

INCORPORATED VILLAGE OF HUNTINGTON BAY

Road Opening Permit Application

Application is hereby made for the permit indicated below, pursuant to the provisions of Chapter 74, Sub Section 4 of the General Code of the Village of Huntington Bay.

1. Utility: _____
2. Applicant: Name _____
Address _____

Name & Title of Utility Rep. _____
Telephone No. _____
3. Nature and Purpose of Work (Brief Description) _____

4. Exact Location _____
5. Duration of Work: Start Date: _____ Completion Date: _____
6. Applicant shall give the following notices: 24 hours advance notice, before work starts, to the Police Department and to the Village Administrator.
7. Map, plan, survey or sketch of work showing street location and work area is submitted herewith. Permit fee is **\$250.00** and applicant is responsible for all associated Village Engineering/Arborist services associated with each application.
8. Applicant agrees to restore the street, highway or bicycle path pavement and surrounding terrain as per attached specs and drawing.
9. Certificate of liability insurance must be submitted with the Village of Huntington Bay named as certificate holder. This certificate must cover all risks inherent in the work to be done with a minimum of \$3 million for bodily injury, including death, in any one occurrence and \$100,000 property damage with exclusions for excavation, collapse and underground construction eliminated and with completed operations endorsement. Applicant will indemnify and hold harmless the Village of Huntington Bay from all damage resulting from activities related to this application.

For Office use only:

Certificate of Insurance Received _____

Permit Fee Received _____

Permission is hereby granted the applicant to do work indicated in the above application.

Date _____ By _____

Permit No. _____ Title _____

ROADWAY & PAVEMENT RESTORATION SPECIFICATION

PART 1 - GENERAL

1.01 SCOPE

- A. The Contractor shall be responsible at all times for the carrying out of all excavation operations, roadway repair and pavement restoration in a safe and prudent manner so that the workmen, the public and adjacent public and private property shall be protected from unreasonable hazard. All applicable Federal, State and local requirements shall be observed and necessary permits acquired by the Contractor. Extent of the roadway and pavement restoration required shall be as specified on the road opening permit or as specified by the representative of the Village of Huntington Bay (herein known as the Village).
- B. Roadway repair and pavement restoration includes, but is not limited to, the following:
1. Shoring, bracing and other protection as necessary to protect the work area in conformance with the latest editions of the Industrial Code Rule 23 of the rules and regulations of the State of New York with subsection 107-05 of the N.Y.S.D.O.T. Standard Specifications, with applicable Federal regulations and requirements. Shoring and bracing shall be provided as necessary to protect existing, buildings, streets, walkways, utilities etc..., against movement of ground or caving embankments. Shoring and bracing shall be maintained during the complete course of work and removed upon completion.
 2. Excavation trenching, embankment, filling and back filling required in conjunction with utility work or excavation within the right-of-way.
 3. Placement of one or more courses of bituminous pavement and recycled concrete base course material and granular subbase material constructed on the prepared surface in conformance with the road opening permit and the Pavement Restoration Detail.
 4. Compaction testing of granular backfill, recycled concrete subbase and pavement installation.

1.02 QUALITY CONTROL

- A. Work, and types or methods of construction, shall in no event be less than that necessary to conform to all the provisions of the Village, local law, ordinances and regulations of the Village, Town, County, State or any of the jurisdictional departments, applicable to the work included in this section.
1. The Specifications, Details, Requirements and Ordinances of the Village.

2. Village Specifications.
 3. "Standard Specifications Construction and Materials" of the New York State Department of Transportation, latest edition.
 4. Title 29 Code of Federal Regulations, Part 1926, Safety, and Health Regulations for Construction, (O.S.H.A.), latest edition.
 5. Industrial Code Rules of the New York State Department of Labor, Board of Standards and Appeals, latest edition.
 6. New York State Labor Law sections pertaining to safety and health of employees, latest edition.
 7. Compaction of all granular backfill and subbase areas shall not be less than 95% of the maximum density as determined by the Modified Proctor Density at optimum moisture content. Contractor shall provide the Village or its representative with compaction test results from a certified testing agency; a minimum of one (1) test per 1,000 square feet shall be performed.
 7. Compaction of each course in accordance with the requirements of the New York State Department of Transportation standard specifications Section 400, Bituminous Pavement. Asphalt courses shall be compacted to a minimum of 95% as determined by A.S.T.M. Density Testing Standards. Contractor shall provide the Village or its representative with compaction test results from a certified testing agency; a minimum of one (1) test per 1,000 square feet shall be performed.
- B. Roadway repair and pavement restoration shall be accomplished in accordance with the requirements and regulations of the Village unless otherwise indicated by the Village in writing.
1. Work within the Roadway Right-of-Way (ROW) shall conform to the requirements of the road opening permit issued by the Village.
 2. The contractor shall provide continuous access to the roadway. Coordinate work with other contractors and subcontractors working on the roadway, adjacent roadways, or adjacent properties as necessary. The Contractor shall not obstruct access to and from the roadway to and from adjacent roadways and driveways.
 3. The contractor shall observe applicable local and/or municipal requirements. The contractor shall take immediate steps to rectify hazardous or unsafe conditions, conform to the maintenance and protection of traffic requirements of the Village and/or designated authority and conform to The National Manual of Uniform Traffic Control Devices (MUTCD) and New York State Supplement, latest edition.

- C. The Contractor shall provide access to the work area to the Village and/or their representatives for purposes of observing the work at any time during the progress of the work.
- D. The Contractor shall submit delivery tickets to the Village and its authorized representatives for all materials supplied and a supplier's certification that the materials conform to the specifications referred to herein, as specified in 1.03 Submittals.

1.03 SUBMITTALS

- A. The Contractor shall submit to the Village and its authorized representative copies of delivery tickets for all materials supplied indicating the material type, delivery date, time, project, amount and source and supplier certifications that the materials delivered are in compliance with the specifications.
- B. The Contractor shall submit to the Village and its authorized representative copies of all test results, lab analysis, etc. including the date time and location of the test and weather conditions at the time of testing.

1.04 PROJECT LOCATION CONDITIONS

- A. The Contractor shall protect existing and new facilities, structures, including pavement, slab, walks or foundations, etc. against damage and maintain said existing and/or new improvements, etc. in a safe and serviceable condition. Repair or replace damaged improvements on the R.O.W. or adjacent properties which are damaged by construction operations, as specified herein and to the satisfaction of the Village and its authorized representatives.
- B. The Contractor shall conduct and coordinate work so as to minimize interference with other contractors and subcontractors working on adjacent roadways or properties and the traveling public utilizing the adjacent roadways and driveways. The Contractor shall not close or obstruct streets, driveways, walks or other occupied or used facilities without written permission from the Village. The Contractor shall maintain traffic and protect contiguous roadways and driveways during progress of the work. Materials, warning signs and traffic control devices used shall be acceptable to the Village and be in accordance to the National Manual of Uniform Traffic Control Devices (MUTCD) and New York State Supplement, latest edition.

PART 2 – PRODUCTS & MATERIALS

2.01 PRODUCTS & MATERIALS

- A. Suitable coarse-grained soil materials are generally defined as a minimum as those complying with ASTM D2487 soil classification Groups GW, GP, SW and SP or other material approved by the Village and its authorized representative.

- B. The base course under all asphalt or concrete pavement graded material shall conform to N.Y.S.D.O.T. Standard Specification No. 17304.1011 recycled concrete aggregate as specified on the Pavement Restoration Detail.
- C. All asphaltic concrete shall conform to the requirements of the New York State Department of Transportation (N.Y.S.D.O.T) Standard Specifications Section 400, Bituminous Pavement, unless otherwise indicated on the drawings.
- D. The Asphalt Joint Filler shall conform to N.Y.S.D.O.T. Material Specification 702, Bituminous Materials.
- E. Subbase material shall be as indicated on the Pavement Restoration Detail and conform to N.Y.S.D.O.T. Section 400 or as otherwise specified.
- F. Bituminous asphalt tack coat shall conform to N.Y.S.D.O.T. Material Specification Section 407, Tack Coat.
- G. All backfill shall be a well graded clean sand and gravel with less than or equal to 10% fines passing a number 200 sieve as noted in the gradation below. Should the Contractor encounter unsuitable subgrade material in the roadway, the Contractor shall excavate material to a minimum depth of 2'-0" below subgrade and replace material with the following gradation or approved equal:

<u>GRADATION</u>	
<u>Sieve Size</u>	<u>% Passing By Weight</u>
2"	100
¼"	30-65
No. 40	5-40
No. 200	0-10

The material shall be placed in controlled lifts and compacted in layers not more than 12" in loose depth for material compacted by heavy compaction equipment, and not more than 6" in loose depth for material compacted by hand-operated tampers.

PART 3 - EXECUTION

3.01 SUBBASE COMPACTION

- A. Compaction shall meet the requirements specified within the N.Y.S.D.O.T. Standard Specifications at subsection(s) "Compaction", (203-3.12), "Proof Rolling In Embankment Sections", (203-3.13), and "Proof Rolling In Cut Sections", (203.3.14), shall apply.
- B. The surface of excavations and subgrades shall be compacted to a smooth and compact surface in accordance with the lines, grades, cross sections or elevations required to provide a smooth transition to the existing road surface. Compaction shall be accomplished by sheepsfoot rollers, pneumatic tired rollers, steelwheeled rollers, vibratory compactors, or other approved equipment, including hand operated compactors, well suited to the type of material and work

(area) being compacted. Control compaction to provide at least the percentage of maximum density as specified. Compaction shall continue until the in place density of each compacted layer complies with the percentage of density requirements specified for each area classification. Lift thickness shall be controlled, and shall not exceed the maximum allowed according to the equipment classifications specified in subparagraph B, section 203-3.12, "Compaction Equipment", N.Y.S.D.O.T. Standard Specifications.

1. Soft, yielding material and areas of non-uniform density shall be removed and replaced, and the replacement material graded and compacted in accordance with the provisions for the given material and area classification.
2. Should soft or yielding conditions of materials other than hardpan be due to excessive moisture, suspend work in such areas until they sufficiently dry out or the material may be removed and replaced, as specified herein.

3.02 SUBGRADE STABILIZATION

- A. Prepare the subgrade below pavement, slabs and sidewalks to established subgrade elevation and compact to specified density requirements. Complete, progressively maintain, and protect subgrade sufficiently in advance of the succeeding operation.

Should the subgrade become unstable at any time prior to the placement of the overlying course due to the gradation of the material furnished, correct the unstable condition.

- B. Prior to placement of pavement, promptly and satisfactorily reshape, and recompact or remove and replace, damaged or unsatisfactory areas. Carefully shape the subgrade to indicated lines and grades. Check the subgrade for line and slope, and make appropriate corrections for pavements, walks, slabs, etc., as shown on the contract drawings and specified herein.

1. Replace unsuitable material with sub material as specified herein. Refer to Section 2.01 "Products & Materials" for additional information.

- C. Any work not in compliance with specified requirements shall be removed and replaced by the Contractor at no additional cost to the Village or its representatives, in accordance with the specifications contained herein. Test the cross section of finished surfaces for surface irregularities at intervals of not more than 20'-0".

3.03 SURFACE PREPARATION

- A. The contractor shall prepare and compact asphalt concrete pavement foundation. Foundation surface shall be proof rolled immediately prior to the placement of bituminous material to 95% of the maximum Modified Proctor

Density at the optimum moisture content. Damaged or unacceptable pavement foundation shall be removed and replaced in accordance to the specifications.

3.04 PLACEMENT

- A. The Contractor shall place material of the type shown on the Pavement Restoration Detail, as specified herein at a thickness as required to yield the required compacted thickness. The asphalt surface to receive another asphalt course shall be clean of all debris, dirt, and other unsuitable material before the course is placed.
- B. Construction shall comply with the N.Y.S.D.O.T. Standard Specifications and the Village requirements.
- C. The Contractor shall place material at a thickness so as to ensure compliance with the specifications herein and the Pavement Restoration Detail and shall not be less than or exceed the limits acceptable to the Village and its authorized representatives.
- D. Upon the completion of the asphalt paving, the Contractor shall maintain and protect the finished surface. Any damaged and unacceptable paving shall be removed and replaced in accordance with the specifications herein at no additional compensation.
- E. The Contractor shall sawcut full thickness, a straight and true line in abutting pavements and place liquid bituminous joint filler on the existing vertical sawcut edge prior to placing new pavement.
- F. When multiple courses of asphalt concrete are to be placed, the top course shall not be placed until all heavy construction is completed, all services installed, all subsurface facilities installed and permission is received from the Village and/or its representative. The Contractor shall not place the entire asphalt pavement section in one (1) 24-hour period. Lower courses shall have a minimum of 24 hours to set prior to placement of top course asphalt. The Contractor shall install temporary pavement markings as necessary, at no additional cost to the Village. Damaged or unacceptable lower asphalt course shall be sawcut, removed and replaced by the Contractor in accordance with the specifications and contract drawings at no additional cost to the Village. The thickness indicated for each of the various courses of bituminous pavement is the nominal thickness. The pavement shall be constructed so that the final compacted thickness is as near to the nominal thickness as is practical, and within the tolerances specified below:

<u>Required Nominal Thickness</u>	<u>Tolerance</u>
4 inches or less	1/4 inch
4 inches to 8 inches	1/2 inch
Greater than 8 inches	5/8 inch

- G. When a single course of asphalt is utilized as the pavement section, it shall not be placed until all heavy construction is completed, all services installed, all subsurface facilities installed and inspected, and permission is received from the

Village or the Village's authorized representative. The Contractor shall employ dust control measures in accordance with the New York State Guidelines for Urban Erosion and Sediment Control during trench closure and compaction prior to the placement of the asphalt pavement.

- H. Bituminous Tack Coat shall be uniformly applied by a pressure distributor to a prepared clean pavement, at an application rate of 0.03 to 0.07 gallons per square yard. Bituminous tack coat shall conform to the requirements of N.Y.S.D.O.T. Standard Specification Section 407-Tack Coat.

3.05 FIELD TESTING

- A. Construction observation and testing shall be as per 1.02 Quality Control of this specification.

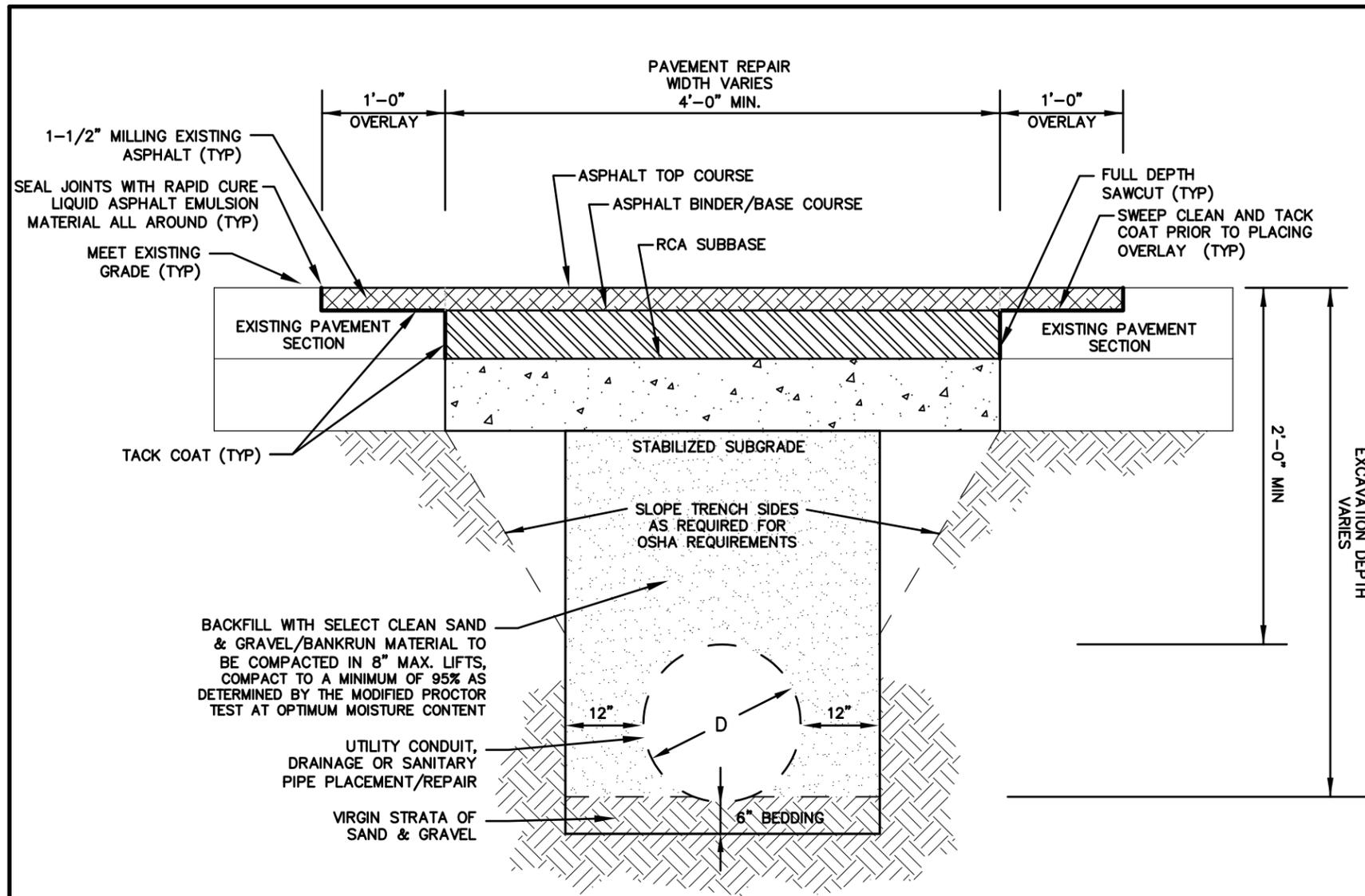
Observations and tests on material replacing the unacceptable material will be performed at the Contractor's expense to determine conformance with specification requirements.

- B. The Village and its authorized representative may require asphalt pavement cores to verify pavement thickness. The cost of coring the asphalt and the cost of removal and replacement of unsatisfactory pavement shall be by the Contractor.
- C. The final pavement elevations shall be within 1/4 inch of the elevation shown on the contract drawings or the established grade unless specified otherwise herein or shown otherwise on the contract drawings. Pavement elevations exceeding the specified deviation shall be removed, replaced and recompactd by the Contractor to meet the specification requirements.
- D. The final pavement shall be free of all ponding of surface water runoff greater than 1/8 inch in depth. Conditions exceeding this depth shall be removed, replaced and recompactd by the Contractor.

3.06 WARRANTY

- A. The Contractor shall provide the Village with a one (1) year unconditional maintenance-free warranty on the roadway and pavement restoration. The warranty time span shall begin on the date of final acceptance of the work by the Village and/or its representative in writing. The warranty shall be executed by the Contractor.

END OF SECTION



ASPHALT TOP:
 1 1/2" COMPACTED ASPHALT TOP COURSE, N.Y.S.D.O.T. TYPE 6F RA
 ASPHALT BINDER/BASE COURSE:
 3" COMPACTED ASPHALT BINDER COURSE, N.Y.S.D.O.T. TYPE 3 RA
 SUBBASE COURSE:
 6" COMPACTED RCA SUBBASE COURSE, N.Y.S.D.O.T. TYPE 1011 MATERIAL "A"

NOTES:

1. SELECT FILL SHALL BE CLEAN FILL CONSISTING OF SAND, GRAVEL, AND/OR STONES FREE OF ROCKS LARGER THAN 2" IN ANY DIMENSION AND SHALL BE SUBSTANTIALLY FREE OF DEGRADABLE OR VEGETATIVE MATERIAL. THE FILL SHALL NOT CONTAIN CONSTRUCTION DEMOLITION DEBRIS SUCH AS LUMBER, ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE AND/OR CLAY BRICKS.
2. ALL SELECT FILL AND RECYCLED CONCRETE AGGREGATE SHALL BE COMPACTED UTILIZING OPTIMUM MOISTURE CONTENT TO AT LEAST 95% STANDARD PROCTOR DENSITY. SUBMIT TEST RESULTS FROM ASTM D698 (MOISTURE) AND ASTM D2922 (DENSITY PER NUCLEAR METHODS) FOR REVIEW. SELECT FILL SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS.
3. TACK COAT (PER ITEM 407.0101 OF N.Y.S.D.O.T. STANDARD SPECIFICATIONS) EMULSIFIED ASPHALT PLACED AT A RATE OF BETWEEN 0.05 & 0.15 GALLONS PER SQUARE YARD.
4. ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE COMPACTED MATERIAL, ALL AS DIRECTED BY THE TOWN ENGINEER.
5. OVERALL WIDTH OF EXCAVATION SHALL BE A MINIMUM OF 2'-0" (D + 2') WIDE WITH A PAVEMENT OVERLAY WIDTH OF 4'-0" WIDE.
6. FOR ASPHALT SECTIONS GREATER THAN 4-1/2" CONTRACTOR TO INSTALL AND COMPACT RCA SUBBASE TO BOTTOM OF EXISTING ASPHALT AND INSTALL ASPHALT BINDER IN 3" MAX. LIFTS. TACK COAT SHALL BE APPLIED BETWEEN EACH LIFT.
7. TEMPORARY SHEETING, SHORING AND BRACING SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF INDUSTRIAL CODE RULE 23 " PROTECTION IN CONSTRUCTION AND EXCAVATION OPERATIONS ", OF THE STATE OF NEW YORK DEPARTMENT OF LABOR AND THE REQUIREMENTS OF THE FEDERAL GOVERNMENTS O.S.H.A.
8. CONTRACTOR SHALL RE-STRIPE PAVEMENT MARKINGS, DAMAGED OR MISSING DUE TO PAVEMENT REPAIR, IN KIND AT COMPLETION OF PAVING.

VILLAGE OF HUNTINGTON BAY
 SUFFOLK COUNTY, NEW YORK

PAVEMENT RESTORATION DETAIL



RMS ENGINEERING

Robinson, Muller & Schiavone Engineers, PC

355 New York Avenue, Huntington, New York 11743
 Phone 631-271-0576 Fax 631-271-0592 www.rmsengineering.com

DATE:	4-10-15
SCALE:	NTS
JOB No.	2015-029
SHEET:	DWG-1