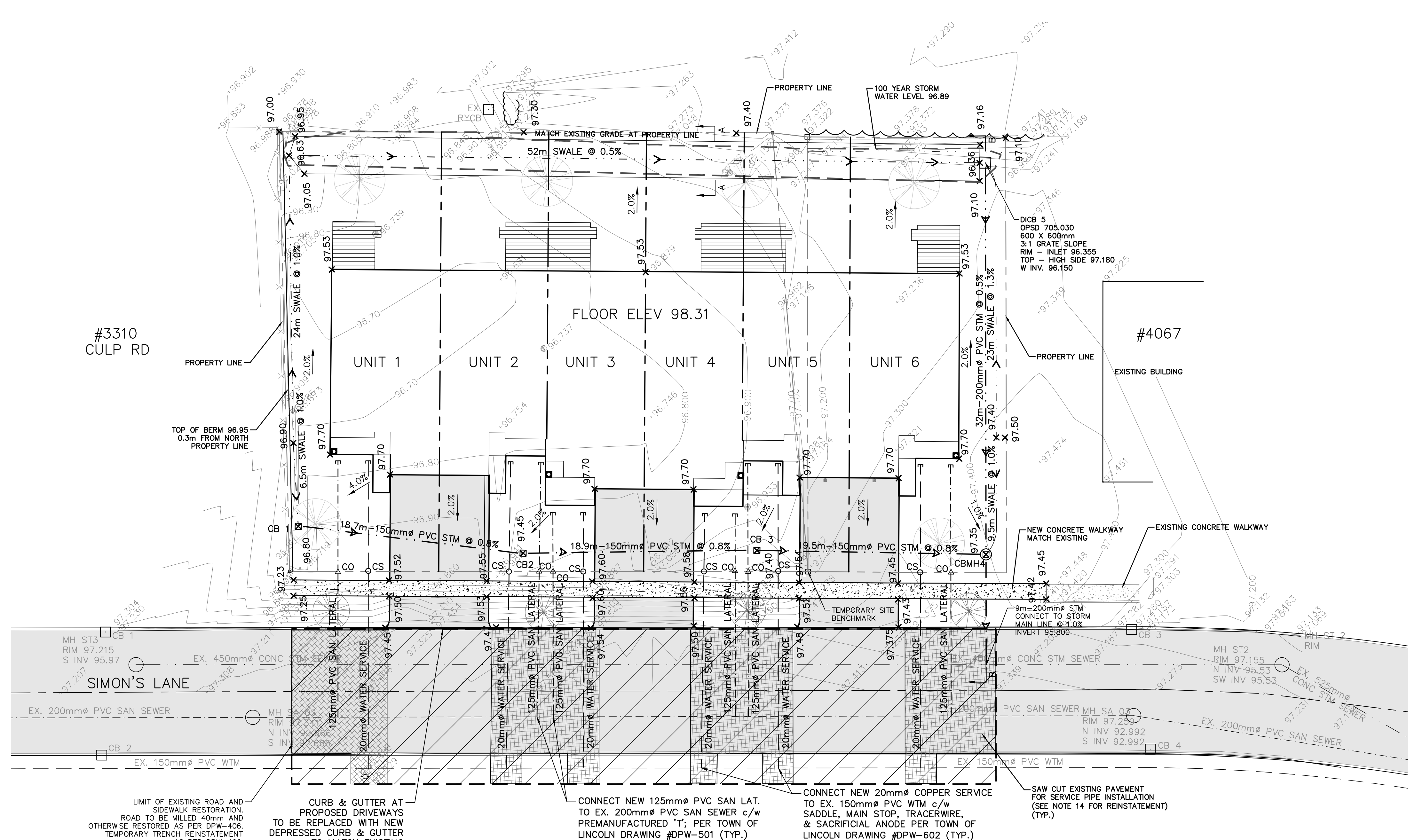


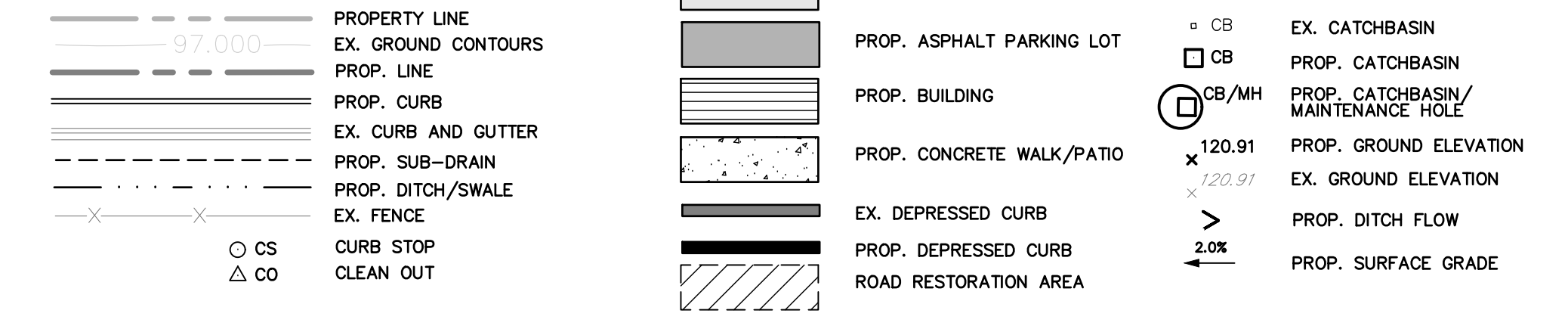
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STORM SEWER STRUCTURE DETAILS

MH NO.	RIM EL.	INVERT EL.	SIZE (mm)	OPS DRAWING		COMMENTS
				STRUCTURE	FRAME/GRATE	
CB1	96.80	S INV. 96.35	400x400			400x400mm HDPE MINI-CB.
CB2	97.45	N INV. 96.21	400x400			400x400mm HDPE MINI-CB.
CB3	97.40	N INV. 96.08	400x400			400x400mm HDPE MINI-CB.
CBM4	97.35	N INV. 96.06 E INV. 95.90 W INV. 95.89	1200Ø	701.010	400.010	ORIFICE PLATE (SEE DETAIL)
DICB5	97.18	W INV. 96.15	600x600	705.030	403.010	SEE PLAN DETAIL
		96.36 (INLET)				

LEGEND



GENERAL NOTES

- LOCATION AND SIZE OF EXISTING UTILITIES WAS DERIVED FROM VARIOUS DRAWINGS FROM OTHERS. THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN AND, WHERE SHOWN, THE ACCURACY OF THE LOCATION SHOWN OF SUCH UTILITIES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL CONTACT ALL SUCH UTILITIES INVOLVED AND INFORM HIMSELF AS TO THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME LIABILITY FOR DAMAGE TO THEM. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES WITH THIS DRAWING TO THE ENGINEER IMMEDIATELY.
- ALL MEASUREMENTS ARE IN METRES UNLESS OTHERWISE NOTED.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE RELEVANT SECTIONS OF THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS, AND THE NIAGARA PENINSULA STANDARD CONTRACT DOCUMENT (NPSCD) UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- COMPUTER DRAWING FILE CO-ORDINATES FOR THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION LAYOUT UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
- ALL GRANULAR MATERIAL SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY AND ALL NATIVE BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY UNLESS OTHERWISE NOTED.
- ALL CONSTRUCTION SHALL BE CARRIED OUT IN SUCH A WAY THAT SILTATION OR OTHER DAMAGE TO WATER COURSES DOES NOT OCCUR. THE REQUIREMENTS OF THE MINISTRY OF NATURAL RESOURCES ARE TO BE ADHERED TO IN THIS RESPECT.
- ALL EXCAVATION IN EXISTING ROADWAYS OR OTHER PAVED SURFACES SHALL BE BACKFILLED WITH GRANULAR 'A' COMPACTED TO 100% SPD. MIN.
- CONTRACTOR TO OBTAIN EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK AND REPORT ANY CONFLICTS OR DISCREPANCIES WITH THESE DRAWINGS TO THE ENGINEER IMMEDIATELY.
- PROPOSED GRADES SHALL NOT ADVERSELY AFFECT ADJACENT PROPERTIES.
- REFER TO SITE PLAN FOR SITE DIMENSIONS.

WATER SUPPLY

- A MINIMUM CLEAR HORIZONTAL SEPARATION OF 2.5m SHALL BE MAINTAINED BETWEEN ANY SEWER AND ANY PARALLEL WATERMAIN. A MINIMUM CLEAR VERTICAL SEPARATION OF 0.5m SHALL BE MAINTAINED ABOVE OR BELOW AT SEWER AND WATERMAIN CROSSINGS WHEREVER POSSIBLE.

ROADS AND EARTHWORKS

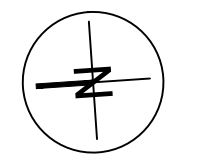
- FILL FOR PARKING AREAS TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 201 IN 200mm THICK LIFTS USING SUITABLE NATIVE EXCAVATED OR IMPORTED MATERIAL APPROVED BY CONTRACT ADMINISTRATOR AND GEOTECHNICAL ENGINEER. THE SUBSOIL BELOW ANY ROADWAY OR PARKING AREA SHALL BE PROOF ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER OR HIS DESIGNATE PRIOR TO THE PLACEMENT OF ANY GRANULAR MATERIAL. THE UPPER 0.6m BELOW ANY RIGID OR PAVED SURFACE SHALL BE COMPACTED TO 98% SPD MIN.
- WHERE DISTURBED OR DAMAGED, REINSTATEMENT OF EXISTING ROADS SHALL COMPLY WITH THE REQUIREMENT OF THE ROAD AUTHORITY. PAVEMENT REINSTATEMENT SHALL COMPLY WITH OPSD 509.010 AND OPSD 310.
- SIDEWALKS SHALL BE 200mm THICK IN TRAFFIC-BEARING AREAS AND 125mm THICK OTHERWISE; ALL PER OPSD-310 SERIES & OPSD-351 WITH FOREMENTIONED THICKNESS EXCEPTION.
- CONCRETE CURB AND GUTTER PER OPSD 600.040 TO COMPLY WITH OPSD-353 AND NPSCD SPC-B8 UNLESS OTHERWISE NOTED.
- AREAS TO BE SODDED SHALL INCLUDE MINIMUM 100mm TOPSOIL PER OPSD 802. SOD TO BE IN ACCORDANCE WITH OPSD 803. NATIVE BACKFILLED AREAS TO BE SODDED SHALL BE FREE OF GRANULAR PARTICLES OR OTHER MATERIALS DELETERIOUS TO PLANT GROWTH.
- PAVEMENT MARKINGS TO BE IN ACCORDANCE WITH ONTARIO TRAFFIC MANUAL BOOK 11.

SEWERS

- ALL SEWERS, LEADS AND LATERALS SHALL HAVE CLASS 'B' BEDDING PER OPSD 802.010, GRANULAR 'A' COVER MATERIAL AND SELECT NATIVE BACKFILL UNLESS OTHERWISE NOTED.
- ALL STORM SEWERS TO BE CONCRETE, CLASS III PER CSA A257.2 WITH CLASS B BEDDING TO OPSD 802.030, OR, HDPE (320 KPa) PER CSA B182.5-02 OR PVC DR-35 PER CSA B137.3 WITH GRANULAR 'A' BEDDING TO OPSD 802.010 UNLESS OTHERWISE NOTED. CATCHBASIN LEADS TO BE 200mmØ PVC DR-35 PER CSA 192.1 UNLESS OTHERWISE NOTED.
- PRECAST CATCHBASINS TO OPSD 705.010 WITH FRAME & GRATE TO OPSD 400.020 UNLESS OTHERWISE NOTED. DITCH INLET CATCHBASINS TO OPSD 705.030 WITH GRATE PER OPSD 403.010 AT SPECIFIED SLOPE.
- ALL SUBDRAIN TO BE 100mmØ PERFORATED HDPE, C/W GEOTEXTILE FILTER SOCK. TEE-FITTING TO BE PROVIDED WHERE AN INTERSECTION IS SHOWN.
- CATCHBASIN/MAINTENANCE HOLES TO OPSD 701.010 WITH FRAME & GRATE TO OPSD 400.020. MAINTENANCE HOLES TO OPSD 701.010 WITH FRAME & COVER TO OPSD 401.010 TYPE 'A'.
- SANITARY LATERALS TO BE 125mmØ PVC DR-28 PER CSA B137.3 AT 2% MIN. SLOPE, PER DPW-501.
- COORDINATE CONNECTIONS TO EXISTING STORM AND SANITARY SEWERS WITH TOWN OF LINCOLN ENGINEERING STAFF AND QUARTEK GROUP INC.

SILTATION/SEDIMENT CONTROLS

- SILT FENCE PER OPSD 219.110 SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE PRIOR TO CONSTRUCTION AND SHALL BE MAINTAINED IN GOOD CONDITION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED (I.E. RE-VEGETATED). AT NO TIME SHALL MUDDY WATER BE ALLOWED TO DISCHARGE FROM THE SITE.
- ALL FILL MATERIAL, WHETHER ORIGINATING FROM THIS PROJECT OR ANOTHER SITE MUST NOT BE PLACED OR TEMPORARILY STORED OUTSIDE THE LIMIT OF SILT FENCING AS SHOWN ON THE DRAWINGS.
- NO EQUIPMENT, MACHINERY OR MATERIALS SHALL EXTEND BEYOND THE AREA OF WORK IDENTIFIED ON THE PLANS.
- ALL DISTURBED AREAS SHALL BE STABILIZED AND RE-VEGETATED AS REQUIRED UPON COMPLETION OF WORK AND RESTORED TO A PRE-DISTURBED STATE OR BETTER.



TEMPORARY SITE BENCH MARK:
STANDARD IRON BAR AT WEST SIDE OF
PROPERTY IN FRONT OF UNIT 5
ELEVATION: 97.22

Issue	Issued for	date	INT.
E PERMIT		07 AUG 2018	HK
D FINAL SPA APPROVAL		20 JUL 2018	AW
C SPA SUBMISSION #2		06 JUN 2018	AW
B SPA SUBMISSION		27 MAR 2018	AW
A REVIEW		26 JAN 2018	BRHJ

12. WATER SERVICES TO BE 20mmØ TYPE "K" SOFT COPPER WITH APPROVED SERVICE SADDLE AND MAIN STOP PER DPW-602 AND CURB STOPS AT PROPERTY LINE. ALL TO THE SATISFACTION OF THE TOWN OF LINCOLN.



Do not scale drawings. Report any discrepancies to Quartek Group Inc. before proceeding.

Drawings must be sealed by the Architect and / or Engineer prior to the use for any building permit applications and / or government approval. Seals must be signed by the Architect and / or Engineer before drawings are used for any construction.

All construction to be in accordance with the current Ontario Building Code and all applicable Ontario regulations.

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project title
UNITED MENNONITE TOWNHOME DEVELOPMENT
 SIMONS LANE, LINCOLN, ONT.

drawing title
SITE SERVICES AND GRADING PLAN

drawn by
 BRHJ
 scale
 1:200
 job number
 17162
 drawing number
 17162-SSG-1

designed by
 HEK
 date
 26 JAN 2018
 issue
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