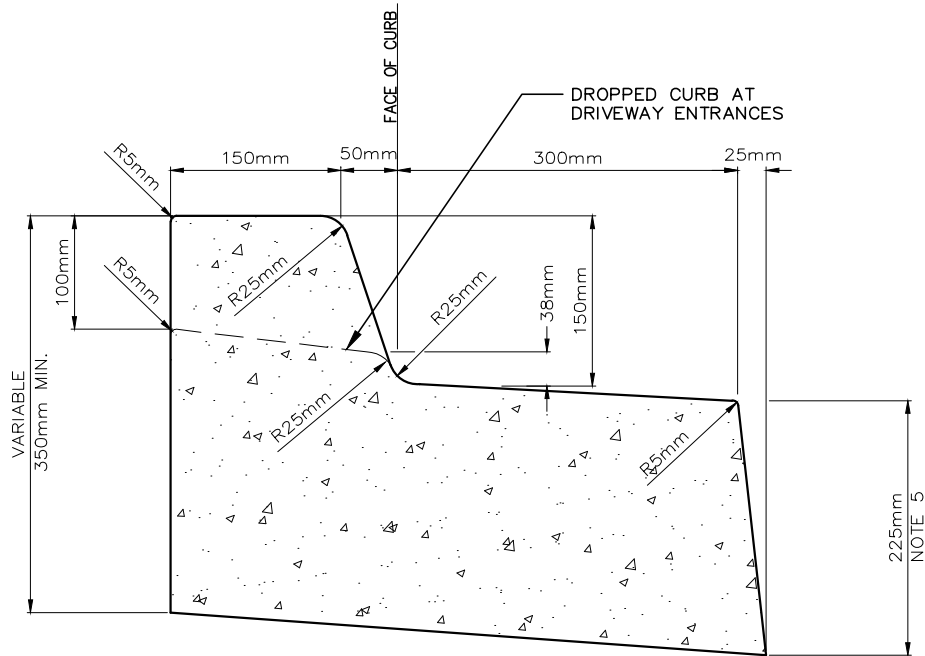


**STANDARD CURB AND GUTTER**




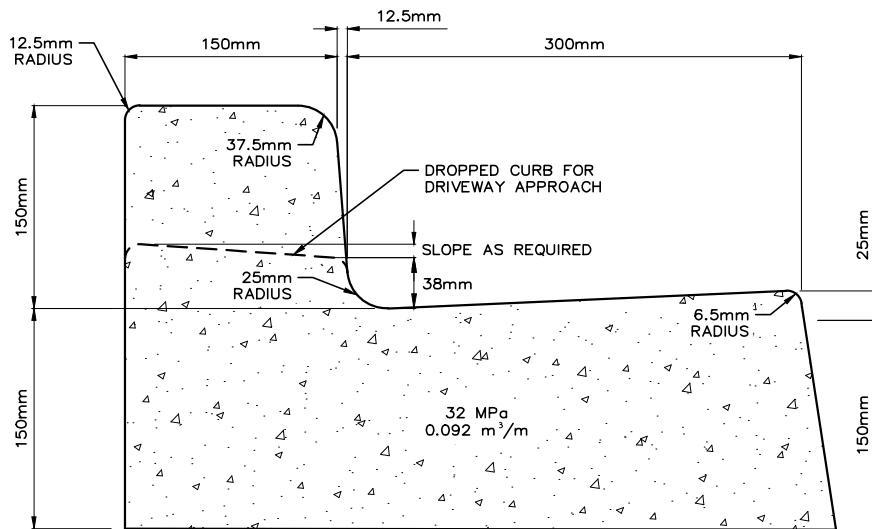
**SUPERELEVATED CURB AND GUTTER**

**NOTES:**

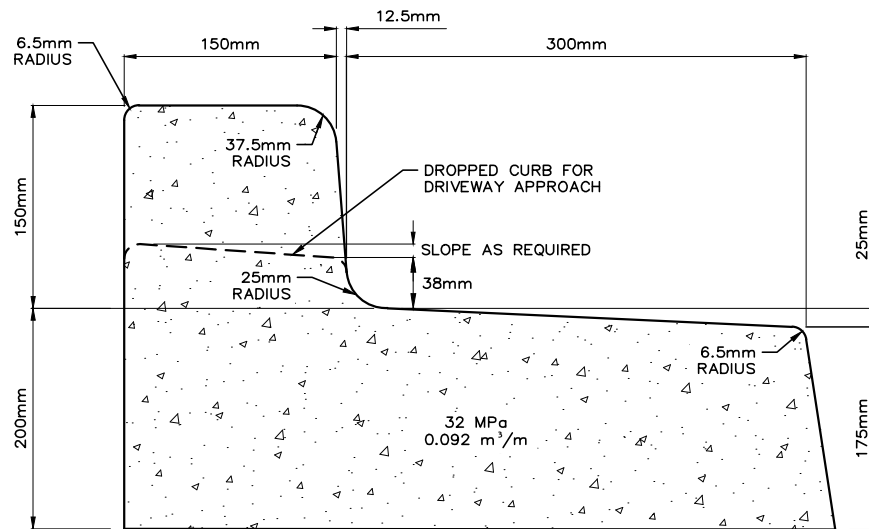
1. PREFORMED JOINT FILLER SHALL BE 12mm THICK, FULL DEPTH, AS PER OPSS.MUNI 1308.
2. PREFORMED JOINT FILLER SHALL BE INSTALLED AT:
  - a) EITHER END OF CURB REPAIRS AND REPLACEMENTS
  - b) WHERE CURB AND GUTTER IS PLACED ABUTTING EXISTING CURB
  - c) AT MAX. 3.0m INTERVALS ALONG CURVES WITH RADIUS LESS THAN 9.0m
  - d) AT MAX. 4.9m INTERVALS ELSEWHERE
3. CONTRACTION JOINTS FOR ASPHALT SURFACES TO BE SPACED 5m AND COINCIDE WITH THE CONTRACTION JOINTS FOR CONCRETE PAVEMENTS.
4. CROSS FALL OF GUTTER SHALL CONFORM TO PAVEMENT CROSS FALL AT CATCH BASIN.
5. FOR COMPOSITE PAVEMENT THE DEPTH OF CONCRETE CURB SHALL BE ADJUSTED TO THE DEPTH OF CONCRETE PAVEMENT.
6. ALL WORK SHALL CONFORM TO CITY OF WINDSOR SPEC. S-5.

NOT TO SCALE

 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>STANDARD &amp; SUPERELEVATED CURB &amp; GUTTER FOR COLLECTOR &amp; ARTERIAL ROADS</b>	
DR'N BY: LEB, AZ	DATE: MAR, 2017
REV. DATE: DEC, 2024	CH'KD BY(ENG): PM, JH
CH'KD BY(GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-208A</b>



### STANDARD CURB & GUTTER




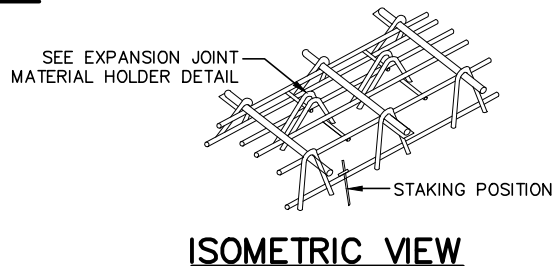
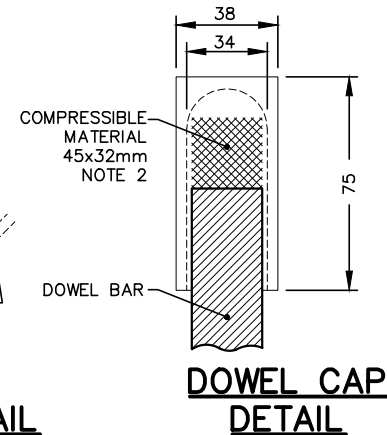
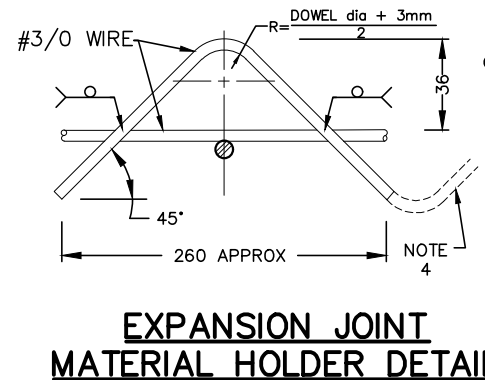
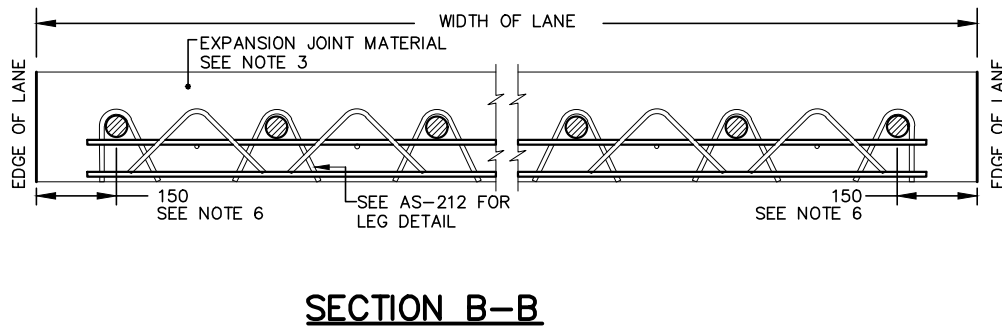
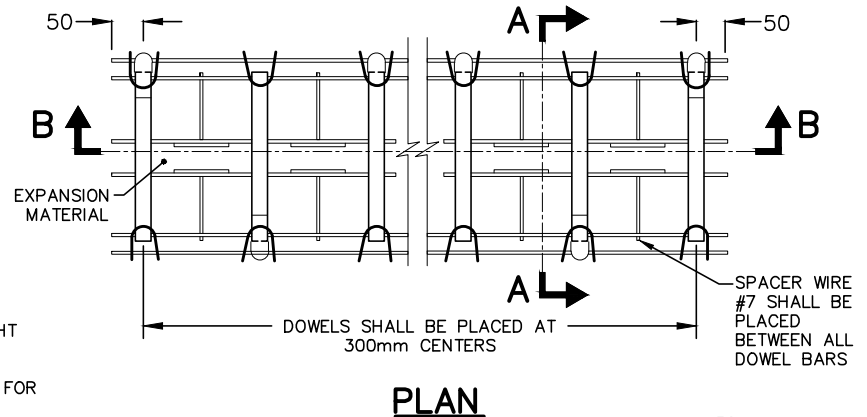
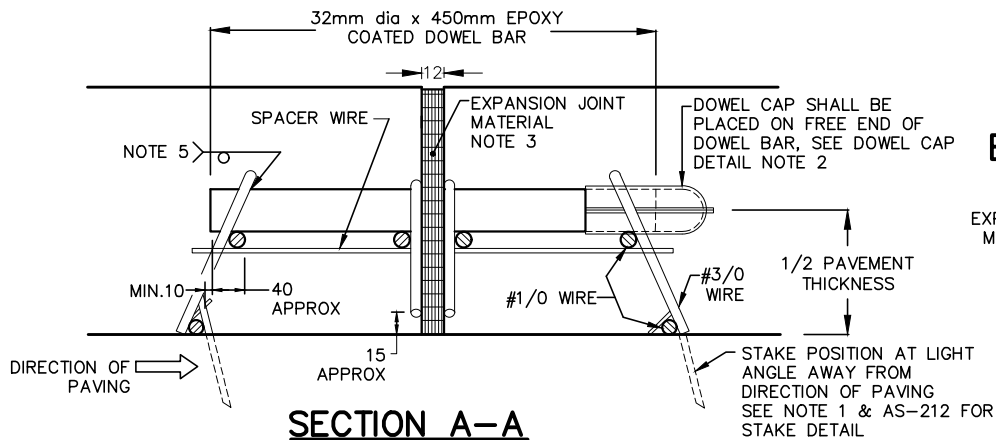
### SUPERELEVATED CURB & GUTTER

#### NOTES:

1. PREFORMED JOINT FILLER SHALL BE 12mm THICK, FULL DEPTH, AS PER OPSS.MUNI 1308.
2. PREFORMED JOINT FILLER SHALL BE INSTALLED AT:
  - a) EITHER END OF CURB REPAIRS AND REPLACEMENTS
  - b) WHERE CURB AND GUTTER IS PLACED ABUTTING EXISTING CURB
  - c) AT MAX. 3.0m INTERVALS ALONG CURVES WITH RADIUS LESS THAN 9.0m
  - d) AT MAX. 4.9m INTERVALS ELSEWHERE
3. CONTRACTION JOINTS FOR ASPHALT SURFACES TO BE SPACED 5m AND COINCIDE WITH THE CONTRACTION JOINTS FOR CONCRETE PAVEMENTS.
4. CROSS FALL OF GUTTER SHALL CONFORM TO PAVEMENT CROSS FALL AT CATCH BASIN.
5. ALL WORK SHALL CONFORM TO CITY OF WINDSOR SPEC. S-5.

NOT TO SCALE


 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>STANDARD &amp; SUPERELEVATED CURB &amp; GUTTER FOR RESIDENTIAL ROADS</b>	
DR'N BY: ET, PR, AZ	DATE: MAR, 2017
REV. DATE: DEC, 2024	CH'KD BY(ENG):PM, JH
CH'KD BY(GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-208</b>

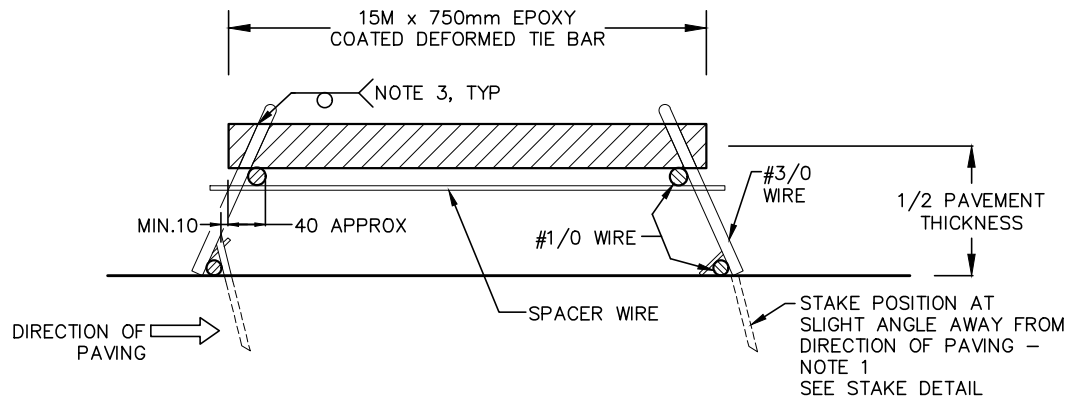


**NOTES:**

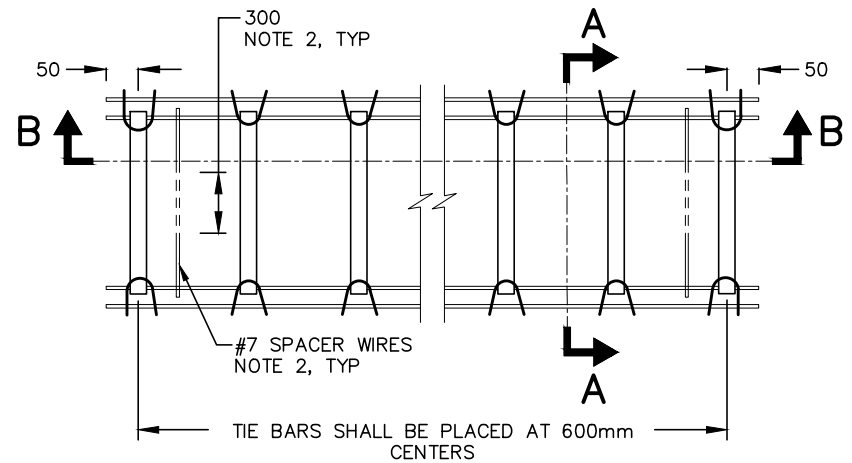
1. A MINIMUM OF 3 STAKES SHALL BE UNIFORMLY SPACED PER SIDE PER LANE.
  2. THE COMPRESSIBLE CAP MATERIAL SHALL BE A NON-ADSORPTIVE, CLOSED CELL POLYETHYLENE FOAM. DOWEL CAPS TO BE INSTALLED AS PER MANUFACTURE'S RECOMMENDATION.
  3. THE EXPANSION JOINT MATERIAL SHALL BE 12mm THICK, FULL DEPTH, PREFORMED JOINT FILLER AS PER OPSS.MUNI 1308, AND SHALL EXTEND FOR THE FULL WIDTH OF THE CONCRETE SLAB. THE EXPANSION MATERIAL SHALL BE MACHINED PUNCHED WITH HOLES THAT ARE 3mm LARGER THAN THE DIAMETER OF THE DOWEL BARS.
  4. EXPANSION JOINT MATERIAL HOLDER MAY BE CONTINUOUS OR BROKEN AS SHOWN.
  5. ARC OR RESISTANCE SPOT WELD, ALTERNATE ENDS OF ADJACENT DOWELS ONLY, TOP OR BOTTOM OF DOWEL BAR.
  6. HORIZONTAL OFFSET FROM EDGE OF LANE TO CENTER OF FIRST DOWEL SHALL BE EQUAL FROM EITHER EDGE OF LANE. HORIZONTAL DIMENSION SHALL BE 150mm UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
  7. SHOP DRAWINGS FOR LOAD TRANSFER DEVICE ASSEMBLIES SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- A. AT BRIDGE APPROACHES THE SKEW OF THE DEVICE SHALL MATCH THE APPROACH SLAB SKEW.
  - B. LOAD TRANSFER DEVICE SHALL BE SHOP COATED WITH RC-250, TECTYL 506, OR PROTEC 6116-DS AMBER.
  - C. LOAD TRANSFER DEVICES NOT REQUIRED IN SHOULDERS OR GORE AREAS HOWEVER, EXPANSION JOINT MATERIAL SHALL EXTEND THROUGH THE SHOULDER, GORE AREAS, AND CURB AND GUTTER TO EDGE OF CONCRETE SLAB.
  - D. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NOT TO SCALE

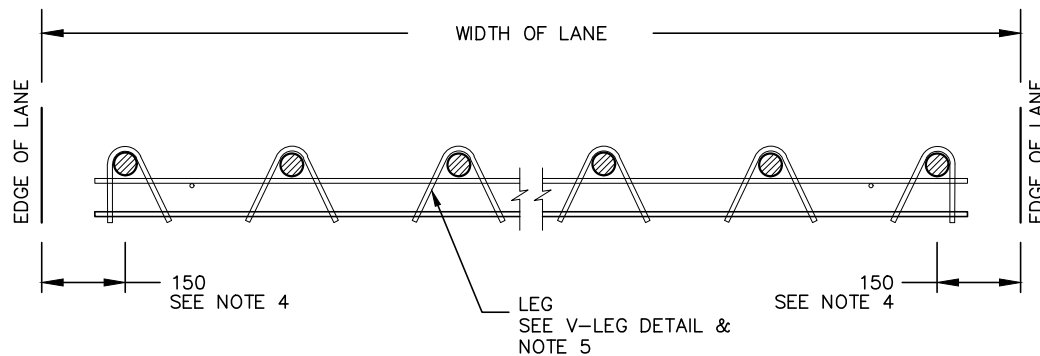
 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>LOAD TRANSFER DEVICE RIGHT ANGLE EXPANSION JOINT</b>	
DR'N BY: AZ	DATE: JUN, 2024
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJJ, AL	PASSED BY: FM
CITY ENGINEER	<b>AS-212A</b>



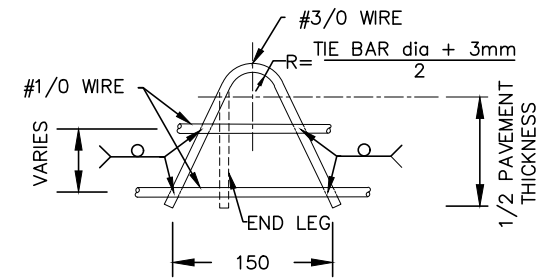
**SECTION A-A**



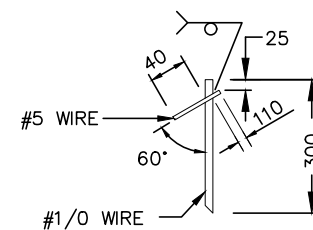
**PLAN**



**SECTION B-B**



**V-LEG DETAIL**




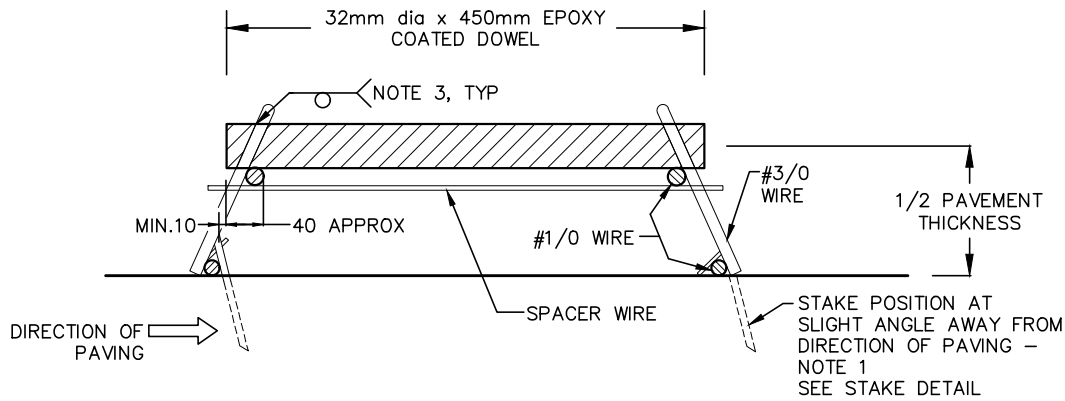
**STAKE DETAIL**

**NOTES:**

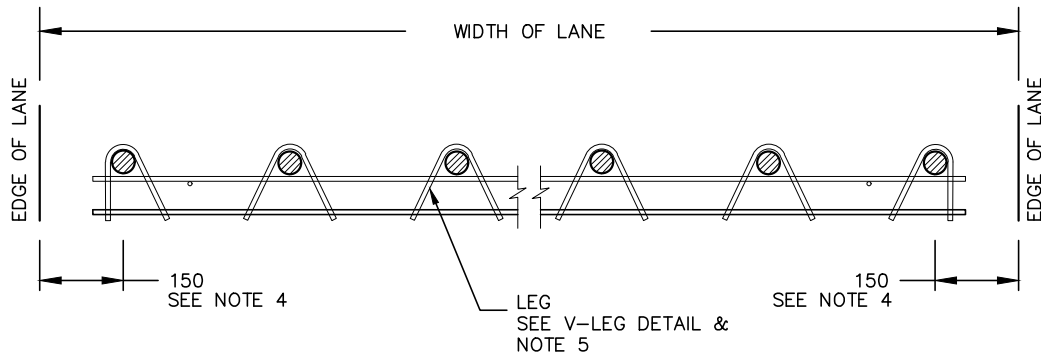
1. A MINIMUM OF 3 STAKES SHALL BE UNIFORMLY SPACED PER SIDE PER LANE.
  2. SPACER WIRE SHALL BE CUT IN TWO PLACES AND THE MID SECTION REMOVED AFTER STAKING ASSEMBLY IS IN POSITION. SECTION REMOVED SHALL BE A MINIMUM LENGTH OF 300mm.
  3. ARC OR RESISTANCE SPOT WELD, ALTERNATE ENDS OF ADJACENT TIE BARS ONLY, TOP OR BOTTOM OF TIE BAR.
  4. HORIZONTAL OFFSET FROM EDGE OF LANE TO CENTER OF FIRST TIE BAR SHALL BE EQUAL FROM EITHER EDGE OF LANE. HORIZONTAL DIMENSION SHALL BE 150mm UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
  5. U-LEG AND J-LEG ALTERNATIVES MAY BE APPROVED AT THE DISCRETION OF THE CITY ENGINEER.
  6. SHOP DRAWINGS FOR TIE BAR ASSEMBLIES SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- A. TIE BARS SHALL BE SHOP COATED WITH RC-250, TECTYL 506, OR PROTEC 6116-DS AMBER.
  - B. TIE BARS NOT REQUIRED IN SHOULDERS OR GORE AREAS.
  - C. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NOT TO SCALE

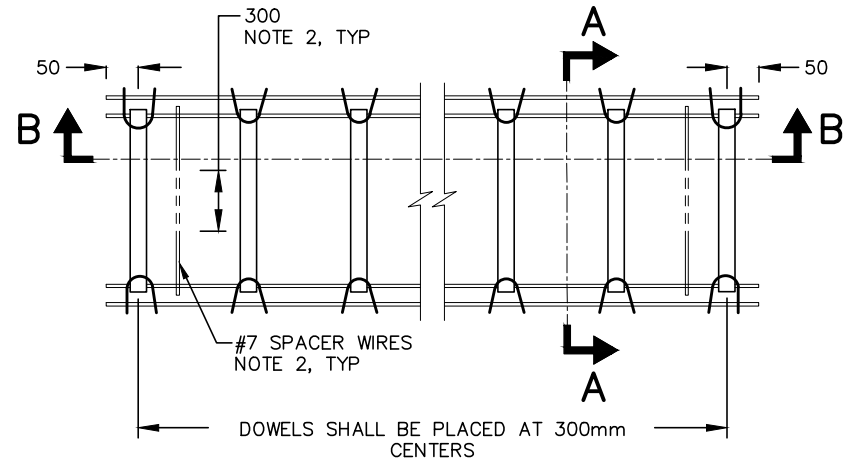
 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>TIE BAR DEVICE RIGHT ANGLE CONTRACTION JOINT</b>	
DR'N BY: AZ	DATE: JUN, 2024
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJJ, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-212B</b>



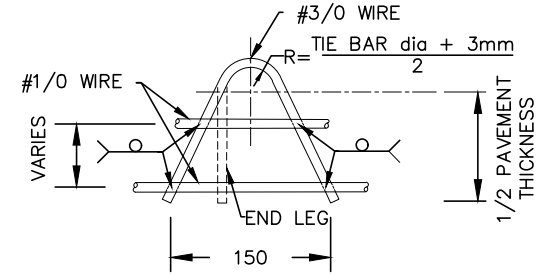
**SECTION A-A**



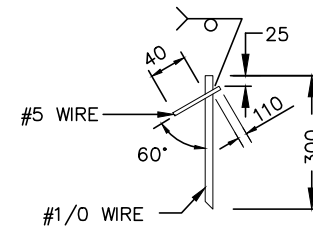
**SECTION B-B**



**PLAN**



**V-LEG DETAIL**




**STAKE DETAIL**

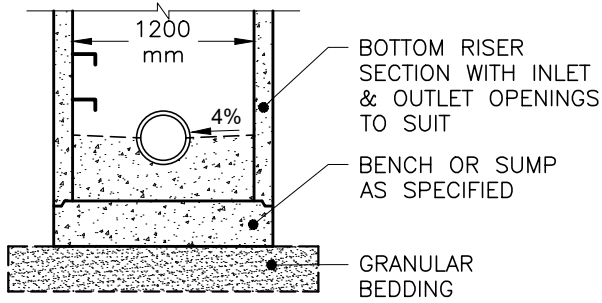
**NOTES:**

1. A MINIMUM OF 3 STAKES SHALL BE UNIFORMLY SPACED PER SIDE PER LANE.
  2. SPACER WIRE SHALL BE CUT IN TWO PLACES AND THE MID SECTION REMOVED AFTER STAKING ASSEMBLY IS IN POSITION. SECTION REMOVED SHALL BE A MINIMUM LENGTH OF 300mm.
  3. ARC OR RESISTANCE SPOT WELD, ALTERNATE ENDS OF ADJACENT DOWELS ONLY, TOP OR BOTTOM OF DOWEL BAR.
  4. HORIZONTAL OFFSET FROM EDGE OF LANE TO CENTER OF FIRST DOWEL SHALL BE EQUAL FROM EITHER EDGE OF LANE. HORIZONTAL DIMENSION SHALL BE 150mm UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
  5. U-LEG AND J-LEG ALTERNATIVES MAY BE APPROVED AT THE DISCRETION OF THE CITY ENGINEER.
  6. SHOP DRAWINGS FOR LOAD TRANSFER DEVICE ASSEMBLIES SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- A. AT BRIDGE APPROACHES THE LOAD TRANSFER DEVICE SHALL MATCH THE SKEW OF THE APPROACH SLAB.  
 B. LOAD TRANSFER DEVICES SHALL BE SHOP COATED WITH RC-250, TECTYL 506, OR PROTEC 6116-DS AMBER.  
 C. LOAD TRANSFER DEVICES NOT REQUIRED IN SHOULDERS OR GORE AREAS.  
 D. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

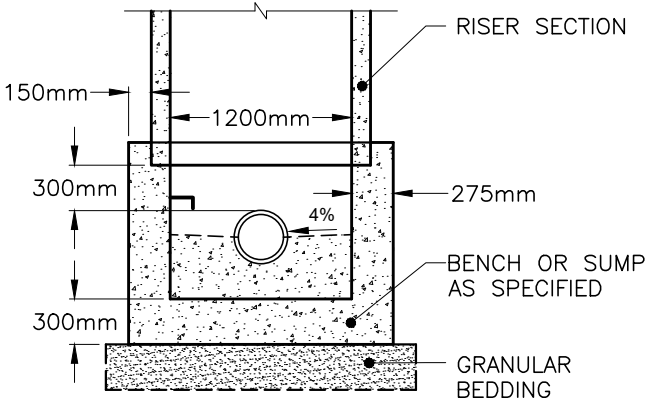
NOT TO SCALE

 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>LOAD TRANSFER DEVICE RIGHT ANGLE          CONTRACTION JOINT</b>	
DR'N BY: AZ	DATE: JUN, 2024
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJJ, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-212</b>

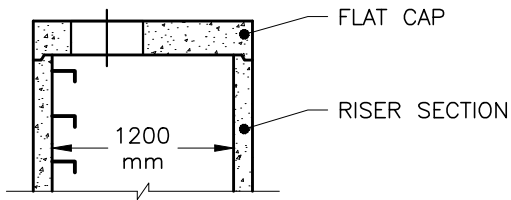
# ALTERNATIVES



## A. PRECAST SLAB BASE



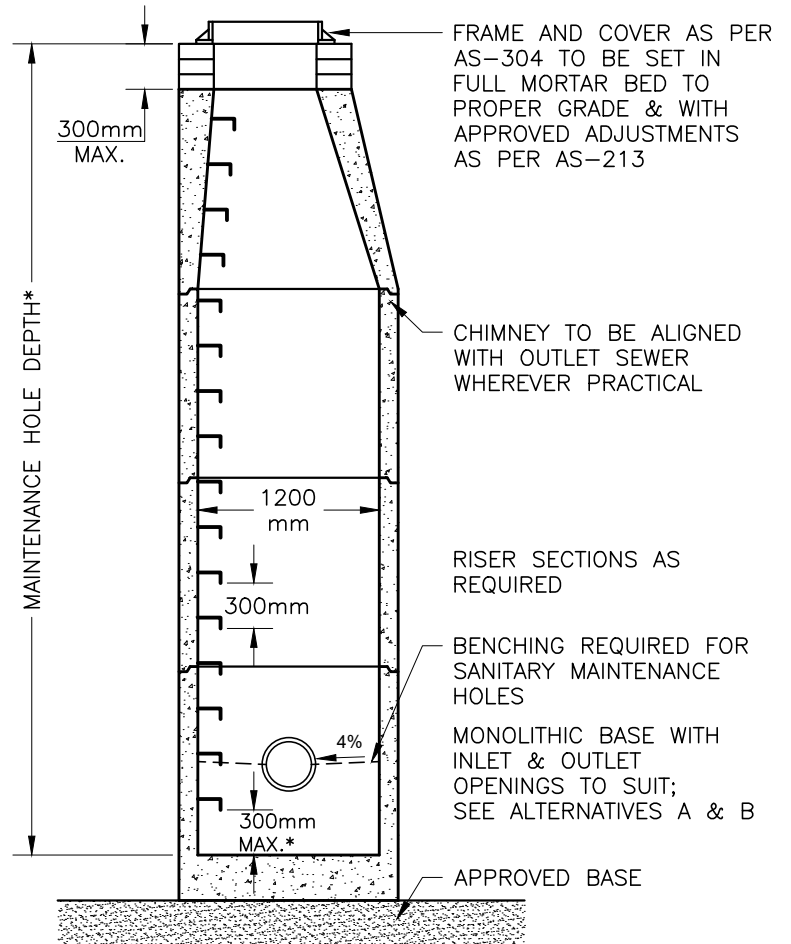
## B. CAST-IN-PLACE BASE



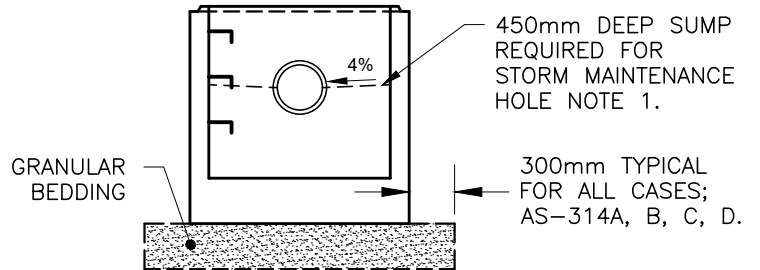
## C. PRECAST FLAT CAP

### NOTES:

1. THE SUMP IS MEASURED FROM THE LOWEST INVERT.
2. GRANULAR 'A' BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT EXCEEDING 300mm TO A MINIMUM WIDTH OF 300mm AROUND THE ENTIRE PERIMETER OF THE MAINTENANCE HOLE.
3. PRECAST CONCRETE COMPONENTS SHALL BE ACCORDING TO OPSD 701 & 703 SERIES.
4. PIPE SUPPORT SHALL BE CLASS 'A' BEDDING TO FIRST PIPE JOINT BEYOND MANHOLE (RIGID PIPE) OR A FLEXIBLE JOINT WITHIN 900mm OF MANHOLE WALL (RIGID OR FLEXIBLE PIPE) WITH SEWER STONE BEDDING.
5. MAINTENANCE HOLE STEPS IN ACCORDANCE WITH AS-305.
6. FROST STRAPPING FOR SANITARY MAINTENANCE HOLES AS PER AS-314 TO EXTEND 2.0m BELOW FINISHED GRADE (1.0m BELOW FROST DEPTH).




\*MEASURED TO BENCHING OR SUMP, WHICHEVER IS APPLICABLE



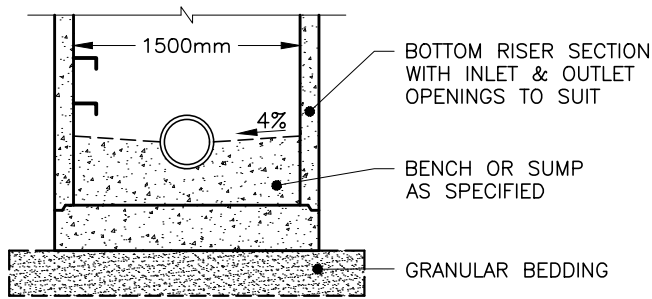
## SUMP DETAIL

7. WATERPROOFING MEMBRANE FOR SANITARY MAINTENANCE HOLES AS PER AS-314, SHALL BE INSTALLED PRIOR TO INSTALLATION OF FROST STRAPPING.

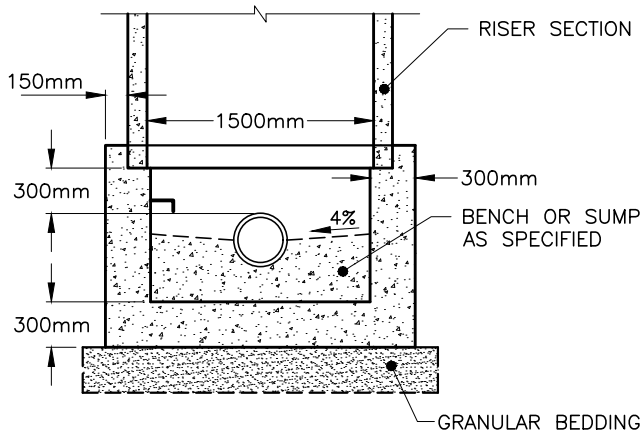
NOT TO SCALE

 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>PRECAST MAINTENANCE HOLE</b> <b>1200mm DIAMETER</b>	
DR'N BY: NB, AZ	DATE: MAR, 2017
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-314A</b>

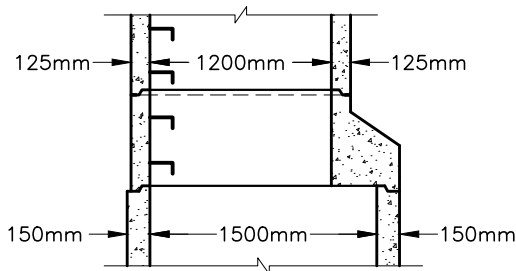
# ALTERNATIVES



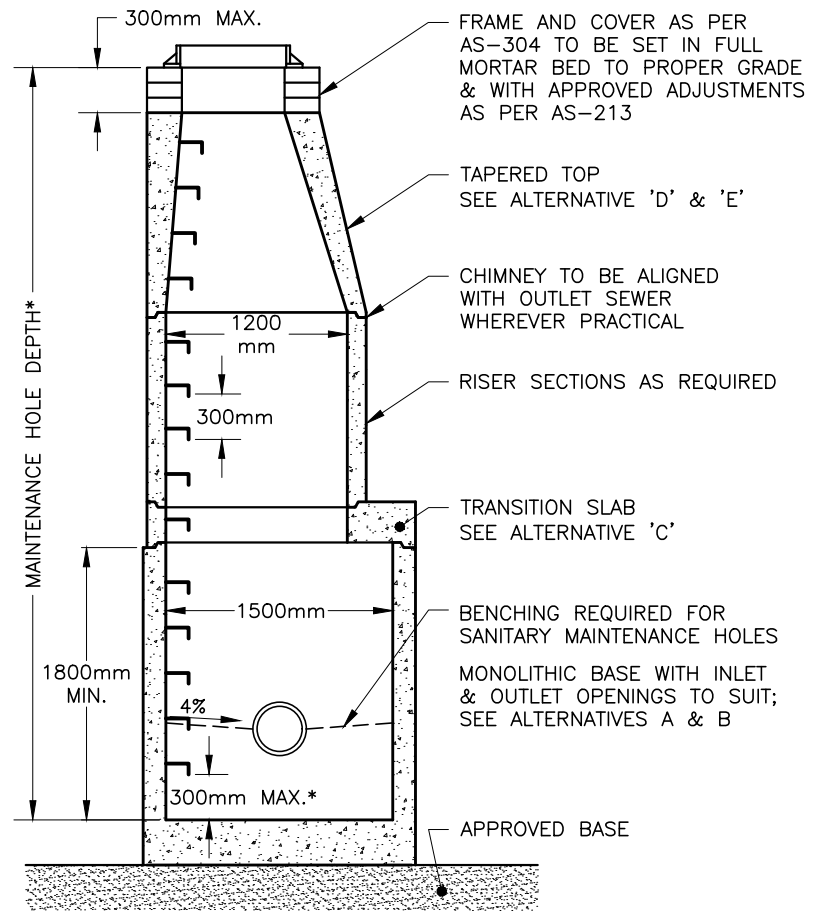
## A. PRECAST SLAB BASE



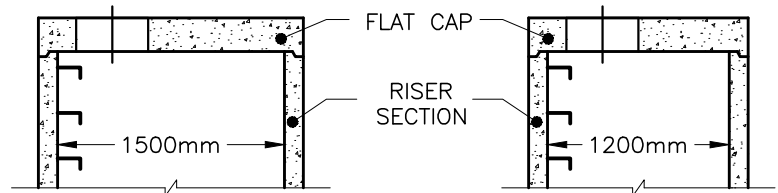
## B. CAST-IN-PLACE BASE



## C. TAPERED TRANSITION SLAB



\*MEASURED TO BENCHING OR SUMP, WHICHEVER IS APPLICABLE



## D. 1500mm PRECAST FLAT CAP


## E. 1200mm PRECAST FLAT CAP

### NOTES:

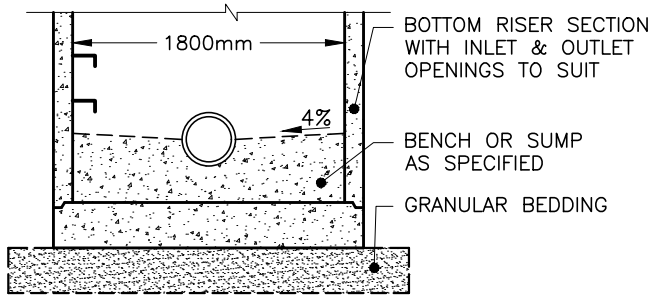
1. THE SUMP IS MEASURED FROM THE LOWEST INVERT, FOR SUMP DETAIL SEE AS-314A.
2. GRANULAR 'A' BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT EXCEEDING 300mm TO A MINIMUM WIDTH OF 300mm AROUND THE ENTIRE PERIMETER OF THE MAINTENANCE HOLE.
3. PRECAST CONCRETE COMPONENTS SHALL BE ACCORDING TO OPSD 701 & 703 SERIES.
4. PIPE SUPPORT SHALL BE CLASS 'A' BEDDING TO FIRST PIPE JOINT BEYOND MANHOLE (RIGID PIPE) OR A FLEXIBLE JOINT WITHIN 900mm OF MANHOLE WALL (RIGID OR FLEXIBLE PIPE) WITH SEWER STONE BEDDING.
5. MAINTENANCE HOLE STEPS IN ACCORDANCE WITH AS-305.
6. FROST STRAPPING FOR SANITARY MAINTENANCE HOLES AS PER AS-314 TO EXTEND 2.0m BELOW FINISHED GRADE (1.0m BELOW FROST DEPTH).

7. WATERPROOFING MEMBRANE FOR SANITARY MAINTENANCE HOLES AS PER AS-314, SHALL BE INSTALLED PRIOR TO INSTALLATION OF FROST STRAPPING.

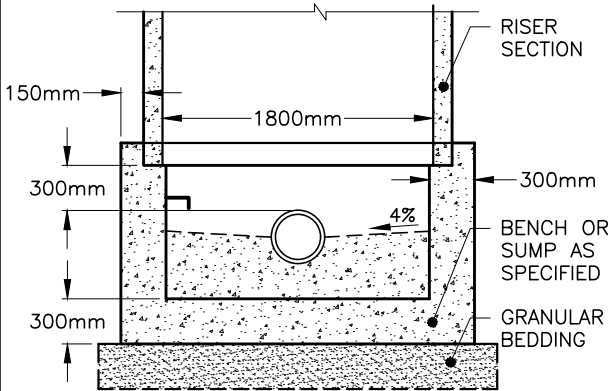
NOT TO SCALE

 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>PRECAST MAINTENANCE HOLE</b> <b>1500mm DIAMETER</b>	
DR'N BY: NB, AZ	DATE: MAR, 2017
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-314B</b>

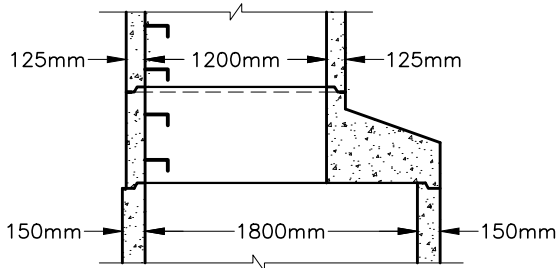
# ALTERNATIVES



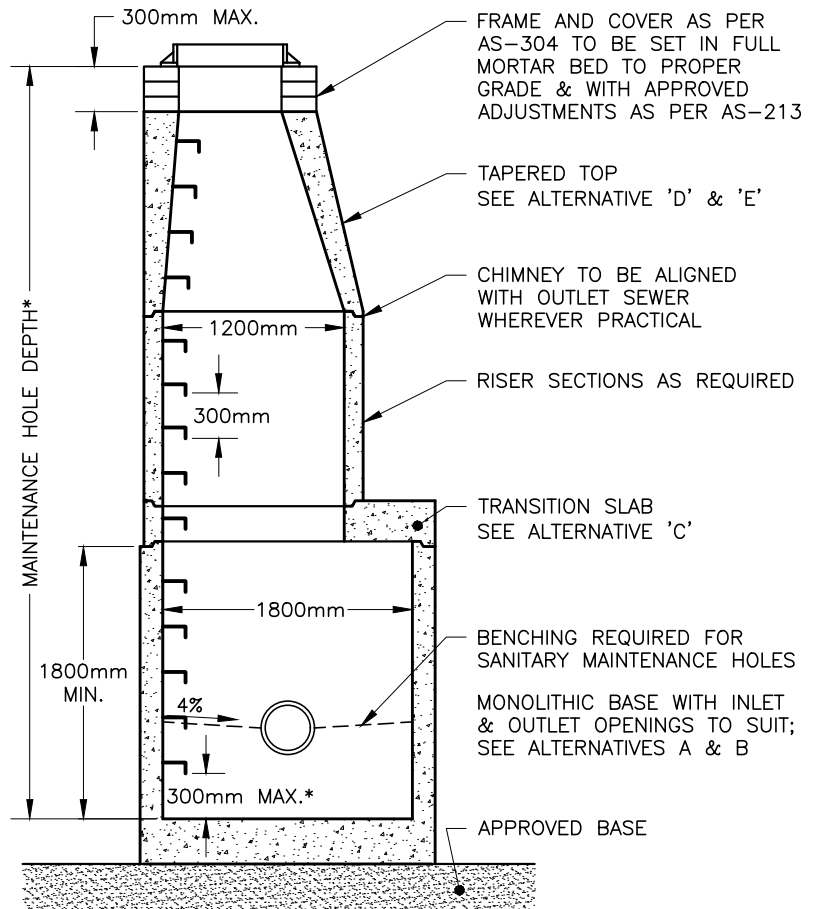
**A. PRECAST SLAB BASE**



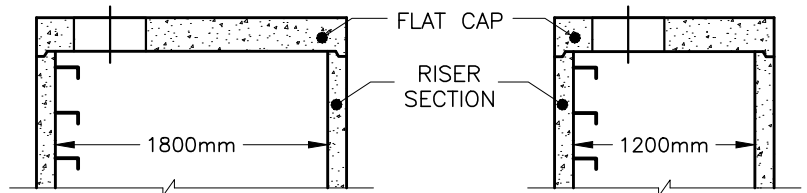
**B. CAST-IN-PLACE BASE**



**C. TAPERED TRANSITION SLAB**



\*MEASURED TO BENCHING OR SUMP, WHICHEVER IS APPLICABLE



**D. 1800mm PRECAST FLAT CAP**


**E. 1200mm PRECAST FLAT CAP**

**NOTES:**

1. THE SUMP IS MEASURED FROM THE LOWEST INVERT, FOR SUMP DETAIL SEE AS-314A.
2. GRANULAR 'A' BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT EXCEEDING 300mm TO A MINIMUM WIDTH OF 300mm AROUND THE ENTIRE PERIMETER OF THE MAINTENANCE HOLE.
3. PRECAST CONCRETE COMPONENTS SHALL BE ACCORDING TO OPSD 701 & 703 SERIES.
4. PIPE SUPPORT SHALL BE CLASS 'A' BEDDING TO FIRST PIPE JOINT BEYOND MANHOLE (RIGID PIPE) OR A FLEXIBLE JOINT WITHIN 900mm OF MANHOLE WALL (RIGID OR FLEXIBLE PIPE) WITH SEWER STONE BEDDING.
5. MAINTENANCE HOLE STEPS IN ACCORDANCE WITH AS-305.
6. FROST STRAPPING FOR SANITARY MAINTENANCE HOLES AS PER AS-314 TO EXTEND 2.0m BELOW FINISHED GRADE (1.0m BELOW FROST DEPTH).

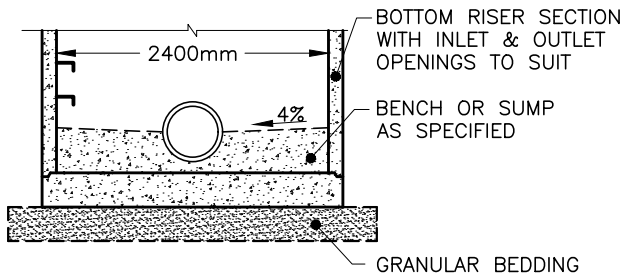
7. WATERPROOFING MEMBRANE FOR SANITARY MAINTENANCE HOLES AS PER AS-314, SHALL BE INSTALLED PRIOR TO INSTALLATION OF FROST STRAPPING.

NOT TO SCALE

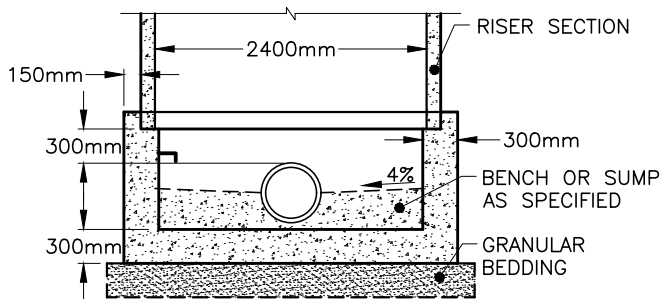
 <p><b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT</p>	
<p><b>PRECAST MAINTENANCE HOLE 1800mm DIAMETER</b></p>	
DR'N BY: NB, AZ	DATE: MAR, 2017
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJU, AL	PASSED BY: FM
<p>_____ CITY ENGINEER</p>	<p><b>AS-314C</b></p>



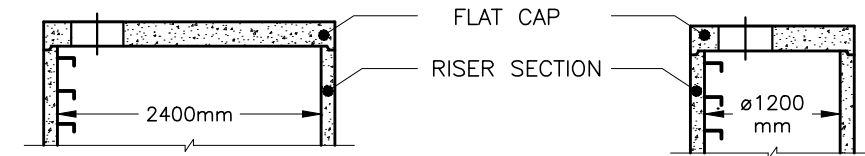
# ALTERNATIVES



## A. PRECAST SLAB BASE



## B. CAST-IN-PLACE BASE

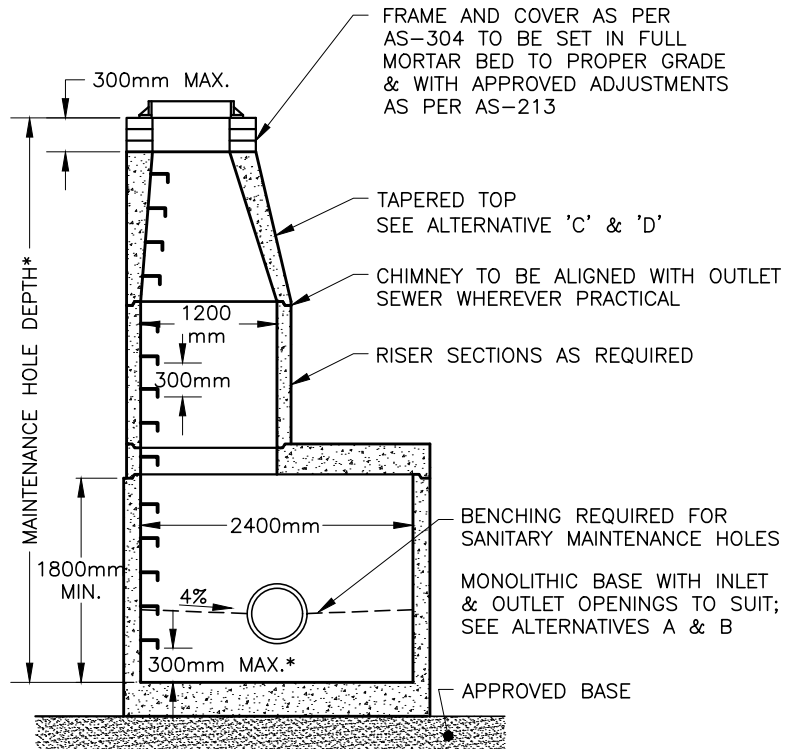


## C. 2400mm PRECAST FLAT CAP

## D. 1200mm PRECAST FLAT CAP


### NOTES:

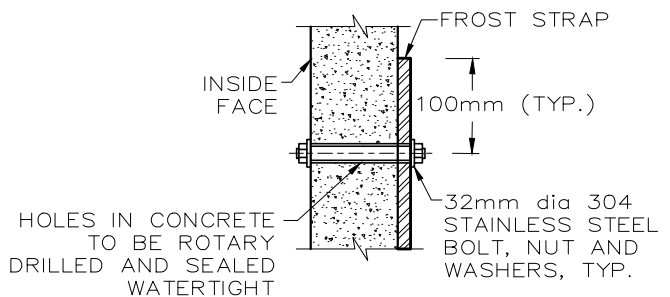
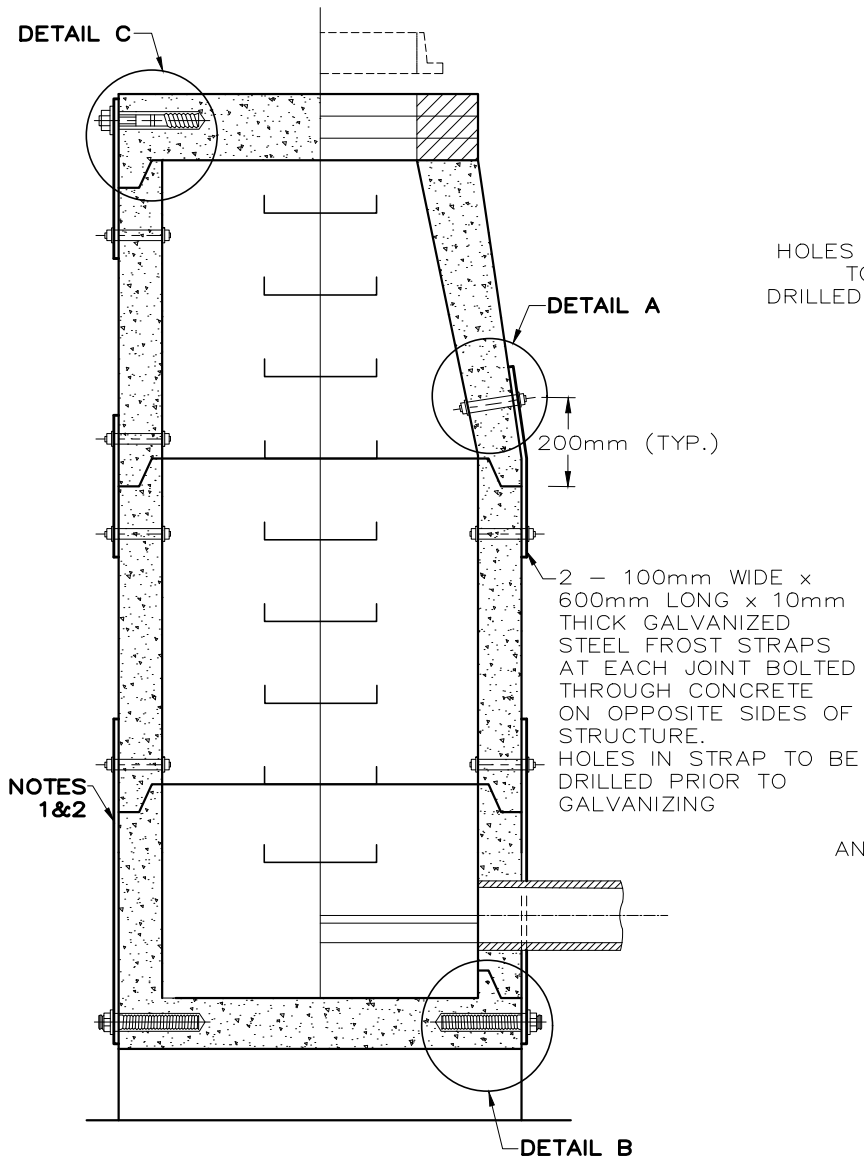
1. THE SUMP IS MEASURED FROM THE LOWEST INVERT, FOR SUMP DETAIL SEE AS-314A.
2. GRANULAR 'A' BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT EXCEEDING 300mm TO A MINIMUM WIDTH OF 300mm AROUND THE ENTIRE PERIMETER OF THE MAINTENANCE HOLE.
3. PRECAST CONCRETE COMPONENTS SHALL BE ACCORDING TO OPSD 701 & 703 SERIES.
4. PIPE SUPPORT SHALL BE CLASS 'A' BEDDING TO FIRST PIPE JOINT BEYOND MANHOLE (RIGID PIPE) OR A FLEXIBLE JOINT WITHIN 900mm OF MANHOLE WALL (RIGID OR FLEXIBLE PIPE) WITH SEWER STONE BEDDING.
5. MAINTENANCE HOLE STEPS IN ACCORDANCE WITH AS-305.
6. FROST STRAPPING FOR SANITARY MAINTENANCE HOLES AS PER AS-314 TO EXTEND 2.0m BELOW FINISHED GRADE (1.0m BELOW FROST DEPTH).
7. WATERPROOFING MEMBRANE FOR SANITARY MAINTENANCE HOLES AS PER AS-314, SHALL BE INSTALLED PRIOR TO INSTALLATION OF FROST STRAPPING.



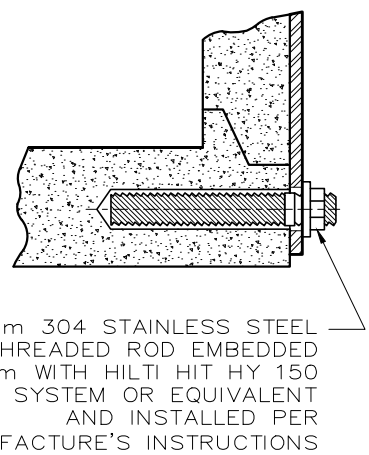
\*MEASURED TO BENCHING OR SUMP, WHICHEVER IS APPLICABLE

NOT TO SCALE

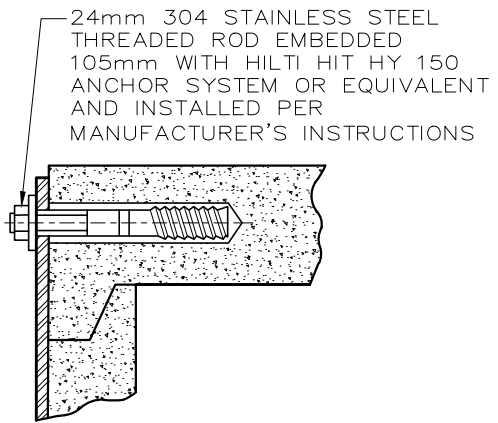
 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>PRECAST MAINTENANCE HOLE</b> <b>2400mm DIAMETER</b>	
DR'N BY: SS, NB, AZ	DATE: MAR, 2017
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-314D</b>



**DETAIL A**



**DETAIL B**



**DETAIL C**


**NOTES 1&2**

2 - 100mm WIDE x 600mm LONG x 10mm THICK GALVANIZED STEEL FROST STRAPS AT EACH JOINT BOLTED THROUGH CONCRETE ON OPPOSITE SIDES OF STRUCTURE. HOLES IN STRAP TO BE DRILLED PRIOR TO GALVANIZING

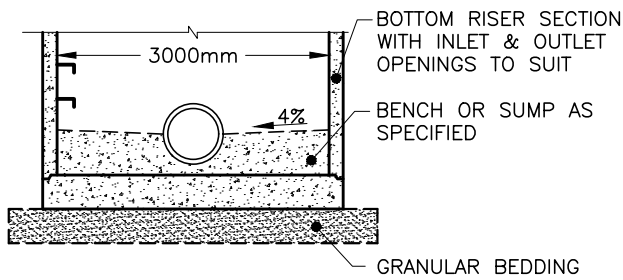
**NOTES:**

1. EACH SANITARY MAINTENANCE HOLE JOINT SHALL BE EXTERNALLY WRAPPED WITH A 300mm WIDE (MIN.) WATERPROOFING MEMBRANE PRIOR TO INSTALLATION OF FROST STRAPPING.
2. TWO FROST STRAPS TO BE INSTALLED AT EACH SANITARY MANHOLE JOINT TO A MINIMUM DEPTH OF 2.0m BELOW FINISHED GRADE (1.0m BELOW FROST DEPTH).
3. FROST STRAPS SHALL BE PLACED SO THEY DO NOT INTERFERE WITH SEWER PIPE OPENINGS AND THE STEPS.
4. GALVANIZING SHALL BE ACCORDING TO CAN/CSA G164.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
6. TO BE READ IN CONJUNCTION WITH AS-314A, 314B, 314C, 314D, AND 314E.

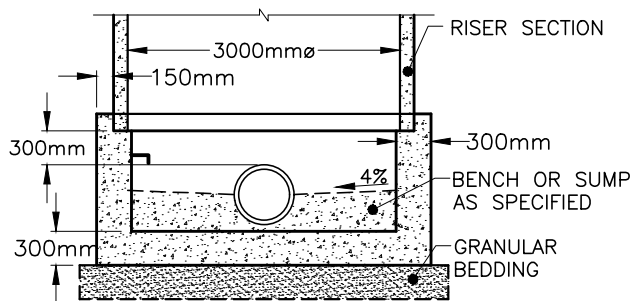
NOT TO SCALE

 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>WATERPROOFING AND FROST STRAPPING FOR SANITARY MAINTENANCE HOLES</b>	
DR'N BY: AZ	DATE: DEC, 2024
REV. DATE:	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	
<b>AS-314</b>	

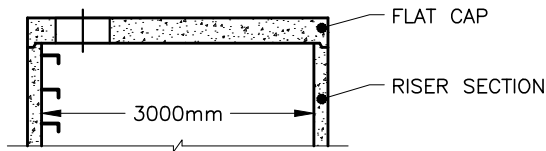
# ALTERNATIVES



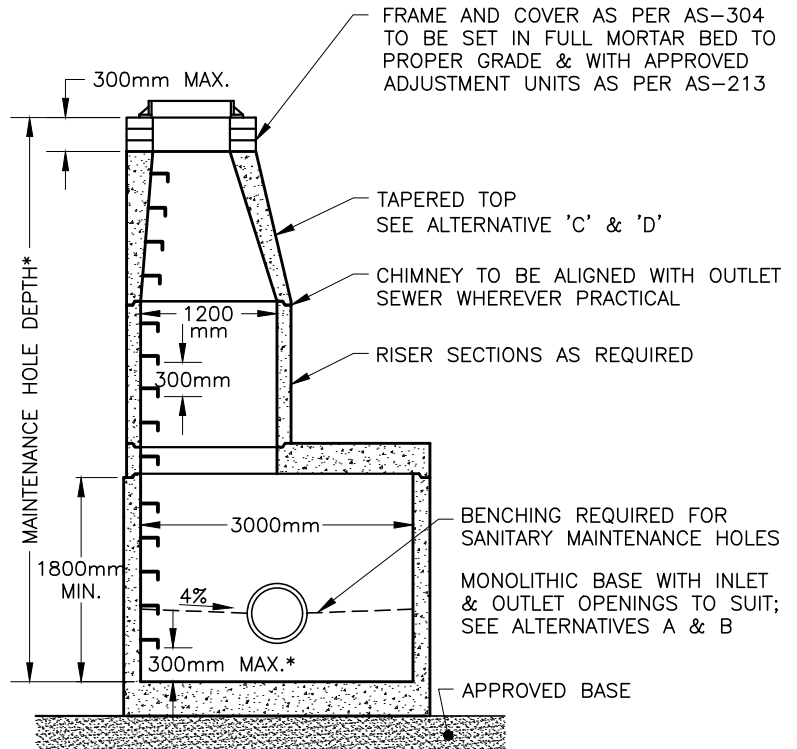
## A. PRECAST SLAB BASE



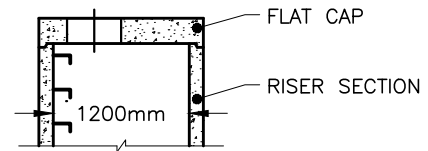
## B. CAST-IN-PLACE BASE



## C. 3000mm PRECAST FLAT CAP



\*MEASURED TO BENCHING OR SUMP, WHICHEVER IS APPLICABLE




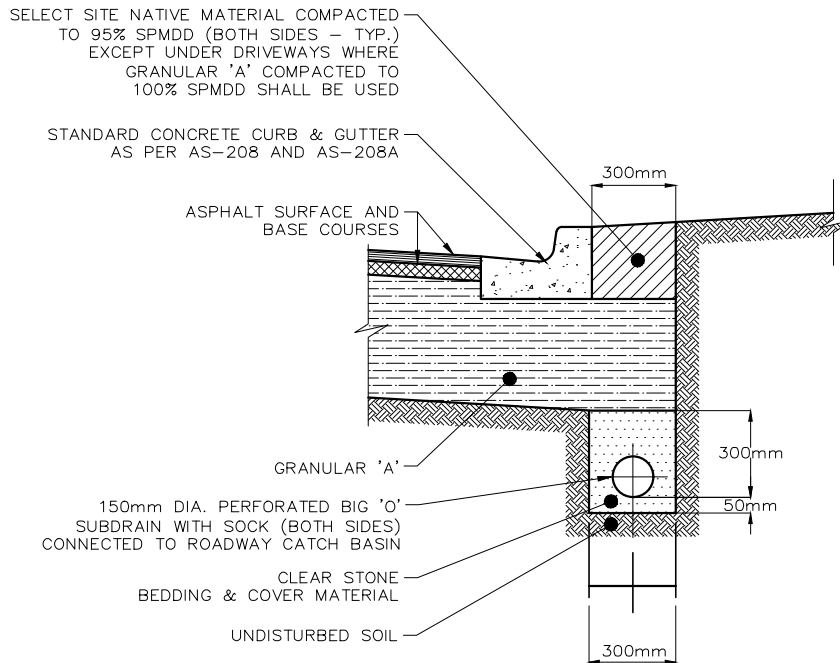
## D. 1200mm PRECAST FLAT CAP

### NOTES:

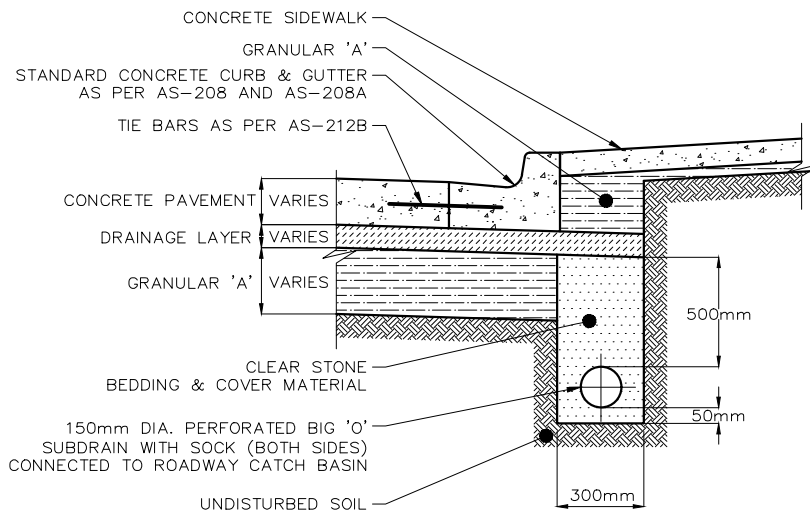
1. THE SUMP IS MEASURED FROM THE LOWEST INVERT, FOR SUMP DETAIL SEE AS-314A.
2. GRANULAR 'A' BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT EXCEEDING 300mm TO A MINIMUM WIDTH OF 300mm AROUND THE ENTIRE PERIMETER OF THE MAINTENANCE HOLE.
3. PRECAST CONCRETE COMPONENTS SHALL BE ACCORDING TO OPSD 701 & 703 SERIES.
4. PIPE SUPPORT SHALL BE CLASS 'A' BEDDING TO FIRST PIPE JOINT BEYOND MANHOLE (RIGID PIPE) OR A FLEXIBLE JOINT WITHIN 900mm OF MANHOLE WALL (RIGID OR FLEXIBLE PIPE) WITH SEWER STONE BEDDING.
5. MAINTENANCE HOLE STEPS IN ACCORDANCE WITH AS-305.
6. FROST STRAPPING FOR SANITARY MAINTENANCE HOLES AS PER AS-314 TO EXTEND 2.0m BELOW FINISHED GRADE (1.0m BELOW FROST DEPTH).
7. CAST-IN-PLACE BASES TO BE TO THE SATISFACTION OF THE CITY ENGINEER.
8. WATERPROOFING MEMBRANE FOR SANITARY MAINTENANCE HOLES AS PER AS-314, SHALL BE INSTALLED PRIOR TO INSTALLATION OF FROST STRAPPING.

NOT TO SCALE

 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>PRECAST MAINTENANCE HOLE          3000mm DIAMETER</b>	
DR'N BY: SS, NB, AZ	DATE: JUN, 2017
REV. DATE: DEC, 2024	CH'KD BY (ENG): PM, JH
CH'KD BY (GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-314E</b>



**DETAIL A – SUBDRAIN FOR ASPHALT PAVEMENT**




**DETAIL B – SUBDRAIN FOR CONCRETE PAVEMENT**

**NOTES:**

1. TO BE READ IN CONJUNCTION WITH CITY OF WINDSOR STANDARD SPECIFICATIONS S-16.
2. CLEAR STONE MAY BE 16mm OR 19mm. REFER TO CITY OF WINDSOR STANDARD SPECIFICATION S-4.
3. DEPTH OF SUBDRAIN SHALL FOLLOW LONGITUDINAL PROFILE OF THE ROAD.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NOT TO SCALE

 <b>CITY OF WINDSOR</b> ENGINEERING DEPARTMENT	
<b>SUBDRAIN DETAIL FOR          ASPHALT &amp; CONCRETE PAVEMENT</b>	
DR'N BY: BC, AZ	DATE: JUN, 2015
REV. DATE: DEC, 2024	CH'KD BY(ENG): PM, JH
CH'KD BY(GEO/OPS): PJU, AL	PASSED BY: FM
_____ CITY ENGINEER	<b>AS-557</b>